NORTH BAY COOPERATIVE LIBRARY SYSTEM

HTTPS://NORTHNETLIBS.ORG/ABOUT-NLS/NBCLS/

Board of Directors Annual Meeting

May 25, 2021
3:00 p.m.

Join Zoom Meeting
https://us02web.zoom.us/j/87562485549?pwd=SG5uMjV4TnFHcFR1d3V5Tmw4dWV0QT09
Meeting ID: 875 6248 5549
Passcode: 110038
Phone Access: +1 669 900 6833

1. Call to Order	Dodd	
2. Roll Call	Dodd	
3. Public Invited to Address the Council		
4. Approval of Consent Calendar **(ACTION ITEM)**		
A. Adoption of Agenda	Dodd	
B. Approve Minutes of June 9, 2021 Meeting	Dodd	Attachment 1 pg. 3
5. Approve Renewal of NBCLS Delivery Contract with Sprint **(ACTION ITEM)**	Dodd	Attachment 2 pg. 5
6. Approve Resolution #540 -Payment of Retiree Health Benefits for Calendar Year 2022 **(ACTION ITEM)**	Dodd	Attachment 3 pg. 6
7. Approval of CalPERS FY 2021/22 Pre-Payment Option for Annual Payment and Cost Share (**ACTION ITEM)**	Dodd	Attachment 4 pg. 9
8. Adoption of NBCLS FY 21/22 Budget (**ACTION ITEM**)	Dodd	Attachment 5 pg. 40
9. Election of Chair and Vice Chair FY 21/22 (**ACTION ITEM**)	Dodd	
10. Announcements		
11. Adjournment		

Due To The State Of California's Declaration Of Emergency – This Meeting Is Being Held Pursuant To Authorization From Governor Newsom's Executive Order N 29-20

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

NORTH BAY COOPERATIVE LIBRARY SYSTEM

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Board of Directors Annual Meeting
DRAFT Minutes
June 9, 2020

1. Meeting called to order at 2:00 p.m. by Chair, Suzanne Olawski.

2. Roll Call
   Present were: Suzanne Olawski (Solano County Library), David Dodd (Benicia), Bonnie Katz (Solano County), Henry Bankhead (San Rafael Public Library), Ann Hammond (Sonoma County Library), Linda Kenton (San Anselmo), Sara Jones (Marin County), Abbott Chambers (Sausalito), Anthony Halstead (Napa County Library), Anji Brenner (Mill Valley Public Library), Christopher Veach (Lake County Library), Franklin Escobedo (Larkspur Public Library), and Chris Kreiden (St. Helena). Also attending, Carol Frost (PLP/NLS), Andrew Yon (PLP), and Jacquie Brinkley (PLP/NLS).

3. No Public in attendance.

4. **Motion to approve agenda. Bankhead moved; Escobedo seconded. Motion carried**.

5. **Motion to approve Minutes of March 19, 2020. Brenner moved; Hammond seconded. Motion carried.**

6. Brinkley reviewed the NBCLS Delivery Request for Proposal process and results of the evaluation on the three proposals received. The staff recommendation was that NBCLS select one of the two finalists for the FY 20/21 contract.
   Discussion regarding results of the RFP evaluations and experience from libraries with each vendor. Veach reported that online reviews were concerning regarding one of the vendors and while there was concern with higher costs for another vendor, he felt more confident in their ability to provide NBCLS delivery service based on past history.
   Halstead shared Napa County's experience with one vendor and reported that services of the two vendors were comparable, although there were occasional issues with their current vendor.
   Olawski stated that she was inclined to stay with current courier even at a higher cost.
   Dodd asked about the courier's use of driver's personal vehicles. Yon confirmed that the RFP specified a dedicated truck be used for this contract. One vendor priced out their quote using personal vehicles and that based on a phone interview Yon had, the delivery vehicle would depend on the volume of material. The vendor explained to Yon that the use of personal vehicles is an attempt to be cost effective.
   Dodd agreed to stay with current courier. Hammond stated that she was not confident with the other vendor. Kreiden agreed to stay with current courier.
   Frost reviewed the recent 30% cost increase to the existing contract required by Sprint beginning in January 2020 through June 30, 2020. Frost asked Yon to confirm that the price quote from Sprint would not increase after signing of new contract.

Yon replied that the contract is binding once signed and that he believed Sprint included all anticipated increased costs in the RFP quote.

MARINet had intended to also issue an RFP for a courier, but due to COVID-19, has put this on hold. Jones and Chambers reported that MARINet will defer the RFP until July 1, 2020 or the end of calendar year 2020.

Motion to award the NBCLS Delivery Contract for FY 20/21 to Sprint. Dodd moved; Veach seconded.
No public comment or other discussion.
Motion Carried.

7. Olawski presented Resolution #539 for the Retiree Health coverage for calendar year 2021. Olawski reviewed the approval made at the NBCLS meeting of March 19, 2020 whereby NBCLS approved to pay up to $250 per month for calendar year 2021 and the retiree would pay the difference for Medicare Supplemental coverage. This agreement is to be reviewed annually by NBCLS Board.
Motion to approve Resolution #539 for payment of retiree health benefits for calendar year 2021. Dodd moved; Kenton seconded. Motion carried.
Bankhead asked if NBCLS Fund Balance would cover the annual cost for 2021. Yon confirmed that NBCLS had fund balance to cover all of 2021. Health costs will be allocated to member libraries beginning in FY 21/22 for the calendar year 2022.

8. Olawski presented the FY 20/21 NBCLS Budget. Bankhead asked if the cost sharing formula had been determined. Olawski confirmed that the formula had been agreed upon at the NBCLS meeting of October 17, 2019 whereby the Cost Share will be based on distribution by 50% Population and 50% Operating Budget using the most recent available CA State Library annual data reporting – and to be reviewed annually at NBCLS Board meeting and to be Invoiced and paid in May of each year.
Motion to approve the FY 20/21 NBCLS Budget. Hammond moved; Kreiden seconded. Motion carried.

9. Olawski asked for nominations for NBCLS Chair and Vice Chair for FY 20/21. Hammond nominated Dodd. Olwaski concurred. Dodd nominated Hammond as Vice Chair.
Motion to elect Dodd as Chair and Hammond as Vice Chair.
Olawski moved; Jones seconded. Motion Carried.

Jones reported that MARINet was currently on month to month contract with Sprint and that they had been a good collaborative partner/vendor to work with.

10. Meeting adjourned at 2:40 p.m.

NORTH BAY COOPERATIVE LIBRARY SYSTEM

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To: NBCLS Board of Directors
From: Jacquie Brinkley, NLS System Coordinator
Subject: Sprint Courier Contract – FY2021-22, First One-Year Option to Renew
Date: May 25, 2021

Background

NBCLS issued an RFP for courier services, and at the June 9, 2020 meeting, the Board approved a one-year contract with Sprint.

The terms of the contract include:

> The contract term shall be from **July 1, 2020 to June 30, 2021,** with an option to continue for
> **Three (3) additional years** in one-year increments with annual CPI adjustment not to exceed 3%, by mutual consent of the NLS and Vendor. This period is predicated upon the need for program continuity and is intended to provide program stability through uninterrupted service. The plans to negotiate extensions with the winning contractor assuming: (a) good performance on the contractor's part, (b) continued requirement for the services, (c) the availability of funds, (d) the status of the competitive market, and (e) the continuation of services on a reasonable cost basis. Negotiated contract extensions without formal competition is a NLS prerogative, not a contractual right.

The current contract is $21,500 per month, or $258,000 annually. The FY 2021/22 contract includes a 2% CPI increase, to $22,149 per month, or $265,792 annually, which includes costs for gas surcharges.

Recommendation

The NBCLS libraries utilize some of their CLSA funds to offset courier costs.

It is recommended that the NBCLS Board of Directors approve the one-year option to renew with a 2% CPI adjustment from July 1, 2021 through June 30, 2022, for a total of $265,792.

NORTH BAY COOPERATIVE LIBRARY SYSTEM

HTTPS://NORTHNETLIBS.ORG/ABOUT-NLS/NBCLS/

To: NBCLS Board of Directors
From: Jacquie Brinkley, NLS System Coordinator
Subject: 2022 Retiree Health Insurance
Date: May 25, 2021

Background

Since 2014, the Board of Directors has agreed to annually approve continuing retiree health insurance and to pay only the rate set for single people receiving Medicare. At the March 2020 Board meeting, the NBCLS Board of Directors approved discontinuation of the health insurance for the remaining retiree through an annual contract between NBCLS and Golden State Risk Management Authority.

The Board approved continuation of payment of the retiree health insurance with the following provisions:

> The retiree will select their own plan in open enrollment of October 2020 and notify PLP/NBCLS Administration with documentation of coverage and statement of plan fees.
>
> NBCLS will reimburse the retiree for a portion of the insurance premium beginning in calendar year 2021 to be capped at $250/month.
>
> The NBCLS Chair and Pacific Library Partnership administration will be authorized to establish the payment structure with the retiree.
>
> Ongoing coverage of retiree health benefits will continued to be reviewed annually by the NBCLS Board.
>
> Costs for coverage incurred by NBCLS will be shared among NBCLS members using the cost-sharing formula approved at Board meeting of October 17, 2019.

Activities and Considerations

In Fall 2020, the existing retiree chose a medical plan with a monthly cost of $214.52. The retiree is being reimbursed on a monthly basis for these costs, for a total annual reimbursement of $2,574.24. Prior to this change, NBCLS was paying Golden State Risk Management (GSRMA) $669 per month/ $8,028 annually, for health care, with a 5% annual increase. The current NBCLS cap is $250 per month, or $3,000 annually.

The retiree has noted the following: "If I remember correctly the Board authorized paying for the prescription plan but didn't offer any assistance with the increased annual deductible and co-pay costs. As I mentioned in the Board meeting there will be a major increase in out-of-pocket medication expense. My current 2020 out of pocket medication annual costs are about $725. The 2021 estimated out of pocket cost will be $2,053. That is quite an increase that will not be matched by the projected cost of living adjustments from Social Security and PERS.”

Based on the cost for 2020, the Board may consider a 5-10% increase to the current cap of $250 per month, and may take into consideration the out-of-pocket cost of the retiree.

Recommendation:

It is recommended that the Board of Directors adopt a resolution that states:

(a) It will annually determine by Board action if it will provide retiree health insurance for the following calendar year, and

(b) If so, it will determine how much the System will pay toward the monthly premium for the retiree during that calendar year. NBCLS may consider an increase of the monthly reimbursement to cover increased cost to retiree in the 2022 calendar year.

It is further recommended that the Board of Directors pass a motion to continue offering the currently covered retiree health insurance for calendar 2022, with the retiree choosing the health plan during open enrollment and with NBCLS reimbursing the retiree monthly up to a specific amount for the plan, and that said retiree may elect to cover dependents at their own expense.

RESOLUTION # 540
Calendar Year 2022

It is resolved by the Board of Directors of the North Bay Cooperative Library system to annually determine if it will provide retiree health insurance for the upcoming calendar year.

And it is further resolved that if the Board of Directors determines that it will provide retiree health insurance for a given calendar year it will decide by motion how much the System will pay toward the monthly premium and how much the retiree will pay toward their premium for the upcoming year.

The foregoing resolution was introduced by Director _____________and seconded by Director_______________and adopted by (a unanimous vote OR an "aye" vote) of the following directors:

Aye votes:

Nay votes:

WHEREUPON the Chairperson declared the foregoing resolution adopted and SO ORDERED.

Date: May 25, 2021

Attested:

Signed _______________________________________
David Dodd, Chair, NBCLS Board of Directors

Signature ______________________________________
Jacquie Brinkley, NLS System Coordinator

NORTH BAY COOPERATIVE LIBRARY SYSTEM

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To: North Bay Cooperative Library System Board of Directors
From: David Dodd
Subject: Approval of NBCLS CalPERS FY 2021/22 Pre-Payment Option for Annual Payment and Shared Funding Formula
Date: May 25, 2021

Background

Due to the impending depletion of fund balance from the increased CalPERS Unfunded Liability repayment schedule and retiree health care costs, the NBCLS Board of Directors approved a Shared Funding formula at the October 2019 meeting. The motion to approve the formula includes the following:

A cost share based on distribution by 50% population and 50% operating budget (not including the capital budget) using the most recent available CA State Library annual data reporting, and to be reviewed annually at NBCLS Board meeting and to be Invoiced and paid in May of each year.

It was further requested that the CalPERS obligation be invoiced in combination with the NLS membership dues in one billing, versus a separate invoice.

In FY2021/22, NBCLS will commence using this formula for costs related to the CalPERS Unfunded Liability, retiree health care costs, and GASB 68 cost.

CalPERS costs

For FY2021/22, the CalPERS Unfunded Liability is $ 87,159, and the pre-payment discounted amount is $84,260.

Other CalPERS costs for FY 2021/22 include $350 for the GASB 68 Accounting Valuation Report, and $2,700 for retiree health care, for a total of $87,310. NBCLS ending Fund Balance for FY 2020/21 is estimated to be $3,661, leaving funds to help offset FY2021/22 CalPERS Unfunded Liability obligations.

Cost Share Formula for FY2021/22

The most recent available California State Library annual data reporting is FY 2019/20 for Operating Expenditure and FY2020/21 for Certified Population Figures.

The chart below shows the cost share formula.

Northbay Cooperative Library System
Proposed FY2021-22 CalPERS Cost Distribution $83,629 - Population and Budget Size Cost Share Distribution

FY2021-22 Unfunded Liability and Medical Costs
$83,629

Library	FY19/20 Operating Expenditure	50% Based on Budget Size	FY20/21 CSL Certifed Population**	% Based on Population	Total Proposed Unfunded Liability & Medical Costs
Belvedere-Tiburon	$2,555,925	$ 1,123	11,664	$ 334	$ 1,457
Benicia	$2,435,214	$ 1,070	27,175	$ 777	$ 1,848
Lake County	$1,074,639	$ 472	64,040	$ 1,832	$ 2,304
Larkspur	$918,363	$ 404	12,253	$ 351	$ 754
Marin	$18,321,233	$ 8,052	142,424	$ 4,074	$ 12,126
Mendocino	$3,776,192	$ 1,660	87,946	$ 2,516	$ 4,175
Mill Valley	$2,457,874	$ 1,080	14,674	$ 420	$ 1,500
Napa	$8,479,188	$ 3,726	133,015	$ 3,805	$ 7,531
San Anselmo	$874,114	$ 384	12,757	$ 365	$ 749
San Rafael	$4,486,395	$ 1,972	59,807	$ 1,711	$ 3,682
Sausalito	$881,401	$ 387	7,252	$ 207	$ 595
Solano	$19,211,588	$ 8,443	389,856	$ 11,151	$ 19,594
Sonoma	$28,515,784	$ 12,532	492,980	$ 14,101	$ 26,633
St.Helena	$1,156,749	$ 508	6,073	$ 174	$ 682
Total	**$ 95,144,659**	**$ 41,815**	**1,461,916**	**$ 41,815**	**$ 83,629**

*Source: CSL Ready Report - FY19/20 Expenditure ** CSL Certification of Population Figures for 2020-21*

Recommendation

It is recommended that the NBCLS Board of Directors approve the FY2021/22 CalPERS cost share formula and CalPERS pre-payment.

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 2020

Miscellaneous Plan of the North Bay Cooperative Library System
(CalPERS ID: 2429114785)
Annual Valuation Report as of June 30, 2019

Dear Employer,

Attached to this letter, you will find the June 30, 2019 actuarial valuation report of your CalPERS pension plan. **Provided in this report is the determination of the minimum required employer contributions for fiscal year 2021-22**. 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, 2019.

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 or Safety Risk Pool Actuarial Valuation Report as appropriate.

Your June 30, 2019 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 after August 1, 2020.

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, before any cost sharing, for fiscal year 2021-22 along with estimates of the required contributions for fiscal year 2022-23. 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
2021-22	0.00%	$87,159
Projected Results		
2022-23	*0.0%*	*$87,000*

The actual investment return for fiscal year 2019-20 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 2019-20 differs from 7.00%, the actual contribution requirements for fiscal year 2022-23 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 2026-27.

Changes from Previous Year's Valuation

The CalPERS Board of Administration has adopted a new amortization policy effective with the June 30, 2019 actuarial valuation. The new policy shortens the period over which actuarial gains and losses are amortized from 30 years to 20 years with the payments computed as a level dollar amount. In addition, the new policy does not utilize a 5-year ramp-up and ramp-down on Unfunded Accrued Liability (UAL) bases attributable to assumption and method changes and non-investment gains/losses. The new policy does not utilize a 5-year ramp-down on investment gains/losses. These changes apply only to new UAL bases established on or after June 30, 2019.

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

Questions

We understand that you might have some questions about these results. While we are very interested in discussing these results with your agency, in the interest of allowing us to give every public agency their results, we ask that you wait until after August 1, 2020 to contact us with actuarial questions. If you have other questions, you may call the Customer Contact Center at (888)-CalPERS or (**888-225-7377**).

Sincerely,

SCOTT TERANDO
Chief Actuary

Actuarial Valuation
as of June 30, 2019

for the
Miscellaneous Plan
of the
North Bay Cooperative Library System

(CalPERS ID: 2429114785)

Required Contributions
for Fiscal Year
July 1, 2021 - June 30, 2022

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Section 2 – Risk Pool Actuarial Valuation Information

Section 1

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

(CalPERS ID: 2429114785)
(Valuation Rate Plan ID: 605)

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Actuarial Certification

Section 1 of this report is based on the member and financial data contained in our records as of June 30, 2019 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, 2019 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, 2019 and employer contribution as of July 1, 2021 have been properly and accurately determined in accordance with the principles and standards stated above.

The undersigned is an actuary for CalPERS, a member of both the American Academy of Actuaries and Society of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

JEAN FANNJIANG, ASA, MAAA
Senior 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**
- **Cost**
- **Changes Since the Prior Year's Valuation**
- **Subsequent Events**

Introduction

This report presents the results of the June 30, 2019 actuarial valuation of the Miscellaneous Plan of the North Bay Cooperative Library System of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the required employer contributions for fiscal year 2021-22.

Purpose of Section 1

This Section 1 report for the Miscellaneous Plan of the North Bay 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, 2019;
- Determine the minimum required employer contribution for this plan for the fiscal year July 1, 2021 through June 30, 2022; and
- Provide actuarial information as of June 30, 2019 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 GASB Statement No. 68 for a Cost Sharing Employer Defined Benefit Pension Plan. A separate accounting valuation report for such purposes is available from CalPERS and details for ordering are available on our 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 mortality assumptions adopted in 2017.
- Plan maturity measures indicating how sensitive a plan may be to the risks noted above.

Required Employer Contributions

Required Employer Contributions	Fiscal Year 2021-22
Employer Normal Cost Rate	**0.00%**
Plus, Either	
1) Monthly Employer Dollar UAL Payment	**$7,263.25**
Or	
2) Annual UAL Prepayment Option*	**$84,260**

The total minimum required employer contribution is the ***sum*** *of the Plan's Employer Normal Cost Rate (expressed as a percentage of payroll)* ***plus*** *the Employer Unfunded Accrued Liability (UAL) Contribution Amount (billed monthly in dollars).*

** Only the UAL portion of the employer contribution can be prepaid* ***(which must be received in full no later than July 31)****. Any prepayment totaling over $5 million requires a 72-hour notice email to FCSD_public_agency_wires@calpers.ca.gov. Plan Normal Cost contributions will be made as part of the payroll reporting process. If there is contractual cost sharing or other change, this amount will change.*

In accordance with Sections 20537 and 20572 of the Public Employees' Retirement Law, if a contracting agency fails to remit the required contributions when due, interest and penalties may apply.

	Fiscal Year 2020-21	Fiscal Year 2021-22
Development of Normal Cost as a Percentage of Payroll[1]		
Base Total Normal Cost for Formula	0.000%	0.00%
Surcharge for Class 1 Benefits[2]		
None	0.000%	0.00%
Phase out of Normal Cost Difference[3]	0.000%	0.00%
Plan's Total Normal Cost	0.000%	0.00%
Formula's Expected Employee Contribution Rate	0.000%	0.00%
Employer Normal Cost Rate	0.000%	0.00%
Projected Payroll for the Contribution Fiscal Year	$0	$0
Estimated Employer Contributions Based on Projected Payroll		
Plan's Estimated Employer Normal Cost	$0	$0
Plan's Payment on Amortization Bases[4]	84,379	87,159
% of Projected Payroll (illustrative only)	N/A	N/A
Estimated Total Employer Contribution	$84,379	$87,159
% of Projected Payroll (illustrative only)	N/A	N/A

[1] The results shown for fiscal year 2020-21 reflect the prior year valuation and may not take into account any lump sum payment, side fund payoff, or rate adjustment made after April 30, 2019.

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

[3] The normal cost difference is phased out over a five-year period. The phase out of normal cost difference is 100% for the first year of pooling and is incrementally reduced by 20% of the original normal cost difference for each subsequent year. This is non-zero only for plans that joined a pool within the past 5 years. Most plans joined a pool June 30, 2003, when risk pooling was implemented.

[4] See Schedule of Plan's Amortization Bases.

Additional Discretionary Employer Contributions

The minimum required employer contribution towards the Unfunded Accrued Liability (UAL) for this rate plan for the 2021-22 fiscal year is $87,159. 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 2021-22 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 2021-22

Estimated Normal Cost	Minimum UAL Payment	ADP	Total UAL Contribution	Estimated Total Contribution
$0	$87,159	$0	$87,159	$87,159

Alternative Fiscal Year 2021-22 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	$87,159	$16,555	$103,714	$103,714
5 years	$0	$87,159	$90,501	$177,660	$177,660

[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, 2021 as determined in the June 30, 2019 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, 2018	June 30, 2019
1. Present Value of Projected Benefits (PVB)	$2,807,643	$2,844,908
2. Entry Age Normal Accrued Liability (AL)	2,807,643	2,844,908
3. Plan's Market Value of Assets (MVA)	2,041,872	2,037,810
4. Unfunded Accrued Liability (UAL) [(2) - (3)]	765,771	807,098
5. Funded Ratio [(3) / (2)]	72.7%	71.6%

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. As of the preparation date of this report, the year to date return for the 2019-20 fiscal year was well below the 7% assumed return. Actual contribution rates during this projection period could be significantly higher than the projection shown below.

	Required Contribution	**Projected Future Employer Contributions (Assumes 7.00% Return for Fiscal Year 2019-20)**				
Fiscal Year	**2021-22**	**2022-23**	**2023-24**	**2024-25**	**2025-26**	**2026-27**
Normal Cost %	0.00%	0.0%	0.0%	0.0%	0.0%	0.0%
UAL Payment	$87,159	$87,000	$87,000	$87,000	$87,000	$87,000

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. 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.

Cost

Actuarial Determination of Pension Plan Cost

Contributions to fund the pension plan are comprised of two components:

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

For fiscal years prior to FY 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 will continue to be 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 5.8% over the 20 years ending June 30, 2019, 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 for a summary of the plan provisions used in this valuation. The effect of any mandated benefit changes or plan amendments on the unfunded liability is shown in the "(Gain)/Loss Analysis" and the effect on the employer contribution is shown in the "Reconciliation of Required Employer Contributions." It should be noted that no change in liability or contribution is shown for any plan changes which were already included in the prior year's valuation.

Actuarial Methods and Assumptions

The CalPERS Board of Administration adopted a new amortization policy effective with this actuarial valuation. The new policy shortens the period over which actuarial gains and losses are amortized from 30 years to 20 years with the payments computed as a level dollar amount. In addition, the new policy does not utilize a 5-year ramp-up and ramp-down on UAL bases attributable to assumption and method changes and non-investment gains/losses. The new policy also does not utilize a 5-year ramp-down on investment gains/losses. These changes will apply only to new UAL bases established on or after June 30, 2019.

For inactive employers, the new amortization policy imposes a maximum amortization period of 15 years for all unfunded accrued liabilities effective June 30, 2017. Furthermore, the plan actuary has the ability to shorten the amortization period on any valuation date based on the life expectancy of plan members and projected cash flow needs to the plan.

Subsequent Events

The contribution requirements determined in this actuarial valuation report are based on demographic and financial information as of June 30, 2019. 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.

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 2019-20 is 7.0%.

This actuarial valuation report reflects statutory changes, regulatory changes and CalPERS Board actions through January 2020. Any subsequent changes or actions are not reflected.

Assets and Liabilities

- **Breakdown of Entry Age Normal 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 Normal Accrued Liability

Active Members	$0
Transferred Members	721,483
Terminated Members	200,239
Members and Beneficiaries Receiving Payments	1,923,186
Total	$2,844,908

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	$2,844,908
2.	Projected UAL balance at 6/30/2019	786,104
3.	Pool's Accrued Liability[1]	18,394,114,919
4.	Sum of Pool's Individual Plan UAL Balances at 6/30/2019[1]	4,268,374,183
5.	Pool's 2018/19 Investment (Gain)/Loss[1]	68,711,010
6.	Pool's 2018/19 Non-Investment (Gain)/Loss[1]	70,985,020
7.	Plan's Share of Pool's Investment (Gain)/Loss: [(1) - (2)] ÷ [(3) - (4)] × (5)	10,015
8.	Plan's Share of Pool's Non-Investment (Gain)/Loss: (1) ÷ (3) × (6)	10,979
9.	Plan's New (Gain)/Loss as of 6/30/2019: (7) + (8)	20,993
10.	Other Changes in the UAL[2]	0

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

[2] May include Golden Handshakes, Service Purchases, etc. See Schedule of Plan's Amortization Bases for details.

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

11.	Plan's UAL: (2) + (9) + (10)	$807,098
12.	Plan's Share of Pool's MVA: (1) - (11)	$2,037,810

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, 2019.
- The required employer contributions determined by the valuation are for the fiscal year beginning two years after the valuation date: fiscal year 2021-22.

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

The Unfunded Accrued Liability (UAL) is used to determine the employer contribution and therefore must be rolled forward two years from the valuation date to the first day of the fiscal year for which the contribution is being determined. The UAL is rolled forward each year by subtracting the expected payment on the UAL for the fiscal year and adjusting for interest. The expected payment on the UAL for a fiscal year is equal to the Expected Employer Contribution for the fiscal year minus the Expected Normal Cost for the year. The Employer Contribution 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 2021-22	Ramp Shape	Escala-tion Rate	Amort. Period	Balance 6/30/19	Expected Payment 2019-20	Balance 6/30/20	Expected Payment 2020-21	Balance 6/30/21	Minimum Required Payment 2021-22
Fresh Start	6/30/19	No Ramp		0.00%	13	807,098	75,222	785,785	84,379	753,507	87,159
Total						**807,098**	**75,222**	**785,785**	**84,379**	**753,507**	**87,159**

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 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.

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

			Alternate Schedules			
	Current Amortization Schedule		10 Year Amortization		5 Year Amortization	
Date	**Balance**	**Payment**	**Balance**	**Payment**	**Balance**	**Payment**
6/30/2021	753,508	87,159	753,508	103,714	753,508	177,661
6/30/2022	716,096	87,159	698,971	103,714	622,480	177,661
6/30/2023	676,065	87,159	640,616	103,714	482,280	177,661
6/30/2024	633,232	87,159	578,177	103,714	332,266	177,661
6/30/2025	587,400	87,159	511,367	103,714	171,751	177,661
6/30/2026	538,360	87,159	439,880	103,714		
6/30/2027	485,887	87,159	363,389	103,714		
6/30/2028	429,741	87,159	281,544	103,714		
6/30/2029	369,665	87,159	193,969	103,714		
6/30/2030	305,384	87,159	100,264	103,714		
6/30/2031	236,603	87,159				
6/30/2032	163,007	87,159				
6/30/2033	84,260	87,159				
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						
Total		**1,133,067**		**1,037,140**		**888,305**
Interest Paid		**379,559**		**283,631**		**134,797**
Estimated Savings				**95,927**		**244,761**

Employer Contribution History

The table below provides a recent history of the required employer contributions for the plan, as determined by the annual actuarial valuation. It does not account for prepayments or benefit changes made during a fiscal year.

Fiscal Year	Employer Normal Cost	Unfunded Liability Payment ($)
2016 - 17	0.000%	$12,385
2017 - 18	0.000%	20,584
2018 - 19	0.000%	32,165
2019 - 20	0.000%	75,222
2020 - 21	0.000%	84,379
2021 - 22	0.00%	87,159

Funding History

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

Valuation Date	Accrued Liability (AL)	Share of Pool's Market Value of Assets (MVA)	Plan's Share of Pool's Unfunded Liability	Funded Ratio	Annual Covered Payroll
06/30/2011	$2,558,443	$2,156,491	$401,952	84.3%	$377,619
06/30/2012	2,596,002	2,065,580	530,422	79.6%	0
06/30/2013	2,271,272	1,896,468	374,804	83.5%	0
06/30/2014	2,486,396	2,158,411	327,985	86.8%	0
06/30/2015	2,614,774	2,153,765	461,009	82.4%	0
06/30/2016	2,621,543	1,970,346	651,197	75.2%	0
06/30/2017	2,742,370	2,086,328	656,042	76.1%	0
06/30/2018	2,807,643	2,041,872	765,771	72.7%	0
06/30/2019	2,844,908	2,037,810	807,098	71.6%	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 (2019-20, 2020-21, 2021-22 and 2022-23). 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 2019-20, 2020-21, 2021-22, and 2022-23, 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, 2023. 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 2019-20 through 2022-23	**Projected Employer Contributions**			
	2022-23	**2023-24**	**2024-25**	**2025-26**
1.0%				
Normal Cost	0.0%	0.0%	0.0%	0.0%
UAL Contribution	$103,000	$120,000	$136,000	$153,000
4.0%				
Normal Cost	0.0%	0.0%	0.0%	0.0%
UAL Contribution	$95,000	$104,000	$112,000	$121,000
7.0%				
Normal Cost	0.0%	0.0%	0.0%	0.0%
UAL Contribution	$87,000	$87,000	$87,000	$87,000
9.0%				
Normal Cost	0.0%	0.0%	0.0%	0.0%
UAL Contribution	$84,000	$80,000	$76,000	$71,000
12.0%				
Normal Cost	0.0%	0.0%	0.0%	0.0%
UAL Contribution	$76,000	$63,000	$48,000	$32,000

These projections reflect the impact of the CalPERS risk mitigation policy, which reduces the discount rate when investment returns exceed specified trigger points.

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, 2019 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, 2019	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	$3,126,906	$2,844,908	$2,603,901
c) Market Value of Assets	$2,037,810	$2,037,810	$2,037,810
d) Unfunded Liability/(Surplus) [(b) - (c)]	$1,089,096	$807,098	$566,091
e) Funded Status	65.2%	71.6%	78.3%

Sensitivity to the Price Inflation Assumption

As of June 30, 2019	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	$2,967,822	$2,844,908	$2,659,269
c) Market Value of Assets	$2,037,810	$2,037,810	$2,037,810
d) Unfunded Liability/(Surplus) [(b) - (c)]	$930,012	$807,098	$621,459
e) Funded Status	68.7%	71.6%	76.6%

Mortality Rate Sensitivity

The following table looks at the change in the June 30, 2019 plan costs and funded ratio 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, 2019	10% Lower Mortality Rates	Current Assumptions	10% Higher Mortality Rates
a) Total Normal Cost	0.00%	0.00%	0.00%
b) Accrued Liability	$2,916,559	$2,844,908	$2,779,278
c) Market Value of Assets	$2,037,810	$2,037,810	$2,037,810
d) Unfunded Liability/(Surplus) [(b) - (c)]	$878,749	$807,098	$741,468
e) Funded Status	69.9%	71.6%	73.3%

Maturity Measures

As pension plans mature they become more sensitive to risks. Understanding plan maturity and how it affects the ability of a pension plan to tolerate risk is important in understanding how the plan is impacted by investment return volatility, other economic variables and changes in longevity or other demographic assumptions. One way to look at the maturity level of CalPERS and its plans is to look at the ratio of a plan's retiree liability to its total liability. A pension plan in its infancy will have a very low ratio of retiree liability to total liability. As the plan matures, the ratio starts increasing. A mature plan will often have a ratio above 60%-65%.

Ratio of Retiree Accrued Liability to Total Accrued Liability	**June 30, 2018**	**June 30, 2019**
1. Retired Accrued Liability	1,930,921	1,923,186
2. Total Accrued Liability	2,807,643	2,844,908
3. Ratio of Retiree AL to Total AL [(1) / (2)]	0.69	0.68

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, 2018**	**June 30, 2019**
1. Number of Actives	0	0
2. Number of Retirees	17	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, 2018**	**June 30, 2019**
1. Market Value of Assets	$2,041,872	$2,037,810
2. Payroll	0	0
3. Asset Volatility Ratio (AVR) [(1) / (2)]	N/A	N/A
4. Accrued Liability	$2,807,643	$2,844,908
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	0.71	0.00	N/A	N/A
06/30/2018	0.69	0.00	N/A	N/A
06/30/2019	0.68	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, 2019. 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] @ 1.75%	Funded Status	Unfunded Termination Liability @ 1.75%	Hypothetical Termination Liability[1,2] @ 3.25%	Funded Status	Unfunded Termination Liability @ 3.25%
$2,037,810	$5,228,373	39.0%	$3,190,563	$4,496,793	45.3%	$2,458,983

[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 2.31% on June 30, 2019, and was 1.83% on January 31, 2020.

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, 2018	**June 30, 2019**
Reported Payroll	$0	$0
Projected Payroll for Contribution Purposes	$0	$0
Number of Members		
Active	0	0
Transferred	5	5
Separated	4	3
Retired	17	17

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	
Demographics				
Actives	No	No	No	
Transfers/Separated	Yes	No	No	
Receiving	Yes	Yes	Yes	
Benefit Provision				
Benefit Formula	2% @ 55			
Social Security Coverage	No			
Full/Modified	Full			
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	Indexed			
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 Bay Cooperative Library System
FY 2021-22 Proposed Budget

North Bay Cooperative Library System (921)

GL Acct	Revenue	Adopted FY 20/21	Proposed FY 21/22	Note
3000	Budgeted Fund Balance	$80,822	$3,661	NBCLS Fund Balance (Remaining Balance)
3510	Interest Income	1,100	20	
3674	Reimbursement-Retirees	2,100	-	
3674	**Reimbursement-Member Libraries**		**83,629**	**Libraries CalPERS Cost Share Distribution**
	TOTAL REVENUE	**$84,022**	**$87,310**	***3.91%***
	Expenditure			
4448	Reimbursable-Retiree Benefits	$84,022	$87,310	CalPERS Prepay UAL $84,260, Medical $225/mo or $2,700/Yr and GASB 68 Report $350
	TOTAL EXPENDITURE	**$84,022**	**$87,310**	***3.91%***

Note: CalPERS Unfunded Liability cost reflects the $ 84,260 for lump-sum prepayment by July 2021

Fund Balance **as of 6/30/20**	$	90,415	
Interest Income	$	15	
FY20/21 Expenditure	$	(86,769)	
Fund Balance as of 6/30/21	**$**	**3,661**	*Estimated*