



**TOWN OF LOS GATOS
SPECIAL MEETING OF THE TOWN PENSION AND OPEB
TRUSTS OVERSIGHT COMMITTEE AGENDA
DECEMBER 20, 2022
110 EAST MAIN STREET AND TELECONFERENCE
TOWN COUNCIL CHAMBERS
6:15 P.M.**

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

PARTICIPATION IN THE PUBLIC PROCESS

How to participate: The Town of Los Gatos strongly encourages your active participation in the public process, which is the cornerstone of democracy. If you wish to speak to an item on the agenda, please follow the participation instructions on page 2 of this agenda. If you wish to speak to an item NOT on the agenda, you may do so during the “Verbal Communications” period, by following the participation instructions on page 2 of this agenda. The time allocated to speakers may change to better facilitate the Town Council meeting.

Effective Proceedings: The purpose of the Town Council meeting is to conduct the business of the community in an effective and efficient manner. For the benefit of the community, the Town of Los Gatos asks that you follow the Town’s meeting guidelines while attending Town Council meetings and treat everyone with respect and dignity. This is done by following meeting guidelines set forth in State law and in the Town Code. Disruptive conduct is not tolerated, including but not limited to: addressing the Town Council without first being recognized; interrupting speakers, Town Council or Town staff; continuing to speak after the allotted time has expired; failing to relinquish the podium when directed to do so; and repetitiously addressing the same subject.

Deadlines for Public Comment and Presentations are as follows:

- Persons wishing to make an audio/visual presentation on any agenda item must submit the presentation electronically, either in person or via email, to the Clerk’s Office no later than 3:00 p.m. on the day of the Council meeting.
- Persons wishing to submit written comments to be included in the materials provided to Town Council must provide the comments as follows:
 - For inclusion in the regular packet: by 11:00 a.m. the Thursday before the Council meeting
 - For inclusion in any Addendum: by 11:00 a.m. the Monday before the Council meeting
 - For inclusion in any Desk Item: by 11:00 a.m. on the day of the Council Meeting

Town Council Meetings Broadcast Live on KCAT, Channel 15 (on Comcast) on the 1st and 3rd Tuesdays at 7:00 p.m.

Rebroadcast of Town Council Meetings on the 2nd and 4th Tuesdays at 7:00 p.m.

Live & Archived Council Meetings can be viewed by going to:

www.LosGatosCA.gov/TownYouTube

IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT, IF YOU NEED SPECIAL ASSISTANCE TO PARTICIPATE IN THIS MEETING, PLEASE CONTACT THE CLERK DEPARTMENT AT (408) 354-6834. NOTIFICATION 48 HOURS BEFORE THE MEETING WILL ENABLE THE TOWN TO MAKE REASONABLE ARRANGEMENTS TO ENSURE ACCESSIBILITY TO THIS MEETING [28 CFR §35.102-35.104]

**TOWN OF LOS GATOS
SPECIAL MEETING OF THE TOWN PENSION AND OPEB TRUSTS OVERSIGHT
COMMITTEE AGENDA
DECEMBER 20, 2022
110 EAST MAIN STREET AND TELECONFERENCE
TOWN COUNCIL CHAMBERS
6:15 PM**

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 the Zoom webinar application (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.

PARTICIPATION

To provide oral comments in real-time during the meeting:

- **Zoom webinar:** Join from a PC, Mac, iPad, iPhone or Android device: Please click this URL to join: <https://losgatosca.gov.zoom.us/j/86848726681?pwd=djlxUS9pVmpMUmtzWE5Yc1FDa2dWQT09>
Passcode: 587955 You can also type in 868 4872 6681 and Passcode: 587955 in the “Join a Meeting” page on the Zoom website at <https://zoom.us/join>.
- **Join by telephone:** Join by Telephone: Dial: USA 877 336 1839 US Toll-free or 636 651 0008 US Toll. Conference code: 686100
 - If you are participating by calling in, press #2 on your telephone keypad to raise your hand.
- **In-Person:** If you wish to speak during the meeting, please complete a “speaker’s card” located on the back of the chamber benches and return it to the Town Clerk. If you wish to speak to an item on the agenda, please list the item number. If you wish to speak on an item NOT on the agenda, please list the subject and you may speak during the “Verbal Communications” period. The time allocated to speakers may change to better facilitate the Town Council meeting.

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

When called to speak, you will be asked to provide your full name and your town/city of residence. This identifying information is optional and not a requirement for participation. Please limit your comments to three (3) minutes, or such other time as the Mayor may decide, consistent with the time limit for speakers at a Council meeting.

If you wish to speak to an item or items on the Consent Calendar, please state which item number(s) you are commenting on at the beginning of your time.

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) or "Verbal Communications – Non-Agenda Item." Comments received by 11:00 a.m. the day of the meeting will be reviewed and distributed before the meeting. All comments received will become part of the record.

RULES OF DECORUM AND CIVILITY

To conduct the business of the community in an effective and efficient manner, please follow the meeting guidelines set forth in the Town Code and State law.

The Town does not tolerate disruptive conduct, which includes but is not limited to:

- addressing the town Council without first being recognized;
- interrupting speakers, Town Council, or Town staff;
- continuing to speak after the allotted time has expired;
- failing to relinquish the microphone when directed to do so;
- repetitiously addressing the same subject.

Town Policy does not allow speakers to cede their commenting time to another speaker. Disruption of the meeting may result in a violation of Penal Code 403.

MEETING CALL TO ORDER

ROLL CALL

PLEDGE OF ALLEGIANCE

CONSENT ITEMS *Items appearing on the Consent Items are considered routine Town business and may be approved by one motion. Any member of the Council 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 2 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 September 20, 2022 Town Pension and OPEB Trust Oversight Committee Meeting.
2. Receive California Employer's Retiree Benefit Trust (CERBT) Strategy 1 Market Value Summary Report for the Period Ending September 30, 2022.
3. Receive California Employer's Pension Prefunding Trust (CEPPT) Strategy Market Value Summary Report for the Period Ending September 30, 2022.

VERBAL COMMUNICATIONS *(Members of the public are welcome to address the Town Council on any matter that is not listed on the agenda. To ensure all agenda items are heard and unless additional time is authorized by the Mayor, this portion of the agenda is limited to 30 minutes and no more than three (3) minutes per speaker. In the event additional speakers were not able*

to be heard during the initial Verbal Communications portion of the agenda, an additional Verbal Communications will be opened prior to adjournment.)

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

- [4.](#) Adopt Proposed Revisions to the Town of Los Gatos IRS Section 115 Pension Trust and Other Post-Employment Benefits (OPEB) Investment Policy As Recommended by the Finance Commission.
- [5.](#) Receive CalPERS 2022 Annual Review of Funding Levels and Risks.

ADJOURNMENT *(Council policy is to adjourn no later than midnight unless a majority of Council votes for an extension of time).*

Writings related to an item on the Town Council meeting agenda distributed to members of the Council within 72 hours of the meeting are available for public inspection at the front desk of the Los Gatos Town Library, located at 100 Villa Avenue, and are also available for review on the official Town of Los Gatos website. Copies of desk items distributed to members of the Council at the meeting are available for review in the Town Council Chambers.

Note: The Town of Los Gatos has adopted the provisions of Code of Civil Procedure §1094.6; litigation challenging a decision of the Town Council must be brought within 90 days after the decision is announced unless a shorter time is required by State or Federal law.



**TOWN OF LOS GATOS
PENSION AND OPEB TRUST
OVERSIGHT COMMITTEE
REPORT**

MEETING DATE: 12/20/2022

ITEM NO: 1

**DRAFT
Minutes of the Pension and OPEB Trust Oversight Committee Meeting
September 20, 2022**

The Pension and OPEB Trust Oversight Committee of the Town of Los Gatos conducted a regular Meeting utilizing teleconference and electronic means consistent with Government Code Section 54953, as Amended by Assembly Bill 361, in response to the state of emergency relating to COVID-19 and enabling teleconferencing accommodations by suspending or waiving specified provisions in the Ralph M. Brown Act (Government Code § 54950 et seq.) and Town of Los Gatos Resolution 2021-044 on September 20, 2022 at 6:00 p.m.

MEETING CALLED TO ORDER AT 6:00 P.M.

ROLL CALL

Present: Mayor Rob Rennie, Vice Mayor Maria Ristow, Council Member Mary Badame, Council Member Marico Sayoc (all participating remotely).

Absent: Council Member Matthew Hudes.

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

1. Approve Minutes of the Pension and OPEB Trusts Oversight Committee Meeting of June 21, 2022.
2. Receive California Employer's Retiree Benefit Trust (CERBT) Strategy 1 Market Value Summary Report for the Period Ending June 30, 2022.
3. Receive California Employer's Pension Prefunding Trust (CEPPT) Strategy Market Value Summary Report for the Period Ending June 30, 2022.
4. Receive CalPERS Public Employees' Retirement Fund (PERF) Preliminary Performance Report as June 30, 2022.

MOTION: Motion by Council Member Badame to approve the Consent Items 1 - 4. Seconded by Vice Mayor Ristow.

VOTE: Motion passed 4-0-1. Council Member Hudes absent.

VERBAL COMMUNICATIONS

None.

PAGE 2 OF 2

SUBJECT: Draft Minutes of the Pension and OPEB Trust Oversight Committee Meeting of
September 20, 2022

DATE: November 3, 2022

OTHER BUSINESS

5. Receive the Town of Los Gatos Retiree Healthcare Plan June 30, 2021 Actuarial Valuation and Adopt its Assumptions as Prepared and Recommended by Bartel Associates, LLC.

Arn Andrews, Assistant Town Manager, and Mary Beth Redding, from Bartel Associates, presented the staff report and Actuarial Valuation.

Opened Public Comment.

No one spoke.

Closed Public Comment.

Council discussed the item.

MOTION: Motion by Vice Mayor Ristow to adopt the assumptions as prepared and recommended by Bartel Associates for the Los Gatos Retiree Health Care Plan June 30, 2021 actuarial valuation changing the discount rate from 6 ¾ to 6 ¼ percent.
Seconded by Council Member Sayoc.

VOTE: Motion passes 4-0-1. Council Member Hudes absent.

6. Receive CalPERS Actuarial Valuation Reports as of June 30, 2021.

Arn Andrews, Assistant Town Manager, presented the staff report.

Opened Public Comment.

No one spoke.

Closed Public Comment.

Council discussed the item and received the report.

ADJOURNMENT

The meeting adjourned at 6:29 p.m.

Attest:

Jenna De Long, Deputy Clerk



TOWN OF LOS GATOS
TOWN PENSION AND OPEB TRUSTS
OVERSIGHT COMMITTEE REPORT

MEETING DATE: 12/20/2022

ITEM NO: 2

DATE: November 23, 2022
TO: Town Pension and OPEB Trusts Oversight Committee
FROM: Laurel Prevetti, Town Manager
SUBJECT: Receive California Employer's Retiree Benefit Trust (CERBT) Strategy 1 Market Value Summary Report for the Period Ending September 30, 2022

RECOMMENDATION:

Receive California Employer's Retiree Benefit Trust (CERBT) Strategy 1 Market Value Summary Report for the Period Ending September 30, 2022.

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 September 30, 2022, was \$21,197,608 compared to \$22,861,333 as of June 30, 2022 (Attachment 1). As of October 31, 2022, the CERBT Strategy 1 fund had a net return of 3.31% for the month and -4.21% for the Fiscal YTD (Attachment 2). These documents will be provided to the Finance Commission at its regular December meeting.

Attachments:

1. OPEB 115 Trust Market Value Summary
2. CERBT Performance Report October 2022

PREPARED BY: Arn Andrews
Assistant Town Manager

Reviewed by: Town Manager, Town Attorney, and Finance Director



Market Value Summary:

	QTD Current Period	Fiscal Year to Date
Beginning Balance	\$22,861,333.23	\$22,861,333.23
Contribution	0.00	0.00
Disbursement	0.00	0.00
Transfer In	0.00	0.00
Transfer Out	0.00	0.00
Investment Earnings	(1,658,721.76)	(1,658,721.76)
Administrative Expenses	(2,890.35)	(2,890.35)
Investment Expense	(2,113.29)	(2,113.29)
Other	0.00	0.00
Ending Balance	\$21,197,607.83	\$21,197,607.83
FY End Contrib per GASB 74 Para 22	0.00	0.00
FY End Disbursement Accrual	0.00	0.00
Grand Total	\$21,197,607.83	\$21,197,607.83

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	19.234593	19.234593
Period Ending Unit Value	17.834803	17.834803

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.

Statement of Transaction Detail for the Quarter Ending 09/30/2022

Town of Los Gatos

Entity #: SKB0-4589482285



Date	Description	Amount	Unit Value	Units	Check/Wire	Notes
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Client Contact:
CERBT4U@CalPERS.ca.gov

CERBT Strategy 1

October 31, 2022

**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.

Composition**Asset Class Allocations and Benchmarks**

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

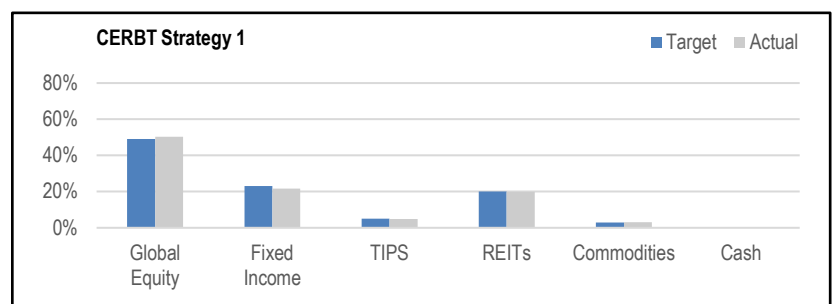
Asset Class	Target Allocation	Target Range	Benchmark
Global Equity	49%	± 5%	MSCI All Country World Index IMI (Net)
Fixed Income	23%	± 5%	Bloomberg Long Liability Index
Treasury Inflation-Protected Securities ("TIPS")	5%	± 3%	Bloomberg US TIPS Index, Series L
Real Estate Investment Trusts ("REITs")	20%	± 5%	FTSE EPRA/NAREIT Developed Index (Net)
Commodities	3%	± 3%	S&P GSCI Total Return Index
Cash	-	+ 2%	91-Day Treasury Bill

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.

**Assets Under Management**

As of the specified reporting month-end:

CERBT Strategy 1	Annual Operating Ratio
\$12,516,618,331	0.10%

CERBT Strategy 1 Performance as of October 31, 2022

	1 Month	3 Months	Fiscal YTD	1 Year	3 Years*	5 Years*	10 Years*	Since Inception* (June 1, 2007)
Gross Return ^{1,3}	3.32%	-9.58%	-4.18%	-19.64%	2.05%	3.66%	5.82%	4.46%
Net Return ^{2,3}	3.31%	-9.60%	-4.21%	-19.71%	1.97%	3.57%	5.72%	4.38%
Benchmark Returns	3.31%	-9.54%	-4.18%	-19.79%	1.81%	3.40%	5.48%	4.06%
Standard Deviation ⁴	-	-	-	-	15.17%	12.99%	10.44%	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 Returns 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.

CERBT Strategy 1

October 31, 2022



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.

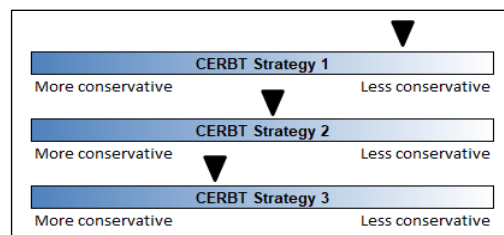
Fund Performance

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	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%





TOWN OF LOS GATOS
TOWN PENSION AND OPEB TRUSTS
OVERSIGHT COMMITTEE REPORT

MEETING DATE: 12/20/2022

ITEM NO: 3

DATE: November 23, 2022
TO: Town Pension and OPEB Trusts Oversight Committee
FROM: Laurel Prevetti, Town Manager
SUBJECT: Receive California Employer's Pension Prefunding Trust (CEPPT) Strategy
Market Value Summary Report for the Period Ending September 30, 2022

RECOMMENDATION:

Receive California Employer's Pension Prefunding Trust (CEPPT) Strategy 2 Market Value Summary Report for the period ending September 30, 2022.

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:

On April 14, 2021, the remaining CEPPT balance at the time of approximately \$700,000 was liquidated for inclusion in a \$2,050,942 additional discretionary payment. The CEPPT account continues to be maintained by the Town (at no cost) to accommodate annual account distributions associated with the Town's General Fund Reserve Policy.

Effective Fiscal Year (FY) 2015/16, Council determined if sufficient General Fund year-end savings are available and targeted reserve levels for the Catastrophic Reserve and Budget

PREPARED BY: Arn Andrews
Assistant Town Manager

Reviewed by: Town Manager, Town Attorney, and Finance Director

DISCUSSION (continued):

Stabilization Reserve have been met, upon final close of the fiscal year, a minimum of \$300,000 annually shall be deposited into the Pension/OPEB Reserve Fund. In addition, in 2018 the Council updated the General Fund Reserve Policy to provide for additional discretionary payments (ADPs) of \$400,000 per year to address the unfunded pension liability. Under the updated Policy, a 20-year amortization equivalence will be achieved.

Since the last distribution in 2021, the ending CEPPT 115 Trust account balance as of September 30, 2022, was \$638,355 (Attachment 1). As of October 31, 2022, the CEPPT Strategy 2 fund had a net return of 0.86% for the month and -4.78% for the Fiscal YTD (Attachment 2). Per prior Oversight Committee direction, staff will consult with the Town's actuary and the Finance Commission, and return to the Oversight Committee with a recommended amortization base for an ADP.

Attachments:

1. CEPPT Market Value Summary
2. CEPPT Performance October 2022



Market Value Summary:

	QTD Current Period	Fiscal Year to Date
Beginning Balance	\$676,150.03	\$676,150.03
Contribution	0.00	0.00
Disbursement	0.00	0.00
Transfer In	0.00	0.00
Transfer Out	0.00	0.00
Investment Earnings	(37,400.73)	(37,400.73)
Administrative Expenses	(260.01)	(260.01)
Investment Expense	(134.21)	(134.21)
Other	0.00	0.00
Ending Balance	\$638,355.08	\$638,355.08
FY End Contribution Accrual	0.00	0.00
FY End Disbursement Accrual	0.00	0.00
Grand Total	\$638,355.08	\$638,355.08

Unit Value Summary:

	QTD Current Period	Fiscal Year to Date
Beginning Units	68,400.224	68,400.224
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	68,400.224	68,400.224
Period Beginning Unit Value	9.885202	9.885202
Period Ending Unit Value	9.332646	9.332646

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.

Statement of Transaction Detail for the Quarter Ending 09/30/2022

Town of Los Gatos

Entity #: SKHE-4589482285-501P



Date	Description	Amount	Unit Value	Units	Check/Wire	Notes
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CEPPT Strategy 2

October 31, 2022



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.

Composition

Asset Class Allocations and Benchmarks

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

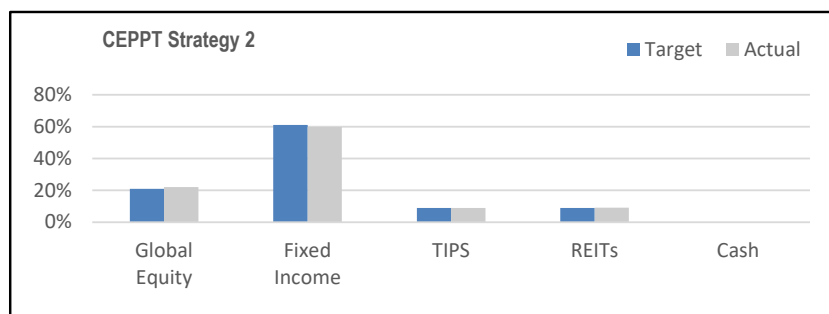
Asset Class	Target Allocation	Target Range	Benchmark
Global Equity	21%	± 5%	MSCI All Country World Index IMI (Net)
Fixed Income	61%	± 5%	Bloomberg US Aggregate Bond Index
Treasury Inflation-Protected Securities ("TIPS")	9%	± 3%	Bloomberg US TIPS Index, Series L
Real Estate Investment Trusts ("REITs")	9%	± 5%	FTSE EPRA/NAREIT Developed Index (Net)
Cash	-	+ 2%	91-Day Treasury Bill

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.



Assets Under Management

As of the specified reporting month-end:

CEPPT Strategy 2	Annual Expense Ratio
\$25,685,433	0.25%

CEPPT Strategy 2 Performance as of October 31, 2022

	1 Month	3 Months	Fiscal YTD	1 Year	3 Years*	5 Years*	10 Years*	Since Inception* (January 1, 2020)
Gross Return ^{1,3}	0.88%	-8.05%	-4.71%	-16.05%	-	-	-	-2.11%
Net Return ^{2,3}	0.86%	-8.10%	-4.78%	-16.24%	-	-	-	-2.33%
Benchmark Return	0.88%	-8.09%	-4.75%	-16.16%	-	-	-	-2.24%
Standard Deviation ⁴	-	-	-	-	-	-	-	-

* 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.

CEPPT Strategy 2



October 31, 2022

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.

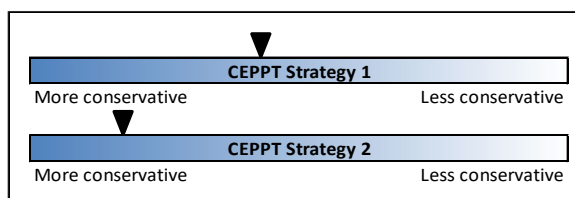
Fund Performance

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: 12/20/2022

ITEM NO: 4

DATE: November 23, 2022
TO: Town Pension and OPEB Trusts Oversight Committee
FROM: Laurel Prevetti, Town Manager
SUBJECT: Adopt Proposed Revisions to the Town of Los Gatos IRS Section 115 Pension Trust and Other Post-Employment Benefits (OPEB) Investment Policy As Recommended by the Finance Commission

RECOMMENDATION:

Adopt proposed revisions to the Town of Los Gatos IRS Section 115 Pension Trust and OPEB Investment Policy as recommended by the Finance Commission.

BACKGROUND:

At its November 7, 2017 meeting, the Town Council reviewed and discussed the IRS Section 115 Trust governance. At the conclusion of the meeting, the Town Council established the Town Council as an Oversight Committee for the Town of Los Gatos IRS Section 115 Pension Trust and Other Post-Employment Benefits (OPEB) Trust and adopted an Investment Policy for the Trusts.

At its December 18, 2018 meeting, the Town Pension and OPEB Trusts Oversight Committee adopted revisions to the Investment Policy to reflect that the “purpose” of the 115 pension funds is for “long-term capital accumulation and appreciation, additional discretionary payments (ADPs), and pension contribution management strategies. “

At its December 3, 2019 meeting, the Town Pension and OPEB Trusts Oversight Committee adopted revisions to the Investment Policy to include simplifying the Title of the Investment Policy, acknowledging the closure of the PARS 115 pension trust, identifying the Town’s participation in the CalPERS California Employers’ Pension Prefunding Trust (CEPPT), and stating that the OPEB actuarial valuations occur biennially.

PREPARED BY: Arn Andrews
Assistant Town Manager

Reviewed by: Town Manager, Town Attorney, and Finance Director

DISCUSSION:

At the September 12, 2022 Finance Commission meeting, Commissioners discussed potentially developing a policy for when it would be appropriate to utilize assets in the OPEB 115 Trust. Commissioners asked staff to review options and present a recommendation to the Commission.

On November 14, 2022, staff provided the Finance Commission with recommended updates to the Town of Los Gatos IRS Section 115 Pension Trust and OPEB Investment Policy. Similar to earlier deliberations regarding the appropriate use of assets in the Pension 115 Trust, staff recommended that OPEB asset utilization is best addressed by updating the Town of Los Gatos IRS Section 115 Pension Trust and OPEB Trust Investment Policy.

The proposed revisions to the Investment Policy (Attachment 1) address that the California Employers' Retiree Benefit Trust (CERBT) is the sole source of assets for funding OPEB liabilities and introduces reimbursing the Town for Other Post-Employment Benefits pay-as-you-go expenses as an eligible use.

Actual execution of this policy update would be achieved through consultation with the Town actuary and review by the Finance Commission consistent with the adoption and execution of additional discretionary payments (ADP) to the pension plans.

CONCLUSION:




The Council Finance Commission recommended revisions to the Investment Policy to clarify that the CERBT is the sole source of assets for funding OPEB liabilities and introduce reimbursing the Town for Other Post-Employment Benefits pay-as-you-go expenses as an eligible use.

COORDINATION:

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

Attachments:

1. Town of Los Gatos IRS Section 115 Pension Trust and OPEB Trust Investment Policy (redline)

		
TITLE: Town of Los Gatos IRS Section 115 Pension Trust and OPEB Trust Investment Policy		POLICY NUMBER: 4-04
EFFECTIVE DATE: 11/7/17		PAGES: 3
ENABLING ACTIONS: 2017-062		REVISED DATES: 12/18/2018; 12/03/2019
APPROVED:		

PURPOSE

The Town of Los Gatos (the "Town") has established IRS Section 115 Trusts for both pension and other post-employment benefits (OPEB). The Pension Trust is administered by the CalPERS California Employers' Pension Prefunding Trust (the "CEPPT") and the OPEB trust is administered by the California Employers' Retiree Benefit Trust (the "CERBT"), collectively the "115 Trusts". The 115 Trusts provide for funding of pension, retiree health and other post-employment benefits for the City's eligible retirees.

The CEPPT acts as an additional investment vehicle for the overall funding of pension liabilities associated with the Town's Miscellaneous and Safety Pension Plans (the "Pension Plans"). Funds in the 115 Pension Trust may be used for long-term capital accumulation and appreciation, additional discretionary payments (ADPs), and pension contribution management strategies.

The CERBT is the single investment vehicle for the Town's OPEB Plan ("OPEB Plan") **and the sole source of assets for the overall funding of OPEB liabilities. As such, the primary objective of the OPEB trust is to prefund the Town's obligations for postemployment benefits other than pensions. Funds in the 115 OPEB Trust may be used for reimbursing the Town for Other Post-Employment Benefits pay-as-you-go expenses.**

The Town has established the 115 Trusts Oversight Committee (the "Oversight Committee") to oversee the assets of the 115 Trusts and to perform the duties and responsibilities set forth in this Investment Policy (IP).

COMPOSITION

The membership of the Oversight Committee is composed of the entire Town Council.

FIDUCIARY DUTIES AND RESPONSIBILITIES

1. The Oversight Committee has exclusive control of the investments of the 115 Trusts. The Oversight Committee will manage the funds under the Trusts:
 - a) solely in the interest of, and for the exclusive purposes of providing for funding of benefits for participants and their beneficiaries, minimizing employer contributions thereto, and defraying reasonable expenses of administering the Trusts;

TITLE: Town of Los Gatos IRS Section 115 Pension Trust and OPEB Trust Investment Policy	PAGE: 2 of 3	POLICY NUMBER: 4-04
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- b) with the care, skill, prudence and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims; and
 - c) by diversifying the investments of the Trusts so as to minimize the risk of loss and to maximize the rate of return, unless under the circumstances it is clearly prudent not to do so.
- 2. The work of the Oversight Committee shall be consistent with written statement of Investment Policy (i.e., this Investment Policy for the Trusts). At least once every three years, the Oversight Committee will evaluate the appropriateness of the Investment Policy and, based on such evaluation, either confirm the tenets of the Investment Policy as then in effect, or amend the 115 Trusts Investment Policy as appropriate. The Investment Policy must include the following:
 - a) document investment objectives, performance expectations and investment guidelines for assets under the Trusts;
 - b) establish an appropriate investment strategy for managing all assets under the Trusts, including an investment time horizon, risk tolerance ranges and asset allocation to provide sufficient diversification and overall return over the long-term time horizon of the Trusts; and
 - d) establish periodic performance reporting requirements that will effectively monitor investment results and ensure that the investment policy is being followed.

INVESTMENT OBJECTIVES

- 1. The primary objective of the 115 Trusts investment portfolios is to satisfy the Pension Plans and OPEB Plan obligations to pay benefits to members and their beneficiaries. To do so, the 115 Trusts will seek to achieve long-term net returns in excess of the actuarial investment return assumption while maintaining a reasonable level of investment risk.
- 2. The funds will be managed as an ongoing concern with a long-term investment horizon, consistent with demographic profile of the members and beneficiaries of the plans.
- 3. A range of risks will be managed in connection with the trusts, with an emphasis on the following:
 - a) The impact of the investment decisions on the funded status of the plans and the resulting volatility of contributions.
 - b) Risk of loss of plan assets.
- 4. In determining the investment strategies of the 115 Trusts, various factors will be considered including, but not limited to:
 - a) The structure and duration of the Pension Plans and OPEB Plan liabilities.
 - b) Modern Portfolio Theory.
 - c) The liquidity needs of Pension Plans and OPEB Plan.

TITLE: Town of Los Gatos IRS Section 115 Pension Trust and OPEB Trust Investment Policy	PAGE: 3 of 3	POLICY NUMBER: 4-04
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INVESTMENT STRATEGY/ASSET ALLOCATION

The Oversight Committee has delegated the investment management function to third parties. These third parties offer multiple asset allocation options with varying degrees of risk return profiles. The Oversight Committee has the sole discretion to select the asset allocation which best aligns with the aforementioned fiduciary standards and investment objectives.

The Oversight Committee will review the selected asset allocations annually. However, the Oversight Committee can review the current asset allocation selections at any time in light of market conditions.

MONITORING AND REPORTING

1. Monitor the 115 Trusts investment managers on an ongoing basis and may be terminated by Oversight Committee at any time due to performance or other developments that call into question the investment manager's ability to continue to effectively manage assets of the 115 Trusts.
2. Review and assess the performance of any Investment Manager(s) appointed by the Oversight Committee to perform services related to the Trusts quarterly.
3. Measure and evaluate the annual and quarterly performance of investment managers relative to appropriate long-term performance benchmark.
4. Measure and evaluate annual and quarterly fees.
5. Review quarterly cash flow statements associated with the Trusts.
6. Review the actuarial pension evaluation annually.
7. Review the actuarial OPEB evaluation biennially.
8. Monitor compliance with this Investment Policy for the Trusts.

Approved as to Form:

Gabrielle Whelan
Town Attorney



TOWN OF LOS GATOS
TOWN PENSION AND OPEB TRUSTS
OVERSIGHT COMMITTEE REPORT

MEETING DATE: 12/20/2022

ITEM NO: 5

DATE: November 29, 2022
TO: Town Pension and OPEB Trusts Oversight Committee
FROM: Laurel Prevetti, Town Manager
SUBJECT: Receive CalPERS 2022 Annual Review of Funding Levels and Risks

RECOMMENDATION:

Receive CalPERS 2022 Annual Review of Funding Levels and Risks.

BACKGROUND:

Staff routinely monitors items presented to the CalPERS Investment Committee and Board of Administration. While the Town has no fiduciary control over the investment decisions determined by CalPERS it is prudent as a fiduciary to understand the potential risks, and consequences, inherent in actions taken by CalPERS. Attachment 1 contains the CalPERS 2022 Annual Review of funding levels and risks. This report focuses on:

- Reporting the current funded status of the system,
- Identifying and quantifying investment risks,
- Examining other system risks, such near-term high inflation and the COVID pandemic, and
- Discussing risk mitigating activities for the system and employers

This report is intended to assist the CalPERS Board of Administration, participating employers, and other stakeholders in assessing the soundness and sustainability of the Public Employees' Retirement System for ongoing pension plans. The results presented in this report are based on the June 30, 2021 annual valuations, which have been projected forward to June 30, 2022 based on preliminary investment performance for the year ending June 30, 2022. Staff routinely utilizes information from CalPERS during development of the Proposed Operating Budget, Five-Year Forecast, and other Town financial analysis. The Finance Commission received this same information at its December 12th meeting.

PREPARED BY: Arn Andrews
Assistant Town Manager

Reviewed by: Town Manager, Town Attorney, and Finance Director

DISCUSSION:

Following are items of note identified in the report:

With the lower-than-expected investment returns for Fiscal Year (FY) 2021/22, the funded status of the system is projected to decrease from 81.2% as of June 30, 2021 to an estimated 72% as of June 30, 2022. Employer contribution levels are expected to increase in response to the investment loss for FY 2021/22.

Many CalPERS plans are less than 100% funded as of June 30, 2022. CalPERS believes this is not a significant cause for concern provided employers continue to make the actuarially determined required contributions. The report states there is no specific funded status that indicates a retirement plan and its members are in jeopardy, but states plans that fall below 50% would likely have short-term required contributions that would strain the employer's budget.

CalPERS completed an Asset Liability Management (ALM) process in November 2021 that reviewed updated capital market assumptions and based on that review adopted a revised strategic asset allocation. Based on the ALM results, the discount rate was reduced to 6.8% along with a reduction in the inflation assumption to 2.3% and an increase in the payroll growth assumption to 2.8%.

CalPERS cautions that recent and current increases in the Consumer Price Index (CPI) are expected to have a material impact on the pension liabilities in future actuarial valuation reports for both retirees (due to cost of living increases) and the active members (due to future salary increases). If current inflationary trends continue, CalPERS has determined that required contributions may increase 5%-12% of payroll over the next several years depending on how long the high inflation period lasts and how quickly it returns to Federal Reserve targets.

CalPERS concludes the report with the following observation:

"Over the last few years various external factors have had material impacts on the experience of the Retirement System. While some of the impacts may have led to short-term improvements in the current funding levels of the system, other factors have worsened the funded position and pose additional threats to the system in the future.

"Recent factors that were favorable to the funded status of the system were:

- Significant investment gains during the 2020-21 fiscal year
- Higher than expected mortality likely due to the COVID pandemic

"Factors that were unfavorable to the current funding levels of the system and pose potential future threats are:

- Significant investment losses during the 2021-22 fiscal year
- Financial strain on employers due in part to the COVID pandemic
- High levels of inflation over the last 1-2 years which may persist
- Potential ongoing effects of COVID
- Potential economic downturn in the near-term

DISCUSSION (continued):

- Reduced expectations of future investment returns

“The combined impact of the above factors has the potential to worsen the funded status of the system and result in large increases to required contributions for employers and members. The ability of employers to continue making required contributions to the system is the area of greatest concern.

“While certain external factors are outside of the control of the system, CalPERS and its participating agencies have responded to these risks in a number of positive ways such as:

- The recent adoption of new amortization policies that mitigate the risk of the system dropping to dangerously low funding levels.
- The increased level of additional contributions made by CalPERS agencies.
- The use of a separate 115 trust by many CalPERS agencies for minimizing the risk of required contribution spikes and volatility.
- The adoption of a new investment policy which maintains favorable investment return expectations and associated volatility.
- Improvements in the processes of setting actuarial assumptions which are expected to lead to less volatile contributions rates in the future.
- Improved modeling tools that allow CalPERS and its participating employers to forecast future required contributions and funded status under a variety of possible future scenarios.

“In addition to the actions listed above, we believe the following items should receive a high level of focus going forward.

- Continual focus on the acceptable level of investment risk versus the desire for higher investment returns including the possible impacts of the existing Funding Risk Mitigation Policy.
- Monitor the effectiveness of the current investment policy to ensure desired returns relative to the chosen level of risk.
- Continue the focus on educating participating employers on the risks facing the system and providing tools that enhance their ability to manage these risks.
- Stakeholder outreach regarding employers' ability to make required contributions.

“With the anticipated increases in required employer contributions, due primarily to the investment losses experienced during the 2021-22 fiscal year, combined with current economic difficulties caused by the pandemic, inflation, and turbulent investment markets, some employers will likely have difficulty making required CalPERS contributions over the next several years. In addition, near-term forecasts by investment and economic professionals suggest it may be difficult to achieve a 6.8% investment return in the near-term. This potential for further increases to required employer contributions increases the risk that individual agencies may struggle to make required CalPERS contributions leading to potential contract terminations and possible benefit reductions. While financial necessity policies within the

DISCUSSION (continued):

CalPERS amortization policy can be used in some cases to spread amortization payments over a longer period and hence reduce near-term contributions, these policies require minimum contributions that may still pose challenges for some agencies. In addition, these policies do not reduce costs but merely delay and increase them. CalPERS and its participating employers have taken many positive steps to manage the risks of the system. Continued focus on the risks described in this report, and opportunities to minimize and manage them, will be of utmost importance going forward.”

Attachment:

1. CalPERS 2022 Annual Review of Funding Levels and Risks

California Public Employees' Retirement System

2022 Annual Review of Funding Levels and Risks

November 2022



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Introduction

This report is intended to assist the CalPERS Board of Administration (board), participating employers and other stakeholders in assessing the soundness and sustainability of the Public Employees' Retirement System for ongoing pension plans. It does not address the Terminated Agency Pool or the 1959 Survivor Benefit Program, nor does it address the other systems (Judges' Retirement Systems, Legislators' Retirement System or the non-pension programs) administered by CalPERS.

The results presented in this report are based on the June 30, 2021 annual valuations, which have been projected forward to June 30, 2022 based on preliminary investment performance for the year ending June 30, 2022. Unless stated otherwise, current and projected results in the report are based on a long-term discount rate of 6.80% and the demographic assumptions reflect all changes recommended in the 2021 Experience Study.

The actual results based on the June 30, 2021 valuations are summarized in Appendix A.

This report focuses on:

- Reporting the current funded status of the system
- Identifying and quantifying investment risks
- Examining other system risks, such near-term high inflation and the COVID pandemic
- Discussing risk mitigating activities for the system and employers

Pension and investment beliefs adopted by the board that inform our work on risks and funding include the following:

Pension Belief 5: Funding policies should be applied in a fair, consistent manner, accommodate investment return fluctuations and support rate stability.

Pension Belief 9: Sound understanding, and deployment of enterprise-wide risk management is essential to the ongoing success of a retirement system.

Investment Belief 1: Liabilities must influence the asset structure. More specifically, ensuring the ability to pay promised benefits by maintaining an adequate funding status is the primary measure of success for CalPERS.

Investment Belief 9: Risk to CalPERS is multi-faceted and not fully captured through measures such as volatility or tracking error.

Executive Summary

With the lower-than-expected investment returns for fiscal year (FY) 2021-22, the funded status of the system has decreased from 81.2% as of June 30, 2021 to an estimated 72% as of June 30, 2022. Funded ratios vary somewhat among the different plans, with the plans for miscellaneous members generally having higher funded ratios than plans for safety members.

The recent decrease in funded status has increased the risk that plans will fall to low funding levels. In addition, employer contribution levels are expected to increase in response to the investment loss for fiscal year 2021-22. With the added economic stress due to the Coronavirus pandemic, increased inflation, and the possibility of a recession, the ability of employers to continue making required contributions is an area of concern for the system and its members. However, with few exceptions, employers are currently up to date with their contribution requirements, and many are making additional discretionary payments to improve their funded status and lower their overall costs.

The termination policies and processes currently in place should mitigate risk to the system. However, if an employer is under severe financial stress, the termination policies do not fully protect the benefits of members that have served that employer. Ultimately, the members' benefits are only secure if the employer continues to make the required contributions.

CalPERS completed an Asset Liability Management (ALM) process in November 2021 that reviewed the capital market assumptions and adopted a revised strategic asset allocation. In addition, the discount rate was reduced to 6.8% along with a reduction in the inflation assumption to 2.3% and an increase in the payroll growth assumption to 2.8%. At the same time the Actuarial Office completed its Experience Study to review the demographic experience within the pension system and made minor changes to modify future assumptions where necessary. The most significant change was implementing fully generational mortality assumptions with mortality rates weighted by benefits. This weighting reflects the observed trend of lower mortality rates for wealthier members.

Recent and current increases in the Consumer Price Index (CPI) are expected to have a material impact on the pension liabilities in future actuarial valuation reports for both retirees (due to cost of living increases) and the active members (due to future salary increases). We have determined that required contributions may increase 5%-12% of payroll over the next several years depending on how long the high inflation period lasts and how quickly it returns to Federal Reserve targets.

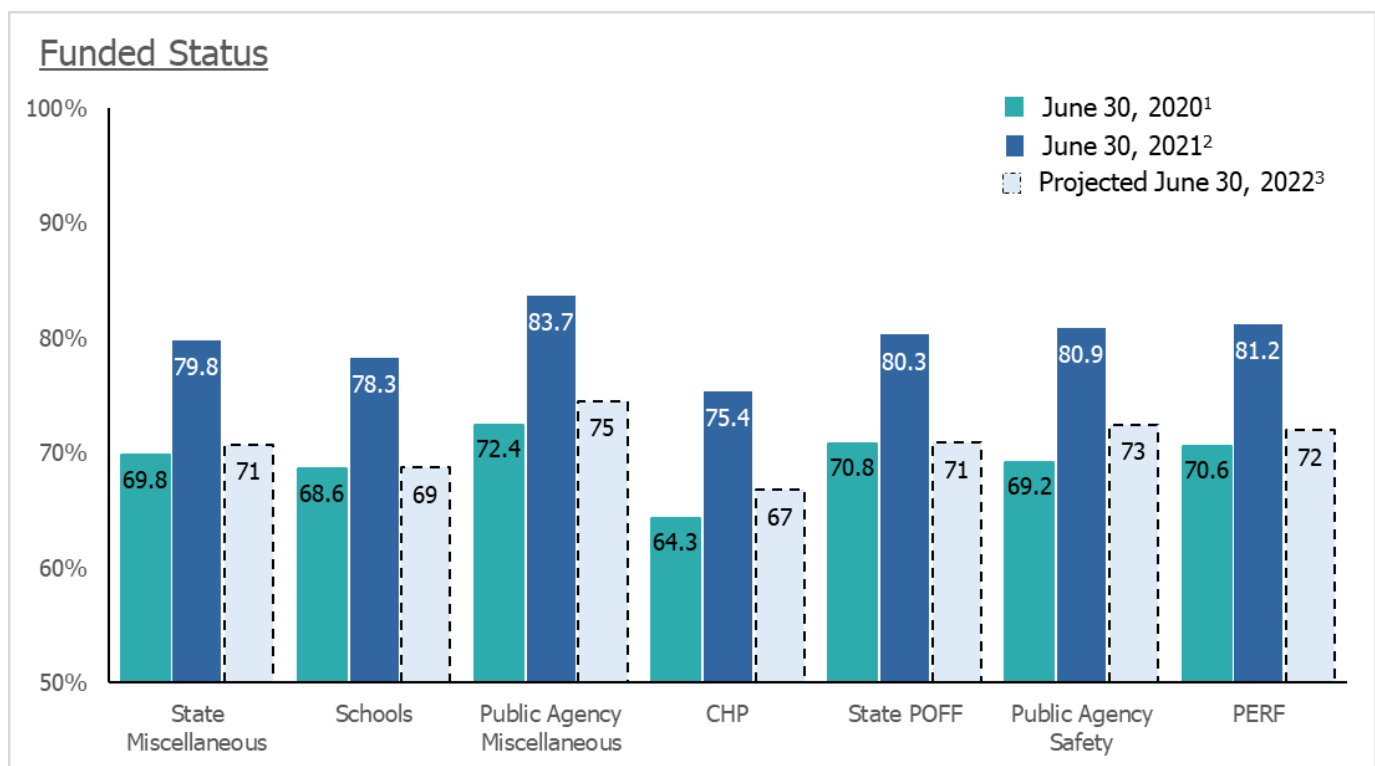
This report illustrates the impact of recent events on the retirement system and projects the possible impacts of various factors that are possible in the future. While there is no immediate concern regarding the system's ability to pay required benefits, the possibility of unfavorable events in the near future, such as high inflation, continued impacts from the Coronavirus pandemic and the possibility of an economic recession, lead to concerns that required employer contributions could rise to levels that would be challenging for employers. Understanding these risks and opportunities to manage them is the main focus of this report.

Funding Levels

The overall level of funding of the system has been quite volatile over the last 2-3 years. Strong investment performance during the fiscal year ending June 30, 2021 significantly improved asset values. However, the following fiscal year ending June 30, 2022 saw decreases in asset values due to the FY 2021-22 poor investment return.

The system is a conglomeration of multiple plans and several risk sharing pools. Each of these pools and the non-pooled plans are funded separately. Over the last two years, many of these individual plans received additional discretionary payments (ADPs) from the sponsoring agencies. As a result, funded statuses for these plans are higher than they would otherwise be.

The chart below shows the funding levels of the various components of the Public Employees' Retirement Fund (PERF) as of June 30, 2020, June 30, 2021, and estimated results as of June 30, 2022. Estimates as of June 30, 2022 were based on preliminary asset values as of June 30, 2022 and liabilities rolled forward from the most recent valuation date of June 30, 2021 to June 30, 2022.



¹June 30, 2020 valuations based on a 7.00% discount rate.

²June 30, 2021 valuations based on a 6.80% discount rate.

³June 30, 2022 projected funded status based on a preliminary investment return of -7.4% for FY 2021-22.

The previous chart shows that the funded status increased significantly between June 30, 2020 and June 30, 2021, and then decreased significantly as of June 30, 2022. Based on the results of the funding valuations as of June 30, 2021, the overall funded ratio of the PERF was about 81% and the estimated PERF funded ratios of June 30, 2022 is 72%. While the favorable and unfavorable returns during these two years both deviated significantly from the expected returns of 7.0% and 6.8% respectively, the returns for both years were within two standard deviations of the expected return. Based on the current allocation of assets, returns that deviate from the expected return by two standard deviations or more are expected to occur about once every 20 years. Therefore, such investment volatility is expected to occur sporadically but not regularly.

The term “funded status” as used in the chart, is the funded portion of the funding target determined annually for each plan in the actuarial valuation process. This funding target reflects all the actuarial assumptions and methods adopted by the Board of Administration. Alternate funding methods and assumptions would yield different funding targets and therefore different funded status results. For example, reflection of a lower assumption for future investment return would lower the current funded status for each CalPERS plan. The Trend Toward Lower Discount Rates section of this report provides funded status results by employee group under alternate assumptions for future investment return (i.e., discount rate).

If an agency elects to terminate its contract with CalPERS, the employer is required to contribute the amount necessary to fully fund the plan. However, for this purpose, the funded status of the plan is determined using different actuarial assumptions and methods. Since the employer will no longer be obligated to make up any shortfalls in investment return (or due to other economic or demographic events), CalPERS funds the terminated agency pool on a much more conservative basis to ensure that the affected members’ benefits are secure. With the funding of terminated plans based on fixed income assets, the termination discount rate depends on actual market rates of return for such assets on the date of termination. Such rates are lower than the ongoing discount rate (currently around 4%) and result in a lower funded status for CalPERS plans. A typical CalPERS plan that is currently 70% funded based on a 6.8% discount rate, would be around 40%-45% funded based on current termination rates. This indicates some additional risk to public agency members, in the form of potential benefit reductions, if their employer were to terminate their plan and be unable to make the required final contribution to fully fund the plan.

Identifying and Quantifying Investment Risks

This section looks at risks to the retirement system and members due to future investment performance by focusing on three key risk considerations:

1. The funded status and probability that it will fall to very low levels
2. The risk of increasing contributions due to lower-than-expected average investment returns
3. The possibility of high contribution increases in a single year due to investment “shocks”

These risks were evaluated in connection with alternate investment scenarios. Other factors can impact the risks of the system but generally not to the same extent as investment returns. However, COVID and high near-term inflation are potentially material risks and are analyzed separately in later sections of the report.

Shared Risk

Member benefits are paid through the combination of CalPERS investment returns, required employer contributions, and member contributions. While there is a legal requirement for the employer to make the full contribution needed to fund the system, in extreme circumstances the employer may be unable to do so. In these situations, the employer’s financial hardship can become a direct risk to the members and their benefits.

The risks borne by the employers (primarily investment risk) can impact their ability to make required CalPERS contributions. Investment and actuarial policies adopted by the board are always adopted with the purpose of maintaining benefit security for members.

By focusing on the risks to the soundness and sustainability to the overall system, CalPERS can take steps to mitigate risks to both members and employers. Ultimately, pensions are a shared responsibility between members and employers.

Risk of Low Funding Levels

When the funded status of a plan is low, the required employer contributions can become quite high. If required contributions exceed the amount that an employer is able to pay, there is a possibility the employer’s CalPERS contract will be terminated which can lead to benefit reductions for members of that plan. Many CalPERS plans are less than 100% funded as of June 30, 2022. This is not a significant cause for concern provided employers continue to make the actuarially determined required contributions. While there is no specific funded status that indicates a retirement plan and its members are in jeopardy, plans that fall below 50% would likely have short-term required contributions that would strain the employer’s budget.

The likelihood that a plan falls below 50% funded in the future can be estimated with "Stochastic Modeling". With this type of modeling, alternate future investment scenarios are used to create projected future funded ratios. The results provided in this section are based on the outcomes of 5,000 alternate investment scenarios for all future years provided by the investment office.

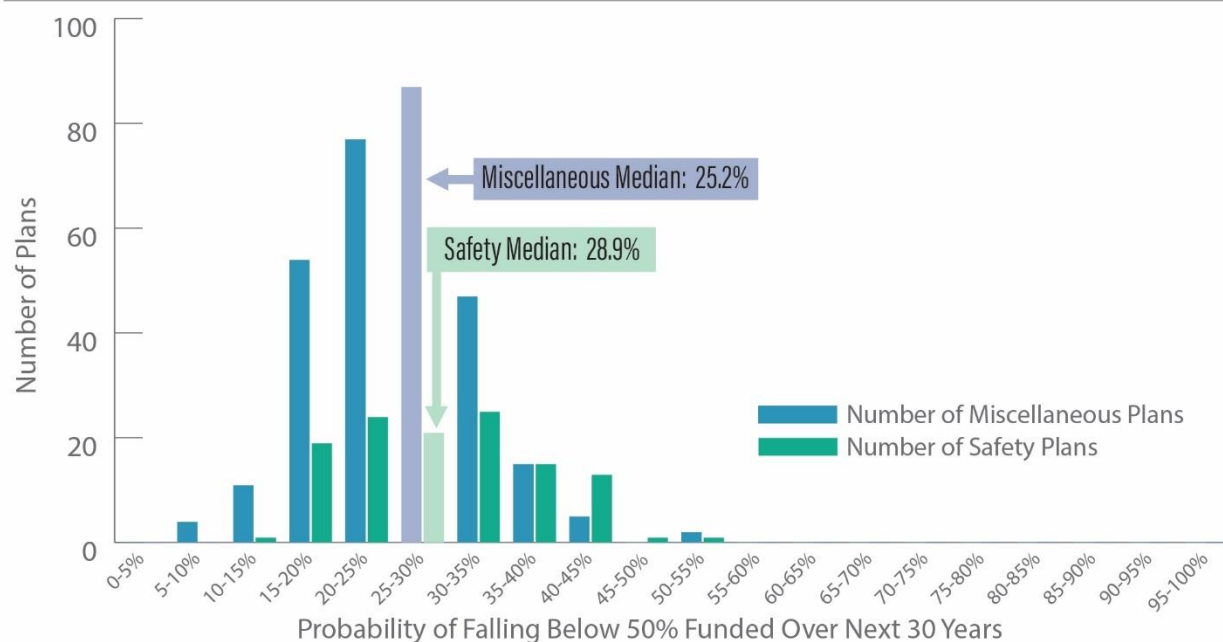
Alternate investment return scenarios were developed based on the expected returns and standard deviations of each of the asset classes in the PERF. Assumed correlations along with a covariance matrix between asset classes are also reflected.

Based on stochastic modeling, the State Miscellaneous Plan has a 23.4% probability of falling below 50% funded at some point over the next 30 years. For the School's Pool, the probability is 24.9%. While many factors contribute to these results, the recent investment loss during the fiscal year ending June 30, 2022 was a primary factor in increases to these percentages. Notably, additional contributions by the state reduced the probability for the State Miscellaneous Plan.

The probability of falling below 50% funded status for CalPERS public agency plans is illustrated in the chart below. The chart shows the numbers of non-pooled plans within various probability ranges of falling below 50% funded. (Pooled plans are expected to have similar results.) For example, 87 miscellaneous plans have a 25%-30% probability of falling below 50% funded over the next 30 years.

Probability of Falling Below 50% Funded (at any point in next 30 years)

Distribution of Non-Pooled Public Agency Plans



Lower Than Expected Average Investment Returns

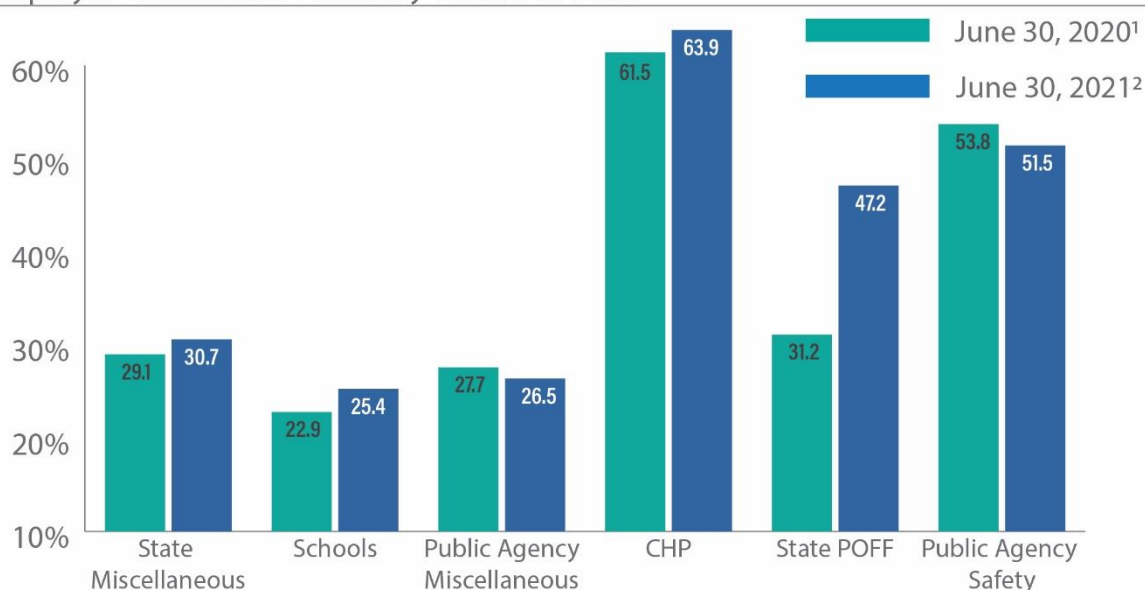
While it is believed that the current investment policy and asset allocation will result in average long-term geometric returns of approximately 6.8%, future average returns may be higher or lower. It is also believed that there is an equal likelihood that long-term average returns will be either greater than or lower than 6.8%. Average future returns of greater than 6.8% pose little risk to the system. However, since required contributions for PEPRA members reflect the current 6.8% assumption, it could be considered that PEPRA members overcontributed if the fund earns greater than 6.8% on a long-term basis.

Returns in any year that are lower than the assumed 6.8% result in increases to employer contributions. High employer contribution rates impose significant financial stress and may increase the risk that employers will default and be unable to make their required contributions. Since future employer contributions are one of the funding sources for the benefit payments, a default by the employer would result in increased risk to the members' benefits. The level of financial stress associated with any particular level of contributions will differ by employer.

Current State

Current contribution levels or average contribution levels for public agency plans are shown in the table below. As shown below, employer contribution levels are relatively high, especially for safety plans. Actions to reduce the probability of low funded status or contribution volatility generally result in increases in the contribution levels. It is difficult to assess just how much strain current contribution levels are putting on employers. However, evidence such as collections activities, inquiries regarding extensions to amortization schedules and information regarding termination procedures indicate that some public agencies may be under significant strain.

Employer Contribution Rates by Valuation Date



1 June 30, 2020 valuations for state plans and the schools pool set FY 2021-22 rates and set FY 2022-23 rates for public agencies.

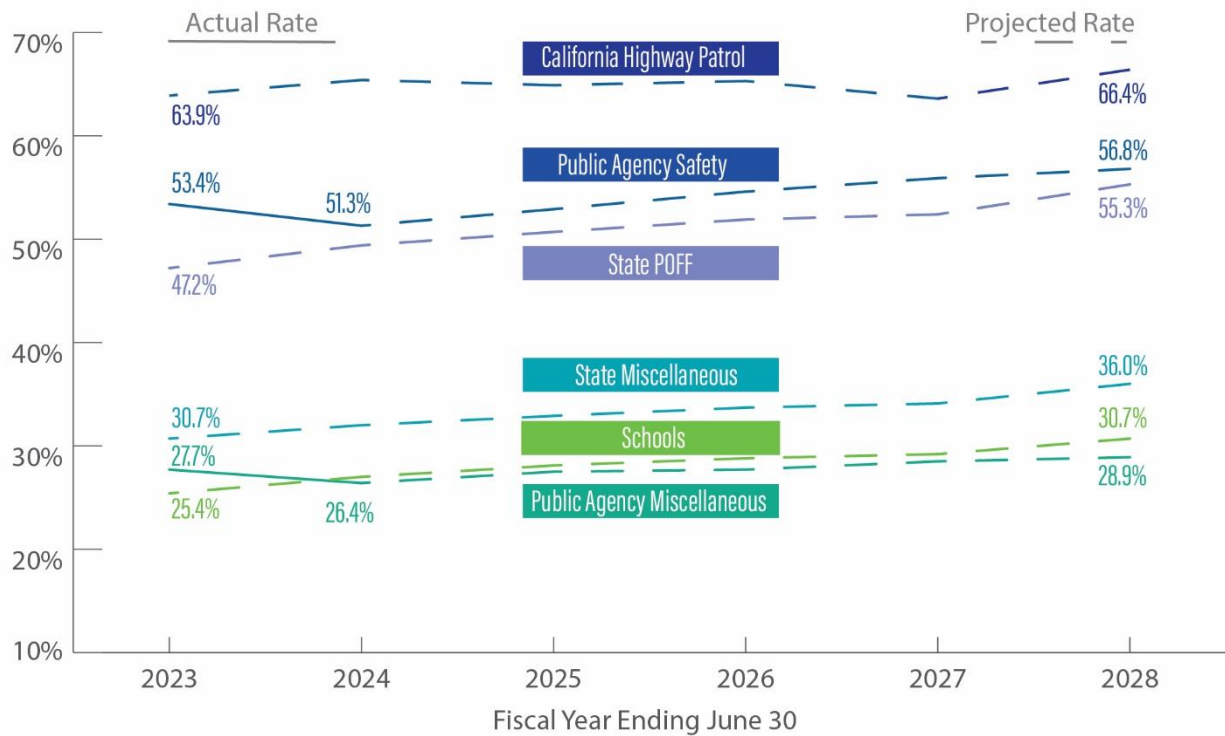
2 June 30, 2021 valuations for state plans and the schools pool set FY 2022-23 rates and set FY 2023-24 rates for public agencies.

Note, for the above chart the results for Public Agency plans were determined by summing the required dollar contributions for each plan and then dividing by total payroll for all plans.

Expected Future State

Below are projected employer contribution requirements (expressed as percentage of payroll) based on the June 30, 2021 actuarial valuation results projected forward with a preliminary investment return of -7.4% for FY 2021-22 and assumed annual investment returns thereafter of 6.8%.

Recent and Projected¹ Employer Contribution Rates (FY 2022-23 through FY 2027-28)



¹FY 2022-23 state plan and schools pool rates are actual. FY 2022-23 and 2023-24 public agency rates are actual.

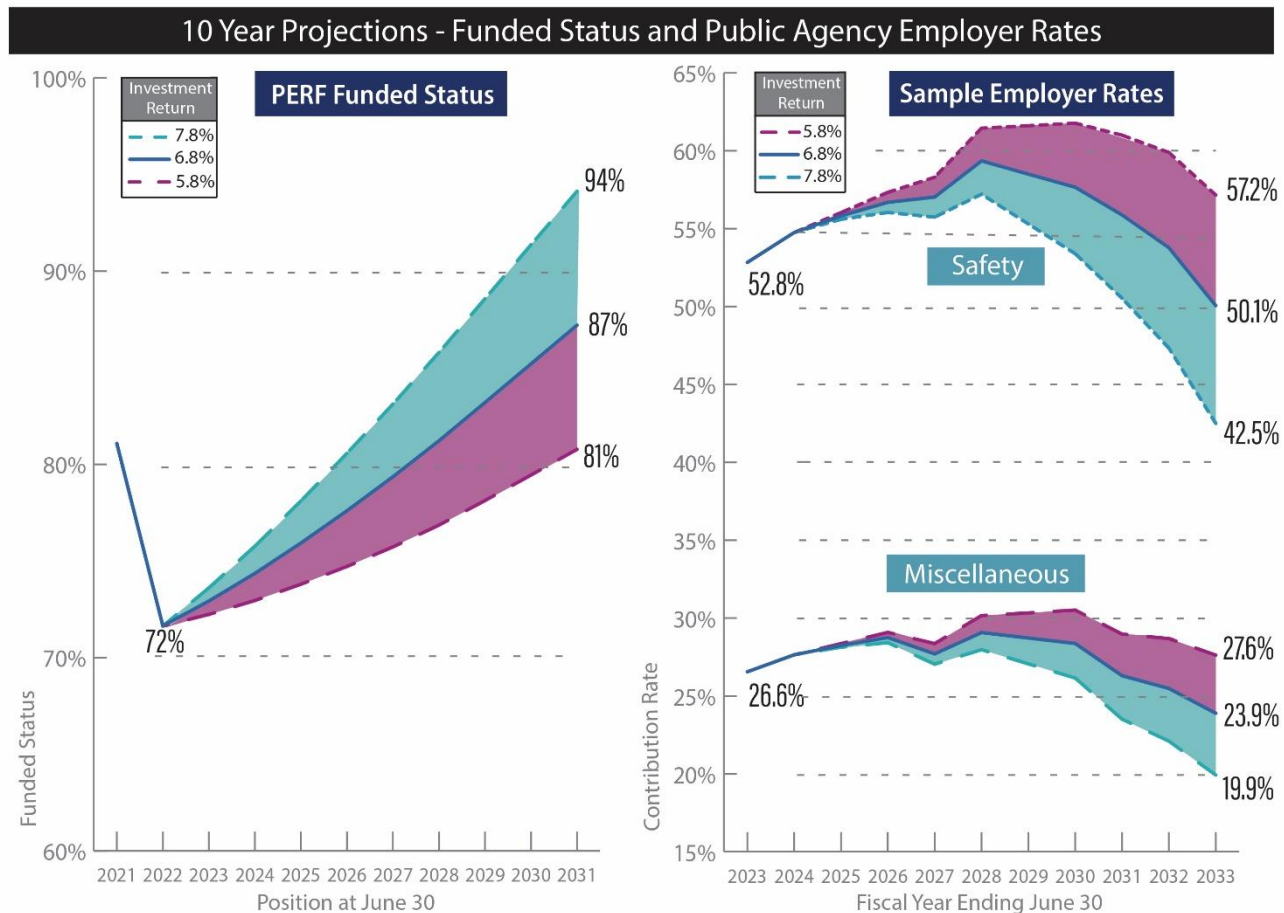
Alternate Investment Scenarios

To the extent future experience deviates from the actuarial assumptions, adjustments are made to the unfunded liability position which result in required contribution increases or decreases from present levels. The factor that is likely to have the largest impact on future contribution requirements is the investment return of the PERF. While actual plan experience in other areas such as mortality, inflation, rates of retirement, pay changes, etc., also impact required contributions, these factors are typically not as volatile as investment return.

The expected long-term investment return of the PERF is 6.8%. If the actual returns every year in the future were 6.8%, the following are expected to occur:

- Required employer contributions would continue to increase over the next few years while the full costs of recent investment losses are being phased in.
- In approximately five years, required employer contributions are expected to decrease. This is due to two separate factors:
 1. the continual decrease in normal cost as Classic members retire or terminate and are replaced by PEPRAs members, and
 2. current required payments toward existing unfunded accrued liability bases will be gradually eliminated as individual UAL bases are fully paid-off.
- In the long-term, required employer contributions will trend toward the employer portion of the normal cost.
- The funded status of all plans would gradually increase to around 100% over the next 20 to 25 years.

The charts below provide the projected funded status of the PERF and sample employer contribution rates for a public agency safety and miscellaneous plan over the next ten years reflecting the assumed 6.8% annual investment return, with alternative annual investment returns of 5.8% and 7.8% to demonstrate the sensitivity of the PERF and the plans to future investment returns.



Over longer periods of 30 years or more, chances are greater the average return will be closer to the expected geometric average of 6.8%. However, based on the current allocation of assets and the expected volatility of the various asset classes, the possibility exists that the average return over the next 30 years will fall outside of the range illustrated above of 5.8% to 7.8%.

Investment Shocks

Over periods shorter than 30 years or single year periods, the likelihood of varying from the 6.8% expected return is even greater. For example, there is roughly a 16% chance that in a single year, the investment return will be lower than -5.2% and a 16% chance that it will be greater than 18.8%. These returns are one standard deviation lower and higher than the expected return of 6.8%. So, while it is more likely that any single year return will be between -5.2% and 18.8% (68% probability), the chance of falling outside this range for one year is not insignificant.

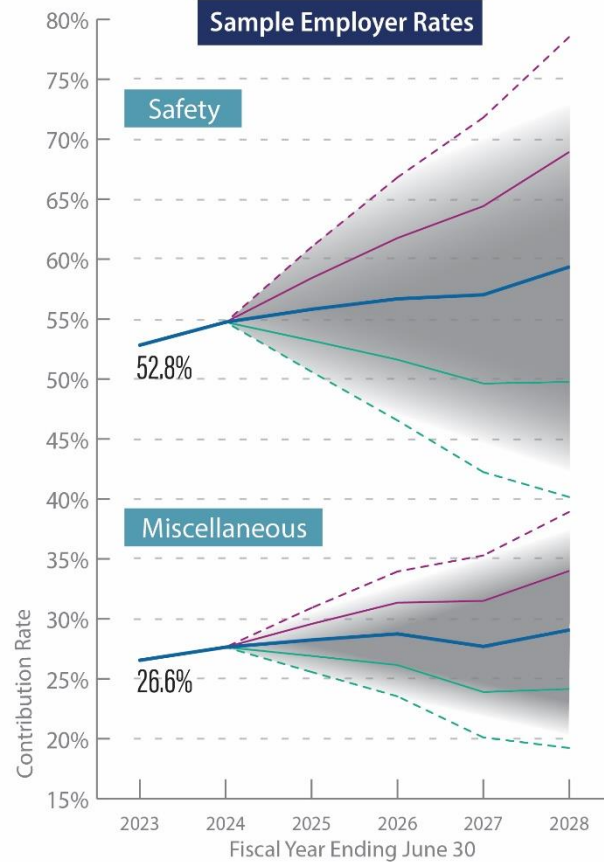
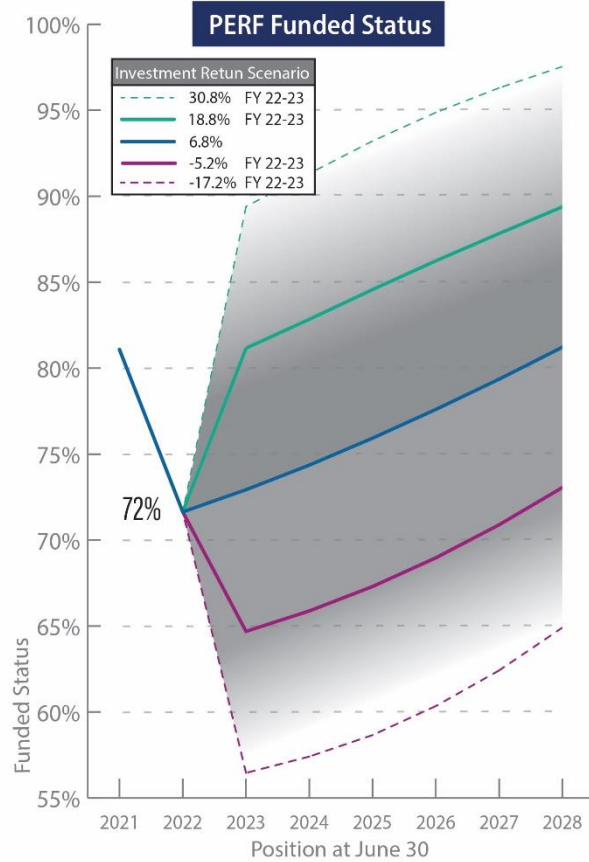
A two standard deviation higher or lower return is much less likely but does have roughly a 5% chance of occurring. The two standard deviation range is -17.2% to 30.8%. Or said another way, a return between -17.2% and 30.8% in any given year has a probability of around 95%.

While such "shock" returns are possible and do occur, history has shown that market corrections in the opposite direction typically occur over the next few years. However, such corrections are certainly not guaranteed.

The chart below provides the impact of various "shock" returns in the year ending June 30, 2023 with no assumed future correction. The purpose of the chart is to illustrate the potential impact of a single very good year or very bad year of investment return.

As demonstrated in the chart, funded status is impacted immediately and significantly while changes to required contributions happen more gradually due to the 5-year phase-in of the impact of investment gains and losses. The 5-year phase-in would allow time for a possible correction to occur which would then begin to have the opposite effect on future contributions.

Hypothetical Investment Return Scenarios - Funded Status and Public Agency Employer Rates



Other Risks

COVID-19

As of the publication of this document, there have been close to 100,000 COVID-19 related deaths in California. While many of these deaths have been among older individuals, deaths have occurred at younger ages as well. The impacts of the pandemic in California began early in the 2020 calendar year and continue through today. During this relatively short period of time, impacts of the pandemic on the economy, public health and workplace norms have been significant but there remain many unknowns regarding the potential long-term impacts to CalPERS.

The pandemic has the potential to alter the experience of the retirement system in several different areas. These include, investment returns, inflation, deaths, retirements, terminations, disability retirements, pay increases, etc. Experience in these areas will impact future actuarial valuation results and required contributions.

Impacts on the pension system to date

- In FY 2020-21 mortality was 20.1% over expected
- In FY 2021-22 mortality was 15.3% over expected
- More retirements occurred than expected in the school's pool and within public agency plans

While there were a significant number of additional deaths over the last 2 years, presumably due primarily to COVID 19, the impact on the liabilities of CalPERS plans has been less. Many of these "additional" deaths were among older retirees and therefore liability gains measured in the June 30, 2021 valuations were less material than if deaths occurred among younger retirees. We expect to see similar results in the June 30, 2022 valuations.

Long-term Questions

- Will viruses like COVID-19 be more common in the future?
- Will COVID-19 survivors and those that experience Long Covid have a higher likelihood of earlier death or disability?
- Will increased handwashing, masks, and social distancing practices lower the risk of existing diseases and therefore improve future mortality?
- Will changes in work patterns (e.g., increased teleworking) change the frequency of job changes?
- Will high interest rates and forecasts of slower economic growth persist and reduce the long-term expected return on plan assets?

These questions will be examined in the November 2025 experience study which will also analyze their impact to the pension system and provide us with enough credible experience to determine if changes are needed to the demographic assumptions.

A larger concern is the impact of the pandemic on inflation and on employers' ability to continue to make required contributions to CalPERS. Even before the pandemic, employers' ability to make future required contributions was a concern. Increased inflation due in part to lingering supply chain issues and decreased revenues resulting from the pandemic have added to this concern.

Several employers have utilized budget management tools such as golden handshakes, furloughs, pay decreases and staff reductions to reduce short-term spending. In addition, many employers have issued Pension Obligation Bonds using the proceeds to reduce or eliminate CalPERS unfunded liability. There are risks to these tools and it remains of utmost importance that employers use appropriate due diligence.

Inflation

Inflation recently experienced a 40-year high when US consumer prices jumped by 9.1% in June 2022. Factors that are likely contributing to the current levels of inflation include supply chain issues persisting from the COVID-19 pandemic, high gas prices due in part to the war in Ukraine and the presence of a strong labor market. It appears likely high inflation will persist in the near-term. It remains to be seen how long before inflation declines to Federal Reserve targets. Given the transitory nature of some of the causes of the current high inflation and continued efforts by the Federal Reserve to reduce inflation through interest rate increases, it is expected that inflation will gradually return to levels near our current long-term inflation assumption of 2.3%. However, we will continue to monitor actual inflation levels as well as inflation forecasts by economists and investment professionals in order to assess whether a change to this assumption may be appropriate. Temporary high inflation can have significant impacts on CalPERS and its members as discussed below.

Cost of Living Adjustments (COLAs)

CalPERS retirees are entitled to cost of living adjustments based on the specific provisions adopted by the plan sponsor. Provisions vary, but most existing retirees are expected to receive higher benefit increases in the near-term while higher inflation persists. This is expected to result in somewhat higher employer contributions. While retirees' benefits will likely experience higher increases, these increases will likely not fully maintain current purchasing power for many retirees.

Pay Increases

Workers' wages generally tend to keep pace with inflation. However, pay increases may lag higher inflation measurements due to the time it takes to negotiate bargaining agreements. Future pay increases to CalPERS members exceeding the assumed increases will also lead to higher employer contributions. Such increases will be in the form of higher dollar contributions but required employer contributions expressed as a percentage of payroll will not be impacted to the same extent. For example, if plan members experience salary increases 5% greater than expected, the normal cost percent of the plan may not change materially. However, when the employer contributes future required normal costs, the unchanged normal cost percent will be applied to higher payroll resulting in higher dollar contributions.

Other Factors

The determination of member benefits can be impacted by other factors that are tied to inflation. One such factor is the compensation limit that applies to most PEPPRA members. Increases to this pay limit due to higher inflation will increase employer contributions. In addition, certain federal limits that apply to qualified retirement plans are also impacted by inflation. These include limits on member compensation and benefit amounts. However, the impact of these federal limits is to cap benefits paid from the PERF with the difference in benefits being paid by the Replacement Benefit Fund (RBF). Therefore, higher increases to these federal limits due to higher near-term inflation will generally simply result in a different allocation of costs between the PERF and RBF.

Estimated Contribution Impact

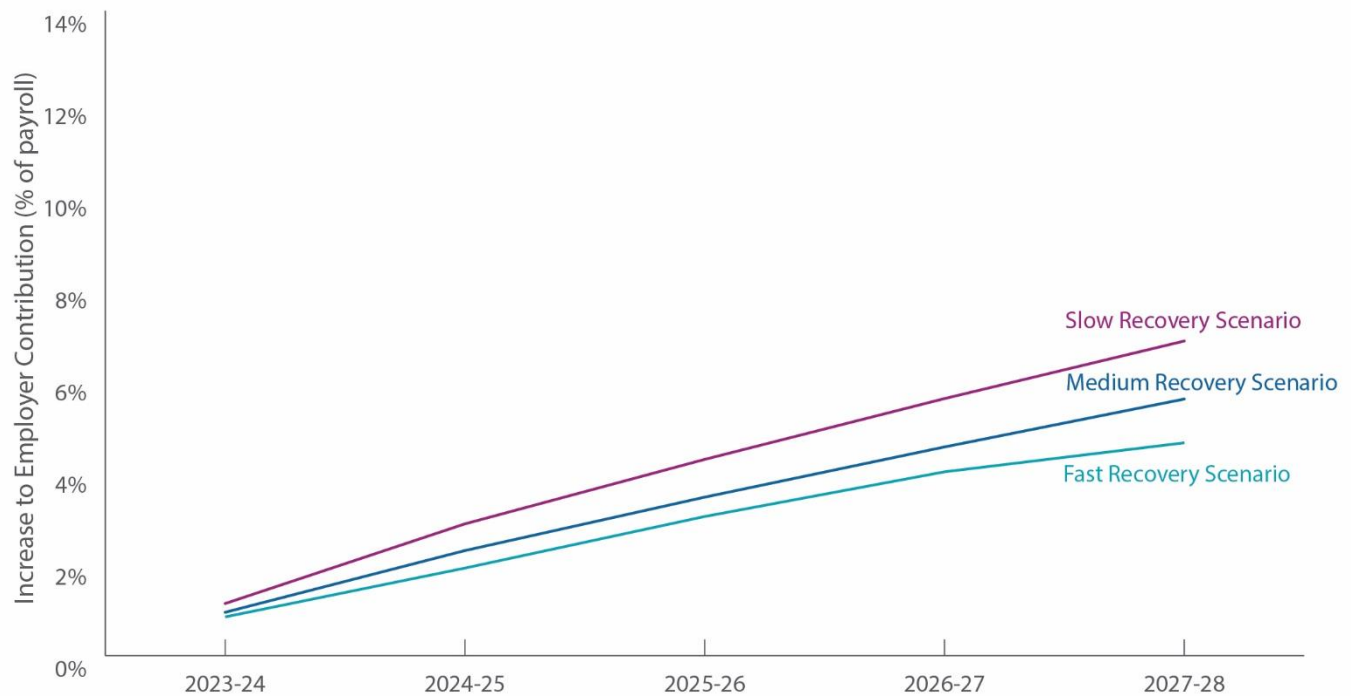
For purposes of estimating the impact of inflation on future contributions, we selected three reasonable scenarios for future near-term inflation. The three scenarios considered are shown below. The difference between the scenarios is the speed with which it takes to return to the expected price inflation of 2.3% (slow, medium, and fast).

Projection Year	Fast Recovery	Medium Recovery	Slow Recovery
1	5.0%	5.0%	5.0%
2	8.0%	8.0%	8.0%
3	3.0%	4.0%	6.0%
4	2.3%	3.0%	4.0%
5 and beyond	2.3%	2.3%	2.3%

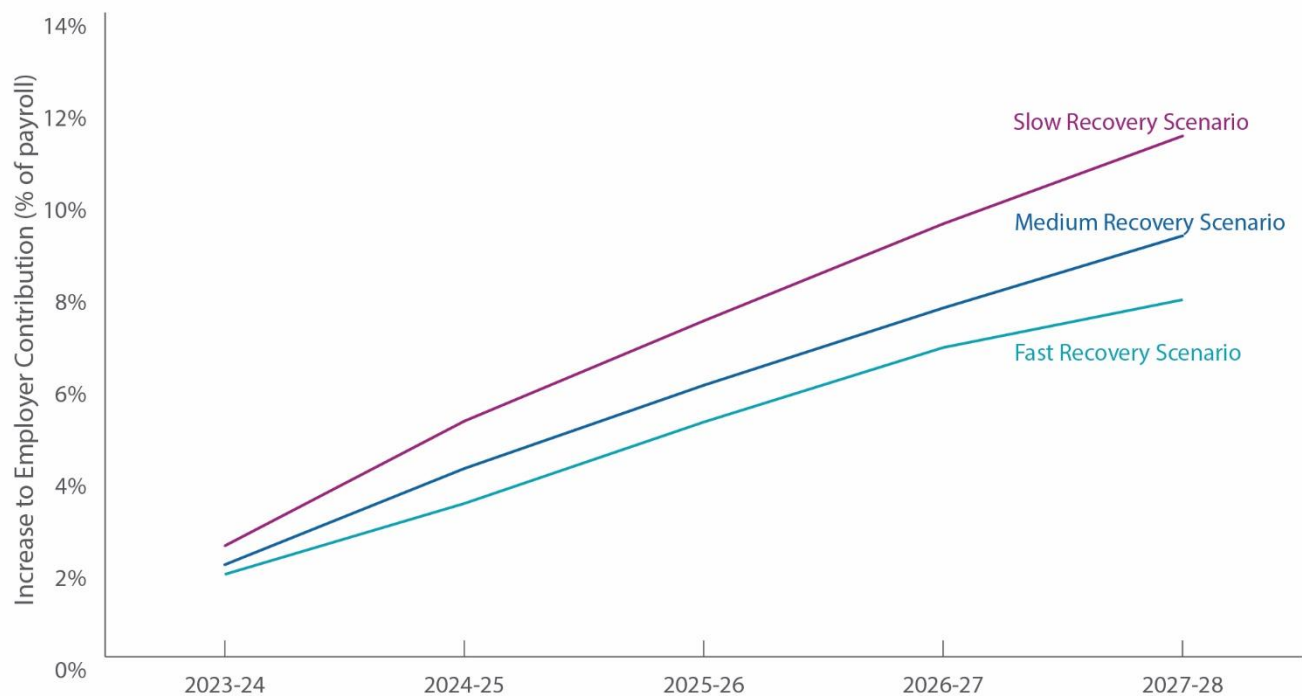
The charts below provide estimates of the additional employer costs that may arise under various scenarios for higher near-term price inflation. As stated above, increases to member earnings consistent with the inflation scenarios may take several years to materialize. However, for simplicity, the results below assume such pay increases occur immediately following the measurement of the higher inflation values. In addition, due to the phenomenon discussed above regarding how contributions are expected to change as dollar amounts versus rates of payroll, we have chosen to represent results as estimated contribution increases expressed as percentages of current payroll without adjustments for higher assumed inflation. This provides a better comparison of current dollar costs versus projected higher dollar costs. Finally, the graphs below provide median results for non-pooled plans. Actual results for individual plans can be somewhat higher or lower than the median. In particular, the actual results for plans with higher contracted COLA levels or with higher liability volatility ratios are likely to be higher than the median results.

Estimated Median Impact of High Inflation on Employer Contribution Rates

Miscellaneous Non-Pooled Public Agency Plans



Safety Non-Pooled Public Agency Plans



Impacts of Plan Maturity

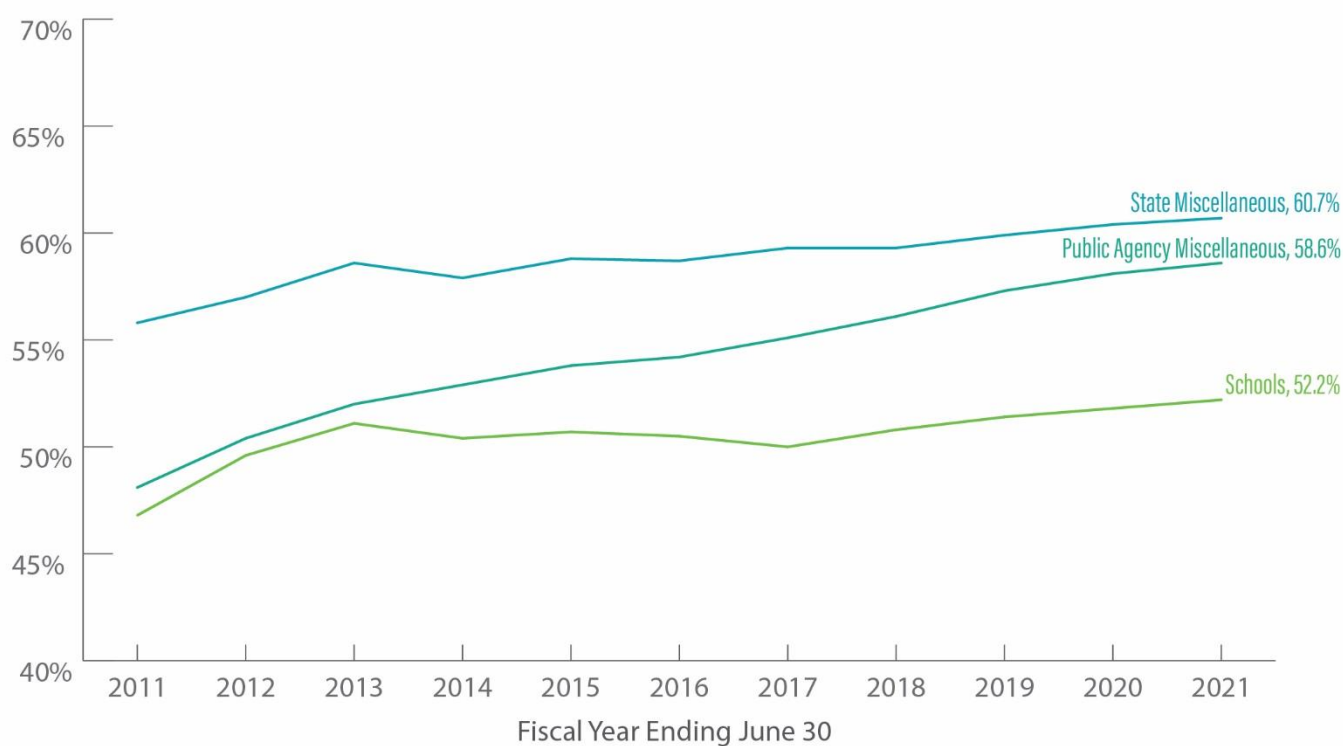
The aging of the population and the retirement of the baby boomer generation are well known demographic shifts that have long been predicted and considered in the funding of the system. The higher number of retirements experienced over the previous ten years was anticipated, and this trend is expected to continue over the next several years as the remainder of the baby boomer generation leaves the workforce to enter their retirement years. Even though anticipated, demographic shifts such as this impact risk measures identified in this report and should be part of any discussion on funding levels and risks.

A simple way to look at the maturity level of CalPERS and its plans is to look at the ratio of active members to retirees. An ever more relevant ratio is 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%. For CalPERS and other retirement systems in the United States, these ratios have been steadily increasing in recent years. However, as seen in the charts below, this measure has flattened out somewhat in the last few years. Certain individual plans may have a significantly lower ratio, particularly if the plan has not been in existence as long.

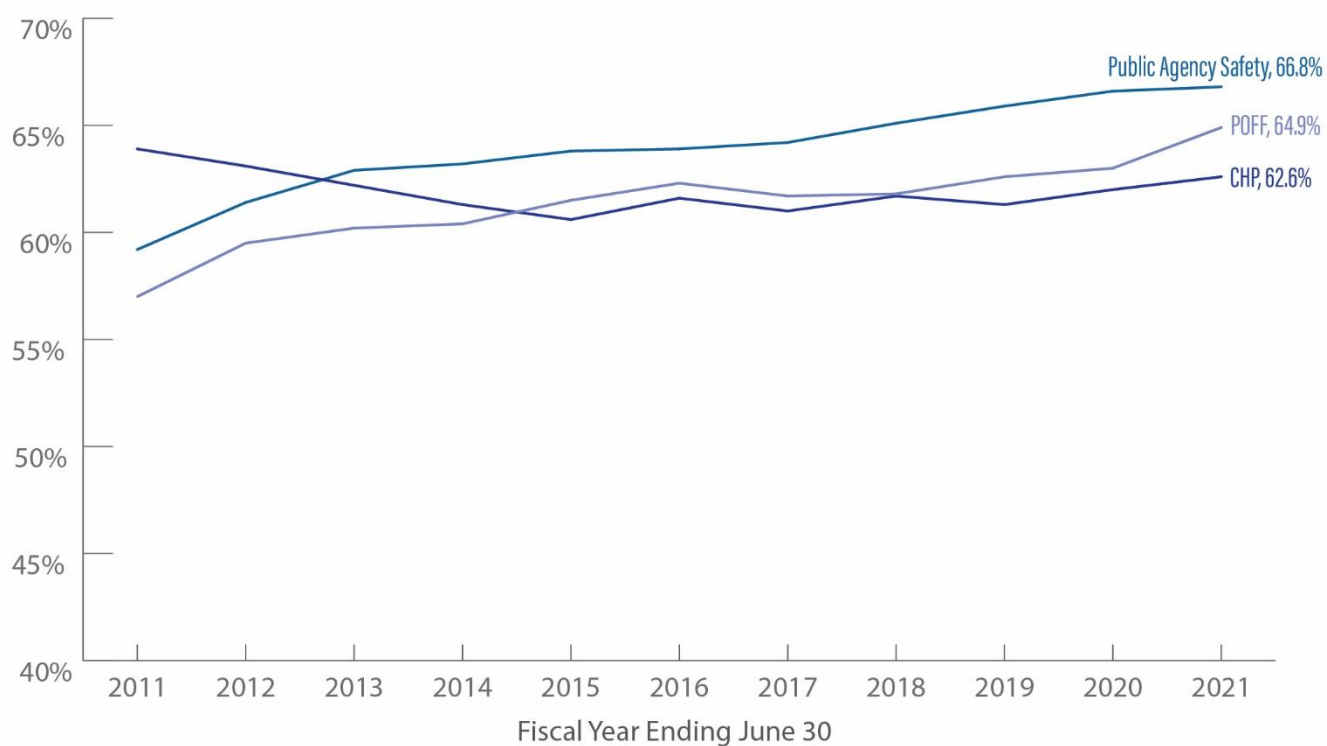
The steep incline in this measure from 2011 through 2013 was largely attributable to the wave of retirements experienced during the most recent recession. A similar increase may be seen if we experience another recession in the near future.

In general, plans with higher retiree liability ratios have a shorter "duration" over which current accrued benefits will be paid. In some cases, particularly when a plan has only retiree liability, the actuary may determine that a shorter amortization period for unfunded liability is appropriate to avoid the depletion of plan assets.

Ratio of Retiree Accrued Liability to Total Accrued Liability (June 30, 2011 through June 30, 2021)



Ratio of Retiree Accrued Liability to Total Accrued Liability (June 30, 2011 through June 30, 2021)



Other measures of plan maturity are the Asset Volatility Ratio (AVR) and the Liability Volatility Ratio (LVR). The AVR is the ratio of assets to payroll, and the LVR is the ratio of liability to payroll. As with the ratio of retiree liability to total liability, these ratios start out low given the low levels of assets and accrued liabilities, then increase over time as service is earned and contributions are made. Plans that have higher asset-to-payroll or liability-to-payroll ratios generally experience more volatile employer contributions (as a percentage of payroll) due to unexpected experience such as investment returns or mortality experience. For example, if the investment return in any given year is 1% less than expected, a plan with an AVR of 10 experiences an investment loss equal to 10% of annual payroll, whereas a plan with an AVR of 5 only suffers an investment loss equal to 5% of annual payroll.

The projected increases in the AVR are only partially due to demographic maturation. The other factor causing the AVRs to increase is the fact that the assets are projected to grow to equal the accrued liability as the funded ratio grows toward 100%. The funding policy alone will cause the AVRs to increase above current levels. As the AVR increases, each investment loss will have a higher impact than the last from the perspective of the employer.

As plans mature, they accrue more assets and liabilities, both in an absolute sense, but also in relation to the financial resources of the plan sponsor. This means that when financial markets fail to deliver a strong return or even collapse like they did in 2008–2009, it can lead to very high contribution levels. These high contribution levels could result in severe financial stress for employers. Larger swings in required contributions are generally due to investment experience. However, other factors such as unexpected pay increases or mortality experience can also produce material contribution changes.

While many of the individual plans within CalPERS have comparable AVRs and LVRs, there can be significant differences from plan to plan based on several factors such as:

- The age of the plan
- The funded ratio of the plan
- The level of benefits provided by the plan
- Changes to the membership of the plan, for example if fire services are moved from a city to a county, etc.

Projections of these ratios indicates that Liability Volatility Ratios are projected to grow minimally (or decrease) for many CalPERS plans which have already been in existence for a long period of time. However, some public agency plans that were established more recently have lower current LVRs that are projected to grow more significantly in the future. Overall, the results indicate that contribution risks due to factors that impact plan liabilities, such as mortality, salary increases, retirements, etc., are not expected to increase significantly for most plans due to further maturation. However, current LVRs are already relatively high which indicates most CalPERS plans already face high contribution volatility.

The gap between Asset Volatility Ratios and Liability Volatility Ratios is generally determined by the funded status of a plan. Lower funded plans have lower AVR that are projected to approach the LVRs over time as the plan approaches full funding. As these AVR increase, so too will contribution volatility due to future investment returns.

The chart below shows projected AVR and LVRs for typical public agency plans. Additional charts for the State Miscellaneous Plan, the School's Pool and less typical public agency plans can be found in the appendix.

Projected Asset and Liability Volatility Ratios

Typical Non-Pooled Public Agency Miscellaneous and Safety Plans



The maturing of a defined benefit retirement system is expected and is not a sign of mismanagement or that corrective action needs to necessarily take place. In fact, it is difficult to reduce plan maturity measures without lowering benefits or settling benefit obligations with retirees through lump sums or annuity purchases. However, it is important to recognize that increasing plan maturity typically leads to increased contribution volatility. Employers who may be more sensitive to such volatility may wish to create or increase funding toward a stabilization or rainy-day fund such as the new California Employers' Pension Prefunding Trust (CEPPT). Eventually, there will be downward pressure on AVR as liabilities for benefits earned by PEPPRA members become a larger portion of total liabilities.

Trend Toward Lower Expected Returns and Discount Rates

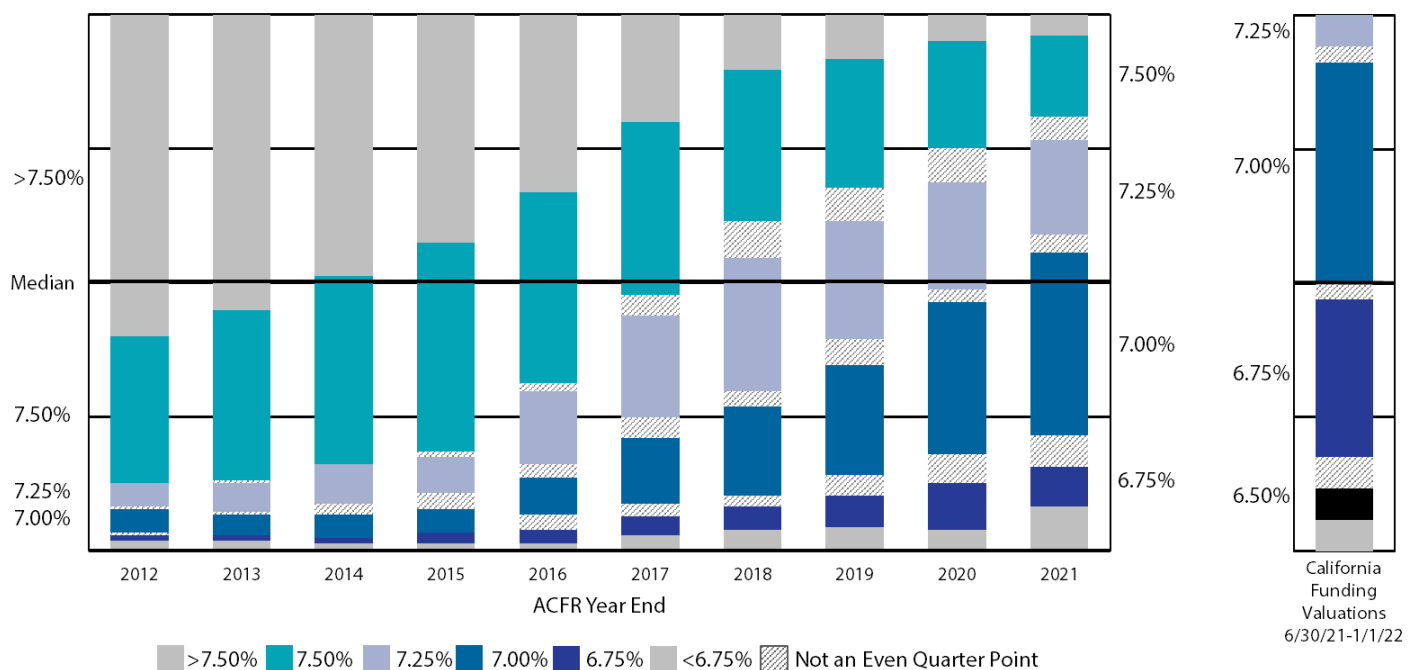
In addition to demographic forces, concerns about lower returns over the next 10 to 20 years persist. The trend nationally for public pension plans in recent years has been a reduction in the rate of return assumption.

Not only have bond yields trended downward, well below historical averages, but forecasts of economic growth and inflation also remain lower than they were prior to 2009. This means that plans must change their asset allocations to accept a higher level of investment risk (to achieve the same level of expected return) or to accept a lower expected return on investments. Over the prior year, price inflation has increased, and the Federal Reserve has responded by increasing interest rates. Whether this will impact long-term assumptions remains to be seen.

CalPERS is not alone in facing the changed expectations of what can be achieved in the capital markets. The chart below left shows the change in distribution of public pension investment return assumptions from 2012 through 2021.

The survey shows that based on the available 2021 Annual Comprehensive Financial Report (ACFR) data, discount rates ranged from 5.25% to 8.25% with a median of 7.00%

Distribution of Public Pension Plan Investment Return Assumptions



Data sources: Center for Retirement Research at Boston College Public Plans Data (left), downloaded September 19, 2022 and California Funding Valuations (right)

Each year from 2012 through 2021 between 15% and 40% of the systems included in the survey reduced their discount rates.

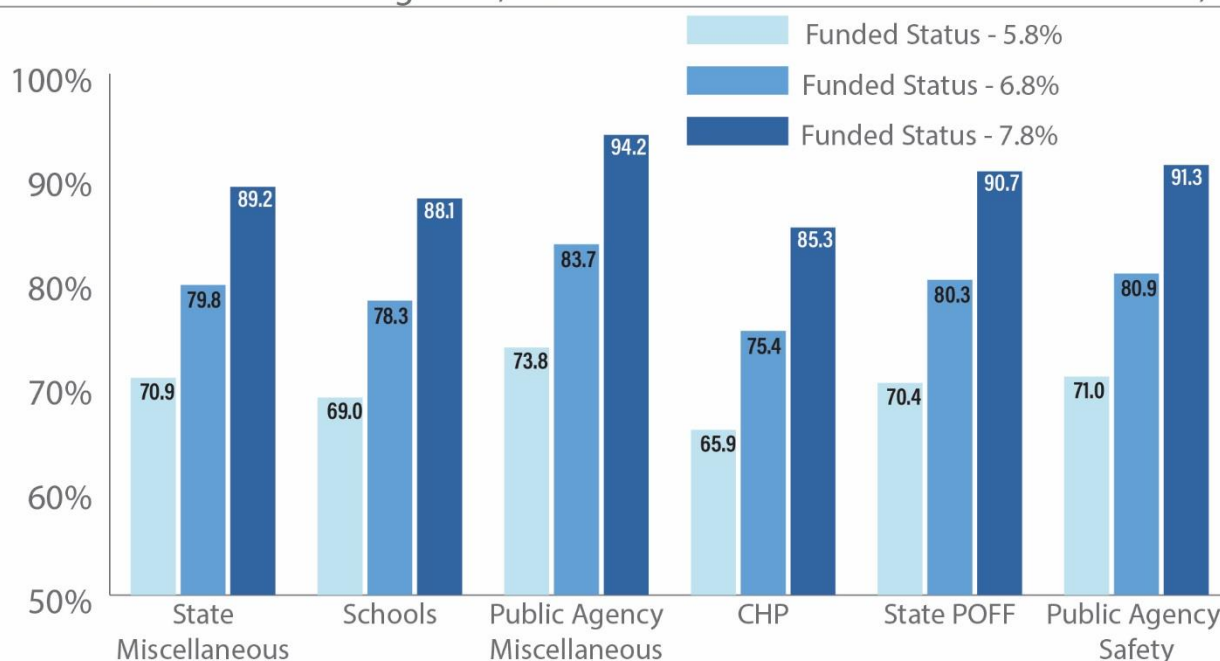
Since the Public Plans Data was compiled from available 2021 ACFR information, it is somewhat out of date compared to current funding practices. For example, in the data used for the chart, the 2021 ACFR discount rate for CalPERS is 7.25%. For funding purposes, CalPERS used a discount rate of 7.00% for three years before reducing it to 6.80% in the 2021 funding valuation.

The Actuarial Office performed a more up to date, albeit smaller, survey of public retirement systems in California. The discount rates for 34 state, county and city retirement systems within California were compiled from funding valuations with valuation dates ranging from June 30, 2021 through January 1, 2022 and are shown to the right of the Public Plans Data. The survey found that discount rates ranged from 6.00% to 7.25%. There were 17 systems with discount rates at or above 7.00% and 17 systems with discount rates at or below 6.80%.

Given the recent changes in capital market assumptions, and the uncertainty regarding what the actual CalPERS long-term rate of investment return will be, it is informative to consider the current funded status under alternate discount rate assumptions. The chart below provides such results assuming 5.8%, 6.8%, and 7.8% discount rates with no change to the current inflation assumption of 2.3%.

Funded Status based upon 5.8%, 6.8% and 7.8% Discount Rates

Funded Status Based using 5.8%, 6.8% and 7.8% Discount Rates¹ as of June 30, 2021



¹Inflation assumption is kept at 2.3% for all scenarios listed. The inflation assumption may increase or decrease along with the discount rate assumption.

Discount rate changes are primarily due to 1) revised expectations of the future returns of utilized asset classes, or 2) decision to raise/lower investment risk by shifting investment allocations toward more/less risky investments. The decision regarding the level of investment risk to target is among the most important decisions made by the system and its board. Excessive risk can lead to significant swings in funded status and contribution requirements as illustrated throughout this report. In addition, if discount rates are set higher than the reasonably expected average return, required contributions will be understated with the differences needing to be made up by future generations. Under that scenario, future contributions can rise to levels higher than if the discount rate had been set appropriately.

Managing Risk

Current Amortization Progress

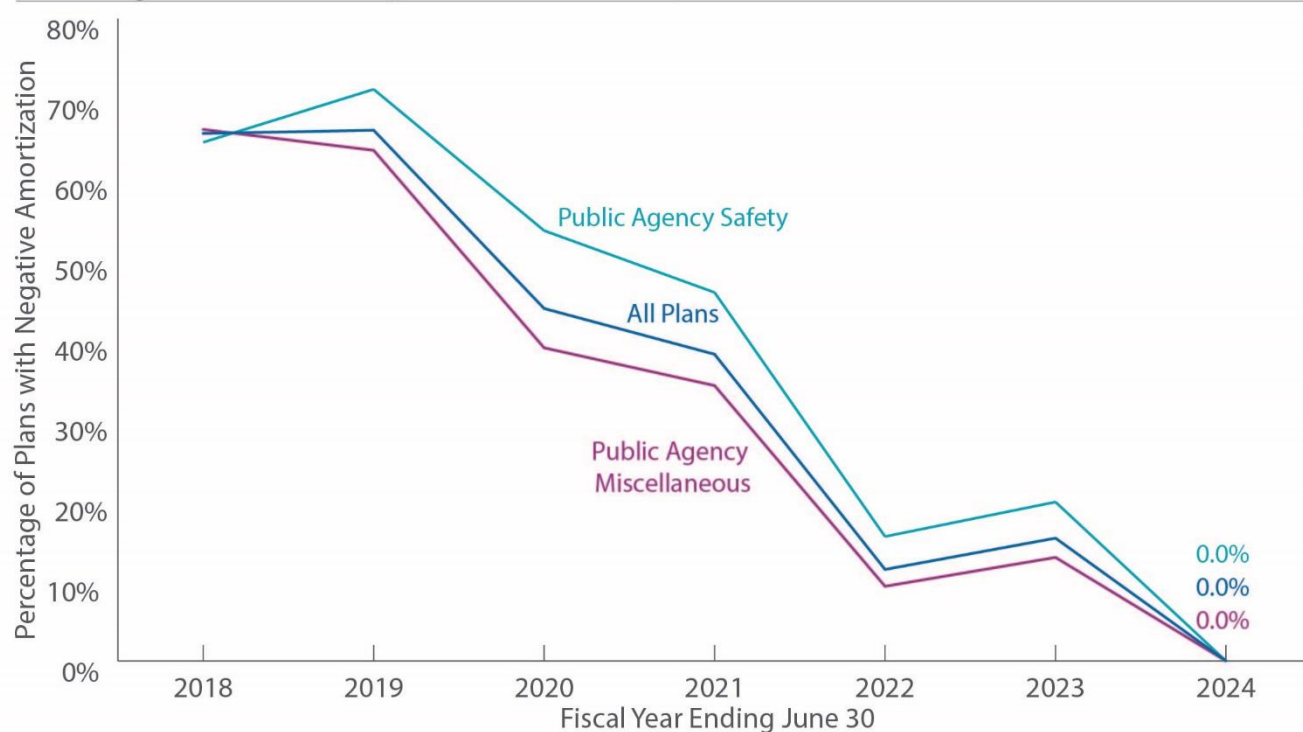
The goals of a retirement system's amortization policy should be to pay down existing unfunded liability over a reasonable amount of time in order to:

- Provide benefit security for plan members
- Maintain intergenerational equity
- Limit contribution volatility to the extent possible

CalPERS current amortization policy adopted by the Board (effective with the June 30, 2019 Actuarial Valuation Reports), improved the overall expected outlook for these objectives relative to the previous policy. In particular, the current policy greatly reduces the possibility of "negative amortization" which occurs when required amortization payments are lower than the interest on a plan's existing unfunded liability. However, it is still possible under the current policy that a plan's required payment toward the UAL is less than one year of interest on the UAL. The main factors that can produce this result are 1) recent increases in the UAL due to investment losses for which required payments are in the 5-year ramp-up period, and 2) the relatively long average remaining amortization period for the UAL due to older bases with longer periods. As shown in the chart below, the number of rate plans subject to negative amortization has declined over the last few years as the recent UAL bases due to investment losses and assumption changes approach the end of the 5-year ramp-up period.

While the chart below indicates that no CalPERS plan has a required UAL payment for FY 2023-24 that is less than interest on the UAL, we expect that following the investment loss for FY 2021-22, several plans will have required UAL payments for FY 2024-25 that will be less than interest on the UAL.

Percentage of Plans with Negative Amortization by Contribution Year



The Actuarial Amortization Policy addresses situations where an employer has requested an extension of the amortization of the UAL due to a financial necessity. Such employers are required to contribute at least interest on the UAL.

Employers Making Supplemental Payments

Many employers have elected to make additional contributions over and above the minimum required contributions. Education efforts over the last few years have increased employers' awareness of the ability to make such payments and the many advantages of doing so. As part of the education efforts, CalPERS Actuarial Office has been providing the Managing Employer Contribution (MEC) spreadsheet upon employer request and access to the newly created Pension Outlook tool on the CalPERS website. These tools help employers determine the possible impact of additional contributions to their plans.

The primary advantages of additional contributions are:

- Expected savings in interest paid and lowering the overall cost of the pension program
- Lower risk of low funded status in the future
- Lower risk of high contributions in the future
- A reduction to net pension liability for financial reporting purposes
- A reduction in pension expense for financial reporting purposes

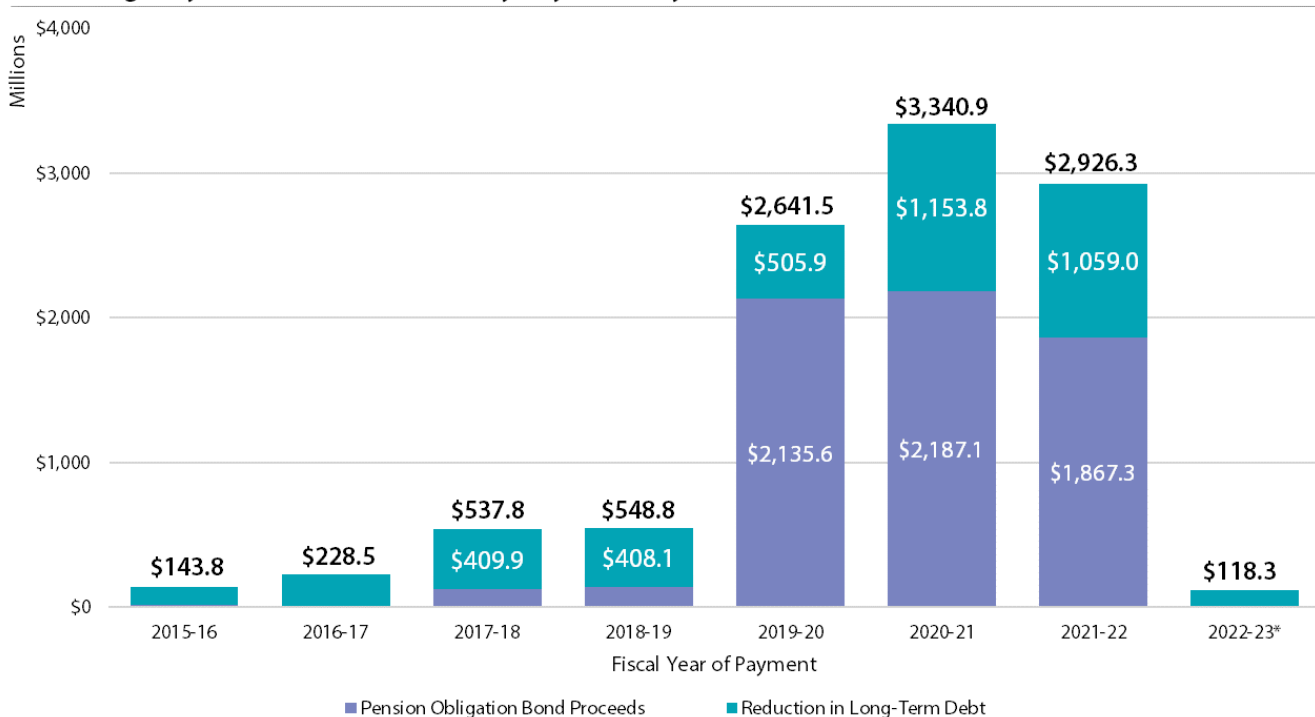
The form of these additional discretionary payments (ADPs) varies between employers. Some employers make occasional ADPs on an ad hoc basis, for example, if they have a budgetary surplus towards the end of a fiscal year. Other employers have made more regular ADPs on a monthly or quarterly basis, and some even have a formal plan in place to pay off their unfunded liabilities by a specific target date.

The State of California also makes contributions in excess of the actuarially required contributions in order to reduce unfunded liabilities. Some additional contributions have been collectively bargained, some are due to a provision in the California Constitution that requires certain surplus funds be used to reduce State pension debt, and some are discretionary and serve to reduce long-term costs and stabilize contribution rates. In FY 2022-23, the State is expected to contribute over \$3 billion more than the actuarially required contributions.

In addition to additional discretionary payments, public agencies have also been issuing Pension Obligation Bonds (POBs) with increased frequency since FY 2019-20. A POB is a taxable bond that some agencies issue to fund the unfunded portion of their pension liabilities by creating a debt to bondholders. The low interest environment likely contributed to the recent trend of public agencies issuing POBs. Now that interest rates are beginning to rise, the frequency of new POB issues may start to decline.

The chart below reflects the total ADPs made by public agencies including the POBs that were issued in order to make those ADPs. The ADPs reduce long-term public agency debt only to the extent they exceed new POB issues. Although much of the increase in ADPs over the last few years has been driven by an increased use of POBs, agencies continue to pay off pension debt. The total public agency ADPs that were not paid for with POB proceeds has increased to over \$1 billion per year in each of the last two years.

Public Agency Additional Discretionary Payments by Fiscal Year



*ADPs from July 1, 2022 through September 30, 2022

ADP information was provided by the CalPERS Financial Office. POB issuance data was downloaded from the California Debt and Investment Advisory Commission at <https://www.treasurer.ca.gov/cdiac/debt.asp>.

California Employers' Pension Prefunding Trust Program

Many public employers set aside additional pension assets in a trust separate from pension fund. These trusts, known as "Section 115 Trusts" (after Internal Revenue Code Section 115), allow employers to prefund future required defined benefit pension system normal costs and unfunded accrued liability (UAL) payments. This also includes both lump sum annual UAL payments and voluntary Additional Discretionary Payments (ADP's). Section 115 pension trust assets can be used by the employer at any time to reimburse the employer's general fund from which they have made these pension contributions. Employers may also make pension contributions directly from a Section 115 pension trust.

The purposes of Section 115 pension trusts include the following:

- Save overall pension costs due to additional prefunding which generates investment income
- Likely earn higher long-term returns than the State Treasurer's Local Agency Investment Fund or a county treasurer's office
- Invest with different time horizons and risk levels than the pension fund
- Retain liquidity on assets dedicated to pension costs
- Stabilize and subsidize future budgets
- Create a contingency reserve for difficult times ahead
- Pay down pension liabilities in a predictable and prudent manner

One of the most attractive of these Section 115 pension trust purposes from an employer's point of view is the ability to build up a contingency reserve that can be used to satisfy CalPERS contribution requirements during years the employer's budget is strained. This can be an effective way to deal with CalPERS contribution volatility due to fluctuating investment markets.

The unfunded pension liabilities and future pension contribution volatility summarized in the previous sections of this report do not reflect the fact that hundreds of public employers already have Section 115 pension trust funds. Because Section 115 pension trusts can be expensive to set up and administer, CalPERS launched the California Employers' Pension Prefunding Trust (CEPPT) in 2019. The CEPPT was established by Senate Bill 1413 which provides public agencies additional low cost and not-for-profit investment vehicles to help manage pension costs. Participation in the CEPPT is voluntary and provides employers with the flexibility to determine the amount of their contributions, reimbursements, and overall funding strategy. The CEPPT offers two broadly diversified portfolio options with low to moderate risk profiles that are expected to have a net rate of investment return of 3.5% and 4.5%, respectively. As of October 2022, a total of 77 employers have established CEPPT accounts with assets under management totaling approximately \$90 million.

Conclusion

Over the last few years various external factors have had material impacts on the experience of the Retirement System. While some of the impacts may have led to short-term improvements in the current funding levels of the system, other factors have worsened the funded position and pose additional threats to the system in the future.

Recent factors that were favorable to the funded status of the system were:

- Significant investment gains during the 2020-21 fiscal year
- Higher than expected mortality likely due to the COVID pandemic

Factors that were unfavorable to the current funding levels of the system and pose potential future threats are:

- Significant investment losses during the 2021-22 fiscal year
- Financial strain on employers due in part to the COVID pandemic
- High levels of inflation over the last 1-2 years which may persist
- Potential ongoing effects of COVID
- Potential economic downturn in the near-term
- Reduced expectations of future investment returns

The combined impact of the above factors has the potential to worsen the funded status of the system and result in large increases to required contributions for employers and members. The ability of employers to continue making required contributions to the system is the area of greatest concern.

While certain external factors are outside of the control of the system, CalPERS and its participating agencies have responded to these risks in a number of positive ways such as:

- The recent adoption of new amortization policies that mitigate the risk of the system dropping to dangerously low funding levels
- The increased level of additional contributions made by CalPERS agencies
- The use of a separate 115 trust by many CalPERS agencies for minimizing the risk of required contribution spikes and volatility
- The adoption of a new investment policy which maintains favorable investment return expectations and associated volatility
- Improvements in the processes of setting actuarial assumptions which are expected to lead to less volatile contributions rates in the future
- Improved modeling tools that allow CalPERS and its participating employers to forecast future required contributions and funded status under a variety of possible future scenarios

In addition to the actions listed above, we believe the following items should receive a high level of focus going forward.

- Continual focus on the acceptable level of investment risk versus the desire for higher investment returns including the possible impacts of the existing Funding Risk Mitigation Policy
- Monitor the effectiveness of the current investment policy to ensure desired returns relative to the chosen level of risk
- Continue the focus on educating participating employers on the risks facing the system and providing tools that enhance their ability to manage these risks
- Stakeholder outreach regarding employers' ability to make required contributions

With the anticipated increases in required employer contributions, due primarily to the investment losses experienced during the 2021-22 fiscal year, combined with current economic difficulties caused by the pandemic, inflation, and turbulent investment markets, some employers will likely have difficulty making required CalPERS contributions over the next several years. In addition, near-term forecasts by investment and economic professionals suggest it may be difficult to achieve a 6.8% investment return in the near-term. This potential for further increases to required employer contributions increases the risk that individual agencies may struggle to make required CalPERS contributions leading to potential contract terminations and possible benefit reductions. While financial necessity policies within the CalPERS amortization policy can be used in some cases to spread amortization payments over a longer period and hence reduce near-term contributions, these policies require minimum contributions that may still pose challenges for some agencies. In addition, these policies do not reduce costs but merely delay and increase them. CalPERS and its participating employers have taken many positive steps to manage the risks of the system. Continued focus on the risks described in this report, and opportunities to minimize and manage them, will be of utmost importance going forward.

Appendix A – Public Employees' Retirement System (PERS) Summary Statistics

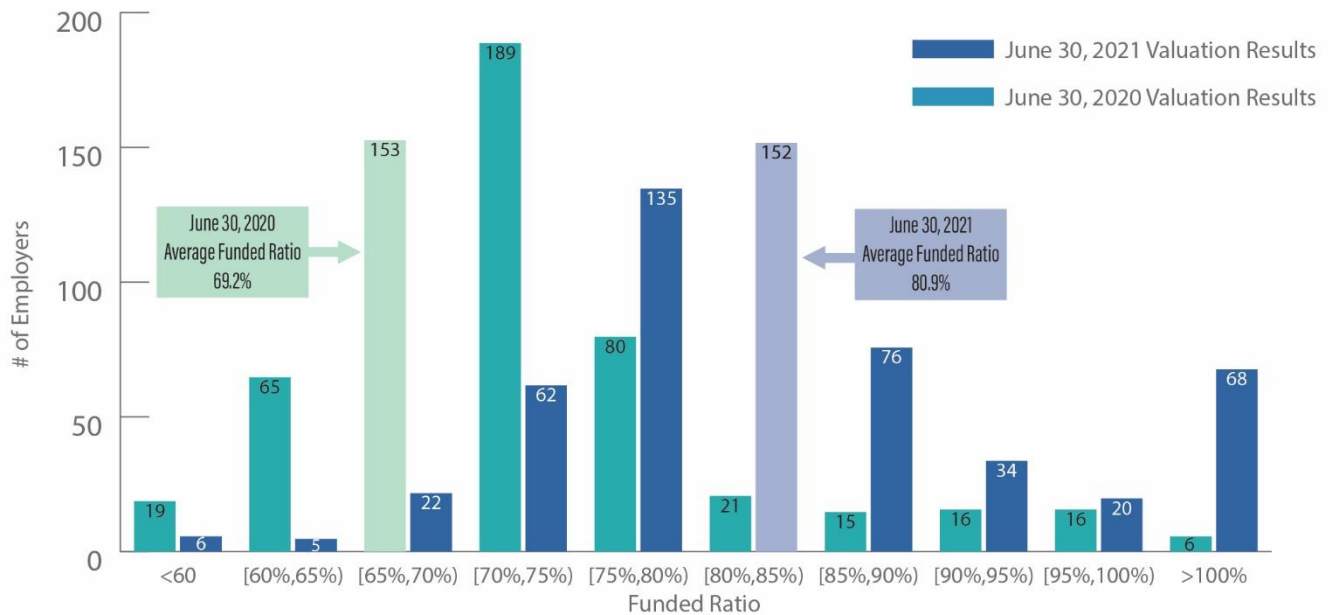
	June 30, 2020	June 30, 2021
Number of Actives¹	861,976	844,905
Number of Transferred¹	167,375	166,686
Number of Separated¹	433,500	458,012
Number of Receiving¹	869,819	897,640
Payroll	\$58.6 billion	\$58.7 billion
Entry Age Accrued Liability	\$554.1 billion	\$587.3 billion
Market Value of Assets	\$390.4 billion	\$476.2 billion
Unfunded Liability	\$163.7 billion	\$111.1 billion
Funded Status	70.5%	81.1%
Prior Year Benefit Payments	\$26.1 billion	\$27.7 billion
Prior Year Employer Contributions	\$22.0 billion	\$20.0 billion
Prior Year Employee Contributions	\$4.9 billion	\$4.8 billion

¹These counts are from the CalPERS actuarial valuation system, which may not match the statistics provided in CalPERS Annual Comprehensive Financial Report (ACFR). For example, the number of receiving displayed in this report is not the count of unique benefit recipients; rather, it is the count of data records in CalPERS actuarial valuations for benefits in pay status. Some individual retirees have multiple records in our data due to having worked at multiple CalPERS agencies. Numbers shown in the ACFR for retirees receiving benefits include individuals just once in the count even if they are receiving benefits from multiple CalPERS agencies.

Appendix B – Results of June 30, 2021 Public Agency Valuations for Safety Plans

Public Agency Funded Ratios for Safety Plans

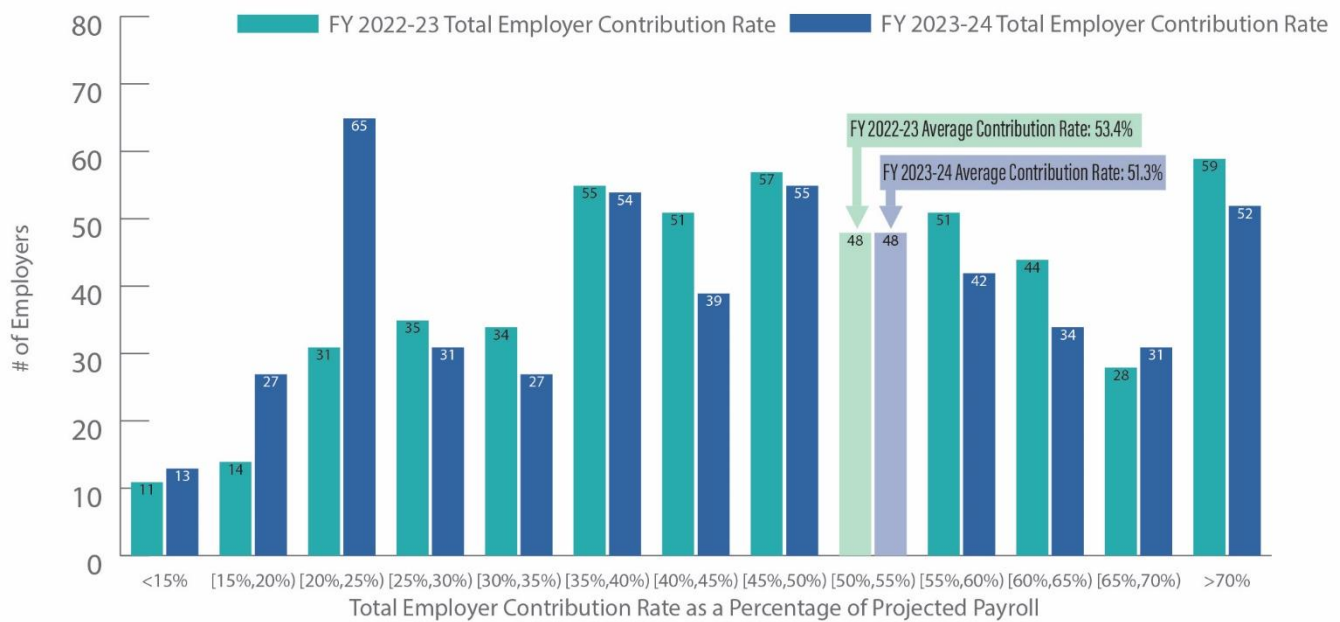
Funded Ratios by Employer as of June 30, 2020 and June 30, 2021 (Public Agency Safety)



Public Agency Contribution Rates for Safety Plans

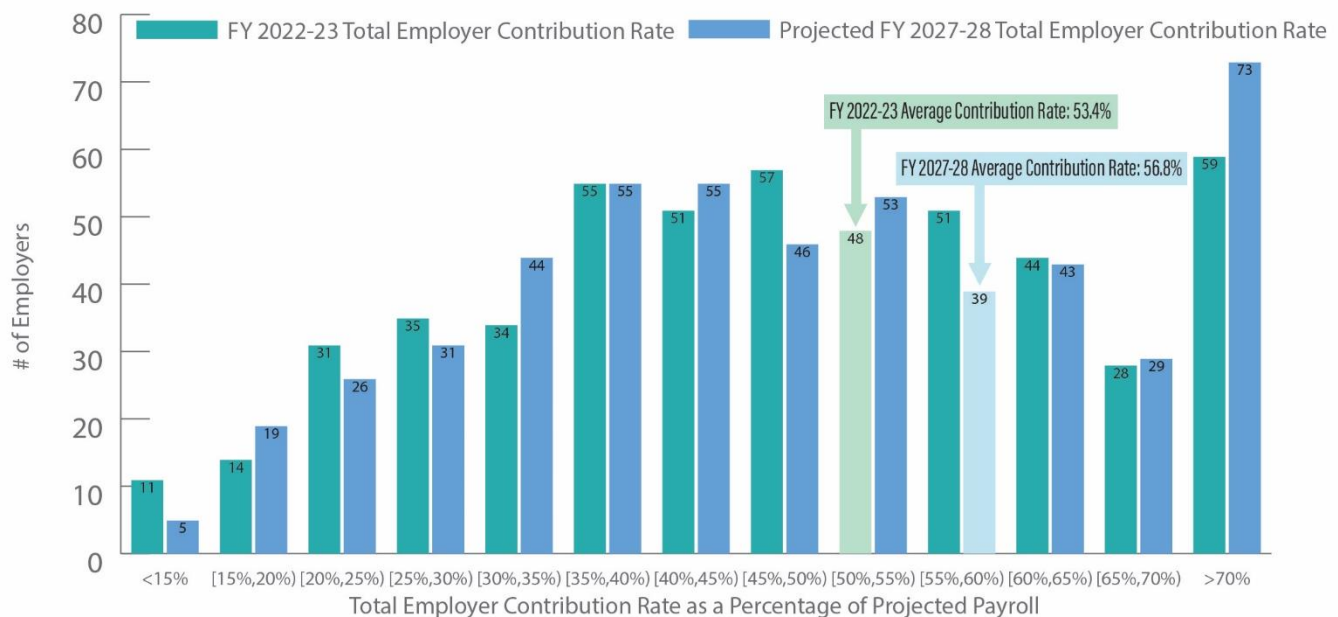
The following table displays the total employer contribution rates for public agency safety plans that contract with CalPERS for benefits. These contribution percentages reflect both the required normal cost contribution percentage and the required payment toward any unfunded liability (converted to a percent of payroll).

Total Employer Contribution Rates for Fiscal Year 2022-23 and 2023-24 (Public Agency Safety)



The following table displays the actual and projected total employer contribution rates for public agency safety plans that contract with CalPERS for benefits. These contribution percentages reflect both the required normal cost contribution percentage and the required payment toward any unfunded liability (converted to a percent of payroll). FY 2027-28 rates are based on a projected payroll. For plans with a decreasing number of active members (and therefore decreasing payroll), these contribution percentages can become quite large when the required payment toward unfunded liability becomes a large percentage of the decreasing payroll. In addition, the projected contributions are based on experience through June 30, 2021. There will be additional investment, economic and demographic experience that will impact the projected rates before they become actual rates in the future.

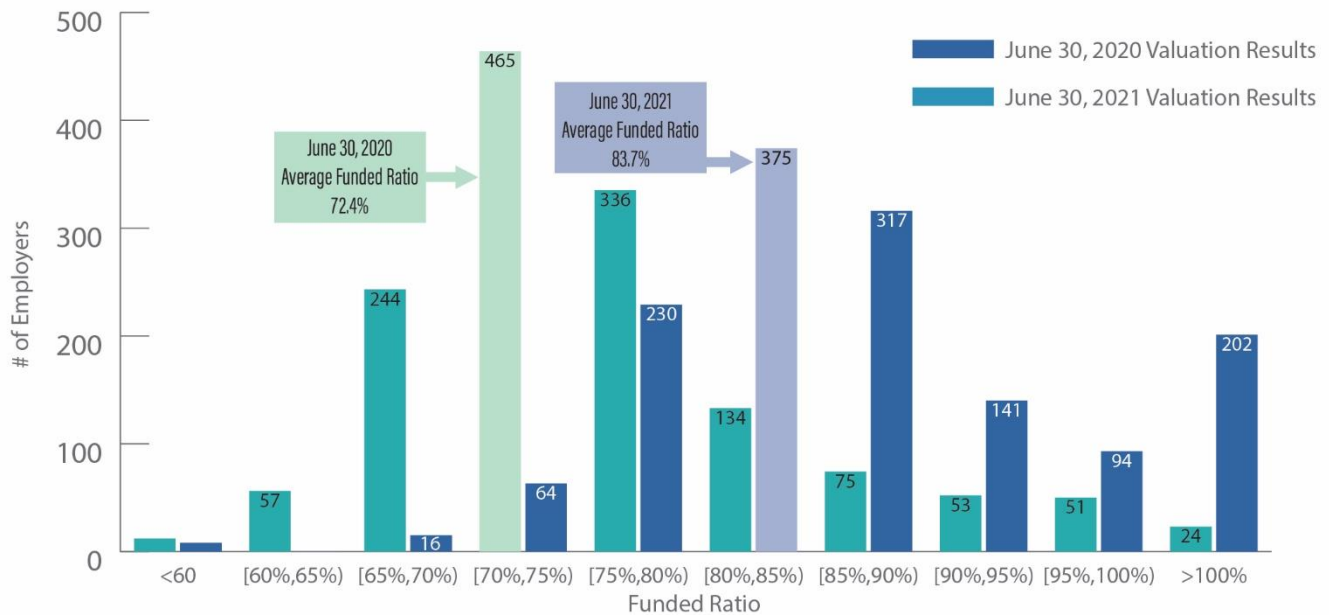
Total Employer Contribution Rates for Fiscal Year 2022-23 and 2027-28 (Public Agency Safety)



Appendix C – Results of June 30, 2021 Public Agency Valuations for Miscellaneous Plans

Public Agency Funded Ratios for Miscellaneous Plans

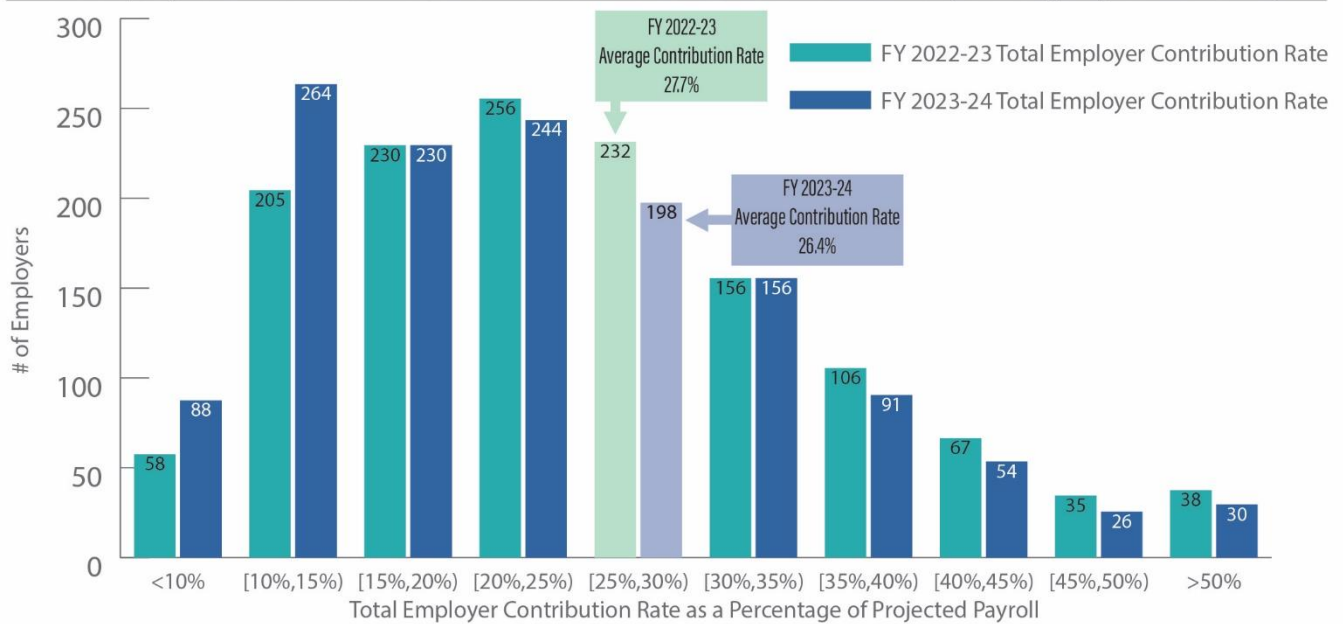
Funded Ratios by Employer as of June 30, 2020 and June 30, 2021 (Public Agency Miscellaneous)



Public Agency Contribution Rates for Miscellaneous Plans

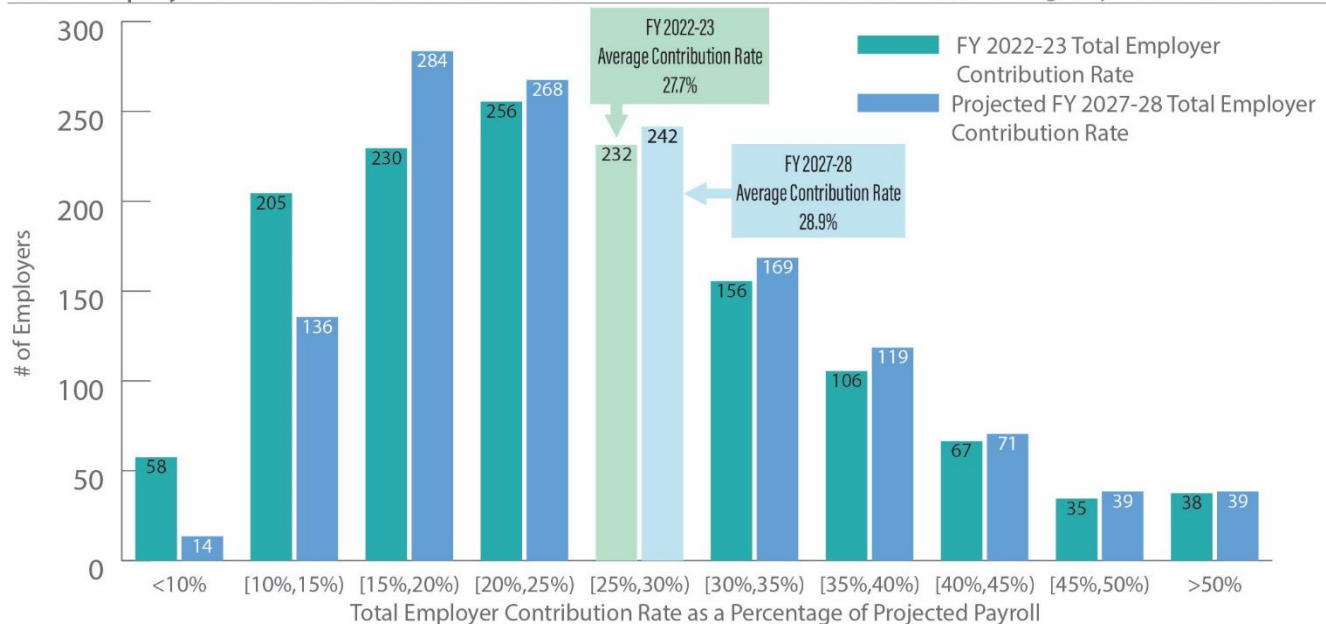
The following table displays the total employer contribution rates for public agency miscellaneous plans that contract with CalPERS for benefits. These contribution percentages reflect both the required normal cost contribution percentage and the required payment toward any unfunded liability (converted to a percent of payroll).

Total Employer Contribution Rates for Fiscal Year 2022-23 and 2023-24 (Public Agency Miscellaneous)



The following table displays the actual and projected total employer contribution rates for public agency miscellaneous plans that contract with CalPERS for benefits. These contribution percentages reflect both the required normal cost contribution percentage and the required payment toward any unfunded liability (converted to a percent of payroll). FY 2027-28 rates are based on a projected payroll. For plans with a decreasing number of active members (and therefore decreasing payroll), these contribution percentages can become quite large when the required payment toward unfunded liability becomes a large percentage of the decreasing payroll. In addition, the projected contributions are based on experience through June 30, 2021. There will be additional investment, economic and demographic experience that will impact the projected rates before they become actual rates in the future.

Total Employer Contribution Rates for Fiscal Year 2022-23 and 2027-28 (Public Agency Miscellaneous)



Appendix D – Recent and Projected Employer Contribution Rates

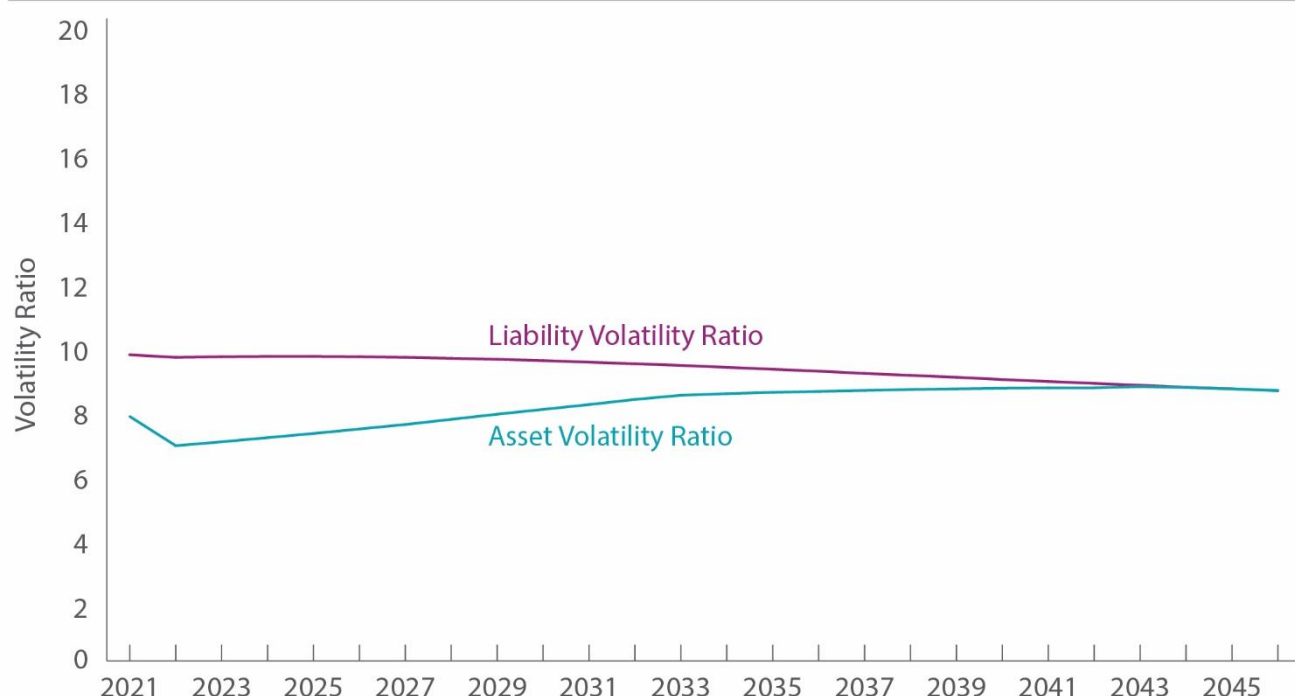
Average of Public Agency Total Employer Contribution Rates (FY 2022-23 to 2028-29)



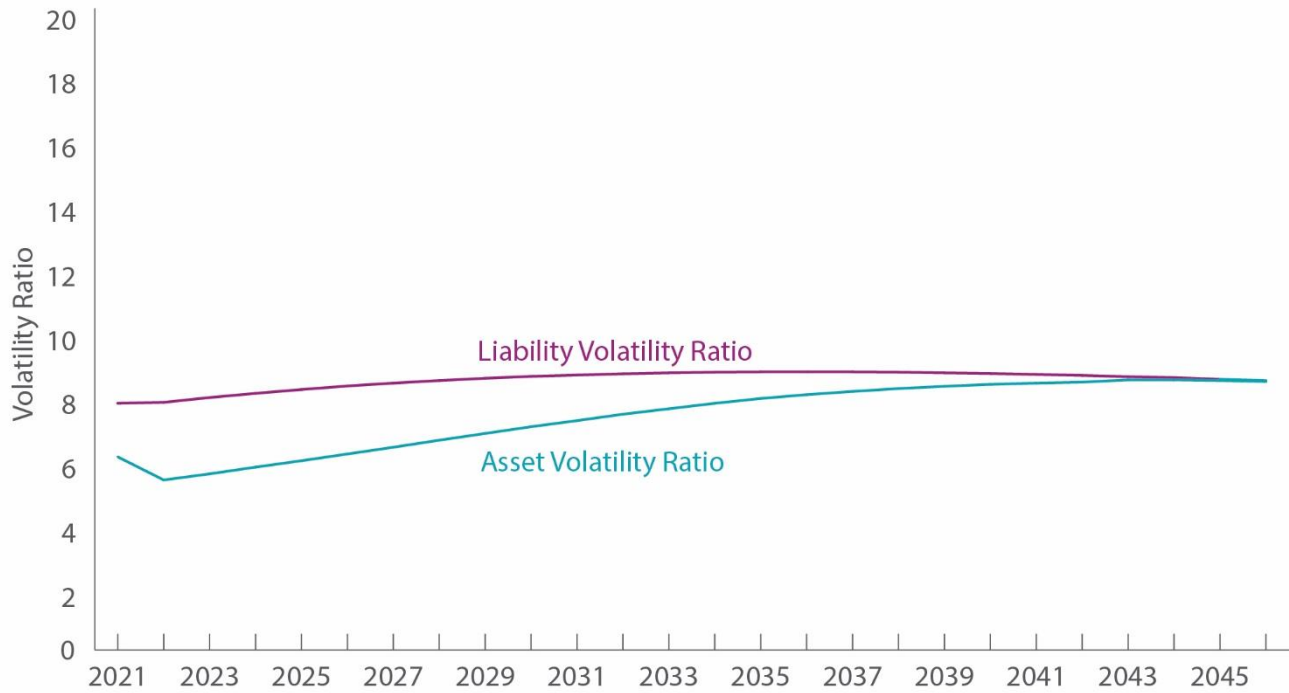
Appendix E – Asset and Liability Volatility Ratio Charts

As discussed in the Impacts of Plan Maturity section, this appendix contains the Asset and Liability Ratio charts for the State Miscellaneous Plan, the School's Pool and less typical public agency plans.

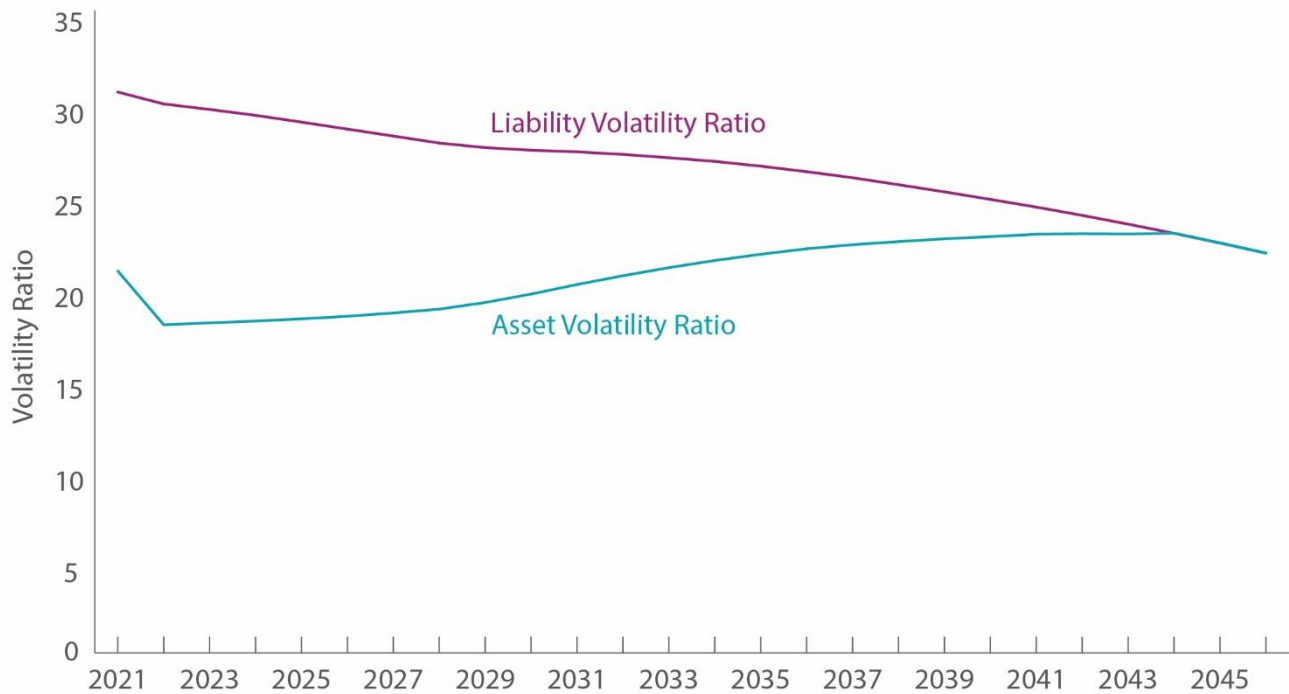
State Miscellaneous Plan



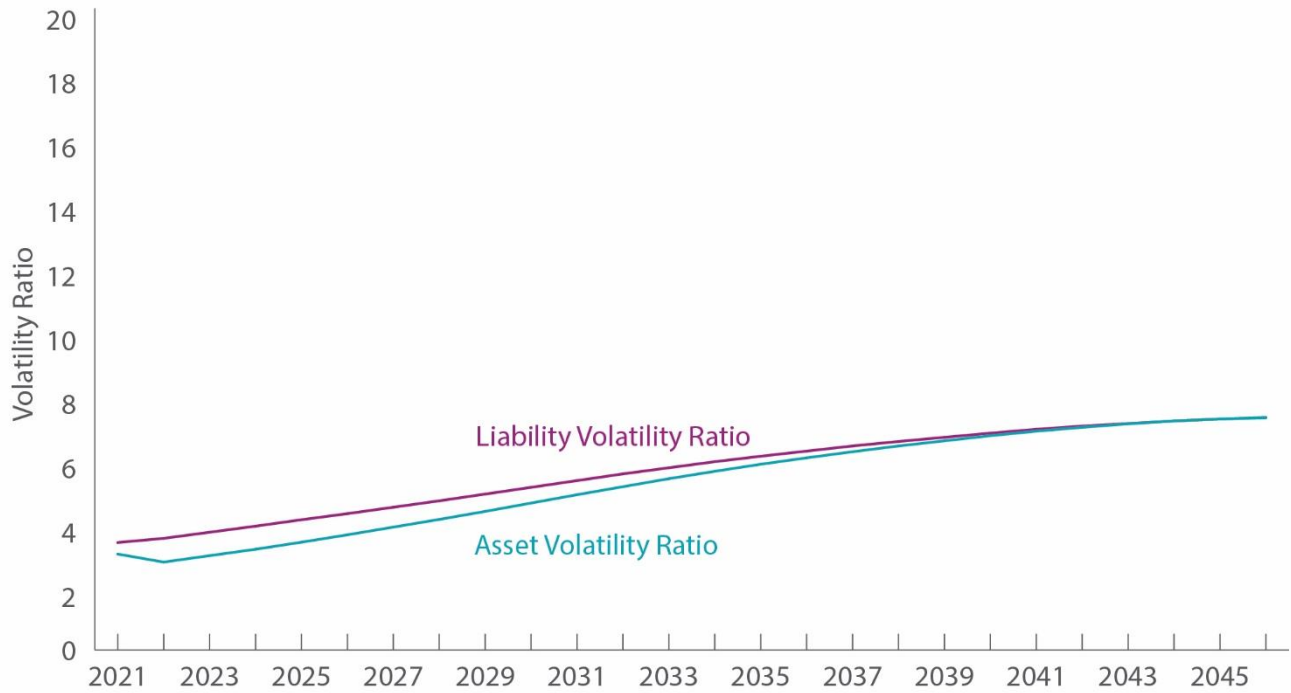
School's Pool



Super Mature Safety Plan



Less Mature Miscellaneous Plan



2022 Annual Review of Funding Levels and Risks

November 2022

