NOTICE OF
BUDGET & FINANCE COMMITTEE MEETING

Responsible for the review of District finances including: rates, fees, charges and other sources of revenue; budget and reserves; audit; investments; insurance; and other financial matters.

<u>NOTICE IS HEREBY GIVEN</u> that the San Lorenzo Valley Water District has called a meeting of the Budget & Finance Committee to be held on Tuesday, **August 6, 2019 at 9:00 a.m.** at the Operations Building, 13057 Highway 9, Boulder Creek, California.

AGENDA

1. Convene Meeting/Roll Call

2. Oral Communications
   This portion of the agenda is reserved for Oral Communications by the public for items which are not on the Agenda. Please understand that California law (The Brown Act) limits what the Board can do regarding issues raised during Oral Communication. No action or discussion may occur on issues outside of those already listed on today's agenda. Any person may address the Committee at this time, on any subject that lies within the jurisdiction of the District. Normally, presentations must not exceed five (5) minutes in length, and individuals may only speak once during Oral Communications. Any Director may request that the matter be placed on a future agenda or staff may be directed to provide a brief response.

3. Old Business: None
   Members of the public will be given the opportunity to address each scheduled item prior to Committee action. The Chairperson of the Committee may establish a time limit for members of the public to address the Committee on agendized items.

4. New Business:
   Members of the public will be given the opportunity to address each scheduled item prior to Committee action. The Chairperson of the Committee may establish a time limit for members of the public to address the Committee on agendized items.

   A. YEAR END AUDIT PROCESS
   Discussion and possible action by the Committee regarding the 2018-19 Year End Audit process.

   B. CALPERS PENSION LIABILITY
   Discussion and possible action by the Committee regarding CalPERS Pension liability.

   C. OTHER POST EMPLOYMENT BENEFIT (OPEB) LIABILITY
   Discussion and possible action by the Committee regarding OPEB liability.

5. Informational Material: None.

6. Adjournment

In compliance with the requirements of Title II of the American Disabilities Act of 1990, the San Lorenzo Valley Water District requires that any person in need of any type of special equipment, assistance or accommodation(s) in order to communicate at the District's Public Meeting can contact the District Office at (831) 338-2153 a minimum of 72 hours prior to the scheduled meeting.

Agenda documents, including materials related to an item on this agenda submitted to the Committee after distribution of the agenda packet, are available for public inspection and may be reviewed at the office of the District Secretary, 13060 Highway 9, Boulder Creek, CA 95006 during normal business hours. Such documents may also be available on the District website at www.slvwd.com subject to staff's ability to post the documents before the meeting.

Certification of Posting

I hereby certify that on August 2, 2019, I posted a copy of the foregoing agenda in the outside display case at the District Office, 13060 Highway 9, Boulder Creek, California, said time being at least 72 hours in advance of the regular meeting of the Budget & Finance Committee of the San Lorenzo Valley Water District in compliance with California Government Code Section 54956.

Executed at Boulder Creek, California, on August 2, 2019.

Holly B. Hossack, District Secretary
San Lorenzo Valley Water District

M E M O

TO: Budget & Finance Committee

FROM: Director of Finance & Business Services

SUBJECT: 2018-19 Year End Audit Process

DATE: August 6, 2019

BACKGROUND:

It was requested to go over the timing of the year-end process.

- Joint – The auditors typically come out in April/May to do interim testing
    - This is typically some payroll, cash disbursements and receipts, and internal controls
    - Field work is down to 1 day, with some follow-up questions
- Internal - year-end process starts in May for any prepaid invoices for the future fiscal year.
- Internal – Year-end inventory counts occur end of June.
- Internal – July is heavy on accruing back any now prior fiscal year invoices. This typically continues into August.
- Internal – July will also be closing out and reconciling as many of the accounts as we can. Some do not make sense to do until the majority of the accruals are in. (main one being CIP)
- Joint – Coordination with any third parties, such as OPEB actuarial for GASB 75 reporting. They need full fiscal year numbers, these are usually provided the end of July.
- Internal – by the end of August we are close to having a pretty complete trial balance for the auditors.
- Auditors – From the trial balance, they begin their process for making data requests to base their selections on. These are typically sent in advance so internally we can pull together all the sample support.

- Joint – The auditors have multiple clients in the area they try to schedule all at once. Final fieldwork is typically in September or beginning of October. This year is the week of 10/14.

- Auditors – If there are no unusual items, after final fieldwork, it takes approximately two weeks to provide a draft report.

- Joint – there is then typically 2 weeks of review/comments on the report.

- Joint – Financial statements are usually presented in November or December to the Board.

The auditor stated his experience has been that the audited financial statements are usually presented in the months of November and December for governmental organizations. There are a few where the audited financial statements are presented in the month of October. For some bigger governmental organizations, the audited financial statements are not available until after the month of December.

Please also note we do not only have the SLVWD audit, but also the Santa Margarita Groundwater Agency.

Given there are no abnormal items this year, such as a single audit, merger, or new GASB pronouncements, we believe the audited financials will be ready for a November meeting. The audit typically is held as a special meeting.

M E M O

TO: Budget & Finance Committee

FROM: Director of Finance & Business Services

SUBJECT: CalPERS Pension Liability Discussion

DATE: August 6, 2019

BACKGROUND:

The District administers employee pensions through CalPERS. CalPERS is the largest pension provider in the US, with approximately 1.9M members and current assets of $370B.

Pensions and related pension liability is a hot subject nationwide. Staff recently attended a CalPERS seminar. Attached is the presentation and the Districts most current actuarial reports.

This is intended to be a higher level, informational session to help better understand the pension liability and some ways we can begin to reduce it.

Employer Leadership Dialogue

CalPERS

Welcome and Introduction

CalPERS

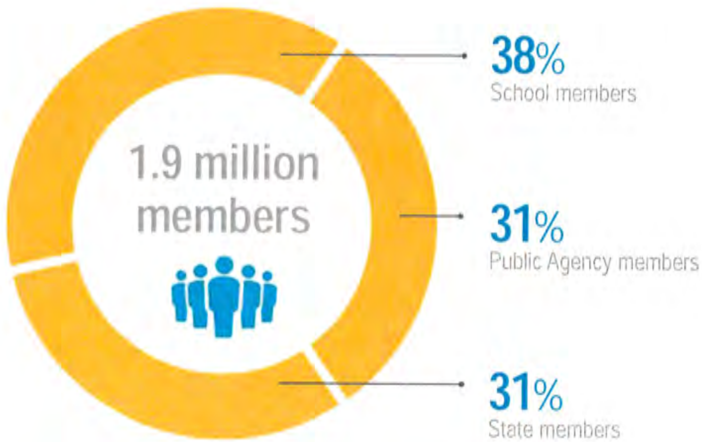
Agenda

- Welcome and Introduction
- Key Issues Update
- Pension Costs
- Health Program Update
- Employer Business Rules Update
- Benefits Update
- Open Q&A

CalPERS

Overview & Key Pension Issues

CalPERS

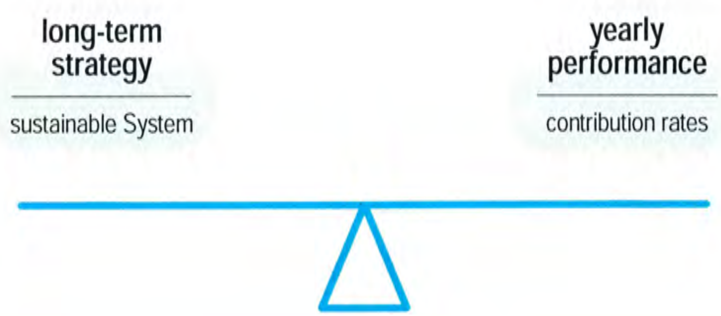


5

Current Value $370 billion~

6.7%	5.8%	9.1%	5.8%	8.1%
2018/19 Portfolio Return	5-yr Annualized Return	10-yr Annualized Return	20-yr Annualized Return	30-yr Annualized Return

6

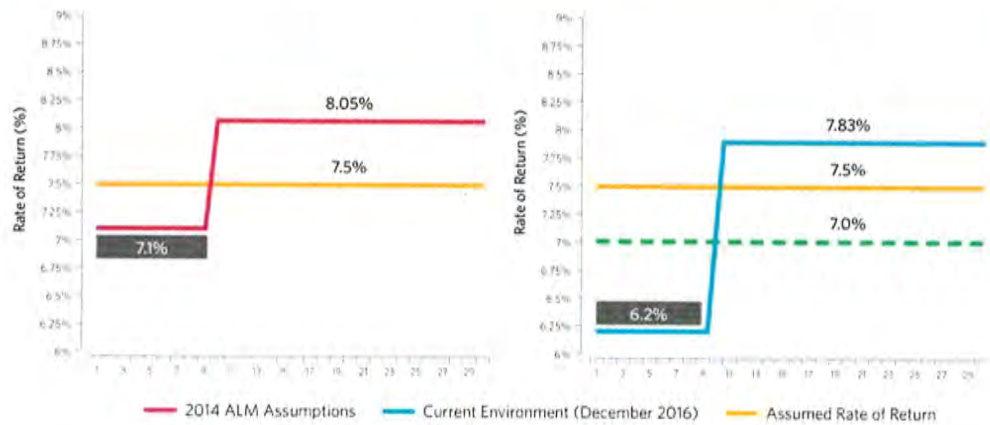


CalPERS

How are CalPERS Retirement Benefits Funded?

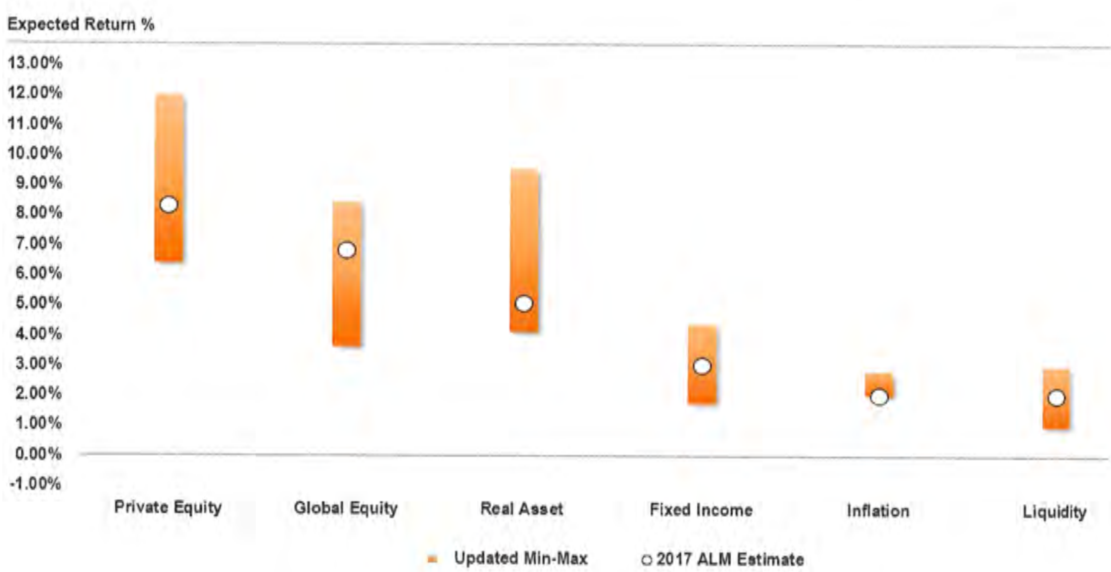
CalPERS

2014 vs Current Investment Return Projections



CalPERS

9



10

What is CalPERS Doing to Keep the System Strong?

Lower Discount Rate
Lowered the discount rate from 7.5% to 7% over three years *(assumed rate of return)*

7.5% ⬇ 7%

New Asset Allocation
Adopted new strategic asset allocation effective July 1, 2018

- 50% Global Equity
- 28% Fixed Income
- 13% Real Assets
- 8% Private Equity
- 1% Liquidity

Shorter Amortization
Shortened the amortization period for employers to pay their unfunded liability

30 yrs. ➡ 20 yrs.
=
significant long-term savings

Capital Injection
Additional contribution to State and School pension obligations

$9 billion to the State

$904 million to Schools

CalPERS

11

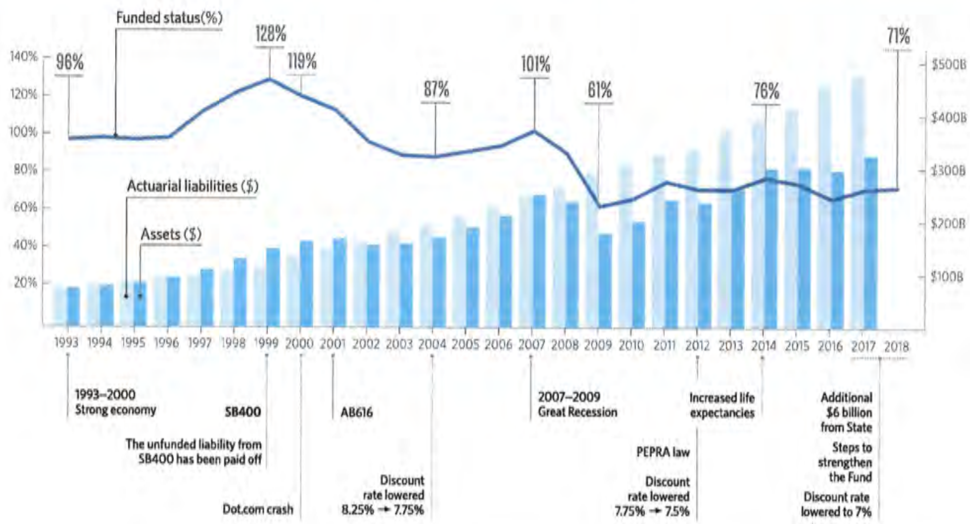
Key Stat: the Funded Status

70%

CalPERS

12

Historical Factors Impact Funded Status *(1993-2018)*



13

Committed to Partnership

- Transparency
- Engagement/Outreach
- One Message to All Stakeholder Groups
- Open Board Meetings

CalPERS

14

Recent and Ongoing Developments

- Governor proposes $3 billion extra to State's UAL
- New Board members: 13 total
  - Fiona Ma
  - Jason Perez
  - Mona Pasquil Rodgers
  - Eraina Ortega
  - Lisa Middleton
- New Board President: Henry Jones
- State Supreme Court Case – "air time" & the California Rule
- Private Equity
- Divestment vs Corporate Engagement

CalPERS 15

Actuarial Update 2019

CalPERS

Topics for Discussion

- Valuation Results for June 30, 2017
  - Funded Statuses
  - Where rates are going?
  - Other
- Early Results for June 30, 2018
- Amortization Policy
- Financial Necessity
- Managing your Unfunded Accrued Liability
- 115 Trust for pension UL, new 7/1/19, similar to CERBT
- Cost Sharing

CalPERS 17

Valuation Results

CalPERS

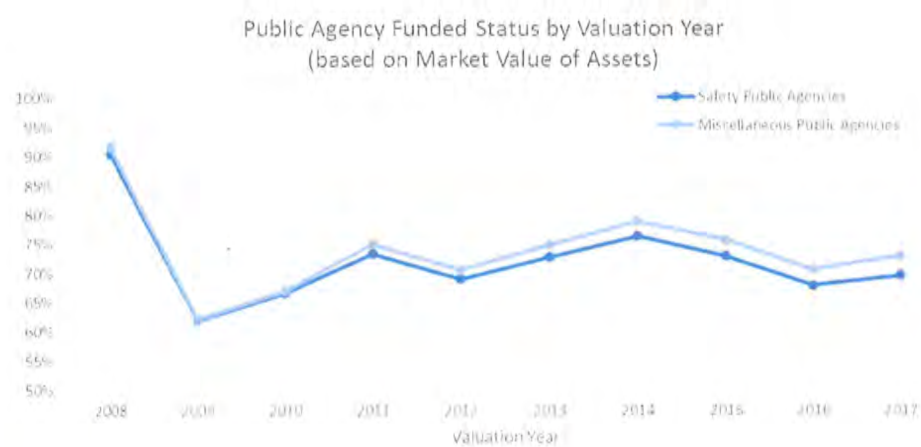
June 30, 2017 Valuation Results for Public Agencies

- Funded statuses up
- Contribution rates increasing
  - Continued phase-in of discount rate changes and investment losses for 2015 and 2016 (2.4% and 0.6% respectively)

2016 - 2021 phase in

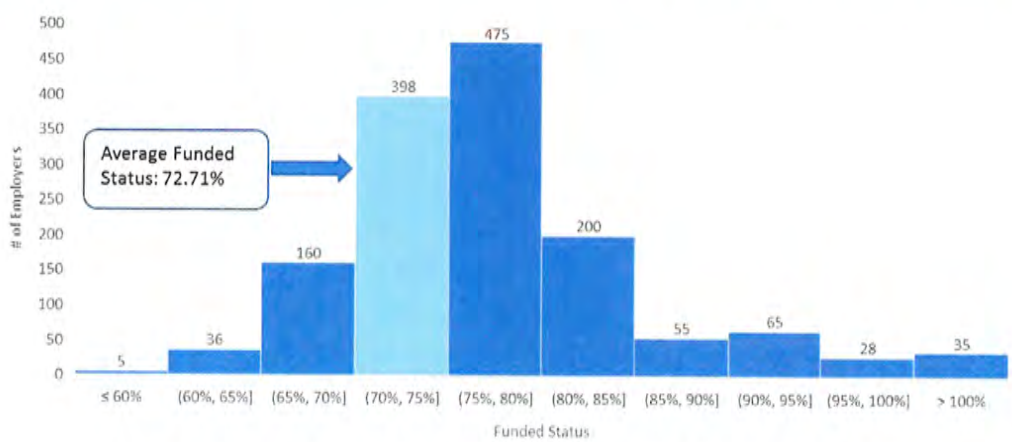
CalPERS 19

Public Agency Funded Status by Valuation Year



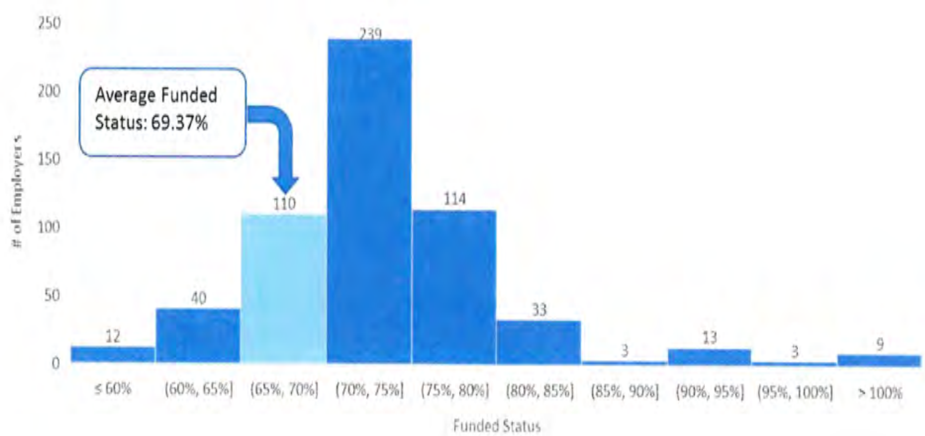
CalPERS 20

June 30, 2017 Funded Status – Public Agency Miscellaneous



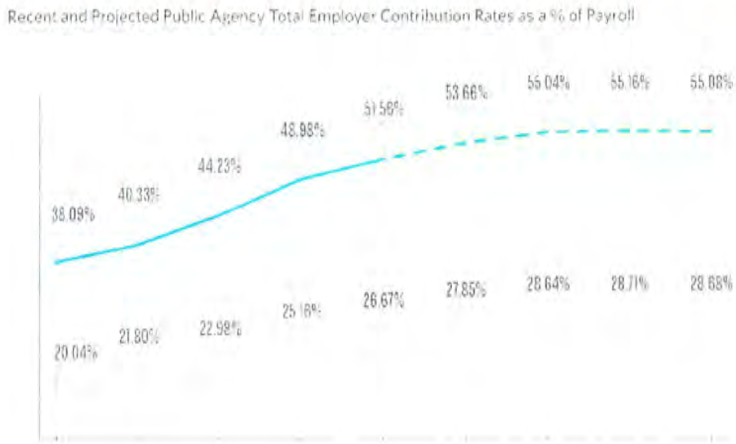
CalPERS 21

June 30, 2017 Funded Status – Public Agency Safety



CalPERS 22

Average Total Employer Contribution (% of Payroll)



CalPERS

Projected Employer Contributions (Page 5 of the valuation report)

	Required Contribution	Projected Future Employer Contributions (Assumes 7.25% Return for Fiscal Year 2017-18)				
Fiscal Year	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**	**2024-25**
Normal Cost %	9.584%	10.3%	10.3%	10.3%	10.3%	10.3%
UAL Payment	222,123,063	248,176,000	279,218,000	305,420,000	320,800,000	337,030,000

*Total as a % of Payroll**	*23.5%*	*25.5%*	*26.9%*	*28.0%*	*28.4%*	*28.8%*
Projected Payroll	*1,594,257,589*	*1,634,121,290*	*1,679,059,626*	*1,725,233,766*	*1,772,677,694*	*1,821,426,330*

Only in Non-Pooled Valuations

CalPERS

Investment Return Scenarios (Page 22 for NP, page 14 for pooled)

Assumed Annual Return From 2018-19 through 2020-21	Projected Employer Contributions			
	2020-21	2021-22	2022-23	2023-24
1.0%				
Normal Cost	10.3%	10.3%	10.3%	10.3%
UAL Contribution	$248,176,000	$286,530,000	$327,844,000	$366,673,000
4.0%				
Normal Cost	10.3%	10.3%	10.3%	10.3%
UAL Contribution	$248,176,000	$282,874,000	$316,742,000	$344,186,000
7.0%				
Normal Cost	10.3%	10.3%	10.3%	10.3%
UAL Contribution	$248,176,000	$279,218,000	$305,420,000	$320,800,000
9.0%				
Normal Cost	10.3%	10.5%	10.8%	11.0%
UAL Contribution	$248,176,000	$276,810,000	$298,910,000	$308,324,000
12.0%				
Normal Cost	10.3%	10.5%	10.8%	11.0%
UAL Contribution	$248,176,000	$273,178,000	$287,377,000	$283,874,000

CalPERS

25

Preliminary June 30, 2018 Valuation Results for Public Agencies

- Funded statuses decreased slightly due to discount rate change
- Contribution rates increasing
  - Continued phase-in of discount rate changes and investment losses for 2015 and 2016 (2.4% and 0.6% respectively)
- New valuation software
  - Identified as "method change" in 6/30/18 reports
- No change to amortization procedures, but coming in 6/30/2019 reports

CalPERS

26

Preliminary June 30, 2018 Valuation Results for Public Agencies

Plan Type	Average Funded Status		
	June 30, 2017 Valuation Date – 7.25%	June 30, 2017 Valuation Date – 7%	June 30, 2018 Valuation Date – 7%
Miscellaneous Public Agencies	72.7%	70.8%	71.7%
Safety Public Agencies	69.4%	67.5%	68.4%

CalPERS 27

Amortization Policy

CalPERS

Amortization Policy

- What is it?
  - Set of rules for determining the required payment toward unfunded accrued liability (UAL) in any given year
  - Recommended by CalPERS actuarial office, adopted by Board of Administration
  - Also provides rules for extending the amortization period in cases of financial necessity
  - Policy modifications were adopted by the CalPERS Board of Administration in February 2018

CalPERS 29

Amortization Policy

- Goals of Amortization Policy
  - Benefit security
  - Intergenerational equity
  - Contribution payment stability
- Difficult to maximize all three since improvement in any one can lead to challenges with the other two

CalPERS 30

Old Actuarial Amortization Policy

Driver	Source				
	(Gain)/Loss		Assumption / Method Change	Benefit Change	Golden Handshake
	Investment	Non-investment			
Amortization Period	30 Years	30 Years	20 Years	20 Years	5 Years
Escalation Rate - Active Plans - Inactive Plans	Payroll Growth Assumption* 0%	 0%	 0%	 0%	 0%
Ramp Up	5	5	5	0	0
Ramp Down	5	5	5	0	0

CalPERS

31

Amortization Policy

- Drivers Behind Recent Changes
  - Improve benefit security
  - Improve intergenerational equity
  - Align with industry recommendations
  - Limit contribution volatility as much as possible
  - Simplify to the extent possible

CalPERS

32

New Actuarial Amortization Policy

- Designed to pay down unfunded liability during the career of the members who earned the benefit
- Changes are effective with the June 30, 2019 valuation (FY 2021-22 rates for public agencies)
- No required change in how the current UAL is amortized (prospective only)

CalPERS

New Amortization Policy

Driver	Source				
	(Gain)/Loss		Assumption / Method Change	Benefit Change	Golden Handshake
	Investment	Non-investment			
Amortization Period - Active Agencies - Inactive Agencies	20 Years Closed Period (15 Years or less)	20 Years Closed Period (15 Years or less)	20 Years Closed Period (15 Years or less)	20 Years	5 Years
Escalation Rate	0%	0%	0%	0%	0%
Ramp Up	5	0	0	0	0
Ramp Down	0	0	0	0	0

CalPERS

Financial Necessity

CalPERS

Financial Necessity (formerly Financial Hardship)

Under Old Rules

- Statement of hardship from employer
- Employer notifies employees
- Employer is aware of potential reduction in benefits
  - Extension will provide relief
  - Extension to 30 years, level percent

CalPERS

Financial Necessity (formerly Financial Hardship)

Adopted Rules

- Pension Contracts and Prefunding Programs (PCPP) review
  - Employer demonstrates a financial necessity
  - Future contributions by the employer are sustainable
  - Final determination by the Chief Actuary (CA)

CalPERS

37

Financial Necessity (formerly Financial Hardship)

Adopted Modification

- Standard is 25 year level dollar
  - Under extreme circumstances CA will consider 30 years and/or level percent of pay
  - Inactive plans
    - 20 years or less, level dollar

CalPERS

38

Financial Necessity (formerly Financial Hardship)

Adopted Modification

- Reassessment after 3-5 years
  - Pension Contracts & Prefunding Program Division will reassess
  - Agency may want to fresh start at a shorter period if financial necessity no longer exists
- If a plans has a financial necessity, there will be no new extensions for the next 5 years

CalPERS 39

Managing your Unfunded Accrued Liability

CalPERS

What is the Unfunded Accrued Liability (UAL)?

- UAL = Accrued Liability – Market Value of Plan Assets
- Agencies required to make **minimum** annual payments on the UAL
- Many Agencies are electing to make additional discretionary payments to save interest

CalPERS 41

Understanding Your UAL

- Most recent valuation report at June 30, 2017
- Amortization Schedule (Pooled Pg. 9, NP Pg. 16)
- Amortization Bases
  - (Gain)/Loss Base – 30 years
  - Assumption Change Base – 20 years
  - Amendments – 20 years
  - Golden Handshake – 5 years

CalPERS 42

Accelerated Funding

- Multiple ways to do it
  - Fresh Start over a reduced period
  - Additional Discretionary Payment (ADP) on an ad hoc basis
  - Section 115 Trust

CalPERS 43

Accelerated Funding

- Fresh Start
  - Must pay off bases faster than existing schedule
  - Creates new higher Minimum UAL payment
  - Significant long-term savings
  - Inflexible
- Soft Fresh Start
  - Pay as though you did a fresh start
  - Flexible

CalPERS 44

Alternate Amortization Schedules – Fresh Start

Page 11 of Report for Pooled
Page 10 for Non-Pooled

	Current Amortization Schedule*		Alternate Schedules: 20 Year Amortization		Alternate Schedules: 15 Year Amortization	
Date	Balance	Payment	Balance	Payment	Balance	Payment
6/30/2018	73,756,921	4,878,299	73,756,921	5,513,514	73,756,921	6,708,623
6/30/2019	74,141,508	5,600,449	73,483,286	5,678,919	72,244,891	6,909,881
6/30/2020	73,806,152	6,058,957	73,018,074	5,849,287	70,412,801	7,117,178
6/30/2021	72,970,949	6,569,013	72,342,014	6,024,765	68,230,790	7,330,693
6/30/2022	71,545,620	6,997,645	71,434,261	6,205,508	65,666,607	7,550,614
6/30/2023	69,571,014	7,207,574	70,272,272	6,391,673	62,685,429	7,777,132
6/30/2024	67,233,249	7,423,799	68,831,678	6,583,424	59,249,666	8,010,446
6/30/2025	64,499,020	6,882,890	67,086,145	6,780,926	55,318,752	8,250,760
6/30/2026	62,123,642	7,141,073	65,007,223	6,984,354	50,848,916	8,498,282
6/30/2027	59,305,542	6,788,361	62,564,185	7,193,885	45,792,941	8,753,231
6/30/2028	56,645,096	6,992,010	59,723,853	7,409,701	40,099,905	9,015,828
6/30/2029	53,577,416	7,201,770	56,450,413	7,631,992	33,714,901	9,286,303
6/30/2044	3,247,088	1,526,483				
6/30/2045	1,904,790	886,492				
6/30/2046	1,126,670	859,264				
6/30/2047	319,375	330,943				
Totals		**157,208,707**		**148,150,176**		**124,773,094**
Interest Paid		**83,451,786**		**74,393,255**		**51,016,173**
Estimated Savings				**9,058,531**		**32,435,613**

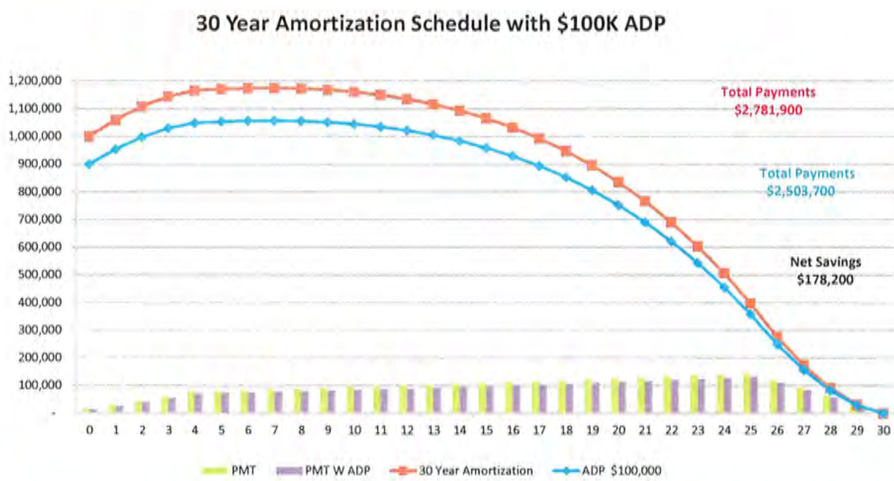
CalPERS

Accelerated Funding

- Additional Discretionary Payment (ADP)
  - On an Ad Hoc Basis
  - Short-term savings: Apply ADP to base with shortest remaining period
  - Long-term savings: Apply ADP to base with longest remaining period
  - Flexible
- Proactively Managing Your UAL webinar
  - CalPERS network Youtube.com May 31, 2018 webinar
  - UAL management tool available upon request

CalPERS

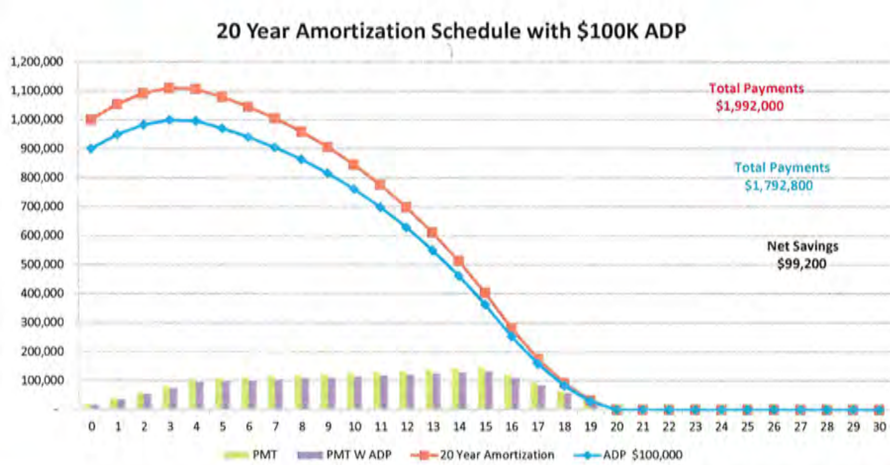
ADP Example 1



CalPERS

47

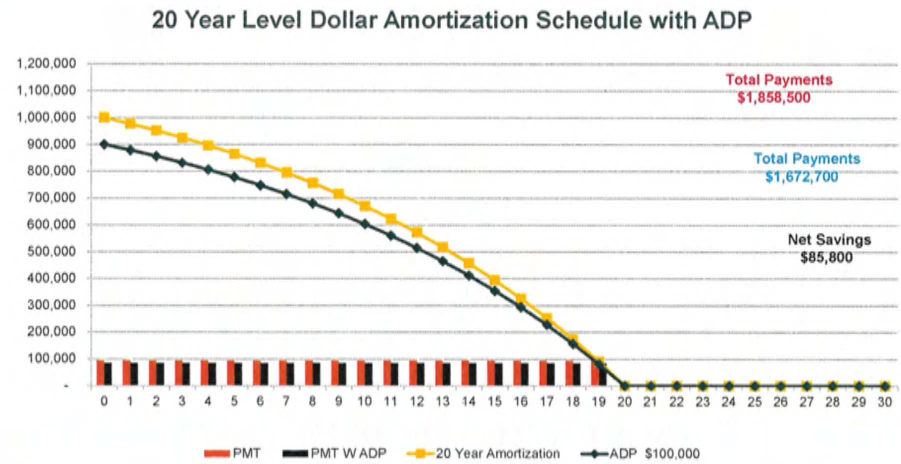
ADP Example 2



CalPERS

48

ADP Example 3



CalPERS

49

IRC Section 115 Trust

CalPERS

115 Trust

- SB 1413 signed September 21, 2018
- Established California Employers' Pension Prefunding Trust Fund
- Contributions are irrevocable
- Not recognized in your GASB 68 accounting statements
- May want to fund during surplus years, use during deficits
- May be used to pay minimum required contribution

CalPERS 51

115 Trust

- Investment options
  - Strategy 1 – 47% fixed income, 48% global equity/REITS, 5% TIPS 5%
  - Strategy 2 – 73% fixed income, 22% global equity/REITS, 5% TIPS 4%

  est. returns
- Timing
  - Up and running July 2019

CalPERS 52

Employers Taking Charge

Accelerated Funding - Section 115 Trust - Pension Prefunding Tools

Potential Benefit	ADP	Fresh-Start	115 Trust
Immediate increase in valuation report funded status /decrease in UAL	Yes	No	No
Immediate reduction in Net Pension Liability for financial reporting	Yes	No	No
Long-term interest savings	Yes	Yes	Probable
Can be used to reduce contribution volatility	Yes	Yes	Yes
Potential source of required CalPERS contributions during budget shortfalls	No	No	Yes
Can be used to increase or decrease overall investment volatility of pension assets	No	No	Yes

CalPERS

53

Cost Sharing

CalPERS

Cost Sharing

- Public Employees Pension Reform Act (PEPRA)
  - Goal is for members to pay half of the cost of service accrual (i.e., normal cost)
  - Effective January 1, 2013
  - Permits the Employer to mandate cost sharing up to certain limits beginning January 1, 2018
    - 8% for Miscellaneous
    - 12% for Safety

CalPERS

Normal Cost by Benefit group

Found in Appendix D-2 in Non-Pooled reports

Rate Plan Identifier	Benefit Group Name	Total Normal Cost FY 2019-20	Number of Actives	Payroll on 6/30/2017
1	Miscellaneous First Tier	19.543%	332	22,113,245
2	Miscellaneous PEPRA	13.423%	74	3,592,369
3	Miscellaneous Second Tier	22.125%	28	2,317,817

CalPERS

Break

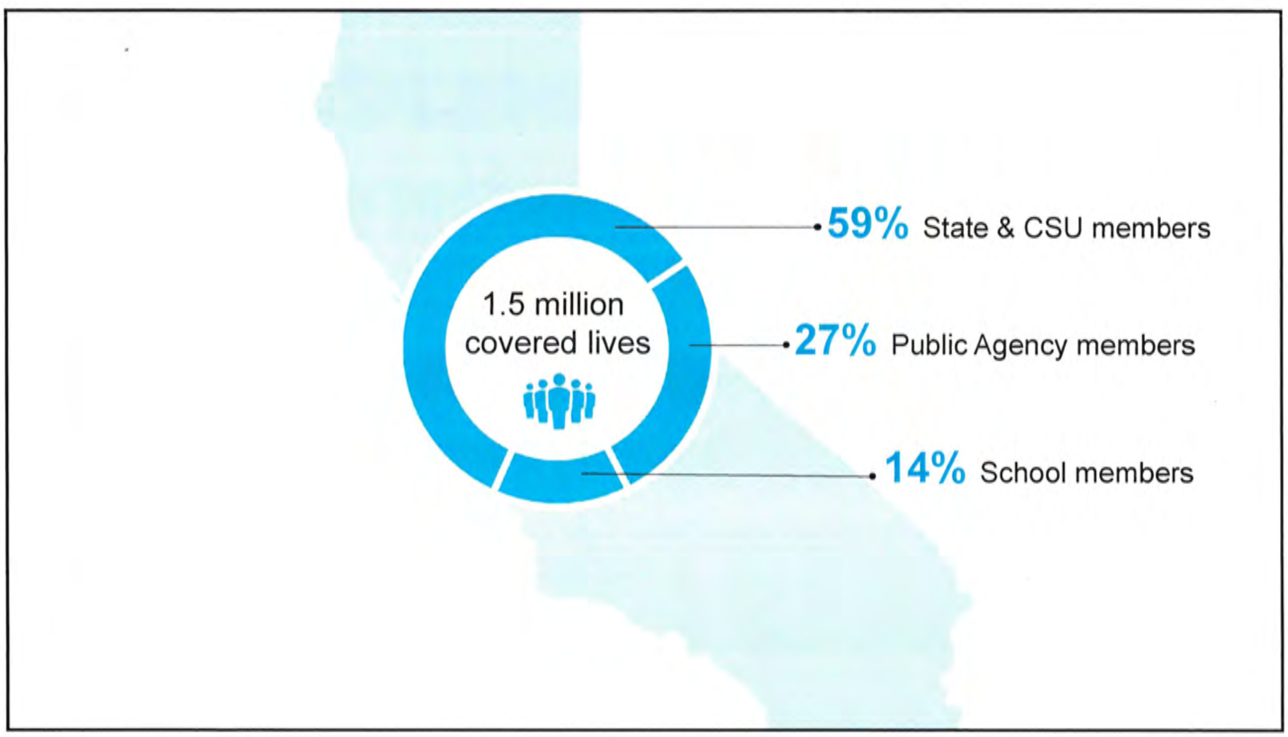
CalPERS

57

CalPERS Health Benefits

CalPERS


1.5 Million
Total covered lives in the CalPERS health benefits program
1,200 Employers
Comprised of public agencies and schools that contract with us for health benefits
$9.2 Billion
Spent on purchasing health benefits in 2018


1.5 million covered lives
59% State & CSU members
27% Public Agency members
14% School members

Where Our Health Care Dollar Goes

CalPERS Health Buck

We spend 92 cents of every premium dollar on medical and pharmacy services for members. Federal law requires insurers to spend a minimum of 80 cents.

CalPERS

Containing Health Care Costs

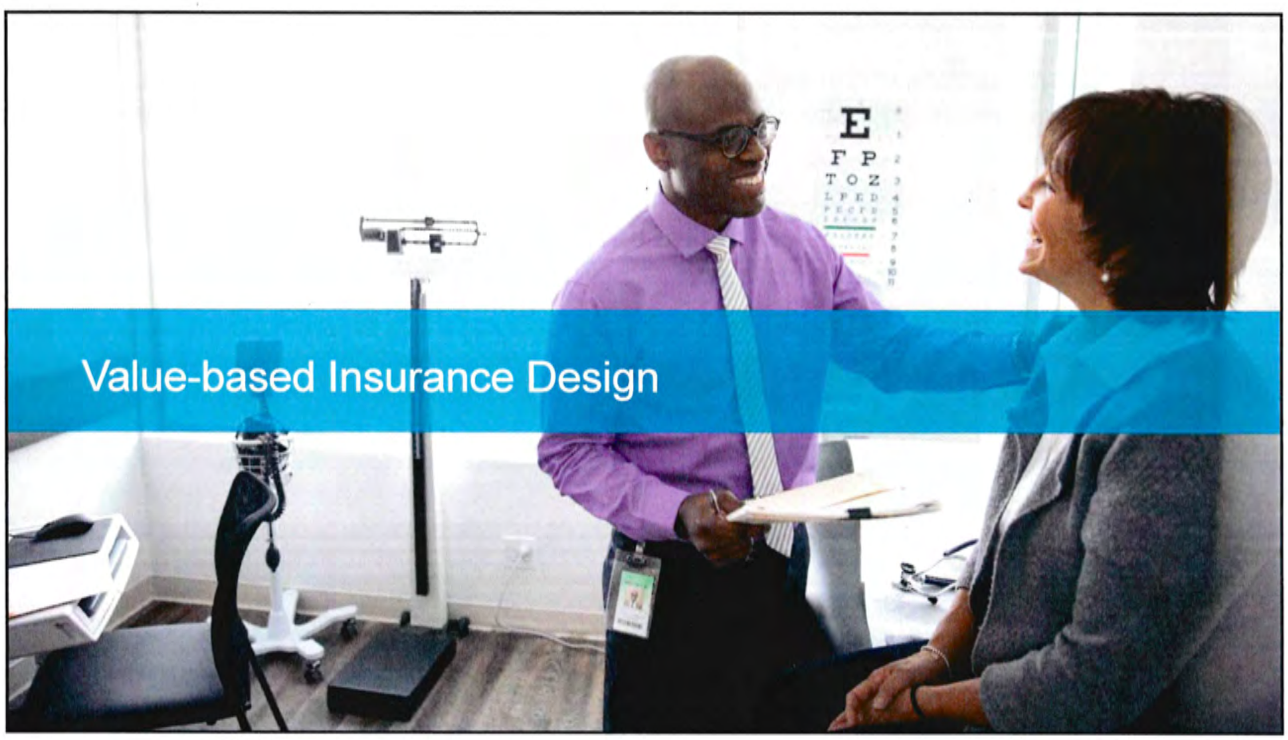
CalPERS

Our choice

- Cost-effective benefit design
- Improve transparency
- Wellness and prevention
- Partner for better programs

Their choice:

- Reduce benefits
- Shift to high deductible plans
- Lower the benefit package for new employees
- Shift more costs and responsibility to employees




HMO-like plan in PPO product
Coordinated care with a personal doctor
Healthy behaviors lower deductible
Available in all 58 counties
Popular with employers and members


Value-Based purchasing saves $8 million annually


$2 Billion
Spent on pharmacy benefits
$68 Million
Saved by our Pharmacy Benefit Manager in 2018
2020
Strategies such as a Prescription Drug Reference Pricing program


100% of Savings Lowers Future Premiums

Plans & Premiums

CalPERS

HMO and PPO Plans

Anthem BlueCross

blue of california

Health Net

KAISER PERMANENTE

PERS Select | Choice | Care

PORAC

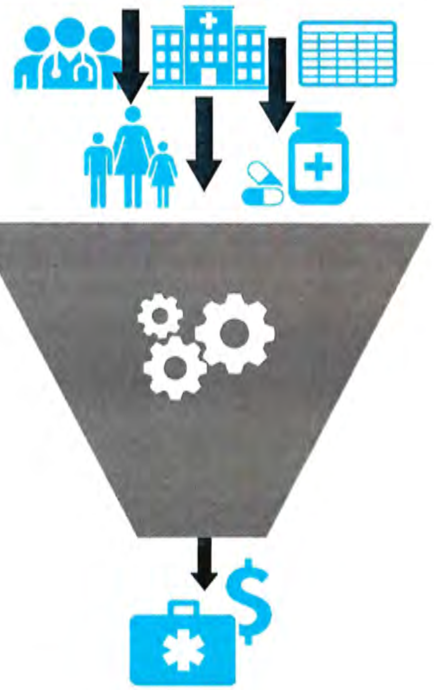
SHARP

UnitedHealthcare

Western Health Advantage

CalPERS

70



71

Agency and School Health Regions Change

CalPERS

72

2019 Open Enrollment Key Dates

1. 2020 health plan premiums available on the website
2. Health Plan Statements available August 26
3. Open Enrollment is September 9 – October 4
4. Open Enrollment Mobile app available
5. Employer transaction deadline is November 1

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Contracting With Us

CalPERS

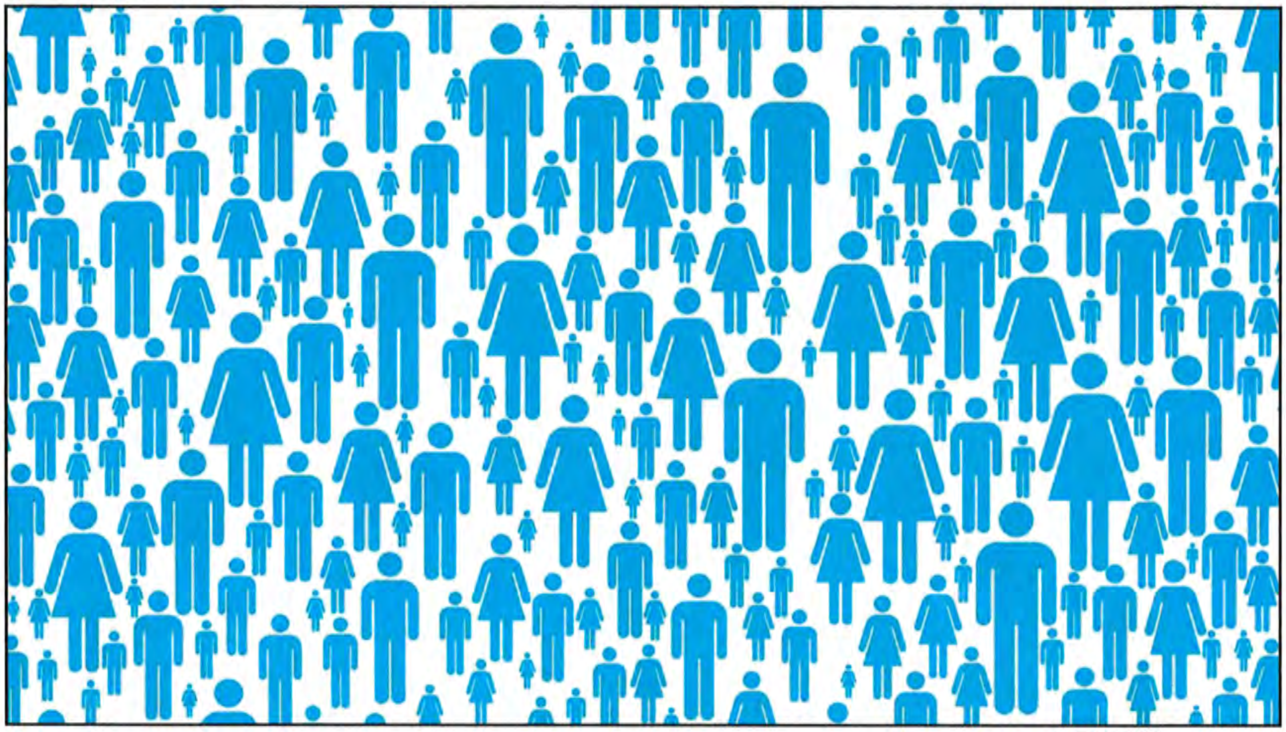
5 Things to Know About Our Program

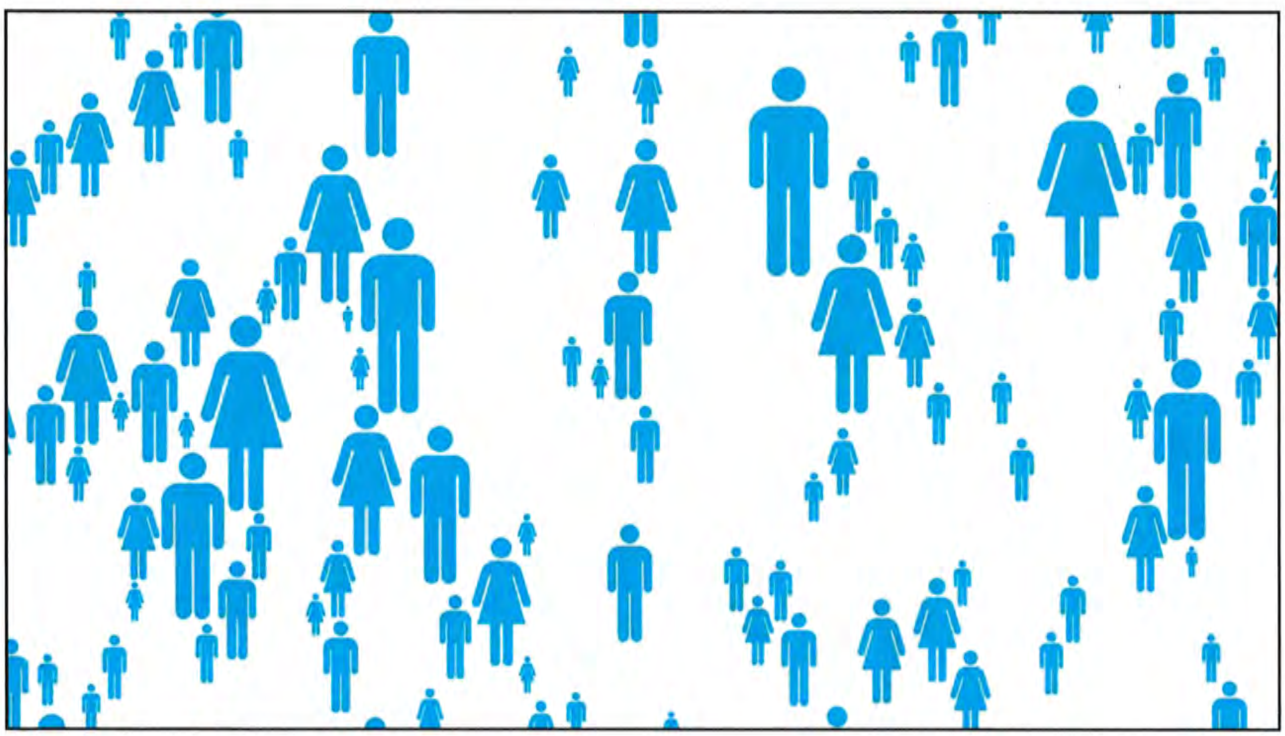
1. Innovation drives down cost
2. Plans for active employees and retirees
3. 100% participation not required
4. No pension, no problem
5. Very low administrative fee .27%

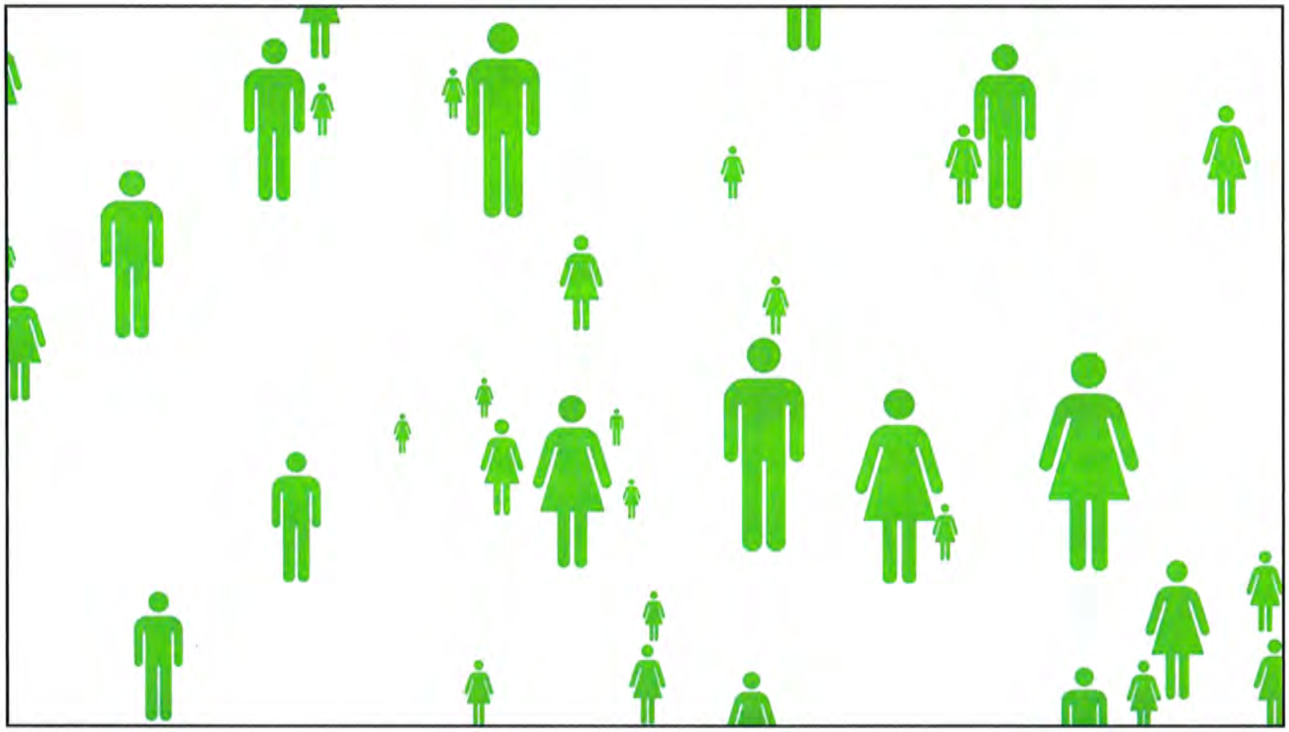
CalPERS 75

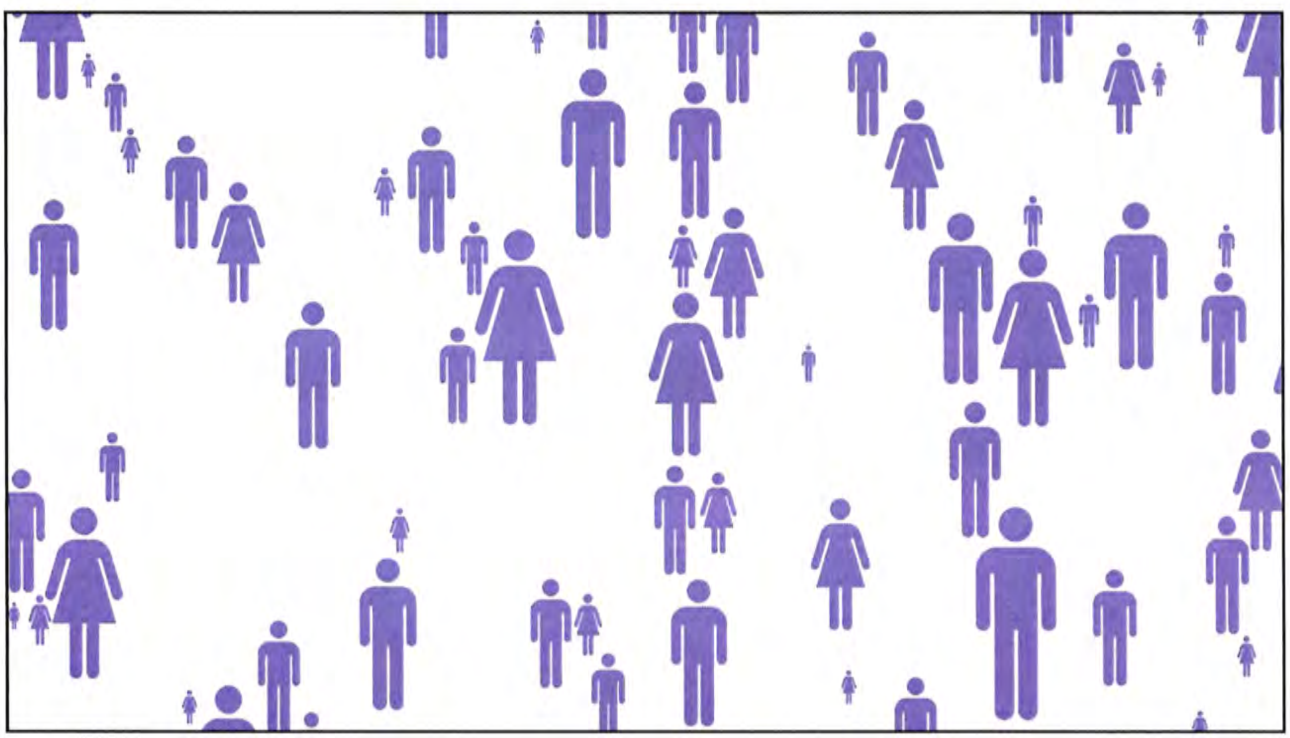
Your Options for Contracting Resolutions

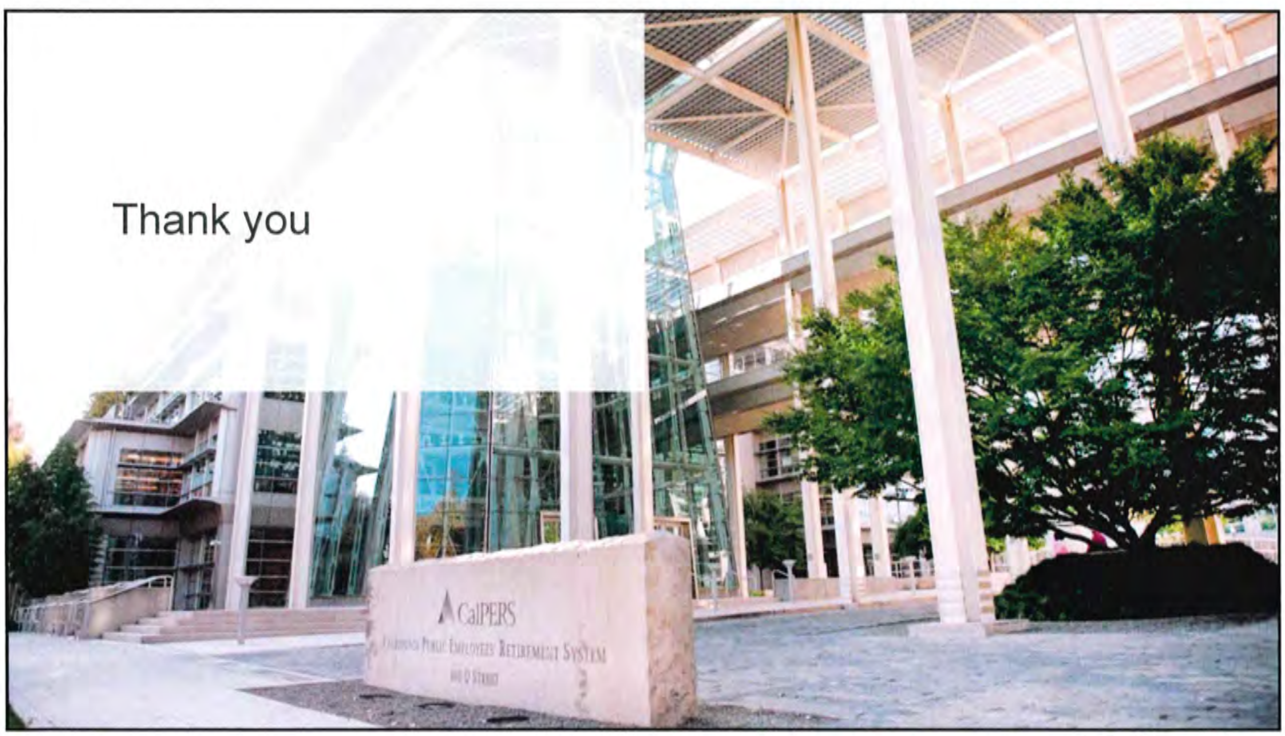
CalPERS










Thank you
CalPERS

Long-Term Care

CalPERS

Why CalPERS…

CalPERS

We are a unique member-centric organization that passes savings directly to members by lowering future premiums.

85

We consistently bridge the gap between cost containment, access to quality care, and improving the health of our members.

86

Our size, expertise, and passion give us the power to positively change the health care system.

Questions?

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Compensation

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Audit Findings – Compensation

- Publicly Available Pay Schedule - CCR 570.5
  - Approved and adopted by governing body
  - Every position, payrate, and time base identified
  - Doesn't reference another document
  - Publicly available
  - Effective date
  - Retained for at least five years

CalPERS

90

Audit Findings - Compensation

- Special Compensation – CCR 571 & 571.1
  - Must be on the exclusive list provided
  - Written labor policy or agreement
  - Statutory items
  - Available to group or class
  - Normal working hours
  - Reported as earned

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91

Independent Contractor

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Independent Contractor

- Excluded from CalPERS membership
- Contract to provide a service or complete a task
- Not subject to the contracting agency's control
- Utilize Common Law Control Test

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93

Common Law Control Test

- Control of manner and means of accomplishing the desired result
- Contract ≠ Independent Contractor
- Additional factors considered include
  - Skill levels
  - Tools and workplace
  - Length of time
  - Payment by time or by job
- Contract directly at Membership_Reporting@calpers.ca.gov

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94

Independent Contractor Checklist

California Public Employees' Retirement System
Employer Account Management Division
P.O. Box 942704
Sacramento, CA 94229-2704
TTY: (877) 249-7442
888 CalPERS (or 888-225-7377) phone · (916) 795-4166 fax
www.calpers.ca.gov

Worker/Independent Contractor Checklist

Please provide these documents, if applicable, for CalPERS review. Please note that these documents are not the sole determining factors used in the determination of the employment relationship.

- ☐ Contracts to which the individual is subject, including but not limited to:
  - Collective bargaining agreements
  - Memoranda of understanding
  - Employment contracts
  - Service agreements
- ☐ Evidence of the individual's reporting relationships, including but not limited to:
  - Organization charts
- ☐ Individual's duty statement(s)/job description(s)
- ☐ Payroll information, including but not limited to:
  - Mem-1344 (CalPERS payroll information form)
  - Paystubs
  - Invoices
  - W-2s
  - 1099s
  - Employer withholding information
  - Documentation evidencing whether the employer is reimbursed for payment of the individual's salary
- ☐ Personnel information, including but not limited to:
  - Offer letters
  - Leave requests
  - Documents related to hiring/firing/discipline/termination/salary adjustments
  - Documents related to benefits provided to the individual
  - Performance appraisals
  - Training materials/information
  - Travel expense reimbursements
  - Leave requests and approvals
  - Documents evidencing who reviews/supervises the individual

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95

Temporary Agency Employee

- Common law control test
  - Similar to Independent Contractor Review
- Questionnaires from employer and employee utilized
- Typically employees of CalPERS agency
  - Subject to membership rules

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96

Post-Retirement Employment

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Post Retirement Employment

- Limited duration
  - Gov. Code 21221(h)
  - Gov. Code 21224
- 180-day wait period
  - Exclusions apply
  - Resolution can be filed
  - No waiver for Retirement Incentive
  - Bona fide separation

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Post Retirement Employment

- 960 hour maximum per fiscal year, regardless of position
  - No exceptions
- Retiree compensation
  - Salary must be within posted salary range
  - No additional benefits

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99

Consequences of Illegal Employment

- Reinstatement (mandatory)
- Financial Consequences
  - Loss of COLA
  - Admin Fees
- Contact directly at Working_After_Retirement@calpers.ca.gov

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100

Recent Legislation and Regulations

CalPERS

Legislative Updates

- 2019 Legislation
  - Working after retirement for disability retirees
  - SB 266 – Employer Misreporting of Disallowed Compensation
  - AB 2196 – Discontinuing Installment Payments into Retirement
    - Effective 1/1/2020
- 2018 Statute changes
  - JPA member agencies – Gov. Codes 20575, 20574.1
  - CalPERS agency termination – Gov. Code 20570

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102

Regulation Updates

- Excess Liability – CCR 579.9
  - Approved by Office of Administrative Law (OAL) 3/21/19
  - To be published 7/1/19
- Full-time Employment – CCR 574
  - Approved by OAL 2/25/19
  - Published 4/1/19

CalPERS 103

Resources

CalPERS

Employer Response Team

- Single point of contact for critical and/or complex employer issues
- Easy to access services
  - Phone: 800-253-4594
  - Email: ERT@calpers.ca.gov

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105

Criteria – ERT or Contact Center?

Critical
Multiple Contacts
Sensitive
Financial Impact
→ **ERT**

Day-to-Day
Single Contact
PRAs
Regular Business
→ CalPERS Customer Contact Center: **888 CalPERS**

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106

Resources – Email

CalPERS_Stakeholder_Relations@calpers.ca.gov

ERT@calpers.ca.gov

ERReview@calpers.ca.gov

MOU_Review@calpers.ca.gov

Employer_Technical_Support@calpers.ca.gov

Membership_Reporting@calpers.ca.gov

Working_After_Retirement@calpers.ca.gov

SSSA@calpers.ca.gov

CalPERSHealth@calpers.ca.gov

CalPERS 107

Join Us for the 20th Annual CalPERS Educational Forum

2019 CalPERS Educational Forum

When: October 28-30, 2019

Where: Oakland Marriott City Center

- Attend customized learning sessions
- Connect one-on-one with CalPERS experts & meet CalPERS leaders
- Discuss important issues facing your organization
- Network with colleagues from around the state.

*Early bird registration begins June 4, 2019:

CalPERS 108

Open Q&A

CalPERS

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 2018

Miscellaneous Plan of the San Lorenzo Valley Water District
(CalPERS ID: 5032326097)
Annual Valuation Report as of June 30, 2017

Dear Employer,

As an attachment to this letter, you will find a copy of the June 30, 2017 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, 2017.

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*" and from the results list download the Miscellaneous or Safety Risk Pool Actuarial Valuation Report as appropriate.

Your June 30, 2017 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, 2018.

The exhibit below displays the minimum employer contributions, before any cost sharing, for Fiscal Year 2019-20 along with estimates of the required contributions for Fiscal Year 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
2019-20	9.680%	$287,007
Projected Results		
2020-21	*10.3%*	*$329,000*

The actual investment return for Fiscal Year 2017-18 was not known at the time this report was prepared. The projections above assume the investment return for that year would be 7.25 percent. *If the actual investment return for Fiscal Year 2017-18 differs from 7.25 percent, the actual contribution requirements for the projected years will differ from those shown above.*

Moreover, the projected results for Fiscal Year 2020-21 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 2020-21 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

At its December 2016 meeting, 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 2019-20 determined in this valuation were calculated using a discount rate of 7.25 percent. The projected employer contributions on Page 5 are calculated under the assumption that the discount rate will be lowered to 7.00 percent next year as adopted by the Board.

On December 19, 2017, the CalPERS Board of Administration adopted new actuarial assumptions based on the recommendations in the December 2017 CalPERS Experience Study and Review of Actuarial Assumptions. This study reviewed the retirement rates, termination rates, mortality rates, rates of salary increases and inflation assumption for Public Agencies. These new assumptions are incorporated in your actuarial valuations and will impact the required contribution for FY 2019-20. In addition, the Board adopted a new asset portfolio as part of its Asset Liability Management. The new asset mix supports a 7.00 percent discount rate. The reduction of the inflation assumption will be implemented in two steps in conjunction with the decreases in the discount rate. For the June 30, 2017 valuation an inflation rate of 2.625 percent was used and a rate of 2.50 percent will be used in the following 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 using a level dollar amount. In addition, the new policy removes the 5-year ramp-up and ramp-down on UAL bases attributable to assumption changes and non-investment gains/losses. The new policy removes the 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. The impact of this has been reflected in the current valuation results.

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 1 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, 2017

for the
Miscellaneous Plan
of the
San Lorenzo Valley Water District

(CalPERS ID: 5032326097)

Required Contributions
for Fiscal Year
July 1, 2019 - June 30, 2020

Table of Contents

Section 1

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Plan Specific Information
for the
Miscellaneous Plan
of the
San Lorenzo Valley Water District

(CalPERS ID: 5032326097)
(Rate Plan: 1267)

Table of Contents

Actuarial Certification

Section 1 of this report is based on the member and financial data contained in our records as of June 30, 2017 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, 2017 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 Unfunded Accrued Liability amortization bases as of June 30, 2017 and employer contribution as of July 1, 2019, 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.

DAVID CLEMENT, ASA, MAAA, EA
Senior Pension Actuary, CalPERS
Plan Actuary

Highlights and Executive Summary

- Introduction
- Purpose of Section 1
- Required Employer Contributions
- 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, 2017 actuarial valuation of the Miscellaneous Plan of the San Lorenzo Valley Water District of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the required employer contributions for Fiscal Year 2019-20.

Purpose of Section 1

This Section 1 report for the Miscellaneous Plan of the San Lorenzo Valley Water District 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, 2017;
- Determine the minimum required employer contribution for this plan for the fiscal year July 1, 2019 through June 30, 2020; and
- Provide actuarial information as of June 30, 2017 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 Contributions

Required Employer Contributions		Fiscal Year 2019-20
Employer Normal Cost Rate		9.680%
Plus, Either		
1) Monthly Employer Dollar UAL Payment	$	23,917.21
Or		
2) Annual Lump Sum Prepayment Option	$	277,136

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.

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

		Fiscal Year 2018-19		Fiscal Year 2019-20
Development of Normal Cost as a Percentage of Payroll[1]				
Base Total Normal Cost for Formula		15.794%		16.586%
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		15.794%		16.586%
Formula's Expected Employee Contribution Rate		6.902%		6.906%
Employer Normal Cost Rate		8.892%		9.680%
Projected Payroll for the Contribution Fiscal Year	$	1,878,160	$	1,861,875
Estimated Employer Contributions Based on Projected Payroll				
Plan's Estimated Employer Normal Cost	$	167,006	$	180,230
Plan's Payment on Amortization Bases[4]		247,401		287,007
% of Projected Payroll (illustrative only)		13.173%		15.415%
Estimated Total Employer Contribution	$	414,407	$	467,237
% of Projected Payroll (illustrative only)		22.065%		25.095%

[1] The results shown for Fiscal Year 2018-19 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, 2017.

[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, 2016		June 30, 2017
1. Present Value of Projected Benefits (PVB)	$	16,827,523	$	18,739,648
2. Entry Age Normal Accrued Liability (AL)		15,062,194		16,774,216
3. Plan's Market Value of Assets (MVA)		11,280,925		13,062,215
4. Unfunded Accrued Liability (UAL) [(2) - (3)]		3,781,269		3,712,001
5. Funded Ratio [(3) / (2)]		74.9%		77.9%

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 7.25% Return for Fiscal Year 2017-18)				
Fiscal Year	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Normal Cost %	9.680%	10.3%	10.3%	10.3%	10.3%	10.3%
UAL Payment	$287,007	$329,000	$376,000	$414,000	$435,000	$459,000

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 next year's valuation in combination with the 5-year phase-in ramp, the increases in the required contributions are expected to continue for six years from Fiscal Year 2019-20 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

At its December 2016 meeting, 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 2019-20 determined in this valuation were calculated using a discount rate of 7.25 percent. The projected employer contributions on page 5 are calculated assuming that the discount rate will be lowered to 7.00 percent next 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.

On December 19, 2017, the CalPERS Board of Administration adopted new actuarial assumptions based on the recommendations in the December 2017 CalPERS Experience Study and Review of Actuarial Assumptions. This study reviewed the retirement rates, termination rates, mortality rates, rates of salary increases and inflation assumption for Public Agencies. These new assumptions are incorporated in this actuarial valuation and will impact the required contribution for FY 2019-20. In addition, the Board adopted a new asset portfolio as part of its Asset Liability Management. The new asset mix supports a 7.00 percent discount rate. The reduction of the inflation assumption will be implemented in two steps in conjunction with the decreases in the discount rate. For the June 30, 2017 valuation an inflation rate of 2.625 percent will be used and a rate of 2.50 percent in the following valuation.

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.

Subsequent Events

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 using a level dollar amount. In addition, the new policy removes the 5-year ramp-up and ramp-down on UAL bases attributable to assumption changes and non-investment gains/losses. The new policy removes the 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. The impact of this has been reflected in the current valuation results.

The contribution requirements determined in this actuarial valuation report are based on demographic and financial information as of June 30, 2017. Changes in the value of assets subsequent to that date are not reflected. Investment returns below the assumed rate of return will increase the retired contribution, while investment returns above the assumed rate of return will decrease the retired contribution.

This actuarial valuation report reflects statutory changes, regulatory changes and CalPERS Board actions through January 2018. 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
- Amortization Schedule and Alternatives
- Employer Contribution History
- Funding History

Breakdown of Entry Age Normal Accrued Liability

Active Members	$	6,808,549
Transferred Members		658,773
Terminated Members		222,258
Members and Beneficiaries Receiving Payments		9,084,636
Total	$	16,774,216

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	$	16,774,216
2.	Projected UAL balance at 6/30/17		3,907,748
3.	Pool's Accrued Liability[1]	$	15,780,998,593
4.	Sum of Pool's Individual Plan UAL Balances at 6/30/17[1]		3,912,002,885
5.	Pool's 2016/17 Investment & Asset (Gain)/Loss		(413,206,167)
6.	Pool's 2016/17 Other (Gain)/Loss		(21,126,605)
7.	Plan's Share of Pool's Asset (Gain)/Loss [(1) - (2)] / [(3) - (4)] * (5)		(447,932)
8.	Plan's Share of Pool's Other (Gain)/Loss [(1)] / [(3)] * (6)		(22,456)
9.	Plan's New (Gain)/Loss as of 6/30/2017 [(7) + (8)]	$	(470,388)
10.	Increase in Pool's Accrued Liability due to Change in Assumptions[1]		258,379,047
11.	Plan's Share of Pool's Change in Assumptions [(1)] / [(3)] * (10)	$	274,641

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

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

12.	Plan's UAL [(2) + (9) + (11)]	$	3,712,001
13.	Plan's Share of Pool's MVA [(1) - (12)]	$	13,062,215

Schedule of Plan's 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, 2017.
- The employer contribution determined by the valuation is for the fiscal year beginning two years after the valuation date: Fiscal Year 2019-20.

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. Additional discretionary payments are reflected in the Expected Payments column in the fiscal year they were made by the agency.

								Amounts for Fiscal 2019-20	
Reason for Base	Date Established	Ramp Up/Down 2019-20	Amortization Period	Balance 6/30/17	Payment 2017-18	Balance 6/30/18	Payment 2018-19	Balance 6/30/19	Scheduled Payment for 2019-20
FRESH START	06/30/14	No Ramp	12	$2,138,564	$206,304	$2,079,958	$210,495	$2,012,763	$216,178
ASSET (GAIN)/LOSS	06/30/15	60% ↗	28	$775,778	$10,924	$820,709	$22,146	$857,276	$34,132
NON-ASSET (GAIN)/LOSS	06/30/15	60% ↗	28	$(61,284)	$(863)	$(64,833)	$(1,749)	$(67,722)	$(2,696)
ASSET (GAIN)/LOSS	06/30/16	40% ↗	29	$857,718	$0	$919,903	$12,765	$973,376	$26,234
NON-ASSET (GAIN)/LOSS	06/30/16	40% ↗	29	$(104,312)	$0	$(111,875)	$(1,552)	$(118,379)	$(3,190)
MERGER - LOMPICO WD	06/30/16	No Ramp	9	$47,217	$(233)	$50,882	$6,320	$48,026	$6,490
ASSUMPTION CHANGE	06/30/16	40% ↗	19	$254,067	$(7,895)	$280,663	$5,296	$295,526	$10,882
NON-ASSET (GAIN)/LOSS	06/30/17	20% ↗	30	$(22,456)	$0	$(24,084)	$0	$(25,830)	$(358)
ASSET (GAIN)/LOSS	06/30/17	20% ↗	30	$(447,932)	$0	$(480,407)	$0	$(515,237)	$(7,142)
ASSUMPTION CHANGE	06/30/17	20% ↗	20	$274,641	$(12,746)	$307,752	$(13,112)	$343,643	$6,476
TOTAL				$3,712,001	$195,491	$3,778,668	$240,609	$3,803,442	$287,006

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.

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 2.875 percent for each year into the future. The schedules do not attempt to reflect any experience after June 30, 2017 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.

Amortization Schedule and Alternatives

	Current Amortization Schedule		Alternate Schedules: 15 Year Amortization		Alternate Schedules: 10 Year Amortization	
Date	Balance	Payment	Balance	Payment	Balance	Payment
6/30/2019	3,803,443	287,007	3,803,443	345,851	3,803,443	471,700
6/30/2020	3,781,964	322,435	3,721,024	355,794	3,590,692	485,262
6/30/2021	3,722,237	359,664	3,622,333	366,023	3,348,473	499,213
6/30/2022	3,619,625	387,359	3,505,893	376,546	3,074,244	513,565
6/30/2023	3,480,893	397,349	3,370,113	387,372	2,765,270	528,330
6/30/2024	3,321,757	408,773	3,213,278	398,509	2,418,605	543,520
6/30/2025	3,139,253	420,525	3,033,539	409,966	2,031,076	559,146
6/30/2026	2,931,346	432,615	2,828,904	421,752	1,599,269	575,222
6/30/2027	2,695,845	445,053	2,597,226	433,878	1,119,507	591,759
6/30/2028	2,430,390	449,472	2,336,195	446,352	587,836	608,772
6/30/2029	2,141,113	462,394	2,043,320	459,184		
6/30/2030	1,817,482	475,688	1,715,922	472,386		
6/30/2031	1,456,619	185,604	1,351,117	485,967		
6/30/2032	1,370,009	190,940	945,798	499,938		
6/30/2033	1,271,594	196,430	496,624	514,312		
6/30/2034	1,160,359	193,753				
6/30/2035	1,043,831	180,567				
6/30/2036	932,510	166,464				
6/30/2037	827,725	151,399				
6/30/2038	730,943	135,332				
6/30/2039	643,785	127,806				
6/30/2040	558,102	131,481				
6/30/2041	462,400	135,261				
6/30/2042	355,846	139,149				
6/30/2043	237,540	122,461				
6/30/2044	127,939	81,296				
6/30/2045	53,023	53,333				
6/30/2046	1,634	1,692				
6/30/2047						
6/30/2048						
Totals		7,041,304		6,373,827		5,376,490
Interest Paid		3,237,861		2,570,384		1,573,047
Estimated Savings				667,476		1,664,813

* This schedule does not reflect the impact of adopted discount rate changes that will become effective beyond June 30, 2017. 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	8.377%	$119,651
2017 - 18	8.418%	$216,365
2018 - 19	8.892%	$247,401
2019 - 20	9.680%	$287,007

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	$ 10,564,230	$ 8,638,886	$ 1,925,344	81.8%	$ 1,792,536
06/30/2012	11,347,210	8,752,099	2,595,111	77.1%	1,794,546
06/30/2013	12,273,035	9,968,817	2,304,218	81.2%	1,887,260
06/30/2014	13,763,004	11,736,152	2,026,852	85.3%	1,838,495
06/30/2015	15,040,922	12,303,396	2,737,526	81.8%	1,880,177
06/30/2016	15,062,194	11,280,925	3,781,269	74.9%	1,718,783
06/30/2017	16,774,216	13,062,215	3,712,001	77.9%	1,710,098

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 (2017-18, 2018-19, 2019-20 and 2020-21). 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 7.25 percent for fiscal year 2017-18. For fiscal years 2018-19, 2019-20, and 2020-21 each scenario assumes an alternate fixed annual return. The fixed return assumptions for the five scenarios are 1.0 percent, 4.0 percent, 7.0 percent, 9.0 percent and 12.0 percent.

The alternate investment returns were chosen based on stochastic analysis of possible future investment returns over the four-year period ending June 30, 2021. 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 recently completed Asset Liability Management process. We then selected annual returns that approximate the 5^{th}, 25^{th}, 50^{th}, 75^{th}, and 95^{th} percentiles for these outcomes. For example, of all the 4-year outcomes generated in the stochastic analysis, approximately 25 percent of them had an average annual return of 4.0 percent 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 percent or greater than 12.0 percent over this four-year period, the possibility of a single investment return less than 1.0 percent or greater than 12.0 percent in any given year is much greater.

Assumed Annual Return From 2018-19 through 2020-21	Projected Employer Contributions			
	2020-21	2021-22	2022-23	2023-24
1.0%				
Normal Cost	10.3%	10.3%	10.3%	10.3%
UAL Contribution	$329,000	$389,000	$454,000	$517,000
4.0%				
Normal Cost	10.3%	10.3%	10.3%	10.3%
UAL Contribution	$329,000	$382,000	$434,000	$477,000
7.0%				
Normal Cost	10.3%	10.3%	10.3%	10.3%
UAL Contribution	$329,000	$376,000	$414,000	$435,000
9.0%				
Normal Cost	10.3%	10.6%	10.8%	11.0%
UAL Contribution	$329,000	$372,000	$403,000	$414,000
12.0%				
Normal Cost	10.3%	10.6%	10.8%	11.0%
UAL Contribution	$329,000	$365,000	$382,000	$370,000

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 Year 2020-21. In addition, the projections above do not reflect the recent changes to the new amortization policy effective with the June 30, 2019 valuation but the impact on the results above is expected to be minimal.

Analysis of Discount Rate Sensitivity

Shown below are various valuation results as of June 30, 2017 assuming alternate discount rates. Results are shown using the current discount rate of 7.25 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" at the end of this section.

Sensitivity Analysis				
As of June 30, 2017	**Plan's** Total Normal Cost	Accrued Liability	Unfunded Accrued Liability	Funded Status
7.25% (current discount rate)	16.586%	$16,774,216	$3,712,001	77.9%
6.0%	21.483%	$19,440,602	$6,378,387	67.2%
7.0%	17.250%	$17,229,318	$4,167,103	75.8%
8.0%	14.006%	$15,385,289	$2,323,074	84.9%

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 (7.25 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, 2017
1. Market Value of Assets	$	13,062,215
2. Payroll		1,710,098
3. Asset Volatility Ratio (AVR) [(1) / (2)]		7.6
4. Accrued Liability	$	16,774,216
5. Liability Volatility Ratio (LVR) [(4) / (2)]		9.8
6. Accrued Liability (7.00% discount rate)		17,229,318
7. Projected Liability Volatility Ratio [(6) / (2)]		10.1

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, 2017. 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%
$13,062,215	$32,599,798	40.1%	$19,537,583	$29,331,217	44.5%	$16,269,001

[1] The hypothetical liabilities calculated above include a 5 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 2.61 percent on June 30, 2017, and was 2.83 percent on January 31, 2018.

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, 2016	June 30, 2017
Reported Payroll	$ 1,718,783	$ 1,710,098
Projected Payroll for Contribution Purposes	$ 1,878,160	$ 1,861,875
Number of Members		
Active	19	18
Transferred	7	7
Separated	7	10
Retired	23	27

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	Active Misc	Inactive Misc	Inactive Misc	Receiving Misc
Benefit Formula	2.0% @ 55	2.0% @ 55	2.0% @ 55	
Social Security Coverage	Yes	No	Yes	
Full/Modified	Modified	Full	Full	
Employee Contribution Rate	7.00%			
Final Average Compensation Period	Three Year	Three Year	Three Year	
Sick Leave Credit	Yes	Yes	Yes	
Non-Industrial Disability	Standard	Standard	Standard	
Industrial Disability	No	No	No	
Pre-Retirement Death Benefits				
Optional Settlement 2	Yes	Yes	Yes	
1959 Survivor Benefit Level	No	No	No	
Special	No	No	No	
Alternate (firefighters)	No	No	No	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

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

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 2018

PEPRA Miscellaneous Plan of the San Lorenzo Valley Water District
(CalPERS ID: 5032326097)
Annual Valuation Report as of June 30, 2017

Dear Employer,

As an attachment to this letter, you will find a copy of the June 30, 2017 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, 2017.

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*" and from the results list download the Miscellaneous or Safety Risk Pool Actuarial Valuation Report as appropriate.

Your June 30, 2017 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, 2018.

The exhibit below displays the minimum employer contributions, before any cost sharing, for Fiscal Year 2019-20 along with estimates of the required contributions for Fiscal Year 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
2019-20	6.985%	$3,459
Projected Results		
2020-21	*7.5%*	*$4,200*

The actual investment return for Fiscal Year 2017-18 was not known at the time this report was prepared. The projections above assume the investment return for that year would be 7.25 percent. *If the actual investment return for Fiscal Year 2017-18 differs from 7.25 percent, the actual contribution requirements for the projected years will differ from those shown above.*

Moreover, the projected results for Fiscal Year 2020-21 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 2020-21 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

At its December 2016 meeting, 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 2019-20 determined in this valuation were calculated using a discount rate of 7.25 percent. The projected employer contributions on Page 5 are calculated under the assumption that the discount rate will be lowered to 7.00 percent next year as adopted by the Board.

On December 19, 2017, the CalPERS Board of Administration adopted new actuarial assumptions based on the recommendations in the December 2017 CalPERS Experience Study and Review of Actuarial Assumptions. This study reviewed the retirement rates, termination rates, mortality rates, rates of salary increases and inflation assumption for Public Agencies. These new assumptions are incorporated in your actuarial valuations and will impact the required contribution for FY 2019-20. In addition, the Board adopted a new asset portfolio as part of its Asset Liability Management. The new asset mix supports a 7.00 percent discount rate. The reduction of the inflation assumption will be implemented in two steps in conjunction with the decreases in the discount rate. For the June 30, 2017 valuation an inflation rate of 2.625 percent was used and a rate of 2.50 percent will be used in the following 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 using a level dollar amount. In addition, the new policy removes the 5-year ramp-up and ramp-down on UAL bases attributable to assumption changes and non-investment gains/losses. The new policy removes the 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. The impact of this has been reflected in the current valuation results.

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 1 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, 2017

for the
PEPRA Miscellaneous Plan
of the
San Lorenzo Valley Water District

(CalPERS ID: 5032326097)

Required Contributions
for Fiscal Year
July 1, 2019 - June 30, 2020

Table of Contents

Section 1

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Plan Specific Information for the PEPRA Miscellaneous Plan of the San Lorenzo Valley Water District

(CalPERS ID: 5032326097)
(Rate Plan: 26819)

Table of Contents

Actuarial Certification

Section 1 of this report is based on the member and financial data contained in our records as of June 30, 2017 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, 2017 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 PEPRA 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, 2017 and employer contribution as of July 1, 2019, 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.

David Clement

DAVID CLEMENT, ASA, MAAA, EA
Senior Pension Actuary, CalPERS
Plan Actuary

Highlights and Executive Summary

- Introduction
- Purpose of Section 1
- Required Employer Contributions
- 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, 2017 actuarial valuation of the PEPRA Miscellaneous Plan of the San Lorenzo Valley Water District of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the required employer contributions for Fiscal Year 2019-20.

Purpose of Section 1

This Section 1 report for the PEPRA Miscellaneous Plan of the San Lorenzo Valley Water District 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, 2017;
- Determine the minimum required employer contribution for this plan for the fiscal year July 1, 2019 through June 30, 2020; and
- Provide actuarial information as of June 30, 2017 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 Contributions

Required Employer Contributions		Fiscal Year 2019-20
Employer Normal Cost Rate		6.985%
Plus, Either		
1) Monthly Employer Dollar UAL Payment	$	288.23
Or		
2) Annual Lump Sum Prepayment Option	$	3,340

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.

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

		Fiscal Year 2018-19		Fiscal Year 2019-20
Development of Normal Cost as a Percentage of Payroll[1]				
Base Total Normal Cost for Formula		13.092%		13.735%
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		13.092%		13.735%
Plan's Employee Contribution Rate		6.250%		6.750%
Employer Normal Cost Rate		6.842%		6.985%
Projected Payroll for the Contribution Fiscal Year	$	663,760	$	993,729
Estimated Employer Contributions Based on Projected Payroll				
Plan's Estimated Employer Normal Cost	$	45,414	$	69,412
Plan's Payment on Amortization Bases[4]		2,596		3,459
% of Projected Payroll (illustrative only)		0.391%		0.348%
Estimated Total Employer Contribution	$	48,010	$	72,871
% of Projected Payroll (illustrative only)		7.233%		7.333%

[1] The results shown for Fiscal Year 2018-19 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, 2017.

[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, 2016	June 30, 2017
1. Present Value of Projected Benefits (PVB)	$ 838,162	$ 1,461,273
2. Entry Age Normal Accrued Liability (AL)	117,612	258,456
3. Plan's Market Value of Assets (MVA)	104,443	244,038
4. Unfunded Accrued Liability (UAL) [(2) - (3)]	13,169	14,418
5. Funded Ratio [(3) / (2)]	88.8%	94.4%

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 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 7.25% Return for Fiscal Year 2017-18)				
Fiscal Year	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Normal Cost %	6.985%	7.5%	7.5%	7.5%	7.5%	7.5%
UAL Payment	$3,459	$4,200	$5,000	$5,800	$6,000	$6,700

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 next year's valuation in combination with the 5-year phase-in ramp, the increases in the required contributions are expected to continue for six years from Fiscal Year 2019-20 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

At its December 2016 meeting, 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 2019-20 determined in this valuation were calculated using a discount rate of 7.25 percent. The projected employer contributions on page 5 are calculated assuming that the discount rate will be lowered to 7.00 percent next 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.

On December 19, 2017, the CalPERS Board of Administration adopted new actuarial assumptions based on the recommendations in the December 2017 CalPERS Experience Study and Review of Actuarial Assumptions. This study reviewed the retirement rates, termination rates, mortality rates, rates of salary increases and inflation assumption for Public Agencies. These new assumptions are incorporated in this actuarial valuation and will impact the required contribution for FY 2019-20. In addition, the Board adopted a new asset portfolio as part of its Asset Liability Management. The new asset mix supports a 7.00 percent discount rate. The reduction of the inflation assumption will be implemented in two steps in conjunction with the decreases in the discount rate. For the June 30, 2017 valuation an inflation rate of 2.625 percent will be used and a rate of 2.50 percent in the following valuation.

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.

Subsequent Events

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 using a level dollar amount. In addition, the new policy removes the 5-year ramp-up and ramp-down on UAL bases attributable to assumption changes and non-investment gains/losses. The new policy removes the 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. The impact of this has been reflected in the current valuation results.

The contribution requirements determined in this actuarial valuation report are based on demographic and financial information as of June 30, 2017. Changes in the value of assets subsequent to that date are not reflected. Investment returns below the assumed rate of return will increase the retired contribution, while investment returns above the assumed rate of return will decrease the retired contribution.

This actuarial valuation report reflects statutory changes, regulatory changes and CalPERS Board actions through January 2018. 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
- Amortization Schedule and Alternatives
- Employer Contribution History
- Funding History

Breakdown of Entry Age Normal Accrued Liability

Active Members	$	247,977
Transferred Members		4,898
Terminated Members		5,581
Members and Beneficiaries Receiving Payments		0
Total	$	258,456

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	$	258,456
2.	Projected UAL balance at 6/30/17		18,873
3.	Pool's Accrued Liability[1]	$	15,780,998,593
4.	Sum of Pool's Individual Plan UAL Balances at 6/30/17[1]		3,912,002,885
5.	Pool's 2016/17 Investment & Asset (Gain)/Loss		(413,206,167)
6.	Pool's 2016/17 Other (Gain)/Loss		(21,126,605)
7.	Plan's Share of Pool's Asset (Gain)/Loss [(1) - (2)] / [(3) - (4)] * (5)		(8,341)
8.	Plan's Share of Pool's Other (Gain)/Loss [(1)] / [(3)] * (6)		(346)
9.	Plan's New (Gain)/Loss as of 6/30/2017 [(7) + (8)]	$	(8,687)
10.	Increase in Pool's Accrued Liability due to Change in Assumptions[1]		258,379,047
11.	Plan's Share of Pool's Change in Assumptions [(1)] / [(3)] * (10)	$	4,232

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

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

12.	Plan's UAL [(2) + (9) + (11)]	$	14,418
13.	Plan's Share of Pool's MVA [(1) - (12)]	$	244,038

Schedule of Plan's 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, 2017.
- The employer contribution determined by the valuation is for the fiscal year beginning two years after the valuation date: Fiscal Year 2019-20.

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. Additional discretionary payments are reflected in the Expected Payments column in the fiscal year they were made by the agency.

								Amounts for Fiscal 2019-20	
Reason for Base	Date Established	Ramp Up/Down 2019-20	Amortization Period	Balance 6/30/17	Payment 2017-18	Balance 6/30/18	Payment 2018-19	Balance 6/30/19	Scheduled Payment for 2019-20
FRESH START - LOMPICO WD	06/30/16	No Ramp	4	$1,961	$(313)	$2,427	$546	$2,038	$561
FRESH START	06/30/16	No Ramp	9	$16,912	$(2,665)	$20,898	$2,596	$19,725	$2,666
NON-ASSET (GAIN)/LOSS	06/30/17	20% ↗	30	$(346)	$0	$(371)	$0	$(398)	$(6)
ASSUMPTION CHANGE	06/30/17	20% ↗	20	$4,232	$(6,803)	$11,583	$(6,998)	$19,671	$371
ASSET (GAIN)/LOSS	06/30/17	20% ↗	30	$(8,341)	$0	$(8,946)	$0	$(9,594)	$(133)
TOTAL				$14,418	$(9,781)	$25,591	$(3,856)	$31,442	$3,459

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.

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 2.875 percent for each year into the future. The schedules do not attempt to reflect any experience after June 30, 2017 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.

Amortization Schedule and Alternatives

	Current Amortization Schedule		Alternate Schedules			
			10 Year Amortization		5 Year Amortization	
Date	Balance	Payment	Balance	Payment	Balance	Payment
6/30/2019	31,440	3,459	31,440	3,899	31,440	7,065
6/30/2020	30,137	3,797	29,681	4,011	26,402	7,268
6/30/2021	28,390	4,152	27,679	4,127	20,789	7,477
6/30/2022	26,148	4,524	25,412	4,245	14,553	7,692
6/30/2023	23,359	4,286	22,858	4,367	7,641	7,913
6/30/2024	20,613	4,409	19,992	4,493		
6/30/2025	17,542	4,536	16,789	4,622		
6/30/2026	14,116	4,666	13,220	4,755		
6/30/2027	10,306	4,801	9,254	4,892		
6/30/2028	6,082	1,498	4,859	5,032		
6/30/2029	4,971	1,541				
6/30/2030	3,735	1,586				
6/30/2031	2,364	1,631				
6/30/2032	846	876				
6/30/2033						
6/30/2034						
6/30/2035						
6/30/2036						
6/30/2037						
6/30/2038						
6/30/2039						
6/30/2040						
6/30/2041						
6/30/2042						
6/30/2043						
6/30/2044						
6/30/2045						
6/30/2046						
6/30/2047						
6/30/2048						
Totals		45,763		44,443		37,417
Interest Paid		14,324		13,003		5,977
Estimated Savings				1,321		8,347

* This schedule does not reflect the impact of adopted discount rate changes that will become effective beyond June 30, 2017. 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	6.555%	$35
2017 - 18	6.533%	$126
2018 - 19	6.842%	$2,596
2019 - 20	6.985%	$3,459

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
06/30/2013	$ 506	$ 679	$ (173)	134.2%	$ 50,220
06/30/2014	8,546	9,129	(583)	106.8%	257,244
06/30/2015	51,921	48,755	3,166	93.9%	374,647
06/30/2016	117,612	104,443	13,169	88.8%	607,435
06/30/2017	258,456	244,038	14,418	94.4%	912,722

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 (2017-18, 2018-19, 2019-20 and 2020-21). 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 7.25 percent for fiscal year 2017-18. For fiscal years 2018-19, 2019-20, and 2020-21 each scenario assumes an alternate fixed annual return. The fixed return assumptions for the five scenarios are 1.0 percent, 4.0 percent, 7.0 percent, 9.0 percent and 12.0 percent.

The alternate investment returns were chosen based on stochastic analysis of possible future investment returns over the four-year period ending June 30, 2021. 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 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 percent of them had an average annual return of 4.0 percent 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 percent or greater than 12.0 percent over this four-year period, the possibility of a single investment return less than 1.0 percent or greater than 12.0 percent in any given year is much greater.

Assumed Annual Return From 2018-19 through 2020-21	Projected Employer Contributions			
	2020-21	2021-22	2022-23	2023-24
1.0%				
Normal Cost	7.5%	7.5%	7.5%	7.5%
UAL Contribution	$4,200	$5,200	$6,500	$7,600
4.0%				
Normal Cost	7.5%	7.5%	7.5%	7.5%
UAL Contribution	$4,200	$5,100	$6,200	$6,800
7.0%				
Normal Cost	7.5%	7.5%	7.5%	7.5%
UAL Contribution	$4,200	$5,000	$5,800	$6,000
9.0%				
Normal Cost	7.5%	7.7%	7.9%	7.3%
UAL Contribution	$4,200	$4,900	$5,600	$5,700
12.0%				
Normal Cost	7.5%	7.7%	7.9%	7.3%
UAL Contribution	$4,200	$4,800	$5,200	$710

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 Year 2020-21. In addition, the projections above do not reflect the recent changes to the new amortization policy effective with the June 30, 2019 valuation but the impact on the results above is expected to be minimal.

Analysis of Discount Rate Sensitivity

Shown below are various valuation results as of June 30, 2017 assuming alternate discount rates. Results are shown using the current discount rate of 7.25 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" at the end of this section.

Sensitivity Analysis				
As of June 30, 2017	**Plan's** Total Normal Cost	Accrued Liability	Unfunded Accrued Liability	Funded Status
7.25% (current discount rate)	13.735%	$258,456	$14,418	94.4%
6.0%	17.669%	$337,221	$93,183	72.4%
7.0%	14.273%	$269,252	$25,214	90.6%
8.0%	11.666%	$217,070	$(26,968)	112.4%

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 (7.25 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, 2017
1. Market Value of Assets	$	244,038
2. Payroll		912,722
3. Asset Volatility Ratio (AVR) [(1) / (2)]		0.3
4. Accrued Liability	$	258,456
5. Liability Volatility Ratio (LVR) [(4) / (2)]		0.3
6. Accrued Liability (7.00% discount rate)		269,252
7. Projected Liability Volatility Ratio [(6) / (2)]		0.3

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, 2017. 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%
$244,038	$602,782	40.5%	$358,744	$450,667	54.2%	$206,629

[1] The hypothetical liabilities calculated above include a 5 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 2.61 percent on June 30, 2017, and was 2.83 percent on January 31, 2018.

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, 2016	June 30, 2017
Reported Payroll	$ 607,435	$ 912,722
Projected Payroll for Contribution Purposes	$ 663,760	$ 993,729
Number of Members		
Active	10	14
Transferred	0	1
Separated	0	2
Retired	0	0

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	Active Misc	Inactive Misc
Benefit Formula	2.0% @ 62	2.0% @ 62
Social Security Coverage	Yes	Yes
Full/Modified	Full	Full
Employee Contribution Rate	6.25%	
Final Average Compensation Period	Three Year	Three Year
Sick Leave Credit	Yes	Yes
Non-Industrial Disability	Standard	Standard
Industrial Disability	No	No
Pre-Retirement Death Benefits		
Optional Settlement 2	Yes	Yes
1959 Survivor Benefit Level	No	No
Special	No	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

GASB Statement No. 75

Supplemental Schedules
for San Lorenzo Water District

Reporting Period:	*July 1, 2017 to June 30, 2018*
Measurement Period:	*July 1, 2017 to June 30, 2018*
Valuation Date:	*July 1, 2017*

October 31, 2018

M E M O

TO: Budget & Finance Committee

FROM: Director of Finance & Business Services

SUBJECT: Other Post-Employment Benefits Liability Discussion

DATE: August 6, 2019

BACKGROUND:

District employees who retire under the provisions of the District's retirement plan contract with CalPERS, are eligible to continue CalPERS medical plan coverage. Based on the years of service with the District, the District contributes an amount to employees utilizing this benefit.

GASB 75 went into effect in the FY1718 fiscal year. Similar to GASB 68, it now required the full actuarial liability to go onto the balance sheet. The most recent OPEB actuarial report is attached.

While the District has been contributing on a pay-go method, the District took the first steps last year by opening a CERBT Fund (California Employer's Retiree Benefit Trust). This is a Section 115 trust fund dedicated to prefunding OPEB liabilities.

In a nut shell, public agencies are limited in the types of investing we can do on our own. Special trusts like this allow the District to fund money for a specific purposes and are able to typically see higher returns than we would be able to attain.

Similar to the pension liability discussion, this is meant to be a higher level, informational session to help better understand the OPEB liability and some ways we can begin to reduce it.

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Notes to the Financial Statements
For the Year Ended June 30, 2018

Plan Description

Plan administration. The District sponsors healthcare coverage under the California Public Employees Medical and Hospital Care Act ("PEMHCA"), commonly referred to as PERS Health. PEMHCA provides health insurance through a variety of Health Maintenance Organization (HMO) and Preferred Provider Organization (PPO) options.

Benefits provided. The District provides a capped benefit, which varies based on years of service and employee classification. Classified employees who retire directly from the District are eligible to receive a monthly benefit up to $325, if having over 25 years District service. Classified employees with 15-24 years of service receive a monthly benefit up to $275. Classified employees with under 15 years of service receive a monthly benefit up to $225. Management employees who retire directly from the District are eligible to receive a monthly benefit up to $275, if having over 25 years District service. Management employees with 15-24 years of service receive a monthly benefit up to $225. Management employees with under 15 years of service receive a monthly benefit up to $175. Current retirees are subject to caps ranging from $150/month to $275/month. One retiree receives the full premium. The District also pays the PEMHCA administrative fee (0.23% for 2018/19).

Plan membership. At July 1, 2017, membership consisted of the following:

Inactive plan members or beneficiaries currently receiving benefit payments	5
Active plan members	33

Contributions. The District currently finances benefits on a pay-as-you-go basis.

Net OPEB Liability

The District's Net OPEB Liability was measured as of June 30, 2018 and the Total OPEB Liability used to calculate the Net OPEB Liability was determined by an actuarial valuation as of July 1, 2017. Standard actuarial update procedures were used to project/discount from valuation to measurement dates.

Actuarial assumptions. The total OPEB liability was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Salary increases	3.00 percent
Healthcare cost trend rate	6.00 percent for 2017; 5.00 percent for 2018 and later years
District cap increases	None assumed

Pre-retirement mortality rates were based on the RP-2014 Employee Mortality Table for Males or Females, as appropriate, without projection. Post-retirement mortality rates were based on the RP-2014 Health Annuitant Mortality Table for Males or Females, as appropriate, without projection.

Discount rate. GASB 75 requires a discount rate that reflects the following:

a) The long-term expected rate of return on OPEB plan investments – to the extent that the OPEB plan's fiduciary net position (if any) is projected to be sufficient to make projected benefit payments and assets are expected to be invested using a strategy to achieve that return;
b) A yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher – to the extent that the conditions in (a) are not met.

To determine a resulting single (blended) rate, the amount of the plan's projected fiduciary net position (if any) and the amount of projected benefit payments is compared in each period of projected benefit payments. The discount rate used to measure the District's Total OPEB liability is based on these requirements and the following information:

Reporting Date	Measurement Date	Long-Term Expected Return of Plan Investments (if any)	Municipal Bond 20-Year High Grade Rate Index	Discount Rate
July 1, 2017	July 1, 2017	4.00%	3.13%	3.13%
June 30, 2018	June 30, 2018	4.00%	3.62%	3.62%

The components of the net OPEB liability were as follows:

	Cash Subsidy	Implied Subsidy	Total
Total OPEB liability	$616,452	$412,814	$1,029,266
Plan fiduciary net position	0	0	0
Net OPEB liability	$616,452	$412,814	$1,029,266

Measurement date	June 30, 2018
Reporting date	June 30, 2018

Covered payroll	$2,962,700
Total Net OPEB liability (asset) as a percentage of covered payroll	34.74%
Plan fiduciary net position as a percentage of the total OPEB liability	0.00%

Schedule of Changes in Net OPEB Liability

Total OPEB Liability	Cash	Implied	Total
Service Cost	27,373	41,945	69,318
Interest	18,770	11,960	30,730
Changes of benefit terms	0	0	0
Difference between expected and actual experience	0	0	0
Changes of assumptions	(20,375)	(17,459)	(37,834)
Benefit payments[1]	(17,853)	(11,376)	(29,229)
Net change in total OPEB liability	7,915	25,070	32,985
Total OPEB liability – beginning (a)	$608,537	$387,744	$996,281
Total OPEB liability – ending (b)	$616,452	$412,814	$1,029,266
Plan fiduciary net position			
Contributions – employer[1]	17,853	11,376	29,229
Net investment income	0	0	0
Benefit payments[1]	(17,853)	(11,376)	(29,229)
Administrative expense	0	0	0
Net change in plan fiduciary net position	0	0	0
Plan fiduciary net position – beginning (c)	$0	$0	$0
Plan fiduciary net position – ending (d)	$0	$0	$0
Net OPEB liability – beginning (c) – (a)	$608,537	$387,744	$996,281
Net OPEB liability – ending (d) – (b)	$616,452	$412,814	$1,029,266

[1] Amount includes implicit subsidy associated with benefits paid.

Sensitivity of the net OPEB liability to changes in the discount rate. The following presents the net OPEB liability, as well as what the net OPEB liability would be if it were calculated using a discount rate that is 1-percentage point lower (2.62 percent) or 1-percentage-point higher (4.62 percent) than the current discount rate:

Cash Subsidy	1% Decrease (2.62%)	Discount Rate (3.62%)	1% Increase (4.62%)
Net OPEB liability (asset)	646,736	616,452	587,025

Implied Subsidy	1% Decrease (2.62%)	Discount Rate (3.62%)	1% Increase (4.62%)
Net OPEB liability (asset)	462,097	412,814	371,417

Total	1% Decrease (2.62%)	Discount Rate (3.62%)	1% Increase (4.62%)
Net OPEB liability (asset)	1,108,833	1,029,266	958,442

Sensitivity of the net OPEB liability to changes in the healthcare cost trend rates. The following presents the net OPEB liability, as well as what the net OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower (5.00 percent decreasing to 4.00 percent) or 1-percentage-point higher (7.00 percent decreasing to 6.00 percent) than the current healthcare cost trend rates:

Cash Subsidy	1% Decrease (5.00% decreasing to 4.00%)	Trend Rate (6.00% decreasing To 5.00%)	1% Increase (7.00% decreasing to 6.00%)
Net OPEB liability (asset)	560,323	616,452	684,885

Implied Subsidy	1% Decrease (5.00% decreasing to 4.00%)	Trend Rate (6.00% decreasing To 5.00%)	1% Increase (7.00% decreasing to 6.00%)
Net OPEB liability (asset)	376,227	412,814	453,853

Total	1% Decrease (5.00% decreasing to 4.00%)	Trend Rate (6.00% decreasing To 5.00%)	1% Increase (7.00% decreasing to 6.00%)
Net OPEB liability (asset)	936,550	1,029,266	1,138,738

Statement of Changes in Fiduciary Net Position

Additions	
Employer contributions[2]	29,229
Investment income:	
Net increase in fair value of investments	0
Total additions	29,229
Deductions	
Trustee fees	0
Administrative expense	0
Benefit payments[2]	29,229
Total deductions	29,229
Net increase in net position	0
Net position restricted for postemployment benefits other than pensions	
Beginning of year	$0
End of year	$0

[2] Includes $17,853 of pay-as-you-go contributions made from sources outside of trust, plus an implicit subsidy amount of $11,376.

Deferred Outflows/Deferred Inflows of Resources Related to OPEB – Cash Subsidy

At June 30, 2018, the District's deferred outflows of resources and deferred inflows of resources to OPEB from the following sources are:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience[3,4]	0	0
Changes in assumptions or other inputs[3,4]	0	17,859
Differences between projected and actual return investments[3,4]	0	0
Total	$0[5]	$17,859

[3] Measured at June 30, 2018.
[4] See Schedule of Deferred Outflows and Inflows of Resources for additional information;
[5] Does not include District contributions after the measurement date, which will be recognized as a reduction of the Net OPEB Liability in the year ending June 30, 2019.

Amounts reported as deferred outflows and deferred inflows of resources will be recognized in OPEB expense as follows:

Fiscal Year ending June 30:	Deferred Outflows of Resources	Deferred Inflows of Resources
2019	0	(2,516)
2020	0	(2,516)
2021	0	(2,516)
2022	0	(2,516)
2023	0	(2,516)
2024	0	(2,516)
2025	0	(2,516)
2026	0	(247)
2027	0	0
2028	0	0
2029	0	0
2030	0	0
2031	0	0
2032	0	0
2033	0	0
2034	0	0
2035	0	0
2036	0	0
2037	0	0
2038	0	0

Deferred Outflows/Deferred Inflows of Resources Related to OPEB – Implied Subsidy

At June 30, 2018, the District's deferred outflows of resources and deferred inflows of resources to OPEB from the following sources are:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience[3,4]	0	0
Changes in assumptions or other inputs[3,4]	0	15,304
Differences between projected and actual return investments[3,4]	0	0
Total	$0[5]	$15,304

[3] Measured at June 30, 2018.
[4] See Schedule of Deferred Outflows and Inflows of Resources for additional information;
[5] Does not include District contributions after the measurement date, which will be recognized as a reduction of the Net OPEB Liability in the year ending June 30, 2019.

Amounts reported as deferred outflows and deferred inflows of resources will be recognized in OPEB expense as follows:

Fiscal Year ending June 30:	Deferred Outflows of Resources	Deferred Inflows of Resources
2019	0	(2,155)
2020	0	(2,155)
2021	0	(2,155)
2022	0	(2,155)
2023	0	(2,155)
2024	0	(2,155)
2025	0	(2,155)
2026	0	(219)
2027	0	0
2028	0	0
2029	0	0
2030	0	0
2031	0	0
2032	0	0
2033	0	0
2034	0	0
2035	0	0
2036	0	0
2037	0	0
2038	0	0

Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB - Total

At June 30, 2018, the District's deferred outflows of resources and deferred inflows of resources to OPEB from the following sources are:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience[3,4]	0	0
Changes in assumptions or other inputs[3,4]	0	33,163
Differences between projected and actual return investments[3,4]	0	0
Total	$0[5]	$33,163

[3] Measured at June 30, 2018.
[4] See Schedule of Deferred Outflows and Inflows of Resources for additional information;
[5] Does not include District contributions after the measurement date, which will be recognized as a reduction of the Net OPEB Liability in the year ending June 30, 2019.

Amounts reported as deferred outflows and deferred inflows of resources will be recognized in OPEB expense as follows:

Fiscal Year ending June 30:	Deferred Outflows of Resources	Deferred Inflows of Resources
2019	0	(4,671)
2020	0	(4,671)
2021	0	(4,671)
2022	0	(4,671)
2023	0	(4,671)
2024	0	(4,671)
2025	0	(4,671)
2026	0	(466)
2027	0	0
2028	0	0
2029	0	0
2030	0	0
2031	0	0
2032	0	0
2033	0	0
2034	0	0
2035	0	0
2036	0	0
2037	0	0
2038	0	0

San Lorenzo Water District
Post-Employment Medical Benefits Plan

GASB 75 Disclosure Information

Schedule of Deferred Outflows and Inflows of Resources

Year	Type	Category	Initial Base	Amortization Period	Current Balance
2018	Deferred Outflow	Difference between expected and actual experience	0	8.1	0
2018	Deferred Outflow	Changes in assumptions	0	8.1	0
2018	Deferred Outflow	Net difference between projected and actual earnings on plan investments	0	5.0	0
				Total	0

Cash Subsidy					
Year	Type	Category	Initial Base	Amortization Period	Current Balance
2018	Deferred Inflow	Difference between expected and actual experience	0	8.1	0
2018	Deferred Inflow	Changes in assumptions	20,375	8.1	17,859
2018	Deferred Inflow	Net difference between projected and actual earnings on plan investments	0	5.0	0
				Total	33,163

Implied Subsidy					
Year	Type	Category	Initial Base	Amortization Period	Current Balance
2018	Deferred Inflow	Difference between expected and actual experience	0	8.1	0
2018	Deferred Inflow	Changes in assumptions	17,459	8.1	15,304
2018	Deferred Inflow	Net difference between projected and actual earnings on plan investments	0	5.0	0
				Total	33,163

Year	Type	Category	Initial Base	Amortization Period	Current Balance
2018	Deferred Inflow	Difference between expected and actual experience	0	8.1	0
2018	Deferred Inflow	Changes in assumptions	37,834	8.1	33,163
2018	Deferred Inflow	Net difference between projected and actual earnings on plan investments	0	5.0	0
				Total	33,163

Net OPEB Expense

The District's Net OPEB expense is as follows:

	Cash	Implied	Total
Net OPEB Liability - beginning (a)	$608,537	$387,744	$996,281
Net OPEB Liability – ending (b)	$616,452	$412,814	$1,029,266
Change in Net OPEB Liability [(b)-(a)]	7,915	25,070	32,985
Change in Deferred Outflows	0	0	0
Change in Deferred Inflows	17,859	15,304	33,163
Employer Contributions	17,853	11,376	29,229
OPEB Expense	$43,627	$51,750	$95,377

	Cash	Implied	Total
Service Cost	27,373	41,945	69,318
Interest Cost	18,770	11,960	30,730
Expected Return on Assets	0	0	0
Changes of benefit terms	0	0	0
Recognition of Deferred Outflows and Inflows			
Differences between expected and actual experience	0	0	0
Changes of assumptions	(2,516)	(2,155)	(4,671)
Differences between projected and actual investments	0	0	0
Total	(2,516)	(2,155)	(4,671)
Net OPEB Expense	$43,627	$51,750	$95,377

Actuarial Certification

The results set forth in this supplement are based on our actuarial valuation of the health and welfare benefit plans of the San Lorenzo Water District as of July 1, 2017.

The valuation was performed in accordance with generally accepted actuarial principles and practices. We relied on census data for active employees and retirees provided to us by the District. We also made use of claims, premium, expense, and enrollment data, and copies of relevant sections of healthcare documents provided to us by the District, and (when applicable) trust statements prepared by the trustee and provided to us by the District.

The assumptions used in performing the valuation, as summarized in this report, and the results based thereupon, represent our best estimate of the actuarial costs of the program under GASB 74 and GASB 75, and the existing and proposed Actuarial Standards of Practice for measuring post-retirement healthcare benefits.

The undersigned actuary meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Certified by:

Carlos Diaz, ASA, EA, MAAA
Actuary

Stephanie Hill
Director of Finance and Business Services
San Lorenzo Water District
c/o CSBA

California Employers' Retiree Benefit Trust (CERBT)

CERBT Strategy 1

June 30, 2019

Objective

The objective of the CERBT Strategy 1 portfolio is to seek returns that reflect the broad investment performance of the financial markets through capital appreciation and investment income. There is no guarantee that the portfolio will achieve its investment objective.

Strategy

The CERBT Strategy 1 portfolio is invested in various asset classes in percentages approved by the CalPERS Board. The specific percentages of portfolio assets allocated to each asset class are shown under "Composition." Generally, equities are intended to help build the value of the employer's portfolio over the long term while bonds are intended to help provide income and stability of principal. Also, strategies invested in a higher percentage of equities seek higher investment returns (but assume more risk) compared with strategies invested in a higher percentage of bonds.

Compared with CERBT Strategy 2 and Strategy 3, this portfolio consists of a higher percentage of equities than bonds and other assets. Historically, equities have displayed greater price volatility and therefore this portfolio may experience greater fluctuation of value. Employers that seek higher investment returns, and are able to accept greater risk and tolerate more fluctuation in returns, may wish to consider this portfolio.

CalPERS Board may change the list of approved asset classes, in composition as well as targeted allocation percentages and ranges at any time.

Assets Under Management

As of the specified reporting month-end, the aggregate total of assets under management for all CERBT Strategies was

$9,800,514,809.

Composition

Asset Class Allocations and Benchmarks

The CERBT Strategy 1 portfolio consists of the following asset classes and corresponding benchmarks:

Asset Class	Target Allocation[1]	Target Range	Benchmark
Global Equity	59%	± 5%	MSCI All Country World Index IMI (net)
Fixed Income	25%	±5%	Bloomberg Barclays Long Liability Index
Treasury Inflation-Protected Securities ("TIPS")	5%	± 3%	Bloomberg Barclays US TIPS Index
Real Estate Investment Trusts ("REITs")	8%	± 5%	FTSE EPRA/NAREIT Developed Liquid Index (net)
Commodities	3%	± 3%	S&P GSCI Total Return Index
Cash	-	+2%	91 Day Treasury Bill

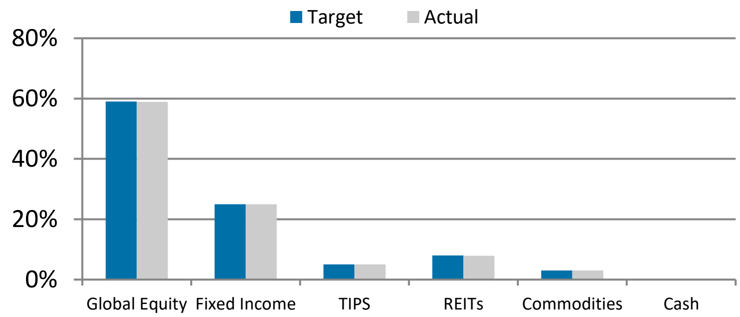
[1] Allocations approved by the Board at the May 2018 Investment Committee meeting

Portfolio Benchmark

The CERBT Strategy 1 benchmark is a composite of underlying asset class market indices, each assigned the target weight for the asset class it represents.

Target vs. Actual Asset Class Allocations

The following chart shows policy target allocations compared with actual asset allocations as of the specified reporting month-end. CalPERS may overweight or underweight an allocation to a particular asset class based on market, economic, or CalPERS policy considerations.



CERBT Strategy 1 Performance as of June 30, 2019								
	1 Month	3 Months	Fiscal YTD	1 Year	3 Years*	5 Years*	10 Years*	Since Inception* (June 1, 2007)
Gross Return[1,3]	4.49%	3.25%	6.22%	6.22%	8.26%	5.07%	9.42%	4.92%
Net Return[2,3]	4.48%	3.23%	6.13%	6.13%	8.17%	4.98%	9.33%	4.85%
Benchmark returns	4.52%	3.30%	6.00%	6.00%	7.83%	4.66%	9.08%	4.48%
Standard Deviation[4]	-	-	-	-	7.80%	8.05%	9.85%	12.61%

Performance quoted represents past performance, which is no guarantee of future results that may be achieved by the fund.

* Returns for periods greater than one year are annualized.

[1] Gross performance figures are provided net of SSGA operating expenses.

[2] Net Performance figures deduct all expenses to the fund, including investment management, administrative and recordkeeping fees.

[3] See the Expense section of this document.

[4] Standard Deviation is from gross return.

California Employers' Retiree Benefit Trust (CERBT)

CERBT Strategy 1

June 30, 2019

General Information

Information Accessibility

The CERBT Strategy 1 portfolio consists of assets managed internally by CalPERS and/or external advisors. Since it is not a mutual fund, a prospectus is not available nor is information available from a newspaper source. This summary is designed to provide descriptive information. CalPERS provides a quarterly statement of the employer's account and other information about the CERBT. For total market value, detailed asset allocation, investment policy and current performance information, including performance to the most recent month-end, please visit our website at: **www.calpers.ca.gov**.

Portfolio Manager Information

The CalPERS Investment Committee and Board of Administration directs the investment strategy and investments of the CERBT. State Street Global Advisors (SSGA) manages all asset classes for CERBT, which includes: Global Equity, Fixed Income, Real Estate Investment Trusts, Treasury Inflation-Protected Securities, and Commodities.[1]

Custodian and Record Keeper

State Street Bank serves as custodian for the CERBT. Northeast Retirement Services serves as record keeper.

Expenses

CERBT is a self-funded trust in which participating employers pay for all administrative and investment expenses. Expenses reduce the gross investment return by the fee amount. The larger the fee, the greater the reduction of investment return. Currently, CERBT expenses are 0.10% which consist of administrative expenses borne by CalPERS to administer and oversee the Trust assets, investment management and administrative fees paid to SSGA to manage all asset classes, and recordkeeping fees paid to Northeast Retirement Services to administer individual employer accounts. The expenses described herein are reflected in the net asset value per share. CERBT's actual expenses may differ from the amount currently being accrued due to factors such as changes in average fund assets or market conditions. The expense accrual rate may change without notice in order to reflect changes in average portfolio assets or in expense amounts. The CalPERS Board annually reviews the operating expenses and changes may be made as appropriate. Even if the portfolio loses money during a period, the fee is still charged.

What Employers Own

Each employer choosing CERBT Strategy 1 owns a percentage of this portfolio, which invests in pooled asset classes managed by CalPERS and/or external advisors. Employers do not have direct ownership of the securities in the portfolio.

Price

The value of the portfolio changes daily, based upon the market value of the underlying securities. Just as prices of individual securities fluctuate, the portfolio's value also changes with market conditions.

Principal Risks of the Portfolio

The CalPERS CERBT Fund provides California government employers with a trust through which they may prefund retiree medical costs and other post-employment benefits. CERBT is not, however, a defined benefit plan. There is no guarantee that the portfolio will achieve its investment objectives nor provide sufficient funding to meet these employer obligations. Further, CalPERS will not make up the difference between the employer's CERBT assets and the actual cost of Other Post Employment Benefits provided to employer's plan members.

An investment in the portfolio is not a bank deposit, and it is not insured nor guaranteed by the Federal Deposit Insurance Corporation (FDIC), CalPERS, the State of California or any other government agency.

There are risks associated with investing, including possible loss of principal. The portfolio's risk depends in part on the portfolio's asset class allocations and the selection, weighting and risks of the underlying investments. For more information about investment risks, please see the document entitled "CERBT Principal Investment Risks" located at **www.calpers.ca.gov**.

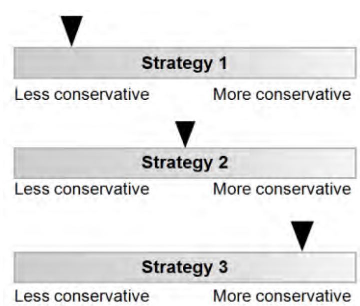
Fund Performance

Performance data shown on page 1 represents past performance and is no guarantee of future results. The investment return and principal value of an investment will fluctuate so that an employer's units, when redeemed, may be worth more or less than their original cost. Current performance may be higher or lower than historical performance data shown. For current performance information, please visit **www.calpers.ca.gov** and follow the links to California Employers' Retiree Benefit Trust.

CERBT Strategy Risk Levels

CalPERS offers employers the choice of one of three investment strategies. Risk levels among strategies vary, depending upon the target asset class allocations. Generally, equities carry more risk than fixed income securities.

Asset Class Target Allocations	Strategy 1	Strategy 2	Strategy 3
Global Equity	59%	40%	22%
Fixed Income	25%	43%	49%
Treasury Inflation-Protected Securities	5%	5%	16%
Real Estate Investment Trusts	8%	8%	8%
Commodities	3%	4%	5%



[1] Since June 2018 SSGA has managed passively all CERBT asset classes. Previously Fixed Income, TIPS and Commodity asset classes were internally managed.