City of Moreno Valley

GASB 75 OPEB Valuation Report Measured as of June 30, 2020 for Disclosures for the Fiscal Year Ending June 30, 2021

July 16, 2021





11750 Atwood Road Auburn, California 95603 t: (415) 801–5987 f: (415) 358–8500 www.precisionactuarial.com



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July 16, 2021

Brigitta Bartha Principal Accountant City of Moreno Valley 14177 Frederick Street Moreno Valley, California 92553

Re: City of Moreno Valley Retiree Health Benefits Plan GASB 75 OPEB Valuation Report Measured as of June 30, 2020

Dear Ms. Bartha:

At your request, we completed an actuarial valuation of the retiree health and welfare benefits valued as of June 30, 2020, and measured as of June 30, 2020, for the City of Moreno Valley. 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 City 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,

Rogen J Buston

Roger T. Burton, FSA, MAAA, FCA



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Purpose of the Report

Precision Actuarial prepared this report to meet employer financial accounting requirements under GASB Statement No. 75 "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions" (GASB 75), issued in June 2015, 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, 2020
Measurement Date:	June 30, 2020
Report Date:	June 30, 2021

Application to Financials

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

The City should use the liabilities, assets, and expense measured as of June 30, 2020, 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 City 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
- 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 City of Moreno Valley beyond the contractual services that we perform for the City of Moreno Valley.

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

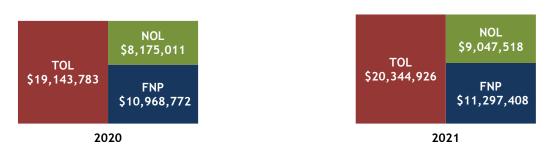
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Christian M. Boughner, ASA, MAAA Senior Consulting Actuary

Executive Summary

Accounting Summary

A summary of the key valuation results follows.	Prior Report	Current Report
Valuation Date:	June 30, 2018	June 30, 2020
Measurement Date:	June 30, 2019	June 30, 2020
Report Date:	June 30, 2020	June 30, 2021
Present Value of Future Benefits	 ,	
Active Employees	\$ 11,111,717	\$ 10,029,076
Retirees +	11,571,843	 13,847,001
Total Present Value of Future Benefits =	22,683,560	23,876,077
Total Present Value of Future Normal Costs _	3,539,777	3,531,151
Total OPEB Liability (TOL) =	\$ 19,143,783	\$ 20,344,926
OPEB Liability		
Active Employees	\$ 7,571,940	\$ 6,497,925
Retirees +	11,571,843	13,847,001
Total OPEB Liability (TOL) =	 19,143,783	 20,344,926
Fiduciary Net Position (FNP)	10,968,772	11,297,408
Net OPEB Liability (NOL) =	\$ 8,175,011	\$ 9,047,518
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	57.30%	55.53%
Covered-Employee Payroll	\$ 20,682,710	\$ 24,421,260
Net OPEB Liability as a Percentage of Covered-Employee Payroll	39.53%	37.05%
Measurement Period:	2018-2019	2019-2020
Reporting Period:	2019-2020	2020-2021
Expense	\$ 994,094	\$ 1,159,329
Actuarially Determined Contribution (ADC)*	908,656	1,114,937



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 City contributes directly to the fund. See page 16 for the City's direct contribution.

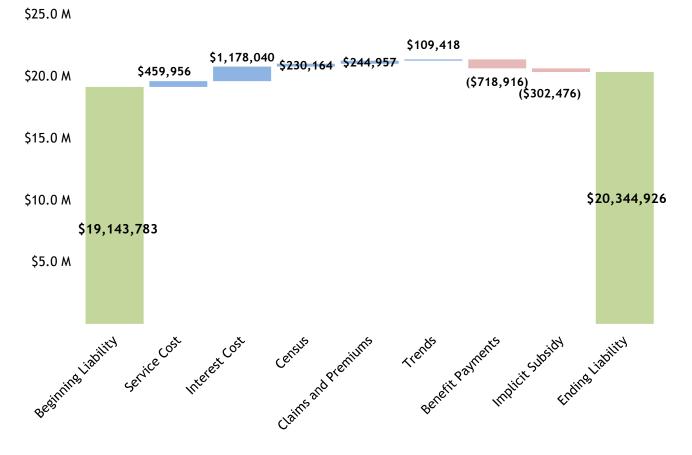
Reconciliation of the Change in the Total OPEB Liability

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, 2019 /

Report Date June 30, 2020	<u>\$ 19,143,783</u>
Service Cost	459,956
Interest Cost	1,178,040
Change in Census	230,164
Change in Claims and Premiums	244,957
Change in Healthcare Trends	109,418
Benefits Paid	(718,916)
Implicit Subsidy Credit	(302,476)
Total OPEB Liability as of Measurement Date June 30, 2020 /	\$ 20,344,926
Report Date June 30, 2021	\$ 20,344,920

Reconciliation of the Change in the Total OPEB Liability



Statement of Fiduciary Net Position

Measurement Da	te:	June 30, 2020
Report Da	te:	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		-
Total Receivables		-
Investments:		
Domestic Fixed Income Securities		-
Domestic Equities		-
Investment Funds		11,297,408
International Equities		-
Real Estate		-
Total Investments		11,297,408
Total Assets	\$	11,297,408
Liabilities		
Payables:		
Investment Management Fees	\$	-
Due to Broker for Investments Purchased		-
Collateral Payable for Securities Lending		-
Other		-
Total Liabilities	\$	-
Net Position Restricted for Postemployment Benefits Other than Pensions	\$	11,297,408

Measurement Date: Report Date:		<i>Prior Report</i> June 30, 2019 June 30, 2020	<i>Current Report</i> June 30, 2020 June 30, 2021
Additions			
Investment Income:			
Net Appreciation in the Fair Value of Investments	\$	670,718	\$ 421,628
Interest and Dividends		-	-
Less Investment Expense, Other than from Securities Lending Net Income from Investing, Other than from Securities Lending		- 670,718	 421,628
Securities Lending Income		-	
Less Securities Lending Expense –			
Net Income from Securities Lending			 -
Other Income/(Expense)		(10,898)	 -
Net Investment Income (a)		659,820	 421,628
Contributions:			
Employer – City's Contribution		661,483	631,564
Employer — Implicit Subsidy		295,036	 302,476
Total Contributions (b)		956,519	 934,040
Total Additions (c) = (a) + (b)		1,616,339	1,355,668
Deductions			
Benefit Payments		689,589	718,916
Implicit Subsidy Credit		295,036	302,476
Administrative Expense		2,350	 5,640
Total Deductions (d)		986,975	1,027,032
Net Increase in Net Position = (c) - (d)		629,364	328,636
Net Position Restricted for Postemployment Benefits Other tha	n Pens	ions	
Beginning of Year		10,339,408	10,968,772
Net Increase in Net Position		629,364	 328,636
End of Year	\$	10,968,772	\$ 11,297,408

Statement of Changes to the Fiduciary Net Position

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 O		Plan Fiduciary		Net OPEB
	Liab	-	Net Position		Liability
		(a)	(b)		(c) = (a) – (b)
Balance as of: Measurement Date June 30, 2019 / Report Date June 30, 2020	<u>\$ 19,143,7</u>	<u>/83 \$</u>	10,968,772	\$	8,175,011
Changes for the year:					
Service Cost	459,9	956			459,956
Interest	1,178,0	040			1,178,040
Changes of Benefit Terms		-			-
Differences Between Expected and Actual Experience	475,	121			475,121
Changes of Assumptions	109,4	418			109,418
Net Investment Income			421,628		(421,628)
Contributions					
Employer – City's Contribution			631,564		(631,564)
Employer — Implicit Subsidy			302,476		(302,476)
Benefit Payments	(718,9	916)	(718,916)		-
Implicit Subsidy Credit	(302,4	476)	(302,476)		-
Administrative Expense			(5,640)		5,640
Other Changes			-		-
Net Changes	1,201,	143	328,636		872,507
Balance as of: Measurement Date June 30, 2020 / Report Date June 30, 2021	\$ 20,344,9)26 \$	11,297,408	Ś	9,047,518
,	<u>, 20,344,7</u>	<u>20</u> 3	11,277,400	<u>ب</u>	7,077,310

Development of Deferred Outflows and Inflows of Resources

Balances as of Measurement Date June 30, 2020 / Report Date June 30, 2021

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

Measurement Date — June 30:		Experience Losses (a)	Experience Gains (b)	A	mounts Recognized in Expense Through Measurement Date June 30, 2020 (c)		ferred Outflows of D Resources (a) - (c)	eferred Inflows of Resources (b) - (c)
2017	\$	-	\$ -	\$	-	\$	- \$	-
2018***	•	-	-		-	•	-	-
2018**		135,598	-		59,823		75,775	-
2019		-	(200,112)		(58,858)		-	(141,254)
2020		475,121	-		77,889		397,232	-
Total						\$	473,007 \$	(141,254)

Deferred Outflows and Inflows of Resources Arising from Changes in Assumptions

Measurement Date —	Increase in Total Liability	Decrease in Total Liability	A	mounts Recognized in Expense Through Measurement Date June 30, 2020	eferred Outflows of Resources	D	eferred Inflows of Resources
June 30:	(a)	(b)		(C)	(a) - (c)		(b) - (c)
2017	\$ -	\$ -	\$	-	\$ -	\$	-
2018***	-	-		-	-		-
2018**	-	(854,050)		(376,788)	-		(477,262)
2019	1,961,763	-		576,990	1,384,773		-
2020	109,418	-		17,938	91,480		-
Total					\$ 1,476,253	\$	(477,262)

*Report Year Ending June 30, 2018

**Report Year Ending June 30, 2019

Development of Deferred Outflows and Inflows of Resources

Balances as of Measurement Date June 30, 2020 / Report Date June 30, 2021

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

			Amounts Recognized			
		Investment Earnings	in Expense Through			
Measurement	Investment Earnings	Greater Than	Measurement Date	Deferred Outflows of	Deferred Inflows of	
Date —	Less Than Projected	Projected	June 30, 2020	Resources	Resources	Net
June 30:	(a)	(b)	(c)	(d) = (a) - (c)	(e) = (b) - (c)	(f) = (d) + (e)
2017	\$-	\$ (854,695)	\$ (854,695)	\$-	\$-	
2018*	266,057	-	212,848	53,209	-	
2018**	72,538	-	43,524	29,014	-	
2019	-	(34,388)	(13,756)	-	(20,632)	
2020	252,276	-	50,456	201,820	-	
Total				\$ 284,043	\$ (20,632) \$	263,411

*Report Year Ending June 30, 2018 **Report Year Ending June 30, 2019

Expense and Deferred Outflows and Inflows

	M	easurement Period:		2019-2020
	14	Reporting Period:		2020-2021
Frances		Reporting renou.		2020 2021
Expense				
Service Cost			\$	459,956
Interest on Total OPEB Liability				1,178,040
Changes of Benefit Terms				-
Recognized Differences Between Expected and Actual Expe	rienc	e		68,401
Recognized Changes of Assumptions				180,837
Projected Earnings on OPEB Plan Investments				(673,904)
Recognized Differences Between Projected and Actual Earn	ings			(59,641)
Administrative Expense				5,640
Other Miscellaneous (Income)/Expense				-
Total Expense			\$	1,159,329
Deferred Outflows and Inflows of Resources		Report Year Endi	ng .	June 30, 2021
	C	eferred Outflows of		Deferred Inflows of
		Resources		Resources
Differences Between Expected and Actual Experience	\$	473,007	\$	(141,254)
Changes of Assumptions		1,476,253		(477,262)
Net Difference Between Projected and Actual Earnings on				
Plan Investments		263,411		-

Contributions Subsequent to the Measurement Date1,838,078Total\$ 4,050,749\$ (618,516)

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	\$ 360,533
2023	307,322
2024	292,818
2025	320,823
2026	303,082
Remaining	9,577

Impact on the Statement of Net Position

Impact on the Statement of Net Position

Measurement Date: Report Date:	June 30, 2019 June 30, 2020	 June 30, 2020 June 30, 2021	 Change During Period
Total OPEB Liability	\$ 19,143,783	\$ 20,344,926	\$ 1,201,143
Fiduciary Net Position	10,968,772	11,297,408	328,636
Net OPEB Liability / (Asset)	8,175,011	9,047,518	\$ 872,507
Deferred (Outflows) / Inflows Due To:			
Differences between Expected and Actual			
Experience	74,967	(331,753)	(406,720)
Changes of Assumptions	(1,070,410)	(998,991)	71,419
Differences between Projected and Actual			
Investment Earnings	48,506	(263,411)	(311,917)
(Contributions Subsequent to the Measurement			
Date)	(934,040)	(1,838,078)	(904,038)
Net Deferred (Outlfows) / Inflows	 (1,880,977)	 (3,432,233)	 (1,551,256)
Impact on the Statement of Net Position	 6,294,034	5,615,285	 (678,749)

Change in Net Position During Fiscal Year

Measurement Date:	June 30, 2020
Report Date:	June 30, 2021
Impact on the Statement of Net Position, Fiscal Year	
Ending June 30, 2020	6,294,034
OPEB Expense / (Income)	1,159,329
(Employer Contributions During Fiscal Year)	(1,838,078)
Impact on the Statement of Net Position for the	
Fiscal Year Ending June 30, 2021	5,615,285

OPEB Expense

Measurement Date: Report Date:	June 30, 2020 June 30, 2021
···· F ···	
Deterioration / (Improvement) in Net Position	(678,749)
Employer Contributions During the Fiscal Year	1,838,078
OPEB Expense / (Income) for the Fiscal Year	
Ending June 30, 2021	1,159,329

Reconciliation of Expense

						Ν	let Investment			Net OPEB	
	Total OPEB	Plan Fiduciary	Net OPEB		Deferred	Deferred	(Inflows)/			Liability plus	Annual
	Liability	Net Position	Liability		(Inflows)	Outflows	Outflows	Net Deferrals	1	Net Deferrals	 Expense
Balance as of:											
Measurement Date June 30, 2019 / Report Date June 30, 2020	¢ (40,442,702)		(0.475.044)	~		4 740 004 6	(40 50())	0.44, 0.27	~	(7.220.074)	
1 ,	\$ (19,143,783)	\$ 10,968,772 \$	(8,175,011)	\$	(773,541) \$	1,768,984 \$	(48,506) \$	946,937	\$	(7,228,074)	
Service Cost	(459,956)		(459,956)								\$ 459,956
Interest on Total OPEB Liability	(1,178,040)		(1,178,040)								1,178,040
Effect of Changes of Benefit Terms	-		-								-
Effect of Liability Gains or Losses	(475,121)		(475,121)		-	475,121		475,121			
Effect of Assumption Changes or Inputs	(109,418)		(109,418)		-	109,418		109,418			
Expected Investment Income (Net of Investment											
Expenses)		673,904	673,904								(673,904)
Investment Gains or Losses on Expected Return		(252,276)	(252,276)				252,276	252,276			
Contributions											
Employer – City's Contribution		631,564	631,564							631,564	
Employer — Implicit Subsidy		302,476	302,476							302,476	
Benefit Payments	718,916	(718,916)	-								
Implicit Subsidy Credit	302,476	(302,476)	-								
Administrative Expenses	, -	(5,640)	(5,640)								5,640
Other Income/(Expense)		(0,010)	(0,010)								-
Recognition of Liability Gains or Losses					29,429	(97,830)		(68,401)			68,401
Recognition of Assumption Changes or Inputs					125,596	(306,433)		(180,837)			180,837
Recognition of Assumption changes of inputs Recognition of Investment Gains or Losses					125,590	(300,433)	EQ (11	,			
Recognition of investment dains of Losses							59,641	59,641			(59,641)
Contributions Subsequent to the Measurement Date						1,838,078		1,838,078		1,838,078	
•						1,030,078		1,030,078			
Annual Expense										(1,159,329)	\$ 1,159,329
Balance as of:											
Measurement Date June 30, 2020 / Report Date June 30, 2021	\$ (20,344,926)	\$ 11,297,408 \$	(9,047,518)	\$	(618,516) \$	3,787,338	\$ 263,411	\$ 3,432,233	\$	(5,615,285)	

Sample Journal Entries

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

Beginning Balance			Debit (Outflow)		Credit (Inflow)
Net OPEB Liability/Asset		\$	-	\$	8,175,011
Differences between Expected and Actual					
Experience			95,716		170,683
Changes of Assumptions			1,673,268		602,858
Differences between Projected and Actual					
Investment Earnings			-		48,506
Contributions Subsequent to the					
Measurement Date			934,040		-
Impact on Statement of Net Position			-		6,294,034
Ending Balance			Debit (Outflow)		Credit (Inflow)
Net OPEB Liability/Asset		\$	-	\$	9,047,518
Differences between Expected and Actual				•	, ,
Experience			473,007		141,254
Changes of Assumptions			1,476,253		477,262
Differences between Projected and Actual					
Investment Earnings			263,411		-
Contributions Subsequent to the					
Measurement Date			1,838,078		-
Impact on Statement of Net Position			-		5,615,285
OPEB-Expense Journal Entries		_	Debit		Credit
Net OPEB Liability/Asset		\$	-	\$	872,507
Differences between Expected and Actual	Deferred Outflows		377,291		-
Experience	Deferred Inflows		29,429		-
Changes of Assumptions	Deferred Outflows		-		197,015
	Deferred Inflows		125,596		-
Differences between Projected and Actual	Deferred Outflows		263,411		-
Investment Earnings	Deferred Inflows		48,506		-
Contributions Subsequent to the					
Measurement Date	Deferred Outflows		904,038		-
Change in Net OPEB Liability/Asset from					
Contributions			-		1,838,078
OPEB Expense/Credit			1,159,329		-
Total		_	2,907,600		2,907,600
Change to the Impact on the Statement of			(70 7 (0		
Net Position			678,749		-

Sample Journal Entries

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

Journal Entries — Deferred Outflows	Debit	Credit
Net OPEB Liability/Asset	\$ 934,040	\$ -
Contributions Subsequent to the Measurement Date: Fiscal Year 2019-2020	-	934,040
Contributions Subsequent to the Measurement Date: Fiscal Year 2020-2021	1,838,078	-
Contributions Expense	-	1,838,078
Journal Entries – Benefits Paid Outside of the Trust ¹	Debit	Credit
OPEB Expense	\$ -	\$ -
Employer Contributions for Retiree Benefits During the Fiscal Year	-	-
Journal Entries — Implicit Subsidy ²	Debit	Credit
OPEB Expense	\$ 302,476	\$ -
Premium Expense During the Fiscal Year	-	302,476

¹ 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.

² 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

Catimatad

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 City 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:	15

				Estimated
	Measurement Period:	2020-2021	2021-2022	2022-2023
	Report Date (June 30):	2021	2022	2023
Total OPEB Liability	\$	20,344,926	\$ 20,659,356	\$ 20,967,018
Fiduciary Net Position		11,297,408	 12,826,025	 13,410,169
Net OPEB Liability	= <u>\$</u>	9,047,518	\$ 7,833,331	\$ 7,556,849

All values measured at the beginning of the measurement period.

Amortization Type	Closed	Closed	Closed
Interest Rate Used to Determine Amortization			
Payment	6.17%	6.17%	6.17%
Assumed Rate of Payroll Growth	2.750%	2.750%	2.750%
Amortization Period	15 years	14 years	13 years
Amount Recognized, Beginning of Year	\$ 751,002 \$	686,234 \$	702,204
It is the policy of the City pat to allow possible amor	tizations		

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

Actuarially Determined Contribution (ADC)

- ..

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

			Estimated
Measurement Period:	2020-2021	2021-2022	2022-2023
Report Date (June 30):	2022	2023	2024
Service Cost	\$ 441,404	\$ 453,543	\$ 466,015
Amortization of the Net OPEB Liability	751,002	686,234	702,204
Interest on Service Cost to the End of the Year	27,235	27,984	28,753
Interest on Amortization to the End of the Year	 46,337	 42,341	 43,326
Service Cost and Amortization (with Interest)	\$ 1,265,978	\$ 1,210,102	\$ 1,240,298
Service Cost (with Interest) as a Percentage of Payroll	2.02%	2.02%	2.02%
Amortization of the Net OPEB Liability (with Interest) as a Percentage of Payroll	<u>3.43</u> %	<u>3.05</u> %	<u>3.04</u> %
Service Cost and Amortization (with Interest) as a Percentage of Payroll	5.45%	5.07%	5.06%
Discount Rate for ADC Calculation	6.17%	6.17%	6.17%
ADC Components			
City's Contribution to the Trust Fund Credit for Retiree Benefit Payments Outside of the Trust	\$ 1,004,655 -	\$ 951,540 -	\$ 983,565 -
Credit for Implicit Subsidy	261,323	258,562	256,733
Total ADC	\$ 1,265,978	\$ 1,210,102	\$ 1,240,298
ADC as a Percentage of Payroll	 5.45%	 5.07%	 5.06%

City's Funding Policy

The City'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 City 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 City 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 Beginning Total OPEB Liability Service Cost Benefit Payments Implicit Subsidy	\$	Amount for Period (a) 19,143,783 459,956 (718,916) (302,476)	Portion of Period (b) 100% 100% 50% 50%	Interest Rate (c) 6.17% 6.17% 6.17% 6.17%	Interest on the Total OPEB Liability (d) = (a) × (b) × (c) \$ 1,181,171 28,379 (22,179) (9,331)
Total Interest on Total OPEB Liab	ility				\$ 1,178,040
Projected Earnings on Plan Investments		Amount for Period (a)	Portion of Period (b)	Projected Rate of Return (c)	Projected Earnings (d) = (a) × (b) × (c)
Beginning Plan Fiduciary Net Position Excluding Receivables Employer Contributions Benefit Payments from Trust Administrative Expense Other Miscellaneous Income/(Expense)	\$	10,968,772 631,564 (718,916) (5,640)	100% 50% 50% 50% 100%	6.17% 6.17% 6.17% 6.17% 6.17%	

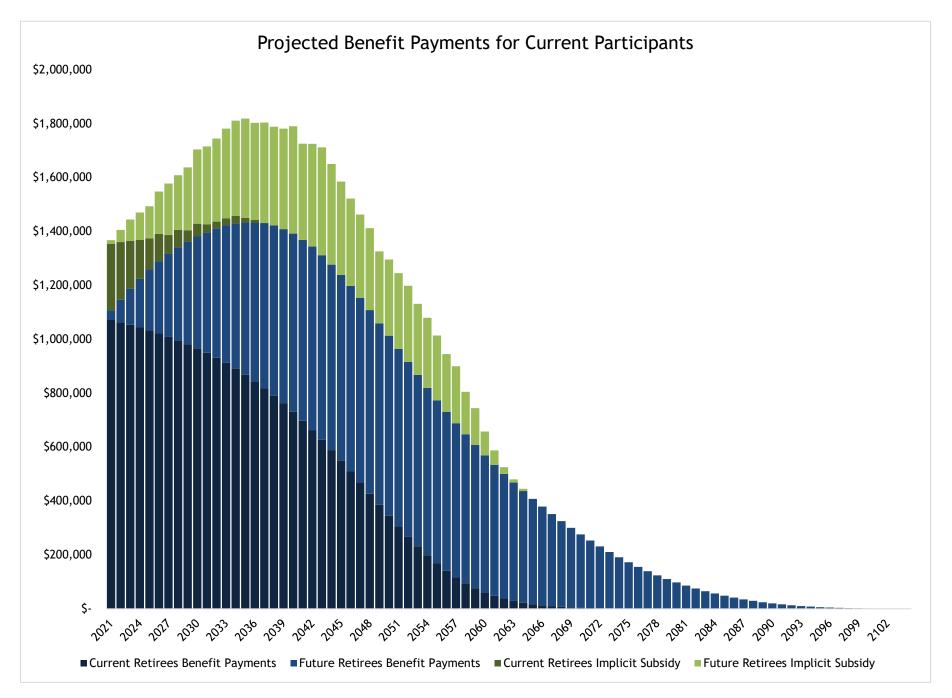
Net Projected Earnings	\$ 673,904
Investment Gain / Loss	Amount
Net Projected Earnings	\$ 673,904
Actual Net Earnings	421,628
Investment (Gain) / Loss	<u>\$252,276</u>

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.

Period Ending	Projecte	d Retiree Benefit P	ayments			Proj	jected In	nplicit Sub	sidy		
June 30:	Current Retirees	Future Retirees		Total	Currer	nt Retirees	Futur	e Retirees		Total	 Grand Total
2021	\$ 1,070,804	\$ 35,182	\$1,	105,986	\$	247,066	\$	14,257	\$	261,323	\$ 1,367,309
2022	1,062,139	84,495	1,	146,634		213,761		44,801		258,562	1,405,196
2023	1,052,941	134,318	1,	187,259		177,468		79,265		256,733	1,443,992
2024	1,043,090	180,544	1,	223,634		144,359		102,125		246,484	1,470,118
2025	1,032,551	227,067	1,	259,618		113,993		119,196		233,189	1,492,807
2026	1,021,266	268,324	1,	289,590		100,574		157,427		258,001	1,547,591
2027	1,009,020	308,149	1,	317,169		68,886		191,496		260,382	1,577,551
2028	995,889	344,536	1,	340,425		64,759		202,967		267,726	1,608,151
2029	981,560	380,232	1,	361,792		42,098		233,288		275,386	1,637,178
2030	966,137	414,488	1,	380,625		47,753		275,273		323,026	1,703,651
:	:	:		:		:		:		:	:
2095	-	5,623		5,623		-		-		-	5,623
2096	-	4,131		4,131		-		-		-	4,131
2097	-	2,962		2,962		-		-		-	2,962
2098	-	2,071		2,071		-		-		-	2,071
2099	-	1,406		1,406		-		-		-	1,406
2100	-	924		924		-		-		-	924
2101	-	585		585		-		-		-	585
2102	-	354		354		-		-		-	354
2103	-	203		203		-		-		-	203
2104	-	110		110		-		-		-	110
2105	-	56		56		-		-		-	56
2106	-	26		26		-		-		-	26
2107	-	11		11		-		-		-	11
2108	-	4		4		-		-		-	4
2109	-	1		1		-		-		-	1
2110	-	-		-		-		-		-	-

Measurement

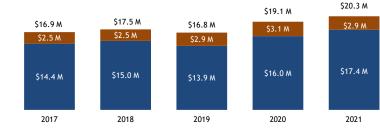


Actuarial standard of practice (ASOP) number 6, "Measuring Retiree Group Benefits Obligations and Determining Retiree Group Benefits Program Periodic Costs or Actuarially Determined Contributions", requires the inclusion of the implicit subsidy in OPEB valuations.

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 <u>2018</u>	2018 2019	2019 <u>2020</u>		2020 <u>2021</u>
Retiree Benefit Payments	\$		14,401,313 \$	15,	003,730	\$ 13,916,285	\$ 16,020,470	\$	17,408,719
Implicit Subsidy	_		2,511,028	2,	481,151	 2,876,610	 3,123,313		2,936,207
Total OPEB Liability	<u>\$</u>	1	6,912,341 \$	17,4	84,881	\$ 16,792,895	\$ 19,143,783	<u>\$</u>	20,344,926
Discount Rate			7.00%		7.00%	7.28%	6.17%		6.17%





Retiree Benefit Payments
 Implicit Subsidy

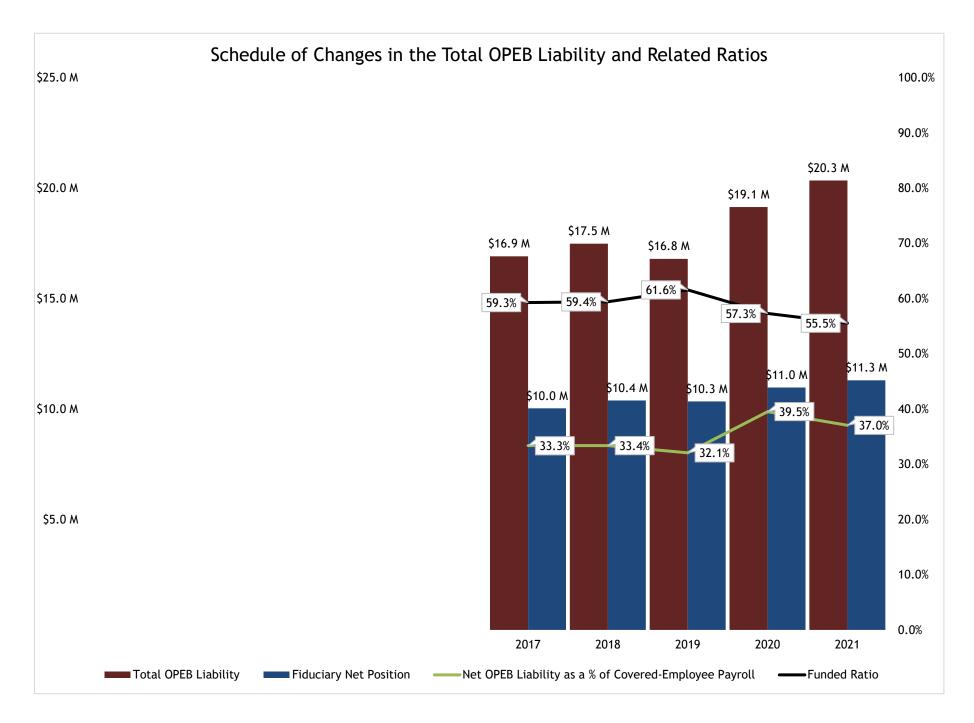
Schedule of Deferred Outflows and Inflows of Resources

			Amount					e) in Expense: Me				
	Measurement		,	Recognition	Remaining	2020	2021	2022	2023	2024	2025	
	Period	Base Amount	Recognized	Period	Period	2021	2022	2023	2024	2025	2026	Remaining
Differences Between Expected	2016-2017	\$-\$	-	6.8	2.8 \$	- \$	- \$	- \$	- \$	- \$	- \$	-
and Actual Experience	2017-2018*		-	6.8	3.8	-	-	-	-	-	-	-
	2017-2018**	135,598	39,882	6.8	4.8	19,941	19,941	19,941	19,941	15,952	-	-
	2018-2019	(200,112)	(29,429)	6.8	5.8	(29,429)	(29,429)	(29,429)	(29,429)	(29,429)	(23,538)	-
	2019-2020	475,121	-	6.1	6.1	77,889	77,889	77,889	77,889	77,889	77,889	7,787
hanges of Assumptions	2016-2017	-	-	6.8	2.8	-	-	-		-	-	-
	2017-2018*	-	-	6.8	3.8	-	-	-	-	-	-	-
	2017-2018**	(854,050)	(251,192)	6.8	4.8	(125,596)	(125,596)	(125,596)	(125,596)	(100,474)	-	-
	2018-2019	1,961,763	288,495	6.8	5.8	288,495	288,495	288,495	288,495	288,495	230,793	-
	2019-2020	109,418	-	6.1	6.1	17,938	17,938	17,938	17,938	17,938	17,938	1,790
ifferences Between Projected	2016-2017	(854,695)	(683,756)	5.0	1.0	(170,939)						
nd Actual Earnings	2017-2018*	266,057	159,636	5.0	2.0	53,212	53,209					
	2017-2018**	72,538	29,016	5.0	3.0	14,508	14,508	14,506				
	2018-2019	(34,388)	(6,878)	5.0	4.0	(6,878)	(6,878)	(6,878)	(6,876)			
	2019-2020	252,276	-	5.0	5.0	50,456	50,456	50,456	50,456	50,452		
ummary of Deferred Outflows a	nd Inflows of Re	sources										
Measurement Period	: July 1, 2019 -	June 30, 2020										
Fiscal Reporting Period	: July 1, 2020 -	June 30, 2021										
			Measurem	ent Years Endi	ng June 30:	2020	2021	2022	2023	2024	2025	
			Rep	ort Years Endi	ng June 30:	2021	2022	2023	2024	2025	2026	Remaining
	Differences Bet	ween Expected and	Actual Experie	ence	\$	68,401 \$	68,401 \$	68,401 \$	68,401 \$	64,412 \$	54,351 \$	7,787
	Changes of Assu	umptions				180,837	180,837	180,837	180,837	205,959	248,731	1,790
	Differences Bet	ween Projected and	d Actual Earning	gs		(59,641)	111,295	58,084	43,580	50,452	-	-
	Total				\$	189,597 \$	360,533 \$	307,322 \$	292,818 \$	320,823 \$	303,082 \$	9,577

*Report Year Ending June 30, 2018 **Report Year Ending June 30, 2019

		edule of	Chai	nges in the	То	tal OPEB L	iab	oility and Re	ela	ted Ratios
GASB 75 requires a disclosure of the changes in the Net OPEB Liability for the last ten i Measurement Date (June 30):	fiscal years, or for as many years as are available.	201	7	2018		2018		2019		2020
Report Date (June 30):		201		2018		2019		2020		2021
Total OPEB Liability										
Service Cost	\$	397,60	4\$	409,532	\$	-	\$	360,905	\$	459,956
Interest		1,103,30	1	1,149,342		-		1,212,957		1,178,040
Changes of Benefit Terms			-	-		-		-		-
Differences Between Expected and										
Actual Experience			-	-		135,598		(200,112)		475,121
Changes of Assumptions		(700.00	-	-		(854,050)		1,961,763		109,418
Benefit Payments Implicit Rate Subsidy Credit		(700,00 (277,89		(700,673) (285,661)		26,466		(689,589) (295,036)		(718,916) (302,476)
	—	523,01		· · · · · · · · · · · · · · · · · · ·		(601.096)			_	1,201,143
Net Change in Total OPEB Liability				572,540		(691,986)		2,350,888		
Total OPEB Liability – Beginning	-	16,389,32		16,912,341	_	17,484,881	_	16,792,895	-	19,143,783
Total OPEB Liability — Ending (a)	<u>\$</u>	16,912,34	<u>1</u>	17,484,881	\$	16,792,895	<u>\$</u>	19,143,783	\$	20,344,926
Plan Fiduciary Net Position										
Net Investment Income	\$	1,450,41	7\$	423,688	\$	(72,538)	\$	670,718	\$	421,628
Employer — City's Contribution										
		838,85		642,216		-		661,483		631,564
Employer – Implicit Subsidy		277,89		285,661		-		295,036		302,476
Benefit Payments		(700,00		(700,673)		26,466		(689,589)		(718,916)
Implicit Subsidy Credit Administrative Expense		(277,89 (4,60		(285,661) (5,244)		- (66)		(295,036) (2,350)		(302,476) (5,640)
Other Miscellaneous		(4,00	1)	(5,244)		(00)		(2,350)		(5,640)
Income/(Expense)			-	-		-		(10,898)		-
Net Change in Plan Fiduciary Net	—									
Position		1,584,67	1	359,987		(46,138)		629,364		328,636
Plan Fiduciary Net Position —						,				
Beginning		8,440,88	<u> </u>	10,025,559		10,385,546		10,339,408		10,968,772
Plan Fiduciary Net Position — Ending					_					
(b)	<u>\$</u>	10,025,55	<u> </u>	10,385,546	<u>\$</u>	10,339,408	<u>Ş</u>	10,968,772	\$	11,297,408
Net OPEB Liability										
City's Net OPEB Liability — Ending =										
(a) – (b)	\$	6,886,78	2\$	7,099,335	\$	6,453,487	\$	8,175,011	\$	9,047,518
Plan Fiduciary Net Position as a										
Percentage of the Total OPEB										
Liability		59.3		59.4%	~	61.6%		57.3%		55.5%
Covered-Employee Payroll	\$	20,650,03	ŏŞ	21,269,539	Ş	20,129,158	\$	20,682,710	\$	24,421,260
City's Net OPEB Liability as a Percentage of Covered-Employee										
Payroll		33.3	8%	33.4%		32.1%		39.5%		37.0%
•			0/0	55.4%		52.1/0		J7.J/0		57.0%

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



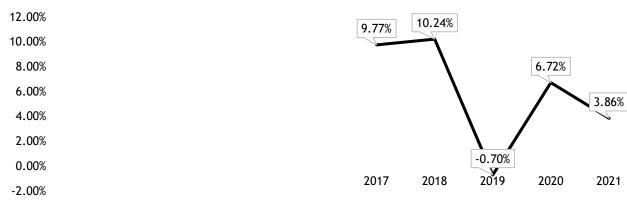
GovInvest Inc. / Precision Actuarial Inc.

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	2018	2019	2020
Report Date (June 30):	2017	2018	2019	2020	2021
Annual Money-Weighted Rate of Return, Net of					
Investment Expense	9.77%	10.24%	-0.70%	6.72%	3.86%

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).



Investment Returns

Investment Return

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.

Schedule of Contributions

Measurement Period: Reporting Period: Report Date (June 30):			2016-2017 2016-2017 2017	2017-2018 2017-2018 2018	2017-2018 2018-2019 2019	2018-2019 2019-2020 2020	2019-2020 2020-2021 2021
Actuarially Determined Contribution (ADC)		\$	642,132 \$	659,902 \$	- \$	908,656 \$	1,114,937
Less: Contributions Made in Relation to the ADC –			1,116,747	927,877	-	956,519	934,040
Contribution Deficiency (Excess)			(474,615)	(267,975)	-	(47,863)	180,897
Covered-Employee Payroll		\$	20,650,038 \$	21,269,539 \$	20,129,158 \$	20,682,710 \$	24,421,260
Contributions as a Percentage of Covered-Employee Payroll			5.41%	4.36%	0.00%	4.62%	3.82%
\$1.2 M	A	DC, Contributions, and Percentag	ge of Payroll				
51.2 M		5.	41%				
\$1.0 M					4.	62%	
\$0.8 M			4.	36%		3.	82% >
\$0.6 M					/		
\$0.4 M							
\$0.2 M							
			2017	2018	2019	2020	2021
	uarially Determined Contribution (ADC)	Contributions Made in Relation to the ADC	Contribu	tions as a Percentag	e of Covered-Emplo	yee Payroll	
Notes to Schedule:							
Assumptions and Methods Actuarial Cost Method: Entry-age	e normal, level percent of pay						
, .	eriod, level percent of pay						

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

 Amortization Method:
 Closed period, level percent of pay

 Amortization Period:
 20 years

 Inflation:
 2.50%

 Assumed Payroll Growth:
 2.750%

 Healthcare Trend Rates:
 7.00%, trending down to 4.04%

 Rate of Return on Assets:
 6.17%

 Mortality Rate:
 CalPERS Rates. See appendix.

 Retirement Rates:
 CalPERS Rates. See appendix.

GovInvest Inc. / Precision Actuarial Inc.

Draft Notes to the Financial Statements

A draft of the required notes to the City's financial statements, based on the requirements of GASB 75 and our understanding of the City'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 City'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 City 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

The PEMHCA minimum amount for retirees participating in PEMHCA is \$139/month in 2020 & \$143/month in 2021. PEMHCA amounts are adjusted on an annual basis. An additional \$318.73 per month will be paid for medical, dental, and vision for full-time employees hired and for City Council elected before September 30, 2011. The total subsidy will not be greater than the premium for the retiree and spouse. Coverage is allowed under any medical plan.

Employees Covered by Benefit Terms

At June 30, 2020 (the census date), the benefit terms covered the following employees:

Category	Count
Inactive employees, spouses, or beneficiaries currently receiving benefit payments:	147
Inactive employees entitled to but not receiving benefit payments:	134
Active employees:	320
Total	601

Draft Notes to the Financial Statements

Contributions

The City makes contributions based on an actuarially determined rate.

Contribution rate:	5.06%	for 15 years,
	2.02%	thereafter.
Reporting period contributions:	\$934,040	(Includes implicit subsidy credit.)

Financial Report

The City issues a stand-alone financial report that is available to the public. The report is available at: http://www.moval.org/departments/financial-mgmt-svcs/report-CAFR.html

Net OPEB Liability

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

Actuarial Assumptions

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

Measurement Date:	June 30, 2019 Jur	ne 30, 2020
Discount Rate	6.17%	6.17%
Investment Rate of Return	6.17%	6.17%
Inflation	2.50%	2.50%
Healthcare Cost Trend Rates		
Pre-Medicare	6.50%	7.00% *
Medicare	6.00%	4.00% *
Salary Increases	2.750%	2.750% **
Mortality Rates	Based on CalPERS table	s.

• 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 City'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 6.17%.

*Trending down to 4.04% over 55 years. Applies to calendar years.

**Additional merit-based increases based on CalPERS merit salary increase tables.

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	59%	6.80%	17.00%	8.14%
Fixed Income	25%	3.10%	7.83%	3.40%
TIPS	5%	2.25%	5.46%	2.40%
Commodities	3%	3.50%	21.50%	5.71%
REITs	8%	5.50%	17.28%	6.90%
Total/Average	100%			
Expected Compou	nd Return (1-10 Ye	ars)		5.85%
Expected Compou	nd Return (11-60 Y	ears)		8.07%
Expected Volatilit	у			11.83%
Uses an expected	long-term inflation	rate of 2.00%		

Current Liability	Amount
Current OPEB Liability	\$ 1,326,390
Non-Current OPEB Liability	 19,018,536
Total OPEB Liability	\$ 20,344,926

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: 6.1 years

Changes in the Net OPEB Liability	Inci	rease/(Decrease)	
	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
	(a)	(b)	(c) = (a) - (b)
Balance as of Report Date June 30, 2020	\$ 19,143,783 \$	10,968,772 \$	8,175,011
Changes for the year:			
Service Cost	459,956		459,956
Interest	1,178,040		1,178,040
Changes of Benefit Terms	-		-
Differences Between Expected and Actual Experience	475,121		475,121
Changes of Assumptions	109,418		109,418
Contributions			
Employer — City's Contribution		631,564	(631,564)
Employer — Implicit Subsidy		302,476	(302,476)
Net Investment Income		421,628	(421,628)
Benefit Payments	(718,916)	(718,916)	-
Implicit Subsidy Credit	(302,476)	(302,476)	-
Administrative Expenses		(5,640)	5,640
Other Miscellaneous Income/(Expense)	<u> </u>	-	-
Net Changes	1,201,143	328,636	872,507
Balance as of Report Date June 30, 2021	<u>\$ 20,344,926</u> <u>\$</u>	11,297,408 \$	9,047,518

Draft Notes to the Financial Statements

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 City, as well as what the City's total and net OPEB liability would be if they were calculated using a discount rate that is one percentage point lower (5.17%) or one percentage point higher (7.17%) follows:

	1% Decrease 5.17%			Discount Rate 6.17%		1% Increase 7.17%	
Total OPEB Liability (Asset)\$Increase (Decrease)% Change		22,490,424 2,145,498 10.5%	\$ 20,344,926			18,517,872 (1,827,054) -9.0%	
Net OPEB Liability (Asset) Increase (Decrease) % Change	\$	11,193,016 2,145,498 23.7%	\$	9,047,518	\$	7,220,464 (1,827,054) -20.2%	

Sensitivity of the total OPEB liability to changes in the healthcare cost trend rates. The healthcare trend for this valuation started at 7.00% and decreased to 4.04% over 55 years. The total OPEB liability of the City, as well as what the City's total OPEB liability would be if it were calculated using healthcare cost trend rates that are one percentage point lower (6.00%) or one percentage point higher (8.00%) than current healthcare cost trend rates follows:

	1% Decrease 6.00%			Trend Rate 7.00%		1% Increase 8.00%	
Total OPEB Liability (Asset) Increase (Decrease) % Change	\$	20,085,301 (259,625) -1.3%		\$ 20,344,926		20,643,536 298,610 1.5%	
Net OPEB Liability (Asset) Increase (Decrease) % Change	\$	8,787,893 (259,625) -2.9%	\$	9,047,518	\$	9,346,128 298,610 3.3%	

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 City recognized an OPEB expense of \$1,159,329. The City reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferred Outflows of		Deferred Inflows of
		Resources	 Resources
Differences Between Actual and Expected Experience	\$	473,007	\$ (141,254)
Changes of Assumptions		1,476,253	(477,262)
Net Difference Between Projected and Actual Earnings on OPEB Plan Investments		263,411	
Contributions Subsequent to the Measurement Date		1,838,078	 -
Total	\$	4,050,749	\$ (618,516)

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	\$ 360,533
2023	307,322
2024	292,818
2025	320,823
2026	303,082
Remaining	9,577

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

All Retirees	
Duration of coverage	Retiree's lifetime.
Conditions of coverage	Retire directly from the City under CalPERS (service or disability).
Dependent coverage	Benefit continues to surviving spouse of retiree or on death of active employee while eligible for retirement.
Medical plan choices	Same as actives.

Management hired/elected before September 30, 2011 and Non-Management hired before July 1, 2009								
Eligibility for additional retiree benefits Age 50 with 5 years of service.								
Eligibility for PEMHCA-only benefits	Age 50 with 5 years of service.							
Employer monthly contributi	Employer monthly contributions (full benefits)							
• Additional amount \$318.73 monthly, no future increases.								
PEMHCA amount	\$139 monthly (2020 amount) with annual increase.							

Non-Management Full-Time Employees Hired between July 1, 2009 and September 30, 2011							
Eligibility for additional Age 50 with 10 years of service.							
Eligibility for PEMHCA-only benefits	Age 50 with 5 years of service.						
Employer monthly contributions (full benefits)							
• Additional amount \$318.73 monthly, no future increases.							
PEMHCA amount	\$139 monthly (2020 amount) with annual increase.						

	es hired after September 30, 2011						
Age 50 with 5 years of service.							
Employer monthly con	Employer monthly contributions (full benefits)						
• Retiree only \$139 monthly (2020 amount) with annual increase.							

Excluded Employees	
Temporary employees	Unless participating in PEMHCA.
Crossing guards	Unless participating in PEMHCA.
Seasonal employees	Unless participating in PEMHCA.

Participant Summary

Census Date:

June 30, 2020

Age and service determined as of the census date.

	Active Participants										
Years of Service											
Age	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
< 25	3	2									5
25-29	7	15	2								24
30-34	6	17	4	3							30
35-39	2	17	9	7	2						37
40-44	4	21	6	3	6	4					44
45-49		14	6	22	8	4					54
50-54		12	6	9	15	8	3	1			54
55-59	2	2	5	7	9	2	2				29
60-64		4	2	1	9	6	1	4			27
65-69			1		2	3		2			8
70+				5	2	1					8
Total	24	104	41	57	53	28	6	7	vo Dortigir		320

Changes from Prior Census

Active Participants	Count
Prior Census	296
Hires	70
Retirements	(14)
Current Census	352

Inactive Participants	Retiree	Spouse	Total
Prior Census	215	41	256
Retirements	28	5	33
Deaths/Withdrawals	(8)	0	(8)
Current Census	235	46	281

*Includes surviving spouses, inactive employees not receiving benefits, service retirees, and disabled retirees Average Active Participant Age: 46.5

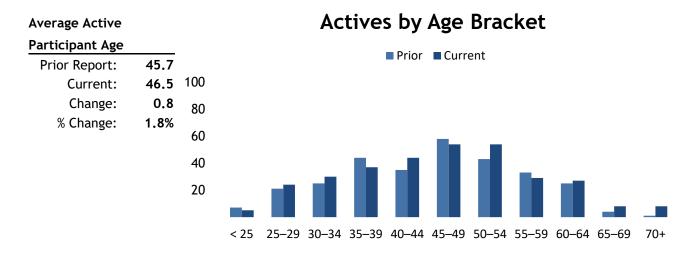
Average Years of Service: 10.2

Inactive Participants			
Age	Retiree*	Spouse	Total
< 50		10	10
50-54	1	12	13
55-59	30	17	47
60-64	65	3	68
65-69	61	2	63
70-74	35	2	37
75-79	20		20
80-84	14		14
85-89	6		6
90+	3		3
Total	235	46	281

Average Inactive Participant Age: 67.8

Participant Summary Charts

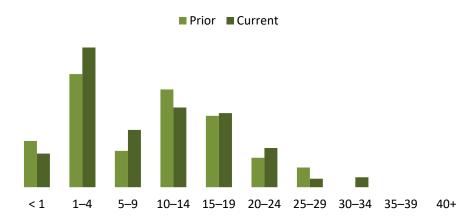
Census Date: June 30, 2020 Age and service determined as of the census date.



Average Years of

Service		
Prior Report:	10.2	
Current:	10.2	100
Change:	0.0	80
% Change:	0.0%	60
		40
		20

Actives by Years of Service



Inactives by Age Bracket



Basis of Valuation

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, 2020
Measurement Date	June 30, 2020
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 OPFB liability is 6 17%
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 City's actual premiums for all other purposes. Assumed annual per capita claims costs follow:

Age	Males	Females
50	\$ 9,806	\$ 10,166
55	11,093	10,696
60-64	13,437	11,977

Average Per Capita Cost for Implicit Subsidy Calculation

Developed based on premiums for the City's enrollment by plan, family demographics from CalPERS plans, and risk scores (both HMO and PPO) for the CalPERS population.

Basis of Valuation

Actuarial Assumptions

Assumption	Rates									
Aging or Morbidity Factors	Based on actual Ca	Based on actual CalPERS HMO and PPO population data.								
Participant Contributions	Based on service a	Based on service at retirement and employee group.								
Salary Increases	2.750% The salary payroll.	2.750% The salary increase is used to determine the growth in the aggregate payroll.								
	Individual Salary I	ncreases: 2018 CalPERS Merit Sala	ry Increases.							
Inflation Rate	2.50%									
Marital Status	Current Retirees:	Actual spouse coverage is used.								
	Future retirees: 50	0% assumed to be married.								
Spouse Gender	Assumes spouse of	opposite gender for current and t	future retirees.							
Spouse Age Difference	Actual spouse age than females for f	is used for current retirees. Assur uture retirees.	nes males are three years older							
Participation		Assume current elections continue								
		ction assumptions summarized be								
	Healthcare Plan	Hired Before 9/30/2011	Hired On or After 9/30/2011							
	PEMHCA	60%	70.0%							
	Non-PEMHCA	30%	0.0%							
	Waived 10% 30.0%									
	*Assumed all cove	*Assumed all covered spouses elect survivor spouse benefits.								
PEMHCA Administrative Fee	0.24% of retiree p	remium.								
Annual PEMHCA Amount	\$1,692 for the per	iod June 30, 2020 through June 30), 2021.							

Basis of Valuation

Actuarial Assumptions

Assumption	Rates									
Premiums	Premiums used to develop aged claims									
	Grouping			Employee	Two-Party					
	Pre-Medicare			\$ 7,720	\$ 15,440					
	Medicare			4,087	8,174					
Trend Rates	Medical long-ter	m trends from Soci	ety of Actuar	ies "Long Term	Healthcare					
	Cost Trends Mod	lel v2019_b" using b	aseline assun	nptions. Applied	d to both					
	claims and premiums.									
		Pre-Medicare	Medicare							
	Calendar Year	Trend	Trend	PEMHCA Trend						
	2020	7.00%	4.00%	3.00%						
	2021	6.50%	4.00%	3.00%						
	2022	6.00%	4.00%	3.00%						
	2023	5.50%	4.00%	3.00%						
	2024	5.45%	4.00%	3.00%						
	2025	5.39%	4.00%	3.00%						
	2026	5.34%	4.00%	3.00%						
	2027	5.29%	4.00%	3.00%						
	2028-2074		•••							
	2075+	4.04%	4.00%	3.00%						
Inactives Not Currently Receiving Benefits:	Inactive individuals not receiving a contribution toward CalPERS premiums or outside health coverage by the City are assumed to receive a contribution of \$318.73/month with a 20% probability.									
Benefit Reimbursement Assumptions:	continue to rece they did from Ju	led in a health plar rive the same benef Ily 1, 2019 through plan are assumed to	fit reimburser June 30, 2020	ment amount pe 0. Employees ei	er month as nrolled in a					

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

About GASB 75

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

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

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

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

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

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

About GASB 75 (continued)

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

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

Key Terminology

Actuarially Determined Contribution	A target or recommended contribution to a defined benefit OPEB plan for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.
Actuarial Present Value of Projected Benefit Payments	Projected benefit payments discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.
Agent Employer	An employer whose employees are provided with OPEB through an agent multiple- employer defined-benefit OPEB plan.
Closed Period	A specific number of years that is counted from one date, which declines to zero with the passage of time. For example, if the recognition period initially is five years on a closed basis, four years remain after the first year, three years after the second year, and so forth until no years remain.
Contributions	Additions to an OPEB plan's fiduciary net position for amounts from employers, non- employer contributing entities, or employees.
Dates and Periods	
• Census Date	The date of the census. It is usually the same as the Valuation Date.
• Measurement Date	The date on which assets are measured. The liabilities are rolled forward to this date from the Valuation Date , should it differ, using actuarial roll-forward techniques.
Measurement Period	The year ending on the Measurement Date.
• Report Date	The date on which the amounts are reported in the financial statements. It is the same as the fiscal year-end. It may be up to one year ahead of the Measurement Date, with no roll-forward of liabilities or assets required.
 Reporting Period 	The year ending on the Report Date . It is the same as the fiscal year.
Valuation Date	The date on which the liabilities are valued.
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.

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 .
Substantive Plan	The plan terms as understood by the employer and the plan members at the time of the valuation, including only changes to plan terms that have been made and communicated to employees.
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.

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

Mortality Miscellaneous Employees	Source Table Mort and Disb Rates_PA Misc
Disability Rates Miscellaneous Employees	Mort and Disb Rates_PA Misc
Terminated Refund Rates Miscellaneous Employees	Terminated Refund Rates_Misc
Terminated Vested Rates Miscellaneous Employees	Terminated Vested Rates_PA Misc
Salary Scale Rates Miscellaneous Employees	Salary Scale Rates_PA Misc
Service Retirement Rates	Salary Scale Nales_FA Misc
Miscellaneous Employees	
• 2.0% at 55	Rx PA Misc 2% @ 55
• 2.0% at 62	Rx PA Misc 2% @ 62
• 2.7% at 55	Rx PA Misc 2.7% @ 55

Sample Mortality and Disability Rates

Public Agency Miscellaneous

		Pre-Retirem	ent Mortality		Post-Retirement Mortality					Disability				
	Male Ass	umptions	Female As	sumptions	Male Assumptions			Female Assumptions			Male Assumptions		Female Assumptions	
	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:

1) Pre-Retirement and Post-Retirement mortality rates include 20 years of projected on-going mortality improvement using Scale BB published by the Society of Actuaries.

2) Miscellaneous Plans usually have Industrial Death rates set to zero unless the agency has specifically contracted for Industrial Death benefits. If so, each Non-Industrial Death rate shown above will be split into two components: 99% will become the Non-Industrial Death rate and 1% will become the Industrial Death rate.

3) The Miscellaneous Non-Industrial Disability rates are used for Local Prosecutors.

4) Normally, Industrial Disability rates are zero for miscellaneous plans unless the agency has specifically contracted for Industrial Disability benefits. If so, each miscellaneous non-industrial disability rate will be split into two components: 50% will become the Non-Industrial Disability rate and 50% will become the Industrial Disability rate.

Entry Ages

Sample Termination Rates

Sample Terminated Refund Rates Public Agency Miscellaneous

	Lifti y Ages	Ages Tublic Agency Miscellaneo								Lettaneous
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

ſ	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 Salary Scale Rates

Entry Ages Public Agency Miscellaneous														
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

Matrix of Sample Service Retirement Assumption Rates

	Attained Ages	5	Public Agency Miscellaneous 2% @ 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	0.0080	0.0400	0.0580	0.1450	0.1500	1.0000	1.0000	
10	0.0130	0.0400	0.0750	0.1730	0.1710	1.0000	1.0000	
15	0.0180	0.0560	0.0930	0.2010	0.1920	1.0000	1.0000	
20	0.0210	0.0930	0.1260	0.2330	0.2390	1.0000	1.0000	
25	0.0220	0.1090	0.1430	0.2660	0.3040	1.0000	1.0000	
30	0.0330	0.1540	0.1690	0.2890	0.3300	1.0000	1.0000	
35	0.0500	0.2100	0.2070	0.3160	0.3300	1.0000	1.0000	
40	0.0000	0.2400	0.2800	0.3300	0.3300	1.0000	1.0000	
45	0.0000	0.0000	0.2800	0.3300	0.3300	1.0000	1.0000	
50	0.0000	0.0000	0.0000	0.3300	0.3300	1.0000	1.0000	

Public Agency Miscellaneous 2% @ 62

	Attained Ages
-	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	0.00000	0.01000	0.03100	0.10800	0.12000	1.00000	1.00000
10	0.00000	0.01900	0.05100	0.14100	0.15600	1.00000	1.00000
15	0.00000	0.02800	0.07100	0.17300	0.19300	1.00000	1.00000
20	0.00000	0.03600	0.09100	0.20600	0.22900	1.00000	1.00000
25	0.00000	0.06100	0.11100	0.23900	0.26500	1.00000	1.00000
30	0.00000	0.09600	0.13800	0.30000	0.33300	1.00000	1.00000
35	0.00000	0.15200	0.18300	0.34800	0.38700	1.00000	1.00000
40	0.00000	0.18000	0.20400	0.36000	0.40000	1.00000	1.00000
45	0.00000	0.00000	0.20400	0.36000	0.40000	1.00000	1.00000
50	0.00000	0.00000	0.00000	1.00000	1.00000	1.00000	1.00000

Public Agency Miscellaneous 2.7% @ 55

	Attained Ages	5		F	Public Agency	Miscellaneo	us 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