



Staff Liaison
 Crystal Reams | 510-215-4312
creams@ci.el-cerrito.ca.us

MINUTES

REGULAR MEETING OF THE FINANCIAL ADVISORY BOARD (FAB)

Tuesday, October 24, 2023 at 6:30 p.m.
 City hall, council Chambers
 10890 San Pablo Avenue
 El Cerrito, CA 94530

This Meeting Place is Wheelchair Accessible

6:30 p.m. CONVENNE REGULAR MEETING

1. **ROLL CALL** – Chair Farhad Farahmand, called the meeting to order at 6:33p.m.
 Present: Chair Farhad Farahmand; Members Dick Patterson, Kimberly White, Nate Schaffran.
 Absent: None.
2. **ORAL COMMUNICATIONS FROM THE PUBLIC**
 Remarks are typically limited to three (3) minutes per person, and may be on anything within the subject matter jurisdiction of the body. Remarks on non-agenda items will be heard first, as well as introduction by individuals interested in serving on the advisory body. Remarks on agenda items will be heard at the time the item is discussed.
 Public Comments: None.
3. **COUNCIL/STAFF LIAISONS ANNOUNCEMENTS AND REPORTS** (10 min.)
 Staff and/or Councilmembers may report Council policies, priorities and significant actions taken by the City Council, and/or on matters of general interest to the FAB.
 - Council Liaison Announcements and Reports: Carolyn Wysinger, Councilmember.
 None.
 - Staff Liaison Report: Crystal Reams, Finance Director
 On September 29, 2023 S&P Global Ratings upgraded its Underlying Rating on the City's 2017 Certificates of Participation rating was upgraded to 'BBB' from 'BBB-'. S&P Global Ratings also upgraded its Underlying Rating on the City's 2017 Sales Tax Revenue Refunding Bonds to 'A-' from 'BBB+'.
4. **APPROVAL OF THE MINUTES** (5 min.) (Attachment)
 Consider a motion adopting the minutes for the FAB meeting held on August 22, 2023.
Moved/Second: Members Patterson/White. Action Passed a motion adopting the minutes of the FAB meeting on August 22, 2023, with the addition of the word "on" under Item three Council/Staff Liaisons Announcements and Reports. The

comment should read “City Manager Karen Pinkos also noted that City Staff will be working with S&P on the rating review”. **Ayes:** Chair Farhad Farahmand, Members, Dick Patterson, Kimberly White. **Noes:** None. **Abstained:** Member Nate Schaffran.

Public comment: None

5. FAB MEETING SCHEDULE DECEMBER 26, 2023 (10 min.)

Discussion of cancelation and possible scheduling of special meeting in December due to City Hall closure; December 21, 2023, through January 1, 2024.

No action taken. Per direction of the members, staff will try to reschedule the meeting for December 12, 2023, at 6:30 p.m.

Public comment: None

6. FAB MEETING SCHEDULE CALENDAR YEAR 2024 (5 min.) (Attachment)

Consider a motion adopting the proposed calendar year 2024 meeting schedule.

No action taken. Per direction of the members, staff will try to reschedule the November and December 2024 meetings; possible options November 12, 2024 and December 10, 2024.

Public comment: None

7. FISCAL YEAR 2023 FOURTH QUARTER GENERAL FUND UPDATE (attachment)

Review the information presented to council.

No action taken.

Public comment: None

8. 2024 GENERAL FUND ASSUMPTIONS AND FIVE-YEAR FORECAST (attachment)

Review the information presented to council during the budget adoption process.

No action taken.

Public comment: None

9. WORKGROUP UPDATES (15 min.)

No workgroup updates.

10. FUTURE AGENDA ITEMS (10 min.)

- FAB/Council Communications Plan
- Comprehensive Financial Policies
- City Council Compensation Review
- Five-year Forecast
- General Fund Reserve

Members stated they wish to remove the FAB/Council Communications Plan, The City Council Compensation Review, and the Five-year forecast from the future agenda items. Members also stated that they wish to combine Comprehensive Financial Policies and General Fund Reserve into the same item Comprehensive Financial Policies. Members also stated they would like to add a review of the CalPERS valuations if available and a

Budget process discussion.

11. ADJOURNMENT

The meeting adjourned at 8:20 p.m.

Farhad Farahmand, Chair

This is to certify that the foregoing is a true and correct copy of the minutes of the regular Financial Advisory board meeting of August 22, 2023, as approved by the Financial Advisory Board.

Crystal Reams, Staff Liaison



2024 Regular Meeting Schedule

City Holiday/Closed

Regular Meeting

Location:

Council Chambers (10890 San Pablo Ave)

Meeting Time:

4th Tuesday 6:30 p.m.

FINANCIAL ADVISORY BOARD

JANUARY 2024						
Sun	Mon	Tue	Wed	Thur	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

FEBRUARY 2024						
Sun	Mon	Tue	Wed	Thur	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29		

MARCH 2024						
Sun	Mon	Tue	Wed	Thur	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

APRIL 2024						
Sun	Mon	Tue	Wed	Thur	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

MAY 2024						
Sun	Mon	Tue	Wed	Thur	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

JUNE 2024						
Sun	Mon	Tue	Wed	Thur	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

JULY 2024						
Sun	Mon	Tue	Wed	Thur	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

AUGUST 2024						
Sun	Mon	Tue	Wed	Thur	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

SEPTEMBER 2024						
Sun	Mon	Tue	Wed	Thur	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

OCTOBER 2024						
Sun	Mon	Tue	Wed	Thur	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

NOVEMBER 2024						
Sun	Mon	Tue	Wed	Thur	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

DECEMBER 2024						
Sun	Mon	Tue	Wed	Thur	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				



AGENDA BILL

Agenda Item No. 9.A.

Date: November 21, 2023
To: El Cerrito City Council
From: Crystal Reams, Finance Director/City Treasurer, Finance Department
Subject: FY 2023-24 General Fund Budget Quarterly Update through September 2023

ACTION PROPOSED

Receive and file an update on City General Fund revenues and expenses for FY 2023-24 through September 2023.

BACKGROUND/ANALYSIS

The El Cerrito City Council adopted an annual Budget for FY 2023-24 on June 20, 2023. The Council has closely monitored the City's budget and financial position and directed City staff to submit quarterly General Fund financial update reports.

The General Fund Update (Attachment 1) includes information on revenues and expenditures and lists the year-to-date totals by classification and by department. This report summarizes the major General Fund revenue and expenditure categories through September 30, 2023 on a cash basis and includes comparisons to the prior year's budget. Similar to the first quarter reports from prior fiscal years, revenue cycles for many revenue sources - including property taxes - occur in the second, third and fourth quarters of the fiscal year. Consequently, revenue receipts are not realized in equal quarterly amounts.

The following are FY 2023-24 highlights occurring for the report period of July 1, 2023 through September 30, 2023 and reflect preliminary unaudited cash basis information.

1. Total revenue was \$6.7 million, approximately 14% of the adopted FY 2023-24 budget. As a reminder, property taxes are the City's largest income category and are received in December and April each year. The majority of revenues are non-departmental, as they are general and not allocated to one department.
2. Real property transfer taxes are performing slightly under projections reflected in the adopted FY 2023-24 budget, which is slightly less than the prior fiscal year as reflected in the adopted budget for this category. Staff will continue to monitor revenue streams closely and will report back to the City Council at midyear.
3. Total expenditures were \$12.4 million, or 25% of the adopted budget, which is on track with budget for the quarter.

4. Personnel costs of \$8.5 million include all personnel related costs. Personnel is the largest component of General Fund expenditures (72%), as departments continue to fill vacancies we will align with budgeted amounts. Staff will continue to monitor these expenses.

STRATEGIC PLAN CONSIDERATIONS

This report is consistent with the City's Strategic Plan Goal B - Achieve long-term financial sustainability– and will allow the City Manager to develop a plan to ensure that Citywide Revenue meets the cost of providing Citywide services, including adequate reserves in the face of significant unanticipated revenue shortfalls. It further ensures procedures that represent best practices in financial management.

ENVIRONMENTAL CONSIDERATIONS

This section is not applicable to this agenda item.

FINANCIAL CONSIDERATIONS

General Fund revenues and expenditures for FY 2023-24, both overall and by department, are tracking as expected for the first quarter of the fiscal year.

As reported in the FY 2022-23 Fourth Quarter Unaudited General Fund Budget Update, the City projected a surplus of approximately \$5.6 million which substantially exceeds the \$481,530 projected deficit reported during midyear FY 2022-23. The higher than projected surplus resulted from increased sales tax revenues, franchise tax revenues, and utility users tax revenues and lower than projected expenditures. Salary savings due to vacancies largely contributed to the reduced expenditures. The City Council has directed staff to establish and fund the Emergency Disaster and Recovery Fund, and the Section 115 Trust for pension obligations, with \$9 million and \$1 million respectively.

LEGAL CONSIDERATIONS

This section is not applicable to this agenda item.

Reviewed by:



Karen Pinkos, City Manager

Attachments:

1. FY 2023-24 1st Quarter General Fund Update



General Fund Budget Update

Quarter 1 FY 2023-24

07/01/23 – 09/30/23

INTRODUCTION

The City of El Cerrito is pleased to submit the Quarter 1 FY 2023-24 General Fund Budget Update, for the period 07/01/23 through 09/30/23. The report provides a high-level overview of the City's status on the budget, with expenditures by department, showing unaudited actuals.

GENERAL FUND REVENUES

FY 2023-24 General Fund revenue is budgeted at \$48.5 million. Table 1 shows the year-to-date revenues by classification, and Table 2 shows the year-to-date revenues by department. As of September 30, 2023, tax revenues are at 8% of budget, which is primarily due to revenue cycles for property taxes, the largest income source for the City, which are received in December and April and consequently are not reflected in Quarter 1 revenue actuals. Taxes partially received during Quarter 1 include business license taxes, utility users' taxes, sales taxes, and real property transfer taxes (July and August only). Overall General Fund Revenues for Quarter 1 are at 14% of the total FY 2023-24 Adopted Budget, which is slightly higher than the 12% received for Quarter 1 FY 2022-23.

Table 1 reflects real property transfer taxes for the months of July and August only, as September funds (totaling \$266,855) were received in October and will be reflected in the FY 2023-24 Midyear Budget Update. Adding the September real property transfer tax funds to the Quarter 1 revenue actuals results in year-to-date revenue of \$670,497 or 16% of the Adopted Budget. Property transfer taxes are performing slightly under the projected amount in the FY 2023-24 Adopted Budget, which is slightly lower than the prior fiscal year. Staff will continue to monitor revenue streams closely and will report back to the City Council at midyear.

Table 1
General Fund Revenue – Classification
Quarter 1

Classification	YTD Budget Amount	YTD Actual Amount	% of Budget	Prior Year Total Actual
Property Taxes	\$11,417,064	\$0	0%	\$0
Sales Taxes	7,853,666	549,183	7	638,616
Transient Occupancy Taxes	150,000	0	0	0
Franchise Taxes	1,400,000	0	0	401,162
Business License Taxes	1,150,600	964,922	84	475,010
Property Transfer Taxes	4,300,000	403,642	9	574,963
Utility Users' Taxes	3,520,000	503,060	14	453,088
Other Taxes	1,500	1,238	83	0
Taxes Totals	\$29,792,830	\$2,422,045	8%	\$2,542,839
Licenses & Permits	1,054,618	320,046	30	304,894
Fines & Forfeitures	120,000	49,828	42	23,710
Use of Money and Property	646,573	362,475	56	102,546
Intergovernmental Revenues	8,393,092	905,519	11	678,724
Charges for Services Totals	6,674,468	2,372,305	36	1,651,168
Other Revenue Totals	870,000	62,926	7	64,858
Other Financing Sources Totals	977,182	245,213	25	0
Totals	\$48,528,763	\$6,740,357	14%	\$5,368,739

Table 2
General Fund Revenues – Department
Quarter 1

Revenue	YTD Budget Amount	YTD -Q1 Actual Amount	% of Budget	Prior Year Total Actual
Non-departmental	\$35,136,304	\$2,933,353	8%	\$2,573,051
Administration	140,100	2,504	2	539
Police	189,000	49,380	26	46,509
Fire	5,213,592	516,235	10	706,190
Public Works	523,700	269,141	51	100,860
Community Development	2,482,638	1,062,808	43	655,462
Recreation	4,843,429	1,906,936	39	1,286,128
Totals	\$48,528,763	\$6,740,357	14	\$5,368,739

GENERAL FUND - EXPENDITURES

General Fund expenditures are budgeted at \$48.4 million for FY 2023-24. Tables 3 and 4 show the expenditures year-to-date by classification and by department, respectively. Departments are on track for Quarter 1 at 25% of budgeted expenditures. This is slightly above the Quarter 1 FY 2022-23 expenditures at 21%.

As in previous fiscal years, Personnel is the largest component of General Fund expenditures (72%). Departments have continued to fill vacant positions and we are now trending at 24% of budgeted expenditures. This is slightly higher than Quarter 1 FY 2022-23 at 22%.

Table 3
General Fund Expenditures – Classification
Quarter 4

Classification	YTD Budget Amount	YTD -Q1 Actual Amount	% of Budget	Prior Year Total Actual
Personnel	\$35,057,398	\$8,529,691	24%	\$7,190,442
Purchased Professional & Technical Services	5,257,392	915,970	17	593,041
Purchased Property Services	2,401,325	277,293	11	124,682
Other Purchased Services	3,134,201	2,025,341	65	1,477,397
Supplies	869,692	168,400	19	26,161
Property & Capital	562,428	53,671	9	36,212
Financing Costs	570,386	106,631	19	18,461
Other Financing Uses	582,763	291,381	50	0
Totals	\$48,435,585	\$12,368,378	25%	\$9,466,396

In Table 3, the actual expenditures reflected for the “Other Purchased Services” classification includes the one-time full fiscal year’s annual insurance premiums which are paid each year in July. Also, in Table 4 expenditures reflected for the Administration Department include the one-time full fiscal year’s annual payments.

Table 4
General Fund Expenditures – Department
Quarter 4

Expenditures	FY 2023- 2024 Amended Budget	Year To Date Actual (thru Qtr 1)	Year To Date % of Amended Budget	Comparison Qtr 1 FY 2023 YTD Actual
Administration	\$7,275,373	\$2,822,721	39%	\$2,173,782
Police	13,523,728	3,061,591	23	2,385,022
Fire	14,432,355	3,490,729	24	2,715,279
Public Works	2,483,303	446,575	18	287,662
Community Development	3,799,601	602,907	16	565,728
Recreation	6,005,416	1,635,863	27	1,316,466
Non-departmental	915,809	307,992	34	22,457
Total	\$48,435,585	\$12,368,378	25%	\$9,466,396

CONCLUSION

The City of El Cerrito is currently on track to meet our FY 2023-24 budget goals. Revenues are not received in equal quarterly releases, primarily due to the biannual funding cycle (December and April) for property taxes. Expenditures are on track, with departments spending approximately 25% of their annual budget in Quarter 1.

Staff is continuously monitoring revenue and expenditures trends. Any trends indicating a need for budget adjustments are determined after the completion of Quarter 2 and will be reported to City Council at the FY 2023-24 Midyear budget session.



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

400 Q Street, Sacramento, CA 95811 | Phone: (916) 795-3000 | Fax: (916) 795-2744
888 CalPERS (or 888-225-7377) | TTY: (877) 249-7442 | www.calpers.ca.gov

July 2023

**PEPRA Safety Fire Plan of the City of El Cerrito (CalPERS ID: 7718662328)
Annual Valuation Report as of June 30, 2022**

Dear Employer,

Attached to this letter is the June 30, 2022 actuarial valuation report for the rate plan noted above. **Provided in this report is the determination of the minimum required employer contributions for fiscal year (FY) 2024-25.** In addition, the report contains important information regarding the current financial status of the plan as well as projections and risk measures to aid in planning for the future.

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

- Section 1 contains specific information for the plan including the development of the current and projected employer contributions, and
- Section 2 contains the Risk Pool Actuarial Valuation appropriate to the plan as of June 30, 2022.

Section 2 can be found on the CalPERS website (www.calpers.ca.gov). From the home page, go to "Forms & Publications" and select "View All". In the search box, enter "Risk Pool" and from the results list download the Safety Risk Pool Actuarial Valuation Report for June 30, 2022.

Actuarial valuations are based on assumptions regarding future plan experience including investment return and payroll growth, eligibility for the types of benefits provided, and longevity among retirees. The CalPERS Board of Administration (board) adopts these assumptions after considering the advice of CalPERS actuarial and investment teams and other professionals. Each actuarial valuation reflects all prior differences between actual and assumed experience and adjusts the contribution requirements as needed. This valuation is based on an investment return assumption of 6.8%, which was adopted by the board in November 2021. Other assumptions used in this report are those recommended in the CalPERS Experience Study and Review of Actuarial Assumptions report from November 2021.

Required Contributions

The table below shows the minimum required employer contributions and the PEPRA member contribution rate for FY 2024-25 along with estimates of the required contributions for FY 2025-26. Employee contributions other than cost sharing (whether paid by the employer or the employee) are in addition to the results shown below. **The required employer contributions in this report do not reflect any cost sharing arrangement between the agency and the employees.**

Fiscal Year	Employer Normal Cost Rate	Employer Amortization of Unfunded Accrued Liability	PEPRA Member Contribution Rate
2024-25	13.76%	\$14,343	13.75%
<i>Projected Results</i>			
2025-26	13.8%	\$19,000	TBD

The actual investment return for FY 2022-23 was not known at the time this report was prepared. The projections above assume the investment return for that year would be 6.8%. ***To the extent the actual investment return for FY 2022-23 differs from 6.8%, the actual contribution requirements for FY 2025-26 will differ from those shown above.*** For additional details regarding the assumptions and methods used for these projections, please refer to the "Projected Employer Contributions" in the "Highlights and Executive Summary" section. This section also contains projected required contributions through FY 2029-30.

Changes from Previous Year's Valuations

There are no significant changes in actuarial assumptions or policies in the 2022 actuarial valuation. There may be changes specific to the plan such as contract amendments and funding changes.

Further descriptions of general changes are included in "Highlights and Executive Summary" and in Appendix A of the Section 2 report in "Actuarial Methods and Assumptions." The effects of any changes on the required contributions are included in "Reconciliation of Required Employer Contributions," also in the Section 2 report.

Questions

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

Sincerely,

A handwritten signature in black ink, appearing to read "Scott Terando", with a long horizontal flourish extending to the right.

SCOTT TERANDO, ASA, EA, MAAA, FCA, CFA
Chief Actuary, CalPERS

A handwritten signature in blue ink, appearing to read "Randall Dziubek", with a long horizontal flourish extending to the right.

RANDALL DZIUBEK, ASA, MAAA
Deputy Chief Actuary, Valuation Services, CalPERS



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

**for the
PEPRA Safety Fire Plan
of the
City of El Cerrito
(CalPERS ID: 7718662328)**

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

Table of Contents

Section 1 – Plan Specific Information

Section 2 – Risk Pool Actuarial Valuation Information

Section 1

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Plan Specific Information for the PEPRA Safety Fire Plan of the City of El Cerrito

**(CalPERS ID: 7718662328)
(Rate Plan ID: 25344)**

Table of Contents

Actuarial Certification	1
Highlights and Executive Summary	
Introduction	3
Purpose of Section 1	3
Required Contributions	4
Additional Discretionary Employer Contributions	5
Funded Status – Funding Policy Basis	6
Projected Employer Contributions	7
Other Pooled Safety Risk Pool Rate Plans	8
Cost	9
Changes Since the Prior Year's Valuation	10
Subsequent Events	10
Assets and Liabilities	
Breakdown of Entry Age Accrued Liability	12
Allocation of Plan's Share of Pool's Experience/Assumption Change	12
Development of Plan's Share of Pool's Market Value of Assets	12
Schedule of Amortization Bases	13
Amortization Schedule and Alternatives	14
Employer Contribution History	16
Funding History	16
Risk Analysis	
Future Investment Return Scenarios	18
Discount Rate Sensitivity	19
Mortality Rate Sensitivity	19
Maturity Measures	20
Maturity Measures History	21
Funded Status – Termination Basis	22
Participant Data	23
List of Class 1 Benefit Provisions	23
Plan's Major Benefit Options	24
PEPRA Member Contribution Rates	25

Actuarial Certification

To the best of our knowledge, this report, comprised of Sections 1 and 2, is complete and accurate and contains sufficient information to disclose, fully and fairly, the funded condition of the PEPRA Safety Fire Plan of the City of El Cerrito and satisfies the actuarial valuation requirements of Government Code section 7504. This valuation is based on the member and financial data as of June 30, 2022 provided by the various CalPERS databases and the benefits under this plan with CalPERS as of the date this report was produced. Section 1 of this report is based on the member and financial data for City of El Cerrito, while Section 2 is based on the corresponding information for all agencies participating in the Safety Risk Pool to which the plan belongs.

As set forth in Section 2 of this report, the pool actuaries have certified that, in their opinion, the valuation of the Safety Risk Pool has been performed in accordance with generally accepted actuarial principles, in accordance with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for the risk pool as of the date of this valuation and as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.

Having relied upon the information set forth in Section 2 of this report and based on the census and benefit provision information for the rate plan, it is my opinion as the plan actuary that the Unfunded Accrued Liability amortization bases as of June 30, 2022 and employer contribution as of July 1, 2024 have been properly and accurately determined in accordance with the principles and standards stated above.

The undersigned is an actuary who satisfies the *Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States* with regard to pensions.



TONY CUNY, ASA, MAAA
Senior Actuary, CalPERS

Highlights and Executive Summary

- **Introduction**
- **Purpose of Section 1**
- **Required Contributions**
- **Additional Discretionary Employer Contributions**
- **Funded Status – Funding Policy Basis**
- **Projected Employer Contributions**
- **Other Pooled Safety Risk Pool Rate Plans**
- **Cost**
- **Changes Since the Prior Year's Valuation**
- **Subsequent Events**

Introduction

This report presents the results of the June 30, 2022 actuarial valuation of the PEPRA Safety Fire Plan of the City of El Cerrito of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the minimum required contributions for fiscal year (FY) 2024-25.

Purpose of Section 1

This Section 1 report for the PEPRA Safety Fire Plan of the City of El Cerrito of CalPERS was prepared by the Actuarial Office using data as of June 30, 2022. The purpose of the valuation is to:

- Set forth the assets and accrued liabilities of this rate plan as of June 30, 2022;
- Determine the minimum required employer contributions for this rate plan for FY July 1, 2024 through June 30, 2025;
- Determine the required member contribution rate for FY July 1, 2024 through June 30, 2025 for employees subject to the California Public Employees' Pension Reform Act of 2013 (PEPRA); and
- Provide actuarial information as of June 30, 2022 to the CalPERS Board of Administration (board) and other interested parties.

The pension funding information presented in this report should not be used in financial reports subject to Governmental Accounting Standards Board (GASB) Statement No. 68 for a Cost Sharing Employer Defined Benefit Pension Plan. A separate accounting valuation report for such purposes is available on the CalPERS website (www.calpers.ca.gov).

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

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

Assessment and Disclosure of Risk

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

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

Required Contributions

	Fiscal Year
Required Employer Contributions	2024-25
Employer Normal Cost Rate	13.76%
<i>Plus</i>	
Required Payment on Amortization Bases ¹	\$14,343
<i>Paid either as</i>	
1) Monthly Payment	\$1,195.25
<i>Or</i>	
2) Annual Prepayment Option*	\$13,879
Required PEPRA Member Contribution Rate	13.75%
<i>The total minimum required employer contribution is the sum of the Plan's Employer Normal Cost Rate (expressed as a percentage of payroll and paid as payroll is reported) plus the Employer Unfunded Accrued Liability (UAL) Contribution Amount (billed monthly (1) or prepaid annually (2) in dollars).</i>	
<i>* Only the UAL portion of the employer contribution can be prepaid (which must be received in full no later than July 31).</i>	
<i>For additional detail regarding the determination of the required contribution rate for PEPRA members, see "PEPRA Member Contribution Rates" section.</i>	

	Fiscal Year	Fiscal Year
	2023-24	2024-25
Development of Normal Cost as a Percentage of Payroll		
Base Total Normal Cost for Formula	27.29%	27.51%
Surcharge for Class 1 Benefits ²		
None	0.00%	0.00%
Phase out of Normal Cost Difference ³	0.00%	0.00%
Plan's Total Normal Cost	27.29%	27.51%
Offset Due to Employee Contributions	13.75%	13.75%
Employer Normal Cost Rate	13.54%	13.76%

¹ The required payment on amortization bases does not take into account any additional discretionary payment made after April 28, 2023.

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

³ When a rate plan joins the pool, the difference in normal cost between the pool and the rate plan is phased out over a five-year period in accordance with the CalPERS contribution allocation policy.

Additional Discretionary Employer Contributions

The minimum required employer contribution towards the Unfunded Accrued Liability (UAL) for this rate plan for FY 2024-25 is \$14,343. CalPERS allows agencies to make additional discretionary payments (ADPs) at any time and in any amount. These optional payments serve to reduce the UAL and future required contributions and can result in significant long-term savings. Agencies can also use ADPs to stabilize annual contributions as a fixed dollar amount, percent of payroll or percent of revenue.

Provided below are select ADP options for consideration. Making such an ADP during FY 2024-25 does not require an ADP be made in any future year, nor does it change the remaining amortization period of any portion of unfunded liability. For information on permanent changes to amortization periods, see the "Amortization Schedule and Alternatives" section of the report.

Agencies considering making an ADP should contact CalPERS for additional information.

Minimum Required Employer Contribution for Fiscal Year 2024-25

Estimated Normal Cost	Minimum UAL Payment	ADP	Total UAL Contribution	Estimated Total Contribution
\$308,761	\$14,343	\$0	\$14,343	\$323,104

The minimum required contribution above is less than interest on the UAL. With no ADP the UAL is projected to increase over the following year. If the minimum UAL payment were split between interest and principal, the principal portion would be negative. This situation is referred to as **negative amortization**. If only the minimum required contribution is made, contributions are not expected to exceed interest on the UAL until FY **2025-26**, as shown in the "Amortization Schedule and Alternatives" section of the report (see columns labeled "Current Amortization Schedule").

Fiscal Year 2024-25 Employer Contribution Necessary to Avoid Negative Amortization

Estimated Normal Cost	Minimum UAL Payment	ADP ¹	Total UAL Contribution	Estimated Total Contribution
\$308,761	\$14,343	\$4,663	\$19,006	\$327,767

Alternative Fiscal Year 2024-25 Employer Contributions for Greater UAL Reduction

Funding Horizon	Estimated Normal Cost	Minimum UAL Payment	ADP ¹	Total UAL Contribution	Estimated Total Contribution
20 years	\$308,761	\$14,343	\$11,631	\$25,974	\$334,735
15 years	\$308,761	\$14,343	\$15,958	\$30,301	\$339,062
10 years	\$308,761	\$14,343	\$25,084	\$39,427	\$348,188
5 years	\$308,761	\$14,343	\$53,460	\$67,803	\$376,564

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

Note that the calculations above are based on the projected UAL as of June 30, 2024 as determined in the June 30, 2022 actuarial valuation. New unfunded liabilities can emerge in future years due to assumption or method changes, changes in plan provisions, and actuarial experience different than assumed. Making an ADP illustrated above for the indicated number of years will not result in a plan that is exactly 100% funded in the indicated number of years. Valuation results will vary from one year to the next and can diverge significantly from projections over a period of several years.

Funded Status – Funding Policy Basis

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

	June 30, 2021	June 30, 2022
1. Present Value of Benefits	\$6,079,294	\$6,896,856
2. Entry Age Accrued Liability	1,128,938	1,554,626
3. Market Value of Assets (MVA)	1,160,902	1,325,089
4. Unfunded Accrued Liability (UAL) [(2) – (3)]	(\$31,964)	\$229,537
5. Funded Ratio [(3) / (2)]	102.8%	85.2%

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

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

	1% Lower Average Return	Current Assumption	1% Higher Average Return
Discount Rate	5.8%	6.8%	7.8%
1. Entry Age Accrued Liability	\$1,984,028	\$1,554,626	\$1,228,864
2. Market Value of Assets (MVA)	1,325,089	1,325,089	1,325,089
3. Unfunded Accrued Liability (UAL) [(1) – (2)]	\$658,939	\$229,537	(\$96,225)
4. Funded Ratio [(2) / (1)]	66.8%	85.2%	107.8%

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

Projected Employer Contributions

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

	Required Contribution	Projected Future Employer Contributions (Assumes 6.80% Return for Fiscal Year 2022-23 and Beyond)				
Fiscal Year	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
	Rate Plan 25344 Results					
Normal Cost %	13.76%	13.8%	13.8%	13.8%	13.8%	13.8%
UAL Payment	\$14,343	\$19,000	\$25,000	\$30,000	\$28,000	\$28,000

For ongoing plans, investment gains and losses are amortized using a 5-year ramp up. For more information, please see "Amortization of the Unfunded Actuarial Accrued Liability" under "Actuarial Methods" in Appendix A of the Section 2 Report. This method phases in the impact of the change in UAL over a 5-year period in order to reduce employer cost volatility from year to year. As a result of this methodology, dramatic changes in the required employer contributions in any one year are less likely. However, required contributions can change gradually and significantly over the next five years. In years when there is a large investment loss, the relatively small amortization payments during the ramp up period could result in contributions that are less than interest on the UAL (i.e. negative amortization) while the contribution impact of the increase in the UAL is phased in.

The required contribution for FY 2024-25 is less than interest on the UAL, a situation referred to as **negative amortization**, as explained in the "Additional Discretionary Employer Contributions" section earlier in this report. If only the minimum required contribution is made, contributions are not expected to exceed interest on the UAL until FY 2025-26, as shown in the "Amortization Schedule and Alternatives" section of the report (see columns labelled "Current Amortization Schedule").

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

Other Pooled Safety Risk Pool Rate Plans

All of the results presented in this Section 1 report, except those shown on this page, correspond to rate plan 25344. In many cases, employers have additional rate plans within the same risk pool. For cost analysis and budgeting it is useful to consider contributions for these rate plans as a whole rather than individually. The estimated contribution amounts and rates for all of the employer's rate plans in the Safety Risk Pool are shown below and assume that the total employer payroll within the Safety Risk Pool will grow according to the overall payroll growth assumption of 2.80% per year for three years. In a refinement since the prior year's report, Classic members who are projected to terminate employment are assumed to be replaced by PEPRA members.

	Fiscal Year 2023-24	Fiscal Year 2024-25
Estimated Combined Employer Contributions for all Pooled Safety Rate Plans		
Projected Payroll for the Contribution Year	\$10,700,529	\$9,848,373
Estimated Employer Normal Cost	\$2,384,749	\$2,062,850
Required Payment on Amortization Bases	\$4,246,509	\$4,959,323
Estimated Total Employer Contributions	\$6,631,258	\$7,022,173
Estimated Total Employer Contribution Rate (illustrative only)	61.97%	71.30%

Cost

Actuarial Determination of Plan Cost

Contributions to fund the plan are comprised of two components:

- Normal Cost, expressed as a percentage of total active payroll
- Amortization of the Unfunded Accrued Liability (UAL), expressed as a dollar amount

For fiscal years prior to 2015-16, the Amortization of UAL component was expressed as a percentage of total active payroll. Starting with FY 2015-16, the Amortization of UAL component was expressed as a dollar amount and invoiced on a monthly basis. There is an option to prepay this amount during July of each fiscal year.

The Normal Cost component is expressed as a percentage of active payroll with employer and employee contributions payable as part of the regular payroll reporting process.

The determination of both components requires complex actuarial calculations. The calculations are based on a set of actuarial assumptions which can be divided into two categories:

- Demographic assumptions (e.g., mortality rates, retirement rates, employment termination rates, disability rates)
- Economic assumptions (e.g., future investment earnings, inflation, salary growth rates)

These assumptions reflect CalPERS' best estimate of future experience of the plan and are long term in nature. We recognize that all assumptions will not be realized in any given year. For example, the investment earnings at CalPERS have averaged 6.9% over the 20 years ending June 30, 2022, yet individual fiscal year returns have ranged from -23.6% to +21.3%. In addition, CalPERS reviews all actuarial assumptions by conducting in-depth experience studies every four years, with the most recent experience study completed in 2021.

Changes Since the Prior Year's Valuation

Benefits

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

This valuation generally reflects plan amendments effective before the date of the report. Please refer to the "Plan's Major Benefit Options" in this report and Appendix B of the Section 2 Report for a summary of the plan provisions used in this valuation.

In 2022, SB 1168 increased the standard retiree lump sum death benefit from \$500 to \$2,000 for any death occurring on or after July 1, 2023. For pooled plans this is a Class 3 benefit and there is no normal cost surcharge. The impact on the unfunded liability is included in the pool's (gain)/loss.

Actuarial Methods and Assumptions

There are no significant changes to the actuarial methods or assumptions for the June 30, 2022 actuarial valuation.

Subsequent Events

This actuarial valuation report reflects fund investment return through June 30, 2022 and statutory/regulatory changes and board actions through January 2023.

During the time period between the valuation date and the publication of this report, inflation has been significantly higher than the expected inflation of 2.3% per annum. Since inflation influences cost-of-living increases for retirees and beneficiaries and active member pay increases, higher inflation is likely to put at least some upward pressure on contribution requirements and downward pressure on the funded status in the June 30, 2023 valuation. The actual impact of higher inflation on future valuation results will depend on, among other factors, how long higher inflation persists. At this time, we continue to believe the long-term inflation assumption of 2.3% is appropriate.

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

Assets and Liabilities

- **Breakdown of Entry Age Accrued Liability**
- **Allocation of Plan's Share of Pool's Experience/Assumption Change**
- **Development of Plan's Share of Pool's Market Value of Assets**
- **Schedule of Amortization Bases**
- **Amortization Schedule and Alternatives**
- **Employer Contribution History**
- **Funding History**

Breakdown of Entry Age Accrued Liability

Active Members	\$1,377,880
Transferred Members	173,759
Separated Members	2,987
Members and Beneficiaries Receiving Payments	<u>0</u>
Total	\$1,554,626

Allocation of Plan's Share of Pool's Experience/Assumption Change

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

1. Plan's Accrued Liability	\$1,554,626
2. Projected UAL Balance at 6/30/2022	(2,598)
3. Other UAL Adjustments (Golden Handshake, Prior Service Purchase, etc.)	0
4. Adjusted UAL Balance at 6/30/2022 for Asset Share	(2,598)
5. Pool's Accrued Liability ¹	28,855,988,965
6. Sum of Pool's Individual Plan UAL Balances at 6/30/2022 ¹	4,262,073,817
7. Pool's 2021-22 Investment (Gain)/Loss ¹	3,300,630,707
8. Pool's 2021-22 Non-Investment (Gain)/Loss ¹	429,637,362
9. Plan's Share of Pool's Investment (Gain)/Loss: $[(1) - (4)] \div [(5) - (6)] \times (7)$	208,988
10. Plan's Share of Pool's Non-Investment (Gain)/Loss: $(1) \div (5) \times (8)$	23,147
11. Plan's New (Gain)/Loss as of 6/30/2022: $(9) + (10)$	232,135
12. Increase in Pool's Accrued Liability due to Change in Assumptions ¹	0
13. Plan's Share of Pool's Change in Assumptions: $(1) \div (5) \times (12)$	0
14. Increase in Pool's Accrued Liability due to Funding Risk Mitigation ¹	0
15. Plan's Share of Pool's Change due to Funding Risk Mitigation: $(1) \div (5) \times (14)$	0
16. Offset due to Funding Risk Mitigation	0
17. Plan's Investment (Gain)/Loss: $(9) - (16)$	208,988

¹ Does not include plans that transferred to Pool on the valuation date.

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

18. Plan's UAL: $(2) + (3) + (11) + (13) + (15)$	\$229,537
19. Plan's Share of Pool's MVA: $(1) - (18)$	\$1,325,089

Schedule of Amortization Bases

Below is the schedule of the plan's amortization bases. Note that there is a two-year lag between the valuation date and the start of the contribution year.

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

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

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

Reason for Base	Date Est.	Ramp Level 2024-25	Ramp Shape	Escalation Rate	Amort. Period	Balance 6/30/22	Expected Payment 2022-23	Balance 6/30/23	Expected Payment 2023-24	Balance 6/30/24	Minimum Required Payment 2024-25
Fresh Start	6/30/21	No Ramp		0.00%	4	(2,598)	(30,900)	29,159	6,845	24,068	6,845
Investment (Gain)/Loss	6/30/22	20%	Up Only	0.00%	20	208,988	0	223,199	0	238,377	5,124
Non-Investment (Gain)/Loss	6/30/22	No Ramp		0.00%	20	23,147	0	24,721	0	26,402	2,374
Total						229,537	(30,900)	277,079	6,845	288,847	14,343

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

Amortization Schedule and Alternatives

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

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

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

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

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

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

Amortization Schedule and Alternatives (continued)

Date	<u>Current Amortization</u>		<u>Alternate Schedules</u>			
	<u>Schedule</u>		20 Year Amortization		15 Year Amortization	
	Balance	Payment	Balance	Payment	Balance	Payment
6/30/2024	288,847	14,343	288,847	25,974	288,847	30,301
6/30/2025	293,666	19,467	281,646	25,974	277,174	30,301
6/30/2026	293,517	24,589	273,955	25,974	264,708	30,301
6/30/2027	288,064	29,713	265,741	25,974	251,394	30,301
6/30/2028	276,945	27,993	256,969	25,974	237,175	30,301
6/30/2029	266,848	27,993	247,600	25,974	221,989	30,301
6/30/2030	256,065	27,993	237,594	25,974	205,770	30,301
6/30/2031	244,548	27,993	226,908	25,974	188,448	30,301
6/30/2032	232,248	27,993	215,495	25,974	169,948	30,302
6/30/2033	219,112	27,993	203,306	25,974	150,189	30,301
6/30/2034	205,082	27,993	190,288	25,974	129,088	30,302
6/30/2035	190,098	27,993	176,385	25,974	106,551	30,302
6/30/2036	174,096	27,993	161,537	25,974	82,481	30,301
6/30/2037	157,006	27,994	145,679	25,974	56,775	30,301
6/30/2038	138,752	27,993	128,743	25,975	29,321	30,302
6/30/2039	119,258	27,995	110,654	25,975		
6/30/2040	98,436	27,993	91,335	25,974		
6/30/2041	76,200	27,994	70,703	25,974		
6/30/2042	52,451	27,993	48,668	25,975		
6/30/2043	27,088	27,994	25,134	25,975		
6/30/2044						
6/30/2045						
6/30/2046						
6/30/2047						
6/30/2048						
6/30/2049						
Total		536,005		519,484		454,519
Interest Paid		247,158		230,637		165,672
Estimated Savings				16,521		81,486

Employer Contribution History

The table below provides a recent history of the required and discretionary employer contributions for the plan. The required amounts are based on the actuarial valuation from two years prior without subsequent adjustments, if any. Additional discretionary payments before July 1, 2019 or after April 28, 2023 are not included.

Fiscal Year	Employer Normal Cost	Unfunded Liability Payment (\$)	Additional Discretionary Payments
2016 - 17	12.082%	\$501	N/A
2017 - 18	11.990%	1,057	N/A
2018 - 19	12.141%	1,282	N/A
2019 - 20	13.034%	1,813	0
2020 - 21	13.044%	2,967	0
2021 - 22	13.13%	4,677	0
2022 - 23	12.78%	5,282	0
2023 - 24	13.54%	6,845	
2024 - 25	13.76%	14,343	

Funding History

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

Valuation Date	Accrued Liability (AL)	Share of Pool's Market Value of Assets (MVA)	Unfunded Accrued Liability (UAL)	Funded Ratio	Annual Covered Payroll
06/30/2013	\$58	\$85	(\$27)	146.6%	\$74,780
06/30/2014	34,081	35,559	(1,478)	104.3%	177,928
06/30/2015	47,385	44,669	2,716	94.3%	100,525
06/30/2016	101,234	89,312	11,922	88.2%	232,675
06/30/2017	220,456	209,018	11,438	94.8%	550,581
06/30/2018	389,350	357,340	32,010	91.8%	686,356
06/30/2019	546,388	491,118	55,270	89.9%	874,387
06/30/2020	747,033	662,140	84,893	88.6%	953,643
06/30/2021	1,128,938	1,160,902	(31,964)	102.8%	1,401,205
06/30/2022	1,554,626	1,325,089	229,537	85.2%	1,543,365

Risk Analysis

- **Future Investment Return Scenarios**
- **Discount Rate Sensitivity**
- **Mortality Rate Sensitivity**
- **Maturity Measures**
- **Maturity Measures History**
- **Funded Status – Termination Basis**

Future Investment Return Scenarios

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

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

Assumed Annual Return FY 2022-23 through 2041-42	Projected Employer Contributions				
	2025-26	2026-27	2027-28	2028-29	2029-30
3.0% (5th percentile)					
Normal Cost Rate	13.8%	13.8%	13.8%	13.8%	13.8%
UAL Contribution	\$21,000	\$28,000	\$37,000	\$40,000	\$47,000
10.8% (95th percentile)					
Normal Cost Rate	14.1%	14.5%	14.3%	14.7%	15.0%
UAL Contribution	\$18,000	\$21,000	\$23,000	\$17,000	\$0

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

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

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

Assumed Annual Return for Fiscal Year 2022-23	Required Employer Contributions	Projected Employer Contributions
	2024-25	2025-26
(17.2)% (2 standard deviation loss)		
Normal Cost Rate	13.76%	13.8%
UAL Contribution	\$14,343	\$27,000
(5.2)% (1 standard deviation loss)		
Normal Cost Rate	13.76%	13.8%
UAL Contribution	\$14,343	\$23,000

- Without investment gains (returns higher than 6.8%) in FY 2023-24 or later, projected contributions rates would continue to rise over the next four years due to the continued phase-in of the impact of the illustrated investment loss in FY 2022-23.
- The Pension Outlook Tool can be used to model projected contributions for these scenarios beyond FY 2025-26 as well as to model other investment return scenarios.

Discount Rate Sensitivity

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

Sensitivity to the Real Rate of Return Assumption

As of June 30, 2022	1% Lower Real Return Rate	Current Assumptions	1% Higher Real Return Rate
Discount Rate	5.8%	6.8%	7.8%
Price Inflation	2.3%	2.3%	2.3%
Real Rate of Return	3.5%	4.5%	5.5%
a) Total Normal Cost	34.63%	27.51%	22.13%
b) Accrued Liability	\$1,984,028	\$1,554,626	\$1,228,864
c) Market Value of Assets	\$1,325,089	\$1,325,089	\$1,325,089
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$658,939	\$229,537	(\$96,225)
e) Funded Ratio	66.8%	85.2%	107.8%

Sensitivity to the Price Inflation Assumption

As of June 30, 2022	1% Lower Price Inflation	Current Assumptions	1% Higher Price Inflation
Discount Rate	5.8%	6.8%	7.8%
Price Inflation	1.3%	2.3%	3.3%
Real Rate of Return	4.5%	4.5%	4.5%
a) Total Normal Cost	29.07%	27.51%	24.85%
b) Accrued Liability	\$1,635,673	\$1,554,626	\$1,407,754
c) Market Value of Assets	\$1,325,089	\$1,325,089	\$1,325,089
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$310,584	\$229,537	\$82,665
e) Funded Ratio	81.0%	85.2%	94.1%

Mortality Rate Sensitivity

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

As of June 30, 2022	10% Lower Mortality Rates	Current Assumptions	10% Higher Mortality Rates
a) Total Normal Cost	27.87%	27.51%	27.17%
b) Accrued Liability	\$1,578,645	\$1,554,626	\$1,532,267
c) Market Value of Assets	\$1,325,089	\$1,325,089	\$1,325,089
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$253,556	\$229,537	\$207,178
e) Funded Ratio	83.9%	85.2%	86.5%

Maturity Measures

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

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

Ratio of Retiree Accrued Liability to Total Accrued Liability	June 30, 2021	June 30, 2022
1. Retired Accrued Liability	\$0	\$0
2. Total Accrued Liability	1,128,938	1,554,626
3. Ratio of Retiree AL to Total AL [(1) / (2)]	0.00	0.00

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

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

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

Support Ratio	June 30, 2021	June 30, 2022
1. Number of Actives	12	13
2. Number of Retirees	0	0
3. Support Ratio [(1) / (2)]	N/A	N/A

Maturity Measures (continued)

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

Asset Volatility Ratio

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

Liability Volatility Ratio

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

Contribution Volatility	June 30, 2021	June 30, 2022
1. Market Value of Assets	\$1,160,902	\$1,325,089
2. Payroll	1,401,205	1,543,365
3. Asset Volatility Ratio (AVR) [(1) / (2)]	0.8	0.9
4. Accrued Liability	\$1,128,938	\$1,554,626
5. Liability Volatility Ratio (LVR) [(4) / (2)]	0.8	1.0

Maturity Measures History

Valuation Date	Ratio of Retiree Accrued Liability to Total Accrued Liability	Support Ratio	Asset Volatility Ratio	Liability Volatility Ratio
06/30/2017	0.00	N/A	0.4	0.4
06/30/2018	0.00	N/A	0.5	0.6
06/30/2019	0.00	N/A	0.6	0.6
06/30/2020	0.00	N/A	0.7	0.8
06/30/2021	0.00	N/A	0.8	0.8
06/30/2022	0.00	N/A	0.9	1.0

Funded Status – Termination Basis

The funded status measured on a termination basis is an estimate of the financial position of the plan had the contract with CalPERS been terminated as of June 30, 2022. The accrued liability on a termination basis (termination liability) is calculated differently compared to the plan's ongoing funding liability. For the termination liability calculation, both compensation and service are frozen as of the valuation date and no future pay increases or service accruals are assumed. This measure of funded status is not appropriate for assessing the need for future employer contributions in the case of an ongoing plan, that is, for an employer that continues to provide CalPERS retirement benefits to active employees. Unlike the actuarial cost method used for ongoing plans, the termination liability is the present value of the benefits earned through the valuation date.

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

The effective termination discount rate will depend on actual market rates of return for risk-free securities on the date of termination. As market discount rates are variable, the table below shows a range for the hypothetical termination liability based on the lowest and highest interest rates observed during an approximate 19-month period from 12 months before the valuation date to seven months after.

Discount Rate: 1.75% Price Inflation: 2.50%			Discount Rate: 4.50% Price Inflation: 2.75%			
Market Value of Assets (MVA)	Termination Liability ^{1,2}	Funded Ratio	Unfunded Termination Liability	Termination Liability ^{1,2}	Funded Ratio	Unfunded Termination Liability
\$1,325,089	\$4,086,962	32.4%	\$2,761,873	\$1,649,499	80.3%	\$324,410

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

² The discount rate used for termination valuations is a weighted average of the 10-year and 30-year U.S. Treasury yields where the weights are based on matching asset and liability durations as of the termination date. The discount rates used in the table are based on 20-year Treasury bonds, rounded to the nearest quarter percentage point, which is a good proxy for most plans. The 20-year Treasury yield was 3.38% on June 30, 2022, the valuation date.

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

Participant Data

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

	June 30, 2021	June 30, 2022
Active Members		
Counts	12	13
Average Attained Age	31.8	32.5
Average Entry Age to Rate Plan	29.0	29.0
Average Years of Credited Service	2.9	3.6
Average Annual Covered Pay	\$116,767	\$118,720
Annual Covered Payroll	\$1,401,205	\$1,543,365
Present Value of Future Payroll	\$22,791,412	\$24,468,168
Transferred Members	2	2
Separated Members	1	1
Retired Members and Beneficiaries*		
Counts	0	0
Average Annual Benefits	\$0	\$0
Total Annual Benefits	\$0	\$0

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

* Values include community property settlements.

List of Class 1 Benefit Provisions

This plan has the additional Class 1 Benefit Provisions:

- None

Plan's Major Benefit Options

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

	Benefit Group	
Member Category	Fire	
Demographics		
Actives	Yes	
Transfers/Separated	Yes	
Receiving	No	
Benefit Provision		
Benefit Formula	2.7% @ 57	
Social Security Coverage	No	
Full/Modified	Full	
Employee Contribution Rate	13.75%	
Final Average Compensation Period	Three Year	
Sick Leave Credit	Yes	
Non-Industrial Disability	Standard	
Industrial Disability	Standard	
Pre-Retirement Death Benefits		
Optional Settlement 2	Yes	
1959 Survivor Benefit Level	Level 4	
Special	Yes	
Alternate (firefighters)	No	
Post-Retirement Death Benefits		
Lump Sum	\$2000	
Survivor Allowance (PRSA)	No	
COLA	2%	

PEPRA Member Contribution Rates

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

The table below shows the determination of the PEPRA member contribution rates effective July 1, 2024, based on 50% of the total normal cost rate as of the June 30, 2022 valuation.

Rate Plan Identifier	Benefit Group Name	<u>Basis for Current Rate</u>		<u>Rates Effective July 1, 2024</u>			
		Total Normal Cost	Member Rate	Total Normal Cost	Change	Change Needed	Member Rate
25344	Safety Fire PEPRA Level	27.29%	13.75%	27.51%	0.22%	No	13.75%

Section 2

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Risk Pool Actuarial Valuation Information

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



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

400 Q Street, Sacramento, CA 95811 | Phone: (916) 795-3000 | Fax: (916) 795-2744
888 CalPERS (or 888-225-7377) | TTY: (877) 249-7442 | www.calpers.ca.gov

July 2023

**PEPRA Miscellaneous Plan of the City of El Cerrito (CalPERS ID: 7718662328)
Annual Valuation Report as of June 30, 2022**

Dear Employer,

Attached to this letter is the June 30, 2022 actuarial valuation report for the rate plan noted above. **Provided in this report is the determination of the minimum required employer contributions for fiscal year (FY) 2024-25.** In addition, the report contains important information regarding the current financial status of the plan as well as projections and risk measures to aid in planning for the future.

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

- Section 1 contains specific information for the plan including the development of the current and projected employer contributions, and
- Section 2 contains the Risk Pool Actuarial Valuation appropriate to the plan as of June 30, 2022.

Section 2 can be found on the CalPERS website (www.calpers.ca.gov). From the home page, go to "Forms & Publications" and select "View All". In the search box, enter "Risk Pool" and from the results list download the Miscellaneous Risk Pool Actuarial Valuation Report for June 30, 2022.

Actuarial valuations are based on assumptions regarding future plan experience including investment return and payroll growth, eligibility for the types of benefits provided, and longevity among retirees. The CalPERS Board of Administration (board) adopts these assumptions after considering the advice of CalPERS actuarial and investment teams and other professionals. Each actuarial valuation reflects all prior differences between actual and assumed experience and adjusts the contribution requirements as needed. This valuation is based on an investment return assumption of 6.8%, which was adopted by the board in November 2021. Other assumptions used in this report are those recommended in the CalPERS Experience Study and Review of Actuarial Assumptions report from November 2021.

Required Contributions

The table below shows the minimum required employer contributions and the PEPRA member contribution rate for FY 2024-25 along with estimates of the required contributions for FY 2025-26. Employee contributions other than cost sharing (whether paid by the employer or the employee) are in addition to the results shown below. **The required employer contributions in this report do not reflect any cost sharing arrangement between the agency and the employees.**

Fiscal Year	Employer Normal Cost Rate	Employer Amortization of Unfunded Accrued Liability	PEPRA Member Contribution Rate
2024-25	7.87%	\$11,099	7.75%
<i>Projected Results</i>			
2025-26	7.9%	\$19,000	TBD

The actual investment return for FY 2022-23 was not known at the time this report was prepared. The projections above assume the investment return for that year would be 6.8%. ***To the extent the actual investment return for FY 2022-23 differs from 6.8%, the actual contribution requirements for FY 2025-26 will differ from those shown above.*** For additional details regarding the assumptions and methods used for these projections, please refer to the "Projected Employer Contributions" in the "Highlights and Executive Summary" section. This section also contains projected required contributions through FY 2029-30.

Changes from Previous Year's Valuations

There are no significant changes in actuarial assumptions or policies in the 2022 actuarial valuation. There may be changes specific to the plan such as contract amendments and funding changes.

Further descriptions of general changes are included in "Highlights and Executive Summary" and in Appendix A of the Section 2 report in "Actuarial Methods and Assumptions." The effects of any changes on the required contributions are included in "Reconciliation of Required Employer Contributions," also in the Section 2 report.

Questions

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

Sincerely,

A handwritten signature in black ink, appearing to read "Scott Terando", with a long horizontal flourish extending to the right.

SCOTT TERANDO, ASA, EA, MAAA, FCA, CFA
Chief Actuary, CalPERS

A handwritten signature in blue ink, appearing to read "Randall Dziubek", with a long horizontal flourish extending to the right.

RANDALL DZIUBEK, ASA, MAAA
Deputy Chief Actuary, Valuation Services, CalPERS



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

**for the
PEPRA Miscellaneous Plan
of the
City of El Cerrito
(CalPERS ID: 7718662328)**

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

Table of Contents

Section 1 – Plan Specific Information

Section 2 – Risk Pool Actuarial Valuation Information

Section 1

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Plan Specific Information for the PEPRA Miscellaneous Plan of the City of El Cerrito

**(CalPERS ID: 7718662328)
(Rate Plan ID: 26319)**

Table of Contents

Actuarial Certification	1
Highlights and Executive Summary	
Introduction	3
Purpose of Section 1	3
Required Contributions	4
Additional Discretionary Employer Contributions	5
Funded Status – Funding Policy Basis	6
Projected Employer Contributions	7
Other Pooled Miscellaneous Risk Pool Rate Plans	8
Cost	9
Changes Since the Prior Year's Valuation	10
Subsequent Events	10
Assets and Liabilities	
Breakdown of Entry Age Accrued Liability	12
Allocation of Plan's Share of Pool's Experience/Assumption Change	12
Development of Plan's Share of Pool's Market Value of Assets	12
Schedule of Amortization Bases	13
Amortization Schedule and Alternatives	14
Employer Contribution History	16
Funding History	16
Risk Analysis	
Future Investment Return Scenarios	18
Discount Rate Sensitivity	19
Mortality Rate Sensitivity	19
Maturity Measures	20
Maturity Measures History	21
Funded Status – Termination Basis	22
Participant Data	23
List of Class 1 Benefit Provisions	23
Plan's Major Benefit Options	24
PEPRA Member Contribution Rates	25

Actuarial Certification

To the best of our knowledge, this report, comprised of Sections 1 and 2, is complete and accurate and contains sufficient information to disclose, fully and fairly, the funded condition of the PEPRA Miscellaneous Plan of the City of El Cerrito and satisfies the actuarial valuation requirements of Government Code section 7504. This valuation is based on the member and financial data as of June 30, 2022 provided by the various CalPERS databases and the benefits under this plan with CalPERS as of the date this report was produced. Section 1 of this report is based on the member and financial data for City of El Cerrito, while Section 2 is based on the corresponding information for all agencies participating in the Miscellaneous Risk Pool to which the plan belongs.

As set forth in Section 2 of this report, the pool actuaries have certified that, in their opinion, the valuation of the Miscellaneous Risk Pool has been performed in accordance with generally accepted actuarial principles, in accordance with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for the risk pool as of the date of this valuation and as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.

Having relied upon the information set forth in Section 2 of this report and based on the census and benefit provision information for the rate plan, it is my opinion as the plan actuary that the Unfunded Accrued Liability amortization bases as of June 30, 2022 and employer contribution as of July 1, 2024 have been properly and accurately determined in accordance with the principles and standards stated above.

The undersigned is an actuary who satisfies the *Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States* with regard to pensions.



TONY CUNY, ASA, MAAA
Senior Actuary, CalPERS

Highlights and Executive Summary

- **Introduction**
- **Purpose of Section 1**
- **Required Contributions**
- **Additional Discretionary Employer Contributions**
- **Funded Status – Funding Policy Basis**
- **Projected Employer Contributions**
- **Other Pooled Miscellaneous Risk Pool Rate Plans**
- **Cost**
- **Changes Since the Prior Year's Valuation**
- **Subsequent Events**

Introduction

This report presents the results of the June 30, 2022 actuarial valuation of the PEPRA Miscellaneous Plan of the City of El Cerrito of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the minimum required contributions for fiscal year (FY) 2024-25.

Purpose of Section 1

This Section 1 report for the PEPRA Miscellaneous Plan of the City of El Cerrito of CalPERS was prepared by the Actuarial Office using data as of June 30, 2022. The purpose of the valuation is to:

- Set forth the assets and accrued liabilities of this rate plan as of June 30, 2022;
- Determine the minimum required employer contributions for this rate plan for FY July 1, 2024 through June 30, 2025;
- Determine the required member contribution rate for FY July 1, 2024 through June 30, 2025 for employees subject to the California Public Employees' Pension Reform Act of 2013 (PEPRA); and
- Provide actuarial information as of June 30, 2022 to the CalPERS Board of Administration (board) and other interested parties.

The pension funding information presented in this report should not be used in financial reports subject to Governmental Accounting Standards Board (GASB) Statement No. 68 for a Cost Sharing Employer Defined Benefit Pension Plan. A separate accounting valuation report for such purposes is available on the CalPERS website (www.calpers.ca.gov).

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

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

Assessment and Disclosure of Risk

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

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

Required Contributions

	Fiscal Year
Required Employer Contributions	2024-25
Employer Normal Cost Rate	7.87%
<i>Plus</i>	
Required Payment on Amortization Bases ¹	\$11,099
<i>Paid either as</i>	
1) Monthly Payment	\$924.92
<i>Or</i>	
2) Annual Prepayment Option*	\$10,740
Required PEPRA Member Contribution Rate	7.75%
<i>The total minimum required employer contribution is the sum of the Plan's Employer Normal Cost Rate (expressed as a percentage of payroll and paid as payroll is reported) plus the Employer Unfunded Accrued Liability (UAL) Contribution Amount (billed monthly (1) or prepaid annually (2) in dollars).</i>	
<i>* Only the UAL portion of the employer contribution can be prepaid (which must be received in full no later than July 31).</i>	
<i>For additional detail regarding the determination of the required contribution rate for PEPRA members, see "PEPRA Member Contribution Rates" section.</i>	

	Fiscal Year	Fiscal Year
	2023-24	2024-25
Development of Normal Cost as a Percentage of Payroll		
Base Total Normal Cost for Formula	15.43%	15.62%
Surcharge for Class 1 Benefits ²		
None	0.00%	0.00%
Phase out of Normal Cost Difference ³	0.00%	0.00%
Plan's Total Normal Cost	15.43%	15.62%
Offset Due to Employee Contributions	7.75%	7.75%
Employer Normal Cost Rate	7.68%	7.87%

¹ The required payment on amortization bases does not take into account any additional discretionary payment made after April 28, 2023.

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

³ When a rate plan joins the pool, the difference in normal cost between the pool and the rate plan is phased out over a five-year period in accordance with the CalPERS contribution allocation policy.

Additional Discretionary Employer Contributions

The minimum required employer contribution towards the Unfunded Accrued Liability (UAL) for this rate plan for FY 2024-25 is \$11,099. CalPERS allows agencies to make additional discretionary payments (ADPs) at any time and in any amount. These optional payments serve to reduce the UAL and future required contributions and can result in significant long-term savings. Agencies can also use ADPs to stabilize annual contributions as a fixed dollar amount, percent of payroll or percent of revenue.

Provided below are select ADP options for consideration. Making such an ADP during FY 2024-25 does not require an ADP be made in any future year, nor does it change the remaining amortization period of any portion of unfunded liability. For information on permanent changes to amortization periods, see the "Amortization Schedule and Alternatives" section of the report.

Agencies considering making an ADP should contact CalPERS for additional information.

Minimum Required Employer Contribution for Fiscal Year 2024-25

Estimated Normal Cost	Minimum UAL Payment	ADP	Total UAL Contribution	Estimated Total Contribution
\$278,353	\$11,099	\$0	\$11,099	\$289,452

The minimum required contribution above is less than interest on the UAL. With no ADP the UAL is projected to increase over the following year. If the minimum UAL payment were split between interest and principal, the principal portion would be negative. This situation is referred to as **negative amortization**. If only the minimum required contribution is made, contributions are not expected to exceed interest on the UAL until FY **2027-28**, as shown in the "Amortization Schedule and Alternatives" section of the report (see columns labeled "Current Amortization Schedule").

Fiscal Year 2024-25 Employer Contribution Necessary to Avoid Negative Amortization

Estimated Normal Cost	Minimum UAL Payment	ADP ¹	Total UAL Contribution	Estimated Total Contribution
\$278,353	\$11,099	\$14,598	\$25,697	\$304,050

Alternative Fiscal Year 2024-25 Employer Contributions for Greater UAL Reduction

Funding Horizon	Estimated Normal Cost	Minimum UAL Payment	ADP ¹	Total UAL Contribution	Estimated Total Contribution
20 years	\$278,353	\$11,099	\$24,019	\$35,118	\$313,471
15 years	\$278,353	\$11,099	\$29,870	\$40,969	\$319,322
10 years	\$278,353	\$11,099	\$42,209	\$53,308	\$331,661
5 years	\$278,353	\$11,099	\$80,574	\$91,673	\$370,026

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

Note that the calculations above are based on the projected UAL as of June 30, 2024 as determined in the June 30, 2022 actuarial valuation. New unfunded liabilities can emerge in future years due to assumption or method changes, changes in plan provisions, and actuarial experience different than assumed. Making an ADP illustrated above for the indicated number of years will not result in a plan that is exactly 100% funded in the indicated number of years. Valuation results will vary from one year to the next and can diverge significantly from projections over a period of several years.

Funded Status – Funding Policy Basis

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

	June 30, 2021	June 30, 2022
1. Present Value of Benefits	\$5,214,913	\$6,289,267
2. Entry Age Accrued Liability	1,944,122	2,465,446
3. Market Value of Assets (MVA)	2,014,000	2,144,927
4. Unfunded Accrued Liability (UAL) [(2) – (3)]	(\$69,878)	\$320,519
5. Funded Ratio [(3) / (2)]	103.6%	87.0%

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

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

	1% Lower Average Return	Current Assumption	1% Higher Average Return
Discount Rate	5.8%	6.8%	7.8%
1. Entry Age Accrued Liability	\$3,002,906	\$2,465,446	\$2,051,963
2. Market Value of Assets (MVA)	2,144,927	2,144,927	2,144,927
3. Unfunded Accrued Liability (UAL) [(1) – (2)]	\$857,979	\$320,519	(\$92,964)
4. Funded Ratio [(2) / (1)]	71.4%	87.0%	104.5%

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

Projected Employer Contributions

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

	Required Contribution	Projected Future Employer Contributions (Assumes 6.80% Return for Fiscal Year 2022-23 and Beyond)				
Fiscal Year	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
	Rate Plan 26319 Results					
Normal Cost %	7.87%	7.9%	7.9%	7.9%	7.9%	7.9%
UAL Payment	\$11,099	\$19,000	\$26,000	\$34,000	\$41,000	\$41,000

For ongoing plans, investment gains and losses are amortized using a 5-year ramp up. For more information, please see "Amortization of the Unfunded Actuarial Accrued Liability" under "Actuarial Methods" in Appendix A of the Section 2 Report. This method phases in the impact of the change in UAL over a 5-year period in order to reduce employer cost volatility from year to year. As a result of this methodology, dramatic changes in the required employer contributions in any one year are less likely. However, required contributions can change gradually and significantly over the next five years. In years when there is a large investment loss, the relatively small amortization payments during the ramp up period could result in contributions that are less than interest on the UAL (i.e. negative amortization) while the contribution impact of the increase in the UAL is phased in.

The required contribution for FY 2024-25 is less than interest on the UAL, a situation referred to as **negative amortization**, as explained in the "Additional Discretionary Employer Contributions" section earlier in this report. If only the minimum required contribution is made, contributions are not expected to exceed interest on the UAL until FY 2027-28, as shown in the "Amortization Schedule and Alternatives" section of the report (see columns labelled "Current Amortization Schedule").

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

Other Pooled Miscellaneous Risk Pool Rate Plans

All of the results presented in this Section 1 report, except those shown on this page, correspond to rate plan 26319. In many cases, employers have additional rate plans within the same risk pool. For cost analysis and budgeting it is useful to consider contributions for these rate plans as a whole rather than individually. The estimated contribution amounts and rates for all of the employer's rate plans in the Miscellaneous Risk Pool are shown below and assume that the total employer payroll within the Miscellaneous Risk Pool will grow according to the overall payroll growth assumption of 2.80% per year for three years. In a refinement since the prior year's report, Classic members who are projected to terminate employment are assumed to be replaced by PEPRA members.

	Fiscal Year 2023-24	Fiscal Year 2024-25
Estimated Combined Employer Contributions for all Pooled Miscellaneous Rate Plans		
Projected Payroll for the Contribution Year	\$6,583,801	\$6,976,110
Estimated Employer Normal Cost	\$870,411	\$829,316
Required Payment on Amortization Bases	\$1,896,880	\$2,184,913
Estimated Total Employer Contributions	\$2,767,291	\$3,014,229
Estimated Total Employer Contribution Rate (illustrative only)	42.03%	43.21%

Cost

Actuarial Determination of Plan Cost

Contributions to fund the plan are comprised of two components:

- Normal Cost, expressed as a percentage of total active payroll
- Amortization of the Unfunded Accrued Liability (UAL), expressed as a dollar amount

For fiscal years prior to 2015-16, the Amortization of UAL component was expressed as a percentage of total active payroll. Starting with FY 2015-16, the Amortization of UAL component was expressed as a dollar amount and invoiced on a monthly basis. There is an option to prepay this amount during July of each fiscal year.

The Normal Cost component is expressed as a percentage of active payroll with employer and employee contributions payable as part of the regular payroll reporting process.

The determination of both components requires complex actuarial calculations. The calculations are based on a set of actuarial assumptions which can be divided into two categories:

- Demographic assumptions (e.g., mortality rates, retirement rates, employment termination rates, disability rates)
- Economic assumptions (e.g., future investment earnings, inflation, salary growth rates)

These assumptions reflect CalPERS' best estimate of future experience of the plan and are long term in nature. We recognize that all assumptions will not be realized in any given year. For example, the investment earnings at CalPERS have averaged 6.9% over the 20 years ending June 30, 2022, yet individual fiscal year returns have ranged from -23.6% to +21.3%. In addition, CalPERS reviews all actuarial assumptions by conducting in-depth experience studies every four years, with the most recent experience study completed in 2021.

Changes Since the Prior Year's Valuation

Benefits

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

This valuation generally reflects plan amendments effective before the date of the report. Please refer to the "Plan's Major Benefit Options" in this report and Appendix B of the Section 2 Report for a summary of the plan provisions used in this valuation.

In 2022, SB 1168 increased the standard retiree lump sum death benefit from \$500 to \$2,000 for any death occurring on or after July 1, 2023. For pooled plans this is a Class 3 benefit and there is no normal cost surcharge. The impact on the unfunded liability is included in the pool's (gain)/loss.

Actuarial Methods and Assumptions

There are no significant changes to the actuarial methods or assumptions for the June 30, 2022 actuarial valuation.

Subsequent Events

This actuarial valuation report reflects fund investment return through June 30, 2022 and statutory/regulatory changes and board actions through January 2023.

During the time period between the valuation date and the publication of this report, inflation has been significantly higher than the expected inflation of 2.3% per annum. Since inflation influences cost-of-living increases for retirees and beneficiaries and active member pay increases, higher inflation is likely to put at least some upward pressure on contribution requirements and downward pressure on the funded status in the June 30, 2023 valuation. The actual impact of higher inflation on future valuation results will depend on, among other factors, how long higher inflation persists. At this time, we continue to believe the long-term inflation assumption of 2.3% is appropriate.

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

Assets and Liabilities

- **Breakdown of Entry Age Accrued Liability**
- **Allocation of Plan's Share of Pool's Experience/Assumption Change**
- **Development of Plan's Share of Pool's Market Value of Assets**
- **Schedule of Amortization Bases**
- **Amortization Schedule and Alternatives**
- **Employer Contribution History**
- **Funding History**

Breakdown of Entry Age Accrued Liability

Active Members	\$1,501,315
Transferred Members	500,097
Separated Members	168,536
Members and Beneficiaries Receiving Payments	<u>295,498</u>
Total	\$2,465,446

Allocation of Plan's Share of Pool's Experience/Assumption Change

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

1. Plan's Accrued Liability	\$2,465,446
2. Projected UAL Balance at 6/30/2022	(50,196)
3. Other UAL Adjustments (Golden Handshake, Prior Service Purchase, etc.)	0
4. Adjusted UAL Balance at 6/30/2022 for Asset Share	(50,196)
5. Pool's Accrued Liability ¹	22,021,735,002
6. Sum of Pool's Individual Plan UAL Balances at 6/30/2022 ¹	2,453,954,297
7. Pool's 2021-22 Investment (Gain)/Loss ¹	2,614,071,182
8. Pool's 2021-22 Non-Investment (Gain)/Loss ¹	309,490,972
9. Plan's Share of Pool's Investment (Gain)/Loss: $[(1) - (4)] \div [(5) - (6)] \times (7)$	336,066
10. Plan's Share of Pool's Non-Investment (Gain)/Loss: $(1) \div (5) \times (8)$	34,649
11. Plan's New (Gain)/Loss as of 6/30/2022: $(9) + (10)$	370,715
12. Increase in Pool's Accrued Liability due to Change in Assumptions ¹	0
13. Plan's Share of Pool's Change in Assumptions: $(1) \div (5) \times (12)$	0
14. Increase in Pool's Accrued Liability due to Funding Risk Mitigation ¹	0
15. Plan's Share of Pool's Change due to Funding Risk Mitigation: $(1) \div (5) \times (14)$	0
16. Offset due to Funding Risk Mitigation	0
17. Plan's Investment (Gain)/Loss: $(9) - (16)$	336,066
18. Partial Fresh Start Base: $(2) + (17)$	285,870

¹ Does not include plans that transferred to Pool on the valuation date.

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

19. Plan's UAL: $(2) + (3) + (11) + (13) + (15)$	\$320,519
20. Plan's Share of Pool's MVA: $(1) - (19)$	\$2,144,927

Schedule of Amortization Bases

Below is the schedule of the plan's amortization bases. Note that there is a two-year lag between the valuation date and the start of the contribution year.

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

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

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

Reason for Base	Date Est.	Ramp Level 2024-25	Ramp Shape	Escalation Rate	Amort. Period	Balance 6/30/22	Expected Payment 2022-23	Balance 6/30/23	Expected Payment 2023-24	Balance 6/30/24	Minimum Required Payment 2024-25
Non-Investment (Gain)/Loss	6/30/22	No Ramp		0.00%	20	34,649	0	37,005	0	39,521	3,554
Partial Fresh Start	6/30/22	20%	Up Only	0.00%	20	285,870	(22,602)	328,667	0	351,016	7,545
Total						320,519	(22,602)	365,672	0	390,537	11,099

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

The partial fresh start base established June 30, 2022 is the sum of the UAL balance from the June 30, 2021 valuation (projected to June 30, 2022) and the June 30, 2022 investment loss, as shown on the previous page.

Amortization Schedule and Alternatives

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

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

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

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

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

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

Amortization Schedule and Alternatives (continued)

Date	<u>Current Amortization Schedule</u>		<u>Alternate Schedules</u>			
	Balance	Payment	20 Year Amortization		15 Year Amortization	
			Balance	Payment	Balance	Payment
6/30/2024	390,537	11,099	390,537	35,118	390,537	40,969
6/30/2025	405,624	18,644	380,801	35,119	374,754	40,969
6/30/2026	413,939	26,189	370,402	35,118	357,898	40,969
6/30/2027	415,022	33,734	359,297	35,119	339,896	40,969
6/30/2028	408,382	41,279	347,436	35,118	320,670	40,969
6/30/2029	393,493	41,279	334,769	35,118	300,137	40,969
6/30/2030	377,591	41,279	321,241	35,119	278,207	40,968
6/30/2031	360,608	41,279	306,792	35,119	254,787	40,968
6/30/2032	342,470	41,279	291,360	35,118	229,775	40,969
6/30/2033	323,098	41,279	274,880	35,118	203,061	40,969
6/30/2034	302,410	41,279	257,279	35,118	174,530	40,969
6/30/2035	280,315	41,279	238,482	35,119	144,059	40,968
6/30/2036	256,717	41,279	218,405	35,118	111,517	40,969
6/30/2037	231,514	41,279	196,964	35,118	76,761	40,968
6/30/2038	204,598	41,279	174,065	35,119	39,643	40,969
6/30/2039	175,851	41,279	149,608	35,118		
6/30/2040	145,150	41,279	123,489	35,119		
6/30/2041	112,361	41,279	95,593	35,118		
6/30/2042	77,342	41,278	65,801	35,119		
6/30/2043	39,943	41,279	33,982	35,118		
6/30/2044						
6/30/2045						
6/30/2046						
6/30/2047						
6/30/2048						
6/30/2049						
Total		750,129		702,368		614,531
Interest Paid		359,592		311,831		223,994
Estimated Savings				47,761		135,598

Employer Contribution History

The table below provides a recent history of the required and discretionary employer contributions for the plan. The required amounts are based on the actuarial valuation from two years prior without subsequent adjustments, if any. Additional discretionary payments before July 1, 2019 or after April 28, 2023 are not included.

Fiscal Year	Employer Normal Cost	Unfunded Liability Payment (\$)	Additional Discretionary Payments
2016 - 17	6.555%	\$105	N/A
2017 - 18	6.533%	1,306	N/A
2018 - 19	6.842%	1,846	N/A
2019 - 20	6.985%	2,729	0
2020 - 21	7.732%	4,523	0
2021 - 22	7.59%	6,971	0
2022 - 23	7.47%	8,869	0
2023 - 24	7.68%	0	
2024 - 25	7.87%	11,099	

Funding History

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

Valuation Date	Accrued Liability (AL)	Share of Pool's Market Value of Assets (MVA)	Unfunded Accrued Liability (UAL)	Funded Ratio	Annual Covered Payroll
06/30/2013	\$3,760	\$5,045	(\$1,285)	134.2%	\$196,385
06/30/2014	36,372	39,493	(3,121)	108.6%	379,384
06/30/2015	94,864	91,611	3,253	96.6%	760,207
06/30/2016	228,912	206,800	22,112	90.3%	1,209,913
06/30/2017	430,332	408,601	21,731	95.0%	1,282,271
06/30/2018	715,573	658,044	57,529	92.0%	1,487,336
06/30/2019	1,029,551	939,572	89,979	91.3%	2,107,811
06/30/2020	1,439,235	1,298,725	140,510	90.2%	2,234,815
06/30/2021	1,944,122	2,014,000	(69,878)	103.6%	2,000,206
06/30/2022	2,465,446	2,144,927	320,519	87.0%	2,459,552

Risk Analysis

- **Future Investment Return Scenarios**
- **Discount Rate Sensitivity**
- **Mortality Rate Sensitivity**
- **Maturity Measures**
- **Maturity Measures History**
- **Funded Status – Termination Basis**

Future Investment Return Scenarios

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

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

Assumed Annual Return FY 2022-23 through 2041-42	Projected Employer Contributions				
	2025-26	2026-27	2027-28	2028-29	2029-30
3.0% (5th percentile)					
Normal Cost Rate	7.9%	7.9%	7.9%	7.9%	7.9%
UAL Contribution	\$21,000	\$32,000	\$46,000	\$62,000	\$72,000
10.8% (95th percentile)					
Normal Cost Rate	8.1%	8.3%	8.5%	8.7%	8.4%
UAL Contribution	\$17,000	\$21,000	\$23,000	\$22,000	\$0

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

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

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

Assumed Annual Return for Fiscal Year 2022-23	Required Employer Contributions	Projected Employer Contributions
	2024-25	2025-26
(17.2)% (2 standard deviation loss)		
Normal Cost Rate	7.87%	7.9%
UAL Contribution	\$11,099	\$31,000
(5.2)% (1 standard deviation loss)		
Normal Cost Rate	7.87%	7.9%
UAL Contribution	\$11,099	\$25,000

- Without investment gains (returns higher than 6.8%) in FY 2023-24 or later, projected contributions rates would continue to rise over the next four years due to the continued phase-in of the impact of the illustrated investment loss in FY 2022-23.
- The Pension Outlook Tool can be used to model projected contributions for these scenarios beyond FY 2025-26 as well as to model other investment return scenarios.

Discount Rate Sensitivity

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

Sensitivity to the Real Rate of Return Assumption

As of June 30, 2022	1% Lower Real Return Rate	Current Assumptions	1% Higher Real Return Rate
Discount Rate	5.8%	6.8%	7.8%
Price Inflation	2.3%	2.3%	2.3%
Real Rate of Return	3.5%	4.5%	5.5%
a) Total Normal Cost	19.53%	15.62%	12.65%
b) Accrued Liability	\$3,002,906	\$2,465,446	\$2,051,963
c) Market Value of Assets	\$2,144,927	\$2,144,927	\$2,144,927
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$857,979	\$320,519	(\$92,964)
e) Funded Ratio	71.4%	87.0%	104.5%

Sensitivity to the Price Inflation Assumption

As of June 30, 2022	1% Lower Price Inflation	Current Assumptions	1% Higher Price Inflation
Discount Rate	5.8%	6.8%	7.8%
Price Inflation	1.3%	2.3%	3.3%
Real Rate of Return	4.5%	4.5%	4.5%
a) Total Normal Cost	16.48%	15.62%	14.20%
b) Accrued Liability	\$2,595,644	\$2,465,446	\$2,238,982
c) Market Value of Assets	\$2,144,927	\$2,144,927	\$2,144,927
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$450,717	\$320,519	\$94,055
e) Funded Ratio	82.6%	87.0%	95.8%

Mortality Rate Sensitivity

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

As of June 30, 2022	10% Lower Mortality Rates	Current Assumptions	10% Higher Mortality Rates
a) Total Normal Cost	15.89%	15.62%	15.37%
b) Accrued Liability	\$2,513,642	\$2,465,446	\$2,421,032
c) Market Value of Assets	\$2,144,927	\$2,144,927	\$2,144,927
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$368,715	\$320,519	\$276,105
e) Funded Ratio	85.3%	87.0%	88.6%

Maturity Measures

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

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

Ratio of Retiree Accrued Liability to Total Accrued Liability	June 30, 2021	June 30, 2022
1. Retired Accrued Liability	\$92,340	\$295,498
2. Total Accrued Liability	1,944,122	2,465,446
3. Ratio of Retiree AL to Total AL [(1) / (2)]	0.05	0.12

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

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

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

Support Ratio	June 30, 2021	June 30, 2022
1. Number of Actives	39	44
2. Number of Retirees	1	2
3. Support Ratio [(1) / (2)]	39.00	22.00

Maturity Measures (continued)

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

Asset Volatility Ratio

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

Liability Volatility Ratio

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

Contribution Volatility	June 30, 2021	June 30, 2022
1. Market Value of Assets	\$2,014,000	\$2,144,927
2. Payroll	2,000,206	2,459,552
3. Asset Volatility Ratio (AVR) [(1) / (2)]	1.0	0.9
4. Accrued Liability	\$1,944,122	\$2,465,446
5. Liability Volatility Ratio (LVR) [(4) / (2)]	1.0	1.0

Maturity Measures History

Valuation Date	Ratio of Retiree Accrued Liability to Total Accrued Liability	Support Ratio	Asset Volatility Ratio	Liability Volatility Ratio
06/30/2017	0.00	N/A	0.3	0.3
06/30/2018	0.00	N/A	0.4	0.5
06/30/2019	0.00	N/A	0.4	0.5
06/30/2020	0.00	N/A	0.6	0.6
06/30/2021	0.05	39.00	1.0	1.0
06/30/2022	0.12	22.00	0.9	1.0

Funded Status – Termination Basis

The funded status measured on a termination basis is an estimate of the financial position of the plan had the contract with CalPERS been terminated as of June 30, 2022. The accrued liability on a termination basis (termination liability) is calculated differently compared to the plan's ongoing funding liability. For the termination liability calculation, both compensation and service are frozen as of the valuation date and no future pay increases or service accruals are assumed. This measure of funded status is not appropriate for assessing the need for future employer contributions in the case of an ongoing plan, that is, for an employer that continues to provide CalPERS retirement benefits to active employees. Unlike the actuarial cost method used for ongoing plans, the termination liability is the present value of the benefits earned through the valuation date.

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

The effective termination discount rate will depend on actual market rates of return for risk-free securities on the date of termination. As market discount rates are variable, the table below shows a range for the hypothetical termination liability based on the lowest and highest interest rates observed during an approximate 19-month period from 12 months before the valuation date to seven months after.

Discount Rate: 1.75% Price Inflation: 2.50%				Discount Rate: 4.50% Price Inflation: 2.75%		
Market Value of Assets (MVA)	Termination Liability ^{1,2}	Funded Ratio	Unfunded Termination Liability	Termination Liability ^{1,2}	Funded Ratio	Unfunded Termination Liability
\$2,144,927	\$5,863,232	36.6%	\$3,718,305	\$2,981,142	71.9%	\$836,215

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

² The discount rate used for termination valuations is a weighted average of the 10-year and 30-year U.S. Treasury yields where the weights are based on matching asset and liability durations as of the termination date. The discount rates used in the table are based on 20-year Treasury bonds, rounded to the nearest quarter percentage point, which is a good proxy for most plans. The 20-year Treasury yield was 3.38% on June 30, 2022, the valuation date.

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

Participant Data

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

	June 30, 2021	June 30, 2022
Active Members		
Counts	39	44
Average Attained Age	44.3	43.8
Average Entry Age to Rate Plan	41.1	40.6
Average Years of Credited Service	2.9	3.0
Average Annual Covered Pay	\$51,287	\$55,899
Annual Covered Payroll	\$2,000,206	\$2,459,552
Present Value of Future Payroll	\$19,725,551	\$24,394,949
Transferred Members	32	29
Separated Members	21	27
Retired Members and Beneficiaries*		
Counts	1	2
Average Annual Benefits	\$7,821	\$11,044
Total Annual Benefits	\$7,821	\$22,087

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

* Values include community property settlements.

List of Class 1 Benefit Provisions

This plan has the additional Class 1 Benefit Provisions:

- None

Plan's Major Benefit Options

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

Member Category	Benefit Group		
	Misc	Misc	
Demographics			
Actives	Yes	Yes	
Transfers/Separated	Yes	No	
Receiving	Yes	No	
Benefit Provision			
Benefit Formula	2% @ 62	2% @ 62	
Social Security Coverage	Yes	No	
Full/Modified	Full	Full	
Employee Contribution Rate	7.75%	7.75%	
Final Average Compensation Period	Three Year	Three Year	
Sick Leave Credit	Yes	Yes	
Non-Industrial Disability	Standard	Standard	
Industrial Disability	No	No	
Pre-Retirement Death Benefits			
Optional Settlement 2	Yes	Yes	
1959 Survivor Benefit Level	No	No	
Special	No	No	
Alternate (firefighters)	No	No	
Post-Retirement Death Benefits			
Lump Sum	\$2000	\$2000	
Survivor Allowance (PRSA)	No	No	
COLA	2%	2%	

PEPRA Member Contribution Rates

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

The table below shows the determination of the PEPRA member contribution rates effective July 1, 2024, based on 50% of the total normal cost rate as of the June 30, 2022 valuation.

Rate Plan Identifier	Benefit Group Name	<u>Basis for Current Rate</u>		<u>Rates Effective July 1, 2024</u>			
		Total Normal Cost	Member Rate	Total Normal Cost	Change	Change Needed	Member Rate
26319	Miscellaneous PEPRA Level	15.43%	7.75%	15.62%	0.19%	No	7.75%

Section 2

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Risk Pool Actuarial Valuation Information

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



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

400 Q Street, Sacramento, CA 95811 | Phone: (916) 795-3000 | Fax: (916) 795-2744
888 CalPERS (or 888-225-7377) | TTY: (877) 249-7442 | www.calpers.ca.gov

July 2023

**Miscellaneous Plan of the City of El Cerrito (CalPERS ID: 7718662328)
Annual Valuation Report as of June 30, 2022**

Dear Employer,

Attached to this letter is the June 30, 2022 actuarial valuation report for the rate plan noted above. **Provided in this report is the determination of the minimum required employer contributions for fiscal year (FY) 2024-25.** In addition, the report contains important information regarding the current financial status of the plan as well as projections and risk measures to aid in planning for the future.

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

- Section 1 contains specific information for the plan including the development of the current and projected employer contributions, and
- Section 2 contains the Risk Pool Actuarial Valuation appropriate to the plan as of June 30, 2022.

Section 2 can be found on the CalPERS website (www.calpers.ca.gov). From the home page, go to "*Forms & Publications*" and select "*View All*". In the search box, enter "*Risk Pool*" and from the results list download the Miscellaneous Risk Pool Actuarial Valuation Report for June 30, 2022.

Actuarial valuations are based on assumptions regarding future plan experience including investment return and payroll growth, eligibility for the types of benefits provided, and longevity among retirees. The CalPERS Board of Administration (board) adopts these assumptions after considering the advice of CalPERS actuarial and investment teams and other professionals. Each actuarial valuation reflects all prior differences between actual and assumed experience and adjusts the contribution requirements as needed. This valuation is based on an investment return assumption of 6.8%, which was adopted by the board in November 2021. Other assumptions used in this report are those recommended in the CalPERS Experience Study and Review of Actuarial Assumptions report from November 2021.

Required Contributions

The table below shows the minimum required employer contributions for FY 2024-25 along with estimates of the required contributions for FY 2025-26. Employee contributions other than cost sharing (whether paid by the employer or the employee) are in addition to the results shown below. **The required employer contributions in this report do not reflect any cost sharing arrangement between the agency and the employees.**

Fiscal Year	Employer Normal Cost Rate	Employer Amortization of Unfunded Accrued Liability
2024-25	16.02%	\$2,173,814
<i>Projected Results</i>		
2025-26	16.0%	\$2,312,000

The actual investment return for FY 2022-23 was not known at the time this report was prepared. The projections above assume the investment return for that year would be 6.8%. ***To the extent the actual investment return for FY 2022-23 differs from 6.8%, the actual contribution requirements for FY 2025-26 will differ from those shown above.*** For additional details regarding the assumptions and methods used for these projections, please refer to the "Projected Employer Contributions" in the "Highlights and Executive Summary" section. This section also contains projected required contributions through FY 2029-30.

Changes from Previous Year's Valuations

There are no significant changes in actuarial assumptions or policies in the 2022 actuarial valuation. There may be changes specific to the plan such as contract amendments and funding changes.

Further descriptions of general changes are included in "Highlights and Executive Summary" and in Appendix A of the Section 2 report in "Actuarial Methods and Assumptions." The effects of any changes on the required contributions are included in "Reconciliation of Required Employer Contributions," also in the Section 2 report.

Questions

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

Sincerely,

A handwritten signature in black ink, appearing to read "Scott Terando", with a long horizontal flourish extending to the right.

SCOTT TERANDO, ASA, EA, MAAA, FCA, CFA
Chief Actuary, CalPERS

A handwritten signature in blue ink, appearing to read "Randall Dziubek", with a stylized, looping design.

RANDALL DZIUBEK, ASA, MAAA
Deputy Chief Actuary, Valuation Services, CalPERS



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

**for the
Miscellaneous Plan
of the
City of El Cerrito
(CalPERS ID: 7718662328)**

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

Table of Contents

Section 1 – Plan Specific Information

Section 2 – Risk Pool Actuarial Valuation Information

Section 1

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Plan Specific Information for the Miscellaneous Plan of the City of El Cerrito

**(CalPERS ID: 7718662328)
(Rate Plan ID: 415)**

Table of Contents

Actuarial Certification	1
Highlights and Executive Summary	
Introduction	3
Purpose of Section 1	3
Required Contributions	4
Additional Discretionary Employer Contributions	5
Funded Status – Funding Policy Basis	6
Projected Employer Contributions	7
Other Pooled Miscellaneous Risk Pool Rate Plans	8
Cost	9
Changes Since the Prior Year's Valuation	10
Subsequent Events	10
Assets and Liabilities	
Breakdown of Entry Age Accrued Liability	12
Allocation of Plan's Share of Pool's Experience/Assumption Change	12
Development of Plan's Share of Pool's Market Value of Assets	12
Schedule of Amortization Bases	13
Amortization Schedule and Alternatives	15
Employer Contribution History	17
Funding History	17
Risk Analysis	
Future Investment Return Scenarios	19
Discount Rate Sensitivity	20
Mortality Rate Sensitivity	20
Maturity Measures	21
Maturity Measures History	22
Funded Status – Termination Basis	23
Participant Data	24
List of Class 1 Benefit Provisions	24
Plan's Major Benefit Options	25

Actuarial Certification

To the best of our knowledge, this report, comprised of Sections 1 and 2, is complete and accurate and contains sufficient information to disclose, fully and fairly, the funded condition of the Miscellaneous Plan of the City of El Cerrito and satisfies the actuarial valuation requirements of Government Code section 7504. This valuation is based on the member and financial data as of June 30, 2022 provided by the various CalPERS databases and the benefits under this plan with CalPERS as of the date this report was produced. Section 1 of this report is based on the member and financial data for City of El Cerrito, while Section 2 is based on the corresponding information for all agencies participating in the Miscellaneous Risk Pool to which the plan belongs.

As set forth in Section 2 of this report, the pool actuaries have certified that, in their opinion, the valuation of the Miscellaneous Risk Pool has been performed in accordance with generally accepted actuarial principles, in accordance with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for the risk pool as of the date of this valuation and as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.

Having relied upon the information set forth in Section 2 of this report and based on the census and benefit provision information for the rate plan, it is my opinion as the plan actuary that the Unfunded Accrued Liability amortization bases as of June 30, 2022 and employer contribution as of July 1, 2024 have been properly and accurately determined in accordance with the principles and standards stated above.

The undersigned is an actuary who satisfies the *Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States* with regard to pensions.



TONY CUNY, ASA, MAAA
Senior Actuary, CalPERS

Highlights and Executive Summary

- **Introduction**
- **Purpose of Section 1**
- **Required Contributions**
- **Additional Discretionary Employer Contributions**
- **Funded Status – Funding Policy Basis**
- **Projected Employer Contributions**
- **Other Pooled Miscellaneous Risk Pool Rate Plans**
- **Cost**
- **Changes Since the Prior Year's Valuation**
- **Subsequent Events**

Introduction

This report presents the results of the June 30, 2022 actuarial valuation of the Miscellaneous Plan of the City of El Cerrito of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the minimum required contributions for fiscal year (FY) 2024-25.

Purpose of Section 1

This Section 1 report for the Miscellaneous Plan of the City of El Cerrito of CalPERS was prepared by the Actuarial Office using data as of June 30, 2022. The purpose of the valuation is to:

- Set forth the assets and accrued liabilities of this rate plan as of June 30, 2022;
- Determine the minimum required employer contributions for this rate plan for FY July 1, 2024 through June 30, 2025;
- Determine the required member contribution rate for FY July 1, 2024 through June 30, 2025 for employees subject to the California Public Employees' Pension Reform Act of 2013 (PEPRA); and
- Provide actuarial information as of June 30, 2022 to the CalPERS Board of Administration (board) and other interested parties.

The pension funding information presented in this report should not be used in financial reports subject to Governmental Accounting Standards Board (GASB) Statement No. 68 for a Cost Sharing Employer Defined Benefit Pension Plan. A separate accounting valuation report for such purposes is available on the CalPERS website (www.calpers.ca.gov).

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

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

Assessment and Disclosure of Risk

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

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

Required Contributions

	Fiscal Year
Required Employer Contributions	2024-25
Employer Normal Cost Rate	16.02%
<i>Plus</i>	
Required Payment on Amortization Bases ¹	\$2,173,814
<i>Paid either as</i>	
1) Monthly Payment	\$181,151.17
<i>Or</i>	
2) Annual Prepayment Option*	\$2,103,472
<i>The total minimum required employer contribution is the sum of the Plan's Employer Normal Cost Rate (expressed as a percentage of payroll and paid as payroll is reported) plus the Employer Unfunded Accrued Liability (UAL) Contribution Amount (billed monthly (1) or prepaid annually (2) in dollars).</i>	
<i>* Only the UAL portion of the employer contribution can be prepaid (which must be received in full no later than July 31).</i>	

	Fiscal Year	Fiscal Year
	2023-24	2024-25
Development of Normal Cost as a Percentage of Payroll		
Base Total Normal Cost for Formula	23.13%	23.20%
Surcharge for Class 1 Benefits ²		
a) FAC 1	0.78%	0.78%
Phase out of Normal Cost Difference ³	0.00%	0.00%
Plan's Total Normal Cost	23.91%	23.98%
Offset Due to Employee Contributions	7.96%	7.96%
Employer Normal Cost Rate	15.95%	16.02%

¹ The required payment on amortization bases does not take into account any additional discretionary payment made after April 28, 2023.

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

³ When a rate plan joins the pool, the difference in normal cost between the pool and the rate plan is phased out over a five-year period in accordance with the CalPERS contribution allocation policy.

Additional Discretionary Employer Contributions

The minimum required employer contribution towards the Unfunded Accrued Liability (UAL) for this rate plan for FY 2024-25 is \$2,173,814. CalPERS allows agencies to make additional discretionary payments (ADPs) at any time and in any amount. These optional payments serve to reduce the UAL and future required contributions and can result in significant long-term savings. Agencies can also use ADPs to stabilize annual contributions as a fixed dollar amount, percent of payroll or percent of revenue.

Provided below are select ADP options for consideration. Making such an ADP during FY 2024-25 does not require an ADP be made in any future year, nor does it change the remaining amortization period of any portion of unfunded liability. For information on permanent changes to amortization periods, see the "Amortization Schedule and Alternatives" section of the report.

Agencies considering making an ADP should contact CalPERS for additional information.

Minimum Required Employer Contribution for Fiscal Year 2024-25

Estimated Normal Cost	Minimum UAL Payment	ADP	Total UAL Contribution	Estimated Total Contribution
\$550,963	\$2,173,814	\$0	\$2,173,814	\$2,724,777

Alternative Fiscal Year 2024-25 Employer Contributions for Greater UAL Reduction

Funding Horizon	Estimated Normal Cost	Minimum UAL Payment	ADP ¹	Total UAL Contribution	Estimated Total Contribution
15 years	\$550,963	\$2,173,814	\$307,920	\$2,481,734	\$3,032,697
10 years	\$550,963	\$2,173,814	\$1,055,389	\$3,229,203	\$3,780,166
5 years	\$550,963	\$2,173,814	\$3,379,405	\$5,553,219	\$6,104,182

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

Note that the calculations above are based on the projected UAL as of June 30, 2024 as determined in the June 30, 2022 actuarial valuation. New unfunded liabilities can emerge in future years due to assumption or method changes, changes in plan provisions, and actuarial experience different than assumed. Making an ADP illustrated above for the indicated number of years will not result in a plan that is exactly 100% funded in the indicated number of years. Valuation results will vary from one year to the next and can diverge significantly from projections over a period of several years.

Funded Status – Funding Policy Basis

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

	June 30, 2021	June 30, 2022
1. Present Value of Benefits	\$73,715,880	\$75,074,448
2. Entry Age Accrued Liability	65,705,040	67,921,787
3. Market Value of Assets (MVA)	48,704,943	43,660,224
4. Unfunded Accrued Liability (UAL) [(2) – (3)]	\$17,000,097	\$24,261,563
5. Funded Ratio [(3) / (2)]	74.1%	64.3%

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

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

	1% Lower Average Return	Current Assumption	1% Higher Average Return
Discount Rate	5.8%	6.8%	7.8%
1. Entry Age Accrued Liability	\$76,500,516	\$67,921,787	\$60,801,527
2. Market Value of Assets (MVA)	43,660,224	43,660,224	43,660,224
3. Unfunded Accrued Liability (UAL) [(1) – (2)]	\$32,840,292	\$24,261,563	\$17,141,303
4. Funded Ratio [(2) / (1)]	57.1%	64.3%	71.8%

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

Projected Employer Contributions

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

	Required Contribution	Projected Future Employer Contributions (Assumes 6.80% Return for Fiscal Year 2022-23 and Beyond)				
Fiscal Year	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
	Rate Plan 415 Results					
Normal Cost %	16.02%	16.0%	16.0%	16.0%	16.0%	16.0%
UAL Payment	\$2,173,814	\$2,312,000	\$2,447,000	\$2,560,000	\$2,789,000	\$2,852,000

For ongoing plans, investment gains and losses are amortized using a 5-year ramp up. For more information, please see "Amortization of the Unfunded Actuarial Accrued Liability" under "Actuarial Methods" in Appendix A of the Section 2 Report. This method phases in the impact of the change in UAL over a 5-year period in order to reduce employer cost volatility from year to year. As a result of this methodology, dramatic changes in the required employer contributions in any one year are less likely. However, required contributions can change gradually and significantly over the next five years. In years when there is a large investment loss, the relatively small amortization payments during the ramp up period could result in contributions that are less than interest on the UAL (i.e. negative amortization) while the contribution impact of the increase in the UAL is phased in.

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

Other Pooled Miscellaneous Risk Pool Rate Plans

All of the results presented in this Section 1 report, except those shown on this page, correspond to rate plan 415. In many cases, employers have additional rate plans within the same risk pool. For cost analysis and budgeting it is useful to consider contributions for these rate plans as a whole rather than individually. The estimated contribution amounts and rates for all of the employer's rate plans in the Miscellaneous Risk Pool are shown below and assume that the total employer payroll within the Miscellaneous Risk Pool will grow according to the overall payroll growth assumption of 2.80% per year for three years. In a refinement since the prior year's report, Classic members who are projected to terminate employment are assumed to be replaced by PEPRAs members.

	Fiscal Year 2023-24	Fiscal Year 2024-25
Estimated Combined Employer Contributions for all Pooled Miscellaneous Rate Plans		
Projected Payroll for the Contribution Year	\$6,583,801	\$6,976,110
Estimated Employer Normal Cost	\$870,411	\$829,316
Required Payment on Amortization Bases	\$1,896,880	\$2,184,913
Estimated Total Employer Contributions	\$2,767,291	\$3,014,229
Estimated Total Employer Contribution Rate (illustrative only)	42.03%	43.21%

Cost

Actuarial Determination of Plan Cost

Contributions to fund the plan are comprised of two components:

- Normal Cost, expressed as a percentage of total active payroll
- Amortization of the Unfunded Accrued Liability (UAL), expressed as a dollar amount

For fiscal years prior to 2015-16, the Amortization of UAL component was expressed as a percentage of total active payroll. Starting with FY 2015-16, the Amortization of UAL component was expressed as a dollar amount and invoiced on a monthly basis. There is an option to prepay this amount during July of each fiscal year.

The Normal Cost component is expressed as a percentage of active payroll with employer and employee contributions payable as part of the regular payroll reporting process.

The determination of both components requires complex actuarial calculations. The calculations are based on a set of actuarial assumptions which can be divided into two categories:

- Demographic assumptions (e.g., mortality rates, retirement rates, employment termination rates, disability rates)
- Economic assumptions (e.g., future investment earnings, inflation, salary growth rates)

These assumptions reflect CalPERS' best estimate of future experience of the plan and are long term in nature. We recognize that all assumptions will not be realized in any given year. For example, the investment earnings at CalPERS have averaged 6.9% over the 20 years ending June 30, 2022, yet individual fiscal year returns have ranged from -23.6% to +21.3%. In addition, CalPERS reviews all actuarial assumptions by conducting in-depth experience studies every four years, with the most recent experience study completed in 2021.

Changes Since the Prior Year's Valuation

Benefits

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

This valuation generally reflects plan amendments effective before the date of the report. Please refer to the "Plan's Major Benefit Options" in this report and Appendix B of the Section 2 Report for a summary of the plan provisions used in this valuation.

In 2022, SB 1168 increased the standard retiree lump sum death benefit from \$500 to \$2,000 for any death occurring on or after July 1, 2023. For pooled plans this is a Class 3 benefit and there is no normal cost surcharge. The impact on the unfunded liability is included in the pool's (gain)/loss.

Actuarial Methods and Assumptions

There are no significant changes to the actuarial methods or assumptions for the June 30, 2022 actuarial valuation.

Subsequent Events

This actuarial valuation report reflects fund investment return through June 30, 2022 and statutory/regulatory changes and board actions through January 2023.

During the time period between the valuation date and the publication of this report, inflation has been significantly higher than the expected inflation of 2.3% per annum. Since inflation influences cost-of-living increases for retirees and beneficiaries and active member pay increases, higher inflation is likely to put at least some upward pressure on contribution requirements and downward pressure on the funded status in the June 30, 2023 valuation. The actual impact of higher inflation on future valuation results will depend on, among other factors, how long higher inflation persists. At this time, we continue to believe the long-term inflation assumption of 2.3% is appropriate.

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

Assets and Liabilities

- **Breakdown of Entry Age Accrued Liability**
- **Allocation of Plan's Share of Pool's Experience/Assumption Change**
- **Development of Plan's Share of Pool's Market Value of Assets**
- **Schedule of Amortization Bases**
- **Amortization Schedule and Alternatives**
- **Employer Contribution History**
- **Funding History**

Breakdown of Entry Age Accrued Liability

Active Members	\$19,277,770
Transferred Members	5,412,843
Separated Members	2,141,376
Members and Beneficiaries Receiving Payments	<u>41,089,798</u>
Total	\$67,921,787

Allocation of Plan's Share of Pool's Experience/Assumption Change

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

1. Plan's Accrued Liability	\$67,921,787
2. Projected UAL Balance at 6/30/2022	16,427,900
3. Other UAL Adjustments (Golden Handshake, Prior Service Purchase, etc.)	0
4. Adjusted UAL Balance at 6/30/2022 for Asset Share	16,427,900
5. Pool's Accrued Liability ¹	22,021,735,002
6. Sum of Pool's Individual Plan UAL Balances at 6/30/2022 ¹	2,453,954,297
7. Pool's 2021-22 Investment (Gain)/Loss ¹	2,614,071,182
8. Pool's 2021-22 Non-Investment (Gain)/Loss ¹	309,490,972
9. Plan's Share of Pool's Investment (Gain)/Loss: $[(1) - (4)] \div [(5) - (6)] \times (7)$	6,879,098
10. Plan's Share of Pool's Non-Investment (Gain)/Loss: $(1) \div (5) \times (8)$	954,565
11. Plan's New (Gain)/Loss as of 6/30/2022: $(9) + (10)$	7,833,663
12. Increase in Pool's Accrued Liability due to Change in Assumptions ¹	0
13. Plan's Share of Pool's Change in Assumptions: $(1) \div (5) \times (12)$	0
14. Increase in Pool's Accrued Liability due to Funding Risk Mitigation ¹	0
15. Plan's Share of Pool's Change due to Funding Risk Mitigation: $(1) \div (5) \times (14)$	0
16. Offset due to Funding Risk Mitigation	0
17. Plan's Investment (Gain)/Loss: $(9) - (16)$	6,879,098

¹ Does not include plans that transferred to Pool on the valuation date.

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

18. Plan's UAL: $(2) + (3) + (11) + (13) + (15)$	\$24,261,563
19. Plan's Share of Pool's MVA: $(1) - (18)$	\$43,660,224

Schedule of Amortization Bases

Below is the schedule of the plan's amortization bases. Note that there is a two-year lag between the valuation date and the start of the contribution year.

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

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

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

Reason for Base	Date Est.	Ramp Level 2024-25	Ramp Shape	Escalation Rate	Amort. Period	Balance 6/30/22	Expected Payment 2022-23	Balance 6/30/23	Expected Payment 2023-24	Balance 6/30/24	Minimum Required Payment 2024-25
Side Fund	2013 or Prior	No Ramp		2.80%	7	3,172,108	427,265	2,946,258	433,341	2,698,771	445,475
Golden Handshake	6/30/13	No Ramp		2.80%	11	716,381	72,007	690,680	72,744	662,470	74,781
Investment (Gain)/Loss	6/30/13	100%	Up/Down	2.80%	21	4,696,706	337,799	4,666,987	338,741	4,634,273	348,225
Non-Investment (Gain)/Loss	6/30/13	100%	Up/Down	2.80%	21	20,072	1,444	19,945	1,448	19,805	1,488
Share of Pre-2013 Pool UAL	6/30/13	No Ramp		2.80%	12	5,000,879	475,437	4,849,603	479,840	4,683,490	493,276
Assumption Change	6/30/14	100%	Up/Down	2.80%	12	2,504,913	268,453	2,397,817	271,428	2,280,364	279,028
Investment (Gain)/Loss	6/30/14	100%	Up/Down	2.80%	22	(3,879,107)	(270,954)	(3,862,871)	(271,477)	(3,844,991)	(279,078)
Non-Investment (Gain)/Loss	6/30/14	100%	Up/Down	2.80%	22	4,885	341	4,865	342	4,842	351
Investment (Gain)/Loss	6/30/15	100%	Up/Down	2.80%	23	2,346,453	159,485	2,341,193	159,658	2,335,397	164,128
Non-Investment (Gain)/Loss	6/30/15	100%	Up/Down	2.80%	23	(222,859)	(15,147)	(222,360)	(15,164)	(221,809)	(15,588)
Assumption Change	6/30/16	100%	Up/Down	2.80%	14	1,002,280	95,491	971,751	96,368	938,239	99,066
Investment (Gain)/Loss	6/30/16	100%	Up/Down	2.80%	24	2,972,719	196,955	2,971,323	197,008	2,969,777	202,524
Non-Investment (Gain)/Loss	6/30/16	100%	Up/Down	2.80%	24	(424,487)	(28,124)	(424,288)	(28,132)	(424,067)	(28,919)
Assumption Change	6/30/17	100%	Up/Down	2.80%	15	1,174,611	86,597	1,164,992	109,146	1,131,416	112,202
Investment (Gain)/Loss	6/30/17	100%	Up/Down	2.80%	25	(1,550,836)	(81,270)	(1,572,305)	(101,537)	(1,574,289)	(104,380)
Non-Investment (Gain)/Loss	6/30/17	100%	Up/Down	2.80%	25	(91,687)	(4,805)	(92,956)	(6,003)	(93,073)	(6,171)
Assumption Change	6/30/18	100%	Up/Down	2.80%	16	1,933,381	105,463	1,955,861	141,625	1,942,498	181,988
Investment (Gain)/Loss	6/30/18	100%	Up/Down	2.80%	26	(487,772)	(19,205)	(501,093)	(25,567)	(508,745)	(32,854)
Method Change	6/30/18	100%	Up/Down	2.80%	16	531,449	28,990	537,628	38,930	533,955	50,025
Non-Investment (Gain)/Loss	6/30/18	100%	Up/Down	2.80%	26	274,249	10,798	281,739	14,375	286,042	18,472

Schedule of Amortization Bases (continued)

Reason for Base	Date Est.	Ramp Level 2024-25	Ramp Shape	Escalation Rate	Amort. Period	Balance 6/30/22	Expected Payment 2022-23	Balance 6/30/23	Expected Payment 2023-24	Balance 6/30/24	Minimum Required Payment 2024-25
Investment (Gain)/Loss	6/30/19	80%	Up Only	0.00%	17	234,331	9,802	240,136	14,439	241,543	19,251
Non-Investment (Gain)/Loss	6/30/19	No Ramp		0.00%	17	260,323	24,397	252,812	23,970	245,232	23,970
Investment (Gain)/Loss	6/30/20	60%	Up Only	0.00%	18	1,119,694	24,527	1,170,486	48,115	1,200,355	72,173
Non-Investment (Gain)/Loss	6/30/20	No Ramp		0.00%	18	226,508	20,708	220,510	20,336	214,489	20,336
Assumption Change	6/30/21	No Ramp		0.00%	19	235,707	(31,688)	284,483	25,582	277,390	25,582
Net Investment (Gain)	6/30/21	40%	Up Only	0.00%	19	(5,028,122)	0	(5,370,034)	(115,427)	(5,615,909)	(230,854)
Non-Investment (Gain)/Loss	6/30/21	No Ramp		0.00%	19	(283,727)	0	(303,020)	(27,249)	(295,465)	(27,249)
Risk Mitigation	6/30/21	No Ramp		0.00%	0	1,703,369	(32,193)	1,852,468	1,914,416	0	0
Risk Mitigation Offset	6/30/21	No Ramp		0.00%	0	(1,734,521)	0	(1,852,468)	(1,914,416)	0	0
Investment (Gain)/Loss	6/30/22	20%	Up Only	0.00%	20	6,879,098	0	7,346,877	0	7,846,465	168,657
Non-Investment (Gain)/Loss	6/30/22	No Ramp		0.00%	20	954,565	0	1,019,475	0	1,088,799	97,909
Total						24,261,563	1,862,573	23,986,494	1,896,880	23,657,264	2,173,814

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

Amortization Schedule and Alternatives

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

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

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

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

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

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

Amortization Schedule and Alternatives (continued)

Date	<u>Current Amortization</u>		<u>Alternate Schedules</u>			
	<u>Schedule</u>		15 Year Amortization		10 Year Amortization	
	Balance	Payment	Balance	Payment	Balance	Payment
6/30/2024	23,657,264	2,173,814	23,657,264	2,481,734	23,657,264	3,229,203
6/30/2025	23,019,449	2,312,026	22,701,233	2,481,734	21,928,768	3,229,203
6/30/2026	22,195,429	2,447,002	21,680,192	2,481,734	20,082,734	3,229,203
6/30/2027	21,175,887	2,559,532	20,589,720	2,481,734	18,111,170	3,229,203
6/30/2028	19,970,722	2,789,148	19,425,096	2,481,734	16,005,539	3,229,203
6/30/2029	18,446,309	2,851,812	18,181,277	2,481,734	13,756,725	3,229,203
6/30/2030	16,753,479	2,916,235	16,852,879	2,481,734	11,354,992	3,229,203
6/30/2031	14,878,960	2,441,983	15,434,149	2,481,734	8,789,941	3,229,202
6/30/2032	13,367,082	2,425,328	13,918,946	2,481,734	6,050,468	3,229,203
6/30/2033	11,769,611	2,406,255	12,300,709	2,481,734	3,124,710	3,229,203
6/30/2034	10,083,223	2,358,533	10,572,432	2,481,734		
6/30/2035	8,331,478	2,174,960	8,726,632	2,481,733		
6/30/2036	6,650,327	1,332,121	6,755,319	2,481,734		
6/30/2037	5,725,881	1,227,049	4,649,955	2,481,733		
6/30/2038	4,847,158	1,115,474	2,401,428	2,481,734		
6/30/2039	4,023,990	1,027,106				
6/30/2040	3,236,169	968,251				
6/30/2041	2,455,599	820,053				
6/30/2042	1,775,103	664,966				
6/30/2043	1,208,606	1,178,044				
6/30/2044	73,351	75,804				
6/30/2045						
6/30/2046						
6/30/2047						
6/30/2048						
6/30/2049						
Total		38,265,496		37,226,008		32,292,029
Interest Paid		14,608,232		13,568,744		8,634,765
Estimated Savings				1,039,488		5,973,467

Employer Contribution History

The table below provides a recent history of the required and discretionary employer contributions for the plan. The required amounts are based on the actuarial valuation from two years prior without subsequent adjustments, if any. Additional discretionary payments before July 1, 2019 or after April 28, 2023 are not included.

Fiscal Year	Employer Normal Cost	Unfunded Liability Payment (\$)	Additional Discretionary Payments
2016 - 17	11.634%	\$960,574	N/A
2017 - 18	11.675%	1,075,481	N/A
2018 - 19	12.212%	1,231,229	N/A
2019 - 20	13.182%	1,404,112	0
2020 - 21	14.194%	1,542,149	0
2021 - 22	14.02%	1,734,419	0
2022 - 23	14.03%	1,926,454	0
2023 - 24	15.95%	1,896,880	
2024 - 25	16.02%	2,173,814	

Funding History

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

Valuation Date	Accrued Liability (AL)	Share of Pool's Market Value of Assets (MVA)	Unfunded Accrued Liability (UAL)	Funded Ratio	Annual Covered Payroll
06/30/2013	\$42,755,940	\$29,062,863	\$13,693,077	68.0%	\$5,203,067
06/30/2014	46,959,878	33,698,514	13,261,364	71.8%	5,046,833
06/30/2015	47,489,811	32,338,793	15,151,018	68.1%	4,590,461
06/30/2016	49,777,692	31,687,182	18,090,510	63.7%	4,863,691
06/30/2017	52,784,582	34,734,477	18,050,105	65.8%	4,872,517
06/30/2018	57,323,516	37,269,868	20,053,648	65.0%	4,978,297
06/30/2019	60,510,884	39,820,379	20,690,505	65.8%	5,020,297
06/30/2020	63,353,262	41,449,011	21,904,251	65.4%	5,099,164
06/30/2021	65,705,040	48,704,943	17,000,097	74.1%	4,060,139
06/30/2022	67,921,787	43,660,224	24,261,563	64.3%	3,961,911

Risk Analysis

- **Future Investment Return Scenarios**
- **Discount Rate Sensitivity**
- **Mortality Rate Sensitivity**
- **Maturity Measures**
- **Maturity Measures History**
- **Funded Status – Termination Basis**

Future Investment Return Scenarios

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

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

Assumed Annual Return FY 2022-23 through 2041-42	Projected Employer Contributions				
	2025-26	2026-27	2027-28	2028-29	2029-30
3.0% (5th percentile)					
Normal Cost Rate	16.0%	16.0%	16.0%	16.0%	16.0%
UAL Contribution	\$2,353,000	\$2,569,000	\$2,806,000	\$3,203,000	\$3,478,000
10.8% (95th percentile)					
Normal Cost Rate	16.3%	16.7%	17.0%	17.3%	17.6%
UAL Contribution	\$2,271,000	\$2,328,000	\$2,321,000	\$2,382,000	\$2,226,000

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

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

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

Assumed Annual Return for Fiscal Year 2022-23	Required Employer Contributions	Projected Employer Contributions
	2024-25	2025-26
(17.2)% (2 standard deviation loss)		
Normal Cost Rate	16.02%	16.0%
UAL Contribution	\$2,173,814	\$2,568,000
(5.2)% (1 standard deviation loss)		
Normal Cost Rate	16.02%	16.0%
UAL Contribution	\$2,173,814	\$2,440,000

- Without investment gains (returns higher than 6.8%) in FY 2023-24 or later, projected contributions rates would continue to rise over the next four years due to the continued phase-in of the impact of the illustrated investment loss in FY 2022-23.
- The Pension Outlook Tool can be used to model projected contributions for these scenarios beyond FY 2025-26 as well as to model other investment return scenarios.

Discount Rate Sensitivity

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

Sensitivity to the Real Rate of Return Assumption

As of June 30, 2022	1% Lower Real Return Rate	Current Assumptions	1% Higher Real Return Rate
Discount Rate	5.8%	6.8%	7.8%
Price Inflation	2.3%	2.3%	2.3%
Real Rate of Return	3.5%	4.5%	5.5%
a) Total Normal Cost	30.25%	23.98%	19.22%
b) Accrued Liability	\$76,500,516	\$67,921,787	\$60,801,527
c) Market Value of Assets	\$43,660,224	\$43,660,224	\$43,660,224
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$32,840,292	\$24,261,563	\$17,141,303
e) Funded Ratio	57.1%	64.3%	71.8%

Sensitivity to the Price Inflation Assumption

As of June 30, 2022	1% Lower Price Inflation	Current Assumptions	1% Higher Price Inflation
Discount Rate	5.8%	6.8%	7.8%
Price Inflation	1.3%	2.3%	3.3%
Real Rate of Return	4.5%	4.5%	4.5%
a) Total Normal Cost	25.16%	23.98%	21.88%
b) Accrued Liability	\$70,187,666	\$67,921,787	\$62,666,603
c) Market Value of Assets	\$43,660,224	\$43,660,224	\$43,660,224
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$26,527,442	\$24,261,563	\$19,006,379
e) Funded Ratio	62.2%	64.3%	69.7%

Mortality Rate Sensitivity

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

As of June 30, 2022	10% Lower Mortality Rates	Current Assumptions	10% Higher Mortality Rates
a) Total Normal Cost	24.36%	23.98%	23.62%
b) Accrued Liability	\$69,379,615	\$67,921,787	\$66,583,698
c) Market Value of Assets	\$43,660,224	\$43,660,224	\$43,660,224
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$25,719,391	\$24,261,563	\$22,923,474
e) Funded Ratio	62.9%	64.3%	65.6%

Maturity Measures

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

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

Ratio of Retiree Accrued Liability to Total Accrued Liability	June 30, 2021	June 30, 2022
1. Retired Accrued Liability	\$38,901,504	\$41,089,798
2. Total Accrued Liability	65,705,040	67,921,787
3. Ratio of Retiree AL to Total AL [(1) / (2)]	0.59	0.60

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

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

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

Support Ratio	June 30, 2021	June 30, 2022
1. Number of Actives	51	47
2. Number of Retirees	161	166
3. Support Ratio [(1) / (2)]	0.32	0.28

Maturity Measures (continued)

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

Asset Volatility Ratio

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

Liability Volatility Ratio

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

Contribution Volatility	June 30, 2021	June 30, 2022
1. Market Value of Assets	\$48,704,943	\$43,660,224
2. Payroll	4,060,139	3,961,911
3. Asset Volatility Ratio (AVR) [(1) / (2)]	12.0	11.0
4. Accrued Liability	\$65,705,040	\$67,921,787
5. Liability Volatility Ratio (LVR) [(4) / (2)]	16.2	17.1

Maturity Measures History

Valuation Date	Ratio of Retiree Accrued Liability to Total Accrued Liability	Support Ratio	Asset Volatility Ratio	Liability Volatility Ratio
06/30/2017	0.56	0.49	7.1	10.8
06/30/2018	0.55	0.45	7.5	11.5
06/30/2019	0.61	0.42	7.9	12.1
06/30/2020	0.61	0.38	8.1	12.4
06/30/2021	0.59	0.32	12.0	16.2
06/30/2022	0.60	0.28	11.0	17.1

Funded Status – Termination Basis

The funded status measured on a termination basis is an estimate of the financial position of the plan had the contract with CalPERS been terminated as of June 30, 2022. The accrued liability on a termination basis (termination liability) is calculated differently compared to the plan's ongoing funding liability. For the termination liability calculation, both compensation and service are frozen as of the valuation date and no future pay increases or service accruals are assumed. This measure of funded status is not appropriate for assessing the need for future employer contributions in the case of an ongoing plan, that is, for an employer that continues to provide CalPERS retirement benefits to active employees. Unlike the actuarial cost method used for ongoing plans, the termination liability is the present value of the benefits earned through the valuation date.

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

The effective termination discount rate will depend on actual market rates of return for risk-free securities on the date of termination. As market discount rates are variable, the table below shows a range for the hypothetical termination liability based on the lowest and highest interest rates observed during an approximate 19-month period from 12 months before the valuation date to seven months after.

Discount Rate: 1.75% Price Inflation: 2.50%			Discount Rate: 4.50% Price Inflation: 2.75%			
Market Value of Assets (MVA)	Termination Liability ^{1,2}	Funded Ratio	Unfunded Termination Liability	Termination Liability ^{1,2}	Funded Ratio	Unfunded Termination Liability
\$43,660,224	\$136,308,941	32.0%	\$92,648,717	\$89,318,889	48.9%	\$45,658,665

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

² The discount rate used for termination valuations is a weighted average of the 10-year and 30-year U.S. Treasury yields where the weights are based on matching asset and liability durations as of the termination date. The discount rates used in the table are based on 20-year Treasury bonds, rounded to the nearest quarter percentage point, which is a good proxy for most plans. The 20-year Treasury yield was 3.38% on June 30, 2022, the valuation date.

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

Participant Data

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

	June 30, 2021	June 30, 2022
Active Members		
Counts	51	47
Average Attained Age	50.6	51.8
Average Entry Age to Rate Plan	36.8	36.3
Average Years of Credited Service	13.3	14.4
Average Annual Covered Pay	\$79,611	\$84,296
Annual Covered Payroll	\$4,060,139	\$3,961,911
Present Value of Future Payroll	\$29,974,740	\$27,921,631
Transferred Members	53	46
Separated Members	74	76
Retired Members and Beneficiaries*		
Counts	161	166
Average Annual Benefits	\$19,926	\$20,372
Total Annual Benefits	\$3,208,009	\$3,381,746

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

* Values include community property settlements.

List of Class 1 Benefit Provisions

This plan has the additional Class 1 Benefit Provisions:

- One Year Final Compensation (FAC 1)

Plan's Major Benefit Options

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

	Benefit Group						
Member Category	Misc	Misc	Misc	Misc	Misc	Misc	Misc
Demographics							
Actives	No	Yes	No	No	No	No	No
Transfers/Separated	Yes	Yes	No	No	No	No	No
Receiving	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Benefit Provision							
Benefit Formula	2% @ 55	2.7% @ 55					
Social Security Coverage	Yes	Yes					
Full/Modified	Modified	Modified					
Employee Contribution Rate		8.00%					
Final Average Compensation Period	One Year	One Year					
Sick Leave Credit	Yes	Yes					
Non-Industrial Disability	Standard	Standard					
Industrial Disability	No	No					
Pre-Retirement Death Benefits							
Optional Settlement 2	Yes	Yes					
1959 Survivor Benefit Level	No	No					
Special	No	No					
Alternate (firefighters)	No	No					
Post-Retirement Death Benefits							
Lump Sum	\$2000	\$2000	\$2000	\$2000	\$2000	\$2000	\$2000
Survivor Allowance (PRSA)	No	No	No	No	No	No	No
COLA	2%	2%	2%	2%	2%	2%	2%

Plan's Major Benefit Options

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

Member Category	Benefit Group		
	Misc	Misc	
Demographics			
Actives	No	No	
Transfers/Separated	No	No	
Receiving	Yes	Yes	
Benefit Provision			
Benefit Formula			
Social Security Coverage			
Full/Modified			
Employee Contribution Rate			
Final Average Compensation Period			
Sick Leave Credit			
Non-Industrial Disability			
Industrial Disability			
Pre-Retirement Death Benefits			
Optional Settlement 2			
1959 Survivor Benefit Level			
Special			
Alternate (firefighters)			
Post-Retirement Death Benefits			
Lump Sum	\$2000	\$2000	
Survivor Allowance (PRSA)	No	No	
COLA	2%	2%	

Section 2

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Risk Pool Actuarial Valuation Information

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



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

400 Q Street, Sacramento, CA 95811 | Phone: (916) 795-3000 | Fax: (916) 795-2744
888 CalPERS (or 888-225-7377) | TTY: (877) 249-7442 | www.calpers.ca.gov

July 2023

**PEPRA Safety Police Plan of the City of El Cerrito (CalPERS ID: 7718662328)
Annual Valuation Report as of June 30, 2022**

Dear Employer,

Attached to this letter is the June 30, 2022 actuarial valuation report for the rate plan noted above. **Provided in this report is the determination of the minimum required employer contributions for fiscal year (FY) 2024-25.** In addition, the report contains important information regarding the current financial status of the plan as well as projections and risk measures to aid in planning for the future.

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

- Section 1 contains specific information for the plan including the development of the current and projected employer contributions, and
- Section 2 contains the Risk Pool Actuarial Valuation appropriate to the plan as of June 30, 2022.

Section 2 can be found on the CalPERS website (www.calpers.ca.gov). From the home page, go to "Forms & Publications" and select "View All". In the search box, enter "Risk Pool" and from the results list download the Safety Risk Pool Actuarial Valuation Report for June 30, 2022.

Actuarial valuations are based on assumptions regarding future plan experience including investment return and payroll growth, eligibility for the types of benefits provided, and longevity among retirees. The CalPERS Board of Administration (board) adopts these assumptions after considering the advice of CalPERS actuarial and investment teams and other professionals. Each actuarial valuation reflects all prior differences between actual and assumed experience and adjusts the contribution requirements as needed. This valuation is based on an investment return assumption of 6.8%, which was adopted by the board in November 2021. Other assumptions used in this report are those recommended in the CalPERS Experience Study and Review of Actuarial Assumptions report from November 2021.

Required Contributions

The table below shows the minimum required employer contributions and the PEPRA member contribution rate for FY 2024-25 along with estimates of the required contributions for FY 2025-26. Employee contributions other than cost sharing (whether paid by the employer or the employee) are in addition to the results shown below. **The required employer contributions in this report do not reflect any cost sharing arrangement between the agency and the employees.**

Fiscal Year	Employer Normal Cost Rate	Employer Amortization of Unfunded Accrued Liability	PEPRA Member Contribution Rate
2024-25	13.76%	\$32,768	13.75%
<i>Projected Results</i>			
2025-26	13.8%	\$44,000	TBD

The actual investment return for FY 2022-23 was not known at the time this report was prepared. The projections above assume the investment return for that year would be 6.8%. ***To the extent the actual investment return for FY 2022-23 differs from 6.8%, the actual contribution requirements for FY 2025-26 will differ from those shown above.*** For additional details regarding the assumptions and methods used for these projections, please refer to the "Projected Employer Contributions" in the "Highlights and Executive Summary" section. This section also contains projected required contributions through FY 2029-30.

Changes from Previous Year's Valuations

There are no significant changes in actuarial assumptions or policies in the 2022 actuarial valuation. There may be changes specific to the plan such as contract amendments and funding changes.

Further descriptions of general changes are included in "Highlights and Executive Summary" and in Appendix A of the Section 2 report in "Actuarial Methods and Assumptions." The effects of any changes on the required contributions are included in "Reconciliation of Required Employer Contributions," also in the Section 2 report.

Questions

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

Sincerely,

A handwritten signature in black ink, appearing to read "Scott Terando", with a long horizontal flourish extending to the right.

SCOTT TERANDO, ASA, EA, MAAA, FCA, CFA
Chief Actuary, CalPERS

A handwritten signature in blue ink, appearing to read "Randall Dziubek", with a long horizontal flourish extending to the right.

RANDALL DZIUBEK, ASA, MAAA
Deputy Chief Actuary, Valuation Services, CalPERS



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

**for the
PEPRA Safety Police Plan
of the
City of El Cerrito
(CalPERS ID: 7718662328)**

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

Table of Contents

Section 1 – Plan Specific Information

Section 2 – Risk Pool Actuarial Valuation Information

Section 1

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Plan Specific Information for the PEPRA Safety Police Plan of the City of El Cerrito

**(CalPERS ID: 7718662328)
(Rate Plan ID: 25345)**

Table of Contents

Actuarial Certification	1
Highlights and Executive Summary	
Introduction	3
Purpose of Section 1	3
Required Contributions	4
Additional Discretionary Employer Contributions	5
Funded Status – Funding Policy Basis	6
Projected Employer Contributions	7
Other Pooled Safety Risk Pool Rate Plans	8
Cost	9
Changes Since the Prior Year's Valuation	10
Subsequent Events	10
Assets and Liabilities	
Breakdown of Entry Age Accrued Liability	12
Allocation of Plan's Share of Pool's Experience/Assumption Change	12
Development of Plan's Share of Pool's Market Value of Assets	12
Schedule of Amortization Bases	13
Amortization Schedule and Alternatives	14
Employer Contribution History	16
Funding History	16
Risk Analysis	
Future Investment Return Scenarios	18
Discount Rate Sensitivity	19
Mortality Rate Sensitivity	19
Maturity Measures	20
Maturity Measures History	21
Funded Status – Termination Basis	22
Participant Data	23
List of Class 1 Benefit Provisions	23
Plan's Major Benefit Options	24
PEPRA Member Contribution Rates	25

Actuarial Certification

To the best of our knowledge, this report, comprised of Sections 1 and 2, is complete and accurate and contains sufficient information to disclose, fully and fairly, the funded condition of the PEPRA Safety Police Plan of the City of El Cerrito and satisfies the actuarial valuation requirements of Government Code section 7504. This valuation is based on the member and financial data as of June 30, 2022 provided by the various CalPERS databases and the benefits under this plan with CalPERS as of the date this report was produced. Section 1 of this report is based on the member and financial data for City of El Cerrito, while Section 2 is based on the corresponding information for all agencies participating in the Safety Risk Pool to which the plan belongs.

As set forth in Section 2 of this report, the pool actuaries have certified that, in their opinion, the valuation of the Safety Risk Pool has been performed in accordance with generally accepted actuarial principles, in accordance with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for the risk pool as of the date of this valuation and as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.

Having relied upon the information set forth in Section 2 of this report and based on the census and benefit provision information for the rate plan, it is my opinion as the plan actuary that the Unfunded Accrued Liability amortization bases as of June 30, 2022 and employer contribution as of July 1, 2024 have been properly and accurately determined in accordance with the principles and standards stated above.

The undersigned is an actuary who satisfies the *Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States* with regard to pensions.



TONY CUNY, ASA, MAAA
Senior Actuary, CalPERS

Highlights and Executive Summary

- **Introduction**
- **Purpose of Section 1**
- **Required Contributions**
- **Additional Discretionary Employer Contributions**
- **Funded Status – Funding Policy Basis**
- **Projected Employer Contributions**
- **Other Pooled Safety Risk Pool Rate Plans**
- **Cost**
- **Changes Since the Prior Year's Valuation**
- **Subsequent Events**

Introduction

This report presents the results of the June 30, 2022 actuarial valuation of the PEPRA Safety Police Plan of the City of El Cerrito of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the minimum required contributions for fiscal year (FY) 2024-25.

Purpose of Section 1

This Section 1 report for the PEPRA Safety Police Plan of the City of El Cerrito of CalPERS was prepared by the Actuarial Office using data as of June 30, 2022. The purpose of the valuation is to:

- Set forth the assets and accrued liabilities of this rate plan as of June 30, 2022;
- Determine the minimum required employer contributions for this rate plan for FY July 1, 2024 through June 30, 2025;
- Determine the required member contribution rate for FY July 1, 2024 through June 30, 2025 for employees subject to the California Public Employees' Pension Reform Act of 2013 (PEPRA); and
- Provide actuarial information as of June 30, 2022 to the CalPERS Board of Administration (board) and other interested parties.

The pension funding information presented in this report should not be used in financial reports subject to Governmental Accounting Standards Board (GASB) Statement No. 68 for a Cost Sharing Employer Defined Benefit Pension Plan. A separate accounting valuation report for such purposes is available on the CalPERS website (www.calpers.ca.gov).

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

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

Assessment and Disclosure of Risk

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

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

Required Contributions

Required Employer Contributions		Fiscal Year
		2024-25
Employer Normal Cost Rate		13.76%
<i>Plus</i>		
Required Payment on Amortization Bases ¹		\$32,768
<i>Paid either as</i>		
1) Monthly Payment		\$2,730.67
<i>Or</i>		
2) Annual Prepayment Option*		\$31,708
Required PEPRA Member Contribution Rate		13.75%
<i>The total minimum required employer contribution is the sum of the Plan's Employer Normal Cost Rate (expressed as a percentage of payroll and paid as payroll is reported) plus the Employer Unfunded Accrued Liability (UAL) Contribution Amount (billed monthly (1) or prepaid annually (2) in dollars).</i>		
<i>* Only the UAL portion of the employer contribution can be prepaid (which must be received in full no later than July 31).</i>		
<i>For additional detail regarding the determination of the required contribution rate for PEPRA members, see "PEPRA Member Contribution Rates" section.</i>		

	Fiscal Year	Fiscal Year
	2023-24	2024-25
Development of Normal Cost as a Percentage of Payroll		
Base Total Normal Cost for Formula	27.29%	27.51%
Surcharge for Class 1 Benefits ²		
None	0.00%	0.00%
Phase out of Normal Cost Difference ³	0.00%	0.00%
Plan's Total Normal Cost	27.29%	27.51%
Offset Due to Employee Contributions	13.75%	13.75%
Employer Normal Cost Rate	13.54%	13.76%

¹ The required payment on amortization bases does not take into account any additional discretionary payment made after April 28, 2023.

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

³ When a rate plan joins the pool, the difference in normal cost between the pool and the rate plan is phased out over a five-year period in accordance with the CalPERS contribution allocation policy.

Additional Discretionary Employer Contributions

The minimum required employer contribution towards the Unfunded Accrued Liability (UAL) for this rate plan for FY 2024-25 is \$32,768. CalPERS allows agencies to make additional discretionary payments (ADPs) at any time and in any amount. These optional payments serve to reduce the UAL and future required contributions and can result in significant long-term savings. Agencies can also use ADPs to stabilize annual contributions as a fixed dollar amount, percent of payroll or percent of revenue.

Provided below are select ADP options for consideration. Making such an ADP during FY 2024-25 does not require an ADP be made in any future year, nor does it change the remaining amortization period of any portion of unfunded liability. For information on permanent changes to amortization periods, see the "Amortization Schedule and Alternatives" section of the report.

Agencies considering making an ADP should contact CalPERS for additional information.

Minimum Required Employer Contribution for Fiscal Year 2024-25

Estimated Normal Cost	Minimum UAL Payment	ADP	Total UAL Contribution	Estimated Total Contribution
\$328,223	\$32,768	\$0	\$32,768	\$360,991

The minimum required contribution above is less than interest on the UAL. With no ADP the UAL is projected to increase over the following year. If the minimum UAL payment were split between interest and principal, the principal portion would be negative. This situation is referred to as **negative amortization**. If only the minimum required contribution is made, contributions are not expected to exceed interest on the UAL until FY **2025-26**, as shown in the "Amortization Schedule and Alternatives" section of the report (see columns labeled "Current Amortization Schedule").

Fiscal Year 2024-25 Employer Contribution Necessary to Avoid Negative Amortization

Estimated Normal Cost	Minimum UAL Payment	ADP ¹	Total UAL Contribution	Estimated Total Contribution
\$328,223	\$32,768	\$7,755	\$40,523	\$368,746

Alternative Fiscal Year 2024-25 Employer Contributions for Greater UAL Reduction

Funding Horizon	Estimated Normal Cost	Minimum UAL Payment	ADP ¹	Total UAL Contribution	Estimated Total Contribution
20 years	\$328,223	\$32,768	\$22,613	\$55,381	\$383,604
15 years	\$328,223	\$32,768	\$31,838	\$64,606	\$392,829
10 years	\$328,223	\$32,768	\$51,297	\$84,065	\$412,288
5 years	\$328,223	\$32,768	\$111,797	\$144,565	\$472,788

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

Note that the calculations above are based on the projected UAL as of June 30, 2024 as determined in the June 30, 2022 actuarial valuation. New unfunded liabilities can emerge in future years due to assumption or method changes, changes in plan provisions, and actuarial experience different than assumed. Making an ADP illustrated above for the indicated number of years will not result in a plan that is exactly 100% funded in the indicated number of years. Valuation results will vary from one year to the next and can diverge significantly from projections over a period of several years.

Funded Status – Funding Policy Basis

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

	June 30, 2021	June 30, 2022
1. Present Value of Benefits	\$9,967,634	\$9,144,763
2. Entry Age Accrued Liability	2,864,509	3,299,994
3. Market Value of Assets (MVA)	2,873,030	2,779,495
4. Unfunded Accrued Liability (UAL) [(2) – (3)]	(\$8,521)	\$520,499
5. Funded Ratio [(3) / (2)]	100.3%	84.2%

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

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

	1% Lower Average Return	Current Assumption	1% Higher Average Return
Discount Rate	5.8%	6.8%	7.8%
1. Entry Age Accrued Liability	\$4,167,454	\$3,299,994	\$2,652,442
2. Market Value of Assets (MVA)	2,779,495	2,779,495	2,779,495
3. Unfunded Accrued Liability (UAL) [(1) – (2)]	\$1,387,959	\$520,499	(\$127,053)
4. Funded Ratio [(2) / (1)]	66.7%	84.2%	104.8%

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

Projected Employer Contributions

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

	Required Contribution	Projected Future Employer Contributions (Assumes 6.80% Return for Fiscal Year 2022-23 and Beyond)				
Fiscal Year	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
	Rate Plan 25345 Results					
Normal Cost %	13.76%	13.8%	13.8%	13.8%	13.8%	13.8%
UAL Payment	\$32,768	\$44,000	\$54,000	\$65,000	\$59,000	\$59,000

For ongoing plans, investment gains and losses are amortized using a 5-year ramp up. For more information, please see "Amortization of the Unfunded Actuarial Accrued Liability" under "Actuarial Methods" in Appendix A of the Section 2 Report. This method phases in the impact of the change in UAL over a 5-year period in order to reduce employer cost volatility from year to year. As a result of this methodology, dramatic changes in the required employer contributions in any one year are less likely. However, required contributions can change gradually and significantly over the next five years. In years when there is a large investment loss, the relatively small amortization payments during the ramp up period could result in contributions that are less than interest on the UAL (i.e. negative amortization) while the contribution impact of the increase in the UAL is phased in.

The required contribution for FY 2024-25 is less than interest on the UAL, a situation referred to as **negative amortization**, as explained in the "Additional Discretionary Employer Contributions" section earlier in this report. If only the minimum required contribution is made, contributions are not expected to exceed interest on the UAL until FY 2025-26, as shown in the "Amortization Schedule and Alternatives" section of the report (see columns labelled "Current Amortization Schedule").

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

Other Pooled Safety Risk Pool Rate Plans

All of the results presented in this Section 1 report, except those shown on this page, correspond to rate plan 25345. In many cases, employers have additional rate plans within the same risk pool. For cost analysis and budgeting it is useful to consider contributions for these rate plans as a whole rather than individually. The estimated contribution amounts and rates for all of the employer's rate plans in the Safety Risk Pool are shown below and assume that the total employer payroll within the Safety Risk Pool will grow according to the overall payroll growth assumption of 2.80% per year for three years. In a refinement since the prior year's report, Classic members who are projected to terminate employment are assumed to be replaced by PEPRA members.

	Fiscal Year 2023-24	Fiscal Year 2024-25
Estimated Combined Employer Contributions for all Pooled Safety Rate Plans		
Projected Payroll for the Contribution Year	\$10,700,529	\$9,848,373
Estimated Employer Normal Cost	\$2,384,749	\$2,062,850
Required Payment on Amortization Bases	\$4,246,509	\$4,959,323
Estimated Total Employer Contributions	\$6,631,258	\$7,022,173
Estimated Total Employer Contribution Rate (illustrative only)	61.97%	71.30%

Cost

Actuarial Determination of Plan Cost

Contributions to fund the plan are comprised of two components:

- Normal Cost, expressed as a percentage of total active payroll
- Amortization of the Unfunded Accrued Liability (UAL), expressed as a dollar amount

For fiscal years prior to 2015-16, the Amortization of UAL component was expressed as a percentage of total active payroll. Starting with FY 2015-16, the Amortization of UAL component was expressed as a dollar amount and invoiced on a monthly basis. There is an option to prepay this amount during July of each fiscal year.

The Normal Cost component is expressed as a percentage of active payroll with employer and employee contributions payable as part of the regular payroll reporting process.

The determination of both components requires complex actuarial calculations. The calculations are based on a set of actuarial assumptions which can be divided into two categories:

- Demographic assumptions (e.g., mortality rates, retirement rates, employment termination rates, disability rates)
- Economic assumptions (e.g., future investment earnings, inflation, salary growth rates)

These assumptions reflect CalPERS' best estimate of future experience of the plan and are long term in nature. We recognize that all assumptions will not be realized in any given year. For example, the investment earnings at CalPERS have averaged 6.9% over the 20 years ending June 30, 2022, yet individual fiscal year returns have ranged from -23.6% to +21.3%. In addition, CalPERS reviews all actuarial assumptions by conducting in-depth experience studies every four years, with the most recent experience study completed in 2021.

Changes Since the Prior Year's Valuation

Benefits

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

This valuation generally reflects plan amendments effective before the date of the report. Please refer to the "Plan's Major Benefit Options" in this report and Appendix B of the Section 2 Report for a summary of the plan provisions used in this valuation.

In 2022, SB 1168 increased the standard retiree lump sum death benefit from \$500 to \$2,000 for any death occurring on or after July 1, 2023. For pooled plans this is a Class 3 benefit and there is no normal cost surcharge. The impact on the unfunded liability is included in the pool's (gain)/loss.

Actuarial Methods and Assumptions

There are no significant changes to the actuarial methods or assumptions for the June 30, 2022 actuarial valuation.

Subsequent Events

This actuarial valuation report reflects fund investment return through June 30, 2022 and statutory/regulatory changes and board actions through January 2023.

During the time period between the valuation date and the publication of this report, inflation has been significantly higher than the expected inflation of 2.3% per annum. Since inflation influences cost-of-living increases for retirees and beneficiaries and active member pay increases, higher inflation is likely to put at least some upward pressure on contribution requirements and downward pressure on the funded status in the June 30, 2023 valuation. The actual impact of higher inflation on future valuation results will depend on, among other factors, how long higher inflation persists. At this time, we continue to believe the long-term inflation assumption of 2.3% is appropriate.

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

Assets and Liabilities

- **Breakdown of Entry Age Accrued Liability**
- **Allocation of Plan's Share of Pool's Experience/Assumption Change**
- **Development of Plan's Share of Pool's Market Value of Assets**
- **Schedule of Amortization Bases**
- **Amortization Schedule and Alternatives**
- **Employer Contribution History**
- **Funding History**

Breakdown of Entry Age Accrued Liability

Active Members	\$1,923,683
Transferred Members	1,166,034
Separated Members	210,277
Members and Beneficiaries Receiving Payments	<u>0</u>
Total	\$3,299,994

Allocation of Plan's Share of Pool's Experience/Assumption Change

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

1. Plan's Accrued Liability	\$3,299,994
2. Projected UAL Balance at 6/30/2022	32,905
3. Other UAL Adjustments (Golden Handshake, Prior Service Purchase, etc.)	0
4. Adjusted UAL Balance at 6/30/2022 for Asset Share	32,905
5. Pool's Accrued Liability ¹	28,855,988,965
6. Sum of Pool's Individual Plan UAL Balances at 6/30/2022 ¹	4,262,073,817
7. Pool's 2021-22 Investment (Gain)/Loss ¹	3,300,630,707
8. Pool's 2021-22 Non-Investment (Gain)/Loss ¹	429,637,362
9. Plan's Share of Pool's Investment (Gain)/Loss: $[(1) - (4)] \div [(5) - (6)] \times (7)$	438,460
10. Plan's Share of Pool's Non-Investment (Gain)/Loss: $(1) \div (5) \times (8)$	49,134
11. Plan's New (Gain)/Loss as of 6/30/2022: $(9) + (10)$	487,594
12. Increase in Pool's Accrued Liability due to Change in Assumptions ¹	0
13. Plan's Share of Pool's Change in Assumptions: $(1) \div (5) \times (12)$	0
14. Increase in Pool's Accrued Liability due to Funding Risk Mitigation ¹	0
15. Plan's Share of Pool's Change due to Funding Risk Mitigation: $(1) \div (5) \times (14)$	0
16. Offset due to Funding Risk Mitigation	0
17. Plan's Investment (Gain)/Loss: $(9) - (16)$	438,460

¹ Does not include plans that transferred to Pool on the valuation date.

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

18. Plan's UAL: $(2) + (3) + (11) + (13) + (15)$	\$520,499
19. Plan's Share of Pool's MVA: $(1) - (18)$	\$2,779,495

Schedule of Amortization Bases

Below is the schedule of the plan's amortization bases. Note that there is a two-year lag between the valuation date and the start of the contribution year.

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

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

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

Reason for Base	Date Est.	Ramp Level 2024-25	Ramp Shape	Escalation Rate	Amort. Period	Balance 6/30/22	Expected Payment 2022-23	Balance 6/30/23	Expected Payment 2023-24	Balance 6/30/24	Minimum Required Payment 2024-25
Fresh Start	6/30/21	No Ramp		0.00%	4	32,905	(35,982)	72,328	16,978	59,701	16,978
Investment (Gain)/Loss	6/30/22	20%	Up Only	0.00%	20	438,460	0	468,275	0	500,118	10,750
Non-Investment (Gain)/Loss	6/30/22	No Ramp		0.00%	20	49,134	0	52,475	0	56,043	5,040
Total						520,499	(35,982)	593,078	16,978	615,862	32,768

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

Amortization Schedule and Alternatives

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

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

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

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

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

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

Amortization Schedule and Alternatives (continued)

Date	<u>Current Amortization</u>		<u>Alternate Schedules</u>			
	<u>Schedule</u>		20 Year Amortization		15 Year Amortization	
	Balance	Payment	Balance	Payment	Balance	Payment
6/30/2024	615,862	32,768	615,862	55,381	615,862	64,606
6/30/2025	623,877	43,518	600,508	55,380	590,974	64,606
6/30/2026	621,327	54,267	584,111	55,381	564,394	64,606
6/30/2027	607,495	65,016	566,598	55,381	536,006	64,606
6/30/2028	581,615	58,789	547,894	55,381	505,688	64,606
6/30/2029	560,410	58,789	527,918	55,381	473,308	64,606
6/30/2030	537,763	58,790	506,583	55,380	438,726	64,606
6/30/2031	513,575	58,789	483,799	55,381	401,793	64,606
6/30/2032	487,743	58,788	459,464	55,380	362,348	64,606
6/30/2033	460,156	58,790	433,476	55,381	320,221	64,606
6/30/2034	430,691	58,790	405,719	55,380	275,230	64,606
6/30/2035	399,222	58,788	376,076	55,380	227,179	64,607
6/30/2036	365,616	58,790	344,417	55,381	175,860	64,607
6/30/2037	329,722	58,789	310,604	55,380	121,051	64,606
6/30/2038	291,388	58,789	274,493	55,380	62,516	64,607
6/30/2039	250,447	58,789	235,927	55,381		
6/30/2040	206,722	58,789	194,737	55,381		
6/30/2041	160,024	58,788	150,746	55,380		
6/30/2042	110,151	58,789	103,765	55,381		
6/30/2043	56,887	58,789	53,588	55,380		
6/30/2044						
6/30/2045						
6/30/2046						
6/30/2047						
6/30/2048						
6/30/2049						
Total		1,136,194		1,107,611		969,093
Interest Paid		520,332		491,749		353,231
Estimated Savings				28,583		167,101

Employer Contribution History

The table below provides a recent history of the required and discretionary employer contributions for the plan. The required amounts are based on the actuarial valuation from two years prior without subsequent adjustments, if any. Additional discretionary payments before July 1, 2019 or after April 28, 2023 are not included.

Fiscal Year	Employer Normal Cost	Unfunded Liability Payment (\$)	Additional Discretionary Payments
2016 - 17	12.082%	\$0	N/A
2017 - 18	11.990%	60	N/A
2018 - 19	12.141%	1,212	N/A
2019 - 20	13.034%	3,276	0
2020 - 21	13.044%	7,125	0
2021 - 22	13.13%	12,105	0
2022 - 23	12.78%	18,246	0
2023 - 24	13.54%	16,978	
2024 - 25	13.76%	32,768	

Funding History

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

Valuation Date	Accrued Liability (AL)	Share of Pool's Market Value of Assets (MVA)	Unfunded Accrued Liability (UAL)	Funded Ratio	Annual Covered Payroll
06/30/2013	\$10,241	\$15,031	(\$4,790)	146.8%	\$149,861
06/30/2014	77,935	86,859	(8,924)	111.5%	374,425
06/30/2015	224,314	218,077	6,237	97.2%	885,722
06/30/2016	454,618	411,347	43,271	90.5%	1,189,792
06/30/2017	789,467	742,844	46,623	94.1%	1,617,401
06/30/2018	1,250,981	1,132,286	118,695	90.5%	1,755,726
06/30/2019	1,675,612	1,487,307	188,305	88.8%	2,087,105
06/30/2020	2,171,773	1,897,404	274,369	87.4%	2,257,715
06/30/2021	2,864,509	2,873,030	(8,521)	100.3%	2,100,091
06/30/2022	3,299,994	2,779,495	520,499	84.2%	1,875,970

Risk Analysis

- **Future Investment Return Scenarios**
- **Discount Rate Sensitivity**
- **Mortality Rate Sensitivity**
- **Maturity Measures**
- **Maturity Measures History**
- **Funded Status – Termination Basis**

Future Investment Return Scenarios

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

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

Assumed Annual Return FY 2022-23 through 2041-42	Projected Employer Contributions				
	2025-26	2026-27	2027-28	2028-29	2029-30
3.0% (5th percentile)					
Normal Cost Rate	13.8%	13.8%	13.8%	13.8%	13.8%
UAL Contribution	\$46,000	\$62,000	\$81,000	\$85,000	\$98,000
10.8% (95th percentile)					
Normal Cost Rate	14.1%	14.5%	14.3%	14.7%	15.0%
UAL Contribution	\$41,000	\$48,000	\$51,000	\$35,000	\$0

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

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

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

Assumed Annual Return for Fiscal Year 2022-23	Required Employer Contributions	Projected Employer Contributions
	2024-25	2025-26
(17.2)% (2 standard deviation loss)		
Normal Cost Rate	13.76%	13.8%
UAL Contribution	\$32,768	\$60,000
(5.2)% (1 standard deviation loss)		
Normal Cost Rate	13.76%	13.8%
UAL Contribution	\$32,768	\$52,000

- Without investment gains (returns higher than 6.8%) in FY 2023-24 or later, projected contributions rates would continue to rise over the next four years due to the continued phase-in of the impact of the illustrated investment loss in FY 2022-23.
- The Pension Outlook Tool can be used to model projected contributions for these scenarios beyond FY 2025-26 as well as to model other investment return scenarios.

Discount Rate Sensitivity

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

Sensitivity to the Real Rate of Return Assumption

As of June 30, 2022	1% Lower Real Return Rate	Current Assumptions	1% Higher Real Return Rate
Discount Rate	5.8%	6.8%	7.8%
Price Inflation	2.3%	2.3%	2.3%
Real Rate of Return	3.5%	4.5%	5.5%
a) Total Normal Cost	34.63%	27.51%	22.13%
b) Accrued Liability	\$4,167,454	\$3,299,994	\$2,652,442
c) Market Value of Assets	\$2,779,495	\$2,779,495	\$2,779,495
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$1,387,959	\$520,499	(\$127,053)
e) Funded Ratio	66.7%	84.2%	104.8%

Sensitivity to the Price Inflation Assumption

As of June 30, 2022	1% Lower Price Inflation	Current Assumptions	1% Higher Price Inflation
Discount Rate	5.8%	6.8%	7.8%
Price Inflation	1.3%	2.3%	3.3%
Real Rate of Return	4.5%	4.5%	4.5%
a) Total Normal Cost	29.07%	27.51%	24.85%
b) Accrued Liability	\$3,503,021	\$3,299,994	\$2,971,223
c) Market Value of Assets	\$2,779,495	\$2,779,495	\$2,779,495
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$723,526	\$520,499	\$191,728
e) Funded Ratio	79.3%	84.2%	93.5%

Mortality Rate Sensitivity

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

As of June 30, 2022	10% Lower Mortality Rates	Current Assumptions	10% Higher Mortality Rates
a) Total Normal Cost	27.87%	27.51%	27.17%
b) Accrued Liability	\$3,344,623	\$3,299,994	\$3,258,389
c) Market Value of Assets	\$2,779,495	\$2,779,495	\$2,779,495
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$565,128	\$520,499	\$478,894
e) Funded Ratio	83.1%	84.2%	85.3%

Maturity Measures

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

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

Ratio of Retiree Accrued Liability to Total Accrued Liability	June 30, 2021	June 30, 2022
1. Retired Accrued Liability	\$0	\$0
2. Total Accrued Liability	2,864,509	3,299,994
3. Ratio of Retiree AL to Total AL [(1) / (2)]	0.00	0.00

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

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

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

Support Ratio	June 30, 2021	June 30, 2022
1. Number of Actives	18	15
2. Number of Retirees	0	0
3. Support Ratio [(1) / (2)]	N/A	N/A

Maturity Measures (continued)

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

Asset Volatility Ratio

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

Liability Volatility Ratio

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

Contribution Volatility	June 30, 2021	June 30, 2022
1. Market Value of Assets	\$2,873,030	\$2,779,495
2. Payroll	2,100,091	1,875,970
3. Asset Volatility Ratio (AVR) [(1) / (2)]	1.4	1.5
4. Accrued Liability	\$2,864,509	\$3,299,994
5. Liability Volatility Ratio (LVR) [(4) / (2)]	1.4	1.8

Maturity Measures History

Valuation Date	Ratio of Retiree Accrued Liability to Total Accrued Liability	Support Ratio	Asset Volatility Ratio	Liability Volatility Ratio
06/30/2017	0.00	N/A	0.5	0.5
06/30/2018	0.00	N/A	0.6	0.7
06/30/2019	0.00	N/A	0.7	0.8
06/30/2020	0.00	N/A	0.8	1.0
06/30/2021	0.00	N/A	1.4	1.4
06/30/2022	0.00	N/A	1.5	1.8

Funded Status – Termination Basis

The funded status measured on a termination basis is an estimate of the financial position of the plan had the contract with CalPERS been terminated as of June 30, 2022. The accrued liability on a termination basis (termination liability) is calculated differently compared to the plan's ongoing funding liability. For the termination liability calculation, both compensation and service are frozen as of the valuation date and no future pay increases or service accruals are assumed. This measure of funded status is not appropriate for assessing the need for future employer contributions in the case of an ongoing plan, that is, for an employer that continues to provide CalPERS retirement benefits to active employees. Unlike the actuarial cost method used for ongoing plans, the termination liability is the present value of the benefits earned through the valuation date.

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

The effective termination discount rate will depend on actual market rates of return for risk-free securities on the date of termination. As market discount rates are variable, the table below shows a range for the hypothetical termination liability based on the lowest and highest interest rates observed during an approximate 19-month period from 12 months before the valuation date to seven months after.

Discount Rate: 1.75% Price Inflation: 2.50%			Discount Rate: 4.50% Price Inflation: 2.75%			
Market Value of Assets (MVA)	Termination Liability ^{1,2}	Funded Ratio	Unfunded Termination Liability	Termination Liability ^{1,2}	Funded Ratio	Unfunded Termination Liability
\$2,779,495	\$9,296,972	29.9%	\$6,517,477	\$3,795,167	73.2%	\$1,015,672

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

² The discount rate used for termination valuations is a weighted average of the 10-year and 30-year U.S. Treasury yields where the weights are based on matching asset and liability durations as of the termination date. The discount rates used in the table are based on 20-year Treasury bonds, rounded to the nearest quarter percentage point, which is a good proxy for most plans. The 20-year Treasury yield was 3.38% on June 30, 2022, the valuation date.

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

Participant Data

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

	June 30, 2021	June 30, 2022
Active Members		
Counts	18	15
Average Attained Age	32.5	39.0
Average Entry Age to Rate Plan	28.9	34.9
Average Years of Credited Service	3.6	3.9
Average Annual Covered Pay	\$116,672	\$125,065
Annual Covered Payroll	\$2,100,091	\$1,875,970
Present Value of Future Payroll	\$28,166,541	\$21,164,511
Transferred Members	14	16
Separated Members	4	9
Retired Members and Beneficiaries*		
Counts	0	0
Average Annual Benefits	\$0	\$0
Total Annual Benefits	\$0	\$0

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

* Values include community property settlements.

List of Class 1 Benefit Provisions

This plan has the additional Class 1 Benefit Provisions:

- None

Plan's Major Benefit Options

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

	Benefit Group	
Member Category	Police	
Demographics		
Actives	Yes	
Transfers/Separated	Yes	
Receiving	No	
Benefit Provision		
Benefit Formula	2.7% @ 57	
Social Security Coverage	No	
Full/Modified	Full	
Employee Contribution Rate	13.75%	
Final Average Compensation Period	Three Year	
Sick Leave Credit	Yes	
Non-Industrial Disability	Standard	
Industrial Disability	Standard	
Pre-Retirement Death Benefits		
Optional Settlement 2	Yes	
1959 Survivor Benefit Level	Level 4	
Special	Yes	
Alternate (firefighters)	No	
Post-Retirement Death Benefits		
Lump Sum	\$2000	
Survivor Allowance (PRSA)	No	
COLA	2%	

PEPRA Member Contribution Rates

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

The table below shows the determination of the PEPRA member contribution rates effective July 1, 2024, based on 50% of the total normal cost rate as of the June 30, 2022 valuation.

Rate Plan Identifier	Benefit Group Name	<u>Basis for Current Rate</u>		<u>Rates Effective July 1, 2024</u>			
		Total Normal Cost	Member Rate	Total Normal Cost	Change	Change Needed	Member Rate
25345	Safety Police PEPRA Level	27.29%	13.75%	27.51%	0.22%	No	13.75%

Section 2

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Risk Pool Actuarial Valuation Information

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



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

400 Q Street, Sacramento, CA 95811 | Phone: (916) 795-3000 | Fax: (916) 795-2744
888 CalPERS (or 888-225-7377) | TTY: (877) 249-7442 | www.calpers.ca.gov

July 2023

**Safety Plan of the City of El Cerrito (CalPERS ID: 7718662328)
Annual Valuation Report as of June 30, 2022**

Dear Employer,

Attached to this letter is the June 30, 2022 actuarial valuation report for the rate plan noted above. **Provided in this report is the determination of the minimum required employer contributions for fiscal year (FY) 2024-25.** In addition, the report contains important information regarding the current financial status of the plan as well as projections and risk measures to aid in planning for the future.

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

- Section 1 contains specific information for the plan including the development of the current and projected employer contributions, and
- Section 2 contains the Risk Pool Actuarial Valuation appropriate to the plan as of June 30, 2022.

Section 2 can be found on the CalPERS website (www.calpers.ca.gov). From the home page, go to "Forms & Publications" and select "View All". In the search box, enter "Risk Pool" and from the results list download the Safety Risk Pool Actuarial Valuation Report for June 30, 2022.

Actuarial valuations are based on assumptions regarding future plan experience including investment return and payroll growth, eligibility for the types of benefits provided, and longevity among retirees. The CalPERS Board of Administration (board) adopts these assumptions after considering the advice of CalPERS actuarial and investment teams and other professionals. Each actuarial valuation reflects all prior differences between actual and assumed experience and adjusts the contribution requirements as needed. This valuation is based on an investment return assumption of 6.8%, which was adopted by the board in November 2021. Other assumptions used in this report are those recommended in the CalPERS Experience Study and Review of Actuarial Assumptions report from November 2021.

Required Contributions

The table below shows the minimum required employer contributions for FY 2024-25 along with estimates of the required contributions for FY 2025-26. Employee contributions other than cost sharing (whether paid by the employer or the employee) are in addition to the results shown below. **The required employer contributions in this report do not reflect any cost sharing arrangement between the agency and the employees.**

Fiscal Year	Employer Normal Cost Rate	Employer Amortization of Unfunded Accrued Liability
2024-25	27.32%	\$4,912,212
<i>Projected Results</i>		
2025-26	27.3%	\$5,245,000

The actual investment return for FY 2022-23 was not known at the time this report was prepared. The projections above assume the investment return for that year would be 6.8%. ***To the extent the actual investment return for FY 2022-23 differs from 6.8%, the actual contribution requirements for FY 2025-26 will differ from those shown above.*** For additional details regarding the assumptions and methods used for these projections, please refer to the "Projected Employer Contributions" in the "Highlights and Executive Summary" section. This section also contains projected required contributions through FY 2029-30.

Changes from Previous Year's Valuations

There are no significant changes in actuarial assumptions or policies in the 2022 actuarial valuation. There may be changes specific to the plan such as contract amendments and funding changes.

Further descriptions of general changes are included in "Highlights and Executive Summary" and in Appendix A of the Section 2 report in "Actuarial Methods and Assumptions." The effects of any changes on the required contributions are included in "Reconciliation of Required Employer Contributions," also in the Section 2 report.

Questions

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

Sincerely,

A handwritten signature in black ink, appearing to read "Scott Terando", with a long horizontal flourish extending to the right.

SCOTT TERANDO, ASA, EA, MAAA, FCA, CFA
Chief Actuary, CalPERS

A handwritten signature in blue ink, appearing to read "Randall Dziubek", with a long horizontal flourish extending to the right.

RANDALL DZIUBEK, ASA, MAAA
Deputy Chief Actuary, Valuation Services, CalPERS



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

**for the
Safety Plan
of the
City of El Cerrito**
(CalPERS ID: 7718662328)

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

Table of Contents

Section 1 – Plan Specific Information

Section 2 – Risk Pool Actuarial Valuation Information

Section 1

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Plan Specific Information for the Safety Plan of the City of El Cerrito

**(CalPERS ID: 7718662328)
(Rate Plan ID: 416)**

Table of Contents

Actuarial Certification	1
Highlights and Executive Summary	
Introduction	3
Purpose of Section 1	3
Required Contributions	4
Additional Discretionary Employer Contributions	5
Funded Status – Funding Policy Basis	6
Projected Employer Contributions	7
Other Pooled Safety Risk Pool Rate Plans	8
Cost	9
Changes Since the Prior Year's Valuation	10
Subsequent Events	10
Assets and Liabilities	
Breakdown of Entry Age Accrued Liability	12
Allocation of Plan's Share of Pool's Experience/Assumption Change	12
Development of Plan's Share of Pool's Market Value of Assets	12
Schedule of Amortization Bases	13
Amortization Schedule and Alternatives	15
Employer Contribution History	17
Funding History	17
Risk Analysis	
Future Investment Return Scenarios	19
Discount Rate Sensitivity	20
Mortality Rate Sensitivity	20
Maturity Measures	21
Maturity Measures History	22
Funded Status – Termination Basis	23
Participant Data	24
List of Class 1 Benefit Provisions	24
Plan's Major Benefit Options	25

Actuarial Certification

To the best of our knowledge, this report, comprised of Sections 1 and 2, is complete and accurate and contains sufficient information to disclose, fully and fairly, the funded condition of the Safety Plan of the City of El Cerrito and satisfies the actuarial valuation requirements of Government Code section 7504. This valuation is based on the member and financial data as of June 30, 2022 provided by the various CalPERS databases and the benefits under this plan with CalPERS as of the date this report was produced. Section 1 of this report is based on the member and financial data for City of El Cerrito, while Section 2 is based on the corresponding information for all agencies participating in the Safety Risk Pool to which the plan belongs.

As set forth in Section 2 of this report, the pool actuaries have certified that, in their opinion, the valuation of the Safety Risk Pool has been performed in accordance with generally accepted actuarial principles, in accordance with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for the risk pool as of the date of this valuation and as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.

Having relied upon the information set forth in Section 2 of this report and based on the census and benefit provision information for the rate plan, it is my opinion as the plan actuary that the Unfunded Accrued Liability amortization bases as of June 30, 2022 and employer contribution as of July 1, 2024 have been properly and accurately determined in accordance with the principles and standards stated above.

The undersigned is an actuary who satisfies the *Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States* with regard to pensions.



TONY CUNY, ASA, MAAA
Senior Actuary, CalPERS

Highlights and Executive Summary

- **Introduction**
- **Purpose of Section 1**
- **Required Contributions**
- **Additional Discretionary Employer Contributions**
- **Funded Status – Funding Policy Basis**
- **Projected Employer Contributions**
- **Other Pooled Safety Risk Pool Rate Plans**
- **Cost**
- **Changes Since the Prior Year's Valuation**
- **Subsequent Events**

Introduction

This report presents the results of the June 30, 2022 actuarial valuation of the Safety Plan of the City of El Cerrito of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the minimum required contributions for fiscal year (FY) 2024-25.

Purpose of Section 1

This Section 1 report for the Safety Plan of the City of El Cerrito of CalPERS was prepared by the Actuarial Office using data as of June 30, 2022. The purpose of the valuation is to:

- Set forth the assets and accrued liabilities of this rate plan as of June 30, 2022;
- Determine the minimum required employer contributions for this rate plan for FY July 1, 2024 through June 30, 2025;
- Determine the required member contribution rate for FY July 1, 2024 through June 30, 2025 for employees subject to the California Public Employees' Pension Reform Act of 2013 (PEPRA); and
- Provide actuarial information as of June 30, 2022 to the CalPERS Board of Administration (board) and other interested parties.

The pension funding information presented in this report should not be used in financial reports subject to Governmental Accounting Standards Board (GASB) Statement No. 68 for a Cost Sharing Employer Defined Benefit Pension Plan. A separate accounting valuation report for such purposes is available on the CalPERS website (www.calpers.ca.gov).

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

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

Assessment and Disclosure of Risk

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

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

Required Contributions

	Fiscal Year
Required Employer Contributions	2024-25
Employer Normal Cost Rate	27.32%
<i>Plus</i>	
Required Payment on Amortization Bases ¹	\$4,912,212
<i>Paid either as</i>	
1) Monthly Payment	\$409,351.00
<i>Or</i>	
2) Annual Prepayment Option*	\$4,753,259
<i>The total minimum required employer contribution is the sum of the Plan's Employer Normal Cost Rate (expressed as a percentage of payroll and paid as payroll is reported) plus the Employer Unfunded Accrued Liability (UAL) Contribution Amount (billed monthly (1) or prepaid annually (2) in dollars).</i>	
<i>* Only the UAL portion of the employer contribution can be prepaid (which must be received in full no later than July 31).</i>	

	Fiscal Year	Fiscal Year
	2023-24	2024-25
Development of Normal Cost as a Percentage of Payroll		
Base Total Normal Cost for Formula	34.64%	34.85%
Surcharge for Class 1 Benefits ²		
a) FAC 1	1.46%	1.46%
Phase out of Normal Cost Difference ³	0.00%	0.00%
Plan's Total Normal Cost	36.10%	36.31%
Offset Due to Employee Contributions	8.99%	8.99%
Employer Normal Cost Rate	27.11%	27.32%

¹ The required payment on amortization bases does not take into account any additional discretionary payment made after April 28, 2023.

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

³ When a rate plan joins the pool, the difference in normal cost between the pool and the rate plan is phased out over a five-year period in accordance with the CalPERS contribution allocation policy.

Additional Discretionary Employer Contributions

The minimum required employer contribution towards the Unfunded Accrued Liability (UAL) for this rate plan for FY 2024-25 is \$4,912,212. CalPERS allows agencies to make additional discretionary payments (ADPs) at any time and in any amount. These optional payments serve to reduce the UAL and future required contributions and can result in significant long-term savings. Agencies can also use ADPs to stabilize annual contributions as a fixed dollar amount, percent of payroll or percent of revenue.

Provided below are select ADP options for consideration. Making such an ADP during FY 2024-25 does not require an ADP be made in any future year, nor does it change the remaining amortization period of any portion of unfunded liability. For information on permanent changes to amortization periods, see the "Amortization Schedule and Alternatives" section of the report.

Agencies considering making an ADP should contact CalPERS for additional information.

Minimum Required Employer Contribution for Fiscal Year 2024-25

Estimated Normal Cost	Minimum UAL Payment	ADP	Total UAL Contribution	Estimated Total Contribution
\$1,425,866	\$4,912,212	\$0	\$4,912,212	\$6,338,078

Alternative Fiscal Year 2024-25 Employer Contributions for Greater UAL Reduction

Funding Horizon	Estimated Normal Cost	Minimum UAL Payment	ADP ¹	Total UAL Contribution	Estimated Total Contribution
20 years	\$1,425,866	\$4,912,212	\$405,168	\$5,317,380	\$6,743,246
15 years	\$1,425,866	\$4,912,212	\$1,290,976	\$6,203,188	\$7,629,054
10 years	\$1,425,866	\$4,912,212	\$3,159,303	\$8,071,515	\$9,497,381
5 years	\$1,425,866	\$4,912,212	\$8,968,268	\$13,880,480	\$15,306,346

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

Note that the calculations above are based on the projected UAL as of June 30, 2024 as determined in the June 30, 2022 actuarial valuation. New unfunded liabilities can emerge in future years due to assumption or method changes, changes in plan provisions, and actuarial experience different than assumed. Making an ADP illustrated above for the indicated number of years will not result in a plan that is exactly 100% funded in the indicated number of years. Valuation results will vary from one year to the next and can diverge significantly from projections over a period of several years.

Funded Status – Funding Policy Basis

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

	June 30, 2021	June 30, 2022
1. Present Value of Benefits	\$175,288,015	\$180,159,961
2. Entry Age Accrued Liability	161,290,875	168,023,634
3. Market Value of Assets (MVA)	120,388,390	108,398,918
4. Unfunded Accrued Liability (UAL) [(2) – (3)]	\$40,902,485	\$59,624,716
5. Funded Ratio [(3) / (2)]	74.6%	64.5%

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

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

	1% Lower Average Return	Current Assumption	1% Higher Average Return
Discount Rate	5.8%	6.8%	7.8%
1. Entry Age Accrued Liability	\$190,041,432	\$168,023,634	\$149,889,934
2. Market Value of Assets (MVA)	108,398,918	108,398,918	108,398,918
3. Unfunded Accrued Liability (UAL) [(1) – (2)]	\$81,642,514	\$59,624,716	\$41,491,016
4. Funded Ratio [(2) / (1)]	57.0%	64.5%	72.3%

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

Projected Employer Contributions

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

	Required Contribution	Projected Future Employer Contributions (Assumes 6.80% Return for Fiscal Year 2022-23 and Beyond)				
Fiscal Year	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
	Rate Plan 416 Results					
Normal Cost %	27.32%	27.3%	27.3%	27.3%	27.3%	27.3%
UAL Payment	\$4,912,212	\$5,245,000	\$5,570,000	\$5,841,000	\$6,397,000	\$6,535,000

For ongoing plans, investment gains and losses are amortized using a 5-year ramp up. For more information, please see "Amortization of the Unfunded Actuarial Accrued Liability" under "Actuarial Methods" in Appendix A of the Section 2 Report. This method phases in the impact of the change in UAL over a 5-year period in order to reduce employer cost volatility from year to year. As a result of this methodology, dramatic changes in the required employer contributions in any one year are less likely. However, required contributions can change gradually and significantly over the next five years. In years when there is a large investment loss, the relatively small amortization payments during the ramp up period could result in contributions that are less than interest on the UAL (i.e. negative amortization) while the contribution impact of the increase in the UAL is phased in.

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

Other Pooled Safety Risk Pool Rate Plans

All of the results presented in this Section 1 report, except those shown on this page, correspond to rate plan 416. In many cases, employers have additional rate plans within the same risk pool. For cost analysis and budgeting it is useful to consider contributions for these rate plans as a whole rather than individually. The estimated contribution amounts and rates for all of the employer's rate plans in the Safety Risk Pool are shown below and assume that the total employer payroll within the Safety Risk Pool will grow according to the overall payroll growth assumption of 2.80% per year for three years. In a refinement since the prior year's report, Classic members who are projected to terminate employment are assumed to be replaced by PEPRAs members.

	Fiscal Year 2023-24	Fiscal Year 2024-25
Estimated Combined Employer Contributions for all Pooled Safety Rate Plans		
Projected Payroll for the Contribution Year	\$10,700,529	\$9,848,373
Estimated Employer Normal Cost	\$2,384,749	\$2,062,850
Required Payment on Amortization Bases	\$4,246,509	\$4,959,323
Estimated Total Employer Contributions	\$6,631,258	\$7,022,173
Estimated Total Employer Contribution Rate (illustrative only)	61.97%	71.30%

Cost

Actuarial Determination of Plan Cost

Contributions to fund the plan are comprised of two components:

- Normal Cost, expressed as a percentage of total active payroll
- Amortization of the Unfunded Accrued Liability (UAL), expressed as a dollar amount

For fiscal years prior to 2015-16, the Amortization of UAL component was expressed as a percentage of total active payroll. Starting with FY 2015-16, the Amortization of UAL component was expressed as a dollar amount and invoiced on a monthly basis. There is an option to prepay this amount during July of each fiscal year.

The Normal Cost component is expressed as a percentage of active payroll with employer and employee contributions payable as part of the regular payroll reporting process.

The determination of both components requires complex actuarial calculations. The calculations are based on a set of actuarial assumptions which can be divided into two categories:

- Demographic assumptions (e.g., mortality rates, retirement rates, employment termination rates, disability rates)
- Economic assumptions (e.g., future investment earnings, inflation, salary growth rates)

These assumptions reflect CalPERS' best estimate of future experience of the plan and are long term in nature. We recognize that all assumptions will not be realized in any given year. For example, the investment earnings at CalPERS have averaged 6.9% over the 20 years ending June 30, 2022, yet individual fiscal year returns have ranged from -23.6% to +21.3%. In addition, CalPERS reviews all actuarial assumptions by conducting in-depth experience studies every four years, with the most recent experience study completed in 2021.

Changes Since the Prior Year's Valuation

Benefits

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

This valuation generally reflects plan amendments effective before the date of the report. Please refer to the "Plan's Major Benefit Options" in this report and Appendix B of the Section 2 Report for a summary of the plan provisions used in this valuation.

In 2022, SB 1168 increased the standard retiree lump sum death benefit from \$500 to \$2,000 for any death occurring on or after July 1, 2023. For pooled plans this is a Class 3 benefit and there is no normal cost surcharge. The impact on the unfunded liability is included in the pool's (gain)/loss.

Actuarial Methods and Assumptions

There are no significant changes to the actuarial methods or assumptions for the June 30, 2022 actuarial valuation.

Subsequent Events

This actuarial valuation report reflects fund investment return through June 30, 2022 and statutory/regulatory changes and board actions through January 2023.

During the time period between the valuation date and the publication of this report, inflation has been significantly higher than the expected inflation of 2.3% per annum. Since inflation influences cost-of-living increases for retirees and beneficiaries and active member pay increases, higher inflation is likely to put at least some upward pressure on contribution requirements and downward pressure on the funded status in the June 30, 2023 valuation. The actual impact of higher inflation on future valuation results will depend on, among other factors, how long higher inflation persists. At this time, we continue to believe the long-term inflation assumption of 2.3% is appropriate.

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

Assets and Liabilities

- **Breakdown of Entry Age Accrued Liability**
- **Allocation of Plan's Share of Pool's Experience/Assumption Change**
- **Development of Plan's Share of Pool's Market Value of Assets**
- **Schedule of Amortization Bases**
- **Amortization Schedule and Alternatives**
- **Employer Contribution History**
- **Funding History**

Breakdown of Entry Age Accrued Liability

Active Members	\$39,406,000
Transferred Members	8,154,455
Separated Members	942,698
Members and Beneficiaries Receiving Payments	<u>119,520,481</u>
Total	\$168,023,634

Allocation of Plan's Share of Pool's Experience/Assumption Change

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

1. Plan's Accrued Liability	\$168,023,634
2. Projected UAL Balance at 6/30/2022	39,932,518
3. Other UAL Adjustments (Golden Handshake, Prior Service Purchase, etc.)	0
4. Adjusted UAL Balance at 6/30/2022 for Asset Share	39,932,518
5. Pool's Accrued Liability ¹	28,855,988,965
6. Sum of Pool's Individual Plan UAL Balances at 6/30/2022 ¹	4,262,073,817
7. Pool's 2021-22 Investment (Gain)/Loss ¹	3,300,630,707
8. Pool's 2021-22 Non-Investment (Gain)/Loss ¹	429,637,362
9. Plan's Share of Pool's Investment (Gain)/Loss: $[(1) - (4)] \div [(5) - (6)] \times (7)$	17,190,491
10. Plan's Share of Pool's Non-Investment (Gain)/Loss: $(1) \div (5) \times (8)$	2,501,707
11. Plan's New (Gain)/Loss as of 6/30/2022: $(9) + (10)$	19,692,198
12. Increase in Pool's Accrued Liability due to Change in Assumptions ¹	0
13. Plan's Share of Pool's Change in Assumptions: $(1) \div (5) \times (12)$	0
14. Increase in Pool's Accrued Liability due to Funding Risk Mitigation ¹	0
15. Plan's Share of Pool's Change due to Funding Risk Mitigation: $(1) \div (5) \times (14)$	0
16. Offset due to Funding Risk Mitigation	0
17. Plan's Investment (Gain)/Loss: $(9) - (16)$	17,190,491

¹ Does not include plans that transferred to Pool on the valuation date.

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

18. Plan's UAL: $(2) + (3) + (11) + (13) + (15)$	\$59,624,716
19. Plan's Share of Pool's MVA: $(1) - (18)$	\$108,398,918

Schedule of Amortization Bases

Below is the schedule of the plan's amortization bases. Note that there is a two-year lag between the valuation date and the start of the contribution year.

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

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

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

Reason for Base	Date Est.	Ramp Level 2024-25	Ramp Shape	Escalation Rate	Amort. Period	Balance 6/30/22	Expected Payment 2022-23	Balance 6/30/23	Expected Payment 2023-24	Balance 6/30/24	Minimum Required Payment 2024-25
Side Fund	2013 or Prior	No Ramp		2.80%	11	7,100,362	713,694	6,845,626	720,997	6,566,021	741,185
Golden Handshake	6/30/13	No Ramp		2.80%	11	306,761	30,834	295,756	31,150	283,676	32,022
Investment (Gain)/Loss	6/30/13	100%	Up/Down	2.80%	21	13,559,692	975,248	13,473,890	977,966	13,379,445	1,005,349
Non-Investment (Gain)/Loss	6/30/13	100%	Up/Down	2.80%	21	(167,494)	(12,047)	(166,434)	(12,080)	(165,268)	(12,418)
Share of Pre-2013 Pool UAL	6/30/13	No Ramp		2.80%	13	10,345,120	934,892	10,082,433	942,652	9,793,863	969,046
Assumption Change	6/30/14	100%	Up/Down	2.80%	12	6,472,065	693,616	6,195,354	701,302	5,891,884	720,939
Investment (Gain)/Loss	6/30/14	100%	Up/Down	2.80%	22	(9,891,656)	(690,928)	(9,850,255)	(692,262)	(9,804,661)	(711,645)
Non-Investment (Gain)/Loss	6/30/14	100%	Up/Down	2.80%	22	132,651	9,266	132,095	9,283	131,484	9,543
Investment (Gain)/Loss	6/30/15	100%	Up/Down	2.80%	23	5,944,166	404,015	5,930,844	404,455	5,916,161	415,779
Non-Investment (Gain)/Loss	6/30/15	100%	Up/Down	2.80%	23	(23,738)	(1,613)	(23,685)	(1,615)	(23,627)	(1,660)
Assumption Change	6/30/16	100%	Up/Down	2.80%	14	2,467,613	235,100	2,392,449	237,257	2,309,944	243,900
Investment (Gain)/Loss	6/30/16	100%	Up/Down	2.80%	24	7,617,807	504,710	7,614,230	504,847	7,610,268	518,983
Non-Investment (Gain)/Loss	6/30/16	100%	Up/Down	2.80%	24	(1,358,344)	(89,996)	(1,357,706)	(90,020)	(1,357,000)	(92,541)
Assumption Change	6/30/17	100%	Up/Down	2.80%	15	3,254,901	239,965	3,228,245	302,447	3,135,205	310,916
Investment (Gain)/Loss	6/30/17	100%	Up/Down	2.80%	25	(3,836,081)	(201,026)	(3,889,186)	(251,158)	(3,894,094)	(258,191)
Non-Investment (Gain)/Loss	6/30/17	100%	Up/Down	2.80%	25	105,298	5,518	106,756	6,894	106,891	7,087
Assumption Change	6/30/18	100%	Up/Down	2.80%	16	4,940,312	269,487	4,997,754	361,891	4,963,608	465,030
Investment (Gain)/Loss	6/30/18	100%	Up/Down	2.80%	26	(1,193,523)	(46,993)	(1,226,118)	(62,560)	(1,244,842)	(80,390)
Method Change	6/30/18	100%	Up/Down	2.80%	16	1,113,648	60,748	1,126,597	81,578	1,118,900	104,827
Non-Investment (Gain)/Loss	6/30/18	100%	Up/Down	2.80%	26	612,701	24,124	629,434	32,116	639,046	41,269

Schedule of Amortization Bases (continued)

Reason for Base	Date Est.	Ramp Level 2024-25	Ramp Shape	Escalation Rate	Amort. Period	Balance 6/30/22	Expected Payment 2022-23	Balance 6/30/23	Expected Payment 2023-24	Balance 6/30/24	Minimum Required Payment 2024-25
Investment (Gain)/Loss	6/30/19	80%	Up Only	0.00%	17	573,852	24,003	588,068	35,358	591,516	47,145
Non-Investment (Gain)/Loss	6/30/19	No Ramp		0.00%	17	687,524	64,434	667,687	63,305	647,668	63,305
Investment (Gain)/Loss	6/30/20	60%	Up Only	0.00%	18	2,687,539	58,870	2,809,453	115,489	2,881,145	173,233
Non-Investment (Gain)/Loss	6/30/20	No Ramp		0.00%	18	515,828	47,159	502,168	46,311	488,456	46,311
Assumption Change	6/30/21	No Ramp		0.00%	19	983,759	(71,907)	1,124,966	101,161	1,096,920	101,161
Net Investment (Gain)	6/30/21	40%	Up Only	0.00%	19	(12,282,386)	0	(13,117,588)	(281,959)	(13,718,196)	(563,917)
Non-Investment (Gain)/Loss	6/30/21	No Ramp		0.00%	19	(646,816)	0	(690,799)	(62,119)	(673,577)	(62,119)
Risk Mitigation	6/30/21	No Ramp		0.00%	0	4,252,934	(92,022)	4,637,233	4,792,306	0	0
Risk Mitigation Offset	6/30/21	No Ramp		0.00%	0	(4,341,977)	0	(4,637,233)	(4,792,306)	0	0
Investment (Gain)/Loss	6/30/22	20%	Up Only	0.00%	20	17,190,491	0	18,359,444	0	19,607,886	421,466
Non-Investment (Gain)/Loss	6/30/22	No Ramp		0.00%	20	2,501,707	0	2,671,823	0	2,853,507	256,597
Total						59,624,716	4,089,151	59,453,301	4,222,686	59,132,229	4,912,212

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

Amortization Schedule and Alternatives

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

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

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

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

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

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

Amortization Schedule and Alternatives (continued)

Date	<u>Current Amortization</u>		<u>Alternate Schedules</u>			
	<u>Schedule</u>		15 Year Amortization		10 Year Amortization	
	Balance	Payment	Balance	Payment	Balance	Payment
6/30/2024	59,132,229	4,912,212	59,132,229	6,203,188	59,132,229	8,071,515
6/30/2025	58,076,743	5,245,262	56,742,593	6,203,188	54,811,787	8,071,515
6/30/2026	56,605,295	5,569,998	54,190,461	6,203,188	50,197,555	8,071,515
6/30/2027	54,698,191	5,840,559	51,464,784	6,203,188	45,269,555	8,071,515
6/30/2028	52,381,796	6,396,750	48,553,761	6,203,187	40,006,451	8,071,515
6/30/2029	49,333,096	6,535,250	45,444,790	6,203,188	34,385,456	8,071,515
6/30/2030	45,933,952	6,677,622	42,124,408	6,203,187	28,382,234	8,071,515
6/30/2031	42,156,532	6,823,980	38,578,241	6,203,188	21,970,793	8,071,515
6/30/2032	37,970,997	6,794,605	34,790,933	6,203,187	15,123,374	8,071,515
6/30/2033	33,531,202	6,759,374	30,746,090	6,203,188	7,810,330	8,071,514
6/30/2034	28,825,911	6,653,686	26,426,196	6,203,187		
6/30/2035	23,909,880	5,405,998	21,812,550	6,203,187		
6/30/2036	19,948,970	5,002,603	16,885,177	6,203,188		
6/30/2037	16,135,606	3,392,413	11,622,741	6,203,187		
6/30/2038	13,726,971	3,115,687	6,002,461	6,203,188		
6/30/2039	11,440,529	2,895,760				
6/30/2040	9,225,891	2,758,934				
6/30/2041	7,002,057	2,355,776				
6/30/2042	5,043,642	1,953,894				
6/30/2043	3,367,377	3,113,283				
6/30/2044	378,963	377,238				
6/30/2045	14,881	15,379				
6/30/2046						
6/30/2047						
6/30/2048						
6/30/2049						
Total		98,596,263		93,047,814		80,715,149
Interest Paid		39,464,034		33,915,585		21,582,920
Estimated Savings				5,548,449		17,881,114

Employer Contribution History

The table below provides a recent history of the required and discretionary employer contributions for the plan. The required amounts are based on the actuarial valuation from two years prior without subsequent adjustments, if any. Additional discretionary payments before July 1, 2019 or after April 28, 2023 are not included.

Fiscal Year	Employer Normal Cost	Unfunded Liability Payment (\$)	Additional Discretionary Payments
2016 - 17	19.536%	\$1,792,383	N/A
2017 - 18	19.723%	2,092,601	N/A
2018 - 19	20.556%	2,498,404	N/A
2019 - 20	21.927%	2,955,657	0
2020 - 21	23.674%	3,306,700	0
2021 - 22	23.71%	3,789,412	0
2022 - 23	23.75%	4,253,080	0
2023 - 24	27.11%	4,222,686	
2024 - 25	27.32%	4,912,212	

Funding History

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

Valuation Date	Accrued Liability (AL)	Share of Pool's Market Value of Assets (MVA)	Unfunded Accrued Liability (UAL)	Funded Ratio	Annual Covered Payroll
06/30/2013	\$101,809,265	\$72,547,569	\$29,261,696	71.3%	\$8,321,279
06/30/2014	111,959,814	83,778,367	28,181,447	74.8%	7,916,094
06/30/2015	115,010,168	81,703,497	33,306,671	71.0%	7,504,349
06/30/2016	121,203,599	80,358,400	40,845,199	66.3%	7,254,709
06/30/2017	128,583,157	86,999,870	41,583,287	67.7%	7,158,298
06/30/2018	138,612,535	91,780,070	46,832,465	66.2%	7,353,844
06/30/2019	146,218,995	97,388,993	48,830,002	66.6%	6,956,438
06/30/2020	151,566,930	99,468,323	52,098,607	65.6%	6,926,350
06/30/2021	161,290,875	120,388,390	40,902,485	74.6%	6,348,470
06/30/2022	168,023,634	108,398,918	59,624,716	64.5%	5,646,026

Risk Analysis

- **Future Investment Return Scenarios**
- **Discount Rate Sensitivity**
- **Mortality Rate Sensitivity**
- **Maturity Measures**
- **Maturity Measures History**
- **Funded Status – Termination Basis**

Future Investment Return Scenarios

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

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

Assumed Annual Return FY 2022-23 through 2041-42	Projected Employer Contributions				
	2025-26	2026-27	2027-28	2028-29	2029-30
3.0% (5th percentile)					
Normal Cost Rate	27.3%	27.3%	27.3%	27.3%	27.3%
UAL Contribution	\$5,345,000	\$5,872,000	\$6,447,000	\$7,412,000	\$8,067,000
10.8% (95th percentile)					
Normal Cost Rate	27.8%	28.3%	28.8%	29.3%	29.8%
UAL Contribution	\$5,146,000	\$5,281,000	\$5,261,000	\$5,410,000	\$5,022,000

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

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

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

Assumed Annual Return for Fiscal Year 2022-23	Required Employer Contributions	Projected Employer Contributions
	2024-25	2025-26
(17.2)% (2 standard deviation loss)		
Normal Cost Rate	27.32%	27.3%
UAL Contribution	\$4,912,212	\$5,877,000
(5.2)% (1 standard deviation loss)		
Normal Cost Rate	27.32%	27.3%
UAL Contribution	\$4,912,212	\$5,561,000

- Without investment gains (returns higher than 6.8%) in FY 2023-24 or later, projected contributions rates would continue to rise over the next four years due to the continued phase-in of the impact of the illustrated investment loss in FY 2022-23.
- The Pension Outlook Tool can be used to model projected contributions for these scenarios beyond FY 2025-26 as well as to model other investment return scenarios.

Discount Rate Sensitivity

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

Sensitivity to the Real Rate of Return Assumption

As of June 30, 2022	1% Lower Real Return Rate	Current Assumptions	1% Higher Real Return Rate
Discount Rate	5.8%	6.8%	7.8%
Price Inflation	2.3%	2.3%	2.3%
Real Rate of Return	3.5%	4.5%	5.5%
a) Total Normal Cost	46.03%	36.31%	28.96%
b) Accrued Liability	\$190,041,432	\$168,023,634	\$149,889,934
c) Market Value of Assets	\$108,398,918	\$108,398,918	\$108,398,918
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$81,642,514	\$59,624,716	\$41,491,016
e) Funded Ratio	57.0%	64.5%	72.3%

Sensitivity to the Price Inflation Assumption

As of June 30, 2022	1% Lower Price Inflation	Current Assumptions	1% Higher Price Inflation
Discount Rate	5.8%	6.8%	7.8%
Price Inflation	1.3%	2.3%	3.3%
Real Rate of Return	4.5%	4.5%	4.5%
a) Total Normal Cost	38.08%	36.31%	33.03%
b) Accrued Liability	\$173,690,604	\$168,023,634	\$154,806,836
c) Market Value of Assets	\$108,398,918	\$108,398,918	\$108,398,918
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$65,291,686	\$59,624,716	\$46,407,918
e) Funded Ratio	62.4%	64.5%	70.0%

Mortality Rate Sensitivity

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

As of June 30, 2022	10% Lower Mortality Rates	Current Assumptions	10% Higher Mortality Rates
a) Total Normal Cost	36.77%	36.31%	35.88%
b) Accrued Liability	\$171,071,146	\$168,023,634	\$165,212,682
c) Market Value of Assets	\$108,398,918	\$108,398,918	\$108,398,918
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$62,672,228	\$59,624,716	\$56,813,764
e) Funded Ratio	63.4%	64.5%	65.6%

Maturity Measures

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

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

Ratio of Retiree Accrued Liability to Total Accrued Liability	June 30, 2021	June 30, 2022
1. Retired Accrued Liability	\$110,364,888	\$119,520,481
2. Total Accrued Liability	161,290,875	168,023,634
3. Ratio of Retiree AL to Total AL [(1) / (2)]	0.68	0.71

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

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

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

Support Ratio	June 30, 2021	June 30, 2022
1. Number of Actives	39	34
2. Number of Retirees	139	145
3. Support Ratio [(1) / (2)]	0.28	0.23

Maturity Measures (continued)

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

Asset Volatility Ratio

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

Liability Volatility Ratio

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

Contribution Volatility	June 30, 2021	June 30, 2022
1. Market Value of Assets	\$120,388,390	\$108,398,918
2. Payroll	6,348,470	5,646,026
3. Asset Volatility Ratio (AVR) [(1) / (2)]	19.0	19.2
4. Accrued Liability	\$161,290,875	\$168,023,634
5. Liability Volatility Ratio (LVR) [(4) / (2)]	25.4	29.8

Maturity Measures History

Valuation Date	Ratio of Retiree Accrued Liability to Total Accrued Liability	Support Ratio	Asset Volatility Ratio	Liability Volatility Ratio
06/30/2017	0.67	0.41	12.2	18.0
06/30/2018	0.65	0.40	12.5	18.8
06/30/2019	0.68	0.34	14.0	21.0
06/30/2020	0.67	0.31	14.4	21.9
06/30/2021	0.68	0.28	19.0	25.4
06/30/2022	0.71	0.23	19.2	29.8

Funded Status – Termination Basis

The funded status measured on a termination basis is an estimate of the financial position of the plan had the contract with CalPERS been terminated as of June 30, 2022. The accrued liability on a termination basis (termination liability) is calculated differently compared to the plan's ongoing funding liability. For the termination liability calculation, both compensation and service are frozen as of the valuation date and no future pay increases or service accruals are assumed. This measure of funded status is not appropriate for assessing the need for future employer contributions in the case of an ongoing plan, that is, for an employer that continues to provide CalPERS retirement benefits to active employees. Unlike the actuarial cost method used for ongoing plans, the termination liability is the present value of the benefits earned through the valuation date.

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

The effective termination discount rate will depend on actual market rates of return for risk-free securities on the date of termination. As market discount rates are variable, the table below shows a range for the hypothetical termination liability based on the lowest and highest interest rates observed during an approximate 19-month period from 12 months before the valuation date to seven months after.

Discount Rate: 1.75% Price Inflation: 2.50%			Discount Rate: 4.50% Price Inflation: 2.75%			
Market Value of Assets (MVA)	Termination Liability ^{1,2}	Funded Ratio	Unfunded Termination Liability	Termination Liability ^{1,2}	Funded Ratio	Unfunded Termination Liability
\$108,398,918	\$352,829,205	30.7%	\$244,430,287	\$226,739,497	47.8%	\$118,340,579

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

² The discount rate used for termination valuations is a weighted average of the 10-year and 30-year U.S. Treasury yields where the weights are based on matching asset and liability durations as of the termination date. The discount rates used in the table are based on 20-year Treasury bonds, rounded to the nearest quarter percentage point, which is a good proxy for most plans. The 20-year Treasury yield was 3.38% on June 30, 2022, the valuation date.

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

Participant Data

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

	June 30, 2021	June 30, 2022
Active Members		
Counts	39	34
Average Attained Age	47.4	47.6
Average Entry Age to Rate Plan	30.6	30.8
Average Years of Credited Service	16.8	16.7
Average Annual Covered Pay	\$162,781	\$166,060
Annual Covered Payroll	\$6,348,470	\$5,646,026
Present Value of Future Payroll	\$41,480,763	\$35,517,871
Transferred Members	37	35
Separated Members	12	12
Retired Members and Beneficiaries*		
Counts	139	145
Average Annual Benefits	\$58,121	\$60,256
Total Annual Benefits	\$8,078,755	\$8,737,077

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

* Values include community property settlements.

List of Class 1 Benefit Provisions

This plan has the additional Class 1 Benefit Provisions:

- One Year Final Compensation (FAC 1)

Plan's Major Benefit Options

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

	Benefit Group						
Member Category	Police	Fire	Fire	Fire	Police	Police	
Demographics							
Actives	Yes	Yes	No	No	No	No	
Transfers/Separated	Yes	Yes	No	No	No	No	
Receiving	Yes	Yes	Yes	Yes	Yes	Yes	
Benefit Provision							
Benefit Formula	3% @ 50	3% @ 50					
Social Security Coverage	No	No					
Full/Modified	Full	Full					
Employee Contribution Rate	9.00%	9.00%					
Final Average Compensation Period	One Year	One Year					
Sick Leave Credit	Yes	Yes					
Non-Industrial Disability	Standard	Standard					
Industrial Disability	Standard	Standard					
Pre-Retirement Death Benefits							
Optional Settlement 2	Yes	Yes					
1959 Survivor Benefit Level	Level 4	Level 4					
Special	Yes	Yes					
Alternate (firefighters)	No	No					
Post-Retirement Death Benefits							
Lump Sum	\$2000	\$2000	\$2000	\$2000	\$2000	\$2000	
Survivor Allowance (PRSA)	No	No	No	No	No	No	
COLA	2%	2%	2%	2%	2%	2%	

Section 2

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Risk Pool Actuarial Valuation Information

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