



November 9, 2015

Geoffrey S. Kiehl
Director of Finance and Treasurer
City of Palm Springs
3200 E Tahquitz Canyon Way
Palm Springs, CA 92263-2743

Re: June 30, 2015 Actuarial Report on GASB 45 Retiree Benefit Valuation

Dear Mr. Kiehl:

We are pleased to enclose our report providing the results of the June 30, 2015 actuarial valuation of other post-employment benefit (OPEB) liabilities for the City of Palm Springs (the City). The report's text describes our analysis and assumptions in detail.

The primary purposes of the report are to develop:

- The value of future OPEB expected to be provided by the City, and
- The current OPEB liability and the annual OPEB expense to be reported in the City's financial statements for the fiscal years ending June 30, 2015 and 2016.

The majority of the exhibits included in this report reflect our understanding that the City intends to continue financing its OPEB liability on a pay-as-you-go basis. Other approaches are possible and these are discussed briefly in the report. We have included an illustration of valuation results calculated on a prefunding basis as an Appendix to this report, should the City wish to consider a prefunding approach in the future.

This report includes the introduction of a new model for developing projected retiree medical claims by age. In addition, an implicit subsidy liability is now being recognized for pre-Medicare retirees covered under the CalPERS medical program. This report also includes an estimated liability for retirees for the excise tax for high cost healthcare plans, which is scheduled to go into effect in 2018 under the Affordable Care Act.

We have based our valuation on employee data and plan information provided by the City, including copies of current bargaining agreements and PEMHCA resolutions. We encourage you to review our summary of the benefits described in Table 3A to be comfortable that we have captured these provisions correctly.

We appreciate the opportunity to work on this analysis and acknowledge the efforts of the City's staff, who provided valuable information and assistance to enable us to perform this valuation. Please let us know if we can be of further assistance.

Sincerely,

A handwritten signature in black ink that reads "Catherine L. MacLeod".

Catherine L. MacLeod, FSA, FCA, EA, MAAA
Director, Health and Benefit Actuarial Services
Enclosure



City of Palm Springs

Actuarial Valuation of the Other
Post-Employment Benefit Programs
As of June 30, 2015

Submitted November 2015

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A. Executive Summary

This report presents the results of the June 30, 2015 actuarial valuation of the City of Palm Springs (the City) other post-employment benefit (OPEB) programs. The purpose of this valuation is to assess the OPEB liabilities and provide disclosure information as required by Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). This report reflects the valuation of two distinct types of OPEB liability, described further in Section C.

- An “explicit subsidy” exists when the employer contributes directly toward retiree healthcare premiums. In this program, benefits may include a monthly subsidy toward medical premiums for eligible retirees.
- An “implicit subsidy” exists when the premiums charged for retiree coverage are lower than the expected retiree claims for that coverage. Allowing retirees to continue medical coverage at the same premium rates as are charged for active employees is considered an implicit benefit subsidy under GASB 45.

How much the City contributes each year affects the calculation of liabilities. “Prefunding” is the term used to describe when an agency consistently contributes an amount at least equal to the annual required contribution (ARC) each year. Contributing only the current year’s retiree payments is referred to as “pay-as-you-go” financing. There are other options relating to the funding policy, including shorter amortization periods and partial pre-funding. These other options would require additional calculations not provided in this report, though we would be happy to provide illustrations at the City’s request.

Prefunding the plan generally supports use of a higher discount rate and often produces substantially lower liabilities than a pay-as-you-go financing approach. With the City’s approval, this valuation uses a discount rate of 4.0% for pay-as-you-go calculations and illustrates prefunding results using a 6.5% discount rate. Neither rate is a guarantee of future investment performance, but rather an assumption about the long term rate of return.

In its financial report for the period ending June 30, 2014, the City reported a net OPEB obligation of \$29,450,205. Exhibits presented in the body of this report are based on our understanding that the results of this June 30, 2015 valuation will be applied in determining the annual OPEB expense for the fiscal years ending June 30, 2015 and 2016. With no OPEB trust yet established, we assumed OPEB financing will continue on a pay-as-you-go basis and determined the Unfunded Actuarial Accrued Liability as of June 30, 2015 to be:

Subsidy	Explicit	Implicit	Total
Discount Rate	4.0%	4.0%	4.0%
Actuarial Accrued Liability	\$ 89,390,911	\$ 17,762,182	\$ 107,153,093
Actuarial Value of Assets	-	-	-
Unfunded Actuarial Accrued Liability	89,390,911	17,762,182	107,153,093
Funded Ratio	0.0%	0.0%	0.0%

The liabilities shown in the report reflect assumptions regarding continued future employment, rates of retirement and survival, and elections by future retirees to retain coverage for themselves and their dependents. We also note that this valuation has been prepared on a closed group basis; no provision is generally made for new employees until the valuation date following their employment.

Executive Summary (Concluded)

The following summarizes results for the fiscal year ending June 30, 2015:

Subsidy	Explicit	Implicit	Total
Annual Required Contribution (ARC) for FYE 2015	\$ 6,067,630	\$ 1,251,091	\$ 7,318,721
Expected employer paid benefits for retirees	2,301,963	-	2,301,963
Current year's implicit subsidy credit	-	522,539	522,539
Expected contribution to OPEB trust	-	-	-
Expected net OPEB obligation at June 30, 2015	28,125,045	5,574,421	33,699,466

Detailed calculations for the fiscal years ending June 30, 2015 and 2016 begin on page 14; additional information to facilitate OPEB reporting is provided in Appendix 3.

An exhibit comparing current valuation results to those from the prior valuation is provided on page 7, followed by a brief description of changes. An actuarial valuation is, by its nature, a projection and to the extent that actual experience is not what we assumed, future results will be different. Some possible sources of future differences may include:

- A significant change in the number of covered or eligible plan members;
- A significant increase or decrease in the future medical premium rates or in the subsidy provided by the City toward retiree health coverage;
- Longer life expectancies of retirees;
- Significant changes in expected retiree healthcare claims by age, relative to healthcare claims for active employees and their dependents;
- Establishment of and recurring City contributions to an irrevocable OPEB trust;
- Implementation of GASB 75, the new OPEB accounting standard, which should be not later than the City's fiscal year ending June 30, 2018. One key change moves reporting of the unfunded OPEB liability from a footnote to the balance sheet.

Details of our valuation process and the various disclosures required by GASB 45 are provided on the succeeding pages. The date of the next actuarial valuation should not be later than June 30, 2017. If there are any significant changes in the employee data, benefits provided or the funding policy, please contact us to discuss whether an earlier valuation is appropriate.

Important Notices

This report is intended to be used only to present the actuarial information relating to other postemployment benefits for the City's financial statements and to provide the annual contribution information with respect to the City's current OPEB funding policy. The results of this report may not be appropriate for other purposes, where other assumptions, methodology and/or actuarial standards of practice may be required or more suitable. We note that various issues in this report may involve legal analysis of applicable law or regulations. The City should consult counsel on these matters; Bickmore does not practice law and does not intend anything in this report to constitute legal advice. In addition, we recommend the City consult with their internal accounting staff or external auditor or accounting firm about the accounting treatment of OPEB liabilities.

B. Requirements of GASB 45

The Governmental Accounting Standards Board (GASB) issued GASB Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*. This Statement establishes standards for the measurement, recognition, and display of OPEB expense/expenditures and related liabilities (assets), note disclosures, and, if applicable, required supplementary information (RSI) in the financial reports of state and local governmental employers. We understand that the City implemented GASB 45 for the fiscal year ended June 30, 2009.

For agencies with 200 or more members covered by or eligible for plan benefits, GASB 45 requires that a valuation be prepared no less frequently than every two years. GASB 45 disclosures include the determination of an annual OPEB cost. For the first year, the annual OPEB cost is equal to the annual required contribution (ARC) as determined by the actuary.

- If the City's OPEB contributions had been equal to the ARC each year, the net OPEB obligation would equal \$0.
- If the City's actual contribution is less than (greater than) the ARC, then a net OPEB obligation (asset) amount is established. In subsequent years, the annual OPEB expense will reflect adjustments made to the net OPEB obligation, in addition to the ARC (see Tables 1B and 1D).

GASB 45 provides for recognition of payments as contributions if they are made (a) directly to retirees or beneficiaries, (b) to an insurer, e.g., for the payment of premiums, or (c) to an OPEB fund set aside toward the cost of future benefits. Funds set aside for future benefits should be considered contributions to an OPEB plan only if the vehicle established is one that is capable of building assets that are separate from and independent of the control of the employer and legally protected from its creditors. Furthermore, the sole purpose of the assets should be to provide benefits under the plan. These conditions generally require the establishment of a legal trust. Earmarked assets or reserves may be an important step in financing future benefits, but they may not be recognized as an asset for purposes of reporting under GASB 45.

The decision whether or not to prefund, and at what level, is at the discretion of the City, as are the manner and term for paying down the unfunded actuarial accrued liability. Once a funding policy has been established, however, the City's auditor may have an opinion as to the timing and manner of any change to such policy in future years. The level of prefunding also affects the selection of the discount rate used for valuing the liabilities.

C. Sources of OPEB Liabilities

Post-employment benefits other than pensions (OPEB) comprise a part of compensation that employers offer for services received. The most common OPEB are:

- Medical
- Dental
- Prescription Drug
- Vision
- Life Insurance

Other possible post-employment benefits may include outside group legal, long-term care, or disability benefits outside of a pension plan. OPEB does not generally include vacation, sick leave¹ or COBRA payments which fall under other GASB accounting statements.

A direct employer payment toward the cost of OPEB is referred to as an “explicit subsidy” and these are included in the determination of OPEB liabilities. In addition, if claims experience of employees and retirees are pooled when determining premiums, the retirees pay a premium based on a pool of members that, on average, are younger and healthier. For certain types of coverage, such as medical, payment of the same premium rate results in an “implicit subsidy” of retiree premiums by active employee premiums since the retiree premiums are lower than they would have been if the retirees were insured separately. Paragraph 13.a. of GASB 45 generally requires an implicit subsidy of retiree premium rates to be valued as an OPEB liability.

For actuarial valuations dated prior to March 31, 2015, an exception existed for plan employers with a very small membership in a large “community-rated” healthcare program. Following a change in Actuarial Standards of Practice, GASB no longer offers this exception. *This change did impact this valuation of the City’s OPEB liability, though was offset by other changes made or recognized at the same time.*

OPEB Obligations of the City

The City provides continuation of medical coverage to qualifying retiring employees.

- **Explicit subsidy liabilities:** The City contributes directly to the cost of medical coverage for retirees meeting specific requirements, as described in Table 3A, and liabilities have been included in this valuation.
- **Implicit subsidy liabilities:** Where applicable, as described below, we determine the difference between projected retiree claim costs by age and premiums expected to be charged for retirees (see Addendum 1: Bickmore Age Rating Methodology).
 - *Miscellaneous employees and retirees* are covered by the CalPERS medical program. The same monthly premiums are charged for active employees and pre-Medicare retirees and CalPERS has confirmed that the claims experience of these members is considered together in setting these premium rates. Accordingly, we have made age-related premium adjustments and computed an implicit rate subsidy for pre-Medicare retirees covered or expected to be covered in retirement.

Different monthly premiums are charged for Medicare-eligible members and CalPERS has confirmed that only the claims experience of these members is considered in setting these premium rates. We have assumed that this premium structure is adequate to cover the expected claims of these retirees and believe that there is no implicit subsidy of premiums for these members by active employees.

¹ When a terminating employee’s unused sick leave credits are converted to provide or enhance a defined benefit OPEB, e.g., healthcare, such converted sick leave credits should be valued under GASB 45.

Sources of OPEB Liability (Concluded)

- Implicit subsidy liabilities – continued
 - *Safety employees and some Safety retirees* are covered by plans in which the claims experience of active and retired members (both before and after Medicare eligibility) is co-mingled in setting premium rates. We believe an implicit subsidy of pre-65 medical claims exists for retirees covered by these plans and have included the liabilities for this subsidy in this valuation.

Separate monthly premiums are charged for Medicare-eligible members in the Safety medical plan. Based on some testing that we did, we have assumed that this premium structure is adequate to cover the expected claims of these retirees and believe that there is no implicit subsidy of premiums for these members by active employees, or that it is insignificant.

D. Valuation Process

The valuation has been based on employee census data and benefits initially submitted to us by the City in August 2015 and clarified in various related communications. A summary of the employee data is provided in Table 2 and a summary of the benefits provided under the Plan is provided in Table 3A. While individual employee records have been reviewed to verify that they are reasonable in various respects, the data has not been audited and we have otherwise relied on the City as to its accuracy. The valuation described below has been performed in accordance with the actuarial methods and assumptions described in Table 4.

In developing the projected benefit values and liabilities, we first determine an expected premium or benefit stream over the employee's future retirement. Benefits may include both direct employer payments (explicit subsidies) and/or an implicit subsidy, arising when retiree premiums are expected to be subsidized by active employee premiums. The projected benefit streams reflect assumed trends in the cost of those benefits and assumptions as to the expected date(s) when benefits will end. We then apply assumptions regarding:

- The probability that each individual employee will or will not continue in service with the City to receive benefits.
- To the extent assumed to retire from the City, the probability of when such retirement will occur for each retiree, based on current age, service and employee type; and
- The likelihood that future retirees will or will not elect retiree coverage (and benefits) for themselves and/or their dependents.

We then calculate a present value of these benefits by discounting the value of each future expected benefit payment, multiplied by the assumed expectation that it will be paid, back to the valuation date using the discount rate. These benefit projections and liabilities have a very long time horizon. The final benefits for currently active employees may not be made for 70 years or more.

The resulting present value for each employee is allocated as a level percent of payroll each year over the employee's career using the entry age normal cost method and the amounts for each individual are then summed to get the results for the entire plan. This creates a cost expected to increase each year as payroll increases. Amounts attributed to prior fiscal years form the "actuarial accrued liability" (AAL). The OPEB cost allocated for active employees in the current year is referred to as the "normal cost". The remaining active cost to be assigned to future years is called the "present value of future normal costs". In summary:

Actuarial Accrued Liability	Past Years' Costs
<i>plus</i> Normal Cost	Current Year's Cost
<u><i>plus</i> Present Value of Future Normal Costs</u>	<u>Future Years' Costs</u>
<i>equals</i> Present Value of Projected Benefits	Total Benefit Costs

Where contributions have been made to an irrevocable OPEB trust, the accumulated value of trust assets is applied to offset the AAL. It is our understanding that the City's plans have not yet been funded and no assets have been set aside in an irrevocable trust as of the valuation date. The portion of the AAL not covered by assets is referred to as the unfunded actuarial accrued liability (UAAL).

E. Basic Valuation Results

The following chart compares the results of the June 30, 2015 valuation of OPEB liabilities to the results of the June 30, 2013 valuation.

Funding Policy Valuation date	Pay-As-You-Go Basis					
	6/30/2013			6/30/2015		
	Explicit	Implicit	Total	Explicit	Implicit	Total
Subsidy						
Discount rate	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Number of Covered Employees						
Actives	261	133	379	336	321	336
Retirees	158	74	166	197	136	203
Total Participants	419	207	545	533	457	539
Actuarial Present Value of Projected Benefits						
Actives	\$ 62,145,031	\$ 14,595,623	\$ 76,740,654	\$ 60,009,320	\$ 11,839,616	\$ 71,848,936
Retirees	42,750,536	15,189,736	57,940,272	49,171,676	10,411,773	59,583,449
Total APVPB	104,895,567	29,785,359	134,680,926	109,180,996	22,251,389	131,432,385
Actuarial Accrued Liability (AAL)						
Actives	39,888,347	8,677,640	48,565,987	40,219,235	7,350,409	47,569,644
Retirees	42,750,536	15,189,736	57,940,272	49,171,676	10,411,773	59,583,449
Total AAL	82,638,883	23,867,376	106,506,259	89,390,911	17,762,182	107,153,093
Actuarial Value of Assets	-	-	-	-	-	-
Unfunded AAL (UAAL)	82,638,883	23,867,376	106,506,259	89,390,911	17,762,182	107,153,093
Normal Cost	1,950,283	491,293	2,441,576	1,895,712	421,162	2,316,874
Percent funded	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Reported covered payroll	34,035,753	34,035,753	34,035,753	30,169,887	30,169,887	30,169,887
UAAL as percent of payroll	242.8%	70.1%	312.9%	296.3%	58.9%	355.2%

Basic Valuation Results (Concluded)

Changes Since the Prior Valuation

In comparing results shown in the exhibit on the preceding page, we can see that the Unfunded Actuarial Accrued Liability (UAAL) actually decreased by roughly \$647,000, between June 30, 2013 and June 30, 2015. During this period, however, we anticipated changes, such as additional cost accruals for active employees, increased values from the passage of time and some benefit payments to retirees. From this activity, we expected the UAAL to increase to \$115,433,000. Thus, the actual UAAL of \$107,153,000 is \$8,280,000 lower than expected. This difference (decrease) between the actual and expected UAAL is primarily a result of the following:

- An \$8,224,000 decrease in the AAL relating to the implicit subsidy liability. This change is collectively the result of:
 - (a) changes in the model we used for developing age-related retiree medical claim costs;
 - (b) elimination of an implicit subsidy liability for those Tier 2 safety employees who are now understood to be ineligible to continue medical coverage through the City; and
 - (c) the addition of an implicit subsidy liability for pre-Medicare retirees covered by the CalPERS medical program.
- A \$9,947,000 increase in the AAL from revised assumptions for future service and disability retirements and other terminations (withdrawals) prior to retirement, based on the 2014 CalPERS retirement plan experience study covering City employees; mortality rates and mortality improvement rates were also updated;
- A \$2,903,000 increase in the AAL resulting from a change in benefits, specifically, the availability of the PEMHCA minimum contribution for retired Safety Management and General employees; and
- A \$12,906,000 decrease in the UAAL from favorable plan experience relative to prior assumptions. Plan experience includes factors such as changes in plan membership, retiree elections and changes in medical premiums and limits on benefits other than previously projected. As one example, CalPERS premiums for Medicare retirees increase by an average of only 9% over the past two years, though we projected increases of 17.2% over this period.

F. Funding Policy

The specific calculation of the ARC and annual OPEB expense for an employer depends on how the employer elects to fund these benefits. The funding levels can generally be categorized as follows:

1. *Prefunding* - contributing an amount greater than or equal to the ARC each year. Prefunding generally allows the employer to have the liability calculated using a higher discount rate, which in turn lowers the liability. In addition, following a prefunding policy does not build up a net OPEB obligation (or gradually reduces it to \$0). Prefunding results in this report were illustrated using a discount rate of 6.5%.
2. *Pay-As-You-Go funding* – contributing only the amounts needed to pay retiree benefits in the current year; generally requires a lower discount rate, such as the 4.0% rate used in this report.
3. *Partial prefunding* – contributing more than the current year’s retiree payments but less than 100% of the ARC; requires that liabilities be developed using a discount rate that “blends” the relative portions of benefits that are prefunded and those not.

Determination of the ARC

The Annual Required Contribution (ARC) consists of two basic components:

- The amounts attributed to service performed in the current fiscal year (the normal cost) and
- Amortization of the unfunded actuarial accrued liability (UAAL).

The ARCs for the fiscal years ending June 30, 2015 and June 30, 2016 are developed in Tables 1A and 1C.

Decisions Affecting the Amortization Payment

The period and method for amortizing the AAL can significantly affect the ARC. GASB 45:

- Prescribes a maximum amortization period of 30 years and requires no minimum amortization period (except 10 years for certain actuarial gains). Immediate full funding of the liability is also permitted.
- Allows amortization payments to be determined (a) as a level percentage of payroll, designed to increase over time as payroll increases, or (b) as a level dollar amount much like a conventional mortgage, so that this component of the ARC does not increase over time. Where a plan is closed and has no ongoing payroll base, a level percent of payroll basis is not permitted.
- Allows the amortization period to decrease annually by one year (closed basis) or to be maintained at the same number of years (open basis).

Funding Policy Illustrated in This Report

It is our understanding that the City’s pay-as-you-go policy includes amortization of the UAAL over a closed 30-year period initially set for the fiscal year ending June 30, 2009; the remaining period applicable in determining the ARC for the fiscal year ending June 30, 2015 is 24 years. Amortization payments are determined on a level percent of pay basis.²

² With a pay-as-you-go funding policy and/or one where the UAAL is amortized on a level percent of pay basis, if all assumptions are met, the UAAL will increase, rather than decrease, over time.

Funding Policy (Concluded)

Funding of the Implicit Subsidy

The implicit subsidy liability created when expected retiree medical claims exceed the retiree premiums was described earlier in Section C. In practical terms, when the City pays the premiums for active employees each year, their premiums include an amount expected to be transferred to cover the portion of the retirees' claims not covered by their premiums. This transfer represents the current year's implicit subsidy. Paragraph 13.g. of GASB 45 allows for recognition of payments to an irrevocable trust *or directly to the insurer* as an employer's contribution to the ARC. We have estimated the portion of this year's premium payment attributable to the implicit subsidy and recommend netting this amount against the funding requirement for the implicit subsidy (see Tables 1B and 1D).

G. Choice of Actuarial Funding Method and Assumptions

The “ultimate real cost” of an employee benefit plan is the value of all benefits and other expenses of the plan over its lifetime. These expenditures are dependent only on the terms of the plan and the administrative arrangements adopted, and as such are not affected by the actuarial funding method. The actuarial funding method attempts to spread recognition of these expected costs on a level basis over the life of the plan, and as such sets the “incidence of cost”. Methods that produce higher initial annual (prefunding) costs will produce lower annual costs later. Conversely, methods that produce lower initial costs will produce higher annual costs later relative to the other methods. GASB 45 allows the use of any of six actuarial funding methods; a brief description of each is in the glossary.

Factors Impacting the Selection of Funding Method

While the goal of GASB 45 is to match recognition of retiree medical expense with the periods during which the benefit is earned, the funding methods differ because they focus on different financial measures in attempting to level the incidence of cost. Appropriate selection of a funding method contributes to creating intergenerational equity between generations of taxpayers. The impact of potential new employees entering the plan may also affect selection of a funding method, though this is not a factor in this plan.

We believe it is most appropriate for the plan sponsor to adopt a theory of funding and consistently apply the funding method representing that theory. This valuation was prepared using the entry age normal cost method with normal cost determined on a level percent of pay basis. The entry age normal cost method often produces initial contributions between those of the other more common methods and is generally regarded by pension actuaries as the most stable of the funding methods and is one of the most commonly used methods for GASB 45 compliance.

Factors Affecting the Selection of Assumptions

Special considerations apply to the selection of actuarial funding methods and assumptions for the City. The actuarial assumptions used in this report were chosen, for the most part, to be the same as the actuarial assumptions used for the most recent actuarial valuation of the retirement plan covering City employees. Other assumptions, such as age related healthcare claims, retiree participation rates and spouse coverage, were selected based on demonstrated plan experience and/or our best estimate of expected future experience. We will continue to gather information and monitor these assumptions for future valuations.

In selecting an appropriate discount rate, GASB states that the discount rate should be based on the expected long-term yield of investments used to finance the benefits. The City approved calculation of liabilities on a pay-as-you-go basis using a 4.0% discount rate, the same rate used in the prior valuation. Since no OPEB trust has yet been established, for illustrative purposes, we have used a 6.5% discount rate in developing results assuming the City were to begin funding 100% of the ARC. The actual discount rate, should the City decide to establish an irrevocable OPEB trust, will depend on the particular investments and asset allocation strategy selected and on and the percentage of the ARC expected to be funded each year.

H. Certification

This report presents the results of our actuarial valuation of the other post employment benefits provided by the City of Palm Springs. The purpose of this valuation was to provide the actuarial information required for the City's reporting under Statement 45 of the Governmental Accounting Standards Board. The calculations were focused on determining the plan's funded status as of the valuation date, developing the Annual Required Contribution and projecting the Net OPEB Obligations for the years to which this report is expected to be applied.

We certify that this report has been prepared in accordance with our understanding of GASB 45. To the best of our knowledge, the report is complete and accurate, based upon the data and plan provisions provided to us by the City. We believe the assumptions and method used are reasonable and appropriate for purposes of the financial reporting required by GASB 45. The results may not be appropriate for other purposes.

Each of the undersigned individuals is a Fellow in the Society of Actuaries and Member of the American Academy of Actuaries who satisfies the Academy Qualification Standards for rendering this opinion.

Signed: November 9, 2015



Catherine L. MacLeod, FSA, FCA, EA, MAAA



Francis M. Schauer Jr., FSA, FCA, EA, MAAA

Table 1

The basic results of our June 30, 2015 valuation of OPEB liabilities for the City calculated under GASB 45 were summarized in Section E. Those results are applied to develop the annual required contribution (ARC), annual OPEB expense (AOE) and the net OPEB obligation (NOO) or net OPEB asset (NOA) to be reported by the City for its fiscal years ending June 30, 2015 and June 30, 2016.

As noted earlier in this report, the development of the ARC reflects our assumption that the City will contribute only the amount needed to pay retiree benefits each year. We have also assumed that the City will recognize the current year's implicit subsidy as a contribution credit against the OPEB expense. If either of these assumptions is incorrect, please let us know, as some of the results in this report should be revised.

An illustration of results assuming 100% ARC funding (using a 6.5% discount rate) is provided in Appendix 1.

The counts of active employees and retirees shown in Table 1C are the same as the counts of active and retired employees on the valuation date. While we do not adjust these counts between valuation dates, the liabilities and costs developed for those years already anticipate the likelihood that some active employees may leave employment forfeiting benefits, some may retire and elect benefits and coverage for some of the retired employees may cease. However, because this valuation has been prepared on a closed group basis, no potential future employees are included. We will incorporate any new employees in the next valuation, in the same way we included new employees hired after June 2013 in this June 2015 valuation.

We note that the number of active employees and retirees which create an implicit subsidy liability are lower than the number of those which create an explicit subsidy liability. CalPERS medical premiums for those over age 65 (active or retired) and expected to be eligible for Medicare are not subsidized by active employee medical premiums, so do not create an implicit subsidy liability.

Table 1A
Summary of Valuation Results and ARC Calculation for FYE 2015

The table provides separate valuation results for Explicit and Implicit OPEB benefits determined on a pay-as-you-go basis. Some of these values have been adjusted from the basic valuation results presented in Section E to reflect accruals for the fiscal years to which the costs are being assigned.

Funding Policy Valuation date	Pay-As-You-Go Basis		
	6/30/2015		
Subsidy	Explicit	Implicit	Total
For fiscal year beginning	7/1/2014	7/1/2014	7/1/2014
For fiscal year ending	6/30/2015	6/30/2015	6/30/2015
Discount rate	4.0%	4.0%	4.0%
Number of Covered Employees			
Actives	336	321	336
Retirees	197	136	203
Total Participants	533	457	539
Actuarial Present Value of Projected Benefits			
Actives	\$ 60,009,320	\$ 11,839,616	\$ 71,848,936
Retirees	51,473,639	10,934,312	62,407,951
Total APVPB	111,482,959	22,773,928	134,256,887
Actuarial Accrued Liability (AAL)			
Actives	38,323,523	6,929,247	45,252,770
Retirees	51,473,639	10,934,312	62,407,951
Total AAL	89,797,162	17,863,559	107,660,721
Actuarial Value of Assets	-	-	-
Unfunded AAL (UAAL)	89,797,162	17,863,559	107,660,721
Normal Cost	1,895,712	421,162	2,316,874
Amortization method	Level % of Pay	Level % of Pay	Level % of Pay
Initial amortization period (in years)	30	30	30
Remaining period (in years)	24	24	24
Determination of Amortization Payment			
UAAL	\$ 89,797,162	\$ 17,863,559	\$ 107,660,721
Factor	21.5242	21.5242	21.5242
Payment	4,171,918	829,929	5,001,847
Annual Required Contribution (ARC)			
Normal Cost	1,895,712	421,162	2,316,874
Amortization of UAAL	4,171,918	829,929	5,001,847
Interest to fiscal year end	-	-	-
Total ARC at fiscal year end	6,067,630	1,251,091	7,318,721
Projected covered payroll	\$ 30,169,887	\$ 30,169,887	\$ 30,169,887
Normal Cost as a percent of payroll	6.3%	1.4%	7.7%
ARC as a percent of payroll	20.1%	4.1%	24.3%
ARC per active ee	18,058	3,897	21,782

Table 1B
Expected OPEB Disclosures for FYE 2015

The following exhibit develops the annual OPEB expense, estimates the expected OPEB contributions and projects the net OPEB obligation as of June 30, 2015 reflecting the assumed pay-as-you-go financing policy described in this report.

Fiscal Year End	Pay-As-You-Go Basis		
	6/30/2015	6/30/2015	6/30/2015
Subsidy	Explicit	Implicit	Total
1. Calculation of the Annual OPEB Expense			
a. ARC for current fiscal year	\$ 6,067,630	\$ 1,251,091	\$ 7,318,721
b. Interest on Net OPEB Obligation (Asset)	982,548	195,461	1,178,009
c. Adjustment to the ARC	(1,186,862)	(236,105)	(1,422,967)
d. Annual OPEB Expense (a. + b. + c.)	5,863,316	1,210,447	7,073,763
2. Calculation of Expected Contribution			
a. Estimated payments on behalf of retirees	2,301,963	-	2,301,963
b. Estimated current year's implicit subsidy	-	522,539	522,539
c. Estimated contribution to OPEB trust	-	-	-
d. Total Expected Employer Contribution	2,301,963	522,539	2,824,502
3. Change in Net OPEB Obligation (1.d. minus 2.d.)	3,561,353	687,908	4,249,261
Net OPEB Obligation (Asset), beginning of fiscal year	24,563,692	4,886,513	29,450,205
Net OPEB Obligation (Asset) at fiscal year end	28,125,045	5,574,421	33,699,466

In the table above, we assumed that the City will contribute the current year's retiree benefit payments and take credit for the current year's implicit subsidy as an OPEB contribution. No other OPEB contributions were projected to be made.

Notes on calculations above:

- Interest on the net OPEB obligation (or asset), shown above in item 1.b. is equal to the applicable discount rate (4%) multiplied by the net OPEB obligation (or asset) at the beginning of the year.
- The Adjustment to the ARC, shown above in item 1.c., is always the opposite sign of the net OPEB obligation or asset and exists to avoid double-counting of the amounts previously expensed but imbedded in the current ARC. This adjustment is calculated as *the opposite of* the net OPEB obligation (or asset) at the beginning of the year, plus interest on that amount (item 1.b.) with the sum then divided by the same amortization factor used to determine the ARC for this year (see the prior page for these factors).

Table 1C
ARC Calculation for FYE 2016

In the following exhibit, the June 30, 2015 valuation results have been adjusted (rolled forward) one year based on the underlying actuarial assumptions. These results are used to develop the amortization payment and the annual required contribution (ARC) for the fiscal year ending June 30, 2016

Funding Policy Valuation date	Pay-As-You-Go Basis		
	6/30/2015		
	Explicit	Implicit	Total
Subsidy			
For fiscal year beginning	7/1/2015	7/1/2015	7/1/2015
For fiscal year ending	6/30/2016	6/30/2016	6/30/2016
Discount rate	4.0%	4.0%	4.0%
Number of Covered Employees			
Actives	336	321	336
Retirees	197	136	203
Total Participants	533	457	539
Actuarial Present Value of Projected Benefits			
Actives	\$ 62,409,693	\$ 12,313,201	\$ 74,722,894
Retirees	51,230,622	10,849,145	62,079,767
Total APVPB	113,640,315	23,162,346	136,802,661
Actuarial Accrued Liability (AAL)			
Actives	41,828,004	7,644,425	49,472,429
Retirees	51,230,622	10,849,145	62,079,767
Total AAL	93,058,626	18,493,570	111,552,196
Actuarial Value of Assets	-	-	-
Unfunded AAL (UAAL)	93,058,626	18,493,570	111,552,196
Normal Cost	1,957,323	434,850	2,392,173
Amortization method	Level % of Pay	Level % of Pay	Level % of Pay
Initial amortization period (in years)	30	30	30
Remaining period (in years)	23	23	23
Determination of Amortization Payment			
UAAL	\$ 93,058,626	\$ 18,493,570	\$ 111,552,196
Factor	20.7235	20.7235	20.7235
Payment	4,490,498	892,398	5,382,896
Annual Required Contribution (ARC)			
Normal Cost	1,957,323	434,850	2,392,173
Amortization of UAAL	4,490,498	892,398	5,382,896
Interest to fiscal year end	-	-	-
Total ARC at fiscal year end	6,447,821	1,327,248	7,775,069
Projected covered payroll	\$ 31,150,408	\$ 31,150,408	\$ 31,150,408
Normal Cost as a percent of payroll	6.3%	1.4%	7.7%
ARC as a percent of payroll	20.7%	4.3%	25.0%
ARC per active ee	19,190	4,135	23,140

Table 1D
Expected OPEB Disclosures for FYE 2016

The following exhibit develops the annual OPEB expense, estimates the expected OPEB contributions and projects the net OPEB obligation as of June 30, 2016 reflecting the assumed pay-as-you-go financing policy described earlier in this report.

Fiscal Year End	Pay-As-You-Go Basis		
	6/30/2016	6/30/2016	6/30/2016
Subsidy	Explicit	Implicit	Total
1. Calculation of the Annual OPEB Expense			
a. ARC for current fiscal year	\$ 6,447,821	\$ 1,327,248	\$ 7,775,069
b. Interest on Net OPEB Obligation (Asset)	1,125,002	222,977	1,347,979
c. Adjustment to the ARC	(1,411,447)	(279,751)	(1,691,198)
d. Annual OPEB Expense (a. + b. + c.)	6,161,376	1,270,474	7,431,850
2. Calculation of Expected Contribution			
a. Estimated payments on behalf of retirees	2,444,788	-	2,444,788
b. Estimated current year's implicit subsidy	-	597,204	597,204
c. Estimated contribution to OPEB trust	-	-	-
d. Total Expected Employer Contribution	2,444,788	597,204	3,041,992
3. Change in Net OPEB Obligation (1.d. minus 2.d.)	3,716,588	673,270	4,389,858
Net OPEB Obligation (Asset), beginning of fiscal year	28,125,045	5,574,421	33,699,466
Net OPEB Obligation (Asset) at fiscal year end	31,841,633	6,247,691	38,089,324

In the table above, we assumed that the City will contribute the current year's retiree benefit payments and take credit for the current year's implicit subsidy as an OPEB contribution. No other OPEB contributions were projected to be made.

Notes on calculations above:

- Interest on the net OPEB obligation (or asset), shown above in item 1.b. is equal to the applicable discount rate (4%) multiplied by the net OPEB obligation (or asset) at the beginning of the year.
- The Adjustment to the ARC, shown above in item 1.c., is always the opposite sign of the net OPEB obligation or asset and exists to avoid double-counting of the amounts previously expensed but imbedded in the current ARC. This adjustment is calculated as *the opposite of* the net OPEB obligation (or asset) at the beginning of the year, plus interest on that amount (item 1.b.) with the sum then divided by the same amortization factor used to determine the ARC for this year (see the prior page for these factors).

Table 2
Summary of Employee Data

The City reported 336 active employees; of these, 326 are currently participating in the medical program while 10 employees were waiving coverage as of the valuation date. Age and service information for the reported individuals is provided below:

Distribution of Benefits-Eligible Active Employees								
Current Age	Years of Service						Total	Percent
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 & Up		
Under 25	2	4					6	2%
25 to 29	4	4	3	2			13	4%
30 to 34	9	4	10	12	1		36	11%
35 to 39	4	9	14	12	8	1	48	14%
40 to 44	3	8	9	12	15	2	49	15%
45 to 49		3	11	15	10	8	47	14%
50 to 54	1	3	12	11	13	13	53	16%
55 to 59		6	12	9	10	9	46	14%
60 to 64		4	5	3	1	10	23	7%
65 to 69	1			2	6	2	11	3%
70 & Up				1	1	2	4	1%
Total	24	45	76	79	65	47	336	100%
Percent	7%	13%	23%	24%	19%	14%	100%	

<u>Valuation</u>	<u>June 2013</u>	<u>June 2015</u>
Annual Covered Payroll	\$34,035,753	\$30,169,887
Average Attained Age for Actives	45.6	46.8
Average Years of Service	11.7	13.0

There are also 196 retirees (some with dependents) and 7 surviving spouses with medical coverage through the City. Their ages are summarized in the chart below.

Retirees by Age					
Current Age	"Tier I" Benefits	PEMHCA Minimum Only*	Covered without City Subsidy	Total	Percent
Below 50	0	0	0	0	0%
50 to 54	15	1	1	17	8%
55 to 59	54	3	1	58	29%
60 to 64	35	3	2	40	20%
65 to 69	36	10	1	47	23%
70 to 74	22	1	0	23	11%
75 to 79	6	3	1	10	5%
80 & up	3	5	0	8	4%
Total	171	26	6	203	100%
Average Attained Age for Retirees:				64.1	

* Dates of birth were not available for 5 retirees or their survivors. We assumed these individuals were age 68 as of the valuation date.

Table 2- Summary of Employee Data (continued)

The chart below reconciles the number of actives and retirees included in the June 30, 2013 valuation of the City plan with those included in the June 30, 2015 valuation:

Reconciliation of City Plan Members Between Valuation Dates					
Status	Covered Actives	Waiving Actives	Covered Retirees	Covered Surviving Spouses	Total
Number reported as of June 30, 2013	372	7	163	3	545
New employees	46	2	(1)	-	47
Terminated employees	(14)	-	-	-	(14)
New retiree, elected coverage	(31)	-	31	-	0
New retiree, eligible for coverage but waived	(12)	-	-	-	(12)
Previously covered, now waiving	(3)	3	-	-	0
Previously waiving, now covered/re-enrolled	2	(2)	16	2	18
Tier II Safety employee - not OPEB eligible	(34)	-	-	-	(34)
Deceased or dropped coverage	-	-	(14)	2	(12)
Data corrections	-	-	1	-	1
Number reported as of June 30, 2015	326	10	196	7	539

From the chart above, we make the following observations:

- There is net decrease in the number of active employees included in this valuation, down from 379 to 336. In part, this reflects our understanding that non-management police and fire safety “Tier 2” employees are not eligible for medical coverage through the City in retirement. This change had no impact on the explicit subsidy liability, but did reduce the implicit subsidy liability reflected in this valuation.
- There was a net increase of 37 retirees (22%) over the past 2 years.
 - Coverage ended for 12 retirees, due to death or voluntary discontinuance; surviving spouses of 2 deceased retirees elected to continue their coverage.
 - Of 43 new retirees, 31 elected to continue their coverage through the City. All but 2 are receiving benefits from the City toward their monthly premiums.
 - In addition, 16 prior retirees and 2 surviving spouses elected to rejoin the CalPERS healthcare program and resumed receiving benefits from the City.
- Of the 12 new retirees waiving City medical coverage, 10 would have been required to pay the full premium themselves; only 2 were entitled to a paid benefit from the City.

Some employees receive (or will receive) a substantial subsidy from the City toward their monthly retiree medical premiums, including premiums for a covered spouse or other dependents. Others (in CalPERS plans) will receive a more modest monthly payment and the remainder will be responsible for paying 100% of their medical premiums in retirement

Benefit Level	Number of Participants			% of Members Covering a Spouse		
	Active	Retired	Total	Active	Retired	Total
Tier 1: % of Premium Subsidy	206	171	377	68.0%	71.9%	69.8%
PEMHCA Minimum Only	130	26	156	46.2%	50.0%	46.8%
Coverage Only (No Subsidy)	N/A	6	6	N/A	16.7%	16.7%
Total	336	203	539	59.5%	67.5%	62.5%

**Table 2- Summary of Employee Data
(Concluded)**

The chart below summarizes the number of active and retired employees included in the valuation by bargaining unit:

Participants by Group			
Group	Actives	Retirees	Total
Elected Official	8	2	10
Exempt	18	25	43
Fire Management	15	15	30
Fire Safety*	15	18	33
General	170	45	215
Management	63	45	108
Police Management	2	11	13
Police Safety*	45	42	87
Total	336	203	539

**Tier II employees in the Fire Safety and Police Safety groups are not eligible for retiree medical coverage and have not been included in this valuation.*

Employees and retirees are currently covered by the following plans:

Plan	Actives	Pre-65 Retirees	Post-65 Retirees	Total
Blue Shield PPO (Safety)	77	63	21	161
Anthem HMO Select SoCal	11	-	-	11
Anthem HMO Traditional LA	4	-	-	4
Anthem HMO Traditional SoCal	2	-	-	2
Blue Shield Access LA	13	9	2	24
Blue Shield Access SoCal	79	9	6	94
Blue Shield NetValue SoCal	6	-	-	6
Kaiser Bay	-	-	1	1
Kaiser LA	4	-	1	5
Kaiser SoCal	25	2	2	29
PERS Choice LA	2	4	2	8
PERS Choice OOS	-	3	18	21
PERS Choice SoCal	46	21	27	94
PERS Select SoCal	15	-	1	16
PERSCare LA	1	1	1	3
PERSCare OOS	-	1	2	3
PERSCare SoCal	22	-	4	26
UnitedHealthcare SoCal	19	2	-	21
Waived	10	-	-	10
Total	336	115	88	539

Table 3A
Summary of Retiree Benefit Provisions

OPEB provided: The City reported that the only OPEB provided is medical plan coverage. Access to coverage and the amount of benefits provided by the City depend on the employment group, date hired and date retired from the City. Retirees are generally categorized as Tier 1 or Tier 2, as shown in this chart:

Tier 1 Retirees	Retired After	Hired Prior To
Elected Officials & Exempt Management	7/1/1999	7/1/2007
General	7/1/1999	12/7/2005
Fire Management	7/1/2000	7/1/2006
Fire Safety	1/1/1998	11/1/2006
Police Management	7/1/1998	10/20/2005
Police Safety	11/1/1997	10/25/2006
Tier 2 Retirees	All those not Tier 1	

Access to coverage: The medical plans available to City retirees are determined by their employment group:

- All miscellaneous retirees (including Elected Officials, Exempt, Management and General group members) are covered by plans in the CalPERS medical program as provided under the requirements of the Public Employees’ Medical and Hospital and Care Act (PEMHCA).
- Tier 1 Police Safety, Tier 1 Fire Safety, Tier 1 Police Management and all Fire Management retirees are covered by the Blue Shield PPO plan for Safety members.
- Fire Management and Police Management retirees also have access to the CalPERS medical plans.

To be eligible for CalPERS medical coverage in retirement, whether Tier 1 or Tier 2, the employee must retire from the City under PERS and begin receiving their pension benefit within 120 days of terminating employment with the City. Coverage is available for the retiree’s lifetime and a surviving spouse may also continue coverage until his or her death. The retiree may enroll in a CalPERS medical plan within 60 days of retirement or during any future open enrollment period.

To be eligible for Safety medical plan coverage in retirement, safety employees must retire from the City under PERS. All Tier 1 safety retirees may continue this coverage in retirement, whether or not they receive a direct premium subsidy from the City. Tier 2 Fire Management retirees may also continue their Safety medical plan coverage in retirement.³ Survivors of eligible retirees may continue their coverage after the retiree’s death.

Benefits Provided: The City’s contribution toward the cost of medical coverage varies for each retiree based on his or her employment group, date hired and years of City service.

³ Tier 2 employees receive monthly contributions from the City *while actively employed* which accumulate in a Retiree Health Savings Plan (RHSP); the monthly credits vary based on bargaining agreements. These amounts accumulate until retirement and may then be applied toward the cost of retiree health coverage. In accordance with GASB 45, neither the RHSP contributions for active employees nor the RHSP balance are considered as liabilities in this valuation.

**Table 3A – Summary of Retiree Benefit Provisions
(Concluded)**

➤ **For Tier 1 retirees**, the amount of the subsidy provided is shown in the following chart.

Tier I Retiree Health Benefits						
Group	Retired After	Hired Prior To	Premium % Paid By City	For How Long?	Included Parties	Plan
Elected Officials and Exempt	7/1/1999	7/1/2007	50% after 7.5 years 75% after 11.5 years 100% after 15.5 years	The % of premium paid by the City continues for the retiree's lifetime.	Retiree & Spouse	CalPERS Medical
Management	7/1/1999	9/7/2005	75% after 20 years			
General	7/1/1999	12/7/2005				
Fire Management	7/1/2000	7/1/2006	100% after 25 years		Retiree & All Eligible Dependents	Blue Shield PPO
Fire Safety	1/1/1998	11/1/2006				
Police Management	7/1/1998	10/20/2005				
Police Safety	11/1/1997	10/25/2006				

➤ **For Tier 2 retirees covered by the CalPERS medical program**, the City will contribute the required PEMHCA Minimum Employer Contribution (MEC) for the retiree's lifetime and that of his/her covered surviving spouse, if any.⁴ The MEC is \$122 per month during 2015. The retiree is responsible for paying the remainder of the medical premium.

➤ **Tier 2 Fire Management Association retirees covered under the City's Safety medical plan** are responsible for payment of the full medical premium for themselves and any covered dependents.

Current premium rates: The 2016 monthly premiums are shown in the table below.

City of Palm Springs 2016 Retiree Medical Premium Rates						
Plan	Pre-Medicare			Medicare		
	Single	Two Party	Family	Single	Two Party	Family
<i>CalPERS Other Southern California Counties</i>						
Kaiser HMO	\$ 605.05	\$ 1,210.10	\$ 1,573.13	\$ 297.23	\$ 594.46	\$ 957.49
PERS Choice PPO	683.71	1,367.42	1,777.65	366.38	732.76	1,142.99
PERS Select PPO	625.20	1,250.40	1,625.52	366.38	732.76	1,107.88
PERSCare PPO	761.50	1,523.00	1,979.90	408.04	816.08	1,272.98
UnitedHealthcare HMO	493.99	987.98	1,284.37	320.98	641.96	938.35
<i>CalPERS Los Angeles Area</i>						
Kaiser HMO	\$ 543.83	\$ 1,087.66	\$ 1,413.96	\$ 297.23	\$ 594.46	\$ 920.76
PERS Choice PPO	598.75	1,197.50	1,556.75	366.38	732.76	1,092.01
PERS Select PPO	547.55	1,095.10	1,423.63	366.38	732.76	1,061.29
PERSCare PPO	666.91	1,333.82	1,733.97	408.04	816.08	1,216.23
UnitedHealthcare HMO	492.24	984.48	1,279.82	320.98	641.96	937.30
<i>CalPERS Out of State</i>						
Kaiser HMO	\$ 930.29	\$ 1,860.58	\$ 2,418.75	\$ 297.23	\$ 594.46	\$ 1,152.63
PERS Choice PPO	625.31	1,250.62	1,625.81	366.38	732.76	1,107.95
PERSCare PPO	696.49	1,392.98	1,810.87	408.04	816.08	1,233.97
Blue Shield PPO (for Police & Fire)						
	\$ 919.96	\$ 1,766.69	\$ 1,879.35	\$ 697.59	\$ 1,274.21	\$ 1,280.92

⁴ The City confirms that it provides additional benefits for active employees through a pre-tax flexible benefit plan and that these benefits need not be provided to retired employees to meet PEMHCA requirements.

Table 3B

General CalPERS Annuitant Eligibility Provisions

The content of this section has been drawn from Section C, Summary of Plan Provisions, of the State of California OPEB Valuation as of June 30, 2014, issued December 2014, to the State Controller from Gabriel Roeder & Smith. It is provided here as a brief summary of general annuitant and survivor coverage.

Health Care Coverage

Retired Employees

A member is eligible to enroll in a CalPERS health plan if he or she retires within 120 days of separation from employment and receives a monthly retirement allowance. If the member meets this requirement, he or she may continue his or her enrollment at retirement, enroll within 60 days of retirement, or enroll during any Open Enrollment period. If a member is currently enrolled in a CalPERS health plan and wants to continue enrollment into retirement, the employee will notify CalPERS and the member's coverage will continue into retirement.

Eligibility Exceptions: Certain family members are not eligible for CalPERS health benefits:

- Children age 26 or older
- Children's spouses
- Former spouses
- Disabled children over age 26 who were never enrolled or were deleted from coverage
- Grandparents
- Parents
- Children of former spouses
- Other relatives

Coordination with Medicare

CalPERS retired members who qualify for premium-free Part A, either on their own or through a spouse (current, former, or deceased), must sign up for Part B as soon as they qualify for Part A. A member must then enroll in a CalPERS sponsored Medicare plan. The CalPERS-sponsored Medicare plan will pay for costs not paid by Medicare, by coordinating benefits.

Survivors of an Annuitant

If a CalPERS annuitant satisfied the requirement to retire within 120 days of separation, the survivor may be eligible to enroll within 60 days of the annuitant's death or during any future Open Enrollment period. Note: A survivor cannot add any new dependents; only dependents that were enrolled or eligible to enroll at the time of the member's death qualify for benefits.

Surviving registered domestic partners who are receiving a monthly annuity as a surviving beneficiary of a deceased employee or annuitant on or after January 1, 2002, are eligible to continue coverage if currently enrolled, enroll within 60 days of the domestic partner's death, or enroll during any future Open Enrollment period.

Surviving enrolled family members who do not qualify to continue their current coverage are eligible for continuation coverage under COBRA.

Table 4
Actuarial Methods and Assumptions

Valuation Date	June 30, 2015
Funding Method	Entry Age Normal Cost, level percent of pay ⁵
Asset Valuation Method	Market value of assets (\$0; no OPEB trust has been established)
Long Term Return on Assets	4.0%
Discount Rate	4.0% for pay-as-you-go; 6.5% for prefunding
Participants Valued	Only current active employees and retired participants and covered dependents are valued. No future entrants are considered in this valuation.
Salary Increase	3.25% per year, used only to allocate the cost of benefits between service years
Assumed Wage Inflation	3.0% per year; used to determine amortization payments if developed on a level percent of pay basis
General Inflation Rate	2.75% per year

Demographic actuarial assumptions used in this valuation are based on the 2014 experience study of the California Public Employees Retirement System using data from 1997 to 2011, except for a different basis used to project future mortality improvements. Rates for selected age and service are shown below and on the following pages. The representative mortality rates were those published by CalPERS, adjusted to back out 20 years of Scale BB to central year 2008 and then projected forward 6 years using Bickmore Scale 2014 to year 2014.

Mortality Before Retirement Representative mortality rates for 2014 are shown below.

These rates were then adjusted on a generational basis by Bickmore Scale 2014 to anticipate future mortality improvement.

In laymen's terms, that means mortality is projected to improve each year until the payments anticipated in any future year occur.

CalPERS Public Agency Miscellaneous Non- Industrial Deaths			Police & Fire Combined Industrial & Non-Industrial Deaths		
Age	Male	Female	Age	Male	Female
15	0.00020	0.00015	15	0.00020	0.00015
20	0.00028	0.00018	20	0.00031	0.00021
30	0.00051	0.00027	30	0.00061	0.00037
40	0.00070	0.00047	40	0.00083	0.00060
50	0.00147	0.00103	50	0.00162	0.00118
60	0.00340	0.00201	60	0.00357	0.00218
70	0.00619	0.00408	70	0.00637	0.00427
80	0.01157	0.00918	80	0.01178	0.00938

⁵ The level percent of pay aspect of the funding method refers to how the normal cost is determined. Use of level percent of pay cost allocations in the funding method is separate from and has no effect on a decision regarding use of a level percent of pay or level dollar basis for determining amortization payments.

**Table 4 - Actuarial Methods and Assumptions
(Continued)**

Mortality After Retirement Representative mortality rates for 2014 are shown in the charts below. The rates were then adjusted on a generational basis by Bickmore Scale 2014 to anticipate future mortality improvement.

Healthy Lives

CalPERS Public Agency Miscellaneous, Police & Fire Post Retirement Mortality		
Age	Male	Female
40	0.00103	0.00085
50	0.00475	0.00480
60	0.00785	0.00481
70	0.01541	0.01105
80	0.04556	0.03271
90	0.14423	0.10912
100	0.32349	0.29541
110	0.97827	0.97516
115	1.00000	1.00000

Disabled Miscellaneous

CalPERS Public Agency Disabled Miscellaneous Post Retirement Mortality		
Age	Male	Female
20	0.00548	0.00339
30	0.00717	0.00469
40	0.00887	0.00565
50	0.01594	0.01192
60	0.02530	0.01363
70	0.03394	0.02460
80	0.07108	0.05326
90	0.16458	0.14227

Disabled Fire

CalPERS Public Agency Disabled Fire Post Retirement Mortality		
Age	Male	Female
20	0.00440	0.00277
30	0.00348	0.00247
40	0.00291	0.00222
50	0.00545	0.00524
60	0.00884	0.00596
70	0.01964	0.01573
80	0.05747	0.04422
90	0.14455	0.10964

Disabled Police

CalPERS Public Agency Disabled Police Post Retirement Mortality		
Age	Male	Female
20	0.00548	0.00339
30	0.00206	0.00162
40	0.00240	0.00193
50	0.00520	0.00508
60	0.00888	0.00598
70	0.01974	0.01579
80	0.05761	0.04431
90	0.14475	0.10997

Disable

**Table 4 - Actuarial Methods and Assumptions
(Continued)**

Termination Rates

For miscellaneous employees: sum of CalPERS Terminated Refund and Terminated Vested rates – Illustrative rates

Attained Age	Years of Service					
	0	3	5	10	15	20
15	0.1812	0.0000	0.0000	0.0000	0.0000	0.0000
20	0.1742	0.1193	0.0946	0.0000	0.0000	0.0000
25	0.1674	0.1125	0.0868	0.0749	0.0000	0.0000
30	0.1606	0.1055	0.0790	0.0668	0.0581	0.0000
35	0.1537	0.0987	0.0711	0.0587	0.0503	0.0450
40	0.1468	0.0919	0.0632	0.0507	0.0424	0.0370
45	0.1400	0.0849	0.0554	0.0427	0.0347	0.0290

For Police employees: sum of applicable CalPERS Terminated Refund and Terminated Vested rates– Illustrative rates

Attained Age	Years of Service					
	0	3	5	10	15	20
15	0.1013	0.0000	0.0000	0.0000	0.0000	0.0000
20	0.1013	0.0258	0.0249	0.0000	0.0000	0.0000
25	0.1013	0.0258	0.0249	0.0179	0.0000	0.0000
30	0.1013	0.0258	0.0249	0.0179	0.0109	0.0000
35	0.1013	0.0258	0.0249	0.0179	0.0109	0.0082
40	0.1013	0.0258	0.0249	0.0179	0.0109	0.0082
45	0.1013	0.0258	0.0249	0.0179	0.0109	0.0082

For Fire employees: sum of applicable CalPERS Terminated Refund and Terminated Vested rates– Illustrative rates

Attained Age	Years of Service					
	0	3	5	10	15	20
15	0.0710	0.0000	0.0000	0.0000	0.0000	0.0000
20	0.0710	0.0242	0.0191	0.0000	0.0000	0.0000
25	0.0710	0.0242	0.0191	0.0070	0.0000	0.0000
30	0.0710	0.0242	0.0191	0.0070	0.0064	0.0000
35	0.0710	0.0242	0.0191	0.0070	0.0064	0.0058
40	0.0710	0.0242	0.0191	0.0070	0.0064	0.0058
45	0.0710	0.0242	0.0191	0.0070	0.0064	0.0058

**Table 4 - Actuarial Methods and Assumptions
(Continued)**

Disability Retirement Rates

CalPERS Public Agency Miscellaneous Disability			CalPERS Public Agency Fire Combined Disability		CalPERS Public Agency Police Combined Disability	
Age	Male	Female	Age	Unisex	Age	Unisex
20	0.00017	0.00010	20	0.00017	20	0.00010
25	0.00017	0.00010	25	0.00035	25	0.00175
30	0.00019	0.00024	30	0.00084	30	0.00496
35	0.00049	0.00081	35	0.00168	35	0.00818
40	0.00122	0.00155	40	0.00310	40	0.01140
45	0.00191	0.00218	45	0.00550	45	0.01461
50	0.00213	0.00229	50	0.02821	50	0.01925
55	0.00221	0.00179	55	0.04184	55	0.04909
60	0.00222	0.00135	60	0.05974	60	0.06212

Service Retirement Rates

For **Miscellaneous** employees hired before 12/24/2012:
CalPERS Public Agency 2.7% @ 55 – Illustrative rates

Current Age	Years of Service					
	5	10	15	20	25	30
50	0.0040	0.0090	0.0140	0.0350	0.0550	0.0950
55	0.0760	0.1010	0.1250	0.1650	0.2050	0.2650
60	0.0690	0.0930	0.1160	0.1540	0.1920	0.2500
65	0.1340	0.1740	0.2150	0.2700	0.3260	0.4010
70	0.1410	0.1830	0.2260	0.2830	0.3410	0.4180
75 & over	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

For **Miscellaneous** "Classic" employees hired after 12/24/2012:
CalPERS Public Agency 2% @ 60 – Illustrative rates

Current Age	Years of Service					
	5	10	15	20	25	30
50	0.0100	0.0130	0.0150	0.0180	0.0190	0.0210
55	0.0220	0.0290	0.0350	0.0400	0.0450	0.0490
60	0.0560	0.0770	0.0920	0.1050	0.1170	0.1300
65	0.1500	0.2090	0.2550	0.2870	0.3210	0.3580
70	0.1170	0.1620	0.1970	0.2220	0.2480	0.2770
75 & over	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

**Table 4 - Actuarial Methods and Assumptions
(Continued)**

For **Miscellaneous** PEPRAs employees: CalPERS Public Agency 2% @ 62 – Illustrative rates

Current Age	Years of Service					
	5	10	15	20	25	30
52	0.0103	0.0132	0.0160	0.0188	0.0216	0.0244
55	0.0440	0.0560	0.0680	0.0800	0.0920	0.1040
60	0.0616	0.0784	0.0952	0.1120	0.1288	0.1456
65	0.1287	0.1638	0.1989	0.2340	0.2691	0.3042
70	0.1254	0.1596	0.1938	0.2280	0.2622	0.2964
75 & over	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

For **Police** employees hired before 6/17/2011: CalPERS Public Agency 3% @ 50 – Illustrative rates

Current Age	Years of Service					
	5	10	15	20	25	30
50	0.0500	0.0500	0.0500	0.0990	0.2400	0.3140
53	0.0390	0.0390	0.0390	0.0800	0.2120	0.2770
56	0.0420	0.0420	0.0420	0.0870	0.2210	0.2890
59	0.0540	0.0540	0.0540	0.1080	0.2530	0.3300
62	0.0610	0.0610	0.0610	0.1220	0.2740	0.3570
65 & over	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

For **Police** employees hired after 6/17/2011 (including “Classic” employees hired after 12/31/2012): CalPERS Public Agency 3% @ 55 – Illustrative rates

Current Age	Years of Service					
	5	10	15	20	25	30
50	0.0040	0.0040	0.0040	0.0040	0.0150	0.0860
53	0.0380	0.0380	0.0380	0.0380	0.0830	0.1880
56	0.0720	0.0720	0.0720	0.0720	0.1530	0.2950
59	0.1180	0.1180	0.1180	0.1180	0.2470	0.4370
62	0.1080	0.1080	0.1080	0.1080	0.2260	0.4050
65 & over	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

For **Police** PEPRAs employees: CalPERS Public Agency 2.7% @ 57 – Illustrative rates

Current Age	Years of Service					
	5	10	15	20	25	30
50	0.0138	0.0138	0.0138	0.0138	0.0253	0.0451
53	0.0497	0.0497	0.0497	0.0497	0.0909	0.1621
56	0.0606	0.0606	0.0606	0.0606	0.1108	0.1975
59	0.1396	0.1396	0.1396	0.1396	0.1735	0.2544
62	0.1396	0.1396	0.1396	0.1396	0.1719	0.2506
65 & over	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

**Table 4 - Actuarial Methods and Assumptions
(continued)**

Service Retirement Rates
(continued)

*For Fire "Classic" employees hired before 12/17/2011:
CalPERS Public Agency 3% @ 50 – Illustrative rates*

Current Age	Years of Service					
	5	10	15	20	25	30
50	0.0200	0.0200	0.0200	0.0400	0.1300	0.1920
53	0.0230	0.0230	0.0230	0.0430	0.1350	0.1980
56	0.0530	0.0530	0.0530	0.0850	0.1960	0.2690
59	0.0750	0.0750	0.0750	0.1160	0.2390	0.3210
62	0.0680	0.0680	0.0680	0.1060	0.2240	0.3040
65 & over	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

*For Fire "Classic" employees hired after 12/17/2011 (including
"Classic" employees hired after 12/31/2012): CalPERS Public
Agency 3% @ 55 – Illustrative rates*

Current Age	Years of Service					
	5	10	15	20	25	30
50	0.0010	0.0010	0.0010	0.0060	0.0160	0.0690
53	0.0320	0.0320	0.0320	0.0490	0.0850	0.1490
56	0.0640	0.0640	0.0640	0.0970	0.1610	0.2380
59	0.0880	0.0880	0.0880	0.1310	0.2130	0.2990
62	0.0870	0.0870	0.0870	0.1280	0.2100	0.2950
65 & over	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

*For Fire PEPPRA employees: CalPERS Public Agency 2.7% @
57 – Illustrative rates*

Current Age	Years of Service					
	5	10	15	20	25	30
50	0.0065	0.0065	0.0065	0.0065	0.0101	0.0151
53	0.0065	0.0065	0.0065	0.0065	0.0101	0.0151
56	0.0442	0.0442	0.0442	0.0442	0.0680	0.1018
59	0.0740	0.0740	0.0740	0.0740	0.1140	0.1706
62	0.0729	0.0729	0.0729	0.0729	0.1123	0.1681
65	0.1136	0.1136	0.1136	0.1136	0.1749	0.2618
68 & over	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Medicare Eligibility

Absent contrary data, all individuals are assumed to be eligible for Medicare Parts A and B at age 65.

**Table 4 - Actuarial Methods and Assumptions
(continued)**

Healthcare Trend

Medical plan premiums and claims costs by age are assumed to increase once each year. The increases over the prior year's levels are assumed to be effective on the dates shown below:

Effective January 1	Premium Increase	Effective January 1	Premium Increase
2016	Actual	2021	5.50%
2017	7.50%	2022	5.00%
2018	7.00%	2023	4.50%
2019	6.50%	2024	4.50%
2020	6.00%	2025 & later	4.64%

The PEMHCA minimum required contribution (MEC) is assumed to increase annually by 4.5%.

Participation Rates

Active employees: The following percentages of active employees eligible for retiree coverage are assumed to continue their current plan election in retirement:

Portion of Medical Premium Paid by the City	Percent Electing
75% - 100% of premium	100%
50% of premium	75%
PEMHCA Minimum Only	50%
No City cost sharing	20%

Retired employees: Existing medical plan elections are assumed to be maintained until death.

Spouse Coverage

Active employees: 85% are assumed to be married and of these, 90% of those electing coverage in retirement are assumed to also elect coverage for their spouse. Surviving spouses are assumed to retain coverage until their death. Husbands are assumed to be 3 years older than their wives.

Retired participants: Existing elections for spouse coverage are assumed to continue until the spouse's death. Actual spouse ages are used, where known; in not, husbands are assumed to be 3 years older than their wives.

Dependent Coverage

Where the City subsidizes the cost of dependent benefits, an existing election for coverage of dependent children is assumed to continue until the youngest child is age 26.

**Table 4 - Actuarial Methods and Assumptions
(continued)**

Excise tax on high-cost plans

The expected value of excise taxes for high cost plan coverage for retirees was included in this valuation. Annual threshold amounts for 2018 under the Affordable Care Act (ACA) were assumed to increase at the General Inflation Rate. An effective excise tax rate was applied to the portion of premiums projected to exceed the threshold (40% was applied to CalPERS PPO plans and 67.5% was applied to all other available plans).

2018 Thresholds	Ages 55-64	All other Ages
Single	\$ 11,850	\$ 10,200
Other than Single	\$ 30,950	\$ 27,500

Development of Age-related
Medical Premiums

Actual premium rates for retirees and their spouses were adjusted to an age-related basis by applying medical claim cost factors developed from the data presented in the report, “Health Care Costs – From Birth to Death”, sponsored by the Society of Actuaries. A description of the use of claims cost curves can be found in Bickmore’s Age Rating Methodology provided in Addendum 1 to this report.

Medicare retirees: All current and future Medicare-eligible retirees covered under the CalPERS medical program are assumed to be covered by plans that are rated based solely on the experience of Medicare retirees. While the claims experience of Medicare-eligible retirees covered under the Blue Shield PPO Safety Plan are understood to be rated together with the claims experience of active Safety employees and pre-Medicare retirees, based on our review, we have assumed that the premium structure for the Medicare retirees in the Safety plan is adequate to cover their expected claims. Accordingly, we have developed no implicit subsidy liability for Medicare-eligible retirees under either the PEMHCA or Safety medical program.

Non-Medicare retirees: Representative claims costs derived from the dataset provided by CalPERS for retirees not currently covered or not expected to be eligible for Medicare appear on the following page. Representative claim costs for retirees expected to be covered by the Blue Shield plan for safety employees are also shown.

**Table 4 - Actuarial Methods and Assumptions
(Continued)**

Illustrative claims by age are shown for pre-Medicare retirees in the chart below:

Expected Monthly Claims by Medical Plan for Selected Ages										
	Male					Female				
	50	53	56	59	62	50	53	56	59	62
Blue Shield PPO (Safety Plan)	\$ 725	\$ 855	\$ 993	\$ 1,139	\$ 1,294	\$ 899	\$ 987	\$ 1,062	\$ 1,148	\$ 1,265
<i>CalPERS Plans:</i>										
Blue Shield Access+: Los Angeles	\$ 571	\$ 673	\$ 782	\$ 896	\$ 1,019	\$ 707	\$ 777	\$ 836	\$ 903	\$ 996
Blue Shield Access+: Other Southern California	627	739	859	984	1,119	777	853	918	992	1,094
Blue Shield NetValue: Other Southern California	677	798	927	1,062	1,207	838	921	991	1,071	1,180
Kaiser: Bay Area	732	863	1,002	1,149	1,306	907	996	1,072	1,158	1,277
Kaiser: Los Angeles	550	648	753	863	981	681	748	805	870	959
Kaiser: Other Southern California	601	709	823	943	1,072	745	818	880	951	1,048
PERS Choice: Los Angeles	540	637	740	848	964	669	735	791	855	942
PERS Choice: Out of State	396	467	542	622	707	491	539	580	627	691
PERS Choice: Other Southern California	585	690	802	919	1,044	725	797	857	926	1,021
PERS Select: Other Southern California	677	798	927	1,063	1,208	839	921	992	1,071	1,181
PERSCare: Los Angeles	513	605	702	805	915	636	698	751	812	895
PERSCare: Out of State	396	467	543	622	707	491	539	580	627	691
PERSCare: Other Southern California	544	642	745	854	971	674	741	797	861	949
PERS Choice: Other Southern California	585	690	802	919	1,044	725	797	857	926	1,021
Other HMO: Other Southern California	631	744	864	990	1,126	782	858	924	998	1,100
Other HMO: Los Angeles	566	667	775	888	1,009	701	770	828	895	987

**Table 4 - Actuarial Methods and Assumptions
(Concluded)**

Changes Since the Prior Valuation:

Assumed Wage Inflation	Decreased from 3.25% to 3.0%
General Inflation Rate	Decreased from 3.0% to 2.75%
Demographic assumptions	Rates of assumed mortality, termination, disability and retirement rates were updated from those provided in the CalPERS 2010 experience study report to those provided in the CalPERS 2014 experience study report. Rates of mortality were updated to the rates in the midpoint year of the CalPERS 2014 experience study (2008), then projected on a generational basis by Bickmore Scale 2014.
Age-Related Medical Premiums	We modified the basis for developing age-related medical premiums based on updated research and data sponsored by the Society of Actuaries. We added an implicit subsidy analysis for pre-Medicare retirees covered by the CalPERS medical program.
Excise Tax Impact	We reflected the potential impact of the excise tax attributable to retirees for high cost healthcare plans for retirees, as provided by the Affordable Care Act.

Table 5
Projected Benefit Payments

The following is an estimate of other post-employment benefits to be paid on behalf of current retirees and current employees expected to retire from the City. Expected annual benefits have been projected on the basis of the actuarial assumptions outlined in Table 4.

These projections do not include any benefits expected to be paid on behalf of current active employees *prior to* retirement, nor do they include any benefits for potential *future employees* (i.e., those who might be hired in future years).

Projected Annual Benefit Payments							
Fiscal Year Ending June 30	Explicit Subsidy			Implicit Subsidy			Total
	Current Retirees	Future Retirees	Total	Current Retirees	Future Retirees	Total	
2015	\$2,301,963	\$ -	\$2,301,963	\$ 522,539	\$ -	\$ 522,539	\$2,824,502
2016	2,312,817	131,971	2,444,788	564,342	32,862	597,204	3,041,992
2017	2,324,737	238,381	2,563,118	591,981	65,175	657,156	3,220,274
2018	2,405,451	355,776	2,761,227	616,963	108,619	725,582	3,486,809
2019	2,490,475	476,853	2,967,328	654,337	146,373	800,710	3,768,038
2020	2,558,317	614,553	3,172,870	684,069	205,100	889,169	4,062,039
2021	2,616,783	764,397	3,381,180	707,310	267,263	974,573	4,355,753
2022	2,625,589	924,371	3,549,960	635,571	330,278	965,849	4,515,809
2023	2,647,761	1,095,460	3,743,221	608,287	387,403	995,690	4,738,911
2024	2,622,203	1,269,276	3,891,479	492,561	425,247	917,808	4,809,287
2025	2,616,879	1,468,109	4,084,988	406,652	481,822	888,474	4,973,462
2026	2,643,812	1,684,575	4,328,387	377,888	534,111	911,999	5,240,386
2027	2,645,517	1,919,126	4,564,643	305,546	578,050	883,596	5,448,239
2028	2,669,103	2,159,748	4,828,851	229,332	625,297	854,629	5,683,480
2029	2,678,535	2,374,167	5,052,702	169,759	603,204	772,963	5,825,665

The amounts shown in the Explicit Subsidy section reflect the expected payment by the City toward retiree medical premiums in each of the years shown. The amounts are shown separately, and in total, for those retired on the valuation date (“current retirees”) and those expected to retire after the valuation date (“future retirees”).

The amounts shown in the Implicit Subsidy section reflect the expected excess of retiree medical (and prescription drug) claims over the premiums expected to be charged during the year for retirees’ coverage. These amounts are also shown separately and in total for those currently retired on the valuation date and for those expected to retire in the future.

Appendix 1 Prefunding Illustration for the FYE 2016

The following table compares an illustration of prefunding results to those developed on a pay-as-you-go basis for the fiscal year ending June 30, 2016. Amortization of the unfunded actuarial accrued liability is developed on the same basis as described in Section F.

Valuation date	Pay-As-You-Go	Prefunding
	6/30/2015	
For fiscal year beginning	7/1/2015	7/1/2015
For fiscal year ending	6/30/2016	6/30/2016
Discount rate	4.0%	6.5%
Actuarial Present Value of Projected Benefits		
Actives	\$ 74,722,894	\$ 43,702,441
Retirees	62,079,767	46,880,222
Total APVPB	136,802,661	90,582,663
Actuarial Accrued Liability (AAL)		
Actives	49,472,429	32,612,648
Retirees	62,079,767	46,880,222
Total AAL	111,552,196	79,492,870
Actuarial Value of Assets	-	-
Unfunded AAL (UAAL)	111,552,196	79,492,870
Factor	20.72345	16.31955
Annual Required Contribution (ARC)		
Normal Cost	2,392,173	1,219,731
Amortization of UAAL	5,382,896	4,871,019
Interest to 6/30	-	-
Total ARC at fiscal year end	7,775,069	6,090,750
1. Calculation of the Annual OPEB Expense		
a. ARC for current fiscal year	\$ 7,775,069	\$ 6,090,750
b. Interest on Net OPEB Obligation (Asset) at beginning of year	1,347,979	2,190,465
c. Adjustment to the ARC	(1,691,198)	(2,199,198)
d. Annual OPEB Expense (a. + b. + c.)	7,431,850	6,082,017
2. Calculation of Expected Contribution		
a. Estimated payments on behalf of retirees	2,444,788	2,444,788
b. Estimated current year's implicit subsidy	597,204	597,204
c. Estimated contribution to OPEB trust	-	3,048,758
d. Total Expected Employer Contribution	3,041,992	6,090,750
3. Change in Net OPEB Obligation (1.d. minus 2.d.)	4,389,858	(8,733)
Net OPEB Obligation (Asset), beginning of fiscal year	33,699,466	33,699,466
Net OPEB Obligation (Asset) at fiscal year end	38,089,324	33,690,733

Appendix 2 Breakout of Valuation Results by Group

The chart below breaks out the valuation results for 8 employee groups for the fiscal year ending June 30, 2015 and June 30, 2016. Results shown below tie to the total presented in Table 1A and 1C.

FISCAL YEAR ENDING JUNE 30, 2015 Group	Projected Value of Projected Benefits	UAAL: Unfunded Actuarial Accrued Liability	Normal Cost	Amortization of UAAL	Interest to Fiscal Year End	ARC: Annual Required Contribution
Elected Official	\$ 1,347,764	\$ 1,026,523	\$ 49,295	\$ 47,692	\$ -	\$ 96,987
Exempt	\$ 7,246,258	\$ 6,528,828	\$ 84,000	\$ 303,325	\$ -	\$ 387,325
Fire Safety	\$ 17,764,745	\$ 13,178,479	\$ 302,774	\$ 612,264	\$ -	\$ 915,038
General	\$ 28,288,169	\$ 22,283,684	\$ 558,751	\$ 1,035,285	\$ -	\$ 1,594,036
Management	\$ 14,880,962	\$ 12,393,511	\$ 266,173	\$ 575,795	\$ -	\$ 841,968
Police Management	\$ 5,043,142	\$ 4,914,598	\$ 17,348	\$ 228,329	\$ -	\$ 245,677
Police Safety	\$ 44,239,115	\$ 34,689,347	\$ 791,332	\$ 1,611,644	\$ -	\$ 2,402,976
Fire Management	\$ 15,446,732	\$ 12,645,751	\$ 247,201	\$ 587,513	\$ -	\$ 834,714
Totals	\$ 134,256,887	\$ 107,660,721	\$ 2,316,874	\$ 5,001,847	\$ -	\$ 7,318,721

FISCAL YEAR ENDING JUNE 30, 2016 Group	Projected Value of Projected Benefits	UAAL: Unfunded Actuarial Accrued Liability	Normal Cost	Amortization of UAAL	Interest to Fiscal Year End	ARC: Annual Required Contribution
Elected Official	\$ 1,378,016	\$ 1,095,192	\$ 50,897	\$ 52,848	\$ -	\$ 103,745
Exempt	\$ 7,246,574	\$ 6,587,807	\$ 86,730	\$ 317,891	\$ -	\$ 404,621
Fire Safety	\$ 18,116,112	\$ 13,661,280	\$ 312,614	\$ 659,218	\$ -	\$ 971,832
General	\$ 28,852,315	\$ 23,188,751	\$ 576,910	\$ 1,118,962	\$ -	\$ 1,695,872
Management	\$ 15,117,104	\$ 12,806,975	\$ 274,824	\$ 617,994	\$ -	\$ 892,818
Police Management	\$ 5,066,366	\$ 4,950,722	\$ 17,912	\$ 238,895	\$ -	\$ 256,807
Police Safety	\$ 45,249,042	\$ 36,140,267	\$ 817,051	\$ 1,743,931	\$ -	\$ 2,560,982
Fire Management	\$ 15,777,132	\$ 13,121,202	\$ 255,235	\$ 633,157	\$ -	\$ 888,392
Totals	\$ 136,802,661	\$ 111,552,196	\$ 2,392,173	\$ 5,382,896	\$ -	\$ 7,775,069

Appendix 3 General OPEB Disclosure and Required Supplementary Information

The information necessary to complete the OPEB footnote in the City's financial reports is summarized below, or we note the location of the information contained elsewhere in this report:

Summary of Plan Provisions:	See Table 3A
OPEB Funding Policy:	See Section F; summarized in Tables 1A & 1C
Annual OPEB Cost and Net OPEB Obligation:	See Tables 1B and 1D
Actuarial Methods and Assumptions:	See Table 4.
Funding Status and Funding Progress:	See Section E – Basic Valuation Results

Schedule of Funding Progress						
Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (b)	Unfunded Actuarial Accrued Liability (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
6/30/2009	\$ -	\$ 82,358,071	\$ 82,358,071	0.0%	\$ 31,310,364	263.0%
6/30/2011	\$ -	\$ 99,590,050	\$ 99,590,050	0.0%	\$ 26,309,954	378.5%
6/30/2013	\$ -	\$ 106,506,259	\$ 106,506,259	0.0%	\$ 34,035,753	312.9%
6/30/2015	\$ -	\$ 107,153,093	\$ 107,153,093	0.0%	\$ 30,169,887	355.2%

Required Supplementary Information: Three Year History of Amounts Funded
See chart below:

OPEB Cost Contributed				
Fiscal Year Ended	Annual OPEB Cost	Employer OPEB Contributions	Percentage of Annual OPEB Cost Contributed	Net OPEB Obligation (Asset)
6/30/2013	\$ 6,843,865	\$ 2,378,429	34.8%	\$ 24,715,030
6/30/2014	\$ 7,222,728	\$ 2,487,553	34.4%	\$ 29,450,205
6/30/2015	\$ 7,073,763	\$ 2,824,502	39.9%	\$ 33,699,466
6/30/2016	\$ 7,431,850	\$ 3,041,992	40.9%	\$ 38,089,324

Italicized values above are estimates which may change if contributions are other than projected.

Addendum 1: Bickmore Age Rating Methodology

Both accounting standards (e.g. GASB 45) and actuarial standards (e.g. ASOP 6) require that expected retiree claims, not just premiums paid, be reflected in most situations where an actuary is calculating retiree healthcare liabilities. Unfortunately the actuary is often required to perform these calculations without any underlying claims information. In most situations, the information is not available, but even when available, the information may not be credible due to the size of the group being considered.

Actuaries have developed methodologies to approximate healthcare claims from the premiums being paid by the plan sponsor. Any methodology requires adopting certain assumptions and using general studies of healthcare costs as substitutes when there is a lack of credible claims information for the specific plan being reviewed.

Premiums paid by sponsors are often uniform for all employee and retiree ages and genders, with a drop in premiums for those participants who are Medicare-eligible. While the total premiums are expected to pay for the total claims for the insured group, on average, the premiums charged would not be sufficient to pay for the claims of older insureds, and would be expected to exceed the expected claims of younger insureds. An age-rating methodology takes the typically uniform premiums paid by plan sponsors and spreads the total premium dollars to each age and gender intended to better approximate what the insurer might be expecting in actual claims costs at each age and gender.

The process of translating premiums into expected claims by age and gender generally follows the steps below.

1. *Obtain or Develop Relative Medical Claims Costs by Age, Gender, or other categories that are deemed significant.* For example, a claims cost curve might show that, if a 50 year old male has \$1 in claims, then on average a 50 year old female has claims of \$1.25, a 30 year male has claims of \$0.40, and an 8 year old female has claims of \$0.20. The claims cost curve provides such relative costs for each age, gender, or any other significant factor the curve might have been developed to reflect. Table 4 provides the source of information used to develop such a curve and shows sample relative claims costs developed for the plan under consideration.
2. *Obtain a census of participants, their chosen medical coverage, and the premium charged for their coverage.* An attempt is made to find the group of participants that the insurer considered in setting the premiums they charge for coverage. That group includes the participant and any covered spouses and children. When information about dependents is unavailable, assumptions must be made about spouse age and the number and age of children represented in the population. These assumptions are provided in Table 4.
3. *Spread the total premium paid by the group to each covered participant or dependent based on expected claims.* The medical claims cost curve is used to spread the total premium dollars paid by the group to each participant reflecting their age, gender, or other relevant category. After this step, the actuary has a schedule of expected claims costs for each age and gender for the current premium year. It is these claims costs that are projected into the future by medical cost inflation assumptions when valuing expected future retiree claims.

The methodology described above is dependent on the data and methodologies used in whatever study might be used to develop claims cost curves for any given plan sponsor. These methodologies and assumptions can be found in the referenced paper cited as a source in the valuation report.

Addendum 2: Bickmore Mortality Projection Methodology

Actuarial standards of practice (e.g., ASOP 35, Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations, and ASOP 6, Measuring Retiree Group Benefits Obligations) indicate that the actuary should reflect the effect of mortality improvement (i.e., longer life expectancies in the future), both before and after the measurement date. The development of credible mortality improvement rates requires the analysis of large quantities of data over long periods of time. Because it would be extremely difficult for an individual actuary or firm to acquire and process such extensive amounts of data, actuaries typically rely on large studies published periodically by organizations such as the Society of Actuaries or Social Security Administration.

As noted in a recent actuarial study on mortality improvement, key principals in developing a credible mortality improvement model would include the following:

- (1) Short-term mortality improvement rates should be based on recent experience.
- (2) Long-term mortality improvement rates should be based on expert opinion.
- (3) Short-term mortality improvement rates should blend smoothly into the assumed long-term rates over an appropriate transition period.

The **Bickmore Scale 2014** was developed from a blending of data and methodologies found in two published sources: (1) the Society of Actuaries Mortality Improvement Scale MP-2014 Report, published in October 2014 and (2) the demographic assumptions used in the 2015 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds, published July 2015.

Bickmore Scale 2014 is a two-dimensional mortality improvement scale reflecting both age and year of mortality improvement. The underlying base scale is Scale MP-2014 which has two segments – (1) historical improvement rates for the period 1951-2007 and (2) Scale MP-2014's best estimate of future mortality improvement for years 2008 and thereafter. The Bickmore scale uses the same improvement rates as the MP-2014 scale during the historical period 1951-2007. In addition, the Bickmore scale uses Scale MP-2014's best estimate of future mortality improvement for years 2008-2010. The Bickmore scale then transitions from the last used MP-2014 improvement rate in 2010 to the Social Security Administration (SSA) Intermediate Scale. This transition to the SSA Intermediate Scale occurs linearly over the 10 year period 2011-2020. After this transition period, the Bickmore Scale uses the constant mortality improvement rate from the SSA Intermediate Scale from 2020-2038. The SSA's Intermediate Scale has a final step down in 2039 which is reflected in the Bickmore scale for years 2039 and thereafter. Over the ages 100 to 115, the SSA improvement rate is graded to zero.

Scale MP-2014 can be found at the SOA website and the projection scales used in the 2015 Social Security Administrations Trustees Report at the Social Security Administration website.

Glossary

Actuarial Accrued Liability (AAL) – Total dollars required to fund all plan benefits attributable to service rendered as of the valuation date for current plan members and vested prior plan members; see “Actuarial Present Value”

Actuarial Funding Method – A procedure which calculates the actuarial present value of plan benefits and expenses, and allocates these expenses to time periods, typically as a normal cost and an actuarial accrued liability

Actuarial Present Value Projected Benefits (APVPB) – The amount presently required to fund all projected plan benefits in the future, it is determined by discounting the future payments by an appropriate interest rate and the probability of nonpayment.

Aggregate – An actuarial funding method under which the excess of the actuarial present value of projected benefits over the actuarial accrued liability is levelly spread over the earnings or service of the group forward from the valuation date to the assumed exit date, based not on individual characteristics but rather on the characteristics of the group as a whole

Annual Required Contribution (ARC) – The amount the employer would contribute to a defined benefit OPEB plan for a given year, it is the sum of the normal cost and some amortization (typically 30 years) of the unfunded actuarial accrued liability

Annual OPEB Expense – The OPEB expense reported in the Agency’s financial statement, which is comprised of three elements: the ARC, interest on the net OPEB obligation at the beginning of the year and an ARC adjustment.

Attained Age Normal Cost (AANC) – An actuarial funding method where, for each plan member, the excess of the actuarial present value of benefits over the actuarial accrued liability (determined under the unit credit method) is levelly spread over the individual’s projected earnings or service forward from the valuation date to the assumed exit date

CalPERS – Many state governments maintain a public employee retirement system; CalPERS is the California program, covering all eligible state government employees as well as other employees of other governments within California who have elected to join the system

Defined Benefit (DB) – A pension or OPEB plan which defines the monthly income or other benefit which the plan member receives at or after separation from employment

Defined Contribution (DC) – A pension or OPEB plan which establishes an individual account for each member and specifies how contributions to each active member’s account are determined and the terms of distribution of the account after separation from employment

Entry Age Normal Cost (EANC) – An actuarial funding method where, for each individual, the actuarial present value of benefits is levelly spread over the individual’s projected earnings or service from entry age to the last age at which benefits can be paid

Glossary (Continued)

Frozen Attained Age Normal Cost (FAANC) – An actuarial funding method under which the excess of the actuarial present value of projected benefits over the actuarial accrued liability (determined under the unit credit method) is levelly spread over the earnings or service of the group forward from the valuation date to the assumed exit date, based not on individual characteristics but rather on the characteristics of the group as a whole

Frozen Entry Age Normal Cost (FEANC) – An actuarial funding method under which the excess of the actuarial present value of projected benefits over the actuarial accrued liability (determined under the entry age normal cost method) is levelly spread over the earnings or service of the group forward from the valuation date to the assumed exit date, based not on individual characteristics but rather on the characteristics of the group as a whole

Financial Accounting Standards Board (FASB) – A private, not-for-profit organization designated by the Securities and Exchange Commission (SEC) to develop generally accepted accounting principles (GAAP) for U.S. public corporations

Government Accounting Standards Board (GASB) – A private, not-for-profit organization which develops generally accepted accounting principles (GAAP) for U.S. state and local governments; like FASB, it is part of the Financial Accounting Foundation (FAF), which funds each organization and selects the members of each board

Net OPEB Obligation (Asset) - The net OPEB obligation (NOO) represents the accumulated shortfall of OPEB funding since GASB 45 was implemented. If cumulative contributions have exceeded the sum of the prior years' annual OPEB expenses, then a net OPEB asset results.

Non-Industrial Disability (NID) – Unless specifically contracted by the individual Agency, PAM employees are assumed to be subject to only non-industrial disabilities.

Normal Cost – Total dollar value of benefits expected to be earned by plan members in the current year, as assigned by the chosen funding method; also called current service cost

Other Post-Employment Benefits (OPEB) – Post-employment benefits other than pension benefits, most commonly healthcare benefits but also including life insurance if provided separately from a pension plan

Pay-As-You-Go (PAYGO) – Contributions to the plan are made at about the same time and in about the same amount as benefit payments and expenses coming due

PEMHCA – The Public Employees' Medical and Hospital Care Act, established by the California legislature in 1961, provides community-rated medical benefits to participating public employers. Among its extensive regulations are the requirements that medical insurance contributions for retired annuitants and paid for by a contracting Agency be equal to the medical insurance contributions paid for its active employees, and that a contracting Agency file a resolution, adopted by its governing body, with the CalPERS Board establishing any new contribution.

Glossary (Concluded)

Projected Unit Credit (PUC) – An actuarial funding method where, for each individual, the projected plan benefit is allocated by a consistent formula from entry date to assumed exit date

Public Agency Miscellaneous (PAM) – Actuarial assumptions used by CalPERS for most non-safety public employees.

Select and Ultimate – Actuarial assumptions which contemplate rates which differ by year initially (the select period) and then stabilize at a constant long-term rate (the ultimate rate)

Trend – The healthcare cost trend rate, defined as the rate of change in per capita health claims costs over time as a result of factors such as medical inflation, utilization of healthcare services, plan design and technological developments

Unfunded Actuarial Accrued Liability (UAAL) – The excess of the actuarial accrued liability over the actuarial value of plan assets

Unit Credit (UC) -- An actuarial funding method where, for each individual, the unprojected plan benefit is allocated by a consistent formula from entry date to assumed exit date

Vesting – As defined by the plan, requirements which when met make a plan benefit nonforfeitable on separation of service before retirement eligibility