

NORTH STATE COOPERATIVE LIBRARY SYSTEM

AGENDA

NSCLS COUNCIL OF LIBRARIANS

Tuesday, September 15, 2020

3:00 p.m.

Zoom Meeting

<https://us02web.zoom.us/j/82379953879?pwd=QXMzRFhRbUlwbnd1bGZxRFlmZmJKdz09>

Meeting ID: 823 7995 3879

Passcode: 552525

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 February 5, 2020 Annual Meeting Minutes | | Attachment 1, p. 3 |
| 5. Establishing a Cost Share for the Colusa County Library for CalPERS Liability for the North State Cooperative Library System (Action Item) | Frost | Attachment 2, p. 6 |
| 6. Review of NSCLS Annual Valuation Report 2019 | Yon | Attachment 3, p. 13 |
| 7. Review and Consideration of Approval of NSCLS CalPERS FY 2021/22 Cost-Share Assessment (Action Item) | Perry | Attachment 4, p. 42 |
| 8. 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 STATE COOPERATIVE LIBRARY SYSTEM

DRAFT MINUTES

North State Cooperative Library System Administrative Council Meeting February 5, 2020

1. Chair, Michael Perry, called the meeting to order at 4:02 p.m.
2. Roll Call was taken.

PRESENT	ABSENT	PUBLIC LIBRARY	NAME
x		Butte County Library	Narinder Sufi
	x	Del Norte Co. Library District	Shane Pipinos-Gausepohl
	x	Humboldt County Library	Ronda Wittenberg
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	Elizabeth Kelley
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, Jacquie Brinkley, NLS System Coordinator.

3. No Public in attendance.
 4. Motion to approve the February 5, 2020 agenda.
Meza moved; Deck seconded. Motion Carried.
 5. Motion to approve the Minutes of April 16, 2019.
Meza moved; Sufi seconded. Two abstentions (Fuchs and Deck). Motion Carried.
 6. Perry reviewed the CalPERS report from the agenda packet, noting pages 22, 25 and 30. Discussion regarding future investment scenarios of CalPERS and potential impact to NSCLS future payment obligation; participant data (currently 16 retirees).
- Deck asked about the amortization schedule and if NSCLS proposed any discussion of using the 10 or 5 year payment schedule.

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Perry responded that no discussion had yet been made regarding those payment plan options.

Brinkley noted that CalPERS would recalculate the actual “pay off” amount should NSCLS file a notice of intent to pay entire balance.

Blevins asked about payment to retirees beyond the 15 year amortization period. Perry explained that CalPERS factors in these variables when calculating the amount due.

7. Perry reviewed the proposed cost-share model for CalPERS payments. The same formula that was approved by NSCLS Administrative Council for calculating the FY 2019/20 payment was used to calculate proposed payments for FY 2020/21. In addition, a second model of payment was proposed 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 a NSCLS member library be delayed in making their annual payment.

Meza reported that it would be up to her Finance departments to agree on an increased rate of payment, but the higher amount with buffer was not much more for her libraries than the base rate. She added that she would prefer to pay the higher amount to create the set aside.

Fuchs asked if the Option B payment plan (with buffer) would be constant in future years, or was this a one-time model of payment.

Perry responded that the intent was to make this a one-time bump in payment to add cushion now. He noted that the situation for NSCLS in prior years initiated this proposal.

Blevins responded that she would prefer to pay the increased amount now, as noted in Option B, as future budgets for Lassen may not have the ability to cover the additional costs.

Meza asked if the CalPERS payments are reviewed annually.

Perry confirmed that the CalPERS payments will continue to be reviewed and approved annually by the NSCLS Council. Perry noted that the goal is to have NSCLS build a reserve fund for CalPERS that would cover the payment of the largest member’s obligation – in this case, Butte County.

Deck agreed that supporting the Option B cost share model was a good plan. Deck asked about past NSCLS members and their obligation (Agenda Item #8).

Perry responded that to his knowledge, Colusa County is the only formerly active member of NSCLS and that would have obligations to the CalPERS payment, as they were active in NSCLS during the time NSCLS had employees and incurred the CalPERS obligation. Colusa County has since moved to the Mountain Valley Library System. Perry has been in communication with Colusa County and they are aware that NSCLS is reviewing obligations of past members.

Blevins agreed to support Option B cost share plan for FY 2020/21 payment.

Perry noted that a discount is available off the total FY 2020/21 payment if payment is made before

NORTH STATE COOPERATIVE LIBRARY SYSTEM

July 31, 2020. He agreed that it was worthwhile for NSCSL to review the 10 year and 5 year amortization schedules and suggested that members share those schedules with their Boards and auditors for future consideration.

Motion to approve Option B of cost sharing model for payment of NSCLS CalPERS FY 2020/21.
Fuchs moved; Blevins seconded. Motion Carried.

Perry noted that NLS would send Invoices as soon as possible. Perry requests that Invoices be available soon for budget planning purposes. Perry also stated that he would make himself available to talk with any NSCLS member who was not present at this meeting.

8. Perry continued the former member discussion and stated that Colusa could be included in the cost-share assessment in the future, but acknowledged that while Colusa is obligated, who will pursue through communications and how much would their share off-set the current shared obligations.

Meza recommended that NSCLS obtain legal assistance to communicate with Colusa County Library regarding their CalPERS obligation.

Deck stated that to have credibility with Boards, obligations such as the CalPERS payments do continue, if a member library leaves the system. Deck continued to say that holding Colusa accountable for this obligation sets a correct precedent for the future.

Brinkley reported that the NLS Executive Committee had approved at their August 13, 2019 meeting, up to \$8,000 per system for legal fees.

Perry will contact Colusa director, Stacey Costello, to notify her of this discussion of NSCLS plan to pursue and establish Colusa's CalPERS obligation within NSCLS. Perry continued to say that he had created cost-sharing assessment models to include Colusa and will share those with Costello. The communications with Colusa have been positive and Costello is aware and understands this obligation. Her hesitance is that Colusa County's administration may not be as understanding of their past obligation and it may be difficult to convince them of that on-going commitment.

Perry offered to follow-up with seeking legal assistance on behalf of NSCLS to communicate with Colusa and give official notice of obligation to NSCLS for CalPERS payments.

No other previous or former members are apparent, but Perry will research this. If any additional legal action would be required for Colusa or other former members, Perry will convene a NSCLS meeting.

Deck asked about history or plans for NSCLS to meet in person. Discussion of upcoming opportunities to meet in person might include the NLS Annual Administrative Council Meeting (June 12, 2020) or the proposed Public Library Director's Forum, Oct 21, 2020 in Pasadena, CA (prior to CLA Annual Conference).

Meeting adjourned at 5:06 p.m.



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(650) 349-5538 Fax: (650) 349-5089

www.northnetlibs.org

To: NSCLS Council of Librarians
From: Carol Frost
Subject: Establishing a Cost Share for the Colusa County Library for CalPERS
Unfunded Liability for the North State Cooperative Library System
Date: September 15, 2020

On June 18, 1968 the Colusa County Free Library joined North Sacramento Valley Library Cooperative System. At some time in the past (documentation is not available), this system changed its name to the North State Cooperative Library System (NSCLS). There is a historical memo from 1974 which references the North State Cooperative Library System, so the name change occurred sometime between 1968 and 1974.

On July 1, 2001, the Colusa County Free Library switched membership to join the Mountain Valley Library System (MVLS) with the intent of having greater access to shared collections.

Neither NSCLS nor MVLS has employees currently. Both NSCLS and MVLS have CalPERS liability for former employees.

NSCLS has adopted a shared funding formula for CalPERS obligations which does not currently include Colusa.

At the October 29, 2019 MVLS Administrative Council meeting, a shared funding formula for CalPERS obligations was adopted. Colusa was not included in the shared formula, with the belief that their CalPERS obligations would fall to NSCLS. The approved Minutes reflect the following:

There was a discussion about the Colusa Library, which formerly belonged to North State Cooperative Library System. The Director expressed the opinion that their fiscal obligation to CalPERS payments resides with NSCLS, not MVLS, based on years of membership in NSCLS and relatively recent move to MVLS (estimated at 2008).

Because of this, Colusa's fiscal responsibility for contributing to CalPERS obligations will be with those associated with NSCLS.

Relevant Information from Attorney Hired by NLS for CalPERS Obligations

The NorthNet Library System (NLS) is a cooperative, comprised of the three 'legacy' systems: North State Cooperative Library System, Mountain Valley Library System, and North State Cooperative Library System. Each of these three legacy systems has CalPERS obligations. In

2017, NLS hired Best, Best and Krieger, Attorneys at Law, to examine the CalPERS obligations of the systems.

In a memo from the attorney to NorthNet dated June 12, 2018, the following was asked specifically about North State, and former members, knowing that Colusa was a former member and may have fiscal liability:

What is the liability of North State Cooperative Library System's ("North State") former members? There are libraries that left the system but were members when the retirement benefits were voted on and given to employees. Are they still liable for a portion of the costs, up to when they left the system? Also, is there a formula that will assign each jurisdiction a portion of the liability?

"Under current law: Former members of North State may be held liable for North State's CalPERS obligations which accrued during the former members' respective periods of membership in North State during the same period. Thus, libraries that were members of North State when the retirement benefits were voted on and given to members, should be proportionately liable for their share of the present and future CalPERS obligations which have accrued and are accruing from the period in time in which such libraries were members. Although there is no requisite formula for determining a former member's liability, it would be reasonable to allocate liabilities on a proportionate basis according to the liabilities that accrued while the member was a member of North State, including future liabilities related to that particular membership period, pursuant to Government Code Section 6508.1. The services of an actuarial firm would be necessary to make this determination.

If AB 1912 passes as currently written: All members – former and then current, will need to agree on the apportionment of liability, otherwise CalPERS will apportion liability. Depending on how the members or CalPERS decide(s) to apportion liability, some members could be liable for more or less than what their "proportionate" liability would be if AB 1912 does not pass. For example, a current member which was not active when other members voted on retirement benefits could be liable for all or a significant portion of North State's liability if the members or CalPERS agree(s) to apportion liability in such manner pursuant to AB 1912. On the other hand, if AB 1912 does not pass, it would not be reasonable to allocate liabilities to members which were not active when CalPERS obligations accrued to North State.

Further considerations: Please note, the issue of agreeing on, and collecting, the proportionate or apportioned liability of former members will be challenging for North State, as it appears that North State, at one point, operated under the assumption that its members were not liable for the debts and obligations of the system. In a letter dated August 20, 1999 from Jim Kirks,

System Administrator for North State, to Wanda Green, Secretary for the Library of California, Mr. Kirks stated:

[North State] is one of two Systems in the State of California organized by adoption of "Joint Resolution", rather than Joint Exercise of Powers. This approach was chosen because members of the System are not directly liable as in a JPA where each signatory is directly liable in the event of some legal action involving the JPA and its members.

However, Mr. Kirks' understanding, as expressed in this letter, should not overcome Article II of North State's Bylaws which state that North State's "objectives...shall be to implement and accomplish the purposes described...agreed upon by the member libraries consistent with the provisions of the California Government Code, Sections 6500-6578 (Joint Exercise of Powers)." Since this citation includes Section 6508.1, the shared responsibility provision, North State has a viable argument for demanding that former members agree to apportion and pay for North State's CalPERS liabilities."

The passage of AB1912 (which became effective January 1, 2019), the retirement liabilities of a JPA are the debts of the parties to the JPA agreement. This rule applies on a retroactive and prospective basis. The attorney's assessment of shared liability for NSCLS is as follows (excerpt from November 29, 2018 memorandum):

"With regard to North State, we concluded that members are liable, in proportion with the members' respective periods of membership, because North State's Bylaws voluntarily subject North State to the Joint Exercise of Powers Act, including the shared liability provisions of Government Code section 6508.1.

Members of North Bay and North State will share liability for the retirement obligations of their respective library system. However neither system will be required to allocate liability unless either intends to adopt a resolution of intent to terminate its contract with CalPERS or CalPERS provides either with a notice of a potential termination. Members of North Bay and North State will not be required to apportion liability if their respective systems are not at risk of failing, continue to pay required employer contributions, and do not plan to terminate their CalPERS contract.

Please keep in mind that North State members may be likely to challenge application of AB 1912 since the system was not explicitly formed pursuant to JPA law, but rather a provision in its Bylaws voluntarily subjects North State to JPA law. Moreover, documents previously provided by NorthNet indicate that North State administrators may be under the mistaken impression that the system is not subject to JPA law. However based on our review, we believe the Bylaws are sufficient to show that parties intended for members to be responsible for the debts of North

State, given that JPA law imposed joint liability on member agencies of a JPA absent a clear renunciation of liability pursuant to section 6508.1.”

North State members have agreed by Council approval to annually apportion the cost of the CalPERS unfunded liability among its members through a member shared funding formula. Colusa County Library would be included in this shared liability.

Background of North State Cooperative Library System

There are currently 12 public libraries within NSCLS: Butte County Library, Del Norte County Library District, Humboldt County Library, Lassen Library District, Modoc County Library, Orland Free Library, Plumas County Library, Shasta Libraries, Siskiyou County Library, Tehama County Library, Trinity County Library, and Willows Public Library.

Eleven of the 12 were part of the founding of North Sacramento Valley Library Cooperative (NSVLC), which existed in the 1960s (the date of origin and membership is not clear). Colusa County Free Library was one of the founding members of the cooperative.

In December 1967, they began discussions to become NSCLS, a California cooperative library system. In March 1968, a Plan of Service was drafted for the new NSCLS system. A budget exists from 1969 for the North State Cooperative Library System (NSCLS), and Minutes from that time indicate there were staff.

Background of Employees in NSCLS

There were a total of 44 Staff who were entered into NSCLS CalPERS. Below is a summary of their activity:

- 43 Staff who were in NSCLS CalPERS during Colusa membership
- 1 Employee whose time at NSCLS was solely after Colusa left
- 18 are currently receiving benefits
- 5 are deceased
- There is one deceased employee that is getting payments to their beneficiary
- 2 former-employees are still active and have not retired yet.
- 14 former-employees who have “terminated” their CalPERS membership, which refers to cashing out their retirement contribution.

The last staff person left NSCLS on February 1, 2008, and the last staff person was hired on September 16, 2002. This person is a participant of NSCLS’ CalPERS plan.

Establishing a NSCLS Shared Funding Formula Which Includes Colusa

In reviewing the past Minutes of NSCLS Council of Librarians meetings, a motion was approved at the April 25, 2012 meeting to establish a cost share formula for health care costs for retirees because there was not sufficient fund balance to continue paying, and the health care coverage was terminated in June 30, 2014. At the June 11, 2013 NSCLS Council of Librarian Meeting, a motion was approved for a 'fair share' allocation formula "to be applied for the retiree CalPERS liability, using the same formula approved at the 2012 meeting for the retiree health insurance liability. Since that time, NSCLS has annually reviewed and approved a formula for the annual CalPERS unfunded obligation which is shared among the member libraries. For FY 2020/21, NSCLS approved a 12-tier cost share for the participating libraries:

County	Budget (FY 17/18)	Base Rate	Factor ¹	FY 20/21
Lassen Library	\$ 116,026	\$ 100	10.64	\$ 1,064
Del Norte County	\$ 192,291	\$ 200	10.64	\$ 2,128
Modoc County	\$ 239,233	\$ 300	10.64	\$ 3,192
Willows Public	\$ 270,015	\$ 400	10.64	\$ 4,256
Trinity County	\$ 335,882	\$ 500	10.64	\$ 5,321
Orland Free Library	\$ 377,415	\$ 600	10.64	\$ 6,385
Plumas County Library	\$ 443,216	\$ 700	10.64	\$ 7,449
Siskiyou County Library	\$ 456,343	\$ 800	10.64	\$ 8,513
Tehama County	\$ 668,448	\$ 900	10.64	\$ 9,577
Shasta Public Library	\$ 2,157,973	\$ 1,000	10.64	\$ 10,641
Humboldt County	\$ 2,550,522	\$ 1,100	10.64	\$ 11,705
Butte County	\$ 3,246,028	\$ 1,200	10.64	\$ 12,769
		\$ 7,800		\$ 83,000

If this cost-share factor was applied to Colusa, it would be the following:

Cost-Share Table for FY20/21

Library	FY17/18 Budget	Base Rate	Factor	FY20/21
Lassen Library	\$116,026	\$100	9.121	\$912
Del Norte County	\$192,291	\$200	9.121	\$1,824
Modoc County Library	\$239,233	\$300	9.121	\$2,736
Willows Public Library	\$270,015	\$400	9.121	\$3,648
Trinity County Library	\$335,882	\$500	9.121	\$4,560
Orland Free Library	\$377,415	\$600	9.121	\$5,473
Plumas County Library	\$443,216	\$700	9.121	\$6,385
Siskiyou County Library	\$456,343	\$800	9.121	\$7,297
Tehama County Library	\$668,448	\$900	9.121	\$8,209
Colusa County Library	\$923,889	\$1,000	9.121	\$9,121
Shasta Public Library	\$2,157,973	\$1,100	9.121	\$10,033
Humboldt County Library	\$2,550,522	\$1,200	9.121	\$10,945
Butte County Library	\$3,246,028	\$1,300	9.121	\$11,857
TOTAL		\$9,100		\$83,000

*CSL Ready Report

There remains the question as to whether Colusa County Library is liable for any previous fiscal year payments to NSCLS for CalPERS obligations. Michael Perry, the NSCLS Chair, developed the chart below. The figures were derived from the retirement contributions to CalPERS from NSCLS, whose first payment was during FY 2013/14. The cost share for Colusa is derived using an assumption that Colusa were participating in the cost share at that time. It is worth noting that the Colusa County Librarian has stated that it may be difficult for their system to provide any payment for previous years.

Fiscal Year	Colusa Shared Amount of Total
FY 13-14	\$1,866
FY 14-15	\$1,944
FY 15-16	\$2,933
FY 16-17	\$3,154
FY 17-18	\$3,763
FY 18-19	\$5,023
FY 19-20	\$7,696
FY 20-21	\$9,121
Total	\$35,771

Options for Cost Shares

There are several options for NSCLS:

1. For FY 2021/22, approve a 13 -tier cost share formula which includes Colusa, and Colusa commences participating in the CalPERS unfunded liability shared cost.
2. For FY 2020/21, develop a cost share formula which includes Colusa, and retroactively invoice Colusa for the current CalPERS payment. Since this payment was made in whole, the question about what to do with the funds already received would need to be addressed.
3. For addressing payments for previous years, NSCLS may choose to:
 - a. Determine if these funds can be pursued.
 - b. Determine if NSCLS wants to pursue the payments.
 - c. Determine the structured repayment method. This may include developing a mutually agreed upon model between NSCLS and Colusa County Library for those contributions, such as a lump sum, or a repayment over a period of year. Colusa has previously stated it may be difficult to make any repayment, so additional discussion would be needed on this point.

Recommendation

The Colusa County Library Director has reviewed this data, as has the NSCLS Chair. With this preliminary review complete, the NSCLS Council of Librarians should review the document and approve a motion to include Colusa in the shared funding formula for CalPERS unfunded liabilities. At that time, the Colusa County Library Director will have formal direction to discuss with County, and should additional discussion be needed, the NSCLS Chair and the PLP staff will assist, as necessary.


California Public Employees' Retirement System
Actuarial Office

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 888 CalPERS (or 888-225-7377) | TTY: (877) 249-7442 | www.calpers.ca.gov
July 2020
Miscellaneous Plan of the North State Cooperative Library System
(CalPERS ID: 1897174550)
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%	\$79,239
<i>Projected Results</i>		
2022-23	0.0%	\$79,000

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,

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

SCOTT TERANDO
Chief Actuary



**Actuarial Valuation
as of June 30, 2019**

**for the
Miscellaneous Plan
of the
North State Cooperative Library System
(CalPERS ID: 1897174550)**

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

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Section 2 – Risk Pool Actuarial Valuation Information

Section 1

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

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

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

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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.



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**
- **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 State 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 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, 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

	Fiscal Year
Required Employer Contributions	2021-22
Employer Normal Cost Rate	0.00%
Plus, Either	
1) Monthly Employer Dollar UAL Payment	\$6,603.25
Or	
2) Annual UAL Prepayment Option*	\$76,603
<i>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).</i>	
<i>* 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.</i>	
<i>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.</i>	

	Fiscal Year 2020-21	Fiscal Year 2021-22
Development of Normal Cost as a Percentage of Payroll¹		
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	77,174	79,239
% of Projected Payroll (illustrative only)	N/A	N/A
Estimated Total Employer Contribution	\$77,174	\$79,239
% 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 \$79,239. 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	\$79,239	\$0	\$79,239	\$79,239

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	\$79,239	\$15,051	\$94,290	\$94,290
5 years	\$0	\$79,239	\$82,279	\$161,518	\$161,518

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)	\$2,207,869	\$2,189,404
2. Entry Age Normal Accrued Liability (AL)	2,207,869	2,189,404
3. Plan's Market Value of Assets (MVA)	1,490,619	1,453,630
4. Unfunded Accrued Liability (UAL) [(2) - (3)]	717,250	735,774
5. Funded Ratio [(3) / (2)]	67.5%	66.4%

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	\$79,239	\$79,000	\$79,000	\$79,000	\$79,000	\$79,000

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	131,171
Terminated Members	33,887
Members and Beneficiaries Receiving Payments	2,024,346
Total	\$2,189,404

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	\$2,189,404
2. Projected UAL balance at 6/30/2019	720,178
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: $[(1) - (2)] \div [(3) - (4)] \times (5)$	7,147
8. Plan's Share of Pool's Non-Investment (Gain)/Loss: $(1) \div (3) \times (6)$	8,449
9. Plan's New (Gain)/Loss as of 6/30/2019: $(7) + (8)$	15,596
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: $(2) + (9) + (10)$	\$735,774
12. Plan's Share of Pool's MVA: $(1) - (11)$	\$1,453,630

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	735,774	70,036	714,832	77,174	685,041	79,239
Total						735,774	70,036	714,832	77,174	685,041	79,239

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

Date	<u>Current Amortization Schedule</u>		<u>Alternate Schedules</u>			
	Balance	Payment	10 Year Amortization		5 Year Amortization	
			Balance	Payment	Balance	Payment
6/30/2021	685,041	79,239	685,041	94,290	685,041	161,518
6/30/2022	651,028	79,239	635,460	94,290	565,918	161,517
6/30/2023	614,635	79,239	582,408	94,290	438,458	161,518
6/30/2024	575,694	79,239	525,642	94,290	302,075	161,518
6/30/2025	534,027	79,239	464,903	94,290	156,145	161,518
6/30/2026	489,443	79,239	399,912	94,290		
6/30/2027	441,739	79,240	330,372	94,291		
6/30/2028	390,694	79,239	255,963	94,291		
6/30/2029	336,077	79,240	176,345	94,291		
6/30/2030	277,636	79,239	91,154	94,290		
6/30/2031	215,105	79,240				
6/30/2032	148,196	79,240				
6/30/2033	76,603	79,239				
6/30/2034						
6/30/2035						
6/30/2036						
6/30/2037						
6/30/2038						
6/30/2039						
6/30/2040						
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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		1,030,111		942,903		807,589
Interest Paid		345,070		257,862		122,548
Estimated Savings				87,208		222,522

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%	\$30,751
2017 - 18	0.000%	36,973
2018 - 19	0.000%	45,707
2019 - 20	0.000%	70,036
2020 - 21	0.000%	77,174
2021 - 22	0.00%	79,239

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	\$2,003,701	\$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

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	\$91,000	\$102,000	\$114,000	\$126,000
4.0%				
Normal Cost	0.0%	0.0%	0.0%	0.0%
UAL Contribution	\$85,000	\$91,000	\$97,000	\$104,000
7.0%				
Normal Cost	0.0%	0.0%	0.0%	0.0%
UAL Contribution	\$79,000	\$79,000	\$79,000	\$79,000
9.0%				
Normal Cost	0.0%	0.0%	0.0%	0.0%
UAL Contribution	\$77,000	\$74,000	\$71,000	\$67,000
12.0%				
Normal Cost	0.0%	0.0%	0.0%	0.0%
UAL Contribution	\$71,000	\$62,000	\$51,000	\$39,000

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	\$2,374,601	\$2,189,404	\$2,029,667
c) Market Value of Assets	\$1,453,630	\$1,453,630	\$1,453,630
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$920,971	\$735,774	\$576,037
e) Funded Status	61.2%	66.4%	71.6%

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	\$2,277,476	\$2,189,404	\$2,056,654
c) Market Value of Assets	\$1,453,630	\$1,453,630	\$1,453,630
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$823,846	\$735,774	\$603,024
e) Funded Status	63.8%	66.4%	70.7%

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	\$2,261,197	\$2,189,404	\$2,124,564
c) Market Value of Assets	\$1,453,630	\$1,453,630	\$1,453,630
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$807,567	\$735,774	\$670,934
e) Funded Status	64.3%	66.4%	68.4%

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	2,051,236	2,024,346
2. Total Accrued Liability	2,207,869	2,189,404
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, 2018	June 30, 2019
1. Number of Actives	0	0
2. Number of Retirees	16	16
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	\$1,490,619	\$1,453,630
2. Payroll	0	0
3. Asset Volatility Ratio (AVR) [(1) / (2)]	N/A	N/A
4. Accrued Liability	\$2,207,869	\$2,189,404
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

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%
\$1,453,630	\$3,687,731	39.4%	\$2,234,101	\$3,219,675	45.2%	\$1,766,045

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	3	3
Separated	3	3
Retired	16	16

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
(www.calpers.ca.gov) in the Forms and
Publications section**

FY 21/22 NSCLS CalPERS Cost-Share

Background – Cost-Share Amount for last year FY 20/21

The cost-share model introduced last fiscal year (FY 20/21) assigned a unique base-rate value to each library system, depending on its budget size, from smallest to largest (based on the “Local Government Income” data in the California State Library report).

For FY 20/21, we selected to cost-share amount of \$83,000 (based on a more conservative CalPERS return on investment of 4%) than the actual requested amount of \$77,173 to help build a small reserve for future years – especially if a library member encounters push-back from local leaders to pay their annual contribution.

Cost-share table for FY 20/21 based on 4% rate of return

County	Budget (FY 17/18)	Base Rate	Factor ¹	FY 20/21
Lassen Library	\$ 116,026	\$ 100	10.64	\$ 1,064
Del Norte County	\$ 192,291	\$ 200	10.64	\$ 2,128
Modoc County	\$ 239,233	\$ 300	10.64	\$ 3,192
Willows Public	\$ 270,015	\$ 400	10.64	\$ 4,256
Trinity County	\$ 335,882	\$ 500	10.64	\$ 5,321
Orland Free Library	\$ 377,415	\$ 600	10.64	\$ 6,385
Plumas County Library	\$ 443,216	\$ 700	10.64	\$ 7,449
Siskiyou County Library	\$ 456,343	\$ 800	10.64	\$ 8,513
Tehama County	\$ 668,448	\$ 900	10.64	\$ 9,577
Shasta Public Library	\$ 2,157,973	\$ 1,000	10.64	\$ 10,641
Humboldt County	\$ 2,550,522	\$ 1,100	10.64	\$ 11,705
Butte County	\$ 3,246,028	\$ 1,200	10.64	\$ 12,769
		\$ 7,800		\$ 83,000

In July 2020, we were able to collect our membership contributions and pay a lump-sum payment of \$74,607 (the discounted amount) saving \$2,567.

Heading into FY 21/22, we should have a minimum reserve of ~\$8,393

$$\$83,000 - \$74,607 = \$8,393$$

Calculation without Colusa for FY 21/22

North State's CalPERS minimum obligation is \$79,239¹

¹ If paid by July 31, 2021, the amount would be discounted to \$76,603, but for the purposes of this document, we will reference the minimum amount needed as \$79,239.

Option A – FY 21/22 Calculation with Minimum Amount

Calculating the Factor value

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

$$\frac{\$79,239}{7,800} = 10.159$$

Cost-share table for FY 21/22 for \$79,239

County	Budget (FY 18/19)	Base Rate	Factor	FY 20/21
Lassen Library	\$ 110,338	\$ 100	10.16	\$ 1,016
Del Norte County	\$ 199,541	\$ 200	10.16	\$ 2,032
Modoc County	\$ 239,000	\$ 300	10.16	\$ 3,048
Willows Public	\$ 285,339	\$ 400	10.16	\$ 4,064
Trinity County	\$ 372,126	\$ 500	10.16	\$ 5,079
Plumas County	\$ 422,987	\$ 600	10.16	\$ 6,095
Orland Free Library	\$ 460,351	\$ 700	10.16	\$ 7,111
Tehama County	\$ 682,177	\$ 800	10.16	\$ 8,127
Siskiyou County Library	\$ 692,032	\$ 900	10.16	\$ 9,143
Shasta Public Library	\$ 2,207,073	\$ 1,000	10.16	\$ 10,159
Humboldt County	\$ 2,679,942	\$ 1,100	10.16	\$ 11,175
Butte County	\$ 3,298,630	\$ 1,200	10.16	\$ 12,191
		\$ 7,800		\$ 79,240

Budget data used is "Local Government Income" data from the latest California State Library report (FY 18/19).

Calculating a Library System's Total

To find the amount each system is owed, we take its respective Base Rate and multiply it by the Factor.

So for Modoc, its cost-share for FY 21/22 is $\$300 \times 10.16 \approx \$3,048$

Option B – Using 4% Return of Investment

The \$79,239 aligns approximately with CalPERS expected rate of return of investments of 7%.

Ideally, if the CalPERS investments always return 7%, our amount owed will always be in the ballpark of \$77,000 until 2033, assuming the cost to our retirees doesn't alter significantly (see table on pages 6 and the Amortization Schedule on page 13 of *CalPERS Actuarial Valuation Report, dated June 30, 2019*).

For this Option B, North State could consider the rate of return was 4%, North State would need to contribute \$85,000 instead of \$79,239 (see table on page 16 of *CalPERS Actuarial Valuation Report, dated June 30, 2019*). This is the option NSCLS we chose for FY 19/20.

Cost-share table for FY 21/22 based on 4% rate of return

County	Budget (FY 18/19)	Base Rate	Factor	FY 20/21
Lassen Library	\$ 110,338	\$ 100	10.90	\$ 1,090
Del Norte County	\$ 199,541	\$ 200	10.90	\$ 2,179
Modoc County	\$ 239,000	\$ 300	10.90	\$ 3,269
Willows Public	\$ 285,339	\$ 400	10.90	\$ 4,359
Trinity County	\$ 372,126	\$ 500	10.90	\$ 5,449
Plumas County	\$ 422,987	\$ 600	10.90	\$ 6,538
Orland Free Library	\$ 460,351	\$ 700	10.90	\$ 7,628
Tehama County	\$ 682,177	\$ 800	10.90	\$ 8,718
Siskiyou County Library	\$ 692,032	\$ 900	10.90	\$ 9,808
Shasta Public Library	\$ 2,207,073	\$ 1,000	10.90	\$ 10,897
Humboldt County	\$ 2,679,942	\$ 1,100	10.90	\$ 11,987
Butte County	\$ 3,298,630	\$ 1,200	10.90	\$ 13,077
		\$ 7,800		\$ 84,999

Budget data used is "Local Government Income" data from the latest California State Library report (FY 18/19).

Contributing based on a lower return on investment will allow NSCLS to continue to build our reserve as we started in FY 20/21 and help the reserve meet a few needs:

- 1) To be of sufficient size to absorb the missed payment from our largest member
- 2) To make it more likely to meet July 31, 2021 early lump-sum payment date (as we have a bigger reserve to "dip" into if anyone's payment is held up)
- 3) To reduce the overall amount owed, especially as the full impact on budgets due to COVID is still unknown

Calculation with Colusa for FY 21/22

North State's CalPERS minimum obligation is \$79,239

Option C – FY 21/22 Calculation with Minimum Amount, with Colusa

If we include Colusa's cost-share contribution, the membership factor and cost-share amount would be lower.

Calculating the Factor value

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

$$\frac{\$79,239}{9,100} = 8.707$$

Cost-share table for FY 21/22, including Colusa, for \$79,239

County	Budget (FY 18/19)	Base Rate	Factor	FY 20/21
Lassen Library	\$ 110,338	\$ 100	8.71	\$ 871
Del Norte County	\$ 199,541	\$ 200	8.71	\$ 1,742
Modoc County	\$ 239,000	\$ 300	8.71	\$ 2,612
Willows Public	\$ 285,339	\$ 400	8.71	\$ 3,483
Trinity County	\$ 372,126	\$ 500	8.71	\$ 4,354
Plumas County	\$ 422,987	\$ 600	8.71	\$ 5,225
Orland Free Library	\$ 460,351	\$ 700	8.71	\$ 6,095
Tehama County	\$ 682,177	\$ 800	8.71	\$ 6,966
Siskiyou County Library	\$ 692,032	\$ 900	8.71	\$ 7,837
Colusa County	\$ 872,335	\$ 1,000	8.71	\$ 8,708
Shasta Public Library	\$ 2,207,073	\$ 1,100	8.71	\$ 9,578
Humboldt County	\$ 2,679,942	\$ 1,200	8.71	\$ 10,449
Butte County	\$ 3,298,630	\$ 1,300	8.71	\$ 11,320
		9,100		\$ 79,240

Option D – Using 4% Return of Investment, with Colusa

Calculating the Factor value

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

$$\frac{\$85,000}{9,100} = 9.341$$

Cost-share table for FY 21/22, including Colusa, based on 4% rate of return

County	Budget (FY 18/19)	Base Rate	Factor	FY 20/21
Lassen Library	\$ 110,338	\$ 100	9.34	\$ 934
Del Norte County	\$ 199,541	\$ 200	9.34	\$ 1,868
Modoc County	\$ 239,000	\$ 300	9.34	\$ 2,802
Willows Public	\$ 285,339	\$ 400	9.34	\$ 3,736
Trinity County	\$ 372,126	\$ 500	9.34	\$ 4,670
Plumas County	\$ 422,987	\$ 600	9.34	\$ 5,604
Orland Free Library	\$ 460,351	\$ 700	9.34	\$ 6,538
Tehama County	\$ 682,177	\$ 800	9.34	\$ 7,473
Siskiyou County Library	\$ 692,032	\$ 900	9.34	\$ 8,407
Colusa County	\$ 872,335	\$ 1,000	9.34	\$ 9,341
Shasta Public Library	\$ 2,207,073	\$ 1,100	9.34	\$ 10,275
Humboldt County	\$ 2,679,942	\$ 1,200	9.34	\$ 11,209
Butte County	\$ 3,298,630	\$ 1,300	9.34	\$ 12,143
		9,100		\$ 85,000

Action Item

Approve, one of the following cost-share amounts shown

- a) Option A – pay \$79,239 without considering Colusa
- b) Option B – pay \$85,000 without considering Colusa
- c) Option C – pay \$79,239 including Colusa
- d) Option D – pay \$85,000 including Colusa

as the associated cost-share amounts for each library system to pay for FY 21/22.