San José Federated City Employees' Retirement System



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Classic Values, Innovative Advice

2024 Final Pension Valuation Results

December 19, 2024

Bill Hallmark, ASA, EA, MAAA, FCA Steven Hastings, FSA, EA, MAAA, FCA Jacqui King, FSA, EA, MAAA

Agenda







Schedule



- October Board Meeting
 - ASOP 4 Updates
 - Pension Economic Assumption Review
- November Board Meeting
 - Preliminary Pension
 Valuation Results
 - OPEB Assumptions Review

- December Board Meeting
 - Final Pension Valuation
 Presentation
 - Final Pension Valuation Report
 - Preliminary OPEB Valuation Results
- January Board Meeting
 - Final OPEB Valuation
 Presentation
 - Final OPEB Valuation Report





A Dynamic System



Contributions + Investments =



Expenses + Benefits



- Primary purpose of valuation is to set member and City contributions
 - 2024 valuation develops contributions for FYE 2026
- Project future benefit payments
 - Plan provisions, census data, and actuarial assumptions
- Determine funding target
 - Actuarial cost method and assumptions
- Set member and City contributions
 - Plan provisions, actuarial methods, and discount rate

Funded Status





Funded Status By Tier										
	06	/30/2023	/30/2024	Change						
<u>Tier 1</u>										
Actuarial Liability	\$	4,694.5	\$	4,797.6	2.2%					
AVA		2,650.9		2,813.5	6.1%					
UAL-AVA Basis		2,043.5		1,984.1	-2.9%					
AVA Funded Ratio		56.5%		58.6%	2.2%					
MVA		2,668.1		2,847.6	6.7%					
UAL-MVA Basis		2,026.4		1,950.0	-3.8%					
MVA Funded Ratio		56.8%		59.4%	2.5%					
<u>Tier 2</u>										
Actuarial Liability	\$	271.2	\$	340.3	25.5%					
AVA		239.0		303.3	26.9%					
UAL-AVA Basis		32.2		37.0	14.9%					
AVA Funded Ratio		88.1%		89.1%	1.0%					
MVA		239.3		306.8	28.2%					
UAL-MVA Basis		32.0		33.5	4.8%					
MVA Funded Ratio		88.2%		90.2%	1.9%					

Amounts in millions





Contribution Rates Total Plan Tier 2 Tier 1 Total Plan Tier 1 Member City Normal Cost City Admin Expenses UAL Principal \$300.0 60.1% \$270.2 60.0% 56.4% 11.4% \$51.4 12.3% \$200.0 40.0% 28.5% \$128.1 24.2% \$100.0 20.0% 11.0% 10.5% \$49.3 8.0% 8.1% \$35.8 0.0% \$0.0 FYE 2025 FYE 2026

Contribution Amounts





Current and Historical Changes in UAL





Changes in UAL Individual Years All Years \$200 \$100 \$0 \$(100) 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 Net UAL Change AVA Investment (G)/L Liability (G)/L Contributions Assumptions Benefit Change



Classic Values, Innovative Advice

Comparison of Funded Ratio (Market Value of Assets)







Baseline Projections – Funded Status and UAL





Schedule of Tier 1 Amortization Payments

R

Tier 1 City Amortization Payment Layers



Net Payment 2009 UAL Experience Assumption Benefit





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Baseline Projections – Contributions





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Mature Pension Plans Are More Sensitive to Risk



Membership Trends



Membership Trends



Valuation Year





Liability Leverage Ratio 18.00 18.00 5th to 25th Percentile ■ 50th to 75th Percentile 25th to 50th Percentile 75th to 95th Percentile San Jose Federated ▲ San Jose 16.00 16.00 14.00 14.00 12.00 12.00 10.00 10.00 8.00 8.00 6.00 6.00 4.00 4.00 2.00 2.00 5th to 25th Percentile 25th to 50th Percentile 50th to 75th Percentile 75th to 95th Percentile San Jose Federated ▲ San Jose 0.00 0.00 $\mathcal{A}_{\mathcal{O}_{1}}^{\mathcal{O}_{2}}\mathcal{A}_{\mathcal{O}_{1}}^{\mathcal{O}_{1}}\mathcal{A}_{\mathcal{O}_{1}}^{\mathcal{O}_{2}}\mathcal{A}_{\mathcal{O}_{1}}^{\mathcal{O}_{1}}\mathcal{A}_{\mathcal{O}_{1}}^{\mathcal{O}_{1}}\mathcal{A}_{\mathcal{O}_{1}}^{\mathcal{O}_{1}}\mathcal{A}_{\mathcal{O}_{1}}^{\mathcal{O}_{1}}\mathcal{A}_{\mathcal{O}_{1}}^{\mathcal{O}_{1}}\mathcal{A}_{\mathcal{O}_{1}}^{\mathcal{O}_{1}}\mathcal{A}_{\mathcal{O}_{1}}^{\mathcal{O}_{1}}\mathcal{A}_{\mathcal{O}_{1}}^{\mathcal{O}_{1}}\mathcal{A}_{\mathcal{O}_{1}}^{\mathcal{O}_{1}}\mathcal{A}_{\mathcal{O}_{1}}^{\mathcal{O}_{1}}\mathcal{A}_{\mathcal{O}_{1}}^{\mathcal{O}_{1}}\mathcal{A}_{\mathcal{O}_{1}}^{\mathcal{O}_{1}}\mathcal{A}_{\mathcal{O}_{1}}^{\mathcal{O}_{1}}\mathcal{A}_{\mathcal{O}_{1}}^{\mathcal{O}_{1}}\mathcal{A}_{\mathcal{O}_{1}}^{\mathcal{O}_{1}}\mathcal{A}_{\mathcal{O}_{1}}^{\mathcal{O}_{1}}\mathcal{A}_{\mathcal{O}_{1}}^{\mathcal{O}_{1}}\mathcal{A}_{\mathcal{O}_{1}}^{\mathcal{O}_{1}}\mathcal{A}_{\mathcal{O}_{1}}^$ -01⁵ (a, b, b, c, c),023,202A

Asset Leverage Ratio

Survey Data from Public Plans Data as of 6/6/2024

Survey Data from Public Plans Data as of 6/6/2024



Illustration of Sensitivity



Discount Rate Change Impact 80% 80% **City Total** 57.0% 70% 70% **City Total** UAL Principal 60% 48.3% 60% 13.6% **UAL** Principal 50% 50% 12.3% Interest on 40% 40% UAL 28.6% Interest on UAL 30% 30% 24.2% City Admin 1.2% City Admin 1.2% 20% 20% City NC 13.6% City NC 10.5% 10% 10% Member 10.4% Member 8.1% 0% 0% 6.625% 5.625% **Discount Rate**





Projection Scenarios

Deterministic Scenarios

- Scenarios are intended to illustrate the range of potential contributions
 - Based on Meketa's 10-year capital market assumptions
 - Impact of asset smoothing and amortization
 - Volatility due to plan maturity
- Not intended to be realistic economic scenarios

Annual Average Investment Return									
Percentile	1 Year	5 Years							
95 th	31.5%	17.5%							
75 th	16.6%	11.4%							
25 th	-1.2%	3.4%							
5th	-12.4%	-2.0%							

Deterministic Scenarios											
FYE	1-Year	Shock	5-Year Moderate								
2025	-12.4%	31.5%	3.4%	11.4%							
2026	6.625%	6.625%	3.4%	11.4%							
2027	6.625%	6.625%	3.4%	11.4%							
2028	6.625%	6.625%	3.4%	11.4%							
2029	6.625%	6.625%	3.4%	11.4%							
2030+	6.625%	6.625%	6.625%	6.625%							







December 19, 2024





December 19, 2024





December 19, 2024





December 19, 2024





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Stochastic Contributions – Contribution Rates

Historical and Projected Employer Contribution Rates





Stochastic Projections – Contributions by Tier



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\$400

\$350

\$300

\$250

\$200

\$150

\$100

\$50

\$0

Millions

Stochastic Projections – UAL and Funded Ratio





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Certification



- The purpose of this presentation is to present the results of the June 30, 2024 Actuarial Valuation for the City of San José Federated City Employees' Retirement System.
- In preparing our presentation, we relied on information (some oral and some written) supplied by the City of San José Department of Retirement Services. 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. A summary of the data, assumptions, methods, and plan provisions used to prepare the valuation can be found in the June 30, 2024 actuarial valuation report.
- 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.
- This presentation 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
 presentation. This presentation does not address any contractual or legal issues. We are not attorneys, and our firm does
 not provide any legal services or advice.
- This presentation was prepared exclusively for the City of San José Federated City Employees' Retirement System for the
 purpose described herein. This presentation is not intended to benefit any third party, and Cheiron assumes no duty or
 liability to any such party.

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Appendix: Models



- 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 assumptions or output of ProVal that would affect this valuation.
- Deterministic projections in this valuation report were developed using P-Scan, a proprietary tool used to illustrate the impact of changes in assumptions, methods, plan provisions, or actual experience (particularly investment experience) on the future financial status of the System.
- 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 for the development of the model. The stochastic projections of investment returns assume that each future year's investment return is independent from all other years and is identically distributed according to a lognormal distribution. The standard deviation used in the stochastic projection of investment returns was provided by the System's investment consultant.



Appendix – 5-Year Contribution Projection



Contribution Rates and Amounts (Throughout the Year)												
		2025		2026		Fiscal Yea 2027	ar E	2028		2029		2030
Member Rates (including r	eclas	sification rat	es)									
Tier 1		6.75%		6.68%		6.66%		6.64%		6.65%		6.65%
Tier 2		8.49%		8.62%		8.60%		8.59%		8.41%		8.39%
City Rates and Amounts												
Tier 1 UAL Payment	\$	176,758	\$	180,067	\$	180,845	\$	189,737	\$	193,357	\$	197,697
Tier 1 Administrative Expens	es \$	5,314	\$	5,877	\$	6,053	\$	6,235	\$	6,422	\$	6,614
Tier 1 Normal Cost	\$	24,376 18.73%	\$	23,608 18.55%	\$	21,406 18.50%	\$	19,265 18.41%	\$	17,122 18.35%	\$	15,098 18.33%
Tier 2 Contribution	\$	27,878 8.73%	\$	32,205 8.62%	\$	34,410 8.60%	\$	36,650 8.59%	\$	38,176 8.41%	\$	40,381 8.39%
Aggregate City Contribution	\$	234,326 52.13%	\$	241,757 48.27%	\$	242,714 47.05%	\$	251,887 47.41%	\$	255,077 46.61%	\$	259,790 46.09%

Dollar amounts in thousands



Tier 1 City Contribution Amounts (beginning of year assuming full discount) Fiscal Year Ending												
		2025		2026		2027		2028		2029		2030
Tier 1 UAL Payment	\$	171,178	\$	174,383	\$	175,137	\$	183,748	\$	187,254	\$	191,457
Tier 1 Administrative Expen	ses	5,146		5,691		5,862		6,038		6,219		6,405
Tier 1 Normal Cost		23,608		22,863		20,730		18,657		16,582		14,621
Tier 1 Total	\$	199,932	\$	202,937	\$	201,729	\$	208,443	\$	210,055	\$	212,483

Dollar amounts in thousands

