

Classic Values, Innovative Advice



City of San José Federated City Employees' Retirement System

Actuarial Valuation Report as of June 30, 2024

Produced by Cheiron

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www.cheiron.us 1.877.CHEIRON (243.4766)

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Contributions Funded Status 70% \$6.0 Billions Market Assets 🔶 Actuarial Assets **Total City** 52.1% **Total City** 60% 48.3% UAL \$5.0 Principal UAL Active 11.4% 50% Principal Active 12.3% \$4.0 **Deferred Vested Deferred Vested** 40% 61% Interest on 59% Interest on \$3.0 UAL UAL 61% 28.5% 30% 58% 24.2% \$2.0 In Pay In Pay City Admin 1.2% City Admin 1.2% 20% Status Status City NC City NC 11.0% 10.5% \$1.0 10% Member Member 8.0% 8.1% \$0.0 0% 06/30/2023 06/30/2024 **FYE 2025 FYE 2026**

SECTION I – BOARD SUMMARY

Historical and Projected Employer Contribution Rates





SECTION I – BOARD SUMMARY

Membership

Underlying the changes in the actuarial valuation from one year to the next are changes in the membership of the System. These changes affect the System's liability and contributions to the System. As shown in Table I-1 below, total membership grew 3.7% from 2023 to 2024. Total active membership increased 6.3% with Tier 1 active membership declining by 6.2%, while Tier 2 active membership increased by 11.5%. Total payroll increased by 11.4%, which is significantly greater than the assumed increase rate of 3.00%. Tier 2 now accounts for approximately 74% of active members and 69% of payroll.

Total Membership											
	Jun	e 30, 2023	Jur	ne 30, 2024	% Change						
Active Members											
Tier 1		1,197		1,123	-6.2%						
Tier 2		2,851		3,178	<u>11.5</u> %						
Total Actives		4,048		4,301	6.3%						
Terminated Vested Members		2,019		2,131	5.5%						
Members In Pay Status		4,626		4,657	<u>0.7</u> %						
Total Membership		10,693		11,089	3.7%						
Annual Rate of Pay for Active Members											
Tier 1	\$	148,586	\$	149,089	0.3%						
Tier 2		287,804		337,128	<u>17.1</u> %						
Total	\$	436,391	\$	486,216	11.4%						

Table I-1



SECTION I – BOARD SUMMARY

As shown in the chart below, the number of active members declined by about 25% from 4,079 in 2009 to 3,076 in 2012. Since then, there has been a gradual increase in active members to 4,301 in 2024, finally surpassing the 2009 level. At the same time, the number of members in pay status has increased by about 59% from 2,930 in 2009 to 4,657 in 2024. As a result, the support ratio (the ratio of the number of vested terminated and members in pay status to the number of active members) increased from 0.89 in 2009 to 1.49 in 2012 due to the recession. Then, it increased steadily to a high of 1.70 in 2022. The support ratio has declined for the past two years, reflecting the recent growth in active membership. With more retirees for each active member to support, contributions tend to become more volatile and sensitive to gains and losses. This type of progression is to be expected for a maturing plan over a long period of time, but the impact of the Great Recession accelerated the trend significantly from 2009 to 2012. Following the recents has reversed the trend, at least temporarily.



Assets and Liabilities

This report measures assets and liabilities for funding purposes only. These measures are not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the System's benefit obligations, and there is a separate report for financial reporting. Table I-2 on the next page summarizes the Actuarial Liability, assets, and related ratios for the System as of June 30, 2024 compared to June 30, 2023.



SECTION I – BOARD SUMMARY

Table I-2

Summary of Funde	d St	atus and R	elat	ed Ratios	
	Ju	ne 30, 2023	Ju	ne 30, 2024	% Change
Actuarial Liability Actives Deferred Vested In Pay Status Total	\$ \$	1,297,138 300,106 <u>3,368,424</u> 4,965,668	\$ \$	1,390,150 300,292 3,447,496 5,137,938	7.2% 0.1% <u>2.3</u> % 3.5%
Market Value of Assets (MVA) Unfunded Actuarial Liability - MVA Basis Funding Ratio - MVA Basis	\$	2,907,314 2,058,354 58.5%	\$	3,154,441 1,983,497 61.4%	8.5% -3.6% 4.9%
Actuarial Value of Assets (AVA) Unfunded Actuarial Liability - AVA Basis Funding Ratio - AVA Basis	\$	2,889,956 2,075,712 58.2%	\$	3,116,847 2,021,091 60.7%	7.9% -2.6% 4.2%
FYE 2025 Expected Payroll Asset Leverage Ratio Actuarial Liability Leverage Ratio	\$	436,391 6.7 11.4	\$	486,216 6.5 10.6	11.4% -2.6% -7.1%

Dollar amounts in thousands

The Actuarial Liability represents the target amount of assets the plan should have in the trust as of the valuation date based on the actuarial cost method. The Actuarial Liability grew by 3.5%, while the Market Value of Assets (MVA) increased by 8.5%. The Unfunded Actuarial Liability (UAL) measured on the MVA decreased 3.6% from approximately \$2,058 million to \$1,983 million. The funding ratio on an MVA basis increased from 58.5% to 61.4%.

The asset smoothing method deferred 80% of the investment gain while recognizing 20% of the prior four years' gains and losses, resulting in a 7.9% increase in the Actuarial Value of Assets (AVA). The UAL measured on the AVA decreased 2.6% from approximately \$2,076 million to \$2,021 million, and the funding ratio increased from 58.2% to 60.7%. The MVA is slightly more than the actuarial value, so if assumptions are met in the future, we expect a slight decrease in contribution rates as the deferred asset gains are recognized in the AVA.

The asset leverage ratio (MVA divided by payroll) of 6.5 means that if the System experiences a 10% loss on assets compared to the discount rate of 6.625%, the loss would be equivalent to 65% of payroll. Interest payments on such a loss would be approximately 4.3% of payroll. Even with assets increasing by 8.5%, the even larger increase in payroll caused the asset leverage ratio to decline.



SECTION I – BOARD SUMMARY

As the System becomes better funded, the asset leverage ratio will increase, and if it were 100% funded, the leverage ratio would be 10.6 (Actuarial Liability divided by payroll). Higher asset leverage ratios indicate that a system is more sensitive to investment gains and losses. That is, the same level of investment gain or loss will have a greater impact on contribution rates for a system with a higher ratio than for a system with a lower ratio.

The chart below shows the historical and projected trends for assets (both market and smoothed actuarial) versus the Actuarial Liability, and also shows the progress of the funded ratios (based on the AVA) since 2015 and projected through 2039. The historical Actuarial Liability is shown in light gray, while the projected Actuarial Liability is shown in a darker gray. From 2015 to 2020, the funding ratio declined primarily because the System experienced lower-than-expected investment returns on the AVA, and the assumptions used to measure the Actuarial Liability became more conservative, including reducing assumed future investment returns from 7.00% in 2015 to 6.625% in 2020. The funding ratio increased in 2021, 2022, 2023, and 2024 due to the exceptional investment returns of fiscal year ending 2021 being recognized in the AVA as well as contributions reaching a level that pays down the UAL. If all assumptions are met in the future, including an expected return of 6.625% each year, the funding ratio is expected to reach about 97% by 2039.



Historical and Projected Assets and Actuarial Liability

While the UAL is expected to decline, it is dependent on actual investment returns, changes in assumptions and actuarial gains and losses, so there is potentially a wide range for the projected UAL.

More detail on the assets can be found in section IV of this report, and more detail on the measures of liability can be found in section V of this report.



SECTION I – BOARD SUMMARY

Changes in Unfunded Actuarial Liability

Over the last 10 years, the Unfunded Actuarial Liability (UAL) increased approximately \$697.8 million. The chart below and Table I-3 on the following page summarize the sources of these changes in the UAL. Five categories of changes are shown: investment gains or losses on the Actuarial Value of Assets (AVA), liability gains or losses, assumption changes, benefit changes, and contributions.



Significant assumption changes, as shown by the purple bars in the chart above, have occurred, including reductions in the discount rate in steps from 7.00% in 2015 to the current rate of 6.625%, which have increased the measure of the UAL by a total of \$357.4 million over the last 10 years.

There have been losses on the Actuarial Liability for the last five years and eight of the last 10 years that have added roughly \$280.1 million to the UAL. Most of these losses occurred in the last five years and were largely attributable to higher-than-expected salary increases. Assumption changes made in the prior valuation mitigated the effect of these losses this year, a trend we expect to continue in the future.

Investment losses have contributed to the growth in the UAL with investment losses on the AVA from 2015 through 2020. This trend reversed with the exceptional investment performance in 2021 producing investment gains for the last four years. In sum, net investment losses over the last 10 years have increased the UAL by about \$164.5 million.



SECTION I – BOARD SUMMARY

The only benefit changes in the last 10 years that affected the UAL were changes under Measure F in 2017 and 2018, increasing the UAL by \$15.7 million.

Actual contributions were consistently less than the normal cost plus interest on the UAL until 2019, resulting in an annual increase in the amount of the UAL as shown by the red bars in the chart above. Since then, actual contributions have been more than the normal cost plus interest on the UAL. In sum, contributions have reduced the UAL by \$119.9 million over the last 10 years. Contribution rates in the future are expected to continue to exceed normal cost plus interest on the UAL and gradually pay down the UAL.

In aggregate, the UAL has increased in 7 of the last 10 years for a total increase of approximately \$697.8 million, as shown in Table I-3.

Changes in Unfunded Actuarial Liability																						
	20 1	15	2	016	2	2017	2	2018	2	2019		2020	1	2021	2	2022	2	2023	1	2024		Total
Discount Rate	7.00	0%	7.	000%	6.	875%	6	.875%	6	.750%	6	.750%	6	.625%	6	.625%	6	.625%	6	.625%		
Source																						
AVA (G)/L	\$	3.6	\$	81.5	\$	44.6	\$	49.9	\$	88.8	\$	68.0	\$	(76.5)	\$	(31.0)	\$	(18.3)	\$	(46.2)	\$	164.5
Liability (G)/L	3	8.2		33.0		13.7		(11.5)		(23.2)		43.6		30.7		63.2		64.3		28.2		280.1
Assumptions	19	1.5		60.2		(15.6)		54.4		(2.9)		37.0		9.7		0.5		22.6		0.0		357.4
Benefit Changes		0.0		0.0		13.8		1.9		0.0		0.0		0.0		0.0		0.0		0.0		15.7
Contributions		8.8		11.8		14.0		4.0		(12.1)		(20.8)		(13.7)		(41.5)		(33.8)		(36.6)		(119.9)
Total Change	\$ 24	2.1	\$	186.6	\$	70.5	\$	98.8	\$	50.6	\$	127.7	\$	(49.7)	\$	(8.9)	\$	34.7	\$	(54.6)	\$	697.8

Table I-3

Dollar amounts in millions

Table I-4 on the next page breaks out the sources of the changes in UAL for the fiscal year ending June 30, 2024. The UAL decreased approximately \$54.6 million during the year. About \$46.2 million of the decrease was due to investment gains, and \$36.6 was due to contributions greater than normal cost plus interest on the UAL. Offsetting these gains, liability losses increased the UAL by about \$28.2 million, which included \$23.5 million due to salary increases greater than expected.



SECTION I – BOARD SUMMARY

Table I-4

Sources of FYE 2024 Change in UAL											
		Amount	% of AL								
Unfunded Actuarial Liability, June 30, 2024	\$	2,021,091	39.3%								
Unfunded Actuarial Liability, June 30, 2023		2,075,712	<u>40.4</u> %								
Change in Unfunded Actuarial Liability	\$	(54,621)	-1.1%								
Sources of Changes											
Plan Changes	\$	0	0.0%								
Assumption Changes		0	0.0%								
Normal Cost and Interest on UAL less Contributions		(36,556)	-0.7%								
Investment (gain) or loss on Actuarial Value of Assets		(46,229)	-0.9%								
Liability (gain) or loss											
Salary experience	\$	23,453	0.5%								
Termination experience		8,736	0.2%								
Other experience		(4,025)	- <u>0.1</u> %								
Total Liability (gain) or loss	\$	28,164	0.5%								
Total Changes	\$	(54,621)	-1.1%								

Dollar amounts in thousands

Contribution Amounts and Rates

As shown in the upper left corner of the dashboard (page 1), the total City contribution rate decreased from 52.1% for FYE 2025 to 48.3% for FYE 2026, while the average member contribution increased from 8.0% to 8.1%. The purple bars represent the normal cost, the benefits attributable to the next year of service, with the light purple paid by members¹ and the dark purple paid by the City. The green bars represent the City contributions that pay expected administrative expenses. The light and dark gold bars represent the City contributions that pay for the UAL. The dark gold bars represent the expected interest on the Market Value UAL for the fiscal year, and the light gold bars represent the portion of the payment that is expected to reduce the UAL. The UAL principal payment is expected to increase from 11.4% of pay to 12.3% of pay for FYE 2026.

Table I-5 and the chart on the following page summarize the member and City contribution rates and amounts for the fiscal years ending in 2025 and 2026. The City's Tier 1 UAL payment increased \$3.3 million from 2025 to 2026, primarily reflecting the scheduled increase in UAL payments, offset by the credit for the 2024 actuarial gains. The Tier 1 normal cost rate declined



¹A small portion of the member contributions also pays a portion of Tier 2 administrative expenses and the UAL.

SECTION I – BOARD SUMMARY

slightly due to demographic changes, and the Tier 1 normal cost dollar amount decreased slightly due to the decline in Tier 1 active members, offset by the higher-than-expected salary increases. The Tier 2 contribution amount increased due to the growing Tier 2 population and the higher-than-expected salary increases. In aggregate, the City's contribution amount increased by about \$7.4 million, while its contribution rate decreased by 3.86% of payroll.

Contribution R Through			ou	nts	
	F	YE 2025	F	YE 2026	Change
Member Rates (Excluding Reclassific	ation	n Payment	<u>s)</u>		
Tier 1		6.61%		6.55%	-0.06%
Tier 2		8.49%		8.62%	0.13%
City Contributions					
Tier 1 UAL Payment	\$	176,758	\$	180,067	\$ 3,310
Tier 1 Administrative Expenses	\$	5,314	\$	5,877	\$ 563
Tier 1 Normal Cost	\$	24,377	\$	23,608	\$ (769)
The T Normal Cost		18.73%		18.56%	-0.17%
Tion 2 Contribution	\$	27,878	\$	0	\$ (27,878)
Tier 2 Contribution		8.73%		8.62%	-0.11%
Aggregate Contribution	\$	234,326 52.13%	\$	209,552 41.84%	\$ (24,775) -10.29%

Table I-5



SECTION I – BOARD SUMMARY



By far, the most significant portion of the City's contribution is the Tier 1 UAL payment which is substantially attributable to members who no longer work for the City.

The following chart shows the historical and projected aggregate member contribution rates (purple bars) and City contribution rates (gold bars) compared to the projection from the prior valuation, indicated by the red line. These contribution rates assume that all assumptions are met. The black line shows the historical and projected total normal cost rate. The blue line represents the historical and projected tread water rate. Historical rates are shown in shades of gray.



SECTION I – BOARD SUMMARY



The aggregate City contribution rate increased from FYE 2016 through FYE 2021 primarily due to investment losses and assumption changes that increased the UAL rate, including discount rate reductions from 7.00% to 6.625%. Future aggregate City contribution rates are expected to gradually decrease over time. The gradual decrease in the total rate is driven by the projected gradual decrease in total normal cost rate as Tier 2 becomes a greater proportion of the active membership and the gradual decrease in UAL rate as payroll is expected to grow slightly faster than amortization payments (3.00% vs. 2.75%). After 2037, contribution rates are expected to drop more rapidly as some amortization layers are fully paid off.

The following chart shows historical and projected member (purple bars) and City (gold bars) contribution amounts (assuming contributions throughout the year) compared to the projected amounts shown in the prior valuation. If all actuarial assumptions are exactly met, City contributions are expected to increase from \$242 million in FYE 2026 to approximately \$280 million in FYE 2037, before declining in FYE 2038 and onwards as portions of the UAL are paid off. The large decrease in FYE 2041 is due to the large 2009 UAL amortization base being fully paid off.



SECTION I – BOARD SUMMARY



Historical and Deterministic Projection of Contribution Amounts

Section VI of this report provides additional detail on the contribution rates and the amortization schedules separately by Tier.



SECTION II – ASSESSMENT AND DISCLOSURE OF RISK

Actuarial valuations are based on assumptions about future economic and demographic experience. These assumptions represent a reasonable estimate of future experience, but actual future experience will undoubtedly be different and may be significantly different. This section of the report is intended to identify the primary risks to the plan, provide some background information about those risks, and provide an assessment of those risks.

Identification of Risks

As we have discussed with the Board, the fundamental risk to the System is that the contributions needed to pay the benefits become unaffordable. While there are a number of factors that could lead to contribution amounts becoming unaffordable, we believe the primary risks for this System are:

- Investment risk,
- Interest rate risk, and
- Assumption change risk.

Other risks that we have not identified may also turn out to be important.

Investment Risk is the potential for investment returns to be different than expected. Lower investment returns than anticipated will increase the Unfunded Actuarial Liability (UAL), necessitating higher contributions in the future unless other gains offset these investment losses. The potential volatility of future investment returns is determined by the System's asset allocation and the affordability of the investment risk is determined by the amount of assets invested relative to the size of the City.





SECTION II - ASSESSMENT AND DISCLOSURE OF RISK

The chart on the previous page shows the impact of investment gains and losses on the smoothed Actuarial Value of Assets (AVA) over the last 10 years compared to the System's total change in UAL. Investment returns have been a material contributor to the growth or decline in the UAL.

Interest rate risk is the potential for interest rates to be different than expected. For public plans, short-term fluctuations in interest rates have little or no effect as the plan's liability is usually measured based on the expected return on assets. Longer-term trends in interest rates, however, can have a powerful effect to the extent they affect future expected investment earnings. The following chart shows the yield on a 10-year Treasury security compared to the System's assumed rate of return. The difference is a simple measure of the amount of investment risk taken. As interest rates declined, plans faced a choice: maintain the same level of risk and reduce the expected rate of return, maintain the same expected rate of return and take on more investment risk, or some combination of the two strategies. If the recent rise in interest rates rates rates achieve expected returns.



Assumption change risk is the potential for the environment to change such that future valuation assumptions are different than the current assumptions. For example, declines in interest rates over the last three decades resulted in higher investment returns for fixed-income investments, but lower expected future returns necessitating either a change in investment policy, a reduction in discount rate, or some combination of the two. Assumption change risk is an extension of the other risks identified, but rather than capturing the risk as it is experienced, it captures the cost of recognizing a change in environment when the current assumption is no longer reasonable.



SECTION II - ASSESSMENT AND DISCLOSURE OF RISK

As shown in the chart below, there have been substantial changes in assumptions increasing the UAL. Most of these changes are due to reducing the discount rate from 7.00% to 6.625% over this period, but it also includes changes to demographic assumptions such as mortality and retirement rates. The reductions in the discount rate largely reflected the impact of declining interest rates on future expected investment returns.



Plan Maturity Measures

The future financial condition of a mature pension plan is more sensitive to each of the risks identified above than that of a less mature plan. Before assessing each of these risks, it is important to understand the plan's maturity compared to other plans and how the maturity has changed over time.

Plan maturity can be measured in a variety of ways, but they all get at one basic dynamic – the larger the plan is compared to the contribution or revenue base that supports it, the more sensitive the plan will be to risk. The following measures have been selected as the most important in understanding the primary risks identified for the plan.

Support Ratio (Inactives per Active)

One simple measure of plan maturity is the ratio of the number of inactive members (those receiving benefits or entitled to a deferred benefit) to the number of active members. The revenue base supporting the plan is usually proportional to the number of active members, so a relatively high number of inactives compared to actives indicates a larger plan relative to its revenue base as well.



SECTION II – ASSESSMENT AND DISCLOSURE OF RISK



The chart above shows the distribution from the 5th to 95th percentile of support ratios for the plans in the Public Plans Database. The gold diamond represents San José Federated, and the black triangle the combined Federated and Police and Fire plans. Through 2009, the System was in the middle of the distribution even as the support ratio increased. However, after the Great Recession, the Plan's support ratio increased dramatically and is now in the upper quartile of the plans in the database.

Leverage Ratios

Leverage or volatility ratios measure the size of the plan compared to its revenue base more directly. For example, an asset leverage ratio of 5.0 means that if the System experiences a 10% loss on assets compared to the expected return, the loss would be equivalent to 50% of payroll. The same investment loss for a plan with an asset leverage ratio of 10.0 would equal 100% of payroll. The amortization payment required to pay for the loss would be twice as much as a percentage of payroll for the plan with an asset leverage ratio of 10.0 than for the plan with a ratio of 5.0.

As the System becomes better funded, the asset leverage ratio will increase. If it were 100% funded, the leverage ratio would equal the Actuarial Liability (AL) leverage ratio. The AL leverage ratio also indicates how sensitive the System is to gains and losses or assumption changes. For example, an assumption change that increases the AL by 5% would add a liability equivalent to about 50% of payroll if the AL leverage ratio is 10.0.



SECTION II – ASSESSMENT AND DISCLOSURE OF RISK



The charts above show the distribution from the 5th to 95th percentile of asset and liability leverage ratios for the plans in the Public Plans Database. The gold diamond represents San José Federated, and the black triangle represents the combined Federated and Police and Fire plans. As we have discussed with the Board for several years and as shown in the charts on the previous



SECTION II - ASSESSMENT AND DISCLOSURE OF RISK

page, the leverage ratios for the Federated System are higher than most plans and significantly higher when combined with Police and Fire, indicating that San José is much more sensitive to risk than most plan sponsors.

Assessing Costs and Risks

The fundamental risk to the System is that the contributions needed to fund the benefits become unaffordable. Assessing this risk, however, is complex because there is no bright line of what is unaffordable, and the contribution amounts themselves are affected not just by the experience of the System, but also by the interaction of that experience and decisions by the Board related to assumptions, asset smoothing methods, and amortization periods.

Sensitivity to Discount Rate

The chart below compares the Market Value of Assets (gold line) to the Actuarial Liability (blue bar) using discount rates equal to the current expected rate of return and 100 basis points above and below the expected rate of return. In addition, the chart shows the low-default-risk obligation measure (LDROM), which is the Actuarial Liability using a discount rate derived from lowdefault-risk fixed income securities that approximately match the plan's benefit payments.



Sensitivity to Discount Rate

The System invests in a diversified portfolio to maximize investment returns at a reasonable level of risk. If investments return 6.625% annually, the System would need approximately \$5.1 billion in assets today to pay all benefits attributable to past service compared to current assets of \$3.2 billion. If investment returns are only 5.625%, the System would need approximately \$5.8 billion in assets today, and if investment returns are 7.625%, the System would only need \$4.6 billion in assets. The lowest-risk portfolio for a pension plan with fixed



SECTION II – ASSESSMENT AND DISCLOSURE OF RISK

cash flows would be composed entirely of low-default-risk fixed-income securities whose cash flows match the benefit cash flows of the System. As of June 30, 2024, using the FTSE Pension Liability Index to approximate the low-default-risk matching portfolio, we estimate that such a portfolio would have an expected return of 5.4%, and the System would need \$6.0 billion to pay all benefits attributed to past service. This amount is the LDROM. The \$876 million difference between the LDROM and the Actuarial Liability at 6.625% represents the expected savings from bearing the risk of investing in the System's diversified portfolio. Alternatively, it also represents the cost of eliminating the investment risk.

Because the System invests in a diversified portfolio, not the LDROM portfolio, the reported funded status is higher and expected employer contributions are lower. Benefit security for members of the System depends on a combination of the System's assets, the investment returns generated on those assets, and San José's ability to make any needed future contributions. An LDROM portfolio would generate more predictable but lower expected investment returns, potentially changing the level of reliance on future San José contributions to secure benefits.

Point-in-Time Assessments

To assess the risks of the System independent of the contribution strategy, there are two measures on which to focus: normal cost and interest cost. The normal cost represents the expected cost of the benefits attributable to the next year of service. The interest cost represents the interest on the UAL calculated using the discount rate. Combined, the normal cost plus the interest cost is referred to as the Tread Water Cost. If actual contributions are less than the Tread Water Cost, the UAL would be expected to grow; and, if actual contributions are greater than the Tread Water Cost, the UAL would be expected to shrink.

The stacked bars in the following chart show the Member and City contributions at the current discount rate compared to a discount rate 100 basis points lower.





SECTION II - ASSESSMENT AND DISCLOSURE OF RISK

Decreasing the discount rate by 100 basis points would increase the normal cost by over 5% of payroll (3% for the City and 2% for members) and the interest on the UAL by about 4% of payroll. Using the current amortization methods, the City contribution rate would increase by 9% of payroll to 57% of pay.

Discount rate declines over the last decade or more have been largely driven by declines in interest rates, which affect expectations of future investment returns. Recent increases in interest rates have eased the pressure to continue reducing the discount rate.

Actual investment returns do not affect the normal cost, but they directly affect the interest cost. One simple measure of the risk inherent in the investment policy is the Interest Cost at Risk (ICaR), which is the amount that the interest cost would increase if the investment returns for one year were two standard deviations below the expected return. Based on the capital market assumptions of Meketa over a 10-year horizon, the standard deviation for the current portfolio is 13.39%, making the investment return used to determine ICaR -20.155% (6.625% – 2 x 13.39%).

The following chart shows the contribution rates for FYE 2026 on the far left and the expected FYE 2027 contribution rates based on a 6.625% investment rate of return for FYE 2025 in the middle. The FYE 2027 bar graph on the right shows the impact of a -20.155% return for FYE 2025. The City contribution rate for FYE 2027 in this scenario would be 52.2% of pay and expected to increase in future years as the investment loss is recognized over the 5-year smoothing period.



SECTION II – ASSESSMENT AND DISCLOSURE OF RISK



Stochastic Projections

If experience has taught us anything, it is that future projections are highly uncertain. The largest source of uncertainty is the projection of investment returns. To better understand the potential impact of investment returns on the System, we have included some stochastic projections in the dashboard and in this section of the report. The stochastic projections assume a geometric return of 6.625% and a standard deviation of 13.39% (based on Meketa's capital market assumptions for the System's investment portfolio). Each projection contains 10,000 trials that are 15 years in length.

The chart on the next page shows the historical and stochastically projected City contribution amounts for Tier 1. The gold line represents the amounts paid historically or already determined by an actuarial valuation. The colored ranges represent different percentiles of the 10,000 trials. This range is intended to convey the uncertainty in the projections based on future investment returns.



SECTION II - ASSESSMENT AND DISCLOSURE OF RISK



The chart shows the wide range of potential Tier 1 City contribution amounts depending on actual investment returns. For example, the range between the 5th and 95th percentile for FYE 2035 (based on the 2033 actuarial valuation) is from a contribution of \$7 million to a contribution of \$340 million. The standard deviation of the investment portfolio largely drives this range.

The chart on the following page shows the historical and stochastically projected City contribution amounts for Tier 2. The range of contribution amounts is significantly narrower for Tier 2 than Tier 1. Tier 2 is projected to grow quickly, but assets are relatively small right now. As a result, actual investment returns have a limited impact on future contribution amounts while the rate of growth will have a larger impact.



SECTION II - ASSESSMENT AND DISCLOSURE OF RISK



More Detailed Assessment

A more detailed assessment is always valuable to enhance understanding of the risks identified above. While more detail would provide some additional value, we don't believe performing an indepth analysis every year is necessary. Consequently, we recommend the Board review the analysis provided above annually and consider a more detailed analysis periodically and when there is a substantial change in the financial position or maturity of the System.



SECTION III – CERTIFICATION

The purpose of this report is to present the June 30, 2024 Actuarial Valuation of the City of San José Federated City Employees' Retirement System ("System"). This report is for the use of the System and the City of San José.

In preparing our report, we relied on information, some oral and some written, supplied by the System. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

The price inflation, wage inflation, amortization payment growth rate, and discount rate were adopted by the Board of Administration with our input at the October 17, 2024 Board meeting. All other assumptions were adopted at the November 16, 2023 Board meeting based on recommendations from our Experience Study covering plan experience through June 30, 2023. Please refer to the full experience study report for details, including the rationale for each assumption. We believe these assumptions are reasonable for the purpose of the valuation.

The liability measures and funding ratios in this report are for the purpose of establishing contribution rates. These measures are not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the System's benefit obligations.

Cheiron utilizes ProVal actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate liabilities and project benefit payments. We have relied on WinTech as the developer of ProVal. We have a basic understanding of ProVal and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in the assumptions or output of ProVal that would affect this valuation.

Deterministic projections in this valuation report were developed using P-scan, a proprietary tool for illustrating the impact of changes in assumptions, methods, plan provisions, or actual experience (particularly investment experience) on the system's future financial status. P-scan uses standard roll-forward techniques that implicitly assume a stable active population. Because P-scan does not automatically capture how changes in one variable affect all other variables, some scenarios may not be consistent.

Stochastic projections in this valuation report were developed using R-scan, our proprietary tool for assessing the probability of different outcomes based on a range of potential investment returns. We relied on Cheiron colleagues to develop the model. The stochastic projections of investment returns assume that each future year's investment return is independent of all other years and is identically distributed according to a lognormal distribution. The System's investment consultant provided the standard deviation used in the stochastic projection of investment returns.

Future actuarial measurements may differ significantly from the current measurements due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions, changes in economic or demographic assumptions, and changes in plan provisions or applicable law.



SECTION III – CERTIFICATION

This report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

This report was prepared for the City of San José Federated City Employees' Retirement System for the purposes described herein. Other users of this report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any other user.

Willia R. Hallank

William R. Hallmark, ASA, EA, MAAA, FCA Consulting Actuary

Jacqueline R. King, FSA, EA

Jacqueline R. King, FSA, EA, MAAA Consulting Actuary

Steven M. Hastings, FSA, EA, MAAA, FCA Consulting Actuary



SECTION IV – ASSETS

The System uses two asset measurements: the Market Value and Actuarial Value of Assets. The market value represents the value of the assets if they were liquidated on the valuation date. The actuarial value smooths annual investment returns over five years to reduce the impact of short-term investment volatility on employer contribution rates. The Market Value of Assets is used primarily for reporting and disclosure, and the Actuarial Value of Assets is used primarily to determine contribution rates.

This section shows the changes in the Market Value of Assets and develops the Actuarial Value of Assets.

Statement of Change in Market Value of Assets

Table IV-1 shows the changes in the Market Value of Assets for the current and prior fiscal years for each tier.

	Change in Market Value of Assets													
		Fiscal	Ye	ar Ending	; 2(Fiscal	<u>; 2024</u>						
		Tier 1		Tier 2		Total		Tier 1		Tier 2		Total		
Beginning Market Value	\$	2,523,113	\$	184,913	\$	2,708,026	\$	2,668,050	\$	239,263	\$	2,907,313		
Contributions Member City Total	\$	10,744 179,623 190,367	\$	19,817 19,817 39,634	\$	30,561 199,440 230,001	\$	10,628 195,008 205,636	\$	23,305 23,305 46,610	\$	33,933 218,313 252,246		
Net Investment Earnings	Ψ	205,323	Ψ	16,778	Ψ	222,101	Ψ	234,379	Ψ	23,204	Ψ	257,583		
Benefit Payments Administrative Expenses		(245,653) (5,100)		(1,703) (359)		(247,356) (5,459)		(254,777) (5,644)		(1,789) (492)		(256,566) (6,136)		
Market Value, End of Year	\$	2,668,050	\$	239,263	\$	2,907,313	\$	2,847,644	\$	306,796	\$	3,154,440		
Estimated Rate of Return		7.9%		8.2%		8.0%		8.9%		8.9%		8.9%		

Table IV-1

Dollar amounts in thousands

The net investment earnings for the year ended June 30, 2024 represent approximately an 8.9% return on the Market Value of Assets compared to an assumed return of 6.625%. This return produced an investment gain of \$65.3 million for the year ending June 30, 2024. For the year ended June 30, 2023, the net investment return was approximately 8.0% (6.625% was assumed), which produced an investment gain of \$37.4 million.



SECTION IV – ASSETS

Actuarial Value of Assets

To determine ongoing contributions, most pension systems utilize an Actuarial Value of Assets that smooths year-to-year market value returns to reduce the volatility of contributions.

The Actuarial Value of Assets is calculated by recognizing the deviation of actual investment returns compared to the expected return (6.625% for FYE 2024, FYE 2023, FYE 2022, and FYE 2021, and 6.75% for FYE 2020) over a five-year period. The dollar amount of the expected return on the Market Value of Assets is determined using actual contributions, benefit payments, and administrative expenses during the year. Any difference between this amount and the actual net investment earnings is considered a gain or loss. Table IV-2 on the following page shows the calculation of the Actuarial Value of Assets separately for Tier 1 and Tier 2. For each of the last four years, it shows the actual earnings, the expected earnings, the gain or loss, and the portion of the gain or loss that is not recognized in the current Actuarial Value of Assets. These deferred amounts will be recognized in future years.



SECTION IV – ASSETS

Table IV-2

	Γ	Developm	iei	nt of Act	ua	rial Valu	ie o	of Assets					
				Tier 1						Tier 2			
		Basic		COLA		Total		Basic		COLA	Total		
Market Value of Assets	\$	1,682,650	\$	1,164,994	\$	2,847,644	\$	261,664	\$	45,132	\$	306,796	
<u>FYE 2024</u>													
Actual Earnings	\$	139,701	\$	94,678	\$	234,379	\$	19,806	\$	3,398	\$	23,204	
Expected Earnings		104,308		70,665		174,973		14,764		2,532		17,296	
Investment Gain/(Loss)		35,393		24,013		59,406		5,042		866		5,908	
Deferred (80%)	\$	28,315	\$	19,210	\$	47,525	\$	4,034	\$	692	\$	4,726	
FYE 2023													
Actual Earnings	\$	124,637	\$	80,687	\$	205,324	\$	14,350	\$	2,427	\$	16,777	
Expected Earnings		103,638		67,595		171,233		11,526		1,949		13,475	
Investment Gain/(Loss)		20,999		13,092		34,091		2,824		478		3,302	
Deferred (60%)	\$	12,599	\$	7,855	\$	20,454	\$	1,695	\$	286	\$	1,981	
FYE 2022													
Actual Earnings	\$	(98,171)	\$	(60,412)	\$	(158,583)	\$	(9,044)	\$	(1,503)	\$	(10,547)	
Expected Earnings		114,341		71,054		185,395		10,192		1,693		11,885	
Investment Gain/(Loss)		(212,512)		(131,466)		(343,978)		(19,236)		(3,196)		(22,432)	
Deferred (40%)	\$	(85,005)	\$	(52,586)	\$	(137,591)	\$	(7,694)	\$	(1,279)	\$	(8,973)	
FYE 2021													
Actual Earnings	\$	417,535	\$	244,947	\$	662,482	\$	31.044	\$	5,081	\$	36,125	
Expected Earnings		90,200		53,541		143,741		6,455	·	1,056		7,511	
Investment Gain/(Loss)		327,335		191,406		518,741		24,589		4,025		28,614	
Deferred (20%)	\$	65,467	\$	38,281	\$	103,748	\$	4,917	\$	807	\$	5,724	
Total Deferred Gain/(Loss)	\$	21,376	\$	12,760	\$	34,136	\$	2,952	\$	506	\$	3,458	
Actuarial Value of Assets	\$	1,661,274	\$	1,152,234	\$	2,813,508	\$	258,712	\$	44,627	\$	303,339	
Actuarial to Market Ratio		98.7%		98.9%		98.8%		98.9%		98.9%		98.9%	
Estimated Rate of Return		8.4%		8.1%		8.3%		7.7%		7.6%		7.6%	

Dollar amounts in thousands

On an Actuarial Value of Assets basis, the aggregate return for the year ending June 30, 2024 was 8.3% for Tier 1 and 7.6% for Tier 2, more than the assumed return of 6.625%. The return for both Tiers was less than the return on the Market Value of Assets. This return on the Actuarial Value of Assets produced an investment gain of \$46.2 million for the year ending June 30, 2024.



SECTION IV – ASSETS

As shown in the following chart, over the last 10 years, the investment return on the Market Value of Assets has varied significantly from a high of 30.6% in 2021 to a low of -5.7% in 2022. The geometric average return was 8.6% and 5.6% over the last 5 and 10 years, respectively. The return on the Actuarial Value of Assets is more stable than on the market value, with a geometric average of 7.4% and 5.9% over the last 5 and 10 years, respectively.



Historical Rates of Return



SECTION V – MEASURES OF LIABILITY

This section presents detailed information on liability measures for the System for funding purposes, including:

- Present value of future benefits,
- Normal cost,
- Actuarial Liability, and
- An analysis of changes in the Unfunded Actuarial Liability during the year.

Present Value of Future Benefits: The present value of future benefits represents the expected amount of money needed today if all assumptions are met to pay for all benefits both earned as of the valuation date and expected to be earned in the future by current plan members under the current plan provisions. Table V-1 below shows the present value of future benefits as of June 30, 2023 and June 30, 2024 separately by Tier.

		Present	Va	lue of Fut	ur	e Benefits		
	Ju	ne 30, 2023			Ju	ne 30, 2024		
		Total		Basic		COLA	Total	% Change
Tier 1								
Actives	\$	1,266,848	\$	914,818	\$	372,612	\$ 1,287,430	1.6%
Deferred Vested		270,581		185,235		78,152	263,387	-2.7%
In Pay Status								
Retirees	\$	3,062,340	\$	1,702,714	\$	1,430,080	\$ 3,132,794	2.3%
Beneficiaries		209,746		101,033		113,002	214,035	2.0%
Disabled		88,611		42,354		48,470	 90,824	<u>2.5</u> %
Total In Pay Status	\$	3,360,697	\$	1,846,101	\$	1,591,552	\$ 3,437,653	2.3%
Total Tier 1	\$	4,898,126	\$	2,946,154	\$	2,042,316	\$ 4,988,470	1.8%
Tier 2								
Actives	\$	636,097	\$	639,744	\$	119,451	\$ 759,195	19.4%
Deferred Vested		29,526		32,718		4,186	36,904	25.0%
In Pay Status								
Retirees	\$	7,727	\$	8,144	\$	1,434	\$ 9,578	24.0%
Beneficiaries		0		239		26	265	
Disabled		0		0		0	 0	
Total In Pay Status	\$	7,727	\$	8,383	\$	1,460	\$ 9,843	27.4%
Total Tier 2	\$	673,350	\$	680,845	\$	125,097	\$ 805,942	19.7%
Total System	\$	5,571,476	\$	3,626,999	\$	2,167,413	\$ 5,794,412	4.0%

Table V-1



SECTION V – MEASURES OF LIABILITY

Normal Cost

Under the Entry Age (EA) actuarial cost method, the present value of future benefits for each individual is spread over the individual's expected working career under the System as a level percentage of the individual's expected pay. The normal cost rate is determined as the value, as of entry age into the System, of each member's projected future benefits divided by the value, also at entry age, of each member's expected future salary. The normal cost rate is multiplied by the current salary to determine each member's normal cost. The normal cost of the System is the sum of the normal costs for each individual. The normal cost represents the expected amount of money needed to fund the benefits attributed to the next year of service under the Entry Age actuarial cost method. Table V-2 below shows the Total normal cost rates as of June 30, 2023 and June 30, 2024 separately by Tier.

			N	lormal C	ost			
	Jun	e 30, 2023			Jur	ne 30, 2024		
		Total		Basic		COLA	Total	% Change
Tier 1								
Retirement	\$	22,427	\$	15,640	\$	6,451	\$ 22,091	-1.5%
Termination		8,191		6,009		2,042	8,051	-1.7%
Death		600		413		175	588	-2.0%
Disability		1,320		884		399	1,283	-2.8%
Reciprocity		1,431		990		427	 1,417	- <u>1.0</u> %
Total Tier 1	\$	33,969	\$	23,936	\$	9,494	\$ 33,430	-1.6%
Expected Payroll	\$	134,276	\$	133,251	\$	133,251	\$ 133,251	-0.8%
Tier 1 NC Rate		25.30%		17.96%		7.13%	25.09%	-0.8%
Tier 2								
Retirement	\$	28,272	\$	27,807	\$	5,151	\$ 32,958	16.6%
Termination		10,423		10,870		1,549	12,419	19.1%
Death		616		632		78	710	15.3%
Disability		1,904		1,896		339	 2,235	<u>17.4</u> %
Total Tier 2	\$	41,215	\$	41,205	\$	7,117	\$ 48,322	17.2%
Expected Payroll	\$	263,801	\$	308,924	\$	308,924	\$ 308,924	17.1%
Tier 2 NC Rate		15.62%		13.34%		2.30%	15.64%	0.1%

Table	V-2
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SECTION V – MEASURES OF LIABILITY

Actuarial Liability

The Actuarial Liability represents the expected amount of money needed today if all assumptions are met to pay for benefits attributed to service before the valuation date under the Entry Age actuarial cost method. As such, it is the amount of assets targeted by the actuarial cost method for the System to hold as of the valuation date. It is not the amount necessary to settle the obligation. Table V-3 below shows the Actuarial Liability as of June 30, 2023 and June 30, 2024 separately by Tier.

		l	Actu	arial Lia	bil	ity		
	Ju	ne 30, 2023			Ju	ne 30, 2024		
		Total		Basic		COLA	Total	% Change
Tier 1								
Actives								
Retirement	\$	987,091	\$	729,754	\$	294,218	\$ 1,023,972	3.7%
Termination		53,542		32,890		17,549	50,439	-5.8%
Death		8,930		6,437		2,350	8,787	-1.6%
Disability		13,609		9,580		3,820	 13,400	- <u>1.5</u> %
Total Actives	\$	1,063,172	\$	778,661	\$	317,937	\$ 1,096,598	3.1%
Deferred Vested	\$	270,581	\$	185,235	\$	78,152	\$ 263,387	-2.7%
In Pay Status		3,360,697		1,846,101		1,591,552	 3,437,653	<u>2.3</u> %
Total Tier 1	\$	4,694,450	\$	2,809,997	\$	1,987,641	\$ 4,797,638	2.2%
Tier 2								
Actives								
Retirement	\$	194,008	\$	206,955	\$	38,209	\$ 245,164	26.4%
Termination		29,316		27,015		8,246	35,261	20.3%
Death		3,628		3,896		526	4,422	21.9%
Disability		7,013		7,306		1,400	 8,706	<u>24.1</u> %
Total Actives	\$	233,965	\$	245,172	\$	48,381	\$ 293,553	25.5%
Deferred Vested		29,526		32,718		4,186	36,904	25.0%
In Pay Status		7,727		8,383		1,460	 9,843	27.4%
Total Tier 2	\$	271,218	\$	286,273	\$	54,027	\$ 340,300	25.5%
Total System	\$	4,965,668	\$	3,096,270	\$	2,041,668	\$ 5,137,938	3.5%

Table V-3



SECTION V – MEASURES OF LIABILITY

Liability (Gains) and Losses

Each year, the Actuarial Liability increases with normal cost and interest and decreases due to benefit payments. In addition, any deviation in experience from the actuarial assumptions creates a gain or loss. Table V-4 below summarizes the sources of liability gains and losses for the last five years. The other category includes gains and losses on administrative expenses, minor demographic assumptions, and data corrections. The largest source of loss over the 5-year period is from salary increases that were larger than expected.

Historical Sources of Liability (Gain) or Loss											
Year Ending June 30th											
Source	2020	2021	2022	2023	2024	Total					
Salary increases	25,889	21,085	47,333	50,316	23,453	168,076					
Retirement	7,873	3,392	13,217	4,345	5,379	34,206					
Termination	7,077	4,986	(1,589)	7,265	8,736	26,475					
Mortality	(1,330)	2,613	(4,036)	1,638	(3,308)	(4,423)					
Disability	49	(946)	(1,032)	(915)	(1,097)	(3,941)					
Other	4,129	(393)	9,257	1,610	(4,999)	9,604					
Total	\$ 43,687 \$	30,737 \$	63,150	\$ 64,259	\$ 28,164	\$ 229,997					

Table V-4



SECTION V – MEASURES OF LIABILITY

Liability and Payroll by Tier and Union

The following table breaks down the Actuarial Liability and payroll as of June 30, 2024, by Tier and Union group.

Actuarial Liability and Payroll as of June 30, 2024									
	Ac	tuarial Liabi	lity	Payroll as of June 30, 2024					
	Tier 1	Tier 2	Total	Tier 1	Tier 2	Total			
Actives									
AEA	\$ 61,277	\$ 35,462	\$ 96,739	\$ 7,886	\$ 36,774	\$ 44,661			
AMSP	78,491	9,108	87,598	9,764	7,090	16,854			
CAMP	226,585	44,625	271,210	30,488	45,518	76,006			
MEF	290,043	101,944	391,987	39,023	137,216	176,240			
ABMEI	23,112	11,183	34,295	3,257	7,986	11,244			
ALP	12,938	6,345	19,282	1,681	6,989	8,670			
IBEW	28,595	4,968	33,562	4,205	4,675	8,880			
POPRA	0	263	263	0	583	583			
SJPDA	44,441	8,723	53,164	5,822	10,540	16,362			
Unit99	227,771	31,715	259,487	32,899	29,957	62,856			
Other	103,345	39,218	142,564	14,062	49,798	63,861			
Inactives	3,701,041	46,747	3,747,788	N/A	N/A	N/A			
Total	\$4,797,638	\$ 340,300	\$5,137,938	\$ 149,089	\$ 337,128	\$ 486,216			

Table V-5


SECTION VI – CONTRIBUTIONS

Amortization of the Unfunded Actuarial Liability

Under the contribution allocation procedure employed by the System, there are three components to the contribution: the normal cost, administrative expenses, and an amortization payment on the Unfunded Actuarial Liability (UAL). The normal cost rate was developed in Section V. This section develops the administrative expense and UAL contributions.

The difference between the Actuarial Liability and the Actuarial Value of Assets is the Unfunded Actuarial Liability. The UAL is made up of the unamortized UAL as of June 30, 2023 plus the impact of the 2024 experience, and the 2023 UAL payment that is made by the City on July 1, 2024. There were no assumption changes or plan changes in 2024.

For members who were reclassified under Measure F from Tier 2 to Tier 1, a portion of the increase in liability for the reclassification is to be paid by members. Table VI-1 below shows the outstanding amount owed by members and the expected amortization payment amount. Rehires pay a fixed percentage of pay until the amount they owe has been paid. Classic members pay their portion of the UAL over 20 years (14 years remaining).

Tier	1 Membe	r UAL Am	ortization	
		standing alance	Remaining Period	ortization yment
Employee Rehire UAL Classic Employee UAL	\$	362 844	N/A 14	\$ 75 81
Total Members Basic COLA	\$	1,206 702 504		\$ 156 90 66

Table VI-1

Dollar amounts in thousands

Table VI-2 on the following page provides the payment schedule to amortize the Tier 1 UAL. The entire UAL as of June 30, 2009, was amortized over 30 years. Subsequent actuarial gains or (losses) or method changes were amortized over 20 years and assumption changes over 25 years from the valuation in which they are first recognized. The amortization payments increase by 2.75% each year, while payroll is expected to increase by 3.00% each year. As a result, payments are expected to become a slightly smaller percentage of combined Tier 1 and Tier 2 payroll each year.



SECTION VI – CONTRIBUTIONS

Table VI-2

	Tier 1 City	VUAL Amor	tization		
	0	utstanding Balance	Remaining Period		nortization Payment
Golden Handshake	\$	19,725	15	\$	1,794
2009 UAL		707,740	15	·	64,365
2010 (Gain)/Loss		29,380	6		5,716
2010 Assumption Change		(45,117)	11		(5,227)
2011 (Gain)/Loss		(1,907)	7		(324)
2011 Assumption Change		149,914	12		16,196
2012 (Gain)/Loss		80,938	8		12,236
SRBR Elimination		(29,744)	8		(4,497)
2013 (Gain)/Loss		54,260	9		7,420
2013 Assumption Change		55,448	14		5,312
2014 (Gain)/Loss		(19,945)	10		(2,498)
2014 Assumption Change		93,469	15		8,500
2015 (Gain)/Loss		40,120	11		4,648
2015 Assumption Change		192,355	16		16,677
2016 (Gain)/Loss		96,111	12		10,383
2016 Assumption Change		57,235	17		4,749
2017 (Gain)/Loss		52,548	13		5,331
Measure F		6,274	13		636
2017 Assumption Change		(16,920)	18		(1,348)
2018 (Gain)/Loss		44,244	14		4,239
2018 Assumption Change		52,277	19		4,011
2019 (Gain)/Loss		52,327	15		4,759
2019 Assumption Change		(1,683)	20		(125)
2020 (Gain)/Loss		92,738	16		8,040
2020 Assumption Change		34,390	21		2,466
2021 (Gain)/Loss		(39,739)	17		(3,297)
2021 Assumption Change		9,479	22		659
2022 (Gain)/Loss		21,247	18		1,693
2022 Assumption Change		496	23		34
2023 (Gain)/Loss		38,366	19		2,943
2023 Assumption Change		5,995	24		395
2024 (Gain)/Loss		(20,275)	20		(1,502)
7/1/2024 Payment		171,178			
Total City	\$	1,982,924		\$	174,384
Basic		1,148,021			92,179
COLA		834,903			82,205



SECTION VI – CONTRIBUTIONS

The chart below shows the future payment schedule for the Tier 1 amortization bases in Table VI-2. The original 2009 UAL is shown in red, assumption changes in purple, experience gain or loss bases in gold, and benefit changes in green. The blue line shows the net scheduled payment for each year.





SECTION VI - CONTRIBUTIONS

Table VI-3 below provides the payment schedule to amortize the Tier 2 UAL as of June 30, 2024. As of June 30, 2017, all amortization layers were reset to 10 years. Subsequent layers are amortized over 10 years from the valuation in which they are first recognized. The amortization payments increase by 2.75% each year, while payroll is expected to increase by 3.00% each year. As a result, payments are expected to become a slightly smaller percentage of combined Tier 1 and Tier 2 payroll each year.

	Tier 2 UA	L Amortiz	ation	
		standing alance	Remaining Period	ortization syment
2013 (Gain)/Loss	\$	20	3	\$ 7
2013 Assumption Change		0	3	0
2014 (Gain)/Loss		(252)	3	(93)
2014 Assumption Change		46	3	17
2015 (Gain)/Loss		364	3	134
2015 Assumption Change		177	3	65
2016 (Gain)/Loss		(238)	3	(88)
2016 Assumption Change		194	3	71
2017 (Gain)/Loss		(313)	3	(115)
Measure F		2,384	3	880
2017 Assumption Change		702	3	259
2018 (Gain)/Loss		(1,225)	4	(345)
2018 Assumption Change		751	4	211
2019 (Gain)/Loss		608	5	139
2019 Assumption Change		(776)	5	(178)
2020 (Gain)/Loss		2,418	6	470
2020 Assumption Change		1,805	6	351
2021 (Gain)/Loss		(2,486)	7	(422)
2021 Assumption Change		175	7	30
2022 (Gain)/Loss		937	8	142
2022 Assumption Change		21	8	3
2023 (Gain)/Loss		7,288	9	997
2023 Assumption Change		15,610	9	2,135
2024 (Gain)/Loss		4,206	10	527
7/1/2024 Payment		4,545		
Total Tier 2	\$	36,961		\$ 5,197
Basic		27,561		3,782
COLA		9,400		1,415

Table VI-3

Dollar amounts in thousands



SECTION VI – CONTRIBUTIONS

The chart below shows the historical UAL based on the Market Value of Assets and its projected decline over the next 20 years if all assumptions are met and as scheduled amortization payments are made.



This amortization structure results in a total UAL rate of 36.5% of payroll for FYE 2026, which is more than the amount needed to pay the projected interest on the UAL based on the Market Value of Assets. As a result, the dollar amount of the UAL based on the Market Value of Assets is expected to decrease during FYE 2026.

Contributions for Administrative Expenses

Administrative expenses for FYE 2025 were assumed to be \$5,790,747, which were the actual expenses for FYE 2023 increased by 3.0% annually for two years. Administrative expenses for FYE 2026 are assumed to be \$6,509,952, which is the actual expenses for FYE 2024 increased by 3.0% annually for two years. These expenses are allocated to each tier in proportion to the Market Value of Assets. Table VI-4 on the next page shows the contributions for administrative expenses by tier and the administrative expense contribution rates for Tier 2 for FYE 2025 and 2026. Tier 1 members do not share in the cost of administrative expenses, while Tier 2 members pay half of the administrative expenses expected for Tier 2.



SECTION VI – CONTRIBUTIONS

Table VI-4

Admi	nistra	ative Ex	per	nse By Gro	oup				
		cal Year Fier 1		ling 2025 Tier 2	<u> </u>				
Market Assets Administrative Expense	\$ 2, \$,668,050 5,314		239,263 477		847,644 5,877		306,796 633	
Tier 2 City/Member Admin Exj Basic COLA	pense	Rate		0.07% 0.06% 0.01%				0.08% 0.07% 0.01%	

Dollar amounts in thousands

Contribution Rates and Amounts

Tier 1 members pay 3/11^{ths} of the total normal cost (excluding reciprocity normal cost). For Tier 1, the City pays 8/11^{ths} of the total normal cost (excluding reciprocity normal cost), all of the reciprocity normal cost, all administrative expenses, and the UAL payments shown above. The total contribution cannot be less than the normal cost.

For Tier 2, members and the City each pay half of the total normal cost, half of administrative expenses, and half of the UAL payments. However, the member's UAL contribution rate cannot increase by more than 0.33% of pay each year. The City contributes any amounts in excess of this cap that the member would otherwise contribute. The member and City contribution rates each cannot be less than 50% of the normal cost rate.

Tier 1 members who were rehired into Tier 2 and subsequently reclassified back into Tier 1 under Measure F pay half of the increased cost attributable to their Tier 2 service. The Board set a contribution rate of 3.0 percent of pay that applies to each individual member until they have paid off their individual UAL amount for reclassification. In addition, Tier 2 members who were defined as classic members due to reciprocal service were reclassified as Tier 1 members under Measure F. All classic members pay an additional contribution rate to pay half of the additional liability attributable to reclassifying these members. This contribution rate is recalculated with each valuation. Table VI-5 shows the reclassification contribution rates applicable to classic members for FYE 2025 and 2026.



SECTION VI – CONTRIBUTIONS

Table VI-5

Classi	c Mei	mb	er Cor	ntr	ibution	Rat	te				
	Fiscal	Ye	ar Endi	ng	2025		Fiscal Y	Yea	ar Endir	ng 2	2026
B	asic	(COLA		Total	B	Basic	(COLA	'	Fotal
\$	46	\$	33	\$	79	\$	47	\$	34	\$	81
				\$	7,679					\$	8,684
(0.60%		0.43%		1.03%		0.55%		0.38%		0.93%
	B: \$	Fiscal Basic	Fiscal Ye Basic C \$ 46 \$	Fiscal Year EndiBasicCOLA\$46\$33	Fiscal Year EndingBasicCOLA\$46\$33\$\$\$\$\$\$	Fiscal Year Ending 2025 Basic COLA Total \$ 46 \$ 33 \$ 79 \$ 7,679 \$	Fiscal Year Ending 2025 Basic COLA Total E \$ 46 \$ 33 \$ 79 \$ \$ 7,679 \$ \$ \$	Basic COLA Total Basic \$ 46 \$ 33 \$ 79 \$ 47 \$ 7,679 \$ 7,679	Fiscal Year Ending 2025Fiscal YeaBasicCOLATotalBasicCOLA\$ 46\$ 33\$ 79\$ 47\$\$ 7,679\$ 7,679\$ 7,679\$ 33\$ 7,679	Fiscal Year Ending 2025Fiscal Year EndirBasicCOLATotalBasicCOLA\$ 46\$ 33\$ 79\$ 47\$ 34\$ 7,679\$ 7,679\$ 34	Fiscal Year Ending 2025Fiscal Year Ending 2BasicCOLATotalBasicCOLA\$ 46\$ 33\$ 79\$ 47\$ 34\$\$ 7,679\$ 7,679\$ 5\$ 5

Dollar amounts in thousands

Table VI-6 shows the components of the member contribution rates for FYE 2025 and 2026, including the average of the reclassification rates under Measure F over all Tier 1 payroll.

	Member	r Contrib	ution Rat	es					
	Fiscal	Year Endi	ng 2025	Fiscal	Fiscal Year Ending 2026				
	Basic	COLA	Total	Basic	COLA	Total			
<u>Tier 1</u>									
Normal Cost Rate	4.75%	1.86%	6.61%	4.70%	1.85%	6.55%			
Average Reclassification Rate	0.08%	0.06%	0.14%	0.07%	0.06%	<u>0.13</u> %			
Average Member Rate	4.83%	1.92%	6.75%	4.77%	1.91%	6.68%			
<u>Tier 2</u>									
Normal Cost Rate	6.66%	1.15%	7.81%	6.67%	1.15%	7.82%			
Admin Expense Rate	0.06%	0.01%	0.07%	0.07%	0.01%	0.08%			
UAL Rate	0.54%	0.07%	0.61%	0.52%	0.20%	0.72%			
Member Rate	7.26%	1.23%	8.49%	7.26%	1.36%	8.62%			

Table VI-6

Table VI-7 shows the City's contribution rates and dollar amounts for FYE 2025 and 2026 assuming contributions are made throughout the fiscal year. The UAL rate is calculated as the payment shown in Tables VI-1 and VI-2 increased with one-half year of interest and divided by the projected payroll for the fiscal year. For FYE 2026, the projected payroll is \$127.2 million for Tier 1 and \$373.6 million for Tier 2.



SECTION VI – CONTRIBUTIONS

Table VI-7

City Contr	ibu	ition Ra	ite	s and A	\n	nounts T	hra	oughout	th	e Year		
		Fiscal Y	Ye	a <mark>r Endi</mark> r	ng i	2025		Fiscal Y	Ye	a <mark>r Endi</mark> r	ıg ź	2026
		Basic		COLA		Total		Basic		COLA		Total
Tier 1 UAL Payment	\$	93,604	\$	83,154	\$	176,758	\$	95,184	\$	84,883	\$	180,067
Tier 1 Admin Expenses	\$	3,197	\$	2,117	\$	5,314	\$	3,473	\$	2,404	\$	5,877
Tier 1 Normal Cost	\$	17,466 13.42%	\$	6,910 5.31%	\$	24,376 18.73%	\$	16,891 13.28%	\$	6,717 5.28%	\$	23,608 18.56%
Tier 2 Contribution	\$	23,184 7.26%	\$	4,694 1.47%	\$	27,878 8.73%	\$	27,124 7.26%	\$	5,081 1.36%	\$	32,205 8.62%
Aggregate Contribution	\$	137,451 30.58%	\$	96,875 21.55%	\$	234,326 52.13%	\$	142,672 28.49%	\$	99,085 19.78%	\$	241,757 48.27%

Dollar amounts in thousands

The City retains an option to make its Tier 1 contribution as a lump sum at the beginning of the fiscal year. Table VI-8 below shows the City contribution amounts for Tier 1 as of the beginning of the fiscal year assuming the Board elects to discount the amounts for one half year of interest at the valuation discount rate. Any amounts contributed after the beginning of the year should be adjusted for interest at the valuation discount rate.

Table VI-8

Estimated Tier 1 City Contribution Amounts - Beginning of Year														
	Fiscal	Ye	ar Endi	ng	2025		Fiscal	Ye	ar Endi	ng	2026			
	Basic	(COLA		Total		Basic		COLA		Total			
\$	16,914	\$	6,694	\$	23,608	\$	16,359	\$	6,503	\$	22,862			
	3,096	\$	2,050		5,146		3,363		2,328		5,691			
_	90,650		80,528		171,178		92,179		82,205		174,384			
\$	110,660	\$	89,272	\$	199,932	\$	111,901	\$	91,036	\$	202,937			
		Fiscal Basic \$ 16,914 3,096 90,650	Fiscal Ye Basic \$ 16,914 \$ 3,096 \$	Fiscal Year Endi Basic COLA \$ 16,914 \$ 6,694 3,096 \$ 2,050 90,650 80,528	Fiscal Year Ending Basic COLA \$ 16,914 \$ 6,694 \$ 3,096 \$ 2,050 90,650 80,528	Fiscal Year Ending 2025 Basic COLA Total \$ 16,914 \$ 6,694 \$ 23,608 3,096 \$ 2,050 5,146 90,650 80,528 171,178	Fiscal Year Ending 2025 Basic COLA Total \$ 16,914 \$ 6,694 \$ 23,608 \$ 3,096 \$ 2,050 5,146 90,650 _80,528 _171,178	Fiscal Year Ending 2025 Fiscal Basic COLA Total Basic \$ 16,914 \$ 6,694 \$ 23,608 \$ 16,359 3,096 \$ 2,050 5,146 3,363 90,650 80,528 171,178 92,179	Fiscal Year Ending 2025 Fiscal Year Ending 2025 Basic COLA Total Basic \$ 16,914 \$ 6,694 \$ 23,608 \$ 16,359 \$ 3,096 \$ 2,050 5,146 3,363 90,650 80,528 171,178 92,179 92,179	Fiscal Year Ending 2025 Fiscal Year Ending Basic COLA Total Fiscal Year Ending \$ 16,914 \$ 6,694 \$ 23,608 \$ 16,359 \$ 6,503 3,096 \$ 2,050 5,146 3,363 2,328 90,650 80,528 171,178 92,179 82,205	Fiscal Year Ending 2025 Fiscal Year Ending Basic Basic COLA Total Fiscal Year Ending Basic COLA \$ 16,914 \$ 6,694 \$ 23,608 \$ 16,359 \$ 6,503 \$ 3,096 \$ 2,050 5,146 3,363 2,328 90,650 80,528 171,178 92,179 82,205 \$ 10,000 <t< td=""></t<>			

Dollar amounts in thousands

Table VI-9 reconciles the change in the Tier 1 and Tier 2 member and City contributions from the contribution rates and amounts calculated in the prior valuation. The asset experience shown in the table includes investment returns, contributions, and administrative expense experience.



SECTION VI – CONTRIBUTIONS

Demographic experience in 2024 increased the contribution rate, offset by investment experience. However, higher-than-expected payroll growth caused a net reduction in the contribution rate because the UAL payment is spread over a larger payroll, but it also caused an increase in the dollar amount of the contribution because the normal cost rate is charged on a larger payroll.

Reconciliatio	on of Ch	anges i	n Contri	bution	Rates ar	nd Amou	nts								
		City Aggregate													
	Membe Tier 1	r Rate Tier 2	Normal Cost	UAL Rate	Total Rate	Projected Payroll		City Amount							
FYE 2025 Contribution	6.75%	8.49%	10.97%	41.16%	52.13%	\$ 449,482	\$	234,326							
Expected FYE 2026	6.74%	8.65%	10.63%	40.58%	51.21%	462,967	,	237,074							
Changes Due to:															
Asset experience	0.00%	-0.05%	0.00%	-0.69%	-0.69%	462,967	,	(3,194)							
Demographic experience	-0.06%	0.08%	-0.01%	0.83%	0.82%	462,967	'	3,779							
Payroll Change	0.00%	-0.06%	-0.07%	-2.99%	-3.06%	500,803	;	4,098							
Assumption Change	<u>0.00%</u>	<u>0.00%</u>	0.00%	<u>0.00%</u>	0.00%	500,803	<u> </u>	0							
Subtotal	-0.06%	-0.03%	-0.08%	-2.85%	-2.93%	\$ 500,803	\$	4,683							
FYE 2026 Contribution	6.68%	8.62%	10.55%	37.72%	48.27%	\$ 500,803	\$	241,757							

City administrative expenses are included in the UAL rate.

Dollar amounts in thousands



SECTION VII - ACTUARIAL SECTION OF THE ACFR

The Government Finance Officers Association (GFOA) maintains a checklist of items to be included in the System's Annual Comprehensive Financial Report (ACFR) in order to receive recognition for excellence in financial reporting. The schedules in this section are listed by the GFOA for inclusion in the Actuarial Section of the System's ACFR.

	Schedule of Funding Progress													
Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Liability (AL)	Unfunded AL	Funded Ratio	Covered Payroll	Unfunded AL as a % of Covered Payroll								
06/30/2024	\$ 3,116,847	\$ 5,137,938	\$ 2,021,091	61%	\$ 486,216	416%								
06/30/2023 9	2,889,956	4,965,668	2,075,712	58%	436,391	476%								
06/30/2022 8	2,709,625	4,750,646	2,041,021	57%	384,197	531%								
06/30/2021 7	2,513,095	4,562,981	2,049,886	55%	359,061	571%								
06/30/2020 6	2,301,469	4,401,083	2,099,614	52%	341,552	615%								
06/30/2019 5	2,228,802	4,200,708	1,971,906	53%	313,310	629%								
06/30/2018 4	2,179,488	4,100,821	1,921,333	53%	298,985	643%								
06/30/2017 3	2,101,435	3,923,966	1,822,531	54%	287,339	634%								
06/30/2016 2	2,034,741	3,786,730	1,751,989	54%	266,823	657%								
06/30/2015	2,004,481	3,569,898	1,565,417	56%	251,430	623%								

Table VII-1

Dollar amounts in thousands

¹ Demographic assumption changes increased the AL by \$192 million.

² *Reducing the discount rate from 7.00% to 6.875% increased the AL by \$60 million.*

³ Measure F implementation increased the AL by \$14 million and assumption changes decreased the AL by \$16 million

⁴ Assumption changes, including reducing the discount rate from 6.875% to 6.75%, increased the AL by \$54 million

⁵ Assumption changes decreased the AL by \$3 million

⁶ Assumption changes, including reducing the discount rate from 6.75% to 6.625%, increased the AL by \$37 million

⁷ Assumption changes increased the AL by \$10 million

⁸ Assumption changes increased the AL by \$0.5 million

⁹ Assumption changes increased the AL by \$22.6 million



SECTION VII – ACTUARIAL SECTION OF THE ACFR

Table VII-2

		Actu	arial Liability						
Valuation		(A) Active Member	(B) Retirees, Beneficiaries and Other	(C) Remaining Active Members'	Reported	Portion of Actuarial Liability Covered by Reported Assets			
Date	Cor	ntributions	Inactives	Liabilities	Assets*	(A)	(B)	(C)	
06/30/2024	\$	283,680	\$ 3,747,788	\$ 1,106,470	\$ 3,116,847	100%	76%	0%	
06/30/2023		262,269	3,668,531	1,034,868	2,889,956	100%	72%	0%	
06/30/2022		246,803	3,575,879	927,964	2,709,625	100%	69%	0%	
06/30/2021		241,016	3,443,968	877,997	2,513,095	100%	66%	0%	
06/30/2020		234,385	3,308,069	858,629	2,301,469	100%	62%	0%	
06/30/2019		228,905	3,150,673	821,130	2,228,802	100%	63%	09	
06/30/2018		230,282	3,002,012	868,527	2,179,488	100%	65%	09	
06/30/2017		236,819	2,830,143	857,004	2,101,435	100%	66%	09	
06/30/2016		240,872	2,722,224	823,634	2,034,741	100%	66%	09	
06/30/2015		243,828	2,553,892	772,178	2,004,481	100%	69%	00	

* Actuarial Value of Assets

Dollar amounts in thousands

Table VII-3

	Analysis of Financial Experience											
Actuarial Valuation Date	Ga Investment Income		or (Loss) for Ye Combined Liability Experience		Ending on Val Total Financial Experience		ion Date Due ' on-Recurring Items		Total Experience			
06/30/2024	\$ 46,229	\$	(30,160)	\$	16,068	\$	0	\$	16,068			
06/30/2023	18,329		(64,743)		(46,414)		(22,572)		(68,985)			
06/30/2022	31,034		(53,747)		(22,713)		(518)		(23,231)			
06/30/2021	76,461		(32,329)		44,132		(9,687)		34,446			
06/30/2020	(67,979)		(32,761)		(100,741)		(36,981)		(137,722)			
06/30/2019	(88,845)		(4,283)		(93,129)		39,030		(54,099)			
06/30/2018	(49,921)		4,702		(45,219)		(56,306)		(101,525)			
06/30/2017	(44,650)		(13,819)		(58,468)		1,813		(56,655)			
06/30/2016	(81,539)		(29,989)		(111,528)		(60,233)		(171,761)			
06/30/2015	(3,641)		(45,998)		(49,639)		(191,527)		(241,167)			

Dollar amounts in thousands



APPENDIX A – MEMBERSHIP INFORMATION

Data Assumptions and Methods

In preparing our data, we relied on information supplied by the San José Department of Retirement Services. This information includes, but is not limited to, plan provisions, employee data, and financial information. Our methodology for obtaining the data used for the valuation is based upon the following assumptions and practices:

- Records on the "Active" data file are considered to be Active if they do not have a reason for termination.
- Records on any of the data files are considered to be Inactive if they have a reason for termination of deferred vested or leave of absence/inactive.
- Records on the "Retiree" and "Beneficiary/QDRO" files are considered in pay status if they do not have a date of death, are not inactive, and have not withdrawn from the plan.
- All active employees are assumed to accrue a full year of service in all future years.
- Service for inactives that have no service amount is calculated to be the time from date of hire to date of termination.
- The expected annual salary for Tier 1 full-time active employees is calculated to be "compensation rate 2 earnable" multiplied by the expected pay periods for the year and increased by any expected pay increases.
- The expected annual salary for Tier 1 part-time active employees and all Tier 2 active employees is calculated to be 80 hours multiplied by their hourly rate of pay in the pay period immediately preceding the valuation date, multiplied by the expected pay periods for the year and increased by any expected pay increase.
- The Tier 1 annual benefit for inactives is set to be the accrued benefit provided. If an accrued benefit is not provided, then the annual benefit is calculated to be 2.5% of final compensation per year of service in Tier 1, up to a maximum of 75% of final compensation. Members who terminated prior to June 30, 2001 have their final compensation adjusted for a three-year average rather than a 12-month average.
- The Tier 2 annual benefit for inactives is set to be the accrued benefit provided. If an accrued benefit is not provided, then the annual benefit is calculated to be 2.0% of final compensation per year of service in Tier 2, up to a maximum of 70% of final compensation. The final compensation is adjusted for a three-year average.
- We assume any member found in last year's "Retiree" file and not in this year's file is deceased without a beneficiary and should be removed from the valuation data.
- We assume all deceased members with payments continuing to a beneficiary have already been accounted for in the "Retiree" file.

Changes since Last Valuation

None.



APPENDIX A – MEMBERSHIP INFORMATION

Table A-1

Active	Men	ıber Data			
	Ju	ne 30, 2023	Ju	ne 30, 2024	% Change
<u>Tier 1</u>					
Count		1,197		1,123	-6.2%
Average Current Age		52.2		52.8	1.1%
Average Eligibility Service		19.7		20.5	4.1%
Average Benefit Service		19.0		19.7	3.7%
Average Expected Pensionable Earnings	\$	124,132	\$	132,759	6.9%
<u>Tier 2</u>					
Count		2,851		3,178	11.5%
Average Current Age		39.3		39.4	0.3%
Average Eligibility Service		4.2		4.4	4.8%
Average Benefit Service		4.0		4.3	7.5%
Average Expected Pensionable Earnings	\$	100,949	\$	106,082	5.1%
<u>Total</u>					
Count		4,048		4,301	6.3%
Average Current Age		43.1		42.9	-0.5%
Average Eligibility Service		8.8		8.6	-2.3%
Average Benefit Service		8.5		8.3	-2.4%
Average Expected Pensionable Earnings	\$	107,804	\$	113,047	4.9%

Table	A-2
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	Sched	ule of Active M	ember Data	1
Valuation Date	Active Count	Annual Payroll	Average Annual Pay	Percent Change in Average Pay
2024	4,301	\$ 486,216,000	\$ 113,047	4.9%
2023	4,048	436,391,000	107,804	6.4%
2022	3,792	384,197,000	101,318	6.5%
2021	3,775	359,061,000	95,115	4.2%
2020	3,742	341,552,000	91,275	5.4%
2019	3,617	313,310,000	86,622	3.0%
2018	3,554	298,985,000	84,126	-0.2%
2017	3,410	287,339,000	84,264	4.1%
2016	3,297	266,823,000	80,929	4.2%
2015	3,236	251,430,000	77,698	3.3%



APPENDIX A – MEMBERSHIP INFORMATION

Table A-3

	Payee	Member D	Data		
	June	30, 2023	June	e 30, 2024	% Change
Retired					
Count		3,894		3,921	0.7%
Average Age		70.7		71.1	0.6%
Average Annual Benefit	\$	58,075	\$	59,723	2.8%
Service Disability					
Count		113		117	3.5%
Average Age		69.0		69.6	0.9%
Average Annual Benefit	\$	42,568	\$	44,014	3.4%
Non-Service Disability					
Count		66		63	- 4.5%
Average Age		69.3		70.2	1.3%
Average Annual Benefit	\$	37,139	\$	37,673	1.4%
Beneficiaries & SADROs					
Count		553		556	0.5%
Average Age		75.7		75.6	- 0.1%
Average Annual Benefit	\$	34,193	\$	35,357	3.4%
Total					
Count		4,626		4,657	0.7%
Average Age		71.2		71.6	0.6%
Average Annual Benefit	\$	54,542	\$	56,121	2.9%

Table A	\-4
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	Schedule Of Retirees And Beneficiaries Added To And Removed From Rolls											
	Beginning of Period Annual		Added to Rolls Annual		Removed from Rolls Annual		End of Period Annual		% Increase in Annual	Average Annual		
Period	Count	Allowances	Count	Allowances	Count	Allowances	Count	Allowances	Allowances	Allowances		
2023-2024	4,626	\$ 252,313	154	\$ 7,532	123	\$ 5,874	4,657	\$ 261,356	3.6%	\$ 56		
2022-2023	4,557	241,253	185	7,810	116	5,251	4,626	252,313	4.6%	55		
2021-2022	4,511	232,043	173	8,440	127	5,463	4,557	241,253	4.0%	53		
2020-2021	4,441	221,575	188	9,246	118	5,090	4,511	232,043	4.7%	51		
2019-2020	4,359	210,350	208	9,499	126	4,596	4,441	221,575	5.3%	50		
2018-2019	4,225	198,157	230	10,394	96	3,634	4,359	210,350	6.2%	48		
2017-2018	4,115	187,714	223	9,133	113	3,994	4,225	198,157	5.6%	47		
2016-2017	4,003	177,751	225	8,843	113	3,894	4,115	187,714	5.6%	46		
2015-2016	3,901	168,917	212	7,907	110	3,904	4,003	177,751	5.2%	44		
2014-2015	3,800	159,124	200	8,266	99	3,122	3,901	168,917	6.2%	43		

Dollar amounts in thousands



APPENDIX A – MEMBERSHIP INFORMATION

Table A-5

Inactive Member Data									
	June	e 30, 2023	Jun	e 30, 2024	%Change				
Tier 1									
Terminated Vested									
Count		677		639	-5.6%				
Average Age		49.7		50.3	1.2%				
Average Annual Benefit	\$	23,451	\$	23,535	0.4%				
Average Contribution Balance with Interest	\$	87,342	\$	89,249	2.2%				
Non-Vested Terminated									
Count		216		213	-1.4%				
Average Age		49.7		50.4	1.4%				
Average Annual Benefit	\$	3,750	\$	3,614	-3.6%				
Average Contribution Balance with Interest	\$	19,398	\$	19,540	0.7%				
Total									
Count		893		852	-4.6%				
Average Age		49.7		50.3	1.2%				
Average Annual Benefit	\$	18,686	\$	18,555	-0.7%				
Average Contribution Balance with Interest	\$	70,907	\$	71,822	1.3%				
Tier 2									
Terminated Vested									
Count		205		256	24.9%				
Average Age		41.9		42.2	0.7%				
Average Annual Benefit	\$	10,573	\$	11,209	6.0%				
Average Contribution Balance with Interest	\$	39,453	\$	43,541	10.4%				
Non-Vested Terminated									
Count		921		1,023	11.1%				
Average Age		38.5		39.2	1.8%				
Average Annual Benefit	\$	2,514	\$	2,511	-0.1%				
Average Contribution Balance with Interest	\$	10,854	\$	11,110	2.4%				
Total									
Count		1,126		1,279	13.6%				
Average Age		39.1		39.8	1.8%				
Average Annual Benefit	\$	3,981	\$	4,252	6.8%				
Average Contribution Balance with Interest	\$	16,060	\$	17,601	9.6%				
Total									
Count		2,019		2,131	5.5%				
Average Age		43.8		44.0	0.5%				
Average Annual Benefit	\$	10,485	\$	9,970	-4.9%				
Average Contribution Balance with Interest	\$	40,319	\$	39,279	-2.6%				

If not provided in the data, benefit is calculated using the data assumptions outlined in Appendix A.



APPENDIX A – MEMBERSHIP INFORMATION

Table A-6

Distribution of Active Member Counts as of June 30, 2024

				Y	ears of Ben	efit Service					
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up	Total
Under 25	90	40	0	0	0	0	0	0	0	0	130
25 to 29	146	308	31	0	0	0	0	0	0	0	485
30 to 34	126	334	213	8	0	0	0	0	0	0	681
35 to 39	73	210	255	39	12	0	0	0	0	0	589
40 to 44	44	130	203	74	65	14	0	0	0	0	530
45 to 49	42	113	133	67	93	82	16	1	0	0	547
50 to 54	27	80	112	41	65	118	72	2	0	0	517
55 to 59	23	68	91	35	60	72	48	7	0	0	404
60 to 64	11	46	66	20	38	33	25	6	0	0	245
65 to 69	6	14	36	15	24	17	12	1	1	1	127
70 and up	0	4	8	5	9	9	6	1	3	1	46
Total Count	588	1,347	1,148	304	366	345	179	18	4	2	4,301

Distribution of Average Expected Salaries as of June 30, 2024

					Years of Be	nefit Servic	e				
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up	Total
Under 25	\$ 71,916	\$ 79,124	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 74,134
25 to 29	81,917	92,686	98,053	0	0	0	0	0	0	0	89,787
30 to 34	90,348	97,287	108,348	158,261	0	0	0	0	0	0	100,179
35 to 39	96,677	99,369	113,519	128,683	112,727	0	0	0	0	0	107,374
40 to 44	107,829	104,443	116,166	129,576	139,619	137,347	0	0	0	0	117,906
45 to 49	112,508	112,495	128,495	135,978	131,068	125,132	136,236	161,117	0	0	125,098
50 to 54	104,784	114,992	129,561	140,874	135,730	132,035	146,509	152,266	0	0	130,698
55 to 59	93,547	121,451	124,026	131,550	133,271	129,944	122,314	113,937	0	0	124,559
60 to 64	93,020	112,978	127,176	132,869	128,733	126,539	148,103	148,602	0	0	126,257
65 to 69	114,410	113,664	135,585	142,414	119,068	125,575	107,965	160,114	72,983	92,861	125,268
70 and up	0	136,318	100,676	182,375	111,086	141,404	109,485	107,979	181,116	69,862	128,545
Avg. Salary	\$ 90,194	\$ 101,080	\$ 118,130	\$ 135,097	\$ 131,654	\$ 129,574	\$ 135,500	\$ 134,606	\$ 154,083	\$ 81,362	\$ 113,047



APPENDIX A – MEMBERSHIP INFORMATION

Chart A-1



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APPENDIX A – MEMBERSHIP INFORMATION

Table A-7

Retirees and Disabled by Attained Age and Benefit Effective Date as of June 30, 2024

Benefit Effective					Age						
Fiscal Year End	Under 50	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and up	Total
Prior to 1995	0	0	0	2	5	7	7	34	91	93	239
1996	0	0	2	0	1	1	0	12	3	4	23
1997	0	0	0	1	0	0	1	27	9	2	40
1998	0	0	0	1	0	2	1	21	6	7	38
1999	0	0	0	0	0	1	6	42	4	5	58
2000	0	0	0	0	0	1	19	34	6	2	62
2001	0	0	0	0	1	3	26	22	11	2	65
2002	0	0	0	1	1	3	66	20	15	0	106
2003	0	0	0	1	1	8	52	25	9	1	97
2004	1	0	0	4	0	16	65	14	8	0	108
2005	0	0	0	1	3	28	67	26	12	3	140
2006	0	2	1	4	6	53	41	24	3	0	134
2007	0	0	0	1	12	58	39	15	2	3	130
2008	0	0	1	1	9	74	37	16	4	0	142
2009	0	0	3	1	17	70	31	8	2	0	132
2010	0	0	0	5	43	88	42	16	2	1	197
2011	0	0	2	9	102	113	72	19	4	1	322
2012	0	0	0	12	90	49	38	13	0	0	202
2013	0	1	0	5	89	16	24	0	1	0	136
2014	1	0	3	12	94	19	12	3	0	0	144
2015	0	0	3	45	70	24	13	2	1	0	158
2016	0	0	8	89	24	27	14	1	0	1	164
2017	1	0	11	87	39	30	8	3	0	0	179
2018	0	1	4	97	38	21	12	3	2	0	178
2019	0	3	20	111	28	26	5	1	0	0	194
2020	0	3	38	75	28	13	2	1	0	0	160
2021	0	3	70	41	22	14	2	1	0	0	153
2022	0	4	63	31	22	16	0	1	0	0	137
2023	0	1	77	26	29	9	1	1	0	0	144
2024	0	2	63	30	19	3	2	0	0	0	119
Total	3	20	369	693	793	793	705	405	195	125	4,101
Average Age at Ref	tirement/Disal	bility	57.6	A	verage Curi	rent Age	71.1 A	verage Ann	ual Pension		\$ 58,936



APPENDIX A – MEMBERSHIP INFORMATION

Table A-8

Distribution of Retirees, Disabled Members, and Beneficiaries as of June 30, 2024										
Age	Count	Ar	nnual Benefit							
Under 50	14	\$	362,423							
50 to 54	32		1,983,602							
55 to 59	385		20,390,248							
60 to 64	737		43,034,451							
65 to 69	865		49,329,320							
70 to 74	880		52,435,196							
75 to 79	801		46,317,203							
80 to 84	491		27,168,489							
85 to 89	263		13,106,920							
90 and up	189		7,227,692							
Total	4,657	\$	261,355,545							

Chart A-2



Count Distribution



APPENDIX A – MEMBERSHIP INFORMATION

Chart A-3





APPENDIX A – MEMBERSHIP INFORMATION

Table A-9

Change in Plan Membership TIER 1							
		Terminated		D 4	T21 1 11/4	Beneficiary/	
	Actives	Vested			Disabilities	SADRO	Total
June 30, 2023	1,197	677	216	3,845	179	553	6,667
Rehires	7	(6)	0	(1)	0	0	0
Non-Vested Terminated	(1)	0	1	0	0	0	0
Terminated Vested	(13)	14	(1)	0	0	0	0
Return of Contributions	0	(6)	(2)	0	0	0	(8)
Disabilities	0	(1)	0	(5)	6	0	0
Retirements	(70)	(37)	(2)	109	0	0	0
Deaths	(2)	(2)	0	(86)	(5)	33	(62)
Beneficiary Deaths	0	0	0	0	0	(31)	(31)
Tier Adjustment	3	0	0	0	0	0	3
Miscellaneous Adjustments	2	0	1	0	0	0	3
June 30, 2024	1,123	639	213	3,862	180	555	6,572
	TIER 2						
June 30, 2023	2,851	205	921	49	0	0	4,026
New Entrants	527	0	41	0	0	0	568
Rehires	21	(5)	(16)	0	0	0	0
Non-Vested Terminated	(107)	0	107	0	0	0	0
Terminated Vested	(59)	62	(3)	0	0	0	0
Return of Contributions	(41)	(5)	(27)	0	0	0	(73)
Disabilities	0	0	0	0	0	0	0
Retirements	(9)	(1)	0	10	0	0	0
Deaths	(2)	0	0	0	0	1	(1)
Tier Adjustment	(3)	0	ů 0	0	0	0	(3)
June 30, 2024	3,178	256	1,023	59	Ő	1	4,517
5 une 0 0, 2021	0,170		TAL	0,2	0	-	1,017
June 30, 2023	4,048	882	1,137	3,894	179	553	10,693
New Entrants	4,040 527	002	41	3,094 0	0	555 0	10,093 568
Rehires	28	(11)	(16)	(1)	0	0	508 0
Non-Vested Terminated	28 (108)	(11)	(10)	(1)	0 0	0	0
Terminated Vested	(108) (72)	0 76	(4)	0	0	0	0
Return of Contributions						-	
Disabilities	(41)	(11)	(29)	$\begin{pmatrix} 0 \\ (5) \end{pmatrix}$	0	0	(81)
Retirements	0 (70)	(1) (28)	$\begin{pmatrix} 0 \\ (2) \end{pmatrix}$	(5) 119	6	0	$\begin{array}{c} 0\\ 0\end{array}$
	(79) (4)	(38)	(2)		$\begin{pmatrix} 0 \\ (5) \end{pmatrix}$	0 24	-
Deaths	(4)	(2)	0	(86)	(5)	34	(63)
Beneficiary Deaths	0	0	0	0	0	(31)	(31)
Miscellaneous Adjustments June 30, 2024	2 4,301	0 895	1 1,236	0 3,921	0 180	0 556	3 11,089
June 30, 2024	4,301	649	1,236	3,921	190	550	11,089



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

Actuarial Assumptions

The price inflation, wage inflation, amortization payment growth, and discount rates were adopted by the Board of Administration with our input at the October 17, 2024 Board meeting. Please refer to that Board presentation for details, including the rationale for each economic assumption. All other assumptions were adopted at the November 16, 2023 Board meeting based on recommendations from our experience study covering plan experience through June 30, 2023. Please refer to the full experience study report and the November 16, 2023 Board presentation for details, including the rationale for each demographic assumption.

1. Discount Rate

6.625%. The Board expects a long-term rate of return of 8.5% based on Meketa's 2024 20-year capital market assumptions and the System's current investment policy. A margin for adverse deviation was used to improve the probability of achieving the discount rate.

2. Wage Inflation and Payroll Growth

Reflect currently bargained increases for FYE 2025, 3.5% effective July 1, 2025, and 3.00% thereafter. These increases approximate the bargained increases for the largest bargaining groups.

3. Amortization Payment Growth

2.75%, compounded annually.

4. Price Inflation

2.50%, compounded annually.

5. Administrative Expenses

Administrative expenses are assumed to equal the prior year's actual administrative expenses increased by the ultimate wage inflation assumption to the year of the contribution. Administrative expenses are allocated to each tier in proportion to each tier's market value of assets.



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

6. Salary Increase Rate

In addition to the wage inflation component shown above, the following merit component is added based on an individual member's years of service:

Table B-1 Salary Merit Increases				
Years of Service	Merit/ Longevity	Years of Service	Merit/ Longevity	
0	3.25%	10	1.00	
1	3.25	11	0.85	
2	3.05	12	0.70	
3	2.75	13	0.55	
4	2.40	14	0.45	
5	2.10	15	0.40	
6	1.85	16	0.35	
7	1.60	17	0.30	
8	1.35	18+	0.25	
9	1.20			

7. Rates of Termination

Rates of termination are shown in the following Table B-2.

Table B-2 Rates of Termination				
Years of Service	Termination Rate	Years of Service	Termination Rate	
0	15.00%	8	5.50	
1	12.75	9	4.75	
2	11.75	10	4.25	
3	10.75	11	4.00	
4	9.75	12	3.75	
5	8.75	13	3.50	
6	7.75	14	3.25	
7	6.50	15+	3.25	

Termination rates do not apply once a member is eligible for retirement.



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

8. Rates of Refund for Current Active Members

Applied before Rates of Reciprocity assumption

<u>Tier 1:</u>

Rates of vested terminated electing a refund of contributions are shown in the following Table B-3.

	Table B-3 Rates of Refund	
Years of Service	Younger than Age 45	Ages 45 and Older
0-4	100.0%	100.0%
5	20.0	15.0
6	18.0	12.5
7	16.5	10.0
8	15.0	8.0
9	13.5	6.0
10	12.0	5.0
11	10.0	5.0
12	8.0	5.0
13	6.0	5.0
14	3.0	2.5
15+	0.0	0.0

Refund rates do not apply once a member is eligible for retirement.

<u>Tier 2:</u>

Future vested terminated employees are assumed to take a refund if it exceeds the actuarial present value of their deferred benefit payment.

100% of future non-vested terminated employees are assumed to receive a refund of contributions.

9. Rate of Reciprocity for Current Active Members

Applied after Rates of Refund assumption

40% of future terminating employees who do not take a refund are assumed to subsequently work for a reciprocal employer and receive annual pay increases equal to the ultimate wage inflation assumption (3.00%) plus 1.00%.



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

10. Refund and Reciprocity for Current Terminated Members

40% of current terminated employees who have not taken a refund are assumed to subsequently work for a reciprocal employer and receive annual pay increases equal to the ultimate wage inflation assumption (3.00%) plus 1.00%.

60% of non-vested terminated members are expected to take a refund, and 60% of vested terminated members are expected to take a deferred benefit payment.

11. Deferred Vested Member Retirement Age

Tier 1 terminated vested members are assumed to retire from age 57 and Tier 2 terminated vested members are assumed to retire at age 62.



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

12. Rates of Retirement for Tier 1 Members

Rates of retirement for Tier 1 members are based on age and service as shown in the following Table B-4 – Tier 1.

Table B-4 – Tier 1Rates of Retirement by Age and Service					
	Years of Service				
Age	Less than 15	15 to 24	25 to 29	30 or more	
50	0.0%	0.0%	0.0%	75.0%	
51	0.0	0.0	0.0	60.0	
52	0.0	0.0	0.0	55.0	
53	0.0	0.0	0.0	55.0	
54	0.0	0.0	0.0	55.0	
55	7.0	25.0	55.0	55.0	
56	7.0	14.0	25.0	55.0	
57	7.0	14.0	25.0	40.0	
58	7.0	14.0	25.0	30.0	
59	7.0	14.0	25.0	30.0	
60	7.0	14.0	25.0	30.0	
61	10.0	14.0	25.0	20.0	
62	15.0	14.0	25.0	20.0	
63	15.0	14.0	20.0	20.0	
64	15.0	14.0	20.0	20.0	
65	20.0	18.0	30.0	20.0	
66	20.0	18.0	40.0	20.0	
67	20.0	25.0	50.0	20.0	
68	25.0	25.0	50.0	20.0	
69	25.0	25.0	50.0	20.0	
70+	100.0	100.0	100.0	100.0	



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

13. Rates of Retirement for Tier 2 Members

Rates of retirement for Tier 2 members are based on age and service as shown in the following Table B-4 – Tier 2.

Table B-4 – Tier 2Tier 2 Rates of Retirement by Age and Service						
	Years of Service					
Age	Less than 15	15 to 24	25 to 34	35 or more		
55	5.0%	5.0%	7.5%	100%		
56	5.0	5.0	7.5	100		
57	5.0	5.0	7.5	100		
58	5.0	5.0	7.5	100		
59	5.0	7.5	10.0	100		
60	5.0	10.0	15.0	100		
61	5.0	10.0	15.0	100		
62	15.0	25.0	50.0	100		
63	7.5	15.0	25.0	100		
64	12.5	15.0	25.0	100		
65	17.5	30.0	50.0	100		
66	17.5	30.0	50.0	100		
67	17.5	30.0	50.0	100		
68	17.5	30.0	50.0	100		
69	17.5	30.0	50.0	100		
70+	100.0	100.0	100.0	100		



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

14. Rates of Disability

Disability rates are equal to the 0.956 times the CalPERS 2021 non-industrial disability incidence rates for miscellaneous public agencies, blended 55% male and 45% female. Sample disability rates of active members are provided in Table B-5.

Table B-5Rates of Disability at Selected Ages		
Age	Disability	
25	0.0233%	
30	0.0289	
35	0.0529	
40	0.1187	
45	0.2325	
50	0.3174	
55	0.2508	
60	0.2075	
65+	0.2394	

50% of disabilities are assumed to be duty related, and 50% are assumed to be non-duty related.

15. Base Rates of Mortality

Base mortality rates are based on the sex-distinct employee and retiree mortality tables shown below.

Table B-6 Base Mortality Tables				
Category	Male	Female		
Healthy Retirees and Beneficiaries	0.995 times the 2010 Public General Mortality Table (PubG- 2010) for Healthy Retirees	1.020 times the 2010 Public General Mortality Table (PubG- 2010) for Healthy Retirees		
Healthy Non- Annuitant	0.992 times the 2010 Public General Mortality Table (PubG- 2010) for Healthy Employees	1.084 times the 2010 Public General Mortality Table (PubG- 2010) for Healthy Employees		
Disabled Retirees	0.990 times the 2010 Public General Mortality Table (PubG- 2010) for Disabled Retirees	0.920 times the 2010 Public General Mortality Table (PubG- 2010) for Disabled Retirees		



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

16. Rates of Mortality Improvement

Future mortality improvements are reflected by applying the MP-2021 projection scale issued by the Society of Actuaries on a generational basis from the base year of 2010.

17. Family Composition

Percentage married is shown in the following Table B-7. Male retirees are assumed to be two years older than their partner, and female retirees are assumed to be two years younger than their partner.

Table B-7Percentage Married		
Gender	Percentage	
Males	80%	
Females	60%	

18. Changes Since the Last Valuation

None.



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

Contribution Allocation Procedure

The contribution allocation procedure primarily consists of an actuarial cost method, an asset smoothing method, and an amortization method as described below. This contribution allocation procedure, combined with reasonable assumptions, produces a Reasonable Actuarially Determined Contribution as defined in Actuarial Standard of Practice No. 4. The contribution allocation procedure was selected to balance benefit security, intergenerational equity, and the stability of actuarially determined contributions. The selection also considered the demographics of plan members, the funding goals and objectives of the Board, and the need to accumulate assets to make benefit payments when due.

1. Actuarial Cost Method

The Entry Age actuarial cost method was used for active employees, whereby the normal cost is computed as the level annual percentage of pay required to fund all benefits between each member's date of hire and last assumed date of employment. The Actuarial Liability is the difference between the present value of future benefits and the present value of future normal costs. Or, equivalently, it is the accumulation of normal costs for all periods prior to the valuation date. The normal cost and Actuarial Liability are calculated on an individual basis. The sum of the individual amounts is the normal cost and Actuarial Liability for the System. The Actuarial Liability for the System represents the target amount of assets the System should have as of the valuation date according to the actuarial cost method.

2. Asset Valuation Method

For the purpose of determining contribution rates and amounts, an Actuarial Value of Assets is used that dampens the effects of volatility in the market value of assets on the pattern of contributions.

The Actuarial Value of Assets is calculated by recognizing 20% of the difference in each of the prior four years of actual investment returns compared to the expected return on the Market Value of Assets.

3. Amortization Method

The Unfunded Actuarial Liability is the difference between the Actuarial Liability and the Actuarial Value of Assets.

The Tier 1 Unfunded Actuarial Liability as of June 30, 2009, is amortized over a closed 30-year period commencing June 30, 2009. Tier 1 actuarial gains and losses and plan changes are amortized over 20-year periods, and Tier 1 assumption changes are amortized over 25-year periods beginning with the valuation date in which they first arise. Effective June 30, 2017, all prior assumption amortization base periods were increased by 5 years, so they have the same remaining period as if they had originally been amortized over 25 years. Amortization payments are scheduled to increase by 2.75% each year.



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

The Tier 2 Unfunded Actuarial Liability as of June 30, 2017, is amortized over a closed 10-year period. Future Tier 2 actuarial gains and losses, assumption changes, and plan changes will be amortized over 10-year periods beginning with the valuation date in which they first arise. Amortization payments are scheduled to increase by 2.75% each year.

4. Contributions

The Board adopted a policy in 2010 and modified it in 2015 setting the City's contribution to be the UAL contribution amount reported in the actuarial valuation plus the greater of the normal cost dollar amount reported in the actuarial valuation (adjusted for interest based on the time of the contribution) and the dollar amount determined by applying the normal cost as a percent of payroll reported in the actuarial valuation to the actual payroll for the fiscal year. The City and Member contributions determined by a valuation become effective for the fiscal year commencing one year after the valuation date. Contributions are generally made on a payroll-by-payroll basis although the City retains an option to make its contribution as of the beginning of the year.

The total contribution rate is the sum of the normal cost rate, assumed administrative expenses, and the UAL rate. Under Measure F, the total contribution rate cannot be less than the normal cost rate. The normal cost rate is determined by dividing the total normal cost determined under the actuarial cost method by the payroll expected for members active on the valuation date. The UAL payments are adjusted for interest from the valuation date to the date of expected payment in the following fiscal year. The UAL rate is determined by dividing members active on the valuation date and new entrants expected to replace active members who are expected to leave employment).

For Tier 1, members contribute 3/11ths of the normal cost rate (excluding reciprocity), and the City pays the remainder of the total contribution rate. Tier 1 members who were rehired into Tier 2 and then returned to Tier 1 under Measure F also pay half of the increased cost attributable to their Tier 2 service.

For Tier 2, the members and the City each pay half of the total contribution rate. However, the member's UAL contribution rate cannot increase by more than 0.33% of pay each year. The City contributes any amounts in excess of this cap that would otherwise be contributed by the member.

5. Changes Since the Last Valuation

None.



APPENDIX C – SUMMARY OF PLAN PROVISIONS TIER 1

1. Membership Requirement

Participation in the Plan is immediate upon the first day of full-time employment for members hired before September 30, 2012, including members that are rehired after September 30, 2012 and had prior service under Tier 1 and did not take a return of contributions. In addition, any person accepting employment on or after September 30, 2012 who is otherwise eligible for this plan and who was a "classic" member in another California public retirement system with which this plan has reciprocity, and who has a break in service of less than six months from that covered employment and employment with the City, shall be a Tier 1 member of this plan.

2. Final Compensation

Members who separated from city service prior to June 30, 2001

The highest average annual compensation earnable during any period of three consecutive years.

Members who separated from city service on or after June 30, 2001

The highest average annual compensation earnable during any period of twelve consecutive months.

3. Credited Service

One year of service credit is given for 1,739 or more hours of Federated city service rendered in any calendar year. A partial year (fraction with the numerator equal to the hours worked, and the denominator equal to 1,739) is given for each calendar year with less than 1,739 hours worked.

4. Member Contributions

Member

The amount needed to fund 3/11ths of benefits accruing for the current year. These contributions are credited with interest at 3.0% per year, compounded annually.

For bargaining units that have agreed to the provision, member contributions cease once a member has 30 years of City service (excluding reciprocal service).

Employer

The Employer contributes the remaining amounts necessary to maintain the soundness of the Retirement System.



APPENDIX C – SUMMARY OF PLAN PROVISIONS TIER 1

5. Service Retirement

Eligibility

Age 55 with five years of service, or any age with 30 years of service.

Benefit – Member

2.5% of Final Compensation for each year of credited service, subject to a maximum of 75% of Final Compensation.

Benefit – Survivor

50% of the service retirement benefit paid to a qualified survivor.

6. Service-Connected Disability Retirement

<u>Eligibility</u>

No age or service requirement.

Benefit – Member

2.5% of Final Compensation for each year of credited service, subject to a minimum of 40% and a maximum of 75% of Final Compensation. Workers' Compensation benefits are generally offset from the service-connected benefits under this system.

Benefit – Survivor

50% of the disability retirement benefit paid to a qualified survivor.

7. Non-Service Connected Disability Retirement

<u>Eligibility</u>

Five years of service.

Benefit – Member

Members who were hired prior to September 1, 1998:

The amount of the service-connected benefit reduced by 0.5% for each year that the disability age preceded 55.



APPENDIX C – SUMMARY OF PLAN PROVISIONS TIER 1

Members who were hired on or after September 1, 1998:

20% of Final Compensation, plus 2% of Final Compensation for each year of credited service between six and 16 years, plus 2.5% of Final Compensation for each year of credited service in excess of 16 years, subject to a maximum of 75% of Final Compensation.

Benefit – Survivor

50% of the disability retirement benefit paid to a qualified survivor.

8. Death Before Retirement

Less than five Years of Service, or No Qualified Survivor

Lump sum benefit equal to the accumulated refund of all employee contributions with interest, plus one month of salary for each year of service, up to a maximum of six years.

Five or more Years of Service

2.5% of Final Compensation for each year of credited service, subject to a maximum of 75% of Final Compensation. Benefit is subject to a minimum of 40% of Final Compensation if member dies while an active employee. The benefit is payable until the spouse or registered domestic partner marries or establishes a domestic partnership. If the member was age 55 with 20 years of service at death, the benefit is payable for the lifetime of the member's spouse or registered domestic partner.

9. Withdrawal Benefits

Less than five Years of Service

Lump sum benefit equal to the accumulated employee contributions with interest.

Five or more years of credited service

The amount of the service retirement benefit, payable at age 55.

10. Additional Post-retirement Death Benefit

A death benefit payable as a lump sum equal to \$500 will be paid to a qualified survivor upon the member's death.

11. Post-retirement Cost-of-Living Benefit

Benefits are increased every April 1 by 3.0%, regardless of actual inflation.



APPENDIX C – SUMMARY OF PLAN PROVISIONS TIER 1

12. Changes Since the Last Valuation

None.



APPENDIX C – SUMMARY OF PLAN PROVISIONS TIER 2

1. Membership Requirement

Any person who is hired, rehired or reinstated by the City on or after September 30, 2012 except those who elect to participate in a defined contribution plan, had prior service under Tier 1 and did not take a return of contributions, or had prior service as a "classic" member in a reciprocal system with less than a six month break in service.

2. Final Compensation

The average annual compensation earnable during the highest three consecutive years of service. Final compensation only includes base pay, excluding premium pay and any other additional compensation.

3. Credited Service

One year of service credit is given for 2,080 or more hours of Federated city service rendered in any calendar year. A partial year (fraction with the numerator equal to the hours worked, and the denominator equal to 2,080) is given for each calendar year with less than 2,080 hours worked.

4. Member Contributions

50% of total Tier 2 contributions to the pension plan, including, but not limited to administrative expenses, normal cost, and Unfunded Actuarial Liability. However, the member's UAL contribution rate cannot increase by more than 0.33% of pay each year. The City contributes any amounts in excess of this cap that would otherwise be contributed by the member.

The member contribution rate cannot be less than 50% of the normal cost rate.

5. City Contributions

50% of total Tier 2 contributions to the pension plan, including, but not limited to administrative expenses, normal cost, and Unfunded Actuarial Liability. In addition, the City contributes any UAL amounts in excess of the member UAL cap until the member rate covers 50% of the UAL rate.

The City contribution rate cannot be less than 50% of the normal cost rate.



APPENDIX C – SUMMARY OF PLAN PROVISIONS TIER 2

6. Unreduced Service Retirement

Eligibility

Age 62 with five years of service.

Benefit – Member

2.0% of Final Compensation for each year of credited service attributable to Tier 2, subject to a maximum of 70% of Final Compensation.

Benefit - Survivor

50% of the service retirement benefit paid to a qualified survivor.

7. Early Service Retirement

Eligibility

Age 55 with five years of service.

Benefit – Member

Benefit reduced by a factor of 5% for each year the member retires before age 62.

The early retirement reduction is applied to the benefit after the application of the maximum of 70% of final compensation.

8. Service-Connected Disability Retirement

Eligibility

No age or service requirement.

Benefit – Member

2.0% of Final Compensation for each year of credited service, subject to a minimum of 40% of Final Compensation and a maximum of 70% of Final compensation, less the amounts specified in Section 3.28.1330 and Section 3.28.1340.



APPENDIX C – SUMMARY OF PLAN PROVISIONS TIER 2

9. Non-Service Connected Disability Retirement

Eligibility

Five years of service.

Benefit – Member

2.0% of Final Compensation for each year of credited service attributable to Tier 2, subject to a minimum of 20% of Final Compensation and a maximum of 70% of Final Compensation less the amounts specified in Section 3.28.1330 and Section 3.28.1340.

10. Death Before Retirement

Not yet eligible for Retirement, or No Qualified Survivor

Lump sum benefit equal to the accumulated refund of all employee contributions with interest.

Eligible for Retirement

2.0% of Final Compensation for each year of credited service, subject to a maximum of 70% of Final Compensation. Benefit is subject to a minimum of 40% of Final Compensation if member dies while an active employee. The benefit is payable until the spouse or registered domestic partner marries or establishes a domestic partnership. If the member was age 55 with 20 years of service at death, the benefit is payable for the lifetime of the member's spouse or registered domestic partner.

11. Withdrawal Benefits

Less than five years of credited service

Lump sum benefit equal to the accumulated employee contributions with interest.

Five or more years of credited service

The amount of the service retirement benefit reduced for early retirement, and payable when retirement eligibility is reached.

12. Benefit Forms

Annuity benefits are paid in the form of a 50% joint and survivor annuity or an actuarially equivalent annuity with 75% or 100% continuance to a survivor.



APPENDIX C – SUMMARY OF PLAN PROVISIONS TIER 2

13. Post-retirement Cost-of-Living Benefit

Benefits are increased every April 1 by the change in the December CPI-U for San José-San Francisco-Oakland, subject to a cap based on years of service as shown in the table below.

Years of Service	Maximum COLA
At least 1, but less than 11	1.25%*
At least 11, but less than 21	1.50%
At least 21, but less than 26	1.75%
At least 26	2.00%

*1.5% for members hired before Measure F effective date

The first COLA after retirement shall be prorated based on the number of months retired.

14. Changes Since the Last Valuation

None.

Note: The summary of major plan provisions is designed to outline principal plan benefits. If the Department of Retirement Services should find the plan summary not in accordance with the actual provisions, the actuary should immediately be alerted so the proper provisions are valued.



APPENDIX D – GLOSSARY OF TERMS

1. Actuarial Liability

The Actuarial Liability is the difference between the present value of future benefits and the present value of total future normal costs. This is also referred to as the "accrued liability" or "actuarial accrued liability." The Actuarial Liability represents the targeted amount of assets a plan should have as of a valuation date according to the actuarial cost method.

2. Actuarial Assumptions

Estimates of future experience with respect to rates of mortality, disability, turnover, retirement rate or rates of investment income, and salary increases. Demographic actuarial assumptions (rates of mortality, disability, turnover, and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (price inflation, wage inflation, and investment income) are generally based on expectations for the future that may differ from the Plan's past experience.

3. Actuarial Cost Method

A mathematical budgeting procedure for allocating the dollar amount of the present value of future benefits between future normal cost and Actuarial Liability.

4. Actuarial Gain (Loss)

The difference between actual experience and the anticipated experience based on the actuarial assumptions during the period between two actuarial valuation dates.

5. Actuarial Present Value

The amount of funds currently required to provide a payment or series of payments in the future. It is determined by discounting future payments at the discount rate and by probabilities of payment.

6. Actuarially Determined Contribution

The payment to the System as determined by the actuary using a contribution allocation procedure. It may or may not be the actual amount contributed to the System.

7. Amortization Method

A method for determining the amount, timing, and pattern of payments of the Unfunded Actuarial Liability.



APPENDIX D – GLOSSARY OF TERMS

8. Asset Valuation Method

The method used to develop the Actuarial Value of Assets from the Market Value of Assets typically by smoothing investment returns above or below the assumed rate of return over a period of time.

9. Contribution Allocation Procedure

A procedure typically using an actuarial cost method, an asset valuation method, and an amortization method to develop the actuarially determined contribution.

10. Discount Rate

The rate of interest used to discount future benefit payments to determine the actuarial present value. For purposes of determining an actuarially determined contribution, the discount rate is typically based on the long-term expected return on assets.

11. Funded Status or Funding Ratio

The Market or Actuarial Value of assets divided by the Actuarial Liability. For purposes of this report, the funded status represents the proportion of the actual assets compared to the target established by the actuarial cost method as of the valuation date. These measures are for contribution budgeting purposes and are not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations.

12. Normal Cost

The portion of the present value of future benefits allocated to the current year by the actuarial cost method.

13. Present Value of Future Benefits

The actuarial present value of all benefits both earned as of the valuation date and expected to be earned in the future by current plan members based on current plan provisions and actuarial assumptions.

14. Unfunded Actuarial Liability (UAL)

The Unfunded Actuarial Liability is the difference between Actuarial Liability and either the Market or the Actuarial Value of Assets. This value is sometimes referred to as "unfunded actuarial accrued liability." It represents the difference between the actual assets and the amount of assets expected by the actuarial cost method as of the valuation date.





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