NORTH BAY COOPERATIVE LIBRARY SYSTEM

Board of Directors Meeting
Thursday, May 31, 2018
3:00 - 4:00 P.M.
Conference Call Meeting

1.	Call to Order	Bankhead	
2.	Roll Call	Bankhead	
3.	Public invited to address the Council		
4.	Approval of Agenda **(Action Item)**	Bankhead	
5.	Approval of Minutes of May 30, 2017 Meeting **(Action Item)**	Brinkley	Attachment 1
6.	Approve NBCLS FY 2018/19 CalPERS Payment **(Action Item)**	Brinkley	Attachment 2
7.	Setting 2019 system payments for Retiree Health Insurance **(Action Item)** (to be distributed separately prior to meeting)	Brinkley	
8.	Adoption of Resolution regarding Retiree Health Insurance **(Action Item)** (to be distributed separately prior to meeting)	Brinkley	
9.	Adoption of NBCLS FY 2018/19 Proposed Budget **(Action Item)**	Brinkley	Attachment 3
10.	Election of Chair and Vice Chair FY 2018/19	Bankhead	
11.	Adjournment	Bankhead	

Conference Call Information
Phone Number: 1-877-216-1555
Passcode: 907394

Brown Act:
The legislative body of a local agency may use teleconferencing in connection with any meeting or proceeding authorized by law. Cal. Gov't Code §54953(b)(1). A "teleconference" is "a meeting of a legislative body, the members of which are in different locations, connected by electronic means, through either audio or video, or both." Cal. Gov't Code § 54953(b)(4). A local agency may provide the public with additional teleconference locations. Cal. Gov't Code § 54953(b)(4).

The teleconferenced meeting must meet the following requirements:

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

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

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

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

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

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

Meeting Locations

Belvedere-Tiburon Library	1501 Tiburon Boulevard, Tiburon, CA 94920
Benicia Public Library	150 East L Street, Benicia, CA 94510
Dixon Public Library	230 North First Street, Dixon, CA 95620
Lake County Library	1425 N. High Street, Lakeport, CA 95453
Larkspur Public Library	400 Magnolia Avenue, Larkspur, CA 94939
Marin County Free Library	3501 Civic Center Drive, #414, San Rafael, CA 94903
Mendocino County Library	105 North Main Street, Ukiah, CA 95482
Mill Valley Public Library	375 Throckmorton Avenue, Mill Valley, CA 94941
Napa County Library	580 Coombs Street, Napa, CA 94559
St. Helena Public Library	1492 Library Lane, St. Helena, CA 94574
San Anselmo Public Library	110 Tunstead Avenue, San Anselmo, CA 94960
San Rafael Public Library	1100 E Street, San Rafael, CA 94901
Sausalito Public Library	420 Litho Street, Sausalito, CA 94965
Solano County Library	1150 Kentucky Street, Fairfield, CA 94533
Sonoma County Library	211 E Street, Santa Rosa, CA 95404
Dominican University	50 Acacia Avenue, San Rafael, CA 94901

NORTH BAY COOPERATIVE LIBRARY SYSTEM

Board of Directors Meeting Minutes
Tuesday, May 30, 2017
Adobe Virtual Meeting

1. Meeting called to order at 2:03 p.m. by Chair, Henry Bankhead.
2. Roll Call
   Present were: Henry Bankhead (San Rafael Public Library), Sarah Houghton (San Rafael Public Library), Chris Kreiden (St. Helena Public Library), Linda Kenton (San Anselmo Public Library), David Dodd (Benicia Public Library), Danis Kreimeier, (Napa County Library), Bonnie Katz (Solano County Library), Tracy Gray (Sonoma County Library), . Also present was Jacquie Brinkley, NorthNet Library System/Pacific Library Partnership.

3. Public address – No public in attendance.
4. Approval of Agenda.
   Motion to approve – Kreimeier moved. Kenton seconded. Motion approved.
   Later in meeting, Agenda Item # 6 was moved to after Item #7.

5. Approval of Minutes of August 22, 2016
   Motion to approve – Katz moved. Kreimeier seconded.
   Dodd and Gray abstained. Motion approved.

6. FY 2017/18 Budget – Requested to Hold until after Agenda Item #7
7. Health Insurance Premiums for retirees

   Kreimeier recommended that after this year's payment of health insurance premiums, the 2 NBCLS retirees be contacted to notify them that future payments on premiums will be capped, as fund balance is being depleted with this and CalPERS payment obligations.

   Discussion ensued re: existing fund balance and NBCLS obligations on future retirees re: CalPERS that will deplete remaining fund balance within a short amount of time. Members stated that not all employees have retired and NBCLS is not currently aware of all future obligations. Contracts on current retirees need to be analyzed to determine NBCLS's obligations to continue health insurance payments and at what proportion to retirees' contribution.

   Kreimeier reported that NLS had just contracted with an attorney to research CalPERS obligations of current and former system members within each legacy system. CalPERS issues will be covered in that research and recommendations will be provided to each of the systems for their consideration and any action approved by the Board.

   NBCLS Board directed Brinkley to obtain the following documents to assist in the research and decision making for future health insurance payments on current retirees:

- MOU from NBCLS with Golden State Risk Management Authority
- Severance contract for the two retirees for which health insurance premiums are being paid.

Banks asked that agenda move back to Item #6, Approval of Budget, following this discussion.

Item # 6 - FY 2017/18 Budget – Motion to Approve FY 2017/18 Budget. Dodd Moved. Kreimeier seconded. Motion approved.

Item #7 - Retiree Health Insurance Payments

Motion to Approve – Kremeier moved with direction to discover legal obligations. Dodd seconded. Motion approved.

8. Adoption of Resolution #536 Retiree Health Insurance

Discussion continued regarding the obligation for NBCLS of payment on health insurance and if this is a contract benefit. Referred back to request of obtaining all contracts and MOUs regarding this issue to determine what agreements were made when severance was initiated. Will also look at dates of contract payments, as they do not currently align with NBCLS budget cycle.

NBCLS Board directed Brinkley to research and report back on the following for consideration in FY 2018/19 Budget review:

- Can payment move from calendar year to fiscal year?
- Is there any history of NBCLS paying only a portion, or a reduced portion of the premium?
- Can current contract with Golden State be paid on a six-month schedule, so as not to commit NBCLS beyond their budget year?

Motion to approve Resolution #536. Kenton moved. Kreimeier seconded. Motion approved.

9. Election of Chair and Vice Chair for FY 2017/18
No nominations voiced. Bankhead offered to continue as Chair for another term. Kenton requested that a new member take on the Vice Chair role. Kreimeier suggested that an NLS Executive Committee member from NBCLS be nominated to the Vice Chair position. Katz offered to speak with Suzanne Olawaski, current NLS EC member. Olawaski joined the meeting and agreed to the nomination.
Motion to approve the slate of nominees for FY 2017/18. Bankhead as Chair; Olawaski as Vice Chair. Kreimeier moved. Kenton seconded. Motion approved.

Meeting Adjourned by Chair at 2:50 p.m.

California Public Employees' Retirement System
Actuarial Office
P.O. Box 942709
Sacramento, CA 94229-2709
TTY: (916) 795-3240
(888) 225-7377 phone – (916) 795-2744 fax
www.calpers.ca.gov

August 2017

MISCELLANEOUS PLAN OF THE NORTH BAY COOPERATIVE LIBRARY SYSTEM
(CalPERS ID: 2429114785)
Annual Valuation Report as of June 30, 2016

Dear Employer,

As an attachment to this letter, you will find a copy of the June 30, 2016 actuarial valuation report of the pension plan.

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, 2016.

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

Your June 30, 2016 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 31, 2017.

The exhibit below displays the minimum employer contributions, before any cost sharing, for Fiscal Year 2018-19 along with estimates of the required contributions for Fiscal Years 2019-20 and 2020-21. 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**.

Required Contribution

Fiscal Year	Employer Normal Cost Rate	Employer Payment of Unfunded Liability
2018-19	0.000%	$32,165
Projected Results		
2019-20	*0.0%*	*$45,000*
2020-21	*0.0%*	*$52,000*

The actual investment return for Fiscal Year 2016-17 was not known at the time this report was prepared. The projections above assume the investment return for that year would be 7.375 percent. ***If the actual investment return for Fiscal Year 2016-17 differs from 7.375 percent, the actual contribution requirements for the projected years will differ from those shown above.***

Moreover, the projected results for Fiscal Years 2019-20 and 2020-21 also assume that there are no future plan changes, no further changes in assumptions other than those recently approved, and no liability gains or losses. Such changes can have a significant impact on required contributions. Since they cannot be predicted in advance, the projected employer results shown above are estimates. The actual required employer contributions for Fiscal Year 2019-20 will be provided in next year's report.

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.

The "Risk Analysis" section of the valuation report also contains estimated employer contributions in future years under a variety of investment return scenarios.

Changes since the Prior Year's Valuation

On December 21, 2016, the CalPERS Board of Administration lowered the discount rate from 7.50 percent to 7.00 percent using a three year phase-in beginning with the June 30, 2016 actuarial valuations. The minimum employer contributions for Fiscal Year 2018-19 determined in this valuation were calculated using a discount rate of 7.375 percent. The projected employer contributions on Page 5 are calculated assuming that the discount rate will be lowered to 7.25 percent next year and to 7.00 percent the following year as adopted by the Board.

The CalPERS Board of Administration adopted a Risk Mitigation Policy which is designed to reduce funding risk over time. This Policy has been temporarily suspended during the period over which the discount rate is being lowered. More details on the Risk Mitigation Policy can be found on our website.

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

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

We understand that you might have a number of 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 31 to contact us with actuarial related questions.

If you have other questions, please call our customer contact center at (888) CalPERS or (**888-225-7377**).

Sincerely,

SCOTT TERANDO
Chief Actuary

ACTUARIAL VALUATION
as of June 30, 2016

for the
MISCELLANEOUS PLAN
of the
NORTH BAY COOPERATIVE LIBRARY SYSTEM

(CalPERS ID: 2429114785)

REQUIRED CONTRIBUTIONS
FOR FISCAL YEAR
July 1, 2018 - June 30, 2019

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Section 1

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Plan Specific Information for the MISCELLANEOUS PLAN of the NORTH BAY COOPERATIVE LIBRARY SYSTEM

(CalPERS ID: 2429114785)
(Rate Plan: 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, 2016 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, 2016 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 actuary has 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 Unfunded Accrued Liability amortization bases as of June 30, 2016 and employer contribution as of July 1, 2018, 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
Plan Actuary

HIGHLIGHTS AND EXECUTIVE SUMMARY

- **INTRODUCTION**
- **PURPOSE OF SECTION 1**
- **REQUIRED EMPLOYER CONTRIBUTION**
- **PLAN'S FUNDED STATUS**
- **PROJECTED EMPLOYER CONTRIBUTIONS**
- **CHANGES SINCE THE PRIOR YEAR'S VALUATION**
- **SUBSEQUENT EVENTS**

Introduction

This report presents the results of the June 30, 2016 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 2018-19.

Purpose of Section 1

This Section 1 report for the MISCELLANEOUS PLAN of the NORTH BAY COOPERATIVE LIBRARY SYSTEM of the California Public Employees' Retirement System (CalPERS) was prepared by the plan actuary in order to:

- Set forth the assets and accrued liabilities of this plan as of June 30, 2016;
- Determine the required employer contribution for this plan for the fiscal year July 1, 2018 through June 30, 2019; and
- Provide actuarial information as of June 30, 2016 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.

California Actuarial Advisory Panel Recommendations

This report includes all the basic disclosure elements as described in the *Model Disclosure Elements for Actuarial Valuation Reports* recommended in 2011 by the California Actuarial Advisory Panel (CAAP), with the exception of including the original base amounts of the various components of the unfunded liability in the Schedule of Amortization Bases shown on page 9.

Additionally, this report includes the following "Enhanced Risk Disclosures" also recommended by the CAAP in the Model Disclosure Elements document:

- A "Deterministic Stress Test," projecting future results under different investment income scenarios
- A "Sensitivity Analysis," showing the impact on current valuation results using alternative discount rates of 6.0 percent, 7.0 percent and 8.0 percent.

Required Employer Contribution

		Fiscal Year
Required Employer Contribution		**2018-19**
Employer Normal Cost Rate		**0.000%**
Plus Either		
1) Monthly Employer Dollar UAL Payment	**$**	**2,680.42**
Or		
2) Annual Lump Sum Prepayment Option	**$**	**31,041**

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)****. 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.*

§ 20572 of the Public Employees' Retirement Law assesses interest at an annual rate of 10 percent if a contracting agency fails to remit the required contributions when due.

		Fiscal Year 2017-18		Fiscal Year 2018-19
Development of Normal Cost as a Percentage of Payroll[1]				
Base Total Normal Cost for Formula		0.000%		0.000%
Surcharge for Class 1 Benefits[2]				
None		0.000%		0.000%
Phase out of Normal Cost Difference[3]		0.000%		0.000%
Plan's Total Normal Cost		0.000%		0.000%
Formula's Expected Employee Contribution Rate		0.000%		0.000%
Employer Normal Cost Rate		0.000%		0.000%
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]		20,584		32,165
% of Projected Payroll (illustrative only)		0.000%		0.000%
Estimated Total Employer Contribution	$	20,584	$	32,165
% of Projected Payroll (illustrative only)		0.000%		0.000%

[1] The results shown for Fiscal Year 2017-18 reflect the prior year valuation and may not take into account any lump sum payment, side fund payoff, or rate adjustment made after June 30, 2016.

[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 percent for the first year of pooling, and is incrementally reduced by 20 percent 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 page 9 for a breakdown of the Amortization Bases.

Plan's Funded Status

		June 30, 2015		June 30, 2016
1. Present Value of Projected Benefits (PVB)	$	2,614,774	$	2,621,543
2. Entry Age Normal Accrued Liability (AL)		2,614,774		2,621,543
3. Plan's Market Value of Assets (MVA)		2,153,765		1,970,346
4. Unfunded Accrued Liability (UAL) [(2) - (3)]		461,009		651,197
5. Funded Ratio [(3) / (2)]		82.4%		75.2%

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 projected employer contributions (before cost sharing) for the next six fiscal years. Projected results reflect the adopted changes to the discount rate described in Appendix A, "Statement of Actuarial Data, Methods and Assumptions" of the Section 2 report. The projections also assume that all actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur during the projection period.

	Required Contribution	Projected Future Employer Contributions (Assumes 7.375% Return for Fiscal Year 2016-17)					
Fiscal Year	**2018-19**	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**	**2024-25**
Normal Cost %	0.000%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
UAL Payment	$32,165	$45,000	$52,000	$62,000	$69,000	$72,000	$75,000

Changes in the UAL due to actuarial gains or losses as well as changes in actuarial assumptions or methods are amortized using a 5-year ramp up. For more information, please see "Amortization of the Unfunded Actuarial Accrued Liability" under "Actuarial Methods" in Appendix A of Section 2. This method phases in the impact of unanticipated changes in UAL over a 5-year period and attempts to minimize 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 where 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.

Due to the adopted changes in the discount rate for the next two valuations in combination with the 5-year phase-in ramp, the increases in the required contributions are expected to continue for seven years from Fiscal Year 2018-19 through Fiscal Year 2024-25.

For projected contributions under alternate investment return scenarios, please see the "Analysis of Future Investment Return Scenarios" in the "Risk Analysis" section.

Changes since the Prior Year's Valuation

Benefits

None. This valuation generally reflects plan changes by amendments effective before the date of the report. Please refer to the "Plan's Major Benefit Options" and Appendix B of Section 2 for a summary of the plan provisions used in this valuation.

Actuarial Methods and Assumptions

On December 21, 2016, the CalPERS Board of Administration lowered the discount rate from 7.50 percent to 7.00 percent using a three year phase-in beginning with the June 30, 2016 actuarial valuations. The minimum employer contributions for Fiscal Year 2018-19 determined in this valuation were calculated using a discount rate of 7.375 percent. The projected employer contributions on Page 5 are calculated assuming that the discount rate will be lowered to 7.25 percent next year and 7.00 percent the following year as adopted by the Board. The decision to reduce the discount rate was primarily based on reduced capital market assumptions provided by external investment consultants and CalPERS investment staff. The specific decision adopted by the Board reflected recommendations from CalPERS staff and additional input from employer and employee stakeholder groups. Based on the investment allocation adopted by the Board and capital market assumptions, the reduced discount rate assumption provides a more realistic assumption for the long term investment return of the fund.

Notwithstanding the Board's decision to phase into a 7.0 percent discount rate, subsequent analysis of the expected investment return of CalPERS assets or changes to the investment allocation may result in a change to this three year discount rate schedule. A comprehensive analysis of all actuarial assumptions and methods including the discount rate will be conducted in 2017.

Subsequent Events

The contribution requirements determined in this actuarial valuation report are based on demographic and financial information as of June 30, 2016. Changes in the value of assets subsequent to that date are not reflected. Declines in asset values will increase the required contribution, while investment returns above the assumed rate of return will decrease the actuarial cost of the plan.

This actuarial valuation report reflects statutory changes, regulatory changes and CalPERS Board actions through January 2017. 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 MVA
- SCHEDULE OF PLAN'S AMORTIZATION BASES
- 30-YEAR AMORTIZATION SCHEDULE AND ALTERNATIVES
- EMPLOYER CONTRIBUTION HISTORY
- FUNDING HISTORY

Breakdown of Entry Age Normal Accrued Liability

1.	Active Members	$	0
2.	Transferred Members		544,356
3.	Terminated Members		132,564
4.	Members and Beneficiaries Receiving Payments		1,944,623
5.	Total	$	2,621,543

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	$	2,621,543
2.	Projected UAL balance at 6/30/16		488,695
3.	Pool's Accrued Liability	$	14,775,287,594
4.	Sum of Pool's Individual Plan UAL Balances at 6/30/16		2,987,498,021
5.	Pool's 2015/16 Investment & Asset (Gain)/Loss		771,070,186
6.	Pool's 2015/16 Other (Gain)/Loss		(95,296,686)
7.	Plan's Share of Pool's Asset (Gain)/Loss [(1)-(2)]/[(3)-(4)] * (5)		139,515
8.	Plan's Share of Pool's Other (Gain)/Loss [(1)]/[(3)] * (6)		(16,908)
9.	Plan's New (Gain)/Loss as of 6/30/2016 [(7)+(8)]	$	122,607
10.	Increase in Pool's Accrued Liability due to Change in Assumptions		224,853,121
11.	Plan's Share of Pool's Change in Assumptions [(1)]/[(3)] * (10)	$	39,895

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

1.	Plan's Accrued Liability	$	2,621,543
2.	Plan's UAL	$	651,197
3.	Plan's Share of Pool's MVA [(1)-(2)]	$	**1,970,346**

Schedule of Plan's Side Fund and Other Amortization Bases

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, 2016.
- The employer contribution determined by the valuation is for the fiscal year beginning two years after the valuation date: Fiscal Year 2018-19.

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 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 payment on the UAL for the fiscal year and adjusting for interest.

							Amounts for Fiscal 2018-19	
Reason for Base	**Date Established**	**Amortization Period**	**Balance 6/30/16**	**Payment 2016-17**	**Balance 6/30/17**	**Payment 2017-18**	**Balance 6/30/18**	**Scheduled Payment for 2018-19**
SIDE FUND	2013 or Prior	9	$(194,304)	$(25,618)	$(182,088)	$(25,618)	$(168,971)	$(25,429)
SHARE OF PRE-2013 POOL UAL	06/30/13	21	$284,688	$25,408	$279,355	$25,408	$273,629	$25,109
ASSET (GAIN)/LOSS	06/30/13	27	$359,011	$13,361	$371,643	$20,042	$378,284	$26,376
NON-ASSET (GAIN)/LOSS	06/30/13	27	$9,330	$347	$9,659	$521	$9,831	$686
ASSET (GAIN)/LOSS	06/30/14	28	$(213,080)	$(4,182)	$(224,461)	$(8,363)	$(232,349)	$(12,376)
NON-ASSET (GAIN)/LOSS	06/30/14	28	$225	$4	$237	$9	$245	$13
ASSUMPTION CHANGE	06/30/14	18	$126,267	$3,063	$132,405	$6,126	$135,822	$9,094
ASSET (GAIN)/LOSS	06/30/15	29	$126,480	$0	$135,808	$2,668	$143,059	$5,261
NON-ASSET (GAIN)/LOSS	06/30/15	29	$(9,922)	$0	$(10,654)	$(209)	$(11,223)	$(413)
ASSET (GAIN)/LOSS	06/30/16	30	$139,515	$0	$149,804	$0	$160,852	$3,116
NON-ASSET (GAIN)/LOSS	06/30/16	30	$(16,908)	$0	$(18,155)	$0	$(19,494)	$(378)
ASSUMPTION CHANGE	06/30/16	20	$39,895	$0	$42,837	$0	$45,997	$1,105
TOTAL			**$651,197**	**$12,383**	**$686,390**	**$20,584**	**$715,682**	**$32,164**

The (gain)/loss bases are the plan's allocated share of the risk pool's (gain)/loss for the fiscal year as disclosed on the previous page. These (gain)/loss bases will be amortized according to Board policy over 30 years with a 5-year ramp-up.

If the total Unfunded Liability is negative (i.e., plan has a surplus), the scheduled payment is $0, because the minimum required contribution under PEPRA must be at least equal to the normal cost.

30-Year Amortization Schedule and Alternatives

The amortization schedule on the previous page shows the minimum contributions required according to CalPERS amortization policy. There has been considerable interest from many agencies in paying off these unfunded accrued liabilities sooner and the possible savings in doing so. As a result, we have provided alternate amortization schedules to help analyze the current amortization schedule and illustrate the advantages 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) alternate "fresh start" amortization schedules using two sample periods that would both result in interest savings relative to the current amortization schedule. Note that the payments under each alternate scenario increase by 3 percent for each year into the future. **The schedules do not attempt to reflect any experience after June 30, 2016 that may deviate from the actuarial assumptions. Therefore, future amortization payments displayed in the Current Amortization Schedule may not match projected amortization payments shown in connection with Projected Employer Contributions provided elsewhere in this report.**

The Current Amortization Schedule typically contains individual bases that are both positive and negative. Positive bases result from plan changes, assumption changes or plan experience that result in increases to unfunded liability. Negative bases result from plan changes, assumption changes or plan experience that result in decreases to 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:

- A positive total unfunded liability with a negative total payment,
- A negative total unfunded liability with a positive total payment, or
- Total payments that completely amortize the unfunded liability over a very short period of time

In any year where 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. For purposes of this display, total payments include any negative payments. Therefore, the amount of estimated savings may be understated to the extent that negative payments appear in the current schedule.

30-Year Amortization Schedule and Alternatives

			Alternate Schedules			
	Current Amortization Schedule		25 Year Amortization		20 Year Amortization	
Date	**Balance**	**Payment**	**Balance**	**Payment**	**Balance**	**Payment**
6/30/2018	715,682	32,165	715,682	61,282	715,682	67,106
6/30/2019	735,133	44,109	704,961	61,282	698,926	67,106
6/30/2020	743,643	49,287	693,451	61,282	680,936	67,106
6/30/2021	747,415	55,555	681,091	61,282	661,618	67,106
6/30/2022	744,970	59,399	667,819	61,282	640,875	67,106
6/30/2023	738,361	59,399	653,569	61,282	618,603	67,106
6/30/2024	731,266	59,399	638,268	61,282	594,688	67,106
6/30/2025	723,646	59,399	621,838	61,282	569,010	67,106
6/30/2026	715,465	59,399	604,197	61,282	541,437	67,106
6/30/2027	706,681	84,828	585,255	61,282	511,832	67,106
6/30/2028	670,899	84,828	564,916	61,282	480,042	67,106
6/30/2029	632,478	84,828	543,076	61,282	445,909	67,106
6/30/2030	591,223	84,828	519,626	61,282	409,258	67,106
6/30/2031	546,926	84,828	494,447	61,282	369,904	67,106
6/30/2032	499,362	81,796	467,411	61,282	327,647	67,106
6/30/2033	451,431	78,765	438,380	61,282	282,275	67,106
6/30/2034	403,106	74,629	407,209	61,282	233,555	67,106
6/30/2035	355,503	70,493	373,739	61,282	181,243	67,106
6/30/2036	308,675	66,357	337,800	61,282	125,073	67,106
6/30/2037	262,680	65,252	299,211	61,282	64,761	67,106
6/30/2038	214,438	64,147	257,776	61,282		
6/30/2039	163,783	39,037	213,286	61,282		
6/30/2040	135,411	39,037	165,514	61,282		
6/30/2041	104,946	32,272	114,218	61,282		
6/30/2042	79,246	29,627	59,140	61,282		
6/30/2043	54,390	24,559				
6/30/2044	32,953	16,751				
6/30/2045	18,025	8,944				
6/30/2046	10,087	7,902				
6/30/2047	2,643	2,739				
Totals		**1,604,551**		**1,532,056**		**1,342,125**
Interest Paid		**888,869**		**816,375**		**626,444**
Estimated Savings				**72,495**		**262,426**

* This schedule does not reflect the impact of adopted discount rate changes that will become effective beyond June 30, 2016. For Projected Employer Contributions, please see Page 5.

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

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

RISK ANALYSIS

- **ANALYSIS OF FUTURE INVESTMENT RETURN SCENARIOS**
- **ANALYSIS OF DISCOUNT RATE SENSITIVITY**
- **VOLATILITY RATIOS**
- **HYPOTHETICAL TERMINATION LIABILITY**

Analysis of 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 (2016-17, 2017-18, 2018-19 and 2019-20). 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.

Each of the five investment return scenarios assumes a return of 7.375 percent for fiscal year 2016-17. For fiscal years 2017-18, 2018-19, and 2019-20 each scenario assumes an alternate fixed annual return. The fixed return assumptions for the five scenarios are -3.0 percent, 3.0 percent, 7.0 percent (7.25 percent for 2017-18), 11.0 percent and 17.0 percent.

Alternate investment returns were chosen based on stochastic analysis of possible future investment returns over the four year period ending June 30, 2020. Using the expected returns and volatility of the asset classes in which the funds are invested, we produced ten thousand stochastic outcomes for this period. We then selected annual returns that approximate the 5th, 25th, 50th, 75th, and 95th percentiles for these outcomes. For example, of all of the 4-year outcomes generated in the stochastic analysis, approximately 25 percent of them had an average annual return of 3.0 percent or less.

Required contributions outside of this range are also possible. In particular, while it is unlikely that investment returns will average less than -3.0 percent or greater than 17.0 percent over this four year period, the possibility of a single investment return less than -3.0 percent or greater than 17.0 percent in any given year is much greater.

Assumed Annual Return From 2017-18 through 2019-20	**Projected Employer Contributions**			
	2019-20	**2020-21**	**2021-22**	**2022-23**
(3.0%)				
Normal Cost	0.0%	0.0%	0.0%	0.0%
UAL Contribution	$45,000	$57,000	$75,000	$95,000
3.0%				
Normal Cost	0.0%	0.0%	0.0%	0.0%
UAL Contribution	$45,000	$54,000	$67,000	$80,000
Assumed Discount Rate				
Normal Cost	0.0%	0.0%	0.0%	0.0%
UAL Contribution	$45,000	$52,000	$62,000	$69,000
11.0%				
Normal Cost	0.0%	0.0%	0.0%	0.0%
UAL Contribution	$45,000	$50,000	$56,000	$58,000
17.0%				
Normal Cost	0.0%	0.0%	0.0%	0.0%
UAL Contribution	$45,000	$48,000	$48,000	$42,000

Given the temporary suspension of the Risk Mitigation Policy during the period over which the discount rate assumption is being phased down to 7.0 percent, the projections above were performed without reflection of any possible impact of this Policy for Fiscal Years 2019-20 and 2020-21.

Analysis of Discount Rate Sensitivity

Shown below are various valuation results as of June 30, 2016 assuming alternate discount rates. Results are shown using the current discount rate of 7.375 percent as well as alternate discount rates of 6.0 percent, 7.0 percent, and 8.0 percent. The alternate rate of 7.0 percent was selected since the Board has adopted this rate as the final discount rate at the end of the three year phase-in of the reduction in this assumption. The rates of 6.0 percent and 8.0 percent were selected since they illustrate the impact of a 1 percent increase or decrease to the 7.0 percent assumption. This analysis shows the potential plan impacts if the PERF were to realize investment returns of 6.0 percent, 7.0 percent, or 8.0 percent over the long-term.

This type of analysis gives the reader a sense of the long-term risk to required contributions. 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.

Sensitivity Analysis				
As of June 30, 2016	**Plan's Total Normal Cost**	**Accrued Liability**	**Unfunded Accrued Liability**	**Funded Status**
7.375% (current discount rate)	0.000%	$2,621,543	$651,197	75.2%
6.0%	0.000%	$3,009,899	$1,039,553	65.5%
7.0%	0.000%	$2,718,651	$748,305	72.5%
8.0%	0.000%	$2,472,375	$502,029	79.7%

Volatility Ratios

Actuarial calculations are based on a number of assumptions about long-term demographic and economic behavior. Unless these assumptions (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)

Plans that have higher asset-to-payroll ratios 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. Shown below is the asset volatility ratio, a measure of the plan's current contribution volatility. 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)

Plans that have higher liability-to-payroll ratios experience more volatile employer contributions (as a percentage of payroll) due to investment return and changes in liability. For example, a plan with a liability-to-payroll ratio of 8 is expected to have twice the contribution volatility of a plan with a liability-to-payroll ratio of 4. The liability volatility ratio is also shown in the table below. It should be noted that this ratio indicates a longer-term potential for contribution volatility. The asset volatility ratio, described above, will tend to move closer to the liability volatility ratio as the plan matures. Since the liability volatility ratio is a long-term measure, it is shown below at the current discount rate (7.375 percent) as well as the discount rate the Board has adopted to determine the contribution requirement in the June 30, 2018 actuarial valuation (7.00 percent).

Rate Volatility		As of June 30, 2016
1. Market Value of Assets	$	1,970,346
2. Payroll		0
3. Asset Volatility Ratio (AVR) [(1) / (2)]		N/A
4. Accrued Liability	$	2,621,543
5. Liability Volatility Ratio (LVR) [(4) / (2)]		N/A
6. Accrued Liability (7.00% discount rate)		2,718,651
7. Projected Liability Volatility Ratio [(6) / (2)]		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, 2016. 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 funding risk is limited. 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 2-year period centered around the valuation date.

Market Value of Assets (MVA)	Hypothetical Termination Liability[1,2] @ 1.75%	Funded Status	Unfunded Termination Liability @ 1.75%	Hypothetical Termination Liability[1,2] @ 3.00%	Funded Status	Unfunded Termination Liability @ 3.00%
$1,970,346	$4,820,353	40.9%	$2,850,007	$4,312,103	45.7%	$2,341,757

[1] The hypothetical liabilities calculated above include a 7 percent mortality contingency load in accordance with Board policy. Other actuarial assumptions can be found in Appendix A.

[2] The current discount rate assumption used for termination valuations is a weighted average of the 10-year and 30-year U.S. Treasury yields where the weights are based on matching asset and liability durations as of the termination date. The discount rates used in the table are based on 20-year Treasury bonds, rounded to the nearest quarter percentage point, which is a good proxy for most plans. The 20-year Treasury yield was 1.75 percent on June 30, 2016, and was 2.75 percent on January 31, 2017.

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, 2015	June 30, 2016
Reported Payroll	$ 0	$ 0
Projected Payroll for Contribution Purposes	$ 0	$ 0
Number of Members		
Active	0	0
Transferred	5	4
Separated	5	5
Retired	18	18

List of Class 1 Benefit Provisions

This plan has the additional Class 1 Benefit Provisions:

- None

PLAN'S MAJOR BENEFIT OPTIONS

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 Appendix B within Section 2 of this report.

	Contract package		
Benefit Provision	Inactive Misc	Receiving Misc	
Benefit Formula	2.0% @ 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 2W	Yes		
1959 Survivor Benefit Level	Indexed		
Special	No		
Alternate (firefighters)	No	No	
Post-Retirement Death Benefits			
Lump Sum	$500	$500	
Survivor Allowance (PRSA)	No	No	
COLA	2%	2%	

Section 2

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

North Bay Cooperative System Library Budget (921)

GL Acct		Adopted FY 17/18	Proposed FY 18/19	Note
	Revenue			
3000	Budgeted Fund Balance	$36,491	$46,072	NBCLS Fund Balance
3510	Interest Income	400	2,500	
3674	Reimbursement-retirees	200	200	
	TOTAL REVENUE	**$37,091**	**$48,772**	**31.49%**
	Expenditure			
4105	Retiree Benefits	37,091	48,672	CalPERS $32,165, $650 GASB Report, Medical $14,500 and Medicare-LS $1,357
4302	Membership Fees & Dues	100	100	
	TOTAL EXPENDITURE	**37,191**	**48,772**	**31.14%**

Fund Balance as of 6/30/17	$ 241,164.94	
FY 17/18 Expenditure	(35,571.00)	
Fund Balance as of 6/30/18	**$ 205,593.94**	Estimated