KENSINGTON POLICE PROTECTION AND COMMUNITY SERVICES DISTRICT

Proposal prepared by

Nicolay Consulting Group
in Response to:

Request For Proposal
to Perform Actuarial Valuation

Nicolay Consulting Group
530 Bush St., Suite 500
San Francisco, CA 94108
(415) 512-5300

August 16, 2016

87

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PENSION CONSULTANTS AND ACTUARIES

530 BUSH STREET, SUITE 500
SAN FRANCISCO, CALIFORNIA 94108-3633
TEL: 415-512-5300
FAX: 415-512-5314

August 19, 2016

Chief Kevin Hart
Interim Assistant Director Finance/Chief of Police
Kensington Police Protection and Community Services District
601 Carmen Drive
P.O. Box 248
Camarillo, CA 93011

Dear Chief Hart:

Re: Proposal for Kensington Police Protection and Community Services District Retiree Healthcare Valuation Services

Thank you for inviting us to give you our fees and related information to again perform the required actuarial valuation of the District's Other Post Employment Benefits (OPEB) Program. We had enjoyed providing actuarial and consulting services to the District from 2006 through 2010. This letter describes our qualifications, our approach to completing the valuation, the scope of the work, our fees, and references.

Contents:

About Nicolay Consulting Group

Nicolay Consulting Group (NCG) is a relatively small, low-overhead actuarial firm consisting of five actuaries and thirteen other professionals and support staff. Yet we are a major force in the California GASB post-retirement healthcare actuarial consulting arena, having performed over two hundred actuarial valuations for a wide assortment of public agencies including cities, community services districts, water districts, fire protection districts, housing authorities, school districts, community colleges and other public agencies. In addition to providing the accounting actuarial valuations, we have significant consulting experience on pre-funding of these plans as over 25% of our clients are utilizing PARS, CalPERS or a similar trust vehicle.

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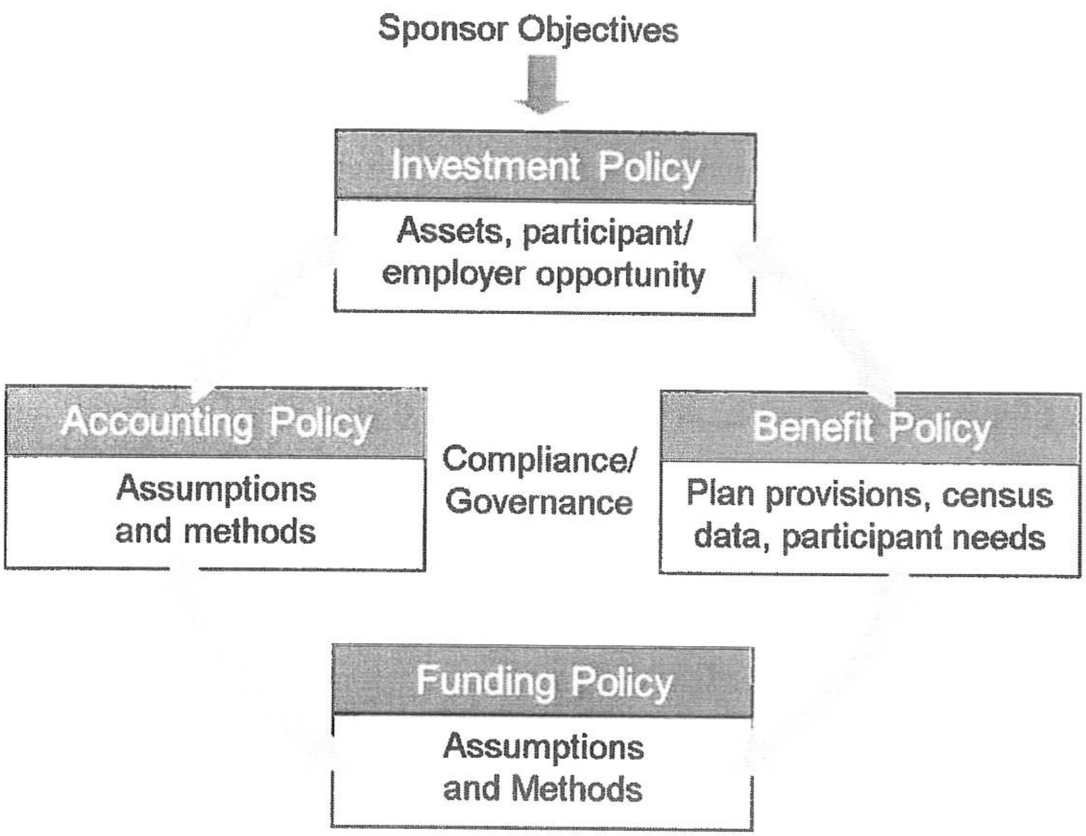
A key differentiator at NCG is that we bring transparency to your valuation results, enabling you to better manage the financial risks associated with your plans as you manage them going forward. One key new component of this strategy is to provide the incremental impact of changes to your valuations. This reconciliation detail is not provided by other actuarial firms, and yet is instrumental in allowing a plan sponsor to see the relative impact of changes to the many assumptions, plan provisions, and data that have occurred since your last valuation. Understanding the impact of these changes each time you perform a valuation helps you see the big picture of what really drives costs in your plan. This enables you to better manage the risks posed by these plans over time. See Table 1-3 in our sample Actuarial Valuation Report (included with this proposal) for an example of this innovation.

At NCG, we strive to understand a Plan Sponsor's Objectives and utilize their Investment, Benefit, Funding and Accounting Policies to manage the risks associated with their plans. Our risk management framework is centered on good governance and is represented by the diagram below:



Retirement Risk Management Framework

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Engagement Team

The firm employs three Fellows of the Society of Actuaries and Conference of Consulting Actuaries, two Associates of the Society of Actuaries and several benefit specialists. Each NCG Senior Actuary is fully qualified to perform actuarial services and has over 20 years of experience. The two Senior Actuaries assigned to this engagement have extensive experience speaking in public meetings and other board of directors and management settings.

Gary Cline is a Senior Actuary and is Nicolay Consulting's new Vice President and Chief Operations Officer for Pension and Healthcare Practices and will manage this engagement. He has more than 25 years of actuarial experience including 20+ years of experience consulting on OPEB plans. He is a member of the American Academy of Actuaries, an Associate of the Society of Actuaries and a Fellow of the Conference of Consulting Actuaries. Gary joined Nicolay Consulting in 2015. He has significant experience managing actuarial valuations governed by the IRS, FASB and GASB regulatory agencies. He is a frequent speaker at industry seminars and public meetings. Gary graduated from the University of California, Davis with a BS degree in Statistics and Computer Science and a BA degree in Economics. He was the 2000 San Francisco Actuarial Club President, and the Actuarial Liaison to the President Clinton Town Hall Meeting on Social Security in San Francisco.

Eddie Lee is a Senior Actuary, a member of the American Academy of Actuaries and a Fellow of the Conference of Consulting Actuaries and an Enrolled Actuary. Prior to joining Nicolay Consulting in 2008, Eddie was a senior retirement consultant with Towers Watson and Mercer Human Resource Consulting. He has been the lead Senior Actuary working in GASB 67/68 implementation for various Hospitals and Cities in California and working with various auditing firms on GASB related matters. Eddie graduated with a BS in computer engineering and BA in computer science from University of Texas, Austin.

Joshua Clement is an Actuarial Analyst who has been with Nicolay Consulting for over five years. During this time, he has worked on more than 100 GASB 45 actuarial valuations for a wide variety of public sector clients. Josh holds a Master's Degree in mathematics from the University of California at Davis.

Project Background

The District obtained a GASB 45 OPEB actuarial valuation effective as of July 1, 2015. The valuation results reflect opinions by the actuary on certain assumptions, specifically (a) TCS did not recognize implicit subsidies, (b) TCS uses flat 4.00% trend rate, and (c) TCS used a 2009 CalPERS mortality table for safety employees with no projection scale. The District would like our input on these assumptions.

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The District owns the actuarial assumptions. What this means is that the District dictates what actuarial assumptions should be used to complete the actuarial valuation. Auditors are responsible for reviewing and approving financial statements and, ultimately, represent the regulator that has the final decision as to the appropriateness of an assumption used in accounting estimates. Given their lack of familiarity with the actuarial valuation process, both the District and the auditor rely on the actuary to present a reasonable set of assumptions.

In the decades to come, auditors will become more familiar with the impact of certain assumptions (e.g., via information presented in a transparent way such as our innovation shown in Table 1-3 of our sample **Actuarial Valuation Report**). When auditors become more familiar with the assumptions and their impact, they will likely take a more prescriptive role in setting these assumptions, especially ones that have a material impact.

At Nicolay, we inform our clients of their options and the potential downstream impacts of their choices when setting assumptions. The downstream impact of the District's choice of assumptions includes financial management, plan design/negotiations, and regulator acceptance. Our sample **Actuarial Valuation Report** shows actuarial assumptions that are representative of ones we would recommend, including (a) reflecting implicit subsidies, (b) initial pre-65 trend rates of 8% grading down to 5%, and (c) the 2013 CalPERS mortality table with projected mortality improvement using scale MP-2014.

Given the complexities of implicit subsidies, the sample **Companion Presentation** (included with this proposal) was created and presented to our clients for free. It is intended to focus in on the implicit subsidies, issues regarding their funding, and the downstream effects of regulatory changes due to GASB 75.

During the 2016-17 fiscal year the District will be required to adopt GASB 74 (for Plans) and during the 2017-18 fiscal year the District will be required to adopt GASB 75 (for employers). The District's OPEB liability balance sheet and income statement footprint will change as a result of these new standards. A key focus of the Nicolay strategy is keep transition fees low whilst satisfying District and regulator needs.

An advantage of hiring our Firm is that we have the historical data and experience to help with the transition to GASB 74 and 75.

"When it comes to GASB 75, I know I have the right man for the job"

-Mr. Thomas Fil, Finance Director, City of Belmont

If we complete a July 1, 2016 valuation, the District is required to follow Governmental Accounting Standards Board **Statement No. 45**, *Accounting and Financial Reporting by*

Employers for Postemployment Benefits Other Than Pensions. This statement requires governmental entities to account for postemployment benefits on an accrual basis, which incorporates the Actuarial Standards of Practice (ASOP). As the District is aware, a key change is a revision to the ASOPs that require us to base the District's obligations under the retiree medical plan on age-graded premiums. This is described in more detail in the next section.

We describe our process for managing a GASB 45 engagement below.

Scope of Services

Our actuarial valuation services include production of a biennial report and the related consulting, including:

- Calculation of the postretirement medical benefit liability based on the present value of future benefits to be provided to current and future retirees, broken down by bargaining group if needed.
- Reconciliation of results with the prior valuation showing separately the impact of key changes, such as material assumption changes, data experience, and plan or regulatory amendments.
- A discussion of key actuarial assumptions to be used in the valuation.
- Projections of the post-employment medical benefit payments for the next ten years.
- Calculation of the Annual Required Contribution with a breakdown of the annual normal cost and amortization of unfunded actuarial accrued liability.
- Provide GASB 43 results, as requested by your Trust auditor.
- Provide a comprehensive report and executive summary discussing assumptions, data utilized, and results. The executive summary should be clear and non-technical. The report should provide sufficient information for staff to implement GASB 45 reporting on the District's Comprehensive Annual Financial Statement, including note disclosure and required supplemental information.
- Attend at least one public meeting to present the study results to the District Council, if necessary.

ASOP 6 Implicit Subisidies: GASB 45 calculations need to meet the requirements of recently issued Actuarial Standard of Practice 6 (ASOP 6). ASOP 6 has made several changes intended to provide increased transparency to how actuaries determine costs. By far, the biggest change is the elimination of reliance on flat rate medical premiums as basis for actual cost of plans that are community-rated (such as CalPERS plans). Instead of flat-rate premiums, actuaries have to age-adjust the costs to reflect the fact that older people tend to cost more than younger ones. CalPERS is providing actuaries with data that can be used to age adjust premiums for GASB 45 valuations. Nicolay Consulting has already taken this data and developed a set of curves that can be used in the District's valuations.

New in 2017: Beginning with the District's July 1, 2017 valuation, the District will be required to adopt GASB 75, which significantly changes how the Net OPEB Obligation (NOO) will be calculated and presented. For example, a key change on how the NOO is calculated includes a new method for determining the discount rate that may significantly increase reported liabilities by lowering the allowable discount rate. In addition, several new schedules will need to be created that reconcile results of the valuations from one year to the next, including tables showing separate tracking and reporting of liability changes due to specific items such as plan amendments and assumption changes, and so on.

For the July 1, 2017 valuation and beyond, note that GASB has not yet published the implementation guide for GASB 75. Additional work that must be performed as a result of additional regulations or guidance that is not yet published, or additional work such as experience studies, financial projections, plan design discussion, and the like can be provided by Nicolay Consulting. *The July 1, 2017 valuation is not currently considered in the scope of this project, however, we can prepare a fee estimate if requested.*

Our Approach

If we are selected, the key steps of the engagement will be:

1. Review all plan design, eligibility rules and census information necessary to perform the project.
2. Perform a detailed analysis of the demographic data.
3. After discussions with the District, select assumptions to be used in the valuation, most importantly the discount rate and the expected rate of increase in future healthcare costs.
4. Prepare computer files required to complete the valuations.
5. Perform the actuarial valuation and perform internal review of the results.
6. Prepare a detailed actuarial report including:
   - A summary of the postemployment benefits provided by the District;
   - The estimated present value of the benefits attributable to past service rendered by current and future retirees; a reconciliation of the change in NOO with the prior valuation due to assumption changes, method changes, plan amendments, and demographic experience;

- Information showing the impact of GASB 45 accounting rules on the District's financial statement.
- An exhibit that contains the estimated postemployment pay-as-you-go costs for the next ten years for current and future retirees; and age/service distributions of active employees and retirees broken down by implicit subsidy amounts prescribed by ASOP 6;

7. Conference calls to discuss the results in actuarial reports or discussing strategic issues with the financial managers and/or other key individuals at the District. Strategic issues include covering the implication of changes required under ASOP 6 and GASB 75 (preliminary) on the District's current funding policy.

If requested, we will be available to present the valuation at a meeting with District representatives and/or to assist with the preparation of year-end financial statement and financial statement disclosure information.

Nicolay Consulting will request the same data as used in our prior actuarial valuations for the District. We are not proposing any changes to the data items or collection process required by Nicolay Consulting to complete future work.

Fees

Our fees for the engagement are determined by the level of staff assigned and the estimated time required to complete the engagement. We have based our fees below on the time and staffing requirements of recent, similar projects. If the requirements of the engagement do not deviate significantly from the approach outlined above, **we agree that our all-inclusive fixed-fee for completing the engagement will be $4,500**. This amount includes $700 for the new work required under recent ASOP 6.

The above fee assumes that the plan has not materially changed since our prior valuation. It is based on the assumption that the District will provide clean demographic data in an Excel file, and that our data analysts will only be required to spend a minimal amount of time verifying that the data is complete and accurate. Our fees are based on regulations published as of the date of this proposal. Additional work caused by publication of new regulations or guidance to existing regulations is considered out-of-scope. In addition, additional work requested by the District such as experience studies, financial projections, plan design consulting and the like is also considered out-of-scope. If significant additional out-of-scope work is required, we will communicate a cost for the additional work and obtain authorization from the District before beginning the work.

Our hourly billing rates for out-of-scope work are the same as those used to develop the fixed fees for in-scope work and are as follows:

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Vice President/Consultant	$250 - $275
Senior Actuary	$200 - $250
Actuarial Analyst	$130 - $175
Administrative Support	$100 - $125

Timing and Fees

We anticipate completion of a draft report within approximately six to eight weeks after we have received all required information. We can accelerate the process in order to meet an earlier deadline (e.g., late October), assuming the District supplies all required information timely.

References

We are happy to provide the following three references for a small sample of the California cities we now serve as actuary.

City of Belmont	City of Marina	City of El Monte
Mr. Thomas Fil Finance Director 1 Twin Pines Lane Belmont, CA 94002 (650) 595-7435 tfil@belmont.gov	Ms. Lauren Lai Finance Director 211 Hillcrest Avenue Marina, CA 93933 (831) 884-1221 llai@ci.marina.ca.us	Ms. Ernestine Jones Finance Director 11333 Valley Boulevard El Monte, CA 91731 (626) 580-2026 ejones@elmonteca.gov

Again, we thank the District for the opportunity to again provide actuarial services. Please let me know if there are any questions about our proposal, either via email or phone at (800) 998-7675 x231.

Sincerely,

Gary E. Cline

Gary E. Cline, ASA, FCA, EA, MAAA
Vice President and Chief Operations Officer

The City of XYZ

Actuarial Valuation of Postretirement Medical Benefits

Valuation Date: July 1, 2015

Nicolay Consulting Group

96

March 17, 2016

Administrative Services Manager
The City of XYZ

Dear Ms. Smith:

Re: Actuarial Valuation of Postretirement Medical Benefits

The City of XYZ ("the City") has retained Nicolay Consulting Group to complete this valuation of the City's postemployment medical program as of July 1, 2015.

The purpose of this valuation is to determine the value of the expected postretirement benefits for current and future retirees and the Actuarial Accrued Liability and Annual Required Contribution recognized under Government Accounting Standards Board Statement No. 45 (GASB 45) requirements for the fiscal year ending June 30, 2016. The amounts reported herein are not necessarily appropriate for use for a different fiscal year without adjustment.

In preparing this report we relied on employee data and plan information provided by the the potential cost of the retiree medical program and for the plan sponsor's financial statements. Use of this report for any other purpose may not be appropriate and may result in mistaken conclusions due to failure to understand applicable assumptions, methodologies, or inapplicability of the report for that purpose. No one may make any representations or City. The results of the valuation are dependent on the accuracy of the data and other information provided. These data are not audited by Nicolay Consulting Group, although they were reviewed for reasonableness. Calculations presented in this valuation do not reflect any other postemployment benefits than those described in this report.

The financial projections presented in this report are intended for internal use in evaluating the potential cost of the retiree medical program and for the plan sponsor's financial statements. Use of this report for any other purpose may not be appropriate and may result in mistaken conclusions due to failure to understand applicable assumptions, methodologies, or inapplicability of the report for that purpose. No one may make any representations or warranties based on any statements or conclusions contained in this report without the written consent of Nicolay Consulting Group.

97

On the basis of the data provided, this report has been prepared in accordance with generally accepted actuarial principles and methods. The assumptions for termination, retirement, mortality and health care claims morbidity rates are those used in the most recent California PERS Public Agency retirement plan valuations. Mortality improvement was reflected based on the recent tables published by the Society of Actuaries. Morbidity rates for age-adjusting claims rates are based on the most recent tables published by CalPERS. Certain other assumptions were selected specifically for this valuation, and in many cases, including assumed health care trend, reflect changes from that used in the prior valuation. For all other assumptions, we believe they are reasonable for the measurement of the obligation involved. It should be recognized, however, that there can be significant differences between actual experience and the assumptions. Moreover, other sets of reasonable assumptions can yield materially lesser or greater results.

GASB stipulates that if the plan is prefunded, the discount rate should be the expected long-term yield on investments to be used to pay plan benefits. The City is considering participating in the Public Agency Retirement Services Trust Fund (PARS).

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: retiree group benefits program experience differing from that anticipated by the assumptions; changes in assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and changes in retiree group benefits program provisions or applicable law. Retiree group benefits models necessarily rely on the use of approximations and estimates, and are sensitive to changes in these approximations and estimates. Small variations in these approximations and estimates may lead to significant changes in actuarial measurements. Because of limited scope, we have not performed analysis of the potential range of such future differences.

Based on the foregoing, the cost results and actuarial exhibits presented in this report were determined on a consistent and objective basis in accordance with applicable Actuarial Standards of Practice and generally accepted actuarial procedures. They fully and fairly disclose the actuarial position of the Plan based on the plan provision, employee and plan cost data submitted.

The passage of healthcare reform in March 2010 ushered in a number of changes that might be expected to impact postretirement medical plans over time. We analyzed the effects of these changes for the City and summarized the results in this report.

On December 18, 2015, the President signed the Omnibus Appropriations Act of 2016. There are significant provisions in this law relating to the Cadillac tax, the annual fee on health insurers, and the medical device tax. This valuation does not reflect this new legislation.

This report represents a statement of actuarial opinion by the undersigned actuary, who is a member of the American Academy of Actuaries (AAA) and is qualified to issue that opinion. Questions about the report should be directed to Doug Tokerud or Gary Cline at (415) 512-5300 x231.

Sincerely,

Gary E. Cline, A.S.A., M.A.A.A

THE CITY OF XYZ

Actuarial Valuation of
Postretirement Medical Benefits

Valuation Date: July 1, 2015

TABLE OF CONTENTS

100

SECTION I

Summary of Valuation Results

Table 1-1

Summary of Valuation Results
Assuming a Discount Rate of 4.00%

	7/1/2015	7/1/2012
Present Value of Future Benefits		
Active	$1,959,511	$1,176,714
Retiree	$502,289	$280,281
Total	$2,461,800	$1,456,995
Actuarial Accrued Liability		
Active	$1,314,407	$805,138
Retiree	$502,289	$280,281
Total	$1,816,696	$1,085,419
Actuarial Value of Assets	$318,424	$0
Unfunded Actuarial Accrued Liability	$1,498,272	$1,085,419
Expected Employer Share of Current Year Plan Cost (Pay-As-You-Go)	$16,354*	$11,934
Annual Required Contribution	$145,382	$92,815
Number of Plan Participants		
Actives	32	35
Retirees & Surviving Spouses	10	9
Total	42	44
Discount rate	4.00%	4.00%
Assumed Increase in Per-Capita Claim Costs		
Initial Rate		
Pre-65	8.0%	6.7%
Post-65	5.5%	6.7%
Ultimate Rate	5.0%	5.0%
Year Ultimate Rate Reached	2029	2021

*Excludes implicit subsidy related to retiree premiums (since unadjusted premiums represent the true cash cost) and the implied subsidy related to active employee premiums (but the Agency can elect to recognize this as a retiree cash cost under GASB 45).

101

Table 1-2

Summary of Valuation Results
Assuming a Discount Rate of 7.00%

	7/1/2015	7/1/2012
Present Value of Future Benefits		
Active	$1,062,874	$617,742
Retiree	$349,993	$199,035
Total	$1,412,867	$816,777
Actuarial Accrued Liability		
Active	$805,612	$468,590
Retiree	$349,993	$199,035
Total	$1,155,605	$667,625
Actuarial Value of Assets	$318,424	$0
Unfunded Actuarial Accrued Liability	$837,181	$667,625
Expected Employer Share of Current Year Plan Cost (Pay-As-You-Go)	$16,354*	$11,934
Annual Required Contribution	$92,062	$63,924
Number of Plan Participants		
Actives	32	35
Retirees & Surviving Spouses	10	9
Total	42	44
Discount rate	7.00%	7.00%
Assumed Increase in Per-Capita Claim Costs		
Initial Rate		
Pre-65	8.0%	6.7%
Post-65	5.5%	6.7%
Ultimate Rate	5.0%	5.0%
Year Ultimate Rate Reached	2029	2021

*Excludes implicit subsidy related to retiree premiums (since unadjusted premiums represent the true cash cost) and the implied subsidy related to active employee premiums (but the Agency can elect to recognize this as a retiree cash cost under GASB 45).

The City has been using a 4% discount rate for financial reporting. On a 4% discount rate basis, the Actuarial Accrued Liability (AAL) has increased $731,277 from $1,085,419 as of July 1, 2012 to $1,816,696 as of July 1, 2015. A breakdown of the sources of this change in liability is shown in Table 1-3.

Table 1-3

Sources of Liability Change (millions)

	Amount	**Percent**
Expected Benefits Earned, Benefit Payments and Interest	0.24	22%
Recognition of an Age-Related Implicit Subsidy	0.85	78%
Revised CalPERS Assumed Mortality Rates	0.11	10%
Revised Marriage Assumptions	0.01	1%
Revised CalPERS Assumed Retirement Rates	(0.03)	(3%)
Mid-year Decrement Assumption	(0.05)	(4%)
Actual 2015 Minimum Contribution Rates	(0.08)	(7%)
Revised Minimum Contribution Assumed Trend Rates	(0.16)	(15%)
Actual Demographic and Other Experience	(0.16)	(14%)
Total Liability Change	0.73*	67%*

*Individual amounts may not add to total due to rounding.

Expected Benefits Earned, Benefit Payments and Interest: The liabilities were expected to increase 22% from the prior actuarial valuation due to net effect of active employees continuing to earn benefits, retirees receiving benefit payments, and interest.

New Pre and Post-Medicare Age-Related Implicit Subsidy: Since healthcare costs generally increase with age, an implied subsidy exists. This subsidy is caused by the difference between the flat-rate premiums participants are charged and the assumed average age-related claims costs.

Effective with measurement dates on or after March 31, 2015, Actuarial Standard of Practice No. 6 (ASOP 6) requires actuarial valuations to reflect the impact of aging on claims for "community-rated" plans. For the City, this means we were required to revise the pre and post-Medicare plan liabilities to base them on a claims cost curve as opposed to premiums. The resulting implicit subsidy identified from this assumption increased liabilities approximately $850,000, or roughly 78%. This subsidy is positive (an increase in the liability), which reflects the fact that the flat-rate premiums are lower than the assumed age-adjusted cost of coverage (e.g., for the pre-Medicare plans the younger active employees are subsidizing the older retired participants).

Revised CalPERS Assumed Mortality Rates: We updated the valuation assumed mortality rates to reflect those rates most recently published by CalPERS, and the projection scales most recently published by the Society of Actuaries, which drove a 10% increase in liabilities. This increase is primarily caused by an observed improvement in longevity for the overall population in the SOA study.

Revised Marriage Assumptions: For current active employees we revised the spouse coverage assumption from assuming all currently married participants would cover their spouses to 60% of all participants would cover a spouse. The result of these changes was a 1% increase in liabilities.

Revised CalPERS Assumed Retirement Rates: We updated the valuation assumed retirement rates to reflect those rates most recently published by CalPERS, which drove a 3% decrease in liabilities. This decrease is caused by an observed delay in retirements for the overall CalPERS population.

Middle-of-Year Active Decrements: We have changed from assuming that decrements for retirees (i.e. deaths) will occur at the beginning of the year to assuming that they will occur in the middle of the year. This change is consistent with uniform distribution of decrements throughout the year. This change has resulted in a 4% decrease in liabilities.

Actual 2015 Minimum Contribution Rates: The increase in premiums from 2012 to 2015 was lower than assumed, resulting in a 7% decrease in liabilities.

Revised Minimum Contribution Assumed Trend Rates: The PEMHCA Minimum Contribution in the July 1, 2012 valuation was assumed to increase at 5%. For the July 1, 2015 valuation we revised this assumption to 4%, resulting in a 15% decrease in liabilities.

Actual Demographic and Other Experience: This is a catch-all category that refers to actual demographic experience (e.g., withdrawal, retirement, death, disability, marriage, etc.) and other experience (e.g., plan participation, plan selection, etc.) other than expected. Actual demographic experience is driven by the participant census data we collect from the City for our valuations. Demographic experience since the July 1, 2012 valuation resulted in an overall 14% decrease in the liability. This is mainly because several actives retired without participating.

SECTION II
Valuation Results

Tables 2-1 and 2-2 present the Present Value of Future Benefits (i.e., liability based on all past and future service) and the Actuarial Accrued Liability (i.e., liability based on past service only) broken down by participant status and benefit type. Table 2-1 assumes a discount rate of 4%; Table 2-2 assumes a discount rate of 7%.

The implicit subsidy is the obligation associated with the difference between premiums and the assumed true per capita healthcare costs for CalPERS participants.

Table 2-1

Present Value of Future Postemployment Medical Benefits
As of July 1, 2015
Entry Age Normal Actuarial Cost Method
Discount Rate: 4.00%

	City Contribution	Implicit Subsidy	Total
Present Value of Future Benefits			
Actives	$979,219	$980,292	$1,959,511
Retirees	$309,294	$192,995	$502,289
Total	$1,288,513	$1,173,287	$2,461,800
Actuarial Accrued Liability (AAL)			
Actives	$660,051	$654,356	$1,314,407
Retirees	$309,294	$192,995	$502,289
Total	$969,345	$847,351	$1,816,696

This valuation was completed using the Entry Age Normal Actuarial Cost method and assumes a closed 30-year amortization of the Unfunded Actuarial Accrued Liability using the level percentage of payroll amortization method.

Table 2-2

Present Value of Future Postemployment Medical Benefits
As of July 1, 2015
Entry Age Normal Actuarial Cost Method
Discount Rate: 7.00%

	City Contribution	Implicit Subsidy	Total
Present Value of Future Benefits			
Actives	$521,219	$541,655	$1,062,874
Retirees	$217,124	$132,869	$349,993
Total	$738,343	$674,524	$1,412,867
Actuarial Accrued Liability (AAL)			
Actives	$396,297	$409,315	$805,612
Retirees	$217,124	$132,869	$349,993
Total	$613,421	$542,184	$1,155,605

Projected Expected Benefit Payments

Table 2-3 contains a 25-year projection of the City pay-as-you-go cost to provide postemployment medical benefits and the expected benefit payments.

Table 2-2

Projected Future Annual Expected Benefit Payments

	City Contribution*	Implicit Subsidy	Total
2015/16	$16,354	$7,837	$24,191
2016/17	$19,587	$17,106	$36,693
2017/18	$22,728	$25,710	$48,438
2018/19	$25,811	$34,835	$60,646
2019/20	$29,089	$42,026	$71,115
2020/21	$32,339	$54,544	$86,883
2021/22	$35,610	$52,184	$87,794
2022/23	$39,581	$55,338	$94,919
2023/24	$42,916	$45,993	$88,909
2024/25	$46,073	$33,360	$79,433
2025/26	$49,287	$28,162	$77,449
2026/27	$52,883	$38,832	$91,715
2027/28	$55,880	$54,100	$109,980
2028/29	$58,847	$68,376	$127,223
2029/30	$62,188	$71,240	$133,428
2030/31	$65,281	$72,321	$137,602
2031/32	$68,116	$56,219	$124,335
2032/33	$70,801	$44,791	$115,592
2033/34	$73,390	$37,695	$111,085
2034/35	$75,750	$34,602	$110,352
2035/36	$77,854	$41,970	$119,824
2036/37	$79,818	$51,735	$131,553
2037/38	$81,749	$64,826	$146,575
2038/39	$83,410	$72,155	$155,565
2039/40	$84,947	$62,262	$147,209

*This is actual pay-as-you-go cost, which excludes the implicit subsidy related to retiree premiums (since unadjusted premiums represent the true cash cost) and the implied subsidy related to active employee premiums (but the Agency can elect to recognize this as a retiree cash cost under GASB 45).

Health Benefit Costs Under GASB 45

The Annual Required Contribution (ARC) consists of the Normal Cost plus the current period amortization of the Unfunded Actuarial Accrued Liability.

Normal Cost is the portion of the actuarial present value of future benefits that is allocated to a particular year. Another interpretation is that the Normal Cost is the present value of future benefits that are "earned" by employees for service rendered during the current year. This valuation is based on the Entry Age Normal actuarial cost method and an attribution period that runs from date of hire until the expected retirement date.

Employers are allowed to amortize the Unfunded Actuarial Accrued Liability (UAAL) over a period not to exceed 30 years. The following Tables are based on amortization of the UAAL over a closed 30-year period using the level percentage of payroll amortization method. The City of XYZ adopted GASB 45 in the 2009/10 fiscal year. The remaining amortization period is 24 years.

Table 2-4

Fiscal Year 2015/16 OPEB Annual Required Contribution
Assuming a Discount Rate of 4.00%

	2015	**2012**
Discount rate	4.00%	4.00%
Actuarial Accrued Liability	$1,816,696	$1,085,419
Actuarial Value of Assets	$318,424	$0
Unfunded Actuarial Accrued Liability	$1,498,272	$1,085,419
Remaining Amortization Period	24 years	27 years
Level Percent of Pay Amortization Factor (based on a 4.00% discount rate)	21.261	23.668
Annual Level Percent of Pay Amortization of Unfunded AAL	$70,472	$45,861
Normal Cost (based on the Entry Age Normal Method)	$74,910	$46,954
Annual Required Contribution	$145,382	$92,815
Interest on Net OPEB Obligation	$7,773	$9,722
Adjustment to ARC	($9,141)	($10,270)
Annual OPEB Cost	$144,015	$92,267

Table 2-5

Fiscal Year 2015/16 OPEB Annual Required Contribution
Assuming a Discount Rate of 7.00%

	2015	2012
Discount rate	7.00%	7.00%
Actuarial Accrued Liability	$1,155,605	$667,625
Actuarial Value of Assets	$318,424	$0
Unfunded Actuarial Accrued Liability	$837,181	$667,625
Remaining Amortization Period	24 years	27 years
Level Percent of Pay Amortization Factor (based on a 7.00% discount rate)	15.340	16.489
Annual Level Percent of Pay Amortization of Unfunded AAL	$54,577	$40,489
Normal Cost (based on the Entry Age Normal Method)	$37,485	$23,435
Annual Required Contribution	$92,062	$63,924
Interest on Net OPEB Obligation	$13,603	$17,014
Adjustment to ARC	($12,669)	($14,741)
Annual OPEB Cost	$92,996	$66,197

Table 2-6 presents a two-year projection under the assumption **that the City contributes $72,000 in both years,** the discount rate remains 4.00% and the Normal Cost component of the ARC increases by 4.0% per year throughout the two-year period. We assumed mid-year benefit withdrawals from the Trust.

Table 2-6

The City of XYZ

Two-year Projection of Annual OPEB Cost and Net OPEB Obligation
Based on a 4.00% discount rate the Entry Age Normal Actuarial Cost Method and assuming contributions of $72,000 in both years

	7/1/15 to 6/30/16	7/1/16 to 6/30/17
Actuarial Accrued Liability (AAL)	**$1,816,696**	**$1,947,596**
Actuarial Value of Assets at beginning of year	**$318,424**	**$404,587**
Unfunded Actuarial Accrued Liability (UAAL)	**$1,498,272**	**$1,543,009**
Remaining Amortization Period	**24**	**23**
Normal Cost	$74,910	$77,906
Amortization of UAAL	$70,472	$75,466
Annual Required Contribution (ARC)	$145,382	$153,372
Annual Required Contribution (ARC)	$145,382	$153,372
Interest on net OPEB Obligation	$7,773	$10,000
Adjustment to ARC	($9,141)	($12,227)
Annual OPEB Cost	**$144,015**	**$151,145**
Contribution	($88,354)	($91,587)
Increase in net OPEB Obligation	$55,661	$59,558
Net OPEB Obligation - Beginning of Year	**$194,335**	**$249,996**
Net OPEB Obligation - End of Year	**$249,996**	**$309,553**
Projected pay-as-you-go Cost*	$16,354	$19,587
Expected Benefit Payments	$24,191	$36,693

* Excludes the implicit subsidy related to retiree premiums and to active employee premiums. Expected Benefit Payments includes both the retiree, but not active employee subsidies.

Note: A substantial change in GASB accounting rules is scheduled for Fiscal Year 2017/18 and later years and we have not reflected the change in GASB rules in the above projection results.

Amounts that can be counted as contributions towards the ARC include:

- Contributions made to the PARS Trust
- Employer paid premium payments for retirees made directly to providers net of any reimbursements from the PARS Trust
- Implicit rate subsidy payments related to premium payments for active employees, if elected

Table 2-7 presents a two-year projection under the assumption **that the City contributes $72,000 in both years,** the Fund earns 7.00% per year, the discount rate remains 7.00% and the Normal Cost component of the ARC increases by 4.0% per year throughout the two-year period. We assumed mid-year benefit withdrawals from the Trust.

Table 2-7

The City of XYZ

Two-year Projection of Annual OPEB Cost and Net OPEB Obligation
Based on a 7.00% discount rate the Entry Age Normal Actuarial Cost Method and assuming contributions of $72,000 in both years

	7/1/15 to 6/30/16	7/1/16 to 6/30/17
Actuarial Accrued Liability (AAL)	**$1,155,605**	**$1,257,020**
Actuarial Value of Assets at beginning of year	**$318,424**	**$415,191**
Unfunded Actuarial Accrued Liability (UAAL)	**$837,181**	**$841,829**
Remaining Amortization Period	**24**	**23**
Normal Cost	$37,485	$38,984
Amortization of UAAL	$54,577	$56,392
Annual Required Contribution (ARC)	$92,062	$95,376
Annual Required Contribution (ARC)	$92,062	$95,376
Interest on net OPEB Obligation	$13,603	$13,928
Adjustment to ARC	($12,669)	($13,329)
Annual OPEB Cost	**$92,996**	**$95,975**
Contribution	($88,354)	($91,587)
Increase in net OPEB Obligation	$4,642	$4,388
Net OPEB Obligation - Beginning of Year	**$194,335**	**$198,977**
Net OPEB Obligation - End of Year	**$198,977**	**$203,366**
Projected pay-as-you-go Cost*	$16,354	$19,587
Expected Benefit Payments	$24,191	$36,693

* Excludes the implicit subsidy related to retiree premiums and to active employee premiums. Expected Benefit Payments includes the retiree, but not active employee subsidies.

Note: A substantial change in GASB accounting rules is scheduled for Fiscal Year 2017/18 and later years and we have not reflected the change in GASB rules in the above projection results.

Again, amounts that can be counted as contributions towards the ARC include:

- Contributions made to the PARS Trust
- Employer paid premium payments for retirees made directly to providers net of any reimbursements from the PARS Trust
- Implicit rate subsidy payments related to premium payments for active employees, if elected

11

SECTION III

Plan Description and Demographic Summary

Employees hired prior to January 1, 2013 are eligible for postretirement medical benefits upon reaching age 50 with a minimum of 5 years of service.

Employees on or after to January 1, 2013 are eligible for postretirement medical benefits upon reaching age 52 with a minimum of 5 years of service.

The benefit is the minimum amount provided under Government Code Section 22825 of the Public Employees Medical and Hospital Care Act (PEMCHA). The minimum PEMCHA benefit is being pro-rated over the 20-year period starting from coverage under CalPERS. The amount being paid in 2015 is 95% of $122, or $115.90 per month. In 2016 and after, the percentage will be 100%. PEMCHA minimum benefits are shown in Table 3-1.

Table 3-1

100% of CalPERS Minimum Monthly Contribution

Calendar Year	Amount
2015	$122.00
2016	$125.00

City-provided benefits continue for the life of the retiree and surviving spouse.

Retirees pay the full cost of coverage in excess of the amounts shown above.

2015 and 2016 CalPERS Premium Rates

2015 and 2016 CalPERS premium rates for the "Other Northern California" counties are shown in Table 3-2. These are used to calculate the implicit subsidy.

Table 3-2
Monthly Premium Rates

Pre-Medicare Rates

Plan	2015 EE	2015 Couple	2015 Family	2016 EE	2016 Couple	2016 Family
Anthem EPO	656.08	1,312.16	1,705.81	795.57	1,591.14	2,068.48
Blue Shield Access+	804.34	1,608.68	2,091.28	879.96	1,759.92	2,287.90
PERS Choice	656.08	1,312.16	1,705.81	795.57	1,591.14	2,068.48
PERS Select	646.35	1,292.70	1,680.51	727.47	1,454.94	1,891.42
PERSCare	725.54	1,451.08	1,886.40	886.15	1,772.30	2,303.99

Post-Medicare Rates

Plan	2015 EE	2015 Couple	2015 Family	2016 EE	2016 Couple	2016 Family
Anthem Blue Cross*	445.38	890.76	1,336.14	n/a	n/a	n/a
Blue Shield Access+	352.63	705.26	1,057.89	n/a	n/a	n/a
PERS Choice	339.47	678.94	1,018.41	366.38	732.76	1,099.14
PERS Select	339.47	678.94	1,018.41	366.38	732.76	1,099.14
PERSCare	368.76	737.52	1,106.28	408.04	816.08	1,224.12

* Assume will switch to PERSCare in 2016

Demographic Data

The City of XYZ provided demographic information as of June 2015. The data is summarized in Tables 3-3 and 3-4.

Table 3-3

Age and Service Table of Active Employees

As of July 2015

Years of Service

Age	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 +	Total
20-24	0	0	0	0	0	0	0
25-29	1	0	0	0	0	0	1
30-34	1	0	0	0	0	0	1
35-39	0	0	0	0	0	0	0
40-44	2	2	0	0	0	0	4
45-49	1	1	0	0	4	1	7
50-54	2	0	0	0	1	0	3
55-59	0	2	0	0	1	5	8
60-64	1	2	0	0	0	2	5
65+	0	1	0	0	2	0	3
Total	8	8	0	0	8	8	32

Table 3-4

Age Table of Retirees,and Surviving Spouses who participate in the Postemployment Healthcare Program

As of July 2015

Age	Total
45-49	0
50-54	0
55-59	2
60-64	0
65-69	3
70-74	2
75-79	2
80-84	1
85-89	0
90+	0
Total	10

SECTION IV
Actuarial Method and Assumptions

In order to project the The City of XYZ liabilities into the future, a number of economic, demographic, and baseline cost assumptions are necessary. For this valuation, we have used assumptions consistent with those specified in the 2014 "OPEB Assumption Model" released by the CalPERS Health Benefits Committee.

Actuarial Cost Method
The valuation was completed using the Entry Age Normal Method. An Actuarial Cost Method is a procedure for allocating the actuarial present value of benefits and expenses and for developing an actuarially equivalent allocation of such value to time periods, usually in the form of a Normal Cost and an Actuarial Accrued Liability. Under the Entry Age Normal cost method the projected benefits of each individual included in the valuation are separately calculated and allocated to each year of service by a consistent formula. The portion of the present value of future benefits allocated to a valuation year is the Normal Cost. The portion allocated to all prior years is the Actuarial Accrued Liability.

Valuation Date
The valuation date is July 1, 2015. This date is the starting point from which current health premium costs are increased according to the assumed annual rates of health care cost trend. The City census is projected from the valuation date to the date of the final benefit payment for each employee and retiree on the census. After calculating future costs for the projected retiree and dependent population, all liabilities are discounted back to the valuation date to obtain the present value of future costs.

Amortization Methodology
This valuation is based on a closed, level dollar, 30-year amortization of the Unfunded Actuarial Accrued Liability. Amortization commenced in the 2009/10 fiscal year.

Actuarial Value of Assets

Actuarial Value of Assets is assumed to be equal to market value of assets as reported by the Public Agency Retirement Services Trust Fund as of the valuation date.

Economic Assumptions

Discount Rate

A discount rate is required to calculate the present value of future benefit payments which are used to determine financial statement expense. This valuation is based on a 4% discount rate and a 7% discount rate. The 4% rate is based on what the City can reasonably expect to earn on its long-term investments, and the City has been funding on that basis. However, the City is considering contributing to the PARS Trust, which earns 7% on its assets.

Health Care Trend

The PEMHCA Minimum benefit is assumed to increase at 4% per year.

Based on our experience with postemployment health plans, we selected the following annual medical trend rates for use in this valuation. We assumed that CalPERS premium rates, which we used to calculate the implicit subsidy, will increase at the rates shown in Table 4-1.

Table 4-1

Annual Health Care Cost Trend Rate Assumption

Year Beginning	Increase in CalPERS Regional Premium Rates Pre-65	Post-65
January 1, 2017	8.00%	5.50%
January 1, 2018	7.75%	5.25%
January 1, 2019	7.50%	5.00%
January 1, 2020	7.25%	5.00%
January 1, 2021	7.00%	5.00%
January 1, 2022	6.75%	5.00%
January 1, 2023	6.50%	5.00%
January 1, 2024	6.25%	5.00%
January 1, 2025	6.00%	5.00%
January 1, 2026	5.75%	5.00%
January 1, 2027	5.50%	5.00%
January 1, 2028	5.25%	5.00%
January 1, 2029 and later	5.00%	5.00%

Administrative Expenses

Administrative Expenses were not included in this valuation.

Plan Assets

As of June 30, 2015 the City's CERBT balance was $318,424.

Per Capita Health Plan Costs

Due to the small size of the retiree population, the per capita claims were developed using the age adjusted premiums for the current CalPERS population. These premiums are assumed to include administrative costs. The premiums for CalPERS are based on community-rated claims experience by region for all CalPERS member agencies.

Age-Adjusted Costs

The gender distinct age morbidity factors for pre- and post-Medicare morbidity were developed by CalPERS based on 2013 data. CalPERS developed these tables for use in complying with ASOP 6. Table 4-2 illustrates the age-graded premiums based on the premiums and the male and female morbidity factors that were provided by CalPERS for HMO and PPO plans.

Table 4-2

Age-Adjusted Costs at Selected Ages

	HMO Rates		**PPO Rates**	
Age	Male	Female	Male	Female
50	8,557	9,652	7,206	8,724
55	11,466	11,072	9,717	9,989
60	14,193	12,122	12,063	11,031
65	5,476	5,746	4,295	4,756
70	4,909	4,548	3,688	3,640
75	5,410	5,409	4,322	4,208
80	5,812	6,100	4,870	4,688
85	5,962	6,374	5,106	4,933

Based on current participants, we have assumed that 70% of future retirees will elect PPO plans, and that the other 30% will elect HMO plans.

Demographic Assumptions

In estimating this obligation, a number of demographic assumptions are needed. The retirement, mortality and termination rates used in this valuation were used in the 2013 California PERS pension valuations.

Withdrawal

We used withdrawal rates that match those used in the 2013 California PERS Public Agency retirement plan valuations. Sample rates for Miscellaneous employees are shown in table 4-3 (e.g., an employee hired at age 30 with 5 years of service is assumed to have a 7.11% probability of leaving City employment in the current year).

Table 4-3

Public Agency Miscellaneous Employees Withdrawal Rates

	------------ Entry Age ------------						
Service	20	25	30	35	40	45	50
0	0.17420	0.16740	0.16060	0.15370	0.14680	0.14000	0.13320
1	0.15450	0.14770	0.14090	0.13390	0.12710	0.12030	0.11350
2	0.13480	0.12800	0.12120	0.11420	0.10740	0.10060	0.09380
3	0.11510	0.10830	0.10150	0.09450	0.08770	0.08090	0.07410
4	0.09540	0.08860	0.08180	0.07480	0.06800	0.06120	0.05430
5	0.08680	0.07900	0.07110	0.06320	0.05540	0.01160	0.00970
6	0.08290	0.07510	0.06700	0.05920	0.05140	0.01030	0.00840
7	0.07900	0.07100	0.06310	0.05520	0.04710	0.00900	0.00720
8	0.07490	0.06700	0.05910	0.05100	0.04300	0.00770	0.00600
9	0.07100	0.06290	0.05480	0.04690	0.03890	0.00660	0.00490
10	0.06680	0.05870	0.05070	0.04270	0.00710	0.00550	0.00380
15	0.05030	0.04240	0.03470	0.00320	0.00230	0.00140	0.00040
20	0.03700	0.02900	0.00210	0.00130	0.00050	0.00010	0.00010
25	0.02290	0.00110	0.00050	0.00010	0.00010	0.00010	0.00010
30	0.00050	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010
35	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010

Disability

Because of the anticipated low incidence of disability retirements we did not value disability retirement.

Retirement Rates

We used the retirement rates that match those used in the most recent California PERS retirement plan valuations.

Table 4-4a illustrates the rates used for miscellaneous employees participating in the CalPERS 2%@55 pension plan (employees hired prior to January 1, 2013) and Table 4-4b illustrates the rates used for miscellaneous employees participating in the CalPERS 2%@62 pension plan (employees hired on or after January 1, 2013). Selected rates are shown below.

Table 4-4a

Annual Rates of Retirement

CalPERS 2%@55 Public Agency Miscellaneous

	Years of Service						
	5	**10**	**15**	**20**	**25**	**30**	**35**
50	0.0140	0.0180	0.0210	0.0250	0.0270	0.0310	0.0350
51	0.0120	0.0140	0.0170	0.0200	0.0210	0.0250	0.0280
52	0.0130	0.0170	0.0190	0.0230	0.0250	0.0280	0.0320
53	0.0150	0.0200	0.0230	0.0270	0.0300	0.0340	0.0390
54	0.0260	0.0330	0.0380	0.0450	0.0510	0.0590	0.0680
55	0.0480	0.0610	0.0740	0.0880	0.1000	0.1170	0.1320
56	0.0420	0.0530	0.0630	0.0750	0.0850	0.1000	0.1130
57	0.0440	0.0560	0.0670	0.0810	0.0910	0.1070	0.1210
58	0.0490	0.0620	0.0740	0.0890	0.1000	0.1180	0.1340
59	0.0570	0.0720	0.0860	0.1030	0.1180	0.1380	0.1560
60	0.0670	0.0860	0.1030	0.1230	0.1390	0.1640	0.1860
61	0.0810	0.1030	0.1240	0.1480	0.1680	0.1990	0.2240
62	0.1160	0.1470	0.1780	0.2140	0.2430	0.2880	0.3240
63	0.1140	0.1440	0.1740	0.2080	0.2370	0.2810	0.3170
64	0.1080	0.1380	0.1660	0.1990	0.2270	0.2680	0.3020
65	0.1550	0.1970	0.2380	0.2850	0.3250	0.3860	0.4350
66	0.1320	0.1680	0.2030	0.2430	0.2760	0.3280	0.3690
67	0.1220	0.1550	0.1890	0.2250	0.2560	0.3040	0.3430
68	0.1110	0.1410	0.1700	0.2040	0.2320	0.2740	0.3090
69	0.1140	0.1440	0.1740	0.2090	0.2380	0.2820	0.3170
70	0.1300	0.1650	0.2000	0.2400	0.2720	0.3230	0.3640
71	0.1070	0.1370	0.1640	0.1980	0.2250	0.2660	0.2990
72	0.1100	0.1400	0.1690	0.2020	0.2300	0.2720	0.3070
73	0.0850	0.1090	0.1320	0.1580	0.1790	0.2120	0.2390
74	0.1000	0.1290	0.1560	0.1860	0.2120	0.2510	0.2820
75	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

For the July 1, 2012 valuation, the 2010 California PERS Miscellaneous 2% at 55 rates were used.

Table 4-4b

Annual Rates of Retirement

CalPERS 2%@62 Public Agency Miscellaneous

	Years of Service						
Age	**5**	**10**	**15**	**20**	**25**	**30**	**35**
50	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
51	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
52	0.0103	0.0132	0.0160	0.0188	0.0216	0.0244	0.0272
53	0.0131	0.0167	0.0202	0.0238	0.0273	0.0309	0.0345
54	0.0213	0.0272	0.0330	0.0388	0.0446	0.0504	0.0562
55	0.0440	0.0560	0.0680	0.0800	0.0920	0.1040	0.1160
56	0.0303	0.0385	0.0468	0.0550	0.0633	0.0715	0.0798
57	0.0363	0.0462	0.0561	0.0660	0.0759	0.0858	0.0957
58	0.0465	0.0592	0.0718	0.0845	0.0972	0.1099	0.1225
59	0.0578	0.0735	0.0893	0.1050	0.1208	0.1365	0.1523
60	0.0616	0.0784	0.0952	0.1120	0.1288	0.1456	0.1624
61	0.0619	0.0788	0.0956	0.1125	0.1294	0.1463	0.1631
62	0.0968	0.1232	0.1496	0.1760	0.2024	0.2288	0.2552
63	0.0888	0.1131	0.1373	0.1615	0.1857	0.2100	0.2342
64	0.0941	0.1197	0.1454	0.1710	0.1967	0.2223	0.2480
65	0.1287	0.1638	0.1989	0.2340	0.2691	0.3042	0.3393
66	0.1045	0.1330	0.1615	0.1900	0.2185	0.2470	0.2755
67	0.1045	0.1330	0.1615	0.1900	0.2185	0.2470	0.2755
68	0.1045	0.1330	0.1615	0.1900	0.2185	0.2470	0.2755
69	0.1045	0.1330	0.1615	0.1900	0.2185	0.2470	0.2755
70	0.1254	0.1596	0.1938	0.2280	0.2622	0.2964	0.3306
71	0.1254	0.1596	0.1938	0.2280	0.2622	0.2964	0.3306
72	0.1254	0.1596	0.1938	0.2280	0.2622	0.2964	0.3306
73	0.1254	0.1596	0.1938	0.2280	0.2622	0.2964	0.3306
74	0.1254	0.1596	0.1938	0.2280	0.2622	0.2964	0.3306
75	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Mortality

The mortality rates used in this valuation are those used in the most recent California PERS pension valuations. These rates provide a starting point for the projection of future mortality rates. The mortality rates for each future year were determined based on a generational mortality projection using Projection Scale MP-2014. This scale consists of a set of Annual Mortality improvement factors as a function of age and sex. The resulting projected mortality rates were applied to each employee and retiree.

Table 4-5

Sample Mortality Rates

(prior to the application of Projection Scale MP-2014)

	Non-Safety Employees		Safety Employees		Retired Employees	
Age	Male	Female	Male	Female	Male	Female
55	0.228%	0.138%	0.244%	0.154%	0.599%	0.416%
60	0.308%	0.182%	0.325%	0.199%	0.710%	0.436%
65	0.400%	0.257%	0.418%	0.275%	0.829%	0.588%
70	0.524%	0.367%	0.543%	0.386%	1.305%	0.993%
75					2.205%	1.722%
80					3.899%	2.902%
85					6.969%	5.243%
90					12.974%	9.887%

For the July 1, 2012 valuation, the 2010 California PERS mortality rates were used with a generational projection using Projection Scale AA.

Spousal enrollment

We have assumed that 50% of active employees will enroll their spouses at retirement. Retirees were assumed to continue their current enrollment. That is, retirees who are enrolled as Single are assumed to remain enrolled as a Single into retirement. Similarly employees who have elected Two Party or Family enrollment are assumed to retain Two Party enrollment at retirement.

Children of future retirees were not included in this valuation.

Age Difference

Females are assumed to be two years younger than their spouses.

Health Plan Participation

We assumed that 85% of future eligible retirees will participate in the City's postretirement medical program. .

Health Care Reform Considerations

Health care delivery is going through an evolution due to enactment of Health Care Reform. The Patient and Affordable Care Act (PPACA), was signed March 23, 2010, with further changes enacted by the Health Care and Education Affordability Reconciliation Act (HCEARA), signed March 30, 2010. This valuation uses various assumptions that may have been modified based on considerations under PPACA. This section discusses particular legislative changes that were reflected in our assumptions. We have not identified any other specific provision of PPACA that would be expected to have a significant impact on the measured obligation. As additional guidance on the Act continues to be issued, we'll continue to monitor impacts.

Individual Mandate

Under PPACA, individuals (whether actively employed or otherwise) must be covered by health insurance or else pay a penalty tax to the government. While it is not anticipated that the Act will result in universal coverage, it is expected to increase the overall portion of the population with coverage. We believe this will result in an increased demand on health care providers, resulting in higher trend for medical services for non-Medicare eligible retirees. (Medicare costs are constrained by Medicare payment mechanisms already in place, plus additional reforms added by PPACA and HCERA.) While we believe that the mandate may result in somewhat higher participation overall, this issue is moot since we assume 100% participation upon retirement.

Employer Mandate

Health Care Reform includes various provisions mandating employer coverage for active employees, with penalties for non-compliance. Those provisions do not directly apply to the postemployment coverage included in this valuation.

Medicare Advantage Plans

Effective January 1, 2011, the Law provides for reductions to the amounts that would be provided to Medicare Advantage plans starting in 2011. We considered the effect of these reductions in federal payments to Medicare Advantage plans when setting our trend assumption.

Expansion of Child Coverage to Age 26

Health Care Reform mandates that coverage be offered to any child, dependent or not, through age 26, consistent with coverage for any other dependent. We assume that this change has been reflected in current premium rates. While this plan covers dependents, we do not currently assume non-spouse dependent coverage other than for firefighters. We believe the impact this assumption has on the valuation is immaterial due to the lack of retirees that have had or are expected to have non-spouse dependents for any significant amount of time during retirement.

Elimination of Annual or Lifetime Maximums

Health Care Reform provides that annual or lifetime maximums have to be eliminated for all "essential services." We assume that current premium rates already reflect the elimination of any historic maximums.

Cadillac Tax (High Cost Plan Excise Tax)

The PPACA legislation added a new High-Cost Plan Excise Tax (also known as the "Cadillac Tax") starting in calendar year 2018. For valuation purposes, we assumed that the value of the tax will be passed back to the plan in higher premium rates.

- The tax is 40% of the excess of (a) the cost of coverage over (b) the limit. We modeled the cost of the tax by calculating (a) using the working rates projected with trend. We calculated (b) starting with the statutory limits ($10,200 single and $27,500 family), adjusted for the following:
    - Limits will increase from 2018 to 2019 by 4.25% (CPI plus 1%);
    - Limits will increase after 2019 by 3.25% (CPI); and
    - For retirees over age 55 and not on Medicare, the limit is increased by an additional dollar amount of $1,650 for single coverage and $3,450 for family coverage.
- Based on the above assumptions, we estimate that the tax will apply as early as 2018 for some of the City's pre-Medicare plans. In addition, we estimate that the tax will not apply to any of the post-Medicare plans.

Other Revenue Raisers

The Health Care Reform includes a variety of other revenue raisers that involve additional costs on providers (such as medical device manufacturers) and insurers. We considered these factors when developing the trend assumptions.

SECTION V
Glossary

- Accrual Accounting – A method of matching the cost of an employee's service, including long term obligations such as OPEB, to that employee's period of active service.

- Actuarial Accrued Liability (AAL) – The Actuarial Present Value of all postemployment benefits attributable to past service. Note: the AAL is sometimes referred to as the Past Service Liability.

- Actuarial Cost Method – A procedure for allocating the actuarial present value of benefits and expenses and for developing an actuarially equivalent allocation of such value to time periods, usually in the form of a Normal Cost and an Actuarial Accrued Liability.

- Actuarial Present Value – The value of an amount or series of amounts payable or receivable at various times. Each such amount or series of amounts is:

  a. adjusted for the probable financial effect of certain intervening events (such as changes in healthcare costs, compensation levels, Medicare, marital status, etc.)

  b. multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned, and

  c. discounted according to an assumed rate (or rates) of return to reflect the time value of money

- Actuarial Valuation – The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets and related Actuarial Present Values.

- Actuarial Value of Assets – The value of cash, investments and other property belonging to a plan. These are amounts that may be applied to fund the Actuarial Accrued Liability. Note: assets must be segregated and placed in a Trust in order to be considered OPEB assets

- Amortization Payment – That portion of the Annual OPEB cost which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

In the year that Statement 45 becomes effective an employer is allowed to commence amortization of the Unfunded Actuarial Accrued Liability, over a period not to exceed 30 years.

- Annual Other Postemployment Benefit (OPEB) Cost - An accrual-basis measure of the periodic cost of an employer's participation in a defined benefit OPEB plan. The annual OPEB cost is the amount that must be calculated and reported as an expense.

  When an employer has no net OPEB obligation (e.g., in the year of implementation) the annual OPEB cost is equal to the Annual Required Contribution (ARC).

  In subsequent years the Annual OPEB cost will include:

  - the ARC (equal to the Normal Cost plus one year's amortization of the Unfunded Actuarial Accrued Liability);
  - one year's interest on the net OPEB obligation at the beginning of the year using the valuation discount rate; and
  - an adjustment to the ARC. This adjustment is intended to provide a reasonable approximation of that portion of the ARC that consists of interest associated with past contribution deficiencies. GASB Statement No. 45 specifies that this adjustment should be equal to an amortization of the discounted present value of the net OPEB obligation at the beginning of the year. The amortization should be calculated using the same amortization method and period used in determining the ARC for that year. If the net OPEB obligation is positive the adjustment should be deducted from the ARC.
  - Note: As long as the net OPEB obligation is zero, there will not be any interest charge or adjustment to the ARC. However, if an employer does not contribute the full amount of the ARC, a net OPEB obligation will emerge.

- Annual required contributions of the employer (ARC) - The employer's periodic required contributions to a defined benefit OPEB plan, calculated in accordance with the parameters.

- Defined benefit OPEB plan - An OPEB plan having terms that specify the *benefits* to be provided at or after separation from employment. The benefits may be specified in dollars (for example, a flat dollar payment or an amount based on one or more factors, such as age, years of service, and compensation), or as a type or level of coverage (for example, prescription drugs or a percentage of healthcare insurance premiums).

- Defined contribution plan - A pension or OPEB plan having terms that (a) provide an individual account for each plan member and (b) specify how contributions to an active plan member's account are to be determined, rather than the income or other benefits the member or his beneficiaries are to receive at or after separation from employment. Those benefits will depend only on the amounts contributed to the member's account, earnings on investments of those contributions, and forfeitures of contributions made for other members that may be allocated to the member's account. For example, an employer may contribute a specified amount to each active member's postemployment healthcare account each month. At or after separation from employment, the balance of the account may be used by the member or on the member's behalf for the purchase of health insurance or other healthcare benefits.

- Employer's contributions - Contributions made in relation to the annual required contributions of the employer (ARC). An employer has made a contribution in relation to the ARC if the employer has (a) made payments of benefits directly to or on behalf of a retiree or beneficiary, (b) made premium payments to an insurer, or (c) irrevocably transferred assets to a trust, or an equivalent arrangement, in which plan assets are dedicated to providing benefits to retirees and their beneficiaries in accordance with the terms of the plan and are legally protected from creditors of the employer(s) or plan administrator.

- Entry Age Normal Actuarial Cost Method – An actuarial cost method under which the Actuarial Present Value of the Projected Benefits of each individual included in the valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age(s). The portion of this Actuarial Present Value allocated to a valuation year is called the Normal Cost.

- Healthcare cost trend rate - 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.

- Investment return assumption (discount rate) - The rate used to adjust a series of future payments to reflect the time value of money.

- Net OPEB obligation - The cumulative difference since the effective date of GASB Statement 45 between annual OPEB cost and the employer's contributions to the plan, including the OPEB liability (asset) at transition, if any, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to OPEB-related debt.

  Most employers will have no net OPEB obligation at the beginning of the year in which Statement 45 is implemented.

If an employer contributes the annual OPEB cost to the plan each year, and there are no actuarial or investment gains or losses then the net OPEB Obligation will remain zero.

- Normal Cost - That portion of the Actuarial Present Value of benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method. Another interpretation is that the Normal Cost is the present value of future benefits that are "earned" by employees for service rendered during the current year.
- OPEB assets - The amount recognized by an employer for contributions to an OPEB plan greater than OPEB expenses.
- OPEB expense - The amount recognized by an employer in each accounting period for contributions to an OPEB plan on the accrual basis of accounting.
- Other postemployment benefits (OPEB) - Postemployment benefits other than pension benefits. Other postemployment benefits (OPEB) include postemployment healthcare benefits, regardless of the type of plan that provides them, and all postemployment benefits provided separately from a pension plan, except benefits defined as special termination benefits.
- Plan assets - Resources, usually in the form of stocks, bonds, and other classes of investments, that have been segregated and restricted in a trust, or in an equivalent arrangement, in which (a) employer contributions to the plan are irrevocable, (b) assets are dedicated to providing benefits to retirees and their beneficiaries, and (c) assets are legally protected from creditors of the employer(s) or plan administrator, for the payment of benefits in accordance with the terms of the plan.
- Present Value – See Actuarial Present Value.
- Entry Age Normal Cost Method – An actuarial cost method under which the projected benefits of each individual included in an Actuarial Valuation are separately calculated and allocated to each year of service by a consistent formula.
- Substantive plan - The terms of an OPEB plan as understood by the employer(s) and plan members.
- Unfunded Actuarial Accrued Liability (UAAL) – The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets.
- Valuation date – The date as of which the postemployment benefit obligation is determined.

127

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FISCALLY READY

Retiree Medical/OPEB Plans

ASOP 6 and GASB 75

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Agenda

- ASOP 6 Implicit Subsidy
  - A New Liability
  - Doesn't increase Cash Cost
  - Expected Future Premiums and Subsidies
  - Discount Rate and Prefunding Considerations
- GASB 75
  - Overview
  - New Discount Rate Method
  - Early Adopt? Measurement Date? Funding Method?
- Summary of GASB 74 & 75

ASOP 6 Implicit Subsidy: A New Liability

- New requirement to include implicit subsidies in the accounting liabilities
  - Effective for Fiscal Years beginning after 3/31/15
- What is an implicit subsidy?
  - Premiums paid for active and retiree benefits are calculated by ACWA/JPIA or CalPERS
  - ACWA/CalPERS calculates a single flat premium rate unadjusted for age or gender
  - Older participants cost more than younger and males cost differently from females

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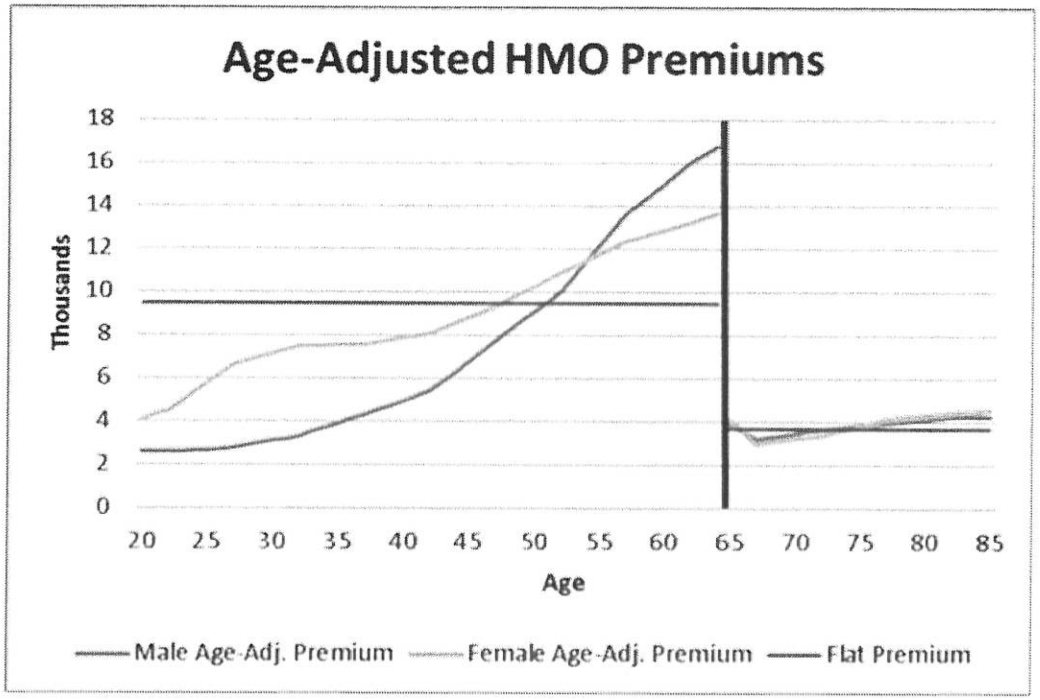
ACWA JPIA

(30

Implicit Subsidy: Doesn't Increase Cash Cost



- Employer actual retiree cash costs are based on flat premiums (i.e., explicit costs)
- Prior to change, GASB allowed accounting liabilities to be based on flat premiums for community rated plans such as those offered by ACWA/JPIA and CalPERS
- Switching to age/gender-adjusted premiums raises the accounting costs, but not the cash costs

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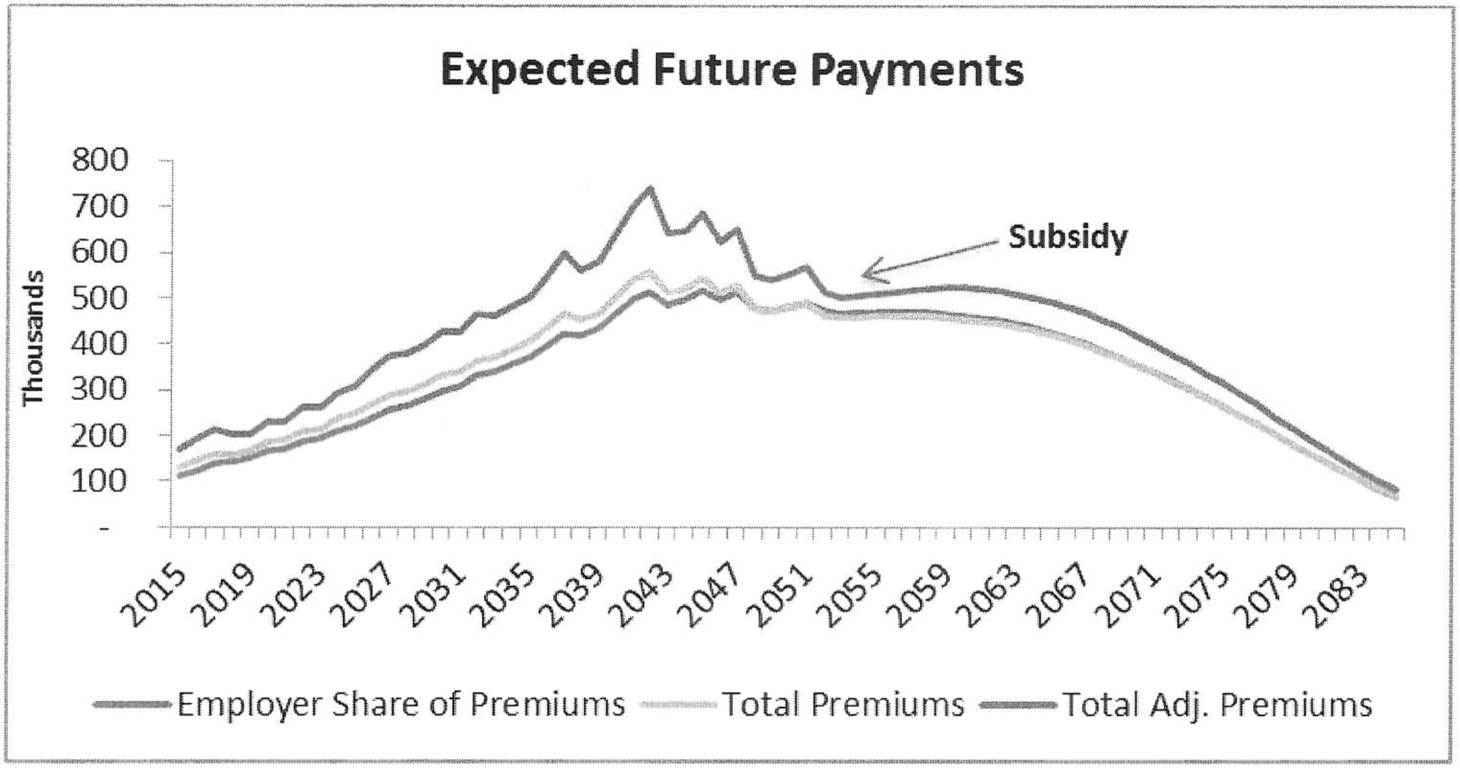
Expected Future Premiums and Subsidies



- Chart assumes the Employer and Retiree pay a share of the premium
- The Retiree pays for the cost of premiums in excess of the Employer's cost
- The implicit subsidy is considered an Employer liability
- If the system became unsustainable, actives and retirees would be rated separately

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132

Discount Rate—No/Partial/Full ARC Funding

Funding Policy	Approximate GASB 45 Discount Rate
No Prefunding (e.g., Pay-go Funding Only)	4.00%
Partial Prefunding (e.g., Explicit Subsidy Only)	5.00%
Full Prefunding (e.g., Explicit and Implicit Subsidies)	7.00%

- No Prefunding: Liability discounted using expected long-term rate of return on employer assets (4.00% assumed)
- Partial Prefunding: Liability discounted using a blend of No and Full prefunding rates of return
- Full Prefunding: Liability discounted using expected long-term rate of return on Trust assets (7.00% assumed)

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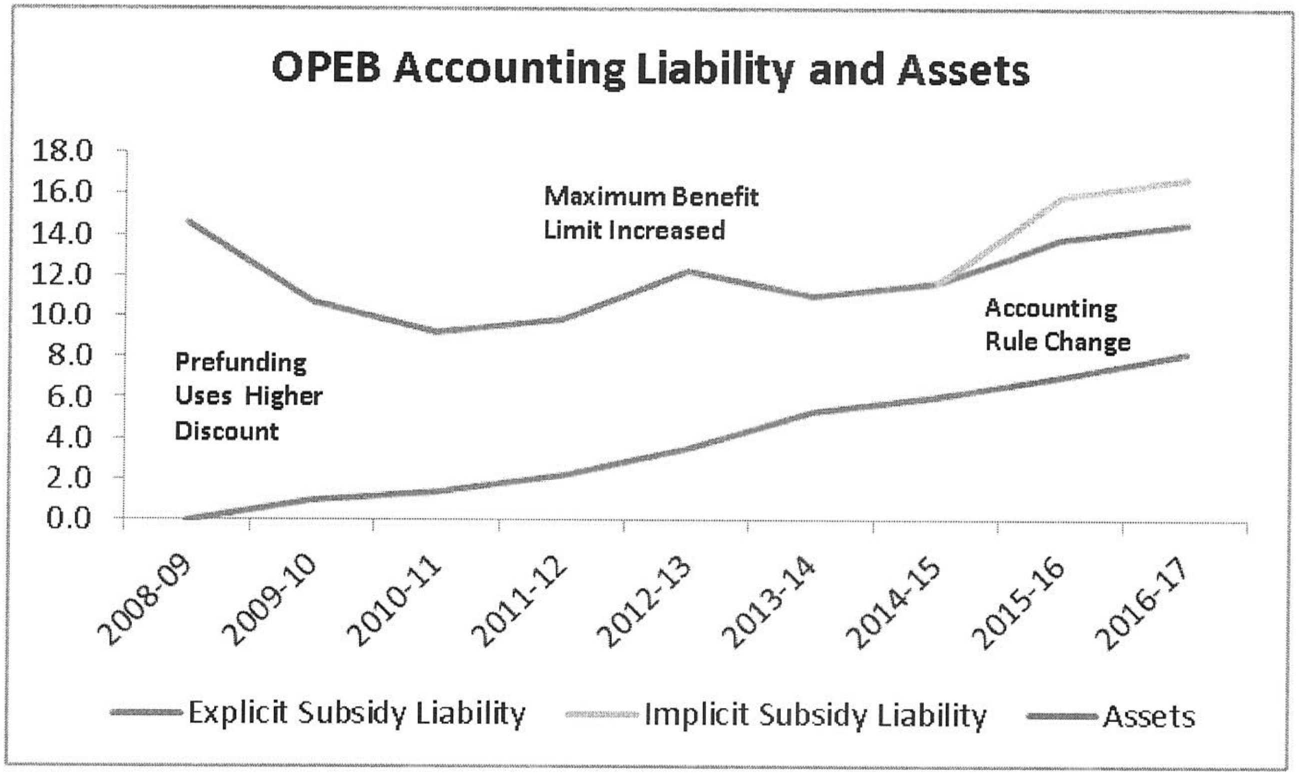
133

Pre-Funding Milestones



- Prefunding allows the Employer to reflect lower liability via a higher discount rate
- Should you prefund the implicit liability if it isn't anticipated to be a cash cost?
- Declining to prefund a portion of the liability means a lower discount rate

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134

Implicit Subsidy Funding Strategies

If you don't want to prefund implicit subsidies, but want a higher accounting discount rate:

- Consider shifting active employee implied subsidies from cash to (GASB 45/75) accrual accounting
- Consider a funding policy that over-funds the accounting explicit subsidy for good reason:
  - <u>Targeted Funding Level</u>: Set a target funding level, say 120% of the explicit subsidy liability, to act as a hedge against future losses (e.g., ad hoc maximum benefit limit increases, asset declines, system unsustainability, etc.)
  - <u>Conservative Assumptions</u>: Base funding policy on a more conservative set of valuation assumptions than your accounting policy to act as a hedge against future experience losses (fund at 4.0% discount rate and account at 7.0% discount rate)

NOTE: GFOA recommends prefunding explicit and implicit subsidies.

GASB 75 Overview

GASB 75 is effective in FY's beginning after 6/15/17

- Puts the unfunded liability on the balance sheet
- Lowers the discount rate for unfunded liabilities
- Shortens the amortization of unanticipated costs, making accounting costs more volatile
- Greater need to manage risks via:
    - Investment Policy
    - Benefit Policy
    - Funding Policy
    - Accounting Policy

Comparison of Discount Rates (GASB 45 and GASB 75)

Funding Policy	Approximate Discount Rate GASB 45	Approximate Discount Rate GASB 75
No Prefunding (e.g., Pay-go Funding Only)	4.00%	3.00%
Partial Prefunding (e.g., Explicit Subsidy Only)	5.00%	3.50%
Full Prefunding (e.g., Explicit and Implicit Subsidies)	7.00%	7.00%

- GASB 45: Unfunded liabilities are discounted using long-term return of employer assets (4.00% assumed)
- GASB 75: Unfunded liabilities are discounted using rate on 20-year, tax exempt general obligation municipal bonds rated AA/Aa or higher (3.00% assumed)
- GASB 45 and GASB 75: Pre-funded liabilities are discounted using Trust long term target return (7.00% assumed)

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GASB 75 Implementation – Initial Considerations

GASB 75 is an *accounting method* and does not dictate methods or assumptions for determining contributions to an OPEB trust.

- Decide if you want to adopt early
- Select your measurement date timing—a lag of up to one year is permitted
- Determine the contribution level desired—you may want to change from GASB 45's ARC to a different actuarial funding method

Valuation (census) date can be up to 30 months prior to the fiscal year-end and need not be consistent from year to year. Measurement date must be consistent.

GASB 75 Setting the Measurement Date

- Early Adopt? Not normally advised because...
- GASB will not issue their Implementation Guides until 2017
  - As late as February 2017 for GASB 74 (plan)
  - As late as November 2017 for GASB 75 (employer)
- If the AICPA issues audit standards similar to those related to pensions, then the plan (trust) assets used in GASB 75 reporting must be audited and the census data used to calculate the accrued liability would be subject to audit, too
  - Employer should confirm that they can obtain these audits in time to use for their financial reporting
  - For these reasons, employers using the CERBT for funding may select a June 30 Measurement date which is 12 months prior to their fiscal year end

Information on this slide is taken from a template letter dated April 6, 2016 provided by Bruce Eastes, CalPERS CERBT Program Compliance and Reporting Specialist

GASB 75 Setting the Measurement Date

- The real issues faced by employers and actuaries in setting the measurement date might, in part, revolve around audit issues, such as:
  - Can the assets in the valuation be supported by an audit performed in a timely way?
  - Will PARS make available on the Internet an audited Statement of Changes in Net Position for all their participating employers?
  - If PARS does not, will employers be required to provide asset related disclosures on their financial statements , and possibly need to report a fiduciary fund under GASB 74?
- In the end, this is a discussion about an accounting standard, so what really matters is what the accountants and auditors have to say

Information on this slide is taken from a template letter dated April 6, 2016 provided by Bruce Eastes, CalPERS CERBT Program Compliance and Reporting Specialist

The remainder of this presentation is material presented at the April 10-16, 2016 Enrolled Actuaries Meeting in Washington DC by Scott Reeser, Supervising Project Manager, GASB

SUMMARY OF GASB 74 & 75

GASB 74 & 75 Other Postemployment Benefits

- **What:** The Board issued Statement 74 (plans) and 75 (employers), making OPEB accounting and financial reporting consistent with the pension standards in Statements 67 and 68
- **Why:** Pension and OPEB standards were updated subsequent to a review of the effectiveness of the standards – objective was to establish a consistent set of standards for all postemployment benefits, providing more transparent reporting of the liability and more useful information about the liability and costs of benefits
- **When:** Effective for periods beginning after June 15, 2016 (plans) and June 15, 2017 (employers)

GASB 74 Plan and Asset Reporting

- Scope includes defined benefit and defined contribution OPEB plans administered through trusts that meet the specified criteria
- Also addresses assets accumulated for purposes of providing OPEB through defined benefit OPEB plans that are *not* administered through trusts that meet the criteria
  - Assets reported as assets in employer's governmental proprietary funds
  - Assets held for other government reported in an agency fund
- Few changes from statement 43 for financial statement recognition
- Notes/RSI changes primarily to reflect changes in measurement of defined benefit liabilities of employers

GASB 75 Scope

- Applies same definition of OPEB as used in Statement 45
  - All postemployment healthcare benefits
  - Other forms of postemployment benefit not provided through a pension plan
- Addresses both defined benefit OPEB and defined contribution OPEB
- Applies to employers and nonemployer contributing entities that have a legal obligation to make contributions directly to an OPEB plan or to make benefit payments as those payments come due
  - Special funding situations
  - Other circumstances

GASB 75 Employer Liability to Employees for OPEB

- Based on total OPEB liability—the portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service
- Is OPEB administered through a trust that meets specific criteria?
  - Yes—recognize net OPEB liability (total OPEB liability, net of OPEB plan fiduciary net position (i.e., assets))
  - No—recognize total OPEB liability

GASB 75 Timing and Frequency of Measurement

- Employer's liability to employees for OPEB measured as of a date no earlier than the end of the employer's prior fiscal year and no later than the employer's current fiscal year
  - Based on an actuarial valuation obtained at least biennially no more than 30 months and 1 day earlier than the employer's most recent fiscal year-end

GASB 75 Measurement

- Three broad steps
  - Project benefit payments
  - Discount projected benefit payments to actuarial present value
  - Attribute actuarial present value to periods
- Methods and assumptions
  - Generally, assumptions in conformity with Actuarial Standards of Practice
  - Single attribution method-entry age, level percentage of pay

GASB 75 Measurement—Projection

- Based on claims costs or age-adjusted premiums approximating claims costs, in accordance with Actuarial Standards of Practice
- Not reduced by amounts expected to be received for making benefits payments unless payments are providing Medicare benefits
- Consider legal or contractual benefit caps if determined to be effective
- Alternative measurement method may be applied if fewer than 100 employees (active and inactive) are provided benefits through plan as of the beginning of the measurement period

GASB 75 Measurement—Discounting

- Single discount rate that reflects:
  - Long-term expected rate of return on OPEB plan investments to extent that fiduciary net position from specified resources is:
    - Projected to be sufficient to make benefit payments
    - Expected to be invested using a strategy to achieve that return
  - Yield or index rate for 20-year, tax-exempt general obligation municipal bond rated AA/Aa (or equivalent) or higher, to extent that conditions for long-term expected rate of return are not met
- Calculated using the same process as required for pensions in Statement 68
- If not administered through a trust in which the specific criteria is met, the tax-exempt municipal bond rate is required to be used

GASB 75 Measurement—Attribution

- Single method
  - Entry age actuarial cost method
  - Level percentage of pay
- Applied on an employee-by-employee basis
- Beginning in 1st period of benefit accrual and through all assumed exit ages from active service
- Same benefit terms to determine service cost as to determine actuarial present value of projected benefit payments

GASB 75 Expense Recognition

- Recognize most changes in liability for the current reporting period as OPEB expense immediately, except:
  - Changes in total OPEB liability:
    - Differences between expected and actual experience with regard to economic and demographic factors in the measurement of the total OPEB liability
    - Changes of assumptions in the measurement of the total OPEB liability
  - For OPEB administered through trust in which specific criteria are met
    - Difference between projected and actual earnings on OPEB plan investments
    - Employer contributions

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151

GASB 75 Cost-Sharing Employers

- Relevant only for OPEB administered through trust in which specific criteria are met
- Recognize proportionate shares of collective net OPEB liability, OPEB expense, and deferred inflows of resources related to OPEB
- Proportion (%)
  - Basis required to be consistent with contributions
  - Use of relative long-term projected contribution effort encouraged
  - Consider separate rates related to separate portions of collective net OPEB liability
- Collective measure x proportion = proportionate share of collective measure

GASB 75 Notes and RSI

- Similar to those required for pensions
- Disclosure of effect on net OPEB liability of a discount rate +/-1 percent
- Disclosure of effect on net OPEB liability of a healthcare cost trend rate +/-1 percent
- Single and agent employers: 10-year RSI schedules for changes in the net OPEB liability, ratios, and actuarially determined contributions (statutorily or contractually determined contributions, if no actuarially determined contribution is calculated)
- Cost-sharing employers: 10-year RSI schedules of proportions and ratios, and statutorily or contractually determined contributions

Nicolay Consulting Representative OPEB Client List

Exhibit 1

ACWA Joint Powers Insurance Authority
Agoura Hills / Calabasas Community Center
Alameda County Transportation Commission
Alexander Valley School District
Arrowbear Park County Water District
Auburn Cemetery District
BETA Healthcare Group
Cal Poly Pomona Foundation
Cal Poly San Luis Obispo Associated Students
Cal Poly San Luis Obispo Corporation
Calaveras County Water District
California Association of Highway Patrolmen
City of Agoura Hills
City of Belmont
City of Benicia
City of Camarillo
City of Carmel-by-the-Sea
City of El Monte
City of Fillmore
City of Marina
City of Milpitas
City of Mountain View
City of Nogales
City of Pacific Grove
City of Pacifica
City of Rosemead
City of Sausalito
City of Spokane
City of Thousand Oaks
Recreation and Park District
Cosumnes Community Services District
Crescenta Valley Water District
Crestline-Lake Arrowhead Water Agency
CSLA Associated Students, Inc.
CSLA University Auxiliary Services, Inc.
CSLA University- Student Union
CSU Chico Associated Students, Inc.
CSU Chico Research Foundation
CSU Dominguez Hills - Associated Students
CSU Dominguez Hills - Foundation
CSU Dominguez Hills - Student Union
CSU Fullerton Associated Students Corporation
CSU Long Beach Research Foundation
CSU San Marcos Foundation
CSU Stanislaus ABS
El Dorado Hills Community Services District
Elk Grove Water District
Empire Union School District
Escondido Secondary Teachers Association
Folsom Cordova Unified School District
Goleta Sanitary District
Hannibal Industries, Inc.
Hayward Area Rec and Park District
Hemet Unified School District
Hesperia Rec and Park District
Housing Authority County of Merced
Housing Authority County of San Bernardino
Housing Authority of Contra Costa County
Housing Authority of Tulare County
Housing Authority Sutter County
Inland Empire Utilities Agency
Kensington Fire Protection District
Las Gallinas Valley Sanitary District
Los Rios Community College District
Macias Gini
Manteca Unified School District
Marina Coast Water District
Marinwood Community Services District
Merced City School District
Monterey Bay Air Pollution Control District
Municipal Pooling Authority (CCCMRMIA)
Murphy School District
Nuview Union School District
Oakland Housing Authority
Olivenhain Municipal Water District
Orchard Dale Water District
Oxnard Harbor District
Pico Water District
Pleasant Valley Recreation and Park District
Rancho Murieta Community Services District
River Delta USD
Round Valley USD
Rowland Water District
Sacramento Area Council of Governments
Sacramento County Office of Education
Salinas Valley Memorial Hospital
San Bernardino Valley Municipal Water District
San Diego City Schools - Administrators Association
San Diego City Schools - OSS
San Diego City Schools - OTBS
San Diego City Schools - Paraeducators
San Diego City Schools - POA
San Diego USD - All BUs
San Diego USD - SDEA Trust
San Gorgonio Pass Water Agency
San Jose State University Foundation
San Jose State University Student Union, Inc.
Santa Ana Watershed Project Authority
Simplicity Bank (formerly Kaiser Federal Bank)
Solano County Mosquito Abatement District
South Placer Fire Protection District
Stinson Beach County Water District
Sylvan Cemetery District
The Doctors Company
The Episcopal Church in Hawaii
Tower Foundation (SJSU)
Town of Atherton
Town of Colma
Town of Tiburon
Town of Woodside
University Enterprises Corp., (CSU San Bernardino)
University Enterprises Corporation
Vallecitos Water District
Vallejo City Unified School District
Ventura County Office of Education
Ventura Unified School District
Victor Valley Water District
Water Replenishment District of So. California
West Contra Costa Unified School District
West Valley Water District
Westlands Water District
Willits USD
Woodside Fire Protection District

BARTEL ASSOCIATES, LLC

June 22, 2016

Kevin E. Hart
Interim General Manager/Chief of Police
Kensington Police Protection and Community Services District
217 Arlington Avenue
Kensington, CA 94707-1401

Re: OPEB Actuarial Valuation Proposal

Dear Chief Hart:

Bartel Associates would be pleased to provide actuarial consulting services to the Kensington Police Protection and Community Services District. This letter summarizes the project scope and our fee estimate for a June 30, 2016 actuarial valuation on the District retiree healthcare plan.

Background

The District had a July 1, 2015 GASB 45 actuarial valuation prepared which indicated the following:

- The District participates in CalPERS for retirement benefits, and provides employees and retirees healthcare benefits through PEMHCA (CalPERS healthcare pool), paying lifetime medical benefits to employees retiring directly from the District up to a cap equal to the Kaiser premium.
- July 1, 2015 Actuarial Accrued Liability of approximately $2.365 million and CERBT (CalPERS OPEB trust) assets of $0.631 million. The 2015/16 Annual Required Contribution was approximately $174 thousand.
- There were 9 active employees and 14 retirees in the valuation (all are Police Sworn Safety).

We understand the District would like a June 30, 2016 GASB 45 actuarial valuation prepared for fiscal years 2016/17 and 2017/18.

Three important developments will impact the new valuation:

- Historically, valuations have not included an implied subsidy (the implied subsidy is the benefit retirees derive when they are charged the same pre-Medicare premium as employees). This approach complies with GASB 45, which defers to Actuarial Standards of Practice (ASOP) on whether the implied subsidy should be included. In May 2014 the Actuarial Standards Board issued a revised ASOP that now requires actuaries value an implied subsidy for community rated plans such as PEMHCA. The effective date is for valuations after March 31, 2015 so we are required to include it.
- The District's recently adopted POA MOU revises retiree healthcare benefits. Based on information provided, including the July 1, 2015 valuation report, we understand the District pays retire medical up to the Kaiser premium, plus dental and vision premiums. Effective January 1, 2017 retirees will pay $85 per month towards the cost of medical. Effective June 30, 2017 the retiree payment increases to $125 per month. The Chief's retiree medical benefit is the PEMHCA minimum ($125 per month currently).
- In June 2015, GASB approved revised OPEB accounting rules under Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. This statement replaces GASB 45, effective for the District's 2017/18 fiscal year. The June 30, 2016 valuation will provide the District recommended contributions for the 2016/17 and 2017/18 fiscal years, GASB 45 information for 2016/17 and GASB 75 information for 2017/18.

Bartel Associates

Bartel Associates, LLC is an actuarial consulting firm specializing in providing California counties, cities, districts, and other public agencies with actuarial consulting services including retiree medical valuations, pension plan valuations, retirement plan design, actuarial audits, and CalPERS retirement consulting. With over 250 GASB 45 clients, we are experts in this field:

- John Bartel was a member of the special task force assisting GASB with GASB Statements 73, 74, and 75, and was a member of the special task force assisting GASB in drafting GASB 45.
- Marilyn Oliver was on the subcommittee drafting Actuarial Standards of Practice No. 6 ("Measuring Retiree Group Benefits Obligations and Determining Retiree Group Benefits Program Periodic Costs or Actuarially Determined Contributions") which was issued in May 2014, mandating the implied subsidy be included for pooled medical plans such as PEMHCA.
- John Bartel is a member of the California Actuarial Advisory Panel. CAAP was created by Senate Bill 1123 and chaptered in State law in September 2008, and is charged with providing impartial and independent information on pensions, other postemployment benefits, and best practices to California public agencies and reporting on those recommendations to the legislature.

Bartel Associates was established in July 2003 and is organized as a Limited Liability Corporation. Our office is located in San Mateo, California. We currently have 21 employees, including 8 senior actuaries, 9 actuarial analysts, and 4 administrative staff members. Nine of our actuaries are Fellows or Associates of the Society of Actuaries, 10 are Members of the American Academy of Actuaries, 7 are Enrolled Actuaries, and 5 are Fellows of the Conference of Consulting Actuaries.

Enclosed is additional information on Bartel Associates (also see www.bartel-associates.com.)

Our Approach and Fees

We believe that there are two levels to an actuarial valuation. The first level is technical compliance with GASB. Some public employers may hire an actuary to assist only with technical compliance with GASB, limiting the scope of services to preparing a compliance-only valuation that provides the required financial reporting and disclosure. The second level goes beyond reporting and disclosure issues and assists the District with an understanding of GASB, the actuarial assumptions and methods, valuation results, financial statement impact, funding policies, and a review of the plan design.

We can offer the District a choice of two approaches for the actuarial valuation:

- **Full Consulting Valuation**
  A full consulting valuation will include a meeting with the District to review the plan provisions, census data, actuarial methods and assumptions, and valuation results. Our discussion outline for the meeting will include:
  1) 10-year projection of the contributions and benefit payments;
  2) Statistical comparison of District results with other Bartel Associates GASB 45 valuations;
  3) Historical valuation results;
  4) Gain and loss analysis with changes in the Actuarial Accrued Liability since the prior valuation (since Bartel Associates did not prepare the prior valuation, this analysis will be limited);
  5) Detailed participant statistics, including summary of healthcare plan and coverage elections; and
  6) Summary of upcoming OPEB and CalPERS issues.

Information provided under the full consulting actuarial valuation, timing, and fees are as follows:

Project	Approximate Start/Completion Date	Fees	
		Estimate	Cap
Valuation report and meeting, including ▪ 6/30/16 funded status ▪ 16/17 and 17/18 recommended contributions ▪ 16/17 GASB 45 reporting information	August 2016/ October 2016	$ 12,500	$ 14,000
GASB 75 disclosure report for 17/18	October 2018/ November 2018[1]	2,000	2,500
Total		14,500	16,500

- **Compliance-only Valuation**
  A compliance-only valuation will include a concise report including a summary of plan provisions, census data, actuarial methods and assumptions, and valuation results. It will not include items (1) through (6) above, nor a meeting with the District.

Project	Approximate Start/Completion Date	Fees	
		Estimate	Cap
Valuation report, including ▪ 6/30/16 funded status ▪ 16/17 and 17/18 recommended contributions ▪ 16/17 GASB 45 reporting information	August 2016/ October 2016	$ 9,500	$ 11,000
GASB 75 disclosure report for 17/18	October 2018/ November 2018[1]	2,000	2,500
Total		11,500	13,500

Please note that our fee estimate assumes:

- We will bill the District at the following hourly rates:

Position	Hourly Rate
Partner & President	$ 310
Partner & Vice President	260
Assistant Vice President	230
Associate Actuary	180
Senior Actuarial Analyst	160
Actuarial Analyst	130

- While the estimated fees represent the likely cost of the valuation, it is possible the valuation may require additional time. We understand the District's budgeting needs and agree not to bill more than the cap amounts above unless the project scope changes.
- The District has made no significant changes to its retiree healthcare plan or healthcare providers since the last actuarial valuation, other than those summarized on the first page of this letter.
- Participant census data requested will be provided completely and accurately in an Excel spreadsheet with one record per participant.

[1] Assumes 6/30/18 Measurement Date for GASB 75.

- The District continues to fund the Annual Required Contribution with the CERBT.
- There will be no additional charges for expenses (e.g., travel, telephone, copying, etc.). The hourly rates listed above include our costs for these items.
- We will invoice the District monthly based on time incurred, subject to the above maximum fees.

Please note that our fee estimate will be higher if:
- Plan provisions and financial information is not provided as requested or is not complete and internally consistent.
- Results are needed for additional assumptions, funding methods, funding policies, or alternative plan designs.
- The District requests assistance with footnotes under GASB 75 beyond our GASB 75 report (which will contain all actuarial related information needed for footnotes).
- The District requests information under GASB 74.
- The District requests additional meetings.
- The District requests an executive summary or a draft financial statement footnote.

Data Requirements

Information needed for the valuation is as follows:
- Written summary of the District's retiree healthcare plan provisions, including a description of the District's contributions for active and retired employees. This summary will be used as the basis of retiree healthcare benefits provided by the District for the actuarial valuation.
- Most recent District Board resolution impacting retiree healthcare benefits.
- The District's July 2016 and most recent CalPERS health premium invoice. (Please remove any Social Security numbers.)
- District's 2015/16 draft OPEB financial statement footnote and required supplementary information.
- Plan asset information:
  - All quarterly trust statements received from CalPERS CERBT since June 30, 2015.
  - Contributions and dates made and expected to be made for 2015/16.
- If full consulting option is selected:
  - all actuarial valuation reports prior to the July 1, 2015 report.
  - all annual trust statements since District commenced funding, including dates of District contributions.
- Active and retired participant data as of June 30, 2016 in an Excel workbook (active and retired participant information can be provided on separate worksheets):
  - Active Data - name, employee number (not Social Security number), gender, birth date, hire date, medical plan, single/2-party/family coverage, total CalPERS service (if available), employee group, and annual PERSable compensation. Indicate the pay period for the compensation reported. Include any active employees who have waived healthcare coverage.
  - Retiree Data - name, employee number (not Social Security number), gender, birth date, hire date, retirement type (service retirement, disability retirement, surviving spouse), retirement date, medical plan, single/2-party/family coverage, employee group, spouse's birth date (if available), premium paid by the retiree.
  - In order to maintain confidentiality, please do not provide Social Security numbers for the employee number. We will delete any files that include Social Security numbers and request a revised file.

159

- Our fee estimate assumes that the District will merge and reconcile all data files and provide one census file with one complete record for each employee and eligible retiree in an Excel workbook. If the District needs our help to merge and reconcile data, our fees will be higher.

We may need additional data, depending on our review of the District's retiree healthcare plan and the data provided.

Please call me at 650-377-1602 with any questions.

Sincerely,

Doug Pryor

Doug Pryor
Vice President

c: John Bartel

enclosures

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Bartel Associates, LLC
Company Profile

Bartel Associates, LLC is an actuarial consulting firm specializing in providing states, counties, cities, and other public agencies with actuarial consulting services including retiree medical plan valuations, pension plan valuations, retirement plan design, actuarial audits, and CalPERS retirement consulting. Our clients range from small special districts to small and large cities and states with tens of thousands of employees.

The firm's founder, John Bartel, has over 30 years of experience as a retirement consultant and practice leader with major consulting firms. John founded Bartel Associates to provide public sector clients high quality actuarial services at reasonable fees, focusing on personal attention and clear results.

John Bartel was a member of the special task force which assisted the Governmental Accounting Standards Board (GASB) in drafting Statement No. 45, "Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions" (GASB 45). He was directly involved in the statement's development and has assisted numerous public agencies quantify and understand the impact of this new accounting standard.

John was appointed in January 2010 by former Governor Schwarzenegger to the California Actuarial Advisory Panel (CAAP) formed under recent legislation (SB 1123). CAAP is charged with providing impartial and independent information on pensions, other postemployment benefits, and best practices to California public agencies. Its responsibilities include:

- Defining actuarial model policies and best practices for public retirement plan pensions and other postemployment benefits
- Developing pricing and disclosure standards for California public sector benefit improvements
- Developing quality control standards for California public sector actuaries.
- Gathering model funding policies and practices
- Replying to policy questions from public retirement systems in California
- Providing comment upon request by public agencies

John Bartel served as consultant for the California State Office of Finance to former Governor Schwarzenegger's Public Employee Post-Employment Benefits Commission, charged with review of policy regarding the State's public employee retirement benefits. He has spoken at an array of organizational meetings including those for Enrolled Actuaries, Conference of Consulting Actuaries, League of California Cities, California Society of CPAs, California Public Employee Labor Relations Association, and California Society of Municipal Finance Officers.

Our services include:

- <u>OPEB Plans</u> - We have prepared "Other Postemployment Benefit" actuarial studies and valuations for over 250 California counties, cities, districts, and special purpose agencies to assist with compliance with GASB Statements Nos. 43 and 45. We also prepare valuations for compensated absence plans for compliance with GASB 16.

- <u>Pension Plans</u> - We prepare actuarial valuations and assist with the administration of defined benefit pension plans for California governments and agencies.

- <u>Plan Design</u> - We assist public agencies redesign existing retirement plans and implement new retirement benefit programs including retiree medical plans and pension plans.

- <u>Retirement System Audits</u> - We review actuarial valuations, experience studies, actuarial assumptions, and actuarial methods for state, county, and other agency retirement systems.

- CalPERS - We provide CalPERS pension consulting services and have made presentations to county boards of supervisors, city councils, district boards of directors, employee bargaining groups, and agency staff on CalPERS contribution rates and benefit design issues.

Bartel Associates was established in July 2003 and is organized as a Limited Liability Corporation. Our office is located in San Mateo, California. We currently have 21 employees, including 8 senior actuaries, 9 actuarial analysts, and 4 administrative staff members. Nine of our actuaries are Fellows or Associates of the Society of Actuaries, 10 are Members of the American Academy of Actuaries, 7 are Enrolled Actuaries, and 5 are Fellows of the Conference of Consulting Actuaries.

Bartel Associates, LLC
411 Borel Avenue, Suite 101
San Mateo, CA 94402
phone: 650-377-1600
phone: 800-256-2090
fax: 650-345-8057

OPEB (Other Post Employment Benefits)

We provide OPEB actuarial services to states, counties, cities and public agencies. This work helps agencies understand the impact of GASB 45 and includes:

- Review and determination of plan benefits per MOUs, bargaining agreements, plan summaries, etc.
- Review of plan demographics and selection of actuarial methods and assumptions
- Calculation of GASB 45 costs and liabilities.
- Review and analysis regarding funding alternatives.
- Preparation of draft financial statement reporting and disclosure information
- Alternative plan design cost impact studies.
- Analysis of defined benefit and defined contribution retiree healthcare plan designs.
- Open and closed group projections, including Annual OPEB Cost (AOC) cost and benefit payout projections.
- Review and analysis of life insurance contracts.

Pension Plans

We prepare actuarial valuations of defined benefit retirement plans for public agencies. This work includes consulting regarding various plan issues, including the following:

- Annual and biennial actuarial valuations.
- Financial statement reporting and disclosure information under Governmental Accounting Standards Board Statement No. 27 (GASB 27).
- Audits of actuarial valuations and experience studies.
- Benefit calculations, plan design, and document review.

CalPERS Consulting

We have worked with many California public agencies consulting on issues related to the CalPERS retirement system. This work covers a broad spectrum of retirement benefits issues, and often includes presentations to city councils, boards of directors, employee bargaining groups, or agency staff. Additional details of projects we have prepared are as follows:

- Benefit improvement analysis including cost allocations for property tax issues.
- Pension Obligation Bond (POB) issues including cash flow analysis and actuarial certifications for POB unfunded actuarial liabilities.
- Asset-liability analysis including modeling stochastic confidence ranges for various funding criteria such as asset returns, contribution rates, and plan funded status.
- Projections of CalPERS contribution rates and related stochastic modeling.
- Cost impact studies of actuarial assumption changes.
- Plan review and design issues.

JOHN E. BARTEL, President

Experience/Responsibilities

With over 30 years in employee benefits, John focuses on pension consulting for a wide variety of public and private sector clients. He founded Bartel Associates to serve public sector agencies, emphasizing quality, personal attention, and clear results at reasonable fees. Clients rely on John's ability to apply complex regulations in understandable ways.

John is one of two actuaries appointed to the California Actuarial Advisory Panel (CAAP) formed under recent legislation (SB 1123). CAAP will provide impartial and independent information on pensions, other postemployment benefits, and best practices to California public agencies. John Bartel served as consultant for the California State Office of Finance to former Governor Schwarzenegger's Public Employee Post-Employment Benefits Commission, charged with review of policy regarding the State's public employee retirement benefits. John was a member of GASB's OPEB task.

John specializes in:

- CalPERS public agency consulting
- Helping clients understand actuarial, accounting, and regulatory issues
- Retiree healthcare plan valuation, study, and design
- Retirement plan review, valuation, and design
- Employee benefit merger and acquisition issues
- Publications (copies available upon request):
  - 2003 California Public Retirement Journal "GASB: Other (Than Pensions) Post employment Benefits Plan Sponsor Reporting and Disclosure"
  - June 2001 National Association of State Retirement Administrators (NASRA) "Is A DROP Plan Right for Your Organization?" with Chris Bone, Aon's Chief Actuary
  - January 2001 Western City "Understanding the Impact of the New CalPERS Public Safety Benefits" with Harriet Commons, City of Fremont.
  - GASB 27 (pension disclosure) White Paper, California Committee on Municipal Accounting with Glenn Steinbrink, City of Fullerton
- Speaker at meetings for Enrolled Actuaries, Society of Actuaries, Conference of Consulting Actuaries, League of California Cities, California Society of CPAs, California Public Employee Labor Relations Association, and California Society of Municipal Finance Officers

Affiliations/Designations/Education

- Associate of the Society of Actuaries
- Fellow of the Conference of Consulting Actuaries
- Member, American Academy of Actuaries
- BS in mathematics, California State University, Chico

DOUG PRYOR, Vice President

Experience/Responsibilities

With over 18 years in employee benefits, Doug specializes in actuarial consulting and other projects. Clients appreciate Doug's ability to provide concise, pertinent, valuable information in a timely fashion. His experience includes:

- Actuarial valuations of public, corporate, and multiemployer pension plans
- Studies analyzing the cost of new benefits and changes to existing programs
- Design and costing of supplemental retirement benefits for executives
- Valuations of postretirement medical programs
- Funding of health and welfare benefits under VEBAs
- Plan amendments, summary plan descriptions, and other employee communications
- Plan terminations, calculating benefits, annuity purchase, employee communications, and government filings
- Benefit issues related to mergers and acquisitions as well as union negotiations

Affiliations/Designations/Education

- Associate of the Society of Actuaries
- Enrolled Actuary
- Member, American Academy of Actuaries
- BS in mathematics, University of California, Davis
- MA Statistics, University of California, Santa Barbara

MARILYN OLIVER, Vice President

Experience/Responsibilities

Marilyn Oliver has worked over 30 years as an actuarial consultant for retirement plans of public and private sector employers. For the last 20 years she has specialized in public sector consulting for state, county, city, and special district retirement and post-retirement health plans. Her experience includes:

- Actuarial valuations, experience studies, and funding method studies
- Actuarial audits
- Legislative costing
- Design studies
- GASB 25, 27, 43 and 45 compliance
- Presentations to legislative bodies and retirement boards

Professional Activities

- Past Chair of the following Society of Actuaries (SOA) committees and task forces:
  - Pension Section Council
  - Retirement Systems Professional Education and Development Committee
  - Retirement Income Needs Taskforce
  - Mortality Projection Taskforce

Community Activities

- Member of the Continuing Care Advisory Committee, advising the State of California Department of Social Services Continuing Care Branch, which is charged with assuring the financial viability of the State's continuing care retirement communities

Affiliations/Designations/Education

- Fellow of the Society of Actuaries
- Enrolled Actuary
- Fellow of the Conference of Consulting Actuaries
- Member, American Academy of Actuaries
- BS, MA Mathematics, University of Arizona

BIANCA LIN, Assistant Vice President

Experience/Responsibilities

Bianca's 15 years of actuarial experience includes 11 in employee benefit consulting. Clients depend on Bianca's ability to coordinate projects with them and prepare results in an efficient, cost-effective manner. Bianca's work includes:

- Pension and retiree healthcare actuarial valuations
- Review and analysis of CalPERS valuations
- Cost analysis and projections of various post employment benefit programs

Affiliations/Designations/Education

- Fellow of the Society of Actuaries
- Enrolled Actuary
- Member, American Academy of Actuaries
- MS in Statistics, National Tsing Hwa University, Taiwan

JOSEPH D'ONOFRIO, Assistant Vice President

Experience/Responsibilities

With over 30 years in employee benefits, Joe has served as retirement consultant for numerous public agencies, private sector corporations, government employers, governmental contractors, nonprofit organizations, and professional corporations.

Joe's experience includes:

- Governmental and corporate pension and retiree medical plan consulting and administration
- GASB, FASB, and CAS accounting valuations
- Qualified retirement plan design and valuations
- Nonqualified executive retirement plan design and financial analysis
- Asset liability modeling
- Employee benefit merger and acquisition issues
- Plan terminations

Affiliations/Designations/Education

- Fellow of the Society of Actuaries
- Enrolled Actuary under ERISA
- Fellow of the Conference of Consulting Actuaries
- Member, American Academy of Actuaries
- BS in Physics, The Cooper Union for the Advancement of Science and Art, New York City

DEANNA VAN VALER, Assistant Vice President

Experience/Responsibilities

Deanna's 20 years of actuarial experience includes 7 years as a CalPERS actuary in addition to working in large and small private sector consulting firms. She has significant experience with public sector plans, including 37 Act Retirement Systems. Clients appreciate Deanna's ability to "speak their language" and provide easy-to-understand explanations of even the most difficult topics. Deanna's experience includes:

- Actuarial valuations for private and public sector pension plans
- Studies analyzing the cost of new benefits and changes to existing plans
- Studies analyzing the rates at which plan members retire, become disabled, terminate, and die
- Valuations of postretirement medical programs
- Plan amendments, summary plan descriptions, and other employee communications
- Calculation of benefits, service purchase, employee communications, and government filings
- Consultant for 37 Act Retirement Systems and other California county and local governmental pension plans, assisting with strategic planning, policy setting, and staff education
- CalPERS actuary for 7 years supervising annual valuations for 5 large State plans with over 600,000 members, non-teaching Schools plans with over 300,000 members, in addition to more than 1,900 plans of participating CalPERS employers
- Speaker at professional conferences and educational seminars for SACRS, CALAPRS, FPPTA

Affiliations/Designations/Education

- Associate of the Society of Actuaries
- Enrolled Actuary under ERISA
- Fellow of the Conference of Consulting Actuaries
- Member, American Academy of Actuaries
- BS in mathematics, Carleton College, Northfield, MN

CATHY WANDRO, Assistant Vice President

Experience/Responsibilities

Cathy has over 15 years of actuarial experience, primarily in employee benefits. Her experience includes:

- Special studies of alternate funding methodologies for public sector retirement systems including funding methods, amortization of unfunded actuarial accrued liabilities and asset valuation methods
- Pension and retiree healthcare public sector actuarial valuations
- Retirement plan redesign, plan amendments, and government filings
- Summary plan descriptions and employee benefit statements
- Profit sharing allocations and benefit adequacy studies

Affiliations/Designations/Education

- Associate of the Society of Actuaries
- Member, American Academy of Actuaries
- BA in mathematics, St. Mary's College of California
- MS in actuarial science, University of Iowa, Iowa City

MARY ELIZABETH REDDING, Assistant Vice President

Experience/Responsibilities

With over 30 years in employee benefits, Mary Beth has served as retirement consultant for a wide range of public agencies, private sector corporations, government employers, governmental contractors, and nonprofit organizations.

Mary Beth's experience includes:

- Governmental and corporate pension and retiree medical plan consulting, valuation and financial modeling and analysis
- Experience studies
- Actuarial audits
- Employee communications, plan amendments, and summary plan descriptions
- GASB, FASB, CASB and IAS accounting valuations
- Qualified retirement and retiree medical plan design, administration and compliance
- Nonqualified executive retirement plan design and financial analysis
- Asset liability modeling
- Employee benefit merger and acquisition consulting
- Plan terminations

Affiliations/Designations/Education

- Fellow of the Society of Actuaries
- Enrolled Actuary under ERISA
- Member, American Academy of Actuaries
- BS in Geology and Geophysics, Yale University, New Haven, Connecticut

Bartel Associates, LLC
GASB 45 Client List

Alameda Corridor Transportation Authority	City of Santa Clarita
Alameda County Fire Department	City of Santa Fe Springs
Alameda County Water District	City of Santa Rosa
American Canyon Fire Protection District	City of Solana Beach
Aptos/La Selva Fire Protection District	City of South Lake Tahoe
Association of Bay Area Governments	City of South San Francisco
Bay Area Air Quality Management District	City of Stanton
Belmont San Carlos Fire District	City of Stockton
Calleguas Municipal Water District	City of Sunnyvale
CalOptima	City of Temple City
Central Contra Costa Sanitary District	City of Torrance
Chino Valley Independent Fire District	City of Tustin
City of Alameda	City of Union City
City of Alhambra	City of Upland
City of Antioch	City of Vallejo
City of Azusa	City of Victorville
City of Belmont	City of West Covina
City of Bishop	City of West Hollywood
City of Brea	City of West Sacramento
City of Brentwood	City of Westlake Village
City of Brisbane	City of Westminster
City of Buena Park	City of Whittier
City of Burbank	City of Yuba City
City of Burlingame	Coachella Valley Water District
City of Campbell	Community Redevelopment Agency of LA
City of Cathedral City	Contra Costa County Public Law Library
City of Chico	Contra Costa Transportation Authority
City of Chino Hills	County of Amador
City of Chula Vista	County of Colusa
City of Citrus Heights	City of Santa Clarita
City of Coachella	County of Madera
City of Commerce	County of Modoc
City of Compton	County of Monterey
City of Concord	County of Napa
City of Corona	County of Nevada
City of Costa Mesa	County of Orange

171

City of Cupertino	County of Placer
City of Cypress	County of Santa Cruz
City of Daly City	County of Shasta
City of Davis	County of Siskiyou
City of Dixon	County of Solano
City of Dublin	County of Tulare
City of El Centro	County of Tuolumne
City of El Segundo	County of Yolo
City of Encinitas	County of Yuba
City of Fairfield	Cucamonga Valley Water District
City of Fort Bragg	Delta Diablo Sanitation District
City of Foster City	Dublin San Ramon Services District
City of Fountain Valley	East Bay Regional Park District
City of Fremont	Eastern Municipal Water District
City of Gilroy	Eastern Sierra Community Services District
City of Glendale	Golden Sierra Job Training Agency
City of Glendora	Helix Water District
City of Half Moon Bay	Ironhouse Sanitation District
City of Hawaiian Gardens	Irvine Ranch Water District
City of Healdsburg	Local and Regional Government Authorities
City of Hemet	Los Altos Unified School District
City of Hercules	Los Angeles County Sanitation District
City of Hermosa Beach	Marin County Housing Authority
City of Hesperia	Marin Municipal Water District
City of Huntington Park	McCloud Community Services District
City of Inglewood	Menlo Park Fire Protection District
City of La Habra	Metropolitan Water District of Southern CA
City of La Puente	Midpeninsula Regional Open Space District
City of Livermore	Moraga-Orinda Fire District
City of Lompoc	Mt. Diablo Unified School District
City of Long Beach	Napa County Transportation and Planning Agency
City of Los Altos	Nevada Irrigation District
City of Lynwood	North Coast County Water District
City of Madera	North Orange County Community College District
City of Manteca	North Tahoe Fire Protection District

172

City of Martinez	Orange County Transportation Authority
City of Menlo Park	Otay Water District
City of Merced	Palm Springs Desert Resort CVA
City of Mill Valley	Palo Alto Unified School District
City of Millbrae	Peralta Community College District
City of Mission Viejo	Placer County Water Agency
City of Monrovia	Port of Stockton
City of Monte Sereno	Rancho Cucamonga Fire District
City of Monterey	Redwood Empire Municipal Insurance Fund
City of Moorpark	Riverside County Transportation Commission
City of Moreno Valley	Rodeo Hercules Fire Protection District
City of Napa	Ross Valley Sanitary District
City of Newark	Sacramento Metropolitan Fire Protection District
City of Newport Beach	Sacramento Regional Fire Communications Center
City of Norco	Salinas Valley Solid Waste Authority
City of Novato	San Bernardino Municipal Water Department
City of Ontario	San Diego County Water Authority
City of Oroville	San Francisco Bay Area Water Emergency Transportation Authority
City of Palo Alto	San Francisco County Transportation Authority
City of Paramount	San Francisco Redevelopment Agency
City of Patterson	San Mateo County Transit District
City of Petaluma	San Ramon Valley Fire Protection District
City of Pico Rivera	Santa Cruz Regional 9-1-1
City of Piedmont	Scotts Valley Fire Protection District
City of Pinole	Solano County Water Agency
City of Pismo Beach	South Coast Water District
City of Pittsburg	South County Fire Protection Authority
City of Pleasanton	Southern California Association of Governments
City of Pomona	Southern California Regional Rail Authority
City of Rancho Cucamonga	Stanislaus County Housing Authority
City of Redding	State of Maine
City of Redondo Beach	Stege Sanitary District
City of Redwood City	Sweetwater Authority
City of Richmond	Tamalpais Union High School District
City of Riverside	Town of Corte Madera

173

City of Rocklin	Town of Hillsborough
City of Rohnert Park	Town of Los Altos Hills
City of Roseville	Town of Los Gatos
City of Sacramento	Town of Ross
City of Salinas	Town of Windsor
City of San Bernardino	Town of Yountville
City of San Carlos	Tuolumne Utilities District
City of San Gabriel	United Water Conservation District
City of San Jose	Ventura County Transportation Commission
City of San Leandro	West Basin Municipal Water District
City of San Luis Obispo	West Valley Sanitation District
City of San Marcos	Westborough Water District
City of San Mateo	Windsor Fire Protection District
City of San Rafael	Yolo County Transportation District
City of Sand City	Yolo-Solano Air Quality Management District
City of Santa Ana	Yuba County Water Agency
City of Santa Clara	

BARTEL ASSOCIATES, LLC

August 2, 2016

Kevin Hart
General Manager
Kensington Community Services District
217 Arlington Ave.
Kensington, CA 94707

Re: 2016 GASB 68 Actuarial Information for CalPERS Cost-Sharing (Risk Pool) Plans

Dear Mr. Hart:

CalPERS has changed the GASB 68 reports for cost-sharing plans in the risk pools. Last year a separate GASB 68 report was issued for each rate plan that contained all necessary reporting. This year, CalPERS did not produce individual reports — shifting much of the calculation burden to employers. Bartel Associates can assist you by preparing a consolidated report with all required actuarial information.

Our actuaries are experts in GASB 68, especially the complex June 30, 2016 calculations required from employers with CalPERS cost-sharing plans. They're extensive, with the number of deferral bases more than doubling. To ease your responsibility, we will prepare a report with:

- Your proportionate share of net pension liability, NPL sensitivity, and deferral amounts based on percentages listed by CalPERS
- All employer-specific deferrals and associated amortization schedules
- Adjustment to pension expense for the difference in proportions due to CalPERS methodology
- Net pension expense, with all employer-specific amounts
- All actuarial amounts required for the note disclosures and RSI.

You'll also receive supporting details including replication of all calculations and journal entries in the CalPERS GASB 68 Guide for Public Agency Cost-Sharing Multiple-Employer Defined Benefit Pension Plan.

We'll need copies of last year's CalPERS GASB 68 reports as a starting point. Based on your participation in the Safety risk pool only, our $2,000-$3,000 fee will include:

- The clear, comprehensive report and supporting information described above for easy review by your auditors. (Let us know if you'd like to see a sample.)
- Up to 1 hour review/discussion of the report with you and/or your auditors.

We look forward to assisting you with this important reporting requirement.

Sincerely,

Mary Elizabeth Redding

Mary Beth Redding
Vice President & Actuary

mbredding@bartel-associates.com/650-377-1617
c: John Bartel, Bartel Associates, LLC

175

City of XYZ
Retiree Healthcare Plan

June 30, 2013 Actuarial Valuation
Executive Summary

(numbers in this sample report are fictitious)

June 2013

Bartel Associates, LLC
411 Borel Avenue, Suite 101
San Mateo, California 94402

176

City of XYZ Retiree Healthcare Plan
June 30, 2013 Actuarial Valuation

Governmental Accounting Standards Board Statement No. 45 (GASB 45), "Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions" provides standards for the financial reporting of the City's Retiree Healthcare Plan. The June 30, 2013 actuarial valuation provides GASB 45 financial reporting information for the City's 2013/14 and 2014/15 fiscal years.

PARTICIPANTS

Participants included in the prior June 30, 2011 actuarial valuation and the current June 30, 2013 actuarial valuation are as follows:

	6/30/11	6/30/13
■ Actives		
• Number	190	200
• Average		
➢ Age	50.2	51.1
➢ City Service	6.5	7.4
➢ CalPERS Service	11.5	12.2
➢ CalPERS Salary	$59,900	$59,200
• Total Salary (000's)	11,381	11,830
■ Retirees		
• Number	50	50
• Average		
➢ Age	61.0	63.1
➢ Retirement Age	55.5	55.5
➢ Monthly Benefit	$ 108	$ 115

PLAN ASSETS AND DISCOUNT RATE

Assets must be set aside in a trust that cannot legally be used for any purpose other than to pay retiree healthcare benefits in order to be considered plan assets for GASB 45 purposes. The City began prefunding in an OPEB trust during 2008/09.

The Market Value of Assets were $2,289,000 as of June 30, 2013. Changes in the Market Value of Assets between June 30, 2011 and June 30, 2013 were as follows (amounts in 000's):

	2011/12	2012/13
■ Market Value at Beginning of Year	$1,699	$1,882
• City Contributions	216	221
• Benefit Payments	(42)	(41)
• Administrative Expenses	(2)	(3)
• Investment Earnings	11	230
■ Market Value at End of Year	1,882	2,289

The City is prefunding with CalPERS CERBT OPEB trust under investment Strategy 1 with the following long-term investment policy targets:

	Target Asset Allocation
Global Equities	66%
U.S. Fixed Income	18%
Real Estate Investment Trusts (REIT's)	8%
Treasury Inflation-Protected Securities (TIPS)	5%
Commodities	3%
Total	100%

The discount rate represents the long term future (net of expenses) expected return on trust assets. A 7.25% discount rate was used in the valuation, unchanged from the June 30, 2011 actuarial valuation.

Investment returns above or below the assumed long-term return are spread over a 5-year rolling period to determine Actuarial Value of Assets. This smoothes volatility in the Market Value of Assets, stabilizing contributions. The Actuarial Value of Assets is kept within a corridor of 80% to 120% of the Market Value of Assets to prevent it from diverging significantly from the Market Value of Assets. The Actuarial Value of Assets is $2,239,000 on the June 30, 2013 valuation date. Historical asset information follow (amounts in 000's):

	Market Value	Actuarial Value
■ 6/30/13	$ 2,289	$ 2,239
■ 6/30/11	1,699	1,624

FUNDED STATUS

Following is the plan's funded status (measured by comparing the Actuarial Accrued Liability with Actuarial Value of Assets) as of June 30, 2011 and June 30, 2013 (amounts in 000's):

Funded Status	6/30/11	6/30/13
■ Actuarial Accrued Liability		
• Actives	$ 1,776	$ 2,217
• Retirees	757	825
• Total	2,533	3,042
■ Actuarial Value of Assets	1,624	2,239
■ Unfunded AAL	909	803
■ Funded Percentage	64.1%	73.6%

ANNUAL REQUIRED CONTRIBUTION

The Annual Required Contribution is equal to the Normal Cost (value of benefits accruing for active participants during the year) plus an amortization of the Unfunded Actuarial Accrued Liability. The City's Annual Required Contribution follows (amounts in 000's):

	6/30/11 Valuation		6/30/13 Valuation	
	2011/12	**2012/13**	**2013/14**	**2014/15**
■ Normal Cost	$ 102	$ 106	$ 126	$ 131
■ Unfunded Liability Amortization	86	89	86	89
■ Annual Required Contribution	188	195	212	220
■ Average Amortization Period	15 years	14 years	12 years	11 years

ACCOUNTING INFORMATION

The City's Net OPEB Obligation is the historical difference between the Annual Required Contributions and actual contributions since GASB 45 implementation. Both contributions to the OPEB trust and benefits paid to retirees are considered contributions. If Annual Required Contributions exceed actual contributions there will be a Net OPEB Obligation. If actual contributions exceed Annual Required Contributions there will be a Net OPEB Asset. The Net OPEB Obligation would be zero if the Annual Required Contribution is always contributed.

The Annual OPEB Cost is the annual accounting accrual. Since the Annual Required Contribution reflects previous over/under funding which is also included in the Net OPEB Obligation, an adjustment is made to the Annual Required Contribution to prevent double counting. Following is the development of the Annual OPEB Cost (amounts in 000's):

	6/30/13 Valuation	
	2013/14	**2014/15**
■ Annual Required Contribution	$ 212	$ 220
• Interest on Net OPEB Obligation	58	57
• Amortization of Net OPEB Obligation	(73)	(76)
■ Annual OPEB Cost	197	201

The City's expected Net OPEB Obligation for 2013/14 and 2014/15 are (amounts in 000's):

	6/30/13 Valuation	
	2013/14	**2014/15**
■ Net OPEB Obligation/(Asset) at Beginning of Year	$ 797	$ 782
• Annual OPEB Cost	197	201
• Projected Trust Contributions	(212)	(220)
■ Net OPEB Obligation/(Asset) at End of Year	782	763

The City's actual Net OPEB Obligations may differ from those shown above because actual contributions may differ from those estimated.

DEFINITIONS

Present Value of Benefits: The first step in an actuarial valuation is to obtain the plan provisions and participant data (eligible active employees, retirees, and beneficiaries) as of the valuation date. Using this information and appropriate actuarial assumptions, the actuary projects the amount and timing of future benefit payments. The actuarial assumptions are used to estimate when employees will retire, terminate, die, or become disabled, as well as project salary increases, inflation, net investment earnings, and plan participation. Expected future benefit payments are discounted back to the valuation date using the expected net investment return or discount rate. This discounted value of future expected benefit payments is the Present Value of Benefits. It represents the funds the plan needs as of the valuation date to pay all expected future benefits if all assumptions are realized and no additional contributions are made by the City. The City's June 30, 2013 Present Value of Benefits was $3.9 million.

Actuarial Accrued Liability: The Actuarial Accrued Liability is the portion of the Present Value of Benefits that has been allocated to prior service through the valuation date. The City's June 30, 2013 Actuarial Accrued Liability was $3.0 million. The Actuarial Accrued Liability less the Actuarial Value of Assets is the Unfunded Actuarial Accrued Liability. The Unfunded Actuarial Accrued Liability was $0.8 million on June 30, 2013.

Normal Cost: The Normal Cost is the portion of the Present Value of Benefits allocated to the current fiscal year. The Plan's Normal Cost for the 2013/14 fiscal year is $126,000. The Present Value of Benefits is equal to the Accrued Actuarial Liability plus the discounted value of all future Normal Costs for current active participants.

Actuarial Cost Method: The actuarial cost method determines how benefits are allocated to each year of service. It has no effect on the Present Value of Benefits but has significant effect on how the Actuarial Accrued Liability and Normal Cost are determined, that is, how the cost of benefits are allocated to each year of service. The City's June 30, 2013 retiree healthcare valuation was prepared using the Entry Age Normal Cost Method. Under the Entry Age Normal Cost Method, the Plan's Normal Cost is determined as a level percent of payroll over each participant's expected working lifetime.

KEY ACTUARIAL ASSUMPTIONS

Discount Rate: GASB 45 requires that the discount rate be based on the source of funds used to pay benefits. The June 30, 2013 actuarial valuation used a discount rate of 7.25%. The discount rate was unchanged from the June 30, 2011 actuarial valuation, reflecting the net long-term return of the plan's fund based on the trust's current long-term investment allocation policy.

Retiree Healthcare Trend: City paid benefit limited by PEMHCA minimum - $115/month in 2013, $119/month in 2014, with future increases determined by CalPERS Board and assumed 4.5% annually.

Actual premiums were used for 2013. The following table shows that the healthcare inflation assumption for non-Medicare eligible participants starts at 8.5% (the increase in 2014 costs over 2013 costs) for premiums, and grades down to 5.0% after 7 years. The healthcare inflation assumption for Medicare eligible participants starts at 8.9% for premiums, and also grades down to 5.0% after 7 years. Since the

180

general inflation assumption is 3%, healthcare increases are assumed to level off at 2% above general inflation.

Healthcare Cost Increase Assumption		
Calendar Year	**Non-Medicare Eligible**	**Medicare Eligible**
2014	8.5%	8.9%
2015	8.0%	8.3%
2016	7.5%	7.8%
2017	7.0%	7.2%
2018	6.5%	6.7%
2019	6.0%	6.1%
2020	5.5%	5.6%
2021+	5.0%	5.0%

RETIREE HEALTHCARE PLAN BENEFIT SUMMARY

■ Eligibility	• Retire directly from City under CalPERS (age 50 and 5 years of CalPERS service or disability) • Continue participating in PEMHCA after retirement
■ Retiree Medical Benefit	• City pays the PEMHCA minimum benefit - $115/month in 2013, $119/month in 2014, with future increases determined by CalPERS Board.
■ Surviving Spouse Benefit	• Surviving spouse coverage based on retirement plan election • Same benefit continues to surviving spouse
■ Other OPEB	• No City contribution for dental, vision, or life

BARTEL ASSOCIATES, LLC

CITY OF XYZ
RETIREE HEALTHCARE PLAN

June 30, 2011 GASB 45 Actuarial Valuation

(numbers in this sample outline are fictitious)

Presented by **John Bartel, President**
Bartel Associates, LLC

August 1, 2012

CONTENTS

183

BENEFIT SUMMARY

	PEMHCA	Non-PEMHCA Benefit
■ Eligibility	■ Retire directly from City under CalPERS ■ Age 50 and 5 years CalPERS service (or disability)	■ Retire directly from City under CalPERS ■ Age 50 and 15 years City service
■ Benefit	■ PEMHCA minimum "unequal method" [1]: • $59.40 in 2011 • $67.20 in 2012 • $74.75 in 2013 ■ 5% of active contribution times years in PEMHCA (City joined PEMHCA in 2000). ■ 100% active contribution in 2020	■ City reimburses up to $300 per month ■ Total of PEMHCA minimum and Non-PEMHCA Benefit limited to medical premium
■ Surviving Spouse Benefit	■ Based on retirement plan election	■ No surviving spouse continuation

[1] City pays PEMHCA minimum for actives ($108 in 2011, $112 in 2012, and $115 in 2013).

BENEFIT SUMMARY

■ Dental, Vision, Medicare Reimbursement & Life	■ None
■ Other	■ Implicit rate subsidy not included ■ Exposure Draft Actuarial Standard of Practice No. 6
■ Pay-as-you-go Costs	Year / Pay-Go 2011/12 $165,000 (estimate) 2010/11 132,179 2009/10 102,542 2008/09 80,144 2007/08 62,816

184

Actives

	1/1/2008	1/1/2010	6/30/2011
■ Count			
• Miscellaneous	132	136	120
• Safety	47	44	44
• Total	179	180	164
■ Averages			
• Age	46.4	46.6	46.5
• City Service	12.0	11.9	12.6
• Salary	$ 86,100	$ 85,800	$95,000
■ Total Salary (000's)	15,442	15,470	15,577

Retirees

	1/1/2008	1/1/2010	6/30/2011
■ Count			
• Miscellaneous	21	24	29
• Safety	15	20	23
• Total (w/ benefits)	36	44	52
• Waived	32	48	46
• Total	68	92	98
■ Averages (w/ benefits)			
• Age	66.0	65.7	64.4
• Monthly Benefit	$172	$180	$240

185

ACTUARIAL ASSUMPTIONS HIGHLIGHTS

Assumption	January 1, 2010 Valuation	June 30, 2011 Valuation
■ Valuation Date	■ January 1, 2010 ■ 2010/11 & 2011/12 FY (end of year)	■ June 30, 2011 ■ 2012/13 & 2013/14 FY (beginning of year)
■ Funding Policy	■ Phase in to full ARC over 10 year period ■ Pay-go plus percent of excess of ARC over PayGo: 2008/09: 10% 2009/10: 20% 2010/11: 30% 2011/12: 40% 2012/13: 50% 2013/14: 60% 2014/15: 70% 2015/16: 80% 2016/17: 90% 2017/18+ 100% (full ARC)	■ Same

ACTUARIAL ASSUMPTIONS HIGHLIGHTS

Assumption	January 1, 2010 Valuation	June 30, 2011 Valuation
■ Discount Rate	■ Select & ultimate discount rates based funding policy: 2008/09 4.60% 2009/10 4.95% 2010/11 5.30% 2011/12 5.65% ↓ ↓ 2017/18+ 7.75%	■ Select & ultimate discount rates based funding policy: 2011/12 5.45% 2012/13 5.75% 2013/14 6.05% 2014/15 6.35% 2015/16 6.65% ↓ ↓ 2017/18+ 7.25%

186

<table>
<tr><th>Assumption</th><th>January 1, 2010 Valuation</th><th>June 30, 2011 Valuation</th></tr>
<tr>
<td>■ Healthcare Trend</td>
<td>
<table>
<tr><td></td><td colspan="4">Increase from Prior Year</td></tr>
<tr><td></td><td colspan="2">Non-Medicare</td><td colspan="2">Medicare</td></tr>
<tr><td>Year</td><td>HMO</td><td>PPO</td><td>HMO</td><td>PPO</td></tr>
<tr><td>2010</td><td colspan="4">Actual Premiums</td></tr>
<tr><td>2011</td><td>8.4%</td><td>9.0%</td><td>8.7%</td><td>9.3%</td></tr>
<tr><td>2012</td><td>7.8%</td><td>8.3%</td><td>8.0%</td><td>8.5%</td></tr>
<tr><td>2013</td><td>7.1%</td><td>7.5%</td><td>7.3%</td><td>7.7%</td></tr>
<tr><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td></tr>
<tr><td>2017+</td><td>4.5%</td><td>4.5%</td><td>4.5%</td><td>4.5%</td></tr>
</table>
■ Adjustment to the above trend rates for:
• Kaiser & PORAC: No adjustment
• Blue Shield: Increase 1% each year for 2011 – 2012
• PPOs: Increase 1% each year for 2011 – 2013
</td>
<td>
<table>
<tr><td></td><td colspan="2">Increase from Prior Year</td></tr>
<tr><td></td><td>Non-Medicare</td><td>Medicare</td></tr>
<tr><td>Year</td><td>HMO & PPO</td><td>HMO & PPO</td></tr>
<tr><td>2010</td><td colspan="2">n/a</td></tr>
<tr><td>2011</td><td colspan="2">Actual Premiums</td></tr>
<tr><td>2012</td><td colspan="2">Actual Premiums</td></tr>
<tr><td>2013</td><td>9.0%</td><td>9.4%</td></tr>
<tr><td>2014</td><td>8.5%</td><td>8.9%</td></tr>
<tr><td>2015</td><td>8.0%</td><td>8.3%</td></tr>
<tr><td>↓</td><td>↓</td><td>↓</td></tr>
<tr><td>2021+</td><td>5.0%</td><td>5.0%</td></tr>
</table>
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</tr>
</table>

Assumption	January 1, 2010 Valuation	June 30, 2011 Valuation
■ Non-PEMHCA Benefit Cap Increase	■ HMO increase rates	■ 0% for 5 years, 3.0% annual increase beginning 2016/17
■ Mortality, Withdrawal, Disability	■ CalPERS 1997-2002 Experience Study	■ CalPERS 1997-2007 Experience Study ■ Projected with Scale AA

187

Market Value of Plan Assets

(Amounts in 000's)

	2008/09	2009/10	2010/11	Projected 2011/12
■ Market Value (Beginning of Year)	$ -	$ 130	$ 274	$ 513
• Contributions	130	124	167	238
• Benefit Payments	-	-	-	-
• Administration Expenses	(0)	(0)	(0)	-
• Investment Earnings	(0)	20	72	37
■ Market Value (End of Year)	130	274	513	788
■ Approximate MVA Return	n/a	15.2%	26.3%	7.3%

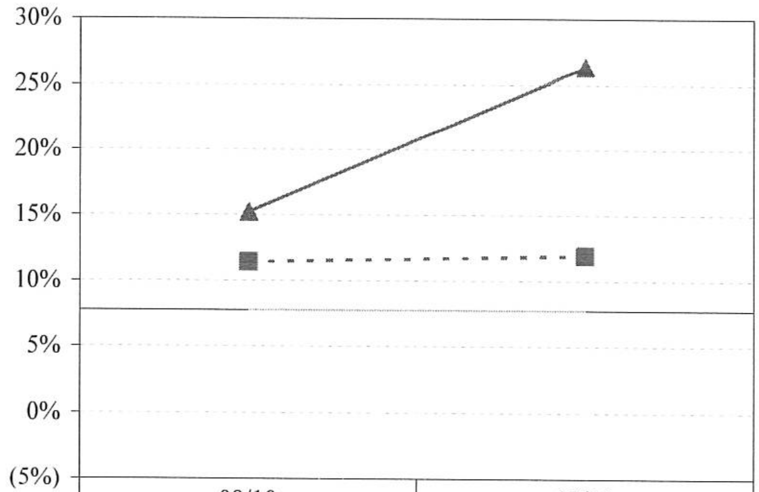
Actuarial Value of Plan Assets

(Amounts in 000's)

	2008/09	2009/10	2010/11	Projected 2011/12
■ Actuarial Value (Beginning of Year)	$ -	$ 130	$ 269	$ 468
• Contributions	130	124	167	238
• Benefit Payments	-	-	-	-
• Credited Return	-	15	32	44
■ Actuarial Value (End of Year)	130	269	468	749
■ Approximate AVA Return	n/a	11.4%	11.9%	9.3%

188

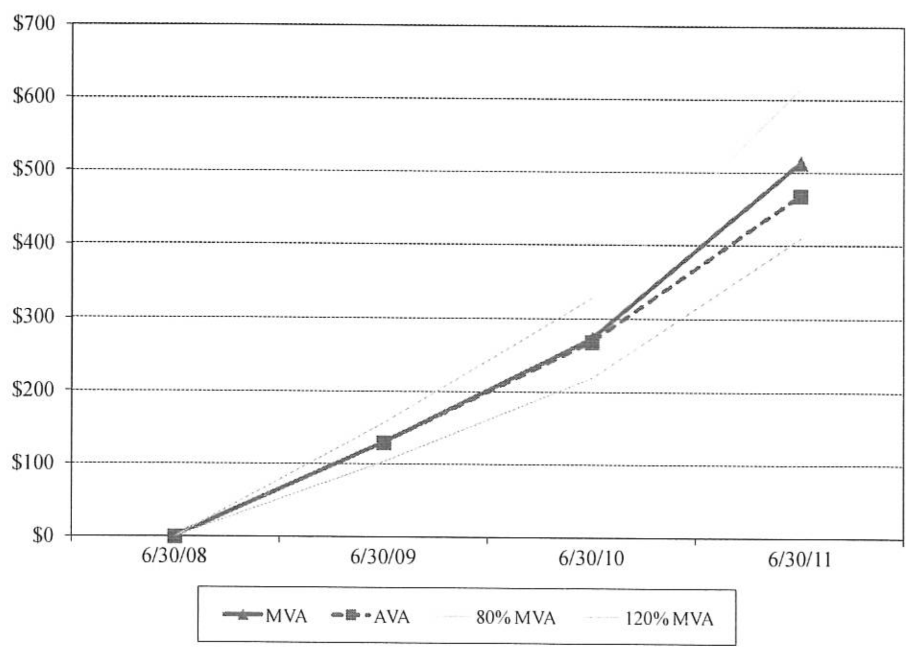
Historical Returns



	09/10	10/11
MVA	15.2%	26.3%
Expected Return	7.8%	7.8%
AVA	11.4%	11.9%

Historical Assets

(Amounts in 000's)

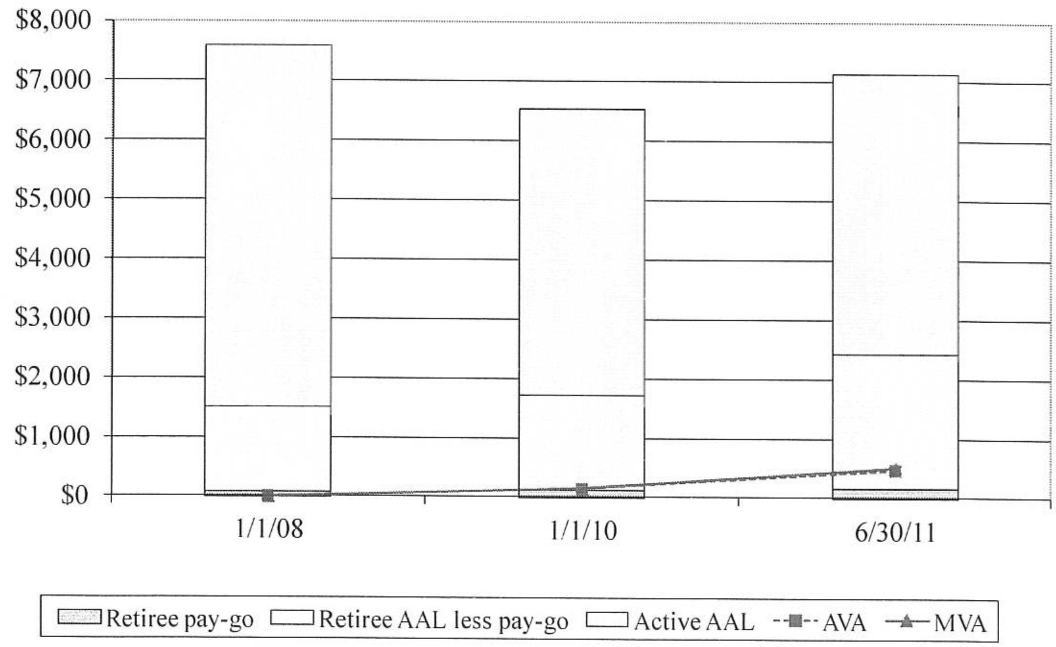


189

Funded Status
(Amounts in 000's)

	1/1/2008	1/1/2010	6/30/2011
■ **Present Value of Benefits**			
• Actives	$ 8,616	$ 7,304	$ 6,776
• Retirees	1,507	1,711	2,426
• Total	10,123	9,015	9,202
■ **Actuarial Accrued Liability**			
• Actives	6,081	4,826	4,715
• Retirees	1,507	1,711	2,426
• Total	7,588	6,537	7,141
■ **Actuarial Value of Assets**	-	140	468
■ **Unfunded Actuarial Accrued Liability**	7,588	6,397	6,673
■ **Normal Cost**	283	298	256
■ **Pay-As-You-Go Cost**	73	107	186

Funded Status
(Amounts in 000's)



190

Actuarial Accrued Liability Gain/Loss

(Amounts in 000's)

	AAL
■ **Actual 1/1/10**	$ 6,537
■ **Expected 6/30/11**	7,366
■ **Changes**	
• Premiums lower than expected	(26)
• Non-PEMHCA benefit lower than expected	(117)
• Change in non-PEMHCA benefit increase rates and healthcare trend	(816)
• Change in CalPERS demographic assumptions	439
• Change in discount rate	448
• Other	(153)
• Total	(225)
■ **Actual 6/30/11**	7,141

Total Gain/Loss

(Amounts in 000's)

Source	6/30/2012 Total (Gain)/Loss
■ Liability	$ (237)
■ Assets	(20)
■ Total	(257)

191

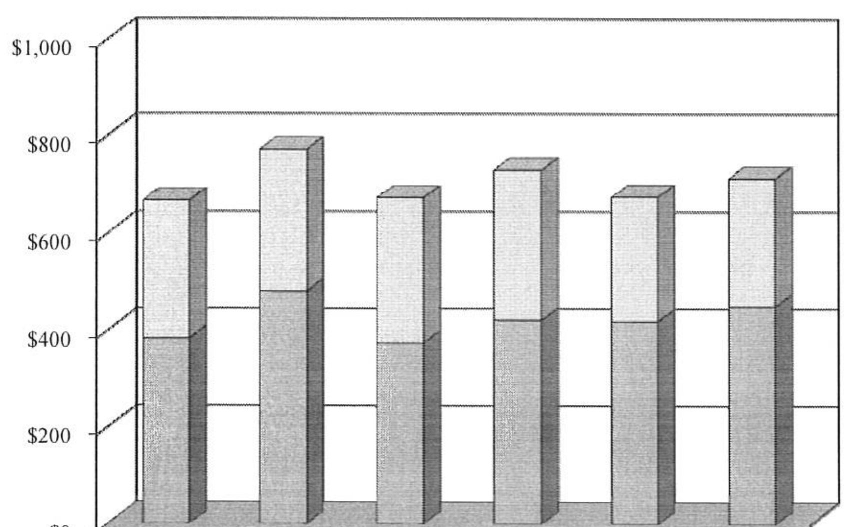
Annual Required Contributions (ARC)

(Amounts in 000's)

	1/1/2010 Valuation		6/30/2011 Valuation	
	2010/11	2011/12	2012/13	2013/14
■ **ARC - $**				
• Normal Cost	$ 298	$ 309	$ 256	$ 264
• UAAL Amortization	374	421	418	449
• Total	672	730	674	713
■ **Projected Payroll**	15,973	16,492	16,084	16,606
■ **ARC - %**				
• Normal Cost	1.9%	1.9%	1.6%	1.6%
• UAAL Amortization	2.3%	2.5%	2.6%	2.7%
• Total	4.2%	4.4%	4.2%	4.3%

Annual Required Contributions (ARC)

(Amounts in 000's)



	08/09	09/10	10/11	11/12	12/13	13/14
□ Normal Cost	283	292	298	309	256	264
▨ Amortization	383	479	374	421	418	449
ARC	666	771	672	730	674	713

192

Amortization Bases
(Amounts in 000's)

	1/1/2010 Valuation		6/30/2011 Valuation	
	6/30/2010	6/30/2011	6/30/2012	6/30/2013
■ Outstanding Balance				
• Initial UAAL	$ 7,739	$ 7,705	$ 7,682	$ 7,678
• (Gains)/Losses & Assumption Changes	-		-	-
➢ 2010 Valuation	(2,241)	(2,231)	(2,225)	(2,223)
➢ 2011 Valuation	-	-	(290)	(281)
• Contributions < ARC (NOO)	1,019	1,388	1,720	1,921
• Total	6,517	6,830	6,910	7,117

Amortization Payments
(Amounts in 000's)

	1/1/2010 Valuation		6/30/2011 Valuation	
	2010/11	2011/12	2012/13	2013/14
■ Amortization Payment				
• Initial UAAL	$ 444	$ 459	$ 422	$ 435
• (Gains)/Losses & Assumption Changes	-		-	-
➢ 2010 Valuation	(129)	(133)	(122)	(126)
➢ 2011 Valuation	-	-	(24)	(25)
• Contributions < ARC (NOO)	58	87	143	164
• Total	374	413	418	449
■ Average Years	30	29	24	23

193

Estimated Net OPEB Obligation (NOO) Projection

(Amounts in 000's)

	CAFR 2010/11	Estimate 2011/12	Estimate 2012/13	Estimate 2013/14
■ **Estimated NOO at Beginning of Year**	$ 1,019	$ 1,388	$ 1,720	$ 1,921
■ **Annual OPEB Cost**				
• Annual Required Contribution (ARC)	672	730	674	713
• Interest on NOO	54	77	99	116
• Adjustment to ARC	(58)	(87)	(143)	(164)
• Annual OPEB Cost	668	720	630	665
■ **Contributions**				
• Benefit Payments	132	150	186	217
• Trust Pre-Funding	184	238	244	298
• Total Contribution	299	388	430	515
■ **Estimated NOO at End of Year**	1,388	1,720	1,921	2,071

Estimated Net OPEB Obligation (NOO) Projection

(Amounts in 000's)

Fiscal Year	Begin Year NOO	Contribution: Ben Pmts	Contribution: Pre Funding	Contribution: Total Contrib	Annual OPEB Cost (AOC)	Payroll	Contrib % of Payroll
2012/13	$ 1,720	$ 186	$ 244	$ 430	$ 630	$ 16,084	2.7%
2013/14	1,921	217	298	515	665	16,606	3.1%
2014/15	2,071	251	349	600	698	17,146	3.5%
2015/16	2,169	286	397	683	729	17,703	3.9%
2016/17	2,215	325	439	764	758	18,279	4.2%
2017/18	2,209	373	466	839	784	18,873	4.4%
2018/19	2,154	421	441	862	800	19,486	4.4%
2019/20	2,093	474	410	884	817	20,119	4.4%
2020/21	2,025	527	380	907	833	20,773	4.4%
2021/22	1,951	577	353	930	850	21,448	4.3%

194

Funded Status by Group

(Amounts in 000's)

	Misc	Police	Total
■ **Present Value of Benefits**			
• Actives	$ 4,446	$ 2,329	$ 6,776
• Retirees	1,269	1,156	2,426
• Total	5,715	3,485	9,202
■ **Actuarial Accrued Liability**			
• Actives	3,101	1,614	4,715
• Retirees	1,269	1,156	2,426
• Total	4,370	2,770	7,141
■ **Actuarial Value of Assets**[2]	286	182	468
■ **Unfunded Actuarial Accrued Liability**	4,084	2,588	6,673
■ **Normal Cost**	171	85	256
■ **Pay-As-You-Go Cost**	105	81	186

[2] Allocated in proportion to AAL

2012/13 Annual Required Contributions (ARC) by Group

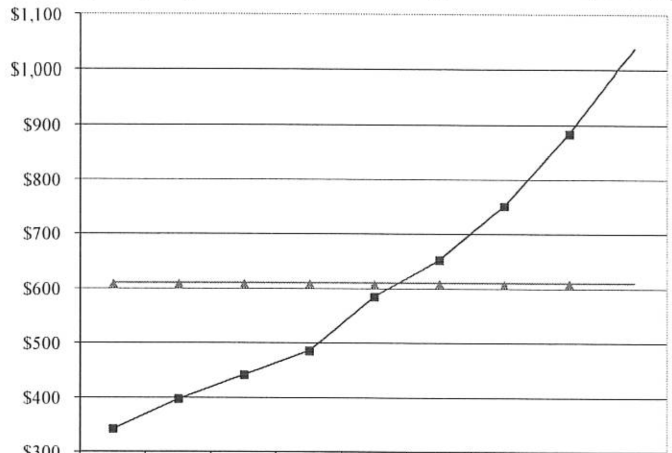
(Amounts in 000's)

	Misc	Police	Total
■ **ARC - $**			
• Normal Cost	$ 171	$ 85	$ 256
• UAAL Amortization	262	165	418
• Total	433	249	674
■ **Projected Payroll**	10,298	5,786	16,084
■ **ARC - %**			
• Normal Cost	1.7%	1.5%	1.6%
• UAAL Amortization	2.5%	2.8%	2.6%
• Total	4.2%	4.3%	4.2%

195

Implied Subsidy

- Background
  - For PEMHCA, employer cost for allowing retirees to participate at active rates.



	25	30	35	40	45	50	55	60	65
Blended Premium	$610	$610	$610	$610	$610	$610	$610	$610	$610
Cost by Age	$343	$398	$442	$486	$586	$652	$752	$885	$1,041

  - Community rated plans <u>historically</u> not required to value implied subsidy.
  - CalPERS has certified PEMHCA is community rated for Public Agencies.
  - Valuation does not include an implied subsidy for PEMHCA.

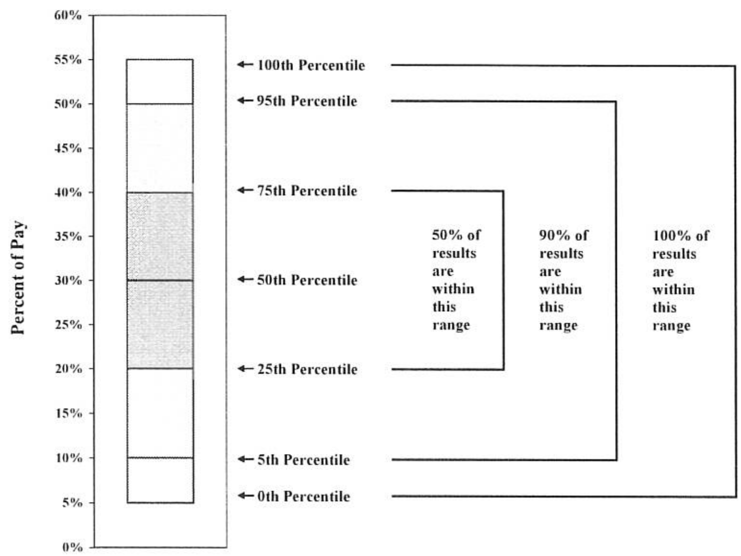
Implied Subsidy

- GASB 45 defers to Actuarial Standards of Practice.
- In April 2012, American Academy of Actuaries released Exposure Draft Actuarial Standard of Practice No. 6[3]:
  - Revision to current ASOP No. 6
  - Would require implied subsidy valued for community rated plans such as PEMHCA.
  - Timing:
    - ➢ Comments due by July 15, 2012
    - ➢ ASOPs generally effective 1 year after final statement adopted by ASB with earlier implementation encouraged
- Implied Subsidy impact depends on a number of factors including:
  - CalPERS provided information
  - Miscellaneous/Safety mix
  - Active/retiree proportions
  - Level of pre-funding
- AAL/ARC increase relative to current plan very large for PEMHCA minimum

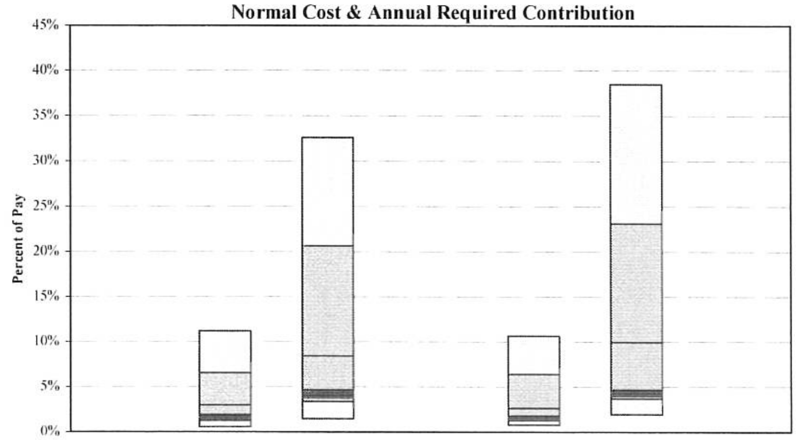
[3] Measuring Retiree Group Benefits Obligations and Determining Retiree Group Benefits Plan Costs or Contributions.

196

GASB 45
Retiree Medical Benefits Comparison
Sample Percentile Graph



Bartel Associates GASB 45 OPEB Database
Normal Cost & Annual Required Contribution

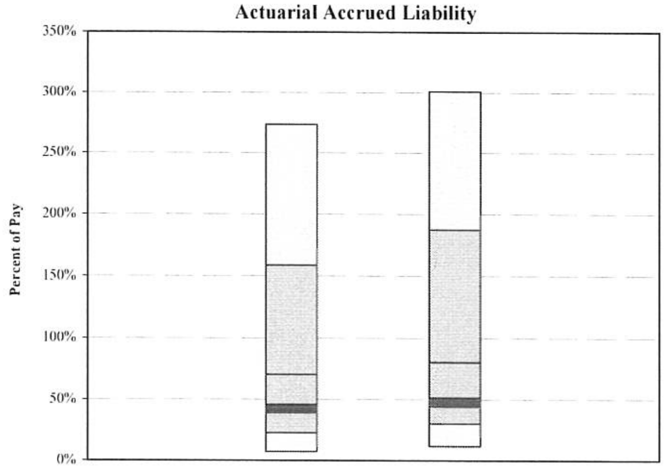


	Miscellaneous NC	Miscellaneous ARC	Safety NC	Safety ARC
95th Percentile	11.2%	32.6%	10.6%	38.5%
75th Percentile	6.5%	20.6%	6.4%	23.1%
50th Percentile	2.9%	8.4%	2.6%	10.0%
25th Percentile	1.2%	3.3%	1.3%	3.7%
5th Percentile	0.6%	1.4%	0.8%	2.0%
Percent of Pay	1.7%	4.2%	1.5%	4.3%
Percentile	32%	33%	31%	31%

Discount Rate = 7.25%, Average Amortization Period = 20.7 Years

197

Bartel Associates GASB 45 OPEB Database
Actuarial Accrued Liability



	Miscellaneous	Safety
95th Percentile	274%	301%
75th Percentile	159%	187%
50th Percentile	70%	80%
25th Percentile	23%	30%
5th Percentile	7%	12%
Percent of Pay	42%	48%
Percentile	40%	36%

Discount Rate = 7.25%

ACTUARIAL CERTIFICATION

This report presents the City of XYZ's Retiree Healthcare Plan ("Plan") June 30, 2011 actuarial valuation. The purpose of this valuation is to:

- Determine the Governmental Accounting Standards Board Statement Nos. 43 and 45 June 30, 2011 Benefit Obligations,
- Determine the Plan's June 30, 2011 Funded Status, and
- Calculate the 2012/13 and 2013/14 Annual Required Contributions.

The report provides information intended for reporting under GASB 43 and 45, but may not be appropriate for other purposes. Information provided in this report may be useful to the City for the Plan's financial management. Future valuations may differ significantly if the Plan's experience differs from our assumptions or if there are changes in Plan design, actuarial methods or actuarial assumptions. The project scope did not include an analysis of this potential variation.

The valuation is based on Plan provisions, participant data, and asset information provided by the City as summarized in this report, which we relied on and did not audit. We reviewed the participant data for reasonableness.

To the best of our knowledge, this report is complete and accurate and has been conducted using generally accepted actuarial principles and practices. Additionally, in our opinion, actuarial methods and assumptions comply with GASB 43 and 45. As a member of the American Academy of Actuaries meeting the Academy Qualification Standards, I certify the actuarial results and opinions herein.

Respectfully submitted,

John Bartel, ASA, MAAA, FCA
President
Bartel Associates, LLC
August 1, 2012

2011 PEMHCA Monthly Premiums
Bay Area

Plan	Non-Medicare Eligible			Medicare Eligible		
	Single	2-Party	Family	Single	2-Party	Family
Blue Shield	$675.51	$1,351.02	$1,756.33	$337.88	$675.76	$1,013.64
Blue Shield NetValue	581.24	1,162.48	1,511.22	337.88	675.76	1,013.64
Kaiser	568.99	1,137.98	1,479.37	282.30	564.60	846.90
PERS Choice	563.40	1,126.80	1,464.84	375.88	751.76	1,127.64
PERS Select	492.68	985.36	1,280.97	375.88	751.76	1,127.64
PERSCare	893.95	1,787.90	2,324.27	433.66	867.32	1,300.98
PORAC	527.00	987.00	1,254.00	418.00	833.00	1,331.00

2012 PEMHCA Monthly Premiums
Bay Area

Plan	Non-Medicare Eligible			Medicare Eligible		
	Single	2-Party	Family	Single	2-Party	Family
Blue Shield	$711.10	$1,422.20	$1,848.86	$337.99	$675.98	$1,013.97
Blue Shield NetValue	611.59	1,223.18	1,590.13	337.99	675.98	1,013.97
Kaiser	610.44	1,220.88	1,587.14	277.81	555.62	833.43
PERS Choice	574.15	1,148.30	1,492.79	383.44	766.88	1,150.32
PERS Select	487.39	974.78	1,267.21	383.44	766.88	1,150.32
PERSCare	1,029.23	2,058.46	2,676.00	432.43	864.86	1,297.29
PORAC	556.00	1,041.00	1,323.00	418.00	833.00	1,331.00

Active Participant Statistics
June 30, 2011

	Miscellaneous	Police	Total
■ Count	120	44	164
■ Average			
• Age	48.2	42.0	46.5
• City service	12.0	14.2	12.6
• CalPERS service	14.1	15.2	14.4
• Pay	$ 83,200	$ 127,000	$ 95,000
■ Total payroll (000's)	9,974	5,603	15,577

Active Participant Statistics
January 1, 2010

	Miscellaneous	Police	Total
■ Count	136	44	180
■ Average			
• Age	48.0	42.0	46.6
• City service	11.0	14.8	11.9
• CalPERS service	13.2	15.7	13.8
• Pay	$ 79,600	$ 104,900	$ 85,800
■ Total payroll (000's)	10,856	4,613	15,470

Retiree Participant Statistics
June 30, 2011

Participants	Miscellaneous	Police	Total
■ Service Retirees:			
• Count	59	22	81
• Average age	70.6	63.4	68.6
• Average retirement age	61.6	53.1	59.3
■ Disability Retirees:			
• Count	6	11	17
• Average age	65.6	59.8	62.0
• Average retirement age	51.7	43.2	46.5
■ Total Retirees:[5]			
• Count	65	33	98
• Average age	70.1	61.9	67.4
• Average retirement age	60.8	49.1	56.9

[5] Includes 55 waived retirees and 2 survivors.

Retiree Participant Statistics
January 1, 2010

Participants	Miscellaneous	Police	Total
■ Service Retirees:			
• Count	57	20	77
• Average age	72.0	63.7	69.9
• Average retirement age	61.5	53.0	59.3
■ Disability Retirees:			
• Count	4	11	15
• Average age	62.2	58.3	59.4
• Average retirement age	47.6	43.2	44.4
■ Total Retirees:[6]			
• Count	61	31	92
• Average age	71.4	61.5	68.1
• Average retirement age	60.7	48.9	56.8

[6] Includes 58 waived retirees and 3 survivors.

201

Medical Plan Participation

Non-Waived Participants

Medical Plan	Actives	Retirees	
		< 65	≥ 65
Blue Shield	18%	16%	-
Blue Shield NetValue	10%	-	-
Kaiser	49%	47%	60%
PERS Choice	21%	37%	27%
PERS Select	1%	-	13%
PERSCare	1%	-	-
Total	100%	100%	100%

DATA SUMMARY

Active Medical Coverage

Medical Plan	Single	2-Party	Family	Waived	Total
Blue Shield	12	3	7	-	22
Blue Shield NetValue	3	-	10	-	13
Kaiser	25	9	26	-	60
PERS Choice	15	4	7	-	26
PERS Select	-	-	1	-	1
PERSCare	1	-	-	-	1
Waived	-	-	-	41	41
Total	56	16	51	41	164

202

Retiree Medical Coverage
Under Age 65

Medical Plan	Region	Single	2-Party	Family	Waived	Total
Blue Shield	Bay Area	1	1	1	-	3
Kaiser	Bay Area	7	1	-	-	8
	North	-	-	1	-	1
	Out of State	1	-	-	-	1
PERS Choice	Bay Area	2	5	-	-	7
	North	-	-	1	-	1
Waived	n/a	-	-	-	23	23
Total	n/a	11	7	3	23	44

Retiree Medical Coverage
Over Age 65

Medical Plan	Region	Single	2-Party	Family	Waived	Total
Kaiser	Bay Area	5	3	-	-	8
	Sacramento	-	1	-	-	1
	South	-	1	-	-	1
PERS Choice	Bay Area	-	3	-	-	3
	Out of State	1	1	-	-	2
PERSCare	Out of State	1	1	-	-	2
Waived	n/a	-	-	-	37	37
Total	n/a	7	10	-	37	54

Actives by Age and City Service
Miscellaneous

	City Service							
Age	**< 1**	**1-4**	**5-9**	**10-14**	**15-19**	**20-24**	**≥ 25**	**Total**
< 25	-	-	-	-	-	-	-	-
25-29	-	4	2	1	-	-	-	7
30-34	1	4	3	1	-	-	-	9
35-39	-	7	2	3	1	-	-	13
40-44	1	2	7	4	-	-	-	14
45-49	1	5	1	7	6	2	1	23
50-54	2	2	4	3	6	4	2	23
55-59	-	1	2	8	1	4	3	19
60-64	-	1	-	4	-	1	2	8
≥ 65	-	-	-	3	-	-	1	4
Total	5	26	21	34	14	11	9	120

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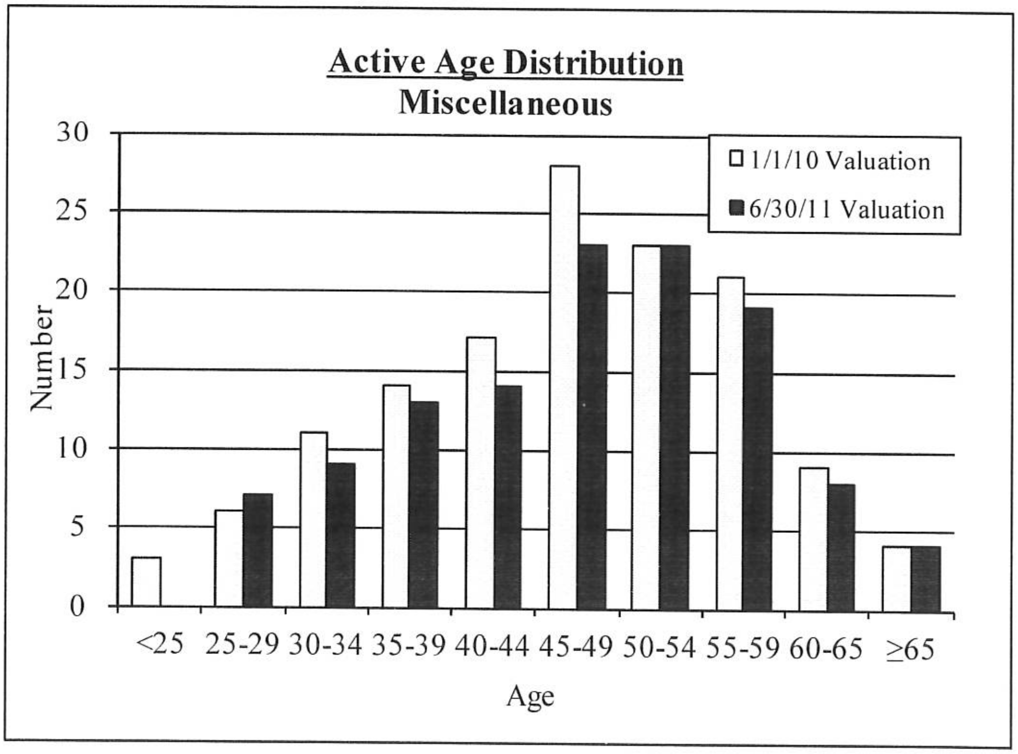
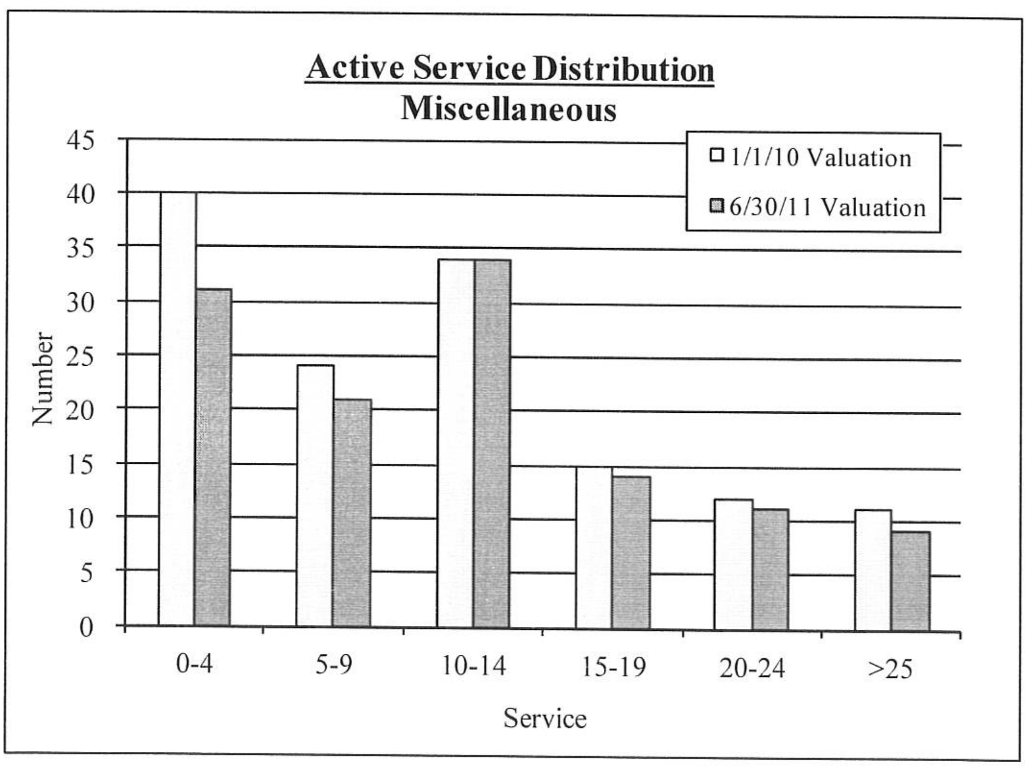
204


Active Age Distribution
Miscellaneous
1/1/10 Valuation
6/30/11 Valuation
Number
0
5
10
15
20
25
30
Age
<25
25-29
30-34
35-39
40-44
45-49
50-54
55-59
60-65
≥65


Active Service Distribution
Miscellaneous
1/1/10 Valuation
6/30/11 Valuation
Number
0
5
10
15
20
25
30
35
40
45
Service
0-4
5-9
10-14
15-19
20-24
>25

205

Actives by Age and City Service
Police

	City Service							
Age	**< 1**	**1-4**	**5-9**	**10-14**	**15-19**	**20-24**	**≥ 25**	**Total**
< 25	1	-	-	-	-	-	-	1
25-29	-	2	1	-	-	-	-	3
30-34	1	2	-	1	-	-	-	4
35-39	-	1	2	6	-	-	-	9
40-44	-	1	2	5	1	-	-	9
45-49	-	-	-	3	2	5	-	10
50-54	-	-	-	-	1	3	3	7
55-59	-	-	-	-	-	1	-	1
60-64	-	-	-	-	-	-	-	-
≥ 65	-	-	-	-	-	-	-	-
Total	2	6	5	15	4	9	3	44

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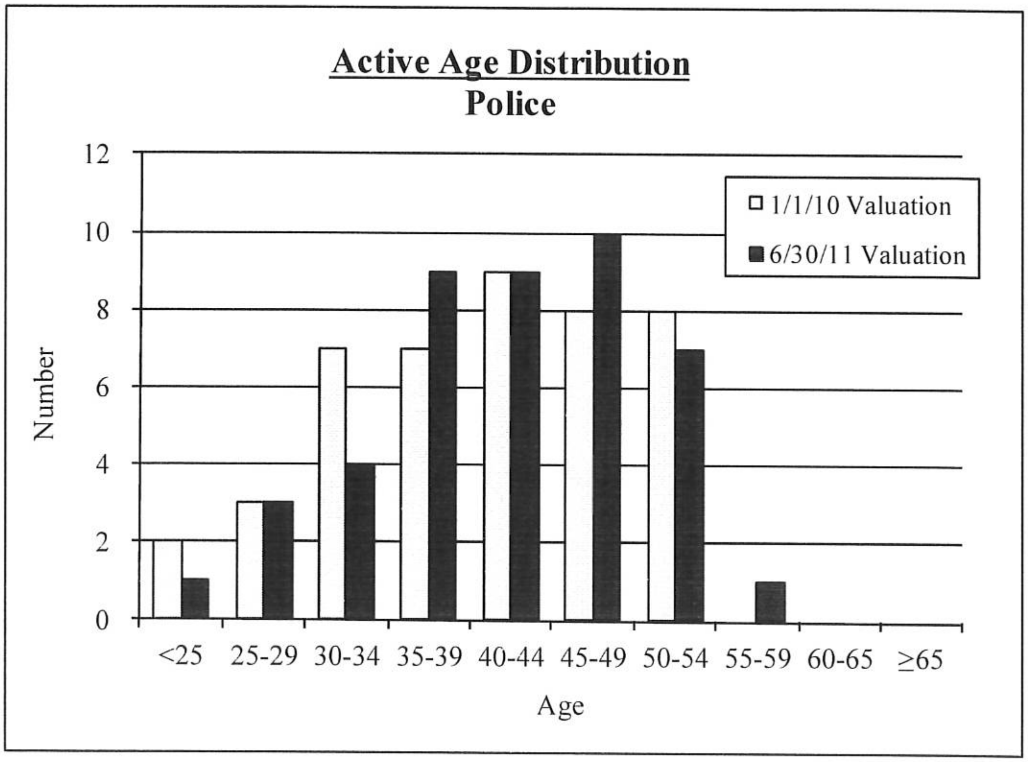
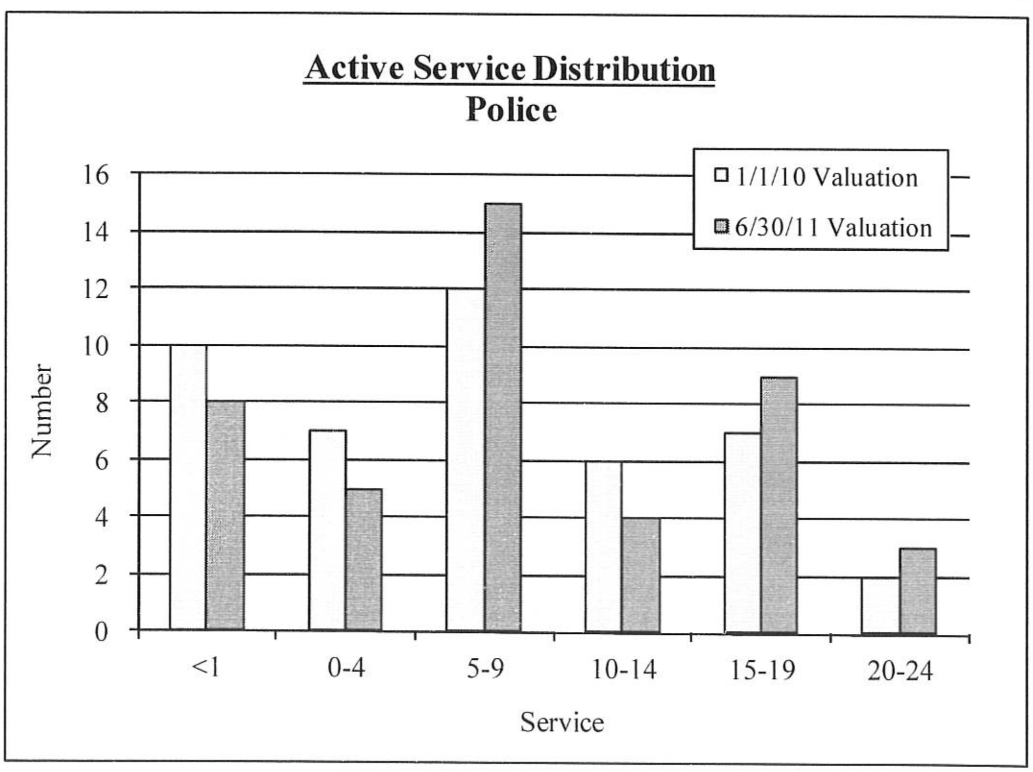
206



DATA SUMMARY



207

Actives by Age and City Service
Total

	City Service							
Age	**< 1**	**1-4**	**5-9**	**10-14**	**15-19**	**20-24**	**≥ 25**	**Total**
< 25	1	-	-	-	-	-	-	1
25-29	-	6	3	1	-	-	-	10
30-34	2	6	3	2	-	-	-	13
35-39	-	8	4	9	1	-	-	22
40-44	1	3	9	9	1	-	-	23
45-49	1	5	1	10	8	7	1	33
50-54	2	2	4	3	7	7	5	30
55-59	-	1	2	8	1	5	3	20
60-64	-	1	-	4	-	1	2	8
≥ 65	-	-	-	3	-	-	1	4
Total	7	32	26	49	18	20	12	164

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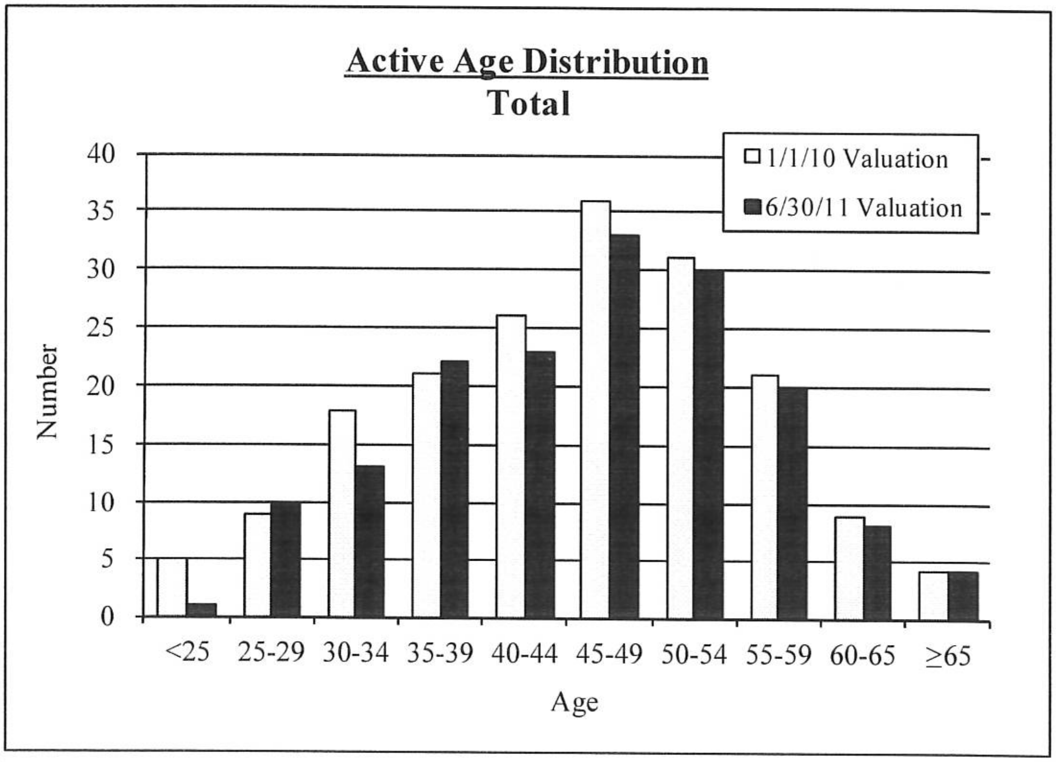
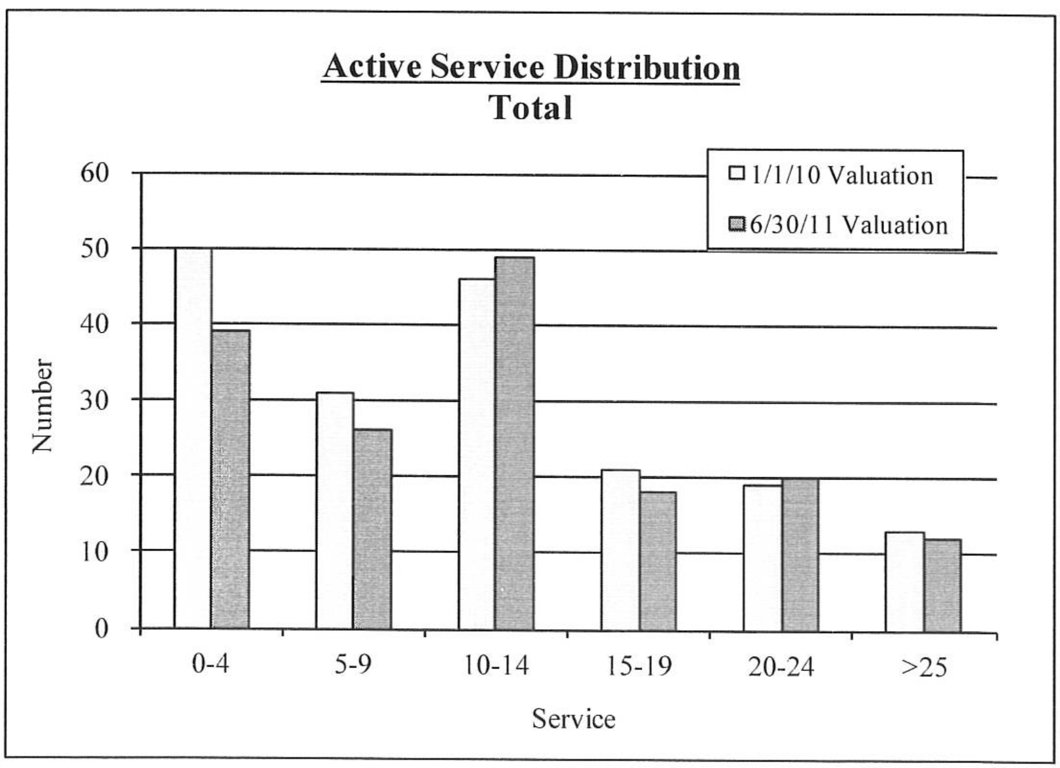
208



DATA SUMMARY



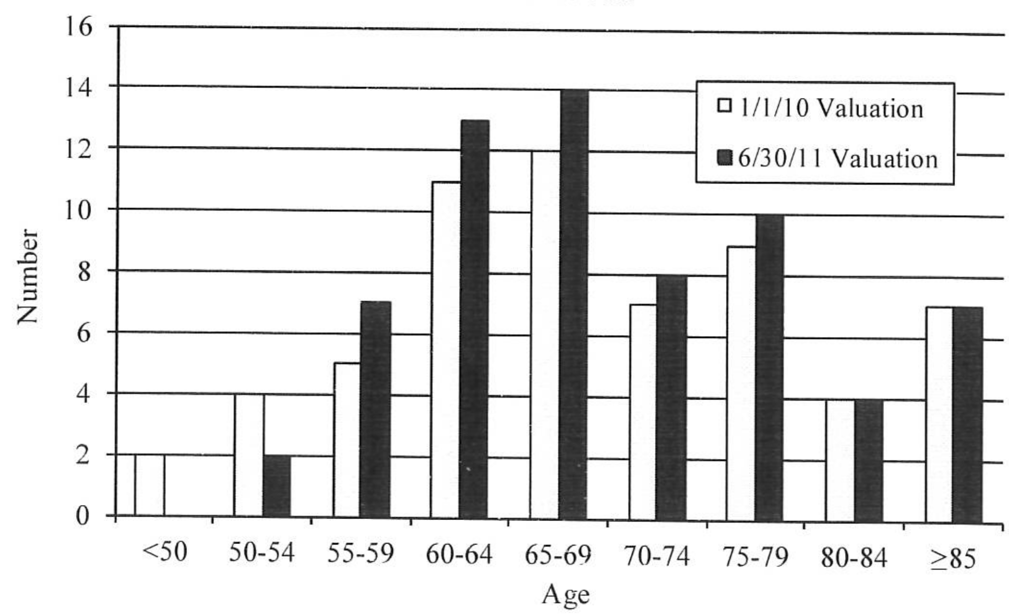
209

Retiree Medical Coverage by Age Group
Miscellaneous

Age	Single	2-Party	Family	Waived	Total
Under 50	-	-	-	-	-
50-54	-	-	1	1	2
55-59	5	1	-	1	7
60-64	3	1	-	9	13
65-69	3	4	-	7	14
70-74	-	2	-	6	8
75-79	1	2	-	7	10
80-84	1	-	-	3	4
Over 85	1	-	-	6	7
Total	14	10	1	40	65
Average Age	66.7	68.4	53.6	72.2	70.1

DATA SUMMARY

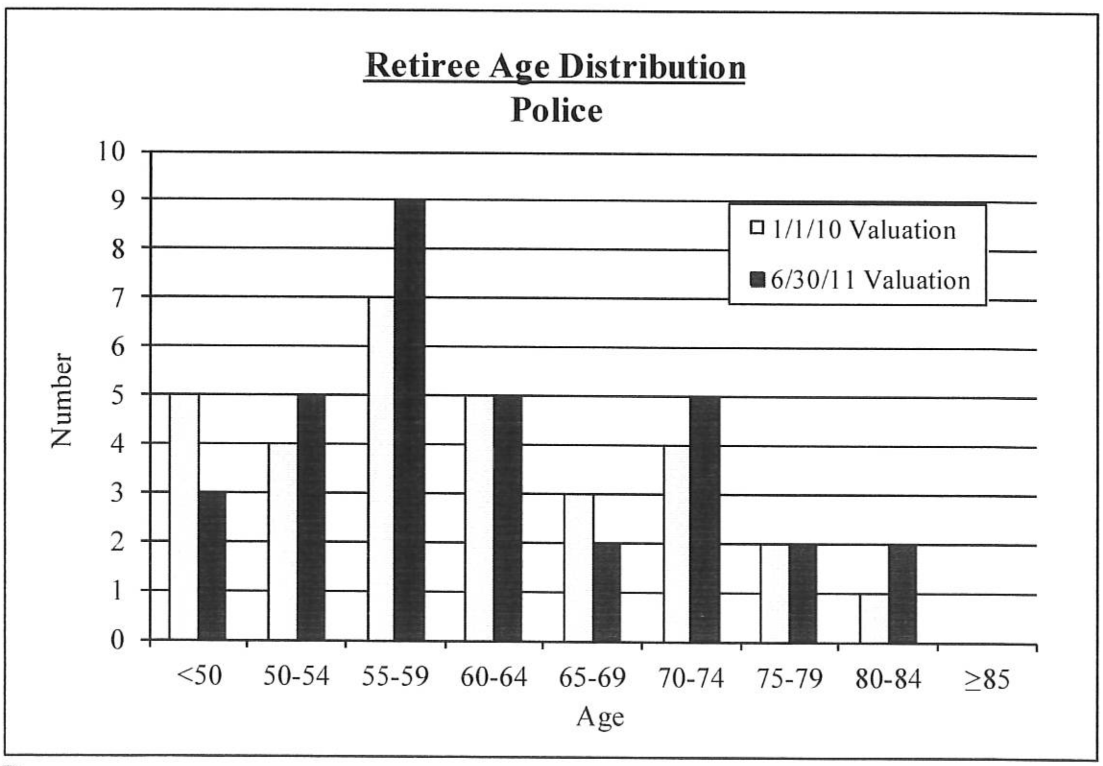
Retiree Age Distribution
Miscellaneous



210

Retiree Medical Coverage by Age Group
Police

Age	Single	2-Party	Family	Waived	Total
Under 50	-	-	1	2	3
50-54	2	-	-	3	5
55-59	1	2	1	5	9
60-64	-	3	-	2	5
65-69	-	-	-	2	2
70-74	-	2	-	3	5
75-79	-	1	-	1	2
80-84	-	-	-	2	2
Over 85	-	-	-	-	-
Total	3	8	2	20	33
Average Age	54.1	66.1	49.9	62.8	61.9



211

ACTUARIAL ASSUMPTIONS

Assumption	January 1, 2010 Valuation	June 30, 2011 Valuation
■ General Inflation	■ 3%	■ Same
■ PEMHCA Minimum	Year / PEMHCA Min 2010 — $ 105/month 2011 — 108/month 2012+ — + 4.5%/year	Year / PEMHCA Min 2011 — $ 108/month 2012 — 112/month 2013 — 115/month 2014+ — + 4.5%/year
■ PEMHCA Admin Fee	■ 0.43% of the premium	■ 0.36% of the premium
■ Non-PEMHCA Benefit Participation	■ Actives: 100% ■ Retirees: same as current election	■ Same

ACTUARIAL ASSUMPTIONS

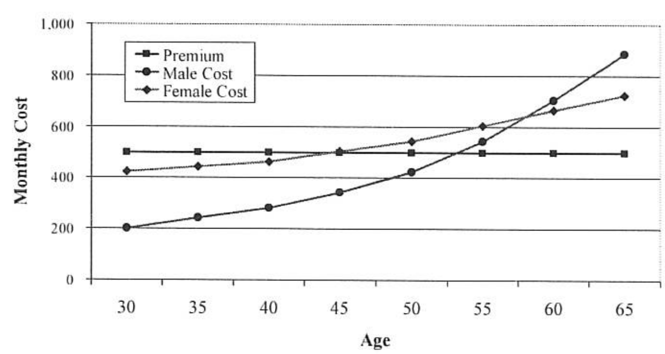
Assumption	January 1, 2010 Valuation	June 30, 2011 Valuation
■ Participation at Retirement	■ Actives: 70% ■ Retirees: • Currently Waived ➢ <65: 20% elect at 65 ➢ ≥ 65: 0%	■ Same
■ Service Retirement	■ CalPERS 1997-2002 Experience Study Misc / Police Benefit: 2.5%@55 / 3%@50 ERA: 61 (M), 60 (F) / 54	■ CalPERS 1997-2007 Experience Study Misc / Police Benefit: 2.5%@55 / 3%@50 ERA: 58 / 54
■ Medicare Eligible Rate	■ 100% ■ Everyone eligible for Medicare will elect Part B coverage	■ Same

2/2

ACTUARIAL ASSUMPTIONS

Assumption	January 1, 2010 Valuation	June 30, 2011 Valuation
■ Marital Status at Retirement	■ Married if 2-party or family coverage ■ 80% married for waived actives	■ Same
■ Payroll Increases	■ Aggregate Increases: 3.25% ■ Merit Increases: CalPERS 1997-2002 Experience Study	■ Aggregate Increases: 3.25% ■ Merit Increases: CalPERS 1997-2007 Experience Study
■ Spouse Age	■ Males 3 yrs older than females	■ Same

ACTUARIAL ASSUMPTIONS

Assumption	January 1, 2010 Valuation	June 30, 2011 Valuation
■ Implied Subsidy	■ Non-Medicare eligible retirees pay active rates instead of actual cost ■ Active employee premiums subsidize retiree cost Single Retiree Medical Cost  ■ GASB 45 includes active "implied subsidy" of retiree costs ■ Community rated plans not required to value implied subsidy ■ PEMHCA is a community rated plan for most employers ■ Not valuing implied subsidy for Medical	

213

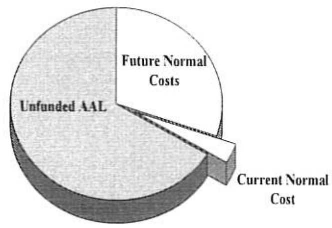
	January 1, 2010 Valuation	June 30, 2011 Valuation
■ Cost Method	• Entry Age Normal	• Same
■ Amortization Method	• Level percent of payroll	• Same
■ Actuarial Value of Assets	• Investment gains and losses spread over a 5-yr open period • Not less than 80% nor more than 120% of market value	• Same

ACTUARIAL METHODS

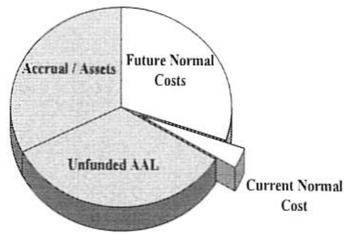
	January 1, 2010 Valuation	June 30, 2011 Valuation
■ Amortization Period	• 6/30/10 UAAL – 30-year fixed (closed) period	• 6/30/10 UAAL – 30-year fixed (closed) period (28 years remaining) • Assumption Changes, Experience Gains/Losses and Contribution Gains/Losses – 15-year fixed (closed) period • Maximum 30-year combined period
■ Future New Entrants	• None – closed group	• Same

Present Value of Projected Benefits (PVPB)

Without Assets



With Assets



- **PVPB - Present Value of all Projected Benefits**
  - Discounted value, at measurement date of all future expected benefit payments
  - Expected benefit payments based on various actuarial assumptions

- **AAL – Actuarial Accrued Liability / Actuarial Obligation**
  - Discounted value at measurement date of benefits "earned" through measurement date based on actuarial cost method
  - Portion of PVPB "earned" at measurement
- **NC - Normal Cost**
  - Value of benefits "earned" during current year
  - Portion of PVPB allocated to current year
- **Actuarial Cost Method**
  - Determines how benefits are "earned" or allocated to each year of service
  - Has no effect on PVPB
  - Has significant effect on Actuarial Obligations and Normal Cost
- **Pay-As-You-Go Cost (PayGo)**
  - Cash Subsidy – Actual cash benefit payments to retirees
  - Implied Subsidy – Difference between cost of retiree benefits and retiree premiums (not valued for PEMHCA)
  - PayGo is the expected retiree benefit payments for the year while Normal Cost is the expense for benefits accrued by active employees during the year

215