BARTEL ASSOCIATES, LLC

CITY OF Richmond CALIFORNIA

CalPERS Miscellaneous and Safety Plans

Pension Override Tax Study for Fiscal Years 2021/22 and 2022/23

Bartel Associates, LLC
June 15, 2022

BARTEL ASSOCIATES, LLC

ACTUARIAL CERTIFICATION

This report presents our analysis of the City of Richmond CalPERS Miscellaneous and Safety Plans ("Plans").

The purpose of this analysis is to calculate the portion of the City's CalPERS employer contribution that can be paid through City property taxes for the 2021/22 and 2022/23 fiscal years. Future calculations may differ significantly if the Plan's experience differs from our assumptions or if there are changes in plan design, actuarial methods or actuarial assumptions. The project scope did not include an analysis of this potential variation. Actuarial calculations for other purposes such as plan funding or financial reporting will differ from those shown in this report.

The analysis is based on our understanding of the benefit provisions, actuarial reports and benefit summaries prepared by CalPERS and provided by the City, and on the methodology detailed in this report. Alternative methods could produce different results. The project scope did not include alternate analyses.

The City previously issued Pension Obligation Bonds in 1999 and 2005. We believe the proportion of bond debt service payments in the future should always be the same as determined when the bonds were issued. Section 2 of our report details the methodology used.

We have reviewed CalPERS information for reasonableness, and have relied on that information as the basis of these calculations. We do not make any representation on the accuracy of CalPERS reports.

To the best of our knowledge, this report is complete and accurate and has been conducted using generally accepted actuarial principles and practices. As members of the American Academy of Actuaries, meeting Academy Qualification Standards, we certify the actuarial results and opinions herein.

We are available to answer any questions on this report.

Respectfully submitted,

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SECTION 1
SUMMARY OF RESULTS

We understand the City of Richmond's property tax can be used to pay for CalPERS retirement benefits effective or contracted before July 1, 1978. The purpose of this study is to estimate the portions of the CalPERS employer contributions for fiscal years 2021/22 and 2022/23, and the portion of the June 30, 2020 unfunded actuarial accrued liability, that are attributable to benefits in effect or contracted before July 1, 1978.

Using the actuarial assumptions and methodology described in this report, we have estimated the portions of the City's 2021/22 and 2022/23 CalPERS required employer contributions for the Miscellaneous and Safety Plans attributable to pre-July 1, 1978 benefit levels and to subsequent benefit improvements. The following summarizes the results of our calculations.

Employer Contribution Attribution

	2021/22 Fiscal Year		2022/23 Fiscal Year	
	Amounts ($000s)	Percent of Total	Amounts ($000s)	Percent of Total
■ Total Employer Contribution Attributable to Pre-1978 Benefit Level	$33,805	83.8%	$34,978	84.3%
■ Total Employer Contribution Attributable to Post-1978 Benefit Level	6,555	16.2%	6,511	15.7%
■ Total	40,360	100.0%	41,489	100.0%

June 30, 2020 Unfunded Actuarial Accrued Liability Attribution

	Miscellaneous ($millions)	Safety ($millions)	Total ($millions)	Percent of Total
■ Total Unfunded Actuarial Accrued Liability Attributable to Pre-1978 Benefit Level	$118.5	$201.6	$320.1	87.2%
■ Total Unfunded Actuarial Accrued Liability Attributable to Post-1978 Benefit Level	19.2	27.7	46.8	12.8%
■ Total	137.7	229.3	366.9	100.0%

SECTION 2
PURPOSE AND METHODOLOGY

The purpose of this study is to estimate the portions of the CalPERS employer contributions for fiscal years 2021/22 and 2022/23 that are attributable to benefits in effect or contracted before July 1, 1978.

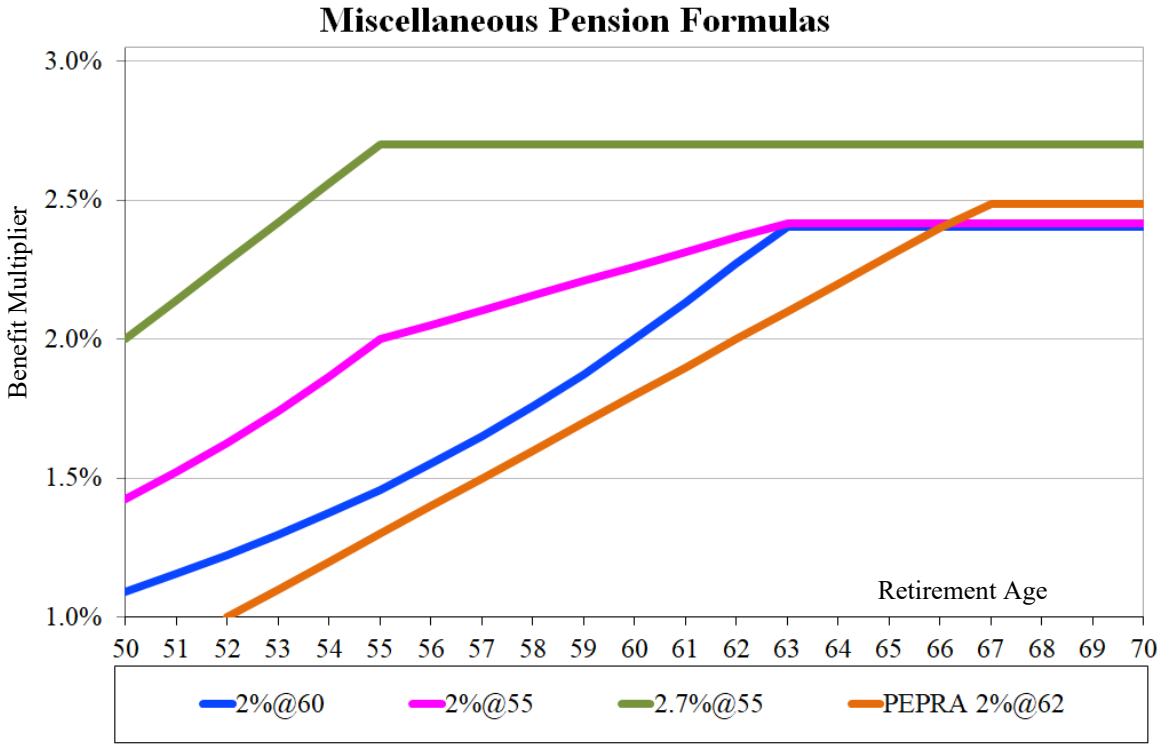
CalPERS Miscellaneous Plan Benefits

The benefit formulas in effect on July 1, 1978 were:

- Miscellaneous Plan: 2% @ 60 benefit formula, with final 3 year average compensation, post-retirement survivor allowance, and 2% COLA

The cost of benefit improvements effective after July 1, 1978 that affect the City's CalPERS contribution rates must be separated. These improvements are:

- Final 1 year average compensation, effective 9/1/1978
- 2% @ 55 benefit formula, effective 7/1/1992.
- 2.7% @ 55 benefit formula, effective 1/1/2003.
- 2% @ 62 benefit formula, effective 1/1/2013. This PEPRA benefit is a lower benefit than the pre-1978 2%@60 benefit for employees retiring at all ages younger than age 66, and so it is not considered a benefit improvement.



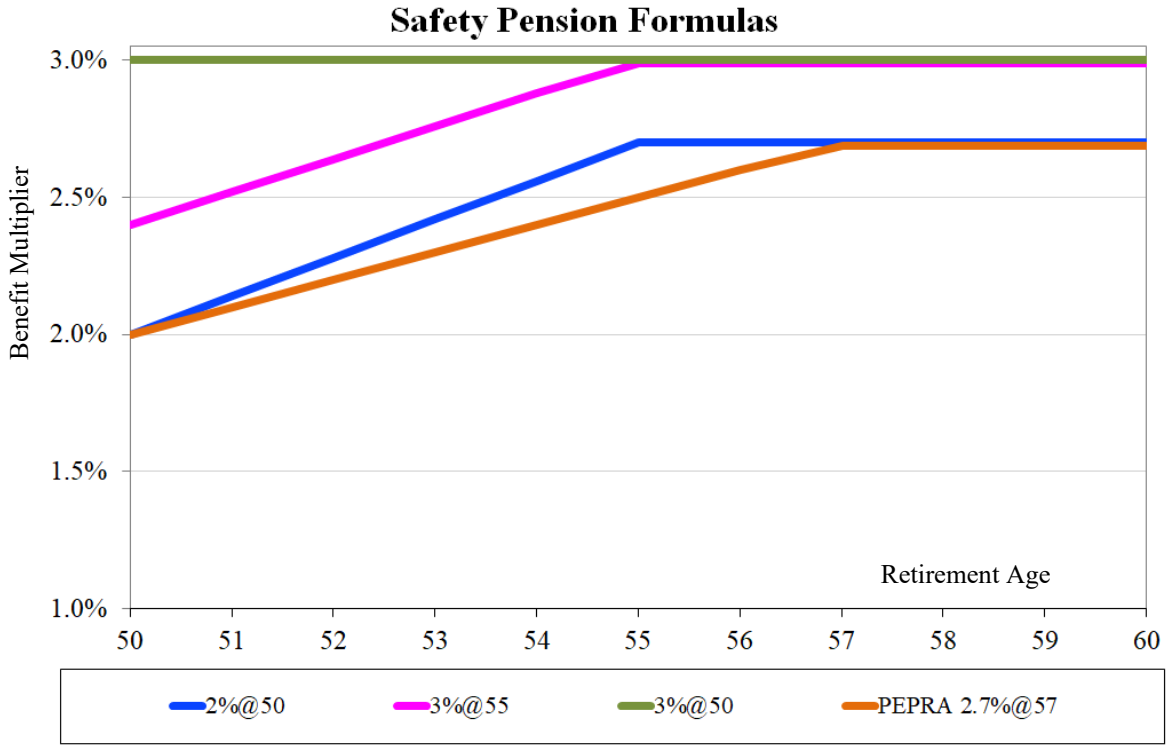
CalPERS Safety Police and Safety Fire Plans Benefits

The benefit formulas in effect on July 1, 1978 were:

- Safety Police and Safety Fire Plans: 2% @ 50 benefit formula, with final 3 year average compensation, post-retirement survivor allowance, and 2% COLA

The cost of benefit improvements effective after July 1, 1978 that affect the City's CalPERS contribution rates must be separated. These are:

- Final 1 year average compensation, effective 7/1/1978 for Fire members and 12/1/1979 for Police members
- 3% @ 55 benefit formula for both Police and Fire members, effective 10/1/2002
- 3% @ 50 benefit formula for Police members, effective 3/1/2003
- 2.7% @ 57 benefit formula, effective 1/1/2013. This PEPRA benefit is a lower benefit than the pre-1978 2%@50 benefit and so it is not considered a benefit improvement.



SECTION 2
PURPOSE AND METHODOLOGY

Cost of Benefit Improvements

The actual costs of a defined benefit plan are determined by the amount of the benefit promise, the actual salaries and service of the plan participants, and how long they and their beneficiaries live to receive payments. The ultimate cost of the plan cannot be determined until all benefits have been paid.

There is no perfect way to evaluate the "true cost" of a benefit change. In part this is because all plan benefits have not yet been paid so the total plan cost is not yet known. Two other important difficulties arise because:

- Benefit changes typically cause changes in employee behavior, most typically retiring earlier or later than before the benefit change. This new behavior impacts both the cost of the original benefit and the benefit improvements.
- Salary negotiations might have been different if benefits had not been improved. Different salary patterns impact both the cost of the original benefits as well as the cost of the improvements.

Following is an example illustrating how lower salaries negotiated in concert with a benefit increase can impact the perceived cost of a benefit improvement.

Illustrative Example for Sample Employee

	Original Benefit Formula 2% @ 50	**Improved Benefit Formula 3% @ 50 Unchanged Final Compensation**	**Improved Benefit Formula 3% @ 50 Lower Final Compensation**
Final compensation	$ 100,000	$ 100,000	$ 95,000
Retirement age	55	55	55
Service at retirement	30 years	30 years	30 years
Benefit Factor for formula	2.70%	3.00%	3.00%
Annual Retirement Benefit (compensation x service x benefit factor)	$ 81,000	$ 90,000	$ 85,500
Apparent pension increase due to benefit change		**11.1%**	**5.6%**

Our calculations do not reflect any employee behavior changes or salary changes triggered by the benefit level change, except for differences by benefit level reflected in CalPERS actuarial assumptions.

Cost of CalPERS Benefit Improvements after July 1, 1978

We estimated the impact of benefit improvements effective after July 1, 1978 by estimating the increase in the Normal Cost (see Section 3) and the portion of the Unfunded Actuarial Accrued Liability (UAAL) (see Section 4) due to the benefit improvements. The cost of benefit improvements can change from time to time as CalPERS actuarial assumptions change. The biggest cost impacts are generally from changes in the discount rate or assumed future salary increases.

Cost of CalPERS Benefit in Effect on July 1, 1978

We estimated the cost of benefits in effect on July 1, 1978 by subtracting our estimate of the cost of benefit improvements effective after July 1, 1978 from the total CalPERS employer contribution rates for each year.

2005 Pension Obligation Bond Refunding

We understand the City of Richmond previously issued pension obligation bonds in 1999 and in 2005. During the 2005 bond issuance process, the City determined that 86.13% of the UAAL at that time was attributable to pre-1978 benefit levels.

The proportion of the plan's unfunded actuarial accrued liability that is attributable to pre-1978 benefit levels will change over time as the mix of current employees with benefits above and below that level changes. However, the 2005 POB paid off the dollar amount of UAAL at that one point in time -- 2005. The amount of UAAL paid off does not change, and so we believe the proportion of that POB that relates to pre-1978 benefit levels also cannot change. Therefore, in our opinion as actuaries, the proportion of the 2005 POB's debt service attributable to pre-1978 benefit levels will not change for the entire duration of that POB, even if the POB is refinanced and the dollar amount of the payments changes.

Similarly, if there are any debt service payments remaining that relate to the 1999 POB, the proportion of those debt service payment attributable to pre-1978 benefit levels also should not change.

Impact of Previous Pension Obligation Bonds

We estimate the 2005 POB funded 99.5% of the estimated UAAL at November 9, 2005. For purposes of the calculations in this report, we have treated the 2005 POB as paying off 100% of the then-existing UAAL. Because the entire UAAL was paid off by adding assets to the CalPERS fund, there was no change in the proportion of the UAAL

attributable to pre-1978 benefits and our methodology can be applied to the entire current UAAL.

The 2005 POB paid off all of the then-existing UAAL and the plans' current UAAL has all arisen since 2005. However, the current UAAL is attributable to pre 1978 and post 1978 benefits.

SECTION 3
NORMAL COST ANALYSIS

The following section summarizes the net employer ("ER") normal cost change due to each benefit improvement after July 1, 1978 separately for each plan and tier.

Miscellaneous Tier 1 Plan
June 30, 2020

Benefit Improvements	Effective Date	Estimated ER Cost as a Percentage of PERSable Payroll	Basis for Estimate: CalPERS June 30, 2020 Miscellaneous Risk Pool Actuarial Valuation
Final One Year Average Compensation	9/1/1978	0.47%	Current normal cost increase for final one year average compensation for 2%@60, including adjustment for demographic difference between the City combined Miscellaneous and the CalPERS risk pool
2%@55 Benefit Formula	7/1/1992	1.74%	Current normal cost increase for 2%@55 over 2%@60 benefit formula with final one year average compensation, post-retirement survivor allowance and 2% COLA, including adjustment for demographic difference between the City combined Miscellaneous and the CalPERS risk pool
2.7%@55 Benefit Formula	1/1/2003	3.14%	Current normal cost increase for 2.7%@55 over 2%@55 benefit formula with final one year average compensation, post-retirement survivor allowance and 2% COLA, including adjustment for demographic difference between the City combined Miscellaneous and the CalPERS risk pool
Total		**5.35%**	

Miscellaneous PEPRA Plan

Miscellaneous is the PEPRA 2%@62 formula. It is a lower benefit than the pre-1978 benefit. Therefore, all PEPRA 2%@62 benefits can be paid from the Pension Override Tax.

SECTION 3
NORMAL COST ANALYSIS

Safety Tier 1 Plans
June 30, 2020

Benefit Improvements	Effective Date	Estimated ER Cost as a Percentage of PERSable Payroll	Basis for Estimate: CalPERS June 30, 2020 Safety Risk Pool Actuarial Valuation
Final One Year Average Compensation	Police 12/1/1979 Fire 7/1/1978	1.03%	Current normal cost increase for final one year average compensation for 2%@50 benefit formula including adjustment for demographic difference between the City combined Safety and the CalPERS risk pool
3%@55 Benefit Formula	Police 10/1/2002 Fire 10/1/2002	2.55%	Current normal cost increase for 3%@55 over 2%@50 benefit formula with final one year average compensation, post-retirement survivor allowance, and 2% COLA, including adjustment for demographic difference between the City combined Safety and the CalPERS risk pool
3%@50 Benefit Formula	Police 3/1/2003	1.21%	Current normal cost increase for 3%@50 over 3%@55 benefit formula with final one year average compensation, post-retirement survivor allowance, and 2% COLA, including adjustment for demographic difference between the City combined Safety and the CalPERS risk pool, as well as adjustment for Police members only
Total		**4.79%**	

Safety PEPRA Plans

Safety PEPRA is the PEPRA 2.7%@57 formula. It is a lower benefit than the pre-1978 benefit. Therefore, all PEPRA 2.7%@57 benefits can be paid from the Pension Override Tax.

SECTION 3
NORMAL COST ANALYSIS

The following table separates the current employer (ER) portion of the normal cost rate for Miscellaneous and Safety plan tiers between amounts attributable to post-July 1, 1978 benefit improvements as calculated above, and the remaining normal cost which is attributable to benefit levels in effect at July 1, 1978.

	FY 2021/22		FY 2022/23	
	Miscella-neous	Safety	Miscella-neous	Safety
■ Total ER normal cost rate (as a percentage of PERSable payroll) for fiscal year	13.03%	21.83%	12.58%	21.07%
■ ER Normal Cost attributable to Post-1978 Benefit Level	4.17%	3.85%	3.96%	3.63%
■ ER Normal Cost attributable to Pre-1978 Benefit Level	8.86%	17.98%	8.62%	17.44%

Normal Cost rates for FY2021/22 are based on the following information in the June 30, 2019 actuarial valuation reports and the cost of benefit improvements from pages 6 to 9 of this report.

Miscellaneous	FY 2021/22		
	Tier 1	PEPRA	Total
■ Total employer normal cost rate as a percentage of payroll	14.68%	7.42%	13.03%
■ ER Normal Cost attributable to Post-1978 Benefit Level (calculated on previous pages)	5.35%	0.00%	4.17%
■ ER Normal Cost attributable to Pre-1978 Benefit Level	9.33%	7.42%	8.86%
■ FY 2021/22 projected payroll ($'000s)	$30,710	$8,662	$39,372

Safety	FY 2021/22		
	Tier 1	PEPRA	Total
■ Total employer normal cost rate as a percentage of payroll	24.81%	10.28%	21.83%
■ ER Normal Cost attributable to Post-1978 Benefit Level (calculated on previous pages)	4.79%	0.00%	3.85%
■ Normal Cost attributable to Pre-1978 Benefit Level	20.02%	10.28%	17.98%
■ FY 2021/22 projected payroll ($'000s)	$30,469	$7,488	$37,957

SECTION 3
NORMAL COST ANALYSIS

Normal Cost rates for FY2022/23 are based on the following information in the June 30, 2020 actuarial valuation reports and the cost of benefit improvements from pages 6 to 9 of this report.

Miscellaneous	FY 2022/23		
	Tier 1	PEPRA	Total
■ Total employer normal cost rate as a percentage of payroll	14.52%	7.29%	12.58%
■ ER Normal Cost attributable to Post-1978 Benefit Level (calculated on previous pages)	5.35%	0.00%	3.96%
■ ER Normal Cost attributable to Pre-1978 Benefit Level	9.17%	7.29%	8.62%
■ FY 2022/23 projected payroll ($'000s)	$27,325	$9,626	$36,952

Safety	FY 2022/23		
	Tier 1	PEPRA	Total
■ Total employer normal cost rate as a percentage of payroll	24.60%	10.50%	21.07%
■ ER Normal Cost attributable to Post-1978 Benefit Level (calculated on previous pages)	4.79%	0.00%	3.63%
■ Normal Cost attributable to Pre-1978 Benefit Level	19.81%	10.50%	17.44%
■ FY 2022/23 projected payroll ($'000s)	$27,461	$8,773	$36,234

SECTION 3
NORMAL COST ANALYSIS

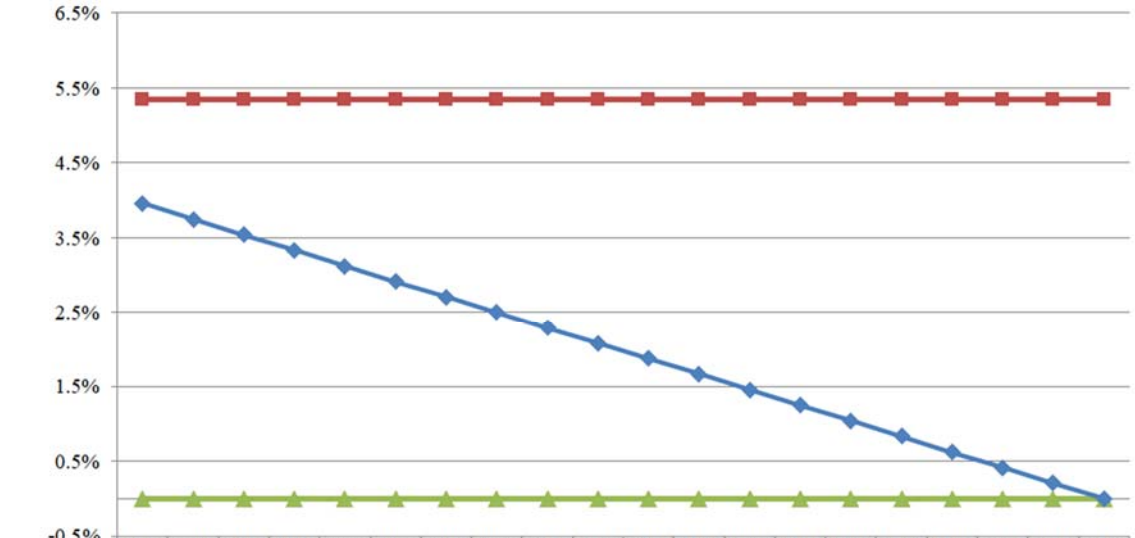
Projection of Future Normal Cost (for Illustrative Purposes Only)

Each year in the future, Miscellaneous and Safety classic members in Tier 1 will leave employment with the City and be replaced by employees in the classic Tier 1 (for certain lateral hires) or PEPRA tiers. As this happens, the portion of the City's normal cost that is attributable to post-July 1, 1978 benefit improvements will decrease, since PEPRA members' benefits are lower than the pre-July 1, 1978 benefit level. The following chart illustrates that anticipated change.

The chart is based on the following assumptions:

- 7.00% discount rate used in the 6/30/20 CalPERS valuation; does not reflect the 2021 discount rate change to 6.8% or the impact of future discount rate reductions anticipated from CalPERS' Risk Mitigation policy. No other changes in CalPERS actuarial assumptions after the 6/30/20 valuations are included.
- The PEPRA benefit formula effective January 1, 2013 is lower than the pre-1978 benefit level.
- Payroll for classic members decreases to zero in 2041/42 in a straight line.

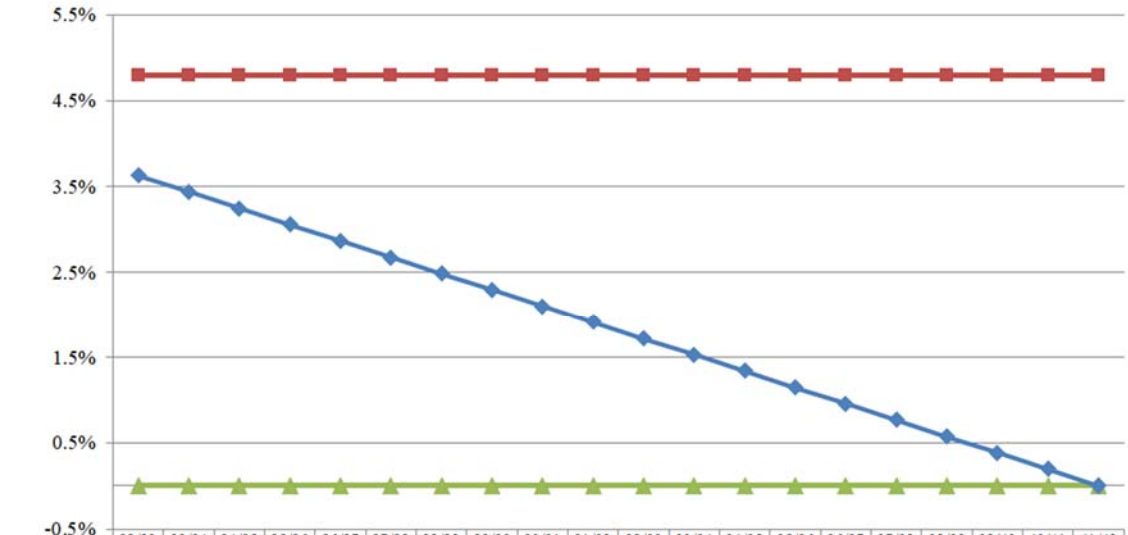
Miscellaneous: Projection of Post-1978 Normal Cost



	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	35/36	36/37	37/38	38/39	39/40	40/41	41/42
Tier 1	5.35%	5.35%	5.35%	5.35%	5.35%	5.35%	5.35%	5.35%	5.35%	5.35%	5.35%	5.35%	5.35%	5.35%	5.35%	5.35%	5.35%	5.35%	5.35%	5.35%
PEPRA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Combined	3.96%	3.75%	3.54%	3.33%	3.12%	2.91%	2.71%	2.50%	2.29%	2.08%	1.87%	1.67%	1.46%	1.25%	1.04%	0.83%	0.62%	0.42%	0.21%	0.00%

Conclusion: When all active Miscellaneous members are in the PEPRA tier, none of the normal cost will be attributable to post July 1, 1978 benefit increases.

Safety: Projection of Post-1978 Normal Cost



	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	35/36	36/37	37/38	38/39	39/40	40/41	41/42
Tier 1	4.79%	4.79%	4.79%	4.79%	4.79%	4.79%	4.79%	4.79%	4.79%	4.79%	4.79%	4.79%	4.79%	4.79%	4.79%	4.79%	4.79%	4.79%	4.79%	4.79%
PEPRA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Combined	3.63%	3.44%	3.25%	3.06%	2.87%	2.68%	2.48%	2.29%	2.10%	1.91%	1.72%	1.53%	1.34%	1.15%	0.96%	0.76%	0.57%	0.38%	0.19%	0.00%

Conclusion: When all active Safety members are in the PEPRA tier, none of the normal cost will be attributable to post July 1, 1978 benefit increases.

SECTION 4
UNFUNDED ACTUARIAL ACCRUED LIABILITY ANALYSIS

Allocation of Current Unfunded Actuarial Accrued Liability

The Plans' current unfunded actuarial accrued liability (UAAL) must be analyzed to determine what portion of that UAAL is attributable to benefit increases after July 1, 1978. We have used the following assumptions in our analysis:

- We used CalPERS actual investment returns from June 30, 1984 through June 30, 2021.
- Actual returns before 1984 were not available. We estimated each year's investment return from July 1, 1978 to June 30, 1984 as the average return from 1984 through 2021.
- City PERSable Payrolls were estimated as:
  - Miscellaneous 1995 – 2020, Safety 1995 – 2020: Based on CalPERS actuarial reports
  - Prior to 1995: projected backward using 2.75% annual total payroll decrease
- No adjustment was made for prior retirement-allocated property taxes different from our model's assumptions.

Methodology

We developed the UAAL allocation basis by calculating two amounts:

1) We applied the normal cost rate attributable to the pre-July 1, 1978 benefit level to the PERSable payroll for each year beginning in 1978/79. Normal cost amounts were accumulated to the present with the actual (or assumed, prior to 1984) investment return in each year
2) We applied the normal cost rate attributable to post-July 1, 1978 benefit increases to the PERSable payroll in each year after the increase was effective. These amounts were accumulated to the present with the actual (or assumed, prior to 1984) investment return in each year
3) The June 30, 2020 UAAL was then allocated to pre- and post-July 1, 1978 in proportion to the two accumulated balances (1) and (2) described above.

This methodology does not take into account any actions the City may have taken in regards to the pension override tax in prior years.

SECTION 4
UNFUNDED ACTUARIAL ACCRUED LIABILITY ANALYSIS

The following tables show the resulting allocation of the UAAL at June 30, 2020.

Miscellaneous UAAL
June 30, 2020

	Miscellaneous	
	($'000s)	%
■ Unfunded Liability Attributable to Pre-1978 Benefit Level	$118,511	86.1%
■ Unfunded Liability Attributable to Post-1978 Benefit Level	19,156	13.9%
■ Total	137,667	100.0%

Safety UAAL
June 30, 2020

	Safety	
	($'000s)	%
■ Unfunded Liability Attributable to Pre-1978 Benefit Level	$201,604	87.9%
■ Unfunded Liability Attributable to Post-1978 Benefit Level	27,675	12.1%
■ Total	229,279	100.0%

Combined Miscellaneous & Safety UAAL
June 30, 2020

	Total	
	($'000s)	%
■ Unfunded Liability Attributable to Pre-1978 Benefit Level	$320,115	87.2%
■ Unfunded Liability Attributable to Post-1978 Benefit Level	46,831	12.8%
■ Total	366,946	100.0%

SECTION 5
EMPLOYER CONTRIBUTION ANALYSIS

Sections 3 and 4 of the report described how the normal cost and unfunded actuarial accrued liability were attributed to the pre-July 1, 1978 and post-July 1, 1978 benefit levels. The following pages detail how these allocations were used to attribute the total employer contributions for the 2021/22 and 2022/23 fiscal years to the pre-July 1, 1978 benefit level and post July 1, 1978 benefit improvements.

- We have used a different attribution for Normal Cost and UAAL payments, as previously described
- Normal Costs were allocated using the Normal Cost Percentages from Section 3 and projected PERSable payroll from the 6/30/19 and 6/30/20 actuarial valuation reports.
- UAAL amortization payments were allocated in proportion to the allocated UAAL calculated in Section 4 of this report

SECTION 5
EMPLOYER CONTRIBUTION ANALYSIS

Employer Contributions for 2021/22 Fiscal Year

Employer Normal Cost - Miscellaneous
2021/22 Fiscal Year

	Miscellaneous	
	($'000s)	%
■ Employer Normal Cost attributable to Pre-1978 benefit level	$3,487	68.0%
■ Employer Normal Cost attributable to Post-1978 benefit level	1,643	32.0%
■ Total	5,130	100.0%

UAAL Payments - Miscellaneous
2021/22 Fiscal Year

	Miscellaneous	
	($'000s)	%
■ UAAL Amortization Payments attributable to Pre-1978 benefit level	$9,291	86.1%
■ UAAL Amortization Payments attributable to Post-1978 benefit level	1,502	13.9%
■ Total	10,793	100.0%

Total Miscellaneous
2021/22 Fiscal Year

	Miscellaneous	
	($'000s)	%
■ Total Employer Contributions attributable to Pre-1978 benefit level	$12,779	80.3%
■ Total Employer Contributions attributable to Post-1978 benefit level	3,144	19.7%
■ Total	15,923	100.0%

Employer Contributions for 2021/22 Fiscal Year (Continued)

Employer Normal Cost – Safety
2021/22 Fiscal Year

	Safety	
	($'000s)	%
■ Employer Normal Cost attributable to Pre-1978 benefit level	$6,826	82.4%
■ Employer Normal Cost attributable to Post-1978 benefit level	1,460	17.6%
■ Total	8,286	100.0%

UAAL Payments – Safety
2021/22 Fiscal Year

	Safety	
	($'000s)	%
■ UAAL Amortization Payments attributable to Pre-1978 benefit level	$14,201	87.9%
■ UAAL Amortization Payments attributable to Post-1978 benefit level	1,950	12.1%
■ Total	16,151	100.0%

Total Safety
2021/22 Fiscal Year

	Safety	
	($'000s)	%
■ Total Employer Contributions attributable to Pre-1978 benefit level	$21,027	86.0%
■ Total Employer Contributions attributable to Post-1978 benefit level	3,410	14.0%
■ Total	24,437	100.0%

Employer Costs for 2021/22 Fiscal Year (Continued)

Employer Contribution Attribution – Grand Total
2021/22 Fiscal Year

	Miscellaneous		Safety		Total	
	($'000s)	%	($'000s)	%	($'000s)	%
■ Total Employer Contributions attributable to Pre-1978 benefit level	$12,779	80.3%	$21,027	86.0%	$33,805	83.8%
■ Total Employer Contributions attributable to Post-1978 benefit level	3,144	19.7%	3,410	14.0%	6,555	16.2%
■ Total	15,923	100.0%	24,437	100.0%	40,360	100.0%

SECTION 5
EMPLOYER CONTRIBUTION ANALYSIS

Employer Costs for 2022/23 Fiscal Year

Employer Normal Cost - Miscellaneous
2022/23 Fiscal Year

	Miscellaneous	
	($'000s)	%
■ Employer Normal Cost attributable to Pre-1978 benefit level	$3,187	68.6%
■ Employer Normal Cost attributable to Post-1978 benefit level	1,462	31.4%
■ Total	4,649	100.0%

UAAL Payments - Miscellaneous
2022/23 Fiscal Year

	Miscellaneous	
	($'000s)	%
■ UAAL Amortization Payments attributable to Pre-1978 benefit level	$9,727	86.1%
■ UAAL Amortization Payments attributable to Post-1978 benefit level	1,572	13.9%
■ Total	11,299	100.0%

Total Miscellaneous
2022/23 Fiscal Year

	Miscellaneous	
	($'000s)	%
■ Total Employer Contributions attributable to Pre-1978 benefit level	$12,914	81.0%
■ Total Employer Contributions attributable to Post-1978 benefit level	3,034	19.0%
■ Total	15,948	100.0%

Employer Costs for 2022/23 Fiscal Year (Continued)

Employer Normal Cost – Safety
2022/23 Fiscal Year

	Safety	
	($'000s)	%
■ Employer Normal Cost attributable to Pre-1978 benefit level	$6,319	82.8%
■ Employer Normal Cost attributable to Post-1978 benefit level	1,316	17.2%
■ Total	7,635	100.0%

UAAL Payments – Safety
2022/23 Fiscal Year

	Safety	
	($'000s)	%
■ UAAL Amortization Payments attributable to Pre-1978 benefit level	$15,745	87.9%
■ UAAL Amortization Payments attributable to Post-1978 benefit level	2,161	12.1%
■ Total	17,906	100.0%

Total Safety
2022/23 Fiscal Year

	Safety	
	($'000s)	%
■ Total Employer Contributions attributable to Pre-1978 benefit level	$22,064	86.4%
■ Total Employer Contributions attributable to Post-1978 benefit level	3,477	13.6%
■ Total	25,541	100.0%

Employer Costs for 2022/23 Fiscal Year (Continued)

Employer Contribution Attribution – Grand Total
2022/23 Fiscal Year

	Miscellaneous		Safety		Total	
	($'000s)	%	($'000s)	%	($'000s)	%
■ Total Employer Contributions attributable to Pre-1978 benefit level	$12,914	81.0%	$22,064	86.4%	$34,978	84.3%
■ Total Employer Contributions attributable to Post-1978 benefit level	3,034	19.0%	3,477	13.6%	6,511	15.7%
■ Total	15,948	100.0%	25,541	100.0%	41,489	100.0%

SECTION 6
SUMMARY OF DATA PROVIDED

The City provided the following information used in our calculation:

- Miscellaneous Plan
  - MyCalPERS benefit provisions and effective dates
  - 1994 – 2020 CalPERS actuarial valuation reports
  - June 30, 1990 contract amendment cost analysis for 2%@55 (not used)
  - June 30, 2000 contract amendment cost analysis for 2.7%@55 (not used)
- Safety Plan
  - MyCalPERS benefit provisions and effective dates
  - 1994 – 2020 CalPERS actuarial valuation reports
  - June 30, 2000 contract amendment cost analysis for 3%@55 and 3%@50 (not used)
  - June 30, 2000 contract amendment cost analysis for 3%@55 and 3%@50 (not used)

SECTION 7
DEFINITIONS

- **Present Value of Benefits (PVB)**: An actuarial valuation begins with participant data (including active employees, former employees not in payment status, participants and beneficiaries in payment status) at the valuation date. Using this data and actuarial assumptions, the actuary projects future benefit payments. The assumptions model, among other things, when people will retire, terminate, die or become disabled, as well as what future benefits might be, depending on such things as future salary increases and cost of living. Those future benefit payments are discounted, using expected future investment return and the likelihood of receiving a benefit, back to the valuation date. This discounted present value is the plan's present value of benefits. It represents the amount the plan needs as of the valuation date to pay all future benefits – if all assumptions are met and no future contributions (employee or employer) are made.
- **Normal Cost (NC)**: The Present Value of Benefits is not funded immediately upon an employee's hire. Instead it is treated as deferred compensation and funded over an employee's working career. The Normal Cost represents the portion of the present value of benefits allocated to, or expected to be earned (on an actuarial, not actual, basis) in the coming year. The Normal Cost is paid by employees and the employer each year as a percentage of PERSable payroll.
- **Actuarial Accrued Liability (AAL):** This represents the portion of the present value of benefits that participants have earned (on an actuarial, not actual, basis) through the valuation date, or allocated are considered to be allocated to periods of past service. This includes the full PVB for retirees and inactive participants, and a portion of the PVB for current active employees.
- **Plan Assets:** This includes funds that have been accumulated in CalPERS' trust fund so they can pay plan benefits and expenses. Amounts are attributable to contributions made by employees and the employer, and to past investment earnings.
- **Unfunded Actuarial Accrued Liability (UAAL):** If all actuarial assumptions had always been exactly met, the accumulated plan assets would equal the actuarial accrued liability. The difference between the actuarial accrued liability and plan assets is the UAAL. It represents the amount of the actuarial accrued liability that must still be funded.

  Every year, during the actuarial valuation, the plan actuary calculates the increase or decrease in the UAAL from several sources including investment return and experience different than expected, and plan changes. Each of these is a new UAAL layer which is amortized – paid off over time by additional employer contributions. The total UAAL amortization payment is paid monthly as a separate portion of the employer contribution.