## **Tiburon Fire Protection District**

GASB 75 OPEB Valuation Report Measured as of June 30, 2021 for Disclosures for the Fiscal Year Ending June 30, 2021

September 7, 2021





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September 7, 2021

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

Re: Tiburon Fire Protection District Retiree Health Benefits Plan GASB 75 OPEB Valuation Report Measured as of June 30, 2021

Dear Ms. Rosevear:

At your request, we completed an actuarial valuation of the retiree health and welfare benefits valued as of June 30, 2021, and measured as of June 30, 2021, for the Tiburon Fire Protection District. This is a full valuation. Please use the information in this report for your financial statements for the fiscal year ending June 30, 2021. 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,

Roger T. Burton, FSA, MAAA, FCA



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### **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, as amended by GASB Statement No. 85. This report includes information with respect to the obligation to provide future retiree health and welfare benefits for the fiscal year ending June 30, 2021.

Valuation Date: June 30, 2021
Measurement Date: June 30, 2021
Report Date: June 30, 2021

#### Application to Financials

This report provides assets, liabilities, and expenses for use in the District's 2021 financial reports.

The District should use the liabilities, assets, and expense measured as of June 30, 2021, for its financial statements for the year ending June 30, 2021.

The report also provides the actuarially determined contributions (ADCs) for funding purposes for reporting for the fiscal years ending June 30 for 2021, 2022, and 2023. The ADC for the fiscal year ending June 30, 2023 is an estimate and we recommend that the District have a roll-forward report produced for the fiscal year ending June 30, 2022, that updates this estimate.

#### **Changes Since the Prior Valuation**

This valuation is a full valuation. We updated:

- Census
- Premiums
- Healthcare trends
- Discount rate from 7.67% to 6.51%
- 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.

#### 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 undersigneds are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Roger T. Burton, FSA, MAAA, FCA

Chief Actuary

Christian M. Boughner, ASA, MAAA

Mistion Doughun

Senior Consulting Actuary

## **Executive Summary**

### **Accounting Summary**

A summary of the key valuation results follows.		Prior Report		Current Report	
Valuation Date:			June 30, 2019		June 30, 2021
Measurement Date:			June 30, 2020		June 30, 2021
Report Date:			June 30, 2020		June 30, 2021
Present Value of Future Benefits					
Active Employees		\$	5,289,501	\$	5,449,045
Retirees	+		3,329,575	_	3,888,576
Total Present Value of Future Benefits	=		8,619,076		9,337,621
Total Present Value of Future Normal Costs	-		2,605,792		3,226,554
Total OPEB Liability (TOL)	=	\$	6,013,284	\$	6,111,067
OPEB Liability					
Active Employees		\$	2,683,709	\$	2,222,491
Retirees	+		3,329,575		3,888,576
Total OPEB Liability (TOL)	=		6,013,284		6,111,067
Fiduciary Net Position (FNP)	_		5,245,278		6,480,288
Net OPEB Liability (NOL)	=	\$	768,006	\$	(369,221)
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability			87.23%		106.04%
Covered-Employee Payroll		\$	2,669,792	\$	3,283,105
Net OPEB Liability as a Percentage of Covered-Employee Payrol	ll		28.77%		-11.25%
Measurement Period:			2019-2020		2020-2021
Reporting Period:			2019-2020		2020-2021
Expense		\$	•	\$	45,017
Actuarially Determined Contribution (ADC)*		-	385,366	-	340,564

### Net Position Chart (NOL not shown if zero or negative)





\*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.

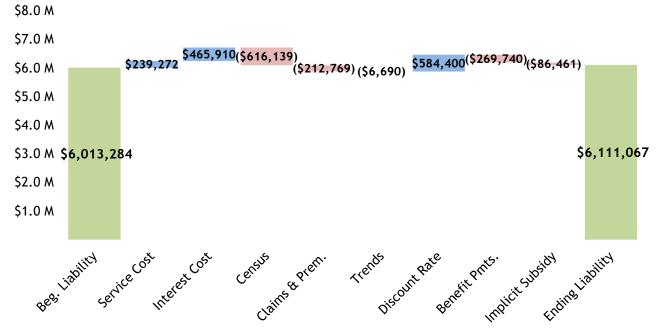
### **Executive Summary**

### 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.

Total OPEB Liability as of Measurement Date June 30, 2020 /	
Report Date June 30, 2020	\$ 6,013,284
Service Cost	239,272
Interest Cost	465,910
Differences Between Expected and Actual Experience	
Change in Census	(616, 139)
Change in Claims and Premiums	(212, 769)
Total Differences Between Expected and Actual Experience	 (828,908)
Changes of Assumptions	
Change in Healthcare Trends	(6,690)
Change in Discount Rate from 7.67% to 6.51%	584,400
Total Changes of Assumptions	577,710
Benefit Payments	(269,740)
Implicit Subsidy Credit	(86,461)
Total OPEB Liability as of Measurement Date June 30, 2021 /	
Report Date June 30, 2021	\$ 6,111,067

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



## **Statement of Fiduciary Net Position**

Measurement D	ate:	June 30, 2021
Report D	ate:	June 30, 2021
Assets		
Cash and Deposits	\$	-
Securities Lending Cash Collateral	_	<u> </u>
Total Cash		-
Receivables:		
Contributions		-
Due from Broker for Investments Sold		-
Investment Income (Interest on Investments)		-
Other	_	<u> </u>
Total Receivables		-
Investments:		
Domestic Fixed Income Securities		-
Domestic Equities		-
Investment Funds		6,480,288
International Equities		-
Real Estate	_	
Total Investments	_	6,480,288
Total Assets	<u>\$</u>	6,480,288
Liabilities		
Payables:		
Investment Management Fees	\$	-
Due to Broker for Investments Purchased		-
Collateral Payable for Securities Lending		-
Other	_	<u> </u>
Total Liabilities	\$	-
Net Position Restricted for Postemployment Benefits Other than Pensions	\$	6,480,288

# Statement of Changes to the Fiduciary Net Position

Measurement Date: Report Date:		Prior Report June 30, 2020 June 30, 2020	Current Report June 30, 2021 June 30, 2021
Additions		<u> </u>	<u> </u>
Investment Income:			
Net Appreciation in the Fair Value of Investments	\$	174,121	\$ 1,240,068
Interest and Dividends		-	-
Less Investment Expense, Other than from Securities Lending -		1,800	 2,136
Net Income from Investing, Other than from Securities			
Lending		172,321	1,237,932
Securities Lending Income		-	-
Less Securities Lending Expense –		<del>-</del>	 <u>-</u>
Net Income from Securities Lending		<u>-</u>	 <u>-</u>
Other Income/(Expense)		<u>-</u>	 <u>-</u>
Net Investment Income (a)		172,321	 1,237,932
Contributions:			
Employer — District's Contribution		399,848	269,740
Employer — Implicit Subsidy		81,131	 86,461
Total Contributions (b)		480,979	 356,201
Total Additions (c) = (a) + (b)		653,300	1,594,133
Deductions			
Benefit Payments		239,848	269,740
Implicit Subsidy Credit		81,131	86,461
Administrative Expense		2,462	2,922
Total Deductions (d)		323,441	359,123
Net Increase in Net Position = (c) - (d)		329,859	1,235,010
Net Position Restricted for Postemployment Benefits Other than	n Pen	sions	
Beginning of Year		4,915,419	5,245,278
Net Increase in Net Position		329,859	 1,235,010
End of Year	\$	5,245,278	\$ 6,480,288

## 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	I	Plan Fiduciary Net Position		Net OPEB Liability	
		(a)		(b)		(c) = (a) - (b)	
Balance as of: Measurement Date June 30, 2020 / Report Date June 30, 2020	<u>\$</u>	6,013,284	\$	5,245,278	\$	768,006	
Changes for the year:							
Service Cost		239,272				239,272	
Interest		465,910				465,910	
Changes of Benefit Terms		-				-	
Differences Between Expected and Actual Experience		(828,908)				(828,908)	
Changes of Assumptions		577,710				577,710	
Net Investment Income				1,237,932		(1,237,932)	
Contributions							
Employer — District's Contribution				269,740		(269,740)	
Employer — Implicit Subsidy				86,461		(86,461)	
Benefit Payments		(269,740)		(269,740)		-	
Implicit Subsidy Credit		(86,461)		(86,461)		-	
Administrative Expense				(2,922)		2,922	
Other Changes		-		-			
Net Changes		97,783		1,235,010	_	(1,137,227)	
Balance as of:							
Measurement Date June 30, 2021 /							
Report Date June 30, 2021	\$	6,111,067	\$	6,480,288	\$	(369,221)	

### **Development of Deferred Outflows and Inflows of Resources**

Balances as of Measurement Date June 30, 2021 / Report Date June 30, 2021

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

Measurement			A	Amounts Recognized in Expense Through	De	ferred Outflows of	eferred Inflows of
Date —	<b>Experience Losses</b>	<b>Experience Gains</b>		Measurement Date June 30, 2021		Resources	Resources
June 30:	(a)	(b)		(c)		(a) - (c)	(b) - (c)
2017	\$ -	\$ -	\$	-	\$	-	\$ -
2018	6,968	-		3,768		3,200	-
2019	-	(148,226)		(52,317)		-	(95,909)
2020	8,680	-		2,044		6,636	-
2021	-	(828,908)		(106,271)		-	(722,637)
Total					\$	9,836	\$ (818,546)

### Deferred Outflows and Inflows of Resources Arising from Changes in Assumptions

Measurement Date –	Increase in Total Liability	Decrease in Total Liability	Amo	ounts Recognized in Expense Through Measurement Date June 30, 2021	De	eferred Outflows of Resources	[	Deferred Inflows of Resources
June 30:	(a)	(b)		(c)		(a) - (c)		(b) - (c)
2017	\$ -	\$ -	\$	-	\$	-	\$	-
2018	-	(158,458)		(85,656)		-		(72,802)
2019	-	(514,604)		(181,626)		-		(332,978)
2020	-	(59,955)		(14,108)		-		(45,847)
2021	577,710	-		74,066		503,644		-
Total					\$	503,644	\$	(451,627)

### **Development of Deferred Outflows and Inflows of Resources**

Balances as of Measurement Date June 30, 2021 / Report Date June 30, 2021

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

				1	Amounts Recognized				
			<b>Investment Earnings</b>		in Expense Through				
Measurement	Investment Earning	S	<b>Greater Than</b>		Measurement Date	[	Deferred Outflows of	Deferred Inflows of	
Date —	Less Than Projecte	d	Projected		June 30, 2021		Resources	Resources	Net
June 30:	(6	ι)	(b)		(c)		(d) = (a) - (c)	(e) = (b) - (c)	(f) = (d) + (e)
2017	\$	. \$	-	\$	-	\$	-	\$ -	
2018			(18,278)		(14,624)		-	(3,654)	
2019	60,930	)	-		36,558		24,372	-	
2020	204,938	}	-		81,976		122,962	-	
2021			(827,522)		(165,505)		-	(662,017)	
Total						\$	147,334	\$ (665,671) \$	(518,337)

## **Expense and Deferred Outflows and Inflows**

Ме	asurement Period: Reporting Period:	2020-2021 2020-2021
Expense		
Service Cost		\$ 239,272
Interest on Total OPEB Liability		465,910
Changes of Benefit Terms		-
Recognized Differences Between Expected and Actual Experience		(121,746)
Recognized Changes of Assumptions		(14,944)
Projected Earnings on OPEB Plan Investments		(410,410)
Recognized Differences Between Projected and Actual Earnings		(115,987)
Administrative Expense		2,922
Other Miscellaneous (Income)/Expense		<u>-</u>
Total Expense		\$ 45,017

Deferred Outflows and Inflows of Resources	Report Year Ending June 30, 2021							
	Defe	rred Outflows of		Deferred Inflows of				
		Resources		Resources				
Differences Between Expected and Actual Experience	\$	9,836	\$	(818,546)				
Changes of Assumptions		503,644		(451,627)				
Net Difference Between Projected and Actual Earnings on								
Plan Investments		-		(518,337)				
Contributions Subsequent to the Measurement Date				-				
Total	\$	513,480	\$	(1,788,510)				

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

Report Y	ear Ending June 30:	Amount
	2022	\$ (252,675)
	2023	(249,021)
	2024	(261,209)
	2025	(289,906)
	2026	(116,218)
	Remaining	(106,001)

## Impact on the Statement of Net Position

### **Impact on the Statement of Net Position**

Measurement Date: Report Date:	June 30, 2020 June 30, 2020	 June 30, 2021 June 30, 2021	 Change During Period
Total OPEB Liability	\$ 6,013,284	\$ 6,111,067	\$ 97,783
Fiduciary Net Position	5,245,278	6,480,288	1,235,010
Net OPEB Liability / (Asset)	768,006	(369,221)	\$ (1,137,227)
Deferred (Outflows) / Inflows Due To:			
Differences between Expected and Actual			
Experience	101,548	808,710	707,162
Changes of Assumptions	540,637	(52,017)	(592,654)
Differences between Projected and Actual			
Investment Earnings	(193,198)	518,337	711,535
(Contributions Subsequent to the Measurement			
Date)	-	-	-
Net Deferred (Outlfows) / Inflows	448,987	1,275,030	826,043
Impact on the Statement of Net Position	1,216,993	905,809	(311,184)

### Change in Net Position During Fiscal Year

Measurement Date:	June 30, 2021
Report Date:	June 30, 2021
Impact on the Statement of Net Position, Fiscal Year	
Ending June 30, 2020	1,216,993
OPEB Expense / (Income)	45,017
(Employer Contributions During Fiscal Year)	(356,201)
Impact on the Statement of Net Position for the	_
Fiscal Year Ending June 30, 2021	905,809

### **OPEB Expense**

Measurement Date:	June 30, 2021
Report Date:	June 30, 2021
Deterioration / (Improvement) in Net Position	(311,184)
Employer Contributions During the Fiscal Year	356,201
OPEB Expense / (Income) for the Fiscal Year	_
Ending June 30, 2021	45,017

### **Reconciliation of Expense**

				Net Investment					No	et OPEB	
	Total OPEB	Plan Fiduciary	Net OPEB		Deferred	Deferred Outflows	(Inflows)/	Net Defermele		lity plus	Annual
Balance as of:	Liability	Net Position	Liability		(Inflows)	Outriows	Outflows	Net Deferrals	Net L	eferrals	Expense
Measurement Date June 30, 2020 /											
Report Date June 30, 2020	\$ (6,013,284)	\$ 5,245,278 \$	(768,006)	\$	(653,985) \$	11,800 \$	193,198 \$	(448,987)	\$ (1,2	216,993)	
Service Cost	(239,272)		(239,272)								\$ 239,272
Interest on Total OPEB Liability	(465,910)		(465,910)								465,910
Effect of Changes of Benefit Terms	-		-								-
Effect of Liability Gains or Losses	828,908		828,908		(828,908)	-		(828,908)			
Effect of Assumption Changes or Inputs	(577,710)		(577,710)		-	577,710		577,710			
Expected Investment Income (Net of Investment											
Expenses)		410,410	410,410								(410,410)
Investment Gains or Losses on Expected Return		827,522	827,522				(827,522)	(827,522)			
Contributions											
Employer — District's Contribution		269,740	269,740						:	269,740	
Employer — Implicit Subsidy		86,461	86,461							86,461	
Benefit Payments	269,740	(269,740)	-								
Implicit Subsidy Credit	86,461	(86,461)	-								
Administrative Expenses		(2,922)	(2,922)								2,922
Other Income/(Expense)		-	-								-
Recognition of Liability Gains or Losses					123,710	(1,964)		121,746			(121,746)
Recognition of Assumption Changes or Inputs					89,010	(74,066)		14,944			(14,944)
Recognition of Investment Gains or Losses							115,987	115,987			(115,987)
Contributions Subsequent to the Measurement Date						-		-		-	
Annual Expense										(45,017)	\$ 45,017
Balance as of:											
Measurement Date June 30, 2021 / Report Date June 30, 2021		÷	240.224	,	(4.270.473) ¢	513,480 \$	(518,337) \$	(1,275,030)	\$ (9	905,809)	
report vate June 30, 2021	\$ (6,111,067)	\$ 6,480,288 \$	369,221	\$	(1,270,173) \$	J13,40U \$	(10,337) \$	(1,273,030)	٠ (:	703,007)	

## **Sample Journal Entries**

### Suggested Journal Entries for the Report Year ending June 30, 2021

Beginning Balance		 Debit (Outflow)	 Credit (Inflow)
Net OPEB Liability/Asset		\$ -	\$ 768,006
Differences between Expected and Actual			
Experience		11,800	113,348
Changes of Assumptions		-	540,637
Differences between Projected and Actual Investment Earnings		193,198	_
Contributions Subsequent to the		173,170	_
Measurement Date		-	-
Impact on Statement of Net Position		-	1,216,993
Ending Balance		 Debit (Outflow)	 Credit (Inflow)
Net OPEB Liability/Asset		\$ 369,221	\$ -
Differences between Expected and Actual			
Experience		9,836	818,546
Changes of Assumptions		503,644	451,627
Differences between Projected and Actual Investment Earnings			518,337
Contributions Subsequent to the		-	310,337
Measurement Date		-	-
Impact on Statement of Net Position		-	905,809
OPEB-Expense Journal Entries		Debit	Credit
Net OPEB Liability/Asset		\$ 398,785	\$ -
Differences between Expected and Actual	<b>Deferred Outflows</b>	-	1,964
Experience	Deferred Inflows	-	705,198
Changes of Assumptions	Deferred Outflows	503,644	-
	Deferred Inflows	89,010	-
Differences between Projected and Actual	Deferred Outflows Deferred Inflows	-	193,198
Investment Earnings Contributions Subsequent to the	Deferred lintows	-	518,337
Measurement Date	Deferred Outflows	_	-
Change in Net OPEB Liability/Asset from			
Contributions		-	-
OPEB Expense/Credit		 427,258	 <u>-</u>
Total		 1,418,697	 1,418,697
Change to the Impact on the Statement of			
Net Position		311,184	-

### Sample Journal Entries

### Suggested Journal Entries for the Report Year ending June 30, 2021

Journal Entries — Deferred Outflows	Debit	Credit
Net OPEB Liability/Asset	\$ -	\$ -
Contributions Subsequent to the Measurement Date: Fiscal Year 2019-2020	-	-
Contributions Subsequent to the Measurement Date: Fiscal Year 2020-2021	-	-
Contributions Expense	-	-
Journal Entries — Benefits Paid Outside of the Trust <sup>1</sup>	Debit	Credit
OPEB Expense	\$ 269,740	\$ -
Employer Contributions for Retiree Benefits During the Fiscal Year	-	269,740
Journal Entries — Implicit Subsidy <sup>2</sup>	 Debit	Credit
OPEB Expense	\$ 86,461	\$ -
Premium Expense During the Fiscal Year	-	86,461

<sup>&</sup>lt;sup>1</sup> The entries here assume that when cash is used to pay benefits, that the trust does not reimburse, an account called "Employer Contributions for Retiree Benefits During the Fiscal Year" was debited (increased). These entries reassign the benefit payments to the OPEB Expense. If the OPEB Expense account was originally debited, then these entries are unnecessary.

<sup>&</sup>lt;sup>2</sup> These entries assume that when premiums are paid for active employees, an account called "Premium Expense During the Fiscal Year" is debited (increased). This entry reverses the portion of the premium payments that represent implicit subsidies, recorded as a retiree liability, and assigns that value to the OPEB Expense.

### Amortization of the Net OPEB Liability

A summary of the information used to establish the amortization amount for the current year and the followivg year, with respect to the Net OPEB Liability, follows. We recalculate the amortization each fiscal year. If the Net OPEB Liability is negative, it is an asset and it is not amortized.

The District is amortizing the Net OPEB Liability using a level-percent-of-pay method on a closed basis. Remaining years of amortization as of the report date of June 30, 2021:

12

				Estimated
	Measurement Period:	2021-2022	2022-2023	2023-2024
	Report Date (June 30):	2021	2022	2023
Total OPEB Liability		\$ 6,111,067	\$ 6,431,528	\$ 6,763,784
Fiduciary Net Position	_	 6,480,288	 6,760,819	 6,982,832
Net OPEB Liability	=	\$ (369,221)	\$ (329,291)	\$ (219,048)

All values measured at the beginning of the measurement period.

Amortization Type	Closed	Closed	Closed
Interest Rate Used to Determine Amortization			
Payment	6.51%	6.51%	6.51%
Assumed Rate of Payroll Growth	2.750%	2.750%	2.750%
Amortization Period	12 years	11 years	10 years
Amount Recognized, Beginning of Year	\$ - \$	- \$	-

It is the policy of the District not to allow negative amortizations.

### **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.

				Estimated
Measurement Period	1:	2021-2022	2022-2023	2023-2024
Report Date (June 30	):	2022	2023	2024
Service Cost	\$	256,632	\$ 263,689	\$ 270,940
Amortization of the Net OPEB Liability		-	-	-
Interest to the End of the Year		16,707	17,166	17,638
Service Cost and Amortization (with Interest)	\$	273,339	\$ 280,855	\$ 288,578
Service Cost and Amortization (with Interest) as a				
Percentage of Payroll		7.82%	7.82%	7.82%
Discount Rate for ADC Calculation		6.51%	6.51%	6.51%
ADC Components				
District's Contribution to the Trust Fund	\$	-	\$ -	\$ -
Credit for Retiree Benefit Payments Outside of the Trust		253,405	260,867	272,589
Credit for Implicit Subsidy		86,248	 94,846	 104,645
Total ADC	\$	339,653	\$ 355,713	\$ 377,234
ADC as a Percentage of Payroll		9.72%	9.90%	10.22%

#### **District's Funding Policy**

The District's funding policy is to contribute 100% of the sum of the service cost and amortization (both with interest) each year until the plan is fully funded, and then contribute the greater of the service cost or the total of the benefit payments and the implicit subsidy.

The ADC is the sum of the service cost and the amortization of the net OPEB liability, plus interest to the end of the year. For payment of the ADC, however, it comprises three parts: the benefit payments paid directly by the District and not reimbursed through the Trust Fund, the credit for the implicit subsidy, and the contribution to the Trust Fund. If the total of the service cost and amortization is less than the total of the benefit payments and implicit subsidy, the contribution to the trust fund will be negative and is typically set to zero.

Because actual benefit payments (paid outside of the trust) rarely match the expected benefit payments used to determine the ADC Funding Goal, the District may adjust their contribution at the end of the year such that the total contributed to the Trust Fund, plus the actual benefit payments and the credit for the implicit subsidy, equals the ADC Funding Goal. If not, the difference between expected and actual benefit payments will be recorded as a contribution deficiency or excess.

## Interest on Liability and Earnings and Investment Gain/Loss

For the report year ending June 30, 2021

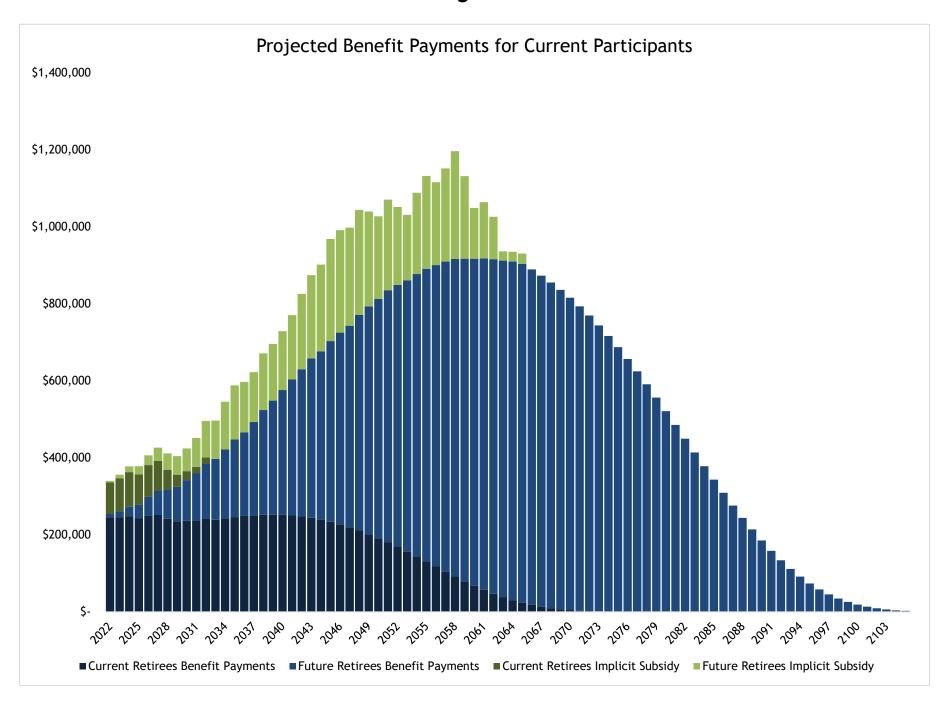
Interest on Total OPEB Liability		Amount for Period (a)	Portion of Period (b)	Interest Rate (c)		terest on the Total  OPEB Liability  (d) = (a) × (b) × (c)
Beginning Total OPEB Liability	\$	6,013,284	100%	7.67%	\$	461,219
Service Cost		239,272	100%	7.67%		18,352
Benefit Payments		(269,740)	50%	7.67%		(10,345)
Implicit Subsidy		(86,461)	50%	7.67%	_	(3,316)
Total Interest on Total OPEB Liabil	lity				<u>\$</u>	465,910
		Amount for	Portion of	Projected Rate		
Projected Earnings on Plan		Period	Period	of Return		Projected Earnings
Investments		(a)	(b)	(c)		$(d) = (a) \times (b) \times (c)$
Beginning Plan Fiduciary Net						
Position Excluding Receivables	\$	5,245,278	100%	7.67%	\$	402,313
Employer Contributions		269,740	50%	7.67%		10,345
Benefit Payments from Trust		-	50%	7.67%		-
Administrative Expense		(2,922)	50%	7.67%		(112)
Other Miscellaneous			400%	7.770/		
Income/(Expense)		-	100%	7.67%		<u> </u>
Total Projected Earnings						412,546
(Investment Expense)					_	(2,136)
Net Projected Earnings					\$	410,410
Investment Gain / Loss						Amount
Net Projected Earnings					\$	410,410
Actual Net Earnings				_		1,237,932
Investment (Gain) / Loss					\$	(827,522)

### **Projection of Benefit Payments**

Projected benefit payments for current participants follow. "Future Retirees" are employees currently working, but projected to retire and receive benefits. The projections do not include benefits for employees hired in the future.

#### Measurement

Period Ending		Projected	d Re	tiree Benefit P	ayme	ents	Projected Implicit Subsidy						
June 30:	Curre	nt Retirees	Fι	uture Retirees		Total	Cur	rent Retirees		Future Retirees		Total	Grand Total
2022	\$	244,884	\$	8,521	\$	253,405	\$	81,794	\$	4,454	\$	86,248	\$ 339,653
2023		244,270		16,597		260,867		85,795		9,051		94,846	355,713
2024		247,124		25,465		272,589		89,826		14,819		104,645	377,234
2025		241,942		37,065		279,007		77,372		21,299		98,671	377,678
2026		248,496		49,316		297,812		82,972		25,385		108,357	406,169
2027		250,941		62,469		313,410		78,062		34,452		112,514	425,924
2028		241,031		76,497		317,528		51,244		42,367		93,611	411,139
2029		234,662		89,425		324,087		31,711		48,317		80,028	404,115
2030		236,245		105,510		341,755		23,056		59,110		82,166	423,921
2031		237,411		122,438		359,849		16,096		75,068		91,164	451,013
2032		242,360		141,428		383,788		16,835		94,609		111,444	495,232
2033		238,393		158,517		396,910		-		99,220		99,220	496,130
2034		242,337		179,257		421,594		-		123,737		123,737	545,331
2035		245,696		201,867		447,563		-		140,201		140,201	587,764
2036		248,400		217,510		465,910		-		131,045		131,045	596,955
2037		250,385		242,029		492,414		-		129,747		129,747	622,161
2038		251,584		272,164		523,748		-		146,974		146,974	670,722
2039		251,933		296,065		547,998		-		147,363		147,363	695,361
2040		251,372		324,255		575,627		-		152,967		152,967	728,594
2041		249,851		353,362		603,213		-		166,651		166,651	769,864
2042		247,333		382,381		629,714		-		195,768		195,768	825,482
2043		243,781		414,241		658,022		-		215,755		215,755	873,777
2044		239,175		437,174		676,349		-		224,884		224,884	901,233
2045		233,521		469,144		702,665		-		265,046		265,046	967,711
2046		226,840		498,126		724,966		-		265,682		265,682	990,648
2047		219,170		523,563		742,733		-		254,528		254,528	997,261
<b>↓</b>		į.		<b>↓</b>		<b>↓</b>		į.		į.		<b>↓</b>	į.



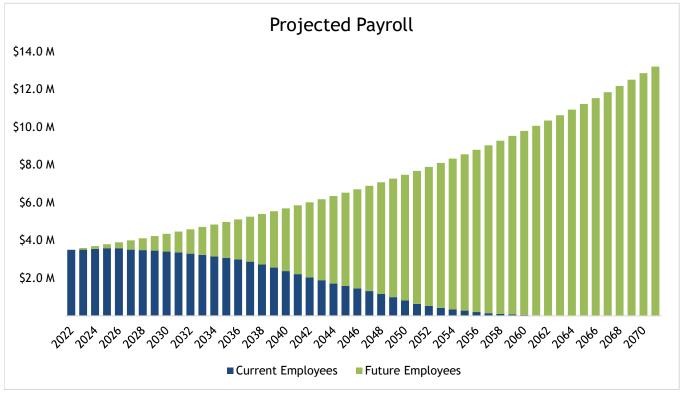
## **Projection of Contributions**

			Payroll				Project	ed Employer Contribu	tions*
Measurement Period Ending June 30:	Current Employe	es a)	Future Employees (b)		Total (c)	Cur	rent Participants (d) = (f) - (e)	Related to Payroll of Future Employees (e) = (b) x 9.39%**	Total Employer Contributions (f) = (c) x 10.22%
2022	\$ 3,495,76		-	\$		\$	339,653	\$ -	\$ 339,653
2023	3,510,82		81,070	7	3,591,893	7	348,101	7,612	355,713
2024	3,550,33		140,336		3,690,670		364,056	13,178	377,234
2025	3,587,01		205,148		3,792,163		358,415	19,263	377,678
2026	3,580,87		315,572		3,896,447		376,537	29,632	406,169
2027	3,504,25		499,344		4,003,599		379,036	46,888	425,924
2028	3,482,37		631,320		4,113,698		351,858	59,281	411,139
2029	3,457,52		769,305		4,226,825		331,877	72,238	404,115
2030	3,408,17		934,890		4,343,063		336,135	87,786	423,921
2031	3,361,31		1,101,180		4,462,497		347,612	103,401	451,013
2032	3,297,75		1,287,466		4,585,216		374,339	120,893	495,232
2033	3,226,01	7	1,485,292		4,711,309		356,661	139,469	496,130
2034	3,142,47	5	1,698,395		4,840,870		385,852	159,479	545,331
2035	3,074,97	8	1,899,016		4,973,994		409,446	178,318	587,764
2036	2,987,47	2	2,123,307		5,110,779		397,576	199,379	596,955
2037	2,873,44	9	2,377,876		5,251,325		398,878	223,283	622,161
2038	2,723,48	4	2,672,252		5,395,736		419,798	250,924	670,722
2039	2,558,64	2	2,985,477		5,544,119		415,025	280,336	695,361
2040	2,375,61	3	3,320,969		5,696,582		416,755	311,839	728,594
2041	2,211,16	4	3,642,074		5,853,238		427,873	341,991	769,864
2042	2,041,00	9	3,973,193		6,014,202		452,399	373,083	825,482
2043	1,886,54	3	4,293,050		6,179,593		470,660	403,117	873,777
2044	1,708,39	1	4,641,141		6,349,532		465,430	435,803	901,233
2045	1,586,39	6	4,937,748		6,524,144		504,056	463,655	967,711
2046	1,447,27	8	5,256,280		6,703,558		497,083	493,565	990,648
<b>↓</b>	<b>.</b>		<b>↓</b>		<b>↓</b>		<b>.</b>	<b>↓</b>	<b>↓</b>

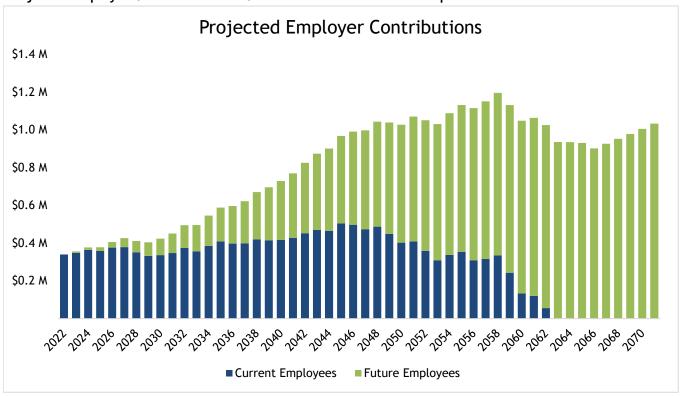
<sup>\*</sup>The contributions for the first two years are calculated separately. Contributions for subsequent years use the percentages shown.

<sup>\*\*</sup>The service cost percentage was determined in the prior report.

### Projected Payroll for Current and Future Employees



#### Projected Employer Contributions for Current and Future Plan Participants



## **Projection of Fiduciary Net Position**

Current Participants Only.

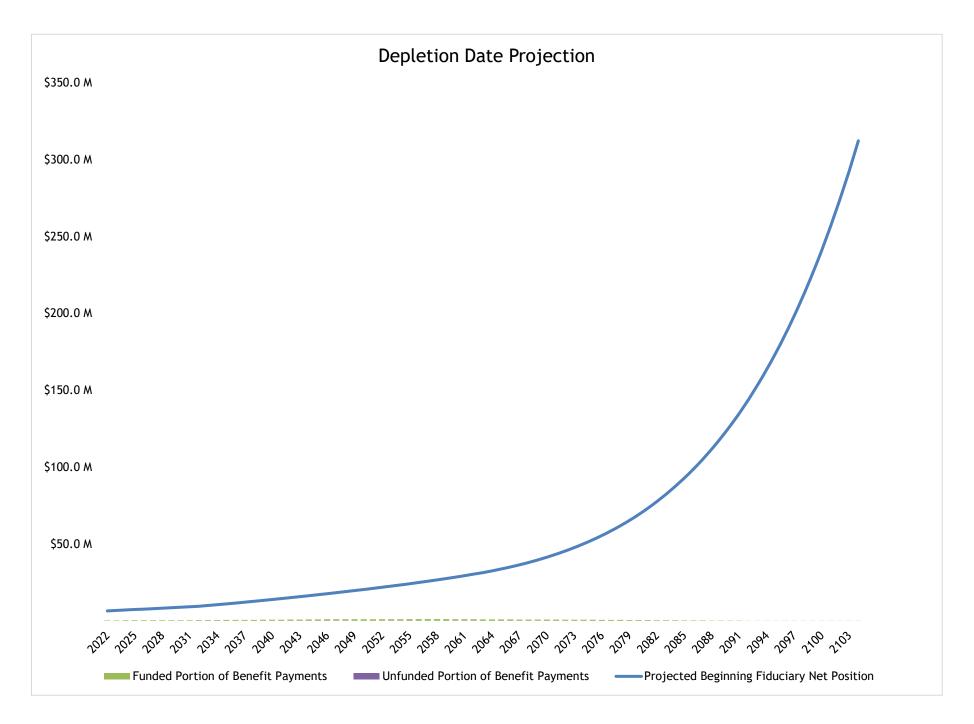
		<b>.</b>				Currer	nt Participants Only.
		Projected		Destructed Description	Butter	Burtuit I	Burtanta I Faltan
	Investment	Beginning		Projected Benefit	Projected	Projected	Projected Ending
Measurement	Rate of	Fiduciary Net		, ,	Administrative	Investment	Fiduciary Net
Period Ending	Return	Position	Current Participants	Implicit Subsidy)	Expense	Earnings	Position
June 30:	(a)	(b)	(c)	(d)	(e)	(f)	$(g) = \Sigma [(b) : (f)]$
2022	4.41%	\$ 6,480,288	\$ 339,653	\$ (339,653)	\$ (2,995)	\$ 285,715	\$ 6,763,008
2023	4.41%	6,763,008	348,101	(355,713)	(3,070)	298,013	7,050,339
2024	4.41%	7,050,339	364,056	(377,234)	(3,147)	310,560	7,344,574
2025	4.41%	7,344,574	358,415	(377,678)	(3,226)	323,400	7,645,485
2026	4.41%	7,645,485	376,537	(406,169)	(3,307)	336,440	7,948,986
2027	4.41%	7,948,986	379,036	(425,924)	(3,390)	349,442	8,248,150
2028	4.41%	8,248,150	351,858	(411,139)	(3,475)	362,360	8,547,754
2029	4.41%	8,547,754	331,877	(404,115)	(3,562)	375,285	8,847,239
2030	4.41%	8,847,239	336,135	(423,921)	(3,651)	388,147	9,143,949
2031	4.41%	9,143,949	347,612	(451,013)	(3,742)	400,886	9,437,692
2032	6.71%	9,437,692	374,339	(495,232)	(3,836)	629,084	9,942,047
2033	6.71%	9,942,047	356,661	(496,130)	(3,932)	662,300	10,460,946
2034	6.71%	10,460,946	385,852	(545,331)	(4,030)	696,444	10,993,881
2035	6.71%	10,993,881	409,446	(587,764)	(4,131)	731,568	11,543,000
2036	6.71%	11,543,000	397,576	(596,955)	(4,234)	767,704	12,107,091
2037	6.71%	12,107,091	398,878	(622,161)	(4,340)	804,749	12,684,217
2038	6.71%	12,684,217	419,798	(670,722)	(4,449)	842,543	13,271,387
2039	6.71%	13,271,387	415,025	(695,361)	(4,560)	880,952	13,867,443
2040	6.71%	13,867,443	416,755	(728,594)	(4,674)	919,886	14,470,816
2041	6.71%	14,470,816	427,873	(769,864)	(4,791)	959,357	15,083,391
2042	6.71%	15,083,391	452,399	(825,482)	(4,911)	999,414	15,704,811
2043	6.71%	15,704,811	470,660	(873,777)	(5,034)	1,040,099	16,336,759
2044	6.71%	16,336,759	465,430	(901,233)	(5,160)	1,081,402	16,977,198
2045	6.71%	16,977,198	504,056	(967,711)	(5,289)	1,123,437	17,631,691
2046	6.71%	17,631,691	497,083	(990,648)	(5,421)	1,166,345	18,299,050
<b>↓</b>	<b>↓</b>	<b>↓</b>	<b>↓</b>	<b>↓</b>	<b>↓</b>	<b>‡</b>	<b>↓</b>

### **Depletion Date Projection**

**Current Participants Only** 

The investment earnings are determined using an investment rate of return of 4.41% for years 1-10 and 6.71% for years 11+

					Present Value of		Present Value of
	Projected				Funded Benefit	Present Value of	Benefit Payments
Measurement	Beginning		<b>Funded Portion</b>	<b>Unfunded Portion</b>	Payments at the	Unfunded Benefit	at an equivalnt
Period Ending	Fiduciary Net	Total Projected	of Benefit	of Benefit	Investment Rate	Payments at	Single Discount
June 30:	Position	<b>Benefit Payments</b>	Payments	Payments	of Return	1.92%	Rate of 6.51%
2022	\$ 6,480,288	\$ 339,653	\$ 339,653	\$ -	\$ 332,403	\$ -	\$ 329,109
2023	6,763,008	355,713	355,713	-	333,416	-	323,604
2024	7,050,339	377,234	377,234	-	338,654	-	322,207
2025	7,344,574	377,678	377,678	-	324,731	-	302,869
2026	7,645,485	406,169	406,169	-	334,478	-	305,809
2027	7,948,986	425,924	425,924	-	335,931	-	301,082
2028	8,248,150	411,139	411,139	-	310,574	-	272,867
2029	8,547,754	404,115	404,115	-	292,374	-	251,812
2030	8,847,239	423,921	423,921	-	293,749	-	248,009
2031	9,143,949	451,013	451,013	-	299,322	-	247,731
2032	9,437,692	495,232	495,232	-	250,412	-	255,393
2033	9,942,047	496,130	496,130	-	235,091	-	240,218
2034	10,460,946	545,331	545,331	-	242,157	-	247,902
2035	10,993,881	587,764	587,764	-	244,587	-	250,861
2036	11,543,000	596,955	596,955	-	232,792	-	239,211
2037	12,107,091	622,161	622,161	-	227,365	-	234,073
2038	12,684,217	670,722	670,722	-	229,698	-	236,920
2039	13,271,387	695,361	695,361	-	223,162	-	230,610
2040	13,867,443	728,594	728,594	-	219,124	-	226,863
2041	14,470,816	769,864	769,864	-	216,977	-	225,062
2042	15,083,391	825,482	825,482	-	218,023	-	226,571
2043	15,704,811	873,777	873,777	-	216,267	-	225,168
2044	16,336,759	901,233	901,233	-	209,036	-	218,049
<b>↓</b>	<b>↓</b>	‡	<b>.</b>	<b>↓</b>	<b>↓</b>	1	<b>↓</b>



#### 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 set to be sufficient to cover the true costs of the Medicare retirees. Thus, there is no implicit subsidy for Medicare retirees.

Measurement Date (June 30): Report Date (June 30):		2017 2017	2018 2018	2019 2019	2020 2020	2021 2021
Retiree Benefit Payments Implicit Subsidy Total OPEB Liability	\$ <u>\$</u>	4,754,906 \$ 1,177,282 5,932,188 \$	1,229,046	4,569,915 \$ 1,133,248 5,703,163 \$	4,808,640 \$ 1,204,644 6,013,284 \$	5,048,697 1,062,370 <b>6,111,067</b>
Discount Rate	Retiree Benefit Payments and Implicit	7.00% <b>Subsidy</b>	7.28%	7.59%	7.67%	6.51%
		\$5.9 M	\$6.1 M	\$5.7 M	\$6.0 M	\$6.1 M
		\$1.2 M	\$1.2 M	\$1.1 M	\$1.2 M	\$1.1 M
		\$4.8 M	\$4.9 M	\$4.6 M	\$4.8 M	\$5.0 M
		2017	2018	2019	2020	2021
	■ Retiree Benefit Payments ■ Implicit Subsidy					

#### Schedule of Deferred Outflows and Inflows of Resources

Schedule of Deferred Outflows and Inflows of Resources
--

			Amount			<u>In</u>	crease/(Decrease	e) in Expense: Me	easurement / Rep	oort Years Ending	g June 30:	
	Measurement		Previously	Recognition	Remaining	2021	2022	2023	2024	2025	2026	
	Period	Base Amount	Recognized	Period	Period	2021	2022	2023	2024	2025	2026	Remaining
Differences Between Expected	2016-2017	\$ - \$	-	7.4	3.4 \$	- \$	- \$	- \$	- \$	- \$	- \$	-
and Actual Experience	2017-2018	6,968	2,826	7.4	4.4	942	942	942	942	374	-	-
	2018-2019	(148,226)	(34,878)	8.5	6.5	(17,439)	(17,439)	(17,439)	(17,439)	(17,439)	(17,439)	(8,714)
	2019-2020	8,680	1,022	8.5	7.5	1,022	1,022	1,022	1,022	1,022	1,022	1,526
	2020-2021	(828,908)	-	7.8	7.8	(106,271)	(106,271)	(106,271)	(106,271)	(106,271)	(106,271)	(191,282)
Changes of Assumptions	2016-2017	-	-	7.4	3.4	-		-	-	-		-
	2017-2018	(158,458)	(64,242)	7.4	4.4	(21,414)	(21,414)	(21,414)	(21,414)	(8,560)	-	-
	2018-2019	(514,604)	(121,084)	8.5	6.5	(60,542)	(60,542)	(60,542)	(60,542)	(60,542)	(60,542)	(30,268)
	2019-2020	(59,955)	(7,054)	8.5	7.5	(7,054)	(7,054)	(7,054)	(7,054)	(7,054)	(7,054)	(10,577)
	2020-2021	577,710	-	7.8	7.8	74,066	74,066	74,066	74,066	74,066	74,066	133,314
Differences Between Projected	2016-2017	-	-	5.0	1.0	-						
and Actual Earnings	2017-2018	(18,278)	(10,968)	5.0	2.0	(3,656)	(3,654)					
	2018-2019	60,930	24,372	5.0	3.0	12,186	12,186	12,186				
	2019-2020	204,938	40,988	5.0	4.0	40,988	40,988	40,988	40,986			
	2020-2021	(827,522)	-	5.0	5.0	(165,505)	(165,505)	(165,505)	(165,505)	(165,502)		

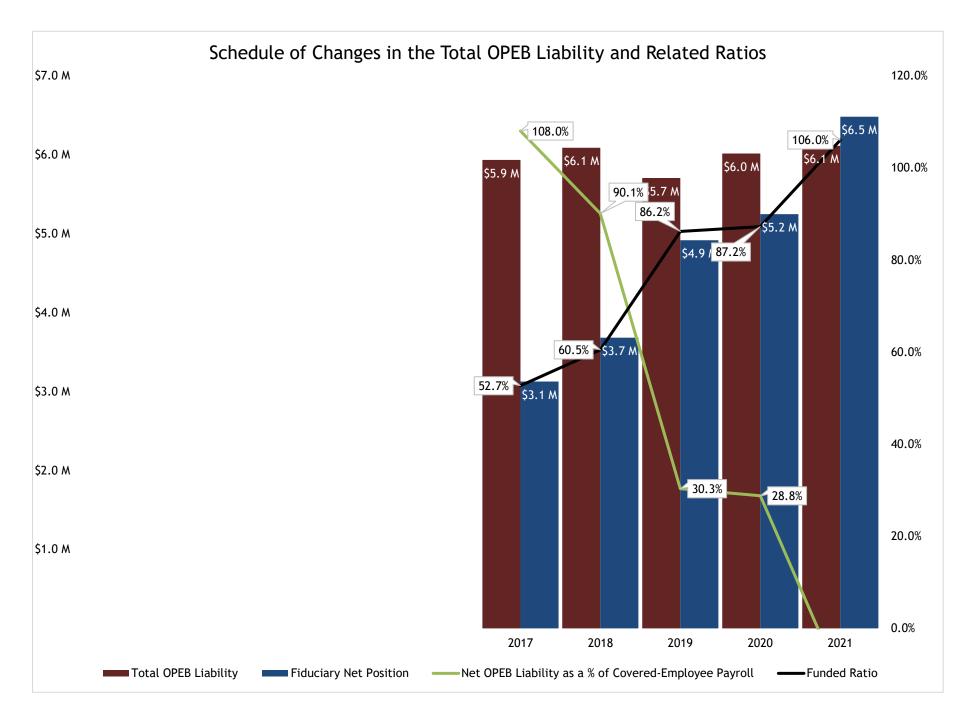
Summary of Deferred Outflows and Inflows of Resources

Measurement Period: July 1, 2020 - June 30, 2021 Fiscal Reporting Period: July 1, 2020 - June 30, 2021

Measurement/Report Years Ending June 30:	2021	2022	2023	2024	2025	2026	Remaining
Differences Between Expected and Actual Experience	\$ (121,746) \$	(121,746) \$	(121,746) \$	(121,746) \$	(122,314) \$	(122,688) \$	(198,470)
Changes of Assumptions	(14,944)	(14,944)	(14,944)	(14,944)	(2,090)	6,470	92,469
Differences Between Projected and Actual Earnings	(115,987)	(115,985)	(112,331)	(124,519)	(165,502)	-	-
Total	\$ (252,677) \$	(252,675) \$	(249,021) \$	(261,209) \$	(289,906) \$	(116,218) \$	(106,001)

	Sche	dule of Ch	nan	ges in the	Tot	al OPEB L	iab	ility and R	elat	ed Ratios
GASB 75 requires a disclosure of the changes in the Net OPEB Liability for the last ten fiscal years, or for as many years as are available.	lable.									
Measurement Date (June 30):		2017		2018		2019		2020		2021
Report Date (June 30):		2017		2018		2019		2020		2021
Total OPEB Liability										
Service Cost	\$	199,394	\$	205,376	\$	198,667	\$	243,225	\$	239,272
Interest		390,385		411,764		414,097		439,150		465,910
Changes of Benefit Terms		-		-		-		-		-
Differences Between Expected and										
Actual Experience		-		6,968		(148,226)		8,680		(828,908)
Changes of Assumptions		-		(158,458)		(514,604)		(59,955)		577,710
Benefit Payments		(198,454)		(234,954)		(243,049)		(239,848)		(269,740)
Implicit Rate Subsidy Credit		(71,179)		(76,161)		(90,445)		(81,131)		(86,461)
Net Change in Total OPEB Liability		320,146		154,535		(383,560)		310,121		97,783
Total OPEB Liability — Beginning		5,612,042		5,932,188		6,086,723		5,703,163		6,013,284
Total OPEB Liability — Ending (a)	\$	5,932,188	\$	6,086,723	\$	5,703,163	\$	6,013,284	\$	6,111,067
Plan Fiduciary Net Position										
Net Investment Income	\$	263,245	\$	252,767	\$	254,279	\$	172,321	\$	1,237,932
Employer — District's Contribution		727,702		539,954		1,225,049		399,848		269,740
Employer — Implicit Subsidy		71,179		76,161		90,445		81,131		86,461
Benefit Payments		(198,454)		(234,954)		(243,049)		(239,848)		(269,740)
Implicit Subsidy Credit		(71,179)		(76,161)		(90,445)		(81,131)		(86,461)
Administrative Expense		(1,276)		(1,684)		(1,881)		(2,462)		(2,922)
Other Miscellaneous										
Income/(Expense)		-		-		-		<u> </u>		<u> </u>
Net Change in Plan Fiduciary Net										
Position		791,217		556,083		1,234,398		329,859		1,235,010
Plan Fiduciary Net Position —										
Beginning		2,333,721		3,124,938		3,681,021	_	4,915,419		5,245,278
Plan Fiduciary Net Position — Ending		2 121 222								
(b)	\$	3,124,938	\$	3,681,021	\$	4,915,419	\$	5,245,278	\$	6,480,288
Net OPEB Liability										
District's Net OPEB Liability —										
Ending = (a) – (b)	\$	2,807,250	\$	2,405,702	\$	787,744	\$	768,006	\$	(369,221)
Plan Fiduciary Net Position as a										
Percentage of the Total OPEB										
Liability		52.7%		60.5%		86.2%		87.2%		106.0%
Covered-Employee Payroll	\$	2,599,322	\$	2,670,803	\$	2,598,338	\$	2,669,792	\$	3,283,105
District's Net OPEB Liability as a										
Percentage of Covered-Employee										
Payroll		108.0%		90.1%		30.3%		28.8%		-11.2%

Notes to schedule: the District adopted GASB 75 for the fiscal year ending June 30, 2017.

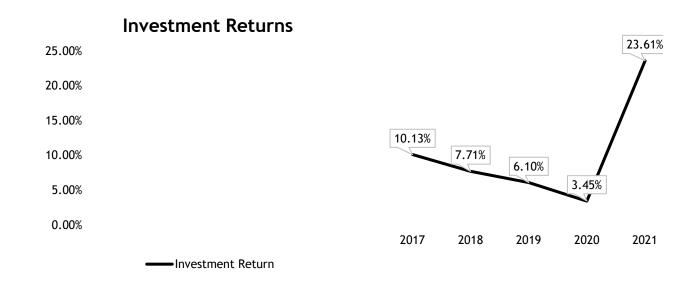


### **Schedule of Investment Returns**

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

Measurement Date (June 30):	2017	2018	2019	2020	2021
Report Date (June 30):	<u>2017</u>	2018	2019	2020	2021
Annual Money-Weighted Rate of Return, Net of					
Investment Expense	10.13%	7.71%	6.10%	3.45%	23.61%

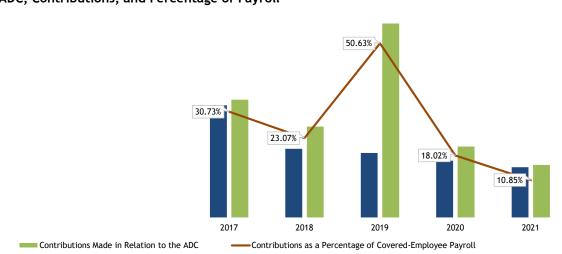
The annual money-weighted rate of return, net of investment expenses, is the net investment income for the year divided by the average net position for the year (less investment expenses).



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	2020-2021
Reporting Period:		2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Report Date (June 30):		2017	2018	2019	2020	2021
Actuarially Determined Contribution (ADC)		\$ 760,836 \$	465,770 \$	437,135 \$	385,366 \$	340,564
Less: Contributions Made in Relation to the ADC	-	798,881	616,115	1,315,494	480,979	356,201
Contribution Deficiency (Excess)		(38,045)	(150,345)	(878,359)	(95,613)	(15,637)
Covered-Employee Payroll		\$ 2,599,322 \$	2,670,803 \$	2,598,338 \$	2,669,792 \$	3,283,105
Contributions as a Percentage of Covered-Employee Payroll		30.73%	23.07%	50.63%	18.02%	10.85%

#### ADC, Contributions, and Percentage of Payroll



### Notes to Schedule:

#### **Assumptions and Methods**

Actuarial Cost Method: Entry-age normal, level percent of pay

Amortization Method: Closed period, level percent of pay

Actuarially Determined Contribution (ADC)

Amortization Period: 16 years Inflation: 2.50% Assumed Payroll Growth: 2.750%

Healthcare Trend Rates: 6.50%, trending down to 4.04%

\$1.4 M

\$1.2 M

\$1.0 M

\$0.8 M

\$0.6 M

\$0.4 M

\$0.2 M

Rate of Return on Assets: 4.41%

Mortality Rate: CalPERS Rates. See appendix. Retirement Rates: CalPERS Rates. See appendix.

#### **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, 2021

#### **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's Retiree Health 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 (the Plan). Dependents are eligible to enroll, and benefits continue to 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, 2021 (the census date), the benefit terms covered the following employees:

Category	Count
Inactive employees, spouses, or beneficiaries currently receiving benefit payments:	43
Inactive employees entitled to but not yet receiving benefit payments:	1
Active employees:	29
Total	73

#### **Draft Notes to the Financial Statements**

#### Contributions

The District makes contributions based on an actuarially determined rate.

Contribution rate: 7.82% for 12 years,

7.82% thereafter.

Reporting period contributions: \$356,201 (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: www.tiburonfire.org/finance/

#### Net OPEB Liability

The District's total OPEB liability was valued as of June 30, 2021, and was used to calculate the net OPEB liability measured as of June 30, 2021.

#### Actuarial Assumptions

The total OPEB liability in the June 30, 2021 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Measurement Date:	June 30, 2020 J	une 30, 2021
Discount Rate	7.67%	6.51%
Investment Rate of Return	7.67%	4.41%
Inflation	2.50%	2.50%
Healthcare Cost Trend Rates		
Pre-Medicare	6.50%	6.50% *
Medicare	5.50%	5.50% *
Salary Increases	2.750%	2.750% **
Mortality Rates	Based on CalPERS tab	les

- Projections of the sharing of benefit-related costs are based on an established pattern of practice.
- Experience studies come from the CalPERS Pension Assumption Model, revised May 14, 2018.
- Inactive employees (retirees) pay the cost of benefits in excess of the District's contribution.
- There were no ad hoc postemployment benefit changes (including ad hoc COLAs) to the plan.

#### Discount Rate

GASB 75 allows the use of a discount rate that is up to the expected long-trem rate of return on the assets in the Trust set aside to pay benefits, if the plan sponsor makes regular contributions to the Trust such that the assets are not depleted at any point in the future. If the plans' actuary determines that contributions are not sufficient to keep the Trust funded, a blend of the long-term rate of return and the yield or index rate for 20-year, tax-exempt municipal bonds will be used for the periods when the Trust funds are not sufficient to cover benefit payments will be used. Based on this requirement, and with the approval of the plan sponsor, the discount rate used to measure the total OPEB liability is 6.51%.

<sup>\*</sup>Trending down to 4.04% over 55 years. Applies to calendar years.

<sup>\*\*</sup>Additional merit-based increases based on CalPERS merit salary increase tables.

### **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 the CalPERS Investment Office in their report dated May 14, 2018.

		Compound		Arithmetic
	Target	Expected		Expected
Asset Class	Allocation	Return	Volatility	Return
Global Equity	22%	6.80%	17.00%	8.14%
Fixed Income	49%	3.10%	7.83%	3.40%
TIPS	16%	2.25%	5.46%	2.40%
Commodities	5%	3.50%	21.50%	5.71%
REITs	8%	5.50%	17.28%	6.90%
Total/Average	100%			
Expected Compou	ınd Return (1-10 Yea	ars)		4.41%
Expected Compou	ınd Return (11-60 Ye	ears)		6.71%
Expected Volatilit		7.28%		

Uses an expected long-term inflation rate of 2.00%

Current Liability	Amount
Current OPEB Liability	\$ 332,325
Non-Current OPEB Liability	5,778,742
Total OPEB Liability	\$ 6,111,067

Expected Average Remaining Service Lives (EARSL)

The effects on the total OPEB liability of (1) changes of economic and demographic assumptions or of other inputs and (2) differences between expected and actual experience are required to be included in OPEB expense in a systematic and rational manner over a closed period equal to the average of the expected remaining service lives of all employees that are provided with benefits through the OPEB plan (active employees and inactive employees), beginning in the current period. The expected average remaining service lives (EARSL) for the current period follows.

EARSL: 7.8 years

# **Accounting Information**

## **Draft Notes to the Financial Statements**

Changes in the Net OPEB Liability		Inc	crease/(Decrease)	)
		Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
		(a)	(b)	(c) = (a) - (b)
Balance as of Report Date June 30, 2020	\$	6,013,284	\$ 5,245,278	\$ 768,006
Changes for the Year:				
Service Cost		239,272		239,272
Interest		465,910		465,910
Changes of Benefit Terms		-		-
Differences Between Expected and Actual Experience		(828,908)		(828,908)
Changes of Assumptions		577,710		577,710
Contributions				
Employer — District's Contribution			269,740	(269,740)
Employer — Implicit Subsidy			86,461	(86,461)
Net Investment Income			1,237,932	(1,237,932)
Benefit Payments		(269,740)	(269,740)	-
Implicit Subsidy Credit		(86,461)	(86,461)	-
Administrative Expenses			(2,922)	2,922
Other Miscellaneous Income/(Expense)		<u> </u>	<u>-</u>	
Net Changes		97,783	1,235,010	(1,137,227)
Balance as of Report Date June 30, 2021	<u>\$</u>	6,111,067	\$ 6,480,288	\$ (369,221)

## **Accounting Information**

#### **Draft Notes to the Financial Statements**

Sensitivity of Liabilities to Changes in the Discount Rate and Healthcare Cost Trend Rate

Sensitivity of the total and net OPEB liability to changes in the discount rate. The total and net OPEB liability of the District, as well as what the District's total and net OPEB liability would be if they were calculated using a discount rate that is one percentage point lower (5.51%) or one percentage point higher (7.51%) follows:

	1% Decrease	<b>Discount Rate</b>	1% Increase
	5.51%	6.51%	7.51%
Total OPEB Liability (Asset)	\$ 6,900,590	\$ 6,111,067	\$ 5,459,562
Increase (Decrease)	789,523		(651,505)
% Change	12.9%		-10.7%
Net OPEB Liability (Asset)	\$ 420,302	\$ (369,221)	\$ (1,020,726)
Increase (Decrease)	789,523		(651,505)
% Change	-213.8%		176.5%

Sensitivity of the total OPEB liability to changes in the healthcare cost trend rates. The healthcare trend for this valuation started at 6.50% and decreased to 4.04% over 55 years. The total OPEB liability of the District, as well as what the District's total 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:

	 1% Decrease 5.50%	 Trend Rate 6.50%	1% Increase 7.50%
Total OPEB Liability (Asset) Increase (Decrease) % Change	\$ <b>5,382,227</b> (728,840) -11.9%	\$ 6,111,067	\$ <b>7,011,695</b> 900,628 14.7%
Net OPEB Liability (Asset) Increase (Decrease) % Change	\$ (1,098,061) (728,840) 197.4%	\$ (369,221)	\$ <b>531,407</b> 900,628 -243.9%

## **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, 2021, the District recognized an OPEB expense of \$45,017. The District reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	<b>Deferred Outflows of</b>		Deferred Inflows of	
		Resources	Resources	
Differences Between Actual and Expected Experience	\$	9,836	\$ (818,546)	
Changes of Assumptions		503,644	(451,627)	
Net Difference Between Projected and Actual Earnings on OPEB Plan Investments		-	(518,337)	
Contributions Subsequent to the Measurement Date		<u> </u>		
Total	\$	513,480	\$ (1,788,510)	

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
2022	2 \$	(252,675)
2023	3	(249,021)
2024	1	(261,209)
2025	<b>;</b>	(289,906)
2026	<u>,</u>	(116,218)
Remaining	3	(106,001)

## **Substantive Plan**

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

Retiree Benefits				
Retiree Medical Benefit				
Eligibility*	Standard CalPE	RS (5 years of servic	ce and attained age 50).	
Duration of Coverage	Retiree's lifetim	ne.		
Surviving Spouse Coverage	Yes, as required	d by CalPERS.		
Medical Plan Choices	Any eligible pla	n available via PEM	HCA 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.			
			Hire Period	
Benefit*		Before 3/1/2005		
bellefit		Maximum (Fixed)	Between 3/1/2005 &	After 7/30/2017
	Tier		7/30/2017 Maximum*	Maximum (Fixed)
	Employee	\$ 664	\$ 664	\$ 664
	Employee +1	1,329	1,329	1,329
	Family	1,729	1,729	1,729

## **Participant Summary**

Census Date:

June 30, 2021

Age and service determined as of the census date.

	Active Participants										
					Years o	f Service					
Age	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
< 25	1										1
25-29	2	2	1								5
30-34		2		1							3
35-39		3	2	2							7
40-44		2			1						3
45-49		1	1	1	1						4
50-54				1	2	1					4
55-59			1								1
60-64							1				1
65-69											
70+											
Total	3	10	5	5	4	1	1				29

**Changes from Prior Census** 

Active Participants	Count
Prior Census	33
Hires	6
Terminations*	(7)
Retirements	(3)
Current Census	29

Inactive Participants	Retiree	Spouse	Total
Prior Census	21	16	37
Retirements	4	3	7
Deaths*	0	0	0
Current Census	25	19	44

\*Includes withdrawals

Average Active Participant Age: 40.3

Average Years of Service: 8.5

lı	Inactive Participants					
Age	Retiree Spouse Tota					
< 50						
50-54		3	3			
55-59	6	5	11			
60-64	3	4	7			
65-69	7	1	8			
70-74	3	3	6			
75-79	4	3	7			
80-84	1		1			
85-89						
90+	1		1			
Total	25	19	44			

Average Inactive Participant Age: 67.4

## **Participant Summary Charts**

**Census Date:** June 30, 2021 Age and service determined as of the census date.

#### **Average Active**

#### Participant Age

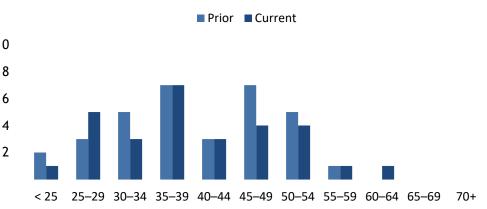
Prior Report: 40.5

Current: 40.3 10

Change: (0.2) 8

% Change: -0.5%

## Actives by Age Bracket



#### Average Years of

#### Service

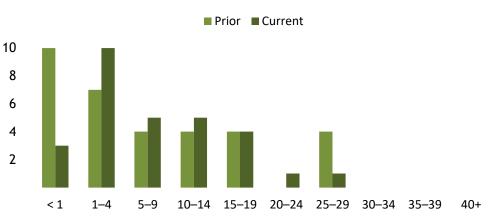
Prior Report: 8.8

Current: 8.5

Change: (0.3)

% Change: -3.4%

## **Actives by Years of Service**

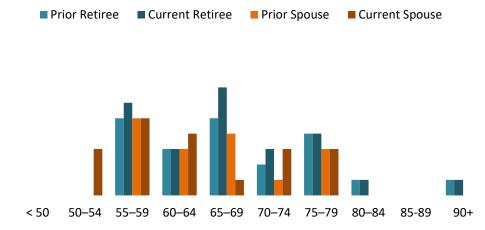


#### Average Inactive

#### Participant Age

Prior Report: 62.6 10
Current: 67.4
Change: 4.8 8
% Change: 7.7% 6

## Inactives by Age Bracket



## **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, 2021				
Measurement Date	June 30, 2021				
Report Date	June 30, 2021				
Discount Rate	GASB 75 allows the use of a discount rate that is up to the expected long-term rate of return on the assets in the Trust set aside to pay benefits, if the plan sponsor makes regular contributions to the Trust such that the assets are not depleted at any point in the future. If the plans' actuary determines that contributions are not sufficient to keep the Trust funded, a blend of the long-term rate of return and the yield or index rate for 20-year, tax-exempt municipal bonds will be used for the periods when the Trust funds are not sufficient to cover benefit payments will be used. Based on this requirement, and with the approval of the plan sponsor, the discount rate used to measure the total OPEB liability is 6.51%.				
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:				
	Age         Males         Females           50         \$ 11,803         \$ 12,235           55         13,351         12,874           60-64         16,173         14,416				
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.				

## **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	2.50%		
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:  Condition  Eligible for Supplemental Benefits  Eligible for PEMHCA Minimum Only  75%		
PEMHCA Administrative Fee	0.24% of retiree premium.		
Annual PEMHCA Amount	\$1,692 for the period June 30, 2020 through June 30, 2021, trended at 3% annually.		

## **Actuarial Assumptions**

#### Assumption

#### **Rates**

#### Monthly Weighted-Average Single Premiums

Premiums of plans in which participants were enrolled were used to develop weighted-average premiums persuant to the development of age-related claims.

Group	Employee	Er	nployee +1
Pre-Medicare	\$ 771.44	\$	1,542.88
Medicare	342.92		685.84

#### **Trend Rates**

Medical long-term trends from Society of Actuaries "Long Term Healthcare Cost Trends Model  $v2020\_b$ " using baseline assumptions. Applied to both claims and premiums.

	Pre-Medicare	Medicare	
Calendar Year	Trend	Trend	PEMHCA Trend
2021	6.50%	5.50%	3.00%
2022	6.00%	5.20%	3.00%
2023	5.50%	5.20%	3.00%
2024	5.45%	5.20%	3.00%
2025	5.39%	5.19%	3.00%
2026	5.34%	5.19%	3.00%
2027	5.29%	5.19%	3.00%
2028	5.23%	5.18%	3.00%
2029-2075	•••		•••
2076+	4.04%	4.04%	3.00%

#### **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**

#### About GASB 75 (continued)

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

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

#### Key Terminology

Actuarially Determined Contribution

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

Actuarial Present Value of Projected Benefit Payments

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

Agent Employer

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

**Closed Period** 

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

Contributions

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

#### **Dates and Periods**

• Census Date The date of the census. It is usually the same as the Valuation Date.

The date on which assets are measured. The liabilities are rolled forward to this

date from the **Valuation Date**, should it differ, using actuarial roll-forward

techniques.

Measurement Period

• Measurement Date

The year ending on the Measurement Date.

Report Date

The date on which the amounts are reported in the financial statements. It is the same as the fiscal year-end. It may be up to one year ahead of the Measurement Date, with no roll-forward of liabilities or assets required.

Reporting Period

The year ending on the **Report Date**. It is the same as the fiscal year.

Valuation Date

The date on which the liabilities are valued.

Deferred Inflows and Outflows of Resources

The portion of the changes in the **Net OPEB Liability** 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.

#### **Key Terminology (continued)**

#### **Defined-Benefit OPEB**

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

#### Discount Rate

The single rate of return that reflects the following:

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.

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 extend that the conditions in (a) are not met.

#### **Fiduciary Net Position**

The market value of assets as of the **Measurement Date**.

#### Implicit Subsidy

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.

#### **Net OPEB Liability**

The Total OPEB Liability minus the Fiduciary Net Position.

#### **Normal Cost**

See Service Cost.

# Other Postemployment Benefits (OPEB)

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.

#### Projected Benefit Payments

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.

### **About GASB 75**

#### **Key Terminology** (continued)

**Service Cost** The portions of the actuarial present value of projected benefit payments that are

attributed to valuation years. Also called Normal Cost.

of the valuation, including only changes to plan terms that have been made and

communicated to employees.

Total OPEB Liability 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.

#### **Decrement Tables**

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

Mortality Source Table

Miscellaneous Employees Mort and Disb Rates\_PA Misc Safety Employees Mort and Disb Rates\_Fire

**Disability Rates** 

Miscellaneous Employees Mort and Disb Rates\_PA Misc Safety Employees Mort and Disb Rates\_Fire

**Terminated Vested Rates** 

Miscellaneous Employees Terminated Vested Rates\_PA Misc Safety Employees Terminated Vested Rates\_Fire

**Salary Scale Rates** 

Miscellaneous Employees Salary Scale Rates\_PA Misc Safety Employees 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 2.7% @ 57
 Rx Safety Fire 3% @ 55

#### Sample Mortality and Disability Rates

**Public Agency Miscellaneous** 

		Pre-Retireme	ent Mortality	1			Post-Retirem	ent Mortality	у		Disability			
	Male Assi	umptions	Female As	sumptions	Ma	ale Assumptio	ons	Fen	nale Assumpt	ions	Male Assi	umptions	Female As	sumptions
	Non		Non			Non			Non		Non		Non	
Attained	Industrial	Industrial	Industrial	Industrial	Healthy	Industrially	,	Healthy	Industrially	,	Industrial	Industrial	Industrial	Industrial
Age	Death	Death	Death	Death	Recipients	Disabled	Disabled	Recipients	Disabled	Disabled	Disability	Disability	Disability	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:

<sup>1)</sup> 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.

<sup>2)</sup> 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.

<sup>3)</sup> The Miscellaneous Non-Industrial Disability rates are used for Local Prosecutors.

<sup>4)</sup> 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.

#### Sample Mortality and Disability Rates

**Public Agency Fire** 

		Pre-Retirem	ent Mortality				Post-Retirem	ent Mortality	/		Disability			
	Male Ass	umptions	Female As	sumptions	Ma	ale Assumptio	ons	Fen	nale Assumpt	ions	Male Assumptions		Female As	sumptions
	Non		Non			Non			Non		Non		Non	
Attained	Industrial	Industrial	Industrial	Industrial	Healthy	Industrially	,	Healthy	Industrially	· · · · · · · · · · · · · · · · · · ·	Industrial	Industrial	Industrial	Industrial
Age	Death	Death	Death	Death	Recipients	Disabled	Disabled	Recipients	Disabled	Disabled	Disability	Disability	Disability	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:

<sup>1)</sup> 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.

<sup>2)</sup> 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.

<sup>3)</sup> The Miscellaneous Non-Industrial Disability rates are used for Local Prosecutors.

<sup>4)</sup> 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.

Entry Ages

## **Sample Termination Rates**

Sample Terminated Refund Rates
Public Agency Miscellaneous

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

# Sample Terminated Vested Rates Public Agency Miscellaneous

[	Entry Ages							Public A	gency Misc	ellaneous
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

## **Sample Termination Rates**

Sample Terminated Refund Rates
Public Agency Fire

	Entry Ages								Public Ag	gency Fire
Service	15	20	25	30	35	40	45	50	55	60
0	0.12980	0.12980	0.12980	0.12980	0.12980	0.12980	0.12980	0.12980	0.12980	0.12980
5	0.00520	0.00520	0.00520	0.00520	0.00520	0.00520	0.00520	0.00520	0.00520	0.00520
10	0.00050	0.00050	0.00050	0.00050	0.00050	0.00050	0.00050	0.00050	0.00050	0.00050
15	0.00040	0.00040	0.00040	0.00040	0.00040	0.00040	0.00040	0.00040	0.00040	0.00040
20	0.00030	0.00030	0.00030	0.00030	0.00030	0.00030	0.00030	0.00030	0.00030	0.00030
25	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00000
30	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	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	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

### Sample Terminated Vested Rates

	Entry Ages								Public Ag	gency Fire
Service	15	20	25	30	35	40	45	50	55	60
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
10	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
20	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	0.00000
30	0.00140	0.00140	0.00140	0.00140	0.00140	0.00140	0.00140	0.00140	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

## Sample Salary Scale Rates

I	Entry Ages											Public A	gency Misc	ellaneous
Service	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
	Entry Ages													ency Fire
Service	Entry Ages 15	20	25	30	35	40	45	50	55	60	65	70	Public Ag	ency Fire
	15 0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	75 0.1700	79 0.1700
Service	15												75	79
Service 0	15 0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	75 0.1700	79 0.1700
Service 0 5 10 15	15 0.1700 0.0372	0.1700 0.0372	75 0.1700 0.0372	79 0.1700 0.0372										
Service 0 5 10 15 20	15 0.1700 0.0372 0.0165	0.1700 0.0372 0.0165	75 0.1700 0.0372 0.0165	79 0.1700 0.0372 0.0165										
Service 0 5 10 15 20 25	15 0.1700 0.0372 0.0165 0.0144	0.1700 0.0372 0.0165 0.0144	0.1700 0.0372 0.0165 0.0144 0.0127 0.0111	0.1700 0.0372 0.0165 0.0144 0.0127 0.0111	0.1700 0.0372 0.0165 0.0144	75 0.1700 0.0372 0.0165 0.0144	79 0.1700 0.0372 0.0165 0.0144 0.0127 0.0111							
Service 0 5 10 15 20 25 30	15 0.1700 0.0372 0.0165 0.0144 0.0127	0.1700 0.0372 0.0165 0.0144 0.0127	75 0.1700 0.0372 0.0165 0.0144 0.0127	79 0.1700 0.0372 0.0165 0.0144 0.0127										
Service 0 5 10 15 20 25	15 0.1700 0.0372 0.0165 0.0144 0.0127 0.0111	0.1700 0.0372 0.0165 0.0144 0.0127 0.0111	75 0.1700 0.0372 0.0165 0.0144 0.0127 0.0111	79 0.1700 0.0372 0.0165 0.0144 0.0127 0.0111										
Service 0 5 10 15 20 25 30	15 0.1700 0.0372 0.0165 0.0144 0.0127 0.0111 0.0097	0.1700 0.0372 0.0165 0.0144 0.0127 0.0111 0.0097	75 0.1700 0.0372 0.0165 0.0144 0.0127 0.0111 0.0097	79 0.1700 0.0372 0.0165 0.0144 0.0127 0.0111 0.0097										
Service 0 5 10 15 20 25 30 35	15 0.1700 0.0372 0.0165 0.0144 0.0127 0.0111 0.0097 0.0097	0.1700 0.0372 0.0165 0.0144 0.0127 0.0111 0.0097 0.0097	75 0.1700 0.0372 0.0165 0.0144 0.0127 0.0111 0.0097 0.0097	79 0.1700 0.0372 0.0165 0.0144 0.0127 0.0111 0.0097 0.0097										

## Matrix of Sample Service Retirement Assumption Rates

	Attained Ages	5		Public Agency	Miscellaneous 2.7% @ 55			
Service	50	55	60	65	70	75	79	
0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
5	0.00300	0.03300	0.06000	0.14000	0.15000	1.00000	1.00000	
10	0.01000	0.05500	0.08600	0.17400	0.18100	1.00000	1.00000	
15	0.01600	0.07800	0.11200	0.20800	0.21200	1.00000	1.00000	
20	0.03400	0.11300	0.15000	0.25400	0.24300	1.00000	1.00000	
25	0.03300	0.15600	0.18200	0.30600	0.29100	1.00000	1.00000	
30	0.04500	0.23400	0.23800	0.38900	0.35000	1.00000	1.00000	
35	0.12000	0.36100	0.30200	0.42200	0.39000	1.00000	1.00000	
40	0.00000	0.42500	0.33000	0.42200	0.40000	1.00000	1.00000	
45	0.00000	0.00000	0.33000	0.42200	0.40000	1.00000	1.00000	
50	0.00000	0.00000	0.00000	0.42200	0.40000	1.00000	1.00000	

#### Attained Ages Public Agency Miscellaneous 2% @ 62 Service 50 65 70 75 79 55 60 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 0.02800 0.07100 0.19300 15 0.00000 0.17300 1.00000 1.00000 0.03600 0.09100 0.22900 1.00000 1.00000 20 0.00000 0.20600 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 1.00000 1.00000 0.15200 0.18300 0.34800 0.38700 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 0.00000 0.00000 0.00000 1.00000 1.00000 1.00000 1.00000 50

## Matrix of Sample Service Retirement Assumption Rates

_	Attained Age:	S			Publ	lic Agency Sa	fety 2% @ 50
Service	50	55	60	65	70	75	79
0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
5	0.00900	0.08900	0.10000	1.00000	1.00000	1.00000	1.00000
10	0.00900	0.08900	0.10000	1.00000	1.00000	1.00000	1.00000
15	0.00900	0.08900	0.10000	1.00000	1.00000	1.00000	1.00000
20	0.00900	0.08900	0.10000	1.00000	1.00000	1.00000	1.00000
25	0.01300	0.13600	0.15400	1.00000	1.00000	1.00000	1.00000
30	0.02000	0.20400	0.23000	1.00000	1.00000	1.00000	1.00000
35	0.02200	0.23000	0.26000	1.00000	1.00000	1.00000	1.00000
40	0.00000	0.23600	0.26700	1.00000	1.00000	1.00000	1.00000
45	0.00000	0.00000	0.26700	1.00000	1.00000	1.00000	1.00000
50	0.00000	0.00000	0.00000	1.00000	1.00000	1.00000	1.00000
	Attained Ages	S			Public	Agency Safe	ty 2.7% @ 57
Service	50	55	60	65	70	75	79
0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
5	0.00650	0.08246	0.11350	1.00000	1.00000	1.00000	1.00000
10	0.00650	0.08246	0.11350	1.00000	1.00000	1.00000	1.00000
15	0.00650	0.08246	0.11350	1.00000	1.00000	1.00000	1.00000
20	0.00650	0.08246	0.11350	1.00000	1.00000	1.00000	1.00000
25	0.01010	0.12692	0.17470	1.00000	1.00000	1.00000	1.00000
30	0.01510	0.19000	0.26150	1.00000	1.00000	1.00000	1.00000
35	0.01700	0.21432	0.29500	1.00000	1.00000	1.00000	1.00000
40	0.00000	0.22002	0.30290	1.00000	1.00000	1.00000	1.00000
45	0.00000	0.00000	0.30290	1.00000	1.00000	1.00000	1.00000
50	0.00000	0.00000	0.00000	1.00000	1.00000	1.00000	1.00000
	Attained Ages	S			Publ	lic Agency Sa	fety 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