AMENDED TOWN OF LOS GATOS
TOWN PENSION AND OPEB TRUSTS
OVERSIGHT COMMITTEE AGENDA
OCTOBER 15, 2024
110 EAST MAIN STREET AND TELECONFERENCE
TOWN COUNCIL CHAMBERS
*6:00 PM

Mary Badame, Mayor
Matthew Hudes, Vice Mayor
Rob Moore, Council Member
Rob Rennie, Council Member
Maria Ristow, Council Member

IMPORTANT NOTICE

This is a hybrid meeting and will be held in-person at the Town Council Chambers at 110 E. Main Street and virtually through Zoom Webinar (log-in information provided below). Members of the public may provide public comments for agenda items in-person or virtually through the Zoom Webinar by following the instructions listed below. The live stream of the meeting may be viewed on television and/or online at www.LosGatosCA.gov/TownYouTube.

Pursuant to Government Code Section 54953(b)(3), Council Member Rob Rennie will be participating via teleconference from the Hilton Budapest, Hess Andras Ter 1-3, Budapest H-1014, Hungary. The teleconference locations shall be accessible to the public and the agenda will be posted at the teleconference location 72 hours before the meeting.

HOW TO PARTICIPATE

The public is welcome to provide oral comments in real-time during the meeting in three ways:
Zoom Webinar (Online): Join from a PC, Mac, iPad, iPhone or Android device. Please click this URL to join: https://losgatosca-gov.zoom.us/j/88602799991?pwd=3fPj2u9KgWUKtHLFZXbBpoKy3bbbAT.1
Passcode: 234211 You can also type in 886 0279 9991 in the "Join a Meeting" page on the Zoom website at zoom.us and use passcode 234211.

When the Mayor announces the item for which you wish to speak, click the "raise hand" feature in Zoom. If you are participating by phone on the Zoom app, press *9 on your telephone keypad to raise your hand.

Telephone: Please dial (877) 336-1839 for US Toll-free or (636) 651-0008 for US Toll. (Conference code: 1052180)

If you are participating by calling in, press #2 on your telephone keypad to raise your hand.

In-Person: Please complete a "speaker's card" located on the back of the chamber benches and return it to the Town Clerk before the meeting or when the Mayor announces the item for which you wish to speak.

NOTES: (1) Comments will be limited to three (3) minutes or less at the Mayor's discretion.
(2) If you are unable to participate in real-time, you may email to Clerk@losgatosca.gov the subject line "Public Comment Item #__" (insert the item number relevant to your comment). All comments received will become part of the record.
(3) Deadlines to submit public comments are:

11:00 a.m. the Thursday before the Committee meeting for inclusion in the agenda packet.
11:00 a.m. the Monday before the Committee meeting for inclusion in an addendum.
11:00 a.m. on the day of the Committee meeting for inclusion in a desk item.

(4) Persons wishing to make an audio/visual presentation must submit the presentation electronically to Clerk@losgatosca.gov no later than 3:00 p.m. on the day of the Committee meeting.

CALL MEETING TO ORDER

ROLL CALL

APPROVE REMOTE PARTICIPATION *(This item is listed on the agenda in the event there is an emergency circumstance requiring a Committee Member to participate remotely under AB 2449 (Government Code 54953)).*

CONSENT ITEMS (*Items appearing on the Consent Items are considered routine Town business and may be approved by one motion. Any member of the Committee may request to have an item removed from the Consent Items for comment and action. Members of the public may provide input on any or multiple Consent Item(s) when the Mayor asks for public comments on the Consent Items. If you wish to comment, please follow the Participation Instructions contained on Page 1 of this agenda. If an item is removed, the Mayor has the sole discretion to determine when the item will be heard.)*

1. Approve Minutes of the June 4, 2024 Town Pension and OPEB Trusts Oversight Committee Meeting.

VERBAL COMMUNICATIONS *(Members of the public are welcome to address the Committee only on matters listed on the agenda. To ensure all agenda items are heard, this portion of the agenda is limited to 30 minutes. Each speaker is limited to no more than three (3) minutes or such time as authorized by the Mayor.)*

OTHER BUSINESS *(Up to three minutes may be allotted to each speaker on any of the following items.)*

2. Receive the California Employer's Pension Prefunding Trust (CEPPT) Strategy Market Value Summary Report for the Period Ending June 30, 2024 and Performance as of July 31, 2024.
3. Receive the California Employer's Retiree Benefit Trust (CERBT) Strategy 1 Market Value Summary Report for the Period Ending June 30, 2024 and the Performance Report as of July 31, 2024.
4. Receive the Town of Los Gatos Retiree Healthcare Plan June 30, 2023 Actuarial Valuation and its Assumptions as Prepared and Recommended by Foster and Foster, Inc.
5. Receive the CalPERS Actuarial Valuation Reports as of June 30, 2023.

ADJOURNMENT

ADA NOTICE In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Clerk's Office at (408) 354- 6834. Notification at least two (2) business days prior to the meeting date will enable the Town to make reasonable arrangements to ensure accessibility to this meeting. [28 CFR §35.102-35.104]

* The agenda was amended to change the start time of the meeting from 5:15 p.m. to 6:00 p.m.

TOWN OF LOS GATOS

PENSION AND OPEB TRUSTS OVERSIGHT COMMITTEE REPORT

MEETING DATE: 10/15/2024

ITEM NO: 1

DRAFT
Minutes of the Pension and OPEB Trusts Oversight Committee Meeting
Tuesday, June 4, 2024

The Pension and OPEB Trusts Oversight Committee of the Town of Los Gatos conducted a regular Meeting on Tuesday, June 4, 2024, at 6:15 p.m.

MEETING CALLED TO ORDER AT 6:15 P.M.

ROLL CALL

Present: Mayor Mary Badame, Vice Mayor Matthew Hudes (remote), Council Member Rob Moore, Council Member Rob Rennie, Council Member Maria Ristow.
Absent: None

CONSENT ITEMS (TO BE ACTED UPON BY A SINGLE MOTION)

1. Approve Minutes of the March 5, 2024 Town Pension and OPEB Oversight Trusts Committee Meeting.
2. Receive the California Employer's Pension Prefunding Trust (CEPPT) Strategy 2 Market Value Summary Report for the Period Ending March 31, 2024 and Performance as of April 3, 2024.
3. Receive the California Employer's Retiree Benefit Trust (CERBT) Strategy 1 Market Value Summary Report for the Period Ending March 31, 2024 and the Performance Report as of April 30, 2024.

Mayor Badame opened public comment.

No one spoke.

Mayor Badame closed public comment.

MOTION: **Motion** by **Council Member Ristow** to approve the consent calendar items. **Seconded** by **Council Member Moore.**

VOTE: **Motion passed unanimously by roll call vote.**

VERBAL COMMUNICATIONS

No one spoke.

OTHER BUSINESS

4. Receive Actuarial Presentation on CalPERS Analysis – 6/30/2022 Valuation Report by Foster & Foster Actuaries and Consultants and Identify Amortization Bases for Future Potential Additional Discretionary Payments (ADPs).

Gitta Ungvari, Finance Director, presented the staff report.

Mayor Badame opened public comment.

No one spoke.

Mayor Badame closed public comment.

The Oversight Committee received the report and provided direction to leave the balance of the Pension IRS 115 Trust as is, not transferring the funds to CalPERS at this time, and reconsider a transfer in December after receiving the Annual Comprehensive Financial Report (ACFR) or at mid-year budget review.

ADJOURNMENT

The meeting adjourned at 6:35 p.m.

Attest:

_____

Jenna De Long, Deputy Town Clerk

TOWN OF LOS GATOS

TOWN PENSION AND OPEB TRUSTS OVERSIGHT COMMITTEE REPORT

MEETING DATE: 10/15/2024

ITEM NO: 2

DATE: September 30, 2024

TO: Town Pension and OPEB Trusts Oversight Committee

FROM: Katy Nomura, Interim Town Manager

SUBJECT: Receive the California Employer's Pension Prefunding Trust (CEPPT) Strategy Market Value Summary Report for the Period Ending June 30, 2024 and Performance as of July 31, 2024

RECOMMENDATION:

Receive the California Employer's Pension Prefunding Trust (CEPPT) Strategy 2 Market Value Summary Report for the period ending June 30, 2024 and performance as of July 31, 2024.

BACKGROUND:

On November 5, 2019, the Town Council authorized the Town Manager to enter into an agreement with CalPERS for participation in the California Employers' Pension Prefunding Trust (CEPPT) program.

The CEPPT Fund is a Section 115 trust fund dedicated to prefunding employer contributions to defined benefit pension systems for eligible California public agencies. On March 3, 2020, the Town Pension and OPEB Trusts Oversight Committee adopted CEPPT Strategy 2 as the asset allocation for the Town's Section 115 Trust pension assets.

DISCUSSION:

Effective Fiscal Year (FY) 2015/16, the Town Council determined that if sufficient General Fund year-end savings are available and targeted reserve levels for the Catastrophic Reserve and Budget Stabilization Reserve have been met, upon the final close of the fiscal year, a minimum of $300,000 annually shall be deposited into the Pension/OPEB Reserve Fund. In 2018 the Town Council updated the General Fund Reserve Policy to provide for additional discretionary payments.

PREPARED BY: Gitta Ungvari
Finance Director

Reviewed by: Interim Town Manager and Town Attorney

Strategy 2 (ADPs) of $390,000 per year to address the unfunded pension liability. Under the updated Policy, a 20-year amortization equivalence will be achieved.

The ending CEPPT 115 Trust account balance as of June 30, 2024, was $2,188,658.95 (Attachment 1). As of July 3, 2024, the CEPPT Strategy 2 fund had a net return of 2.55% for the month and 2.55% for the Fiscal Year to Date (FYTD) (Attachment 2). Staff anticipates transferring an additional $690,000 to the CEPPT Trust during FY 2024/25. Per the March 2024 Pension/OPEB Oversight Committee action, the Town leaves the funds in the CEPPT Trust and continuously monitors and evaluates if an Additional Discretionary Payment should be made directly to CalPERS.

The Town Finance Commission has received this report at its September 9, 2024 regular meeting and recommended that the Town move from Strategy 2 to Strategy 1. If the Town Council would like to explore this option, staff will further analyze this option for a future discussion.

Attachments:
1. CEPPT Market Value Summary Report as of June 30, 2024
2. CEPPT Strategy 2 Performance as of July 31, 2024

Town of Los Gatos
CEPPT Strategy 2
Entity #: SKHE-4589482285-501P
Quarter Ended June 30, 2024

CalPERS

Market Value Summary:

	QTD Current Period	Fiscal Year to Date
Beginning Balance	$2,180,743.10	$1,400,162.56
Contribution	0.00	690,000.00
Disbursement	0.00	0.00
Transfer In	0.00	0.00
Transfer Out	0.00	0.00
Investment Earnings	9,150.40	102,309.76
Administrative Expenses	(814.28)	(2,515.21)
Investment Expense	(420.27)	(1,298.16)
Other	0.00	0.00
Ending Balance	$2,188,658.95	$2,188,658.95
FY End Contribution Accrual	0.00	0.00
FY End Disbursement Accrual	0.00	0.00
Grand Total	$2,188,658.95	$2,188,658.95

Unit Value Summary:

	QTD Current Period	Fiscal Year to Date
Beginning Units	204,653.336	138,648.200
Unit Purchases from Contributions	0.000	66,005.136
Unit Sales for Withdrawals	0.000	0.000
Unit Transfer In	0.000	0.000
Unit Transfer Out	0.000	0.000
Ending Units	204,653.336	204,653.336
Period Beginning Unit Value	10.655790	10.098671
Period Ending Unit Value	10.694469	10.694469

Please note the Grand Total is your actual fund account balance at the end of the period, including accrued contribution and disbursements. Please review your statement promptly. All information contained in your statement will be considered true and accurate unless you contact us within 30 days of receipt of this statement. If you have questions about the validity of this information, please contact CEPPT4U@calpers.ca.gov.

ATTACHMENT 1

Statement of Transaction Detail for the Quarter Ending 06/30/2024

Town of Los Gatos

Entity #: SKHE-4589482285-501P

Date	Description	Amount	Unit Value	Units	Check/Wire	Notes

Client Contact:
CEPPT4U@CalPERS.ca.gov

California Employers' Pension Prefunding Trust (CEPPT)

CEPPT Strategy 2

July 31, 2024

Objective

The CEPPT Strategy 2 portfolio seeks to provide capital appreciation and income consistent with its strategic asset allocation. There is no guarantee that the portfolio will achieve its investment objective.

Strategy

The CEPPT Strategy 2 portfolio is invested in various asset classes that are passively managed to an index. CalPERS periodically adjusts the composition of the portfolio in order to match the target allocations. Generally, equities are intended to help build the value of the employer's portfolio over the long term while bonds are intended to help provide income and stability of principal. Also, strategies invested in a higher percentage of equities seek higher investment returns (but assume more risk) compared with strategies invested in a higher percentage of bonds.

Compared with CEPPT Strategy 1, this portfolio has a lower allocation to equities and a higher allocation to bonds. Historically, funds with a lower percentage of equities have displayed less price volatility and, therefore, this portfolio may experience comparatively less fluctuation of value. Employers that seek greater stability of value, in exchange for possible lower investment returns, may wish to consider this portfolio.

CalPERS Board may change the list of approved asset classes in composition as well as targeted allocation percentages and ranges at any time.

Assets Under Management

As of the specified reporting month-end:

CEPPT Strategy 2	Annual Expense Ratio
$61,323,697	0.25%

Composition

Asset Class Allocations and Benchmarks

The CEPPT Strategy 2 portfolio consists of the following asset classes and corresponding benchmarks:

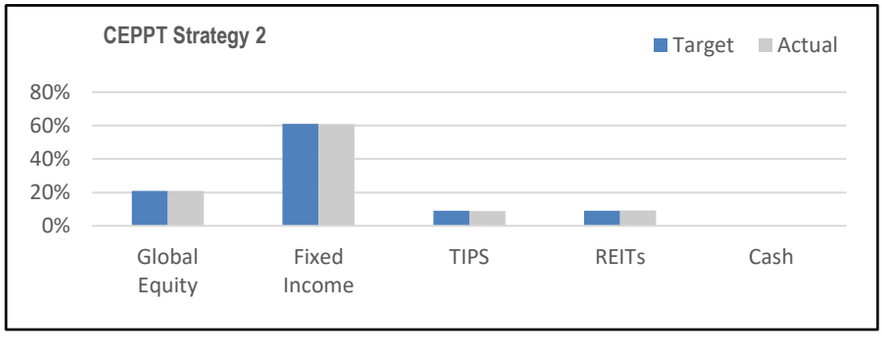
Asset Class	Target Allocation	Target Range	Benchmark
Global Equity	21%	± 5%	MSCI All Country World Index IMI (Net)
Fixed Income	61%	± 5%	Bloomberg US Aggregate Bond Index
Treasury Inflation-Protected Securities ("TIPS")	9%	± 3%	Bloomberg US TIPS Index, Series L
Real Estate Investment Trusts ("REITs")	9%	± 5%	FTSE EPRA/NAREIT Developed Index (Net)
Cash	-	+ 2%	ICE BofA US 3-Month Treasury Bill Index

Portfolio Benchmark

The CEPPT Strategy 2 benchmark is a composite of underlying asset class market indices, each assigned the target weight for the asset class it represents.

Target vs. Actual Asset Class Allocations

The following chart shows policy target allocations compared with actual asset allocations as of the specified reporting month-end. CalPERS may temporarily deviate from the target allocation for a particular asset class based on market, economic, or other considerations.



CEPPT Strategy 2 Performance as of July 31, 2024

	1 Month	3 Months	Fiscal YTD	1 Year	3 Years*	5 Years*	10 Years*	Since Inception* (January 1, 2020)
Gross Return [1,3]	2.57%	6.06%	2.57%	7.66%	-0.67%	-	-	2.14%
Net Return [2,3]	2.55%	6.00%	2.55%	7.41%	-0.90%	-	-	1.91%
Benchmark Return	2.56%	6.08%	2.56%	7.57%	-0.74%	-	-	2.04%
Standard Deviation [4]	-	-	-	-	9.47%	-	-	8.43%

* Returns for periods greater than one year are annualized.

[1] Gross returns are net of SSGA operating expenses.

[2] Net returns are net of SSGA operating expenses, investment management, administrative and recordkeeping fees.

[3] Expenses are described in more detail on page 2 of this document.

[4] Standard deviation is based on gross returns and is reported for periods greater than 3 years.

California Employers' Pension Prefunding Trust (CEPPT)

CEPPT Strategy 2

July 31, 2024

General Information

Information Accessibility

The CEPPT Strategy 2 portfolio consists of assets managed internally by CalPERS and/or by external managers. Since it is not a mutual fund, a prospectus is not available and daily holdings are not published. CalPERS provides a quarterly statement of the employer's account and other information about the CEPPT. For total market value, detailed asset allocation, investment policy and performance information, please visit our website at **www.calpers.ca.gov.**

Portfolio Manager Information

The CalPERS Board, through its Investment Committee, directs the CEPPT investment strategy based on policies approved by the Board of Administration. State Street Global Advisors (SSGA) manages all underlying investments for CEPPT, which include: Global Equity, Fixed Income, Real Estate Investment Trusts, and Treasury Inflation-Protected Securities.

Custodian and Record Keeper

State Street Bank serves as custodian for the CEPPT. Northeast Retirement Services serves as recordkeeper.

Expenses

CEPPT is a self-funded trust in which participating employers pay for all administrative and investment expenses. Expenses reduce the gross investment return by the fee amount. The larger the expenses, the greater reduction of investment return. Currently, CEPPT expense ratios are 0.25%. This equates to $2.50 per $1,000 invested. The expenses consist of administrative expenses borne by CalPERS to administer and oversee the Trust assets, investment management and administrative fees paid to SSGA to manage all asset classes, and recordkeeping fees paid to Northeast Retirement Services to administer individual employer accounts. The expenses described herein are reflected in the net asset value per unit. The expense ratio is subject to change at any time and without prior notification due to factors such as changes to average fund assets or market conditions. CalPERS reviews the operating expenses annually and changes may be made as appropriate. Even if the portfolio loses money during a period, the expenses will still be charged.

What Employers Own

Each employer invested in CEPPT Strategy 2 owns units of this portfolio, which invests in pooled asset classes managed by CalPERS and/or external advisors. Employers do not have direct ownership of the securities in the portfolio.

Price

The value of the portfolio changes daily based upon the market value of the underlying securities. Just as prices of individual securities fluctuate, the portfolio's value also changes with market conditions.

Principal Risks of the Portfolio

The CEPPT fund is a trust fund dedicated to prefunding employer contributions to defined benefit pension plans for eligible state and local agencies. CEPPT is not, however, a defined benefit plan. There is no guarantee that the portfolio will achieve its investment objectives or provide sufficient funding to meet employer obligations.

An investment in the portfolio is not a bank deposit, nor is it insured or guaranteed by the Federal Deposit Insurance Corporation (FDIC), CalPERS, the State of California or any other government agency.

There are risks associated with investing, including possible loss of principal. The portfolio's risk depends in part on the portfolio's asset class allocations and the selection, weighting and risks of the underlying investments. For more information about investment risks, please see the document entitled "CEPPT Principal Investment Risks" located at **www.calpers.ca.gov.**

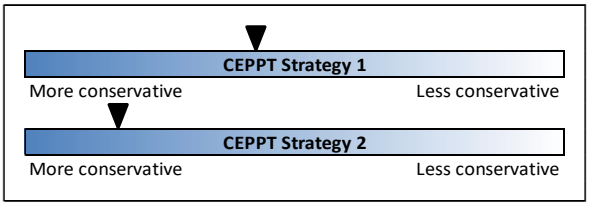
Fund Performance

Performance data shown on page 1 represents past performance and is no guarantee of future results. The investment return and principal value of an investment will fluctuate so that an employer's units, when redeemed, may be worth more or less than their original cost. Current performance may be higher or lower than historical performance data shown. For current performance information, please visit **www.calpers.ca.gov** and follow the links to California Employers' Pension Prefunding Trust.

CEPPT Strategy Risk Levels

CalPERS offers employers the choice of one of two investment strategies. Projected risk levels among risk strategies vary, depending upon the target asset class allocations. Generally, equities carry more risk than fixed income securities.

Asset Class Target Allocations	Strategy 1	Strategy 2
Global Equity	37%	21%
Fixed Income	44%	61%
Treasury-Inflation Protected Securities	5%	9%
Real Estate Investment Trusts	14%	9%



TOWN OF LOS GATOS

TOWN PENSION AND OPEB TRUSTS OVERSIGHT COMMITTEE REPORT

MEETING DATE: 10/15/2024

ITEM NO: 3

DATE: September 30, 2024

TO: Town Pension and OPEB Trusts Oversight Committee

FROM: Katy Nomura, Interim Town Manager

SUBJECT: Receive the California Employer's Retiree Benefit Trust (CERBT) Strategy 1 Market Value Summary Report for the Period Ending June 30, 2024 and the Performance Report as of July 31, 2024

RECOMMENDATION:

Receive California Employer's Retiree Benefit Trust (CERBT) Strategy 1 Market Value Summary Report for the Period Ending June 30, 2024 and the Performance Report as of July 31, 2024.

BACKGROUND:

In 2009, the Council approved participating in the CERBT Fund. The CERBT Fund is an IRS Section 115 trust fund dedicated to the prefunding of other post-employment benefits ("OPEB"). The CERBT Strategy 1 is the single investment vehicle for the Town's OPEB Plan ("OPEB Plan").

DISCUSSION:

The ending OPEB 115 Trust account balance as of June 30, 2024, was $26,976,205.35 compared to $26,782,842.27 as of March 31, 2024 (Attachment 1). As of July 31, 2024, the CERBT Strategy 1 fund had a net return of 2.83% for the month and 2.83% as of Fiscal Year to Date (Attachment 2).

The Town Finance Commission has received this information at its September 9, 2024 regular meeting.

Attachments:
1. OPEB 115 Trust Market Value Summary Report as of June 30, 2024
2. CERBT Strategy 1 Performance Report July 31, 2024

PREPARED BY: Gitta Ungvari
Finance Director

Reviewed by: Interim Town Manager and Town Attorney

Town of Los Gatos
CERBT Strategy 1
Entity #: SKB0-4589482285
Quarter Ended June 30, 2024

CalPERS

Market Value Summary:

	QTD Current Period	Fiscal Year to Date
Beginning Balance	$26,782,842.27	$24,318,329.86
Contribution	0.00	0.00
Disbursement	0.00	0.00
Transfer In	0.00	0.00
Transfer Out	0.00	0.00
Investment Earnings	198,962.31	2,679,267.63
Administrative Expenses	(3,234.36)	(12,357.06)
Investment Expense	(2,364.87)	(9,035.08)
Other	0.00	0.00
Ending Balance	$26,976,205.35	$26,976,205.35
FY End Contrib per GASB 74 Para 22	0.00	0.00
FY End Disbursement Accrual	0.00	0.00
Grand Total	$26,976,205.35	$26,976,205.35

Unit Value Summary:

	QTD Current Period	Fiscal Year to Date
Beginning Units	1,188,552.988	1,188,552.988
Unit Purchases from Contributions	0.000	0.000
Unit Sales for Withdrawals	0.000	0.000
Unit Transfer In	0.000	0.000
Unit Transfer Out	0.000	0.000
Ending Units	1,188,552.988	1,188,552.988
Period Beginning Unit Value	22.533991	20.460451
Period Ending Unit Value	22.696679	22.696679

Please note the Grand Total is your actual fund account balance at the end of the period, including all contributions per GASB 74 paragraph 22 and accrued disbursements. Please review your statement promptly. All information contained in your statement will be considered true and accurate unless you contact us within 30 days of receipt of this statement. If you have questions about the validity of this information, please contact CERBT4U@calpers.ca.gov.

ATTACHMENT 1

Statement of Transaction Detail for the Quarter Ending 06/30/2024

Town of Los Gatos

Entity #: SKB0-4589482285

Date	Description	Amount	Unit Value	Units	Check/Wire	Notes

Client Contact:
CERBT4U@CalPERS.ca.gov

California Employers' Retiree Benefit Trust (CERBT)

CERBT Strategy 1

July 31, 2024

Objective

The CERBT Strategy 1 portfolio seeks to provide capital appreciation and income consistent with its strategic asset allocation. There is no guarantee that the portfolio will achieve its investment objective.

Strategy

The CERBT Strategy 1 portfolio is invested in various asset classes. CalPERS periodically adjusts the composition of the portfolio in order to match the target allocations. Generally, equities are intended to help build the value of the employer's portfolio over the long term while bonds are intended to help provide income and stability of principal. Also, strategies invested in a higher percentage of equities seek higher investment returns (but assume more risk) compared with strategies invested in a higher percentage of bonds.

Compared with CERBT Strategy 2 and Strategy 3, this portfolio has a higher allocation to equities than bonds and other assets. Historically, equities have displayed greater price volatility and, therefore, this portfolio may experience greater fluctuation of value. Employers that seek higher investment returns, and are able to accept greater risk and tolerate more fluctuation in returns, may wish to consider this portfolio.

CalPERS Board may change the list of approved asset classes in composition as well as targeted allocation percentages and ranges at any time.

Assets Under Management

As of the specified reporting month-end:

CERBT Strategy 1	Annual Operating Ratio
$18,830,082,856	0.10%

Composition

Asset Class Allocations and Benchmarks

The CERBT Strategy 1 portfolio consists of the following asset classes and corresponding benchmarks:

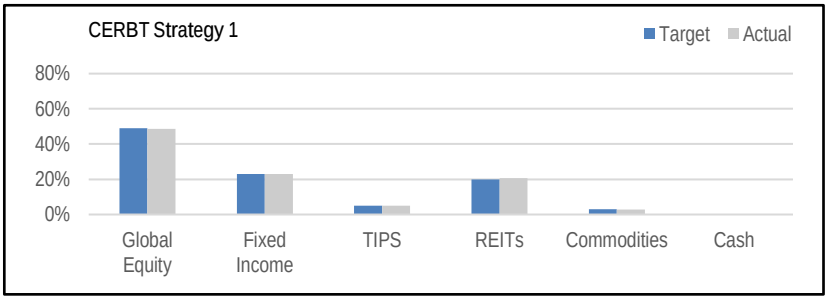
Asset Class	Target Allocation	Target Range	Benchmark
Global Equity	49%	± 5%	MSCI All Country World Index IMI (Net)
Fixed Income	23%	± 5%	Bloomberg Long Liability Index
Treasury Inflation-Protected Securities ("TIPS")	5%	± 3%	Bloomberg US TIPS Index, Series L
Real Estate Investment Trusts ("REITs")	20%	± 5%	FTSE EPRA/NAREIT Developed Index (Net)
Commodities	3%	± 3%	S&P GSCI Total Return Index
Cash	-	+ 2%	ICE BofA US 3-Month Treasury Bill Index

Portfolio Benchmark

The CERBT Strategy 1 benchmark is a composite of underlying asset class market indices, each assigned the target weight for the asset class it represents.

Target vs. Actual Asset Class Allocations

The following chart shows policy target allocations compared with actual asset allocations as of the specified reporting month-end. CalPERS may temporarily deviate from the target allocation to a particular asset class based on market, economic, or other considerations.



CERBT Strategy 1 Performance as of July 31, 2024								
	1 Month	3 Months	Fiscal YTD	1 Year	3 Years*	5 Years*	10 Years*	Since Inception* (June 1, 2007)
Gross Return[1,3]	2.84%	7.55%	2.84%	11.04%	1.31%	6.76%	6.06%	5.45%
Net Return[2,3]	2.83%	7.53%	2.83%	10.94%	1.22%	6.66%	5.97%	5.37%
Benchmark Returns	2.83%	7.49%	2.83%	10.81%	1.10%	6.50%	5.73%	5.06%
Standard Deviation[4]	-	-	-	-	14.38%	14.05%	11.39%	12.99%

* Returns for periods greater than one year are annualized.

[1] Gross returns are net of SSGA operating expenses.

[2] Net returns are net of SSGA operating expenses, investment management, administrative and recordkeeping fees.

[3] Expenses are described in more detail on page 2 of this document.

[4] Standard deviation is based on gross returns and is reported for periods greater than 3 years.

California Employers' Retiree Benefit Trust (CERBT)

CERBT Strategy 1

July 31, 2024

General Information

Information Accessibility

The CERBT Strategy 1 portfolio consists of assets managed internally by CalPERS and/or by external advisors. Since it is not a mutual fund, a prospectus is not available and daily holdings are not published. CalPERS provides a quarterly statement of the employer's account and other information about the CERBT. For total market value, detailed asset allocation, investment policy and current performance information, please visit our website at: www.calpers.ca.gov.

Portfolio Manager Information

The CalPERS Board, through its Investment Committee, directs the CERBT investment strategy based on policies approved by the Board of Administration. State Street Global Advisors (SSGA) manages all underlying investments for CERBT, which include: Global Equity, Fixed Income, Real Estate Investment Trusts, Treasury Inflation-Protected Securities, and Commodities.[1]

Custodian and Record Keeper

State Street Bank serves as custodian for the CERBT. Northeast Retirement Services serves as recordkeeper.

Expenses

CERBT is a self-funded trust in which participating employers pay for all administrative and investment expenses. Expenses reduce the gross investment return by the fee amount. The larger the expenses, the greater the reduction of investment return. Currently, CERBT expenses are 0.10% which consist of administrative expenses borne by CalPERS to administer and oversee the Trust assets, investment management and administrative fees paid to SSGA to manage all asset classes, and recordkeeping fees paid to Northeast Retirement Services to administer individual employer accounts. The expenses described herein are reflected in the net asset value per unit. The expense ratio is subject to change at any time and without prior notification due to factors such as changes to average fund assets or market conditions. CalPERS reviews the operating expenses annually and changes may be made as appropriate. Even if the portfolio loses money during a period, the expenses will still be charged.

What Employers Own

Each employer invested in CERBT Strategy 1 owns units of this portfolio, which invests in pooled asset classes managed by CalPERS and/or external advisors. Employers do not have direct ownership of the securities in the portfolio.

Price

The value of the portfolio changes daily based upon the market value of the underlying securities. Just as prices of individual securities fluctuate, the portfolio's value also changes with market conditions.

Principal Risks of the Portfolio

The CalPERS CERBT Fund provides California government employers with a trust through which they may prefund retiree medical costs and other post-employment benefits (OPEB). CERBT is not, however, a defined benefit plan. There is no guarantee that the portfolio will achieve its investment objectives or provide sufficient funding to meet employer obligations. Further, CalPERS will not make up the difference between an employer's CERBT assets and the actual cost of OPEB provided to an employer's plan members.

An investment in the portfolio is not a bank deposit, nor is it insured or guaranteed by the Federal Deposit Insurance Corporation (FDIC), CalPERS, the State of California or any other government agency.

There are risks associated with investing, including possible loss of principal. The portfolio's risk depends in part on the portfolio's asset class allocations and the selection, weighting and risks of the underlying investments. For more information about investment risks, please see the document entitled "CERBT Principal Investment Risks" located at www.calpers.ca.gov.

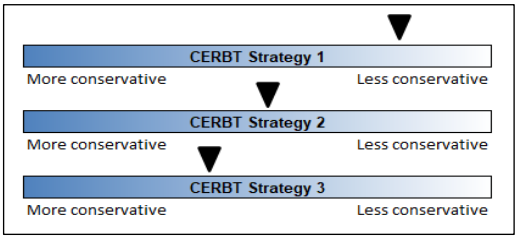
Fund Performance

Performance data shown on page 1 represents past performance and is no guarantee of future results. The investment return and principal value of an investment will fluctuate so that an employer's units, when redeemed, may be worth more or less than their original cost. Current performance may be higher or lower than historical performance data shown. For current performance information, please visit www.calpers.ca.gov and follow the links to California Employers' Retiree Benefit Trust.

CERBT Strategy Risk Levels

CalPERS offers employers the choice of one of three investment strategies. Projected risk levels among strategies vary, depending upon the target asset class allocations. Generally, equities carry more risk than fixed income securities.

Asset Class Target Allocations[1]	Strategy 1	Strategy 2	Strategy 3
Global Equity	49%	34%	23%
Fixed Income	23%	41%	51%
Treasury Inflation-Protected Securities	5%	5%	9%
Real Estate Investment Trusts	20%	17%	14%
Commodities	3%	3%	3%



[1] Since June 2018, SSGA has passively managed all CERBT asset classes. Previously, Fixed Income, TIPS and Commodity asset classes were managed internally by CalPERS.

TOWN OF LOS GATOS

TOWN PENSION AND OPEB TRUSTS OVERSIGHT COMMITTEE REPORT

MEETING DATE: 10/15/2024

ITEM NO: 4

DATE: September 30, 2024

TO: Town Pension and OPEB Trusts Oversight Committee

FROM: Katy Nomura, Interim Town Manager

SUBJECT: Receive the Town of Los Gatos Retiree Healthcare Plan June 30, 2023 Actuarial Valuation and its Assumptions as Prepared and Recommended by Foster and Foster, Inc.

RECOMMENDATION:

Receive the Town of Los Gatos Retiree Healthcare Plan June 30, 2023 actuarial valuation and its assumptions as prepared and recommended by Foster and Foster, Inc.

BACKGROUND:

The Town's healthcare plan pays all, or a portion of, health insurance premiums for qualified retirees and their survivors and dependents. Healthcare benefits are also referred to as Other Post-Employment Benefits or OPEB. The Town's healthcare plan is an Internal Revenue Code Section 115 Trust which is administered by the Town Pension and OPEB Trusts Oversight Committee. The Oversight Committee consists of the five Town Council Members. The Oversight Committee is responsible for the management and control of the healthcare assets. The healthcare assets are maintained at CalPERS and invested in the CalPERS managed California Employers' Retiree Benefit Trust (CERBT) Strategy 1.

In 2009, the Town proactively opted to transition from a "pay-as-you-go" (PayGo) funding policy for OPEB benefits and adopted a ten-year phase-in approach to prefunding the OPEB obligations. Since implementation of the ten-year phase-in of prefunding, the healthcare plan has gone from zero percent funded to the current 77.5% funding ratio.

DISCUSSION:

For the healthcare plan, the Town retains the services of Foster and Foster, Inc. to analyze the respective assets and liabilities of the Healthcare Plan. In order for the Town to understand the

PREPARED BY: Gitta Ungvari
Finance Director

Reviewed by: Interim Town Manager and Town Attorney

value of future healthcare benefit payments, an actuarial valuation is performed every other year for the healthcare plan with the last valuation occurring in 2021.

Attachment 1 presents the June 30, 2023 Actuarial Valuation Final Results from the Town's actuary, Foster and Foster, Inc. Since the 2021 valuation, the total OPEB Actuarial Accrued Liability increased from $28.7 million to $33.3 million as of June 30, 2023. The Unfunded Actuarial Accrued Liability increased from approximately $5.5 million as of June 30, 2021 to $7.5 million as of the June 30, 2023. The net result is a decrease in the funded status for the OPEB plan as of June 30, 2023 to 77.5% from 81.0%.

	June 30, 2023	**June 30, 2021**
Actuarial Value of Plan Assets	$25,824,000	$23,252,000
Actuarial Accrued Liability	33,331,000	28,720,000
Unfunded Actuarial Accrued Liability	7,507,000	5,468,000
Funded Status	77.5%	81.0%

In addition, the development of the actuarial valuation includes assumption recommendations by the Town's actuary. The table on the following page provides the primary actuarial assumptions recommended for the Oversight Committee's consideration. The Finance Commission is welcome to provide comments on the assumptions for the Oversight Committee's consideration.

Assumption	**June 30, 2023**	**June 30, 2021**
General Inflation	2.50%	2.50%
Discount Rate	6.25%	6.25%
Healthcare Trend	Initially 6.25% to 8.5% Declining to 3.45% Over approximately 50 years	Initially 4.5% to 6.5% Declining to 3.75% Over approximately 50 years
Payroll Increases	2.75%	2.75%
Amortization UAL	14-15 Years	16 Years

These reports are posted on the Town's website: https://www.losgatosca.gov/1861/CalPERS-and-OPEB-Actuarial-Valuation-Rep. The Town Finance Commission has received this report on its September 9, 2024 regular meeting.

CONCLUSION:

Receive the Town of Los Gatos Retiree Healthcare Plan June 30, 2023 actuarial valuation and its assumptions as prepared and recommended by Foster and Foster, Inc.

COORDINATION:

This staff report was coordinated with the Interim Town Manager, and the Town Attorney.

FISCAL IMPACT:

There is no fiscal impact related reviewing the OPEB actuarial report.

ENVIRONMENTAL ASSESSMENT:

This is not a project defined under CEQA, and no further action is required.

Attachments:
1. June 30, 2023 OPEB Actuarial Valuation Final Results

TOWN OF LOS GATOS
RETIREE HEALTHCARE PLAN

FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

June 30, 2023 Actuarial Valuation

Plan Funding for 2024/25 and 2025/26

Doug Pryor, ASA, EA, MAAA
Katherine Moore, ASA, MAAA
Joseph Herm
Foster & Foster, Inc.

August 9, 2024

ATTACHMENT 1

CONTENTS

BENEFIT SUMMARY

■ Eligibility	■ Retire directly from Town under CalPERS (service or disability) ■ Town Council members in CalPERS eligible ■ Tier 1 eligibility

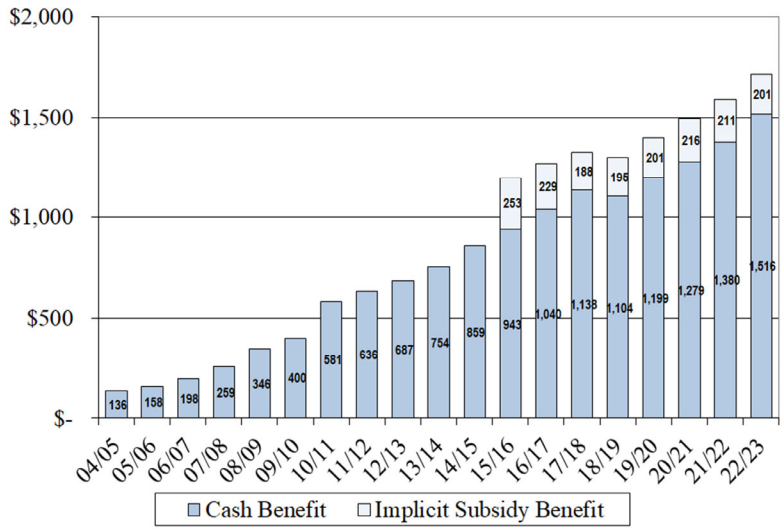
Employee Group	Hired on or before
TEA	8/22/18
AFSCME	7/1/18
POA Management Confidential Town Manager Town Attorney Town Council	10/1/18

BENEFIT SUMMARY

■ Tier 1 Medical Benefit	■ Maximum Town pays up to Kaiser Region 1 single premium plus 90% of difference between Kaiser premium for coverage elected (2-party and family) and single premium using: • Non-Medicare premium for employees who retired before 2/1/16 • Non-Medicare and Medicare premiums for employees who retired on or after 2/1/16 ■ Town cap uses PEMHCA 5% unequal method • Town joined PEMHCA in 1991 • Maximum annual increase of $100 per month for family coverage - $2,047.16 for family coverage for 2023 • Single/dual coverage at 100%
■ Tier 2 Medical Benefit	■ Town pays PEMHCA minimum amount:

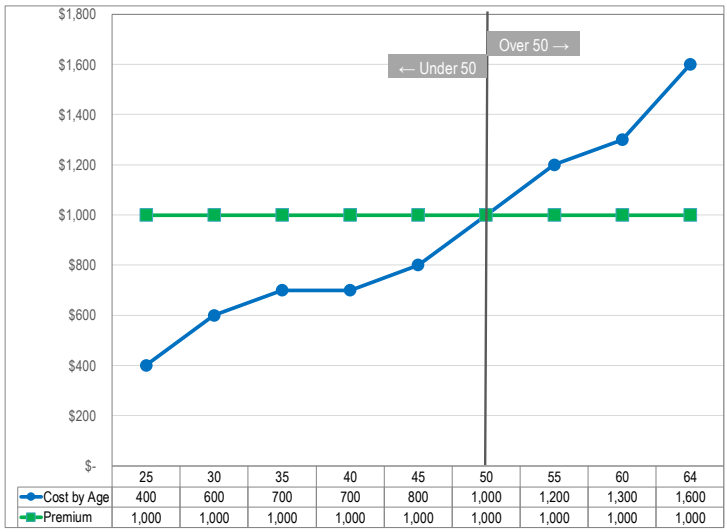
2023	$151 / month
2024	$157 / month
2025	$158 / month
2026+	Medical CPI increases

BENEFIT SUMMARY

■ Surviving Spouse Benefit	■ Retiree benefit paid to surviving spouse of retiree with CalPERS joint and survivor payment option ■ Retiree benefit paid to spouse of active employee who died while eligible to retire receiving CalPERS survivor benefit
■ Pay-As-You-Go Cost (000's)	(Amounts in $000's) 

IMPLICIT SUBSIDY

- GASB defers to Actuarial Standards of Practice (ASOP)
- Actuarial Standards Board (released May 2014) ASOP 6:
  - Requires implicit subsidy valued for community rated plans such as PEMHCA
- Valuations on and after 6/30/15 include the implicit subsidy
- For PEMHCA, employer cost for allowing retirees to participate at active rates.
- General trend:



	25	30	35	40	45	50	55	60	64
Cost by Age	400	600	700	700	800	1,000	1,200	1,300	1,600
Premium	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000

PARTICIPANT STATISTICS

Actives

	6/30/13	6/30/15	6/30/17	6/30/19	6/30/21	6/30/23
■ Count						
• Tier 1	143	157	148	139	113	81
• Tier 2	n/a	n/a	n/a	10	37	68
• Total	143	157	148	149	150	149
■ Averages						
• Age	46.3	44.4	43.9	44.4	44.6	44.2
• Town Service	11.3	8.7	8.5	8.7	8.5	7.8
• Salary	98,300	$91,400	$94,900	$106,600	$110,400	$114,600
■ Total Salary (000s)	13,764	14,354	14,051	15,886	16,553	17,073

PARTICIPANT STATISTICS

Retirees

	6/30/13	6/30/15	6/30/17	6/30/19	6/30/21	6/30/23
■ Count						
• Participating	97	109	122	130	142	150
• Waived	50	53	50	45	42	42
• Total	147	162	172	175	184	192
■ Averages						
• Age	67.7	69.2	69.0	70.2	70.4	70.7
• Retirement Age						
➢ Service Retired	58.7	58.8	58.6	58.6	58.6	58.6
➢ Disabled	47.9	47.3	46.6	46.5	46.0	46.0

Participant Reconciliation

	Actives	Retirees			
		Service	Disabled	Survivors	Total
■ **June 30, 2021**	150	149	19	16	184
• Terminations	(27)	-	-	-	-
• New Retirees & Survivors	(15)	15	-	-	15
• Retiree Deaths with Survivor	-	(3)	-	3	-
• Retiree Deaths without Survivor	-	(5)	(1)	(3)	(9)
• New Participants	41	-	-	-	-
• Adjustments	-	-	-	2	2
■ **June 30, 2023**	149	156	18	18	192

CERBT Investment Options

■ **2022 Asset Allocation** (approved March 14, 2022)

	Strategy 1	Strategy 2	Strategy 3
Global Equity	49%	34%	23%
Fixed Income	23%	41%	51%
TIPS	5%	5%	9%
Commodities	3%	3%	3%
REITs	20%	17%	14%
Total	100%	100%	100%

ACTUARIAL ASSUMPTIONS HIGHLIGHTS

Investment Return

- Future expected returns
  - Stochastic simulations of geometric average returns over 20 years
  - 5,000 trials
  - 2.50% inflation assumption
  - Projections based on 8 independent Investment Advisors 2021 10-year Capital Market Assumptions and where available, investment advisors long-term trends
  - Confidence levels:

	Strategy 1	Strategy 2	Strategy 3
50% Confidence Level	**6.25%**	5.75%	5.25%
55% Confidence Level	6.00%	5.50%	5.00%
60% Confidence Level	5.75%	5.25%	4.75%

- Town currently in Strategy 1
  - Recommend 6.25% investment return assumption

ACTUARIAL ASSUMPTIONS HIGHLIGHTS

	June 30, 2021 Valuation	June 30, 2023 Valuation
■ Valuation Date	■ June 30, 2021 ■ 2022/23 & 2023/24	■ June 30, 2023 ■ 2024/25 & 2025/26
■ Discount Rate	■ 6.25% – Full pre-funding	■ Same
■ Funding Policy	■ Prefund full ADC less cash and implicit benefit payments with CERBT Strategy #1 ■ Benefit payments currently made from Town assets	■ Same
■ Retirement, Mortality, Withdrawal, & Disability	■ CalPERS 2000-2019 Experience Study ■ Mortality projected fully generational with Scale MP-21	■ Same
■ General Inflation	■ 2.50%	■ Same
■ PEMHCA Minimum	■ 4.00% annual increases after 2023	■ 3.50% annual increases after 2025

ACTUARIAL ASSUMPTIONS HIGHLIGHTS

	June 30, 2021 Valuation	June 30, 2023 Valuation
■ Payroll Increases	■ Aggregate Increases: 2.75% ■ Merit Increases: CalPERS 2000-2019 Experience Study	■ Same
■ Healthcare Trend	Increase from Prior Year[1] Year / Non-Medicare / Medicare Kaiser / Medicare Other 2021: Actual Premiums 2022: Actual Premiums 2023: 6.50% / 4.60% / 5.65% 2024: 6.25% / 4.45% / 5.45% 2025: 6.00% / 4.35% / 5.25% 2026: 5.75% / 4.25% / 5.05% 2027: 5.55% / 4.20% / 4.90% 2028: 5.35% / 4.15% / 4.75% 2029: 5.15% / 4.10% / 4.60% 2030: 4.95% / 4.05% / 4.45% 2031-2035: 4.80% / 4.00% / 4.35% 2036-2045: 4.65% / 3.95% / 4.25% 2046-2055: 4.50% / 3.90% / 4.20% 2056-2065: 4.35% / 3.85% / 4.15% 2066-2075: 4.05% / 3.80% / 3.95% 2076+: 3.75% / 3.75% / 3.75%	Increase from Prior Year Calendar Year / Non-Medicare / Medicare Kaiser / Medicare Other 2021: n/a 2022: n/a 2023: Actual Premiums 2024: Actual Premiums 2025: 8.50% / 6.25% / 7.50% 2026: 7.90% / 5.65% / 6.90% 2027: 7.35% / 5.45% / 6.50% 2028: 6.75% / 5.25% / 6.10% 2029: 6.20% / 5.05% / 5.70% 2030: 5.60% / 4.85% / 5.25% 2031: 5.05% / 4.65% / 4.85% 2032-38: 4.45% / 4.45% / 4.45% 2039-40: 4.35% / 4.35% / 4.35% 2041: 4.30% / 4.30% / 4.30% ↓ / ↓ / ↓ / ↓ 2076+: 3.45% / 3.45% / 3.45%

[1] Medical premiums after 2022 and estimated claims after 2021 do not take into account buy-downs (CalPERS subsidizations of premium rates from the reserves).

ACTUARIAL METHODS

Method	June 30, 2021 Valuation	June 30, 2023 Valuation
■ Cost Method	■ Entry Age Normal	■ Same
■ Plan Assets	■ Investment gains and losses spread over a 5-year fixed period ■ Not less than 80% nor more than 120% of market value	■ Same
■ Amortization Method	■ Level percent of payroll	■ Same
■ Amortization Periods	■ 16-year fixed (closed) period for 6/30/22 projected UAAL for 2022/23 ADC	■ 14-year fixed (closed) period for 6/30/22 projected UAAL for 2024/25 ADC ■ 15-year fixed (closed) period for assumption changes and experience gains and losses

Market Value of Plan Assets

(Amounts in 000's)

	2019/20	2020/21	2021/22	2022/23	Projected 2023/24[2]
■ **Market Value (Beginning of Year)**	$18,380	$20,124	$26,235	$22,861	$24,318
• Contributions	1,100	591	149	-	-
• Benefit Payments	-	-	-	-	-
• CERBT Admin Expenses	(9)	(11)	(13)	(11)	(12)
• Investment Expenses	(7)	(8)	(9)	(8)	-
• Investment Earnings	660	5,539	(3,500)	1,477	2,674
■ **Market Value (End of Year)**	20,124	26,235	22,861	24,318	26,981
■ **Estimated Annual Return**	3.6%	27.5%	(13.4%)	6.4%	11.0%

[2] Projection assumes 11.0% investment return for CERBT Strategy #1

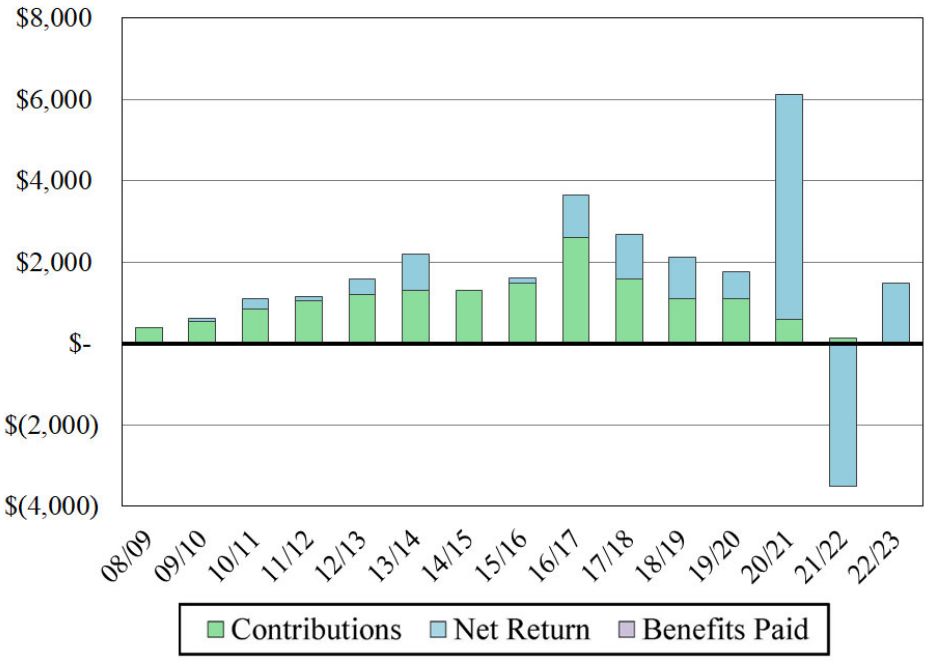
Actuarial Value of Plan Assets (AVA)

(Amounts in 000's)

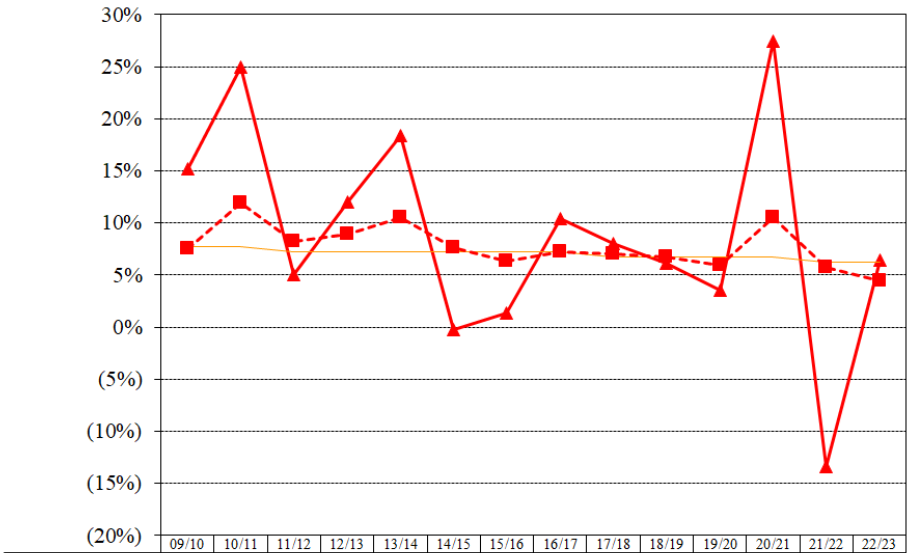
	6/30/22	6/30/23	Projected 6/30/24
■ **Market Value of Assets**	$22,861	$24,318	$26,981
■ **Unrecognized (Gain)/Loss**			
• 1 year prior – 80%	4,119	(32)	(924)
• 2 years prior – 60%	(2,503)	3,089	(24)
• 3 years prior – 40%	235	(1,669)	2,060
• 4 years prior – 20%	18	118	(834)
■ **Adjustment to MVA**	1,869	1,506	277
■ **AVA**	24,730	25,824	27,258
■ **Ratio: AVA/MVA**	108%	106%	101%

Historical Plan Asset Changes

(Amounts in 000's)



Historical Annual Asset Returns



	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23
Market Value	15.3%	25.0%	5.0%	12.0%	18.3%	-0.2%	1.3%	10.5%	8.0%	6.2%	3.6%	27.5%	-13.4%	6.4%
Expected Return	7.75%	7.75%	7.25%	7.25%	7.25%	7.25%	7.25%	7.25%	6.75%	6.75%	6.75%	6.75%	6.25%	6.25%
Actuarial Value	7.5%	11.9%	8.2%	8.9%	10.6%	7.7%	6.3%	7.2%	7.0%	6.8%	5.9%	10.5%	5.8%	4.5%

Actuarial Obligations

(Amounts in 000's)

	6/30/21	6/30/23	Projected 6/30/24
■ **Present Value of Benefits**			
• Actives (future retirees)	$18,251	$17,249	
• Retirees	18,809	23,049	
• Total	37,060	40,298	
■ **Actuarial Accrued Liability**			
• Actives (future retirees)	9,911	10,282	
• Retirees	18,809	23,049	
• Total	28,720	33,331	$34,519
■ **Actuarial (Smoothed) Asset Value**	23,252	25,824	27,258
■ **Unfunded AAL**	5,468	7,507	7,261
■ **Funded % (Assets / AAL)**			
• Actuarial Assets	81.0%	77.5%	79.0%
• Market Assets	91.3%	73.0%	78.2%

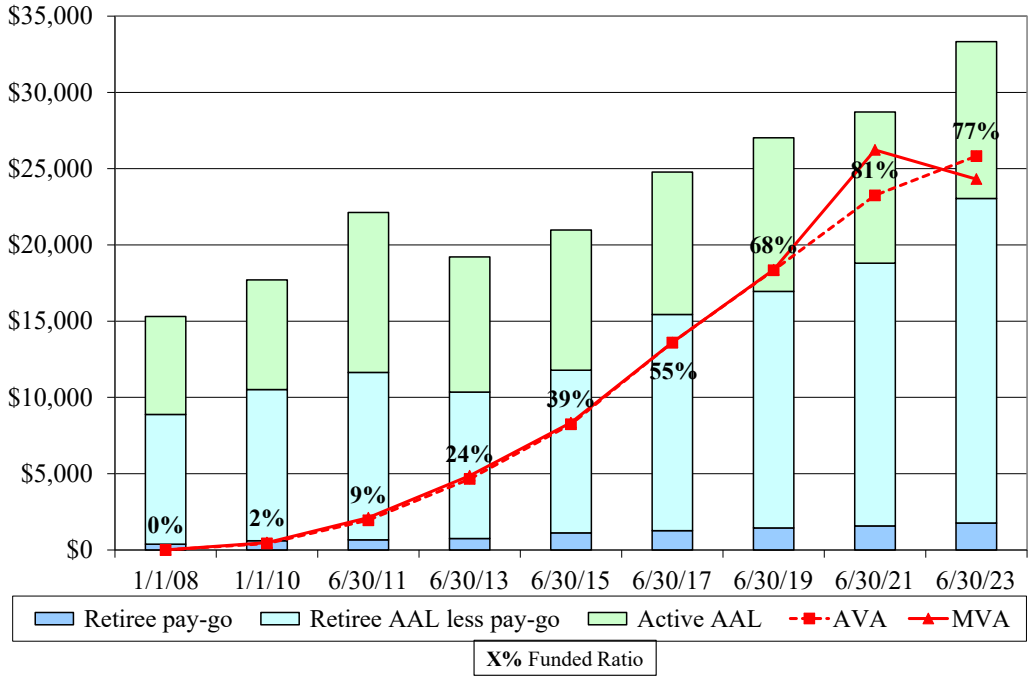
Estimated Actuarial Gains/Losses

(Amounts in 000's)

	AAL	(Assets)	UAAL
■ **6/30/21 Actual Amounts**	$28,720	$(23,252)	$5,468
■ **6/30/23 Expected Amounts**	31,113	(26,181)	4,932
■ **Experience Losses (Gains)**			
• Actual versus expected premiums	(362)	-	(362)
• Demographic	389	-	389
• Asset loss (gain)		357	357
■ **Assumption Changes**			
• Medical & PEMHCA minimum trend update	2,191	-	2,191
■ **Total Changes**	2,218	357	2,575
■ **6/30/23 Actual Amounts**	33,331	(25,824)	7,507

Funded Status

(Amounts in 000's)



Actuarial Obligations by Tier – Actives Only

June 30, 2023

(Amounts in 000's)

	Tier 1	Tier 2	Total
■ **Active Count**	81	68	149
■ **Projected 2024/25 Active Employee Payroll**	$11,561	$6,464	$18,025
■ **2024/25 Normal Cost**	775	119	894
■ **Normal Cost as % of Payroll**	6.7%	1.8%	5.0%
■ **Actuarial Accrued Liability**	10,143	139	10,282

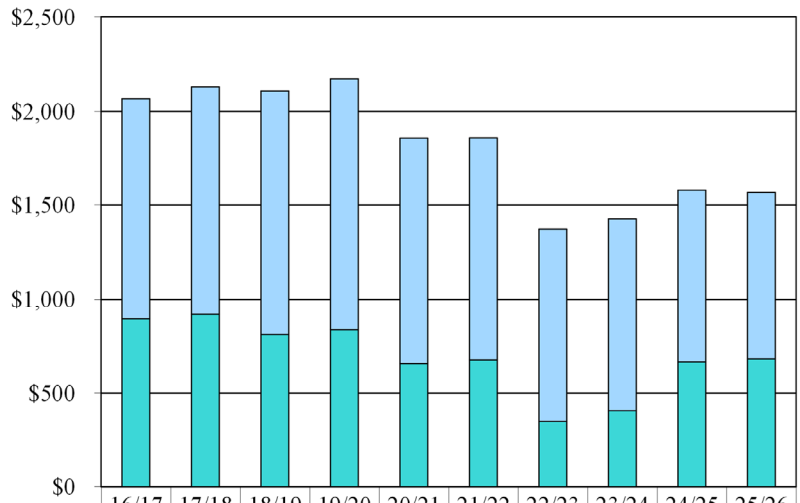
Actuarially Determined Contributions (ADC)

(Amounts in 000's)

	6/30/21 Valuation		6/30/23 Valuation	
	2022/23	2023/24	2024/25	2025/26
■ **ADC - $**				
• Normal Cost	$1,004	$1,001	$894	$865
• Administrative Expenses	18	19	19	20
• UAAL Amortization	350	407	665	681
• Total ADC	1,372	1,427	1,579	1,567
■ **Projected Payroll**	17,476	17,957	18,025	18,521
■ **ADC - %**				
• Normal Cost	5.7%	5.6%	5.0%	4.7%
• Administrative Expenses	0.1%	0.1%	0.1%	0.1%
• UAAL Amortization	2.0%	2.3%	3.7%	3.7%
• Total ADC%	7.9%	7.9%	8.8%	8.5%

Actuarially Determined Contributions (ADC)

(Amounts in $000's)



	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
Normal Cost + Admin	1,174	1,212	1,298	1,337	1,203	1,184	1,022	1,019	913	885
Amortization	893	917	810	835	656	676	350	407	665	681
ADC	2,067	2,129	2,108	2,172	1,859	1,860	1,372	1,427	1,579	1,567

Amortization Bases

(Amounts in 000's)

	6/30/21 Valuation		6/30/23 Valuation	
	6/30/22	6/30/23	6/30/24	6/30/25
■ 2021 Valuation UAAL	$4,154	$4,596	$4,476	$4,337
■ Assumption Changes & Experience (Gain)/Loss				
• 2023 Valuation	-	-	2,785	2,686
■ Total	4,154	4,596	7,261	7,023

Amortization Payments

(Amounts in 000's)

	6/30/21 Valuation		6/30/23 Valuation	
	2022/23	2023/24	2024/25	2025/26
■ 2021 Valuation UAAL	$350	$407	$418	$430
■ Assumption Changes & Experience (Gain)/Loss				
• 2023 Valuation	-	-	247	251
■ Total	350	407	665	681
■ Amortization Years	16.0	15.0	14.4	13.4

10-Year Projection

(Amounts in 000's)

Fiscal Year	Contributions					Payroll	Contrib. %	Funded % BOY
	Pay-Go Cash	Pay-Go Implicit Subsidy	PEMHCA Admin	Trust	Total = ADC			
2024/25	$1,692	$193	$5	$(311)	$1,579	$18,025	8.8%	79.0%
2025/26	1,821	221	6	(481)	1,567	18,521	8.5%	80.3%
2026/27	1,936	245	6	(558)	1,629	19,030	8.6%	79.3%
2027/28	2,033	253	7	(696)	1,597	19,553	8.2%	81.3%
2028/29	2,184	320	7	(939)	1,572	20,091	7.8%	83.1%
2029/30	2,259	337	8	(1,037)	1,567	20,643	7.6%	84.3%
2030/31	2,301	311	8	(1,058)	1,562	21,211	7.4%	85.5%
2031/32	2,437	395	8	(1,275)	1,565	21,794	7.2%	86.9%
2032/33	2,523	459	9	(1,418)	1,573	22,394	7.0%	88.2%
2033/34	2,577	475	9	(1,481)	1,580	23,010	6.9%	89.6%

10-Year Projection Illustration – No Trust Disbursements

(Amounts in 000's)

Fiscal Year	Contributions					Payroll	Contrib. %	Funded % BOY
	Pay-Go Cash	Pay-Go Implicit Subsidy	PEMHCA Admin	Trust	Total			
2024/25	$1,692	$193	$5	$ -	$1,890	$18,025	10.5%	79.0%
2025/26	1,821	221	6	-	2,048	18,521	11.1%	81.3%
2026/27	1,936	245	6	-	2,187	19,030	11.5%	81.8%
2027/28	2,033	253	7	-	2,293	19,553	11.7%	85.6%
2028/29	2,184	320	7	-	2,511	20,091	12.5%	89.6%
2029/30	2,259	337	8	-	2,604	20,643	12.6%	93.7%
2030/31	2,301	311	8	-	2,620	21,211	12.4%	98.2%
2031/32	2,437	395	8	-	2,840	21,794	13.0%	103.0%
2032/33	2,523	459	9	-	2,991	22,394	13.4%	108.6%
2033/34	2,577	475	9	-	3,061	23,010	13.3%	115.0%

Actuarial Obligations
June 30, 2023
(Amounts in 000's)

	Cash Subsidy	Implicit Subsidy	Total Subsidy
■ **Present Value of Benefits**			
• Actives (future retirees)	$14,323	$2,926	$17,249
• Retirees	20,897	2,152	23,049
• Total	35,220	5,078	40,298
■ **Actuarial Accrued Liability**			
• Actives (future retirees)	8,661	1,621	10,282
• Retirees	20,897	2,152	23,049
• Total	29,558	3,773	33,331
■ **Actuarial (Smoothed) Asset Value**[3]	22,901	2,923	25,824
■ **Unfunded AAL**	6,657	850	7,507

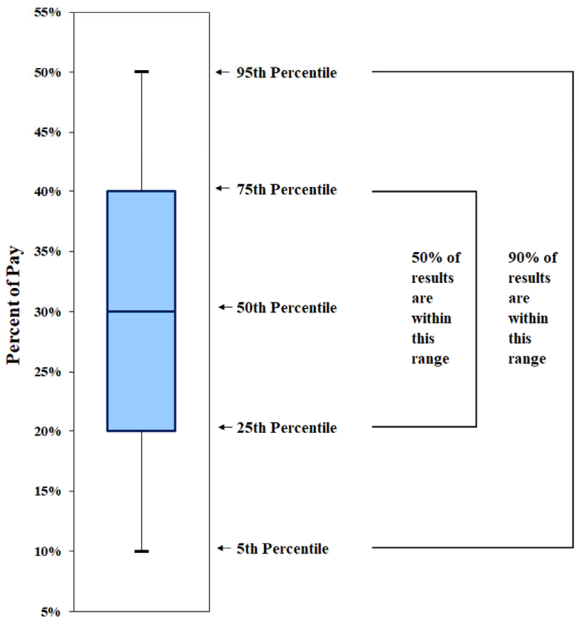
[3] Actuarial Value of Assets allocated to cash subsidy and implicit subsidy in proportion to Actuarial Accrued Liability.

Actuarially Determined Contribution (ADC)
2024/25 Fiscal Year
(Amounts in 000's)

	Cash Subsidy	Implicit Subsidy	Total Subsidy
■ **ADC - $**			
• Normal Cost	$738	$156	$894
• Administrative Expenses	19	-	19
• UAAL Amortization	588	77	665
• Total ADC	1,346	233	1,579
■ **Projected Payroll**	18,025	18,025	18,025
■ **ADC - %**			
• Normal Cost	4.1%	0.9%	5.0%
• Administrative Expenses	0.1%	0.0%	0.1%
• UAAL Amortization	3.3%	0.4%	3.7%
• Total ADC	7.5%	1.3%	8.8%

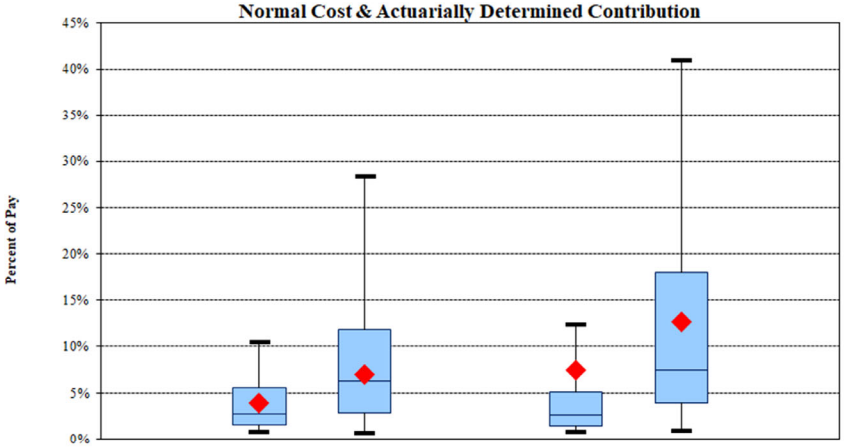
OPEB DATABASE

Foster & Foster California OPEB Database
Sample Percentile Graph



OPEB DATABASE

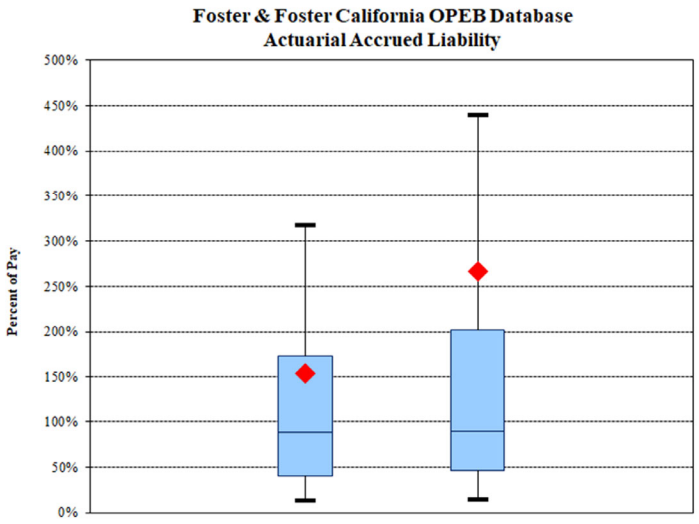
Foster & Foster California OPEB Database
Normal Cost & Actuarially Determined Contribution



	Miscellaneous		Safety	
	NC	ADC	NC	ADC
95th Percentile	10.4%	28.3%	12.3%	41.0%
75th Percentile	5.5%	11.9%	5.1%	18.1%
50th Percentile	2.8%	6.3%	2.6%	7.5%
25th Percentile	1.5%	2.8%	1.5%	4.0%
5th Percentile	0.7%	0.6%	0.7%	0.8%
Percent of Pay (♦)	**3.9%**	**6.9%**	**7.5%**	**12.7%**
Percentile	**65%**	**56%**	**88%**	**67%**

Discount Rate = 6.25%, Average Amortization Period = 14.4 Years

OPEB DATABASE



	Miscellaneous	Safety
95th Percentile	317%	440%
75th Percentile	173%	202%
50th Percentile	88%	89%
25th Percentile	40%	47%
5th Percentile	14%	15%
Percent of Pay (♦)	**154%**	**267%**
Percentile	**71%**	**86%**

Discount Rate = 6.25%

ACTUARIAL CERTIFICATION

This report presents Town of Los Gatos Retiree Healthcare Plan ("Plan") June 30, 2023 actuarial valuation. The purpose of this valuation is to:

- Determine the Plan's June 30, 2023 Benefit Obligations,
- Determine the Plan's June 30, 2023 Funded Status, and
- Calculate the 2024/25 and 2025/26 Actuarially Determined Contributions (ADC).

The report provides information intended for plan funding, but may not be appropriate for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as: plan experience differing from that anticipated by the assumptions; changes in assumptions; changes expected as part of the natural progression of the plan; and changes in plan provisions or applicable law. Actuarial models necessarily rely on the use of estimates and are sensitive to changes. Small variations in estimates may lead to significant changes in actuarial measurements. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of such measurements.

The valuation is based on Plan provisions, participant data, and asset information provided by the Town as summarized in this report, which we relied on and did not audit. We reviewed the participant data for reasonableness.

To the best of our knowledge, this report is complete and accurate and has been conducted using generally accepted actuarial principles and practices. As members of the American Academy of Actuaries meeting the Academy Qualification Standards, we certify the actuarial results and opinions herein.

Respectfully submitted,

Doug Pryor, ASA, MAAA, EA
Foster & Foster, Inc.

Katherine Moore, ASA, MAAA
Foster & Foster, Inc.

2023 PEMHCA Monthly Medical Premiums

Region 1

Medical Plan	Non-Medicare Eligible			Medicare Eligible		
	Single	2-Party	Family	Single	2-Party	Family
Anthem Select	$1,128.83	$2,257.66	$2,934.96	$413.59	$827.18	$1,240.77
Anthem Traditional	1,210.71	2,421.42	3,147.85	413.59	827.18	1,240.77
Blue Shield Access+	1,035.21	2,070.42	2,691.55	361.90	723.80	1,085.70
Blue Shield Trio	888.94	1,777.88	2,311.24	361.90	723.80	1,085.70
Health Net SmartCare	1,174.50	2,349.00	3,053.70	n/a	n/a	n/a
Kaiser	913.74	1,827.48	2,375.72	283.25	566.50	849.75
Kaiser Summit	n/a	n/a	n/a	336.29	672.58	1,008.87
UnitedHealthcare Alliance	1,044.07	2,088.14	2,714.58	n/a	n/a	n/a
UnitedHealthcare MA	n/a	n/a	n/a	299.68	599.36	899.04
UnitedHealthcare MA Edge	n/a	n/a	n/a	357.70	715.40	1,073.10
Western Health Advantage	760.17	1,520.34	1,976.44	331.11	662.22	993.33
PERS Gold	825.61	1,651.22	2,146.59	392.71	785.42	1,178.13
PERS Platinum	1,200.12	2,400.24	3,120.31	420.02	840.04	1,260.06
PORAC	825.00	1,875.00	2,300.00	465.00	1,030.00	1,395.00

2024 PEMHCA Monthly Medical Premiums

Region 1

Medical Plan	Non-Medicare Eligible			Medicare Eligible		
	Single	2-Party	Family	Single	2-Party	Family
Anthem Select	$1,138.86	$2,277.72	$2,961.04	$405.83	$811.66	$1,217.49
Anthem Traditional	1,339.70	2,679.40	3,483.22	405.83	811.66	1,217.49
Blue Shield Access+	1,076.84	2,153.68	2,799.78	392.68	785.36	1,178.04
Blue Shield Trio	946.84	1,893.68	2,461.78	392.68	785.36	1,178.04
Kaiser	1,021.41	2,042.82	2,655.67	324.79	649.58	974.37
Kaiser Summit	n/a	n/a	n/a	386.55	773.10	1,159.65
UnitedHealthcare Alliance	1,091.13	2,182.26	2,836.94	n/a	n/a	n/a
UnitedHealthcare Harmony	937.39	1,874.78	2,437.21	n/a	n/a	n/a
UnitedHealthcare MA	n/a	n/a	n/a	341.72	683.44	1,025.16
UnitedHealthcare MA Edge	n/a	n/a	n/a	366.01	732.02	1,098.03
Western Health Advantage	807.23	1,614.46	2,098.80	268.62	537.24	805.86
PERS Gold	914.82	1,829.64	2,378.53	406.60	813.20	1,219.80
PERS Platinum	1,314.27	2,628.54	3,417.10	448.15	896.30	1,344.45
PORAC	931.00	2,117.00	2,651.00	465.00	1,030.00	1,395.00

Participants - June 30, 2023

	Misc	Safety	Total
■ Actives			
• Count	113	36	149
• Average Age	45.0	41.9	44.2
• Average Town Service	7.1	10.1	7.8
• Average Salary	$103,100	$150,700	$114,600
• Total Salary (000s)	11,646	5,427	17,073
■ Retirees			
• Service Retired	124	32	156
• Disabled	1	17	18
• Survivor	12	6	18
• Total Count	137	55	192
• Average Age	73.2	64.3	70.7
• Average Retirement Age			
➢ Service	59.8	54.3	58.6
➢ Disability	49.8	45.8	46.0

Participants - June 30, 2021

	Misc	Safety	Total
■ Actives			
• Count	113	37	150
• Average Age	45.4	42.2	44.6
• Average Town Service	8.0	9.9	8.5
• Average Salary	99,400	143,900	110,400
• Total Salary (000s)	11,229	5,324	16,553
■ Retirees			
• Service Retired	119	30	149
• Disabled	1	18	19
• Survivor	12	4	16
• Total Count	132	52	184
• Average Age	73.1	63.8	70.4
• Average Retirement Age			
➢ Service Retired	59.9	53.7	58.6
➢ Disabled	49.8	45.8	46.0

Medical Plan Participation
Non-Waived Participants

	Actives	Retirees	
		< 65	≥ 65
Anthem Select	5%	10%	3%
Anthem Traditional	2%	0%	
Blue Shield Access+	2%	0%	1%
Blue Shield Trio	1%	2%	
Kaiser	68%	32%	28%
UnitedHealthcare	0%	0%	10%
PERS Gold	5%	7%	2%
PERS Platinum	13%	32%	50%
PORAC	4%	17%	6%
Total	100%	100%	100%

Active Medical Coverage

	Single	2-Party	Family	Waived	Total
Anthem Select	1	2	3	-	6
Anthem Traditional	1	-	2	-	3
Blue Shield Access+	-	2	1	-	3
Blue Shield Trio	-	-	1	-	1
Kaiser	36	15	30	-	81
PERS Gold	3	1	2	-	6
PERS Platinum	9	2	4	-	15
PORAC	-	-	5	-	5
Waived	-	-	-	29	29
Total	50	22	48	29	149

Retiree Medical Coverage
Under Age 65

	Single	2-Party	Family	Waived	Total
Anthem Select	2	-	2	-	4
Blue Shield Access+	-	-	-	-	-
Blue Shield Trio	-	-	1	-	1
Kaiser	6	3	4	-	13
UnitedHealthcare	-	-	-	-	-
PERS Gold	1	1	1	-	3
PERS Platinum	6	4	3	-	13
PORAC	1	3	3	-	7
Waived	-	-	-	6	6
Total	16	11	14	6	47

Retiree Medical Coverage
Age 65 & Over

	Single	2-Party	Family	Waived	Total
Anthem Preferred	-	2	1	-	3
Blue Shield	-	-	1	-	1
Kaiser	19	11	1	-	31
UnitedHealthcare	6	5	-	-	11
PERS Gold	-	2	-	-	2
PERS Platinum	31	23	-	-	54
PORAC	1	5	1	-	7
Waived	-	-	-	36	36
Total	57	48	4	36	145

Actives by Age and Town Service
Miscellaneous

Age	Town Service							
	< 1	1-4	5-9	10-14	15-19	20-24	≥ 25	Total
< 25	1	1	-	-	-	-	-	2
25-29	4	6	2	-	-	-	-	12
30-34	3	6	9	-	-	-	-	18
35-39	3	2	4	-	-	-	-	9
40-44	3	4	4	1	1	1	-	14
45-49	2	3	6	3	4	-	1	19
50-54	1	3	4	1	2	2	1	14
55-59	3	3	3	1	2	1	-	13
60-64	-	1	3	-	-	1	-	5
≥ 65	1	4	-	-	-	-	2	7
Total	21	33	35	6	9	5	4	113

Actives by Age and Town Service
Safety

Age	Town Service							
	< 1	1-4	5-9	10-14	15-19	20-24	≥ 25	Total
< 25	-	-	-	-	-	-	-	-
25-29	1	7	-	-	-	-	-	8
30-34	-	1	-	-	-	-	-	1
35-39	2	1	1	-	1	-	-	5
40-44	-	1	2	1	1	1	-	6
45-49	1	1	-	-	1	2	1	6
50-54	-	1	2	2	1	2	1	9
55-59	-	-	-	-	-	-	1	1
60-64	-	-	-	-	-	-	-	-
≥ 65	-	-	-	-	-	-	-	-
Total	4	12	5	3	4	5	3	36

Retiree Medical Coverage by Age Group

Miscellaneous

Age	Single	2-Party	Family	Waived	Total
Under 50	-	-	-	-	-
50-54	-	-	1	-	1
55-59	5	3	3	-	11
60-64	5	-	2	1	8
65-69	12	13	3	6	34
70-74	13	7	-	4	24
75-79	12	10	-	8	30
80-84	6	4	-	7	17
85+	6	2	-	4	12
Total	59	39	9	30	137

Retiree Medical Coverage by Age Group

Safety

Age	Single	2-Party	Family	Waived	Total
Under 50	-	-	3	2	5
50-54	-	4	4	1	9
55-59	2	-	1	2	5
60-64	4	4	-	-	8
65-69	3	5	1	2	11
70-74	1	3	-	1	5
75-79	3	3	-	1	7
80-84	-	1	-	3	4
85+	1	-	-	-	1
Total	14	20	9	12	55

ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2021 Valuation	June 30, 2023 Valuation
■ Administrative Expenses	■ CERBT - 0.05% of assets included in ADC ■ PEMHCA - 0.25% of retiree premium included in ADC (2021/22 PEMHCA administrative fee)	■ CERBT - 0.05% of assets included in ADC ■ PEMHCA - 0.30% of retiree premium included in ADC (5-year average)
■ Participation at Retirement	■ Tier 1 Actives: • Participating - 100% • Waived - 100% ■ Tier 2 Actives: • Participating - 60% • Waived - 40% ■ Retirees: • Participating - 100% • Waived - 0%	■ Same
■ Medical Plan at Retirement	■ Current plan election ■ Waived - Kaiser	■ Same

ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2021 Valuation	June 30, 2023 Valuation
■ Spouse Coverage at Retirement	■ Actives: • Currently covered - current spouse coverage • Waived - 80% cover spouse ■ Retirees - based on current coverage	■ Same
■ Spouse Age	■ Actives - males 3 years older than females ■ Retirees - males 3 years older than females if spouse birth date not provided	■ Same

Assumption	June 30, 2021 Valuation	June 30, 2023 Valuation
■ Spouse & Dependent Coverage at Retirement	■ Surviving spouse coverage - 100% of married retirees elect CalPERS joint and survivor annuity ■ Family coverage: • Current Tier 1 actives: - Misc - 10% until age 65 - Safety - 35% until age 65 • Current retirees - Current coverage until 65 • No coverage after age 65	■ Same
■ Medicare Eligibility	■ 100% eligible for Medicare at age 65 ■ Medicare eligible retirees will elect Part B coverage	■ Same

Assumption	June 30, 2023 Valuation
■ Medical Claims Costs 2024 Calendar Year	■ Sample estimated monthly claims costs:

Region 1

	Anthem Select		Anthem Traditional		Kaiser		UnitedHealthcare	
Age	M	F	M	F	M	F	M	F
25	$413	$682	$486	$803	$371	$612	$396	$654
35	543	955	639	1,124	487	857	520	915
45	776	1,034	913	1,216	696	927	743	991
55	1,220	1,333	1,435	1,569	1,094	1,196	1,169	1,278
60	1,535	1,545	1,805	1,817	1,376	1,386	1,470	1,480
64	1,824	1,760	2,146	2,071	1,636	1,579	1,748	1,687
65	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
70	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
75	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
80	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Assumption	June 30, 2023 Valuation
■ Medical Claims Costs 2024 Calendar Year (continued)	■ Sample estimated monthly claims costs:

Region 1

	PERS Gold		PERS Platinum		PORAC	
Age	M	F	M	F	M	F
25	$365	$595	$415	$676	$362	$603
35	476	827	541	941	478	846
45	674	894	767	1,017	686	917
55	1,052	1,149	1,197	1,307	1,083	1,184
60	1,320	1,329	1,503	1,513	1,364	1,373
64	1,567	1,512	1,783	1,722	1,622	1,566
65	370	354	447	428	408	391
70	401	384	484	463	442	423
75	427	410	516	495	471	452
80	440	425	532	514	486	469

Assumption	June 30, 2023 Valuation
■ Basis for Assumptions	■ 2021 CalPERS experience study covering 2000 to 2019 experience ■ Mortality improvement based on Society of Actuaries table ■ Inflation based on the Plan's very long time horizon ■ Participation and coverage take into account Plan experience ■ Capital market assumptions based on 2021 Foster & Foster stochastic analysis, taking into account capital market assumptions of investment advisory firms ■ Age-based claims costs were based on demographic data provided by CalPERS and Society of Actuaries studies ■ Medical trends were based on expectations over the short term blended into long term medical trends developed using the Society of Actuaries Getzen Model of Long-Run Medical Cost Trends
■ Data Quality	■ Our valuation used census data provided by the Town and CalPERS OPEB data extract. We reviewed the data for reasonableness and resolved any questions with the Town. We believe the resulting data can be relied on for all purposes of this valuation without limitation.

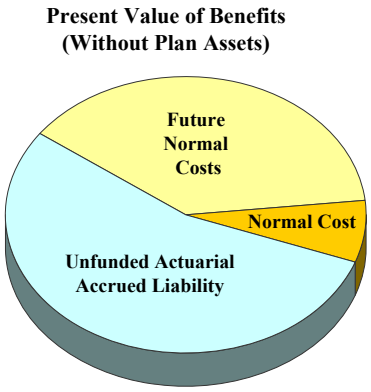
ACTUARIAL ASSUMPTIONS

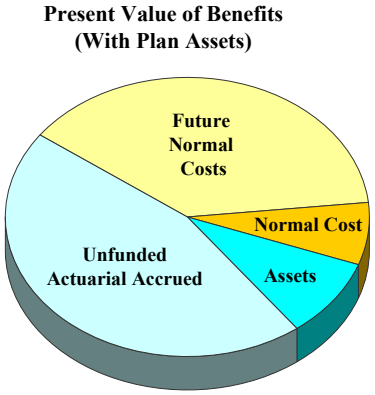
Assumption	June 30, 2023 Valuation
■ Actuarial Modeling	■ Our valuation was performed using and relying on ProVal, an actuarial model leased from WinTech. Our use of ProVal is consistent with its intended purpose. We have reviewed and understand ProVal and its operation, sensitivities and dependencies

DEFINITIONS

■ Actuarial Obligations	■ The Present Value of Benefits (PVB) is calculated as follows: ➢ Project future employer-provided retiree benefits for current retirees and current active employees (future retirees) ➢ Discount projected benefits to valuation date using the discount rate ➢ Discount rate is the expected long-term net rate of return on assets for benefits projected to be paid from the OPEB trust and the expected long-term net rate of return on Town investments for benefits projected to be paid from Town assets ➢ Allocate the PVB to past, current, and future working periods using the Entry Age Normal Cost Method ■ Normal Cost (NC) is portion of the PVB allocated to one fiscal year ■ Actuarial Accrued Liability (AAL) is the portion of the PVB allocated to prior Town service, that is, the accumulation of prior years' NCs ■ Unfunded AAL (UAAL) is AAL less the Actuarial Value of Assets ■ Actuarial Value of Assets (AVA) smooths market value of assets (MVA) volatility by spreading investment gains and losses over 5 years

Present Value of Benefits





■ PayGo Cost	■ Cash Subsidy is the Town's pay-as-you-go cash payments for its portion of retiree premiums ■ Implicit Subsidy is the difference between the expected cost of retiree healthcare benefits, by age and gender, and retiree premiums, that is, it is the portion of retiree healthcare costs subsidized by active employee premiums
■ Terminology Used in Report	■ AAL - Actuarial Accrued Liability ■ ADC - Actuarially Determined Contribution ■ AVA - Actuarial Value of Assets ■ GASBS 75 - Governmental Accounting Standards Board Statement No. 75 ■ MVA - Market Value of Assets ■ NC - Normal Cost ■ OPEB - Other (than pensions) Postemployment Benefits ■ PVB - Present Value of Benefits ■ UAAL - Unfunded Actuarial Accrued Liability

TOWN OF LOS GATOS

TOWN PENSION AND OPEB TRUSTS OVERSIGHT COMMITTEE REPORT

MEETING DATE: 10/15/2024

ITEM NO: 5

DATE: September 30, 2024

TO: Town Pension and OPEB Trust Oversight Committee

FROM: Katy Nomura, Interim Town Manager

SUBJECT: Receive the CalPERS Actuarial Valuation Reports as of June 30, 2023

RECOMMENDATION:

Receive the CalPERS Actuarial Valuation Reports as of June 30, 2023.

BACKGROUND:

The Town's pension plans are administered by the Board of Administration of the California Public Employees' Retirement System (CalPERS). The Board of Administration is responsible for the management and control of CalPERS. In addition, the Board has exclusive control of the administration and investment of funds. Sworn employees are covered under the Safety Plan, which is a pooled plan, while all other employees are covered in the Miscellaneous Plan, which is a separate plan. The Miscellaneous Plan is administered by CalPERS in the Public Employees' Retirement Fund (PERF).

In order for the Town to understand the value of future pension benefit payments, actuarial valuations are performed each year for the pension plans. The CalPERS actuary estimates the payments that will be made for all potential retirees from each plan in each future year. The actuary calculates the present value of future benefits the plan will be required to pay to its current participants: those still working who will retire in the future, retirees, and those who have terminated employment but have not yet begun drawing benefits.

The 2023 valuation reports provide the determination of the minimum required employer contributions for fiscal year (FY) 2025/26. In addition, the reports also contain important information regarding the current financial status of the plans as well as projections and risk measures to aid in planning for the future.

PREPARED BY: Gitta Ungvari
Finance Director

Reviewed by: Interim Town Manager, and Town Attorney

Staff has received the annual Actuarial Valuation Reports from CalPERS for the Miscellaneous Plan (Attachment 1), the Safety Plan (Attachment 2), and the PEPRA Safety Police Plan (Attachment 3). The measurement date for each of the Plans is as of June 30, 2023.

The Town's Safety Plan funded status stood at 68.1% compared to 68.7% for the 2022 valuation. The Town's Safety PEPRA Plan had a funded status of 87.1% versus 87.6% for 2022 and the Miscellaneous Plan funded status of 75.3% compared to 75.9% in 2022.

June 30, 2022	**Miscellaneous Plan**	**Safety Plan**	**PEPRA Safety Plan**
Accrued Liability	$131,694,738	$113,873,815	$2,281,357
Market Value of Assets	$99,158,305	$77,496,417	$1,987,482
Unfunded Accrued Liability	$32,536,433	$36,374,398	$293,875
Funded Ratio	75.3%	68.1%	87.1%

These reports are posted on the Town's website: https://www.losgatosca.gov/1861/CalPERS-and-OPEB-Actuarial-Valuation-Rep. The Town Finance Commission has received this report on its September 9, 2024 regular meeting.

CONCLUSION:

Receive the CalPERS Actuarial Valuation Reports as of June 30, 2023.

COORDINATION:

This staff report was coordinated with the Interim Town Manager and Town Attorney.

FISCAL IMPACT:

There is no fiscal impact from receipt of these reports.

ENVIRONMENTAL ASSESSMENT:

This is not a project defined under CEQA, and no further action is required.

Attachments:

1. CalPERS Annual Valuation Report as of June 30, 2023 – Miscellaneous Plan of the Town of Los Gatos
2. CalPERS Annual Valuation Report as of June 30, 2023 – Safety Plan of the Town of Los Gatos
3. CalPERS Annual Valuation Report as of June 30, 2023 – PEPRA Safety Police Plan of the Town of Los Gatos

California Public Employees' Retirement System
Actuarial Office
400 Q Street, Sacramento, CA 95811 | Phone: (916) 795-3000 | Fax: (916) 795-2744
888 CalPERS (or **888**-225-7377) | TTY: (877) 249-7442 | **www.calpers.ca.gov**

July 2024

Miscellaneous Plan of the Town of Los Gatos (CalPERS ID: 4589482285)
Annual Valuation Report as of June 30, 2023

Dear Employer,

Attached to this letter is the June 30, 2023, actuarial valuation report for the rate plan noted above. **Provided in this report is the determination of the minimum required employer contributions for fiscal year (FY) 2025-26.** In addition, the report contains important information regarding the current financial status of the plan as well as projections and risk measures to aid in planning for the future.

Required Contributions

The table below shows the minimum required employer contributions and the PEPRA member contribution rates for FY 2025-26 along with an estimate of the employer contribution requirements for FY 2026-27. Employee contributions other than cost sharing (whether paid by the employer or the employee) are in addition to the results shown below. **The required employer and member contributions in this report do not reflect any cost sharing arrangement between the agency and the employees.**

Fiscal Year	Employer Normal Cost Rate	Employer Amortization of Unfunded Accrued Liability	PEPRA Member Contribution Rate
2025-26	10.79%	$2,926,599	7.75%
Projected Results			
2026-27	*10.7%*	*$3,197,000*	*TBD*

The actual investment return for FY 2023-24 was not known at the time this report was prepared. The projections above assume the investment return for that year would be 6.8%. To the extent the actual investment return for FY 2023-24 differs from 6.8%, the actual contribution requirements for FY 2026-27 will differ from those shown above. For additional details regarding the assumptions and methods used for these projections, please refer to Projected Employer Contributions. This section also contains projected required contributions through FY 2030-31.

Report Enhancements

A number of enhancements were made to the report this year to ease navigation and allow the reader to find specific information more quickly. The tables of contents are now "clickable." This is true for the main table of contents that follows the title page and the intermediate tables of contents at the beginning of sections. The Adobe navigation pane on the left can also be used to skip to specific exhibits.

There are a number of links throughout the document in blue text. Links that are internal to the document are not underlined, while underlined links will take you to the CalPERS website. Examples are shown below.

Internal Bookmarks	CalPERS Website Links
Required Employer Contributions	Required Employer Contribution Search Tool
Member Contribution Rates	Public Agency PEPRA Member Contribution Rates
Summary of Key Valuation Results	Pension Outlook Overview
Funded Status – Funding Policy Basis	Interactive Summary of Public Agency Valuation Results
Projected Employer Contributions	Public Agency Actuarial Valuation Reports

Further descriptions of general changes are included in the Highlights and Executive Summary section and in Appendix A - Actuarial Methods and Assumptions. The effects of any changes on the required contributions are included in the Reconciliation of Required Employer Contributions section.

Questions

A CalPERS actuary is available to answer questions about this report. Other questions may be directed to the Customer Contact Center at **888 CalPERS** (or **888**-225-7377).

Sincerely,

Matthew Biggart, ASA, MAAA
Actuary, CalPERS

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

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

California Public Employees' Retirement System

Actuarial Valuation for the Miscellaneous Plan of the Town of Los Gatos

as of June 30, 2023

(CalPERS ID: 4589482285)
(Rate Plan ID: 946)

Required Contributions for Fiscal Year

July 1, 2025 — June 30, 2026

Table of Contents

Actuarial Certification

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 Rate Plan Results

To the best of my 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 Miscellaneous Plan of the Town of Los Gatos 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, 2023, provided by the various CalPERS databases and the benefits under this plan with CalPERS as of the date this report was produced.

Matthew Biggart, ASA, MAAA
Actuary, CalPERS

Highlights and Executive Summary

Introduction

This report presents the results of the June 30, 2023, actuarial valuation of the Miscellaneous Plan of the Town of Los Gatos of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the minimum required contributions for fiscal year (FY) 2025-26.

Purpose

This report documents the results of the actuarial valuation prepared by the CalPERS Actuarial Office using data as of June 30, 2023. The purpose of the valuation is to:

- Set forth the assets and accrued liabilities of this rate plan as of June 30, 2023;
- Determine the minimum required employer contributions for this rate plan 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, 2023, 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. The 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 the agency.

Assessment and Disclosure of Risk

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

- A "Scenario Test," projecting future results under different investment income returns.
- A "Sensitivity Analysis," showing the impact on current valuation results using alternative discount rates of 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.

Summary of Key Valuation Results

Below is a brief summary of key valuation results along with page references where more detailed information can be found.

Required Employer Contributions — page 13

	Fiscal Year 2024-25	Fiscal Year 2025-26
Employer Normal Cost Rate	11.15%	10.79%
Unfunded Accrued Liability (UAL) Contribution Amount	$2,812,206	$2,926,599
Paid either as		
Option 1) 12 Monthly Payments of	$234,351	$243,883
Option 2) Annual Prepayment in July	$2,721,207	$2,831,898

Member Contribution Rates — page 14

	Fiscal Year 2024-25	Fiscal Year 2025-26
Classic Member Contribution Rate	7.00%/8.00%	7.00%/8.00%
PEPRA Member Contribution Rate	7.75%	7.75%

Projected Employer Contributions — page 17

Fiscal Year	Normal Cost (% of payroll)	Annual UAL Payment
2026-27	10.7%	$3,197,000
2027-28	10.5%	$3,396,000
2028-29	10.3%	$3,608,000
2029-30	10.1%	$3,691,000
2030-31	9.9%	$3,759,000

Funded Status — Funding Policy Basis — page 15

	June 30, 2022	June 30, 2023
Entry Age Accrued Liability (AL)	$126,242,002	$131,694,738
Market Value of Assets (MVA)	95,841,828	99,158,305
Unfunded Accrued Liability (UAL) [AL – MVA]	$30,400,174	$32,536,433
Funded Ratio [MVA ÷ AL]	75.9%	75.3%

Summary of Valuation Data — Page 73

	June 30, 2022	June 30, 2023
Active Member Count	107	114
Annual Covered Payroll	$11,094,190	$12,754,753
Transferred Member Count	105	112
Separated Member Count	104	100
Retired Members and Beneficiaries Count	263	267

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. For rate plans that are not in a risk pool (non-pooled), benefit changes by contract amendment are generally included in the first valuation that is prepared after the amendment becomes effective, even if the effective date of the amendment is after the valuation date.

Please refer to the Plan's Major Benefit Options and Appendix B - Principal Plan Provisions 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 the (Gain)/Loss Analysis 6/30/22 – 6/30/23 and the effect on the employer contribution is shown in the Reconciliation of Required Employer Contributions. It should be noted that no change in liability or contribution is shown for any plan changes which were already included in the prior year's valuation.

Actuarial Methods and Assumptions

There are no significant changes to the actuarial methods or assumptions for the June 30, 2023, actuarial valuation.

New Disclosure Items

In December 2021, the Actuarial Standards Board issued a revision of Actuarial Standard of Practice No. 4 (ASOP 4) requiring actuaries to disclose a low-default-risk obligation measure (LDROM) of the benefits earned. This information is shown in a new exhibit, Funded Status – Low-Default-Risk Basis.

Subsequent Events

This actuarial valuation report reflects fund investment return through June 30, 2023, as well as statutory changes, regulatory changes and board actions through January 2024.

During the time period between the valuation date and the publication of this report, inflation has been higher than the expected inflation of 2.3% per annum. Since inflation influences cost-of-living increases for retirees and beneficiaries and active member pay increases, higher inflation is likely to put at least some upward pressure on contribution requirements and downward pressure on the funded status in the June 30, 2024, valuation. The actual impact of higher inflation on future valuation results will depend on, among other factors, how long higher inflation persists.

The 2023 annual benefit limit under Internal Revenue Code (IRS) section 415(b) and annual compensation limits under IRS 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 2024 limits, determined in October 2023, are not reflected.

On April 16, 2024, the board took action to modify 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. The 95th percentile return in the Future Investment Return Scenarios exhibit in this report has not been modified and still reflects the projected contribution requirements associated with a reduction in the discount rate.

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

Reconciliation of the Market Value of Assets

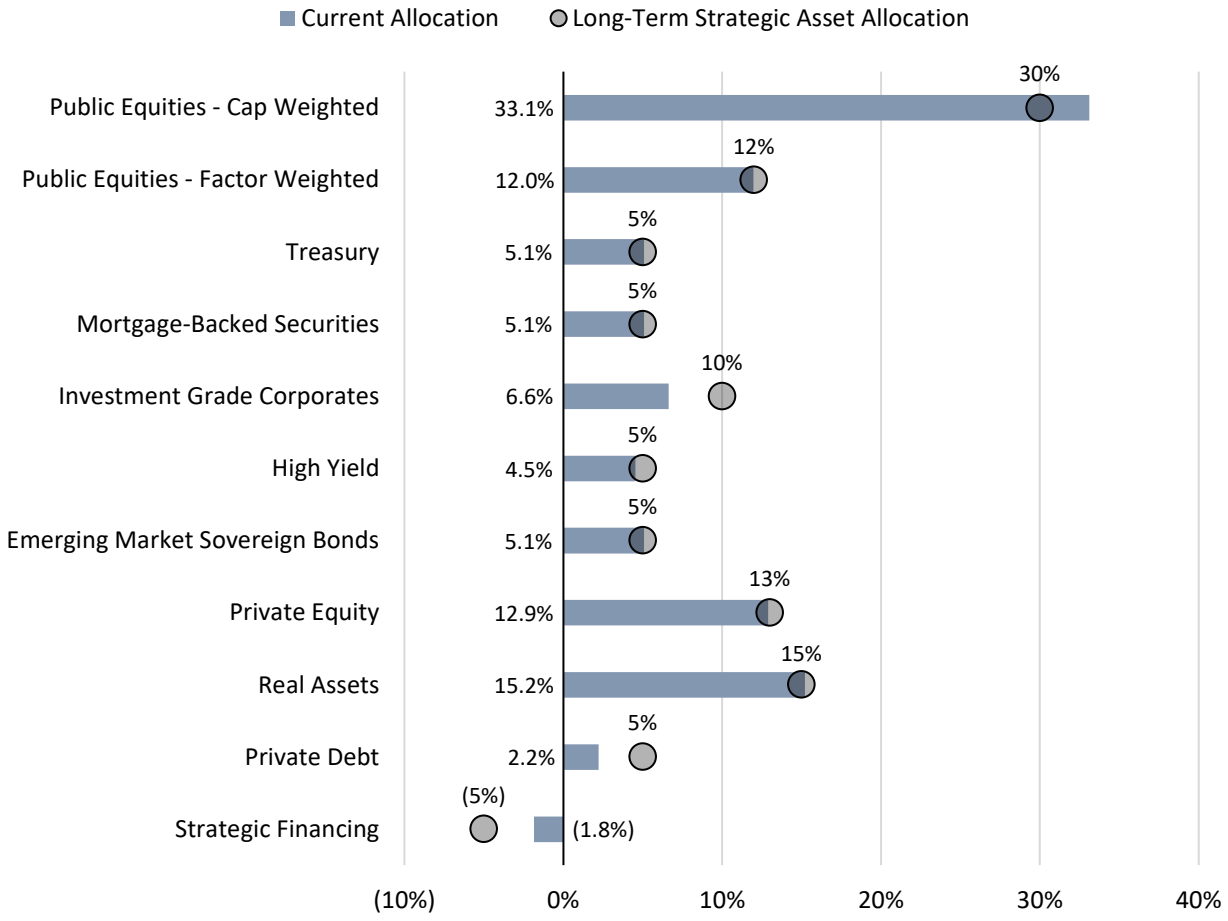
1.	Market Value of Assets as of 6/30/22 including Receivables	$95,841,828
2.	Change in Receivables for Service Buybacks	(9,295)
3.	Employer Contributions	3,687,226
4.	Employee Contributions	907,139
5.	Benefit Payments to Retirees and Beneficiaries	(7,053,865)
6.	Refunds	(15,244)
7.	Transfers	0
8.	Service Credit Purchase (SCP) Payments and Interest	18,762
9.	Administrative Expenses	(56,635)
10.	Miscellaneous Adjustments	0
11.	Investment Return (Net of Investment Expenses)	5,838,390
12.	Market Value of Assets as of 6/30/23 including Receivables	$99,158,305

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 Town of Los Gatos Miscellaneous Plan are a subset of the PERF and are invested accordingly.

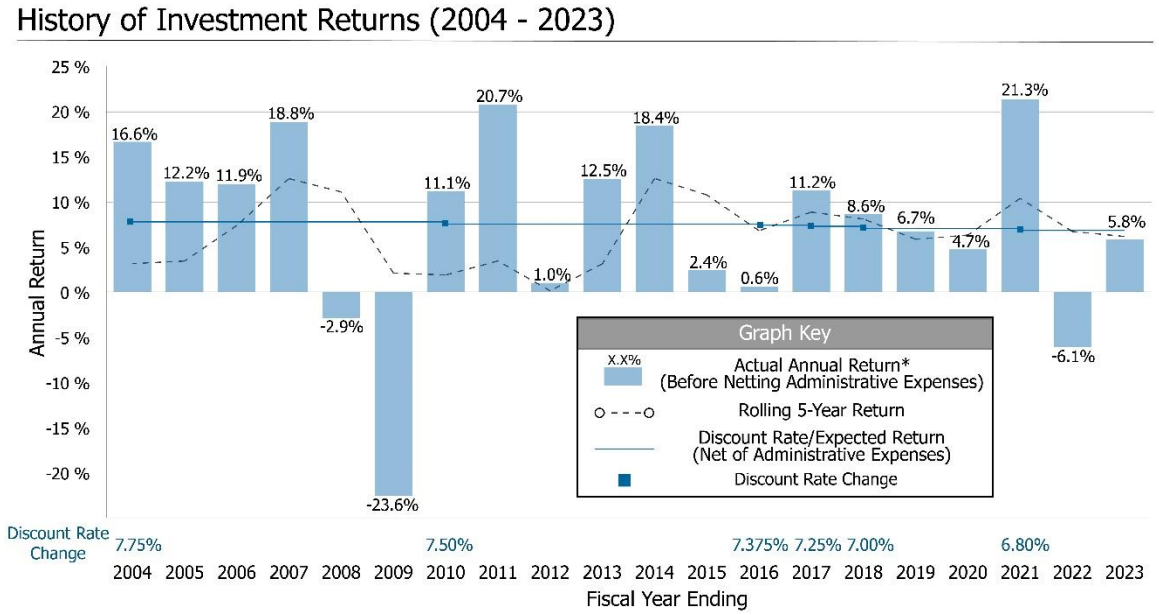
On November 17, 2021, the board adopted changes to the strategic asset allocation. The new allocation was effective July 1, 2022. The asset allocation as of June 30, 2023, is shown below, along with the long-term strategic asset allocations.



For more information see the Trust Level Review as of June 30, 2023, which is available on the CalPERS website.

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 equity and real assets for investment performance reporting purposes. This can lead to a timing difference 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.



* 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, 2023. Figures reported are net of investment expenses but without reduction for administrative expenses. These returns are the annual rates that if compounded over the indicated number of years would equate to the actual time-weighted investment performance of the PERF. It should be recognized that in any given year the rate of return is volatile. The portfolio has an expected volatility of 12.0% per year based on the most recent Asset Liability Management study. The realized volatility is a measure of the risk of the portfolio expressed as the standard deviation of the fund's total monthly return distribution, expressed as an annual percentage. Due to their volatile nature, when looking at investment returns, it is more instructive to look at returns over longer time horizons.

History of CalPERS Compound Annual Rates of Return and Volatilities					
	1 year	**5 year**	**10 year**	**20 year**	**30 year**
Compound Annual Return	5.8%	6.1%	7.1%	7.0%	7.5%
Realized Volatility	–	9.5%	7.8%	8.4%	8.8%

Liabilities and Contributions

Determination of Required Contributions

Contributions to fund the plan are determined by an actuarial valuation performed each year. The valuation employs complex calculations based on a set of actuarial assumptions and methods. See Appendix A for information on the assumptions and methods used in this valuation. The valuation incorporates all plan experience through the valuation date and sets required contributions for the fiscal year that begins two years after the valuation date.

Contribution Components

Two components comprise required contributions:

- Normal Cost — expressed as a percentage of pensionable payroll
- Unfunded Accrued Liability (UAL) Contribution — expressed as a dollar amount

Normal Cost represents the value of benefits allocated to the upcoming year for active employees. If all plan experience exactly matched the actuarial assumptions, normal cost would be sufficient to fully fund all benefits. The employer and employees each pay a share of the normal cost with contributions payable as part of the regular payroll reporting process. The contribution rate for Classic members is set by statute based on benefit formula whereas for PEPRA members it is based on 50% of the total normal cost.

When plan experience differs from the actuarial assumptions, unfunded accrued liability (UAL) emerges. The new UAL may be positive or negative. If the total UAL is positive (i.e., accrued liability exceeds assets), the employer is required to make contributions to pay off the UAL over time. This is called the Unfunded Accrued Liability Contribution component. There is an option to prepay this amount during July of each fiscal year, otherwise it is paid monthly.

In measuring the UAL each year, plan experience is split by source. Common sources of UAL include investment experience different than expected, non-investment experience different than expected, assumption changes, and benefit changes. Each source of UAL (positive or negative) forms a base that is amortized, or paid off, over a specified period of time in accordance with the CalPERS Actuarial Amortization Policy. The Unfunded Accrued Liability Contribution is the sum of the payments on all bases. See the Schedule of Amortization Bases section of this report for an inventory of existing bases and Appendix A for more information on the amortization policy.

Development of Accrued and Unfunded Liabilities

		June 30, 2022	June 30, 2023
1.	Present Value of Projected Benefits		
	a) Active Members	$45,017,281	$47,686,388
	b) Transferred Members	11,512,505	13,074,583
	c) Separated Members	3,976,700	4,459,819
	d) Members and Beneficiaries Receiving Payments	83,950,714	87,182,041
	e) Total	$144,457,200	$152,402,831
2.	Present Value of Future Employer Normal Costs	$10,593,720	$11,485,922
3.	Present Value of Future Employee Contributions	$7,621,478	$9,222,171
4.	Entry Age Accrued Liability		
	a) Active Members [(1a) - (2) - (3)]	$26,802,083	$26,978,295
	b) Transferred Members (1b)	11,512,505	13,074,583
	c) Separated Members (1c)	3,976,700	4,459,819
	d) Members and Beneficiaries Receiving Payments (1d)	83,950,714	87,182,041
	e) Total	$126,242,002	$131,694,738
5.	Market Value of Assets (MVA)	$95,841,828	$99,158,305
6.	Unfunded Accrued Liability (UAL) [(4e) - (5)]	$30,400,174	$32,536,433
7.	Funded Ratio [(5) ÷ (4e)]	75.9%	75.3%

Required Employer Contributions

The required employer contributions in this report do not reflect any cost sharing arrangement between the agency and the employees.

	Fiscal Year
Required Employer Contributions	**2025-26**
Employer Normal Cost Rate	**10.79%**
Plus	
Unfunded Accrued Liability (UAL) Contribution Amount	**$2,926,599**
Paid either as	
1) Monthly Payment	**$243,883**
Or	
2) Annual Prepayment Option*	**$2,831,898**

The total minimum required employer contribution is the sum of the Plan's Employer Normal Cost Rate (expressed as a percentage of payroll and paid as payroll is reported) and the Unfunded Accrued Liability (UAL) Contribution Amount (billed monthly (1) or prepaid annually (2) in dollars).

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

For Member Contribution Rates see the following page.

	Fiscal Year 2024-25	Fiscal Year 2025-26
Normal Cost Contribution as a Percentage of Payroll		
Total Normal Cost[1]	18.76%	18.43%
Offset due to Employee Contributions[2]	7.61%	7.64%
Employer Normal Cost	11.15%	10.79%
Projected Annual Payroll for Contribution Year	$12,052,439	$13,856,431
Estimated Employer Contributions Based on Projected Payroll		
Total Normal Cost	$2,261,038	$2,553,740
Expected Employee Contributions	917,191	1,058,631
Employer Normal Cost	1,343,847	1,495,109
Unfunded Liability Contribution	2,812,206	2,926,599
% of Projected Payroll (illustrative only)	23.33%	21.12%
Estimated Total Employer Contribution	$4,156,053	$4,421,708
% of Projected Payroll (illustrative only)	34.48%	31.91%

[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.

Member Contribution Rates

The required member contributions in this report do not reflect any cost sharing arrangement between the agency and the employees.

Classic Members

Each member contributes toward their retirement based upon the retirement formula. The standard Classic member contribution rate above the breakpoint, if any, is as described below.

Benefit Formula	Percent Contributed above the Breakpoint
Miscellaneous, 1.5% at age 65	2%
Miscellaneous, 2% at age 60	7%
Miscellaneous, 2% at age 55	7%
Miscellaneous, 2.5% at age 55	8%
Miscellaneous, 2.7% at age 55	8%
Miscellaneous, 3% at age 60	8%

Auxiliary organizations of the CSU system may elect reduced contribution rates for Miscellaneous members, in which case the contribution rate above the breakpoint is 6% if members are not covered by Social Security and 5% if they are.

PEPRA Members

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 table below shows the determination of the PEPRA member contribution rates effective July 1, 2025, based on 50% of the total normal cost rate for each respective plan as of the June 30, 2023, valuation.

		Basis for Current Rate		Rates Effective July 1, 2025			
Plan Identifier	Benefit Group Name	Total Normal Cost	Member Rate	Total Normal Cost	Change	Change Needed	Member Rate
27442	Miscellaneous PEPRA Level	15.590%	7.75%	15.94%	0.350%	No	7.75%

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

Funded Status – Funding Policy Basis

The table below provides information on the current funded status of the plan 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.

	June 30, 2022	June 30, 2023
1. Present Value of Benefits	$144,457,200	$152,402,831
2. Entry Age Accrued Liability	126,242,002	131,694,738
3. Market Value of Assets (MVA)	95,841,828	99,158,305
4. Unfunded Accrued Liability (UAL) [(2) – (3)]	$30,400,174	$32,536,433
5. Funded Ratio [(3) ÷ (2)]	75.9%	75.3%

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

Calculations for the funding target reflect the expected long-term investment return of 6.8%. If it were known on the valuation date that future investment returns will average something greater/less than the expected return, calculated normal costs and accrued liabilities provided in this report would be less/greater than the results shown. Therefore, for example, if actual average future returns are less than the expected return, calculated normal costs and UAL contributions will not be sufficient to fully fund all retirement benefits. Under this scenario, required future normal cost contributions will need to increase from those provided in this report, and the plan will develop unfunded liabilities that will also add to required future contributions. For illustrative purposes, funded statuses based on a 1% lower and higher average future investment return (discount rate) are as follows:

	1% Lower Average Return	Current Assumption	1% Higher Average Return
Discount Rate	5.8%	6.8%	7.8%
1. Present Value of Benefits	$177,132,818	$152,402,831	$133,028,944
2. Entry Age Accrued Liability	148,863,816	131,694,738	117,578,614
3. Market Value of Assets (MVA)	99,158,305	99,158,305	99,158,305
4. Unfunded Accrued Liability (UAL) [(2) – (3)]	$49,705,511	$32,536,433	$18,420,309
5. Funded Ratio [(3) ÷ (2)]	66.6%	75.3%	84.3%

The Risk Analysis section of the report provides additional information regarding the sensitivity of valuation results to the expected investment return and other factors. Also provided in that section are measures of funded status that are appropriate for assessing the sufficiency of plan assets to cover estimated termination liabilities.

Additional Employer Contributions

The minimum required employer contribution towards the Unfunded Accrued Liability (UAL) for this rate plan for FY 2025-26 is $2,926,599. CalPERS allows agencies to make additional discretionary payments (ADPs) at any time and in any amount. These optional payments serve to reduce the UAL and future required contributions and can result in significant long-term savings. Agencies can also use ADPs to stabilize annual contributions as a fixed dollar amount, percent of payroll or percent of revenue.

Provided below are select ADP options for consideration. Making such an ADP during FY 2025-26 does not require an ADP be made in any future year, nor does it change the remaining amortization period of any portion of unfunded liability. For information on permanent changes to amortization periods, see Amortization Schedule and Alternatives. Agencies considering making an ADP should contact CalPERS for additional information.

Fiscal Year 2025-26 Employer Contributions — Illustrative Scenarios

Funding Approach	Estimated Normal Cost	Minimum UAL Contribution	ADP[1]	Total UAL Contribution	Estimated Total Contribution
Minimum required only	$1,495,109	$2,926,599	0	$2,926,599	$4,421,708
15 year funding horizon	$1,495,109	$2,926,599	$382,563	$3,309,162	$4,804,271
10 year funding horizon	$1,495,109	$2,926,599	$1,379,243	$4,305,842	$5,800,951
5 year funding horizon	$1,495,109	$2,926,599	$4,478,103	$7,404,702	$8,899,811

[1] The ADP amounts are assumed to be made in the middle of the fiscal year. A payment made earlier or later in the fiscal year would have to be less or more than the amount shown to have the same effect on the UAL amortization.

The calculations above are based on the projected UAL as of June 30, 2025, as determined in the June 30, 2023, actuarial valuation. New unfunded liabilities can emerge in future years due to assumption or method changes, changes in plan provisions, and actuarial experience different than assumed. Making an ADP illustrated above for the indicated number of years will not result in a plan that is exactly 100% funded in the indicated number of years. Valuation results will vary from one year to the next and can diverge significantly from projections over a period of several years.

Additional Discretionary Payment History

The following table provides a recent history of actual ADPs made to the plan.

Fiscal Year	ADP	Fiscal Year	ADP
2018-19	$0	2021-22	$0
2019-20	$4,753,965	2022-23	$0
2020-21	$5,631,307	2023-24	$0

Projected Employer Contributions

The table below shows the required and projected employer contributions (before cost sharing) for the next six fiscal years. The projection assumes that all actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur during the projection period. In particular, the investment return beginning with FY 2023-24 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.

	Required Contribution	Projected Future Employer Contributions (Assumes 6.80% Return for Fiscal Year 2023-24 and Beyond)				
Fiscal Year	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Normal Cost %	10.79%	10.7%	10.5%	10.3%	10.1%	9.9%
UAL Payment	$2,926,599	$3,197,000	$3,396,000	$3,608,000	$3,691,000	$3,759,000
Total as a % of Payroll*	31.91%	33.1%	33.7%	34.3%	33.9%	33.5%
Projected Payroll	$13,856,431	$14,244,411	$14,643,255	$15,053,266	$15,474,757	$15,908,051

*Illustrative only and based on the projected payroll shown.

For ongoing plans, 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.

For projected contributions under alternate investment return scenarios, please see the Future Investment Return Scenarios exhibit. Our online pension plan projection tool, Pension Outlook, is available in the Employers section of the CalPERS website. Pension Outlook can help plan and budget pension costs under various scenarios.

(Gain)/Loss Analysis 6/30/22 – 6/30/23

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 6/30/22	$30,400,174
b)	Expected payment on the UAL during 2022-23	2,347,466
c)	Interest through 6/30/23 [.068 x (1a) - ((1.068)^{½} - 1) x (1b)]	1,988,710
d)	Expected UAL before all other changes [(1a) - (1b) + (1c)]	30,041,418
e)	Change due to plan changes	0
f)	Change due to AL Significant Increase	0
g)	Change due to assumption changes	0
h)	Change due to method changes	0
i)	Change due to discount rate change with Funding Risk Mitigation	0
j)	Expected UAL after all other changes [(1d) + (1e) + (1f) + (1g) + (1h) + (1i)]	30,041,418
k)	Actual UAL as of 6/30/23	32,536,433
l)	Total (Gain)/Loss for 2022-23 [(1k) - (1j)]	$2,495,015
2.	Investment (Gain)/Loss for the Year	
a)	Market Value of Assets as of 6/30/22	$95,841,828
b)	Prior fiscal year receivables	(32,299)
c)	Current fiscal year receivables	23,004
d)	Contributions received	4,594,364
e)	Benefits and refunds paid	(7,069,109)
f)	Transfers, SCP payments and interest, and miscellaneous adjustments	18,762
g)	Expected return at 6.8% per year	6,516,962
h)	Expected assets as of 6/30/23 [(2a) + (2b) + (2c) + (2d) + (2e) + (2f) + (2g)]	99,893,513
i)	Actual Market Value of Assets as of 6/30/23	99,158,305
j)	Investment (Gain)/Loss [(2h) - (2i)]	$735,208
3.	Non-Investment (Gain)/Loss for the Year	
a)	Total (Gain)/Loss (1l)	$2,495,015
b)	Investment (Gain)/Loss (2j)	735,208
c)	Non-Investment (Gain)/Loss [(3a) - (3b)]	$1,759,807

Schedule of Amortization Bases

Below is the schedule of the plan's amortization bases. Note that there is a two-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, 2023.
- The required employer contributions determined by the valuation are for the fiscal year beginning two years after the valuation date: FY 2025-26.

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

The Unfunded Accrued Liability (UAL) is used to determine the employer contribution and therefore must be rolled forward two years from the valuation date to the first day of the fiscal year for which the contribution is being determined. The UAL is rolled forward 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 FY 2023-24 is based on the actuarial valuation two years ago, adjusted for additional discretionary payments, if necessary, and the expected payment for FY 2024-25 is based on the actuarial valuation one year ago.

Reason for Base	Date Est.	Ramp Level 2025-26	Ramp Shape	Escalation Rate	Amort. Period	Balance 6/30/23	Expected Payment 2023-24	Balance 6/30/24	Expected Payment 2024-25	Balance 6/30/25	Minimum Required Payment 2025-26
Assumption Change	6/30/03	No Ramp		2.80%	0	584,457	307,764	306,144	316,382	0	0
Method Change	6/30/04	No Ramp		2.80%	1	(72,700)	(26,006)	(50,768)	(26,733)	(26,593)	(27,482)
Benefit Change	6/30/07	No Ramp		2.80%	3	982,141	218,783	822,827	224,909	646,349	231,206
Assumption Change	6/30/09	No Ramp		2.80%	6	1,920,939	282,535	1,759,580	290,446	1,579,073	298,579
Special (Gain)/Loss	6/30/09	No Ramp		2.80%	16	2,047,560	159,471	2,021,990	163,936	1,990,067	168,526
Special (Gain)/Loss	6/30/10	No Ramp		2.80%	17	1,732,859	130,031	1,716,314	133,672	1,694,881	137,415
Assumption Change	6/30/11	No Ramp		2.80%	8	1,398,176	170,546	1,317,003	175,321	1,225,375	180,230
Special (Gain)/Loss	6/30/11	No Ramp		2.80%	18	807,931	58,567	802,345	60,207	794,684	61,893
(Gain)/Loss	6/30/12	No Ramp		2.80%	19	1,806,915	126,837	1,798,707	130,388	1,786,271	134,039
Payment (Gain)/Loss	6/30/12	No Ramp		2.80%	19	201,569	14,149	200,654	14,545	199,267	14,953
(Gain)/Loss	6/30/13	100%	Up/Dn	2.80%	20	8,702,300	631,633	8,641,301	649,319	8,557,877	667,500
(Gain)/Loss	6/30/14	100%	Up/Dn	2.80%	21	(8,035,068)	(564,693)	(7,997,876)	(580,504)	(7,941,815)	(596,759)
Assumption Change	6/30/14	100%	Up/Dn	2.80%	11	4,183,284	473,540	3,978,372	486,799	3,745,823	500,429
Assumption Change	6/30/16	100%	Up/Dn	2.80%	13	1,749,230	173,470	1,688,907	178,327	1,619,462	183,320
(Gain)/Loss	6/30/17	100%	Up/Dn	2.80%	24	(1,991,305)	(128,596)	(1,993,817)	(132,196)	(1,992,780)	(135,898)
Assumption Change	6/30/17	100%	Up/Dn	2.80%	14	1,588,179	148,793	1,542,406	152,959	1,489,216	157,242
(Gain)/Loss	6/30/18	100%	Up/Dn	2.80%	25	(765,297)	(39,048)	(776,983)	(50,176)	(777,964)	(51,581)
Assumption Change	6/30/18	100%	Up/Dn	2.80%	15	3,697,624	267,747	3,672,362	344,056	3,566,521	353,689
Method Change	6/30/18	100%	Up/Dn	2.80%	15	807,374	58,462	801,858	75,124	778,748	77,228
Non-Investment (Gain)/Loss	6/30/19	No Ramp		0.00%	16	1,421,376	134,763	1,378,760	134,763	1,333,246	134,763

Schedule of Amortization Bases (continued)

Reason for Base	Date Est.	Ramp Level 2025-26	Ramp Shape	Escala-tion Rate	Amort. Period	Balance 6/30/23	Expected Payment 2023-24	Balance 6/30/24	Expected Payment 2024-25	Balance 6/30/25	Minimum Required Payment 2025-26
Investment (Gain)/Loss	6/30/19	100%	Up Only	0.00%	16	482,525	29,013	485,353	38,683	478,380	48,354
Investment (Gain)/Loss	6/30/20	80%	Up Only	0.00%	17	2,246,248	92,337	2,303,568	138,506	2,317,073	184,674
Non-Investment (Gain)/Loss	6/30/20	No Ramp		0.00%	17	(526,957)	(48,597)	(512,568)	(48,597)	(497,200)	(48,597)
Assumption Change	6/30/21	No Ramp		0.00%	18	142,849	12,845	139,288	12,846	135,484	12,845
Net Investment (Gain)	6/30/21	60%	Up Only	0.00%	18	(12,193,475)	(262,095)	(12,751,772)	(524,190)	(13,077,173)	(786,285)
Non-Investment (Gain)/Loss	6/30/21	No Ramp		0.00%	18	(114,446)	(10,291)	(111,593)	(10,291)	(108,546)	(10,291)
Risk Mitigation	6/30/21	No Ramp		0.00%	0	3,401,416	3,515,162	0	0	0	0
Risk Mitigation Offset	6/30/21	No Ramp		0.00%	0	(3,401,416)	(3,515,162)	0	0	0	0
Benefit Change	6/30/22	No Ramp		0.00%	19	177,001	(1,172)	190,248	17,108	185,505	17,108
Investment (Gain)/Loss	6/30/22	40%	Up Only	0.00%	19	16,308,105	0	17,417,056	374,374	18,214,522	748,749
Non-Investment (Gain)/Loss	6/30/22	No Ramp		0.00%	19	752,024	0	803,162	72,223	783,139	72,223
Investment (Gain)/Loss	6/30/23	20%	Up Only	0.00%	20	735,208	0	785,202	0	838,596	18,025
Non-Investment (Gain)/Loss	6/30/23	No Ramp		0.00%	20	1,759,807	0	1,879,474	0	2,007,278	180,502
Total						**32,536,433**	**2,410,788**	**32,257,504**	**2,812,206**	**31,544,766**	**2,926,599**

Amortization Schedule and Alternatives

The amortization schedule on the previous page(s) shows the minimum contributions required according to the CalPERS amortization policy. Many agencies have expressed a desire for a more stable pattern of payments or have indicated interest in paying off the unfunded accrued liabilities more quickly than required. As such, we have provided alternative amortization schedules to help analyze the current amortization schedule and illustrate the potential savings of accelerating unfunded liability payments.

Shown on the following page are future year amortization payments based on 1) the current amortization schedule reflecting the individual bases and remaining periods shown on the previous page, and 2) alternative "fresh start" amortization schedules using two sample periods that would both result in interest savings relative to the current amortization schedule. To initiate a fresh start, please contact a CalPERS actuary.

The current amortization schedule typically contains both positive and negative bases. Positive bases result from plan changes, assumption changes, method changes or plan experience that increase unfunded liability. Negative bases result from plan changes, assumption changes, method changes, or plan experience that decrease unfunded liability. The combination of positive and negative bases within an amortization schedule can result in unusual or problematic circumstances in future years, such as:

- 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.

In any year when one of the above scenarios occurs, the actuary will consider corrective action such as replacing the existing unfunded liability bases with a single "fresh start" base and amortizing it over an appropriate period.

The current amortization schedule on the following page may appear to show that, based on the current amortization bases, one of the above scenarios will occur at some point in the future. It is impossible to know today whether such a scenario will in fact arise since there will be additional bases added to the amortization schedule in each future year. Should such a scenario arise in any future year, the actuary will take appropriate action based on guidelines in the CalPERS Actuarial Amortization Policy.

Amortization Schedule and Alternatives (continued)

	Current Amortization Schedule		Alternative Schedules			
			15 Year Amortization		10 Year Amortization	
Date	**Balance**	**Payment**	**Balance**	**Payment**	**Balance**	**Payment**
6/30/2025	31,544,766	2,926,599	31,544,766	3,309,162	31,544,766	4,305,842
6/30/2026	30,665,343	3,197,249	30,269,987	3,309,162	29,239,977	4,305,842
6/30/2027	29,446,418	3,396,118	28,908,523	3,309,162	26,778,462	4,305,842
6/30/2028	27,939,089	3,607,825	27,454,479	3,309,162	24,149,564	4,305,842
6/30/2029	26,110,472	3,691,273	25,901,560	3,309,161	21,341,901	4,305,842
6/30/2030	24,071,272	3,758,531	24,243,044	3,309,161	18,343,317	4,305,842
6/30/2031	21,823,899	3,475,284	22,471,749	3,309,162	15,140,830	4,305,843
6/30/2032	19,716,424	3,415,061	20,580,005	3,309,162	11,720,572	4,305,842
6/30/2033	17,527,876	3,124,967	18,559,622	3,309,161	8,067,738	4,305,842
6/30/2034	15,490,302	3,001,033	16,401,854	3,309,161	4,166,511	4,305,843
6/30/2035	13,442,249	2,827,267	14,097,358	3,309,162		
6/30/2036	11,434,510	2,525,660	11,636,155	3,309,161		
6/30/2037	9,601,937	2,345,360	9,007,591	3,309,161		
6/30/2038	7,831,077	2,153,994	6,200,285	3,309,162		
6/30/2039	6,137,566	2,005,057	3,202,081	3,309,161		
6/30/2040	4,482,814	1,894,686				
6/30/2041	2,829,599	1,258,694				
6/30/2042	1,721,224	838,355				
6/30/2043	971,880	1,004,380				
6/30/2044						
6/30/2045						
6/30/2046						
6/30/2047						
6/30/2048						
6/30/2049						
Total	**50,447,393**		**49,637,423**		**43,058,422**	
Interest Paid	**18,902,627**		**18,092,657**		**11,513,656**	
Estimated Savings			**809,970**		**7,388,971**	

Reconciliation of Required Employer Contributions

Normal Cost (% of Payroll)

1.	For Period 7/1/24 – 6/30/25	
	a) Employer Normal Cost	11.15%
	b) Employee contribution	7.61%
	c) Total Normal Cost	18.76%
2.	Changes since the prior year annual valuation	
	a) Effect of demographic experience	(0.33%)
	b) Effect of plan changes	0.00%
	c) Effect of discount rate change due to Funding Risk Mitigation	0.00%
	d) Effect of assumption changes	0.00%
	e) Effect of method changes	0.00%
	f) Net effect of the changes above [sum of (a) through (e)]	(0.33%)
3.	For Period 7/1/25 – 6/30/26	
	a) Employer Normal Cost	10.79%
	b) Employee contribution	7.64%
	c) Total Normal Cost	18.43%
Employer Normal Cost Change [(3a) – (1a)]		(0.36%)
Employee Contribution Change [(3b) – (1b)]		0.03%

Unfunded Liability Contribution ($)

1.	For Period 7/1/24 – 6/30/25	2,812,206
2.	Changes since the prior year annual valuation	
	a) Effect of adjustments to prior year's amortization schedule	0
	b) Effect of elimination of amortization bases	(316,382)
	c) Effect of progression of amortization bases[1]	232,248
	d) Effect of investment (gain)/loss during prior year[2]	18,025
	e) Effect of non-investment (gain)/loss during prior year	180,502
	f) Effect of re-amortizing existing bases due to Funding Risk Mitigation	0
	g) Effect of Golden Handshake	0
	h) Effect of plan changes	0
	i) Effect of AL Significant Increase (Government Code section 20791)	0
	j) Effect of assumption changes	0
	k) Effect of adjustments to the amortization schedule (e.g., Fresh Start)	0
	l) Effect of method change	0
	m Net effect of the changes above [sum of (a) through (l)]	114,393
3.	For Period 7/1/25 – 6/30/26 [(1) + (2m)]	2,926,599

The amounts shown for the period 7/1/24 – 6/30/25 may be different if a prepayment of unfunded actuarial liability is made or a plan change became effective after the prior year's actuarial valuation was performed.

[1] Includes scheduled escalation in individual amortization base payments due to the 5-year ramp and payroll growth assumption used in the pre-2019 amortization policy.

[2] The unfunded liability contribution for the investment (gain)/loss during the year prior to the valuation date is 20% of the "full" annual requirement due to the 5-year ramp. Increases to this amount that occur during the ramp period will be included in line c) for each of the next four years.

Employer Contribution History

The table below provides a 10-year history of the employer contribution requirements for the plan, as determined by the annual actuarial valuation. Changes due to prepayments or plan amendments after the valuation report was finalized are not reflected.

Valuation Date	Contribution Year	Employer Normal Cost Rate	Unfunded Liability Rate	Unfunded Liability Payment
06/30/2014	2016 - 17	10.441%	16.515%	N/A
06/30/2015	2017 - 18	9.932%	N/A	1,700,602
06/30/2016	2018 - 19	10.001%	N/A	1,998,006
06/30/2017	2019 - 20	10.226%	N/A	2,328,669
06/30/2018	2020 - 21	10.458%	N/A	2,563,289
06/30/2019	2021 - 22	10.37%	N/A	2,736,531
06/30/2020	2022 - 23	10.20%	N/A	2,515,583
06/30/2021	2023 - 24	11.42%	N/A	2,411,960
06/30/2022	2024 - 25	11.15%	N/A	2,812,206
06/30/2023	2025 - 26	10.79%	N/A	2,926,599

Funding History

The table below shows the recent history of the actuarial accrued liability, market value of assets, unfunded accrued liability, funded ratio and annual covered payroll.

Valuation Date	Accrued Liability (AL)	Market Value of Assets (MVA)	Unfunded Accrued Liability (UAL)	Funded Ratio	Annual Covered Payroll
6/30/2014	$87,887,082	$66,990,804	$20,896,278	76.2%	$8,240,718
6/30/2015	90,796,173	66,288,507	24,507,666	73.0%	8,930,406
6/30/2016	94,603,822	64,502,429	30,101,393	68.2%	8,761,524
6/30/2017	99,902,777	69,526,822	30,375,955	69.6%	9,319,861
6/30/2018	107,075,648	73,291,140	33,784,508	68.4%	9,938,654
6/30/2019	112,050,553	76,137,861	35,912,692	67.9%	10,889,467
6/30/2020	115,223,358	82,711,453	32,511,905	71.8%	11,759,144
6/30/2021	121,630,966	106,171,684	15,459,282	87.3%	11,970,102
6/30/2022	126,242,002	95,841,828	30,400,174	75.9%	11,094,190
6/30/2023	131,694,738	99,158,305	32,536,433	75.3%	12,754,753

Normal Cost by Benefit Group

The table below displays the Total Normal Cost broken out by benefit group for FY 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.

Plan Identifier	Benefit Group Name	Total Normal Cost FY 2025-26	Number of Actives	Payroll on 6/30/2023
946	Miscellaneous First Level	21.31%	23	$2,883,408
27442	Miscellaneous PEPRA Level	15.94%	72	$6,984,523
30563	Miscellaneous Second Level	21.66%	19	$2,886,822
	Plan Total	**18.43%**	**114**	**$12,754,753**

Note that if a Benefit Group above has multiple bargaining units, each of which has separately contracted for different benefits such as Employer Paid Member Contributions, then the Normal Cost shown for the respective benefit level does not reflect those differences. Additionally, if a Second Level Benefit Group amended to the same benefit formula as a First Level Benefit Group, their Normal Costs may be dissimilar due to demographic or other population differences. For questions in these situations, please contact a CalPERS actuary.

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 projections below reflect the impact of the CalPERS Funding Risk Mitigation Policy. 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 3.0% or 10.8% annually. These alternate investment returns were chosen because 90% of long-term average returns are expected to fall between them over the 20-year period ending June 30, 2043.

Assumed Annual Return FY 2023-24 through FY 2042-43	Projected Employer Contributions				
	2026-27	2027-28	2028-29	2029-30	2030-31
3.0% (5th percentile)					
Discount Rate	6.80%	6.80%	6.80%	6.80%	6.80%
Normal Cost Rate	10.7%	10.5%	10.3%	10.1%	9.9%
UAL Contribution	$3,289,000	$3,671,000	$4,158,000	$4,612,000	$5,144,000
10.8% (95th percentile)					
Discount Rate	6.75%	6.70%	6.65%	6.60%	6.55%
Normal Cost Rate	10.9%	10.9%	11.0%	11.0%	11.0%
UAL Contribution	$3,112,000	$3,143,000	$3,094,000	$2,819,000	$1,090,000

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

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

The following table shows the effect of one and two standard deviation investment losses in FY 2023-24 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 Fiscal Year 2023-24	Required Employer Contributions	Projected Employer Contributions
	2025-26	2026-27
(17.2%) (2 standard deviation loss)		
Discount Rate	6.80%	6.80%
Normal Cost Rate	10.79%	10.7%
UAL Contribution	$2,926,599	$3,773,000
(5.2%) (1 standard deviation loss)		
Discount Rate	6.80%	6.80%
Normal Cost Rate	10.79%	10.7%
UAL Contribution	$2,926,599	$3,485,000

- Without investment gains (returns higher than 6.8%) in FY 2024-25 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 2023-24.
- The Pension Outlook Tool can be used to model projected contributions for these scenarios beyond FY 2026-27 as well as to model other investment return scenarios.

Discount Rate Sensitivity

The discount rate assumption is calculated as the sum of the assumed real rate of return and the assumed annual price inflation, currently 4.5% and 2.3%, respectively. Changing either the price inflation assumption or the real rate of return assumption will change the discount rate. The sensitivity of the valuation results to the discount rate assumption depends on which component of the discount rate is changed. Shown below are various valuation results as of June 30, 2023, assuming alternate discount rates by changing the two components independently. Results are shown using the current discount rate of 6.8% as well as alternate discount rates of 5.8% and 7.8%. The rates of 5.8% and 7.8% were selected since they illustrate the impact of a 1.0% increase or decrease to the 6.8% assumption.

Sensitivity to the Real Rate of Return Assumption

As of June 30, 2023	1% Lower Real Return Rate	Current Assumptions	1% Higher Real Return Rate
Discount Rate	**5.8%**	**6.8%**	**7.8%**
Price Inflation	2.3%	2.3%	2.3%
Real Rate of Return	**3.5%**	**4.5%**	**5.5%**
a) Total Normal Cost	23.07%	18.43%	14.91%
b) Accrued Liability	$148,863,816	$131,694,738	$117,578,614
c) Market Value of Assets	$99,158,305	$99,158,305	$99,158,305
d) Unfunded Liability/(Surplus) [(b) - (c)]	$49,705,511	$32,536,433	$18,420,309
e) Funded Ratio	66.6%	75.3%	84.3%

Sensitivity to the Price Inflation Assumption

As of June 30, 2023	1% Lower Price Inflation	Current Assumptions	1% Higher Price Inflation
Discount Rate	**5.8%**	**6.8%**	**7.8%**
Price Inflation	**1.3%**	**2.3%**	**3.3%**
Real Rate of Return	4.5%	4.5%	4.5%
a) Total Normal Cost	19.44%	18.43%	16.70%
b) Accrued Liability	$136,148,538	$131,694,738	$122,285,015
c) Market Value of Assets	$99,158,305	$99,158,305	$99,158,305
d) Unfunded Liability/(Surplus) [(b) - (c)]	$36,990,233	$32,536,433	$23,126,710
e) Funded Ratio	72.8%	75.3%	81.1%

Mortality Rate Sensitivity

The following table looks at the change in the June 30, 2023, plan costs and funded status 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, 2023	10% Lower Mortality Rates	Current Assumptions	10% Higher Mortality Rates
a) Total Normal Cost	18.73%	18.43%	18.16%
b) Accrued Liability	$134,509,297	$131,694,738	$129,113,777
c) Market Value of Assets	$99,158,305	$99,158,305	$99,158,305
d) Unfunded Liability/(Surplus) [(b) - (c)]	$35,350,992	$32,536,433	$29,955,472
e) Funded Ratio	73.7%	75.3%	76.8%

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, 2022	June 30, 2023
1. Retiree Accrued Liability	$83,950,714	$87,182,041
2. Total Accrued Liability	$126,242,002	$131,694,738
3. Ratio of Retiree AL to Total AL [(1) ÷ (2)]	66%	66%

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

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

For comparison, the support ratio for all CalPERS public agency plans as of June 30, 2022, was 0.77 and was calculated consistently with how it is for the individual rate plan. Note that to calculate the support ratio for all public agency plans, a retiree with service from more than one CalPERS agency is counted as a retiree more than once.

Support Ratio	June 30, 2022	June 30, 2023
1. Number of Actives	107	114
2. Number of Retirees	263	267
3. Support Ratio [(1) ÷ (2)]	0.41	0.43

Maturity Measures (continued)

The actuarial calculations supplied in this communication are based on various assumptions about long-term demographic and economic behavior. Unless these assumptions (e.g., terminations, deaths, disabilities, retirements, salary 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

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 an AVR of 8 may experience twice the contribution volatility due to investment return volatility than a plan with an AVR of 4. It should be noted that this ratio is a measure of the current situation. It increases over time but generally tends to stabilize as a plan matures.

Liability Volatility Ratio

Also shown in the table below is the liability volatility ratio (LVR), which is the ratio of accrued liability to payroll. Plans that have a higher LVR experience more volatile employer contributions (as a percentage of payroll) due to changes in liability. For example, a plan with an LVR of 8 is expected to have twice the contribution volatility of a plan with an 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, 2022	June 30, 2023
1. Market Value of Assets without Receivables	$95,809,529	$99,135,302
2. Payroll	11,094,190	12,754,753
3. Asset Volatility Ratio (AVR) [(1) ÷ (2)]	8.6	7.8
4. Accrued Liability	$126,242,002	$131,694,738
5. Liability Volatility Ratio (LVR) [(4) ÷ (2)]	11.4	10.3

Maturity Measures History

Valuation Date	Ratio of Retiree Accrued Liability to Total Accrued Liability	Support Ratio	Asset Volatility Ratio	Liability Volatility Ratio
6/30/2017	66%	0.49	7.5	10.7
6/30/2018	66%	0.48	7.4	10.8
6/30/2019	65%	0.48	7.0	10.3
6/30/2020	65%	0.49	7.0	9.8
6/30/2021	65%	0.47	8.9	10.2
6/30/2022	66%	0.41	8.6	11.4
6/30/2023	66%	0.43	7.8	10.3

Funded Status – Termination Basis

The funded status measured on a termination basis is an estimate of the financial position of the plan had the contract with CalPERS been terminated as of June 30, 2023. The accrued liability on a termination basis (termination liability) is calculated differently from the plan's ongoing funding liability. For the termination liability calculation, both compensation and service are frozen as of the valuation date and no future pay increases or service accruals are assumed. This measure of funded status is not appropriate for assessing the need for future employer contributions in the case of an ongoing plan, that is, for an employer that continues to provide CalPERS retirement benefits to active employees. Unlike the actuarial cost method used for ongoing plans, the termination liability is the present value of the benefits earned through the valuation date.

A more conservative investment policy and asset allocation strategy was adopted by the board for the Terminated Agency Pool. The Terminated Agency Pool has limited funding sources since no future employer contributions will be made. Therefore, expected benefit payments are secured by risk-free assets and benefit security for members is increased while limiting the funding risk. However, this asset allocation has a lower expected rate of return than the remainder of the PERF and consequently, a lower discount rate assumption. The lower discount rate for the Terminated Agency Pool results in higher liabilities for terminated plans.

The discount rate used for actual termination valuations is a weighted average of the 10-year and 30-year Treasury yields where the weights are based on matching asset and liability durations as of the termination date. The discount rates used in the following analysis is based on 20-year Treasury bonds, which is a good proxy for most plans. The discount rate upon contract termination will depend on actual Treasury rates on the date of termination, which varies over time, as shown below.

Valuation Date	20-Year Treasury Rate	Valuation Date	20-Year Treasury Rate
06/30/2014	3.08%	06/30/2019	2.31%
06/30/2015	2.83%	06/30/2020	1.18%
06/30/2016	1.86%	06/30/2021	2.00%
06/30/2017	2.61%	06/30/2022	3.38%
06/30/2018	2.91%	06/30/2023	4.06%

As Treasury rates are variable, the table below shows a range for the termination liability using discount rates 1% below and above the 20-year Treasury rate on the valuation date. The price inflation assumption is the 20-year Treasury breakeven inflation rate, that is, the difference between the 20-year inflation indexed bond and the 20-year fixed-rate bond.

The Market Value of Assets (MVA) also varies with interest rates and will fluctuate depending on other market conditions on the date of termination. Since it is not possible to approximate how the MVA will change in different interest rate environments, the results below use the MVA as of the valuation date.

	Discount Rate: 3.06% Price Inflation: 2.50%	Discount Rate: 5.06% Price Inflation: 2.50%
1. Termination Liability[1]	$210,056,150	$157,916,761
2. Market Value of Assets (MVA)	99,158,305	99,158,305
3. Unfunded Termination Liability [(1) – (2)]	$110,897,845	$58,758,456
4. Funded Ratio [(2) ÷ (1)]	47.2%	62.8%

[1] The termination liabilities calculated above include a 5% contingency load. The contingency load and other actuarial assumptions can be found in Appendix A.

In order to terminate the plan, first contact our Pension Contract Services unit to initiate a Resolution of Intent to Terminate. The completed Resolution will allow a CalPERS actuary to provide a preliminary termination valuation with a more up-to-date estimate of the plan's assets and liabilities. Before beginning this process, please consult with a CalPERS actuary.

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 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 LDROM. 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 LDROM is 4.82%, which is the Standard FTSE Pension Liability Index[1] discount rate as of June 30, 2023, net of assumed administrative expenses.

Selected Measures on a Low-Default-Risk Basis	**June 30, 2023**
Discount Rate	4.82%
1. Accrued Liability[2] – Low-Default-Risk Basis (LDROM)	
a) Active Members	$38,259,371
b) Transferred Members	19,564,329
c) Separated Members	6,142,178
d) Members and Beneficiaries Receiving Payments	105,540,549
e) Total	$169,506,427
2. Market Value of Assets (MVA)	99,158,305
3. Unfunded Accrued Liability – Low-Default-Risk Basis [(1e) – (2)]	$70,348,122
4. Unfunded Accrued Liability – Funding Policy Basis	32,536,433
5. Present Value of Unearned Investment Risk Premium [(3) – (4)]	$37,811,689

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 sufficiency of plan assets to cover the cost of settling the plan's benefit obligations (see Funded Status – Termination Basis), 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-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 LDROM for a subset of the fund, such as a single rate plan or a group of retirees.

2 If plan assets were invested entirely in the AA fixed income securities used to determine the discount rate of 4.82%, the CalPERS discount rate could, at various times, be below 4.5% or 5.25%, and some automatic annual retiree COLAs could be suspended (Gov. Code sections 21329 and 21335). Since there is currently no proposal to adopt an asset allocation entirely comprised of fixed income securities, the automatic COLAs have been fully valued in the measures above based on the assumptions used for plan funding. Removing future COLAs from the measurement would understate the statutory obligation.

Plan’s Major Benefit Options

Plan's Major Benefit Options

Shown below is a summary of the major optional benefits for which the agency has contracted. A description of principal standard and optional plan provisions is in Appendix B.

	Benefit Group					
Member Category	**Misc**	**Misc**	**Misc**	**Misc**	**Misc**	
Demographics						
Actives	No	Yes	Yes	Yes	No	
Transfers/Separated	Yes	Yes	Yes	Yes	No	
Receiving	Yes	Yes	Yes	Yes	Yes	
Benefit Provision						
Benefit Formula	2% @ 55	2.5% @ 55	2% @ 62	2% @ 60		
Social Security Coverage	No	No	No	No		
Full/Modified	Full	Full	Full	Full		
Employee Contribution Rate		8.00%	7.75%	7.00%		
Final Average Compensation Period	One Year	One Year	Three Year	Three Year		
Sick Leave Credit	No	No	No	No		
Non-Industrial Disability	Standard	Standard	Standard	Standard		
Industrial Disability	No	No	No	No		
Pre-Retirement Death Benefits						
Optional Settlement 2	No	No	No	No		
1959 Survivor Benefit Level	Level 4	Level 4	Level 4	Level 4		
Special	No	No	No	No		
Alternate (firefighters)	No	No	No	No		
Post-Retirement Death Benefits						
Lump Sum	$2,000	$2,000	$2,000	$2,000	$2,000	
Survivor Allowance (PRSA)	Yes	Yes	Yes	Yes	Yes	
COLA	2%	2%	2%	2%	2%	

Appendices

- **Appendix A – Actuarial Methods and Assumptions**
- **Appendix B – Principal Plan Provisions**
- **Appendix C – Participant Data**
- **Appendix D – Glossary**

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. 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 former 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 contributions.

Actuarial Methods

Actuarial Cost Method

With one exception, the actuarial cost method used in this valuation is the Entry Age Actuarial Cost Method. This method is used to calculate the required employer contributions and the PEPRA 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.

To calculate the accrued liability on termination basis, this valuation used the Traditional Unit Credit Actuarial Cost Method. This method differs from the entry age method only for active members where the accrued liability is the present value of benefits assuming no future pay increases or service accruals.

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 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.

Prior Policy (Bases Established prior to June 30, 2019)

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 will be amortized over a period of five years. Bases established prior to June 30, 2013, may be amortized differently. A summary is provided in the following table:

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

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:

	Source				
	(Gain)/Loss				
Driver	Investment	Non-investment	Assumption/ Method Change	Benefit Change	Golden Handshake
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

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.

Exceptions for Inactive Plans

The following exceptions apply to plans classified as Inactive. These plans have no active members and no expectation to have active members in the future.

- Amortization of the unfunded liability is on a "level dollar" basis rather than a "level percent of pay" basis. For amortization layers, which utilize a ramp up and ramp down, the "ultimate" payment is constant.
- Actuarial judgment will be used to shorten amortization periods for Inactive plans with existing periods that are deemed too long given the duration of the liability. The specific demographics of the plan will be used to determine if shorter periods may be more appropriate.

Exceptions for Inactive Agencies

For a public agency with no active members in any CalPERS rate plan, the unfunded liability shall be amortized over a closed amortization period of no more than 15 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 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 enough yet. The total PEPRA normal cost for each PEPRA benefit tier will be determined based on the entire active plan population (both PEPRA and Classic) only until the number of members covered under the PEPRA formula meets either:

1. 50% of the active population, or
2. 25% of the active population and 100 or more PEPRA members

Once one of these conditions is met, the total PEPRA normal cost for each PEPRA benefit tier will be determined using the entire active PEPRA population.

Actuarial Assumptions

In 2021, CalPERS completed its most recent asset liability management study incorporating actuarial as sumptions 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) 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, 2023. 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.

Termination Liability Discount Rate
The current discount rate assumption used for termination valuations is a weighted average of the 10-year and 30-year U.S. Treasury yields where the weights are based on matching asset and liability durations as of the termination date. The accrued liabilities on a termination basis in this report use discount rates that are based on the 20-year Treasury rate on the valuation date.

To illustrate the impact of the variability of interest rates, the accrued liabilities on a termination basis in this report use discount rates 1% below and 1% above the 20-year Treasury rate on the valuation date. The 20-year Treasury rate was 4.06% on June 30, 2023.

Salary Increases

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

Public Agency Miscellaneous

Duration of Service	(Entry Age 20)	(Entry Age 30)	(Entry Age 40)
0	0.0764	0.0621	0.0521
1	0.0663	0.0528	0.0424
2	0.0576	0.0449	0.0346
3	0.0501	0.0381	0.0282
4	0.0435	0.0324	0.0229
5	0.0378	0.0276	0.0187
10	0.0201	0.0126	0.0108
15	0.0155	0.0102	0.0071
20	0.0119	0.0083	0.0047
25	0.0091	0.0067	0.0031
30	0.0070	0.0054	0.0020

Public Agency Fire

Duration of Service	(Entry Age 20)	(Entry Age 30)	(Entry Age 40)
0	0.1517	0.1549	0.0631
1	0.1191	0.1138	0.0517
2	0.0936	0.0835	0.0423
3	0.0735	0.0613	0.0346
4	0.0577	0.0451	0.0284
5	0.0453	0.0331	0.0232
10	0.0188	0.0143	0.0077
15	0.0165	0.0124	0.0088
20	0.0145	0.0108	0.0101
25	0.0127	0.0094	0.0115
30	0.0112	0.0082	0.0132

Public Agency Police

Duration of Service	(Entry Age 20)	(Entry Age 30)	(Entry Age 40)
0	0.1181	0.1051	0.0653
1	0.0934	0.0812	0.0532
2	0.0738	0.0628	0.0434
3	0.0584	0.0485	0.0353
4	0.0462	0.0375	0.0288
5	0.0365	0.0290	0.0235
10	0.0185	0.0155	0.0118
15	0.0183	0.0150	0.0131
20	0.0181	0.0145	0.0145
25	0.0179	0.0141	0.0161
30	0.0178	0.0136	0.0179

Salary Increases (continued)

Public Agency County Peace Officers

Duration of Service	(Entry Age 20)	(Entry Age 30)	(Entry Age 40)
0	0.1238	0.1053	0.0890
1	0.0941	0.0805	0.0674
2	0.0715	0.0616	0.0510
3	0.0544	0.0471	0.0387
4	0.0413	0.0360	0.0293
5	0.0314	0.0276	0.0222
10	0.0184	0.0142	0.0072
15	0.0174	0.0124	0.0073
20	0.0164	0.0108	0.0074
25	0.0155	0.0094	0.0075
30	0.0147	0.0083	0.0077

Schools

Duration of Service	(Entry Age 20)	(Entry Age 30)	(Entry Age 40)
0	0.0275	0.0275	0.0200
1	0.0422	0.0373	0.0298
2	0.0422	0.0373	0.0298
3	0.0422	0.0373	0.0298
4	0.0388	0.0314	0.0245
5	0.0308	0.0239	0.0179
10	0.0236	0.0160	0.0121
15	0.0182	0.0135	0.0103
20	0.0145	0.0109	0.0085
25	0.0124	0.0102	0.0058
30	0.0075	0.0053	0.0019

- The Miscellaneous salary scale is used for Local Prosecutors.
- The Police salary scale is used for Other Safety, Local Sheriff, and School Police.

Price Inflation
2.30% compounded annually.

Termination Liability Price Inflation
The breakeven inflation rate for 20-year Treasuries on the valuation date, 2.50%.

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

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.

Non-valued Potential Additional Liabilities
The potential liability loss for a cost-of-living increase exceeding the 2.30% price inflation assumption and any potential liability loss from future member service purchases that are not reflected in the valuation.

Miscellaneous Loading Factors

Credit for Unused Sick Leave
Total years of service is increased by 1% for those plans that have adopted the provision of providing Credit for Unused Sick Leave.

Conversion of Employer Paid Member Contributions (EPMC)
Total years of service is increased by the Employee Contribution Rate for those plans with the provision providing for the Conversion of Employer Paid Member Contributions (EPMC) during the final compensation period.

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.

Termination Liability
The termination liabilities include a 5% contingency load. This load is for unforeseen improvements in mortality.

Demographic Assumptions

Pre-Retirement Mortality
The mortality assumptions are based on mortality rates resulting from the most recent CalPERS Experience Study adopted by the CalPERS Board in November 2021. For purposes of the mortality rates, the rates incorporate generational mortality to capture ongoing mortality improvement. 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 CalPERS Experience Study and Review of Actuarial Assumptions report that can be found on the CalPERS website.

Rates vary by age and gender. This table only contains a sample of the 2017 base table rates for illustrative purposes. The non-industrial death rates are used for all plans. The industrial death rates are used for Safety plans (except for local Safety members described in Government Code section 20423.6 where the agency has not specifically contracted for industrial death benefits.)

	Miscellaneous		Safety			
	Non-Industrial Death (Not Job-Related)		Non-Industrial Death (Not Job-Related)		Industrial Death (Job-Related)	
Age	Male	Female	Male	Female	Male	Female
20	0.00039	0.00014	0.00038	0.00014	0.00004	0.00002
25	0.00033	0.00013	0.00034	0.00018	0.00004	0.00002
30	0.00044	0.00019	0.00042	0.00025	0.00005	0.00003
35	0.00058	0.00029	0.00048	0.00034	0.00005	0.00004
40	0.00075	0.00039	0.00055	0.00042	0.00006	0.00005
45	0.00093	0.00054	0.00066	0.00053	0.00007	0.00006
50	0.00134	0.00081	0.00092	0.00073	0.00010	0.00008
55	0.00198	0.00123	0.00138	0.00106	0.00015	0.00012
60	0.00287	0.00179	0.00221	0.00151	0.00025	0.00017
65	0.00403	0.00250	0.00346	0.00194	0.00038	0.00022
70	0.00594	0.00404	0.00606	0.00358	0.00067	0.00040
75	0.00933	0.00688	0.01099	0.00699	0.00122	0.00078
80	0.01515	0.01149	0.02027	0.01410	0.00225	0.00157

- The pre-retirement mortality rates above are for 2017 and are projected generationally for future years using 80% of the Society of Actuaries' Scale MP-2020.
- Miscellaneous plans usually have industrial death rates set to zero unless the agency has specifically contracted for industrial death benefits. If so, each non-industrial death rate shown above will be split into two components: 99% will become the non-industrial death rate and 1% will become the industrial death rate.

Post-Retirement Mortality
Rates vary by age, type of retirement, and gender. See sample rates in table below. These rates are used for all plans.

	Service Retirement		Non-Industrial Disability (Not Job-Related)		Industrial Disability (Job-Related)	
Age	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	0.06112	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	0.24665	0.20364	0.24665	0.20364
100	0.36198	0.31582	0.36198	0.31582	0.36198	0.31582
105	0.52229	0.44679	0.52229	0.44679	0.52229	0.44679
110	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

- The post-retirement mortality rates above are for 2017 and are projected generationally for future years using 80% of the Society of Actuaries' Scale MP-2020.

Marital Status
For active members, a percentage who are married upon retirement is assumed according to the member category as shown in the following table.

Member Category	Percent Married
Miscellaneous Member	70%
Local Police	85%
Local Fire	85%
Other Local Safety	70%
School Police	85%
Local County Peace Officers	75%

Age of Spouse
It is assumed that female spouses are 3 years younger than male spouses. This assumption is used for all plans.

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 for Miscellaneous members and age 54 for Safety members.

Termination with Refund

Rates vary by entry age and service for Miscellaneous plans. Rates vary by service for Safety plans. See sample rates in tables below.

Public Agency Miscellaneous

Duration of Service	Entry Age 20		Entry Age 25		Entry Age 30		Entry Age 35		Entry Age 40		Entry Age 45	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
0	0.1851	0.1944	0.1769	0.1899	0.1631	0.1824	0.1493	0.1749	0.1490	0.1731	0.1487	0.1713
1	0.1531	0.1673	0.1432	0.1602	0.1266	0.1484	0.1101	0.1366	0.1069	0.1323	0.1037	0.1280
2	0.1218	0.1381	0.1125	0.1307	0.0970	0.1183	0.0815	0.1058	0.0771	0.0998	0.0726	0.0938
3	0.0927	0.1085	0.0852	0.1020	0.0727	0.0912	0.0601	0.0804	0.0556	0.0737	0.0511	0.0669
4	0.0672	0.0801	0.0616	0.0752	0.0524	0.0670	0.0431	0.0587	0.0392	0.0523	0.0352	0.0459
5	0.0463	0.0551	0.0423	0.0517	0.0358	0.0461	0.0292	0.0404	0.0261	0.0350	0.0230	0.0296
10	0.0112	0.0140	0.0101	0.0129	0.0083	0.0112	0.0064	0.0094	0.0048	0.0071	0.0033	0.0049
15	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
20	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
25	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
30	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
35	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Public Agency Safety

Duration of Service	Fire		Police		County Peace Officer	
	Male	Female	Male	Female	Male	Female
0	0.1022	0.1317	0.1298	0.1389	0.1086	0.1284
1	0.0686	0.1007	0.0789	0.0904	0.0777	0.0998
2	0.0441	0.0743	0.0464	0.0566	0.0549	0.0759
3	0.0272	0.0524	0.0274	0.0343	0.0385	0.0562
4	0.0161	0.0349	0.0170	0.0206	0.0268	0.0402
5	0.0092	0.0214	0.0113	0.0128	0.0186	0.0276
10	0.0015	0.0000	0.0032	0.0047	0.0046	0.0038
15	0.0000	0.0000	0.0000	0.0000	0.0023	0.0036
20	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
25	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
30	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
35	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

- The police termination and refund rates are also used for Public Agency Local Prosecutors, Other Safety, Local Sheriff, and School Police.

Termination with Refund (continued)

Schools

Duration of Service	Entry Age 20		Entry Age 25		Entry Age 30		Entry Age 35		Entry Age 40		Entry Age 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	0.0957	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

Termination with Vested Benefits
Rates vary by entry age and service for Miscellaneous plans. Rates vary by service for Safety plans. See sample rates in tables below.

Public Agency Miscellaneous

Duration of Service	Entry Age 20		Entry Age 25		Entry Age 30		Entry Age 35		Entry Age 40	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
5	0.0381	0.0524	0.0381	0.0524	0.0358	0.0464	0.0334	0.0405	0.0301	0.0380
10	0.0265	0.0362	0.0265	0.0362	0.0254	0.0334	0.0244	0.0307	0.0197	0.0236
15	0.0180	0.0252	0.0180	0.0252	0.0166	0.0213	0.0152	0.0174	0.0119	0.0132
20	0.0141	0.0175	0.0141	0.0175	0.0110	0.0131	0.0079	0.0087	0.0000	0.0000
25	0.0084	0.0108	0.0084	0.0108	0.0064	0.0076	0.0000	0.0000	0.0000	0.0000
30	0.0047	0.0056	0.0047	0.0056	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
35	0.0038	0.0041	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Public Agency Safety

Duration of Service	Fire		Police		County Peace Officer	
	Male	Female	Male	Female	Male	Female
5	0.0089	0.0224	0.0156	0.0272	0.0177	0.0266
10	0.0066	0.0164	0.0113	0.0198	0.0126	0.0189
15	0.0048	0.0120	0.0083	0.0144	0.0089	0.0134
20	0.0035	0.0088	0.0060	0.0105	0.0063	0.0095
25	0.0024	0.0061	0.0042	0.0073	0.0042	0.0063
30	0.0012	0.0031	0.0021	0.0037	0.0021	0.0031
35	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

- After termination with vested benefits, a Miscellaneous member is assumed to retire at age 59 and a Safety member at age 54.
- The Police termination with vested benefits rates are also used for Public Agency Local Prosecutors, Other Safety, Local Sheriff, and School Police.

Schools

Duration of Service	Entry Age 20		Entry Age 25		Entry Age 30		Entry Age 35		Entry Age 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	0.0123	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

Non-Industrial (Not Job-Related) Disability
Rates vary by age and gender for Miscellaneous plans. Rates vary by age and category for Safety plans.

	Miscellaneous		Fire	Police	County Peace Officer	Schools	
Age	Male	Female	All	All	All	Male	Female
20	0.0001	0.0000	0.0001	0.0001	0.0001	0.0000	0.0002
25	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0002
30	0.0002	0.0003	0.0001	0.0001	0.0001	0.0002	0.0002
35	0.0004	0.0007	0.0001	0.0002	0.0003	0.0005	0.0004
40	0.0009	0.0012	0.0001	0.0002	0.0006	0.0010	0.0008
45	0.0015	0.0019	0.0002	0.0003	0.0011	0.0019	0.0015
50	0.0015	0.0019	0.0004	0.0005	0.0016	0.0027	0.0021
55	0.0014	0.0013	0.0006	0.0007	0.0009	0.0024	0.0017
60	0.0012	0.0009	0.0006	0.0011	0.0005	0.0020	0.0010

- The Miscellaneous non-industrial disability rates are used for Local Prosecutors.
- The police non-industrial disability rates are also used for Other Safety, Local Sheriff, and School Police.

Industrial (Job-Related) Disability
Rates vary by age and category.

Age	Fire	Police	County Peace Officer
20	0.0001	0.0000	0.0004
25	0.0002	0.0017	0.0013
30	0.0006	0.0048	0.0025
35	0.0012	0.0079	0.0037
40	0.0023	0.0110	0.0051
45	0.0040	0.0141	0.0067
50	0.0208	0.0185	0.0092
55	0.0307	0.0479	0.0151
60	0.0438	0.0602	0.0174

- The police industrial disability rates are also used for Local Sheriff and Other Safety.
- 50% of the police industrial disability rates are used for School Police.
- 1% of the police industrial disability rates are used for Local Prosecutors.
- Normally, rates are zero for Miscellaneous plans unless the agency has specifically contracted for industrial disability benefits. If so, each Miscellaneous non-industrial disability rate will be split into two components: 50% will become the non-industrial disability rate and 50% will become the industrial disability rate.

Service Retirement

Retirement rates vary by age, service, and formula, except for the Safety Half Pay at 55 and 2% at 55 formulas, where retirement rates vary by age only.

Public Agency Miscellaneous 1.5% at age 65

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.008	0.011	0.013	0.015	0.017	0.019
51	0.007	0.010	0.012	0.013	0.015	0.017
52	0.010	0.014	0.017	0.019	0.021	0.024
53	0.008	0.012	0.015	0.017	0.019	0.022
54	0.012	0.016	0.019	0.022	0.025	0.028
55	0.018	0.025	0.031	0.035	0.038	0.043
56	0.015	0.021	0.025	0.029	0.032	0.036
57	0.020	0.028	0.033	0.038	0.043	0.048
58	0.024	0.033	0.040	0.046	0.052	0.058
59	0.028	0.039	0.048	0.054	0.060	0.067
60	0.049	0.069	0.083	0.094	0.105	0.118
61	0.062	0.087	0.106	0.120	0.133	0.150
62	0.104	0.146	0.177	0.200	0.223	0.251
63	0.099	0.139	0.169	0.191	0.213	0.239
64	0.097	0.136	0.165	0.186	0.209	0.233
65	0.140	0.197	0.240	0.271	0.302	0.339
66	0.092	0.130	0.157	0.177	0.198	0.222
67	0.129	0.181	0.220	0.249	0.277	0.311
68	0.092	0.129	0.156	0.177	0.197	0.221
69	0.092	0.130	0.158	0.178	0.199	0.224
70	0.103	0.144	0.175	0.198	0.221	0.248

Public Agency Miscellaneous 2% at age 60

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.010	0.011	0.014	0.014	0.017	0.017
51	0.017	0.013	0.014	0.010	0.010	0.010
52	0.014	0.014	0.018	0.015	0.016	0.016
53	0.015	0.012	0.013	0.010	0.011	0.011
54	0.006	0.010	0.017	0.016	0.018	0.018
55	0.012	0.016	0.024	0.032	0.036	0.036
56	0.010	0.014	0.023	0.030	0.034	0.034
57	0.006	0.018	0.030	0.040	0.044	0.044
58	0.022	0.023	0.033	0.042	0.046	0.046
59	0.039	0.033	0.040	0.047	0.050	0.050
60	0.063	0.069	0.074	0.090	0.137	0.116
61	0.044	0.058	0.066	0.083	0.131	0.113
62	0.084	0.107	0.121	0.153	0.238	0.205
63	0.173	0.166	0.165	0.191	0.283	0.235
64	0.120	0.145	0.164	0.147	0.160	0.172
65	0.138	0.160	0.214	0.216	0.237	0.283
66	0.198	0.228	0.249	0.216	0.228	0.239
67	0.207	0.242	0.230	0.233	0.233	0.233
68	0.201	0.234	0.225	0.231	0.231	0.231
69	0.152	0.173	0.164	0.166	0.166	0.166
70	0.200	0.200	0.200	0.200	0.200	0.200

Service Retirement (continued)

Public Agency Miscellaneous 2% at age 55

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.014	0.014	0.017	0.021	0.023	0.024
51	0.013	0.017	0.017	0.018	0.018	0.019
52	0.013	0.018	0.018	0.020	0.020	0.021
53	0.013	0.019	0.021	0.024	0.025	0.026
54	0.017	0.025	0.028	0.032	0.033	0.035
55	0.045	0.042	0.053	0.086	0.098	0.123
56	0.018	0.036	0.056	0.086	0.102	0.119
57	0.041	0.046	0.056	0.076	0.094	0.120
58	0.052	0.044	0.048	0.074	0.106	0.123
59	0.043	0.058	0.073	0.092	0.105	0.126
60	0.059	0.064	0.083	0.115	0.154	0.170
61	0.087	0.074	0.087	0.107	0.147	0.168
62	0.115	0.123	0.151	0.180	0.227	0.237
63	0.116	0.127	0.164	0.202	0.252	0.261
64	0.084	0.138	0.153	0.190	0.227	0.228
65	0.167	0.187	0.210	0.262	0.288	0.291
66	0.187	0.258	0.280	0.308	0.318	0.319
67	0.195	0.235	0.244	0.277	0.269	0.280
68	0.228	0.248	0.250	0.241	0.245	0.245
69	0.188	0.201	0.209	0.219	0.231	0.231
70	0.229	0.229	0.229	0.229	0.229	0.229

Public Agency Miscellaneous 2.5% at age 55

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.014	0.017	0.027	0.035	0.046	0.050
51	0.019	0.021	0.025	0.030	0.038	0.040
52	0.018	0.020	0.026	0.034	0.038	0.037
53	0.013	0.021	0.031	0.045	0.052	0.053
54	0.025	0.025	0.030	0.046	0.057	0.068
55	0.029	0.042	0.064	0.109	0.150	0.225
56	0.036	0.047	0.068	0.106	0.134	0.194
57	0.051	0.047	0.060	0.092	0.116	0.166
58	0.035	0.046	0.062	0.093	0.119	0.170
59	0.029	0.053	0.072	0.112	0.139	0.165
60	0.039	0.069	0.094	0.157	0.177	0.221
61	0.080	0.077	0.086	0.140	0.167	0.205
62	0.086	0.131	0.149	0.220	0.244	0.284
63	0.135	0.135	0.147	0.214	0.222	0.262
64	0.114	0.128	0.158	0.177	0.233	0.229
65	0.112	0.174	0.222	0.209	0.268	0.273
66	0.235	0.254	0.297	0.289	0.321	0.337
67	0.237	0.240	0.267	0.249	0.267	0.277
68	0.258	0.271	0.275	0.207	0.210	0.212
69	0.117	0.208	0.266	0.219	0.250	0.270
70	0.229	0.229	0.229	0.229	0.229	0.229

Service Retirement (continued)

Public Agency Miscellaneous 2.7% at age 55

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.011	0.016	0.022	0.033	0.034	0.038
51	0.018	0.019	0.023	0.032	0.031	0.031
52	0.019	0.020	0.026	0.035	0.034	0.037
53	0.020	0.020	0.025	0.043	0.048	0.053
54	0.018	0.030	0.040	0.052	0.053	0.070
55	0.045	0.058	0.082	0.138	0.208	0.278
56	0.057	0.062	0.080	0.121	0.178	0.222
57	0.045	0.052	0.071	0.106	0.147	0.182
58	0.074	0.060	0.074	0.118	0.163	0.182
59	0.058	0.067	0.086	0.123	0.158	0.187
60	0.087	0.084	0.096	0.142	0.165	0.198
61	0.073	0.084	0.101	0.138	0.173	0.218
62	0.130	0.133	0.146	0.187	0.214	0.249
63	0.122	0.140	0.160	0.204	0.209	0.243
64	0.104	0.124	0.154	0.202	0.214	0.230
65	0.182	0.201	0.242	0.264	0.293	0.293
66	0.272	0.249	0.273	0.285	0.312	0.312
67	0.182	0.217	0.254	0.249	0.264	0.264
68	0.223	0.197	0.218	0.242	0.273	0.273
69	0.217	0.217	0.217	0.217	0.217	0.217
70	0.227	0.227	0.227	0.227	0.227	0.227

Public Agency Miscellaneous 3% at age 60

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.015	0.020	0.025	0.039	0.040	0.044
51	0.041	0.034	0.032	0.041	0.036	0.037
52	0.024	0.020	0.022	0.039	0.040	0.041
53	0.018	0.024	0.032	0.047	0.048	0.057
54	0.033	0.033	0.035	0.051	0.049	0.052
55	0.137	0.043	0.051	0.065	0.076	0.108
56	0.173	0.038	0.054	0.075	0.085	0.117
57	0.019	0.035	0.059	0.088	0.111	0.134
58	0.011	0.040	0.070	0.105	0.133	0.162
59	0.194	0.056	0.064	0.081	0.113	0.163
60	0.081	0.085	0.133	0.215	0.280	0.333
61	0.080	0.090	0.134	0.170	0.223	0.292
62	0.137	0.153	0.201	0.250	0.278	0.288
63	0.128	0.140	0.183	0.227	0.251	0.260
64	0.174	0.147	0.173	0.224	0.239	0.264
65	0.152	0.201	0.262	0.299	0.323	0.323
66	0.272	0.273	0.317	0.355	0.380	0.380
67	0.218	0.237	0.268	0.274	0.284	0.284
68	0.200	0.228	0.269	0.285	0.299	0.299
69	0.250	0.250	0.250	0.250	0.250	0.250
70	0.245	0.245	0.245	0.245	0.245	0.245

Service Retirement (continued)

Public Agency Miscellaneous 2% at age 62

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	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
52	0.005	0.008	0.012	0.015	0.019	0.031
53	0.007	0.011	0.014	0.018	0.021	0.032
54	0.007	0.011	0.015	0.019	0.023	0.034
55	0.010	0.019	0.028	0.036	0.061	0.096
56	0.014	0.026	0.038	0.050	0.075	0.108
57	0.018	0.029	0.039	0.050	0.074	0.107
58	0.023	0.035	0.048	0.060	0.073	0.099
59	0.025	0.038	0.051	0.065	0.092	0.128
60	0.031	0.051	0.071	0.091	0.111	0.138
61	0.038	0.058	0.079	0.100	0.121	0.167
62	0.044	0.074	0.104	0.134	0.164	0.214
63	0.077	0.105	0.134	0.163	0.192	0.237
64	0.072	0.101	0.129	0.158	0.187	0.242
65	0.108	0.141	0.173	0.206	0.239	0.300
66	0.132	0.172	0.212	0.252	0.292	0.366
67	0.132	0.172	0.212	0.252	0.292	0.366
68	0.120	0.156	0.193	0.229	0.265	0.333
69	0.120	0.156	0.193	0.229	0.265	0.333
70	0.120	0.156	0.193	0.229	0.265	0.333

Public Agency Fire Half Pay at age 55 and 2% at age 55

Age	Rate	Age	Rate
50	0.016	56	0.111
51	0.000	57	0.000
52	0.034	58	0.095
53	0.020	59	0.044
54	0.041	60	1.000
55	0.075		

Public Agency Police Half Pay at age 55 and 2% at age 55

Age	Rate	Age	Rate
50	0.026	56	0.069
51	0.000	57	0.051
52	0.016	58	0.072
53	0.027	59	0.070
54	0.010	60	0.300
55	0.167		

Service Retirement (continued)

Public Agency Police 2% at age 50

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.018	0.077	0.056	0.046	0.043	0.046
51	0.022	0.087	0.060	0.048	0.044	0.047
52	0.020	0.102	0.081	0.071	0.069	0.075
53	0.016	0.072	0.053	0.045	0.042	0.046
54	0.006	0.071	0.071	0.069	0.072	0.080
55	0.009	0.040	0.099	0.157	0.186	0.186
56	0.020	0.051	0.108	0.165	0.194	0.194
57	0.036	0.072	0.106	0.139	0.156	0.156
58	0.001	0.046	0.089	0.130	0.152	0.152
59	0.066	0.094	0.119	0.143	0.155	0.155
60	0.177	0.177	0.177	0.177	0.177	0.177
61	0.134	0.134	0.134	0.134	0.134	0.134
62	0.184	0.184	0.184	0.184	0.184	0.184
63	0.250	0.250	0.250	0.250	0.250	0.250
64	0.177	0.177	0.177	0.177	0.177	0.177
65	1.000	1.000	1.000	1.000	1.000	1.000

- These rates also apply to County Peace officers, Local Prosecutors, Local Sheriff, School Police, and Other Safety.

Public Agency Fire 2% at age 50

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.054	0.054	0.056	0.080	0.064	0.066
51	0.020	0.020	0.021	0.030	0.024	0.024
52	0.037	0.037	0.038	0.054	0.043	0.045
53	0.051	0.051	0.053	0.076	0.061	0.063
54	0.082	0.082	0.085	0.121	0.097	0.100
55	0.139	0.139	0.139	0.139	0.139	0.139
56	0.129	0.129	0.129	0.129	0.129	0.129
57	0.085	0.085	0.085	0.085	0.085	0.085
58	0.119	0.119	0.119	0.119	0.119	0.119
59	0.167	0.167	0.167	0.167	0.167	0.167
60	0.152	0.152	0.152	0.152	0.152	0.152
61	0.179	0.179	0.179	0.179	0.179	0.179
62	0.179	0.179	0.179	0.179	0.179	0.179
63	0.179	0.179	0.179	0.179	0.179	0.179
64	0.179	0.179	0.179	0.179	0.179	0.179
65	1.000	1.000	1.000	1.000	1.000	1.000

Service Retirement (continued)

Public Agency Police 3% at age 55

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.019	0.053	0.045	0.054	0.057	0.061
51	0.002	0.017	0.028	0.044	0.053	0.060
52	0.002	0.031	0.037	0.051	0.059	0.066
53	0.026	0.049	0.049	0.080	0.099	0.114
54	0.019	0.034	0.047	0.091	0.121	0.142
55	0.006	0.115	0.141	0.199	0.231	0.259
56	0.017	0.188	0.121	0.173	0.199	0.199
57	0.008	0.137	0.093	0.136	0.157	0.157
58	0.017	0.126	0.105	0.164	0.194	0.194
59	0.026	0.146	0.110	0.167	0.195	0.195
60	0.155	0.155	0.155	0.155	0.155	0.155
61	0.210	0.210	0.210	0.210	0.210	0.210
62	0.262	0.262	0.262	0.262	0.262	0.262
63	0.172	0.172	0.172	0.172	0.172	0.172
64	0.227	0.227	0.227	0.227	0.227	0.227
65	1.000	1.000	1.000	1.000	1.000	1.000

- These rates also apply to County Peace officers, Local Prosecutors, Local Sheriff, School Police, and Other Safety.

Public Agency Fire 3% at age 55

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.003	0.006	0.013	0.019	0.025	0.028
51	0.004	0.008	0.017	0.026	0.034	0.038
52	0.005	0.011	0.022	0.033	0.044	0.049
53	0.005	0.034	0.024	0.038	0.069	0.138
54	0.007	0.047	0.032	0.051	0.094	0.187
55	0.010	0.067	0.046	0.073	0.134	0.266
56	0.010	0.063	0.044	0.069	0.127	0.253
57	0.135	0.100	0.148	0.196	0.220	0.220
58	0.083	0.062	0.091	0.120	0.135	0.135
59	0.137	0.053	0.084	0.146	0.177	0.177
60	0.162	0.063	0.099	0.172	0.208	0.208
61	0.598	0.231	0.231	0.231	0.231	0.231
62	0.621	0.240	0.240	0.240	0.240	0.240
63	0.236	0.236	0.236	0.236	0.236	0.236
64	0.236	0.236	0.236	0.236	0.236	0.236
65	1.000	1.000	1.000	1.000	1.000	1.000

Service Retirement (continued)

Public Agency Police 3% at age 50

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.124	0.103	0.113	0.143	0.244	0.376
51	0.060	0.081	0.087	0.125	0.207	0.294
52	0.016	0.055	0.111	0.148	0.192	0.235
53	0.072	0.074	0.098	0.142	0.189	0.237
54	0.018	0.049	0.105	0.123	0.187	0.271
55	0.069	0.074	0.081	0.113	0.209	0.305
56	0.064	0.108	0.113	0.125	0.190	0.288
57	0.056	0.109	0.160	0.182	0.210	0.210
58	0.108	0.129	0.173	0.189	0.214	0.214
59	0.093	0.144	0.204	0.229	0.262	0.262
60	0.343	0.180	0.159	0.188	0.247	0.247
61	0.221	0.221	0.221	0.221	0.221	0.221
62	0.213	0.213	0.213	0.213	0.213	0.213
63	0.233	0.233	0.233	0.233	0.233	0.233
64	0.234	0.234	0.234	0.234	0.234	0.234
65	1.000	1.000	1.000	1.000	1.000	1.000

- These rates also apply to County Peace officers, Local Prosecutors, Local Sheriff, School Police, and Other Safety.

Public Agency Fire 3% at age 50

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.095	0.048	0.053	0.093	0.134	0.175
51	0.016	0.032	0.053	0.085	0.117	0.149
52	0.013	0.032	0.054	0.087	0.120	0.154
53	0.085	0.044	0.049	0.089	0.129	0.170
54	0.038	0.065	0.074	0.105	0.136	0.167
55	0.042	0.043	0.049	0.085	0.132	0.215
56	0.133	0.103	0.075	0.113	0.151	0.209
57	0.062	0.048	0.060	0.124	0.172	0.213
58	0.124	0.097	0.092	0.153	0.194	0.227
59	0.092	0.071	0.078	0.144	0.192	0.233
60	0.056	0.044	0.061	0.131	0.186	0.233
61	0.282	0.219	0.158	0.198	0.233	0.260
62	0.292	0.227	0.164	0.205	0.241	0.269
63	0.196	0.196	0.196	0.196	0.196	0.196
64	0.197	0.197	0.197	0.197	0.197	0.197
65	1.000	1.000	1.000	1.000	1.000	1.000

Service Retirement (continued)

Public Agency Police 2% at age 57

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.040	0.040	0.040	0.040	0.040	0.080
51	0.028	0.028	0.028	0.028	0.040	0.066
52	0.028	0.028	0.028	0.028	0.043	0.061
53	0.028	0.028	0.028	0.028	0.057	0.086
54	0.028	0.028	0.028	0.032	0.069	0.110
55	0.050	0.050	0.050	0.067	0.099	0.179
56	0.046	0.046	0.046	0.062	0.090	0.160
57	0.054	0.054	0.054	0.072	0.106	0.191
58	0.060	0.060	0.060	0.066	0.103	0.171
59	0.060	0.060	0.060	0.069	0.105	0.171
60	0.113	0.113	0.113	0.113	0.113	0.171
61	0.108	0.108	0.108	0.108	0.108	0.128
62	0.113	0.113	0.113	0.113	0.113	0.159
63	0.113	0.113	0.113	0.113	0.113	0.159
64	0.113	0.113	0.113	0.113	0.113	0.239
65	1.000	1.000	1.000	1.000	1.000	1.000

- These rates also apply to County Peace officers, Local Prosecutors, Local Sheriff, School Police, and Other Safety.

Public Agency Fire 2% at age 57

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.005	0.005	0.005	0.005	0.008	0.012
51	0.006	0.006	0.006	0.006	0.009	0.013
52	0.012	0.012	0.012	0.012	0.019	0.028
53	0.033	0.033	0.033	0.033	0.050	0.075
54	0.045	0.045	0.045	0.045	0.069	0.103
55	0.061	0.061	0.061	0.061	0.094	0.140
56	0.055	0.055	0.055	0.055	0.084	0.126
57	0.081	0.081	0.081	0.081	0.125	0.187
58	0.059	0.059	0.059	0.059	0.091	0.137
59	0.055	0.055	0.055	0.055	0.084	0.126
60	0.085	0.085	0.085	0.085	0.131	0.196
61	0.085	0.085	0.085	0.085	0.131	0.196
62	0.085	0.085	0.085	0.085	0.131	0.196
63	0.085	0.085	0.085	0.085	0.131	0.196
64	0.085	0.085	0.085	0.085	0.131	0.196
65	1.000	1.000	1.000	1.000	1.000	1.000

Service Retirement (continued)

Public Agency Police 2.5% at age 57

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.050	0.050	0.050	0.050	0.050	0.100
51	0.038	0.038	0.038	0.038	0.055	0.089
52	0.038	0.038	0.038	0.038	0.058	0.082
53	0.036	0.036	0.036	0.036	0.073	0.111
54	0.036	0.036	0.036	0.041	0.088	0.142
55	0.061	0.061	0.061	0.082	0.120	0.217
56	0.056	0.056	0.056	0.075	0.110	0.194
57	0.060	0.060	0.060	0.080	0.118	0.213
58	0.072	0.072	0.072	0.079	0.124	0.205
59	0.072	0.072	0.072	0.083	0.126	0.205
60	0.135	0.135	0.135	0.135	0.135	0.205
61	0.130	0.130	0.130	0.130	0.130	0.153
62	0.135	0.135	0.135	0.135	0.135	0.191
63	0.135	0.135	0.135	0.135	0.135	0.191
64	0.135	0.135	0.135	0.135	0.135	0.287
65	1.000	1.000	1.000	1.000	1.000	1.000

- These rates also apply to County Peace officers, Local Prosecutors, Local Sheriff, School Police, and Other Safety.

Public Agency Fire 2.5% at age 57

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.007	0.007	0.007	0.007	0.010	0.015
51	0.008	0.008	0.008	0.008	0.012	0.018
52	0.016	0.016	0.016	0.016	0.025	0.038
53	0.042	0.042	0.042	0.042	0.064	0.096
54	0.057	0.057	0.057	0.057	0.088	0.132
55	0.074	0.074	0.074	0.074	0.114	0.170
56	0.066	0.066	0.066	0.066	0.102	0.153
57	0.090	0.090	0.090	0.090	0.139	0.208
58	0.071	0.071	0.071	0.071	0.110	0.164
59	0.066	0.066	0.066	0.066	0.101	0.151
60	0.102	0.102	0.102	0.102	0.157	0.235
61	0.102	0.102	0.102	0.102	0.157	0.236
62	0.102	0.102	0.102	0.102	0.157	0.236
63	0.102	0.102	0.102	0.102	0.157	0.236
64	0.102	0.102	0.102	0.102	0.157	0.236
65	1.000	1.000	1.000	1.000	1.000	1.000

Service Retirement (continued)

Public Agency Police 2.7% at age 57

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.050	0.050	0.050	0.050	0.050	0.100
51	0.040	0.040	0.040	0.040	0.058	0.094
52	0.038	0.038	0.038	0.038	0.058	0.083
53	0.038	0.038	0.038	0.038	0.077	0.117
54	0.038	0.038	0.038	0.044	0.093	0.150
55	0.068	0.068	0.068	0.091	0.134	0.242
56	0.063	0.063	0.063	0.084	0.123	0.217
57	0.060	0.060	0.060	0.080	0.118	0.213
58	0.080	0.080	0.080	0.088	0.138	0.228
59	0.080	0.080	0.080	0.092	0.140	0.228
60	0.150	0.150	0.150	0.150	0.150	0.228
61	0.144	0.144	0.144	0.144	0.144	0.170
62	0.150	0.150	0.150	0.150	0.150	0.213
63	0.150	0.150	0.150	0.150	0.150	0.213
64	0.150	0.150	0.150	0.150	0.150	0.319
65	1.000	1.000	1.000	1.000	1.000	1.000

- These rates also apply to County Peace officers, Local Prosecutors, Local Sheriff, School Police, and Other Safety.

Public Agency Fire 2.7% at age 57

	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.007	0.007	0.007	0.007	0.010	0.015
51	0.008	0.008	0.008	0.008	0.013	0.019
52	0.016	0.016	0.016	0.016	0.025	0.038
53	0.044	0.044	0.044	0.044	0.068	0.102
54	0.061	0.061	0.061	0.061	0.093	0.140
55	0.083	0.083	0.083	0.083	0.127	0.190
56	0.074	0.074	0.074	0.074	0.114	0.171
57	0.090	0.090	0.090	0.090	0.139	0.208
58	0.079	0.079	0.079	0.079	0.122	0.182
59	0.073	0.073	0.073	0.073	0.112	0.168
60	0.114	0.114	0.114	0.114	0.175	0.262
61	0.114	0.114	0.114	0.114	0.175	0.262
62	0.114	0.114	0.114	0.114	0.175	0.262
63	0.114	0.114	0.114	0.114	0.175	0.262
64	0.114	0.114	0.114	0.114	0.175	0.262
65	1.000	1.000	1.000	1.000	1.000	1.000

Service Retirement (continued)

Schools 2% at age 55

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

Schools 2% at age 62

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

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 2023 calendar year is $265,000.

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 2023 calendar year is $330,000.

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 2023 is $146,042 for members who participate in Social Security and $175,250 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. We have indicated whether a plan provision is standard or optional. Standard benefits are applicable to all members while optional benefits vary among employers. Optional benefits that apply to a single period of time, such as Golden Handshakes, have not been included. Many of the statements in this summary are general in nature, and are 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

A classic CalPERS member or PEPRA Safety member becomes 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). For employees hired into a plan with the 1.5% at age 65 formula, eligibility for service retirement is age 55 with at least 5 years of service. PEPRA Miscellaneous 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* depends on the benefit formula specified in the agency's contract. The table below shows the factors for each of the available formulas. Factors vary by the member's age at retirement. Listed are the factors for retirement at whole year ages:

Miscellaneous Plan Formulas

Retirement Age	1.5% at age 65	2% at age 60	2% at age 55	2.5% at age 55	2.7% at age 55	3% at age 60	PEPRA 2% at age 62
50	0.5000%	1.092%	1.426%	2.000%	2.000%	2.000%	N/A
51	0.5667%	1.156%	1.522%	2.100%	2.140%	2.100%	N/A
52	0.6334%	1.224%	1.628%	2.200%	2.280%	2.200%	1.000%
53	0.7000%	1.296%	1.742%	2.300%	2.420%	2.300%	1.100%
54	0.7667%	1.376%	1.866%	2.400%	2.560%	2.400%	1.200%
55	0.8334%	1.460%	2.000%	2.500%	2.700%	2.500%	1.300%
56	0.9000%	1.552%	2.052%	2.500%	2.700%	2.600%	1.400%
57	0.9667%	1.650%	2.104%	2.500%	2.700%	2.700%	1.500%
58	1.0334%	1.758%	2.156%	2.500%	2.700%	2.800%	1.600%
59	1.1000%	1.874%	2.210%	2.500%	2.700%	2.900%	1.700%
60	1.1667%	2.000%	2.262%	2.500%	2.700%	3.000%	1.800%
61	1.2334%	2.134%	2.314%	2.500%	2.700%	3.000%	1.900%
62	1.3000%	2.272%	2.366%	2.500%	2.700%	3.000%	2.000%
63	1.3667%	2.418%	2.418%	2.500%	2.700%	3.000%	2.100%
64	1.4334%	2.418%	2.418%	2.500%	2.700%	3.000%	2.200%
65	1.5000%	2.418%	2.418%	2.500%	2.700%	3.000%	2.300%
66	1.5000%	2.418%	2.418%	2.500%	2.700%	3.000%	2.400%
67 & up	1.5000%	2.418%	2.418%	2.500%	2.700%	3.000%	2.500%

Classic Safety Plan Formulas

Retirement Age	Half Pay at age 55*	2% at age 55	2% at age 50	3% at age 55	3% at age 50
50	1.783%	1.426%	2.000%	2.400%	3.000%
51	1.903%	1.522%	2.140%	2.520%	3.000%
52	2.035%	1.628%	2.280%	2.640%	3.000%
53	2.178%	1.742%	2.420%	2.760%	3.000%
54	2.333%	1.866%	2.560%	2.880%	3.000%
55 & Up	2.500%	2.000%	2.700%	3.000%	3.000%

* For this formula, the benefit factor also varies by entry age. The factors shown are for members with an entry age of 35 or greater. If entry age is less than 35, then the age 55 benefit factor is 50% divided by the difference between age 55 and entry age. The benefit factor for ages prior to age 55 is the same proportion of the age 55 benefit factor as in the above table.

PEPRA Safety Plan Formulas

Retirement Age	2% at age 57	2.5% at age 57	2.7% at age 57
50	1.426%	2.000%	2.000%
51	1.508%	2.071%	2.100%
52	1.590%	2.143%	2.200%
53	1.672%	2.214%	2.300%
54	1.754%	2.286%	2.400%
55	1.836%	2.357%	2.500%
56	1.918%	2.429%	2.600%
57 & Up	2.000%	2.500%	2.700%

- 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, and 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.

- The *final compensation* is the monthly average of the member's highest 36 or 12 consecutive months' full-time equivalent monthly pay (no matter which CalPERS employer paid this compensation). The standard benefit is 36 months. Employers had the option of providing a final compensation equal to the highest 12 consecutive months for classic plans only. Final compensation must be defined by the highest 36 consecutive months' pay under the 1.5% at age 65 formula. 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.

- PEPRA benefit formulas have no Social Security offsets and Social Security coverage is optional. For Classic benefit formulas, employees must be covered by Social Security with the 1.5% at age 65 formula. Social Security is optional for all other Classic benefit formulas. For employees covered by Social Security, the modified formula is the standard benefit. Under this type of formula, the final compensation is offset by $133.33 (or by one third if the final compensation is less than $400). Employers may contract for the full benefit with Social Security that will eliminate the offset applicable to the final compensation. For employees not covered by Social Security, the full benefit is paid with no offsets. Auxiliary organizations of the CSUC system may elect reduced contribution rates, in which case the offset is $317 if members are not covered by Social Security or $513 if members are covered by Social Security.

- The Miscellaneous and PEPRA Safety service retirement benefit is not capped. The Classic Safety service retirement benefit is capped at 90% of final compensation.

Vested Deferred Retirement

Eligibility for Deferred Status

CalPERS members becomes 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

The CalPERS classic members and PEPRA Safety members become eligible to receive the deferred retirement benefit upon satisfying the eligibility requirements for deferred status and upon attainment of age 50 (55 for employees hired into a 1.5% at age 65 plan). PEPRA Miscellaneous 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 Disability Retirement

Eligibility

A CalPERS member is eligible for Non-Industrial (non-job related) 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.

Standard Benefit

The standard 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 33⅓% of final compensation.

Improved Benefit

Employers have the option of providing the improved Non-Industrial Disability Retirement benefit. This benefit provides a monthly allowance equal to 30% of final compensation for the first 5 years of service, plus 1% for each additional year of service to a maximum of 50% of final compensation.

Members who are eligible for a larger service retirement benefit may choose to receive that benefit in lieu of a disability benefit. Members 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.

Industrial Disability Retirement

This is a standard benefit for Safety members except those described in Section 20423.6. For excluded Safety members and all Miscellaneous members, employers have the option of providing this benefit. An employer may choose to provide the increased benefit option or the improved benefit option.

Eligibility

An employee is eligible for Industrial (job related) Disability Retirement if he or she becomes disabled while working, where disabled means the member is unable to perform the duties of the job because of a work-related illness or injury, which is expected to be permanent or to last indefinitely. A CalPERS member who has left active employment within this group is not eligible for this benefit, except to the extent described below.

Standard Benefit

The standard Industrial Disability Retirement benefit is a monthly allowance equal to 50% of final compensation.

Increased Benefit (75% of Final Compensation)

The increased Industrial Disability Retirement benefit is a monthly allowance equal to 75% of final compensation for total disability.

Improved Benefit (50% to 90% of Final Compensation)

The improved Industrial Disability Retirement benefit is a monthly allowance equal to the Workman's Compensation Appeals Board permanent disability rate percentage (if 50% or greater, with a maximum of 90%) times the final compensation.

For a CalPERS member not actively employed in this group who became disabled while employed by some other CalPERS employer, the benefit is a return of accumulated member contributions with respect to employment in this group. With the standard or increased benefit, a member may also choose to receive the annuitization of the accumulated member contributions.

If a member is eligible for service retirement and if the service retirement benefit is more than the industrial disability retirement benefit, the member may choose to receive the larger benefit.

Post-Retirement Death Benefit

Standard Lump Sum Payment

Upon the death of a retiree, a one-time lump sum payment of $500 will be made to the retiree's designated survivor(s), or to the retiree's estate. The lump sum payment amount increases to $2,000 for any death occurring on or after July 1, 2023 due to SB 1168.

Optional Lump Sum Payment

In lieu of the standard lump sum death benefit, employers have the option of providing a lump sum death benefit of $600, $3,000, $4,000 or $5,000.

Form of Payment for Retirement Allowance

Standard Form of Payment

Generally, the retirement allowance is paid to the retiree in the form of an annuity for as long as he or she is 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)

Employers have the option to contract for the 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. Or, 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.

Pre-Retirement Death Benefits

Basic Death Benefit

This is a standard 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

This is a standard 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 and PEPRA Safety members and age 52 for PEPRA Miscellaneous members, 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). A CalPERS member must be actively employed with the CalPERS employer providing this benefit to be 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 death benefit instead of this 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.

Optional Settlement 2 Death Benefit

This is an optional benefit.

Eligibility

An employee's *eligible survivor* may receive the Optional Settlement 2 Death benefit if the member dies while actively employed, has attained at least age 50 for classic and PEPRA Safety members and age 52 for PEPRA Miscellaneous members, 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). 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. A member's survivor who is eligible for any other pre-retirement death benefit may choose to receive that death benefit instead of this Optional Settlement 2 Death benefit.

Benefit

The Optional Settlement 2 Death benefit is a monthly allowance equal to the service retirement benefit that the member would have received had the member retired on the date of their death and elected 100% to continue to the eligible survivor after the member's death. The allowance is payable to the surviving spouse until death, at which time it is continued to any unmarried child(ren), if applicable. The total amount paid will be at least equal to the basic death benefit.

Special Death Benefit

This is a standard benefit for Safety members except those described in Section 20423.6. For excluded Safety members and all Miscellaneous members, employers have the option of providing this benefit.

Eligibility

An employee's *eligible survivor(s)* may receive the special death benefit if the member dies while actively employed and the death is job-related. 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 prior to the onset of the injury or illness that resulted in death. If there is no eligible spouse, an eligible survivor means the member's unmarried child(ren) under age 22. An eligible survivor who chooses to receive this benefit will not receive any other death benefit.

Benefit

The special death benefit is a monthly allowance equal to 50% of final compensation and will be increased whenever the compensation paid to active employees is increased but ceasing to increase when the member would have attained age 50. The allowance is payable to the surviving spouse until death, at which time the allowance is continued to any unmarried child(ren) under age 22. There is a guarantee that the total amount paid will at least equal the basic death benefit.

If the member's death is the result of an accident or injury caused by external violence or physical force incurred in the performance of the member's duty, and there are *eligible* surviving child(ren) (*eligible* means unmarried child(ren) under age 22) in addition to an eligible spouse, then an **additional monthly allowance** is paid equal to the following:

- if 1 eligible child: 12.5% of final compensation
- if 2 eligible children: 20.0% of final compensation
- if 3 or more eligible children: 25.0% of final compensation

Alternate Death Benefit for Local Fire Members

This is an optional benefit available only to local fire members.

Eligibility

An employee's *eligible survivor(s)* may receive the alternate death benefit in lieu of the basic death benefit or the 1957 Survivor benefit if the member dies while actively employed and has at least 20 years of total CalPERS service. 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 prior to the onset of the injury or illness that resulted in death. If there is no eligible spouse, an eligible survivor means the member's unmarried child(ren) under age 18.

Benefit

The Alternate Death benefit is a monthly allowance equal to the service retirement benefit that the member would have received had the member retired on the date of their death and elected Optional Settlement 2. (A retiree who elects Optional Settlement 2 receives an allowance that has been reduced so that it will continue to be paid after their death to a surviving beneficiary.) If the member has not yet attained age 50, the benefit is equal to that which would be payable if the member had retired at age 50, based on service credited at the time of death. The allowance is payable to the surviving spouse until death, at which time it is continued to any unmarried child(ren), if applicable. The total amount paid will be at least equal to the basic death benefit.

Cost-of-Living Adjustments (COLA)

Standard Benefit

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 standard 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).

Improved Benefit

Employers have the option of providing a COLA of 3%, 4%, or 5%, determined in the same manner as described above for the standard 2% COLA. An improved COLA is not available with the 1.5% at age 65 formula.

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 80% 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.

Employee Contributions

Each employee contributes toward their retirement based upon the retirement formula. The standard employee contribution is as described below.

- The percent contributed below the monthly compensation breakpoint is 0%.
- The monthly compensation breakpoint is $0 for all PEPRA members and Classic members covered by a full or supplemental formula and $133.33 for Classic members covered by a modified formula.
- The percent contributed above the monthly compensation breakpoint depends upon the benefit formula, as shown in the table below.

Benefit Formula	Percent Contributed above the Breakpoint
Miscellaneous, 1.5% at age 65	2%
Miscellaneous, 2% at age 60	7%
Miscellaneous, 2% at age 55	7%
Miscellaneous, 2.5% at age 55	8%
Miscellaneous, 2.7% at age 55	8%
Miscellaneous, 3% at age 60	8%
Miscellaneous, 2% at age 62	50% of the Total Normal Cost
Miscellaneous, 1.5% at age 65	50% of the Total Normal Cost
Safety, Half Pay at age 55	Varies by entry age
Safety, 2% at age 55	7%
Safety, 2% at age 50	9%
Safety, 3% at age 55	9%
Safety, 3% at age 50	9%
Safety, 2% at age 57	50% of the Total Normal Cost
Safety, 2.5% at age 57	50% of the Total Normal Cost
Safety, 2.7% at age 57	50% of the Total Normal Cost

The employer may choose to “pick-up” these contributions for classic members (Employer Paid Member Contributions or EPMC). EPMC is prohibited for new PEPRA members.

An employer may also include Employee Cost Sharing in the contract, where employees agree to share the cost of the employer contribution. These contributions are paid in addition to the member contribution.

Auxiliary organizations of the CSU system may elect reduced contribution rates, in which case the offset is $317 and the contribution rate is 6% if members are not covered by Social Security. If members are covered by Social Security, the offset is $513 and the contribution rate is 5%.

Refund of Employee Contributions

If the member’s service with the employer ends, and if 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 Benefit

This is a pre-retirement death benefit available only to members not covered by Social Security. Any agency joining CalPERS subsequent to 1993 is required to provide this benefit if the members are not covered by Social Security. The benefit is optional for agencies joining CalPERS prior to 1994. Levels 1, 2, and 3 are now closed. Any new agency or any agency wishing to add this benefit or increase the current level may only choose the 4th or Indexed Level.

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

Summary of Valuation Data

	June 30, 2022	June 30, 2023
1. **Active Members**		
a) Counts	107	114
b) Average Attained Age	45.61	44.96
c) Average Entry Age to Rate Plan	37.29	37.67
d) Average Years of Credited Service	8.02	7.11
e) Average Annual Covered Pay	$103,684	$111,884
f) Annual Covered Payroll	11,094,190	12,754,753
g) Projected Annual Payroll for Contribution Year	12,052,439	13,856,431
h) Present Value of Future Payroll	103,821,233	120,565,572
2. **Transferred Members**		
a) Counts	105	112
b) Average Attained Age	45.39	45.98
c) Average Years of Credited Service	3.22	3.15
d) Average Annual Covered Pay	$124,142	$132,545
3. **Separated Members**		
a) Counts	104	100
b) Average Attained Age	46.99	47.39
c) Average Years of Credited Service	2.52	2.73
d) Average Annual Covered Pay	$70,100	$72,378
4. **Retired Members and Beneficiaries**		
a) Counts	263	267
b) Average Attained Age	70.90	71.26
c) Average Annual Benefits	$26,193	$26,983
d) Total Annual Benefits	$6,888,871	$7,204,417
5. **Active to Retired Ratio** [(1a) ÷ (4a)]	0.41	0.43

Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double counting of liabilities.

Average Annual Benefits represents benefit amounts payable by this plan only. Some members may have service with another agency and would therefore have a larger total benefit than would be included as part of the average shown here.

Active Members

Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double counting of liabilities.

Distribution of Active Members by Age and Service

	Years of Service at Valuation Date						
Attained Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25+**	**Total**
15-24	2	0	0	0	0	0	2
25-29	10	2	0	0	0	0	12
30-34	9	9	0	0	0	0	18
35-39	5	4	0	0	0	0	9
40-44	8	4	1	1	1	0	15
45-49	5	6	3	4	0	1	19
50-54	4	4	1	2	1	2	14
55-59	6	3	1	2	1	0	13
60-64	1	3	0	0	1	0	5
65 and Over	5	0	0	0	0	2	7
All Ages	**55**	**35**	**6**	**9**	**4**	**5**	**114**

Distribution of Average Annual Salaries by Age and Service

	Years of Service at Valuation Date						
Attained Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25+**	**Average Salary**
15-24	$91,005	$0	$0	$0	$0	$0	$91,005
25-29	70,900	112,010	0	0	0	0	77,752
30-34	93,485	109,003	0	0	0	0	101,244
35-39	100,947	97,644	0	0	0	0	99,479
40-44	112,339	110,503	130,263	106,205	87,369	0	110,970
45-49	114,932	126,281	125,834	124,441	0	102,508	121,585
50-54	103,577	150,235	142,563	141,674	230,346	158,673	142,061
55-59	124,091	86,534	109,096	156,216	115,986	0	118,590
60-64	100,004	170,699	0	0	124,249	0	147,270
65 and Over	102,081	0	0	0	0	85,034	97,211
Average	**$99,632**	**$119,085**	**$126,571**	**$133,305**	**$139,488**	**$117,984**	**$111,884**

Transferred and Separated Members

Distribution of Transfers to Other CalPERS Plans by Age, Service, and average Salary

	Years of Service at Valuation Date							
Attained Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25+**	**Total**	**Average Salary**
15-24	0	0	0	0	0	0	0	$0
25-29	9	1	0	0	0	0	10	115,057
30-34	8	2	0	0	0	0	10	96,537
35-39	7	0	0	0	0	0	7	116,698
40-44	15	3	1	0	0	0	19	141,506
45-49	20	4	0	3	0	0	27	144,313
50-54	13	4	1	0	0	0	18	128,517
55-59	7	2	1	0	0	0	10	131,917
60-64	5	5	1	0	0	0	11	154,056
65 and Over	0	0	0	0	0	0	0	0
All Ages	**84**	**21**	**4**	**3**	**0**	**0**	**112**	**$132,545**

Distribution of Separated Participants with Funds on Deposit by Age, Service, and average Salary

	Years of Service at Valuation Date							
Attained Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25+**	**Total**	**Average Salary**
15-24	0	0	0	0	0	0	0	$0
25-29	1	0	0	0	0	0	1	109,200
30-34	8	0	0	0	0	0	8	81,961
35-39	9	3	0	0	0	0	12	72,811
40-44	19	2	0	0	0	0	21	65,076
45-49	19	1	1	0	1	0	22	78,180
50-54	12	2	1	1	0	0	16	90,825
55-59	11	1	0	0	0	0	12	69,113
60-64	4	0	1	0	0	0	5	31,651
65 and Over	2	1	0	0	0	0	3	23,933
All Ages	**85**	**10**	**3**	**1**	**1**	**0**	**100**	**$72,378**

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	0	0	0	0	0
30-34	0	0	0	0	0	0	0
35-39	0	0	1	0	0	0	1
40-44	0	0	0	0	0	0	0
45-49	0	0	1	0	0	0	1
50-54	3	0	2	0	0	0	5
55-59	19	0	0	0	0	0	19
60-64	25	0	4	0	0	3	32
65-69	62	2	0	0	0	3	67
70-74	43	0	1	0	0	5	49
75-79	45	1	0	0	0	3	49
80-84	24	0	0	0	0	6	30
85 and Over	10	1	0	0	0	3	14
All Ages	**231**	**4**	**9**	**0**	**0**	**23**	**267**

Distribution of Average Annual Disbursements to 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	Average
Under 30	$0	$0	$0	$0	$0	$0	$0
30-34	0	0	0	0	0	0	0
35-39	0	0	324	0	0	0	324
40-44	0	0	0	0	0	0	0
45-49	0	0	322	0	0	0	322
50-54	5,109	0	1,544	0	0	0	3,683
55-59	25,768	0	0	0	0	0	25,768
60-64	26,831	0	1,121	0	0	9,122	21,957
65-69	36,614	22,787	0	0	0	8,161	34,927
70-74	30,769	0	571	0	0	30,296	30,104
75-79	21,252	2,069	0	0	0	32,905	21,574
80-84	22,732	0	0	0	0	29,520	24,090
85 and Over	32,803	5,444	0	0	0	21,535	28,434
All Ages	**$28,566**	**$13,272**	**$976**	**$0**	**$0**	**$23,642**	**$26,983**

Retired Members and Beneficiaries (continued)

Distribution of Retirees and Beneficiaries 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 Yrs	45	0	1	0	0	10	56
5-9	56	0	3	0	0	5	64
10-14	55	0	1	0	0	3	59
15-19	40	1	2	0	0	2	45
20-24	20	1	1	0	0	2	24
25-29	11	1	1	0	0	0	13
30 and Over	4	1	0	0	0	1	6
All Years	**231**	**4**	**9**	**0**	**0**	**23**	**267**

Distribution of Average Annual Disbursements to Retirees and Beneficiaries by Years Retired and Retirement Type*

Years Retired	Service Retirement	Non-Industrial Disability	Industrial Disability	Non-Industrial Death	Industrial Death	Death After Retirement	Average
Under 5 Yrs	$29,173	$0	$324	$0	$0	$26,401	$28,162
5-9	34,264	0	952	0	0	28,159	32,226
10-14	28,644	0	2,748	0	0	28,372	28,191
15-19	26,913	41,777	846	0	0	7,538	25,224
20-24	25,354	3,796	571	0	0	13,426	22,429
25-29	13,224	2,069	597	0	0	0	11,395
30 and Over	15,692	5,444	0	0	0	11,917	13,355
All Years	**$28,566**	**$13,272**	**$976**	**$0**	**$0**	**$23,642**	**$26,983**

* Counts of members do not include alternate payees receiving benefits while the member is still working. Therefore, the total counts may not match information on C-1 of the report. Multiple records may exist for those who have service in more than one coverage group. This does not result in double counting of liabilities.

Appendix D - Glossary

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.

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.

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

Glossary (continued)

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.

Traditional Unit Credit Actuarial Cost Method
An actuarial cost method that sets the Accrued Liability equal to the Present Value of Benefits assuming no future pay increases or service accruals. The Traditional Unit Credit Cost Method is used to measure the accrued liability on a termination basis.

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.

California Public Employees' Retirement System
Actuarial Office
400 Q Street, Sacramento, CA 95811 | Phone: (916) 795-3000 | Fax: (916) 795-2744
888 CalPERS (or **888**-225-7377) | TTY: (877) 249-7442 | **www.calpers.ca.gov**

July 2024

Safety Plan of the Town of Los Gatos (CalPERS ID: 4589482285)
Annual Valuation Report as of June 30, 2023

Dear Employer,

Attached to this letter is Section 1 of the June 30, 2023 actuarial valuation report for the rate plan noted above. **Provided in this report is the determination of the minimum required employer contributions for fiscal year (FY) 2025-26**. In addition, the report contains important information regarding the current financial status of the plan as well as projections and risk measures to aid in planning for the future.

Because this plan is in a risk pool, the following valuation report has been separated into two sections:

- Section 1 contains specific information for the plan including the development of the current and projected employer contributions, and
- Section 2 contains the Risk Pool Actuarial Valuation appropriate to the plan as of June 30, 2023.

Section 2 can be found on the CalPERS website (www.calpers.ca.gov). From the home page, go to *"Forms & Publications"* and select *"View All"*. In the search box, enter *"Risk Pool"* and from the results list download the Safety Risk Pool Actuarial Valuation Report for June 30, 2023.

Required Contributions

The table below shows the minimum required employer contributions for FY 2025-26 along with an estimate of the employer contribution requirements for FY 2026-27. Employee contributions other than cost sharing (whether paid by the employer or the employee) are in addition to the results shown below. **The required employer contributions in this report do not reflect any cost sharing arrangement between the agency and the employees.**

Fiscal Year	Employer Normal Cost Rate	Employer Amortization of Unfunded Accrued Liability
2025-26	29.35%	$3,076,665
Projected Results		
2026-27	*29.4%*	*$3,287,000*

The actual investment return for FY 2023-24 was not known at the time this report was prepared. The projections above assume the investment return for that year would be 6.8%. To the extent the actual investment return for FY 2023-24 differs from 6.8%, the actual contribution requirements for FY 2026-27 will differ from those shown above. For additional details regarding the assumptions and methods used for these projections, please refer to Projected Employer Contributions. This section also contains projected required contributions through FY 2030-31.

Report Enhancements

A number of enhancements were made to the report this year to ease navigation and allow the reader to find specific information more quickly. The tables of contents are now "clickable." This is true for the main table of contents that follows the title page and the intermediate tables of contents at the beginning of sections. The Adobe navigation pane on the left can also be used to skip to specific exhibits.

There are a number of links throughout the document in blue text. Links that are internal to the document are not underlined, while underlined links will take you to the CalPERS website. Examples are shown below.

Internal Bookmarks	CalPERS Website Links
Required Employer Contributions	Required Employer Contribution Search Tool
Member Contribution Rates	Public Agency PEPRA Member Contribution Rates
Summary of Key Valuation Results	Pension Outlook Overview
Funded Status – Funding Policy Basis	Interactive Summary of Public Agency Valuation Results
Projected Employer Contributions	Public Agency Actuarial Valuation Reports

Further descriptions of general changes are included in the Highlights and Executive Summary section and in Appendix A - Actuarial Methods and Assumptions in Section 2.

Questions

A CalPERS actuary is available to answer questions about this report. Other questions may be directed to the Customer Contact Center at **888 CalPERS** (or **888**-225-7377).

Sincerely,

Matthew Biggart, ASA, MAAA
Actuary, CalPERS

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

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

California Public Employees' Retirement System

Actuarial Valuation for the Safety Plan of the Town of Los Gatos

as of June 30, 2023

(CalPERS ID: 4589482285)
(Rate Plan ID: 947)

Required Contributions for Fiscal Year

July 1, 2025 — June 30, 2026

Table of Contents

Section 1

California Public Employees' Retirement System

Plan Specific Information for the Safety Plan of the Town of Los Gatos

(CalPERS ID: 4589482285)
(Rate Plan ID: 947)

Table of Contents — Section 1

Actuarial Certification

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, consisting of Section 1 and Section 2, 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 Rate Plan Results

To the best of my knowledge and having relied upon the attestation above that the actuarial methods and assumptions are reasonable as well as the information in Section 2 of this report, this report is complete and accurate and contains sufficient information to disclose, fully and fairly, the funded condition of the Safety Plan of the Town of Los Gatos 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, 2023, provided by the various CalPERS databases and the benefits under this plan with CalPERS as of the date this report was produced. Section 1 of this report is based on the member and financial data for Town of Los Gatos, while Section 2 is based on the corresponding information for all agencies participating in the Safety Risk Pool to which the plan belongs.

Matthew Biggart, ASA, MAAA
Actuary, CalPERS

Highlights and Executive Summary

Introduction

This report presents the results of the June 30, 2023, actuarial valuation of the Safety Plan of the Town of Los Gatos of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the minimum required contributions for fiscal year (FY) 2025-26.

Purpose of Section 1

This Section 1 report for the Safety Plan of the Town of Los Gatos of CalPERS was prepared by the Actuarial Office using data as of June 30, 2023. The purpose of the valuation is to:

- Set forth the assets and accrued liabilities of this rate plan as of June 30, 2023;
- Determine the minimum required employer contributions for this rate plan 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, 2023, 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 a Cost Sharing Employer Defined Benefit Pension Plan. A separate accounting valuation report for such purposes is available on the CalPERS website (www.calpers.ca.gov).

The measurements shown in this actuarial valuation may not be applicable for other purposes. The 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 the agency.

Assessment and Disclosure of Risk

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

- A "Scenario Test," projecting future results under different investment income returns.
- A "Sensitivity Analysis," showing the impact on current valuation results using alternative discount rates of 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.

Summary of Key Valuation Results

Below is a brief summary of key valuation results along with page references where more detailed information can be found .

Required Employer Contributions — page 8

	Fiscal Year 2024-25	Fiscal Year 2025-26
Employer Normal Cost Rate	29.30%	29.35%
Unfunded Accrued Liability (UAL) Contribution Amount	$2,707,269	$3,076,665
Paid either as		
Option 1) 12 Monthly Payments of	$225,605.75	$256,388.75
Option 2) Annual Prepayment in July	$2,619,665	$2,977,108

Member Contribution Rates — page 9

	Fiscal Year 2024-25	Fiscal Year 2025-26
Member Contribution Rate	9.00%	9.00%

Projected Employer Contributions — page 14

Fiscal Year	Normal Cost (% of payroll)	Annual UAL Payment
2026-27	29.4%	$3,287,000
2027-28	29.4%	$3,458,000
2028-29	29.4%	$3,836,000
2029-30	29.4%	$3,923,000
2030-31	29.4%	$4,001,000

Funded Status — Funding Policy Basis — page 12

	June 30, 2022	June 30, 2023
Entry Age Accrued Liability (AL)	$109,557,160	$113,870,815
Market Value of Assets (MVA)	75,229,774	77,496,417
Unfunded Accrued Liability (UAL) [AL – MVA]	$34,327,386	$36,374,398
Funded Ratio [MVA ÷ AL]	68.7%	68.1%

Summary of Valuation Data — Page 27

	June 30, 2022	June 30, 2023
Active Member Count	21	20
Annual Covered Payroll	$3,446,248	$3,602,779
Transferred Member Count	10	10
Separated Member Count	5	3
Retired Members and Beneficiaries Count	90	92

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. For pooled rate plans, voluntary benefit changes by plan amendment are generally included in the first valuation with a valuation date on or after the effective date of the amendment.

Please refer to the Plan's Major Benefit Options in this report and Appendix B of the Section 2 Report for a summary of the plan provisions used in this valuation.

Actuarial Methods and Assumptions

There are no significant changes to the actuarial methods or assumptions for the June 30, 2023, actuarial valuation.

New Disclosure Items

In December 2021, the Actuarial Standards Board issued a revision of Actuarial Standard of Practice No. 4 (ASOP 4) requiring actuaries to disclose a low-default-risk obligation measure (LDROM) of the benefits earned. This information is shown in a new exhibit, Funded Status – Low-Default-Risk Basis.

Subsequent Events

This actuarial valuation report reflects fund investment return through June 30, 2023, as well as statutory changes, regulatory changes and board actions through January 2024.

During the time period between the valuation date and the publication of this report, inflation has been higher than the expected inflation of 2.3% per annum. Since inflation influences cost-of-living increases for retirees and beneficiaries and active member pay increases, higher inflation is likely to put at least some upward pressure on contribution requirements and downward pressure on the funded status in the June 30, 2024, valuation. The actual impact of higher inflation on future valuation results will depend on, among other factors, how long higher inflation persists.

The 2023 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 2024 limits, determined in October 2023, are not reflected.

On April 16, 2024, the board took action to modify 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. The 95th percentile return in the Future Investment Return Scenarios exhibit in this report has not been modified and still reflects the projected contribution requirements associated with a reduction in the discount rate.

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.

Liabilities and Contributions

Determination of Required Contributions

Contributions to fund the plan are determined by an actuarial valuation performed each year. The valuation employs complex calculations based on a set of actuarial assumptions and methods. See Appendix A in Section 2 for information on the assumptions and methods used in this valuation. The valuation incorporates all plan experience through the valuation date and sets required contributions for the fiscal year that begins two years after the valuation date.

Contribution Components

Two components comprise required contributions:

- Normal Cost — expressed as a percentage of pensionable payroll
- Unfunded Accrued Liability (UAL) Contribution — expressed as a dollar amount

Normal Cost represents the value of benefits allocated to the upcoming year for active employees. If all plan experience exactly matched the actuarial assumptions, normal cost would be sufficient to fully fund all benefits. The employer and employees each pay a share of the normal cost with contributions payable as part of the regular payroll reporting process. The contribution rate for Classic members is set by statute based on benefit formula whereas for PEPRA members it is based on 50% of the total normal cost.

When plan experience differs from the actuarial assumptions, unfunded accrued liability (UAL) emerges. The new UAL may be positive or negative. If the total UAL is positive (i.e., accrued liability exceeds assets), the employer is required to make contributions to pay off the UAL over time. This is called the Unfunded Accrued Liability Contribution component. There is an option to prepay this amount during July of each fiscal year, otherwise it is paid monthly.

In measuring the UAL each year, plan experience is split by source. Common sources of UAL include investment experience different than expected, non-investment experience different than expected, assumption changes and benefit changes. Each source of UAL (positive or negative) forms a base that is amortized, or paid off, over a specified period of time in accordance with the CalPERS Actuarial Amortization Policy. The Unfunded Accrued Liability Contribution is the sum of the payments on all bases. See the Schedule of Amortization Bases section of this report for an inventory of existing bases and Appendix A in Section 2 for more information on the amortization policy.

Required Employer Contributions

The required employer contributions in this report do not reflect any cost sharing arrangement between the agency and the employees.

Required Employer Contributions	Fiscal Year 2025-26
Employer Normal Cost Rate	**29.35%**
Plus	
Unfunded Accrued Liability (UAL) Contribution Amount[1]	**$3,076,665**
Paid either as	
1) Monthly Payment	**$256,388.75**
Or	
2) Annual Prepayment Option*	**$2,977,108**

The total minimum required employer contribution is the sum of the Plan's Employer Normal Cost Rate (expressed as a percentage of payroll and paid as payroll is reported) and the Unfunded Accrued Liability (UAL) Contribution Amount (billed monthly (1) or prepaid annually (2) in dollars).

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

For Member Contribution Rates see the following page.

Development of Normal Cost as a Percentage of Payroll	Fiscal Year 2024-25	Fiscal Year 2025-26
Base Total Normal Cost for Formula	34.85%	34.90%
Surcharge for Class 1 Benefits[2]		
a) FAC 1	1.46%	1.47%
b) PRSA	1.98%	1.97%
Plan's Total Normal Cost	38.29%	38.34%
Offset Due to Employee Contributions[3]	8.99%	8.99%
Employer Normal Cost	29.30%	29.35%

[1] The required payment on amortization bases does not take into account any additional discretionary payment made after April 30, 2024.

[2] Section 2 of this report contains a list of Class 1 benefits and corresponding surcharges.

[3] 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.

Member Contribution Rates

The required member contributions in this report do not reflect any cost sharing arrangement between the agency and the employees.

Each member contributes toward their retirement based upon the retirement formula. The standard Classic member contribution rate above the breakpoint, if any, is as described below.

Benefit Formula	Percent Contributed above the Breakpoint
Safety, 2% at age 55	7%
Safety, 2% at age 50	9%
Safety, 3% at age 55	9%
Safety, 3% at age 50	9%

Other Pooled Safety Risk Pool Rate Plans

All of the results presented in this Section 1 report, except those shown on this page, correspond to rate plan 947. In many cases, employers have additional rate plans within the same risk pool. For cost analysis and budgeting it is useful to consider contributions for these rate plans as a whole rather than individually. The estimated contribution amounts and rates for all of the employer's rate plans in the Safety Risk Pool are shown below and assume that the total employer payroll within the Safety Risk Pool will grow according to the overall payroll growth assumption of 2.80% per year for three years. Classic members who are projected to terminate employment are assumed to be replaced by PEPRA members.

Estimated Employer Contributions for all Pooled Safety Rate Plans	Fiscal Year 2024-25	Fiscal Year 2025-26
Projected Payroll for the Contribution Year	$5,883,540	$6,126,845
Estimated Employer Normal Cost	$1,305,715	$1,335,093
Required Payment on Amortization Bases	$2,731,370	$3,104,152
Estimated Total Employer Contributions	$4,037,085	$4,439,245
Estimated Total Employer Contribution Rate (illustrative only)	68.62%	72.46%

Breakdown of Entry Age Accrued Liability

Active Members	$24,768,171
Transferred Members	5,142,919
Separated Members	210,481
Members and Beneficiaries Receiving Payments	83,749,244
Total	$113,870,815

Allocation of Plan's Share of Pool's Experience

It is the policy of CalPERS to ensure equity within the risk pools by allocating the pool's experience gains/losses and assumption changes in a manner that treats each employer equitably and maintains benefit security for the members of the System while minimizing substantial variations in employer contributions. The pool's experience gains/losses and impact of assumption/method changes is allocated to the plan as follows:

1.	Plan's Accrued Liability	$113,870,815
2.	Projected UAL Balance at 6/30/2023	34,372,057
3.	Other UAL Adjustments (Golden Handshake, Prior Service Purchase, etc.)	0
4.	Adjusted UAL Balance at 6/30/2023 for Asset Share	34,372,057
5.	Pool's Accrued Liability[1]	30,525,472,379
6.	Sum of Pool's Individual Plan UAL Balances at 6/30/2023[1]	7,735,444,959
7.	Pool's 2022-23 Investment (Gain)/Loss[1]	146,133,368
8.	Pool's 2022-23 Non-Investment (Gain)/Loss[1]	400,118,077
9.	Plan's Share of Pool's Investment (Gain)/Loss: [(1) - (4)] ÷ [(5) - (6)] × (7)	509,759
10.	Plan's Share of Pool's Non-Investment (Gain)/Loss: (1) ÷ (5) × (8)	1,492,582
11.	Plan's New (Gain)/Loss as of 6/30/2023: (9) + (10)	2,002,341
12.	Increase in Pool's Accrued Liability due to Change in Assumptions[1]	0
13.	Plan's Share of Pool's Change in Assumptions: (1) ÷ (5) × (12)	0
14.	Increase in Pool's Accrued Liability due to Funding Risk Mitigation[1]	0
15.	Plan's Share of Pool's Change due to Funding Risk Mitigation: (1) ÷ (5) × (14)	0
16.	Offset due to Funding Risk Mitigation	0
17.	Plan's Investment (Gain)/Loss: (9) – (16)	509,759

[1] Does not include plans that transferred to the pool on the valuation date.

Development of the Plan's Share of Pool's Assets

18.	Plan's UAL: (2) + (3) + (11) + (13) + (15)	$36,374,398
19.	Plan's Share of Pool's Market Value of Assets (MVA): (1) - (18)	$77,496,417

For a reconciliation of the pool's Market Value of Assets (MVA), information on the fund's asset allocation and a history of CalPERS investment returns, see Section 2, which can be found on the CalPERS website (www.calpers.ca.gov).

Funded Status – Funding Policy Basis

The table below provides information on the current funded status of the plan 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.

	June 30, 2022	June 30, 2023
1. Present Value of Benefits	$118,055,631	$122,014,839
2. Entry Age Accrued Liability	109,557,160	113,870,815
3. Market Value of Assets (MVA)	75,229,774	77,496,417
4. Unfunded Accrued Liability (UAL) [(2) – (3)]	$34,327,386	$36,374,398
5. Funded Ratio [(3) ÷ (2)]	68.7%	68.1%

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

Calculations for the funding target reflect the expected long-term investment return of 6.8%. If it were known on the valuation date that future investment returns will average something greater/less than the expected return, calculated normal costs and accrued liabilities provided in this report would be less/greater than the results shown. Therefore, for example, if actual average future returns are less than the expected return, calculated normal costs and UAL contributions will not be sufficient to fully fund all retirement benefits. Under this scenario, required future normal cost contributions will need to increase from those provided in this report, and the plan will develop unfunded liabilities that will also add to required future contributions. For illustrative purposes, funded statuses based on a 1% lower and higher average future investment return (discount rate) are as follows:

	1% Lower Average Return	Current Assumption	1% Higher Average Return
Discount Rate	5.8%	6.8%	7.8%
1. Entry Age Accrued Liability	$128,993,749	$113,870,815	$101,464,140
2. Market Value of Assets (MVA)	77,496,417	77,496,417	77,496,417
3. Unfunded Accrued Liability (UAL) [(1) – (2)]	$51,497,332	$36,374,398	$23,967,723
4. Funded Ratio [(2) ÷ (1)]	60.1%	68.1%	76.4%

The Risk Analysis section of the report provides additional information regarding the sensitivity of valuation results to the expected investment return and other factors. Also provided in that section are measures of funded status that are appropriate for assessing the sufficiency of plan assets to cover estimated termination liabilities.

Additional Employer Contributions

The minimum required employer contribution towards the Unfunded Accrued Liability (UAL) for this rate plan for FY 2025-26 is $3,076,665. CalPERS allows agencies to make additional discretionary payments (ADPs) at any time. These optional payments serve to reduce the UAL and future required contributions and can result in significant long-term savings. Agencies can also use ADPs to stabilize annual contributions as a fixed dollar amount, percent of payroll or percent of revenue.

Provided below are select ADP options for consideration. Making such an ADP during FY 2025-26 does not require an ADP be made in any future year, nor does it change the remaining amortization period of any portion of unfunded liability. For information on permanent changes to amortization periods, see Amortization Schedule and Alternatives. Agencies considering making an ADP should contact CalPERS for additional information.

Fiscal Year 2025-26 Employer Contributions — Illustrative Scenarios

Funding Approach	Estimated Normal Cost	Minimum UAL Contribution	ADP[1]	Total UAL Contribution	Estimated Total Contribution
Minimum required only	$853,612	$3,076,665	0	$3,076,665	$3,930,277
20 year funding horizon	$853,612	$3,076,665	$177,209	$3,253,874	$4,107,486
15 year funding horizon	$853,612	$3,076,665	$719,263	$3,795,928	$4,649,540
10 year funding horizon	$853,612	$3,076,665	$1,862,552	$4,939,217	$5,792,829
5 year funding horizon	$853,612	$3,076,665	$5,417,242	$8,493,907	$9,347,519

[1] The ADP amounts are assumed to be made in the middle of the fiscal year. A payment made earlier or later in the fiscal year would have to be less or more than the amount shown to have the same effect on the UAL amortization.

The calculations above are based on the projected UAL as of June 30, 2025, as determined in the June 30, 2023, actuarial valuation. New unfunded liabilities can emerge in future years due to assumption or method changes, changes in plan provisions, and actuarial experience different than assumed. Making an ADP illustrated above for the indicated number of years will not result in a plan that is exactly 100% funded in the indicated number of years. Valuation results will vary from one year to the next and can diverge significantly from projections over a period of several years.

Additional Discretionary Payment History

The following table provides a recent history of actual ADPs made to the plan.

Fiscal Year	ADP	Fiscal Year	ADP
2019-20	$0	2022-23	$0
2020-21	$0	2023-24[2]	$0
2021-22	$0		

[2] Excludes payments made after April 30, 2024

Projected Employer Contributions

The table below shows the required and projected employer contributions (before cost sharing) for the next six fiscal years. The projection assumes that all actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur during the projection period. In particular, the investment return beginning with FY 2023-24 is assumed to be 6.80% per year, net of investment and administrative expenses. Future contribution requirements may differ significantly from those shown below. The actual long-term cost of the plan will depend on the actual benefits and expenses paid and the actual investment experience of the fund.

	Required Contribution	**Projected Future Employer Contributions (Assumes 6.80% Return for Fiscal Year 2023-24 and Beyond)**				
Fiscal Year	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
	Rate Plan 947 Results					
Normal Cost %	29.35%	29.4%	29.4%	29.4%	29.4%	29.4%
UAL Payment	$3,076,665	$3,287,000	$3,458,000	$3,836,000	$3,923,000	$4,001,000

For ongoing plans, 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 of the Section 2 Report. 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.

For projected contributions under alternate investment return scenarios, please see the Future Investment Return Scenarios exhibit. Our online pension plan projection tool, Pension Outlook, is available in the Employers section of the CalPERS website. Pension Outlook can help plan and budget pension costs under various scenarios.

Schedule of Amortization Bases

Below is the schedule of the plan's amortization bases. Note that there is a two-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, 2023.
- The required employer contributions determined by the valuation are for the fiscal year beginning two years after the valuation date: FY 2025-26.

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

The Unfunded Accrued Liability (UAL) is used to determine the employer contribution and therefore must be rolled forward two years from the valuation date to the first day of the fiscal year for which the contribution is being determined. The UAL is rolled forward 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 FY 2023-24 is based on the actuarial valuation two years ago, adjusted for additional discretionary payments made on or before April 30, 2024, if necessary, and the expected payment for FY 2024-25 is based on the actuarial valuation one year ago.

Reason for Base	Date Est.	Ramp Level 2025-26	Ramp Shape	Escalation Rate	Amort. Period	Balance 6/30/23	Expected Payment 2023-24	Balance 6/30/24	Expected Payment 2024-25	Balance 6/30/25	Minimum Required Payment 2025-26
Investment (Gain)/Loss	6/30/13	100%	Up/Dn	2.80%	20	8,836,187	641,351	8,774,249	659,309	8,689,541	677,769
Non-Investment (Gain)/Loss	6/30/13	100%	Up/Dn	2.80%	20	(108,373)	(7,866)	(107,613)	(8,086)	(106,574)	(8,313)
Share of Pre-2013 Pool UAL	6/30/13	No Ramp		2.80%	12	6,735,388	629,722	6,542,614	647,354	6,318,510	665,480
Assumption Change	6/30/14	100%	Up/Dn	2.80%	11	3,949,639	447,092	3,756,171	459,610	3,536,611	472,479
Investment (Gain)/Loss	6/30/14	100%	Up/Dn	2.80%	21	(6,880,653)	(483,562)	(6,848,805)	(497,102)	(6,800,798)	(511,021)
Non-Investment (Gain)/Loss	6/30/14	100%	Up/Dn	2.80%	21	84,414	5,932	84,024	6,099	83,435	6,269
Investment (Gain)/Loss	6/30/15	100%	Up/Dn	2.80%	22	4,263,671	290,762	4,253,115	298,903	4,233,428	307,272
Non-Investment (Gain)/Loss	6/30/15	100%	Up/Dn	2.80%	22	(15,468)	(1,055)	(15,430)	(1,084)	(15,359)	(1,115)
Assumption Change	6/30/16	100%	Up/Dn	2.80%	13	1,571,831	155,877	1,517,626	160,242	1,455,224	164,729
Investment (Gain)/Loss	6/30/16	100%	Up/Dn	2.80%	23	5,497,541	364,504	5,494,680	374,710	5,481,078	385,202
Non-Investment (Gain)/Loss	6/30/16	100%	Up/Dn	2.80%	23	(893,681)	(59,254)	(893,216)	(60,913)	(891,005)	(62,619)
Assumption Change	6/30/17	100%	Up/Dn	2.80%	14	2,110,621	197,739	2,049,792	203,276	1,979,104	208,968
Investment (Gain)/Loss	6/30/17	100%	Up/Dn	2.80%	24	(2,787,158)	(179,991)	(2,790,675)	(185,031)	(2,789,222)	(190,211)
Non-Investment (Gain)/Loss	6/30/17	100%	Up/Dn	2.80%	24	70,213	4,534	70,302	4,661	70,266	4,792
Assumption Change	6/30/18	100%	Up/Dn	2.80%	15	3,269,137	236,720	3,246,802	304,186	3,153,226	312,703
Investment (Gain)/Loss	6/30/18	100%	Up/Dn	2.80%	25	(872,217)	(44,503)	(885,537)	(57,187)	(886,654)	(58,788)
Method Change	6/30/18	100%	Up/Dn	2.80%	15	740,155	53,595	735,098	68,870	713,912	70,798
Non-Investment (Gain)/Loss	6/30/18	100%	Up/Dn	2.80%	25	413,733	21,110	420,051	27,126	420,581	27,886
Investment (Gain)/Loss	6/30/19	100%	Up Only	0.00%	16	415,951	25,010	418,389	33,346	412,378	41,683
Non-Investment (Gain)/Loss	6/30/19	No Ramp		0.00%	16	437,799	41,508	424,673	41,509	410,654	41,508

Schedule of Amortization Bases (continued)

Reason for Base	Date Est.	Ramp Level 2025-26	Ramp Shape	Escala-tion Rate	Amort. Period	Balance 6/30/23	Expected Payment 2023-24	Balance 6/30/24	Expected Payment 2024-25	Balance 6/30/25	Minimum Required Payment 2025-26
Investment (Gain)/Loss	6/30/20	80%	Up Only	0.00%	17	1,968,841	80,934	2,019,082	121,400	2,030,920	161,867
Non-Investment (Gain)/Loss	6/30/20	No	Ramp	0.00%	17	328,140	30,262	319,180	30,262	309,610	30,262
Assumption Change	6/30/21	No	Ramp	0.00%	18	738,254	66,386	719,849	66,386	700,193	66,387
Net Investment (Gain)	6/30/21	60%	Up Only	0.00%	18	(9,511,023)	(204,437)	(9,946,499)	(408,873)	(10,200,315)	(613,310)
Non-Investment (Gain)/Loss	6/30/21	No	Ramp	0.00%	18	(457,233)	(41,116)	(445,834)	(41,116)	(433,660)	(41,116)
Risk Mitigation	6/30/21	No	Ramp	0.00%	0	3,061,211	3,163,581	0	0	0	0
Risk Mitigation Offset	6/30/21	No	Ramp	0.00%	0	(3,061,211)	(3,163,581)	0	0	0	0
Investment (Gain)/Loss	6/30/22	40%	Up Only	0.00%	19	12,724,227	0	13,589,474	292,102	14,211,688	584,203
Non-Investment (Gain)/Loss	6/30/22	No	Ramp	0.00%	19	1,742,121	0	1,860,585	167,310	1,814,200	167,310
Investment (Gain)/Loss	6/30/23	20%	Up Only	0.00%	20	509,759	0	544,423	0	581,444	12,498
Non-Investment (Gain)/Loss	6/30/23	No	Ramp	0.00%	20	1,492,582	0	1,594,078	0	1,702,475	153,093
Total						**36,374,398**	**2,271,254**	**36,500,648**	**2,707,269**	**36,184,891**	**3,076,665**

The (gain)/loss bases are the plan's allocated share of the risk pool's (gain)/loss for the fiscal year as disclosed in Allocation of Plan's Share of Pool's Experience earlier in this report. These (gain)/loss bases will be amortized in accordance with the CalPERS amortization policy in effect at the time the base was established.

Amortization Schedule and Alternatives

The amortization schedule on the previous page(s) shows the minimum contributions required according to the CalPERS amortization policy. Many agencies have expressed a desire for a more stable pattern of payments or have indicated interest in paying off the unfunded accrued liabilities more quickly than required. As such, we have provided alternative amortization schedules to help analyze the current amortization schedule and illustrate the potential savings of accelerating unfunded liability payments.

Shown on the following page are future year amortization payments based on 1) the current amortization schedule reflecting the individual bases and remaining periods shown on the previous page, and 2) alternative "fresh start" amortization schedules using two sample periods that would both result in interest savings relative to the current amortization schedule. To initiate a fresh start, please contact a CalPERS actuary.

The current amortization schedule typically contains both positive and negative bases. Positive bases result from plan changes, assumption changes, method changes or plan experience that increase unfunded liability. Negative bases result from plan changes, assumption changes, method changes, or plan experience that decrease unfunded liability. The combination of positive and negative bases within an amortization schedule can result in unusual or problematic circumstances in future years, such as:

- 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.

In any year when one of the above scenarios occurs, the actuary will consider corrective action such as replacing the existing unfunded liability bases with a single "fresh start" base and amortizing it over an appropriate period.

The current amortization schedule on the following page may appear to show that, based on the current amortization bases, one of the above scenarios will occur at some point in the future. It is impossible to know today whether such a scenario will in fact arise since there will be additional bases added to the amortization schedule in each future year. Should such a scenario arise in any future year, the actuary will take appropriate action based on guidelines in the CalPERS Actuarial Amortization Policy.

Amortization Schedule and Alternatives (continued)

	Current Amortization Schedule		Alternative Schedules			
			15 Year Amortization		10 Year Amortization	
Date	**Balance**	**Payment**	**Balance**	**Payment**	**Balance**	**Payment**
6/30/2025	36,184,891	3,076,665	36,184,891	3,795,928	36,184,891	4,939,217
6/30/2026	35,465,913	3,286,522	34,722,597	3,795,928	33,541,075	4,939,217
6/30/2027	34,481,168	3,457,846	33,160,867	3,795,928	30,717,479	4,939,216
6/30/2028	33,252,407	3,835,598	31,492,939	3,795,928	27,701,880	4,939,217
6/30/2029	31,549,706	3,923,300	29,711,592	3,795,928	24,481,219	4,939,216
6/30/2030	29,640,589	4,000,610	27,809,113	3,795,928	21,041,554	4,939,216
6/30/2031	27,521,754	4,080,084	25,777,266	3,795,928	17,367,992	4,939,217
6/30/2032	25,176,709	4,047,134	23,607,253	3,795,928	13,444,627	4,939,216
6/30/2033	22,706,251	4,010,050	21,289,679	3,795,928	9,254,474	4,939,217
6/30/2034	20,106,125	3,926,390	18,814,510	3,795,928	4,779,390	4,939,217
6/30/2035	17,415,651	3,780,727	16,171,030	3,795,928		
6/30/2036	14,692,758	3,520,813	13,347,793	3,795,928		
6/30/2037	12,053,312	2,448,971	10,332,576	3,795,928		
6/30/2038	10,342,068	2,268,151	7,112,324	3,795,927		
6/30/2039	8,701,328	2,124,694	3,673,096	3,795,927		
6/30/2040	7,097,274	2,035,584				
6/30/2041	5,476,232	1,768,563				
6/30/2042	4,020,910	1,502,597				
6/30/2043	2,741,488	2,363,070				
6/30/2044	485,817	481,629				
6/30/2045	21,118	21,824				
6/30/2046						
6/30/2047						
6/30/2048						
6/30/2049						
Total	**59,960,822**		**56,938,918**		**49,392,166**	
Interest Paid	**23,775,931**		**20,754,027**		**13,207,275**	
Estimated Savings			**3,021,904**		**10,568,656**	

Employer Contribution History

The table below provides a recent history of the employer contribution requirements for the plan, as determined by the annual actuarial valuation. Changes due to prepayments or plan amendments after the valuation report was finalized are not reflected.

Valuation Date	Contribution Year	Employer Normal Cost Rate	Unfunded Liability Payment
06/30/2014	2016 - 17	21.230%	$755,232
06/30/2015	2017 - 18	21.418%	936,513
06/30/2016	2018 - 19	22.346%	1,197,652
06/30/2017	2019 - 20	23.654%	1,485,723
06/30/2018	2020 - 21	25.540%	1,708,222
06/30/2019	2021 - 22	25.59%	2,020,167
06/30/2020	2022 - 23	25.64%	2,317,133
06/30/2021	2023 - 24	29.09%	2,271,254
06/30/2022	2024 - 25	29.30%	2,707,269
06/30/2023	2025 - 26	29.35%	3,076,665

Funding History

The table below shows the recent history of the actuarial accrued liability, share of the pool's market value of assets, unfunded accrued liability, funded ratio and annual covered payroll.

Valuation Date	Accrued Liability (AL)	Share of Pool's Market Value of Assets (MVA)	Unfunded Accrued Liability (UAL)	Funded Ratio	Annual Covered Payroll
06/30/2014	$71,547,336	$58,842,584	$12,704,752	82.2%	$4,622,908
06/30/2015	75,115,894	58,735,321	16,380,573	78.2%	4,720,142
06/30/2016	79,779,856	58,072,244	21,707,612	72.8%	4,616,986
06/30/2017	84,570,154	62,493,962	22,076,192	73.9%	4,322,818
06/30/2018	91,111,357	65,569,436	25,541,921	72.0%	4,321,498
06/30/2019	95,874,854	68,916,726	26,958,128	71.9%	4,614,993
06/30/2020	99,040,905	69,727,959	29,312,946	70.4%	4,380,747
06/30/2021	106,756,840	85,438,794	21,318,046	80.0%	3,935,891
06/30/2022	109,557,160	75,229,774	34,327,386	68.7%	3,446,248
06/30/2023	113,870,815	77,496,417	36,374,398	68.1%	3,602,779

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 projections below reflect the impact of the CalPERS Funding Risk Mitigation Policy. The projections also assume that all other actuarial assumptions will be realized and that no further changes in assumptions, contributions, benefits, or funding will occur.

The first table shows projected contribution requirements if the fund were to earn either 3.0% or 10.8% annually. These alternate investment returns were chosen because 90% of long-term average returns are expected to fall between them over the 20-year period ending June 30, 2043.

Assumed Annual Return FY 2023-24 through FY 2042-43	Projected Employer Contributions				
	2026-27	2027-28	2028-29	2029-30	2030-31
3.0% (5th percentile)					
Discount Rate	6.80%	6.80%	6.80%	6.80%	6.80%
Normal Cost Rate	29.4%	29.4%	29.4%	29.4%	29.4%
UAL Contribution	$3,358,000	$3,673,000	$4,269,000	$4,650,000	$5,097,000
10.8% (95th percentile)					
Discount Rate	6.75%	6.70%	6.65%	6.60%	6.55%
Normal Cost Rate	29.9%	30.4%	30.9%	31.4%	31.9%
UAL Contribution	$3,217,000	$3,255,000	$3,425,000	$3,228,000	$2,930,000

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

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

The following table shows the effect of one and two standard deviation investment losses in FY 2023-24 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 Fiscal Year 2023-24	Required Employer Contributions	Projected Employer Contributions
	2025-26	2026-27
(17.2%) (2 standard deviation loss)		
Discount Rate	6.80%	6.80%
Normal Cost Rate	29.35%	29.4%
UAL Contribution	$3,076,665	$3,738,000
(5.2%) (1 standard deviation loss)		
Discount Rate	6.80%	6.80%
Normal Cost Rate	29.35%	29.4%
UAL Contribution	$3,076,665	$3,512,000

- Without investment gains (returns higher than 6.8%) in FY 2024-25 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 2023-24.
- The Pension Outlook Tool can be used to model projected contributions for these scenarios beyond FY 2026-27 as well as to model other investment return scenarios.

Discount Rate Sensitivity

The discount rate assumption is calculated as the sum of the assumed real rate of return and the assumed annual price inflation, currently 4.5% and 2.3%, respectively. Changing either the price inflation assumption or the real rate of return assumption will change the discount rate. The sensitivity of the valuation results to the discount rate assumption depends on which component of the discount rate is changed. Shown below are various valuation results as of June 30, 2023, assuming alternate discount rates by changing the two components independently. Results are shown using the current discount rate of 6.8% as well as alternate discount rates of 5.8% and 7.8%. The rates of 5.8% and 7.8% were selected since they illustrate the impact of a 1.0% increase or decrease to the 6.8% assumption.

Sensitivity to the Real Rate of Return Assumption

As of June 30, 2023	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	48.62%	38.34%	30.56%
b) Accrued Liability	$128,993,749	$113,870,815	$101,464,140
c) Market Value of Assets	$77,496,417	$77,496,417	$77,496,417
d) Unfunded Liability/(Surplus) [(b) - (c)]	$51,497,332	$36,374,398	$23,967,723
e) Funded Ratio	60.1%	68.1%	76.4%

Sensitivity to the Price Inflation Assumption

As of June 30, 2023	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	40.14%	38.34%	34.93%
b) Accrued Liability	$117,774,803	$113,870,815	$106,006,229
c) Market Value of Assets	$77,496,417	$77,496,417	$77,496,417
d) Unfunded Liability/(Surplus) [(b) - (c)]	$40,278,386	$36,374,398	$28,509,812
e) Funded Ratio	65.8%	68.1%	73.1%

Mortality Rate Sensitivity

The following table looks at the change in the June 30, 2023, plan costs and funded status 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, 2023	10% Lower Mortality Rates	Current Assumptions	10% Higher Mortality Rates
a) Total Normal Cost	38.82%	38.34%	37.89%
b) Accrued Liability	$115,701,343	$113,870,815	$112,176,564
c) Market Value of Assets	$77,496,417	$77,496,417	$77,496,417
d) Unfunded Liability/(Surplus) [(b) - (c)]	$38,204,926	$36,374,398	$34,680,147
e) Funded Ratio	67.0%	68.1%	69.1%

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.

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

Ratio of Retiree Accrued Liability to Total Accrued Liability	June 30, 2022	June 30, 2023
1. Retiree Accrued Liability	$82,926,451	$83,749,244
2. Total Accrued Liability	$109,557,160	$113,870,815
3. Ratio of Retiree AL to Total AL [(1) ÷ (2)]	76%	74%

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

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

For comparison, the support ratio for all CalPERS public agency plans as of June 30, 2022, was 0.77 and was calculated consistently with how it is for the individual rate plan. Note that to calculate the support ratio for all public agency plans, a retiree with service from more than one CalPERS agency is counted as a retiree more than once.

Support Ratio	June 30, 2022	June 30, 2023
1. Number of Actives	21	20
2. Number of Retirees	90	92
3. Support Ratio [(1) ÷ (2)]	0.23	0.22

Maturity Measures (continued)

The actuarial calculations supplied in this communication are based on various assumptions about long-term demographic and economic behavior. Unless these assumptions (e.g., terminations, deaths, disabilities, retirements, salary 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

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 an AVR of 8 may experience twice the contribution volatility due to investment return volatility than a plan with an AVR of 4. It should be noted that this ratio is a measure of the current situation. It increases over time but generally tends to stabilize as a plan matures.

Liability Volatility Ratio

Also shown in the table below is the liability volatility ratio (LVR), which is the ratio of accrued liability to payroll. Plans that have a higher LVR experience more volatile employer contributions (as a percentage of payroll) due to changes in liability. For example, a plan with an LVR of 8 is expected to have twice the contribution volatility of a plan with an 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, 2022	June 30, 2023
1. Market Value of Assets	$75,229,774	$77,496,417
2. Payroll	$3,446,248	$3,602,779
3. Asset Volatility Ratio (AVR) [(1) ÷ (2)]	21.8	21.5
4. Accrued Liability	$109,557,160	$113,870,815
5. Liability Volatility Ratio (LVR) [(4) ÷ (2)]	31.8	31.6

Maturity Measures History

Valuation Date	Ratio of Retiree Accrued Liability to Total Accrued Liability	Support Ratio	Asset Volatility Ratio	Liability Volatility Ratio
06/30/2017	71%	0.44	14.5	19.6
06/30/2018	74%	0.39	15.2	21.1
06/30/2019	73%	0.36	14.9	20.8
06/30/2020	72%	0.32	15.9	22.6
06/30/2021	75%	0.27	21.7	27.1
06/30/2022	76%	0.23	21.8	31.8
06/30/2023	74%	0.22	21.5	31.6

Funded Status – Termination Basis

The funded status measured on a termination basis is an estimate of the financial position of the plan had the contract with CalPERS been terminated as of June 30, 2023. The accrued liability on a termination basis (termination liability) is calculated differently from the plan's ongoing funding liability. For the termination liability calculation, both compensation and service are frozen as of the valuation date and no future pay increases or service accruals are assumed. This measure of funded status is not appropriate for assessing the need for future employer contributions in the case of an ongoing plan, that is, for an employer that continues to provide CalPERS retirement benefits to active employees. Unlike the actuarial cost method used for ongoing plans, the termination liability is the present value of the benefits earned through the valuation date.

A more conservative investment policy and asset allocation strategy was adopted by the board for the Terminated Agency Pool. The Terminated Agency Pool has limited funding sources since no future employer contributions will be made. Therefore, expected benefit payments are secured by risk-free assets and benefit security for members is increased while limiting the funding risk. However, this asset allocation has a lower expected rate of return than the remainder of the PERF and consequently, a lower discount rate assumption. The lower discount rate for the Terminated Agency Pool results in higher liabilities for terminated plans.

The discount rate used for actual termination valuations is a weighted average of the 10-year and 30-year Treasury yields where the weights are based on matching asset and liability durations as of the termination date. The discount rates used in the following analysis is based on 20-year Treasury bonds, which is a good proxy for most plans. The discount rate upon contract termination will depend on actual Treasury rates on the date of termination, which varies over time, as shown below.

Valuation Date	20-Year Treasury Rate	Valuation Date	20-Year Treasury Rate
06/30/2014	3.08%	06/30/2019	2.31%
06/30/2015	2.83%	06/30/2020	1.18%
06/30/2016	1.86%	06/30/2021	2.00%
06/30/2017	2.61%	06/30/2022	3.38%
06/30/2018	2.91%	06/30/2023	4.06%

As Treasury rates are variable, the table below shows a range for the termination liability using discount rates 1% below and above the 20-year Treasury rate on the valuation date. The price inflation assumption is the 20-year Treasury breakeven inflation rate, that is, the difference between the 20-year inflation indexed bond and the 20-year fixed-rate bond.

The Market Value of Assets (MVA) also varies with interest rates and will fluctuate depending on other market conditions on the date of termination. Since it is not possible to approximate how the MVA will change in different interest rate environments, the results below use the MVA as of the valuation date.

	Discount Rate: 3.06% Price Inflation: 2.50%	Discount Rate: 5.06% Price Inflation: 2.50%
1. Termination Liability[1]	$191,770,703	$141,447,742
2. Market Value of Assets (MVA)	77,496,417	77,496,417
3. Unfunded Termination Liability [(1) – (2)]	$114,274,286	$63,951,325
4. Funded Ratio [(2) ÷ (1)]	40.4%	54.8%

[1] The termination liabilities calculated above include a 5% contingency load. The contingency load and other actuarial assumptions can be found in Appendix A of the Section 2 report.

In order to terminate the plan, first contact our Pension Contract Services unit to initiate a Resolution of Intent to Terminate. The completed Resolution will allow a CalPERS actuary to provide a preliminary termination valuation with a more up-to-date estimate of the plan's assets and liabilities. Before beginning this process, please consult with a CalPERS actuary.

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 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 LDROM. 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 LDROM is 4.82%, which is the Standard FTSE Pension Liability Index[1] discount rate as of June 30, 2023, net of assumed administrative expenses.

Selected Measures on a Low-Default-Risk Basis	**June 30, 2023**
Discount Rate	4.82%
1. Accrued Liability[2] – Low-Default-Risk Basis (LDROM)	
a) Active Members	$34,089,147
b) Transferred Members	7,575,559
c) Separated Members	328,194
d) Members and Beneficiaries Receiving Payments	105,241,982
e) Total	$147,234,882
2. Market Value of Assets (MVA)	77,496,417
3. Unfunded Accrued Liability – Low-Default-Risk Basis [(1e) – (2)]	$69,738,465
4. Unfunded Accrued Liability – Funding Policy Basis	36,374,398
5. Present Value of Unearned Investment Risk Premium [(3) – (4)]	$33,364,067

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 sufficiency of plan assets to cover the cost of settling the plan's benefit obligations (see Funded Status – Termination Basis), 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-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 LDROM for a subset of the fund, such as a single rate plan or a group of retirees.

2 If plan assets were invested entirely in the AA fixed income securities used to determine the discount rate of 4.82%, the CalPERS discount rate could, at various times, be below 4.5% or 5.25%, and some automatic annual retiree COLAs could be suspended (Gov. Code sections 21329 and 21335). Since there is currently no proposal to adopt an asset allocation entirely comprised of fixed income securities, the automatic COLAs have been fully valued in the measures above based on the assumptions used for plan funding. Removing future COLAs from the measurement would understate the statutory obligation.

Summary of Valuation Data

The table below shows a summary of the plan's member data upon which this valuation is based:

	June 30, 2022	June 30, 2023
Active Members		
Counts	21	20
Average Attained Age	47.3	48.6
Average Entry Age to Rate Plan	32.5	32.8
Average Years of Credited Service	13.9	14.8
Average Annual Covered Pay	$164,107	$180,139
Annual Covered Payroll	$3,446,248	$3,602,779
Present Value of Future Payroll	$20,118,770	$18,636,516
Transferred Members	10	10
Separated Members	5	3
Retired Members and Beneficiaries*		
Counts	90	92
Average Annual Benefits	$62,766	$63,017
Total Annual Benefits	$5,648,932	$5,797,562

Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double counting of liabilities.

* Values include community property settlements.

List of Class 1 Benefit Provisions

This plan has the following Class 1 Benefit Provisions:

- One Year Final Compensation (FAC 1)
- Post-Retirement Survivor Allowance (PRSA)

Plan's Major Benefit Options

Shown below is a summary of the major optional benefits for which the agency has contracted. A description of principal standard and optional plan provisions is in Section 2.

	Benefit Group		
Member Category	**Police**	**Police**	
Demographics			
Actives	Yes	No	
Transfers/Separated	Yes	No	
Receiving	Yes	Yes	
Benefit Provision			
Benefit Formula	3% @ 50		
Social Security Coverage	No		
Full/Modified	Full		
Employee Contribution Rate	9.00%		
Final Average Compensation Period	One Year		
Sick Leave Credit	Yes		
Non-Industrial Disability	Standard		
Industrial Disability	Standard		
Pre-Retirement Death Benefits			
Optional Settlement 2	Yes		
1959 Survivor Benefit Level	Level 4		
Special	Yes		
Alternate (firefighters)	No		
Post-Retirement Death Benefits			
Lump Sum	$2,000	$2,000	
Survivor Allowance (PRSA)	Yes	Yes	
COLA	2%	2%	

Section 2

California Public Employees' Retirement System

Risk Pool Actuarial Valuation Information

Section 2 may be found on the
CalPERS website (www.calpers.ca.gov)
in the Forms & Publications section

California Public Employees' Retirement System
Actuarial Office
400 Q Street, Sacramento, CA 95811 | Phone: (916) 795-3000 | Fax: (916) 795-2744
888 CalPERS (or **888**-225-7377) | TTY: (877) 249-7442 | **www.calpers.ca.gov**

July 2024

PEPRA Safety Police Plan of the Town of Los Gatos (CalPERS ID: 4589482285)
Annual Valuation Report as of June 30, 2023

Dear Employer,

Attached to this letter is Section 1 of the June 30, 2023 actuarial valuation report for the rate plan noted above. **Provided in this report is the determination of the minimum required employer contributions for fiscal year (FY) 2025-26**. In addition, the report contains important information regarding the current financial status of the plan as well as projections and risk measures to aid in planning for the future.

Because this plan is in a risk pool, the following valuation report has been separated into two sections:

- Section 1 contains specific information for the plan including the development of the current and projected employer contributions, and
- Section 2 contains the Risk Pool Actuarial Valuation appropriate to the plan as of June 30, 2023.

Section 2 can be found on the CalPERS website (www.calpers.ca.gov). From the home page, go to *"Forms & Publications"* and select *"View All"*. In the search box, enter *"Risk Pool"* and from the results list download the Safety Risk Pool Actuarial Valuation Report for June 30, 2023.

Required Contributions

The table below shows the minimum required employer contributions and the PEPRA member contribution rate for FY 2025-26 along with an estimate of the employer contribution requirements for FY 2026-27. Employee contributions other than cost sharing (whether paid by the employer or the employee) are in addition to the results shown below. **The required employer contributions in this report do not reflect any cost sharing arrangement between the agency and the employees.**

Fiscal Year	Employer Normal Cost Rate	Employer Amortization of Unfunded Accrued Liability	PEPRA Member Contribution Rate
2025-26	14.96%	$27,487	14.50%
Projected Results			
2026-27	*15.0%*	*$28,000*	*TBD*

The actual investment return for FY 2023-24 was not known at the time this report was prepared. The projections above assume the investment return for that year would be 6.8%. To the extent the actual investment return for FY 2023-24 differs from 6.8%, the actual contribution requirements for FY 2026-27 will differ from those shown above. For additional details regarding the assumptions and methods used for these projections, please refer to Projected Employer Contributions. This section also contains projected required contributions through FY 2030-31.

Report Enhancements

A number of enhancements were made to the report this year to ease navigation and allow the reader to find specific information more quickly. The tables of contents are now "clickable." This is true for the main table of contents that follows the title page and the intermediate tables of contents at the beginning of sections. The Adobe navigation pane on the left can also be used to skip to specific exhibits.

There are a number of links throughout the document in blue text. Links that are internal to the document are not underlined, while underlined links will take you to the CalPERS website. Examples are shown below.

Internal Bookmarks	CalPERS Website Links
Required Employer Contributions	Required Employer Contribution Search Tool
Member Contribution Rates	Public Agency PEPRA Member Contribution Rates
Summary of Key Valuation Results	Pension Outlook Overview
Funded Status – Funding Policy Basis	Interactive Summary of Public Agency Valuation Results
Projected Employer Contributions	Public Agency Actuarial Valuation Reports

Further descriptions of general changes are included in the Highlights and Executive Summary section and in Appendix A - Actuarial Methods and Assumptions in Section 2.

Questions

A CalPERS actuary is available to answer questions about this report. Other questions may be directed to the Customer Contact Center at **888 CalPERS** (or **888**-225-7377).

Sincerely,

Matthew Biggart, ASA, MAAA
Actuary, CalPERS

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

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

California Public Employees' Retirement System

Actuarial Valuation for the PEPRA Safety Police Plan of the Town of Los Gatos

as of June 30, 2023

(CalPERS ID: 4589482285)
(Rate Plan ID: 25874)

Required Contributions for Fiscal Year

July 1, 2025 — June 30, 2026

Table of Contents

Section 1

California Public Employees' Retirement System

Plan Specific Information for the PEPRA Safety Police Plan of the Town of Los Gatos

(CalPERS ID: 4589482285)
(Rate Plan ID: 25874)

Table of Contents — Section 1

Actuarial Certification

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, consisting of Section 1 and Section 2, 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 Rate Plan Results

To the best of my knowledge and having relied upon the attestation above that the actuarial methods and assumptions are reasonable as well as the information in Section 2 of this report, this report is complete and accurate and contains sufficient information to disclose, fully and fairly, the funded condition of the PEPRA Safety Police Plan of the Town of Los Gatos 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, 2023, provided by the various CalPERS databases and the benefits under this plan with CalPERS as of the date this report was produced. Section 1 of this report is based on the member and financial data for Town of Los Gatos, while Section 2 is based on the corresponding information for all agencies participating in the Safety Risk Pool to which the plan belongs.

Matthew Biggart, ASA, MAAA
Actuary, CalPERS

Highlights and Executive Summary

Introduction

This report presents the results of the June 30, 2023, actuarial valuation of the PEPRA Safety Police Plan of the Town of Los Gatos of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the minimum required contributions for fiscal year (FY) 2025-26.

Purpose of Section 1

This Section 1 report for the PEPRA Safety Police Plan of the Town of Los Gatos of CalPERS was prepared by the Actuarial Office using data as of June 30, 2023. The purpose of the valuation is to:

- Set forth the assets and accrued liabilities of this rate plan as of June 30, 2023;
- Determine the minimum required employer contributions for this rate plan 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, 2023, 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 a Cost Sharing Employer Defined Benefit Pension Plan. A separate accounting valuation report for such purposes is available on the CalPERS website (www.calpers.ca.gov).

The measurements shown in this actuarial valuation may not be applicable for other purposes. The 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 the agency.

Assessment and Disclosure of Risk

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

- A "Scenario Test," projecting future results under different investment income returns.
- A "Sensitivity Analysis," showing the impact on current valuation results using alternative discount rates of 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.

Summary of Key Valuation Results

Below is a brief summary of key valuation results along with page references where more detailed information can be found .

Required Employer Contributions — page 8

	Fiscal Year 2024-25	Fiscal Year 2025-26
Employer Normal Cost Rate	14.72%	14.96%
Unfunded Accrued Liability (UAL) Contribution Amount	$24,101	$27,487
Paid either as		
Option 1) 12 Monthly Payments of	$2,008.42	$2,290.58
Option 2) Annual Prepayment in July	$23,321	$26,598

Member Contribution Rates — page 9

	Fiscal Year 2024-25	Fiscal Year 2025-26
Member Contribution Rate	14.50%	14.50%

Projected Employer Contributions — page 14

Fiscal Year	Normal Cost (% of payroll)	Annual UAL Payment
2026-27	15.0%	$28,000
2027-28	15.0%	$28,000
2028-29	15.0%	$28,000
2029-30	15.0%	$29,000
2030-31	15.0%	$29,000

Funded Status — Funding Policy Basis — page 12

	June 30, 2022	June 30, 2023
Entry Age Accrued Liability (AL)	$1,724,746	$2,281,357
Market Value of Assets (MVA)	1,511,398	1,987,482
Unfunded Accrued Liability (UAL) [AL – MVA]	$213,348	$293,875
Funded Ratio [MVA ÷ AL]	87.6%	87.1%

Summary of Valuation Data — Page 26

	June 30, 2022	June 30, 2023
Active Member Count	16	16
Annual Covered Payroll	$1,969,511	$2,036,941
Transferred Member Count	2	4
Separated Member Count	2	3
Retired Members and Beneficiaries Count	1	1

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. For pooled rate plans, voluntary benefit changes by plan amendment are generally included in the first valuation with a valuation date on or after the effective date of the amendment.

Please refer to the Plan's Major Benefit Options in this report and Appendix B of the Section 2 Report for a summary of the plan provisions used in this valuation.

Actuarial Methods and Assumptions

There are no significant changes to the actuarial methods or assumptions for the June 30, 2023, actuarial valuation.

New Disclosure Items

In December 2021, the Actuarial Standards Board issued a revision of Actuarial Standard of Practice No. 4 (ASOP 4) requiring actuaries to disclose a low-default-risk obligation measure (LDROM) of the benefits earned. This information is shown in a new exhibit, Funded Status – Low-Default-Risk Basis.

Subsequent Events

This actuarial valuation report reflects fund investment return through June 30, 2023, as well as statutory changes, regulatory changes and board actions through January 2024.

During the time period between the valuation date and the publication of this report, inflation has been higher than the expected inflation of 2.3% per annum. Since inflation influences cost-of-living increases for retirees and beneficiaries and active member pay increases, higher inflation is likely to put at least some upward pressure on contribution requirements and downward pressure on the funded status in the June 30, 2024, valuation. The actual impact of higher inflation on future valuation results will depend on, among other factors, how long higher inflation persists.

The 2023 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 2024 limits, determined in October 2023, are not reflected.

On April 16, 2024, the board took action to modify 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. The 95th percentile return in the Future Investment Return Scenarios exhibit in this report has not been modified and still reflects the projected contribution requirements associated with a reduction in the discount rate.

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.

Liabilities and Contributions

Determination of Required Contributions

Contributions to fund the plan are determined by an actuarial valuation performed each year. The valuation employs complex calculations based on a set of actuarial assumptions and methods. See Appendix A in Section 2 for information on the assumptions and methods used in this valuation. The valuation incorporates all plan experience through the valuation date and sets required contributions for the fiscal year that begins two years after the valuation date.

Contribution Components

Two components comprise required contributions:

- Normal Cost — expressed as a percentage of pensionable payroll
- Unfunded Accrued Liability (UAL) Contribution — expressed as a dollar amount

Normal Cost represents the value of benefits allocated to the upcoming year for active employees. If all plan experience exactly matched the actuarial assumptions, normal cost would be sufficient to fully fund all benefits. The employer and employees each pay a share of the normal cost with contributions payable as part of the regular payroll reporting process. The contribution rate for Classic members is set by statute based on benefit formula whereas for PEPRA members it is based on 50% of the total normal cost.

When plan experience differs from the actuarial assumptions, unfunded accrued liability (UAL) emerges. The new UAL may be positive or negative. If the total UAL is positive (i.e., accrued liability exceeds assets), the employer is required to make contributions to pay off the UAL over time. This is called the Unfunded Accrued Liability Contribution component. There is an option to prepay this amount during July of each fiscal year, otherwise it is paid monthly.

In measuring the UAL each year, plan experience is split by source. Common sources of UAL include investment experience different than expected, non-investment experience different than expected, assumption changes and benefit changes. Each source of UAL (positive or negative) forms a base that is amortized, or paid off, over a specified period of time in accordance with the CalPERS Actuarial Amortization Policy. The Unfunded Accrued Liability Contribution is the sum of the payments on all bases. See the Schedule of Amortization Bases section of this report for an inventory of existing bases and Appendix A in Section 2 for more information on the amortization policy.

Required Employer Contributions

The required employer contributions in this report do not reflect any cost sharing arrangement between the agency and the employees.

Required Employer Contributions	Fiscal Year 2025-26
Employer Normal Cost Rate	**14.96%**
Plus	
Unfunded Accrued Liability (UAL) Contribution Amount[1]	**$27,487**
Paid either as	
1) Monthly Payment	**$2,290.58**
Or	
2) Annual Prepayment Option*	**$26,598**

The total minimum required employer contribution is the sum of the Plan's Employer Normal Cost Rate (expressed as a percentage of payroll and paid as payroll is reported) and the Unfunded Accrued Liability (UAL) Contribution Amount (billed monthly (1) or prepaid annually (2) in dollars).

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

For Member Contribution Rates see the following page.

Development of Normal Cost as a Percentage of Payroll	Fiscal Year 2024-25	Fiscal Year 2025-26
Base Total Normal Cost for Formula	27.51%	27.74%
Surcharge for Class 1 Benefits[2]		
a) PRSA	1.71%	1.72%
Plan's Total Normal Cost	29.22%	29.46%
Offset Due to Employee Contributions[3]	14.50%	14.50%
Employer Normal Cost	14.72%	14.96%

[1] The required payment on amortization bases does not take into account any additional discretionary payment made after April 30, 2024.

[2] Section 2 of this report contains a list of Class 1 benefits and corresponding surcharges.

[3] 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.

Member Contribution Rates

The required member contributions in this report do not reflect any cost sharing arrangement between the agency and the employees.

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 risk pool, particularly members' entry age. 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 table below shows the determination of the PEPRA member contribution rates effective July 1, 2025, based on 50% of the total normal cost rate as of the June 30, 2023, valuation.

		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
25874	Safety Police PEPRA Level	29.00%	14.50%	29.46%	0.46%	No	14.50%

Other Pooled Safety Risk Pool Rate Plans

All of the results presented in this Section 1 report, except those shown on this page, correspond to rate plan 25874. In many cases, employers have additional rate plans within the same risk pool. For cost analysis and budgeting it is useful to consider contributions for these rate plans as a whole rather than individually. The estimated contribution amounts and rates for all of the employer's rate plans in the Safety Risk Pool are shown below and assume that the total employer payroll within the Safety Risk Pool will grow according to the overall payroll growth assumption of 2.80% per year for three years. Classic members who are projected to terminate employment are assumed to be replaced by PEPRA members.

Estimated Employer Contributions for all Pooled Safety Rate Plans	Fiscal Year 2024-25	Fiscal Year 2025-26
Projected Payroll for the Contribution Year	$5,883,540	$6,126,845
Estimated Employer Normal Cost	$1,305,715	$1,335,093
Required Payment on Amortization Bases	$2,731,370	$3,104,152
Estimated Total Employer Contributions	$4,037,085	$4,439,245
Estimated Total Employer Contribution Rate (illustrative only)	68.62%	72.46%

Breakdown of Entry Age Accrued Liability

Active Members	$1,375,314
Transferred Members	477,918
Separated Members	66,194
Members and Beneficiaries Receiving Payments	361,931
Total	$2,281,357

Allocation of Plan's Share of Pool's Experience

It is the policy of CalPERS to ensure equity within the risk pools by allocating the pool's experience gains/losses and assumption changes in a manner that treats each employer equitably and maintains benefit security for the members of the System while minimizing substantial variations in employer contributions. The pool's experience gains/losses and impact of assumption/method changes is allocated to the plan as follows:

1.	Plan's Accrued Liability	$2,281,357
2.	Projected UAL Balance at 6/30/2023	250,953
3.	Other UAL Adjustments (Golden Handshake, Prior Service Purchase, etc.)	0
4.	Adjusted UAL Balance at 6/30/2023 for Asset Share	250,953
5.	Pool's Accrued Liability[1]	30,525,472,379
6.	Sum of Pool's Individual Plan UAL Balances at 6/30/2023[1]	7,735,444,959
7.	Pool's 2022-23 Investment (Gain)/Loss[1]	146,133,368
8.	Pool's 2022-23 Non-Investment (Gain)/Loss[1]	400,118,077
9.	Plan's Share of Pool's Investment (Gain)/Loss: [(1) - (4)] ÷ [(5) - (6)] × (7)	13,019
10.	Plan's Share of Pool's Non-Investment (Gain)/Loss: (1) ÷ (5) × (8)	29,903
11.	Plan's New (Gain)/Loss as of 6/30/2023: (9) + (10)	42,922
12.	Increase in Pool's Accrued Liability due to Change in Assumptions[1]	0
13.	Plan's Share of Pool's Change in Assumptions: (1) ÷ (5) × (12)	0
14.	Increase in Pool's Accrued Liability due to Funding Risk Mitigation[1]	0
15.	Plan's Share of Pool's Change due to Funding Risk Mitigation: (1) ÷ (5) × (14)	0
16.	Offset due to Funding Risk Mitigation	0
17.	Plan's Investment (Gain)/Loss: (9) – (16)	13,019

[1] Does not include plans that transferred to the pool on the valuation date.

Development of the Plan's Share of Pool's Assets

18.	Plan's UAL: (2) + (3) + (11) + (13) + (15)	$293,875
19.	Plan's Share of Pool's Market Value of Assets (MVA): (1) - (18)	$1,987,482

For a reconciliation of the pool's Market Value of Assets (MVA), information on the fund's asset allocation and a history of CalPERS investment returns, see Section 2, which can be found on the CalPERS website (www.calpers.ca.gov).

Funded Status – Funding Policy Basis

The table below provides information on the current funded status of the plan 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.

	June 30, 2022	June 30, 2023
1. Present Value of Benefits	$8,595,758	$9,657,725
2. Entry Age Accrued Liability	1,724,746	2,281,357
3. Market Value of Assets (MVA)	1,511,398	1,987,482
4. Unfunded Accrued Liability (UAL) [(2) – (3)]	$213,348	$293,875
5. Funded Ratio [(3) ÷ (2)]	87.6%	87.1%

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

Calculations for the funding target reflect the expected long-term investment return of 6.8%. If it were known on the valuation date that future investment returns will average something greater/less than the expected return, calculated normal costs and accrued liabilities provided in this report would be less/greater than the results shown. Therefore, for example, if actual average future returns are less than the expected return, calculated normal costs and UAL contributions will not be sufficient to fully fund all retirement benefits. Under this scenario, required future normal cost contributions will need to increase from those provided in this report, and the plan will develop unfunded liabilities that will also add to required future contributions. For illustrative purposes, funded statuses based on a 1% lower and higher average future investment return (discount rate) are as follows:

	1% Lower Average Return	Current Assumption	1% Higher Average Return
Discount Rate	5.8%	6.8%	7.8%
1. Entry Age Accrued Liability	$2,851,855	$2,281,357	$1,858,556
2. Market Value of Assets (MVA)	1,987,482	1,987,482	1,987,482
3. Unfunded Accrued Liability (UAL) [(1) – (2)]	$864,373	$293,875	($128,926)
4. Funded Ratio [(2) ÷ (1)]	69.7%	87.1%	106.9%

The Risk Analysis section of the report provides additional information regarding the sensitivity of valuation results to the expected investment return and other factors. Also provided in that section are measures of funded status that are appropriate for assessing the sufficiency of plan assets to cover estimated termination liabilities.

Additional Employer Contributions

The minimum required employer contribution towards the Unfunded Accrued Liability (UAL) for this rate plan for FY 2025-26 is $27,487. CalPERS allows agencies to make additional discretionary payments (ADPs) at any time. These optional payments serve to reduce the UAL and future required contributions and can result in significant long-term savings. Agencies can also use ADPs to stabilize annual contributions as a fixed dollar amount, percent of payroll or percent of revenue.

Provided below are select ADP options for consideration. Making such an ADP during FY 2025-26 does not require an ADP be made in any future year, nor does it change the remaining amortization period of any portion of unfunded liability. For information on permanent changes to amortization periods, see Amortization Schedule and Alternatives. Agencies considering making an ADP should contact CalPERS for additional information.

Fiscal Year 2025-26 Employer Contributions — Illustrative Scenarios

Funding Approach	Estimated Normal Cost	Minimum UAL Contribution	ADP[1]	Total UAL Contribution	Estimated Total Contribution
Minimum required only	$481,481	$27,487	0	$27,487	$508,968
20 year funding horizon	$481,481	$27,487	$416	$27,903	$509,384
15 year funding horizon	$481,481	$27,487	$5,064	$32,551	$514,032
10 year funding horizon	$481,481	$27,487	$14,868	$42,355	$523,836
5 year funding horizon	$481,481	$27,487	$45,350	$72,837	$554,318

[1] The ADP amounts are assumed to be made in the middle of the fiscal year. A payment made earlier or later in the fiscal year would have to be less or more than the amount shown to have the same effect on the UAL amortization.

The calculations above are based on the projected UAL as of June 30, 2025, as determined in the June 30, 2023, actuarial valuation. New unfunded liabilities can emerge in future years due to assumption or method changes, changes in plan provisions, and actuarial experience different than assumed. Making an ADP illustrated above for the indicated number of years will not result in a plan that is exactly 100% funded in the indicated number of years. Valuation results will vary from one year to the next and can diverge significantly from projections over a period of several years.

Additional Discretionary Payment History

The following table provides a recent history of actual ADPs made to the plan.

Fiscal Year	ADP	Fiscal Year	ADP
2019-20	$0	2022-23	$0
2020-21	$0	2023-24[2]	$0
2021-22	$0		

[2] Excludes payments made after April 30, 2024

Projected Employer Contributions

The table below shows the required and projected employer contributions (before cost sharing) for the next six fiscal years. The projection assumes that all actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur during the projection period. In particular, the investment return beginning with FY 2023-24 is assumed to be 6.80% per year, net of investment and administrative expenses. Future contribution requirements may differ significantly from those shown below. The actual long-term cost of the plan will depend on the actual benefits and expenses paid and the actual investment experience of the fund.

	Required Contribution	**Projected Future Employer Contributions (Assumes 6.80% Return for Fiscal Year 2023-24 and Beyond)**				
Fiscal Year	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
	Rate Plan 25874 Results					
Normal Cost %	14.96%	15.0%	15.0%	15.0%	15.0%	15.0%
UAL Payment	$27,487	$28,000	$28,000	$28,000	$29,000	$29,000

For ongoing plans, 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 of the Section 2 Report. 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.

For projected contributions under alternate investment return scenarios, please see the Future Investment Return Scenarios exhibit. Our online pension plan projection tool, Pension Outlook, is available in the Employers section of the CalPERS website. Pension Outlook can help plan and budget pension costs under various scenarios.

Schedule of Amortization Bases

Below is the schedule of the plan's amortization bases. Note that there is a two-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, 2023.
- The required employer contributions determined by the valuation are for the fiscal year beginning two years after the valuation date: FY 2025-26.

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

The Unfunded Accrued Liability (UAL) is used to determine the employer contribution and therefore must be rolled forward two years from the valuation date to the first day of the fiscal year for which the contribution is being determined. The UAL is rolled forward 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 FY 2023-24 is based on the actuarial valuation two years ago, adjusted for additional discretionary payments made on or before April 30, 2024, if necessary, and the expected payment for FY 2024-25 is based on the actuarial valuation one year ago.

Reason for Base	Date Est.	Ramp Level 2025-26	Ramp Shape	Escalation Rate	Amort. Period	Balance 6/30/23	Expected Payment 2023-24	Balance 6/30/24	Expected Payment 2024-25	Balance 6/30/25	Minimum Required Payment 2025-26
Fresh Start	6/30/22	No	Ramp	0.00%	19	250,953	0	268,018	24,101	261,336	24,101
Investment (Gain)/Loss	6/30/23	20%	Up Only	0.00%	20	13,019	0	13,904	0	14,849	319
Non-Investment (Gain)/Loss	6/30/23	No	Ramp	0.00%	20	29,903	0	31,936	0	34,108	3,067
Total						**293,875**	**0**	**313,858**	**24,101**	**310,293**	**27,487**

The (gain)/loss bases are the plan's allocated share of the risk pool's (gain)/loss for the fiscal year as disclosed in Allocation of Plan's Share of Pool's Experience earlier in this report. These (gain)/loss bases will be amortized in accordance with the CalPERS amortization policy in effect at the time the base was established.

Amortization Schedule and Alternatives

The amortization schedule on the previous page(s) shows the minimum contributions required according to the CalPERS amortization policy. Many agencies have expressed a desire for a more stable pattern of payments or have indicated interest in paying off the unfunded accrued liabilities more quickly than required. As such, we have provided alternative amortization schedules to help analyze the current amortization schedule and illustrate the potential savings of accelerating unfunded liability payments.

Shown on the following page are future year amortization payments based on 1) the current amortization schedule reflecting the individual bases and remaining periods shown on the previous page, and 2) alternative "fresh start" amortization schedules using two sample periods that would both result in interest savings relative to the current amortization schedule. To initiate a fresh start, please contact a CalPERS actuary.

The current amortization schedule typically contains both positive and negative bases. Positive bases result from plan changes, assumption changes, method changes or plan experience that increase unfunded liability. Negative bases result from plan changes, assumption changes, method changes, or plan experience that decrease unfunded liability. The combination of positive and negative bases within an amortization schedule can result in unusual or problematic circumstances in future years, such as:

- 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.

In any year when one of the above scenarios occurs, the actuary will consider corrective action such as replacing the existing unfunded liability bases with a single "fresh start" base and amortizing it over an appropriate period.

The current amortization schedule on the following page may appear to show that, based on the current amortization bases, one of the above scenarios will occur at some point in the future. It is impossible to know today whether such a scenario will in fact arise since there will be additional bases added to the amortization schedule in each future year. Should such a scenario arise in any future year, the actuary will take appropriate action based on guidelines in the CalPERS Actuarial Amortization Policy.

Amortization Schedule and Alternatives (continued)

	Current Amortization Schedule		Alternative Schedules			
			15 Year Amortization		10 Year Amortization	
Date	**Balance**	**Payment**	**Balance**	**Payment**	**Balance**	**Payment**
6/30/2025	310,293	27,487	310,293	32,551	310,293	42,355
6/30/2026	302,987	27,806	297,753	32,551	287,622	42,355
6/30/2027	294,855	28,126	284,361	32,551	263,409	42,355
6/30/2028	285,838	28,445	270,058	32,551	237,549	42,355
6/30/2029	275,879	28,764	254,782	32,551	209,931	42,355
6/30/2030	264,913	28,764	238,468	32,551	180,435	42,355
6/30/2031	253,201	28,764	221,044	32,551	148,933	42,354
6/30/2032	240,692	28,764	202,435	32,551	115,290	42,355
6/30/2033	227,333	28,764	182,561	32,550	79,358	42,354
6/30/2034	213,066	28,764	161,337	32,551	40,984	42,355
6/30/2035	197,829	28,764	138,668	32,550		
6/30/2036	181,555	28,764	114,459	32,551		
6/30/2037	164,175	28,764	88,603	32,551		
6/30/2038	145,614	28,764	60,988	32,550		
6/30/2039	125,789	28,765	31,497	32,550		
6/30/2040	104,616	28,765				
6/30/2041	82,003	28,765				
6/30/2042	57,852	28,765				
6/30/2043	32,059	28,765				
6/30/2044	4,512	4,663				
6/30/2045						
6/30/2046						
6/30/2047						
6/30/2048						
6/30/2049						
Total	**547,992**		**488,261**		**423,548**	
Interest Paid	**237,699**		**177,968**		**113,255**	
Estimated Savings			**59,731**		**124,444**	

Employer Contribution History

The table below provides a recent history of the employer contribution requirements for the plan, as determined by the annual actuarial valuation. Changes due to prepayments or plan amendments after the valuation report was finalized are not reflected.

Valuation Date	Contribution Year	Employer Normal Cost Rate	Unfunded Liability Payment
06/30/2015	2017 - 18	12.729%	$30
06/30/2016	2018 - 19	12.965%	4,507
06/30/2017	2019 - 20	13.786%	6,059
06/30/2018	2020 - 21	13.884%	15,282
06/30/2019	2021 - 22	13.98%	18,507
06/30/2020	2022 - 23	13.66%	19,258
06/30/2021	2023 - 24	14.50%	0
06/30/2022	2024 - 25	14.72%	24,101
06/30/2023	2025 - 26	14.96%	27,487

Funding History

The table below shows the recent history of the actuarial accrued liability, share of the pool's market value of assets, unfunded accrued liability, funded ratio and annual covered payroll.

Valuation Date	Accrued Liability (AL)	Share of Pool's Market Value of Assets (MVA)	Unfunded Accrued Liability (UAL)	Funded Ratio	Annual Covered Payroll
06/30/2015	$35,246	$33,422	$1,824	94.8%	$281,865
06/30/2016	126,390	115,322	11,068	91.2%	414,054
06/30/2017	237,225	224,872	12,353	94.8%	451,543
06/30/2018	414,453	379,539	34,914	91.6%	682,264
06/30/2019	649,310	594,841	54,469	91.6%	967,007
06/30/2020	888,807	805,416	83,391	90.6%	969,229
06/30/2021	1,301,901	1,370,527	(68,626)	105.3%	1,611,346
06/30/2022	1,724,746	1,511,398	213,348	87.6%	1,969,511
06/30/2023	2,281,357	1,987,482	293,875	87.1%	2,036,941

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 projections below reflect the impact of the CalPERS Funding Risk Mitigation Policy. The projections also assume that all other actuarial assumptions will be realized and that no further changes in assumptions, contributions, benefits, or funding will occur.

The first table shows projected contribution requirements if the fund were to earn either 3.0% or 10.8% annually. These alternate investment returns were chosen because 90% of long-term average returns are expected to fall between them over the 20-year period ending June 30, 2043.

Assumed Annual Return FY 2023-24 through FY 2042-43	Projected Employer Contributions				
	2026-27	2027-28	2028-29	2029-30	2030-31
3.0% (5th percentile)					
Discount Rate	6.80%	6.80%	6.80%	6.80%	6.80%
Normal Cost Rate	15.0%	15.0%	15.0%	15.0%	15.0%
UAL Contribution	$30,000	$34,000	$40,000	$47,000	$57,000
10.8% (95th percentile)					
Discount Rate	6.75%	6.70%	6.65%	6.60%	6.55%
Normal Cost Rate	15.3%	15.2%	15.6%	16.0%	15.6%
UAL Contribution	$26,000	$23,000	$19,000	$0	$0

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

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

The following table shows the effect of one and two standard deviation investment losses in FY 2023-24 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 Fiscal Year 2023-24	Required Employer Contributions	Projected Employer Contributions
	2025-26	2026-27
(17.2%) (2 standard deviation loss)		
Discount Rate	6.80%	6.80%
Normal Cost Rate	14.96%	15.0%
UAL Contribution	$27,487	$39,000
(5.2%) (1 standard deviation loss)		
Discount Rate	6.80%	6.80%
Normal Cost Rate	14.96%	15.0%
UAL Contribution	$27,487	$34,000

- Without investment gains (returns higher than 6.8%) in FY 2024-25 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 2023-24.
- The Pension Outlook Tool can be used to model projected contributions for these scenarios beyond FY 2026-27 as well as to model other investment return scenarios.

Discount Rate Sensitivity

The discount rate assumption is calculated as the sum of the assumed real rate of return and the assumed annual price inflation, currently 4.5% and 2.3%, respectively. Changing either the price inflation assumption or the real rate of return assumption will change the discount rate. The sensitivity of the valuation results to the discount rate assumption depends on which component of the discount rate is changed. Shown below are various valuation results as of June 30, 2023, assuming alternate discount rates by changing the two components independently. Results are shown using the current discount rate of 6.8% as well as alternate discount rates of 5.8% and 7.8%. The rates of 5.8% and 7.8% were selected since they illustrate the impact of a 1.0% increase or decrease to the 6.8% assumption.

Sensitivity to the Real Rate of Return Assumption

As of June 30, 2023	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	37.08%	29.46%	23.70%
b) Accrued Liability	$2,851,855	$2,281,357	$1,858,556
c) Market Value of Assets	$1,987,482	$1,987,482	$1,987,482
d) Unfunded Liability/(Surplus) [(b) - (c)]	$864,373	$293,875	($128,926)
e) Funded Ratio	69.7%	87.1%	106.9%

Sensitivity to the Price Inflation Assumption

As of June 30, 2023	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	31.12%	29.46%	26.62%
b) Accrued Liability	$2,408,280	$2,281,357	$2,065,108
c) Market Value of Assets	$1,987,482	$1,987,482	$1,987,482
d) Unfunded Liability/(Surplus) [(b) - (c)]	$420,798	$293,875	$77,626
e) Funded Ratio	82.5%	87.1%	96.2%

Mortality Rate Sensitivity

The following table looks at the change in the June 30, 2023, plan costs and funded status 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, 2023	10% Lower Mortality Rates	Current Assumptions	10% Higher Mortality Rates
a) Total Normal Cost	29.85%	29.46%	29.10%
b) Accrued Liability	$2,305,919	$2,281,357	$2,258,443
c) Market Value of Assets	$1,987,482	$1,987,482	$1,987,482
d) Unfunded Liability/(Surplus) [(b) - (c)]	$318,437	$293,875	$270,961
e) Funded Ratio	86.2%	87.1%	88.0%

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.

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

Ratio of Retiree Accrued Liability to Total Accrued Liability	June 30, 2022	June 30, 2023
1. Retiree Accrued Liability	$356,618	$361,931
2. Total Accrued Liability	$1,724,746	$2,281,357
3. Ratio of Retiree AL to Total AL [(1) ÷ (2)]	21%	16%

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

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

For comparison, the support ratio for all CalPERS public agency plans as of June 30, 2022, was 0.77 and was calculated consistently with how it is for the individual rate plan. Note that to calculate the support ratio for all public agency plans, a retiree with service from more than one CalPERS agency is counted as a retiree more than once.

Support Ratio	June 30, 2022	June 30, 2023
1. Number of Actives	16	16
2. Number of Retirees	1	1
3. Support Ratio [(1) ÷ (2)]	16.00	16.00

Maturity Measures (continued)

The actuarial calculations supplied in this communication are based on various assumptions about long-term demographic and economic behavior. Unless these assumptions (e.g., terminations, deaths, disabilities, retirements, salary 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

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 an AVR of 8 may experience twice the contribution volatility due to investment return volatility than a plan with an AVR of 4. It should be noted that this ratio is a measure of the current situation. It increases over time but generally tends to stabilize as a plan matures.

Liability Volatility Ratio

Also shown in the table below is the liability volatility ratio (LVR), which is the ratio of accrued liability to payroll. Plans that have a higher LVR experience more volatile employer contributions (as a percentage of payroll) due to changes in liability. For example, a plan with an LVR of 8 is expected to have twice the contribution volatility of a plan with an 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, 2022	June 30, 2023
1. Market Value of Assets	$1,511,398	$1,987,482
2. Payroll	$1,969,511	$2,036,941
3. Asset Volatility Ratio (AVR) [(1) ÷ (2)]	0.8	1.0
4. Accrued Liability	$1,724,746	$2,281,357
5. Liability Volatility Ratio (LVR) [(4) ÷ (2)]	0.9	1.1

Maturity Measures History

Valuation Date	Ratio of Retiree Accrued Liability to Total Accrued Liability	Support Ratio	Asset Volatility Ratio	Liability Volatility Ratio
06/30/2017	0%	N/A	0.5	0.5
06/30/2018	0%	N/A	0.6	0.6
06/30/2019	0%	N/A	0.6	0.7
06/30/2020	0%	N/A	0.8	0.9
06/30/2021	0%	N/A	0.9	0.8
06/30/2022	21%	16.00	0.8	0.9
06/30/2023	16%	16.00	1.0	1.1

Funded Status – Termination Basis

The funded status measured on a termination basis is an estimate of the financial position of the plan had the contract with CalPERS been terminated as of June 30, 2023. The accrued liability on a termination basis (termination liability) is calculated differently from the plan's ongoing funding liability. For the termination liability calculation, both compensation and service are frozen as of the valuation date and no future pay increases or service accruals are assumed. This measure of funded status is not appropriate for assessing the need for future employer contributions in the case of an ongoing plan, that is, for an employer that continues to provide CalPERS retirement benefits to active employees. Unlike the actuarial cost method used for ongoing plans, the termination liability is the present value of the benefits earned through the valuation date.

A more conservative investment policy and asset allocation strategy was adopted by the board for the Terminated Agency Pool. The Terminated Agency Pool has limited funding sources since no future employer contributions will be made. Therefore, expected benefit payments are secured by risk-free assets and benefit security for members is increased while limiting the funding risk. However, this asset allocation has a lower expected rate of return than the remainder of the PERF and consequently, a lower discount rate assumption. The lower discount rate for the Terminated Agency Pool results in higher liabilities for terminated plans.

The discount rate used for actual termination valuations is a weighted average of the 10-year and 30-year Treasury yields where the weights are based on matching asset and liability durations as of the termination date. The discount rates used in the following analysis is based on 20-year Treasury bonds, which is a good proxy for most plans. The discount rate upon contract termination will depend on actual Treasury rates on the date of termination, which varies over time, as shown below.

Valuation Date	20-Year Treasury Rate	Valuation Date	20-Year Treasury Rate
06/30/2014	3.08%	06/30/2019	2.31%
06/30/2015	2.83%	06/30/2020	1.18%
06/30/2016	1.86%	06/30/2021	2.00%
06/30/2017	2.61%	06/30/2022	3.38%
06/30/2018	2.91%	06/30/2023	4.06%

As Treasury rates are variable, the table below shows a range for the termination liability using discount rates 1% below and above the 20-year Treasury rate on the valuation date. The price inflation assumption is the 20-year Treasury breakeven inflation rate, that is, the difference between the 20-year inflation indexed bond and the 20-year fixed-rate bond.

The Market Value of Assets (MVA) also varies with interest rates and will fluctuate depending on other market conditions on the date of termination. Since it is not possible to approximate how the MVA will change in different interest rate environments, the results below use the MVA as of the valuation date.

	Discount Rate: 3.06% Price Inflation: 2.50%	Discount Rate: 5.06% Price Inflation: 2.50%
1. Termination Liability[1]	$4,289,339	$2,552,396
2. Market Value of Assets (MVA)	1,987,482	1,987,482
3. Unfunded Termination Liability [(1) – (2)]	$2,301,857	$564,914
4. Funded Ratio [(2) ÷ (1)]	46.3%	77.9%

[1] The termination liabilities calculated above include a 5% contingency load. The contingency load and other actuarial assumptions can be found in Appendix A of the Section 2 report.

In order to terminate the plan, first contact our Pension Contract Services unit to initiate a Resolution of Intent to Terminate. The completed Resolution will allow a CalPERS actuary to provide a preliminary termination valuation with a more up-to-date estimate of the plan's assets and liabilities. Before beginning this process, please consult with a CalPERS actuary.

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 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 LDROM. 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 LDROM is 4.82%, which is the Standard FTSE Pension Liability Index[1] discount rate as of June 30, 2023, net of assumed administrative expenses.

Selected Measures on a Low-Default-Risk Basis	**June 30, 2023**
Discount Rate	4.82%
1. Accrued Liability[2] – Low-Default-Risk Basis (LDROM)	
a) Active Members	$2,180,492
b) Transferred Members	883,362
c) Separated Members	68,516
d) Members and Beneficiaries Receiving Payments	480,903
e) Total	$3,613,273
2. Market Value of Assets (MVA)	1,987,482
3. Unfunded Accrued Liability – Low-Default-Risk Basis [(1e) – (2)]	$1,625,791
4. Unfunded Accrued Liability – Funding Policy Basis	293,875
5. Present Value of Unearned Investment Risk Premium [(3) – (4)]	$1,331,916

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 sufficiency of plan assets to cover the cost of settling the plan's benefit obligations (see Funded Status – Termination Basis), 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-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 LDROM for a subset of the fund, such as a single rate plan or a group of retirees.

[2] If plan assets were invested entirely in the AA fixed income securities used to determine the discount rate of 4.82%, the CalPERS discount rate could, at various times, be below 4.5% or 5.25%, and some automatic annual retiree COLAs could be suspended (Gov. Code sections 21329 and 21335). Since there is currently no proposal to adopt an asset allocation entirely comprised of fixed income securities, the automatic COLAs have been fully valued in the measures above based on the assumptions used for plan funding. Removing future COLAs from the measurement would understate the statutory obligation.

Summary of Valuation Data

The table below shows a summary of the plan's member data upon which this valuation is based:

	June 30, 2022	June 30, 2023
Active Members		
Counts	16	16
Average Attained Age	30.8	33.4
Average Entry Age to Rate Plan	28.2	31.1
Average Years of Credited Service	2.6	2.6
Average Annual Covered Pay	$123,094	$127,309
Annual Covered Payroll	$1,969,511	$2,036,941
Present Value of Future Payroll	$26,952,975	$26,110,861
Transferred Members	2	4
Separated Members	2	3
Retired Members and Beneficiaries*		
Counts	1	1
Average Annual Benefits	$20,542	$20,662
Total Annual Benefits	$20,542	$20,662

Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double counting of liabilities.

* Values include community property settlements.

List of Class 1 Benefit Provisions

This plan has the following Class 1 Benefit Provisions:

- Post-Retirement Survivor Allowance (PRSA)

Plan's Major Benefit Options

Shown below is a summary of the major optional benefits for which the agency has contracted. A description of principal standard and optional plan provisions is in Section 2.

	Benefit Group	
Member Category	**Police**	
Demographics		
Actives	Yes	
Transfers/Separated	Yes	
Receiving	Yes	
Benefit Provision		
Benefit Formula	2.7% @ 57	
Social Security Coverage	No	
Full/Modified	Full	
Employee Contribution Rate	14.50%	
Final Average Compensation Period	Three Year	
Sick Leave Credit	Yes	
Non-Industrial Disability	Standard	
Industrial Disability	Standard	
Pre-Retirement Death Benefits		
Optional Settlement 2	Yes	
1959 Survivor Benefit Level	Level 4	
Special	Yes	
Alternate (firefighters)	No	
Post-Retirement Death Benefits		
Lump Sum	$2,000	
Survivor Allowance (PRSA)	Yes	
COLA	2%	

Section 2

California Public Employees' Retirement System

Risk Pool Actuarial Valuation Information

Section 2 may be found on the
CalPERS website (www.calpers.ca.gov)
in the Forms & Publications section