Judges' Retirement System II

Actuarial Valuation

as of June 30, 2024

Required Contributions for Fiscal Year

July 1, 2025, through June 30, 2026

CalPERS

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Actuarial Certification

February 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.

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

Randall Dziubek, ASA, MAAA
Deputy Chief Actuary, CalPERS

Actuarial Data and Rate Plan 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 Judges' Retirement System II 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 the Judges' Retirement System II Law as of the date this report was produced.

Yang Yang, FSA, MAAA
Actuary, CalPERS

Julian Robinson, FSA, EA, MAAA
Senior Actuary, CalPERS

Highlights and Executive Summary

Highlights and Executive Summary

Introduction

This report presents the results of the June 30, 2024, actuarial valuation of the Judges' Retirement System II (System). This actuarial valuation sets the minimum required employer contribution rates for fiscal year (FY) 2025-26. The System began on November 9, 1994 to provide retirement and ancillary benefits to judges elected or appointed on or after that date. The employer contribution rate from the inception of the plan until June 30, 1996 was set by State statute. Subsequently, the employer contribution rate was determined through an actuarial valuation process.

Purpose of Report

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 this System as of June 30, 2024
- Determine the minimum required employer contributions for this System for FY July 1, 2025, through June 30, 2026.
- Determine the required member contribution rate for FY July 1, 2025 through June 30, 2026 for 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 No. 68 for an Agent Employer Defined Benefit Pension Plan. A separate accounting valuation report for such purposes is available from CalPERS and details for ordering are available on the CalPERS website (www.calpers.ca.gov). The measurements shown in this actuarial valuation may not be applicable for other purposes.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; changes in actuarial policies; and changes in plan provisions or applicable law, and differences between the required contributions determined by the valuation and the actual contributions made by the System.

Assessment and Disclosure of Risk

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

- A "Scenario Test," projecting future results under different investment income returns.
- A "Sensitivity Analysis," showing the impact on current valuation results using alternative discount rates of 5.0% and 7.0%, and inflation rate of 1.3% and 3.3%.
- A "Sensitivity Analysis," showing the impact on current valuation results assuming rates of mortality are 10% lower or 10% higher than the 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 (LDROM) of benefit costs accrued as of the valuation date.

Highlights and Executive Summary

Required Employer Contribution

This actuarial valuation sets the employer contribution rate for the fiscal year July 1, 2025 through June 30, 2026. The Required Employer Contribution is shown as a percentage of projected payroll and as an estimated dollar amount for current and previous valuation.

Required Employer Contribution

	Fiscal Year 2024-25	Fiscal Year 2025-26
1) Contribution in Projected Dollars		
a) Total Normal Cost	$135,767,832	$142,267,023
b) Employee Contribution	42,930,215	45,249,234
c) Employer Normal Cost [(1a) – (1b)]	92,837,617	97,017,789
d) Unfunded Accrued Liability Payment	4,782,473	0
e) Required Employer Contribution [(1c) + (1d)]	**$97,620,090**	**$97,017,789**
Projected Annual Payroll for Contribution Year	$410,422,710	$428,902,691
2) Contribution as a Percentage of Payroll		
a) Total Normal Cost	33.08%	33.17%
b) Employee Contribution[1]	10.46%	10.55%
c) Employer Normal Cost [(2a) – (2b)]	22.62%	22.62%
d) Unfunded Accrued Liability Payment	1.17%	0.00%
e) Required Employer Contribution Rate [(2c) + (2d)][2]	**23.79%**	**22.62%**

(1) This is the expected average contribution rate between Classic and PEPRA members.

(2) Required Employer Contribution Rate reflects minimum PEPRA law requirement of paying the Employer Normal Cost

Funded Status – Funding Policy Basis

The table below summarizes the funded status of the Judges' Retirement System II as of June 30, 2024.

	June 30, 2023	June 30, 2024
1) Present Value of Projected Benefits	$3,386,429,250	$3,670,336,037
2) Entry Age Accrued Liability	2,361,939,313	2,553,215,373
3) Market Value of Assets (MVA)	2,333,468,381	2,638,410,175
4) Unfunded Accrued Liability [(2) - (3)]	**$28,470,933**	**($85,194,802)**
5) Funded Ratio [(3) / (2)]	**98.8%**	**103.3%**

The Unfunded Accrued Liability and funded ratio are assessments of the need for future employer contributions based on the actuarial cost method used to fund the plan. The Unfunded Accrued Liability, if positive, is the present value of future employer contributions for service that has already been earned and is in addition to future normal cost contributions for active members. The funded ratio, on the other hand, is a relative measure of funded status that allows for comparison between plans of different sizes. The funded ratio is not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the employer's benefit obligations.

Highlights and Executive Summary

Changes Since the Prior Year's Valuation

Benefit

There are no significant changes to benefit for the June 30, 2024, actuarial valuation.

Actuarial Methods and Assumptions

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

A complete description of the actuarial methods and assumptions used in the June 30, 2024, actuarial valuation may be found in Appendix A of this report.

Plan Provisions

No changes were made since the prior valuation. A complete description of the principal plan provisions used in the June 30, 2024, actuarial valuation may be found in Appendix B of this report.

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.

The 2024 annual benefit limit under Internal Revenue Code (IRC) section 415(b) 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.

Assets

Assets

Reconciliation of the Market Value of Assets

The following displays the change in the Market Value of Assets from the prior valuation date to June 30, 2024.

	Market Value
Beginning Balance as of June 30, 2023	$2,333,468,381
Prior Period Adjustment	0
Adjusted Beginning Balance as of June 30, 2023	2,333,468,381
Member Contributions	42,936,418
Employer Contributions	96,310,100
State of California General Fund Contributions	5,781
Benefit Payments	(98,911,833)
Refunds	(256,506)
Administration Costs	(2,564,484)
Investment Earnings[1]	267,416,706
Miscellaneous Income	5,612
Ending Balance as of June 30, 2024	**$2,638,410,175**

- Net Fund return for the FY 2023-24 is 11.3%.

Asset Allocation

The asset allocation shown below reflects the allocation of the Judges' Retirement Fund II (JRF II) as of June 30, 2024. The asset allocation was approved by the Board of Administration at the June 2024 Investment Committee Meeting.

Asset Allocation	Current Allocation	Policy Weight
Public Equity	42.9%	43.0%
Fixed Income	28.8%	29.0%
TIPS	5.0%	5.0%
REITs	20.2%	20.0%
Commodities	3.0%	3.0%
Liquidity	0.0%	0.0%
Total JRFII	**100.0%**	**100.0%**

Liabilities and Employer Contributions

Liabilities and Employer Contributions

Comparison of Current and Prior Year Results

Shown below are the comparisons of key valuation results for the current valuation date compared to corresponding values from the prior valuation date.

	June 30, 2023	June 30, 2024
1) Members Included in the Valuation		
a) Active Members	1,659	1,689
b) Inactive Members	4	2
c) Receiving Payments	535	630
d) Total	**2,198**	**2,321**
2) Payroll		
a) Covered Annual Payroll	$388,369,534	$405,856,534
b) Projected Covered Annual Payroll	$410,422,710	$428,902,691
c) Average Covered Annual Payroll [(2a) / (1a)]	234,099	240,294
3) Age and Service for Actives		
a) Average Attained Age for Actives	58.71	58.27
b) Average Service for Actives	9.79	9.42
4) Present Value of Benefits at Valuation Date		
a) Active Members	$2,487,818,010	$2,588,470,290
b) Inactive Members	2,137,762	550,548
c) Inactive Non-members	1,278,004	550,824
d) Retired Members and Beneficiaries	895,195,474	1,080,764,374
e) Total	**$3,386,429,250**	**$3,670,336,037**
5) Present Value of Future Employee Contributions	**$335,811,953**	**$374,350,064**
6) Present Value of Future Employer Normal Cost	**$688,677,984**	**$742,770,600**
7) Accrued Actuarial Liability		
a) Active Members	$1,463,328,073	$1,471,349,626
b) Inactive Members	2,137,762	550,548
c) Inactive Non-members	1,278,004	550,824
d) Retired Members and Beneficiaries	895,195,474	1,080,764,374
e) Total	**$2,361,939,313**	**$2,553,215,373**
8) Assets		
a) Market Value of Assets	$2,333,468,381	$2,638,410,175
b) Unfunded Accrued Actuarial Liability [(7d) – (8a)]	28,470,933	(85,194,802)
c) Funded Ratio [(8a) / (7d)]	98.8%	103.3%

Liabilities and Employer Contributions

(Gain)/Loss Analysis

To calculate the cost requirements of the plan, 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 shown below.

1) Total (Gain)/Loss for the Year	
a) Unfunded Accrued Liability (UAL) as of 6/30/2023	$28,470,933
b) Expected Payment on UAL During FY 2023-24	1,756,673
c) Interest through 6/30/2024 [.06 X 1a - $(1.06)^{1/2}$ – 1) X 1b]	1,656,324
d) Expected UAL Before All Other Changes [1a – 1b + 1c]	28,370,584
e) Change Due to Revised Actuarial Methods	0
f) Change Due to New Actuarial Assumptions	0
g) Expected UAL After All Changes [1d + 1e + 1f]	28,370,584
h) Actual Unfunded Accrued Liability as of 6/30/2024	(85,194,802)
i) Total (Gain)/Loss for FY 2023-24 [1h – 1g]	**(113,565,386)**
2) Contribution (Gain)/Loss for the Year	
a) Expected Contribution (Employer and Employee)	$131,556,639
b) Interest on Expected Contributions [$((1.060)^{1/2}$ – 1) x 2a]	3,889,211
c) Actual Contribution	139,252,299
d) Interest on Actual Contributions [$((1.060)^{1/2}$ – 1) x 2c]	4,116,718
e) Contribution (Gain)/Loss [(2a + 2b) – (2c + 2d)]	**($7,923,167)**
3) Investment (Gain)/Loss for the Year	
a) Market Value of Assets as of 6/30/2023	$2,333,468,381
b) Contributions Received	139,252,299
c) Benefits, Refunds Paid and Administrative Costs	(99,168,339)
d) Transfers, SCP, and Miscellaneous Adjustments	5,612
e) Expected Interest [0.060 x 3a + $((1.060)^{1/2}$ – 1) x (3b + 3c + 3d)]	141,193,272
f) Expected Assets as of 6/30/2024 [3a + 3b + 3c + 3d + 3e]	2,514,751,225
g) Actual Market Value of Assets as of 6/30/2024	2,638,410,175
h) Investment (Gain)/Loss [3f - 3g]	**($123,658,950)**
4) Liability (Gain)/Loss for the Year	
a) Total (Gain)/Loss (1i)	($113,565,386)
b) Contribution (Gain)/Loss (2e)	(7,923,167)
c) Investment (Gain)/Loss (3h)	(123,658,950)
d) Liability (Gain)/Loss [4a – 4b – 4c]	**$18,016,731**

Liabilities and Employer Contributions

Schedule of Amortization Bases

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

- The assets, liabilities, and funded status of the plan are measured as of the valuation date: June 30, 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.

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 one year by subtracting the expected payment on the UAL for the prior fiscal year and adjusting for interest. The expected payment on the UAL for the prior fiscal year is equal to the Expected Employer Contribution for that fiscal year minus the Expected Normal Cost for the year. The Employer Contribution for the prior fiscal year is determined by the actuarial valuation one year ago. The Normal Cost Rate for the prior fiscal year is assumed to be the same as the rate determined by the current valuation. All expected dollar amounts are determined by multiplying the rate by the expected payroll for the applicable fiscal year, based on payroll as of the valuation date.

The schedule below shows the development of the payment on the Amortization Bases. Please refer to Appendix A for an explanation of how amortization periods are determined. For this valuation, the individual amortization bases were combined into a single amount and amortized over twenty years.

Reason for Base	Date Established	Amortization Period	Balance on 6/30/2024	Expected Payment on UAL 2024-25	Balance on 6/30/2025	Scheduled Payment Fiscal Year 2025-2026	% of Projected Payroll
Projected Surplus	6/30/2024	N/A	($85,194,802)	$3,629,818	($94,043,616)	$0	0.00%
Total			**($85,194,802)**	**$3,629,818**	**($94,043,616)**	**$0**	**0.00%**

The Judges' Retirement System II funded status increased from 98.8% as of June 30, 2023 to 103.3%% as of June 30, 2024. The funded status increase was driven by the investment gain.

Reconciliation of Required Employer Contributions

This table illustrates how the Required Employer Contribution is calculated and, more importantly, why the Required Employer Contribution differs this year from the previous year.

	Percentage of Projected Payroll	Estimated $ Based on Projected Payroll
1) FY 2024-25 Required Employer Contribution (from prior year annual report)	23.79%	97,620,090
2) Effect of Changes Since the Prior Annual Valuation		
a) Effect of Change in Payroll	(0.11%)	3,794,159
b) Effect of (Gain)/Loss	(0.29%)	(1,236,059)
c) Effect of Plan Changes	0.00%	0
d) Effect of Method Changes	0.00%	0
e) Effect of Assumption Changes	0.00%	0
f) Effect of Amortization Progression	(0.13%)	(420,720)
g) Application of PEPRA Normal Cost Minimum(1)	(0.64%)	(2,739,681)
h) Net Effect of Changes [Sum of a – f]	(1.17%)	(602,301)
3) FY 2025-26 Required Employer Contribution	**22.62%**	**97,017,789**

(1) Due to PEPRA, the employer contribution rate cannot be less than normal cost.

Liabilities and Employer Contributions

Required Employer Contribution Rate History

This table provides the 10-year history of Required Employer Contributions for the Judges' Retirement System II.

Fiscal Year	Required Employer Contribution Rate
2025-26	22.62%
2024-25	23.79%
2023-24	23.580%
2022-23	23.230%
2021-22	24.240%
2020-21	24.400%
2019-20	24.964%
2018-19	24.660%
2017-18	24.409%
2016-17	23.185%

Funding History

The Funding History below shows the recent history of the Actuarial Accrued Liability, the Market Value of Assets, Funded Ratio and the Annual Covered Payroll.

Valuation Date	Entry Age Accrued Liability	Market Value of Assets (MVA)	Funded Ratio (MVA)	Projected Annual Covered Payroll
6/30/24	$2,553,215,373	$2,638,410,175	103.3%	$428,902,691
6/30/23	2,361,939,313	2,333,468,381	98.8%	410,422,710
6/30/22	2,157,506,377	2,139,223,765	99.2%	388,920,939
6/30/21	1,964,843,572	2,403,366,317	122.3%	370,873,071
6/30/20	1,913,087,688	1,885,403,709	98.6%	371,038,447
6/30/19	1,725,877,206	1,715,056,468	99.4%	362,399,174
6/30/18	1,554,347,674	1,531,542,896	98.5%	327,594,817
6/30/17	1,365,862,092	1,356,099,297	99.3%	307,629,600
6/30/16	1,272,750,990	1,172,952,527	92.2%	299,830,339
6/30/15	1,081,824,423	1,084,141,932	100.2%	289,305,463

Normal Cost by Benefit Group

The table below displays the Total Normal Cost broken out by benefit group for Fiscal Year 2025-26. 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 contracted. 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.

Rate Plan Identifier	Benefit Group Name	Total Normal Cost FY 2025-26	Number of Actives	Payroll on 6/30/2024
10000	JRS II	33.07%	1,164	$279,656,897
29000	JRS II PEPRA	33.40%	525	$126,199,637
	Plan Total	**33.17%**	**1,689**	**$405,856,534**

Liabilities and Employer Contributions

PEPRA Member Contribution Rates

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 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 of the plan change by 1% or more from the base total normal cost established for the plan, the new member rate shall be 50% of the new normal cost rounded to the nearest quarter percent.

The table below shows the determination of the PEPRA member contribution rates effective July 1, 2025, based on 50% of the Total Normal Cost as of the June 30, 2024 valuation. The Total Normal Cost rate is based on the benefits for the PEPRA members.

		Basis for Current Rate		Rates Effective July 1, 2025			
Rate Plan Identifier	Benefit Group Name	Total Normal Cost	Member Rate	Total Normal Cost	Change	Change Needed	Member Rate
29000	JRS II PEPRA	33.35%	16.75%	33.40%	0.05%	No	16.75%

For a description of the methods used to determine the Total Normal Cost for this purpose, please see the "PEPRA Normal Cost Rate Methodology" section in Appendix A.

Risk Analysis

Risk Analysis

Future Investment Return Scenarios

Analysis using the investment return scenarios from the Asset Liability Management process completed in 2021 was performed to determine the effects of various future investment returns on required employer contributions. The projected normal cost rates reflect that the rates are anticipated to decline over time as new employees are hired into lower-cost benefit tiers. The projections also assume that all other actuarial assumptions will be realized and that no further changes in assumptions, contributions, benefits, or funding will occur.

The first table shows projected contribution requirements if the fund were to earn either 2.3% or 10.2% annually. These alternate investment returns were chosen because 90% of long-term average returns are expected to fall between them over the 20-year period ending June 30, 2044.

Assumed Annual Return from 2024-25 through 2028-29	Projected Employer Contributions				
	2026-27	2027-28	2028-29	2029-30	2030-31
2.3% (5th Percentile)	22.2%	22.4%	23.2%	24.3%	25.9%
10.2% (95th Percentile)	22.2%	21.9%	21.7%	21.5%	21.2%

Required contributions outside of this range are also possible. In particular, whereas it is unlikely that investment returns will average less than 2.3% or greater than 10.2% over a 20-year period, the likelihood of a single investment return less than 2.3% or greater than 10.2% in any given year is much greater. The following analysis illustrates the effect of an extreme, single year investment return.

The portfolio has an expected volatility (or standard deviation) of 12.4% per year. Accordingly, in any given year there is a 16% probability that the annual return will be -6.4% or less and a 2.5% probability that the annual return will be -18.8% or less. These returns represent one and two standard deviations below the expected return of 6.0%.

The following table shows the effect of a one or two standard deviation investment loss in FY 2024-25 on the FY 2026-27 contribution requirements. Note that a single-year investment gain or loss decreases or increases the required UAL contribution amount incrementally for each of the next five years, not just one, due to the 5-year ramp in the amortization policy. However, the contribution requirements beyond the first year are also impacted by investment returns beyond the first year. Historically, significant downturns in the market are often followed by higher than average returns. Such investment gains would offset the impact of these single year negative returns in years beyond FY 2026-27.

Assumed Annual Return for 2024-25	Required Employer Contributions	Projected Employer Contributions
	2025-26	2026-27
(18.8%) (2 standard deviation loss)	22.62%	24.9%
(6.4%) (1 standard deviation loss)	22.62%	23.3%

- Without investment gains (returns higher than 6.0%) in year FY 2025-26 or later, projected contributions rates would continue to rise over the next four years due to the continued phase-in of the impact of the illustrated investment loss in FY 2024-25.

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 3.7% and 2.3%, respectively. Changing either the price inflation assumption or the real rate of return assumption will change the discount rate. The sensitivity of the valuation results to the discount rate assumption depends on which component of the discount rate is changed. Shown below are various valuation results as of June 30, 2024 assuming alternate discount rates by changing the two components independently. Results are shown using the current discount rate of 6.0% as well as alternate discount rates of 5.0% and 7.0%. The rates of 5.0% and 7.0% were selected since they illustrate the impact of a 1.0% increase or decrease to the 6.0% assumption.

Sensitivity to the Real Rate of Return Assumption

As of June 30, 2024	1% Lower Real Return Rate	Current Real Return Rate	1% Higher Real Return Rate
Discount Rate	**5.0%**	**6.0%**	**7.0%**
Inflation	2.3%	2.3%	2.3%
Real Rate of Return	**2.7%**	**3.7%**	**4.7%**
a) Total Normal Cost	39.62%	33.17%	28.25%
b) Accrued Liability	$2,847,333,996	$2,553,215,373	$2,310,358,560
c) Market Value of Assets	2,638,410,175	2,638,410,175	2,638,410,175
d) Unfunded Liability (Surplus) [(b)-(c)]	208,923,820	(85,194,802)	(328,051,615)
e) Funded Status	92.7%	103.3%	114.2%

Sensitivity to the Price Inflation Assumption

As of June 30, 2024	1% Lower Inflation Rate	Current Inflation Rate	1% Higher Inflation Rate
Discount Rate	**5.0%**	**6.0%**	**7.0%**
Inflation	**1.3%**	**2.3%**	**3.3%**
Real Rate of Return	3.7%	3.7%	3.7%
a) Total Normal Cost	33.56%	33.17%	32.03%
b) Accrued Liability	$2,574,504,289	$2,553,215,373	$2,474,382,602
c) Market Value of Assets	2,638,410,175	2,638,410,175	2,638,410,175
d) Unfunded Liability (Surplus) [(b)-(c)]	(63,905,887)	(85,194,802)	(164,027,573)
e) Funded Status	102.5%	103.3%	106.6%

Mortality Rate Sensitivity

The following table looks at 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 the current mortality assumptions. This type of analysis highlights the impact on the plan of improving or worsening mortality over the long-term.

As of June 30, 2024	10% Lower Mortality Rates	Current Mortality	10% Higher Mortality Rates
a) Total Normal Cost	33.89%	33.17%	32.53%
b) Accrued Liability	$2,614,652,701	$2,553,215,373	$2,498,177,245
c) Market Value of Assets	2,638,410,175	2,638,410,175	2,638,410,175
d) Unfunded Liability (Surplus) [(b)-(c)]	(23,757,474)	(85,194,802)	(140,232,930)
e) Funded Status	100.9%	103.3%	105.6%

Risk Analysis

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 to tolerate risk is important in understanding how the plan is impacted by investment return volatility, other economic variables and changes in longevity or other demographic assumptions.

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
1. Retiree Accrued Liability	$895,195,474	$1,080,764,374
2. Total Accrued Liability	$2,361,939,313	$2,553,215,373
3. Ratio of Retiree AL to Total AL [(1) / (2)]	37.9%	42.3%

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

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

Support Ratio	June 30, 2023	June 30, 2024
1. Number of Actives	1,659	1,689
2. Number of Retirees	535	630
3. Support Ratio [(1) / (2)]	3.1	2.7

Risk Analysis

Asset Volatility Ratio (AVR)
Shown in the table below is the asset volatility ratio (AVR), which is the ratio of market value of assets to payroll. Plans that have 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 volatility than a plan with AVR of 4. It should be noted that this ratio is a measure of the current situation. It increases over time but generally tends to stabilize as a plan matures.

Liability Volatility Ratio (LVR)
Also shown in the table below is the liability volatility ratio (LVR), which is the ratio of accrued liability to payroll. Plans that have a higher LVR experience more volatile employer contributions (as a percentage of payroll) due to changes in liability. For example, a plan with LVR ratio 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	June 30, 2023	June 30, 2024
1. Market Value of Assets without Receivables	$2,333,468,381	$2,638,410,175
2. Payroll	$388,369,534	$405,856,534
3. Asset Volatility Ratio (AVR) [(1) / (2)]	6.0	6.5
4. Accrued Liability	$2,361,939,313	$2,553,215,373
5. Liability Volatility Ratio (LVR) [(4) / (2)]	6.1	6.3

Maturity Measures History	June 30, 2022	June 30, 2023	June 30, 2024
Ratio of Retiree AL to Total AL	32.7%	37.9%	42.3%
Support Ratio	3.7	3.1	2.7
Asset Volatility Ratio	5.8	6.0	6.5
Liability Volatility Ratio	5.9	6.1	6.3

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 (LDROM) of benefit costs accrued as of the valuation date using a discount rate based on high quality fixed income securities with cash flows that replicate expected benefit payments. This measure approximates the cost to purchase low-default-risk fixed income securities to fund the accrued benefit.

As permitted in ASOP No. 4, the Actuarial Office uses the Entry Age Actuarial Cost Method to calculate the LDROM. This methodology is in line with the measure of "benefit entitlements" calculated by the Bureau of Economic Analysis (BEA) 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 LDROM is 5.32%, which is the Intermediate FTSE Pension Liability Index[1] discount rate as of June 30, 2024.

Selected Measures on a Low-Default-Risk Basis	June 30, 2024
Discount Rate	5.32%
1. Accrued Liability – Low-Default-Risk Basis (LDROM)	
a) Active Members	$1,596,076,327
b) Inactive Members	$550,548
c) Inactive Non-members	$550,824
d) Retired Members and Beneficiaries	$1,148,707,100
e) Total	$2,745,884,799
2. Market Value of Assets (MVA)	$2,638,410,175
3. Unfunded Accrued Liability – Economic Basis [(1d) – (2)]	$107,474,624
4. Unfunded Accrued Liability – Funding Policy Basis	($85,194,802)
5. Hypothetical Cost of Future Investment Risk [(3) – (4)]	$192,669,426

The difference between the unfunded liabilities on a low-default-risk basis and on the funding policy basis is the market value of the future investment risk being used to reduce required contributions before the risk premium is earned. This hypothetical cost would be paid by future generations if annual returns fall short of the funding policy discount rate of 6.0% over the funding horizon.

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 6.0%, 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 sufficiency of plan assets to cover the cost of settling the plan's benefit obligations, nor is it 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 zero coupon 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 LDROM for a subset of the fund, such as a single rate plan or a group of retirees.

Supplemental Information

21 Status of PEPRA Transition

Supplemental 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
1) Active Members			
a) Count	1,164	525	31.08%
b) Average Attained Age	59.3	56.1	
c) Average Entry Age	47.6	51.4	
d) Average Years of Credited Service	11.6	4.7	
e) Average Annual Covered Payroll	$240,255	$240,380	
f) Annual Covered Payroll	$279,656,897	$126,199,637	31.09%
g) Present Value of Future Payroll	$2,095,943,984	$1,291,715,919	38.13%
2) Retired Members and Beneficiaries			
a) Count[1]	612	18	2.86%
b) Average Benefit[2]	137,163	60,113	
c) Total Annual Benefits[2]	$81,200,496	$1,082,034	1.32%
3) Accrued Liabilities			
a) Active Members	$1,257,451,515	$213,989,111	14.54%
b) Retired Members and Beneficiaries	$1,065,921,114	$14,843,260	1.47%

(1) Deferred retirement retirees and beneficiaries are included.
(2) Deferred retirement benefits that have not commenced as of the valuation date are not included.

Appendices

Appendix A – Actuarial Methods and Assumptions

Actuarial Data

As stated in the Actuarial Certification, the data, which serves as the basis of this valuation, has been obtained from the various CalPERS databases. We have reviewed the valuation data and believe that it is reasonable and appropriate in aggregate.

Actuarial Methods

Actuarial Cost Methods

The actuarial funding method used for the Retirement Program is the Entry Age Normal Cost Method. Under this method, projected benefits are determined for all members and the associated liabilities are spread in a manner that produces level annual cost as a percent of pay in each year from the age of hire (entry age) to the assumed retirement age. The cost allocated to the current fiscal year is called the normal cost.

The actuarial accrued liability for active members is then calculated as the portion of the total cost of the plan 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.

The following table provides a brief history of the actuarial cost method.

Valuation Year June 30	Funding Method
1997-Current	Entry Age Normal

Amortization of Unfunded Actuarial Accrued Liability

The excess of the total actuarial accrued liability over the market value of plan 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 amortization policy. The CalPERS 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.

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

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 provided in the table below:

Driver	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

Appendix A – Actuarial Methods and Assumptions

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.

Exceptions for Plans in Surplus
If a surplus exists (i.e., the Market Value of Assets exceeds the plan's accrued liability) any prior amortization layers shall be considered fully amortized, and the surplus shall not be amortized.

In the event of any subsequent unfunded liability a Fresh Start shall be used with an amortization period of 20 years or less.

Exceptions for Small Amounts
Where small unfunded liabilities are identified in annual valuations which result in small payment amounts, the actuary may shorten the remaining period for these bases.

- When the balance of a single amortization base has an absolute value less than $250, the amortization period is reduced to one year.
- When the entire unfunded liability is a small amount, the actuary may perform a Fresh Start and use an appropriate amortization period.

Asset Valuation Method
The value of assets equals the market value of the fund.

PEPRA Normal Cost Rate Methodology
For purposes of setting PEPRA member rates, it is preferable to determine total normal cost using a large active population so that the rate remains relatively stable. While each CalPERS non-pooled plan has a sufficiently large active population for this purpose, the PEPRA active population by itself may not be sufficiently large. The total PEPRA normal cost will be determined based on the plan's PEPRA membership only if the number of members covered under the PEPRA formula meets either:

- 50% of the active population, or
- 25% of the active population and 100 or more PEPRA members

Until one of these conditions is met, the plan's total PEPRA normal cost will be determined using the entire active plan population (both PEPRA and Classic) based on the PEPRA benefit provisions.

Actuarial Assumptions

The actuarial assumptions used in the valuation are shown below.

The demographic assumptions used in the valuation, with the exception of the mortality and retirement assumptions, have been in place for many years and have not produced significant experience gains or losses for the plan. The actuary has concluded that the continued use of these assumptions is reasonable for valuation purposes and all assumptions represent an estimate of future experience. More information on the mortality assumption is available in the mortality assumption section of this appendix.

The assumptions for inflation, individual salary increase, and overall payroll growth are based on the 2021 experience study performed by CalPERS staff based on the Public Employees' Retirement Fund (PERF) and adopted by the CalPERS Board of Administration in December 2021.

The discount rate (investment return assumption) for this valuation is 6.0%. It was reduced from 6.5% to 6.0% as of the June 30, 2021 valuation. The decision was primarily based on reduced CMAs provided by external investment consultants and CalPERS investment staff in March 2021 along with the change in asset allocation.

Appendix A – Actuarial Methods and Assumptions

Economic Assumptions

The following table identifies the economic assumptions used in the valuation.

June 30, 2024	Percentage
Gross Investment Return	6.15%
Less Administrative Expense	0.15%
Net Investment Return compounded annually	6.00%
Individual Salary Increases, compounded annually	2.80%
Overall Payroll Growth, compounded annually[1]	2.80%
Inflation	2.30%
Monetary Credit Balance Excess Interest Rate	2.75%

(1) The Overall Payroll Growth assumption is used in projecting the payroll over which the unfunded liability is amortized.

Discount Rate

The discount rate assumption (net of investment and administrative expenses), adopted by the CalPERS Board in March of 2022 reflecting the most recent CMAs and asset allocation, is 6.0%. The following table provides a brief history of the discount rate assumption.

Valuation Year	Investment Return
2021-Current	6.00%
2016-2020	6.50%
2011-2015	7.00%
2003-2010	7.25%
1998-2002	7.75%
1997	8.50%

Inflation, Individual Salary Increase, and Payroll Growth

The following table provides a brief history of the Inflation, Individual Salary Increase, and Payroll Growth Assumptions.

Valuation Year	Inflation	Individual Salary Increase	Payroll Growth
2021-Current	2.30%	2.80%	2.80%
2017-2020	2.50%	2.75%	2.75%
2011-2016	2.75%	3.00%	3.00%
2003-2010	3.00%	3.25%	3.25%
1998-2002	3.50%	3.75%	3.75%
1997	4.50%	5.75%	4.50%

Monetary Credit Account Crediting Rate

A judge's monetary credit account is credited at a rate, not less than zero, equal to the annual net investment return achieved by the JRS II Fund from the preceding fiscal year. As a result, the monetary credit accounts are assumed to grow, on average, at a rate greater than the discount rate. The following table shows a summary of the crediting rates used for projecting the monetary credit account balance. The first projection year uses the greater of the actual net investment return from the preceding fiscal year and zero since the actual investment return is known. The crediting rate for all subsequent projection years was developed from the most recent CMAs and asset allocation.

Valuation Year	Crediting Rate for The First Projection Year	Crediting Rate for Subsequent Projection Years	Assumed Return in Excess of Discount Rate
2021-Current	Net investment return from the preceding fiscal year, not less than zero	8.75%	2.75%
1997-2020	Discount rate	Discount rate	0.00%

Appendix A – Actuarial Methods and Assumptions

Demographic Assumptions

Service Retirement
The table below illustrates the assumptions used in the valuation to determine the probability of a judge retiring from the System pursuant to Section 75522.

Age	Years of Service			
	5-9	10-14	15-19	20 or more
Below 65	0.000	0.000	0.000	0.000
65	0.000	0.000	0.000	0.550
66	0.000	0.000	0.000	0.350
67	0.000	0.000	0.000	0.450
68	0.000	0.000	0.000	0.350
69	0.000	0.000	0.000	0.200
70-73	0.250	0.250	0.250	0.250
74-79	0.200	0.200	0.200	0.200
80[1]	1.000	1.000	1.000	1.000

(1) For Judges aged 80 and older with 5 or more years of service the probability of retirement is 100%.

The table below illustrates the assumptions used in the valuation to determine the probability of a judge retiring from the System pursuant to AB 2443. Note that these probabilities are only effective from January 1, 2024 until January 1, 2029.

Age	Years of Service			
	5-9	10-14	15-19	20 or more
Below 60	0.000	0.000	0.000	0.000
60	0.000	0.000	0.150	0.150
61-64	0.000	0.000	0.050	0.050
65-67	0.000	0.200	0.200	0.000
68-69	0.000	0.100	0.100	0.000
70	0.000	0.000	0.000	0.000

Withdrawal
Rates vary by age and years of service as shown in the table below.

	Years of Service					
Entry Age	0- 1	1 - 2	2 - 3	3 - 4	4 - 5	5 or more
35	0.00525	0.00525	0.00525	0.00525	0.00525	0.00225
40	0.00450	0.00450	0.00450	0.00450	0.00450	0.00375
45	0.00375	0.00375	0.00375	0.00375	0.00375	0.00750
50	0.00375	0.00375	0.00375	0.00375	0.00375	0.00900
55	0.00000	0.00000	0.00000	0.00000	0.00000	0.00825
60	0.00000	0.00000	0.00000	0.00000	0.00000	0.00750

Appendix A – Actuarial Methods and Assumptions

Pre-Retirement Non-Industrial Disability
Rates vary by age as shown in the table below.

Attained Age	Male	Female
35	0.00000	0.00000
40	0.00100	0.00100
45	0.00190	0.00190
50	0.00320	0.00320
55	0.00540	0.00540
60	0.00850	0.00850
65	0.01220	0.01220
70	0.00000	0.00000

The mortality assumptions are based on mortality rates resulting from the most recent CalPERS Experience Study adopted by the CalPERS Board. For purposes of the mortality rates, the rates incorporate Generational Mortality to capture on-going mortality improvement using 80% of Scale MP 2020 published by the Society of Actuaries. Generational mortality explicitly assumes that members born more recently will live longer than the members born before them thereby capturing the mortality improvement seen in the past and expected continued improvement. For more details, please refer to the 2021 experience study report that can be found on the CalPERS website. Rates vary by age and gender are shown in the tables below. These tables only contain a sample of the 2017 base table rates for illustrative purposes.

Pre-Retirement Mortality

Attained Age	Male	Female
35	0.00058	0.00029
40	0.00075	0.00039
45	0.00093	0.00054
50	0.00134	0.00081
55	0.00198	0.00123
60	0.00287	0.00179
65	0.00403	0.00250
70	0.00594	0.00404

Post-Retirement Mortality

	Standard		Non-Industrial Disability	
Attained Age	Male	Female	Male	Female
35	0.00058	0.00029	0.00644	0.00504
40	0.00075	0.00039	0.00807	0.00730
45	0.00093	0.00054	0.01114	0.01019
50	0.00266	0.00199	0.01701	0.01439
55	0.00390	0.00325	0.02210	0.01734
60	0.00578	0.00455	0.02708	0.01962
65	0.00857	0.00612	0.03334	0.02276
70	0.01333	0.00996	0.04001	0.02910
75	0.02391	0.01783	0.05376	0.04160
80	0.04371	0.03403	0.07936	0.06111
85	0.08274	0.06166	0.11561	0.09385
90	0.14539	0.11086	0.16608	0.14396
95	0.24664	0.20364	0.24664	0.20364
100	0.36198	0.31582	0.36198	0.31582
105	0.52229	0.44679	0.52229	0.44679
110	1.00000	1.00000	1.00000	1.00000

Appendix A – Actuarial Methods and Assumptions

Industrial Mortality
Rates are zero.

Industrial Disability
Rates are zero.

Marital Status
Probability of being married at service retirement or disability retirement is 90%.

Age of Spouse
Assumes that female spouses are three years younger than male spouses are.

Retirement Benefit Payable at Service Retirement

Service retirement benefit under Section 75522 is assumed to commence on the date of retirement. Service retirement benefit under Section 75522.5 is assumed to commence at the full retirement age. For each contingency under which a service retirement benefit is payable, the value of the monetary credit account and the present value of the defined benefit using valuation assumptions are compared, and the member is assumed to elect the benefit with the larger value. Monetary credit accounts are assumed to be paid as lump sums.

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
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 actuarial gain or loss base. 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 actuarial gain or loss base. The compensation limit for classic members for the 2024 calendar year is $345,000.

Appendix B – Principal Plan Provisions

Background
Judges' Retirement System II (JRS II) was established in 1994 to create a fully funded, actuarially sound retirement system for judges appointed or elected on or after November 9, 1994. This System provides a unique combination of two basic types of retirement allowances: a defined benefit plan and a monetary credit plan. The defined benefit plan provides a lifetime monthly retirement allowance of up to 75% of final compensation. The monetary credit plan allows for a refund of member contributions, employer contributions (see below) and interest at retirement.

Membership
The JRS II provides retirement, death, withdrawal and disability benefits for Supreme and Appellate Court Justices, Superior Court Judges, and Municipal Court Judges who are appointed or elected on or after November 9, 1994, and their beneficiaries.

Membership Contributions
- Classic members - Members contribute 8% of their annual compensation to the plan.
- PEPRA members - The Base Total Normal Cost rate for PEPRA members is re-determined in each annual valuation. The employee contribution for the PEPRA group will only change in any given year once the change to the total normal cost is greater than 1% from the Base Total Normal Cost. The PEPRA member rate should be 50% of the new normal cost rounded to the nearest quarter percentage.

Monetary Credit Account
Members accrue monthly monetary credits equal to 18% of monthly salary. These monetary credits are accumulated in a Monetary Credit Account for each member and also credited with earnings monthly at a rate, not less than zero, equal to the annual net earnings rate achieved by the Fund in the prior fiscal year. The Monetary Credit Account provides an optional benefit at eligible retirement ages (described below) if the member chooses this option. If a member withdraws from the System before he or she has vested (accumulated at least five years of service), the member is paid the amount of his or her contributions to the System, but not the full Monetary Credit Account. After five years of service however, the member is vested in the Monetary Credit Account.

Service Retirement Eligibility
Under Section 75522, judges must be (1) at least age 65 with 20 years or more of service or (2) age 70 with a minimum of five years of service. Two types of service retirement are available: Defined Benefit Plan or Monetary Credit Plan. Election of a plan must be made within 30 days after retirement.

Effective January 1, 2024 until January 1, 2029, Assembly Bill No. 2443 (AB 2443) authorizes judges who are (1) at least age 60 with 15 years or more of service or (2) at least age 65 with 10 years or more of service to retire and defer receipt of a monthly allowance. The bill defines 'full retirement age' as the first age at which a judge would have been eligible to retire under Section 75522 had the judge continued to accrue service rather than retire.

Defined Benefit Plan: Classic Members
This option provides a "defined benefit" of 3.75% of the highest 12-month average salary per year of service, up to 75% of final average pay for judges reaching age 65 with at least 20 years of service. The normal form of payment is a joint and 50% contingent annuity with the spouse as contingent annuitant. This provides a surviving spouse with a monthly allowance equal to 50% of the judge's allowance. Optional settlements are available which reduce a judge's normal retirement benefit.

Judges retiring pursuant to AB 2443 must elect to receive the applicable defined benefit described above with either a 0.07% reduction to the benefit factor for each year of retirement prior to full retirement age, commencing at full retirement age, or to defer the full defined benefit for 0.22 years beyond the full retirement age for each year of retirement prior to full retirement age. The calculation of the retirement allowance includes at most 20 years of service.

Appendix B - Principal Plan Provisions

Defined Benefit Plan: PEPRA Members
This option provides a "defined benefit" of 3.75% of the highest 36-month average salary per year of service, up to 75% of final average pay for judges reaching age 65 with at least 20 years of service. The normal form of payment is a joint and 50% contingent annuity with the spouse as contingent annuitant. This provides a surviving spouse with a monthly allowance equal to 50% of the judge's allowance. Optional settlements are available which reduce a judge's normal retirement benefit.

Judges retiring pursuant to AB 2443 must elect to receive the applicable defined benefit described above with either a 0.07% reduction to the benefit factor for each year of retirement prior to full retirement age, commencing at full retirement age, or to defer the full defined benefit for 0.22 years beyond the full retirement age for each year of retirement prior to full retirement age. The calculation of the retirement allowance includes at most 20 years of service.

Monetary Credit Plan
This option provides a cash payment in a single lump sum, or the member may elect to receive an annuity at retirement based on the value of his or her monetary credit account.

Non-Industrial Disability Retirement: Eligibility
Judges who have five years of service who become permanently disabled because of a mental or physical disability may apply to the Commission on Judicial Performance for disability retirement.

Non-Industrial Disability Retirement: Benefit
An allowance, based upon the judge's age, equal to the lesser of the following:

- 3.75% of final compensation multiplied by the number of years of service the judge would have been credited had he or she continued to work until the age he or she would have first been eligible to retire under Section 75522, or
- 65% of the judge's average monthly salary during the 12 or 36 months preceding the retirement date.

The normal form of payment is a joint and 50% contingent annuity with the spouse as the contingent annuitant.

Industrial Disability Retirement: Benefit
Judges receive 65% of their average monthly salary during the 12 or 36 months preceding the retirement date regardless of age or length of service.

The normal form of payment is a joint and 50% contingent annuity with the spouse as the contingent annuitant.

Pre-Retirement Death: Benefit

- If not eligible for Service Retirement - Spouses receive the judge's monetary credits or three times the annual salary at the time of death, whichever is greater. This is paid in 36 monthly installments. If there is no spouse, this benefit is paid to member children; or if none, to the designated beneficiary.
- If eligible for Service Retirement under AB 2443, but not Section 75522 - Spouses receive either the monthly retirement allowance equal to one-half of the judge's "defined benefit" plan allowance pursuant to 75522.5(f)(1), computed with the reduced benefit factor, or the judge's monetary credits.
- If eligible for Service Retirement under Section 75522 - Spouses receive either the monthly retirement allowance equal to one-half of the judge's "defined benefit" plan allowance or the judge's monetary credits.

Pre-Retirement Death Benefit Optional Settlement Two
If a judge dies in office, is age 65 or older with a minimum of 20 years of service and elects to have this provision apply (one time irrevocable election while judge is in office) then a payment to the surviving spouse is payable upon death. The spouse would receive a monthly allowance equal to the Optional Settlement 2 allowance paid to the judge had he or she retired immediately preceding death. A spouse who receives this benefit is not entitled to any other Pre-Retirement Death Benefit.

Appendix B - Principal Plan Provisions

Post Retirement Death Benefit

- If the judge elected the Defined Benefit Plan under AB 2443 and died prior to commencement of benefits – Spouses receive a monthly allowance equal to 50 percent of the unmodified monthly retirement allowance the deceased judge would have received, beginning the date the judge would have received the allowance.
- If the judge elected the Defined Benefit Plan under AB 2443 and died after commencement of benefits – Spouses receive a monthly allowance equal to 50 percent of the deceased judge's unmodified monthly retirement allowance.
- If the Judge elected the Defined Benefit Plan under Section 75522 - The surviving spouse of a retired judge who elected an Optional Settlement in the defined benefit plan receives one of four options: Option 1 - return of unused accumulated contributions; Option 2 - 4 - the Optional Settlement Benefit amount varies based on the option chosen by the member.
- If the Judge elected the Monetary Credit Plan - If the full amount of monetary credits was received in a lump sum, there are no survivor benefits. If the judge elected the Monetary Credit Plan with benefits paid as an annuity, the spouse receives the amount based on the option chosen at retirement.

Cost-of-Living Adjustments (COLA)

If the Judge elected the Defined Benefit Plan - The retirement allowance of retired judges who have elected the defined benefit plan will be adjusted every January after the judge has received a benefit for six months. The adjustment is based on the United States city average of the "Consumer Price Index For All Urban Consumers," as published by the United States Bureau of Labor Statistics. No adjustment shall be made unless the cost-of-living increase equals or exceeds 1%. Further, the allowance shall not be increased more than 3% in a single year. Increases shall be compounded.

Appendix C – Participant Data

Summary of Valuation Data

The table below illustrates counts of records processed by the valuation.

	June 30, 2023	June 30, 2024
1) Active Members		
a) Counts	1,659	1,689
b) Average Attained Age	58.71	58.27
c) Average Entry Age	48.88	48.81
d) Average Years of Service	9.79	9.42
e) Average Annual Covered Pay	$234,099	$240,294
f) Annual Covered Payroll	$388,369,534	$405,856,534
g) Projected Annual Payroll for Contribution Year	$410,422,710	$428,902,691
h) Present Value of Future Payroll	$3,117,319,243	$3,387,659,903
2) Inactive Members		
a) Counts	4	2
3) Retired Members and Beneficiaries		
a) Counts[1]	535	630
b) Average Attained Age[1]	73.88	73.97
c) Average Annual Benefits[2]	$130,487	$135,135
4) Active to Retired Ratio [(1a) / (3a)]	3.1	2.7

(1) Deferred retirement retirees and beneficiaries are included.
(2) Deferred retirement benefits that have not commenced as of the valuation date are not included.

Reconciliation of Participants

The table below illustrates a reconciliation of the participant data over the course of the valuation year. It identifies numerically who entered the plan, who left the plan and who remained in the plan in the same status as on the previous valuation date or who moved to a new status over the course of the year.

Reconciliation of Participants for the Fiscal Year Ending June 30, 2024

	Actives	Inactive	Retirees and Beneficiaries	Total
As of June 30, 2023	**1,659**	**4**	**535**	**2,198**
New Entrants	145	-	-	145
Non-Vested Terminations				
Refund Paid	-	(3)	-	(3)
Refund Pending	-	-	-	-
Vested Terminations				
Monetary Credit Paid	(16)	(1)	-	(17)
Monetary Credit Pending	(2)	2	-	-
Disabilities	(1)	-	1	-
Retirements	(93)	-	93	-
Death with Beneficiary	(1)	-	1	-
Death without Beneficiary	(1)	-	(1)	(2)
Active Death Beneficiary	(1)	-	1	-
Benefits Ceasing (Beneficiaries)	-	-	-	-
As of June 30, 2024	**1,689**	**2**	**630**	**2,321**

Appendix C - Participant Data

Distribution of Active Members

The following table displays the number of active participants by age and service as of June 30, 2024.

	Years of Service at Valuation Date							
Attained Age	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	Total Count
15 - 19	0	0	0	0	0	0	0	0
20 - 24	-	-	-	-	-	-	-	-
25 - 29	-	-	-	-	-	-	-	-
30 - 34	-	-	-	-	-	-	-	-
35 - 39	9	-	-	-	-	-	-	9
40 - 44	107	11	-	-	-	-	-	118
45 - 49	136	64	1	-	-	-	-	201
50 - 54	101	125	49	6	-	-	-	281
55 - 59	88	105	75	69	3	-	-	340
60 - 64	52	75	79	81	38	18	-	343
65 - 69	22	71	56	75	19	9	-	252
70 - 74	8	17	27	23	19	13	-	107
75 - 79	-	5	7	5	6	5	-	28
80 - 84	-	-	2	2	1	3	-	8
85+	-	-	-	-	-	2	-	2
Total	**523**	**473**	**296**	**261**	**86**	**50**	**-**	**1,689**

Distribution of Average Annual Salaries

The following table displays the average salaries of active participants by age and service as of June 30, 2024.

	Years of Service at Valuation Date							
Attained Age	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	Average Valuation Payroll
15 - 19	$0	$0	$0	$0	$0	$0	$0	$0
20 - 24	-	-	-	-	-	-	-	-
25 - 29	-	-	-	-	-	-	-	-
30 - 34	-	-	-	-	-	-	-	-
35 - 39	238,479	-	-	-	-	-	-	238,479
40 - 44	238,479	238,479	-	-	-	-	-	238,479
45 - 49	238,985	243,066	238,479	-	-	-	-	240,282
50 - 54	238,820	240,001	244,428	244,216	-	-	-	240,439
55 - 59	239,859	241,102	239,856	238,978	238,479	-	-	240,051
60 - 64	239,141	238,479	239,786	240,179	242,102	238,479	-	239,683
65 - 69	238,479	241,388	239,708	239,397	254,785	238,479	-	241,074
70 - 74	238,479	238,479	239,754	242,969	247,538	246,423	-	242,340
75 - 79	-	245,364	243,397	238,479	238,479	245,364	-	242,167
80 - 84	-	-	238,479	238,479	238,479	249,953	-	242,782
85+	-	-	-	-	-	238,479	-	238,479
Average	**$238,975**	**$240,594**	**$240,627**	**$239,930**	**$245,684**	**$241,921**	**$0**	**$240,294**

Appendix C - Participant Data

Distribution of Retired Members and Beneficiaries

The following table displays the number of recipients by age and retirement type as of June 30, 2024. This table includes deferred retirement members and beneficiaries.

Attained Age	Service Retirement	Non-Industrial Disability	Industrial Disability	Beneficiaries	Total Count of Participants Receiving Benefits
Under 30	0	0	0	0	**0**
30 - 34	-	-	-	-	-
35 - 39	-	-	-	-	-
40 - 44	-	-	-	-	-
45 - 49	-	-	-	-	-
50 - 54	-	-	-	-	-
55 - 59	-	1	-	1	2
60 - 64	9	2	-	5	16
65 - 69	107	4	1	2	114
70 - 74	210	5	3	12	230
75 - 79	142	6	-	14	162
80 - 84	64	-	-	8	72
85+	17	-	-	15	32
Total[1]	**549**	**18**	**4**	**57**	**628**

(1) Does not include 2 beneficiaries receiving 36-month pre-retirement death benefit.

Distribution Annual Benefits for Retired Members and Beneficiaries

The following table displays the distribution of annual benefits for retirees, beneficiaries by age used in the June 30, 2024 valuation. Deferred Retirement benefits that have not commenced as of the valuation date are not included in this table.

Attained Age	Service Retirement	Non-Industrial Disability	Industrial Disability	Beneficiaries	Annual Benefits
Under 30	$0	$0	$0	$0	$0
30 - 34	-	-	-	-	-
35 - 39	-	-	-	-	-
40 - 44	-	-	-	-	-
45 - 49	-	-	-	-	-
50 - 54	-	-	-	-	-
55 - 59	-	153,807	-	76,038	114,922
60 - 64	-	152,358	-	71,824	94,834
65 - 69	168,652	142,657	154,349	110,078	166,367
70 - 74	137,949	141,756	145,366	102,516	136,280
75 - 79	128,400	119,697	-	90,985	124,844
80 - 84	129,087	-	-	121,398	128,233
85+	124,583	-	-	80,832	104,075
Average	**$139,456**	**$136,451**	**$147,612**	**$93,736**	**$135,135**

Appendix D – Glossary

Accrued Liability (Actuarial Accrued Liability)
The portion of the Present Value of Benefits allocated to prior years. Based on CalPERS funding policies, the accrued liability is the target level of assets on any valuation date.

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, salary growth, and 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 to their plan provisions.

Amortization Bases
Separate payment schedules for different portions of the Unfunded Accrued Liability (UAL). The total UAL of a 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 gains and losses.

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

Classic Member (under PEPRA)
A classic member is a member who joined The Judges' Retirement System II prior to January 1, 2013 and who is not defined as a new member under PEPRA. (See definition of new member below)

Discount Rate
This is the rate used to discount the expected future benefit payments to the valuation date to determine the Projected Value of Benefits. The discount rate 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.

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 same as the date of hire.

Entry Age Actuarial Cost Method
An actuarial cost method designed to fund a member's total plan benefit over the course of his or her career. This method is designed to yield a rate expressed as a level percentage of payroll, which is designed to remain level throughout the member's career.

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

Appendix D – Glossary

Funded Ratio
Defined as the Market Value of Assets divided by the Accrued Liability. It 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 target established by CalPERS funding policies on the valuation date 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.

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 the Judges Retirement System II 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. The normal cost plus the required amortization of the UAL, if any, make up the required contributions.

Pension Actuary
A business professional proficient in mathematics and statistics who performs the calculations necessary to properly fund a pension plan and allow the plan sponsor to disclose its liabilities. A pension actuary must satisfy the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States with regard to pensions.

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 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.

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California Public Employees' Retirement System

A Component Unit of the State of California