

California Public Employees' Retirement System

Schools Pool Actuarial Valuation

as of June 30, 2024

Required Contributions for Fiscal Year

July 1, 2025 — June 30, 2026

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Actuarial Certification



September 2025

It is our opinion that the valuation has been performed in accordance with generally accepted actuarial principles as well as the applicable Standards of Practice promulgated by the Actuarial Standards Board. While this report is intended to be complete, our office is available to answer questions as needed. All of the undersigned are actuaries who satisfy the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States of the American Academy of Actuaries with regard to pensions.

Actuarial Methods and Assumptions

It is our opinion that the assumptions and methods, as recommended by the Chief Actuary and adopted by the CalPERS Board of Administration, are internally consistent and reasonable for this plan.

Randall Dziubek, ASA, MAAA
Deputy Chief Actuary, Valuation Services, CalPERS

Scott Terando, ASA, EA, MAAA, FCA, CFA
Chief Actuary, CalPERS

Actuarial Data and Schools Pool Results

To the best of our knowledge and having relied upon the attestation above that the actuarial methods and assumptions are reasonable, this report is complete and accurate and contains sufficient information to disclose, fully and fairly, the funded condition of the Schools Pool and satisfies the actuarial valuation requirements of Government Code section 7504. This valuation and related validation work was performed by the CalPERS Actuarial Office. The valuation was based on the member and financial data as of June 30, 2024, provided by the various CalPERS databases and the benefits under this plan with CalPERS as of the date this report was produced.

Paul Tschida, FSA, EA, MAAA
Senior Actuary, CalPERS

May Yu, ASA, MAAA
Senior Actuary, CalPERS

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Highlights and Executive Summary

Introduction

This report presents the results of the June 30, 2024, actuarial valuation for the Schools Pool of the California Public Employees' Retirement System (CalPERS). This actuarial valuation determines the funded status as of June 30, 2024 and sets the minimum required contributions for fiscal year (FY) 2025-26.

The Schools Pool provides retirement benefits to classified employees of K-12 school districts, community college districts, county offices of education (except Los Angeles and San Diego counties), and charter schools (elective) in California. It generally does not cover certificated employees as they are covered by the California State Teachers' Retirement System (CalSTRS).

Purpose

This report documents the results of the actuarial valuation prepared by the CalPERS Actuarial Office using data as of June 30, 2024. The purpose of the valuation is to:

- Set forth the assets and accrued liabilities of the Schools Pool as of June 30, 2024;
- Determine the minimum required employer contributions for the Schools Pool for the FY July 1, 2025, through June 30, 2026;
- Determine the required member contribution rate for FY July 1, 2025, through June 30, 2026 for school employees subject to the California Public Employees' Pension Reform Act of 2013 (PEPRA); and
- Provide actuarial information as of June 30, 2024 to the CalPERS Board of Administration (board) and other interested parties.

The pension funding information presented in this report should not be used in financial reports subject to Governmental Accounting Standards Board (GASB) Statement Number 68 for a Cost-Sharing Multiple-Employer Defined Benefit Pension Plan.

The measurements shown in this actuarial valuation may not be applicable for other purposes. An agency should contact a CalPERS 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; changes in plan provisions or applicable law; and differences between the required contributions determined by the valuation and the actual contributions made by employers.

Assessment and Disclosure of Risk

This report includes the following risk disclosures consistent with the guidance of the Actuarial Standards of Practice:

- A "Sensitivity Analysis," showing the impact on current valuation results using alternative discount rates 5.8% and 7.8%.
- A "Sensitivity Analysis," showing the impact on current valuation 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.
- A low-default-risk obligation measure (LDRM) of benefit costs accrued as of the valuation date.

Highlights and Executive Summary

Required Contribution Rates

Required Employer Contribution Rates

The actuarially determined required employer contributions for FY July 1, 2025, through June 30, 2026 are displayed in the table below. For comparison purposes, the prior fiscal year results are also displayed.

	Fiscal Year 2024-25	Fiscal Year 2025-26
1) Contribution as a Percentage of Payroll		
a) Total Normal Cost ¹	17.12%	16.95%
b) Offset due to Employee Contributions ²	7.54%	7.58%
c) Employer Normal Cost [(1a) – (1b)]	9.58%	9.37%
d) Unfunded Liability Contribution	17.47%	17.44%
e) Required Employer Contribution Rate [(1c) + (1d)]	27.05%	26.81%
Projected Annual Payroll for Contribution Year	\$19,054,625,323	\$21,449,571,628
2) Expected Contribution in Dollars		
a) Total Normal Cost ¹	\$3,262,151,855	\$3,635,702,391
b) Expected Employee Contributions ²	1,436,718,749	1,625,877,529
c) Employer Normal Cost [(2a) – (2b)]	1,825,433,106	2,009,824,862
d) Unfunded Liability Contribution	3,327,996,891	3,741,524,949
e) Estimated Total Employer Contribution [(2c) + (2d)]	\$5,153,429,997	\$5,751,349,811

¹ The Total Normal Cost is a blended rate for all benefit groups in the plan. For a breakout of normal cost by benefit group, see Normal Cost by Benefit Group.

² This is the expected employee contributions, taking into account individual benefit formula and any offset from the use of a modified formula, divided by projected annual payroll. For member contribution rates above the breakpoint for each benefit formula, see Member Contribution Rates.

The payroll used to calculate the expected dollar contribution is the payroll reported for the fiscal year ending on the valuation date projected forward two years using the annual payroll growth assumption in effect on the valuation date. For example, expected fiscal year 2025-26 contributions are based on fiscal year 2023-24 reported payroll increased by 2.80% per year for two years. Actual contribution amounts will be based on actual payroll during the associated fiscal year and will differ from the expected contributions shown in the table above.

PEPRA Member Contribution Rate

The California Public Employees' Pension Reform Act of 2013 ("PEPRA") established new benefit formulas, final compensation period, and contribution requirements for "new" employees (generally those first hired into a CalPERS-covered position on or after January 1, 2013). In accordance with Government Code section 7522.30(b), "new members ... shall have an initial contribution rate of at least 50% of the normal cost rate." The normal cost rate for the plan is dependent on the benefit levels, actuarial assumptions, and demographics of the plan, particularly members' entry age into the plan. Should the total normal cost rate of the plan change by more than 1% from the base total normal cost rate established for the plan, the new member rate shall be 50% of the new normal cost rate rounded to the nearest quarter percent.

The total normal cost of PEPRA members' benefits as measured in the June 30, 2024 actuarial valuation changed by less than 1% from when the rate was last changed. As a result, the PEPRA member contribution rate of 8.00% remains unchanged from fiscal year 2024-25 to fiscal year 2025-26. See Member Contribution Rates for more information.

Highlights and Executive Summary

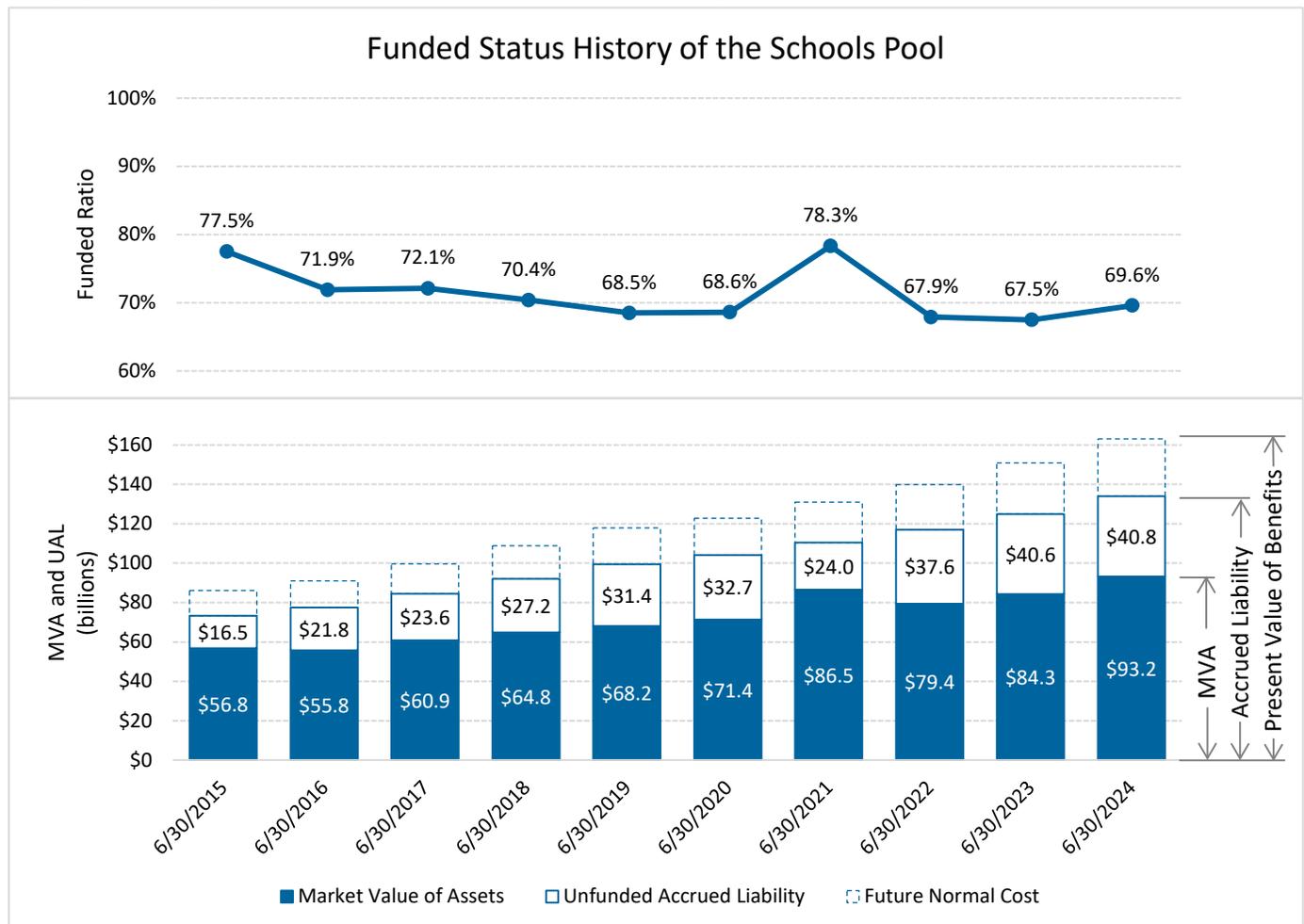
Funded Status – Funding Policy Basis

	June 30, 2023	June 30, 2024
1) Present Value of Benefits	\$150,882,397,588	\$163,119,112,725
2) Entry Age Accrued Liability	124,923,916,585	133,978,106,014
3) Market Value of Assets (MVA)	84,292,061,179	93,186,668,933
4) Unfunded Accrued Liability (UAL) [(2) - (3)]	\$40,631,855,406	\$40,791,437,081
5) Funded Ratio [(3) ÷ (2)]	67.5%	69.6%

The table above displays information on the current funded status of the Schools Pool 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** 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.

From June 30, 2023 to June 30, 2024 the funded ratio for the Schools Pool increased by 2.1%. This was primarily due to employer contributions towards the UAL and an investment gain, partially offset by a non-investment loss.

The graph below displays the funded status of the Schools Pool for the past ten years.



Highlights and Executive Summary

Changes Since the Prior Year's Valuation

Benefits

The standard actuarial practice at CalPERS is to recognize mandated legislative benefit changes in the first annual valuation following the effective date of the legislation. Voluntary benefit changes by plan amendment are generally included in the first valuation that is prepared after the amendment becomes effective, even if the valuation date is prior to the effective date of the amendment.

This valuation generally reflects plan changes by amendments effective before the date of the report. Please refer to Appendix B for a summary of the plan provisions used in this valuation. The effect of any mandated benefit changes or plan amendments on the unfunded liability is shown in (Gain)/Loss Analysis and the effect on the employer contribution is shown in Reconciliation of Required Employer Contributions. It should be noted that no change in liability or contribution is shown for any plan changes already included in the prior year's valuation.

Board Policy

On April 16, 2024, the board modified the Funding Risk Mitigation Policy to remove the automatic change to the discount rate when the investment return exceeds various thresholds. Rather than an automatic change to the discount rate, a board discussion would be placed on the calendar.

Actuarial Methods and Assumptions

There are no significant changes to the actuarial methods or assumptions for the June 30, 2024 actuarial valuation.

Subsequent Events

This actuarial valuation report reflects fund investment return through June 30, 2024, as well as statutory changes, regulatory changes and board actions through January 2025.

CalPERS will be completing an Asset Liability Management (ALM) review process in November 2025 that will review the capital market assumptions and the CalPERS Total Fund Investment Policy and ascertain whether a change in the discount is warranted. In addition, the Actuarial Office will be presenting the findings of its Experience Study which reviews economic assumptions other than the discount rate as well as all demographic assumptions and makes recommendations to modify actuarial assumptions where appropriate. Any changes in actuarial assumptions will be reflected in the June 30, 2025, actuarial valuations.

The 2024 annual benefit limit under Internal Revenue Code (IRC) section 415(b) and annual compensation limits under IRC section 401(a)(17) and Government Code section 7522.10 were used for this valuation and are assumed to increase 2.3% per year based on the price inflation assumption. The actual 2025 limits, determined in October 2024, are not reflected.

To the best of our knowledge, there have been no other subsequent events that could materially affect current or future certifications rendered in this report.

Highlights and Executive Summary

Projected Employer Contributions

The table below shows the required and projected employer contributions (before cost sharing) for the next five 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 FY 2024-25 is assumed to be 6.80% per year, net of investment and administrative expenses. The projected normal cost percentages below reflect that the normal cost is expected to continue to decline over time as new employees are hired into lower cost benefit tiers. 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.

The actual investment return for fiscal year 2024-25 was not known at the time this projection was prepared, and the projections below are identical to those presented in [Agenda Item 5e](#) to the Finance & Administration Committee on April 14, 2025. Updated projections will be provided in a circular letter after preliminary return figures for fiscal year 2024-25 have been incorporated. The circular letter will also include a “scenario test” projecting contribution rates under various investment income returns.

Fiscal Year	Actual	Projected				
	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Employer Contribution Rate	26.81%	26.9%	27.8%	27.4%	27.0%	26.2%

Investment gains and losses are amortized using a 5-year ramp up. For more information, please see [Amortization of Unfunded Actuarial Accrued Liability](#) in Appendix A. This method phases in the impact of the change in UAL over a 5-year period in order to reduce employer cost volatility from year to year. As a result of this methodology, dramatic changes in the required employer contributions in any one year are less likely. However, required contributions can change gradually and significantly over the next five years. In years when there is a large investment loss, the relatively small amortization payments during the ramp-up period could result in contributions that are less than interest on the UAL (i.e., negative amortization) while the contribution impact of the increase in the UAL is phased in.

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Assets

Reconciliation of the Market Value of Assets

1) Market Value of Assets as of June 30, 2023 Including Receivables	\$84,292,061,179
2) Change in Receivables for Service Buybacks	(7,916,208)
3) Employer Contributions	5,368,856,372
4) Employee Contributions	1,518,741,157
5) Benefit Payments to Retirees and Beneficiaries	(5,833,884,556)
6) Refunds	(120,027,902)
7) Transfers	0
8) Service Credit Purchase (SCP) Payments and Interest	23,340,727
9) Administrative Expense	(62,814,654)
10) Miscellaneous Adjustments	0
11) Investment Return (Net of Investment Expenses)	8,008,312,816
12) Market Value of Assets as of June 30, 2024 Including Receivables	\$93,186,668,933

Note: numbers may not add due to rounding.

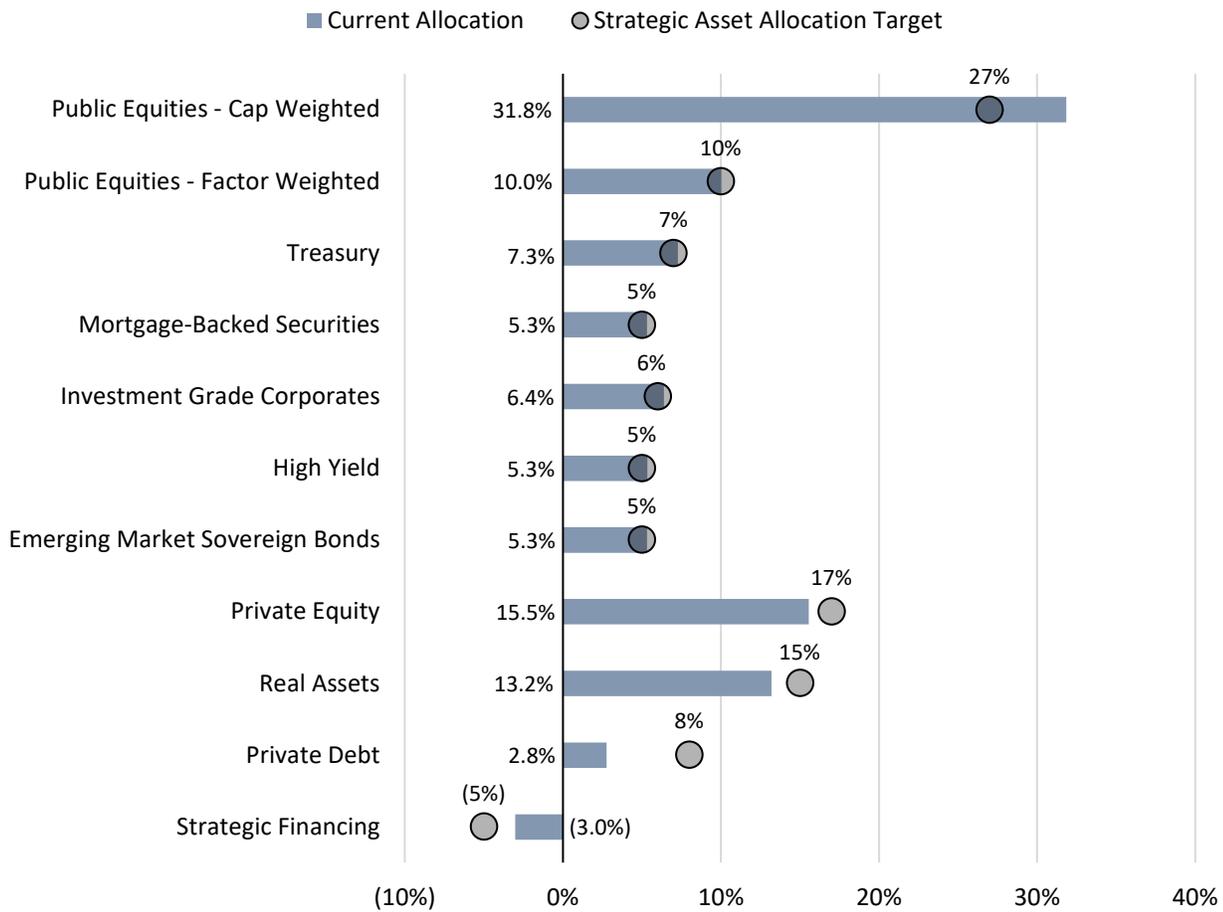
Assets

Asset Allocation

CalPERS adheres to an Asset Allocation Strategy which establishes asset class allocation policy targets and ranges and manages those asset class allocations within their policy ranges. CalPERS Investment Belief No. 6 recognizes that strategic asset allocation is the dominant determinant of portfolio risk and return.

The asset allocation shown below reflects the allocation of the Public Employees' Retirement Fund (PERF) in its entirety. The assets for the Schools Pool are a subset of the PERF and are invested accordingly.

On March 20, 2024, the board adopted changes to the strategic asset allocation. The new allocation was effective July 1, 2024. The asset allocation as of June 30, 2024, is shown below, along with the strategic asset allocation targets.



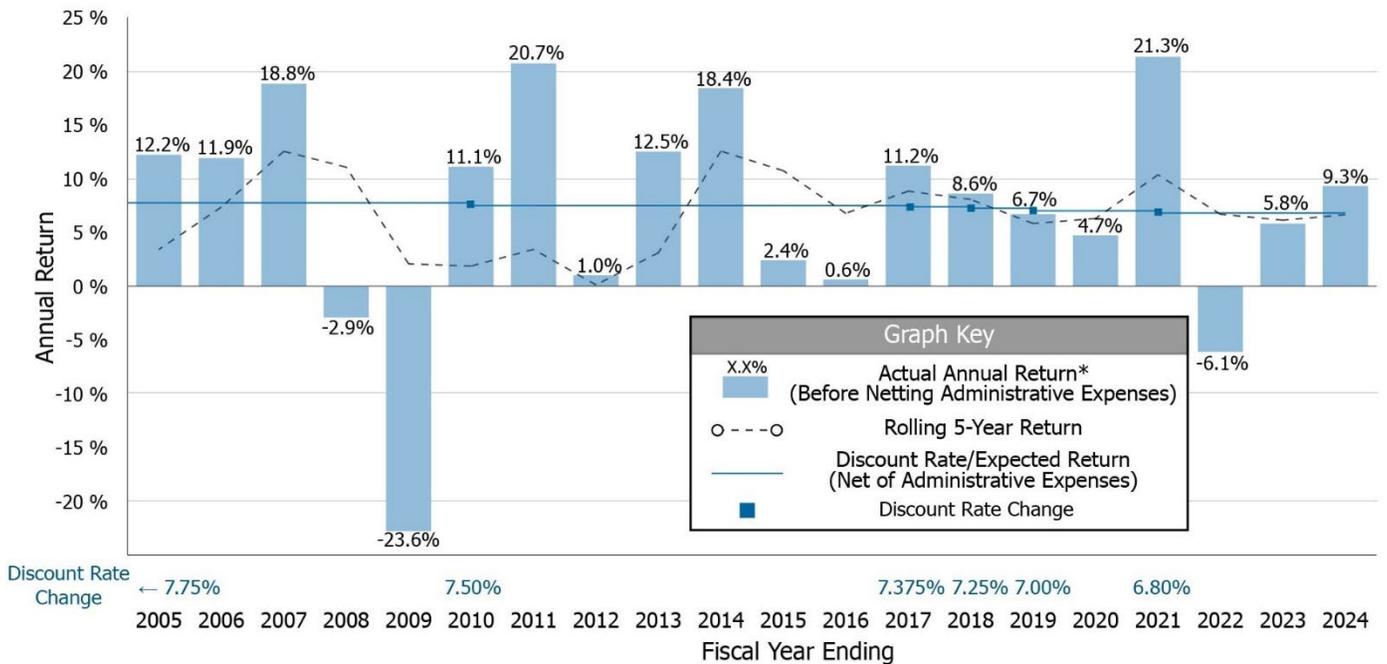
For more information see the [Trust Level Review as of June 30, 2024](#), which is available on the CalPERS website.

Assets

CalPERS History of Investment Returns

The following is a chart with the 20-year historical annual returns of the PERF for each fiscal year ending on June 30 as reported by the Investment Office. Investment returns reported are net of investment expenses but without reduction for administrative expenses. The assumed rate of return, however, is net of both investment and administrative expenses. Also, the Investment Office uses a three-month lag on private asset valuations for investment performance reporting purposes. This can lead to a timing difference in private asset influence on performance in the returns below and those used for financial reporting purposes. The investment gain or loss calculation in this report relies on final assets that have been audited and are appropriate for financial reporting. Because of these differences, the effective investment return for funding purposes in a single year can be higher or lower than the return reported by the Investment Office shown here.

History of Investment Returns (2005 through 2024)



* As reported by the Investment Office with a 3-month lag on private equity and real assets and without any reduction for administrative expenses.

The table below shows annualized investment returns of the PERF for various time periods ending on June 30, 2024. These returns are the annual rates that if compounded over the indicated number of years would equal the actual time-weighted investment performance of the PERF. It should be recognized that in any given year the rate of return is volatile, as the chart above illustrates, so when looking at investment returns, it is informative to look at returns over longer time horizons.

PERF Realized Rates of Return as of June 30, 2024

1-year	3-year	5-year	10-year	20-year	30-year
9.3%	2.8%	6.6%	6.2%	6.7%	7.7%

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Liabilities and Contributions

Development of Accrued and Unfunded Liabilities

	June 30, 2023	June 30, 2024
1) Present Value of Projected Benefits		
a) Active Members	\$80,464,988,552	\$88,701,649,081
b) Transferred Members	1,167,324,856	1,300,985,874
c) Separated Members	4,266,009,340	4,664,494,750
d) Members and Beneficiaries Receiving Payments	64,984,074,840	68,451,983,020
e) Total	\$150,882,397,588	\$163,119,112,725
2) Present Value of Future Employer Normal Costs	\$13,901,792,166	\$15,392,679,106
3) Present Value of Future Employee Contributions	\$12,056,688,837	\$13,748,327,605
4) Entry Age Accrued Liability		
a) Active Members [(1a) – (2) – (3)]	\$54,506,507,549	\$59,560,642,370
b) Transferred Members (1b)	1,167,324,856	1,300,985,874
c) Separated Members (1c)	4,266,009,340	4,664,494,750
d) Members and Beneficiaries Receiving Payments (1d)	64,984,074,840	68,451,983,020
e) Total	\$124,923,916,585	\$133,978,106,014
5) Market Value of Assets	\$84,292,061,179	\$93,186,668,933
6) Unfunded Accrued Liability (UAL) [(4e) – (5)]	\$40,631,855,406	\$40,791,437,081
7) Funded Ratio [(5) ÷ (4e)]	67.5%	69.6%

Liabilities and Contributions

Schedule of Amortization Bases

The schedule on the following page shows the development of payments on the amortization bases used to determine the employer contribution rate. Each row of the schedule gives a brief description of a base (or portion of the Unfunded Actuarial Liability), the date the base was established, the balance of the base on the valuation date, and the number of years remaining in the amortization period. The schedule also shows the expected payment for the year immediately following the valuation date, the balance on the date a year after the valuation date, and the required payment for fiscal year 2025-26. Please refer to Appendix A for an explanation of how amortization periods are determined.

There is a one-year lag between the valuation date and the start of the contribution year.

- The assets, liabilities, and funded status of the plan are measured as of the valuation date (June 30, 2024).
- The required employer contributions determined by the valuation are for the fiscal year beginning one year after the valuation date (fiscal year 2025-26).

This one-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 employers with their required employer contribution rate before the start of the fiscal year.

The Unfunded Accrued Liability (UAL) is used to determine the employer contribution and therefore must be rolled forward one year from the valuation date to the first day of the fiscal year for which the contribution is being determined. The UAL is rolled forward each year by subtracting the expected payment on the UAL for the fiscal year and adjusting for interest. The expected payment on the UAL for a fiscal year is equal to the expected employer contribution for the fiscal year minus the expected Normal Cost for the year. The employer contribution for the first fiscal year is determined by the actuarial valuation from the prior year. The Normal Cost rate for all future fiscal years is assumed to be the same as the rate determined in the current valuation. Expected dollar amounts are determined by multiplying the Normal Cost rate by the expected payroll for the applicable fiscal year.

The total required UAL payment of \$3,741,524,949 is the sum of the required payments for each individual UAL base as shown on the following page. One year of interest at 6.8% on the total UAL is \$2,578,663,876. Therefore, after subtracting the portion of the UAL payment going toward interest, the remaining portion of \$1,162,861,073 will result in a reduction in the UAL of that amount. Another measure that can be used to evaluate the effectiveness of the FY 2025-26 required UAL payment is the number of years it would take for the FY 2025-26 payment, if held constant, to pay off the existing UAL. An annual payment of \$3,741,524,949 would pay off the current UAL in 18.3 years (ignoring any changes in UAL occurring after June 30, 2024).

Liabilities and Contributions

Schedule of Amortization Bases (continued)

Reason for Base	Date Established	Ramp Level 2025-26	Ramp Shape	Remaining Amort. Period	Balance 6/30/2024	Expected Payment 2024-25	Balance 6/30/2025	Expected Payment 2025-26	Payment as Percentage of Payroll
(Gain)/Loss	Various	No Ramp		19	(\$334,915,124)	(\$24,277,986)	(\$332,599,490)	(\$24,957,770)	(0.12%)
Fresh Start	6/30/2004	No Ramp		10	2,338,905,720	264,020,027	2,225,102,227	271,412,588	1.27%
Assumption Change	6/30/2009	No Ramp		5	619,236,094	117,088,305	540,340,310	120,366,778	0.56%
(Gain)/Loss	6/30/2009	No Ramp		15	817,760,236	69,250,786	801,801,341	71,189,808	0.33%
(Gain)/Loss	6/30/2010	No Ramp		16	405,132,346	32,846,669	398,736,256	33,766,375	0.16%
Assumption Change	6/30/2011	No Ramp		7	965,082,039	141,946,107	884,014,712	145,920,598	0.68%
(Gain)/Loss	6/30/2011	No Ramp		17	(901,298,327)	(70,196,003)	(890,043,196)	(72,161,491)	(0.34%)
(Gain)/Loss	6/30/2014	100%	Up/Down	20	4,284,474,721	321,941,133	4,243,111,882	330,955,485	1.54%
Assumption Change	6/30/2015	100%	Up/Down	11	4,193,932,470	513,175,168	3,948,783,694	527,544,073	2.46%
(Gain)/Loss	6/30/2015	100%	Up/Down	21	4,298,397,093	311,987,634	4,268,267,328	320,723,288	1.50%
(Gain)/Loss	6/30/2016	100%	Up/Down	22	5,454,383,521	383,326,201	5,429,136,644	394,059,335	1.84%
Assumption Change	6/30/2017	100%	Up/Down	13	1,473,610,606	155,594,367	1,413,018,552	159,951,009	0.75%
(Gain)/Loss	6/30/2017	100%	Up/Down	23	(423,399,489)	(28,873,775)	(422,351,316)	(29,682,241)	(0.14%)
(Gain)/Loss	6/30/2018	100%	Up/Down	24	(573,189,048)	(38,004,232)	(572,890,777)	(39,068,350)	(0.18%)
Method Change	6/30/2018	100%	Up/Down	14	1,398,702,616	138,708,221	1,350,467,651	142,592,651	0.66%
Assumption Change - Econ	6/30/2018	100%	Up/Down	14	1,213,284,136	120,320,419	1,171,443,421	123,689,390	0.58%
Assumption Change - Demo	6/30/2018	100%	Up/Down	14	1,178,086,301	116,829,877	1,137,459,402	120,101,114	0.56%
Non-Investment (Gain)/Loss	6/30/2019	No Ramp		15	262,974,803	26,581,222	253,386,969	26,581,222	0.12%
Investment (Gain)/Loss	6/30/2019	100%	Up Only	15	602,474,907	60,897,543	580,509,192	60,897,543	0.28%
Assumption Change	6/30/2019	100%	Up/Down	15	3,133,643,349	293,584,171	3,043,329,220	301,804,528	1.41%
Non-Investment (Gain)/Loss	6/30/2020	No Ramp		16	(210,554,975)	(20,580,121)	(203,604,375)	(20,580,121)	(0.10%)
Investment (Gain)/Loss	6/30/2020	100%	Up Only	16	1,954,245,525	155,756,178	1,926,169,423	194,695,222	0.91%
Non-Investment (Gain)/Loss	6/30/2021	No Ramp		17	(951,477,672)	(90,211,243)	(922,950,170)	(90,211,243)	(0.42%)
Net Investment (Gain)	6/30/2021	80%	Up Only	17	(9,603,795,747)	(577,442,938)	(9,660,100,734)	(769,923,917)	(3.59%)
Assumption Change	6/30/2021	No Ramp		17	321,791,178	30,509,578	312,143,134	30,509,578	0.14%
Non-Investment (Gain)/Loss	6/30/2022	No Ramp		18	1,454,873,501	134,172,405	1,415,145,654	134,172,405	0.63%
Investment (Gain)/Loss	6/30/2022	60%	Up Only	18	13,796,264,000	567,126,224	14,148,318,542	850,689,336	3.97%
Non-Investment (Gain)/Loss	6/30/2023	No Ramp		19	2,313,243,437	208,015,072	2,255,572,717	208,015,072	0.97%
Investment (Gain)/Loss	6/30/2023	40%	Up Only	19	646,944,874	13,905,882	676,566,219	27,811,764	0.13%
Non-Investment (Gain)/Loss	6/30/2024	No Ramp		20	2,849,155,587	352,649,447	2,678,455,821	240,856,268	1.12%
Investment (Gain)/Loss	6/30/2024	20%	Up Only	20	(2,186,531,597)	0	(2,335,215,746)	(50,194,748)	(0.23%)
Total					\$40,791,437,081	\$3,680,646,338	\$39,761,524,507	\$3,741,524,949	17.44%

Note: numbers may not add due to rounding.

Liabilities and Contributions

Gain/Loss Analysis

To calculate the cost requirements for the Schools Pool, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year, actual experience is compared to the expected experience based on the actuarial assumptions. This results in actuarial gains or losses, as displayed below.

1) Total (Gain)/Loss for the Year	
a) Unfunded Accrued Liability (UAL) as of June 30, 2023	\$40,631,855,406
b) Expected Payment on the UAL during Fiscal Year 2023-24	3,160,324,531
c) Interest through June 30, 2024 $[0.068 \times (1a) - ((1.068)^{1/2} - 1) \times (1b)]$	2,657,282,216
d) Expected UAL before all other changes $[(1a) - (1b) + (1c)]$	\$40,128,813,091
e) Change due to Discount Rate change with Funding Risk Mitigation	0
f) Change due to all other Assumption Changes	0
g) Change due to Method Changes	0
h) Expected UAL After All Other Changes $[(1d) + (1e) + (1f) + (1g)]$	\$40,128,813,091
i) Actual UAL as of June 30, 2024	40,791,437,081
j) Total (Gain)/Loss for Fiscal Year 2023-24 $[(1i) - (1h)]$	\$662,623,990
2) Contribution (Gain)/Loss for the Year	
a) Expected Contributions with interest (Employer and Employee)	\$6,545,425,800
b) Actual Contributions with interest	7,117,924,678
c) Contribution (Gain)/Loss for Fiscal Year 2023-24 $[(2a) - (2b)]$	(\$572,498,878)
3) Investment (Gain)/Loss for the Year	
a) Market Value of Assets as of June 30, 2023	\$84,292,061,179
b) Prior Fiscal Year Receivables	(72,019,947)
c) Current Fiscal Year Receivables	64,103,739
d) Contributions Received	6,887,597,530
e) Benefits and Refunds Paid	(5,953,912,458)
f) Transfers, Service Credit Purchases, and Miscellaneous Adjustments	23,340,727
g) Expected Return $[0.068 \times (3a + 3b) + ((1.068)^{1/2} - 1) \times ((3d) + (3e) + (3f))]$	5,758,966,565
h) Expected Assets as of June 30, 2024 $[(3a) + (3b) + (3c) + (3d) + (3e) + (3f) + (3g)]$	91,000,137,336
i) Actual Market Value of Assets as of June 30, 2024	93,186,668,933
j) Investment (Gain)/Loss for Fiscal Year 2023-24 $[(3h) - (3i)]$	(\$2,186,531,597)
4) Liability (Gain)/Loss for the Year	
a) Total (Gain)/Loss (1j)	\$662,623,990
b) Contribution (Gain)/Loss (2c)	(572,498,878)
c) Investment (Gain)/Loss (3j)	(2,186,531,597)
d) Liability (Gain)/Loss for Fiscal Year 2023-24 $[(4a) - (4b) - (4c)]$	\$3,421,654,465

Liabilities and Contributions

Reconciliation of Required Employer Contributions

	Rate (Percentage of Payroll)	Estimated Dollars (millions)
Employer Normal Cost		
FY 2024-25 Employer Normal Cost Contribution	9.58%	\$1,825
Effect of Change in Payroll	0.00%	229
Effect of Changes in Demographics	(0.21%)	(45)
Effect of Risk Mitigation	0.00%	0
Effect of Change in Assumptions	0.00%	0
Effect of Change in Member Contribution Rates	<u>0.00%</u>	<u>0</u>
FY 2025-26 Employer Normal Cost Contribution	9.37%	\$2,010
Unfunded Liability Contribution		
FY 2024-25 Unfunded Liability Contribution	17.47%	\$3,328
Effect of Progression of Amortization Bases	0.66%	223
Effect of Amortizing Prior Year's Bases over a (Larger)/Smaller than Expected Payroll	(1.58%)	0
Effect of Investment (Gain)/Loss	(0.23%)	(50)
Effect of Non-Investment (Gain)/Loss	1.12%	241
Effect of Change in Assumptions	<u>0.00%</u>	<u>0</u>
FY 2025-26 Unfunded Liability Contribution	17.44%	\$3,742
Total Required Employer Contribution		
FY 2024-25 Total Required Employer Contribution	27.05%	\$5,153
Effect of Progression of Amortization Bases and Change in Payroll	(0.92%)	452
Effect of Risk Mitigation	0.00%	0
Effect of Change in Assumptions	0.00%	0
Effect of (Gain)/Loss	0.68%	146
Effect of Change in Member Contribution Rates	<u>0.00%</u>	<u>0</u>
FY 2025-26 Total Required Employer Contribution	26.81%	\$5,751

Note: numbers may not add due to rounding.

Liabilities and Contributions

Member Contribution Rates

Classic Members

In accordance with Government Code section 20677, the Classic member contribution rate is 7%.

PEPRA Members

In accordance with Government Code section 7522.30, new members hired on or after January 1, 2013 (“PEPRA members”) are required to contribute 50% of the total normal cost of their pension benefit.

The total normal cost of PEPRA members’ benefits is remeasured annually as part of the actuarial valuation based on the active PEPRA population in the plan. If the total normal cost changes by more than 1% from the basis established for the plan, the member rate is revised to equal 50% of the new total normal cost rounded to the nearest quarter percent. The PEPRA member contribution rate for fiscal year 2024-25 of 8.00% was based on a total normal cost of 15.91% of payroll established by the June 30, 2021 actuarial valuation. In this valuation, the total normal cost for PEPRA members is 16.26% of payroll. Since the total normal cost did not change by more than 1% from when the member contribution rate was last changed, the PEPRA member contribution rate will remain 8.00% effective July 1, 2025.

The table below displays the determination of the PEPRA member contribution rate effective July 1, 2025.

Benefit Group	Basis for Current Rate		Rate Effective July 1, 2025			
	Total Normal Cost	Member Rate	Total Normal Cost	Change in Total Normal Cost	Adjustment Needed	Member Rate
Schools 2% at age 62 - 3 Year FAC	15.91%	8.00%	16.26%	0.35%	No	8.00%

Liabilities and Contributions

Employer Contribution History

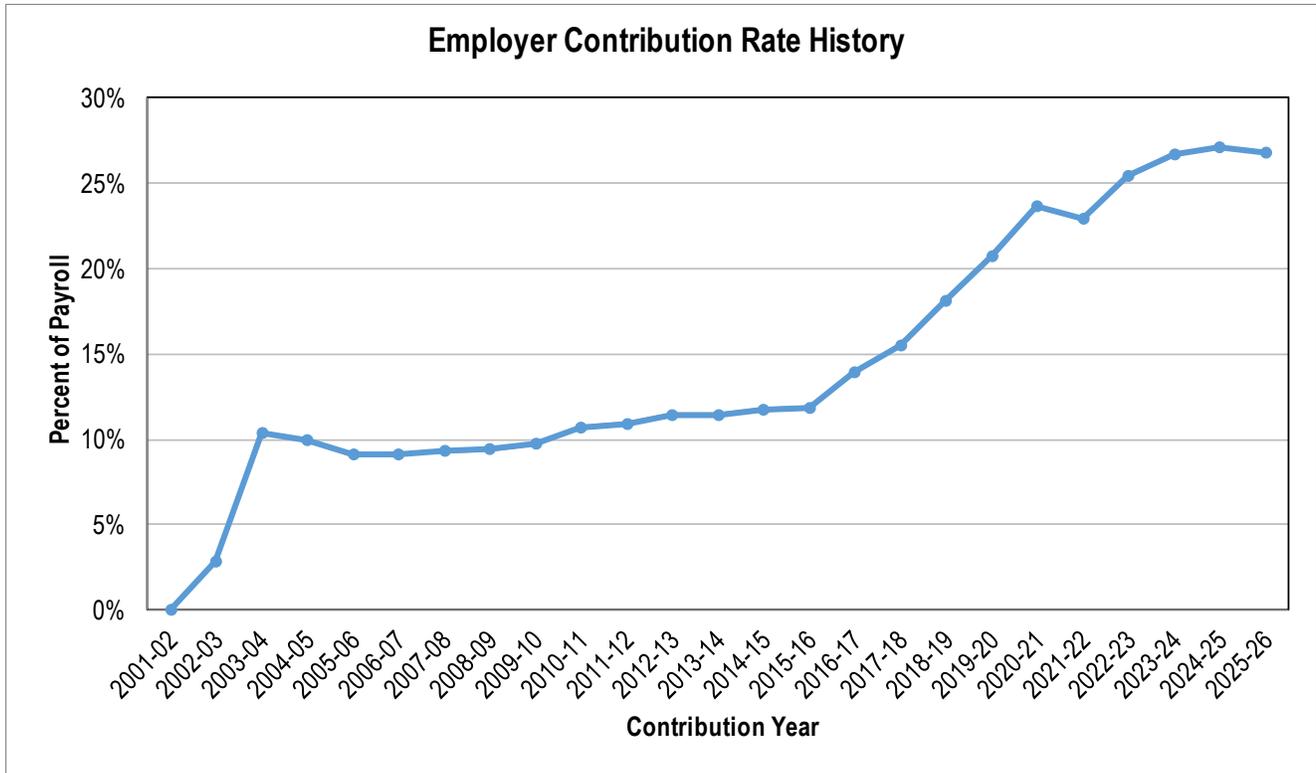
The table below displays a 25-year history of employer contribution rates for the Schools Pool as determined by the annual actuarial valuation. In cases where the contribution rate changed during a fiscal year, the entry shown is the weighted average of the rates effective during the fiscal year.

Contribution Fiscal Year	Valuation Date	Employer Normal Cost Rate	Unfunded Liability Contribution Rate	Total Employer Contribution Rate
2025 - 2026	6/30/2024	9.37%	17.44%	26.81%
2024 - 2025	6/30/2023	9.58%	17.47%	27.05%
2023 - 2024	6/30/2022	9.77%	16.91%	26.68%
2022 - 2023	6/30/2021	9.82%	15.55%	25.37%
2021 - 2022	6/30/2020	9.32%	13.59%	22.91%
2020 - 2021	6/30/2019	9.47%	14.13%	23.60%
2019 - 2020	6/30/2018	8.992%	11.741%	20.733%
2018 - 2019	6/30/2017	8.739%	9.323%	18.062%
2017 - 2018	6/30/2016	8.103%	7.428%	15.531%
2016 - 2017	6/30/2015	8.242%	5.646%	13.888%
2015 - 2016	6/30/2014	7.621%	4.226%	11.847%
2014 - 2015	6/30/2013	7.814%	3.957%	11.771%
2013 - 2014	6/30/2012	7.313%	4.129%	11.442%
2012 - 2013	6/30/2011	7.415%	4.002%	11.417%
2011 - 2012	6/30/2010	7.132%	3.791%	10.923%
2010 - 2011	6/30/2009	7.173%	3.534%	10.707%
2009 - 2010	6/30/2008	7.410%	2.299%	9.709%
2008 - 2009	6/30/2007	7.414%	2.014%	9.428%
2007 - 2008	6/30/2006	7.421%	1.885%	9.306%
2006 - 2007	6/30/2005	7.398%	1.726%	9.124%
2005 - 2006	6/30/2004	7.399%	1.717%	9.116%
2004 - 2005	6/30/2003	7.393%	2.559%	9.952%
2003 - 2004	6/30/2002	9.396%	1.024%	10.420%
2002 - 2003	6/30/2001	9.329%	(6.435%)	2.894%
2001 - 2002	6/30/2000	9.082%	(9.082%)	0.000%

Liabilities and Contributions

Employer Contribution History (continued)

The graph below displays a 25-year history of employer contribution rates for the Schools Pool as determined by the annual actuarial valuation. In cases where the contribution rate changed during a fiscal year, the entry shown is the weighted average of the rates effective during the fiscal year.



Liabilities and Contributions

History of Funding Progress

A 30-year history of funding status for the Schools Pool is displayed below. (Dollars in millions.)

Valuation Date	Actuarial Accrued Liability	Market Value of Assets	Unfunded Liability/(Surplus)	Funded Ratio	Projected Payroll for Contribution Year	Unfunded Liability/(Surplus) as a Percentage of Payroll
6/30/2024	\$133,978	\$93,187	\$40,791	69.6%	\$21,450	190.2%
6/30/2023	124,924	84,292	40,632	67.5%	19,055	213.2%
6/30/2022	116,982	79,386	37,596	67.9%	16,731	224.7%
6/30/2021	110,507	86,519	23,988	78.3%	15,181	158.0%
6/30/2020	104,062	71,400	32,662	68.6%	15,295	213.6%
6/30/2019	99,528	68,177	31,351	68.5%	14,844	211.2%
6/30/2018	92,071	64,846	27,225	70.4%	14,234	191.3%
6/30/2017	84,416	60,865	23,551	72.1%	13,683	172.1%
6/30/2016	77,544	55,785	21,759	71.9%	13,022	167.1%
6/30/2015	73,325	56,814	16,511	77.5%	12,098	136.5%
6/30/2014	65,600	56,838	8,761	86.6%	11,294	77.6%
6/30/2013	61,487	49,482	12,005	80.5%	10,424	115.2%
6/30/2012	59,439	44,854	14,585	75.5%	10,242	142.4%
6/30/2011	58,358	45,901	12,457	78.7%	10,540	118.2%
6/30/2010	55,307	38,435	16,872	69.5%	11,283	149.5%
6/30/2009	52,493	34,146	18,347	65.0%	11,110	165.1%
6/30/2008	48,538	45,548	2,990	93.8%	11,138	26.8%
6/30/2007	44,810	48,293	(3,483)	107.8%	10,250	(34.0%)
6/30/2006	41,409	40,852	556	98.7%	9,881	5.6%
6/30/2005	38,368	36,898	1,469	96.2%	9,223	15.9%
6/30/2004	35,933	32,828	3,104	91.4%	9,069	34.2%
6/30/2003	33,793	28,182	5,611	83.4%	9,079	61.8%
6/30/2002	31,271	27,690	3,581	88.5%	8,344	42.9%
6/30/2001	27,946	30,308	(2,361)	108.4%	7,912	(29.8%)
6/30/2000	25,474	33,295	(7,821)	130.7%	7,053	(110.9%)
6/30/1999	21,216	30,918	(9,702)	145.7%	5,961	(162.8%)
6/30/1998	19,499	27,874	(8,374)	142.9%	5,445	(153.8%)
6/30/1997	17,583	23,499	(5,916)	133.6%	4,907	(120.5%)
6/30/1996	17,572	19,706	(2,135)	112.1%	5,146	(41.5%)
6/30/1995	16,422	17,314	(892)	105.4%	5,351	(16.7%)

Risk Analysis

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Risk Analysis

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. Displayed below are various valuation results as of June 30, 2024 assuming alternative discount rates by changing the two components independently. Results are shown using the current discount rate of 6.8% as well as alternative 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 current assumption of 6.8%.

As of June 30, 2024	Sensitivity to the Discount Rate Due to Varying the Real Rate of Return Assumption		
	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	21.46%	16.95%	13.59%
b) Accrued Liability	\$152,250,054,087	\$133,978,106,014	\$118,906,781,784
c) Market Value of Assets	\$93,186,668,933	\$93,186,668,933	\$93,186,668,933
d) Unfunded Accrued Liability/(Surplus) [(b) – (c)]	\$59,063,385,154	\$40,791,437,081	\$25,720,112,851
e) Funded Ratio	61.2%	69.6%	78.4%

As of June 30, 2024	Sensitivity to the Discount Rate Due to Varying the Price Inflation Assumption		
	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	17.86%	16.95%	15.32%
b) Accrued Liability	\$138,382,965,926	\$133,978,106,014	\$123,249,909,438
c) Market Value of Assets	\$93,186,668,933	\$93,186,668,933	\$93,186,668,933
d) Unfunded Accrued Liability/(Surplus) [(b) – (c)]	\$45,196,296,993	\$40,791,437,081	\$30,063,240,505
e) Funded Ratio	67.3%	69.6%	75.6%

Risk Analysis

Mortality Rate Sensitivity

The table below displays the change in the June 30, 2024, plan costs and funded ratio under two different longevity scenarios, namely assuming rates of post-retirement 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.

As of June 30, 2024	Sensitivity to the Post-Retirement Mortality Assumption		
	10% Lower Mortality Rates	Current Assumptions	10% Higher Mortality Rates
a) Total Normal Cost	17.22%	16.95%	16.70%
b) Accrued Liability	\$136,976,251,278	\$133,978,106,014	\$131,231,235,099
c) Market Value of Assets	\$93,186,668,933	\$93,186,668,933	\$93,186,668,933
d) Unfunded Accrued Liability/(Surplus) [(b) – (c)]	\$43,789,582,345	\$40,791,437,081	\$38,044,566,166
e) Funded Ratio	68.0%	69.6%	71.0%

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 pension plan is impacted by investment return volatility, other economic variables and changes in longevity or other demographic assumptions.

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 increases. A mature plan will often have a ratio above 60%-65%.

Ratio of Retiree Accrued Liability to Total Accrued Liability

	June 30, 2023			June 30, 2024		
	Retiree Accrued Liability	Total Accrued Liability	Ratio	Retiree Accrued Liability	Total Accrued Liability	Ratio
Schools Pool	64,984,074,840	124,923,916,585	52%	68,451,983,020	133,978,106,014	51%

Another measure of maturity CalPERS and its plans is the ratio of the number of actives to number of retirees, also called the support ratio. A pension plan in its infancy will have a 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, 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 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, 2023, was 0.78.

Support Ratio

Plan	June 30, 2023			June 30, 2024		
	Number of Actives	Number of Retirees	Support Ratio	Number of Actives	Number of Retirees	Support Ratio
Schools Pool	356,050	266,322	1.34	375,020	272,432	1.38

Risk Analysis

Maturity Measures (continued)

Volatility Ratios

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 increases, 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

Displayed in the table below is the asset volatility ratio (AVR), which is the ratio of market value of assets to payroll. Plans that have a 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 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 displayed 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 when there is a change in accrued liability, such as when there is a change in actuarial assumptions. 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%.

Contribution Volatility as of the Valuation Date

Market Value of Assets without Receivables	Annual Covered Payroll	Asset Volatility Ratio	Accrued Liability	Liability Volatility Ratio
(1)	(2)	(1) ÷ (2)	(3)	(3) ÷ (2)
\$93,122,565,194	\$20,297,025,341	4.6	\$133,978,106,014	6.6

Maturity Measures History

Valuation Date	Ratio of Retiree Accrued Liability to Total Accrued Liability	Support Ratio	Asset Volatility Ratio	Liability Volatility Ratio
06/30/2020	52%	1.33	4.9	7.2
06/30/2021	52%	1.25	6.0	7.7
06/30/2022	53%	1.28	5.0	7.4
06/30/2023	52%	1.34	4.7	6.9
06/30/2024	51%	1.38	4.6	6.6

Risk Analysis

Funded Status – Low-Default-Risk Basis

Actuarial Standard of Practice (ASOP) No. 4, *Measuring Pension Obligations and Determining Pension Plan Costs or Contributions*, requires the disclosure of a low-default-risk obligation measure (LDRM) of benefit costs accrued as of the valuation date using a discount rate based on the yields of high-quality fixed income securities with cash flows that replicate expected benefit payments. Conceptually, this measure represents the level at which financial markets would value the accrued plan costs and would be approximately equal to the cost of a portfolio of low-default-risk bonds with similar financial characteristics to accrued plan costs.

As permitted in ASOP No. 4, the Actuarial Office uses the Entry Age Actuarial Cost Method to calculate the LDRM. This methodology is in line with the measure of “benefit entitlements” calculated by the Bureau of Economic Analysis and used by the Federal Reserve to report the indebtedness due to pensions of plan sponsors and, conversely, the household wealth due to pensions of plan members.

As shown below, the discount rate used for the LDRM is 5.35%, which is the Standard FTSE Pension Liability Index¹ discount rate as of June 30, 2024.

Selected Measures on a Low-Default-Risk Basis	June 30, 2024
Discount Rate	5.35%
1) Accrued Liability – Low-Default-Risk Basis (LDRM)	
a) Active Members	\$76,388,108,163
b) Transferred Members	1,745,741,980
c) Separated Members	5,607,317,803
d) Members and Beneficiaries Receiving Payments	77,992,059,507
e) Total	\$161,733,227,453
2) Market Value of Assets (MVA)	93,186,668,933
3) Unfunded Accrued Liability – Low-Default-Risk Basis [(1e) – (2)]	\$68,546,558,520
4) Unfunded Accrued Liability – Funding Policy Basis	40,791,437,081
5) Present Value of Unearned Investment Risk Premium [(3) – (4)]	\$27,755,121,439

The difference between the unfunded liabilities on a low-default-risk basis and on the funding policy basis represents the present value of the investment risk premium that must be earned in future years to keep future contributions for currently accrued plan costs at the levels anticipated by the funding policy.

Benefit security for members of the plan relies on a combination of the assets in the plan, the investment income generated from those assets, and the ability of the plan sponsor to make necessary future contributions. If future returns fall short of 6.8%, benefit security could be at risk without higher than currently anticipated future contributions.

The funded status on a low-default-risk basis is not appropriate for assessing the need for future contributions (see Funded Status – Funding Policy Basis).

1) This index is based on a yield curve of hypothetical AA-rated zero coupon corporate bonds whose maturities range from 6 months to 30 years. The index represents the single discount rate that would produce the same present value as discounting a standardized set of liability cash flows for a fully open pension plan using the yield curve. The liability cash flows are reasonably consistent with the pattern of benefits expected to be paid from the entire Public Employees’ Retirement Fund for current and former plan members. A different index, hence, a different discount rate, may be needed to measure the LDRM for a subset of the fund, such as a single rate plan or a group of retirees.

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Supplementary Information

Normal Cost by Benefit Group

The normal cost is determined using the Entry Age cost method. The Total Normal Cost is the annual cost of service accrual for the fiscal year for active employees and can be viewed as the long-term contribution rate for the benefits provided. Generally, the normal cost for a benefit group subject to more generous benefit provisions will exceed the normal cost for a group with less generous benefits. However, based on the characteristics of the members (particularly when the number of actives is small), this may not be the case. Future measurements of the Total Normal Cost for each group may differ significantly from the current values due to such factors as: changes in the demographics of the group, changes in economic and demographic assumptions, changes in plan benefits or applicable law.

Employer Normal Cost rates displayed below for individual benefit groups are illustrative only; employers pay the same normal cost rate for all active members (as shown in the Plan Total line). FAC means Final Average Compensation.

Benefit Group	Total Normal Cost	Employee Contribution ⁽¹⁾	Employer Normal Cost	Number of Actives	Payroll on June 30, 2024
Schools 2% at age 62 – 3 Year FAC	16.26%	8.00%	8.26%	251,114	\$11,784,648,094
Schools 2% at age 55 – 1 Year FAC	17.92%	7.00%	10.92%	123,906	\$8,512,377,247
Plan Total	16.95%	7.58%	9.37%	375,020	\$20,297,025,341

(1) Employee contribution rates are those in effect on the valuation date.

Supplementary Information

Summary of Valuation Data

	June 30, 2023	June 30, 2024
1. Active Members		
a) Counts ¹	356,050	375,020
b) Average Attained Age	45.5	45.1
c) Average Entry Age to Rate Plan	35.8	35.8
d) Average Years of Credited Service	8.2	7.9
e) Average Annual Covered Payroll	\$50,641	\$54,123
f) Annual Covered Payroll	\$18,030,766,290	\$20,297,025,341
g) Projected Annual Payroll for Contribution Year	\$19,054,625,323	\$21,449,571,628
h) Present Value of Future Payroll	\$158,434,654,636	\$179,597,037,917
2. Transferred Members		
a) Counts ¹	22,189	23,676
b) Average Attained Age	46.0	45.8
c) Average Years of Credited Service	3.1	3.1
d) Average Annual Covered Payroll	\$73,889	\$76,896
3. Separated Members		
a) Counts ^{1,2}	249,895	266,410
b) Average Attained Age	45.3	45.3
c) Average Years of Credited Service	2.3	2.3
d) Average Annual Covered Payroll	\$35,352	\$36,681
4. Retired Members and Beneficiaries Receiving Payments		
a) Counts ¹	266,322	272,432
b) Average Attained Age	73.2	73.5
c) Average Annual Benefits	\$21,211	\$21,987
d) Total Annual Benefits	\$5,648,880,045	\$5,990,065,872
5. Active to Retired Ratio [(1a) ÷ (4a)]	1.34	1.38

(1) Counts are of unique members included in the valuation. Multiple records may exist for members with service in more than one benefit group. This does not result in double counting liabilities.

(2) Includes non-vested separated participants with employee contributions remaining in the plan.

Supplementary Information

Status of PEPRA Transition

The California Public Employees' Pension Reform Act of 2013 (PEPRA), which took effect in January 2013, changed CalPERS retirement benefits and placed compensation limits on new members joining CalPERS on or after January 1, 2013. One of the objectives of PEPRA was to improve the ability of employers to manage the costs of retirement benefits for their members. While such changes can reduce future benefit costs in a meaningful way, the full impact on employer contributions will not occur until all active members are subject to the rules and provisions of PEPRA. The table below illustrates the status of this transition as of June 30, 2024.

	Classic	PEPRA	PEPRA Percentage
Active Members			
Count	123,906	251,114	67.0%
Average Attained Age	53.8	40.9	
Average Entry Age	34.0	36.6	
Average Years of Credited Service	16.9	3.5	
Average Annual Covered Payroll	\$68,700	\$46,929	
Annual Covered Payroll	\$8,512,377,247	\$11,784,648,094	58.1%
Present Value of Future Payroll	\$61,943,542,580	\$117,653,495,337	65.5%
Transferred Members			
Count	13,916	9,760	41.2%
Separated Members			
Count	135,059	131,351	49.3%
Retirees and Beneficiaries Receiving Payments			
Count	268,393	4,039	1.5%
Average Annual Benefits	\$22,210	\$7,182	
Total Annual Benefits	\$5,961,059,489	\$29,006,384	0.5%
Accrued Liability			
Active Members	\$48,672,314,892	\$10,888,327,478	18.3%
Transferred Members	1,116,089,388	184,896,486	14.2%
Separated Members	3,864,736,595	799,758,155	17.1%
Retired Members and Beneficiaries	<u>68,058,248,913</u>	<u>393,734,107</u>	<u>0.6%</u>
Total	\$121,711,389,788	\$12,266,716,226	9.2%

Appendix A – Actuarial Methods and Assumptions

Actuarial Data

As stated in the Actuarial Certification, the data that serves as the basis for this valuation has been obtained from various CalPERS databases. We have reviewed the valuation data and believe that it is reasonable and appropriate in aggregate. We are unaware of any potential data issues that would have a material effect on the results of this valuation, except that data does not always contain the latest salary information for members now in reciprocal systems and does not recognize the potential for unusually large salary deviation in certain cases such as elected officials. Therefore, salary information in these cases may not be accurate. These situations are relatively infrequent, however, and generally do not have a material impact on the required employer contribution rate.

Actuarial Methods

Actuarial Cost Method

The actuarial cost method used in this valuation is the Entry Age Actuarial Cost Method. This method is used to calculate the required employer contribution and the PEPRAs member contribution rate. Under this method, the cost of the projected benefits is allocated on an individual basis as a level percent of earnings for the individual between entry age and retirement age. The portion allocated to the year following the valuation date is the normal cost. This method yields a total normal cost rate, expressed as a percentage of payroll, which is designed to remain level throughout the member's career.

The actuarial accrued liability for active members is then calculated as the present value of benefits minus the present value of future normal cost, or the portion of the total present value of benefits allocated to prior years. The actuarial accrued liability for members currently receiving benefits and for members entitled to deferred benefits is equal to the present value of the benefits expected to be paid. No normal costs are applicable for these participants.

Amortization of Unfunded Actuarial Accrued Liability

The excess of the total actuarial accrued liability over the market value of the Pool's assets is called the unfunded actuarial accrued liability (UAL). Funding requirements are determined by adding the normal cost and a payment toward the UAL. The UAL payment is equal to the sum of individual amortization payments, each representing a different source of UAL for a given measurement period.

Amortization payments are determined according to the CalPERS [Actuarial Amortization Policy](#). The Board adopted a new policy effective for the June 30, 2019, actuarial valuation. The new policy applies prospectively only; amortization bases (sources of UAL) established prior to the June 30, 2019, valuation will continue to be amortized according to the prior policy.

Appendix A – Actuarial Methods and Assumptions

Actuarial Methods (continued)

Prior Policy (Bases Established on or after June 30, 2013, and prior to June 30, 2019)¹

Amortization payments are determined as a level percentage of payroll whereby the payment increases each year at an escalation rate. Gains or losses are amortized over a fixed 30-year period with a 5-year ramp up at the beginning and a 5-year ramp down at the end of the amortization period. All changes in liability due to plan amendments (other than golden handshakes) are amortized over a 20-year period with no ramp. Changes in actuarial assumptions or changes in actuarial methodology are amortized over a 20-year period with a 5-year ramp up at the beginning and a 5-year ramp down at the end of the amortization period. Changes in unfunded accrued liability due to a Golden Handshake are amortized over a period of five years (20 years prior to June 30, 2014). A summary is displayed in the table below:

	Source				
	(Gain)/Loss		Assumption/ Method Change	Benefit Change	Golden Handshake
	Investment	Non- Investment			
Amortization Period	30 Years	30 Years	20 Years	20 Years	5 Years
Escalation Rate					
- Active Plans	2.80%	2.80%	2.80%	2.80%	2.80%
- Inactive Plans	0%	0%	0%	0%	0%
Ramp Up	5	5	5	0	0
Ramp Down	5	5	5	0	0

The 5-year ramp up means that the payments in the first four years of the amortization period are 20%, 40%, 60%, and 80% of the “full” payment that begins in year five. The 5-year ramp down means that the reverse is true in the final four years of the amortization period.

Current Policy (Bases Established on or after June 30, 2019)¹

Amortization payments are determined as a level dollar amount. Investment gains or losses are amortized over a fixed 20-year period with a 5-year ramp up at the beginning of the amortization period. Non-investment gains or losses are amortized over a fixed 20-year period with no ramps. All changes in liability due to plan amendments (other than golden handshakes) are amortized over a 20-year period with no ramps. Changes in actuarial assumptions or changes in actuarial methodology are amortized over a 20-year period with no ramps. Changes in unfunded accrued liability due to a Golden Handshake are amortized over a period of five years. A summary is displayed in the table below:

	Source				
	(Gain)/Loss		Assumption/ Method Change	Benefit Change	Golden Handshake
	Investment	Non- Investment			
Amortization Period	20 Years	20 Years	20 Years	20 Years	5 Years
Escalation Rate	0%	0%	0%	0%	0%
Ramp Up	5	0	0	0	0
Ramp Down	0	0	0	0	0

The 5-year ramp up means that the payments in the first four years of the amortization period are 20%, 40%, 60% and 80% of the “full” payment which begins in year five.

¹ An exception for the Schools Pool is that the impact of the discount rate change from 7.25% to 7.00% in the June 30, 2019 valuation is amortized under the prior policy.

Appendix A – Actuarial Methods and Assumptions

Actuarial Methods (continued)

Exceptions for Inconsistencies

An exception to the amortization rules above is used whenever their application results in inconsistencies. In these cases, a “fresh start” approach is used. This means that the current unfunded actuarial liability is projected and amortized over a set number of years. For example, a fresh start is needed in the following situations:

- When a negative payment would be required on a positive unfunded actuarial liability; or
- When the payment would completely amortize the total unfunded liability in a very short time period, and results in a large change in the employer contribution requirement.

It should be noted that the actuary may determine that a fresh start is necessary under other circumstances. In all cases of a fresh start, the period is set by the actuary at what is deemed appropriate; however, the period will not be greater than 20 years.

Asset Valuation Method

The Actuarial Value of Assets is set equal to the Market Value of Assets. Asset values include accounts receivable.

PEPRA Normal Cost Rate Methodology

Per Government Code section 7522.30(b), the “normal cost rate” shall mean the annual actuarially determined normal cost for the plan of retirement benefits provided to the new member and shall be established based on actuarial assumptions used to determine the liabilities and costs as part of the annual actuarial valuation. The plan of retirement benefits shall include any elements that would impact the actuarial determination of the normal cost, including, but not limited to, the retirement formula, eligibility and vesting criteria, ancillary benefit provisions, and any automatic cost-of-living adjustments as determined by the public retirement system.

For purposes of setting PEPRA member contribution rates for the Schools Pool, the total PEPRA normal cost is determined based solely on PEPRA membership of the Pool.

Appendix A – Actuarial Methods and Assumptions

Actuarial Assumptions

In 2021, CalPERS completed its most recent asset liability management study incorporating actuarial assumptions and strategic asset allocation. In November 2021, the board adopted changes to the asset allocation that increased the expected volatility of returns. The adopted asset allocation was expected to have a long-term blended return that continued to support a discount rate assumption of 6.80%. The board also approved several changes to the demographic assumptions that more closely aligned with actual experience.

For more details and additional rationale for the selection of the actuarial assumptions, please refer to the [2021 CalPERS Experience Study and Review of Actuarial Assumptions](#) that can be found on the CalPERS website under: Forms and Publications. Click on “View All” and search for Experience Study.

All actuarial assumptions (except the discount rates and price inflation assumption used for the accrued liability on a termination basis and the interest rate used for the low-default-risk obligation measure) represent an estimate of future experience rather than observations of the estimates inherent in market data.

Economic Assumptions

Discount Rate

The prescribed discount rate assumption, adopted by the board on November 17, 2021, is 6.80% compounded annually (net of investment and administrative expenses) as of June 30, 2024. The discount rate is based on the long-term expected rate of return on assets using a building-block method in which expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. The current assumption, originally based on capital market assumptions developed by the Investment Office in 2021, has been reviewed for this valuation based on capital market assumptions developed by the Investment Office in 2023.

Appendix A – Actuarial Methods and Assumptions

Economic Assumptions (continued)

Salary Increases

Annual increases vary by entry age and duration of service. A sample of assumed increases due to seniority, merit and promotion are displayed in the table below. Assumed wage inflation is combined with these factors to develop the total expected salary increases.

Duration of Service	Entry Age		
	20	30	40
0	2.75%	2.75%	2.00%
3	4.22%	3.73%	2.98%
5	3.08%	2.39%	1.79%
10	2.36%	1.60%	1.21%
15	1.82%	1.35%	1.03%
20	1.45%	1.09%	0.85%
25	1.24%	1.02%	0.58%
30	0.75%	0.53%	0.19%

Payroll Growth

2.80% compounded annually. This is used as the escalation rate of the amortization payments on level percent of payroll amortization bases, that is, on any amortization bases established prior to 2019 for plans that currently have active members.

Wage Inflation

2.80% compounded annually. This is used in projecting individual salary increases.

Price Inflation

2.30% compounded annually.

Appendix A – Actuarial Methods and Assumptions

Demographic Assumptions

Pre-Retirement Mortality and Disability

The table below displays sample pre-retirement mortality base rates as of 2017 as well as disability rates. To reflect future mortality improvement, mortality base rates are projected generationally to future years using 80% of the Society of Actuaries' Scale MP-2020. Rates vary by age and gender.

Attained Age	Mortality		Disability	
	Male	Female	Male	Female
20	0.00039	0.00014	0.00004	0.00015
25	0.00033	0.00013	0.00004	0.00015
30	0.00044	0.00019	0.00018	0.00017
35	0.00058	0.00029	0.00047	0.00038
40	0.00075	0.00039	0.00098	0.00077
45	0.00093	0.00054	0.00191	0.00153
50	0.00134	0.00081	0.00273	0.00214
55	0.00198	0.00123	0.00235	0.00169
60	0.00287	0.00179	0.00198	0.00102
65	0.00403	0.00250	0.00193	0.00073
70	0.00594	0.00404	0.00193	0.00063
75	0.00933	0.00688	0.00193	0.00066
80	0.01515	0.01149	0.00193	0.00062

Appendix A – Actuarial Methods and Assumptions

Demographic Assumptions (continued)

Post-Retirement Mortality

The table below displays sample post-retirement mortality base rates as of 2017. To reflect future mortality improvement, base rates are projected generationally to future years using 80% of the Society of Actuaries' Scale MP-2020. Rates vary by age, type of retirement, and gender.

Age	Healthy Recipients		Non-Industrial Disabled (Not Job-Related)		Industrial Disabled (Job-Related)	
	Male	Female	Male	Female	Male	Female
50	0.00267	0.00199	0.01701	0.01439	0.00430	0.00311
55	0.00390	0.00325	0.02210	0.01734	0.00621	0.00550
60	0.00578	0.00455	0.02708	0.01962	0.00944	0.00868
65	0.00857	0.00612	0.03334	0.02276	0.01394	0.01190
70	0.01333	0.00996	0.04001	0.02910	0.02163	0.01858
75	0.02391	0.01783	0.05376	0.04160	0.03446	0.03134
80	0.04371	0.03403	0.07936	0.06111	0.05853	0.05183
85	0.08274	0.06166	0.11561	0.09385	0.10137	0.08045
90	0.14539	0.11086	0.16608	0.14396	0.16584	0.12434
95	0.24665	0.20364	0.24664	0.20364	0.24664	0.20364
100	0.36198	0.31582	0.36198	0.31582	0.36198	0.31582
110	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

Marital Status

For active members, 70% are assumed to be married upon retirement.

Age of Spouse

It is assumed that female spouses are 3 years younger than male spouses.

Separated Members

It is assumed that separated members refund immediately if non-vested. Separated members who are vested are assumed to retire at age 59.

Separated with Refund

Rates vary by entry age, service, and gender. Sample rates are displayed in the table below.

Duration of Service	Entry Age											
	20		25		30		35		40		45	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
0	0.2054	0.2120	0.1933	0.1952	0.1730	0.1672	0.1527	0.1392	0.1423	0.1212	0.1318	0.1032
1	0.1922	0.2069	0.1778	0.1883	0.1539	0.1573	0.1300	0.1264	0.1191	0.1087	0.1083	0.0910
2	0.1678	0.1859	0.1536	0.1681	0.1298	0.1383	0.1060	0.1086	0.0956	0.0934	0.0853	0.0782
3	0.1384	0.1575	0.1256	0.1417	0.1042	0.1155	0.0829	0.0893	0.0736	0.0774	0.0643	0.0656
4	0.1085	0.1274	0.0978	0.1143	0.0800	0.0925	0.0622	0.0707	0.0542	0.0620	0.0462	0.0533
5	0.0816	0.0991	0.0732	0.0887	0.0590	0.0713	0.0449	0.0539	0.0383	0.0476	0.0317	0.0413
10	0.0222	0.0248	0.0200	0.0221	0.0163	0.0174	0.0125	0.0128	0.0094	0.0100	0.0063	0.0072
15	0.0106	0.0132	0.0095	0.0113	0.0077	0.0083	0.0058	0.0052	0.0040	0.0039	0.0021	0.0026
20	0.0059	0.0065	0.0050	0.0054	0.0035	0.0036	0.0021	0.0019	0.0010	0.0009	0.0000	0.0000
25	0.0029	0.0034	0.0025	0.0029	0.0018	0.0020	0.0010	0.0012	0.0005	0.0006	0.0000	0.0000
30	0.0012	0.0015	0.0011	0.0013	0.0011	0.0011	0.0010	0.0009	0.0005	0.0005	0.0000	0.0000
35	0.0006	0.0007	0.0006	0.0007	0.0005	0.0006	0.0005	0.0005	0.0003	0.0002	0.0000	0.0000

Appendix A – Actuarial Methods and Assumptions

Demographic Assumptions (continued)

Separation with Vested Benefits

Rates vary by entry age, service, and gender. Sample rates are displayed in the table below.

Duration of Service	Entry Age									
	20		25		30		35		40	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
5	0.0359	0.0501	0.0359	0.0501	0.0332	0.0402	0.0305	0.0304	0.0266	0.0272
10	0.0311	0.0417	0.0311	0.0417	0.0269	0.0341	0.0228	0.0265	0.0193	0.0233
15	0.0193	0.0264	0.0193	0.0264	0.0172	0.0220	0.0151	0.0175	0.0122	0.0142
20	0.0145	0.0185	0.0145	0.0185	0.0113	0.0141	0.0080	0.0097	0.0000	0.0000
25	0.0089	0.0123	0.0089	0.0123	0.0074	0.0093	0.0000	0.0000	0.0000	0.0000
30	0.0057	0.0064	0.0057	0.0064	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
35	0.0040	0.0049	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

- When a member is eligible to retire, the separation with vested benefits probability is set to zero.
- After separation with vested benefits, a member is assumed to retire at age 59.

Appendix A – Actuarial Methods and Assumptions

Demographic Assumptions (continued)

Service Retirement

Retirement rates vary by age, service, and formula. Sample rates are displayed in the table below.

Age	Schools 2% at age 55						
	Duration of Service						
	5 years	10 years	15 years	20 years	25 years	30 years	35 years
50	0.003	0.004	0.006	0.007	0.010	0.010	0.011
51	0.004	0.005	0.007	0.008	0.011	0.011	0.012
52	0.005	0.007	0.008	0.009	0.012	0.012	0.013
53	0.007	0.008	0.010	0.012	0.015	0.015	0.016
54	0.006	0.009	0.012	0.015	0.020	0.021	0.023
55	0.011	0.023	0.034	0.057	0.070	0.090	0.117
56	0.012	0.027	0.036	0.056	0.073	0.095	0.108
57	0.016	0.027	0.036	0.055	0.068	0.087	0.101
58	0.019	0.030	0.040	0.062	0.078	0.103	0.122
59	0.023	0.034	0.046	0.070	0.085	0.109	0.128
60	0.022	0.043	0.062	0.095	0.113	0.141	0.166
61	0.030	0.051	0.071	0.103	0.124	0.154	0.171
62	0.065	0.098	0.128	0.188	0.216	0.248	0.256
63	0.075	0.112	0.144	0.197	0.222	0.268	0.295
64	0.091	0.116	0.138	0.180	0.196	0.231	0.249
65	0.163	0.164	0.197	0.232	0.250	0.271	0.289
66	0.208	0.204	0.243	0.282	0.301	0.315	0.329
67	0.189	0.185	0.221	0.257	0.274	0.287	0.300
68	0.127	0.158	0.200	0.227	0.241	0.244	0.249
69	0.168	0.162	0.189	0.217	0.229	0.238	0.248
70	0.191	0.190	0.237	0.250	0.246	0.254	0.258

Age	Schools 2% at age 62						
	Duration of Service						
	5 years	10 years	15 years	20 years	25 years	30 years	35 years
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000
51	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52	0.004	0.007	0.010	0.011	0.013	0.015	0.017
53	0.004	0.008	0.010	0.013	0.014	0.016	0.018
54	0.005	0.011	0.015	0.018	0.020	0.022	0.026
55	0.014	0.027	0.038	0.045	0.050	0.056	0.066
56	0.013	0.026	0.037	0.043	0.048	0.055	0.064
57	0.013	0.027	0.038	0.045	0.050	0.055	0.065
58	0.017	0.034	0.047	0.056	0.062	0.069	0.081
59	0.019	0.037	0.052	0.062	0.068	0.076	0.089
60	0.026	0.053	0.074	0.087	0.097	0.108	0.126
61	0.030	0.058	0.081	0.095	0.106	0.119	0.139
62	0.053	0.105	0.147	0.174	0.194	0.217	0.254
63	0.054	0.107	0.151	0.178	0.198	0.222	0.261
64	0.053	0.105	0.147	0.174	0.194	0.216	0.254
65	0.072	0.142	0.199	0.235	0.262	0.293	0.345
66	0.077	0.152	0.213	0.252	0.281	0.314	0.370
67	0.070	0.139	0.194	0.229	0.255	0.286	0.335
68	0.063	0.124	0.173	0.205	0.228	0.255	0.300
69	0.066	0.130	0.183	0.216	0.241	0.270	0.317
70	0.071	0.140	0.196	0.231	0.258	0.289	0.338

Appendix A – Actuarial Methods and Assumptions

Miscellaneous Loading Factors

Credit for Unused Sick Leave

Total years of service is increased by 1% for employees with the Credit for Unused Sick Leave provision.

Norris Decision (Best Factors)

Employees hired prior to July 1, 1982 have projected benefit amounts increased in order to reflect the use of “Best Factors” in the calculation of optional benefit forms. This is due to a 1983 Supreme Court decision, known as the Norris Decision, which required males and females to be treated equally in the determination of benefit amounts. Consequently, anyone already employed at that time is given the best possible conversion factor when optional benefits are determined. No loading is necessary for employees hired after July 1, 1982.

Miscellaneous

Models

The valuation results are based on proprietary actuarial valuation models. The models are centralized and maintained by a specialized team to achieve a high degree of accuracy and consistency. The Actuarial Office is responsible for confirming the appropriateness of the inputs (such as participant data, actuarial methods and assumptions, and plan provisions) as well as performing tests and validating the reasonableness of the output. The results of our models are independently confirmed by parallel valuations performed by outside actuaries on a periodic basis using their models. In our professional judgment, our actuarial valuation models produce comprehensive pension funding information consistent with the purposes of the valuation and have no material limitations or known weaknesses.

Internal Revenue Code Section 415(b)

The limitations on benefits imposed by Internal Revenue Code section 415(b) are taken into account in this valuation. Each year the impact of any changes in this limitation other than assumed since the prior valuation is included and amortized as part of the non-investment gain or loss base. This results in lower contributions for those employers contributing to the Replacement Benefit Fund and protects CalPERS from prefunding expected benefits in excess of limits imposed by federal tax law. The Section 415(b) dollar limit for the 2024 calendar year is \$275,000.

Internal Revenue Code Section 401(a)(17)

The limitations on compensation imposed by Internal Revenue Code section 401(a)(17) are taken into account in this valuation. Each year, the impact of any changes in the compensation limitation other than assumed since the prior valuation is included and amortized as part of the non-investment gain or loss base. The compensation limit for classic members for the 2024 calendar year is \$345,000.

PEPRA Compensation Limits

The limitations on compensation for PEPRA members imposed by Government Code section 7522.10 are taken into account in this valuation. Each year, the impact of any changes in the compensation limitation other than assumed since the prior valuation is included and amortized as part of the non-investment gain or loss base. The PEPRA compensation limit for 2024 is \$151,446 for members who participate in Social Security and \$181,734 for those who do not. The limits are adjusted annually based on changes to the CPI for all urban consumers.

Appendix B – Principal Plan Provisions

The following is a description of the principal plan provisions used in calculating costs and liabilities. Many of the statements are general in nature and intended to provide an easily understood summary of the Public Employees' Retirement Law and the California Public Employees' Pension Reform Act of 2013. The law itself governs in all situations.

Service Retirement

Eligibility

Classic school members become eligible for Service Retirement upon attainment of age 50 with at least 5 years of credited service (total service across all CalPERS employers, and with certain other Retirement Systems with which CalPERS has reciprocity agreements). PEPRA school members become eligible for Service Retirement upon attainment of age 52 with at least 5 years of service.

Benefit

The Service Retirement benefit is a monthly allowance equal to the product of the *benefit factor*, *years of service*, and *final compensation*.

- The *benefit factor* comes from the **2% at age 55** benefit factor table for classic members, and from the **2% at age 62** benefit factor table for PEPRA members. Factors vary by the member's age at retirement. Displayed in the table below are the factors for retirement at whole year ages:

Retirement Age	2% at 55 Factor	2% at 62 Factor
50	1.100%	N/A
51	1.280%	N/A
52	1.460%	1.000%
53	1.640%	1.100%
54	1.820%	1.200%
55	2.000%	1.300%
56	2.064%	1.400%
57	2.126%	1.500%
58	2.188%	1.600%
59	2.250%	1.700%
60	2.314%	1.800%
61	2.376%	1.900%
62	2.438%	2.000%
63	2.500%	2.100%
64	2.500%	2.200%
65	2.500%	2.300%
66	2.500%	2.400%
67 & Up	2.500%	2.500%

- The *years of service* is the amount credited by CalPERS to a member while he or she is employed in this group (or for other periods that are recognized under the employer's contract with CalPERS). For a member who has earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each employer's contract, then added together for the total allowance. An agency may contract for an optional benefit where any unused sick leave accumulated at the time of retirement will be converted to credited service at a rate of 0.004 years of service for each day of sick leave.

Appendix B – Principal Plan Provisions

Service Retirement (continued)

- The *final compensation* for classic members is the monthly average of the member's highest 12 consecutive months' full-time equivalent monthly pay (no matter which CalPERS employer paid this compensation). For PEPRA members, final compensation is based on the monthly average of the member's highest 36 consecutive months' full-time equivalent monthly pay. PEPRA members have a limit on the annual compensation that can be used to calculate final compensation. The limits are adjusted annually based on changes to the CPI for all urban consumers.
- Employees in the Schools Pool may or may not be covered by Social Security. For employees with service prior to January 1, 2001, and covered by Social Security, monthly final compensation is offset by \$133.33 (or by one-third if final compensation is less than \$400). For PEPRA members, the final compensation is not offset.
- The Service Retirement benefit is not capped.

Vested Deferred Retirement

Eligibility for Deferred Status

CalPERS members become eligible for a deferred vested retirement benefit when they leave employment, keep their contribution account balance on deposit with CalPERS, **and** have earned at least 5 years of credited service (total service across all CalPERS employers, and with certain other retirement systems with which CalPERS has reciprocity agreements).

Eligibility to Start Receiving Benefits

Classic members become eligible to receive the deferred retirement benefit upon satisfying the eligibility requirements for deferred status and upon attainment of age 50. PEPRA members become eligible to receive the deferred retirement benefit upon satisfying the eligibility requirements for deferred status and upon attainment of age 52.

Benefit

The vested deferred retirement benefit is the same as the service retirement benefit, where the benefit factor is based on the member's age at allowance commencement. For members who have earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each employer's contract, and then added together for the total allowance.

Non-Industrial (Non-Job-Related) Disability Retirement

Eligibility

A CalPERS member is eligible for Non-Industrial Disability Retirement if he or she becomes *disabled* and has at least 5 years of credited service (total service across all CalPERS employers, and with certain other retirement systems with which CalPERS has reciprocity agreements). There is no special age requirement. *Disabled* means the member is unable to perform their job because of an illness or injury which is expected to be permanent or to last indefinitely. The illness or injury does not have to be job related. A CalPERS member must be actively employed by any CalPERS employer at the time of disability in order to be eligible for this benefit.

Benefit

The Non-Industrial Disability Retirement benefit is a monthly allowance equal to 1.8% of final compensation multiplied by *service*, which is determined as follows:

- *Service* is CalPERS credited service for members with less than 10 years of service or greater than 18.518 years of service; or
- *Service* is CalPERS credited service plus the additional number of years that the member would have worked until age 60 for members with at least 10 years but not more than 18.518 years of service. The maximum benefit in this case is 33 1/3% of final compensation.

Appendix B – Principal Plan Provisions

Non-Industrial (Non-Job-Related) Disability Retirement (continued)

Members who are eligible for a larger service retirement benefit may choose to receive that benefit in lieu of a disability benefit. Members who are eligible to retire and who have attained the normal retirement age determined by their service retirement benefit formula will receive the same dollar amount for disability retirement as that payable for service retirement. For members who have earned service with multiple CalPERS employers, the benefit attributed to each employer is the total disability allowance multiplied by the ratio of service with a particular employer to the total CalPERS service.

Post-Retirement Death Benefit

Standard Lump Sum Payment

Upon the death of a retiree, a one-time lump sum payment of \$2,000 will be made to the retiree's designated survivor(s), or to the retiree's estate.

Form of Payment for Retirement Allowance

Generally, the retirement allowance is paid to the retiree in the form of an annuity for as long as they are alive. The retiree may choose to provide for a portion of their allowance to be paid to any designated beneficiary after the retiree's death. CalPERS provides for a variety of such benefit options, which the retiree pays for by taking a reduction in their retirement allowance. Such reduction takes into account the amount to be provided to the beneficiary and the probable duration of payments (based on the ages of the member and beneficiary) made subsequent to the member's death.

Improved Form of Payment (Post-Retirement Survivor Allowance)

For retirement allowances with respect to service subject to a modified Classic formula, 25% of the retirement allowance will automatically be continued to certain statutory beneficiaries upon the death of the retiree, without a reduction in the retiree's allowance. For retirement allowances with respect to service subject to a PEPRA formula or a full or supplemental Classic formula, 50% of the retirement allowance will automatically be continued to certain statutory beneficiaries upon the death of the retiree, without a reduction in the retiree's allowance. This additional benefit is referred to as post-retirement survivor allowance (PRSA) or simply as survivor continuance.

In other words, 25% or 50% of the allowance, the continuance portion, is paid to the retiree for as long as he or she is alive, and that same amount is continued to the retiree's spouse (or if no eligible spouse, to unmarried child(ren) until they attain age 18; or, if no eligible child(ren), to a qualifying dependent parent) for the rest of their lifetime. This benefit will not be discontinued in the event the spouse remarries.

The remaining 75% or 50% of the retirement allowance, which may be referred to as the option portion of the benefit, is paid to the retiree as an annuity for as long as he or she is alive. The retiree may choose to provide for some of this option portion to be paid to any designated beneficiary after the retiree's death. Benefit options applicable to the option portion are the same as those offered with the standard form. The reduction is calculated in the same manner but is applied only to the option portion.

Appendix B – Principal Plan Provisions

Pre-Retirement Death Benefits

Basic Death Benefit

Eligibility

An employee's beneficiary (or estate) may receive the basic death benefit if the member dies while actively employed. A CalPERS member must be actively employed with the CalPERS employer providing this benefit to be eligible for this benefit. A member's survivor who is eligible for any other pre-retirement death benefit may choose to receive that death benefit instead of this basic death benefit.

Benefit

The basic death benefit is a lump sum in the amount of the member's accumulated contributions, where interest is credited annually at the greater of 6% or the prevailing discount rate through the date of death, plus a lump sum in the amount of one month's salary for each completed year of current service, up to a maximum of six months' salary. For purposes of this benefit, one month's salary is defined as the member's average monthly full-time rate of compensation during the 12 months preceding death.

1957 Survivor Benefit

Eligibility

An employee's *eligible survivor(s)* may receive the 1957 Survivor benefit if the member dies while actively employed, has attained at least age 50 for classic members and age 52 for PEPRA members, and has at least five years of credited service (total service across all CalPERS employers and with certain other Retirement Systems with which CalPERS has reciprocity agreements). A CalPERS member who is no longer actively employed with any CalPERS employer is not eligible for this benefit. An eligible survivor means the surviving spouse to whom the member was married at least one year before death or, if there is no eligible spouse, to the member's unmarried child(ren) under age 18. A member's survivor who is eligible for any other pre-retirement death benefit may choose to receive that benefit instead of the 1957 Survivor benefit.

Benefit

The 1957 Survivor benefit is a monthly allowance equal to one-half of the unmodified service retirement benefit that the member would have been entitled to receive if the member had retired on the date of their death. If the benefit is payable to the spouse, the benefit is discontinued upon the death of the spouse. If the benefit is payable to dependent child(ren), the benefit will be discontinued upon death or attainment of age 18, unless the child(ren) is disabled. The total amount paid will be at least equal to the basic death benefit.

Cost-of-Living Adjustments (COLA)

Retirement and survivor allowances are adjusted each year in May for cost of living, beginning the second calendar year after the year of retirement. The cost-of-living adjustment (COLA) is 2%. Annual adjustments are calculated by first determining the lesser of 1) 2% compounded from the end of the year of retirement or 2) actual rate of price inflation. The resulting increase is divided by the total increase provided in prior years. For any given year, the COLA adjustment may be less than 2% (when the rate of price inflation is low), may be greater than the rate of price inflation (when the rate of price inflation is low after several years of high price inflation), or may even be greater than 2% (when price inflation is high after several years of low price inflation).

Purchasing Power Protection Allowance (PPPA)

Retirement and survivor allowances are protected against price inflation by PPPA. PPPA benefits are cost-of-living adjustments that are intended to maintain an individual's allowance at 75% of the initial allowance at retirement adjusted for price inflation since retirement. The PPPA benefit will be coordinated with other cost-of-living adjustments provided under the plan. The total annual outlay for PPPA is limited to 1.1% of accumulated member contributions. If this amount of member contributions were insufficient to provide for PPPA payments, the 75% target would be proportionately reduced.

Appendix B – Principal Plan Provisions

Pre-Retirement Death Benefits (continued)

Employee Contributions

Each employee contributes toward their retirement as follows:

- The percentage contributed below the monthly compensation breakpoint is 0%.
- The percentage contributed above the monthly compensation breakpoint is 7% for classic members.
- The PEPRA member contribution rate is tied to normal cost and can change annually. See the Member Contribution Rates section for details.
- The monthly compensation breakpoint is \$0.

Refund of Employee Contributions

If the member's service with the employer ends and the member does not satisfy the eligibility conditions for any of the retirement benefits above, the member may elect to receive a refund of their employee contributions, which are credited with 6% interest compounded annually.

1959 Survivor Benefits Program

This is a pre-retirement death benefit available only to members not covered by Social Security. This benefit is not included in the results presented in this valuation. More information on this benefit is available on the CalPERS website.

Appendix C – Participant Data

Source of the Participant Data

The data was extracted from various databases within CalPERS and placed in a data warehouse. This data includes:

- Individual member and beneficiary information
- Employment and payroll information
- Accumulated contributions with interest
- Service information
- Benefit payment information
- Information about the various organizations which contract with CalPERS
- Detailed information about the plan provisions applicable to each group of members

Data Validation Test and Adjustments

Once the information is extracted from the various databases into the data warehouse, data exception queries are run against this data to identify anomalous results which can then be researched and either explained or corrected. This part of the process is intended to validate the participant data for all CalPERS plans. It is not specific to the Schools Pool.

Checks on the data included:

- A reconciliation of the membership of the plan
- Comparisons of various member statistics (average attained age, average entry age, average salary, etc.) for the plan with those from the prior valuation
- Comparison of current pension amounts for each retiree and beneficiary receiving payments in the plan with amounts from the prior valuation
- Checks for invalid ages and dates
- Reasonableness checks on various key data elements such as service and salary

As a result of these tests, a number of adjustments were made to the data. These included, but are not limited to, the following:

- Dates of hire and dates of plan entry were adjusted where necessary to be consistent with the service fields, the date of birth, and each other
- The annual earnings rate for most school members was overwritten with the annualized earnings based on their yearly contributions

Data Statement

The data does not contain information about reciprocal systems and hence salary information for terminated participants covered by reciprocal systems does not reflect actual reciprocal salaries. This is not expected to have a material impact on the employer contribution rate since terminated participants represent less than 4% of the total present value of benefits for all members. We are unaware of any other data issues that would have a material effect on the results of this valuation.

It is our opinion that, after the adjustments noted above, the participant data was sufficient and reliable for the purposes of the valuation.

Appendix C – Participant Data

Reconciliation of Participants

	Active	Transfer	Separated	Receiving	Total
As of June 30, 2023	356,050	22,189	249,895	266,322	894,456
First Year in Status	48,647	198	5,520	0	54,365
Rehire	6,513	(273)	(6,167)	(73)	0
Transfer	(1,680)	3,395	(1,698)	(17)	0
Terminations ¹	(23,880)	(972)	24,860	(8)	0
Retired	(8,882)	(787)	(1,848)	11,493	(24)
Ordinary Disabilities	(89)	(17)	(41)	165	18
Industrial Disabilities	(1)	(36)	(7)	50	6
Death with Beneficiary	(70)	(3)	(9)	142	60
Refunds of Contributions	(1,374)	(76)	(3,931)	0	(5,381)
Death without Beneficiary	(399)	(17)	(264)	(5,946)	(6,626)
Data Corrections ²	185	75	100	304	664
As of June 30, 2024	375,020	23,676	266,410	272,432	937,538

(1) Includes non-vested separated participants with employee contributions left in the plan.

(2) May include the combining of data records into a single record.

Appendix C – Participant Data

Active Members

Distribution by Age and Service

Attained Age	Years of Service at Valuation Date						Total	Payroll
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25+		
15 – 24	19,695	36	0	0	0	0	19,731	\$679,968,071
25 – 29	29,923	2,903	31	0	0	0	32,857	\$1,400,344,970
30 – 34	28,784	11,398	1,242	28	0	0	41,452	\$2,057,544,449
35 – 39	24,757	12,950	4,883	1,512	33	0	44,135	\$2,376,994,351
40 – 44	23,275	11,873	5,980	4,988	1,603	53	47,772	\$2,724,239,624
45 – 49	19,423	10,562	5,742	5,608	4,065	1,386	46,786	\$2,749,877,795
50 – 54	15,699	10,381	6,521	6,085	4,779	3,714	47,179	\$2,812,108,533
55 – 59	11,450	8,999	6,748	6,463	4,958	5,130	43,748	\$2,597,436,735
60 – 64	7,031	6,725	5,494	5,613	4,203	4,449	33,515	\$1,958,382,760
65 and Over	4,342	3,442	2,809	2,804	2,139	2,309	17,845	\$940,128,048
Total	184,379	79,269	39,450	33,101	21,780	17,041	375,020	\$20,297,025,340

Counts are of unique members included in the valuation. Multiple records may exist for members with service in more than one benefit group. This does not result in double counting liabilities.

Average Annual Salaries by Age and Service

Attained Age	Years of Service at Valuation Date						Average Salary
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25+	
15 – 24	\$34,422	\$56,109	\$0	\$0	\$0	\$0	\$34,462
25 – 29	41,217	56,835	65,159	0	0	0	42,619
30 – 34	44,252	60,708	72,089	81,978	0	0	49,637
35 – 39	43,625	63,083	72,510	81,197	97,394	0	53,857
40 – 44	42,275	63,505	71,408	81,790	90,741	110,331	57,026
45 – 49	41,238	60,154	67,105	78,093	88,770	93,412	58,776
50 – 54	40,954	56,107	62,700	73,144	82,429	91,237	59,605
55 – 59	40,227	52,562	58,205	67,191	77,228	88,481	59,373
60 – 64	38,332	51,271	54,512	63,314	73,725	85,262	58,433
65 and Over	32,615	46,469	50,643	60,004	69,777	77,439	52,683
All Ages	\$41,028	\$58,351	\$63,405	\$71,718	\$80,141	\$87,214	\$54,123

Appendix C – Participant Data

Transferred and Separated Participants

Distribution by Age and Service – Transfers to Other CalPERS Plans

Attained Age	Years of Service at Valuation Date						Total	Average Salary
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25+		
15 – 24	245	0	0	0	0	0	245	\$49,293
25 – 29	1,318	26	0	0	0	0	1,344	58,759
30 – 34	2,546	306	9	0	0	0	2,861	67,495
35 – 39	2,840	470	75	9	0	0	3,394	71,447
40 – 44	2,935	529	147	66	10	0	3,687	79,384
45 – 49	2,810	547	193	91	33	1	3,675	86,049
50 – 54	2,308	553	216	96	35	8	3,216	86,923
55 – 59	1,762	450	194	91	36	13	2,546	80,799
60 – 64	1,271	344	135	59	21	4	1,834	75,450
65 and Over	669	137	49	14	3	2	874	70,258
Total	18,704	3,362	1,018	426	138	28	23,676	\$76,896

Counts are of unique members included in the valuation. Multiple records may exist for members with service in more than one benefit group. This does not result in double counting liabilities.

Distribution by Age and Service – Separated Participants with Funds on Deposit

Attained Age	Years of Service at Valuation Date						Total	Average Salary
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25+		
15 – 24	8,063	1	0	0	0	0	8,064	\$37,845
25 – 29	23,691	309	1	0	0	0	24,001	37,431
30 – 34	33,379	1,906	47	0	0	0	35,332	37,575
35 – 39	32,259	3,330	493	66	0	0	36,148	37,900
40 – 44	31,098	3,921	1,012	281	30	0	36,341	37,791
45 – 49	26,244	3,539	1,253	472	145	14	31,667	37,749
50 – 54	22,672	3,554	1,292	561	205	76	28,359	37,199
55 – 59	19,306	3,170	1,049	421	149	81	24,174	35,626
60 – 64	17,260	2,559	828	291	111	76	21,118	33,927
65 and Over	18,681	1,676	490	187	90	85	21,206	31,583
Total	232,653	23,965	6,465	2,279	730	332	266,410	\$36,681

Counts are of unique members included in the valuation. Multiple records may exist for members with service in more than one benefit group. This does not result in double counting liabilities.

Appendix C – Participant Data

Retired Members and Beneficiaries

Distribution of Retirees and Beneficiaries by Age and Retirement Type

Attained Age	Service Retirement	Non-Industrial Disability	Industrial Disability	Non-Industrial Death	Industrial Death	Death After Retirement	Total
Under 30	0	0	1	7	6	182	196
30 – 34	0	1	3	1	0	196	201
35 – 39	0	7	16	1	1	271	296
40 – 44	0	73	41	7	1	361	483
45 – 49	0	158	79	9	1	404	651
50 – 54	1,269	420	112	40	0	537	2,378
55 – 59	8,889	848	151	96	0	840	10,824
60 – 64	27,228	1,366	164	180	5	1,602	30,545
65 – 69	50,457	1,746	181	247	3	2,606	55,240
70 – 74	53,657	1,807	178	211	0	3,933	59,786
75 – 79	42,448	1,451	123	149	3	4,900	49,074
80 – 84	25,235	1,083	67	85	1	4,628	31,099
85 and Over	23,567	827	19	65	5	7,176	31,659
Total	232,750	9,787	1,135	1,098	26	27,636	272,432

Counts are of unique members included in the valuation. Multiple records may exist for members with service in more than one benefit group. This does not result in double counting liabilities.

Distribution of Average Annual Allowance Amounts by Age and Retirement Type

Attained Age	Service Retirement	Non-Industrial Disability	Industrial Disability	Non-Industrial Death	Industrial Death	Death After Retirement	Total
Under 30	\$0	\$0	\$106	\$10,497	\$183	\$6,281	\$6,213
30 – 34	0	7,877	296	7,344	0	7,030	6,935
35 – 39	0	7,183	518	10,145	1,524	7,255	6,880
40 – 44	0	13,054	504	10,041	4	9,209	9,044
45 – 49	0	12,875	1,053	21,632	2,694	10,073	9,807
50 – 54	10,767	14,735	1,396	11,894	0	11,065	11,113
55 – 59	22,607	14,403	3,696	12,872	0	12,107	20,799
60 – 64	26,538	13,807	2,999	12,125	5,681	13,793	25,086
65 – 69	25,843	14,524	2,399	12,569	1,604	15,242	24,848
70 – 74	24,206	14,034	2,990	10,055	0	15,333	23,202
75 – 79	22,957	13,544	3,595	10,166	1,833	15,379	21,833
80 – 84	21,332	12,900	4,598	8,005	164	14,523	19,952
85 and Over	17,187	11,235	2,733	8,569	1,051	12,571	15,956
All Ages	\$23,449	\$13,685	\$2,721	\$11,137	\$1,902	\$13,855	\$21,987

Appendix C – Participant Data

Retired Members and Beneficiaries (continued)

Distribution by Years Retired and Retirement Type

Years Retired	Service Retirement	Non-Industrial Disability	Industrial Disability	Non-Industrial Death	Industrial Death	Death After Retirement	Total
Under 5 Years	60,033	672	223	295	9	10,057	71,289
5 – 9	55,642	1,069	211	263	1	6,656	63,842
10 – 14	44,190	1,578	175	188	2	4,544	50,677
15 – 19	31,451	1,430	151	189	1	2,868	36,090
20 – 24	22,366	1,921	157	101	1	1,795	26,341
25 – 29	10,961	1,700	89	32	2	934	13,718
30 and Over	8,107	1,417	129	30	10	782	10,475
Total	232,750	9,787	1,135	1,098	26	27,636	272,432

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for members with service in more than one benefit group. This does not result in double counting liabilities.

Average Annual Allowance Amounts by Years Retired and Retirement Type

Years Retired	Service Retirement	Non-Industrial Disability	Industrial Disability	Non-Industrial Death	Industrial Death	Death After Retirement	Total
Under 5 Years	\$26,668	\$15,538	\$3,119	\$13,442	\$3,280	\$15,275	\$24,824
5 – 9	25,315	14,462	2,805	11,358	2,694	14,420	23,865
10 – 14	23,385	14,775	3,838	10,897	497	13,257	22,094
15 – 19	22,124	14,657	3,052	10,152	635	12,729	20,939
20 – 24	21,123	14,540	3,069	8,086	349	11,220	19,810
25 – 29	14,233	12,238	984	7,280	3,474	10,117	13,602
30 and Over	11,183	10,606	765	8,627	831	8,897	10,789
All Ages	\$23,449	\$13,685	\$2,721	\$11,137	\$1,902	\$13,855	\$21,987

Appendix C – Participant Data

Retired Members and Beneficiaries (continued)

Number Counts and Benefits – by Year of Retirement

Year Retired	Total Retirements	Total Benefits	Average Benefits
2024*	6,395	\$160,792,373	\$25,143
2023	12,984	325,804,831	25,093
2022	14,715	355,498,481	24,159
2021	16,021	394,928,757	24,651
2020	14,376	353,414,921	24,584
2019	13,897	340,081,651	24,472
2018	13,406	324,503,432	24,206
2017	13,773	346,306,101	25,144
2016	11,813	276,975,033	23,447
2015	11,695	266,011,034	22,746
2014	10,727	237,300,149	22,122
2013	10,231	216,259,436	21,138
2012	10,117	218,907,077	21,638
2011	9,738	213,335,436	21,908
2010	10,169	232,205,134	22,835
2009	9,160	212,716,384	23,222
2008	7,409	168,668,377	22,765
2007	7,080	153,292,684	21,652
2006	7,124	144,193,671	20,241
2005	6,994	138,569,962	19,813
2004	6,999	140,213,536	20,033
2003	7,005	149,551,230	21,349
2002	5,257	108,597,570	20,658
2001	4,491	90,810,866	20,221
2000	5,275	102,078,833	19,351
1999	2,919	39,931,434	13,680
1998	3,305	46,307,911	14,011
1997	2,792	37,227,098	13,333
1996	2,529	33,876,279	13,395
1995 and Earlier	14,036	161,706,192	11,521
Total	272,432	\$5,990,065,873	\$21,987

* The figures for 2024 are for the first 6 months of the calendar year only.

Counts of members do not include alternate payees receiving benefits while the member is still working. Multiple records may exist for members with service in more than one benefit group. This does not result in double counting liabilities.

Appendix D – Glossary

Accrued Liability (Actuarial Accrued Liability)

The portion of the Present Value of Benefits allocated to prior years. It can also be expressed as the Present Value of Benefits minus the present value of future Normal Cost. Different actuarial cost methods and different assumptions will lead to different measures of Accrued Liability.

Actuarial Assumptions

Assumptions made about certain events that will affect pension costs. Assumptions generally can be broken down into two categories: demographic and economic. Demographic assumptions include such things as mortality, disability, and retirement rates. Economic assumptions include discount rate, wage inflation, and price inflation.

Actuarial Methods

Procedures employed by actuaries to achieve certain funding goals of a pension plan. Actuarial methods include an actuarial cost method, an amortization policy, and an asset valuation method.

Actuarial Valuation

The determination as of a valuation date of the Normal Cost, Accrued Liability, and related actuarial present values for a pension plan. These valuations are performed annually or when an employer is contemplating a change in plan provisions.

Actuary

A business professional proficient in mathematics and statistics who measures and manages risk. A public retirement system actuary in California performs actuarial valuations necessary to properly fund a pension plan and disclose its liabilities and must satisfy the qualification standards for actuaries issuing statements of actuarial opinion in the United States with regard to pensions.

Amortization Bases

Separate payment schedules for different portions of the Unfunded Accrued Liability (UAL). The total UAL of a rate plan can be segregated by cause. The impact of such individual causes on the UAL are quantified at the time of their occurrence, resulting in new amortization bases. Each base is separately amortized and paid for over a specific period of time. Generally, in an actuarial valuation, the separate bases consist of changes in UAL due to contract amendments, actuarial assumption changes, method changes, and/or experience gains and losses.

Amortization Period

The number of years required to pay off an Amortization Base.

Classic Member (under PEPRA)

A member who joined a public retirement system prior to January 1, 2013 and who is not defined as a new member under PEPRA. (See definition of New Member below.)

Discount Rate

The rate used to discount the expected future benefit payments to the valuation date to determine the Projected Value of Benefits. Different discount rates will produce different measures of the Projected Value of Benefits. The discount rate for funding purposes is based on the assumed long-term rate of return on plan assets, net of investment and administrative expenses. This rate is called the “actuarial interest rate” in Section 20014 of the California Public Employees’ Retirement Law.

Effective Amortization Period

The number of years it would take to amortize the UAL using the current required UAL payment as a constant annual payment amount. The effective amortization period quantifies the efficacy of the current required UAL payment. If the current required UAL payment is less than interest on the UAL, the effective amortization period is infinite.

Entry Age

The earliest age at which a plan member begins to accrue benefits under a defined benefit pension plan. In most cases, this is the age of the member on their date of hire.

Entry Age Actuarial Cost Method

An actuarial cost method that allocates the cost of the projected benefits on an individual basis as a level percent of earnings for the individual between entry age and retirement age. This method yields a total normal cost rate, expressed as a percentage of payroll, which is designed to remain level throughout the member’s career.

Appendix D – Glossary

Fresh Start

A Fresh Start is when multiple amortization bases are combined into a single base and amortized over a new Amortization Period.

Funded Ratio

Defined as the Market Value of Assets divided by the Accrued Liability. Different actuarial cost methods and different assumptions will lead to different measures of Funded Ratio. The Funded Ratio with the Accrued Liability equal to the funding target is a measure of how well funded a rate plan is. A ratio greater than 100% means the rate plan has more assets than the funding target and the employer need only contribute the Normal Cost. A ratio less than 100% means assets are less than the funding target and contributions in addition to Normal Cost are required.

Funded Status

Any comparison of a particular measure of plan assets to a particular measure of pension obligations. The methods and assumptions used to calculate a funded status should be consistent with the purpose of the measurement.

Funding Target

The Accrued Liability measure upon which the funding requirements are based. The funding target is the Accrued Liability under the Entry Age Actuarial Cost Method using the assumptions adopted by the board.

GASB 68

Statement No. 68 of the Governmental Accounting Standards Board. The accounting standard governing a state or local governmental employer's accounting and financial reporting for pensions.

New Member (under PEPRA)

A new member includes an individual who becomes a member of a public retirement system for the first time on or after January 1, 2013, and who was not a member of another public retirement system prior to that date, and who is not subject to reciprocity with another public retirement system.

Normal Cost

The portion of the Present Value of Benefits allocated to the upcoming fiscal year for active employees. Different actuarial cost methods and different assumptions will lead to different measures of Normal Cost. The Normal Cost under the Entry Age Actuarial Cost Method, using the assumptions adopted by the board, plus the required amortization of the UAL, if any, make up the required contributions.

PEPRA

The California Public Employees' Pension Reform Act of 2013

Present Value of Benefits (PVB)

The total dollars needed as of the valuation date to fund all benefits earned in the past or expected to be earned in the future for *current* members.

Unfunded Accrued Liability (UAL)

The Accrued Liability minus the Market Value of Assets. If the UAL for a rate plan is positive, the employer is required to make contributions in excess of the Normal Cost.

Valuation Date

The date as of which the Accrued Liability and Market Value of Assets are determined.

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California Public Employees' Retirement System
A Component Unit of the State of California