

**California Public Employees' Retirement System****Actuarial Office**

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April 25, 2024**Miscellaneous Plan of the City of Calabasas****(CalPERS ID: 1664188432)****Merger Actuarial Report: Effective Date July 1, 2024, Based on June 30, 2022 Actuarial Valuation Reports****Section 20508 Cost Analysis for Proposed Merger with the Agoura Hills and Calabasas Community Center**

Dear Requestor:

A cost analysis for the valuation(s) requested above and related information is enclosed.

The change in the employer contribution rate, as of the effective date of the proposed merger, is displayed on page 3.

Government Code sections 20463 (b) and (c) require the governing body of a public agency which requests a contract cost analysis to provide each affected employee organization with a copy within five days of receipt. Likewise, if a cost analysis is requested by an employee organization, the employee organization is required to provide a copy of the analysis to the public agency within five days of receipt.

This cost analysis expires July 1, 2024. A Resolution of Intention declaring the agency's intent to amend the contract must be approved by the agency's governing body. The approved resolution must be received by this office on or before July 1, 2024. If either of these two conditions is not met, an updated cost analysis is required to merge the contracts. An updated cost analysis may be available as early as September 2024.

To complete the contract merger process based on the enclosed analysis, do the following:

- Complete and return the enclosed Contract Request and Schedule of Agency Actions forms. Within 90 days, CalPERS staff will send your agency the Resolution of Intention form for adoption.
- Complete and return the adopted Resolution of Intention to CalPERS on or before July 1, 2024. Adoption of the Final Resolution/Ordinance by this date is not required.

If you have questions about the cost analysis, please call (888) CalPERS (225-7377). Please ask to speak to a contract analyst for questions about the timing of the contract amendment. Please ask to speak to me for questions about this cost analysis.

A handwritten signature in black ink, appearing to read "Alex Grunder".

ALEX GRUNDER, ASA, MAAA
Senior Actuary, CalPERS



**Merger Actuarial Valuation
as of June 30, 2022**

**for the
Miscellaneous Plan
of the**

City of Calabasas
(CalPERS ID: 1664188432)

**Proposed Merger with the
Agoura Hills and Calabasas Community
Center**

(CalPERS ID: 5913005428)

**Required Contributions
for Fiscal Year
July 1, 2024 – June 30, 2025**

Introduction

This report presents the June 30, 2022 actuarial valuation results for the proposed merger of the Agoura Hills and Calabasas Community Center with the City of Calabasas Miscellaneous Plan, pursuant to Section 20508 of the California Public Employees' Retirement Law.

The pension funding information presented in this report should not be used in financial reports subject to GASB Statement No. 68. A separate accounting valuation report for annual GASB reporting purposes is available from CalPERS and details for ordering are available on our website.

The measurements shown in this actuarial valuation may not be applicable for other purposes. The employer should contact their actuary before disseminating any portion of this report for any reason that is not explicitly described above.

Future actuarial measurements may differ significantly from the current measurements presented in this report 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; changes in actuarial policies; and changes in plan provisions or applicable law; and differences between the required contributions determined by the valuation and the actual contributions made by the agency.

Assessment and Disclosure of Risk

This report includes the following risk disclosures consistent with the guidance of Actuarial Standards of Practice No. 51 and recommended by the California Actuarial Advisory Panel (CAAP) in the Model Disclosure Elements document:

- A "Scenario Test," projecting future results under different investment income returns.
- A "Sensitivity Analysis," showing the impact on cost analysis results using alternative discount rates of 5.8% and 7.8%.
- A "Sensitivity Analysis," showing the impact on cost analysis results assuming rates of mortality are 10% lower or 10% higher than our current post-retirement mortality assumptions adopted in 2021.
- Plan maturity measures indicating how sensitive a plan may be to the risks noted above.

Required Contributions

The following tables show the change in the plans’ employer contribution requirements for fiscal year 2024-25 due to the proposed merger. If the effective date of the proposed merger is prior to July 1, 2024, the contribution requirements for the remainder of fiscal year 2023-24 will remain unchanged.

	City of Calabasas (Pre-Merger)	Agoura Hills and Calabasas Community Center (Pre-Merger)	City of Calabasas (Post-Merger)
	Fiscal Year 2024-25	Fiscal Year 2024-25	Fiscal Year 2024-25
Development of Normal Cost as a Percentage of Payroll			
Base Total Normal Cost for Formula	18.81%	18.81%	18.81%
Surcharge for Class 1 Benefits ¹			
a) None	0.00%	0.00%	0.00%
Plan’s Total Normal Cost	18.81%	18.81%	18.81%
Offset Due to Employee Contributions ²	<u>6.93%</u>	<u>6.93%</u>	<u>6.93%</u>
Employer Normal Cost Rate	11.88%	11.88%	11.88%

Required Employer Contributions

Employer Normal Cost Rate	11.88%	11.88%	11.88%
<i>Plus, Either</i>			
1) Monthly UAL Payment	\$69,095.08	\$6,030.83	\$75,125.91
<i>Or</i>			
2) Annual UAL Prepayment*	\$802,311	\$70,028	\$872,339

*The total minimum required employer contribution is the **sum** of the Plan’s Employer Normal Cost Rate (expressed as a percentage of payroll) **plus** the Employer Unfunded Accrued Liability (UAL) Contribution Amount (billed monthly in dollars).*

Only the UAL portion of the employer contribution can be prepaid (which must be received in full no later than July 31**).*

¹ The Section 2 report contains a list of Class 1 benefits and corresponding surcharges for each benefit.

² The rate displayed is the actual average employee contribution rate for the Risk Pool, which takes into account adjustments for Social Security contribution offsets. The required employee contribution, which is set by statute, is 7% of pay.

Funded Status – Funding Policy Basis

The table below provides information on the funded status of the plan before and after the proposed merger under the funding policy. The funded status for this purpose is based on the market value of assets relative to the funding target produced by the entry age actuarial cost method and actuarial assumptions adopted by the board. The actuarial cost method allocates the total expected cost of a member’s projected benefit (Present Value of Benefits) to individual years of service (the Normal Cost). The value of the projected benefit that is not allocated to future service is referred to as the Accrued Liability (AL) and is the plan’s funding target on the valuation date. The Unfunded Accrued Liability (UAL) equals the funding target minus the assets. The UAL is an absolute measure of funded status and can be viewed as employer debt. The funded ratio equals the assets divided by the funding target. The funded ratio is a relative measure of the funded status and allows for comparisons between plans of different sizes.

June 30, 2022	City of Calabasas (Pre-Merger)	Agoura Hills and Calabasas Community Center (Pre-Merger)	City of Calabasas (Post-Merger)
1. Entry Age Accrued Liability (AL)	47,172,149	1,766,405	48,938,554
2. Plan’s Market Value of Assets (MVA)	35,990,187	1,242,623	37,232,810
3. Unfunded Accrued Liability (UAL) [(1) - (2)]	11,181,962	523,782	11,705,744
4. Funded Ratio [(2) / (1)]	76.3%	70.3%	76.1%

A funded ratio of 100% (UAL of \$0) implies that the funding of the plan is on target and that future contributions equal to the normal cost of the active plan members will be sufficient to fully fund all retirement benefits if future experience matches the actuarial assumptions. A funded ratio of less than 100% (positive UAL) implies that in addition to normal costs, payments toward the UAL will be required. Plans with a funded ratio greater than 100% have a negative UAL (or surplus) but are required under current law to continue contributing the normal cost in most cases, preserving the surplus for future contingencies.

Calculations for the funding target reflect the expected long-term investment return of 6.8%. If it were known on the valuation date that future investment returns will average something greater/less than the expected return, calculated normal costs and accrued liabilities provided in this report would be less/greater than the results shown. Therefore, for example, if actual average future returns are less than the expected return, calculated normal costs and UAL contributions will not be sufficient to fully fund all retirement benefits. Under this scenario, required future normal cost contributions will need to increase from those provided in this report, and the plan will develop unfunded liabilities that will also add to required future contributions.

Projected Employer Contributions

The tables below show the required and projected employer contributions before and after the proposed merger (before cost sharing) for the next six fiscal years. The projection assumes that all actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur during the projection period. In particular, the investment return beginning with fiscal year 2022-23 is assumed to be 6.80% per year, net of investment and administrative expenses. Future contribution requirements may differ significantly from those shown below. The actual long-term cost of the plan will depend on the actual benefits and expenses paid and the actual investment experience of the fund.

City of Calabasas

Pre-Merger

	Required Contribution	Projected Future Employer Contributions (Assumes 6.80% Return for Fiscal Year 2022-23)				
Fiscal Year	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Normal Cost %	11.88%	11.9%	11.9%	11.9%	11.9%	11.9%
UAL Payment	\$829,141	\$968,000	\$1,106,000	\$1,245,000	\$1,383,000	\$1,383,000

Agoura Hills and Calabasas Community Center

Pre-Merger

	Required Contribution	Projected Future Employer Contributions (Assumes 6.80% Return for Fiscal Year 2022-23)				
Fiscal Year	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Normal Cost %	11.88%	11.9%	11.9%	11.9%	11.9%	11.9%
UAL Payment	\$72,370	\$72,000	\$72,000	\$72,000	\$72,000	\$72,000

City of Calabasas

Post-Merger

	Required Contribution	Projected Future Employer Contributions (Assumes 6.80% Return for Fiscal Year 2022-23)				
Fiscal Year	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Normal Cost %	11.88%	11.9%	11.9%	11.9%	11.9%	11.9%
UAL Payment	\$901,511	\$1,040,000	\$1,178,000	\$1,317,000	\$1,455,000	\$1,455,000

Schedule of Plan's Amortization Bases

The following pages display the amortization base schedules for City of Calabasas before and after the proposed merger, as well as the amortization base schedule for Agoura Hills and Calabasas Community Center before the proposed merger. Note that there is a two-year lag between the valuation date and the start of the contribution fiscal year.

- The assets, liabilities, and funded status of the plan are measured as of the valuation date: June 30, 2022.
- The required employer contributions determined by the valuation are for the fiscal year beginning two years after the valuation date: fiscal year 2024-25.

This two-year lag is necessary due to the amount of time needed to extract and test the membership and financial data, and the need to provide public agencies with their required employer contribution well in advance of the start of the fiscal year.

The Unfunded Accrued Liability (UAL) is used to determine the employer contribution and therefore must be rolled forward two years from the valuation date to the first day of the fiscal year for which the contribution is being determined. The UAL is rolled forward by subtracting the expected payment on the UAL for the fiscal year and adjusting for interest. The expected payment for the first fiscal year is determined by the actuarial valuation two years ago and the contribution for the second year is from the actuarial valuation one year ago. Additional discretionary payments are reflected in the Expected Payments column in the fiscal year they were made by the agency.

Schedule of Plan's Amortization Bases (Continued)

City of Calabasas (Pre-Merger)

Reason for Base	Date Est.	Ramp Level 2024-25	Ramp Shape	Escalation Rate	Amort. Period	Balance 6/30/22	Expected Payment 2022-23	Balance 6/30/23	Expected Payment 2023-24	Balance 6/30/24	Minimum Required Payment 2024-25
Investment (Gain)/Loss	6/30/13	100%	Up/Down	2.80%	1	2,597,466	2,684,327	0	0	0	0
Non-Investment (Gain)/Loss	6/30/13	100%	Up/Down	2.80%	1	(25,594)	(26,450)	0	0	0	0
Share of Pre-2013 Pool UAL	6/30/13	No Ramp		2.80%	1	1,381,685	1,427,890	0	0	0	0
Assumption Change	6/30/14	100%	Up/Down	2.80%	1	1,260,969	1,303,137	0	0	0	0
Investment (Gain)/Loss	6/30/14	100%	Up/Down	2.80%	1	(2,206,229)	(2,280,007)	0	0	0	0
Investment (Gain)/Loss	6/30/15	100%	Up/Down	2.80%	1	1,523,117	1,574,051	0	0	0	0
Non-Investment (Gain)/Loss	6/30/15	100%	Up/Down	2.80%	1	(119,382)	(123,374)	0	0	0	0
Assumption Change	6/30/16	100%	Up/Down	2.80%	1	612,954	633,452	0	0	0	0
Investment (Gain)/Loss	6/30/16	100%	Up/Down	2.80%	1	2,066,302	2,135,401	0	0	0	0
Non-Investment (Gain)/Loss	6/30/16	100%	Up/Down	2.80%	1	(243,031)	(251,158)	0	0	0	0
Assumption Change	6/30/17	100%	Up/Down	2.80%	1	759,569	784,970	0	0	0	0
Investment (Gain)/Loss	6/30/17	100%	Up/Down	2.80%	1	(1,124,600)	(1,162,208)	0	0	0	0
Non-Investment (Gain)/Loss	6/30/17	100%	Up/Down	2.80%	1	(54,809)	(56,642)	0	0	0	0
Assumption Change	6/30/18	100%	Up/Down	2.80%	1	1,249,919	1,291,717	0	0	0	0
Investment (Gain)/Loss	6/30/18	100%	Up/Down	2.80%	1	(363,639)	(375,799)	0	0	0	0
Method Change	6/30/18	100%	Up/Down	2.80%	1	333,055	344,193	0	0	0	0
Non-Investment (Gain)/Loss	6/30/18	100%	Up/Down	2.80%	1	170,149	175,839	0	0	0	0
Investment (Gain)/Loss	6/30/19	80%	Up Only	0.00%	1	176,411	182,310	0	0	0	0
Non-Investment (Gain)/Loss	6/30/19	No Ramp		0.00%	1	163,586	169,056	0	0	0	0
Investment (Gain)/Loss	6/30/20	60%	Up Only	0.00%	1	863,785	892,671	0	0	0	0
Non-Investment (Gain)/Loss	6/30/20	No Ramp		0.00%	1	146,613	151,516	0	0	0	0
Assumption Change	6/30/21	No Ramp		0.00%	1	176,543	182,447	0	0	0	0
Fresh Start	6/30/21	No Ramp		0.00%	9	0	(4,413,473)	4,561,063	622,582	4,227,814	622,583
Net Investment (Gain)	6/30/21	40%	Up Only	0.00%	1	(4,249,834)	(4,391,952)	0	0	0	0
Non-Investment (Gain)/Loss	6/30/21	No Ramp		0.00%	1	(192,416)	(198,851)	0	0	0	0
Risk Mitigation	6/30/21	No Ramp		0.00%	0	1,172,138	1,211,335	0	0	0	0
Risk Mitigation Offset	6/30/21	No Ramp		0.00%	0	(1,209,588)	(1,250,038)	0	0	0	0
Investment (Gain)/Loss	6/30/22	20%	Up Only	0.00%	20	5,651,501	0	6,035,803	0	6,446,238	138,560
Non-Investment (Gain)/Loss	6/30/22	No Ramp		0.00%	20	662,952	0	708,033	0	756,179	67,998
Total						11,181,962	616,809	11,304,899	622,582	11,430,231	829,141

Schedule of Plan’s Amortization Bases (Continued)

Agoura Hills and Calabasas Community Center (Pre-Merger)

Reason for Base	Date Est.	Ramp Level 2024-25	Ramp Shape	Escalation Rate	Amort. Period	Balance 6/30/22	Expected Payment 2022-23	Balance 6/30/23	Expected Payment 2023-24	Balance 6/30/24	Minimum Required Payment 2024-25
Fresh Start	6/30/22	No Ramp		0.00%	9	523,782	62,907	494,389	35,375	491,449	72,370
Total						523,782	62,907	494,389	35,575	491,449	72,370

Schedule of Plan's Amortization Bases (Continued)

City of Calabasas (Post-Merger)

Reason for Base	Date Est.	Ramp Level 2024-25	Ramp Shape	Escalation Rate	Amort. Period	Balance 6/30/22	Expected Payment 2022-23	Balance 6/30/23	Expected Payment 2023-24	Balance 6/30/24	Minimum Required Payment 2024-25
Investment (Gain)/Loss	6/30/13	100%	Up/Down	2.80%	1	2,597,466	2,684,327	0	0	0	0
Non-Investment (Gain)/Loss	6/30/13	100%	Up/Down	2.80%	1	(25,594)	(26,450)	0	0	0	0
Share of Pre-2013 Pool UAL	6/30/13		No Ramp	2.80%	1	1,381,685	1,427,890	0	0	0	0
Assumption Change	6/30/14	100%	Up/Down	2.80%	1	1,260,969	1,303,137	0	0	0	0
Investment (Gain)/Loss	6/30/14	100%	Up/Down	2.80%	1	(2,206,229)	(2,280,007)	0	0	0	0
Investment (Gain)/Loss	6/30/15	100%	Up/Down	2.80%	1	1,523,117	1,574,051	0	0	0	0
Non-Investment (Gain)/Loss	6/30/15	100%	Up/Down	2.80%	1	(119,382)	(123,374)	0	0	0	0
Assumption Change	6/30/16	100%	Up/Down	2.80%	1	612,954	633,452	0	0	0	0
Investment (Gain)/Loss	6/30/16	100%	Up/Down	2.80%	1	2,066,302	2,135,401	0	0	0	0
Non-Investment (Gain)/Loss	6/30/16	100%	Up/Down	2.80%	1	(243,031)	(251,158)	0	0	0	0
Assumption Change	6/30/17	100%	Up/Down	2.80%	1	759,569	784,970	0	0	0	0
Investment (Gain)/Loss	6/30/17	100%	Up/Down	2.80%	1	(1,124,600)	(1,162,208)	0	0	0	0
Non-Investment (Gain)/Loss	6/30/17	100%	Up/Down	2.80%	1	(54,809)	(56,642)	0	0	0	0
Assumption Change	6/30/18	100%	Up/Down	2.80%	1	1,249,919	1,291,717	0	0	0	0
Investment (Gain)/Loss	6/30/18	100%	Up/Down	2.80%	1	(363,639)	(375,799)	0	0	0	0
Method Change	6/30/18	100%	Up/Down	2.80%	1	333,055	344,193	0	0	0	0
Non-Investment (Gain)/Loss	6/30/18	100%	Up/Down	2.80%	1	170,149	175,839	0	0	0	0
Investment (Gain)/Loss	6/30/19	80%	Up Only	0.00%	1	176,411	182,310	0	0	0	0
Non-Investment (Gain)/Loss	6/30/19		No Ramp	0.00%	1	163,586	169,056	0	0	0	0
Investment (Gain)/Loss	6/30/20	60%	Up Only	0.00%	1	863,785	892,671	0	0	0	0
Non-Investment (Gain)/Loss	6/30/20		No Ramp	0.00%	1	146,613	151,516	0	0	0	0
Assumption Change	6/30/21		No Ramp	0.00%	1	176,543	182,447	0	0	0	0
Fresh Start	6/30/21	No Ramp	0.00%	9	0	(4,413,473)	4,561,063	622,582	4,227,814	622,583	
Net Investment (Gain)	6/30/21	40%	Up Only	0.00%	1	1	(4,249,834)	(4,391,952)	0	0	0
Non-Investment (Gain)/Loss	6/30/21		No Ramp	0.00%	1	(192,416)	(198,851)	0	0	0	0
Risk Mitigation	6/30/21		No Ramp	0.00%	0	1,172,138	1,211,335	0	0	0	0
Risk Mitigation Offset	6/30/21		No Ramp	0.00%	0	(1,209,588)	(1,250,038)	0	0	0	0
Investment (Gain)/Loss	6/30/22	20%	Up Only	0.00%	20	5,651,501	0	6,035,803	0	6,446,238	138,560
Non-Investment (Gain)/Loss	6/30/22		No Ramp	0.00%	20	662,952	0	708,033	0	756,179	67,998
Fresh Start (Agoura Hills and Calabasas Community Center)	6/30/22		No Ramp	0.00%	9	523,782	62,907	494,389	35,375	491,449	72,370
Total						11,705,744	679,716	11,799,288	657,957	11,921,680	901,511

Future Investment Return Scenarios

Analysis using the investment return scenarios from the Asset Liability Management process completed in 2021 was performed to determine the effects of various future investment returns on required employer contributions. The projections below reflect the impact of the CalPERS Funding Risk Mitigation policy. The projections also assume that all other actuarial assumptions will be realized and that no further changes in assumptions, contributions, benefits, or funding will occur.

The first table shows projected contribution requirements if the fund were to earn either 3.0% or 10.8% annually. These alternate investment returns were chosen because 90% of long-term average returns are expected to fall between them over the 20-year period ending June 30, 2042.

City of Calabasas (Pre-Merger)

Assumed Annual Return FY 2022-23 through FY 2041-42	Projected Employer Contributions				
	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
3.0% (5th percentile)					
Normal Cost Rate	11.9%	11.9%	11.9%	11.9%	11.9%
UAL Contribution	\$1,001,000	\$1,207,000	\$1,448,000	\$1,725,000	\$1,900,000
10.8% (95th percentile)					
Normal Cost Rate	12.1%	12.4%	12.6%	12.9%	13.1%
UAL Contribution	\$937,000	\$1,014,000	\$1,056,000	\$1,059,000	\$744,000

City of Calabasas (Post-Merger)

Assumed Annual Return FY 2022-23 through FY 2041-42	Projected Employer Contributions				
	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
3.0% (5th percentile)					
Normal Cost Rate	11.9%	11.9%	11.9%	11.9%	11.9%
UAL Contribution	\$1,075,000	\$1,283,000	\$1,527,000	\$1,809,000	\$1,990,000
10.8% (95th percentile)					
Normal Cost Rate	12.1%	12.4%	12.6%	12.9%	13.1%
UAL Contribution	\$1,008,000	\$1,083,000	\$1,122,000	\$1,120,000	\$744,000

Required contributions outside of this range are also possible. In particular, whereas it is unlikely that investment returns will average less than 3.0% or greater than 10.8% over a 20-year period, the likelihood of a single investment return less than 3.0% or greater than 10.8% in any given year is much greater. The following analysis illustrates the effect of an extreme, single year investment return.

The portfolio has an expected volatility (or standard deviation) of 12.0% per year. Accordingly, in any given year there is a 16% probability that the annual return will be -5.2% or less and a 2.5% probability that the annual return will be -17.2% or less. These returns represent one and two standard deviations below the expected return of 6.8%.

Future Investment Return Scenarios (Continued)

The following table shows the effect of a one or two standard deviation investment loss in FY 2022-23 on the FY 2025-26 contribution requirements. Note that a single-year investment gain or loss decreases or increases the required UAL contribution amount incrementally for each of the next five years, not just one, due to the 5-year ramp in the amortization policy. However, the contribution requirements beyond the first year are also impacted by investment returns beyond the first year. Historically, significant downturns in the market are often followed by higher than average returns. Such investment gains would offset the impact of these single year negative returns in years beyond FY 2025-26.

City of Calabasas (Pre-Merger)

Assumed Annual Return for Fiscal Year 2022-23	Required Employer Contributions	Projected Employer Contributions
	FY 2024-25	FY 2025-26
(17.2%) (2 standard deviation loss)		
Normal Cost Rate	11.88%	11.9%
UAL Contribution	\$829,141	\$1,179,000
(5.2%) (1 standard deviation loss)		
Normal Cost Rate	11.88%	11.9%
UAL Contribution	\$829,141	\$1,073,000

City of Calabasas (Post-Merger)

Assumed Annual Return for Fiscal Year 2022-23	Required Employer Contributions	Projected Employer Contributions
	FY 2024-25	FY 2025-26
(17.2%) (2 standard deviation loss)		
Normal Cost Rate	11.88%	11.9%
UAL Contribution	\$901,511	\$1,259,000
(5.2%) (1 standard deviation loss)		
Normal Cost Rate	11.88%	11.9%
UAL Contribution	\$901,511	\$1,149,000

Without investment gains (returns higher than 6.8%) in year FY 2023-24 or later, projected contributions rates would continue to rise over the next four years due to the continued phase-in of the impact of the illustrated investment loss in FY 2022-23.

Discount Rate Sensitivity

The discount rate assumption is calculated as the sum of the assumed real rate of return and the assumed annual price inflation, currently 4.5% and 2.3%, respectively. Changing either the price inflation assumption or the real rate of return assumption will change the discount rate. The sensitivity of the valuation results to the discount rate assumption depends on which component of the discount rate is changed. Shown below are various valuation results as of June 30, 2022 before and after the proposed merger assuming alternate discount rates by changing the two components independently. Results are shown using the current discount rate of 6.8% as well as alternate discount rates of 5.8% and 7.8%. The rates of 5.8% and 7.8% were selected since they illustrate the impact of a 1.0% increase or decrease to the 6.8% assumption.

Sensitivity to the Real Rate of Return Assumption

City of Calabasas (Pre-Merger)

As of June 30, 2022	1% Lower Real Return Rate	Current Assumptions	1% Higher Real Return Rate
Discount Rate	5.8%	6.8%	7.8%
Price Inflation	2.3%	2.3%	2.3%
Real Rate of Return	3.5%	4.5%	5.5%
a) Total Normal Cost	23.67%	18.81%	15.11%
b) Accrued Liability	54,214,664	47,172,149	41,438,524
c) Market Value of Assets	35,990,187	35,990,187	35,990,187
d) Unfunded Liability/(Surplus) [(b) - (c)]	18,224,477	11,181,962	5,448,337
e) Funded Ratio	66.4%	76.3%	86.9%

City of Calabasas (Post-Merger)

As of June 30, 2022	1% Lower Real Return Rate	Current Assumptions	1% Higher Real Return Rate
Discount Rate	5.8%	6.8%	7.8%
Price Inflation	2.3%	2.3%	2.3%
Real Rate of Return	3.5%	4.5%	5.5%
a) Total Normal Cost	23.67%	18.81%	15.11%
b) Accrued Liability	56,256,831	48,938,554	42,990,460
c) Market Value of Assets	37,232,810	37,232,810	37,232,810
d) Unfunded Liability/(Surplus) [(b) - (c)]	19,024,021	11,705,744	5,757,650
e) Funded Ratio	66.2%	76.1%	86.6%

Discount Rate Sensitivity (continued)

Sensitivity to the Price Inflation Assumption

City of Calabasas (Pre-Merger)

As of June 30, 2022	1% Lower Price Inflation	Current Assumptions	1% Higher Price Inflation
Discount Rate	5.8%	6.8%	7.8%
Price Inflation	1.3%	2.3%	3.3%
Real Rate of Return	4.5%	4.5%	4.5%
a) Total Normal Cost	19.74%	18.81%	17.15%
b) Accrued Liability	49,172,215	47,172,149	43,144,321
c) Market Value of Assets	35,990,187	35,990,187	35,990,187
d) Unfunded Liability/(Surplus) [(b) - (c)]	13,182,028	11,181,962	7,154,134
e) Funded Ratio	73.2%	76.3%	83.4%

City of Calabasas (Post-Merger)

As of June 30, 2022	1% Lower Price Inflation	Current Assumptions	1% Higher Price Inflation
Discount Rate	5.8%	6.8%	7.8%
Price Inflation	1.3%	2.3%	3.3%
Real Rate of Return	4.5%	4.5%	4.5%
a) Total Normal Cost	19.74%	18.81%	17.15%
b) Accrued Liability	51,070,308	48,938,554	44,720,896
c) Market Value of Assets	37,232,810	37,232,810	37,232,810
d) Unfunded Liability/(Surplus) [(b) - (c)]	13,837,498	11,705,744	7,488,086
e) Funded Ratio	72.9%	76.1%	83.3%

Mortality Rate Sensitivity

The following tables look at the change in the June 30, 2022 plan costs and funded ratio under two different longevity scenarios, namely assuming post-retirement rates of mortality are 10% lower or 10% higher than our current mortality assumptions adopted in 2021. This type of analysis highlights the impact on the plan of a change in the mortality assumption.

City of Calabasas (Pre-Merger)

As of June 30, 2022	10% Lower Mortality Rates	Current Assumptions	10% Higher Mortality Rates
a) Total Normal Cost	19.13%	18.81%	18.51%
b) Accrued Liability	48,081,065	47,172,149	46,334,120
c) Market Value of Assets	35,990,187	35,990,187	35,990,187
d) Unfunded Liability/(Surplus) [(b) - (c)]	12,090,878	11,181,962	10,343,933
e) Funded Status	74.9%	76.3%	77.7%

City of Calabasas (Post-Merger)

As of June 30, 2022	10% Lower Mortality Rates	Current Assumptions	10% Higher Mortality Rates
a) Total Normal Cost	19.13%	18.81%	18.51%
b) Accrued Liability	49,881,903	48,938,554	48,068,813
c) Market Value of Assets	37,232,810	37,232,810	37,232,810
d) Unfunded Liability/(Surplus) [(b) - (c)]	12,649,093	11,705,744	10,836,003
e) Funded Status	74.6%	76.1%	77.5%

Maturity Measures

As pension plans mature they become more sensitive to risks. Understanding plan maturity and how it affects the ability of a pension plan sponsor to tolerate risk is important in understanding how the plan is impacted by investment return volatility, other economic variables and changes in longevity or other demographic assumptions.

Since it is the employer that bears the risk, it is appropriate to perform this analysis on a pension plan level considering all rate plans. The following measures are for one rate plan only. One way to look at the maturity level of CalPERS and its plans is to look at the ratio of a plan’s retiree liability to its total liability. A pension plan in its infancy will have a very low ratio of retiree liability to total liability. As the plan matures, the ratio starts increasing. A mature plan will often have a ratio above 60%-65%.

City of Calabasas as of June 30, 2022

Ratio of Retiree Accrued Liability to Total Accrued Liability	Pre-Merger	Post-Merger
1. Retired Accrued Liability	19,995,553	21,761,958
2. Total Accrued Liability	47,172,149	48,938,554
3. Ratio of Retiree AL to Total AL [(1) / (2)]	0.42	0.44

Another measure of the maturity level of CalPERS and its plans is the ratio of actives to retirees, also called the support ratio. A pension plan in its infancy will have a very high ratio of active to retired members. As the plan matures and members retire, the ratio declines. A mature plan will often have a ratio near or below one.

To calculate the support ratio for the rate plan, retirees and beneficiaries receiving a continuance are each counted as one, even though they may have only worked a portion of their careers as an active member of this rate plan. For this reason, the support ratio, while intuitive, may be less informative than the ratio of retiree liability to total accrued liability above.

For comparison, the support ratio for all CalPERS public agency plans as of June 30, 2021, was 0.78 and was calculated consistently with how it is for the individual rate plan. Note that to calculate the support ratio for all public agency plans, a retiree with service from more than one CalPERS agency is counted as a retiree more than once.

City of Calabasas as of June 30, 2022

Support Ratio	Pre-Merger	Post-Merger
1. Number of Actives	48	48
2. Number of Retirees	71	78
3. Support Ratio [(1) / (2)]	0.68	0.62

Maturity Measures (Continued)

The actuarial calculations supplied in this communication are based on various assumptions about long-term demographic and economic behavior. Unless these assumptions (e.g., terminations, deaths, disabilities, retirements, salary growth, investment return) are exactly realized each year, there will be differences on a year-to-year basis. The year-to-year differences between actual experience and the assumptions are called actuarial gains and losses and serve to lower or raise required employer contributions from one year to the next. Therefore, employer contributions will inevitably fluctuate, especially due to the ups and downs of investment returns.

Asset Volatility Ratio

Shown in the table below is the asset volatility ratio (AVR), which is the ratio of market value of assets to payroll. Plans that have higher AVR experience more volatile employer contributions (as a percentage of payroll) due to investment return. For example, a plan with AVR of 8 may experience twice the contribution volatility due to investment return volatility than a plan with AVR of 4. It should be noted that this ratio is a measure of the current situation. It increases over time but generally tends to stabilize as a plan matures.

Liability Volatility Ratio

Also shown in the table below is the liability volatility ratio (LVR), which is the ratio of accrued liability to payroll. Plans that have a higher LVR experience more volatile employer contributions (as a percentage of payroll) due to changes in liability. For example, a plan with LVR of 8 is expected to have twice the contribution volatility of a plan with LVR of 4. It should be noted that this ratio indicates a longer-term potential for contribution volatility, since the AVR, described above, will tend to move closer to the LVR as the funded ratio approaches 100%.

City of Calabasas as of June 30, 2022

Contribution Volatility	Pre-Merger	Post-Merger
1. Market Value of Assets	\$35,990,187	\$37,232,810
2. Payroll	4,738,914	4,738,914
3. Asset Volatility Ratio (AVR) [(1) / (2)]	7.6	7.9
4. Accrued Liability	\$47,172,149	\$48,938,554
5. Liability Volatility Ratio (LVR) [(4) / (2)]	10.0	10.3

Participant Data

The table below summarizes changes in the plan's member data.

June 30, 2022	City of Calabasas (Pre-Merger)	Agoura Hills and Calabasas Community Center (Pre-Merger)	City of Calabasas (Post-Merger)
Reported Payroll	\$4,738,914	\$0	\$4,738,914
Projected Payroll for Contribution Purposes	\$5,148,233	\$0	\$5,148,233
Number of Members			
Actives	48	0	48
Transferred	47	2	49
Separated	57	6	63
Retired	71	7	78
Total	223	15	238

Additional Disclosure

If your agency is requesting cost information for two or more benefit changes, the cost of adopting more than one of these changes **may not** be obtained by adding the individual costs. Instead, a separate valuation must be done to provide a cost analysis for the combination of benefit changes.

Please note that the cost analysis provided in this document **may not** be relied upon after July 1, 2024. If you have not taken action to contract by this date, you must contact our office for an updated cost analysis, based on the new annual valuation.

Descriptions of the actuarial methodologies, actuarial assumptions, and plan benefit provisions may be found in the appendices of the June 30, 2022 annual report. Please note that the results shown here are subject to change if any of the data or plan provisions differ from what was used in this study.

Certification

This actuarial valuation for the proposed merger is based on the participant, benefits, and asset data used in the June 30, 2022 annual valuation, with the benefits modified, if necessary, to reflect what is currently provided under the agency's contract with CalPERS, and further modified to reflect the proposed merger. It is my opinion that the valuation has been performed in accordance with standards of practice prescribed by the Actuarial Standards Board, and the assumptions and methods are internally consistent and reasonable for this plan, as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.



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