County Connection

INTER OFFICE MEMO

To: Administration and Finance Committee **Date:** January 4, 2017

From: Erick Cheung, Director of Finance **Reviewed By:**

SUBJECT: PERS Actuarial Valuation for June 30, 2015; Rate for FY 2018

SUMMARY OF ISSUES:

The PERS Actuarial Valuation Report for the period ending June 30, 2015 was recently received. This valuation is used to set the rate for the next fiscal year and provides County Conneciton's funded status. **The employer rate for FY 2018 will be 7.471% and an unfunded liability payment of $47,020.** County Connection's funded status is currently **95.8% funded,** which is down from 99.9% since CalPERS investment return for 2015 was 2.4%.

CalPERS Updates

Beginning with FY 2018, CalPERS will collect employer contributions toward the plan's unfunded liability as dollar amounts instead of the prior method of a contribution rate. This change will address potential funding issues that could arise from a declining payroll or reduction in the number of active members in the plan. Funding the unfunded liability as a percentage of payroll could lead to the underfunding of the plans. Although employers will be invoiced at the beginning of the fiscal year for their unfunded liability payment the plan's normal cost contribution will continue to be collected as a percentage of payroll.

The CalPERS Board of Administration adopted a Risk Mitigation Policy which is designed to reduce funding risk over time. The policy establishes a mechanism whereby CalPERS investment performance that significantly outperforms the discount rate triggers adjustments to the discount rate, expected investment return and strategic asset allocation targets. A minimum excess investment return of 4% above the existing discount rate is necessary to cause a funding risk mitigation event.

CalPERS Assumptions & Projections

The updated projections shown below will be used for the budget and 10 year forecast. The revised projections for FY 2018 are less than the prior projection by $13,426 under the new method. Afterwards, the normal cost rate remains constatnt at 7.5%, but requires an unfunded liability payment for years that CalPERS didn't achieve the discount rate. CalPERS rate of return of 2.4% for FY 2015 and assumed 0.0% for FY 2016 (CalPERS reported entity wide 0.6% for FY 2016) are lower than the assumed discount rate 7.5%. Below are the CalPERS current projections compared with the prior report's projections:

	Current			Prior (Old Method)	Prior Forecast (Using New Method)		
	Payroll Rate	+	Unfunded Liability Payment	Payroll Rate	Payroll Rate	+	Unfunded Liability Payment
FY 2017 Actual	7.553%		$ -	7.553%	7.553%		$ -
FY 2018	7.500%		$ 47,020.00	7.900%	7.500%		$ 60,446.00
FY 2019	7.500%		$ 197,149.00	8.400%	7.500%		$ 140,083.00
FY 2020	7.500%		$ 356,243.00	8.800%	7.500%		$ 208,413.00
FY 2021	7.500%		$ 524,707.00	9.200%	7.500%		$ 280,716.00
FY 2022	7.500%		$ 702,955.00	9.500%	7.500%		$ 357,169.00
FY 2023	7.500%		$ 829,560.00	N/A	N/A		N/A

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

- Future investment returns of 7.5%.
- Payroll growth of 3%.
- Inflation growth of 2.75%.
- 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 5

As stated earlier, the funded status is 95.8% with unfunded liability totaling $3,346,999. The prior year funded status was 99.9%, with the unfunded liability of $39,198. The main reason was the accrued liability increased $4,175,415 to $80.8 million and market value of assets only increased $797,614 to $77.4 million due to investment return of 2.4%.

Investment rate of return, Page 11

It is CalPERS' policy to use a constant investment return rate (7.5%) 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. The CalPERS Board did approve recommendtation to change the amortization and rate smoothing policies. CalPERS employs a policy that amortizes all gains and losses over a fixed 30-year period. The increase or decrease in the rate is then spread directly over a 5 year period. This method is referred to as "direct rate smoothing." CalPERS no longer uses an actuarial value of assets and only uses the market value of assets.

The CalPERS history of investment returns in shown on **Page 11** of the report.

Other Information- C-1 & C-2

- There are 177 retirees receiving benefits
- The average annual benefit is $15,298
- The average age of retirees is 69.82
- There are 250 active members
- The average annual payroll of the active members is $54,040
- The covered annual payroll is $13,509,930
- The average age for active members is 50.94
- Page C-2 includes a breakdown of the active members by age and salaries & years of service. As of June 30, 2015, 23% or 58 employees was over 60 years of age.

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

ACTION REQUESTED: None; information only.

ATTACHMENTS: Selected pages of the PERS valuation report.

Required Contributions

Required Employer Contribution		Fiscal Year 2017-18
Employer Normal Cost Rate		**7.471%**
Plus Either		
1) Monthly Employer Dollar UAL Payment	**$**	**3,918**
Or		
2) Annual UAL Prepayment Option	**$**	**45,350**
Required PEPRA Member Contribution Rate		**6.75%**

*The total minimum required employer contribution is the **sum** of the Plan's Employer Normal Cost Rate (expressed as a percentage of payroll) **plus** the Employer Unfunded Accrued Liability (UAL) Contribution Amount (billed monthly in dollars). Only the UAL portion of the employer contribution can be prepaid (which must be received in full no later than July 31). Plan Normal Cost contributions will be made as part of the payroll reporting process. If there is contractual cost sharing or other change, this amount will change. §20572 of the Public Employees' Retirement Law assesses interest at an annual rate of 10 percent if a contracting agency fails to remit the required contributions when due. For additional detail regarding the determination of the required contribution for PEPRA members, see Appendix D. Required member contributions for Classic members can be found in Appendix B.*

		Fiscal Year 2016-17		Fiscal Year 2017-18
Normal Cost Contribution as a Percentage of Payroll				
Total Normal Cost		14.552%		14.438%
Employee Contribution[1]		6.999%		6.967%
Employer Normal Cost		7.553%		7.471%
Projected Annual Payroll for Contribution Year	$	14,442,599	$	14,762,665
Estimated Employer Contributions Based On Projected Payroll				
Total Normal Cost	$	2,101,687	$	2,131,434
Employee Contribution[1]		1,010,838		1,028,515
Employer Normal Cost		1,090,849		1,102,919
Unfunded Liability Contribution		0		47,020
Estimated Total Employer Contribution[2]	$	1,090,849	$	1,149,939

[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 Appendix D. Employee cost sharing is not shown in this report.

[2] As a percentage of projected payroll the UAL contribution for Fiscal Year 2017-18 is 0.319 percent for an estimated total employer contribution rate of 7.790 percent. As determined in the June 30, 2014 valuation, the Fiscal Year 2016-17 UAL contribution is 0.000 percent for a total employer contribution rate of 7.553 percent.

Plan's Funded Status

		June 30, 2014		June 30, 2015
1. Present Value of Projected Benefits	$	90,409,511	$	94,643,089
2. Entry Age Normal Accrued Liability		76,635,740		80,811,155
3. Market Value of Assets (MVA)	$	76,596,542	$	77,394,156
4. Unfunded Accrued Liability (UAL) [(2) – (3)]	$	39,198	$	3,416,999
5. Funded Ratio [(3) / (2)]		99.9%		95.8%

Projected Employer Contributions

The estimated employer contribution for Fiscal Year 2018-19 is based on a projection of the most recent information we have available, including an estimated 0.0 percent investment return for Fiscal Year 2015-16.

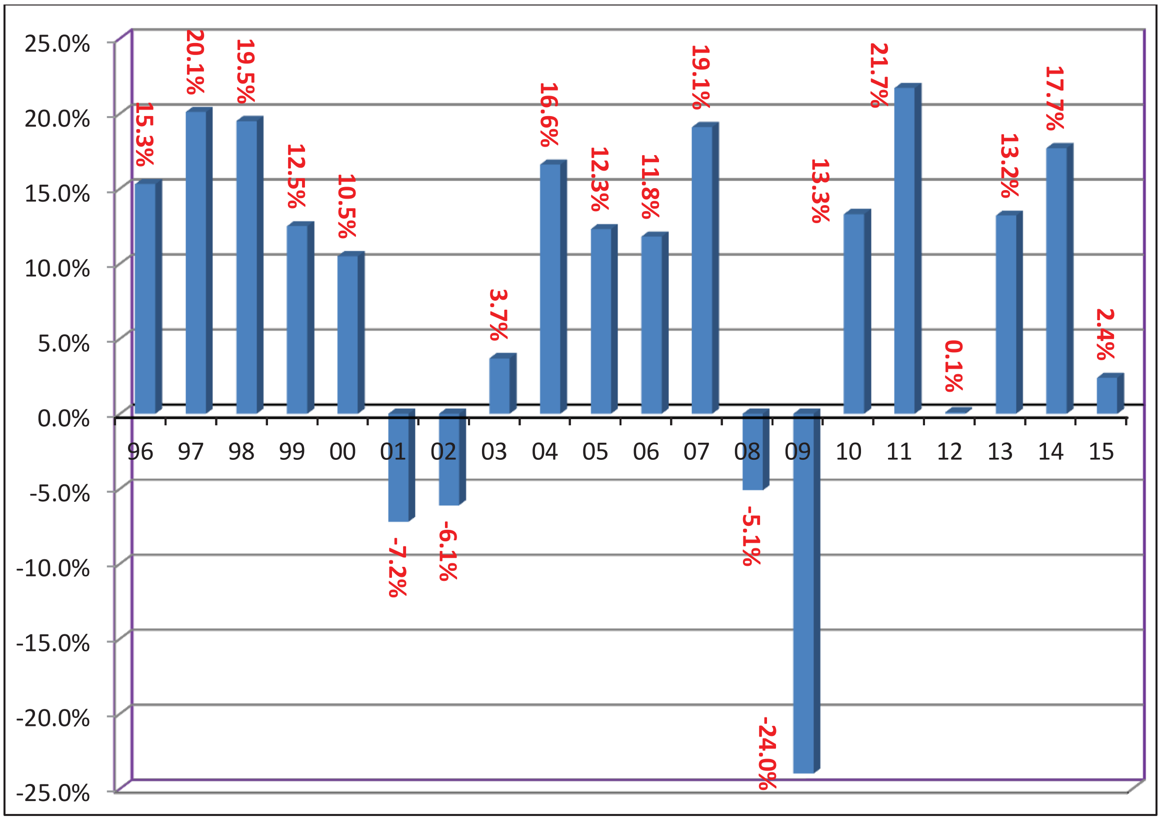
The table below shows projected employer contributions (before cost sharing) for the next five fiscal years, assuming CalPERS earns 0.0 percent for Fiscal Year 2015-16 and 7.50 percent every fiscal year thereafter, and assuming that all other actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur during the projection period. The projected normal cost percentages do not reflect that the normal cost will decline over time as new employees are hired into PEPRA or other lower cost benefit tiers.

	Required Contribution	Projected Future Employer Contributions				
Fiscal Year	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2021-22**	**2022-23**
Normal Cost %	7.471%	7.5%	7.5%	7.5%	7.5%	7.5%
UAL $	47,020	197,149	356,243	524,704	702,955	829,560

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

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 fees.



The table below shows historical geometric mean annual returns of the Public Employees Retirement Fund for various time periods ending on June 30, 2015, (figures are reported as gross of fees). The geometric mean rate of return is the average rate per period compounded over multiple periods. It should be recognized that in any given year the rate of return is volatile. Although the expected rate of return on the recently adopted new asset allocation is 7.5 percent, the portfolio has an expected volatility of 11.76 percent per year. 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 Geometric Mean Rates of Return and Volatilities					
	1 year	**5 year**	**10 year**	**20 year**	**30 year**
Geometric Return	2.4%	10.7%	6.1%	7.7%	9.1%
Volatility	–	9.4%	14.0%	11.8%	10.5%

Summary of Valuation Data

	June 30, 2014	June 30, 2015
1. **Active Members**		
a) Counts	254	250
b) Average Attained Age	50.62	50.94
c) Average Entry Age to Rate Plan	37.02	37.30
d) Average Years of Service	13.60	13.64
e) Average Annual Covered Pay	$ 52,036	$ 54,040
f) Annual Covered Payroll	13,217,024	13,509,930
g) Projected Annual Payroll for Contribution Year	14,442,599	14,762,665
h) Present Value of Future Payroll	100,022,764	100,926,914
2. **Transferred Members**		
a) Counts	25	58
b) Average Attained Age	50.92	45.49
c) Average Years of Service	2.24	1.49
d) Average Annual Covered Pay	$ 67,633	$ 55,040
3. **Terminated Members**		
a) Counts	104	115
b) Average Attained Age	51.97	51.95
c) Average Years of Service	2.96	3.24
d) Average Annual Covered Pay	$ 36,878	$ 37,896
4. **Retired Members and Beneficiaries**		
a) Counts	169	177
b) Average Attained Age	69.24	69.82
c) Average Annual Benefits	$ 14,500	$ 15,298
5. **Active to Retired Ratio** [(1a) / (4a)]	1.50	1.41

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	20-25	25+	Total
15-24	3	0	0	0	0	0	3
25-29	4	1	0	0	0	0	5
30-34	10	3	0	0	0	0	13
35-39	14	5	8	2	0	0	29
40-44	7	4	7	3	0	0	21
45-49	8	8	6	8	3	0	33
50-54	8	5	3	12	6	11	45
55-59	13	2	8	6	4	10	43
60-64	3	2	9	8	5	9	36
65 and over	1	3	2	3	8	5	22
All Ages	**71**	**33**	**43**	**42**	**26**	**35**	**250**

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	20-25	25+	Average
15-24	$42,277	$0	$0	$0	$0	$0	$42,277
25-29	46,764	58,768	0	0	0	0	49,165
30-34	44,197	57,027	0	0	0	0	47,157
35-39	52,469	47,097	55,734	57,829	0	0	52,813
40-44	48,376	56,694	61,572	55,326	0	0	55,352
45-49	45,708	47,947	51,771	60,514	51,128	0	51,435
50-54	44,692	56,015	41,766	55,558	82,239	52,337	55,528
55-59	44,388	46,987	51,000	45,942	54,616	75,165	54,065
60-64	51,063	101,186	55,760	44,551	64,470	52,282	55,742
65 and over	65,584	44,929	54,610	84,477	54,616	60,541	59,212
All Ages	**$47,156**	**$54,148**	**$54,229**	**$55,189**	**$62,483**	**$60,017**	**$54,040**