AGENDA

NSCLS COUNCIL OF LIBRARIANS
Tuesday, June 6, 2023, 3:00 p.m.

Zoom Meeting
https://us02web.zoom.us/j/82550303075?pwd=dGJLb05CNWFIUVo3QnNybS9RelhZdz09

Meeting ID: 825 5030 3075
Passcode: 710912
Phone: +1 669 900 6833

1. Welcome and Call to Order	Perry, Chair	
2. Roll Call	Brinkley	
3. Public Invited to Address the Council		
4. Approval of Content Calendar **(ACTION ITEM)**	Perry	
A. Adoption of Agenda		
B. Approval of May 18, 2022 Administrative Council Meeting Minutes		Attachment 1, p. 3
5. Review and Approval of CalPERS FY 2023-24 Annual Payment and Cost Share **(ACTION ITEM)**	Perry	Attachment 2, p. 5
6. Approval of NSCLS Budget **(ACTION ITEM)**	Perry	Attachment 3, p. 38
7. Announcements		
8. Adjournment		

Brown Act: This meeting abides by Cal. Gov't Code § 54953.
Cal. Gov't Code § 54953(b)(1) "Notwithstanding any other provision of law, the legislative body of a local agency may use teleconferencing for the benefit of the public and the legislative body of a local agency in connection with any meeting or proceeding authorized by law. The teleconferenced meeting or proceeding shall comply with all otherwise applicable requirements of this chapter and all otherwise applicable provisions of law relating to a specific type of meeting or proceeding."
Cal. Gov't Code § 54953(j)(6) A "teleconference" is "a meeting of a legislative body, the members of which are in different locations, connected by electronic means, through either audio or video, or both."
Gov't Code § 54953 (b)(2) "Teleconferencing, as authorized by this section, may be used for all purposes in connection with any meeting within the subject matter jurisdiction of the legislative body. If the legislative body of a local agency elects to use teleconferencing, the legislative body of a local agency shall comply with all of the following:

(A) All votes taken during a teleconferenced meeting shall be by rollcall.
(B) The teleconferenced meetings shall be conducted in a manner that protects the statutory and constitutional rights of the parties or the public appearing before the legislative body of a local agency.
(C) The legislative body shall give notice of the meeting and post agendas as otherwise required by this chapter.
(D) The legislative body shall allow members of the public to access the meeting and the agenda shall provide an opportunity for members of the public to address the legislative body directly pursuant to Section 54954.3."

Gov't Code § 54953 (3) "If the legislative body of a local agency elects to use teleconferencing, it shall post agendas at all teleconference locations. Each teleconference location shall be identified in the notice and agenda of the meeting or proceeding, and each teleconference location shall be accessible to the public. During the teleconference, at least a quorum of the members of the legislative body shall participate from locations within the boundaries of the territory over which the local agency exercises jurisdiction, except as provided in subdivisions (d) and (e)."

Meeting Locations
Butte County Library, 1820 Mitchell Avenue, Oroville, CA 95966
Del Norte County Library District, 190 Price Mall, Crescent City, CA 95531
Humboldt County Library, 1313 Third Street, Eureka, CA 95501
Lassen Library District, 1618 Main Street, Susanville, CA 96130
Modoc County Library, 212 W. 3rd Street, Alturas, CA 96101
Orland Public Library, 333 Mill Street, Orland, CA 95963
Plumas County Library, 445 Jackson Street, Quincy, CA 95971
Shasta Public Libraries, 1100 Parkview Avenue, Redding, CA 96001
Siskiyou County Library, 719 4th Street, Yreka, CA 96097
Trinity County Library, 351 N. Main Street, Weaverville, CA 96093
NLS Administration, 32 West 25th Avenue, Suite 201, San Mateo, CA 94403

DRAFT MINUTES

North State Cooperative Library System
Administrative Council Meeting (via Zoom)
May 18, 2022

1. Chair, Michael Perry, called the meeting to order at 2:00 p.m.

2. **Roll Call** was taken.

PRESENT	ABSENT	PUBLIC LIBRARY	NAME
x		Butte County Library	Narinder Sufi
	x	Del Norte Co. Library District	Phyllis Goodeill
x		Humboldt County Library	Christopher Cooper
x		Lassen Library District	Heather Blevins
x		Modoc County Library	Kris Anderson
x		Orland Free Library	Jody Meza
x		Plumas County Library	Lindsay Fuchs
x		Shasta Public Libraries	Jared Tolman
x		Siskiyou County Library	Michael Perry
	x	Tehama County Library	Todd Deck
	x	Trinity County Library	Kacy Guill
x		Willows Public Library	Jody Meza
x		California State University Chico	John Wang

Also attending: Jacquie Brinkley, NLS System Coordinator.
Note: Cooper, Humboldt County, was unable to vote due to a late change in the posted meeting location.

3. No Public Comment

4. **Motion to approve Consent Calendar**

Sufi moved; Fuchs seconded. **Vote taken by roll call, all votes in favor, motion passed unanimously.**

5. Review and Approval of CalPERS FY 2022/23 Annual Payment and Cost Share

Perry provided a brief history and background regarding the NSCLS CalPERS Cost Share item and noted to CSU Chico member Wang that the CalPERS payment obligation did not impact CSU Chico. Perry continued to review the Cost Share charts and options for the NSCLS payment. Chart 1 is calculated on a CalPERS rate of return of 7%, while Chart 2 is calculated using a more conservative rate of return of 4% and allows NSCLS to build on the reserves that have been set aside to cover one year of the largest library's CalPERS obligation should there be a delay in payment. Perry also noted that CalPERS offers an early payment discount that NSCLS has been able to apply in past years, and for this year it would save NSCLS members $2,822 if the FY 2022/23 payment is made by July 31, 2022. Perry offered to provide assistance to any new director that may need additional information when presenting this payment to their accounting administrator.

Blevins noted that the Charts on page 7 and 8 should read FY 2022/23 in the last column, and not FY 2021/22. Perry will correct these charts and send them out to all Council members.

Perry asked for discussion on the payment options.

Blevins asked about the amount of the current Reserves balance. Perry referred to Attachment 3, page 39, and stated that the current Reserves balance is $15,741. He noted that this amount would cover one year's payment for the largest NSCLS library, should there be any delay. Covering that level of payment was the intended goal for establishing a Reserves.

Meza stated that she prefers to make the higher annual payment that will add to the Reserves balance. Blevins agreed that having the Reserves is beneficial and recommends the higher payment of Option 2. Anderson agreed that Option 2 was her preference as well.

Motion to approve the NSCLS CalPERS FY 2022/23 Annual Payment and Cost Share Formula using Option #2 and based on CalPERS rate of return of 4% with a total payment of $91,000, with the overage going to the NSCLS CalPERS Reserves balance.

Meza moved; Blevins seconded. Vote taken by roll call, all votes in favor, motion passed unanimously.

Perry stated that he would work with Andrew Yon, NLS Chief Financial Officer, to prepare and send invoices, and estimated that invoices would be mailed by mid-June to allow all libraries to make their payment before July 31 to insure the early payment discount. Perry noted to Tolman that the invoice for Shasta Public Libraries is sent to the City of Redding for their direct payment.

6. NSCLS Budget Reserves

Perry reviewed the current status of NSCLS Reserve funds and that the funds were established with the goal to cover a one-year payment of the largest library, should there be any delay. With reaching that threshold at the current balance of $15,741, Perry invited members to suggest how these funds might be used in the future, or any other goals for the Reserves.

Suggestions included that Reserves could be saved to cover one to two years of a lower than planned rate of return should that be needed.

Fuchs suggested that Reserves be saved to possibly pay off the final year CalPERS obligation early. Perry suggested that a percentage of the Reserves could be applied to cover a portion of a future year's payment.

7. Announcements

Perry restated his offer to work with new directors to review the NSCLS CalPERS history and obligation.

Meeting adjourned at 2:34 p.m.

NORTH STATE COOPERATIVE LIBRARY SYSTEM

To: **NSCLS Council of Librarians**
From: **Michael Perry**
Subject: **Review and Approval of CalPERS FY 2023/24 Annual Payment and Cost Share Formula**
Date: **June 6, 2023**

Background

At the September 2020 NSCLS Council meeting, a fixed 13-tier cost share formula was established for the annual CalPERS Unfunded Accrued Liability (UAL) Payment.

The purpose of this memo is to provide the annual CalPERS UAL cost share distribution amounts for libraries based on the minimum required payment amount or an establish lower rate of return of 3% to be used, and whether a pre-payment will be made for the NSCLS FY2023-24 Unfunded Accrued Liability.

CalPERS costs and Pre-Payment Options

In prior years, the NSCLS Council of Librarians approved using the 4% lower rate of return based on the June 30, 2020 Annual Valuation Report's Projected Employer Contributions for the CalPERS cost share distribution. In the latest Annual Valuation Report dated June 30, 2021, the report only includes a 3% and 10.8% rate of return scenarios (page 17 of Valuation Report) and it no longer provides the 1%- 12% scenarios.

Based on this, the chart below reflects a comparison between the minimum required annual payment amount of $71,835 and a 3% lower rate of return amount for FY 2024-25, of $77,350 with both amounts including $350 for the GASB 68 Accounting Valuation Report. The lower rate of return of 3% was used, which will result in $5,515 of unused CalPERS funds for NSCLS CalPERS reserve fund.

Should NSCLS choose the pre-payment amount, the total discounted cost would be $69,522 including the GASB report fee.

Should the NSCLS Council choose a pre-payment option, the payment must be made to CalPERS by July 31, 2023. NLS libraries would be invoiced the first week in June, and all library payments would be needed **by July 21** to meet the CalPERS prepayment deadline. ***If there are not sufficient payments from libraries to meet the CalPERS deadline, the payment will default to the non-discounted payment.***

Should NLS the NSCLS Council choose the non-discounted payment, NLS libraries would be invoiced in July and the CalPERS payment would be made in FY2023/24.

Number of Retirees

In the Valuation report, the number of retirees/beneficiaries dropped from 17 to 14. Per CalPERS, "the plan experienced the deaths of 3 retired members between July 1, 2020 and June 30, 2021. This means that their retirement benefits have ended and these particular members do not have a beneficiary who is receiving an ongoing benefit. This is generally how retired members leave the plan. Non-retired members can leave the plan by taking a refund of contributions or by death without a beneficiary who will be receiving an ongoing benefit." This resulted in a decrease of the NSCLS Plan's Unfunded Liability balance.

There are still a total of six former employees who are not yet retired: 2 who are still working at a CalPERS workplace, and 4 who are inactive, meaning they are not retired but eligible for benefits.

NSCLS CalPERS Reserve

At the February 5, 2020 meeting, the Council agreed to approve a CalPERS formula which included additional funds beyond the CalPERS costs. The intent was to establish a CalPERS Reserve with those funds, to "allow for a buffer amount to be set aside on the chance of the CalPERS rate of return going lower than 7% or should an NSCLS member library be delayed in making their annual payment." The Council confirmed that the reserve should be large enough to cover the cost share amount of the library with the highest CalPERS payment, which is Humboldt County.

The FY 2022/23 NSCLS CalPERS Reserves ending balance is $25,881. This balance also includes the reallocated $1,150 legal reserve.

Based on the Reserve Balance, there are sufficient funds to cover the highest CalPERS payment. The Council may choose to defer contributing to the CalPERS Reserve for FY 2023/24.

Cost Share Distribution Formula for FY2023/24

At the May 28, 2021 meeting, NSCLS discussed and approved the "Total Operating Expenditures" figures submitted to the State Library as reference for future CalPERS cost-share calculations.

The comparison cost distribution schedule below compares the minimum required non-discounted payment amount and an estimated 3% lower rate of return payment.

FY2023-24 NSCLS CalPERS Payment Options

FY 2023-24 CALPERS UNFUNDED LIABILITY PAYMENT OPTIONS - MINIMUM REQUIRED AMOUNT VS. 3% LOWER RATE OF INVESTMENT

Library	FY 21/22 Operating Expenditures	Revised Base Rate	Minimum Req'd Payment Base Factor	FY23/24 Minimum Required Payment Amount	3 % Lower Rate of Investment Payment Option Base Factor	FY23/24 3 % Lower Rate of Investment Payment Option	Difference Between Minimum Req'd vs. 3% Lower ROI
Modoc County	$273,874	$100	7.894	$789	8.500	$850	$61
Lassen Library	$287,716	$200	7.894	$1,579	8.500	$1,700	$121
Willows Public	$300,611	$300	7.894	$2,368	8.500	$2,550	$182
Del Norte County	$336,508	$400	7.894	$3,158	8.500	$3,400	$242
Trinity County	$438,886	$500	7.894	$3,947	8.500	$4,250	$303
Orland Free Library	$478,920	$600	7.894	$4,736	8.500	$5,100	$364
Plumas County Library	$622,353	$700	7.894	$5,526	8.500	$5,950	$424
Tehama County	$623,340	$800	7.894	$6,315	8.500	$6,800	$485
Siskiyou County Library	$885,040	$900	7.894	$7,105	8.500	$7,650	$545
Colusa Couny	$1,408,036	$1,000	7.894	$7,894	8.500	$8,500	$606
Shasta Public Library	$2,759,182	$1,100	7.894	$8,683	8.500	$9,350	$667
Humboldt County	$3,536,460	$1,200	7.894	$9,473	8.500	$10,200	$727
Butte County	$5,347,820	$1,300	7.894	$10,262	8.500	$11,050	$788
	Total	**$9,100**		**$71,835**		**$77,350**	**$5,515**

FY2021-22 Total Operating Expenditure from California State Library website

	Minimum Required Amount FY2023-24		*3% Lower Rate of Investment Amount* FY2023-24
NSCLS CalPERS Payment (Non-Discounted)		NSCLS CalPERS Payment	
Unfunded Liability and GASB Fee	$ 71,835	Unfunded Liability and GASB Fee	$ 77,350
The Base Factor for each system	7.894	The Base Factor for each system	8.500
		NSCLS CalPERS Excess Contribution to Reserve	*$5,515*

Recommendation

It is recommended that the Council approve the FY 2023-24 CalPERS Unfunded Accrued Liability prepayment amount of $69,522 by July 31, 2023, which provides a discount saving of $2,313.

The Council may also choose to pay the payment of either the lower rate of return payment amount of $77,350 which adds $5,515 of additional funds toward the NSCLS CalPERS Reserve or the non-discounted payment of $71,835.

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 2022

Miscellaneous Plan of the North State Cooperative Library System (CalPERS ID: 1897174550)
Annual Valuation Report as of June 30, 2021

Dear Employer,

Attached to this letter, you will find the June 30, 2021 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) 2023-24**. 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, 2021.

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, 2021.

Your June 30, 2021 actuarial valuation report contains important actuarial information about your pension plan at CalPERS. The plan actuary whose signature is in the Actuarial Certification is available to discuss.

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 Contribution

The table below shows the minimum required employer contributions for FY 2023-24 along with estimates of the required contributions for FY 2024-25. 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
2023-24	0.00%	$71,485
Projected Results		
2024-25	*0.0%*	*$71,000*

The actual investment return for FY 2021-22 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 2021-22 differs from 6.8%, the actual contribution requirements for FY 2024-25 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 2028-29.

Changes from Previous Year's Valuation

On July 12, 2021, CalPERS reported a preliminary 21.3% net return on investments for FY 2020-21. Since the return exceeded the 7.00% discount rate sufficiently, the CalPERS Funding Risk Mitigation policy allows CalPERS to use a portion of the investment gain to offset the cost of reducing the expected volatility of future investment returns. Based on the thresholds specified in the policy, the excess return of 14.3% prescribes a reduction in investment volatility that corresponds to a reduction in the discount rate of 0.20%, from 7.00% to 6.80%.

On November 17, 2021, the board adopted new actuarial assumptions based on the recommendations in the November 2021 CalPERS Experience Study and Review of Actuarial Assumptions. This study reviewed the retirement rates, termination rates, mortality rates, rates of salary increases, and inflation assumption for public agencies. These new assumptions are incorporated in this actuarial valuation and will impact the required contribution for FY 2023-24. In addition, the board adopted a new strategic asset allocation as part of its Asset Liability Management process. The new asset allocation along with the new capital market assumptions and economic assumptions support a discount rate of 6.80%. This includes a reduction in the price inflation assumption from 2.50% to 2.30%.

Besides the above noted changes, there may also be changes specific to the plan such as contract amendments and funding changes.

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

Questions

We understand that you might have questions about these results, and the plan actuary whose signature is on the valuation report is available to discuss. If you have other questions, you may call the Customer Contact Center at (888)-CalPERS or (**888-225-7377**).

Sincerely,

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

Actuarial Valuation as of June 30, 2021

for the Miscellaneous Plan of the North State Cooperative Library System

(CalPERS ID: 1897174550)

Required Contributions for Fiscal Year July 1, 2023 - June 30, 2024

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Section 1

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Plan Specific Information for the Miscellaneous Plan of the North State Cooperative Library System

(CalPERS ID: 1897174550)
(Rate Plan ID: 1254)

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Actuarial Certification

To the best of our knowledge, this report, comprising 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 North State Cooperative Library System 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, 2021 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 North State Cooperative Library System, 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 consistent 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, 2021 and employer contribution as of July 1, 2023 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.

NINA RAMSEY, ASA, MAAA
Associate Pension Actuary, CalPERS

Highlights and Executive Summary

- **Introduction**
- **Purpose of Section 1**
- **Required Contributions**
- **Additional Discretionary Employer Contributions**
- **Plan's Funded Status**
- **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, 2021 actuarial valuation of the Miscellaneous Plan of the North State Cooperative Library System of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the required employer contributions for (FY) 2023-24.

Purpose of Section 1

This Section 1 report for the Miscellaneous Plan of the North State Cooperative Library System of CalPERS was prepared by the plan actuary in order to:

- Set forth the assets and accrued liabilities of this plan as of June 30, 2021;
- Determine the minimum required employer contribution for this plan for the FY July 1, 2023 through June 30, 2024; and
- Provide actuarial information as of June 30, 2021 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 recommendations of Actuarial Standards of Practice No. 51 and recommended by the California Actuarial Advisory Panel (CAAP) in the Model Disclosure Elements document:

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

Required Contributions

Required Employer Contributions	Fiscal Year 2023-24
Employer Normal Cost Rate	**0.00%**
Plus	
Required Payment on Amortization Bases[1]	**$71,485**
Paid either as	
1) Monthly Payment	**$5,957.08**
Or	
2) Annual Prepayment Option*	**$69,172**

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).

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

	Fiscal Year 2022-23	Fiscal Year 2023-24
Development of Normal Cost as a Percentage of Payroll		
Base Total Normal Cost for Formula	0.00%	0.00%
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	0.00%	0.00%
Formula's Expected Employee Contribution Rate	0.00%	0.00%
Employer Normal Cost Rate	0.00%	0.00%

1 The required payment on amortization bases does not take into account any additional discretionary payment made after April 29, 2022.

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

3 The normal cost change 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 the 2023-24 FY is $71,485. 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 2023-24 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 2023-24

Estimated Normal Cost	Minimum UAL Payment	ADP	Total UAL Contribution	Estimated Total Contribution
$0	$71,485	$0	$71,485	$71,485

Alternative Fiscal Year 2023-24 Employer Contributions for Greater UAL Reduction

Funding Target	Estimated Normal Cost	Minimum UAL Payment	ADP[1]	Total UAL Contribution	Estimated Total Contribution
10 years	$0	$71,485	$4,890	$76,375	$76,375
5 years	$0	$71,485	$59,857	$131,342	$131,342

[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 Unfunded Accrued Liability as of June 30, 2023 as determined in the June 30, 2021 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.

Plan's Funded Status

	June 30, 2020	June 30, 2021
1. Present Value of Projected Benefits (PVB)	$2,166,153	$1,553,163
2. Entry Age Accrued Liability (AL)	2,166,153	1,553,163
3. Plan's Market Value of Assets (MVA)	1,411,184	909,082
4. Unfunded Accrued Liability (UAL) [(2) - (3)]	754,969	644,081
5. Funded Ratio [(3) / (2)]	65.1%	58.5%

The UAL and funded ratio are assessments of the need for future employer contributions based on the actuarial cost method used to fund the plan. The UAL is the present value of future employer contributions for service that has already been earned and is in addition to future normal cost contributions for active members. The funded ratio, on the other hand, is a relative measure of funded status that allows for comparison between plans of different sizes. For measures of funded status that are appropriate for assessing the sufficiency of plan assets to cover estimated termination liabilities, please see "Hypothetical Termination Liability" in the "Risk Analysis" section.

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 2021-22 is assumed to be 6.80% per year, net of investment and administrative expenses. Actual contribution rates during this projection period could be significantly higher or lower than the projection shown below. 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 2021-22 and Beyond)				
Fiscal Year	**2023-24**	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**
	Rate Plan 1254 Results					
Normal Cost %	0.00%	0.0%	0.0%	0.0%	0.0%	0.0%
UAL Payment	$71,485	$71,000	$71,000	$71,000	$71,000	$71,000

For some sources of UAL, the change in UAL is 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 increase in UAL, the relatively small amortization payments during the ramp up period could result in a funded ratio that is projected to decrease initially 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 below, correspond to rate plan 1254. 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 payroll for each rate plan will grow according to the overall payroll growth assumption of 2.80% per year for three years.

	Fiscal Year 2022-23	Fiscal Year 2023-24
Estimated Combined Employer Contributions for all Pooled Miscellaneous Rate Plans		
Projected Payroll for the Contribution Year	$0	$0
Estimated Employer Normal Cost	$0	$0
Required Payment on Amortization Bases	$84,832	$71,485
Estimated Total Employer Contributions	$84,832	$71,485
Estimated Total Employer Contribution Rate (illustrative only)	0.00%	0.00%

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 2016-17, the Amortization of UAL component was expressed as a percentage of total active payroll. Starting with FY 2016-17, the Amortization of UAL component was expressed as a dollar amount and invoiced on a monthly basis. There continues to be 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, 2021, 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 changes by amendments effective before the date of the report. Please refer to the "Plan's Major Benefit Options" and Appendix B of the Section 2 Report for a summary of the plan provisions used in this valuation.

Actuarial Methods and Assumptions

On November 17, 2021, the board adopted new actuarial assumptions based on the recommendations in the 2021 CalPERS Experience Study and Review of Actuarial Assumptions. This study reviewed the retirement rates, termination rates, mortality rates, rates of salary increases, and inflation assumption for Public Agencies. These new assumptions are incorporated in this actuarial valuation and will impact the required contribution for FY 2023-24. In addition, the board adopted a new asset portfolio as part of its Asset Liability Management process. The new asset mix supports a 6.80% discount rate, which reflects a change in the price inflation assumption to 2.30%.

Subsequent Events

The contribution requirements determined in this actuarial valuation report are based on demographic and financial information as of June 30, 2021. Changes subsequent to that date are not reflected. Investment returns below the assumed rate of return may increase future required contributions while investment returns above the assumed rate of return may decrease future required contributions.

The projected employer contributions on Page 6 are calculated under the assumption that the discount rate remains at 6.8% going forward and that the realized rate of return on assets for FY 2021-22 is 6.8%.

This actuarial valuation report reflects statutory changes, regulatory changes and board actions through January 2022. Any subsequent changes or actions are not reflected.

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 Plan's Amortization Bases**
- **Amortization Schedule and Alternatives**
- **Employer Contribution History**
- **Funding History**

Breakdown of Entry Age Accrued Liability

Active Members	$0
Transferred Members	115,959
Terminated Members	40,300
Members and Beneficiaries Receiving Payments	1,396,904
Total	$1,553,163

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	$1,553,163
2.	Projected UAL balance at 6/30/2021	727,987
3.	Pool's Accrued Liability[1]	20,794,529,023
4.	Sum of Pool's Individual Plan UAL Balances at 6/30/2021[1]	4,597,734,264
5.	Pool's 2020/21 Investment (Gain)/Loss[1]	(2,338,185,055)
6.	Pool's 2020/21 Non-Investment (Gain)/Loss[1]	(84,077,623)
7.	Plan's Share of Pool's Investment (Gain)/Loss: [(1) - (2)] ÷ [(3) - (4)] × (5)	(119,123)
8.	Plan's Share of Pool's Non-Investment (Gain)/Loss: (1) ÷ (3) × (6)	(6,280)
9.	Plan's New (Gain)/Loss as of 6/30/2021: (7) + (8)	(125,403)
10.	Increase in Pool's Accrued Liability due to Change in Assumptions[1]	60,407,898
11.	Plan's Share of Pool's Change in Assumptions: (1) ÷ (3) × (10)	4,512
12.	Increase in Pool's Accrued Liability due to Funding Risk Mitigation[1]	495,172,731
13.	Plan's Share of Pool's Change due to Funding Risk Mitigation: (1) ÷ (3) × (12)	36,985
14.	Offset due to Funding Risk Mitigation	(36,985)
15.	Plan's Net Investment (Gain): (7) – (14)	(82,138)

[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

16.	Plan's UAL: (2) + (9) + (11) + (13)	$644,081
17.	Plan's Share of Pool's MVA: (1) - (16)	$909,082

Schedule of Plan's Amortization Bases

Note that there is a two-year lag between the valuation date and the start of the contribution fiscal year.

- The assets, liabilities, and funded status of the plan are measured as of the valuation date: June 30, 2021.
- The required employer contributions determined by the valuation are for the fiscal year beginning two years after the valuation date: FY 2023-24.

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 2023-24	Ramp Shape	Escala-tion Rate	Amort. Period	Balance 6/30/21	Expected Payment 2021-22	Balance 6/30/22	Expected Payment 2022-23	Balance 6/30/23	Minimum Required Payment 2023-24
Fresh Start	6/30/21	No Ramp		0.00%	11	644,081	79,239	605,990	84,832	559,528	71,485
Total						**644,081**	**79,239**	**605,990**	**84,832**	**559,528**	**71,485**

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)

			Alternate Schedules			
	Current Amortization Schedule		10 Year Amortization		5 Year Amortization	
Date	**Balance**	**Payment**	**Balance**	**Payment**	**Balance**	**Payment**
6/30/2023	559,528	71,485	559,528	76,375	559,528	131,342
6/30/2024	523,700	71,485	518,647	76,375	461,842	131,341
6/30/2025	485,436	71,485	474,986	76,375	357,514	131,342
6/30/2026	444,570	71,485	428,356	76,375	246,091	131,342
6/30/2027	400,925	71,485	378,555	76,375	127,091	131,341
6/30/2028	354,312	71,484	325,368	76,376		
6/30/2029	304,531	71,484	268,563	76,376		
6/30/2030	251,365	71,485	207,895	76,375		
6/30/2031	194,582	71,485	143,103	76,376		
6/30/2032	133,938	71,484	73,904	76,375		
6/30/2033	69,171	71,484				
6/30/2034						
6/30/2035						
6/30/2036						
6/30/2037						
6/30/2038						
6/30/2039						
6/30/2040						
6/30/2041						
6/30/2042						
6/30/2043						
6/30/2044						
6/30/2045						
6/30/2046						
6/30/2047						
6/30/2048						
6/30/2049						
6/30/2050						
6/30/2051						
6/30/2052						
Total		**786,331**		**763,753**		**656,708**
Interest Paid		**226,803**		**204,225**		**97,180**
Estimated Savings				**22,578**		**129,623**

Employer Contribution History

The table below provides a recent history of the required employer contributions for the plan. The amounts are based on the actuarial valuation from two years prior and does not account for prepayments or benefit changes made during a fiscal year. Additional discretionary payments before July 1, 2019 or after June 30, 2021 are not included.

Fiscal Year	Employer Normal Cost	Unfunded Liability Payment ($)	Additional Discretionary Payments
2016 - 17	0.000%	$30,751	N/A
2017 - 18	0.000%	36,973	N/A
2018 - 19	0.000%	45,707	N/A
2019 - 20	0.000%	70,036	0
2020 - 21	0.000%	77,174	0
2021 - 22	0.00%	79,239	
2022 - 23	0.00%	84,832	
2023 - 24	0.00%	71,485	

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
06/30/2012	$1,882,656	$1,370,364	$512,292	72.8%	$0
06/30/2013	1,834,500	1,380,134	454,366	75.2%	0
06/30/2014	2,063,049	1,644,368	418,681	79.7%	0
06/30/2015	2,160,266	1,651,498	508,768	76.4%	0
06/30/2016	2,163,506	1,517,446	646,060	70.1%	0
06/30/2017	2,157,894	1,515,694	642,200	70.2%	0
06/30/2018	2,207,869	1,490,619	717,250	67.5%	0
06/30/2019	2,189,404	1,453,630	735,774	66.4%	0
06/30/2020	2,166,153	1,411,184	754,969	65.1%	0
06/30/2021	1,553,163	909,082	644,081	58.5%	0

Risk Analysis

- **Future Investment Return Scenarios**
- **Discount Rate Sensitivity**
- **Mortality Rate Sensitivity**
- **Maturity Measures**
- **Maturity Measures History**
- **Hypothetical Termination Liability**

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, 2041.

Assumed Annual Return FY 2021-22 through 2040-41	Projected Employer Contributions				
	2024-25	2025-26	2026-27	2027-28	2028-29
3.0% (5th percentile)					
Normal Cost Rate	0.0%	0.0%	0.0%	0.0%	0.0%
UAL Contribution	$77,000	$82,000	$87,000	$92,000	$98,000
10.8% (95th percentile)					
Normal Cost Rate	0.0%	0.0%	0.0%	0.0%	0.0%
UAL Contribution	$67,000	$62,000	$56,000	$50,000	$43,000

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 2021-22 on the FY 2024-25 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 2024-25.

Assumed Annual Return for Fiscal Year 2021-22	Required Employer Contributions	Projected Employer Contributions
	2023-24	2024-25
(17.2)% (2 standard deviation loss)		
Normal Cost Rate	0.00%	0.0%
UAL Contribution	$71,485	$103,000
(5.2)% (1 standard deviation loss)		
Normal Cost Rate	0.00%	0.0%
UAL Contribution	$71,485	$87,000

- Without investment gains (returns higher than 6.8%) in year FY 2022-23 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 2021-22.
- The Pension Outlook Tool can be used to model projected contributions for these scenarios beyond FY 2024-25 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, 2021 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, 2021	1% Lower Real Return Rate	Current Assumptions	1% Higher Real Return Rate
Discount Rate	**5.8%**	**6.8%**	**7.8%**
Inflation	2.3%	2.3%	2.3%
Real Rate of Return	**3.5%**	**4.5%**	**5.5%**
a) Total Normal Cost	0.00%	0.00%	0.00%
b) Accrued Liability	$1,700,075	$1,553,163	$1,427,203
c) Market Value of Assets	$909,082	$909,082	$909,082
d) Unfunded Liability/(Surplus) [(b) - (c)]	$790,993	$644,081	$518,121
e) Funded Ratio	53.5%	58.5%	63.7%

Sensitivity to the Price Inflation Assumption

As of June 30, 2021	1% Lower Inflation Rate	Current Assumptions	1% Higher Inflation Rate
Discount Rate	**5.8%**	**6.8%**	**7.8%**
Inflation	**1.3%**	**2.3%**	**3.3%**
Real Rate of Return	4.5%	4.5%	4.5%
a) Total Normal Cost	0.00%	0.00%	0.00%
b) Accrued Liability	$1,595,897	$1,553,163	$1,441,510
c) Market Value of Assets	$909,082	$909,082	$909,082
d) Unfunded Liability/(Surplus) [(b) - (c)]	$686,815	$644,081	$532,428
e) Funded Ratio	57.0%	58.5%	63.1%

Mortality Rate Sensitivity

The following table looks at the change in the June 30, 2021 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 improving or worsening mortality over the long-term.

As of June 30, 2021	10% Lower Mortality Rates	Current Assumptions	10% Higher Mortality Rates
a) Total Normal Cost	0.00%	0.00%	0.00%
b) Accrued Liability	$1,596,646	$1,553,163	$1,513,622
c) Market Value of Assets	$909,082	$909,082	$909,082
d) Unfunded Liability/(Surplus) [(b) - (c)]	$687,564	$644,081	$604,540
e) Funded Ratio	56.9%	58.5%	60.1%

Maturity Measures

As pension plans mature they become more sensitive to risks. Understanding plan maturity and how it affects the ability of a pension plan sponsor to tolerate risk is important in understanding how the pension plan is impacted by investment return volatility, other economic variables and changes in longevity or other demographic assumptions. Since it is the employer that bears the risk, it is appropriate to perform this analysis on a pension plan level considering all rate plans. The following measures are for one rate plan only.

One way to look at the maturity level of CalPERS and its plans is to look at the ratio of a plan's retiree liability to its total liability. A pension plan in its infancy will have a very low ratio of retiree liability to total liability. As the plan matures, the ratio starts increasing. A mature plan will often have a ratio above 60%-65%.

Ratio of Retiree Accrued Liability to Total Accrued Liability	**June 30, 2020**	**June 30, 2021**
1. Retired Accrued Liability	$2,021,852	$1,396,904
2. Total Accrued Liability	2,166,153	1,553,163
3. Ratio of Retiree AL to Total AL [(1) / (2)]	0.93	0.90

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, may be less informative than the ratio of retiree liability to total accrued liability above. For comparison, the support ratio for all CalPERS public agency plans is 0.82 and is 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, 2020**	**June 30, 2021**
1. Number of Actives	0	0
2. Number of Retirees	17	14
3. Support Ratio [(1) / (2)]	0.00	0.00

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 higher AVR experience more volatile employer contributions (as a percentage of payroll) due to investment return. For example, a plan with an asset-to-payroll ratio of 8 may experience twice the contribution volatility due to investment return volatility than a plan with an asset-to-payroll ratio 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 the 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 ratio 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, 2020	June 30, 2021
1. Market Value of Assets	$1,411,184	$909,082
2. Payroll	0	0
3. Asset Volatility Ratio (AVR) [(1) / (2)]	N/A	N/A
4. Accrued Liability	$2,166,153	$1,553,163
5. Liability Volatility Ratio (LVR) [(4) / (2)]	N/A	N/A

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	0.91	0.00	N/A	N/A
06/30/2018	0.93	0.00	N/A	N/A
06/30/2019	0.93	0.00	N/A	N/A
06/30/2020	0.93	0.00	N/A	N/A
06/30/2021	0.90	0.00	N/A	N/A

Hypothetical Termination Liability

The hypothetical termination liability is an estimate of the financial position of the plan had the contract with CalPERS been terminated as of June 30, 2021. The plan liability on a termination basis is calculated differently compared to the plan's ongoing funding liability. For the hypothetical 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.

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.

Market Value of Assets (MVA)	Hypothetical Termination Liability[1,2] at 1.00%	Funded Ratio	Unfunded Termination Liability at 1.00%	Hypothetical Termination Liability[1,2] at 2.25%	Funded Ratio	Unfunded Termination Liability at 2.25%
$909,082	$2,952,962	30.8%	$2,043,880	$2,604,501	34.9%	$1,695,419

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

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 2.00% on June 30, 2021, 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, 2020	June 30, 2021
Active Members		
Counts	0	0
Average Attained Age	0.00	0.00
Average Entry Age to Rate Plan	0.00	0.00
Average Years of Credited Service	0.00	0.00
Average Annual Covered Pay	$0	$0
Annual Covered Payroll	$0	$0
Present Value of Future Payroll	$0	$0
Transferred Members	2	2
Separated Members	3	3
Retired Members and Beneficiaries		
Counts*	17	14
Average Annual Benefits*	$13,535	$9,456

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	Misc	Misc	Misc	
Demographics				
Actives	No	No	No	
Transfers/Separated	Yes	No	No	
Receiving	Yes	Yes	Yes	
Benefit Provision				
Benefit Formula	2% @ 55			
Social Security Coverage	Yes			
Full/Modified	Modified			
Employee Contribution Rate				
Final Average Compensation Period	One Year			
Sick Leave Credit	Yes			
Non-Industrial Disability	Standard			
Industrial Disability	No			
Pre-Retirement Death Benefits				
Optional Settlement 2	Yes			
1959 Survivor Benefit Level	No			
Special	No			
Alternate (firefighters)	No			
Post-Retirement Death Benefits				
Lump Sum	$500	$500	$500	
Survivor Allowance (PRSA)	No	No	No	
COLA	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

NorthNet Library System

North State Cooperative Library System

FY 2023-24 Proposed Budget (923)

GL Acct		Adopted FY 22/23	Proposed FY 23/24	Note
	Revenue			
3674	Reimbursement from Members	$91,000	$77,350	CalPERS UAL Cost Share $77,000; GASB Report $350
3000	Budgeted Fund Balance	($8,640)	($5,515)	NSCLS CalPERS Reserve
	TOTAL REVENUE	**$82,360**	**$71,835**	***(12.78%)***
	Expenditure			
4448	Reimbursable-Retiree Benefits	$82,360	$71,835	CalPERS Prepay UAL $71,485; GASB Report $350
	TOTAL EXPENDITURE	**$82,360**	**$71,835**	***(12.78%)***

NSCLS Reserve as of 7/1/22	$	17,241	
FY22/23 CalPERS Contribution		$8,640	
Reserve Balance as of 6/30/23	**$**	**25,881**	*Estimated*

Note: CalPERS Unfunded Liability cost reflects $71,485 minimum required payment for FY2023-24.