



Item No. 5 Town of Atherton

FINANCE COMMITTEE STAFF REPORT

TO: FINANCE COMMITTEE

FROM: ROBERT BARRON III, FINANCE DIRECTOR

DATE: JULY 11, 2017

SUBJECT: REVIEW AND DISCUSS CALPERS ACTUARIAL REPORTS AS OF JUNE 30, 2015, AND NEW PENSION DISCOUNT RATE ASSUMPTIONS FOR DISCUSSION OF PAYING DOWN LONG TERM LIABILITIES; IF APPROPRIATE MAKE RECOMMENDATIONS OF OPTIONS FOR COUNCIL CONSIDERATION

RECOMMENDATION

Review and discuss CalPERS actuarial reports as of June 30, 2015, pension discount rate assumptions. If appropriate make recommendations of options for council consideration of paying down long term liabilities.

BACKGROUND

Staff presented for review at March Finance committee meeting the June 30, 2015 CalPERS actuarial reports and letter from League of California Cities addressing that the CalPERS Board of Administration approved lowering the discount rate assumptions, (long term rate of return) from 7.5% to 7% for the next three years. The Town's core strategy of financial stability includes review and paying down of long term liabilities for OPEB and pension. As we've held discussions on CalPER's pension liabilities, one main focus on the Town's CalPER's pension liability revolved on the discount rate and what would happened to the Town liabilities if the discount rate changed. Presented out our last meeting, staff utilized its GovInvest calculation tool to present scenario analysis on a number of assumptions. Staff believes that review of the CalPER's valuation reports tools and use of GovInvest calculation tool is essential. This will help the Town develop analysis with respect to changes in the discount rate and have a forecasting ability on how to reduce the Town's CalPERS unfunded liability. The GovInvest portal will be updated with pension data to help the Town create real time analysis of pension assumptions.

FINDINGS

Within the actuarial reports are projected employer contribution rates through FY 2022/23 so agencies can see changes in the contribution rates over the years. These rates could change as each valuation period CalPERS reassess investment returns in rate calculations. Estimated projections of employer contribution rates will be based on the most recent information CalPERS has available. Investment returns are the key driver on employer rates and funded status. Investment return scenarios are a part of each agency's actuarial report and are to provide better understanding of any changes in investment returns on retirement plans. This includes illustrating any increases or decreases in the Town contribution rate and amortization of unfunded liability with changes in rates of returns. Beginning in FY 2015/16 CalPERS began collecting the employer contributions toward amortization of unfunded liabilities (UAL) as dollar amounts instead of through the contribution rate while each agency plan's normal cost contribution continued to be collected as a percentage of payroll.

Provided in the annual valuation reports are the required employer contribution, project employer contributions, asset & liabilities, and risk analysis tools. The reports provide what the Town's next five years unfunded liability payments would look like under certain assumptions. The Town's Miscellaneous Employees future contribution which includes the investment returns of 0.0% in FY 2015/16 and 7.5% every year after is as follows:

	Required Contribution	Projected Future Employer Contributions				
Fiscal Year	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Normal Cost %	9.096%	9.1%	9.1%	9.1%	9.1%	9.1%
UAL \$	\$183,236	\$237,748	\$295,366	\$328,452	\$366,524	\$394,699

The current FY 17/18 Employer contribution rate for Miscellaneous employees is 9.096% and the unfunded liability payment (UAL) is \$183,236. *The UAL payments for FY 2017/18 for Miscellaneous and Public Safety employees were included in the Town budget.* Collecting the unfunded liability as a dollar amount was designed to pay down the unfunded liability faster. This provides agencies the opportunity to track and pay down their unfunded liabilities faster as more agencies seek to contribute more towards these liabilities. The Plan's funded status as of June 30, 2015 for Miscellaneous Employees is currently at 79.5% with an unfunded liability of \$3,234,914.

Below is a projected future contribution rates for the Town Public Safety Employees assuming investment returns of 0.0% for FY 2015/16 and 7.50 percent every year after is as follows:

	Required Contribution	Projected Future Employer Contributions				
Fiscal Year	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Normal Cost %	21.418%	21.4%	21.4%	21.4%	21.4%	21.4%
UAL \$	\$496,462	\$629,363	\$769,790	\$853,294	\$944,291	\$1,010,942

The normal cost employer contribution rate as a percentage of payroll is 21.418% for FY 17/18. The Town's employer payment of the unfunded liability for Public Safety is \$496,462. Based on

the actuarial report, the Public Safety Employees Plan's funded status as of June 30, 2015 is currently at 76.6% with an unfunded liability of \$8,627,686. The above required contribution for FY 17/18 and the projected future contributions are at the assumed 7.5% rate of return. The new CalPERS Board of Administration approved discount rate assumptions over the next three years begins in FY 18/19. This will increase public agency employer contribution costs. We will discuss this new change further in the report as we look at forecasting our UAL payments and required contribution rates.

Value of Assets

Actuarial valuations of assets are based on the Market Value of Assets (MVA). This is used to illustrate the unfunded liability and the funded ratio. As of June 30, 2015 the MVA for Miscellaneous Employees is \$12,571,337 and the unfunded liability is \$3,234,914. For Public Safety Employees the MVA is \$28,263,430 with an unfunded liability of \$8,627,686. This calculates to a total unfunded liability of \$11,862,600.

Risk Analysis Tools

There are tools within the reports the Town can use to estimate the Town Contributions payments toward unfunded liabilities, Employer normal cost rates, and an outlook on paying down liabilities. *It is discussed within the valuations that the investment return realized during a fiscal year first affects the contribution for the fiscal year two years later.* It is explained in the reports that 0.0% was used as the investment return for Fiscal Year 2015/16 in production of the valuations. The actual realized investment return for FY 2015/16 was .61%. This investment return will first be reflected in the June 30, 2016 actuarial valuation as this will be used to set the Fiscal Year 2018/19 employer contributions rates.

Provided in the reports are analysis of five different investment returns scenarios and any estimated increases to the Unfunded Accrued Liability contribution.

Miscellaneous Employees Investment Return Scenario

2016-19 Investment Return Scenario	Fiscal Year			Estimated Change Between 2018-19 and 2021-22
	2019-20	2020-21	2021-22	
(3.8%)				
Normal Cost	9.1%	9.1%	9.1%	0.0%
UAL Contribution	\$318,264	\$397,536	\$505,568	\$267,820
2.8%				
Normal Cost	9.1%	9.1%	9.1%	0.0%
UAL Contribution	\$304,890	\$357,816	\$426,901	\$189,153
7.5%				
Normal Cost	9.1%	9.1%	9.1%	0.0%
UAL Contribution	\$295,366	\$328,452	\$366,524	\$128,776
12.0%				
Normal Cost	9.3%	9.5%	9.7%	0.6%
UAL Contribution	\$286,717	\$302,331	\$312,353	\$74,605
18.9%				
Normal Cost	9.7%	10.2%	10.8%	1.7%
UAL Contribution	\$273,894	\$263,403	\$0	\$(237,748)

The above illustrates the changes in the UAL contribution portion based on various investment returns. The changes of the projected UAL ranges from a negative (\$237,748) UAL payment to an increase of \$267,820.

Public Safety Employees Investment Return Scenario

2016-19 Investment Return Scenario	Fiscal Year			Estimated Change Between 2018-19 and 2021-22
	2019-20	2020-21	2021-22	
(3.8%)				
Normal Cost	21.4%	21.4%	21.4%	0.0%
UAL Contribution	\$820,091	\$1,004,391	\$1,247,077	\$617,714
2.8%				
Normal Cost	21.4%	21.4%	21.4%	0.0%
UAL Contribution	\$790,715	\$917,530	\$1,075,814	\$446,451
7.5%				
Normal Cost	21.4%	21.4%	21.4%	0.0%
UAL Contribution	\$769,790	\$853,294	\$944,291	\$314,928
12.0%				
Normal Cost	21.8%	22.2%	22.6%	1.2%
UAL Contribution	\$750,460	\$795,683	\$825,945	\$196,582
18.9%				
Normal Cost	22.6%	23.8%	25.0%	3.6%
UAL Contribution	\$721,620	\$709,526	\$646,110	\$16,747

The various investment returns for Public Safety employees projects estimated changes in the UAL contribution portion increases from \$16,747 to \$617,714 through FY 2021/22.

CalPERS Discount Rate Changes

The CalPERS Board of Administration approved discount rate assumptions over the next three years begins in FY 2018/19. Below is the anticipated phase in for discount rate reductions:

Valuation Date	FY for Required Contribution	Discount Rate
June 30, 2016	2018-19	7.375%
June 30, 2017	2019-20	7.25%
June 30, 2018	2020-21	7.00%

There is anticipation that lowering the discount rate means agency plans will see increases in the normal cost required contribution and the accrued liabilities. A result of the change will be higher required employer contributions. Below is a projection of the impact of the reduction to the discount rate to the normal cost and UAL payments beginning in FY 2018/19.

Valuation Date	Fiscal Year Impact	Normal Cost		UAL Payments	
		Misc. Plans	Safety Plans	Misc. Plans	Safety Plans
6/30/2016	2018-19	0.25% - 0.75%	0.5% - 1.25%	2% - 3%	2% - 3%
6/30/2017	2019-20	0.5% - 1.5%	1.0% - 2.5%	4% - 6%	4% - 6%
6/30/2018	2020-21	1.0% - 3.0%	2.0% - 5.0%	10% - 15%	10% - 15%
6/30/2019	2021-22	1.0% - 3.0%	2.0% - 5.0%	15% - 20%	15% - 20%
6/30/2020	2022-23	1.0% - 3.0%	2.0% - 5.0%	20% - 25%	20% - 25%

Taking the projected impact of the reduction of the discount rate above, the Town can project the increase in the normal cost and the UAL payments in the next couple fiscal years. For illustrative purposes the middle of the range of adjustments is used for estimated costs. Again these are projections, as each year these will be based and set on the investment return of CalPERS.

Miscellaneous Employees (New Discount Rate Assumptions)

Fiscal Year	2018-19	2019-20	2020-21	2021-22	2022-23
Normal Cost	9.1%	9.1%	9.1%	9.1%	9.1%
UAL \$	237,748	\$295,366	\$328,452	\$366,524	\$394,699
NC Adj. Factor	.50%	1.0%	2.0%	2.0%	2.0%
UAL Adj Factor	2.5%	5.0%	12.5%	17.5%	22.5%
Estimated Normal Cost	9.6%	10.1%	11.1%	11.1%	11.1%
Estimate UAL	\$243,692	\$310,134	\$369,508	\$430,665	\$483,506

Public Safety Employees (New Discount Rate Assumptions)

Fiscal Year	2018-19	2019-20	2020-21	2021-22	2022-23
Normal Cost	21.4%	21.4%	21.4%	21.4%	21.4%
UAL \$	\$629,363	\$769,790	\$853,294	\$944,291	\$1,010,942
NC Adj. Factor	.75%	1.5%	3.0%	3.0%	3.0%
UAL Adj Factor	2.5%	5.0%	12.5%	17.5%	22.5%
Estimated Normal Cost	22.15%	22.9%	24.4%	24.4%	24.4%
Estimate UAL	\$645,097	\$808,279	\$959,955	\$1,109,541	\$1,238,403

The benefits of reducing the discount rate include:

- Strengthening long-term sustainability of the fund
- Reduction of negative cash flows; additional contributions will help offset the cost to pay pensions
- Reducing the long-term probability of funded ratios falling below undesirable levels
- Improves the prospect of CalPERS investments earning the assumed rate of return.
- Reduces the risk of contribution increases in the future from volatile investment markets.

Pension Risk Mitigation Strategy

Over the past couple years, CalPERS took significant steps to lower funding risk actions as this included new asset allocation, actuarial assumptions and the new smoothing policies. CalPERS also adopted a Funding Risk Mitigation Policy that addresses risk factors such plan demographics (plans are maturing; public employees living longer) and investment volatility (market return). The policy will result in a gradual shifting of the asset allocation in a way that will lower investment risk. This shift means accepting lower future expected returns and a lower actuarial discount rate. Lower investment earnings will result in higher costs that would gradually occur over time as

volatility decreases, but will vary by plan. CalPERS anticipation is that these risk mitigation measures in the long term will produce a sustainable fund, less volatile investment returns, and more stable contribution rates. The illustration to the right depicts the mitigation thresholds for discount rate reductions. In time, the policy is expected to lower the level of risk borne by employers and ultimately, by members.

Thresholds - Proposed

Thresholds are defined as the investment return in excess of the discount rate required to trigger a risk mitigation event

Discount Rate Reduction	Additional Investment Return Required	Total Investment Return Required (Currently)
0.05%	4.0%	11.5%
0.10%	7.0%	14.5%
0.15%	10.0%	17.5%
0.20%	13.0%	20.5%
0.25%	17.0%	24.5%

Discussion and Analysis

The CalPERS actuarial reports and the GovInvest calculation tool provide tools that can help us create a plan to set aside funds to pay down unfunded liabilities and mitigate increase in discount rate costs. The GovInvest calculation portal will be used to highlight the assumption changes to the discount rate above and conduct what if scenarios to the effects on the Town's pension liability. The following items should be considered as we work over the year to provide opportunities the City Council can consider to pay down pension liabilities and mitigate investment volatility.

- Consideration of additional contributions to CalPERS beyond required UAL to lower our payroll normal costs. This will accelerate funding based on alternative amortization schedules in the valuation reports;
- Decision to accumulate reserves and establish an Internal Service Fund to make a singular significant contribution to CalPERS when the Town sees prudent;
- Could establish an Irrevocable Supplemental Trust that can only be used to reimburse for CalPERS contributions or make payments directly to CalPERS;
- Setting of a funding target for unfunded liabilities or should we pay as we go with CalPERS valuation reports.

FISCAL IMPACT

None

PUBLIC NOTICE

Public notification was achieved by posting the agenda, with this agenda item being listed, at least 72 hours prior to the meeting in print and electronically. Information about the project is also disseminated via the Town's electronic News Flash and Atherton Online. There are approximately 1,200 subscribers to the Town's electronic News Flash publications. Subscribers include residents as well as stakeholders – to include, but be not limited to, media outlets, school districts, Menlo Park Fire District, service providers (water, power, and sewer), and regional elected officials.

Review & Discuss CalPERS Actuarial Reports as of June 30, 2015; Discuss New Pension Discount Rate Assumptions

July 11, 2017

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ATTACHMENTS

CalPERS Miscellaneous Employees Valuation Report as of June 30, 2015

CalPERS Public Safety Employees Valuation Report as of June 30, 2015



California Public Employees' Retirement System
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Sacramento, CA 94229-2709
TTY: (916) 795-3240
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www.calpers.ca.gov

August 2016

**MISCELLANEOUS PLAN OF THE TOWN OF ATHERTON
(CalPERS ID: 1382390535)
Annual Valuation Report as of June 30, 2015**

Dear Employer,

As an attachment to this letter, you will find a copy of the June 30, 2015 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, 2015.

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

Your June 30, 2015 actuarial valuation report contains important actuarial information about your pension plan at CalPERS. Your assigned CalPERS staff actuary, whose signature appears in the Actuarial Certification section on page 1, is available to discuss the report with you after August 31, 2016.

Future Employer Contribution

Fiscal Year	Employer Normal Cost Rate	+	Employer Payment of Unfunded Liability
2017-18	9.096%		\$183,236
2018-19 (projected)	9.1%		\$237,748

The exhibit above displays the minimum employer contributions, before any cost sharing, for Fiscal Year 2017-18 along with estimates of the contributions for Fiscal Year 2018-19. The total employer contribution is the sum of a Normal Cost Rate applied to reported payroll plus an Unfunded Liability dollar payment. The estimated contributions for Fiscal Year 2018-19 are 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 (based on the year to date return through April 30, 2016).

For a projection of employer contributions beyond Fiscal Year 2018-19, please refer to the "Projected Employer Contributions" in the "Highlights and Executive Summary" section. This 5-year projection of future employer contributions supersedes any previous projections we have provided. The "Risk Analysis" section of the valuation report also contains estimated employer contributions in future years under a variety of investment return scenarios. Member contributions, other than cost sharing, are in addition to the above amounts. The employer contributions in this report do not reflect any cost sharing arrangements you may have with your employees.

The estimates for Fiscal Year 2018-19 also assume that there are no future contract amendments and no liability gains or losses (such as larger than expected pay increases, more retirements than expected, etc.) This is an important assumption because these gains and losses do occur and can have a significant effect on required contributions. Even for the largest plans or pools, such gains and losses can impact the employer's contributions. These gains and losses cannot be predicted in advance so the projected employer contributions are estimates. The actual required employer contribution for Fiscal Year 2018-19 will be provided in next year's valuation report.

Changes since the Prior Year's Valuation

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. The policy has no impact on the current year valuation results but is expected to have an impact in future years. More details on the Risk Mitigation Policy can be found on our website.

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

Further descriptions of general changes are included in the "Highlights and Executive Summary" section and in Appendix A, "Statement of Actuarial Data, Methods and Assumptions" of the Section 2 report. We understand that you might have a number of questions about these results. While we are very interested in discussing these results with your agency, in the interest of allowing us to give every public agency their results, we ask that you wait until after August 31 to contact us with actuarial related questions.

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

Sincerely,



ALAN MILLIGAN
Chief Actuary



ACTUARIAL VALUATION

as of June 30, 2015

**for the
MISCELLANEOUS PLAN
of the
TOWN OF ATHERTON
(CalPERS ID: 1382390535)**

**REQUIRED CONTRIBUTIONS
FOR FISCAL YEAR**

July 1, 2017 - June 30, 2018

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SECTION 2 – RISK POOL ACTUARIAL VALUATION INFORMATION

Section 1

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Plan Specific Information for the MISCELLANEOUS PLAN of the TOWN OF ATHERTON

**(CalPERS ID: 1382390535)
(Rate Plan: 64)**

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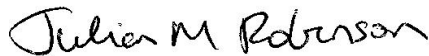
ACTUARIAL CERTIFICATION

Section 1 of this report is based on the member and financial data contained in our records as of June 30, 2015 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, 2015 provided by employers participating in the Miscellaneous Risk Pool to which the plan belongs and benefit provisions under the CalPERS contracts for those agencies.

As set forth in Section 2 of this report, the pool actuary has certified that, in their opinion, the valuation of the risk pool containing your MISCELLANEOUS PLAN has been performed in accordance with generally accepted actuarial principles consistent with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for the risk pool as of the date of this valuation and as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.

Having relied upon the information set forth in Section 2 of this report and based on the census and benefit provision information for the plan, it is my opinion as the plan actuary that the side fund and other Unfunded Accrued Liability bases as of June 30, 2015 and employer contribution as of July 1, 2017, have been properly and accurately determined in accordance with the principles and standards stated above.

The undersigned is an actuary for CalPERS, who is 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.



JULIAN ROBINSON, FSA, EA, MAAA
Senior Pension Actuary, CalPERS
Plan Actuary

HIGHLIGHTS AND EXECUTIVE SUMMARY

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

Introduction

This report presents the results of the June 30, 2015 actuarial valuation of the MISCELLANEOUS PLAN of the TOWN OF ATHERTON of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the required employer contributions for Fiscal Year 2017-18.

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. The Risk Mitigation Policy does not have an impact on the current year actuarial valuation. More details on the Risk Mitigation Policy can be found on our website.

Purpose of Section 1

This Section 1 report for the MISCELLANEOUS PLAN of the TOWN OF ATHERTON 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, 2015;
- Determine the required employer contribution for this plan for the fiscal year July 1, 2017 through June 30, 2018; and
- Provide actuarial information as of June 30, 2015 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 use of this report for any other purposes may be inappropriate. In particular, this report does not contain information applicable to alternative benefit costs. The employer should contact their actuary before disseminating any portion of this report for any reason that is not explicitly described above.

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 8.

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 a 1 percent plus or minus change in the discount rate.

Required Employer Contribution

	Fiscal Year		Fiscal Year	
Required Employer Contribution	2016-17 ¹		2017-18	
Employer Normal Cost Rate	9.055%		9.096%	
<i>Plus Either</i>				
1) Monthly Employer Dollar UAL Payment	\$	12,173.75	\$	15,269.69
<i>Or</i>				
2) Annual Lump Sum Prepayment Option	\$	140,897	\$	176,729

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

	Fiscal Year	Fiscal Year
	2016-17 ¹	2017-18
Development of Normal Cost as a Percentage of Payroll		
Base Total Normal Cost for Formula	15.263%	15.314%
Surcharge for Class 1 Benefits ³		
a) PRSA	0.678%	0.678%
Phase out of Normal Cost Difference ⁴	0.000%	0.000%
Plan's Total Normal Cost	15.941%	15.992%
Formula's Expected Employee Contribution Rate	6.886%	6.896%
Employer Normal Cost Rate	9.055%	9.096%
Projected Payroll for the Contribution Fiscal Year	\$ 1,525,324	\$ 1,587,020
Estimated Employer Contributions Based on Projected Payroll		
Plan's Estimated Employer Normal Cost	\$ 138,113	\$ 144,355
Plan's Payment on Amortization Bases ²	146,085	183,236
Total Employer Contribution ⁵	\$ 284,198	\$ 327,591

¹ The results shown for Fiscal Year 2016-17 reflect the prior year valuation and do not take into account any lump sum payment, side fund payoff, or rate adjustment made after June 30, 2015.

² See page 8 for a breakdown of the Amortization Bases.

³ Section 2 of this report contains a list of Class 1 benefits and corresponding surcharges for each benefit.

⁴ 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.

⁵ As a percentage of projected payroll the UAL contribution is 11.546 percent for an estimated total employer contribution rate of 20.642 percent.

Plan's Funded Status

		June 30, 2014	June 30, 2015
1. Present Value of Projected Benefits (PVB)	\$	17,542,842	\$ 17,924,145
2. Entry Age Normal Accrued Liability (AL)		15,466,674	15,806,251
3. Plan's Market Value of Assets (MVA)		13,003,838	12,571,337
4. Unfunded Accrued Liability (UAL) [(2) - (3)]		2,462,836	3,234,914
5. Funded Ratio [(3) / (2)]		84.1%	79.5%

Projected Employer Contributions

The estimate 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 (based on year to date return through April 30, 2016).

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 between now and the beginning of the projection period.

	Required Contribution	Projected Future Employer Contributions				
Fiscal Year	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Normal Cost %	9.096%	9.1%	9.1%	9.1%	9.1%	9.1%
UAL \$	\$183,236	\$237,748	\$295,366	\$328,452	\$366,524	\$394,699

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

None.

Subsequent Events

Risk Mitigation

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. More details on the Risk Mitigation Policy can be found on our website.

ASSETS AND LIABILITIES

- **ALLOCATION OF PLAN'S SHARE OF POOL'S EXPERIENCE/ASSUMPTION CHANGE**
- **DEVELOPMENT OF PLAN'S SHARE OF POOL'S MVA**
- **SCHEDULE OF PLAN'S SIDE FUND & OTHER AMORTIZATION BASES**
- **30-YEAR AMORTIZATION SCHEDULE AND ALTERNATIVES**
- **EMPLOYER CONTRIBUTION HISTORY**
- **FUNDING HISTORY**

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	\$	15,806,251
2.	Projected UAL balance at 6/30/15		2,604,070
3.	Pool's Accrued Liability	\$	13,889,938,645
4.	Sum of Pool's Individual Plan UAL Balances at 6/30/15		2,423,468,906
5.	Pool's 2014/15 Investment & Asset (Gain)/Loss		596,365,421
6.	Pool's 2014/15 Other (Gain)/Loss		(49,030,273)
7.	Plan's Share of Pool's Asset (Gain)/Loss $[(1)-(2)]/[(3)-(4)] * (5)$		686,639
8.	Plan's Share of Pool's Other (Gain)/Loss $[(1)]/[(3)] * (6)$		(55,795)
9.	Plan's New (Gain)/Loss as of 6/30/2015 $[(7)+(8)]$	\$	630,844
10.	Increase in Pool's Accrued Liability due to Change in Assumptions		0
11.	Plan's Share of Pool's Change in Assumptions $[(1)]/[(3)] * (10)$	\$	0

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

1.	Plan's Accrued Liability	\$	15,806,251
2.	Plan's UAL	\$	3,234,914
3.	Plan's Share of Pool's MVA $[(1)-(2)]$	\$	12,571,337

Schedule of Plan's Side Fund and Other Amortization Bases

There is a two-year lag between the valuation date and the start of the contribution fiscal year.

- The assets, liabilities, and funded status of the plan are measured as of the valuation date: June 30, 2015.
- The employer contribution determined by the valuation is for the fiscal year beginning two years after the valuation date: Fiscal Year 2017-18.

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.

Reason for Base	Date Established	Amortization Period	Balance 6/30/15	Payment 2015-16	Balance 6/30/16	Payment 2016-17	Amounts for Fiscal 2017-18	
							Balance 6/30/17	Scheduled Payment for 2017-18
SHARE OF PRE-2013 POOL UAL	06/30/13	20	\$1,357,629	\$96,648	\$1,359,244	\$99,548	\$1,357,974	\$102,534
ASSET (GAIN)/LOSS	06/30/13	28	\$1,719,969	\$24,191	\$1,823,885	\$49,834	\$1,909,007	\$76,994
NON-ASSET (GAIN)/LOSS	06/30/13	28	\$(16,534)	\$(233)	\$(17,532)	\$(479)	\$(18,350)	\$(740)
ASSET (GAIN)/LOSS	06/30/14	29	\$(1,196,059)	\$0	\$(1,285,763)	\$(18,084)	\$(1,363,445)	\$(37,254)
ASSUMPTION CHANGE	06/30/14	19	\$737,768	\$(7,071)	\$800,432	\$15,246	\$844,657	\$31,408
NON-ASSET (GAIN)/LOSS	06/30/14	29	\$1,297	\$0	\$1,394	\$20	\$1,478	\$40
ASSET (GAIN)/LOSS	06/30/15	30	\$686,639	\$0	\$738,137	\$0	\$793,497	\$11,161
NON-ASSET (GAIN)/LOSS	06/30/15	30	\$(55,795)	\$0	\$(59,979)	\$0	\$(64,478)	\$(907)
TOTAL			\$3,234,914	\$113,535	\$3,359,818	\$146,085	\$3,460,340	\$183,236

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

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

30-Year Amortization Schedule and Alternatives

The amortization schedule on the previous page shows the minimum contributions required according to CalPERS amortization policy. There has been considerable interest from many agencies in paying off these unfunded accrued liabilities sooner and the possible savings in doing so. As a result, we have provided alternate amortization schedules to help analyze the current amortization schedule and illustrate the advantages of accelerating unfunded liability payments.

Shown on the following page are future year amortization payments based on 1) the current amortization schedule reflecting the individual bases and remaining periods shown on the previous page, and 2) alternate "fresh start" amortization schedules using two sample periods that would both result in interest savings relative to the current amortization schedule. Note that the payments under each alternate scenario increase by 3 percent for each year into the future. The schedules do not attempt to reflect any experience after June 30, 2015 that may deviate from the actuarial assumptions. Therefore, future amortization payments displayed in the Current Amortization Schedule may not match projected amortization payments shown in connection with Projected Employer Contributions provided elsewhere in this report.

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

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

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

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

30-Year Amortization Schedule and Alternatives

Date	<u>Current Amortization Schedule</u>		<u>Alternate Schedules</u>			
	Balance	Payment	20 Year Amortization		15 Year Amortization	
	Balance	Payment	Balance	Payment	Balance	Payment
6/30/2017	3,460,340	183,236	3,460,340	261,274	3,460,340	317,208
6/30/2018	3,529,882	222,485	3,448,971	269,113	3,390,978	326,724
6/30/2019	3,563,946	263,924	3,428,621	277,186	3,306,546	336,526
6/30/2020	3,557,599	279,874	3,398,375	285,502	3,205,620	346,622
6/30/2021	3,534,239	299,811	3,357,239	294,067	3,086,657	357,020
6/30/2022	3,488,456	308,806	3,304,137	302,889	2,947,990	367,731
6/30/2023	3,429,914	318,070	3,237,906	311,975	2,787,817	378,763
6/30/2024	3,357,376	327,612	3,157,286	321,335	2,604,194	390,126
6/30/2025	3,269,503	337,440	3,060,915	330,975	2,395,018	401,829
6/30/2026	3,164,851	347,563	2,947,322	340,904	2,158,019	413,884
6/30/2027	3,041,853	357,990	2,814,915	351,131	1,890,746	426,301
6/30/2028	2,898,820	368,730	2,661,973	361,665	1,590,554	439,090
6/30/2029	2,733,924	379,792	2,486,638	372,515	1,254,588	452,262
6/30/2030	2,545,191	391,186	2,286,905	383,690	879,766	465,830
6/30/2031	2,330,491	402,921	2,060,604	395,201	462,765	479,805
6/30/2032	2,087,520	390,543	1,805,396	407,057		
6/30/2033	1,839,160	377,059	1,518,755	419,269		
6/30/2034	1,586,154	362,415	1,197,954	431,847		
6/30/2035	1,329,355	346,553	840,052	444,802		
6/30/2036	1,069,743	329,413	441,876	458,146		
6/30/2037	808,431	154,107				
6/30/2038	709,282	158,730				
6/30/2039	597,903	163,492				
6/30/2040	473,234	168,397				
6/30/2041	334,129	121,779				
6/30/2042	232,926	111,171				
6/30/2043	135,131	77,704				
6/30/2044	64,701	42,128				
6/30/2045	25,874	4,349				
6/30/2046	23,305	24,163				
Totals		7,621,445		7,020,543		5,899,720
Estimated Savings				600,902		1,721,724

Current CalPERS Board policy prioritizes the order for which lump sum contributions in excess of the required employer contribution shall be applied. Excess contributions shall first be applied toward payment on the plan's side fund, and any remainder shall then be applied toward the plan's share of the pool's unfunded accrued liability.

Please contact the plan actuary before making such a payment to ensure that the payment is applied correctly.

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	9.055%	146,085
2017 - 18	9.096%	183,236

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	\$	14,126,030	\$	10,943,760	\$	3,182,270	77.5%	\$	2,098,024
06/30/2012		14,084,104		10,326,106		3,757,998	73.3%		1,062,063
06/30/2013		14,539,412		11,816,121		2,723,291	81.3%		1,369,806
06/30/2014		15,466,674		13,003,838		2,462,836	84.1%		1,395,887
06/30/2015		15,806,251		12,571,337		3,234,914	79.5%		1,452,348

RISK ANALYSIS

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

Analysis of Future Investment Return Scenarios

The investment return for Fiscal Year 2015-16 was not known at the time this report was produced. The investment return in Fiscal Year 2015-16 as of April 30, 2016 is 0.0 percent before administrative expenses. For purposes of projecting future employer contributions, we are assuming a 0.0 percent investment return for Fiscal Year 2015-16.

The investment return realized during a fiscal year first affects the contribution for the fiscal year two years later. For example, the investment return for Fiscal Year 2015-16 will first be reflected in the June 30, 2016 actuarial valuation that will be used to set the Fiscal Year 2018-19 employer contributions, the Fiscal Year 2016-17 investment return will first be reflected in the June 30, 2017 actuarial valuation that will be used to set the Fiscal Year 2019-20 employer contributions, and so forth.

A sensitivity analysis was performed to determine the effects of various investment returns during fiscal years 2016-17, 2017-18, and 2018-19 on the employer contributions for fiscal years 2019-20, 2020-21, and 2021-22. The projected contributions assume that all other actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur.

Five different investment return scenarios were selected.

- The first scenario is a -3.8 percent return for each of the 2016-17, 2017-18, and 2018-19 fiscal years. Based on the current investment allocation, this is what one would expect if the markets were to give us about a 5th percentile return from July 1, 2016 through June 30, 2019.
- The second scenario is a 2.8 percent return for each of the 2016-17, 2017-18, and 2018-19 fiscal years. Based on the current investment allocation, this is what one would expect if the markets were to give us about a 25th percentile return from July 1, 2016 through June 30, 2019.
- The third scenario is a 7.5 percent return for each of the 2016-17, 2017-18, and 2018-19 fiscal years. Based on the current investment allocation, this is what one would expect if the markets were to give us about a 49th percentile return from July 1, 2016 through June 30, 2019.
- The fourth scenario is a 12.0 percent return for each of the 2016-17, 2017-18, and 2018-19 fiscal years. Based on the current investment allocation, this is what one would expect if the markets were to give us about a 75th percentile return from July 1, 2016 through June 30, 2019.
- Finally, the last scenario is an 18.9 percent return for each of the 2016-17, 2017-18, and 2018-19 fiscal years. Based on the current investment allocation, this is what one would expect if the markets were to give us about a 95th percentile return from July 1, 2016 through June 30, 2019.

The table below shows the estimated projected contributions and the estimated increases for the plan under the five different scenarios.

2016-19 Investment Return Scenario	Fiscal Year			Estimated Change Between 2018-19 and 2021-22
	2019-20	2020-21	2021-22	
(3.8%)				
Normal Cost	9.1%	9.1%	9.1%	0.0%
UAL Contribution	\$318,264	\$397,536	\$505,568	\$267,820
2.8%				
Normal Cost	9.1%	9.1%	9.1%	0.0%
UAL Contribution	\$304,890	\$357,816	\$426,901	\$189,153
7.5%				
Normal Cost	9.1%	9.1%	9.1%	0.0%
UAL Contribution	\$295,366	\$328,452	\$366,524	\$128,776
12.0%				
Normal Cost	9.3%	9.5%	9.7%	0.6%
UAL Contribution	\$286,717	\$302,331	\$312,353	\$74,605
18.9%				
Normal Cost	9.7%	10.2%	10.8%	1.7%
UAL Contribution	\$273,894	\$263,403	\$0	\$(237,748)

For the last two scenarios in the table above the results incorporate the impact of CalPERS Risk Mitigation Policy. A 12.0% return would result in a reduction of the discount rate by 0.05% and a return of 18.9% would reduce the discount rate by 0.15%. Reducing the discount rate increases both the plan's accrued liability and normal cost. More details about Risk Mitigation policy can be found on our website.

Analysis of Discount Rate Sensitivity

The following analysis looks at the Fiscal Year 2017-18 total normal cost rates and liabilities under two different discount rate scenarios. Shown below are the total normal cost rates assuming discount rates that are 1 percent lower and 1 percent higher than the current valuation discount rate. This analysis shows the potential plan impacts if the Public Employees' Retirement Fund (PERF) were to realize investment returns of 6.50 percent or 8.50 percent over the long-term.

This analysis is intended to illustrate the long-term risk to the contribution rates.

Sensitivity Analysis			
As of June 30, 2015	6.50% Discount Rate (-1%)	7.50% Discount Rate (assumed rate)	8.50% Discount Rate (+1%)
Plan's Total Normal Cost	19.8%	16.0%	13.1%
Accrued Liability	\$17,777,072	\$15,806,251	\$14,177,599
Unfunded Accrued Liability	\$5,205,735	\$3,234,914	\$1,606,262

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.

Rate Volatility	As of June 30, 2015	
1. Market Value of Assets	\$	12,571,337
2. Payroll		1,452,348
3. Asset Volatility Ratio (AVR) [(1) / (2)]		8.7
4. Accrued Liability	\$	15,806,251
5. Liability Volatility Ratio (LVR) [(4) / (2)]		10.9

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, 2015. 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.

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} @ 2.00%	Funded Status	Unfunded Termination Liability @ 2.00%	Hypothetical Termination Liability^{1,2} @ 3.25%	Funded Status	Unfunded Termination Liability @ 3.25%
\$12,571,337	\$32,383,425	38.8%	\$19,812,088	\$27,224,358	46.2%	\$14,653,021

¹ The hypothetical liabilities calculated above include a 7 percent mortality contingency load in accordance with Board policy. Other actuarial assumptions, such as wage and inflation 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 2.75 percent on June 30, 2015.

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, 2014	June 30, 2015
Reported Payroll	\$ 1,395,887	\$ 1,452,348
Projected Payroll for Contribution Purposes	\$ 1,525,324	\$ 1,587,020
Number of Members		
Active	16	16
Transferred	13	13
Separated	27	26
Retired	54	54

List of Class 1 Benefit Provisions

This plan has the additional Class 1 Benefit Provisions:

- Post-Retirement Survivor Allowance (PRSA)

PLAN'S MAJOR BENEFIT OPTIONS

SECTION 1 – PLAN SPECIFIC INFORMATION FOR THE MISCELLANEOUS PLAN OF THE TOWN OF ATHERTON

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.

Benefit Provision	Contract package		
	Active Misc	Receiving Misc	
Benefit Formula	2.0% @ 55		
Social Security Coverage	No		
Full/Modified	Full		
Employee Contribution Rate	7.00%		
Final Average Compensation Period	Three Year		
Sick Leave Credit	Yes		
Non-Industrial Disability	Standard		
Industrial Disability	No		
Pre-Retirement Death Benefits			
Optional Settlement 2W	Yes		
1959 Survivor Benefit Level	level 3		
Special	No		
Alternate (firefighters)	No	No	
Post-Retirement Death Benefits			
Lump Sum	\$500	\$500	
Survivor Allowance (PRSA)	Yes	Yes	
COLA	2%	2%	

Section 2

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

**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 2016

**SAFETY PLAN OF THE TOWN OF ATHERTON
(CalPERS ID: 1382390535)
Annual Valuation Report as of June 30, 2015**

Dear Employer,

As an attachment to this letter, you will find a copy of the June 30, 2015 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, 2015.

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

Your June 30, 2015 actuarial valuation report contains important actuarial information about your pension plan at CalPERS. Your assigned CalPERS staff actuary, whose signature appears in the Actuarial Certification section on page 1, is available to discuss the report with you after August 31, 2016.

Future Employer Contribution

Fiscal Year	Employer Normal Cost Rate	+	Employer Payment of Unfunded Liability
2017-18	21.418%		\$496,462
2018-19 (projected)	21.4%		\$629,363

The exhibit above displays the minimum employer contributions, before any cost sharing, for Fiscal Year 2017-18 along with estimates of the contributions for Fiscal Year 2018-19. The total employer contribution is the sum of a Normal Cost Rate applied to reported payroll plus an Unfunded Liability dollar payment. The estimated contributions for Fiscal Year 2018-19 are 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 (based on the year to date return through April 30, 2016).

For a projection of employer contributions beyond Fiscal Year 2018-19, please refer to the "Projected Employer Contributions" in the "Highlights and Executive Summary" section. This 5-year projection of future employer contributions supersedes any previous projections we have provided. The "Risk Analysis" section of the valuation report also contains estimated employer contributions in future years under a variety of investment return scenarios. Member contributions, other than cost sharing, are in addition to the above amounts. The employer contributions in this report do not reflect any cost sharing arrangements you may have with your employees.

The estimates for Fiscal Year 2018-19 also assume that there are no future contract amendments and no liability gains or losses (such as larger than expected pay increases, more retirements than expected, etc.) This is an important assumption because these gains and losses do occur and can have a significant effect on required contributions. Even for the largest plans or pools, such gains and losses can impact the employer's contributions. These gains and losses cannot be predicted in advance so the projected employer contributions are estimates. The actual required employer contribution for Fiscal Year 2018-19 will be provided in next year's valuation report.

Changes since the Prior Year's Valuation

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. The policy has no impact on the current year valuation results but is expected to have an impact in future years. More details on the Risk Mitigation Policy can be found on our website.

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

Further descriptions of general changes are included in the "Highlights and Executive Summary" section and in Appendix A, "Statement of Actuarial Data, Methods and Assumptions" of the Section 2 report. We understand that you might have a number of questions about these results. While we are very interested in discussing these results with your agency, in the interest of allowing us to give every public agency their results, we ask that you wait until after August 31 to contact us with actuarial related questions.

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

Sincerely,



ALAN MILLIGAN
Chief Actuary



ACTUARIAL VALUATION

as of June 30, 2015

**for the
SAFETY PLAN
of the
TOWN OF ATHERTON
(CalPERS ID: 1382390535)**

**REQUIRED CONTRIBUTIONS
FOR FISCAL YEAR
July 1, 2017 - June 30, 2018**

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SECTION 2 – RISK POOL ACTUARIAL VALUATION INFORMATION

Section 1

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Plan Specific Information for the SAFETY PLAN of the TOWN OF ATHERTON

**(CalPERS ID: 1382390535)
(Rate Plan: 65)**

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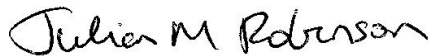
ACTUARIAL CERTIFICATION

Section 1 of this report is based on the member and financial data contained in our records as of June 30, 2015 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, 2015 provided by employers participating in the Safety Risk Pool to which the plan belongs and benefit provisions under the CalPERS contracts for those agencies.

As set forth in Section 2 of this report, the pool actuary has certified that, in their opinion, the valuation of the risk pool containing your SAFETY PLAN has been performed in accordance with generally accepted actuarial principles consistent with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for the risk pool as of the date of this valuation and as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.

Having relied upon the information set forth in Section 2 of this report and based on the census and benefit provision information for the plan, it is my opinion as the plan actuary that the side fund and other Unfunded Accrued Liability bases as of June 30, 2015 and employer contribution as of July 1, 2017, have been properly and accurately determined in accordance with the principles and standards stated above.

The undersigned is an actuary for CalPERS, who is 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.



JULIAN ROBINSON, FSA, EA, MAAA
Senior Pension Actuary, CalPERS
Plan Actuary

HIGHLIGHTS AND EXECUTIVE SUMMARY

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

Introduction

This report presents the results of the June 30, 2015 actuarial valuation of the SAFETY PLAN of the TOWN OF ATHERTON of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the required employer contributions for Fiscal Year 2017-18.

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. The Risk Mitigation Policy does not have an impact on the current year actuarial valuation. More details on the Risk Mitigation Policy can be found on our website.

Purpose of Section 1

This Section 1 report for the SAFETY PLAN of the TOWN OF ATHERTON 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, 2015;
- Determine the required employer contribution for this plan for the fiscal year July 1, 2017 through June 30, 2018; and
- Provide actuarial information as of June 30, 2015 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 use of this report for any other purposes may be inappropriate. In particular, this report does not contain information applicable to alternative benefit costs. The employer should contact their actuary before disseminating any portion of this report for any reason that is not explicitly described above.

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 8.

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 a 1 percent plus or minus change in the discount rate.

Required Employer Contribution

		Fiscal Year 2016-17 ¹	Fiscal Year 2017-18
Required Employer Contribution			
Employer Normal Cost Rate		21.230%	21.418%
<i>Plus Either</i>			
1) Monthly Employer Dollar UAL Payment	\$	33,572.06	\$ 41,371.86
<i>Or</i>			
2) Annual Lump Sum Prepayment Option	\$	388,557	\$ 478,831
<i>The total minimum required employer contribution is the sum of the Plan's Employer Normal Cost Rate (expressed as a percentage of payroll) plus the Employer Unfunded Accrued Liability (UAL) Contribution Amount (billed monthly in dollars). 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.</i>			

	Fiscal Year 2016-17 ¹	Fiscal Year 2017-18
Development of Normal Cost as a Percentage of Payroll		
Base Total Normal Cost for Formula	27.415%	27.603%
Surcharge for Class 1 Benefits ³		
a) FAC 1	1.108%	1.108%
b) PRSA	1.695%	1.695%
Phase out of Normal Cost Difference ⁴	0.000%	0.000%
Plan's Total Normal Cost	30.217%	30.406%
Formula's Expected Employee Contribution Rate	8.987%	8.988%
Employer Normal Cost Rate	21.230%	21.418%
Projected Payroll for the Contribution Fiscal Year	\$ 2,011,027	\$ 2,236,138
Estimated Employer Contributions Based on Projected Payroll		
Plan's Estimated Employer Normal Cost	\$ 426,945	\$ 478,936
Plan's Payment on Amortization Bases ²	402,865	496,462
Total Employer Contribution ⁵	\$ 829,810	\$ 975,398

¹ The results shown for Fiscal Year 2016-17 reflect the prior year valuation and do not take into account any lump sum payment, side fund payoff, or rate adjustment made after June 30, 2015.

² See page 8 for a breakdown of the Amortization Bases.

³ Section 2 of this report contains a list of Class 1 benefits and corresponding surcharges for each benefit.

⁴ 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.

⁵ As a percentage of projected payroll the UAL contribution is 22.202 percent for an estimated total employer contribution rate of 43.620 percent.

Plan's Funded Status

		June 30, 2014	June 30, 2015
1. Present Value of Projected Benefits (PVB)	\$	40,470,443	\$ 42,461,709
2. Entry Age Normal Accrued Liability (AL)		35,213,417	36,891,116
3. Plan's Market Value of Assets (MVA)		28,436,146	28,263,430
4. Unfunded Accrued Liability (UAL) [(2) - (3)]		6,777,271	8,627,686
5. Funded Ratio [(3) / (2)]		80.8%	76.6%

Projected Employer Contributions

The estimate 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 (based on year to date return through April 30, 2016).

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 between now and the beginning of the projection period.

	Required Contribution	Projected Future Employer Contributions				
Fiscal Year	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Normal Cost %	21.418%	21.4%	21.4%	21.4%	21.4%	21.4%
UAL \$	\$496,462	\$629,363	\$769,790	\$853,294	\$944,291	\$1,010,942

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

None.

Subsequent Events

Risk Mitigation

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. More details on the Risk Mitigation Policy can be found on our website.

ASSETS AND LIABILITIES

- **ALLOCATION OF PLAN'S SHARE OF POOL'S EXPERIENCE/ASSUMPTION CHANGE**
- **DEVELOPMENT OF PLAN'S SHARE OF POOL'S MVA**
- **SCHEDULE OF PLAN'S SIDE FUND & OTHER AMORTIZATION BASES**
- **30-YEAR AMORTIZATION SCHEDULE AND ALTERNATIVES**
- **EMPLOYER CONTRIBUTION HISTORY**
- **FUNDING HISTORY**

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	\$	36,891,116
2.	Projected UAL balance at 6/30/15		7,086,680
3.	Pool's Accrued Liability	\$	18,467,886,519
4.	Sum of Pool's Individual Plan UAL Balances at 6/30/15		3,713,009,355
5.	Pool's 2014/15 Investment & Asset (Gain)/Loss		765,720,345
6.	Pool's 2014/15 Other (Gain)/Loss		(2,867,161)
7.	Plan's Share of Pool's Asset (Gain)/Loss $[(1)-(2)]/[(3)-(4)] * (5)$		1,546,734
8.	Plan's Share of Pool's Other (Gain)/Loss $[(1)]/[(3)] * (6)$		(5,727)
9.	Plan's New (Gain)/Loss as of 6/30/2015 $[(7)+(8)]$	\$	1,541,006
10.	Increase in Pool's Accrued Liability due to Change in Assumptions		0
11.	Plan's Share of Pool's Change in Assumptions $[(1)]/[(3)] * (10)$	\$	0

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

1.	Plan's Accrued Liability	\$	36,891,116
2.	Plan's UAL	\$	8,627,686
3.	Plan's Share of Pool's MVA $[(1)-(2)]$	\$	28,263,430

Schedule of Plan's Side Fund and Other Amortization Bases

There is a two-year lag between the valuation date and the start of the contribution fiscal year.

- The assets, liabilities, and funded status of the plan are measured as of the valuation date: June 30, 2015.
- The employer contribution determined by the valuation is for the fiscal year beginning two years after the valuation date: Fiscal Year 2017-18.

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.

Reason for Base	Date Established	Amortization Period	Balance 6/30/15	Payment 2015-16	Balance 6/30/16	Payment 2016-17	Amounts for Fiscal 2017-18	
							Balance 6/30/17	Scheduled Payment for 2017-18
SHARE OF PRE-2013 POOL UAL	06/30/13	20	\$3,961,634	\$282,025	\$3,966,347	\$290,486	\$3,962,641	\$299,201
ASSET (GAIN)/LOSS	06/30/13	28	\$4,018,765	\$56,524	\$4,261,567	\$116,440	\$4,460,457	\$179,899
NON-ASSET (GAIN)/LOSS	06/30/13	28	\$(45,622)	\$(642)	\$(48,378)	\$(1,322)	\$(50,636)	\$(2,042)
ASSET (GAIN)/LOSS	06/30/14	29	\$(2,693,560)	\$0	\$(2,895,577)	\$(40,726)	\$(3,070,520)	\$(83,896)
ASSUMPTION CHANGE	06/30/14	19	\$1,811,842	\$(19,192)	\$1,967,629	\$37,479	\$2,076,342	\$77,206
NON-ASSET (GAIN)/LOSS	06/30/14	29	\$33,621	\$0	\$36,143	\$508	\$38,327	\$1,047
ASSET (GAIN)/LOSS	06/30/15	30	\$1,546,734	\$0	\$1,662,739	\$0	\$1,787,444	\$25,140
NON-ASSET (GAIN)/LOSS	06/30/15	30	\$(5,727)	\$0	\$(6,157)	\$0	\$(6,619)	\$(93)
TOTAL			\$8,627,687	\$318,715	\$8,944,313	\$402,865	\$9,197,436	\$496,462

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

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

30-Year Amortization Schedule and Alternatives

The amortization schedule on the previous page shows the minimum contributions required according to CalPERS amortization policy. There has been considerable interest from many agencies in paying off these unfunded accrued liabilities sooner and the possible savings in doing so. As a result, we have provided alternate amortization schedules to help analyze the current amortization schedule and illustrate the advantages of accelerating unfunded liability payments.

Shown on the following page are future year amortization payments based on 1) the current amortization schedule reflecting the individual bases and remaining periods shown on the previous page, and 2) alternate "fresh start" amortization schedules using two sample periods that would both result in interest savings relative to the current amortization schedule. Note that the payments under each alternate scenario increase by 3 percent for each year into the future. The schedules do not attempt to reflect any experience after June 30, 2015 that may deviate from the actuarial assumptions. Therefore, future amortization payments displayed in the Current Amortization Schedule may not match projected amortization payments shown in connection with Projected Employer Contributions provided elsewhere in this report.

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

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

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

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

30-Year Amortization Schedule and Alternatives

Date	<u>Current Amortization Schedule</u>		<u>Alternate Schedules</u>			
	Balance	Payment	20 Year Amortization		15 Year Amortization	
	Balance	Payment	Balance	Payment	Balance	Payment
6/30/2017	9,197,437	496,462	9,197,437	694,456	9,197,437	843,125
6/30/2018	9,372,502	595,313	9,167,217	715,290	9,013,075	868,419
6/30/2019	9,458,206	699,648	9,113,130	736,749	8,788,660	894,471
6/30/2020	9,442,161	744,924	9,032,737	758,851	8,520,402	921,305
6/30/2021	9,377,969	795,463	8,923,399	781,617	8,204,202	948,944
6/30/2022	9,256,563	819,327	8,782,256	805,065	7,835,631	977,413
6/30/2023	9,101,308	843,907	8,606,216	829,217	7,409,900	1,006,735
6/30/2024	8,908,925	869,224	8,391,931	854,094	6,921,838	1,036,937
6/30/2025	8,675,864	895,301	8,135,783	879,717	6,365,856	1,068,045
6/30/2026	8,398,286	922,160	7,833,857	906,108	5,735,922	1,100,087
6/30/2027	8,072,042	949,825	7,481,923	933,291	5,025,523	1,133,089
6/30/2028	7,692,646	978,319	7,075,410	961,290	4,227,625	1,167,082
6/30/2029	7,255,251	1,007,669	6,609,379	990,129	3,334,640	1,202,094
6/30/2030	6,754,621	1,037,899	6,078,495	1,019,833	2,338,381	1,238,157
6/30/2031	6,185,101	1,069,036	5,476,997	1,050,428	1,230,010	1,275,302
6/30/2032	5,540,584	1,040,965	4,798,666	1,081,940		
6/30/2033	4,876,833	1,010,247	4,036,786	1,114,399		
6/30/2034	4,195,149	976,749	3,184,112	1,147,831		
6/30/2035	3,497,070	940,332	2,232,824	1,182,266		
6/30/2036	2,784,393	900,852	1,174,487	1,217,734		
6/30/2037	2,059,200	387,487				
6/30/2038	1,811,884	399,112				
6/30/2039	1,533,968	411,085				
6/30/2040	1,222,794	423,417				
6/30/2041	875,495	315,605				
6/30/2042	613,931	287,676				
6/30/2043	361,708	203,770				
6/30/2044	177,562	114,571				
6/30/2045	72,090	19,837				
6/30/2046	56,930	59,026				
Totals		20,215,207		18,660,304		15,681,205
Estimated Savings				1,554,902		4,534,001

Current CalPERS Board policy prioritizes the order for which lump sum contributions in excess of the required employer contribution shall be applied. Excess contributions shall first be applied toward payment on the plan's side fund, and any remainder shall then be applied toward the plan's share of the pool's unfunded accrued liability.

Please contact the plan actuary before making such a payment to ensure that the payment is applied correctly.

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	21.230%	402,865
2017 - 18	21.418%	496,462

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	\$	28,919,573	\$	21,722,502	\$	7,197,071	75.1%	\$	1,942,071
06/30/2012		30,999,471		22,860,016		8,139,455	73.7%		1,824,609
06/30/2013		32,050,359		24,846,630		7,203,729	77.5%		1,971,765
06/30/2014		35,213,417		28,436,146		6,777,271	80.8%		1,840,375
06/30/2015		36,891,116		28,263,430		8,627,686	76.6%		2,046,383

RISK ANALYSIS

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

Analysis of Future Investment Return Scenarios

The investment return for Fiscal Year 2015-16 was not known at the time this report was produced. The investment return in Fiscal Year 2015-16 as of April 30, 2016 is 0.0 percent before administrative expenses. For purposes of projecting future employer contributions, we are assuming a 0.0 percent investment return for Fiscal Year 2015-16.

The investment return realized during a fiscal year first affects the contribution for the fiscal year two years later. For example, the investment return for Fiscal Year 2015-16 will first be reflected in the June 30, 2016 actuarial valuation that will be used to set the Fiscal Year 2018-19 employer contributions, the Fiscal Year 2016-17 investment return will first be reflected in the June 30, 2017 actuarial valuation that will be used to set the Fiscal Year 2019-20 employer contributions, and so forth.

A sensitivity analysis was performed to determine the effects of various investment returns during fiscal years 2016-17, 2017-18, and 2018-19 on the employer contributions for fiscal years 2019-20, 2020-21, and 2021-22. The projected contributions assume that all other actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur.

Five different investment return scenarios were selected.

- The first scenario is a -3.8 percent return for each of the 2016-17, 2017-18, and 2018-19 fiscal years. Based on the current investment allocation, this is what one would expect if the markets were to give us about a 5th percentile return from July 1, 2016 through June 30, 2019.
- The second scenario is a 2.8 percent return for each of the 2016-17, 2017-18, and 2018-19 fiscal years. Based on the current investment allocation, this is what one would expect if the markets were to give us about a 25th percentile return from July 1, 2016 through June 30, 2019.
- The third scenario is a 7.5 percent return for each of the 2016-17, 2017-18, and 2018-19 fiscal years. Based on the current investment allocation, this is what one would expect if the markets were to give us about a 49th percentile return from July 1, 2016 through June 30, 2019.
- The fourth scenario is a 12.0 percent return for each of the 2016-17, 2017-18, and 2018-19 fiscal years. Based on the current investment allocation, this is what one would expect if the markets were to give us about a 75th percentile return from July 1, 2016 through June 30, 2019.
- Finally, the last scenario is an 18.9 percent return for each of the 2016-17, 2017-18, and 2018-19 fiscal years. Based on the current investment allocation, this is what one would expect if the markets were to give us about a 95th percentile return from July 1, 2016 through June 30, 2019.

The table below shows the estimated projected contributions and the estimated increases for the plan under the five different scenarios.

2016-19 Investment Return Scenario	Fiscal Year			Estimated Change Between 2018-19 and 2021-22
	2019-20	2020-21	2021-22	
(3.8%)				
Normal Cost	21.4%	21.4%	21.4%	0.0%
UAL Contribution	\$820,091	\$1,004,391	\$1,247,077	\$617,714
2.8%				
Normal Cost	21.4%	21.4%	21.4%	0.0%
UAL Contribution	\$790,715	\$917,530	\$1,075,814	\$446,451
7.5%				
Normal Cost	21.4%	21.4%	21.4%	0.0%
UAL Contribution	\$769,790	\$853,294	\$944,291	\$314,928
12.0%				
Normal Cost	21.8%	22.2%	22.6%	1.2%
UAL Contribution	\$750,460	\$795,683	\$825,945	\$196,582
18.9%				
Normal Cost	22.6%	23.8%	25.0%	3.6%
UAL Contribution	\$721,620	\$709,526	\$646,110	\$16,747

For the last two scenarios in the table above the results incorporate the impact of CalPERS Risk Mitigation Policy. A 12.0% return would result in a reduction of the discount rate by 0.05% and a return of 18.9% would reduce the discount rate by 0.15%. Reducing the discount rate increases both the plan's accrued liability and normal cost. More details about Risk Mitigation policy can be found on our website.

Analysis of Discount Rate Sensitivity

The following analysis looks at the Fiscal Year 2017-18 total normal cost rates and liabilities under two different discount rate scenarios. Shown below are the total normal cost rates assuming discount rates that are 1 percent lower and 1 percent higher than the current valuation discount rate. This analysis shows the potential plan impacts if the Public Employees' Retirement Fund (PERF) were to realize investment returns of 6.50 percent or 8.50 percent over the long-term.

This analysis is intended to illustrate the long-term risk to the contribution rates.

Sensitivity Analysis			
As of June 30, 2015	6.50% Discount Rate (-1%)	7.50% Discount Rate (assumed rate)	8.50% Discount Rate (+1%)
Plan's Total Normal Cost	38.3%	30.4%	24.4%
Accrued Liability	\$42,086,600	\$36,891,116	\$32,680,723
Unfunded Accrued Liability	\$13,823,170	\$8,627,686	\$4,417,293

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.

Rate Volatility	As of June 30, 2015	
1. Market Value of Assets	\$	28,263,430
2. Payroll		2,046,383
3. Asset Volatility Ratio (AVR) [(1) / (2)]		13.8
4. Accrued Liability	\$	36,891,116
5. Liability Volatility Ratio (LVR) [(4) / (2)]		18.0

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, 2015. 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.

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} @ 2.00%	Funded Status	Unfunded Termination Liability @ 2.00%	Hypothetical Termination Liability^{1,2} @ 3.25%	Funded Status	Unfunded Termination Liability @ 3.25%
\$28,263,430	\$81,803,682	34.6%	\$53,540,252	\$66,986,582	42.2%	\$38,723,152

¹ The hypothetical liabilities calculated above include a 7 percent mortality contingency load in accordance with Board policy. Other actuarial assumptions, such as wage and inflation 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 2.75 percent on June 30, 2015.

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, 2014	June 30, 2015
Reported Payroll	\$ 1,840,375	\$ 2,046,383
Projected Payroll for Contribution Purposes	\$ 2,011,027	\$ 2,236,138
Number of Members		
Active	16	16
Transferred	17	20
Separated	10	10
Retired	52	53

List of Class 1 Benefit Provisions

This plan has the additional Class 1 Benefit Provisions:

- One Year Final Compensation (FAC 1)
- Post-Retirement Survivor Allowance (PRSA)

PLAN'S MAJOR BENEFIT OPTIONS

SECTION 1 – PLAN SPECIFIC INFORMATION FOR THE SAFETY PLAN OF THE TOWN OF ATHERTON

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.

Benefit Provision	Contract package		
	Active Police	Receiving Police	
Benefit Formula	3.0% @ 50		
Social Security Coverage	No		
Full/Modified	Full		
Employee Contribution Rate	9.00%		
Final Average Compensation Period	One Year		
Sick Leave Credit	Yes		
Non-Industrial Disability	Standard		
Industrial Disability	Yes		
Pre-Retirement Death Benefits			
Optional Settlement 2W	Yes		
1959 Survivor Benefit Level	level 3		
Special	Yes		
Alternate (firefighters)	No	No	
Post-Retirement Death Benefits			
Lump Sum	\$500	\$500	
Survivor Allowance (PRSA)	Yes	Yes	
COLA	2%	2%	

Section 2

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

**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 2016

**PEPRA MISCELLANEOUS PLAN OF THE TOWN OF ATHERTON
(CalPERS ID: 1382390535)
Annual Valuation Report as of June 30, 2015**

Dear Employer,

As an attachment to this letter, you will find a copy of the June 30, 2015 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, 2015.

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

Your June 30, 2015 actuarial valuation report contains important actuarial information about your pension plan at CalPERS. Your assigned CalPERS staff actuary, whose signature appears in the Actuarial Certification section on page 1, is available to discuss the report with you after August 31, 2016.

Future Employer Contribution

Fiscal Year	Employer Normal Cost Rate	+	Employer Payment of Unfunded Liability
2017-18	6.908%		\$412
2018-19 (projected)	6.9%		\$464

The exhibit above displays the minimum employer contributions, before any cost sharing, for Fiscal Year 2017-18 along with estimates of the contributions for Fiscal Year 2018-19. The total employer contribution is the sum of a Normal Cost Rate applied to reported payroll plus an Unfunded Liability dollar payment. The estimated contributions for Fiscal Year 2018-19 are 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 (based on the year to date return through April 30, 2016).

For a projection of employer contributions beyond Fiscal Year 2018-19, please refer to the "Projected Employer Contributions" in the "Highlights and Executive Summary" section. This 5-year projection of future employer contributions supersedes any previous projections we have provided. The "Risk Analysis" section of the valuation report also contains estimated employer contributions in future years under a variety of investment return scenarios. Member contributions, other than cost sharing, are in addition to the above amounts. The employer contributions in this report do not reflect any cost sharing arrangements you may have with your employees.

The estimates for Fiscal Year 2018-19 also assume that there are no future contract amendments and no liability gains or losses (such as larger than expected pay increases, more retirements than expected, etc.) This is an important assumption because these gains and losses do occur and can have a significant effect on required contributions. Even for the largest plans or pools, such gains and losses can impact the employer's contributions. These gains and losses cannot be predicted in advance so the projected employer contributions are estimates. The actual required employer contribution for Fiscal Year 2018-19 will be provided in next year's valuation report.

Changes since the Prior Year's Valuation

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. The policy has no impact on the current year valuation results but is expected to have an impact in future years. More details on the Risk Mitigation Policy can be found on our website.

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

Further descriptions of general changes are included in the "Highlights and Executive Summary" section and in Appendix A, "Statement of Actuarial Data, Methods and Assumptions" of the Section 2 report. We understand that you might have a number of questions about these results. While we are very interested in discussing these results with your agency, in the interest of allowing us to give every public agency their results, we ask that you wait until after August 31 to contact us with actuarial related questions.

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

Sincerely,



ALAN MILLIGAN
Chief Actuary



ACTUARIAL VALUATION

as of June 30, 2015

**for the
PEPRA MISCELLANEOUS PLAN
of the
TOWN OF ATHERTON
(CalPERS ID: 1382390535)**

**REQUIRED CONTRIBUTIONS
FOR FISCAL YEAR**

July 1, 2017 - June 30, 2018

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SECTION 2 – RISK POOL ACTUARIAL VALUATION INFORMATION

Section 1

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Plan Specific Information for the PEPRA MISCELLANEOUS PLAN of the TOWN OF ATHERTON

**(CalPERS ID: 1382390535)
(Rate Plan: 26036)**

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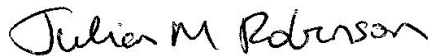
ACTUARIAL CERTIFICATION

Section 1 of this report is based on the member and financial data contained in our records as of June 30, 2015 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, 2015 provided by employers participating in the Miscellaneous Risk Pool to which the plan belongs and benefit provisions under the CalPERS contracts for those agencies.

As set forth in Section 2 of this report, the pool actuary has certified that, in their opinion, the valuation of the risk pool containing your 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 the side fund and other Unfunded Accrued Liability bases as of June 30, 2015 and employer contribution as of July 1, 2017, have been properly and accurately determined in accordance with the principles and standards stated above.

The undersigned is an actuary for CalPERS, who is 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.



JULIAN ROBINSON, FSA, EA, MAAA
Senior Pension Actuary, CalPERS
Plan Actuary

HIGHLIGHTS AND EXECUTIVE SUMMARY

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

Introduction

This report presents the results of the June 30, 2015 actuarial valuation of the PEPRA MISCELLANEOUS PLAN of the TOWN OF ATHERTON of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the required employer contributions for Fiscal Year 2017-18.

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. The Risk Mitigation Policy does not have an impact on the current year actuarial valuation. More details on the Risk Mitigation Policy can be found on our website.

Purpose of Section 1

This Section 1 report for the PEPRA MISCELLANEOUS PLAN of the TOWN OF ATHERTON 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, 2015;
- Determine the required employer contribution for this plan for the fiscal year July 1, 2017 through June 30, 2018; and
- Provide actuarial information as of June 30, 2015 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 use of this report for any other purposes may be inappropriate. In particular, this report does not contain information applicable to alternative benefit costs. The employer should contact their actuary before disseminating any portion of this report for any reason that is not explicitly described above.

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 8.

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 a 1 percent plus or minus change in the discount rate.

Required Employer Contribution

Required Employer Contribution		Fiscal Year 2016-17 ¹	Fiscal Year 2017-18
Employer Normal Cost Rate		6.930%	6.908%
<i>Plus Either</i>			
1) Monthly Employer Dollar UAL Payment	\$	0.00	\$ 34.32
<i>Or</i>			
2) Annual Lump Sum Prepayment Option	\$	0	\$ 397

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

	Fiscal Year 2016-17 ¹	Fiscal Year 2017-18
Development of Normal Cost as a Percentage of Payroll		
Base Total Normal Cost for Formula	12.805%	12.783%
Surcharge for Class 1 Benefits ³		
a) PRSA	0.625%	0.625%
Phase out of Normal Cost Difference ⁴	0.000%	0.000%
Plan's Total Normal Cost	13.430%	13.408%
Plan's Employee Contribution Rate	6.500%	6.500%
Employer Normal Cost Rate	6.930%	6.908%
Projected Payroll for the Contribution Fiscal Year	\$ 70,838	\$ 254,625
Estimated Employer Contributions Based on Projected Payroll		
Plan's Estimated Employer Normal Cost	\$ 4,909	\$ 17,590
Plan's Payment on Amortization Bases ²	0	412
Total Employer Contribution ⁵	\$ 4,909	\$ 18,002

¹ The results shown for Fiscal Year 2016-17 reflect the prior year valuation and do not take into account any lump sum payment, side fund payoff, or rate adjustment made after June 30, 2015.

² See page 8 for a breakdown of the Amortization Bases.

³ Section 2 of this report contains a list of Class 1 benefits and corresponding surcharges for each benefit.

⁴ 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.

⁵ As a percentage of projected payroll the UAL contribution is 0.162 percent for an estimated total employer contribution rate of 7.070 percent.

Plan's Funded Status

		June 30, 2014		June 30, 2015
1. Present Value of Projected Benefits (PVB)	\$	116,119	\$	331,042
2. Entry Age Normal Accrued Liability (AL)		12,473		34,451
3. Plan's Market Value of Assets (MVA)		13,179		33,187
4. Unfunded Accrued Liability (UAL) [(2) - (3)]		(706)		1,264
5. Funded Ratio [(3) / (2)]		105.7%		96.3%

Projected Employer Contributions

The estimate 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 (based on year to date return through April 30, 2016).

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 between now and the beginning of the projection period.

	Required Contribution	Projected Future Employer Contributions				
Fiscal Year	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Normal Cost %	6.908%	6.9%	6.9%	6.9%	6.9%	6.9%
UAL \$	\$412	\$464	\$520	\$578	\$640	\$227

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

None.

Subsequent Events

Risk Mitigation

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. More details on the Risk Mitigation Policy can be found on our website.

ASSETS AND LIABILITIES

- **ALLOCATION OF PLAN'S SHARE OF POOL'S EXPERIENCE/ASSUMPTION CHANGE**
- **DEVELOPMENT OF PLAN'S SHARE OF POOL'S MVA**
- **SCHEDULE OF PLAN'S SIDE FUND & OTHER AMORTIZATION BASES**
- **30-YEAR AMORTIZATION SCHEDULE AND ALTERNATIVES**
- **EMPLOYER CONTRIBUTION HISTORY**
- **FUNDING HISTORY**

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	\$	34,451
2.	Projected UAL balance at 6/30/15		(428)
3.	Pool's Accrued Liability	\$	13,889,938,645
4.	Sum of Pool's Individual Plan UAL Balances at 6/30/15		2,423,468,906
5.	Pool's 2014/15 Investment & Asset (Gain)/Loss		596,365,421
6.	Pool's 2014/15 Other (Gain)/Loss		(49,030,273)
7.	Plan's Share of Pool's Asset (Gain)/Loss $[(1)-(2)]/[(3)-(4)] * (5)$		1,814
8.	Plan's Share of Pool's Other (Gain)/Loss $[(1)]/[(3)] * (6)$		(122)
9.	Plan's New (Gain)/Loss as of 6/30/2015 $[(7)+(8)]$	\$	1,692
10.	Increase in Pool's Accrued Liability due to Change in Assumptions		0
11.	Plan's Share of Pool's Change in Assumptions $[(1)]/[(3)] * (10)$	\$	0

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

1.	Plan's Accrued Liability	\$	34,451
2.	Plan's UAL	\$	1,264
3.	Plan's Share of Pool's MVA $[(1)-(2)]$	\$	33,187

Schedule of Plan's Side Fund and Other Amortization Bases

There is a two-year lag between the valuation date and the start of the contribution fiscal year.

- The assets, liabilities, and funded status of the plan are measured as of the valuation date: June 30, 2015.
- The employer contribution determined by the valuation is for the fiscal year beginning two years after the valuation date: Fiscal Year 2017-18.

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.

Reason for Base	Date Established	Amortization Period	Balance 6/30/15	Payment 2015-16	Balance 6/30/16	Payment 2016-17	Amounts for Fiscal 2017-18	
							Balance 6/30/17	Scheduled Payment for 2017-18
FRESH START	06/30/15	5	\$1,264	\$(328)	\$1,699	\$0	\$1,827	\$412
TOTAL			\$1,264	\$(328)	\$1,699	\$0	\$1,827	\$412

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

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

30-Year Amortization Schedule and Alternatives

The amortization schedule on the previous page shows the minimum contributions required according to CalPERS amortization policy. There has been considerable interest from many agencies in paying off these unfunded accrued liabilities sooner and the possible savings in doing so. As a result, we have provided alternate amortization schedules to help analyze the current amortization schedule and illustrate the advantages of accelerating unfunded liability payments.

Shown on the following page are future year amortization payments based on 1) the current amortization schedule reflecting the individual bases and remaining periods shown on the previous page, and 2) alternate "fresh start" amortization schedules using two sample periods that would both result in interest savings relative to the current amortization schedule. Note that the payments under each alternate scenario increase by 3 percent for each year into the future. The schedules do not attempt to reflect any experience after June 30, 2015 that may deviate from the actuarial assumptions. Therefore, future amortization payments displayed in the Current Amortization Schedule may not match projected amortization payments shown in connection with Projected Employer Contributions provided elsewhere in this report.

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

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

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

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

30-Year Amortization Schedule and Alternatives

Date	<u>Current Amortization Schedule</u>		<u>Alternate Schedules</u>			
	Balance	Payment	0 Year Amortization		0 Year Amortization	
			Balance	Payment	Balance	Payment
6/30/2017	1,826	412	N/A	N/A	N/A	N/A
6/30/2018	1,536	424				
6/30/2019	1,212	437				
6/30/2020	850	450				
6/30/2021	447	463				
6/30/2022	0	0				
6/30/2023	0	0				
6/30/2024	0	0				
6/30/2025	0	0				
6/30/2026	0	0				
6/30/2027	0	0				
6/30/2028	0	0				
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6/30/2039	0	0				
6/30/2040	0	0				
6/30/2041	0	0				
6/30/2042	0	0				
6/30/2043	0	0				
6/30/2044	0	0				
6/30/2045	0	0				
6/30/2046	0	0				
Totals		2,186		0		0
Estimated Savings				0		0

Current CalPERS Board policy prioritizes the order for which lump sum contributions in excess of the required employer contribution shall be applied. Excess contributions shall first be applied toward payment on the plan's side fund, and any remainder shall then be applied toward the plan's share of the pool's unfunded accrued liability.

Please contact the plan actuary before making such a payment to ensure that the payment is applied correctly.

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	6.930%	0
2017 - 18	6.908%	412

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	\$ 377	\$ 506	\$ (129)	134.2%	\$ 60,372
06/30/2014	12,473	13,179	(706)	105.7%	64,827
06/30/2015	34,451	33,187	1,264	96.3%	233,018

RISK ANALYSIS

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

Analysis of Future Investment Return Scenarios

The investment return for Fiscal Year 2015-16 was not known at the time this report was produced. The investment return in Fiscal Year 2015-16 as of April 30, 2016 is 0.0 percent before administrative expenses. For purposes of projecting future employer contributions, we are assuming a 0.0 percent investment return for Fiscal Year 2015-16.

The investment return realized during a fiscal year first affects the contribution for the fiscal year two years later. For example, the investment return for Fiscal Year 2015-16 will first be reflected in the June 30, 2016 actuarial valuation that will be used to set the Fiscal Year 2018-19 employer contributions, the Fiscal Year 2016-17 investment return will first be reflected in the June 30, 2017 actuarial valuation that will be used to set the Fiscal Year 2019-20 employer contributions, and so forth.

A sensitivity analysis was performed to determine the effects of various investment returns during fiscal years 2016-17, 2017-18, and 2018-19 on the employer contributions for fiscal years 2019-20, 2020-21, and 2021-22. The projected contributions assume that all other actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur.

Five different investment return scenarios were selected.

- The first scenario is a -3.8 percent return for each of the 2016-17, 2017-18, and 2018-19 fiscal years. Based on the current investment allocation, this is what one would expect if the markets were to give us about a 5th percentile return from July 1, 2016 through June 30, 2019.
- The second scenario is a 2.8 percent return for each of the 2016-17, 2017-18, and 2018-19 fiscal years. Based on the current investment allocation, this is what one would expect if the markets were to give us about a 25th percentile return from July 1, 2016 through June 30, 2019.
- The third scenario is a 7.5 percent return for each of the 2016-17, 2017-18, and 2018-19 fiscal years. Based on the current investment allocation, this is what one would expect if the markets were to give us about a 49th percentile return from July 1, 2016 through June 30, 2019.
- The fourth scenario is a 12.0 percent return for each of the 2016-17, 2017-18, and 2018-19 fiscal years. Based on the current investment allocation, this is what one would expect if the markets were to give us about a 75th percentile return from July 1, 2016 through June 30, 2019.
- Finally, the last scenario is an 18.9 percent return for each of the 2016-17, 2017-18, and 2018-19 fiscal years. Based on the current investment allocation, this is what one would expect if the markets were to give us about a 95th percentile return from July 1, 2016 through June 30, 2019.

The table below shows the estimated projected contributions and the estimated increases for the plan under the five different scenarios.

2016-19 Investment Return Scenario	Fiscal Year			Estimated Change Between 2018-19 and 2021-22
	2019-20	2020-21	2021-22	
(3.8%)				
Normal Cost	6.9%	6.9%	6.9%	0.0%
UAL Contribution	\$580	\$761	\$1,007	\$543
2.8%				
Normal Cost	6.9%	6.9%	6.9%	0.0%
UAL Contribution	\$545	\$656	\$799	\$335
7.5%				
Normal Cost	6.9%	6.9%	6.9%	0.0%
UAL Contribution	\$520	\$578	\$640	\$176
12.0%				
Normal Cost	6.8%	6.9%	6.9%	0.0%
UAL Contribution	\$499	\$514	\$0	\$(464)
18.9%				
Normal Cost	6.9%	7.2%	7.4%	0.5%
UAL Contribution	\$471	\$0	\$0	\$(464)

For the last two scenarios in the table above the results incorporate the impact of CalPERS Risk Mitigation Policy. A 12.0% return would result in a reduction of the discount rate by 0.05% and a return of 18.9% would reduce the discount rate by 0.15%. Reducing the discount rate increases both the plan's accrued liability and normal cost. More details about Risk Mitigation policy can be found on our website.

Analysis of Discount Rate Sensitivity

The following analysis looks at the Fiscal Year 2017-18 total normal cost rates and liabilities under two different discount rate scenarios. Shown below are the total normal cost rates assuming discount rates that are 1 percent lower and 1 percent higher than the current valuation discount rate. This analysis shows the potential plan impacts if the Public Employees' Retirement Fund (PERF) were to realize investment returns of 6.50 percent or 8.50 percent over the long-term.

This analysis is intended to illustrate the long-term risk to the contribution rates.

Sensitivity Analysis			
As of June 30, 2015	6.50% Discount Rate (-1%)	7.50% Discount Rate (assumed rate)	8.50% Discount Rate (+1%)
Plan's Total Normal Cost	16.5%	13.4%	11.0%
Accrued Liability	\$42,024	\$34,451	\$28,528
Unfunded Accrued Liability	\$8,837	\$1,264	\$(4,659)

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.

Rate Volatility	As of June 30, 2015	
1. Market Value of Assets	\$	33,187
2. Payroll		233,018
3. Asset Volatility Ratio (AVR) [(1) / (2)]		0.1
4. Accrued Liability	\$	34,451
5. Liability Volatility Ratio (LVR) [(4) / (2)]		0.1

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, 2015. 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.

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} @ 2.00%	Funded Status	Unfunded Termination Liability @ 2.00%	Hypothetical Termination Liability ^{1,2} @ 3.25%	Funded Status	Unfunded Termination Liability @ 3.25%
\$33,187	\$18,215	182.2%	\$(14,972)	\$18,215	182.2%	\$(14,972)

For plans where active members have little service the hypothetical termination liability methodology used does not fully vest active members upon termination. In these cases the hypothetical termination liability is understated.

¹ The hypothetical liabilities calculated above include a 7 percent mortality contingency load in accordance with Board policy. Other actuarial assumptions, such as wage and inflation 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 2.75 percent on June 30, 2015.

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, 2014	June 30, 2015
Reported Payroll	\$ 64,827	\$ 233,018
Projected Payroll for Contribution Purposes	\$ 70,838	\$ 254,625
Number of Members		
Active	1	3
Transferred	0	0
Separated	0	0
Retired	0	0

List of Class 1 Benefit Provisions

This plan has the additional Class 1 Benefit Provisions:

- Post-Retirement Survivor Allowance (PRSA)

PLAN'S MAJOR BENEFIT OPTIONS

SECTION 1 – PLAN SPECIFIC INFORMATION FOR THE PEPRA MISCELLANEOUS PLAN OF THE TOWN OF ATHERTON

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.

Benefit Provision	Contract package	
	Active	Misc
Benefit Formula	2.0% @ 62	
Social Security Coverage	No	
Full/Modified	Full	
Employee Contribution Rate	6.50%	
Final Average Compensation Period	Three Year	
Sick Leave Credit	Yes	
Non-Industrial Disability	Standard	
Industrial Disability	No	
Pre-Retirement Death Benefits		
Optional Settlement 2W	Yes	
1959 Survivor Benefit Level	level 3	
Special	No	
Alternate (firefighters)	No	
Post-Retirement Death Benefits		
Lump Sum	\$500	
Survivor Allowance (PRSA)	Yes	
COLA	2%	

Section 2

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

**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 2016

**PEPRA SAFETY POLICE PLAN OF THE TOWN OF ATHERTON
(CalPERS ID: 1382390535)
Annual Valuation Report as of June 30, 2015**

Dear Employer,

As an attachment to this letter, you will find a copy of the June 30, 2015 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, 2015.

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

Your June 30, 2015 actuarial valuation report contains important actuarial information about your pension plan at CalPERS. Your assigned CalPERS staff actuary, whose signature appears in the Actuarial Certification section on page 1, is available to discuss the report with you after August 31, 2016.

Future Employer Contribution

Fiscal Year	Employer Normal Cost Rate	+	Employer Payment of Unfunded Liability
2017-18	12.729%		\$1,974
2018-19 (projected)	12.7%		\$2,112

The exhibit above displays the minimum employer contributions, before any cost sharing, for Fiscal Year 2017-18 along with estimates of the contributions for Fiscal Year 2018-19. The total employer contribution is the sum of a Normal Cost Rate applied to reported payroll plus an Unfunded Liability dollar payment. The estimated contributions for Fiscal Year 2018-19 are 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 (based on the year to date return through April 30, 2016).

For a projection of employer contributions beyond Fiscal Year 2018-19, please refer to the "Projected Employer Contributions" in the "Highlights and Executive Summary" section. This 5-year projection of future employer contributions supersedes any previous projections we have provided. The "Risk Analysis" section of the valuation report also contains estimated employer contributions in future years under a variety of investment return scenarios. Member contributions, other than cost sharing, are in addition to the above amounts. The employer contributions in this report do not reflect any cost sharing arrangements you may have with your employees.

The estimates for Fiscal Year 2018-19 also assume that there are no future contract amendments and no liability gains or losses (such as larger than expected pay increases, more retirements than expected, etc.) This is an important assumption because these gains and losses do occur and can have a significant effect on required contributions. Even for the largest plans or pools, such gains and losses can impact the employer's contributions. These gains and losses cannot be predicted in advance so the projected employer contributions are estimates. The actual required employer contribution for Fiscal Year 2018-19 will be provided in next year's valuation report.

Changes since the Prior Year's Valuation

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. The policy has no impact on the current year valuation results but is expected to have an impact in future years. More details on the Risk Mitigation Policy can be found on our website.

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

Further descriptions of general changes are included in the "Highlights and Executive Summary" section and in Appendix A, "Statement of Actuarial Data, Methods and Assumptions" of the Section 2 report. We understand that you might have a number of questions about these results. While we are very interested in discussing these results with your agency, in the interest of allowing us to give every public agency their results, we ask that you wait until after August 31 to contact us with actuarial related questions.

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

Sincerely,



ALAN MILLIGAN
Chief Actuary



ACTUARIAL VALUATION

as of June 30, 2015

**for the
PEPRA SAFETY POLICE PLAN
of the
TOWN OF ATHERTON
(CalPERS ID: 1382390535)**

**REQUIRED CONTRIBUTIONS
FOR FISCAL YEAR
July 1, 2017 - June 30, 2018**

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SECTION 2 – RISK POOL ACTUARIAL VALUATION INFORMATION

Section 1

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Plan Specific Information for the PEPRA SAFETY POLICE PLAN of the TOWN OF ATHERTON

**(CalPERS ID: 1382390535)
(Rate Plan: 25053)**

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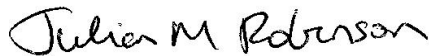
ACTUARIAL CERTIFICATION

Section 1 of this report is based on the member and financial data contained in our records as of June 30, 2015 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, 2015 provided by employers participating in the Safety Risk Pool to which the plan belongs and benefit provisions under the CalPERS contracts for those agencies.

As set forth in Section 2 of this report, the pool actuary has certified that, in their opinion, the valuation of the risk pool containing your PEPRA SAFETY POLICE PLAN has been performed in accordance with generally accepted actuarial principles consistent with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for the risk pool as of the date of this valuation and as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.

Having relied upon the information set forth in Section 2 of this report and based on the census and benefit provision information for the plan, it is my opinion as the plan actuary that the side fund and other Unfunded Accrued Liability bases as of June 30, 2015 and employer contribution as of July 1, 2017, have been properly and accurately determined in accordance with the principles and standards stated above.

The undersigned is an actuary for CalPERS, who is 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.



JULIAN ROBINSON, FSA, EA, MAAA
Senior Pension Actuary, CalPERS
Plan Actuary

HIGHLIGHTS AND EXECUTIVE SUMMARY

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

Introduction

This report presents the results of the June 30, 2015 actuarial valuation of the PEPRA SAFETY POLICE PLAN of the TOWN OF ATHERTON of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the required employer contributions for Fiscal Year 2017-18.

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. The Risk Mitigation Policy does not have an impact on the current year actuarial valuation. More details on the Risk Mitigation Policy can be found on our website.

Purpose of Section 1

This Section 1 report for the PEPRA SAFETY POLICE PLAN of the TOWN OF ATHERTON 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, 2015;
- Determine the required employer contribution for this plan for the fiscal year July 1, 2017 through June 30, 2018; and
- Provide actuarial information as of June 30, 2015 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 use of this report for any other purposes may be inappropriate. In particular, this report does not contain information applicable to alternative benefit costs. The employer should contact their actuary before disseminating any portion of this report for any reason that is not explicitly described above.

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 8.

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 a 1 percent plus or minus change in the discount rate.

Required Employer Contribution

Required Employer Contribution		Fiscal Year 2016-17 ¹	Fiscal Year 2017-18
Employer Normal Cost Rate		12.821%	12.729%
<i>Plus Either</i>			
1) Monthly Employer Dollar UAL Payment	\$	6.99	\$ 164.47
<i>Or</i>			
2) Annual Lump Sum Prepayment Option	\$	81	\$ 1,903

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

	Fiscal Year 2016-17 ¹	Fiscal Year 2017-18
Development of Normal Cost as a Percentage of Payroll		
Base Total Normal Cost for Formula	23.582%	23.490%
Surcharge for Class 1 Benefits ³		
a) PRSA	1.489%	1.489%
Phase out of Normal Cost Difference ⁴	0.000%	0.000%
Plan's Total Normal Cost	25.071%	24.979%
Plan's Employee Contribution Rate	12.250%	12.250%
Employer Normal Cost Rate	12.821%	12.729%
Projected Payroll for the Contribution Fiscal Year	\$ 219,679	\$ 484,226
Estimated Employer Contributions Based on Projected Payroll		
Plan's Estimated Employer Normal Cost	\$ 28,165	\$ 61,637
Plan's Payment on Amortization Bases ²	84	1,974
Total Employer Contribution ⁵	\$ 28,249	\$ 63,611

¹ The results shown for Fiscal Year 2016-17 reflect the prior year valuation and do not take into account any lump sum payment, side fund payoff, or rate adjustment made after June 30, 2015.

² See page 8 for a breakdown of the Amortization Bases.

³ Section 2 of this report contains a list of Class 1 benefits and corresponding surcharges for each benefit.

⁴ 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.

⁵ As a percentage of projected payroll the UAL contribution is 0.408 percent for an estimated total employer contribution rate of 13.137 percent.

Plan's Funded Status

		June 30, 2014		June 30, 2015
1. Present Value of Projected Benefits (PVB)	\$	681,674	\$	1,558,619
2. Entry Age Normal Accrued Liability (AL)		1,842		71,655
3. Plan's Market Value of Assets (MVA)		1,920		66,027
4. Unfunded Accrued Liability (UAL) [(2) - (3)]		(78)		5,628
5. Funded Ratio [(3) / (2)]		104.2%		92.1%

Projected Employer Contributions

The estimate 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 (based on year to date return through April 30, 2016).

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 between now and the beginning of the projection period.

	Required Contribution	Projected Future Employer Contributions				
Fiscal Year	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Normal Cost %	12.729%	12.7%	12.7%	12.7%	12.7%	12.7%
UAL \$	\$1,974	\$2,112	\$2,258	\$2,410	\$2,569	\$448

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

None.

Subsequent Events

Risk Mitigation

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. More details on the Risk Mitigation Policy can be found on our website.

ASSETS AND LIABILITIES

- **ALLOCATION OF PLAN'S SHARE OF POOL'S EXPERIENCE/ASSUMPTION CHANGE**
- **DEVELOPMENT OF PLAN'S SHARE OF POOL'S MVA**
- **SCHEDULE OF PLAN'S SIDE FUND & OTHER AMORTIZATION BASES**
- **30-YEAR AMORTIZATION SCHEDULE AND ALTERNATIVES**
- **EMPLOYER CONTRIBUTION HISTORY**
- **FUNDING HISTORY**

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	\$	71,655
2.	Projected UAL balance at 6/30/15		2,026
3.	Pool's Accrued Liability	\$	18,467,886,519
4.	Sum of Pool's Individual Plan UAL Balances at 6/30/15		3,713,009,355
5.	Pool's 2014/15 Investment & Asset (Gain)/Loss		765,720,345
6.	Pool's 2014/15 Other (Gain)/Loss		(2,867,161)
7.	Plan's Share of Pool's Asset (Gain)/Loss $[(1)-(2)]/[(3)-(4)] * (5)$		3,613
8.	Plan's Share of Pool's Other (Gain)/Loss $[(1)]/[(3)] * (6)$		(11)
9.	Plan's New (Gain)/Loss as of 6/30/2015 $[(7)+(8)]$	\$	3,602
10.	Increase in Pool's Accrued Liability due to Change in Assumptions		0
11.	Plan's Share of Pool's Change in Assumptions $[(1)]/[(3)] * (10)$	\$	0

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

1.	Plan's Accrued Liability	\$	71,655
2.	Plan's UAL	\$	5,628
3.	Plan's Share of Pool's MVA $[(1)-(2)]$	\$	66,027

Schedule of Plan's Side Fund and Other Amortization Bases

There is a two-year lag between the valuation date and the start of the contribution fiscal year.

- The assets, liabilities, and funded status of the plan are measured as of the valuation date: June 30, 2015.
- The employer contribution determined by the valuation is for the fiscal year beginning two years after the valuation date: Fiscal Year 2017-18.

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.

Reason for Base	Date Established	Amortization Period	Balance 6/30/15	Payment 2015-16	Balance 6/30/16	Payment 2016-17	Amounts for Fiscal 2017-18	
							Balance 6/30/17	Scheduled Payment for 2017-18
FRESH START	06/30/15	5	\$5,628	\$(2,096)	\$8,224	\$84	\$8,753	\$1,974
TOTAL			\$5,628	\$(2,096)	\$8,224	\$84	\$8,753	\$1,974

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

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

30-Year Amortization Schedule and Alternatives

The amortization schedule on the previous page shows the minimum contributions required according to CalPERS amortization policy. There has been considerable interest from many agencies in paying off these unfunded accrued liabilities sooner and the possible savings in doing so. As a result, we have provided alternate amortization schedules to help analyze the current amortization schedule and illustrate the advantages of accelerating unfunded liability payments.

Shown on the following page are future year amortization payments based on 1) the current amortization schedule reflecting the individual bases and remaining periods shown on the previous page, and 2) alternate "fresh start" amortization schedules using two sample periods that would both result in interest savings relative to the current amortization schedule. Note that the payments under each alternate scenario increase by 3 percent for each year into the future. The schedules do not attempt to reflect any experience after June 30, 2015 that may deviate from the actuarial assumptions. Therefore, future amortization payments displayed in the Current Amortization Schedule may not match projected amortization payments shown in connection with Projected Employer Contributions provided elsewhere in this report.

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

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

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

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

30-Year Amortization Schedule and Alternatives

Date	<u>Current Amortization Schedule</u>		<u>Alternate Schedules</u>			
	Balance	Payment	0 Year Amortization		0 Year Amortization	
			Balance	Payment	Balance	Payment
6/30/2017	8,754	1,974	N/A	N/A	N/A	N/A
6/30/2018	7,364	2,033				
6/30/2019	5,808	2,094				
6/30/2020	4,073	2,157				
6/30/2021	2,142	2,221				
6/30/2022	0	0				
6/30/2023	0	0				
6/30/2024	0	0				
6/30/2025	0	0				
6/30/2026	0	0				
6/30/2027	0	0				
6/30/2028	0	0				
6/30/2029	0	0				
6/30/2030	0	0				
6/30/2031	0	0				
6/30/2032	0	0				
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6/30/2038	0	0				
6/30/2039	0	0				
6/30/2040	0	0				
6/30/2041	0	0				
6/30/2042	0	0				
6/30/2043	0	0				
6/30/2044	0	0				
6/30/2045	0	0				
6/30/2046	0	0				
Totals		10,478		0		0
Estimated Savings				0		0

Current CalPERS Board policy prioritizes the order for which lump sum contributions in excess of the required employer contribution shall be applied. Excess contributions shall first be applied toward payment on the plan's side fund, and any remainder shall then be applied toward the plan's share of the pool's unfunded accrued liability.

Please contact the plan actuary before making such a payment to ensure that the payment is applied correctly.

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	12.821%	84
2017 - 18	12.729%	1,974

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
06/30/2014	\$	1,842	\$	1,920	\$	(78)		104.2%	\$	201,037
06/30/2015		71,655		66,027		5,628		92.1%		443,135

RISK ANALYSIS

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

Analysis of Future Investment Return Scenarios

The investment return for Fiscal Year 2015-16 was not known at the time this report was produced. The investment return in Fiscal Year 2015-16 as of April 30, 2016 is 0.0 percent before administrative expenses. For purposes of projecting future employer contributions, we are assuming a 0.0 percent investment return for Fiscal Year 2015-16.

The investment return realized during a fiscal year first affects the contribution for the fiscal year two years later. For example, the investment return for Fiscal Year 2015-16 will first be reflected in the June 30, 2016 actuarial valuation that will be used to set the Fiscal Year 2018-19 employer contributions, the Fiscal Year 2016-17 investment return will first be reflected in the June 30, 2017 actuarial valuation that will be used to set the Fiscal Year 2019-20 employer contributions, and so forth.

A sensitivity analysis was performed to determine the effects of various investment returns during fiscal years 2016-17, 2017-18, and 2018-19 on the employer contributions for fiscal years 2019-20, 2020-21, and 2021-22. The projected contributions assume that all other actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur.

Five different investment return scenarios were selected.

- The first scenario is a -3.8 percent return for each of the 2016-17, 2017-18, and 2018-19 fiscal years. Based on the current investment allocation, this is what one would expect if the markets were to give us about a 5th percentile return from July 1, 2016 through June 30, 2019.
- The second scenario is a 2.8 percent return for each of the 2016-17, 2017-18, and 2018-19 fiscal years. Based on the current investment allocation, this is what one would expect if the markets were to give us about a 25th percentile return from July 1, 2016 through June 30, 2019.
- The third scenario is a 7.5 percent return for each of the 2016-17, 2017-18, and 2018-19 fiscal years. Based on the current investment allocation, this is what one would expect if the markets were to give us about a 49th percentile return from July 1, 2016 through June 30, 2019.
- The fourth scenario is a 12.0 percent return for each of the 2016-17, 2017-18, and 2018-19 fiscal years. Based on the current investment allocation, this is what one would expect if the markets were to give us about a 75th percentile return from July 1, 2016 through June 30, 2019.
- Finally, the last scenario is an 18.9 percent return for each of the 2016-17, 2017-18, and 2018-19 fiscal years. Based on the current investment allocation, this is what one would expect if the markets were to give us about a 95th percentile return from July 1, 2016 through June 30, 2019.

The table below shows the estimated projected contributions and the estimated increases for the plan under the five different scenarios.

2016-19 Investment Return Scenario	Fiscal Year			Estimated Change Between 2018-19 and 2021-22
	2019-20	2020-21	2021-22	
(3.8%)				
Normal Cost	12.7%	12.7%	12.7%	0.0%
UAL Contribution	\$2,375	\$2,763	\$3,276	\$1,164
2.8%				
Normal Cost	12.7%	12.7%	12.7%	0.0%
UAL Contribution	\$2,307	\$2,560	\$2,876	\$764
7.5%				
Normal Cost	12.7%	12.7%	12.7%	0.0%
UAL Contribution	\$2,258	\$2,410	\$2,569	\$457
12.0%				
Normal Cost	12.6%	12.8%	12.9%	0.2%
UAL Contribution	\$2,216	\$2,283	\$0	\$(2,112)
18.9%				
Normal Cost	12.9%	13.4%	13.8%	1.1%
UAL Contribution	\$2,157	\$0	\$0	\$(2,112)

For the last two scenarios in the table above the results incorporate the impact of CalPERS Risk Mitigation Policy. A 12.0% return would result in a reduction of the discount rate by 0.05% and a return of 18.9% would reduce the discount rate by 0.15%. Reducing the discount rate increases both the plan's accrued liability and normal cost. More details about Risk Mitigation policy can be found on our website.

Analysis of Discount Rate Sensitivity

The following analysis looks at the Fiscal Year 2017-18 total normal cost rates and liabilities under two different discount rate scenarios. Shown below are the total normal cost rates assuming discount rates that are 1 percent lower and 1 percent higher than the current valuation discount rate. This analysis shows the potential plan impacts if the Public Employees' Retirement Fund (PERF) were to realize investment returns of 6.50 percent or 8.50 percent over the long-term.

This analysis is intended to illustrate the long-term risk to the contribution rates.

Sensitivity Analysis			
As of June 30, 2015	6.50% Discount Rate (-1%)	7.50% Discount Rate (assumed rate)	8.50% Discount Rate (+1%)
Plan's Total Normal Cost	31.0%	25.0%	20.4%
Accrued Liability	\$83,273	\$71,655	\$62,172
Unfunded Accrued Liability	\$17,246	\$5,628	\$(3,855)

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.

Rate Volatility	As of June 30, 2015	
1. Market Value of Assets	\$	66,027
2. Payroll		443,135
3. Asset Volatility Ratio (AVR) [(1) / (2)]		0.1
4. Accrued Liability	\$	71,655
5. Liability Volatility Ratio (LVR) [(4) / (2)]		0.2

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, 2015. 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.

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} @ 2.00%	Funded Status	Unfunded Termination Liability @ 2.00%	Hypothetical Termination Liability ^{1,2} @ 3.25%	Funded Status	Unfunded Termination Liability @ 3.25%
\$66,027	\$56,267	117.4%	\$(9,760)	\$56,267	117.4%	\$(9,760)

For plans where active members have little service the hypothetical termination liability methodology used does not fully vest active members upon termination. In these cases the hypothetical termination liability is understated.

¹ The hypothetical liabilities calculated above include a 7 percent mortality contingency load in accordance with Board policy. Other actuarial assumptions, such as wage and inflation 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 2.75 percent on June 30, 2015.

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, 2014	June 30, 2015
Reported Payroll	\$ 201,037	\$ 443,135
Projected Payroll for Contribution Purposes	\$ 219,679	\$ 484,226
Number of Members		
Active	2	4
Transferred	0	0
Separated	0	0
Retired	0	0

List of Class 1 Benefit Provisions

This plan has the additional Class 1 Benefit Provisions:

- Post-Retirement Survivor Allowance (PRSA)

PLAN'S MAJOR BENEFIT OPTIONS

SECTION 1 – PLAN SPECIFIC INFORMATION FOR THE PEPRA SAFETY POLICE PLAN OF THE TOWN OF ATHERTON

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.

Benefit Provision	Contract package	
	Active Police	
Benefit Formula	2.7% @ 57	
Social Security Coverage	No	
Full/Modified	Full	
Employee Contribution Rate	12.25%	
Final Average Compensation Period	Three Year	
Sick Leave Credit	Yes	
Non-Industrial Disability	Standard	
Industrial Disability	Yes	
Pre-Retirement Death Benefits		
Optional Settlement 2W	Yes	
1959 Survivor Benefit Level	level 3	
Special	Yes	
Alternate (firefighters)	No	
Post-Retirement Death Benefits		
Lump Sum	\$500	
Survivor Allowance (PRSA)	Yes	
COLA	2%	

Section 2

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

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

CalPERS Board Approves Significant Lowering of Discount Rate

Increased Employer and Employee Contributions Coming

December 21, 2016

The CalPERS board of directors on Wednesday morning approved a plan to lower its discount rate (the expected rate of return on portfolio investments) from the current 7.5 percent to 7 percent over the next three years with corresponding incremental increases in employer/employee payments over an eight-year smoothing period.

The action comes less than a day after the CalPERS Finance and Administration Committee approved the change and sent its recommendation to the full board. Negotiated between representatives from CalPERS, labor and Gov. Jerry Brown's Administration, the approved plan differs from the original CalPERS recommendation that would have lowered the discount rate immediately to 7 percent.

The League and the League Pension Task Force were well represented on Tuesday during the committee hearing with League staff testifying, as well as two city managers/fiscal officer(s) and one elected city official. The League and city officials communicated a clear message to the committee and CalPERS board members — lowering of the discount rate is a necessary step but it is by no means the solution to ensure the sustainability of the pension system. To do that, all stakeholders and the CalPERS board must rise to the challenge of difficult but necessary actions to ensure the viability of defined benefits for public employees.

Lowering the discount rate will mean higher contributions from city employers and employees. This is not easy for any CalPERS participating agency, however, stabilizing the fund ensures that the defined benefit promised to employees will be fulfilled. Standing League policy supports prudent policies to address the shortfall that recognize the impacts on local government. City officials are seeking a balance that brings stability to the pension fund while reducing spikes in employer contributions.

The plan provides three steps to incrementally move the discount rate from 7.5 to 7 percent. With each step, the impact of the rate change to unfunded liability payments will be phased-in over five years. This will process will occur over eight years. The steps are as follows:

- FY 2018-19: rate reduced from 7.5 percent to 7.375 percent;
- FY 2019-20: rate reduced from 7.375 percent to 7.25 percent; and
- FY 2020-21: rate reduced from 7.25 percent to 7 percent.

This action is being precipitated by investment returns that are well below the CalPERS assumed rate of return. The nation's largest pension fund reported just a 0.61 percent of return on investments for the fiscal year that ended on June 30, 2016, which is dramatically lower than the 7.5 percent assumed return. In addition, the overall CalPERS funded status has dropped from 73 percent funded to 68 percent in a short period of time. Absent any action, there is currently a 47 percent chance of the fund status dropping below 50 percent, which has been regarded as a point of no return since the grave negative cash flow will require assets to be liquidated and investments to stall.

League Cautions Optimism

The League has taken an active role in representing city governments in discussions with CalPERS and the Administration. The League reported on Dec. 9 that 240 cities had responded to the League's survey on proposed CalPERS discount rate changes.

Although, CalPERS has proactively reached out to local governments to solicit feedback on proposed changes, this proposal does not reflect a fully prudent plan for cities to meet their pension obligations. The plan does not account for two critical pieces of necessary reform. It lacks a mechanism to address employer/employee benefit structures. In addition, the extended phase-in period will result in local governments paying more to meet their pension obligations because of the accrued interest on their unfunded liabilities. However, the longer phase-in will be beneficial for cities facing budget challenges because the increased contributions will occur over a slower timeframe.

Next Steps

The League will continue to be an active voice in pension system changes. In the coming months, CalPERS will be reviewing their risk mitigation protocols and investment priorities and decisions. In addition, League staff will work with CalPERS to deliver all the necessary information cities will need to plan for the expected contribution increases.