County Connection

INTER OFFICE MEMO

To: Administration and Finance Committee **Date:** November 10, 2020

From: Erick Cheung
Chief Finance Officer

SUBJECT: PERS Actuarial Valuation for June 30, 2019; Rate for FY 2022

SUMMARY OF ISSUES:

The PERS Actuarial Valuation Report (Report) for the period ending June 30, 2019 is used to set the rate for the next fiscal year and provides County Connection's funded status. **The employer rate for FY 2022 will be 8.91% and an unfunded liability payment of $752,695.** County Connection's funded status is currently **89.2% funded,** which is down slightly from 89.8%. CalPERS investment return for 2019 was 6.7% which was under the discount rate of 7.0%.

CalPERS Assumptions & Projections

The updated projections shown below were already used in the September Budget update and will be incorporated in the next budget and forecast. The revised unfunded liability payments are slightly higher as CalPERS rate of return was 6.7% for FY 2019 and only 0.3% less than the assumed rate of 7.0%. As shown in the table, the payments for unfunded liability payments over the next 6 fiscal years are up by $178,695.

Below are the CalPERS current projections compared with the prior projections:

	Current			Prior Forecast			Difference		
	Payroll Rate	+	Unfunded Liability Payment	Payroll Rate	+	Unfunded Liability Payment	Payroll Rate	+	Unfunded Liability Payment
FY 2021 Actual	8.785%		$ 537,865	8.785%		$ 537,865	n/a		n/a
FY 2022	8.910%		$ 752,695	8.785%		$ 741,000	1.423%		$ 11,695
FY 2023	9.000%		$ 920,000	8.800%		$ 897,000	2.273%		$ 23,000
FY 2024	9.100%		$ 973,000	8.800%		$ 937,000	3.409%		$ 36,000
FY 2025	9.100%		$ 1,065,000	8.800%		$ 1,017,000	3.409%		$ 48,000
FY 2026	9.200%		$ 1,105,000	8.800%		$ 1,045,000	4.545%		$ 60,000
FY 2027	9.300%		$ 1,134,000	8.800%		n/a	5.682%		n/a
Unfunded Liab Payment Total			$ 6,487,560						
Unfunded Liab Payment Total FY 2021-FY2026			$ 5,353,560			$ 5,174,865			$ 178,695

In the September Budget update, we informed A&F Committee and the Board that CalPERS achieved 4.7% in FY 2020 which is less than 7.0%. Staff included the additional UAL payments (table below) which would **begin in FY 2023** into the forecast based on the estimator tools provided by CalPERS. Actual amounts will be part of next year's valuation.

	Estimated Additional Unfunded Liability Payment
FY 2023	$ 60,000
FY 2024	$ 180,000
FY 2025	$ 290,000
FY 2026	$ 400,000
FY 2027	$ 510,000
Unfunded Liab Payment Total	$ 1,440,000

Estimates of future employer rates depend upon a variety of factors:

- Future investment returns of 7.00%.
- Payroll growth of 2.75%.
- Inflation growth of 2.50%.
- Demographic assumptions including the percentage of employees that will terminate employment, retire, or pass on in each future year.

Several pages of the actuarial report are attached.

Plan's Funded Status, Based on Market Value of Assets (Page 6 Actuarial Report)

As stated earlier, the funded status is 89.2% with the unfunded liability totaling $11.3 million. The prior year funded status was 89.8%, with the unfunded liability of $10.2 million. The reasons for the increase in the unfunded accrued liability (UAL) of $1.1 million was due to the discount rate being slightly less than the assumption of 7.0% and the amortization of the costs related to the reduction in the discount rate from 7.50% to 7.00%.

Investment Rate of Return

It is CalPERS' policy to use a constant investment return rate for the actuarial report rather than the actual rate of return. This is called *asset smoothing*- the delayed recognition of part of the investment gains or losses dampens the effect of short-term market value fluctuations in setting employers' rates. Prior to fiscal year 2019, CalPERS employs a policy that amortizes all gains and losses over a fixed 30-year period which was smoothed by ramping up/down the increase or decrease over a 5 year period. This method is referred to as "direct rate smoothing." Beginning this fiscal year, the CalPERS Board approved amortizing gains/losses over a 20 a year period based on a level dollar amount, and removed the 5 year ramping. Finally, CalPERS does not use the actuarial value of assets, but uses the market value of assets.

The CalPERS history of investment returns is shown on Page 12 of the actuarial report.

Other Information

- There are 205 retirees receiving benefits.
- The average annual benefit is $18,608.
- The average age of retirees is 70.53.
- There are 241 active members.
- The average annual payroll of the active members is $60,872.
- The covered annual payroll is $14,670,139.
- The average age for active members is 51.70.
- Pages C-1 & C-2 include a breakdown of the active members by age and salaries & years of service. As of June 30, 2019, 24% or 58 employees were over 60 years of age.

Options to Reduce Pension Liability

In the previous year, the Board authorized reducing our pension liability by making smaller direct payments to CalPERS to achieve interest saving over time. The following was the framework of how to make those additional payments could be made:

1. If the estimate for pension related costs are less than budget by the May budget presentation, and would not require a draw on the contingency, nor additional TDA allocations; allow the General Manager to authorize additional payments to CalPERS up to $100,000.
2. Additional payment amounts over $100,000 could be recommended by staff and approved by the A&F and Board as part of the May budget review.
3. Any additional payments made by Authority to CalPERS would be adjusted for in the Wage Increase determination done by the auditors each year. In the auditors Agreed Upon Procedure report, that additional payment amount will be reduced from total pension expense for that fiscal year. This amount shall not be included as part of the increase of additional pension costs of $1,000,000 for that fiscal year which might cause a reduction of wage increases.

Due to the Coronavirus, no additional payments were made in FY 2020 and probably none in FY 2021 as we are looking for ways to reduce costs in the near future.

FINANCIAL IMPLICATIONS: These rates will be used for the revised budget and forecast.

ACTION REQUESTED: Information only.

ATTACHMENTS: Selected pages of the PERS valuation report.

Actuarial Valuation
as of June 30, 2019

for the
Miscellaneous Plan
of the
Central Contra Costa Transit Authority

(CalPERS ID: 2146548042)
(Valuation Rate Plan ID: 1380)

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

Required Contributions

	Fiscal Year
Required Employer Contribution	**2021-22**
Employer Normal Cost Rate	**8.91%**
Plus, Either	
1) Monthly Employer Dollar UAL Payment	**$62,725**
Or	
2) Annual UAL Prepayment Option*	**$727,658**
Required PEPRA Member Contribution Rate	**7.25%**

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

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

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

For additional detail regarding the determination of the required contribution for PEPRA members, see "PEPRA Member Contribution Rates" in the "Liabilities and Contributions" section. Required member contributions for Classic members can be found in Appendix B.

	Fiscal Year 2020-21	Fiscal Year 2021-22
Normal Cost Contribution as a Percentage of Payroll		
Total Normal Cost	15.859%	15.99%
Employee Contribution[1]	7.074%	7.08%
Employer Normal Cost[2]	8.785%	8.91%
Projected Annual Payroll for Contribution Year	$16,088,911	$15,914,013
Estimated Employer Contributions Based On Projected Payroll		
Total Normal Cost	$2,551,541	$2,544,651
Employee Contribution[1]	1,138,130	1,126,712
Employer Normal Cost[2]	1,413,411	1,417,939
Unfunded Liability Contribution	537,865	752,695
% of Projected Payroll (illustrative only)	3.343%	4.73%
Estimated Total Employer Contribution	$1,951,276	$2,170,634
% of Projected Payroll (illustrative only)	12.128%	13.64%

[1] For classic members, this is the percentage specified in the Public Employees' Retirement Law, net of any reduction from the use of a modified formula or other factors. For PEPRA members, the member contribution rate is based on 50 percent of the normal cost. A development of PEPRA member contribution rates can be found in the "Liabilities and Contributions" section. Employee cost sharing is not shown in this report.

[2] The Employer Normal Cost is a blended rate for all benefit groups in the plan. For a breakout of normal cost by benefit group, see "Normal Cost by Benefit Group" in the "Liabilities and Contributions" section.

Plan's Funded Status

	June 30, 2018	June 30, 2019
1. Present Value of Projected Benefits	$115,493,189	$120,933,996
2. Entry Age Normal Accrued Liability	99,433,809	104,866,557
3. Market Value of Assets (MVA)	89,262,391	93,584,576
4. Unfunded Accrued Liability (UAL) [(2) – (3)]	$10,171,418	$11,281,981
5. Funded Ratio [(3) / (2)]	89.8%	89.2%

This measure of funded status is an assessment of the need for future employer contributions based on the actuarial cost method used to fund the plan. The UAL is the present value of future employer contributions for service that has already been earned and is in addition to future normal cost contributions for active members. For a measure of funded status that is appropriate for assessing the sufficiency of plan assets to cover estimated termination liabilities, please see "Hypothetical Termination Liability" in the "Risk Analysis" section.

Projected Employer Contributions

The table below shows the required and projected employer contributions (before cost sharing) for the next six fiscal years. The projection assumes that all actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur during the projection period. As of the preparation date of this report, the year to date return for the 2019-20 fiscal year was well below the 7 percent assumed return. Actual contribution rates during this projection period could be significantly higher than the projection shown below. The projected normal cost percentages in the projections below reflect that the normal cost will continue to decline over time as new employees are hired into PEPRA or other lower cost benefit tiers.

	Required Contribution	**Projected Future Employer Contributions (Assumes 7.00% Return for Fiscal Year 2019-20)**				
Fiscal Year	**2021-22**	**2022-23**	**2023-24**	**2024-25**	**2025-26**	**2026-27**
Normal Cost %	8.91%	9.0%	9.1%	9.1%	9.2%	9.3%
UAL Payment	$752,695	$920,000	$973,000	$1,065,000	$1,105,000	$1,134,000
*Total as a % of Payroll**	*13.64%*	*14.6%*	*14.8%*	*15.3%*	*15.4%*	*15.5%*
Projected Payroll	*$15,914,013*	*$16,351,649*	*$16,801,319*	*$17,263,355*	*$17,738,098*	*$18,225,895*

*Illustrative only and based on the projected payroll shown.

For some sources of UAL, the change in UAL is amortized using a 5-year ramp up. For more information, please see "Amortization of the Unfunded Actuarial Accrued Liability" under "Actuarial Methods" in Appendix A. This method phases in the impact of the change in UAL over a 5-year period in order to reduce employer cost volatility from year to year. As a result of this methodology, dramatic changes in the required employer contributions in any one year are less likely. However, required contributions can change gradually and significantly over the next five years. In years when there is a large increase in UAL, the relatively small amortization payments during the ramp up period could result in a funded ratio that is projected to decrease initially while the contribution impact of the increase in the UAL is phased in.

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

Asset Allocation

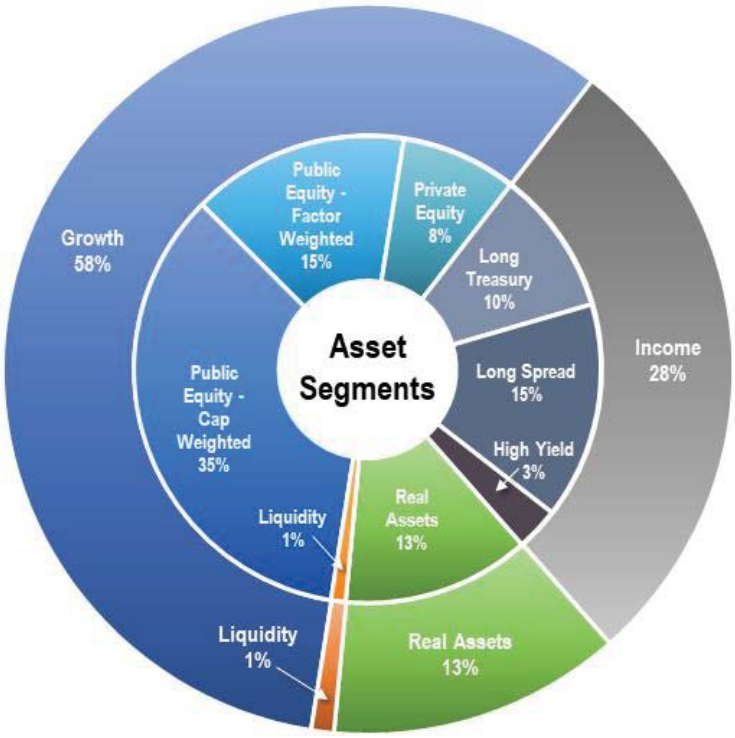
CalPERS adheres to an Asset Allocation Strategy which establishes asset class allocation policy targets and ranges and manages those asset class allocations within their policy ranges. CalPERS Investment Belief No. 6 recognizes that strategic asset allocation is the dominant determinant of portfolio risk and return. On December 19, 2017, the CalPERS Board of Administration adopted changes to the current asset allocation as shown in the Policy Target Allocation below expressed as a percentage of total assets.

The asset allocation shown below reflect the allocation of the Public Employees' Retirement Fund (PERF) in its entirety as of June 30, 2019. The assets for Central Contra Costa Transit Authority Miscellaneous Plan are part of the PERF and are invested accordingly.

Asset Class	Actual Allocation	Policy Target Allocation
Public Equity	50.2%	50.0%
Private Equity	7.1%	8.0%
Global Fixed Income	28.7%	28.0%
Real Assets	11.0%	13.0%
Liquidity	1.0%	1.0%
Inflation Sensitive Assets	0.0%	0.0%
Trust Level[1]	2.0%	0.0%
Total Fund	**100.0%**	**100.0%**

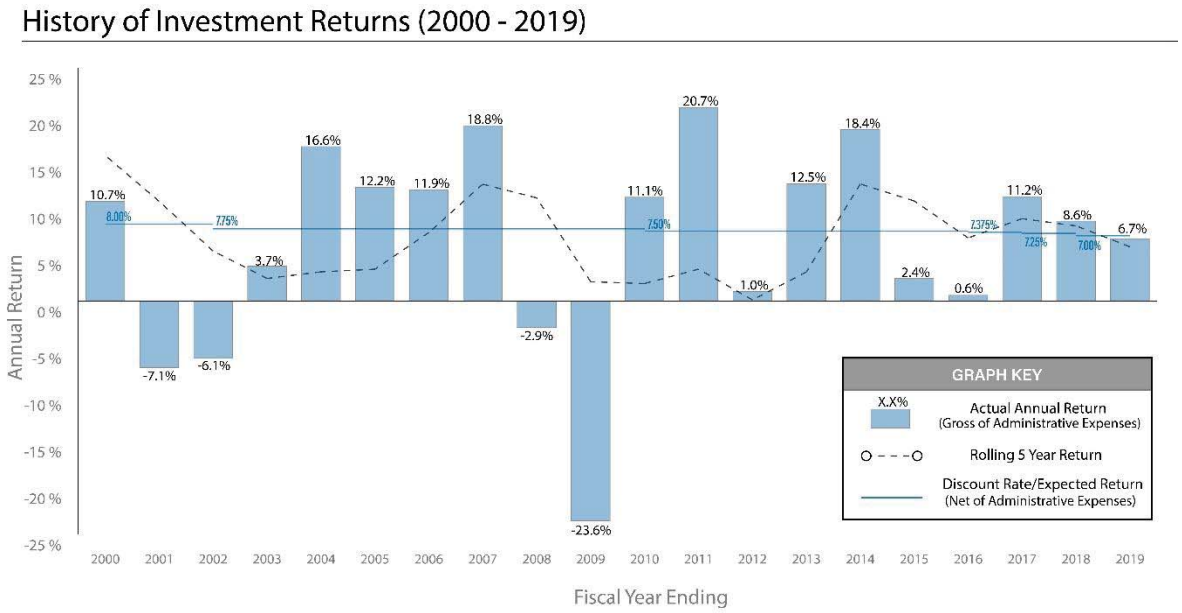
[1] Trust Level includes Multi-Asset Class, Completion Overlay, Risk Mitigation, Absolute Return Strategies, Plan Level Transition and other Total Fund level portfolios.

Strategic Asset Allocation Policy Targets



CalPERS History of Investment Returns

The following is a chart with the 20-year historical annual returns of the Public Employees' Retirement Fund for each fiscal year ending on June 30. Beginning in 2002, the figures are reported as gross of administrative expenses.



The table below shows historical compound annual returns of the Public Employees Retirement Fund for various time periods ending on June 30, 2019 (figures are reported as gross of fees). The compound annual return is the average rate per year compounded over the indicated number of years. It should be recognized that in any given year the rate of return is volatile. The portfolio has an expected volatility of 11.4 percent per year based on the most recent Asset Liability Modelling study. The volatility is a measure of the risk of the portfolio expressed in the standard deviation of the fund's total return distribution, expressed as a percentage. Consequently, when looking at investment returns, it is more instructive to look at returns over longer time horizons.

History of CalPERS Compound Annual Rates of Return and Volatilities					
	1 year	**5 year**	**10 year**	**20 year**	**30 year**
Compound Annual Return	6.7%	5.8%	9.1%	5.8%	8.1%
Volatility	–	4.4%	6.9%	10.7%	9.8%

Schedule of Amortization Bases

Below is the schedule of the plan's amortization bases. Note that there is a two-year lag between the valuation date and the start of the contribution fiscal year.

- The assets, liabilities, and funded status of the plan are measured as of the valuation date: June 30, 2019.
- The required employer contributions determined by the valuation are for the fiscal year beginning two years after the valuation date: fiscal year 2021-22.

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

The Unfunded Accrued Liability (UAL) is used to determine the employer contribution and therefore must be rolled forward two years from the valuation date to the first day of the fiscal year for which the contribution is being determined. The UAL is rolled forward each year by subtracting the expected payment on the UAL for the fiscal year and adjusting for interest. The expected payment on the UAL for a fiscal year is equal to the Expected Employer Contribution for the fiscal year minus the Expected Normal Cost for the year. The Employer Contribution for the first fiscal year is determined by the actuarial valuation two years ago and the contribution for the second year is from the actuarial valuation one year ago. Additional discretionary payments are reflected in the Expected Payments column in the fiscal year they were made by the agency.

Reason for Base	Date Est.	Ramp Level 2021-22	Ramp Shape	Escala-tion Rate	Amort. Period	Balance 6/30/19	Expected Payment 2019-20	Balance 6/30/20	Expected Payment 2020-21	Balance 6/30/21	Minimum Required Payment 2021-22
FS Surplus To 30 Years	6/30/14	No Ramp		2.75%	25	(105,421)	(6,612)	(105,961)	(6,684)	(106,464)	(6,867)
(Gain)/Loss	6/30/15	100%	Up/Down	2.75%	26	4,178,075	166,740	4,298,063	224,806	4,366,386	288,736
Assumption Change	6/30/16	80%	Up/Down	2.75%	17	1,719,714	63,476	1,774,434	96,609	1,798,711	132,354
(Gain)/Loss	6/30/16	80%	Up/Down	2.75%	27	5,936,029	160,361	6,185,672	243,089	6,367,216	333,031
Assumption Change	6/30/17	60%	Up/Down	2.75%	18	1,203,308	22,729	1,264,028	46,093	1,304,831	71,041
(Gain)/Loss	6/30/17	60%	Up/Down	2.75%	28	(4,087,703)	(56,791)	(4,315,097)	(114,702)	(4,498,505)	(176,785)
Method Change	6/30/18	40%	Up/Down	2.75%	19	515,793	6,420	545,258	10,166	572,910	20,891
Assumption Change	6/30/18	40%	Up/Down	2.75%	19	2,909,890	(98,491)	3,215,462	59,951	3,378,531	123,200
(Gain)/Loss	6/30/18	40%	Up/Down	2.75%	29	(1,468,664)	0	(1,571,470)	(21,463)	(1,659,271)	(44,106)
Non-Investment (Gain)/Loss	6/30/19	No Ramp		0.00%	20	(10,569)	0	(11,309)	0	(12,101)	(1,104)
Investment (Gain)/Loss	6/30/19	20%	Up Only	0.00%	20	491,529	0	525,936	0	562,752	12,304
Total						**11,281,981**	**257,832**	**11,805,016**	**537,865**	**12,074,996**	**752,695**

Amortization Schedule and Alternatives

The amortization schedule on the previous page shows the minimum contributions required according to the CalPERS amortization policy. Many agencies have expressed interest in paying off the unfunded accrued liabilities more quickly than required. As such, we have provided alternative amortization schedules to help analyze the current amortization schedule and illustrate the potential savings of accelerating unfunded liability payments.

Shown on the following page are future year amortization payments based on 1) the current amortization schedule reflecting the individual bases and remaining periods shown on the previous page, and 2) alternative "fresh start" amortization schedules using two sample periods that would both result in interest savings relative to the current amortization schedule.

The Current Amortization Schedule typically contains both positive and negative bases. Positive bases result from plan changes, assumption changes, method changes or plan experience that increase unfunded liability. Negative bases result from plan changes, assumption changes, method changes, or plan experience that decrease unfunded liability. The combination of positive and negative bases within an amortization schedule can result in unusual or problematic circumstances in future years, such as:

- When a negative payment would be required on a positive unfunded actuarial liability; or
- When the payment would completely amortize the total unfunded liability in a very short time period, and results in a large change in the employer contribution requirement.

In any year when one of the above scenarios occurs, the actuary will consider corrective action such as replacing the existing unfunded liability bases with a single "fresh start" base and amortizing it over a reasonable period.

The Current Amortization Schedule on the following page may appear to show that, based on the current amortization bases, one of the above scenarios will occur at some point in the future. It is impossible to know today whether such a scenario will in fact arise since there will be additional bases added to the amortization schedule in each future year. Should such a scenario arise in any future year, the actuary will take appropriate action based on guidelines in the CalPERS amortization policy.

Amortization Schedule and Alternatives

	Current Amortization Schedule		Alternative Schedules			
			20 Year Amortization		15 Year Amortization	
Date	**Balance**	**Payment**	**Balance**	**Payment**	**Balance**	**Payment**
6/30/2021	12,074,996	752,695	12,074,996	1,101,881	12,074,996	1,281,670
6/30/2022	12,141,652	920,085	11,780,451	1,101,881	11,594,476	1,281,670
6/30/2023	12,039,824	972,611	11,465,288	1,101,881	11,080,320	1,281,670
6/30/2024	11,876,535	1,064,908	11,128,064	1,101,881	10,530,173	1,281,670
6/30/2025	11,606,344	1,105,177	10,767,234	1,101,881	9,941,515	1,281,670
6/30/2026	11,275,583	1,133,906	10,381,146	1,101,880	9,311,651	1,281,670
6/30/2027	10,891,952	1,163,428	9,968,033	1,101,881	8,637,697	1,281,670
6/30/2028	10,450,929	1,193,759	9,526,001	1,101,881	7,916,566	1,281,670
6/30/2029	9,947,662	1,224,926	9,053,027	1,101,881	7,144,956	1,281,670
6/30/2030	9,376,926	1,256,951	8,546,944	1,101,880	6,319,333	1,281,670
6/30/2031	8,733,110	1,289,854	8,005,437	1,101,881	5,435,917	1,281,670
6/30/2032	8,010,192	1,323,664	7,426,023	1,101,881	4,490,661	1,281,670
6/30/2033	7,201,698	1,358,404	6,806,050	1,101,880	3,479,238	1,281,670
6/30/2034	6,300,673	1,347,019	6,142,680	1,101,880	2,397,015	1,281,670
6/30/2035	5,348,354	1,299,404	5,432,874	1,101,881	1,239,036	1,281,669
6/30/2036	4,378,626	1,139,970	4,673,381	1,101,881		
6/30/2037	3,505,935	970,832	3,860,723	1,101,880		
6/30/2038	2,747,116	791,578	2,991,180	1,101,881		
6/30/2039	2,120,599	655,689	2,060,768	1,101,880		
6/30/2040	1,590,791	551,429	1,065,228	1,101,880		
6/30/2041	1,131,743	504,516				
6/30/2042	689,089	518,389				
6/30/2043	201,099	208,018				
6/30/2044						
6/30/2045						
6/30/2046						
6/30/2047						
6/30/2048						
6/30/2049						
6/30/2050						
Total	**22,747,212**		**22,037,613**		**19,225,049**	
Interest Paid	**10,672,216**		**9,962,617**		**7,150,053**	
Estimated Savings			**709,599**		**3,522,163**	

Hypothetical Termination Liability

The hypothetical termination liability is an estimate of the financial position of the plan had the contract with CalPERS been terminated as of June 30, 2019. The plan liability on a termination basis is calculated differently from the plan's ongoing funding liability. For this hypothetical termination liability calculation, both compensation and service are frozen as of the valuation date and no future pay increases or service accruals are assumed. This measure of funded status is not appropriate for assessing the need for future employer contributions in the case of an ongoing plan, that is, for an employer that continues to provide CalPERS retirement benefits to active employees.

A more conservative investment policy and asset allocation strategy was adopted by the CalPERS Board for the Terminated Agency Pool. The Terminated Agency Pool has limited funding sources since no future employer contributions will be made. Therefore, expected benefit payments are secured by risk-free assets and benefit security for members is increased while limiting the funding risk. However, this asset allocation has a lower expected rate of return than the PERF and consequently, a lower discount rate assumption. The lower discount rate for the Terminated Agency Pool results in higher liabilities for terminated plans.

The effective termination discount rate will depend on actual market rates of return for risk-free securities on the date of termination. As market discount rates are variable the table below shows a range for the hypothetical termination liability based on the lowest and highest interest rates observed during an approximate 19-month period from 12 months before the valuation date to 7 months after.

Market Value of Assets (MVA)	Hypothetical Termination Liability[1,2] @ 1.75%	Funded Status	Unfunded Termination Liability @ 1.75%	Hypothetical Termination Liability[1,2] @ 3.25%	Funded Status	Unfunded Termination Liability @ 3.25%
$93,584,576	$202,410,412	46.2%	$108,825,836	$165,399,919	56.6%	$71,815,343

[1] The hypothetical liabilities calculated above include a 5 percent 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 2.31 percent on June 30, 2019, and was 1.83 percent on January 31, 2020.

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

Summary of Valuation Data

	June 30, 2018	June 30, 2019
1. **Active Members**		
a) Counts	251	241
b) Average Attained Age	51.25	51.70
c) Average Entry Age to Rate Plan	38.29	38.54
d) Average Years of Credited Service	12.65	12.84
e) Average Annual Covered Pay	$59,089	$60,872
f) Annual Covered Payroll	14,831,366	14,670,139
g) Projected Annual Payroll for Contribution Year	16,088,911	15,914,013
h) Present Value of Future Payroll	105,609,728	104,477,417
2. **Transferred Members**		
a) Counts	52	50
b) Average Attained Age	48.58	49.13
c) Average Years of Credited Service	1.48	1.87
d) Average Annual Covered Pay	$66,272	$39,097
3. **Terminated Members**		
a) Counts	128	147
b) Average Attained Age	51.61	51.12
c) Average Years of Credited Service	3.28	3.07
d) Average Annual Covered Pay	$39,798	$39,812
4. **Retired Members and Beneficiaries**		
a) Counts	197	205
b) Average Attained Age	70.32	70.53
c) Average Annual Benefits	$17,792	$18,608
5. **Active to Retired Ratio** [(1a) / (4a)]	1.27	1.18

Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double counting of liabilities.

Average Annual Benefits represents benefit amounts payable by this plan only. Some members may have service with another agency and would therefore have a larger total benefit than would be included as part of the average shown here.

Active Members

Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double counting of liabilities.

Distribution of Active Members by Age and Service

	Years of Service at Valuation Date						
Attained Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25+**	**Total**
15-24	2	0	0	0	0	0	2
25-29	6	0	0	0	0	0	6
30-34	9	2	2	0	0	0	13
35-39	8	3	3	0	0	0	14
40-44	14	6	5	9	2	0	36
45-49	16	3	6	4	1	0	30
50-54	10	5	4	10	6	1	36
55-59	15	1	5	5	5	15	46
60-64	7	7	2	7	3	9	35
65 and Over	2	0	1	6	3	11	23
All Ages	**89**	**27**	**28**	**41**	**20**	**36**	**241**

Distribution of Average Annual Salaries by Age and Service

	Years of Service at Valuation Date						
Attained Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25+**	**Average Salary**
15-24	$45,790	$0	$0	$0	$0	$0	$45,790
25-29	51,134	0	0	0	0	0	51,134
30-34	66,516	80,827	64,860	0	0	0	68,463
35-39	58,423	59,258	67,033	0	0	0	60,447
40-44	59,710	62,943	50,216	60,619	75,474	0	60,033
45-49	60,192	54,460	51,981	92,488	56,534	0	62,161
50-54	44,768	49,889	53,142	59,565	83,547	50,881	57,153
55-59	56,633	54,273	55,121	55,342	49,632	81,645	63,672
60-64	51,179	54,237	63,871	55,306	61,032	86,652	63,307
65 and Over	55,880	0	37,313	57,320	56,534	58,608	56,839
Average	**$56,524**	**$57,920**	**$55,250**	**$61,438**	**$65,481**	**$75,003**	**$60,872**