

# Tiburon Fire Protection District

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

January 24, 2020



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January 24, 2020

Heidi Rosevear  
Finance Officer  
Tiburon Fire Protection District  
1679 Tiburon Boulevard  
Tiburon, California 94920

**Re: Tiburon Fire Protection District GASB 75 OPEB Valuation as of June 30, 2019**

Dear Ms. Rosevear:

At your request, we completed an actuarial valuation of the retiree health and welfare benefits as of June 30, 2019, for the Tiburon Fire Protection 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

## Overview

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### 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, 2019  
**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 7.28% to 7.59%

### 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.

# Executive Summary

## Overview

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### 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 Tiburon Fire Protection District beyond the contractual services that we perform for the Tiburon Fire Protection 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.

<b>Total OPEB Liability as of Measurement Date June 30, 2018</b>	<b><u>\$ 6,086,723</u></b>
Service Cost	198,667
Interest Cost	414,097
Change in Census (Demographics)	(148,226)
Change in Premiums/Claims	51,658
Change in Decrement Assumptions	(35,958)
Change in Salary Merit Scale	246,504
Change in Trend Rate Assumptions	66,591
Change in Discount Rate from 4.85% to 5.61%	(214,929)
Other Assumption Changes	(628,470)
Benefit Payments	(243,049)
Implicit Subsidy Fulfilled	(90,445)
<b>Total OPEB Liability as of Measurement Date June 30, 2019</b>	<b><u><u>\$ 5,703,163</u></u></b>

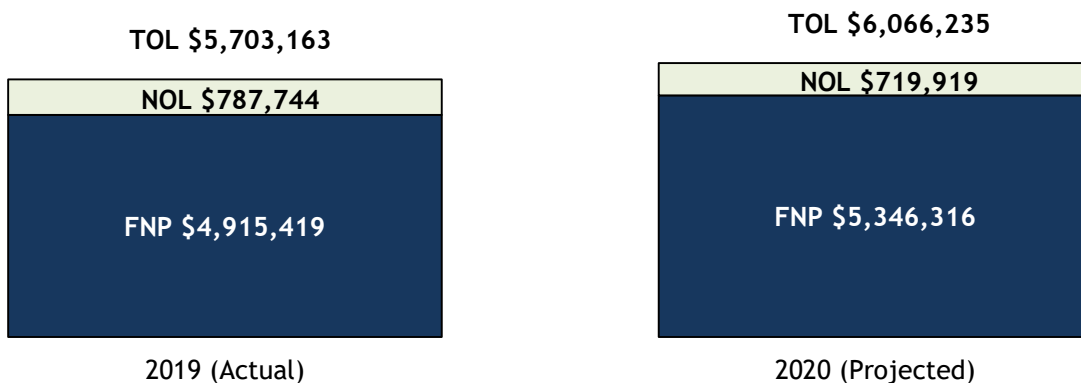
# Executive Summary

## Accounting Summary

A summary of the key valuation results follows.

	<u>Actual</u>	<u>Projected</u>
Valuation Date:	June 30, 2019	June 30, 2019
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	\$ 4,998,133	\$ 5,377,491
Retirees	+ 3,418,807	+ 3,353,815
<b>Total Present Value of Future Benefits</b>	<b>= 8,416,940</b>	<b>= 8,731,306</b>
<b>Total Present Value of Future Normal Costs</b>	<b>- 2,713,777</b>	<b>- 2,665,071</b>
<b>Total OPEB Liability (TOL)</b>	<b>= \$ 5,703,163</b>	<b>= \$ 6,066,235</b>
<b>OPEB Liability</b>		
Active Employees	\$ 2,284,356	\$ 2,712,420
Retirees	+ 3,418,807	+ 3,353,815
<b>Total OPEB Liability (TOL)</b>	<b>= 5,703,163</b>	<b>= 6,066,235</b>
<b>Fiduciary Net Position (FNP)</b>	<b>- 4,915,419</b>	<b>- 5,351,849</b>
<b>Net OPEB Liability (NOL)</b>	<b>= \$ 787,744</b>	<b>= \$ 714,386</b>
<b>Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability</b>		
	86.19%	88.22%
Covered-Employee Payroll	\$ 2,598,338	\$ 2,669,792
Net OPEB Liability as a Percentage of Covered-Employee Payroll	30.3%	26.8%
<b>Measurement Period</b>		
	2018-2019	2019-2020
<b>Reporting Period</b>		
	2018-2019	2019-2020
<b>Expense</b>		
Actuarially Determined Contribution (ADC), End of Year*	\$ 209,514	\$ 247,458
	437,135	377,003

### 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		4,915,419
International Equities		-
Real Estate		-
Total Investments		4,915,419
Total Assets	\$	4,915,419

### 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 \$ 4,915,419



# 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
<b>Additions</b>		
Investment Income:		
Net Appreciation in the Fair Value of Investments	\$ 255,655	\$ 375,451
Interest and Dividends	-	-
Less Investment Expense, Other than from Securities Lending	(1,376)	(1,480)
Net Income from Investing, Other than from Securities Lending	254,279	373,971
Securities Lending Income	-	-
Less Securities Lending Expense	-	-
Net Income from Securities Lending	-	-
<b>Net Investment Income (a)</b>	<b>\$ 254,279</b>	<b>\$ 373,971</b>
Contributions:		
Employer – District's Contribution	\$ 1,225,049	\$ 295,872
Employer – Implicit Subsidy	90,445	81,131
Employee	-	-
<b>Total Contributions (b)</b>	<b>\$ 1,315,494</b>	<b>\$ 377,003</b>
<b>Total Additions (c) = (a) + (b)</b>	<b>\$ 1,569,773</b>	<b>\$ 750,974</b>
<b>Deductions</b>		
Benefit Payments	\$ 243,049	\$ 231,485
Implicit Rate Subsidy Fulfilled	90,445	81,131
Administrative Expense	1,881	1,928
<b>Total Deductions (d)</b>	<b>\$ 335,375</b>	<b>\$ 314,544</b>
<b>Net Increase in Net Position = (c) – (d)</b>	<b>\$ 1,234,398</b>	<b>\$ 436,430</b>
<b>Net Position Restricted for Postemployment Benefits Other than Pensions</b>		
Beginning of Year	\$ 3,681,021	\$ 4,915,419
Net Increase in Net Position	1,234,398	436,430
End of Year	<b>\$ 4,915,419</b>	<b>\$ 5,351,849</b>

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)
<b>Balance as of Report Date June 30, 2018</b>	\$ 6,086,723	\$ 3,681,021	\$ 2,405,702
<b>Changes for the year:</b>			
Service Cost	198,667		198,667
Interest	414,097		414,097
Differences Between Expected and Actual Experience	(148,226)		(148,226)
Changes of Assumptions	(514,604)		(514,604)
Net Investment Income		254,279	(254,279)
Contributions			
Employer – District's Contribution		1,225,049	(1,225,049)
Employer – Implicit Subsidy		90,445	(90,445)
Employee		-	-
Benefit Payments, Including Refunds of Employee Contributions	(243,049)	(243,049)	-
Implicit Rate Subsidy Fulfilled	(90,445)	(90,445)	-
Administrative Expense		(1,881)	1,881
Other Changes		-	-
<b>Net Changes</b>	<b>(383,560)</b>	<b>1,234,398</b>	<b>(1,617,958)</b>
<b>Balance as of Report Date June 30, 2019</b>	<b>\$ 5,703,163</b>	<b>\$ 4,915,419</b>	<b>\$ 787,744</b>

# 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	6,968	-	1,884	5,084	-
2019	-	(148,226)	(17,439)	-	(130,787)
<b>Total</b>			<b>\$</b>	<b>5,084</b>	<b>\$ (130,787)</b>

### 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	-	(158,458)	(42,826)	-	(115,632)
2019	-	(514,604)	(60,542)	-	(454,062)
<b>Total</b>			<b>\$</b>	<b>-</b>	<b>\$ (569,694)</b>

### 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	\$ -	\$ -	\$ -	\$ -	\$ -	-
2018	-	(18,278)	(7,312)	-	(10,966)	(10,966)
2019	60,930	-	12,186	48,744	-	48,744
<b>Total</b>			<b>\$</b>	<b>48,744</b>	<b>\$ (10,966)</b>	<b>\$ 37,778</b>

## 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	6,968	-	2,826	4,142	-
2019	-	(148,226)	(17,439)	-	(130,787)
2020	-	-	-	-	-
<b>Total</b>			<b>\$</b>	<b>4,142</b>	<b>\$ (130,787)</b>

#### 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	-	(158,458)	(64,239)	-	(94,219)
2019	-	(514,604)	(121,084)	-	(393,520)
2020	-	-	-	-	-
<b>Total</b>			<b>\$</b>	<b>-</b>	<b>\$ (487,739)</b>

#### 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	\$ -	\$ -	\$ -	\$ -	\$ -	-
2018	-	(18,278)	(10,968)	-	(7,310)	(7,310)
2019	60,930	-	24,372	36,558	-	36,558
2020	-	-	-	-	-	-
<b>Total</b>			<b>\$</b>	<b>36,558</b>	<b>\$ (7,310)</b>	<b>\$ 29,248</b>

# 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	6,968	7.4	6.4	942	942	942	942	942	942	374
	2018-2019	(148,226)	8.5	8.5	(17,439)	(17,439)	(17,439)	(17,439)	(17,439)	(17,439)	(43,592)
Changes of Assumptions	2016-2017	-	n/a	n/a	-	-	-	-	-	-	-
	2017-2018	(158,458)	7.4	6.4	(21,413)	(21,413)	(21,413)	(21,413)	(21,413)	(21,413)	(8,567)
	2018-2019	(514,604)	8.5	8.5	(60,542)	(60,542)	(60,542)	(60,542)	(60,542)	(60,542)	(151,352)
Differences Between Projected and Actual Earnings	2016-2017	-	n/a	n/a	-	-	-	-	-	-	-
	2017-2018	(18,278)	5.0	4.0	(3,656)	(3,656)	(3,656)	(3,654)	-	-	-
	2018-2019	60,930	5.0	5.0	12,186	12,186	12,186	12,186	12,186	-	-
<b>Summary of Deferred Outflows and Inflows of Resources – Reporting Period 2018-2019</b>											
Differences Between Expected and Actual Experience					\$ (16,497)	\$ (16,497)	\$ (16,497)	\$ (16,497)	\$ (16,497)	\$ (16,497)	\$ (43,218)
Changes of Assumptions					(81,955)	(81,955)	(81,955)	(81,955)	(81,955)	(81,955)	(159,919)
Differences Between Projected and Actual Earnings					8,530	8,530	8,530	8,532	12,186	-	-
<b>Total</b>					<b>(89,922)</b>	<b>(89,922)</b>	<b>(89,922)</b>	<b>(89,920)</b>	<b>(86,266)</b>	<b>(98,452)</b>	<b>(203,137)</b>

# 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:							
					2020	2021	2022	2023	2024	2025	Remaining	
Differences Between Expected and Actual Experience	2016-2017	-	n/a	n/a	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
	2017-2018	6,968	7.4	5.4	942	942	942	942	942	374	-	-
	2018-2019	(148,226)	8.5	7.5	(17,439)	(17,439)	(17,439)	(17,439)	(17,439)	(17,439)	(17,439)	(26,153)
	2019-2020	-	8.5	8.5	-	-	-	-	-	-	-	-
Changes of Assumptions	2016-2017	-	n/a	n/a	-	-	-	-	-	-	-	-
	2017-2018	(158,458)	7.4	5.4	(21,413)	(21,413)	(21,413)	(21,413)	(21,413)	(8,567)	-	-
	2018-2019	(514,604)	8.5	7.5	(60,542)	(60,542)	(60,542)	(60,542)	(60,542)	(60,542)	(60,542)	(90,810)
	2019-2020	-	8.5	8.5	-	-	-	-	-	-	-	-
Differences Between Projected and Actual Earnings	2016-2017	-	n/a	n/a	-	-	-	-	-	-	-	-
	2017-2018	(18,278)	5.0	3.0	(3,656)	(3,656)	(3,654)	-	-	-	-	-
	2018-2019	60,930	5.0	4.0	12,186	12,186	12,186	12,186	-	-	-	-
	2019-2020	-	5.0	5.0	-	-	-	-	-	-	-	-
<b>Summary of Deferred Outflows and Inflows of Resources – Reporting Period 2019-2020</b>												
Differences Between Expected and Actual Experience					\$ (16,497)	\$ (16,497)	\$ (16,497)	\$ (16,497)	\$ (16,497)	\$ (17,065)	\$ (26,153)	
Changes of Assumptions					(81,955)	(81,955)	(81,955)	(81,955)	(81,955)	(69,109)	(90,810)	
Differences Between Projected and Actual Earnings					8,530	8,530	8,532	12,186	-	-	-	
<b>Total</b>					<b>(89,922)</b>	<b>(89,922)</b>	<b>(89,920)</b>	<b>(86,266)</b>	<b>(98,452)</b>	<b>(86,174)</b>	<b>(116,963)</b>	

# Accounting Information

## Calculation of Expense under GASB 75

		<i>Actual</i>
	Measurement Period:	2018-2019
	Reporting Period:	<u>2018-2019</u>
<b>Expense</b>		
Service Cost	\$	198,667
Interest on Total OPEB Liability		414,097
Recognized Differences Between Expected and Actual Experience		(16,497)
Recognized Changes of Assumptions		(81,955)
Employee Contributions		-
Projected Earnings on OPEB Plan Investments		(315,209)
Recognized Differences Between Projected and Actual Earnings		8,530
Administrative expenses		1,881
<b>Total Expense</b>	<b>\$</b>	<b><u>209,514</u></b>

### Deferred Outflows and Inflows of Resources

	<u>June 30, 2019</u>	
	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences Between Expected and Actual Experience	\$ 5,084	\$ (130,787)
Changes of Assumptions	-	(569,694)
Net Difference Between Projected and Actual Earnings on Plan Investments	37,778	-
District Contributions Subsequent to the Measurement Date	-	-
<b>Total</b>	<b><u>\$ 42,862</u></b>	<b><u>\$ (700,481)</u></b>

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	\$	(89,922)
2021		(89,922)
2022		(89,920)
2023		(86,266)
2024		(98,452)
Remaining		(203,137)

# 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
<b>Expense</b>			
Service Cost	\$ 198,667	\$	243,225
Interest on Total OPEB Liability	414,097		466,198
Recognized Changes of Assumptions	(16,497)		(16,497)
Recognized Differences Between Expected and Actual Experience	(81,955)		(81,955)
Employee Contributions	-		-
Projected Earnings on OPEB Plan Investments	(315,209)		(373,971)
Recognized Differences Between Projected and Actual Earnings	8,530		8,530
Administrative expenses	1,881		1,928
<b>Total Expense</b>	<b>\$ 209,514</b>	<b>\$</b>	<b>247,458</b>

### Deferred Outflows and Inflows of Resources

	June 30, 2020	
	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences Between Expected and Actual Experience	\$ 4,142	\$ (130,787)
Changes of Assumptions	-	(487,739)
Net Difference Between Projected and Actual Earnings on Plan Investments	29,248	-
Contributions Subsequent to the Measurement Date	-	-
<b>Total</b>	<b>\$ 33,390</b>	<b>\$ (618,526)</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	\$ (89,922)
2022	(89,920)
2023	(86,266)
2024	(98,452)
2025	(86,174)
Remaining	(116,963)



## Accounting Information

### Reconciliation of Expense

	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability	Net Investment (Inflows)/ Outflows/ Net Deferrals				Net OPEB Liability plus Net Deferrals	Annual Expense
				Deferred (Inflows)	Deferred Outflows				
Balance as of Report Date June 30, 2018	\$ (6,086,723)	\$ 3,681,021	\$ (2,405,702)	\$ (137,045)	\$ 6,026	\$ (14,622)	\$ (145,641)	\$ (2,551,343)	
Service Cost	(198,667)		(198,667)						\$ 198,667
Interest on Total OPEB Liability	(414,097)		(414,097)						414,097
Differences Between Expected and Actual Experience	148,226		148,226	(148,226)			148,226		
Effect of Assumption Changes or Inputs	514,604		514,604	(514,604)			514,604		
Expected Investment Income (Net of Investment Expenses)		315,209	315,209						(315,209)
Investment Gains or Losses on Expected Return		(60,930)	(60,930)			60,930	60,930		
Contributions									
Employer – District's Contribution		1,225,049	1,225,049					1,225,049	
Employer – Implicit Subsidy		90,445	90,445					90,445	
Employee		-	-						
Benefit Payments, Including Refunds of Employee Contributions	243,049	(243,049)	-						
Implicit Rate Subsidy Fulfilled	90,445	(90,445)	-						
Administrative Expenses		(1,881)	(1,881)						1,881
Recognition of Liability Gains or Losses			-	16,497			(16,497)		(16,497)
Recognition of Assumption Changes or Inputs			-	81,955			(81,955)		(81,955)
Recognition of Investment Gains or Losses			-	(8,530)			8,530		8,530
Annual Expense								(209,514)	\$ 209,514
Balance as of Report Date June 30, 2019	\$ (5,703,163)	\$ 4,915,419	\$ (787,744)	\$ (709,953)	\$ 6,026	\$ 46,308	\$ (657,619)	\$ (1,445,363)	

## Accounting Information

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

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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.

	<b>Measurement Period:</b>	<b>2018-2019</b>	<b>2019-2020</b>	<b>2020-2021</b>
	<b>Reporting Period:</b>	<b>2018-2019</b>	<b>2019-2020</b>	<b>2020-2021</b>
Actuarial Accrued Liability (AAL) – Entry Age Normal, Beginning of Fiscal Year		\$ 6,086,723	\$ 6,066,235	\$ 6,441,280
Actuarial Value of Plan Assets, Beginning of Fiscal Year	–	3,681,021	4,915,419	5,351,849
Unfunded Actuarial Accrued Liability (UAAL), Beginning of Fiscal Year	=	<u>\$ 2,405,702</u>	<u>\$ 1,150,816</u>	<u>\$ 1,089,431</u>
Interest Rate Used to Determine Amortization Payment		7.28%	7.59%	7.59%
Assumed Rate of Payroll Growth		2.750%	2.750%	2.750%
Amortization Period		15 years	14 years	13 years
Amount Recognized, Beginning of Year*		\$ 213,202	\$ 107,182	\$ 108,837
Amount Recognized, End of Year*		\$ 228,723	\$ 115,317	\$ 117,098

## 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	\$	198,667	\$ 243,225	\$ 249,914
Amortization of the Unfunded Actuarial Accrued Liability (UAAL)		213,202	107,182	108,837
Actuarially Determined Contribution (ADC), Beginning of Year	\$	411,869	\$ 350,407	\$ 358,751
<b>Actuarially Determined Contribution (ADC), End of Year</b>	<b>\$</b>	<b>441,853</b>	<b>\$ 377,003</b>	<b>\$ 385,980</b>
ADC as a Percentage of Covered-Employee Payroll		17.01%	14.12%	14.07%
Discount Rate		7.28%	7.59%	7.59%
<b>ADC Components</b>				
Benefit Payments	\$	243,049	\$ 231,485	\$ 247,917
District's Contribution to Assets (Trust)		103,641	64,387	51,602
<b>District's Total Contribution</b>		<b>346,690</b>	<b>295,872</b>	<b>299,519</b>
Implied Contribution – Implicit Subsidy		90,445	81,131	86,461
<b>Adjusted ADC</b>	<b>\$</b>	<b>437,135</b>	<b>\$ 377,003</b>	<b>\$ 385,980</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 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 2019-2020 period and after, is:

7.59%

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.

# 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
<b>Estimated Liabilities</b>				
OPEB Liability, Beginning of Year	\$	6,086,723	\$	5,703,163
Service Cost		198,667		243,225
Interest on Liabilities		414,097		466,198
Differences Between Expected and Actual Experience		(148,226)	-	-
Changes of Assumptions		(514,604)	-	-
Benefit Payments		(243,049)	(231,485)	(247,917)
Implicit Rate Subsidy Fulfilled		(90,445)	(81,131)	(86,461)
<b>OPEB Liability, End of Year (a)</b>	<b>\$</b>	<b>5,703,163</b>	<b>\$</b>	<b>6,099,970</b>
<b>Estimated Assets</b>				
Assets, Beginning of Year	\$	3,681,021	\$	4,915,419
Expected Earnings		254,279		373,971
Contributions				
Employer – District's Contribution		1,225,049	295,872	51,602
Employer – Implicit Subsidy		90,445	81,131	86,461
Employee		-	-	-
<b>Total Contributions</b>		<b>1,315,494</b>	<b>377,003</b>	<b>138,063</b>
Projected Benefit Payments				
Benefit Payments, Including Refunds of Employee Contributions		(243,049)	(231,485)	(247,917)
Implicit Rate Subsidy Fulfilled		(90,445)	(81,131)	(86,461)
<b>Total Benefit Payments</b>		<b>(333,494)</b>	<b>(312,616)</b>	<b>(334,378)</b>
Administrative Expenses		(1,881)	(1,928)	(1,976)
<b>Assets, End of Year (b)</b>	<b>\$</b>	<b>4,915,419</b>	<b>\$</b>	<b>5,351,849</b>
<b>Net OPEB liability, End of Year = (a) - (b)</b>	<b>\$</b>	<b>787,744</b>	<b>\$</b>	<b>748,121</b>
<b>Expense</b>		<b>209,514</b>	<b>247,458</b>	<b>n/a</b>
<b>ADC</b>		<b>437,135</b>	<b>377,003</b>	<b>385,980</b>

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

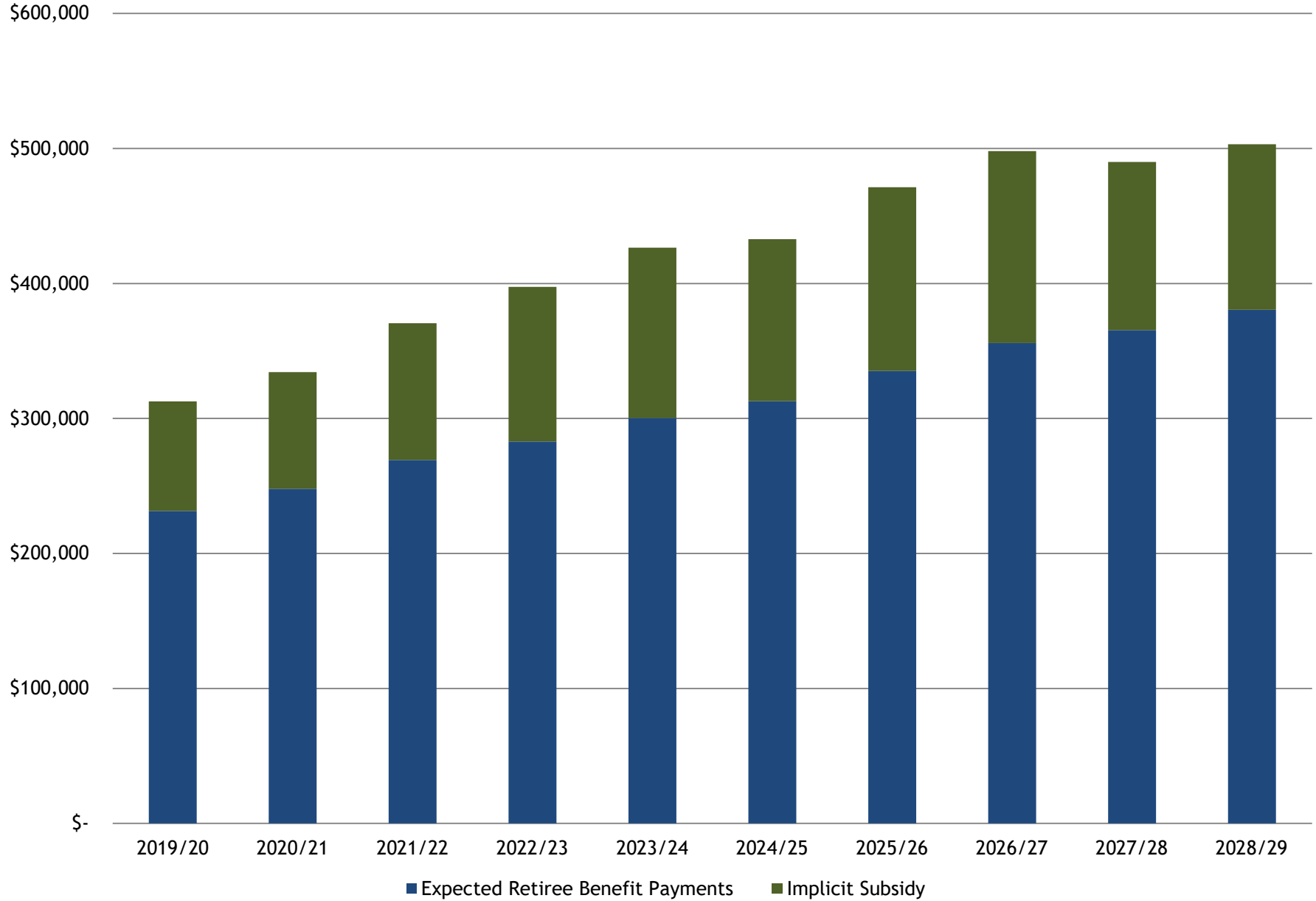
## OPEB Cash-Flow Projections

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<b>Measurement Period Ending June 30:</b>	<b>Expected Retiree Benefit Payments</b>	<b>Implicit Subsidy</b>	<b>Total Expected Credited Benefit Payments</b>
2020	\$ 231,485	\$ 81,131	\$ 312,616
2021	247,917	86,461	334,378
2022	269,323	101,199	370,522
2023	282,888	114,506	397,394
2024	300,464	126,067	426,531
2025	312,794	120,004	432,798
2026	335,286	135,915	471,201
2027	355,861	142,214	498,075
2028	365,435	124,488	489,923
2029	380,588	122,455	503,043
2030	403,947	128,735	532,682
2031	425,275	134,269	559,544
2032	454,593	164,479	619,072
2033	471,093	141,407	612,500
2034	497,676	169,958	667,634
2035	527,980	192,211	720,191
2036	548,823	174,778	723,601
2037	578,806	181,862	760,668
2038	612,938	196,745	809,683
2039	641,117	181,944	823,061
2040	672,351	190,869	863,220
2041	704,998	207,791	912,789
2042	735,585	214,649	950,234
2043	768,106	244,515	1,012,621
2044	794,527	261,142	1,055,669

# Accounting Information

## Ten-Year Projection of Expected Benefit Payments for Existing Participants



## Accounting Information

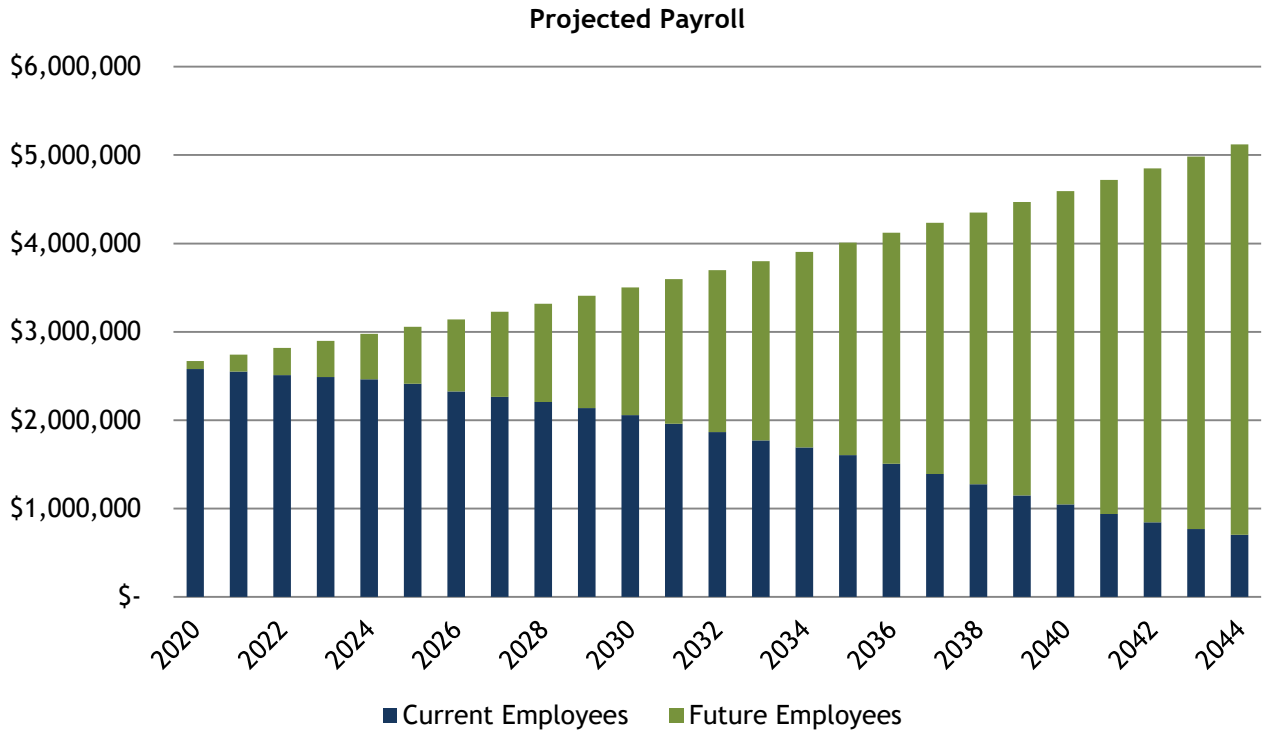
### Projection of Contributions

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 14.07% for 14 Years, 9.80% Thereafter	Employer Contributions Related to Payroll of Future Plan Members (e) = (b) x 9.80%	Portion of Employer Contribution for Current Plan Members (f) = (d) - (e)
2020	\$ 2,578,609	\$ 91,183	\$ 2,669,792	\$ 377,003	\$ 8,938	\$ 368,065
2021	2,547,708	195,503	2,743,211	385,980	19,163	366,817
2022	2,510,368	308,281	2,818,649	396,595	30,217	366,378
2023	2,487,722	408,440	2,896,162	407,501	40,034	367,467
2024	2,462,759	513,047	2,975,806	418,707	50,288	368,419
2025	2,410,681	646,960	3,057,641	430,222	63,413	366,809
2026	2,324,296	817,430	3,141,726	442,053	80,122	361,931
2027	2,263,391	964,732	3,228,123	454,209	94,561	359,648
2028	2,207,180	1,109,716	3,316,896	466,700	108,772	357,928
2029	2,136,363	1,271,748	3,408,111	479,534	124,653	354,881
2030	2,056,833	1,445,001	3,501,834	492,721	141,635	351,086
2031	1,959,459	1,638,675	3,598,134	506,271	160,619	345,652
2032	1,864,713	1,832,370	3,697,083	520,194	179,604	340,590
2033	1,769,575	2,029,178	3,798,753	534,499	198,895	335,604
2034	1,689,785	2,213,434	3,903,219	562,583	216,955	345,628
2035	1,604,706	2,405,852	4,010,558	567,105	235,815	331,290
2036	1,505,708	2,615,140	4,120,848	579,915	256,329	323,586
2037	1,389,645	2,844,526	4,234,171	590,223	278,813	311,410
2038	1,275,996	3,074,615	4,350,611	600,436	301,366	299,070
2039	1,149,225	3,321,028	4,470,253	610,163	325,519	284,644
2040	1,045,969	3,547,216	4,593,185	619,512	347,689	271,823
2041	936,803	3,782,695	4,719,498	628,493	370,770	257,723
2042	843,459	4,005,825	4,849,284	637,114	392,641	244,473
2043	767,223	4,215,416	4,982,639	645,585	413,184	232,401
2044	703,453	4,416,209	5,119,662	653,816	432,865	220,951

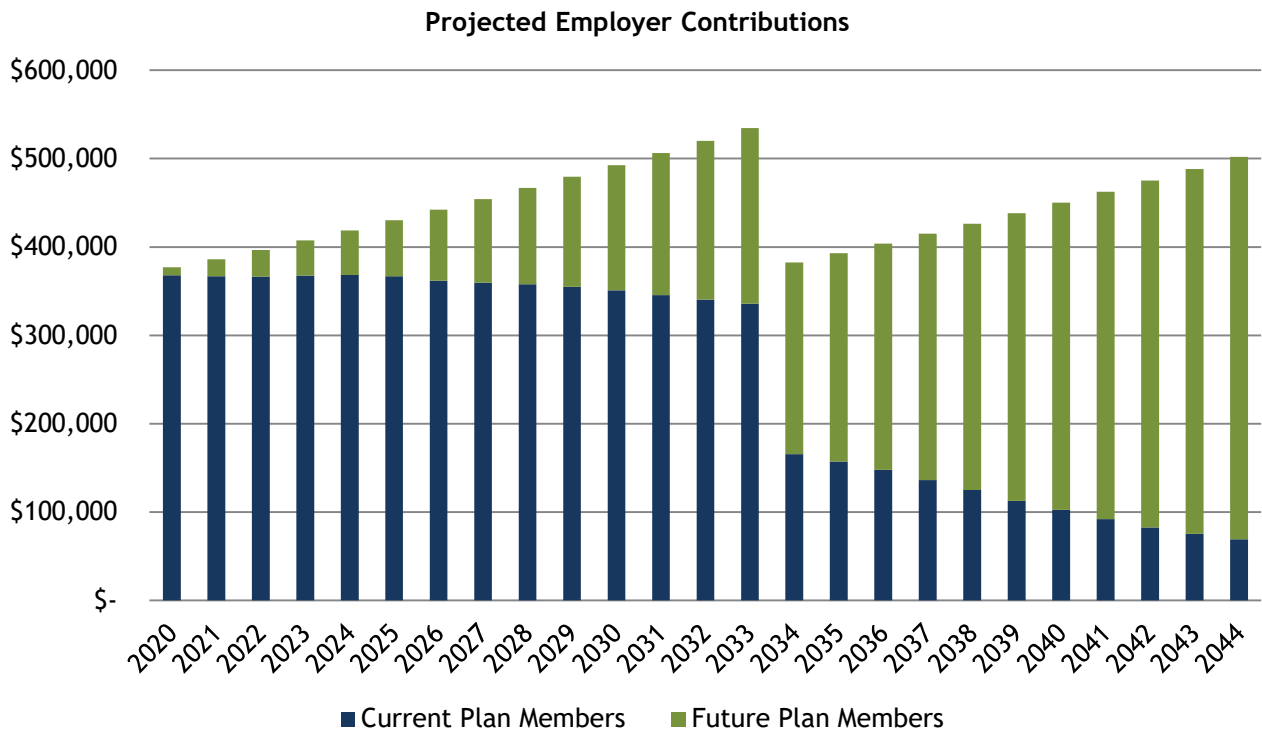
# Accounting Information

## 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	\$ 4,915,419	\$ 377,003	\$ 312,616	\$ 1,928	\$ 373,971	\$ 5,351,849
2021	5,351,849	385,980	334,378	1,976	406,497	5,807,972
2022	5,807,972	396,595	370,522	2,025	440,025	6,272,045
2023	6,272,045	407,501	397,394	2,076	474,510	6,754,586
2024	6,754,586	418,707	426,531	2,128	510,312	7,254,946
2025	7,254,946	430,222	432,798	2,181	548,336	7,798,525
2026	7,798,525	442,053	471,201	2,236	588,421	8,355,562
2027	8,355,562	454,209	498,075	2,292	629,965	8,939,369
2028	8,939,369	466,700	489,923	2,349	674,871	9,588,668
2029	9,588,668	479,534	503,043	2,408	723,937	10,286,688
2030	10,286,688	492,721	532,682	2,468	776,073	11,020,332
2031	11,020,332	506,271	559,544	2,530	831,016	11,795,545
2032	11,795,545	520,194	619,072	2,593	887,871	12,581,945
2033	12,581,945	534,499	612,500	2,658	948,079	13,449,365
2034	13,449,365	382,583	667,634	2,724	1,005,765	14,167,355
2035	14,167,355	393,105	720,191	2,792	1,058,349	14,895,826
2036	14,895,826	403,915	723,601	2,862	1,113,581	15,686,859
2037	15,686,859	415,023	760,668	2,934	1,172,271	16,510,551
2038	16,510,551	426,436	809,683	3,007	1,232,969	17,357,266
2039	17,357,266	438,163	823,061	3,082	1,296,751	18,266,037
2040	18,266,037	450,212	863,220	3,159	1,364,206	19,214,076
2041	19,214,076	462,593	912,789	3,238	1,434,263	20,194,905
2042	20,194,905	475,314	950,234	3,319	1,507,244	21,223,910
2043	21,223,910	488,385	1,012,621	3,402	1,582,909	22,279,181
2044	22,279,181	501,816	1,055,669	3,487	1,661,273	23,383,114

# 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.

	June 30, 2017	June 30, 2018	June 30, 2019	<i>Projected</i> June 30, 2020
Measurement Date:	June 30, 2017	June 30, 2018	June 30, 2019	June 30, 2020
Report Date:	June 30, 2017	June 30, 2018	June 30, 2019	June 30, 2020
Discount Rate	7.00%	7.28%	7.59%	7.59%
Retiree Benefit Payments	\$ 4,754,906	\$ 4,857,677	\$ 4,569,915	\$ 4,855,264
Implicit Subsidy	1,177,282	1,229,046	1,133,248	1,210,971
<b>Total OPEB Liability</b>	<b><u>\$ 5,932,188</u></b>	<b><u>\$ 6,086,723</u></b>	<b><u>\$ 5,703,163</u></b>	<b><u>\$ 6,066,235</u></b>

# 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>
<b><u>Total OPEB Liability</u></b>			
Service Cost	\$ 199,394	\$ 205,376	\$ 198,667
Interest	390,385	411,764	414,097
Changes of Benefit Terms	-	-	-
Differences Between Expected and Actual Experience	-	6,968	(148,226)
Changes of Assumptions	-	(158,458)	(514,604)
Benefit Payments, Including Refunds of Employee Contributions	(198,454)	(234,954)	(243,049)
Implicit Rate Subsidy Fulfilled	<u>(71,179)</u>	<u>(76,161)</u>	<u>(90,445)</u>
Net Change in Total OPEB liability	320,146	154,535	(383,560)
Total OPEB Liability – Beginning of Year	5,612,042	5,932,188	6,086,723
<b>Total OPEB Liability – Ending Year (a)</b>	<b><u>\$ 5,932,188</u></b>	<b><u>\$ 6,086,723</u></b>	<b><u>\$ 5,703,163</u></b>
<b><u>Plan Fiduciary Net Position</u></b>			
Net Investment Income	\$ 263,245	\$ 252,767	\$ 254,279
Contributions			
Employer – District's Contribution	727,702	539,954	1,225,049
Employer – Implicit Subsidy	71,179	76,161	90,445
Benefit Payments, Including Refunds of Employee Contributions	(198,454)	(234,954)	(243,049)
Implicit Rate Subsidy Fulfilled	(71,179)	(76,161)	(90,445)
Administrative Expense	(1,276)	(1,684)	(1,881)
Other	-	-	-
Net Change in Plan Fiduciary Net Position	791,217	556,083	1,234,398
Plan Fiduciary Net Position – Beginning of Year	<u>2,333,721</u>	<u>3,124,938</u>	<u>3,681,021</u>
<b>Plan Fiduciary Net Position – End of Year (b)</b>	<b><u>\$ 3,124,938</u></b>	<b><u>\$ 3,681,021</u></b>	<b><u>\$ 4,915,419</u></b>
<b><u>Net OPEB Liability</u></b>			
District's Net OPEB liability – End of Year = (a) – (b)	\$ 2,807,250	\$ 2,405,702	\$ 787,744
<b>Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability</b>			
	52.68%	60.48%	86.19%
<b>Covered-Employee Payroll</b>	\$ 2,599,322	\$ 2,670,803	\$ 2,598,338
<b>Percentage of Covered-Employee Payroll</b>	108.00%	90.07%	30.32%

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

# Accounting Information

## Schedule of Investment Returns

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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.

	<b>Measurement Date:</b>	<b>June 30, 2017</b>	<b>June 30, 2018</b>	<b>June 30, 2019</b>
	<b>Report Date:</b>	<b><u>June 30, 2017</u></b>	<b><u>June 30, 2018</u></b>	<b><u>June 30, 2019</u></b>
Annual Money-Weighted Rate of Return, Net of Investment Expense		10.13%	7.71%	6.10%

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:	2016-2017	2017-2018	2018-2019
	Reporting Period:	2016-2017	2017-2018	2018-2019
	Report Date:	June 30, 2017	June 30, 2018	June 30, 2019
Actuarially Determined Contribution (ADC)		\$ 760,836	\$ 465,770	\$ 437,135
Less: Contributions Made in Relation to the ADC	-	798,881	616,115	1,315,494
Contribution Deficiency (Excess)		(38,045)	(150,345)	(878,359)
Covered-Employee Payroll		\$ 2,599,322	\$ 2,670,803	\$ 2,598,338
Contributions as a Percentage of Covered-Employee		30.73%	23.07%	50.63%

### 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	6.50%, trending down to 4.73%
Rate of Return on Assets	7.59%
Mortality Rate	CalPERS Rates. See appendix.
Retirement Rates	CalPERS Rates. See appendix.

# Accounting Information

## Draft Notes to the Financial Statements

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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. Benefits vary by hire date. Benefits continue to the surviving spouses.

##### *Benefits Provided.*

Eligibility for retiree health benefits requires retirement from the District on or after age 50 with at least five years of CalPERS service. Eligible employees who were hired before March 1, 2005 receive 100% of medical premium. Spouse and dependent coverage is available. Eligible employees who were hired after March 1, 2005 receive a vested share of the medical premium. Vesting starts at 50% for 10 years of service and increase 5% per additional year of service to a maximum of 100% with 20 years of service. Retirees with 5-10 years of service receive the PEMHCA minimum.

##### *Employees covered by benefit terms.*

At June 30, 2019 (the census date), the benefit terms covered the following employees:

<b>Category</b>	<b>Count</b>
Active employees:	33
Inactive employees, spouses, or beneficiaries currently receiving benefit payments:	37
Inactive employees entitled to but not yet receiving benefit payment:	0
<b>Total</b>	<b>70</b>

##### *Contributions.*

The District makes contributions based on an actuarially determined rate.

# Accounting Information

## Draft Notes to the Financial Statements

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### 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: 7.59%

Healthcare cost trend rates: 6.50% in the first year, trending down to 4.73% over 57 years.

Mortality rates were based on CalPERS tables.

#### *Discount Rate.*

The discount rate used to measure the total OPEB liability is 7.59%. This is the expected long-term rate of return on District assets using investment Strategy 1 within the California Employers' Retiree Benefit Trust (CERBT). 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	\$ 6,086,723	\$ 3,681,021	\$ 2,405,702
Changes for the year:			
Service Cost	198,667		198,667
Interest	414,097		414,097
Differences Between Expected and Actual Experience	(148,226)		(148,226)
Changes of Assumptions	(514,604)		(514,604)
Contributions			
Employer – District’s Contribution		1,225,049	(1,225,049)
Employer – Implicit Subsidy		90,445	(90,445)
Employee		-	-
Net Investment Income		254,279	(254,279)
Benefit Payments, Including Refunds of Employee Contributions	(243,049)	(243,049)	-
Implicit Rate Subsidy Fulfilled	(90,445)	(90,445)	-
Administrative Expenses		(1,881)	1,881
Net Changes	(383,560)	1,234,398	(1,617,958)
<b>Balance as of Report Date June 30, 2019</b>	<b>\$ 5,703,163</b>	<b>\$ 4,915,419</b>	<b>\$ 787,744</b>

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 (6.59%) or one percentage point higher (8.59%) follows:

	<u>1% Decrease</u>	<u>Discount Rate</u>	<u>1% Increase</u>
	6.59%	7.59%	8.59%
<b>Net OPEB Liability (Asset)</b>	<b>\$ 1,474,032</b>	<b>\$ 787,744</b>	<b>\$ 215,350</b>

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 (5.50%) or one percentage point higher (7.50%) than current healthcare cost trend rates follows:

	<u>1% Decrease</u>	<u>Trend Rate</u>	<u>1% Increase</u>
	5.50% Decreasing to 3.73%	6.50% Decreasing to 4.73%	7.50% Decreasing to 5.73%
<b>Net OPEB Liability (Asset)</b>	<b>\$ 152,688</b>	<b>\$ 787,744</b>	<b>\$ 1,561,089</b>



# Accounting Information

## Draft Notes to the Financial Statements

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### 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 \$209,514. 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	\$ 5,084	\$ (130,787)
Changes of Assumptions	-	(569,694)
Net Difference Between Projected and Actual Earnings on OPEB Plan Investments	37,778	-
Contributions Subsequent to the Measurement Date	-	-
<b>Total</b>	<b>\$ 42,862</b>	<b>\$ (700,481)</b>

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	\$ (89,922)
2021	(89,922)
2022	(89,920)
2023	(86,266)
2024	(98,452)
Remaining	(203,137)

## Substantive Plan

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

Retiree Benefits				
Retiree Medical Benefit				
<b>Eligibility*</b>	Standard CalPERS (5 years of service and attained age 50).			
<b>Duration of Coverage</b>	Retiree's lifetime			
<b>Surviving Spouse Coverage</b>	Yes, as required by CalPERS			
<b>Medical Plan Choices</b>	Any eligible plan available via PEMHCA and administered by CalPERS			
	District pays 100% healthcare premiums for retirees subject to a monthly maximum (max). The maximum depends on tier selection, hire date, and years of service (YOS) as shown in the table below.			
<b>Benefit*</b>		Hire Period		
	<b>Tier</b>	Before 3/1/2005 Maximum (Fixed)	Between 3/1/2005 & 7/30/2017 Maximum*	After 7/30/2017 Maximum (Fixed)
	Employee	\$ 664	\$ 664	\$ 664
	Employee +1	1,329	1,329	1,329
	Family	1,729	1,729	1,729

\*This group is subject to additional vesting requirements. After ten years of service, the District shall pay 50% of the cap. For every year of service after ten years, the district shall pay an additional 5% per year toward the cap to a maximum of 100% of the cap after twenty years. For example, after ten years of service, the maximum payment would be \$332 for an employee-only plan. After fifteen years of service, the maximum payment would be \$498. After twenty years of service, maximum payment is \$664.

# Basis of Valuation

## Participant Summary

Census Date:

June 30, 2019

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	1	1									2
25-29	1	2									3
30-34	4		1								5
35-39	2	2	2	1							7
40-44	1			1	1						3
45-49	1	2		2	2						7
50-54			1		1		3				5
55-59							1				1
60-64											0
65-69											0
70+											0
<b>Total</b>	<b>10</b>	<b>7</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>33</b>

Average Employee Age: 40.5

Average Years of Service: 8.8

Inactive Participants					
Age	Retiree	Disabled Retiree	Spouse	Surviving Spouse	Total
< 50					0
50-54					0
55-59	4	1	5		10
60-64	2	1	3		6
65-69	2	3	4		9
70-74	2		1		3
75-79	3		3	1	7
80-84				1	1
85-89					0
90+				1	1
<b>Total</b>	<b>13</b>	<b>5</b>	<b>16</b>	<b>3</b>	<b>37</b>

Average Inactive Age: 66.4

# Basis of Valuation

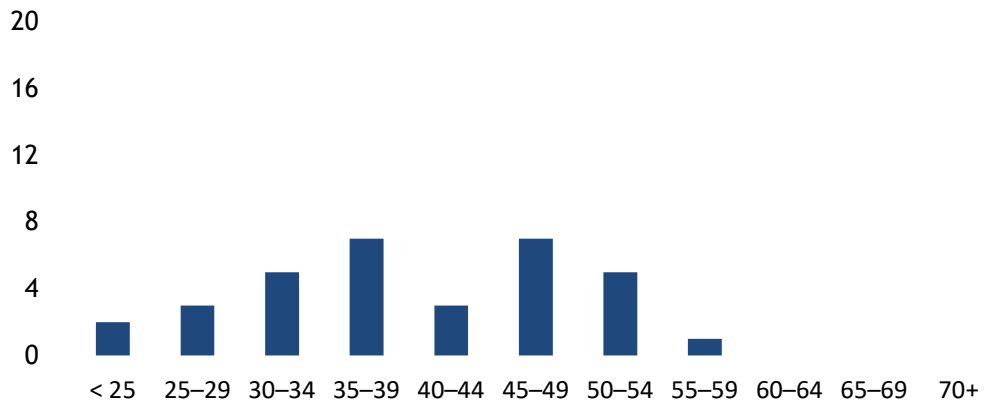
## Participant Summary Charts

Census Date: June 30, 2019

Age and service determined as of the census date.

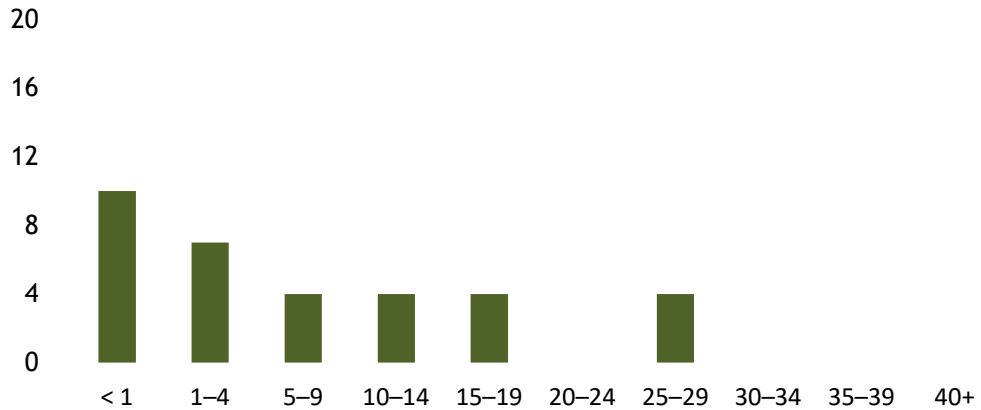
### Count of Actives by Age Bracket

Average Employee Age: 40.5



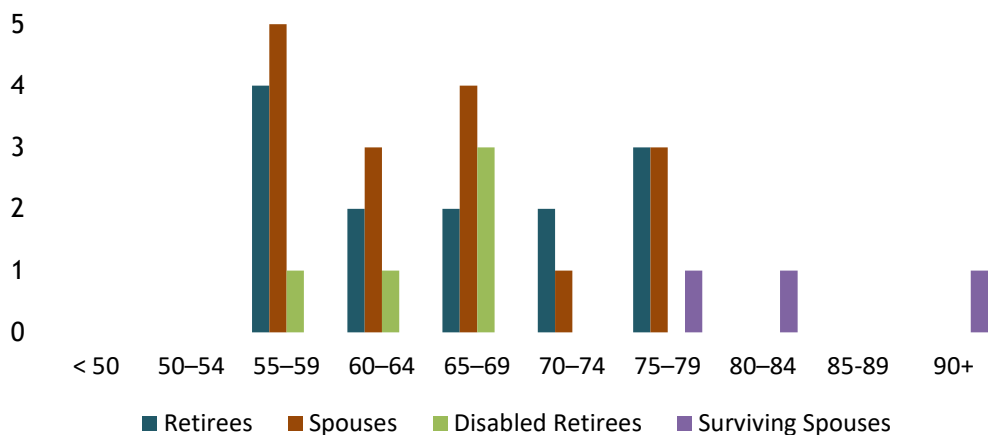
### Count of Actives by Years of Service

Average Years of Service: 8.8



### Count of Inactives by Age Bracket

Average Inactive Age: 66.4



# 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.

<b>Assumption</b>	<b>Rates</b>
<b>Actuarial Cost Method</b>	Entry Age Normal Level Percentage of Salary
<b>Measurement Date</b>	June 30, 2019
<b>Valuation Date</b>	June 30, 2019
<b>Report Date</b>	June 30, 2019
<b>Discount Rate</b>	The discount rate selected is 7.59%. 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.
<b>Mortality</b>	Same as CalPERS. See appendix.
<b>Termination Rates</b>	Same as CalPERS. See appendix. Also known as "turnover".
<b>Disability</b>	Same as CalPERS. See appendix.
<b>Retirement</b>	Same as CalPERS. See appendix.
<b>Average Per Capita Cost for Implicit Subsidy Calculation</b>	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	\$ 12,291	\$ 9,765
55	14,193	13,559
60-64	17,490	15,160

**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 District Contribution above the PEMHCA Minimum	95%
Eligible for the PEMHCA minimum only	75%

**Participant Contributions** Based on service at retirement and employee group.

**Benefit Cap Escalation Rate** 3.50% annually.

# Basis of Valuation

## Actuarial Assumptions

Assumption	Rates																																	
<b>Premiums</b>	<p>Elected Health Plans were used to develop Single-Average Premiums pursuant to the development of Age-Related Claims.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Plan</th> <th style="width: 25%;">Employee</th> <th style="width: 25%;">Employee +1</th> </tr> </thead> <tbody> <tr> <td>Pre-Medicare</td> <td style="text-align: right;">\$ 829.55</td> <td style="text-align: right;">\$ 1,659.10</td> </tr> <tr> <td>Medicare</td> <td style="text-align: right;">363.09</td> <td style="text-align: right;">899.94</td> </tr> </tbody> </table>	Plan	Employee	Employee +1	Pre-Medicare	\$ 829.55	\$ 1,659.10	Medicare	363.09	899.94																								
Plan	Employee	Employee +1																																
Pre-Medicare	\$ 829.55	\$ 1,659.10																																
Medicare	363.09	899.94																																
<b>Trend Rates</b>	<p>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.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 30%;">Year</th> <th style="width: 35%;">Pre-Medicare Trend</th> <th style="width: 35%;">Medicare Trend</th> </tr> </thead> <tbody> <tr><td>2019</td><td style="text-align: center;">6.50%</td><td style="text-align: center;">5.50%</td></tr> <tr><td>2020</td><td style="text-align: center;">6.10%</td><td style="text-align: center;">5.50%</td></tr> <tr><td>2021</td><td style="text-align: center;">5.70%</td><td style="text-align: center;">5.50%</td></tr> <tr><td>2022</td><td style="text-align: center;">5.50%</td><td style="text-align: center;">5.50%</td></tr> <tr><td>2023</td><td style="text-align: center;">5.45%</td><td style="text-align: center;">5.45%</td></tr> <tr><td>2024</td><td style="text-align: center;">5.39%</td><td style="text-align: center;">5.39%</td></tr> <tr><td>2025</td><td style="text-align: center;">5.34%</td><td style="text-align: center;">5.34%</td></tr> <tr><td>2026</td><td style="text-align: center;">5.29%</td><td style="text-align: center;">5.29%</td></tr> <tr><td>2026-2074</td><td style="text-align: center;">...</td><td style="text-align: center;">...</td></tr> <tr><td>2075+</td><td style="text-align: center;">4.73%</td><td style="text-align: center;">4.73%</td></tr> </tbody> </table>	Year	Pre-Medicare Trend	Medicare Trend	2019	6.50%	5.50%	2020	6.10%	5.50%	2021	5.70%	5.50%	2022	5.50%	5.50%	2023	5.45%	5.45%	2024	5.39%	5.39%	2025	5.34%	5.34%	2026	5.29%	5.29%	2026-2074	...	...	2075+	4.73%	4.73%
Year	Pre-Medicare Trend	Medicare Trend																																
2019	6.50%	5.50%																																
2020	6.10%	5.50%																																
2021	5.70%	5.50%																																
2022	5.50%	5.50%																																
2023	5.45%	5.45%																																
2024	5.39%	5.39%																																
2025	5.34%	5.34%																																
2026	5.29%	5.29%																																
2026-2074	...	...																																
2075+	4.73%	4.73%																																
<b>PEMHCA Administration Fee</b>	0.27% of retiree premium.																																	
<b>PEMHCA Amount</b>	\$1,650 for the period June 30, 2019 through June 30, 2020 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

<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>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.

### Key Terminology (continued)

<b>Discount Rate</b>	<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"><li>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.</li><li>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).</li></ul>
<b>Net OPEB Liability</b>	<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>
<b>Normal Cost</b>	<p>See <b>Service Cost</b>.</p>
<b>Other Postemployment Benefits (OPEB)</b>	<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>
<b>Projected Benefit Payments</b>	<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>
<b>Service Cost</b>	<p>The portions of the actuarial present value of projected benefit payments that are attributed to valuation years. Also called <b>Normal Cost</b>.</p>
<b>Substantive Plan</b>	<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

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

### **Mortality**

Miscellaneous Employees  
Safety Employees

### **Source Table**

Mort and Disb Rates\_Misc  
Mort and Disb Rates\_Fire

### **Disability Rates**

Miscellaneous Employees  
Safety Employees

Mort and Disb Rates\_Misc  
Mort and Disb Rates\_Fire

### **Terminated Vested Rates**

Miscellaneous Employees  
Safety Employees

Terminated Vested Rates\_Misc  
Terminated Vested Rates\_Fire

### **Salary Scale Rates**

Miscellaneous Employees  
Safety Employees

Salary Scale Rates\_PA Misc  
Salary Scale Rates\_PA\_Fire

### **Service Retirement Rates**

Miscellaneous Employees

- 2.0% at 62
- 2.7% at 55

Rx PA Misc 2% @ 62  
Rx PA Misc 2.7% @ 55

Safety Employees

- 2.0% at 50
- 2.7% at 57
- 3.0% at 55

Rx Safety Fire 2% @ 50  
Rx Safety Fire 2.7% @ 57  
Rx Safety Fire 3% @ 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	0.00016	0.00016	0.00003	0.00003	0.00003	0.00003	0.00000	0.00000	0.00000	0.00000
5	0.00000	0.00000	0.00000	0.00000	0.00016	0.00016	0.00003	0.00003	0.00003	0.00003	0.00000	0.00000	0.00000	0.00000
10	0.00000	0.00000	0.00000	0.00000	0.00016	0.00016	0.00003	0.00003	0.00003	0.00003	0.00000	0.00000	0.00000	0.00000
15	0.00016	0.00000	0.00003	0.00000	0.00016	0.00016	0.00003	0.00003	0.00003	0.00003	0.00017	0.00000	0.00010	0.00000
20	0.00022	0.00000	0.00007	0.00000	0.00022	0.00022	0.00004	0.00007	0.00007	0.00004	0.00017	0.00000	0.00010	0.00000
25	0.00029	0.00000	0.00011	0.00000	0.00029	0.00029	0.00006	0.00011	0.00011	0.00006	0.00017	0.00000	0.00010	0.00000
30	0.00038	0.00000	0.00016	0.00000	0.00038	0.00038	0.00007	0.00016	0.00016	0.00007	0.00019	0.00000	0.00024	0.00000
35	0.00049	0.00000	0.00027	0.00000	0.00049	0.00049	0.00009	0.00027	0.00027	0.00009	0.00039	0.00000	0.00071	0.00000
40	0.00064	0.00000	0.00037	0.00000	0.00064	0.00064	0.00010	0.00037	0.00037	0.00010	0.00102	0.00000	0.00135	0.00000
45	0.00080	0.00000	0.00054	0.00000	0.00080	0.00080	0.00012	0.00054	0.00054	0.00012	0.00151	0.00000	0.00188	0.00000
50	0.00116	0.00000	0.00079	0.00000	0.00372	0.01183	0.00372	0.00346	0.01083	0.00346	0.00158	0.00000	0.00199	0.00000
55	0.00172	0.00000	0.00120	0.00000	0.00437	0.01613	0.00437	0.00410	0.01178	0.00410	0.00158	0.00000	0.00149	0.00000
60	0.00255	0.00000	0.00166	0.00000	0.00671	0.02166	0.00671	0.00476	0.01404	0.00476	0.00153	0.00000	0.00105	0.00000
65	0.00363	0.00000	0.00233	0.00000	0.00928	0.02733	0.01113	0.00637	0.01757	0.00765	0.00128	0.00000	0.00088	0.00000
70	0.00623	0.00000	0.00388	0.00000	0.01339	0.03358	0.01607	0.00926	0.02184	0.01112	0.00102	0.00000	0.00084	0.00000
75	0.01057	0.00000	0.00623	0.00000	0.02316	0.04277	0.02779	0.01635	0.02969	0.01962	0.00102	0.00000	0.00088	0.00000
80	0.01659	0.00000	0.00939	0.00000	0.03977	0.06272	0.04773	0.03007	0.04641	0.03609	0.00102	0.00000	0.00088	0.00000
85	0.00000	0.00000	0.00000	0.00000	0.07122	0.09793	0.08547	0.05418	0.07847	0.06501	0.00000	0.00000	0.00000	0.00000
90	0.00000	0.00000	0.00000	0.00000	0.13044	0.14616	0.14348	0.10089	0.13220	0.11098	0.00000	0.00000	0.00000	0.00000
95	0.00000	0.00000	0.00000	0.00000	0.21658	0.21658	0.21658	0.17698	0.21015	0.17698	0.00000	0.00000	0.00000	0.00000
100	0.00000	0.00000	0.00000	0.00000	0.32222	0.32222	0.32222	0.28151	0.32226	0.28151	0.00000	0.00000	0.00000	0.00000
105	0.00000	0.00000	0.00000	0.00000	0.46691	0.46691	0.46691	0.43491	0.43491	0.43491	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 Mortality and Disability Rates

Public Agency Fire

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	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	0.00016	0.00016	0.00003	0.00003	0.00003	0.00003	0.00000	0.00000	0.00000	0.00000
5	0.00000	0.00000	0.00000	0.00000	0.00016	0.00016	0.00003	0.00003	0.00003	0.00003	0.00000	0.00000	0.00000	0.00000
10	0.00000	0.00000	0.00000	0.00000	0.00016	0.00016	0.00003	0.00003	0.00003	0.00003	0.00000	0.00000	0.00000	0.00000
15	0.00016	0.00003	0.00003	0.00003	0.00016	0.00016	0.00003	0.00003	0.00003	0.00003	0.00010	0.00002	0.00010	0.00002
20	0.00022	0.00004	0.00007	0.00004	0.00022	0.00022	0.00004	0.00007	0.00007	0.00004	0.00010	0.00005	0.00010	0.00005
25	0.00029	0.00006	0.00011	0.00006	0.00029	0.00029	0.00006	0.00011	0.00011	0.00006	0.00010	0.00019	0.00010	0.00019
30	0.00038	0.00007	0.00016	0.00007	0.00038	0.00038	0.00007	0.00016	0.00016	0.00007	0.00010	0.00056	0.00010	0.00056
35	0.00049	0.00009	0.00027	0.00009	0.00049	0.00049	0.00009	0.00027	0.00027	0.00009	0.00010	0.00119	0.00010	0.00119
40	0.00064	0.00010	0.00037	0.00010	0.00064	0.00064	0.00010	0.00037	0.00037	0.00010	0.00010	0.00225	0.00010	0.00225
45	0.00080	0.00012	0.00054	0.00012	0.00080	0.00080	0.00012	0.00054	0.00054	0.00012	0.00020	0.00398	0.00020	0.00398
50	0.00116	0.00013	0.00079	0.00013	0.00372	0.01183	0.00372	0.00346	0.01083	0.00346	0.00050	0.02079	0.00050	0.02079
55	0.00172	0.00015	0.00120	0.00015	0.00437	0.01613	0.00437	0.00410	0.01178	0.00410	0.00070	0.03066	0.00070	0.03066
60	0.00255	0.00016	0.00166	0.00016	0.00671	0.02166	0.00671	0.00476	0.01404	0.00476	0.00070	0.04375	0.00070	0.04375
65	0.00363	0.00018	0.00233	0.00018	0.00928	0.02733	0.01113	0.00637	0.01757	0.00765	0.00070	0.06069	0.00070	0.06069
70	0.00623	0.00019	0.00388	0.00019	0.01339	0.03358	0.01607	0.00926	0.02184	0.01112	0.00070	0.08221	0.00070	0.08221
75	0.01057	0.00021	0.00623	0.00021	0.02316	0.04277	0.02779	0.01635	0.02969	0.01962	0.00070	0.10910	0.00070	0.10910
80	0.01659	0.00022	0.00939	0.00022	0.03977	0.06272	0.04773	0.03007	0.04641	0.03609	0.00070	0.14219	0.00070	0.14219
85	0.00000	0.00000	0.00000	0.00000	0.07122	0.09793	0.08547	0.05418	0.07847	0.06501	0.00000	0.00000	0.00000	0.00000
90	0.00000	0.00000	0.00000	0.00000	0.13044	0.14616	0.14348	0.10089	0.13220	0.11098	0.00000	0.00000	0.00000	0.00000
95	0.00000	0.00000	0.00000	0.00000	0.21658	0.21658	0.21658	0.17698	0.21015	0.17698	0.00000	0.00000	0.00000	0.00000
100	0.00000	0.00000	0.00000	0.00000	0.32222	0.32222	0.32222	0.28151	0.32226	0.28151	0.00000	0.00000	0.00000	0.00000
105	0.00000	0.00000	0.00000	0.00000	0.46691	0.46691	0.46691	0.43491	0.43491	0.43491	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 Vested Rates										
		Public Agency Miscellaneous										
Entry Ages		15	20	25	30	35	40	45	50	55	59	
Service		0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	5	0.04220	0.04220	0.04220	0.03930	0.03640	0.03440	0.03250	0.02710	0.02180	0.02180	
	10	0.02780	0.02780	0.02780	0.02710	0.02630	0.02150	0.01670	0.01590	0.01500	0.01500	
	15	0.01920	0.01920	0.01920	0.01740	0.01560	0.01200	0.00850	0.00430	0.00000	0.00000	
	20	0.01390	0.01390	0.01390	0.01090	0.00790	0.00470	0.00140	0.00070	0.00000	0.00000	
	25	0.00830	0.00830	0.00830	0.00480	0.00140	0.00070	0.00000	0.00000	0.00000	0.00000	
	30	0.00150	0.00150	0.00150	0.00070	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	

		Sample Terminated Vested Rates										
		Public Agency Fire										
Entry Ages		15	20	25	30	35	40	45	50	55	59	
Service		0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	5	0.00940	0.00940	0.00940	0.00940	0.00940	0.00940	0.00940	0.00940	0.00940	0.00940	0.00940
	10	0.00640	0.00640	0.00640	0.00640	0.00640	0.00640	0.00640	0.00640	0.00640	0.00640	0.00640
	15	0.00480	0.00480	0.00480	0.00480	0.00480	0.00480	0.00480	0.00480	0.00480	0.00480	0.00480
	20	0.00380	0.00380	0.00380	0.00380	0.00380	0.00380	0.00380	0.00380	0.00380	0.00380	0.00380
	25	0.00260	0.00260	0.00260	0.00260	0.00260	0.00260	0.00260	0.00260	0.00260	0.00260	0.00260
	30	0.00140	0.00140	0.00140	0.00140	0.00140	0.00140	0.00140	0.00140	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	0.00000
	40	0.00000	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	0.00000
	50	0.00000	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	0.0850	0.0850	0.0850	0.0775	0.0700	0.0650	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600
5	0.0340	0.0340	0.0340	0.0295	0.0250	0.0215	0.0180	0.0180	0.0180	0.0180	0.0180	0.0180	0.0180	0.0180
10	0.0160	0.0160	0.0160	0.0135	0.0110	0.0090	0.0070	0.0070	0.0070	0.0070	0.0070	0.0070	0.0070	0.0070
15	0.0120	0.0120	0.0120	0.0100	0.0080	0.0060	0.0040	0.0040	0.0040	0.0040	0.0040	0.0040	0.0040	0.0040
20	0.0090	0.0090	0.0090	0.0075	0.0060	0.0045	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030
25	0.0080	0.0080	0.0080	0.0065	0.0050	0.0040	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030
30	0.0080	0.0080	0.0080	0.0065	0.0050	0.0040	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030
35	0.0080	0.0080	0.0080	0.0065	0.0050	0.0040	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030
40	0.0080	0.0080	0.0080	0.0065	0.0050	0.0040	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030
45	0.0080	0.0080	0.0080	0.0065	0.0050	0.0040	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030
50	0.0080	0.0080	0.0080	0.0065	0.0050	0.0040	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030

Service	Entry Ages											Public Agency Fire		
	15	20	25	30	35	40	45	50	55	60	65	70	75	79
0	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
5	0.0372	0.0372	0.0372	0.0372	0.0372	0.0372	0.0372	0.0372	0.0372	0.0372	0.0372	0.0372	0.0372	0.0372
10	0.0165	0.0165	0.0165	0.0165	0.0165	0.0165	0.0165	0.0165	0.0165	0.0165	0.0165	0.0165	0.0165	0.0165
15	0.0144	0.0144	0.0144	0.0144	0.0144	0.0144	0.0144	0.0144	0.0144	0.0144	0.0144	0.0144	0.0144	0.0144
20	0.0127	0.0127	0.0127	0.0127	0.0127	0.0127	0.0127	0.0127	0.0127	0.0127	0.0127	0.0127	0.0127	0.0127
25	0.0111	0.0111	0.0111	0.0111	0.0111	0.0111	0.0111	0.0111	0.0111	0.0111	0.0111	0.0111	0.0111	0.0111
30	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097
35	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097
40	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097
45	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097
50	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097



# Appendix

## Matrix of Sample Service Retirement Assumption Rates

Attained Ages		Public Agency Miscellaneous 2.7% @ 55					
Service	50	55	60	65	70	75	79
0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0030	0.0330	0.0600	0.1400	0.1500	1.0000	1.0000
10	0.0100	0.0550	0.0860	0.1740	0.1810	1.0000	1.0000
15	0.0160	0.0780	0.1120	0.2080	0.2120	1.0000	1.0000
20	0.0340	0.1130	0.1500	0.2540	0.2430	1.0000	1.0000
25	0.0330	0.1560	0.1820	0.3060	0.2910	1.0000	1.0000
30	0.0450	0.2340	0.2380	0.3890	0.3500	1.0000	1.0000
35	0.1200	0.3610	0.3020	0.4220	0.3900	1.0000	1.0000
40	0.0000	0.4250	0.3300	0.4220	0.4000	1.0000	1.0000
45	0.0000	0.0000	0.3300	0.4220	0.4000	1.0000	1.0000
50	0.0000	0.0000	0.0000	0.4220	0.4000	1.0000	1.0000

Attained Ages		Public Agency Miscellaneous 2% @ 62					
Service	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

# Appendix

## Matrix of Sample Service Retirement Assumption Rates

Attained Ages		Public Agency Safety 2% @ 50					
Service	50	55	60	65	70	75	79
0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0090	0.0890	0.1000	1.0000	1.0000	1.0000	1.0000
10	0.0090	0.0890	0.1000	1.0000	1.0000	1.0000	1.0000
15	0.0090	0.0890	0.1000	1.0000	1.0000	1.0000	1.0000
20	0.0090	0.0890	0.1000	1.0000	1.0000	1.0000	1.0000
25	0.0130	0.1360	0.1540	1.0000	1.0000	1.0000	1.0000
30	0.0200	0.2040	0.2300	1.0000	1.0000	1.0000	1.0000
35	0.0220	0.2300	0.2600	1.0000	1.0000	1.0000	1.0000
40	0.0000	0.2360	0.2670	1.0000	1.0000	1.0000	1.0000
45	0.0000	0.0000	0.2670	1.0000	1.0000	1.0000	1.0000
50	0.0000	0.0000	0.0000	1.0000	1.0000	1.0000	1.0000

Attained Ages		Public Agency Safety 2.7% @ 57					
Service	50	55	60	65	70	75	79
0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0065	0.0825	0.1135	1.0000	1.0000	1.0000	1.0000
10	0.0065	0.0825	0.1135	1.0000	1.0000	1.0000	1.0000
15	0.0065	0.0825	0.1135	1.0000	1.0000	1.0000	1.0000
20	0.0065	0.0825	0.1135	1.0000	1.0000	1.0000	1.0000
25	0.0101	0.1269	0.1747	1.0000	1.0000	1.0000	1.0000
30	0.0151	0.1900	0.2615	1.0000	1.0000	1.0000	1.0000
35	0.0170	0.2143	0.2950	1.0000	1.0000	1.0000	1.0000
40	0.0000	0.2200	0.3029	1.0000	1.0000	1.0000	1.0000
45	0.0000	0.0000	0.3029	1.0000	1.0000	1.0000	1.0000
50	0.0000	0.0000	0.0000	1.0000	1.0000	1.0000	1.0000

Attained Ages		Public Agency Safety 3% @ 55					
Service	50	55	60	65	70	75	79
0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0010	0.0730	0.1050	1.0000	1.0000	1.0000	1.0000
10	0.0010	0.0730	0.1050	1.0000	1.0000	1.0000	1.0000
15	0.0010	0.0730	0.1050	1.0000	1.0000	1.0000	1.0000
20	0.0060	0.1090	0.1550	1.0000	1.0000	1.0000	1.0000
25	0.0160	0.1790	0.2510	1.0000	1.0000	1.0000	1.0000
30	0.0690	0.2590	0.3440	1.0000	1.0000	1.0000	1.0000
35	0.0690	0.2590	0.3440	1.0000	1.0000	1.0000	1.0000
40	0.0000	0.2590	0.3440	1.0000	1.0000	1.0000	1.0000
45	0.0000	0.0000	0.3440	1.0000	1.0000	1.0000	1.0000
50	0.0000	0.0000	0.0000	1.0000	1.0000	1.0000	1.0000