# AGENDA

**NSCLS COUNCIL OF LIBRARIANS**
**Wednesday, May 18, 2022**
**2:00 p.m.**

**Zoom Meeting**
https://us02web.zoom.us/j/88566978436?pwd=UTQxZlZ5SFJJaStLc0VSMVhaQzA2UT09
Meeting ID: 885 6697 8436
Passcode: 568498
Phone Access: +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 28, 2021 Administrative Council Meeting Minutes | | Attachment 1 pg. 3 |
| 5. Review and Approval of CalPERS FY2022/23 Annual Payment and Cost Share **(ACTION ITEM)** | Perry | Attachment 2 pg. 6 |
| 6. NSCLS Budget Reserves Discussion | Perry | Attachment 3 pg. 39 |
| 7. Announcements | | |
| 8. Adjournment | | |

**Brown Act:** The legislative body of a local agency may use teleconferencing in connection with any meeting or proceeding authorized by law. Cal. Gov't Code § 54953(b)(1). 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." Cal. Gov't Code § 54953(b)(4). A local agency may provide the public with additional teleconference locations. Cal. Gov't Code § 54953(b)(4).

The teleconferenced meeting must meet the following requirements:

(1) it must comply with all of the Act's requirements applicable to other meetings;

(2) all votes must be taken by roll call;

(3) agendas must be posted at all teleconference locations and the meeting must be conducted in a manner that protects the statutory and constitutional rights of the parties or public appearing before the body;

(4) each teleconference location must be identified in the notice and agenda and each location must be accessible to the public;

(5) during the teleconferenced meeting, at least a quorum of the members of the legislative body must participate from locations within the boundaries of the body's jurisdiction; and

(6) the agenda must provide the public with an opportunity to address the legislative body at each teleconference location. Cal. Gov't Code § 54953(b).

**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
NorthNet Library System, 32 West 25th Avenue, Suite 201, San Mateo, CA 94403
Orland Free 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
Tehama County Library, 545 Diamond Avenue, Red Bluff, CA 96080
Trinity County Library, 351 N. Main Street, Weaverville, CA 96093

DRAFT MINUTES

**North State Cooperative Library System**
**Administrative Council Meeting (via Zoom)**
**May 28, 2021**

1. Chair, Michael Perry, called the meeting to order at 12:03 p.m.

2**. Roll Call** was taken.

| PRESENT | ABSENT | PUBLIC LIBRARY | NAME |
|---|---|---|---|
| x | | Butte County Library | Narinder Sufi |
| | x | Del Norte Co. Library District | Beth Austen |
| x | | Humboldt County Library | Christopher Cooper |
| x | | Lassen Library District | Heather Blevins |
| | x | Modoc County Library | Cheryl Baker |
| x | | Orland Free Library | Jody Meza |
| x | | Plumas County Library | Lindsay Fuchs |
| | x | Shasta Public Libraries | Rochelle Carr |
| 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 | Patrick Newell |

Also attending: Stacey Costello, Director, Colusa County Library; Carol Frost, CEO, Pacific Library Partnership; Andrew Yon, Controller, Pacific Library Partnership, and Jacquie Brinkley, NLS System Coordinator.

**3. No Public Comment**

4**. Motion to approve Consent Calendar**

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

**5. Review and Approval of CalPERS FY 2021/22 Annual Payment and Cost Share**

Perry reviewed the NSCLS Cost Share charts and formulas and the background of how the data point of Local Government Income was used in the past to determine NSCLS CalPERS cost-share allocation (Chart #3). Perry continued to explain that for the current year payment (FY 2021/22), and to consider for using for years moving forward, there two options to be considered for establishing the cost-share formula whereby one uses the *Local Government Income* data using most current information from the California State Library report and a second option to use *Total Operating Expenditures*. Perry explained that the Local Government Income data was used in the first years of establishing a cost-share for NSCLS as there was no model to follow. With more information now and looking to how NLS uses most current Operating Expenditures data to determine member dues and fees and that now the other legacy systems have also established cost-share for their CalPERS obligations and have used Operating Expenditures budgets, he recommends that NSCLS consider moving from Local Government Income and be consistent with NLS and the other two systems and use Operating Expenditures for this and future years cost-share.

Discussion to review the CalPERS obligations of NSCLS and other NLS legacy systems. Perry offered to meet with new directors (Butte and Humboldt) to review the history and background of the CalPERS obligation.

Yon and Perry reminded members that payment may be on beneficiary of the retiree, if retiree has passed. NSCLS is currently paying on 16 retirees (or their beneficiaries). Yon also reiterated that while a "pay off" is provided by CalPERS in annual valuation statements, depending on CalPERS earnings from year to year, while a system may pay down the current unfunded liability, CalPERS may bill in the future for any gaps in their earnings that do not cover the retirement benefits owed.

Blevins asked if an increase in Operating Expenditures budget from year to year would impact the amount owed within the cost-share formula. Perry explained that the data point selected would be a tool for ranking the member libraries within the formula chart. Any change to the Operating Expenditure or Local Government Income for an individual library may just reposition the library in the ranking but likely not impact greatly the amount owed.

**Motion to approve the NSCLS CalPERS FY 2021/22 Annual Payment and Cost Share Formula using the most current Operating Expenditures data from the California State Library (Chart #1) and to continue using most the current Operating Expenditures reported by the State Library as cost-share data point for future years CalPERS payments.**
**Meza moved; Sufi seconded. Vote taken by roll call, all votes in favor, motion passed unanimously.**

Perry noted that NLS will invoice NSCLS member libraries as soon as possible for the full amount of $85,000. Perry reported that a 3% discount could be taken if payment is received before July 31, 2021. This discount was taken last year and funds are held in Reserves fund. Payment should be received from libraries to NLS before July 23, 2021 to ensure discount is achieved.

Perry reported that Colusa County Library, while now a member of the Mountain Valley System, continues to be included in the NSCLS cost-share formula as agreed by Colusa and the NSCLS membership. Costello of Colusa County Library is asking to establish a pay-out for their portion of the full NSCLS CalPERS obligation as they currently may have the ability to pay their payout amount.
Yon has contacted CalPERS to provide the NSCLS unfunded accrued liability amount that would establish an estimated "pay off." Frost noted that the payment amount CalPERS will provide is a snapshot of the obligation but may help to establish what a negotiated payout would be for Colusa County and any other NSCLS member who may be in a position to pay in full. Frost continued to suggest that if Colusa could pay out now, an agreement could be negotiated to release Colusa from any further obligation.

Deck agreed that it would be helpful to know a point-in-time payoff amount from CalPERS.

Fuchs asked how the amount received from Colusa would be handled within the NSCLS budget. Fuchs noted that Plumas County would not be in a position to pay a lump sum at this time.

Frost stated that when CalPERS provides the requested information NLS will contact Costello and Perry to determine next steps.

Perry stated that having the "payoff" information from CalPERS would be helpful to evaluate the current status for NSCLS.

**6. NSCLS Budget Reserves**

Perry reviewed the current status of NSCLS reserve funds and how these funds were established. With no foreseeable need to use the legal reserve funds, these funds could be reallocated to the CalPERS reserves. The CalPERS reserves was established to cover any shortfall or to enable NSCLS to take the discount should a member library be delayed in making their annual payment.

**Motion to reallocate the $1,150 in Legal reserves to the NSCLS general fund to be used for any future purchase designated by the Council.**
**Safi moved; Fuchs seconded. Vote taken by roll call, all votes in favor, motion passed.**

Perry restated his offer to contact Butte and Humboldt and other new directors to discuss the NSCLS CalPERS history and obligation.

**Meeting adjourned at 1:01 p.m.**

# FY 22/23 NSCLS CalPERS Cost-Share

## Which budget numbers to reference?

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 in order to keep in line with the methods that NLS uses to calculate membership dues.

## Colusa inclusion

Beginning in FY 21/22, Colusa was included in the cost-share calculation even though they are not a current member. They were a part of NSCLS from its inception through the early 2000s, the period of time when NSCLS had staff working and accruing the pension benefits.

## Pre-payment Savings

CalPERS offers a small discount if the annual payment is received by the end of July. If NSCLS is able to submit full payment, we will only pay $82,010, and save $2,822 (see page 10 of 30 of the "*Annual Valuation Report as of June 30, 2020*" report).

NSCLS have been successful with the pre-payment over the last two years and it has helped build a reserve.

## NSCLS Reserve

In the past, NSCLS paid a slightly larger value, coupled with prepaying the full amount, to help build a reserve that could cover the annual payment of any branch (in case any library system is unable to initially pay). This would also allow NSCLS to remain in good-standing with CalPERS while it works with the library system to get full payment.

## How long does NSCLS need to pay?

NSCLS has 12 more scheduled payments and is expected to make its final payment in FY 33/34 (see page 17 of 30 of the "*Annual Valuation Report as of June 30, 2020*" report). This has been a consistent end-year timeframe over the last three years, in part because NSCLS has no active staff and the number of retirees will no increase over time.

## FY 22/23 Calculation with Minimum Required Amount

The amount of $84,832 is the minimum amount owed to CalPERS for FY 22/23 (see page 1 of 30 of the "*Annual Valuation Report as of June 30, 2020*" report).

This calculation references this as the minimum amount instead of the discounted amount ($82,010) just in case NSCLS cannot meet the timing for the lump payment.

| County | Total Operating Expenditures (FY 20/21) | Base Rate | Factor | FY 20/21 |
|---|---|---|---|---|
| Lassen Library | $ 249,639 | 100 | 9.32 | $ 932 |
| Modoc County | $ 271,008 | 200 | 9.32 | $ 1,864 |
| Willows Public | $ 275,343 | 300 | 9.32 | $ 2,797 |
| Del Norte County | $ 330,849 | 400 | 9.32 | $ 3,729 |
| Trinity County | $ 342,950 | 500 | 9.32 | $ 4,661 |
| Orland Free Library | $ 439,750 | 600 | 9.32 | $ 5,593 |
| Tehama County | $ 595,172 | 700 | 9.32 | $ 6,526 |
| Siskiyou County Library | $ 600,687 | 800 | 9.32 | $ 7,458 |
| Plumas County | $ 601,459 | 900 | 9.32 | $ 8,390 |
| Colusa County | $ 1,205,156 | 1000 | 9.32 | $ 9,322 |
| Shasta Public Library | $ 2,543,502 | 1100 | 9.32 | $ 10,254 |
| Humboldt County | $ 3,086,915 | 1200 | 9.32 | $ 11,187 |
| Butte County | $ 3,502,537 | 1300 | 9.32 | $ 12,119 |
| | | 9,100 | | $ 84,832 |

### Calculating the Factor Value

The Factor is found by dividing the CalPERS liability amount by the sum of the base rates.

$$\frac{\$84{,}832}{9{,}100} = 9.322$$

## FY 22/23 Calculation using a lower Return of Investment of 4%

In the past few years, NSCLS has opted to cost-share a slightly larger amount to help build a small reserve.

This higher amount of $91,000 is based on CalPERS's estimate on a lower rate-of-return of 4%, instead of their default rate-of-return of 7% (see page 23 of 30 of the "*Annual Valuation Report as of June 30, 2020*" report).

| County | Total Operating Expenditures (FY 20/21) | Base Rate | Factor | FY 20/21 |
|---|---|---|---|---|
| Lassen Library | $ 249,639 | 100 | 10.00 | $ 1,000 |
| Modoc County | $ 271,008 | 200 | 10.00 | $ 2,000 |
| Willows Public | $ 275,343 | 300 | 10.00 | $ 3,000 |
| Del Norte County | $ 330,849 | 400 | 10.00 | $ 4,000 |
| Trinity County | $ 342,950 | 500 | 10.00 | $ 5,000 |
| Orland Free Library | $ 439,750 | 600 | 10.00 | $ 6,000 |
| Tehama County | $ 595,172 | 700 | 10.00 | $ 7,000 |
| Siskiyou County Library | $ 600,687 | 800 | 10.00 | $ 8,000 |
| Plumas County | $ 601,459 | 900 | 10.00 | $ 9,000 |
| Colusa County | $ 1,205,156 | 1000 | 10.00 | $ 10,000 |
| Shasta Public Library | $ 2,543,502 | 1100 | 10.00 | $ 11,000 |
| Humboldt County | $ 3,086,915 | 1200 | 10.00 | $ 12,000 |
| Butte County | $ 3,502,537 | 1300 | 10.00 | $ 13,000 |
| | | 9,100 | | $ 91,000 |

### Calculating the Factor Value

Again, the Factor is found by dividing the CalPERS liability amount by the sum of the base rates.

$$\frac{\$91,000}{9,100} = 10.000$$

**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 2021**

**Miscellaneous Plan of the North State Cooperative Library System**
**(CalPERS ID: 1897174550)**
**Annual Valuation Report as of June 30, 2020**

Dear Employer,

Attached to this letter, you will find the June 30, 2020 actuarial valuation report of your CalPERS pension plan. **Provided in this report is the determination of the minimum required employer contributions for fiscal year 2022-23**. 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, 2020.

Section 2 can be found on the CalPERS website (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, 2020.

Your June 30, 2020 actuarial valuation report contains important actuarial information about your pension plan at CalPERS. Your assigned CalPERS staff actuary, whose signature appears in the Actuarial Certification section on page 1, is available to discuss the report with you.

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 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 rates as needed. This valuation is based on an investment return assumption of 7.0% which was adopted by the board in December 2016. Other assumptions used in this report are those recommended in the CalPERS Experience Study and Review of Actuarial Assumptions report from December 2017.

**Required Contribution**

The exhibit below displays the minimum employer contributions for fiscal year 2022-23 along with estimates of the required contributions for fiscal year 2023-24. Member contributions other than cost sharing (whether paid by the employer or the employee) are in addition to the results shown below. **The employer contributions in this report do not reflect any cost sharing arrangements you may have with your employees**.

| Fiscal Year | Employer Normal Cost Rate | Employer Amortization of Unfunded Accrued Liability |
|---|---|---|
| 2022-23 | 0.00% | $84,832 |
| *Projected Results* | | |
| *2023-24* | *0.0%* | *$85,000* |

The actual investment return for fiscal year 2020-21 was not known at the time this report was prepared. The projections above assume the investment return for that year would be 7.00%. ***To the extent the actual investment return for fiscal year 2020-21 differs from 7.00%, the actual contribution requirements for fiscal year 2023-24 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 fiscal year 2027-28.

**Changes from Previous Year's Valuation**

There are no significant changes in actuarial assumptions or policies in your 2020 actuarial valuation. Your annual valuation report is an important tool for monitoring the health of your CalPERS pension plan. Your report contains useful information about future required contributions and ways to control your plan's funding progress. In addition to your annual actuarial report my office has developed tools for employers to plan, project and protect the retirement benefits of your employees. Pension Outlook is a tool to help plan and budget pension costs into the future with easy to understand results and charts.

You will be able to view the projected funded status and required employer contributions for pension plans in different potential scenarios for up to 30 years into the future — which will make budgeting more predictable. While Pension Outlook can't predict the future, it can provide valuable planning information based on a variety of future scenarios that you select.

Pension Outlook can help you answer specific questions about your plans, including:

- When is my plan's funded status expected to increase?
- What happens to my required contributions in a down market?
- How does the discount rate assumption affect my contributions?
- What is the impact of making an additional discretionary payment to my plan?

To get started, visit our Pension Outlook page at www.calpers.ca.gov/page/employers/actuarial-resources/pension-outlook-overview and take the steps to register online.

CalPERS will be completing an Asset Liability Management (ALM) review process in November 2021 that will review the capital market assumptions and the strategic asset allocation and ascertain whether a change in the discount rate and other economic assumptions is warranted. In addition, the Actuarial Office will be completing its Experience Study to review the demographic experience within the pension system and make recommendations to modify future assumptions where appropriate.

Furthermore, this valuation does not reflect any impacts from the COVID-19 pandemic on your pension plan. The impact of COVID-19 on retirement plans is not yet known and CalPERS actuaries will continue to monitor the effects and where necessary make future adjustments to actuarial assumptions.

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 your assigned CalPERS 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, 2020

# for the
# Miscellaneous Plan
# of the
# North State Cooperative Library System

**(CalPERS ID: 1897174550)**

## Required Contributions
## for Fiscal Year
## July 1, 2022 - June 30, 2023

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# Section 1



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

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

# Table of Contents

# Actuarial Certification

Section 1 of this report is based on the member and financial data contained in our records as of June 30, 2020 which was provided by your agency and the benefit provisions under your contract with CalPERS. Section 2 of this report is based on the member and financial data as of June 30, 2020 provided by employers participating in the Miscellaneous Risk Pool to which the plan belongs and benefit provisions under the CalPERS contracts for those agencies.

As set forth in Section 2 of this report, the pool actuaries have certified that, in their opinion, the valuation of the risk pool containing your Miscellaneous Plan 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 plan, it is my opinion as the plan actuary that the Unfunded Accrued Liability amortization bases as of June 30, 2020 and employer contribution as of July 1, 2022 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 Employer 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, 2020 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 fiscal year 2022-23.

# 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, 2020;
- Determine the minimum required employer contribution for this plan for the fiscal year July 1, 2022 through June 30, 2023; and
- Provide actuarial information as of June 30, 2020 to the CalPERS Board of Administration 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.

The measurements shown in this actuarial valuation may not be applicable for other purposes. The employer should contact their 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; and changes in plan provisions or applicable law.

**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 6.0% and 8.0%.
- 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 2017.
- Pension Plan maturity measures quantifying the risks the employer bears.

# Required Employer Contributions

| Required Employer Contributions | Fiscal Year 2022-23 |
|---|---|
| **Employer Normal Cost Rate** | **0.00%** |
| ***Plus*** | |
| **Required Payment on Amortization Bases[1]** | **$84,832** |
| ***Paid either as*** | |
| **1) Monthly Payment** | **$7,069.33** |
| ***Or*** | |
| **2) Annual Prepayment Option*** | **$82,010** |

*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 2021-22 | Fiscal Year 2022-23 |
|---|---|---|
| **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 30, 2021.

[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 2022-23 fiscal year is $84,832. CalPERS allows employers 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. Employers 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 fiscal year 2022-23 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.

If you are considering making an ADP, please contact your actuary for additional information.

**Minimum Required Employer Contribution for Fiscal Year 2022-23**

| Estimated Normal Cost | Minimum UAL Payment | ADP | Total UAL Contribution | Estimated Total Contribution |
|---|---|---|---|---|
| $0 | $84,832 | $0 | $84,832 | $84,832 |

**Alternative Fiscal Year 2022-23 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 | $84,832 | $11,102 | $95,934 | $95,934 |
| 5 years | $0 | $84,832 | $79,501 | $164,333 | $164,333 |

[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, 2022 as determined in the June 30, 2020 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, 2019 | June 30, 2020 |
|---|---|---|
| 1. Present Value of Projected Benefits (PVB) | $2,189,404 | $2,166,153 |
| 2. Entry Age Accrued Liability (AL) | 2,189,404 | 2,166,153 |
| 3. Plan's Market Value of Assets (MVA) | 1,453,630 | 1,411,184 |
| 4. Unfunded Accrued Liability (UAL) [(2) - (3)] | 735,774 | 754,969 |
| 5. Funded Ratio [(3) / (2)] | 66.4% | 65.1% |

This measure of funded status is an assessment of the need for future employer contributions based on the selected 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. For a measure of funded status that is 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. Actual contribution rates during this projection period could be significantly higher or lower than the projection shown below.

| | **Required Contribution** | **Projected Future Employer Contributions (Assumes 7.00% Return for Fiscal Year 2020-21)** | | | | |
|---|---|---|---|---|---|---|
| **Fiscal Year** | **2022-23** | **2023-24** | **2024-25** | **2025-26** | **2026-27** | **2027-28** |
| | Rate Plan 1254 Results | | | | | |
| **Normal Cost %** | 0.00% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| **UAL Payment** | $84,832 | $85,000 | $85,000 | $85,000 | $85,000 | $85,000 |

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 modeling and projection tool, Pension Outlook, is available in the Employers section of the CalPERS website. Pension Outlook is a tool to help plan and budget pension costs into the future with results and charts that are easy to understand.

# 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 2.75% per year for three years.

| | Fiscal Year 2021-22 | Fiscal Year 2022-23 |
|---|---|---|
| **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 | $79,239 | $84,832 |
| Estimated Total Employer Contributions | $79,239 | $84,832 |
| Estimated Total Employer Contribution Rate (illustrative only) | 0.00% | 0.00% |

# Cost

**Actuarial Determination of Pension Plan Cost**

Contributions to fund the pension 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 fiscal year 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 5.5% over the 20 years ending June 30, 2020, yet individual fiscal year returns have ranged from -23.6% to +20.7%. In addition, CalPERS reviews all actuarial assumptions by conducting in-depth experience studies every four years, with the most recent experience study completed in 2017.

# 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**

The are no significant changes to the actuarial methods or assumptions for the 2020 actuarial valuation.

# Subsequent Events

The contribution requirements determined in this actuarial valuation report are based on demographic and financial information as of June 30, 2020. Changes in the value of assets subsequent to that date are not reflected. Investment returns below the assumed rate of return will increase future required contributions while investment returns above the assumed rate of return will decrease future required contributions.

CalPERS will be completing an Asset Liability Management (ALM) process in November 2021 that will review the capital market assumptions and the strategic asset allocation and ascertain whether a change in the discount rate and other economic assumptions is warranted. As part of the ALM process the Actuarial Office will be completing an Experience Study to review the demographic experience of the retirement system and make recommendations to modify future assumptions where appropriate.

Furthermore, this valuation does not reflect any impacts from the COVID-19 pandemic on your pension plan. The impact of COVID-19 on retirement plans is not yet known and CalPERS actuaries will continue to monitor the effects and where necessary make future adjustments to actuarial assumptions.

The projected employer contributions on Page 6 are calculated under the assumption that the discount rate remains at 7.0% going forward and that the realized rate of return on assets for fiscal year 2020-21 is 7.0%.

This actuarial valuation report reflects statutory changes, regulatory changes and CalPERS Board actions through January 2021. 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 | 108,501 |
| Terminated Members | 35,800 |
| Members and Beneficiaries Receiving Payments | 2,021,852 |
| Total | $2,166,153 |

# 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 | $2,166,153 |
| 2. | Projected UAL balance at 6/30/2020 | 714,832 |
| 3. | Pool's Accrued Liability[1] | 19,314,480,060 |
| 4. | Sum of Pool's Individual Plan UAL Balances at 6/30/2020[1] | 4,306,566,797 |
| 5. | Pool's 2019/20 Investment (Gain)/Loss[1] | 344,968,792 |
| 6. | Pool's 2019/20 Non-Investment (Gain)/Loss[1] | 60,428,629 |
| 7. | Plan's Share of Pool's Investment (Gain)/Loss: [(1) - (2)] ÷ [(3) - (4)] × (5) | 33,360 |
| 8. | Plan's Share of Pool's Non-Investment (Gain)/Loss: (1) ÷ (3) × (6) | 6,777 |
| 9. | Plan's New (Gain)/Loss as of 6/30/2020: (7) + (8) | 40,137 |

[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

| | | |
|---|---|---|
| 10. | Plan's UAL: (2) + (9) | $754,969 |
| 11. | Plan's Share of Pool's MVA: (1) - (10) | $1,411,184 |

# 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, 2020.
- The required employer contributions determined by the valuation are for the fiscal year beginning two years after the valuation date: fiscal year 2022-23.

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 2022-23 | Ramp Shape | Escala-tion Rate | Amort. Period | Balance 6/30/20 | Expected Payment 2020-21 | Balance 6/30/21 | Expected Payment 2021-22 | Balance 6/30/22 | Minimum Required Payment 2022-23 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fresh Start | 6/30/20 | No Ramp | | 0.00% | 12 | 754,969 | 77,174 | 727,987 | 79,239 | 696,981 | 84,832 |
| **Total** | | | | | | **754,969** | **77,174** | **727,987** | **79,239** | **696,981** | **84,832** |

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 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 consult with your 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 a reasonable 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** |
| **6/30/2022** | 696,981 | 84,832 | 696,981 | 95,934 | 696,981 | 164,333 |
| **6/30/2023** | 658,019 | 84,832 | 646,535 | 95,933 | 575,782 | 164,333 |
| **6/30/2024** | 616,329 | 84,832 | 592,559 | 95,934 | 446,099 | 164,332 |
| **6/30/2025** | 571,721 | 84,833 | 534,803 | 95,934 | 307,340 | 164,333 |
| **6/30/2026** | 523,990 | 84,833 | 473,004 | 95,933 | 158,866 | 164,332 |
| **6/30/2027** | 472,917 | 84,832 | 406,880 | 95,933 | | |
| **6/30/2028** | 418,270 | 84,832 | 336,128 | 95,934 | | |
| **6/30/2029** | 359,798 | 84,832 | 260,422 | 95,933 | | |
| **6/30/2030** | 297,233 | 84,833 | 179,418 | 95,934 | | |
| **6/30/2031** | 230,287 | 84,832 | 92,742 | 95,933 | | |
| **6/30/2032** | 158,656 | 84,832 | | | | |
| **6/30/2033** | 82,011 | 84,833 | | | | |
| **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** | | | | | | |
| **Total** | | **1,017,988** | | **959,335** | | **821,663** |
| **Interest Paid** | | **321,007** | | **262,354** | | **124,682** |
| **Estimated Savings** | | | | **58,653** | | **196,325** |

# 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, 2020 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 | |
| 2021 - 22 | 0.00% | 79,239 | |
| 2022 - 23 | 0.00% | 84,832 | |

# 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 |
|---|---|---|---|---|---|
| 06/30/2011 | $2,003,701 | $1,589,379 | $414,322 | 79.3% | $0 |
| 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 |

## 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 was performed to determine the effects of various future investment returns on required employer contributions. The projections below provide a range of results based on five investment return scenarios assumed to occur during the next four fiscal years (2020-21, 2021-22, 2022-23 and 2023-24). The projections also assume that all other actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur.

For fiscal years 2020-21, 2021-22, 2022-23, and 2023-24, each scenario assumes an alternate fixed annual return. The fixed return assumptions for the five scenarios are 1.0%, 4.0%, 7.0%, 9.0% and 12.0%.

These alternate investment returns were chosen based on stochastic analysis of possible future investment returns over the four-year period ending June 30, 2024. Using the expected returns and volatility of the asset classes in which the funds are invested, we produced five thousand stochastic outcomes for this period based on the most recently completed Asset Liability Management process. We then selected annual returns that approximate the 5th, 25th, 50th, 75th, and 95th percentiles for these outcomes. For example, of all the 4-year outcomes generated in the stochastic analysis, approximately 25% had an average annual return of 4.0% or less.

Required contributions outside of this range are also possible. In particular, whereas it is unlikely that investment returns will average less than 1.0% or greater than 12.0% over this four-year period, the likelihood of a single investment return less than 1.0% or greater than 12.0% in any given year is much greater.

| **Assumed Annual Return From 2020-21 through 2023-24** | **Projected Employer Contributions** | | | |
|---|---|---|---|---|
| | **2023-24** | **2024-25** | **2025-26** | **2026-27** |
| **1.0%** | | | | |
| Normal Cost | 0.0% | 0.0% | 0.0% | 0.0% |
| UAL Contribution | $97,000 | $108,000 | $120,000 | $132,000 |
| **4.0%** | | | | |
| Normal Cost | 0.0% | 0.0% | 0.0% | 0.0% |
| UAL Contribution | $91,000 | $97,000 | $103,000 | $110,000 |
| **7.0%** | | | | |
| Normal Cost | 0.0% | 0.0% | 0.0% | 0.0% |
| UAL Contribution | $85,000 | $85,000 | $85,000 | $85,000 |
| **9.0%** | | | | |
| Normal Cost | 0.0% | 0.0% | 0.0% | 0.0% |
| UAL Contribution | $82,000 | $80,000 | $76,000 | $73,000 |
| **12.0%** | | | | |
| Normal Cost | 0.0% | 0.0% | 0.0% | 0.0% |
| UAL Contribution | $77,000 | $67,000 | $56,000 | $44,000 |

# 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 4.50% and 2.50%, 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, 2020 assuming alternate discount rates by changing the two components independently. Results are shown using the current discount rate of 7.0% as well as alternate discount rates of 6.0% and 8.0%. The rates of 6.0% and 8.0% were selected since they illustrate the impact of a 1.0% increase or decrease to the 7.0% assumption.

**Sensitivity to the Real Rate of Return Assumption**

| As of June 30, 2020 | 1% Lower Real Return Rate | Current Assumptions | 1% Higher Real Return Rate |
|---|---|---|---|
| **Discount Rate** | **6.0%** | **7.0%** | **8.0%** |
| Inflation | 2.5% | 2.5% | 2.5% |
| **Real Rate of Return** | **3.5%** | **4.5%** | **5.5%** |
| a) Total Normal Cost | 0.00% | 0.00% | 0.00% |
| b) Accrued Liability | $2,344,562 | $2,166,153 | $2,012,225 |
| c) Market Value of Assets | $1,411,184 | $1,411,184 | $1,411,184 |
| d) Unfunded Liability/(Surplus) [(b) - (c)] | $933,378 | $754,969 | $601,041 |
| e) Funded Status | 60.2% | 65.1% | 70.1% |

**Sensitivity to the Price Inflation Assumption**

| As of June 30, 2020 | 1% Lower Inflation Rate | Current Assumptions | 1% Higher Inflation Rate |
|---|---|---|---|
| **Discount Rate** | **6.0%** | **7.0%** | **8.0%** |
| **Inflation** | **1.5%** | **2.5%** | **3.5%** |
| Real Rate of Return | 4.5% | 4.5% | 4.5% |
| a) Total Normal Cost | 0.00% | 0.00% | 0.00% |
| b) Accrued Liability | $2,251,446 | $2,166,153 | $2,040,496 |
| c) Market Value of Assets | $1,411,184 | $1,411,184 | $1,411,184 |
| d) Unfunded Liability/(Surplus) [(b) - (c)] | $840,262 | $754,969 | $629,312 |
| e) Funded Status | 62.7% | 65.1% | 69.2% |

# Mortality Rate Sensitivity

The following table looks at the change in the June 30, 2020 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 2017. This type of analysis highlights the impact on the plan of improving or worsening mortality over the long-term.

| As of June 30, 2020 | 10% Lower Mortality Rates | Current Assumptions | 10% Higher Mortality Rates |
|---|---|---|---|
| a) Total Normal Cost | 0.00% | 0.00% | 0.00% |
| b) Accrued Liability | $2,239,575 | $2,166,153 | $2,099,942 |
| c) Market Value of Assets | $1,411,184 | $1,411,184 | $1,411,184 |
| d) Unfunded Liability/(Surplus) [(b) - (c)] | $828,391 | $754,969 | $688,758 |
| e) Funded Status | 63.0% | 65.1% | 67.2% |

# 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, 2019** | **June 30, 2020** |
|---|---|---|
| 1. Retired Accrued Liability | 2,024,346 | 2,021,852 |
| 2. Total Accrued Liability | 2,189,404 | 2,166,153 |
| 3. Ratio of Retiree AL to Total AL [(1) / (2)] | 0.93 | 0.93 |

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 starts declining. A mature plan will often have a ratio near or below one. The average support ratio for CalPERS public agency plans is 1.25.

| **Support Ratio** | **June 30, 2019** | **June 30, 2020** |
|---|---|---|
| 1. Number of Actives | 0 | 0 |
| 2. Number of Retirees | 16 | 17 |
| 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, and 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 (AVR)**

Shown in the table below is the asset volatility ratio (AVR), which is the ratio of market value of assets to payroll. Plans that have 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 (LVR)**

Also shown in the table below is the liability volatility ratio (LVR), which is the ratio of accrued liability to payroll. Plans that have a higher LVR experience more volatile employer contributions (as a percentage of payroll) due to investment return and 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. The AVR, described above, will tend to move closer to the LVR as a plan matures.

| Contribution Volatility | June 30, 2019 | June 30, 2020 |
|---|---|---|
| 1. Market Value of Assets | $1,453,630 | $1,411,184 |
| 2. Payroll | 0 | 0 |
| 3. Asset Volatility Ratio (AVR) [(1) / (2)] | N/A | N/A |
| 4. Accrued Liability | $2,189,404 | $2,166,153 |
| 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 |

# 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, 2020. 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 CalPERS 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 7 months after.

| Market Value of Assets (MVA) | Hypothetical Termination Liability[1,2] at 0.75% | Funded Status | Unfunded Termination Liability at 0.75% | Hypothetical Termination Liability[1,2] at 2.50% | Funded Status | Unfunded Termination Liability at 2.50% |
|---|---|---|---|---|---|---|
| $1,411,184 | $3,930,734 | 35.9% | $2,519,550 | $3,327,743 | 42.4% | $1,916,559 |

[1] The hypothetical liabilities calculated above include a 5% mortality contingency load in accordance with Board policy. Other actuarial assumptions can be found in Appendix A of the Section 2 report.

[2] The current discount rate assumption used for termination valuations is a weighted average of the 10-year and 30-year U.S. Treasury yields where the weights are based on matching asset and liability durations as of the termination date. The 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 1.18% on June 30, 2020, and was 1.68% on January 31, 2021.

In order to terminate the plan, you must first contact our Retirement Services Contract Unit to initiate a Resolution of Intent to Terminate. The completed Resolution will allow the plan actuary to give you a preliminary termination valuation with a more up-to-date estimate of the plan liabilities. CalPERS advises you to consult with the plan actuary before beginning this process.

# Participant Data

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

| | June 30, 2019 | June 30, 2020 |
|---|---|---|
| **Active Members** | | |
| Counts | 0 | 0 |
| Average Attained Age | N/A | 0.0 |
| Average Entry Age to Rate Plan | N/A | 0.0 |
| Average Years of Credited Service | N/A | 0.0 |
| Average Annual Covered Pay | $0 | $0 |
| Annual Covered Payroll | $0 | $0 |
| Projected Annual Payroll for Contribution Year | $0 | $0 |
| Present Value of Future Payroll | $0 | $0 |
| **Transferred Members** | 3 | 2 |
| **Separated Members** | 3 | 3 |
| **Retired Members and Beneficiaries** | | |
| Counts* | 16 | 17 |
| Average Annual Benefits* | N/A | $13,535 |

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 your agency has contracted. A description of principal standard and optional plan provisions is in Section 2.

| | **Benefit Group** | | | | |
|---|---|---|---|---|---|
| **Member Category** | Misc | Misc | Misc | Misc | |
| **Demographics** | | | | | |
| Actives | No | No | No | No | |
| Transfers/Separated | Yes | No | No | No | |
| Receiving | Yes | 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 | $500 | |
| Survivor Allowance (PRSA) | No | No | No | No | |
| COLA | 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 (calpers.ca.gov) in the Forms and Publications section

Attachment 3

NORTH STATE COOPERATIVE LIBRARY SYSTEM

**To:** NSCLS Council of Librarians
**From:** Michael Perry
**Subject:** NSCLS Budget Reserves Discussion
**Date:** May 18, 2022

**Background**

The NSCLS Council has established two different sets of reserves in the past several years: the Legal Reserve and the CalPERS Reserve. At the May 2021 Council of Librarians meeting, a motion was approved to combine the Legal Reserve with the CalPERS Reserve and discontinue the Legal Reserve.

**CalPERS Reserve**

At the February 5, 2020 meeting, the Council agreed to approve a 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 amount of the library with the highest CalPERS payment, which is Humboldt County.

The ending balance for FY 2021/22 for the CalPERS Reserves is $15,741.