

# City of Mill Valley

## Actuarial Valuation of Other Post-Employment Benefit Programs as of

*June 30, 2012*



*February 2013*

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## A. Executive Summary

This report presents the results of the June 30, 2012 actuarial valuation of the City of Mill Valley (the City) other post-employment benefit (OPEB) programs. Briefly, benefits include subsidized medical coverage for eligible retirees. The purpose of this valuation is to assess the OPEB liabilities and provide disclosure information as required by Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).

Prefunding the plan supports use of a higher interest rate and generally produces substantially lower liabilities than a pay-as-you-go funding policy, which requires a lower interest rate. When assets are set aside in a trust but at a level not sufficient to meet GASB 45 requirements for prefunding, it is referred to as “partial prefunding”.

- Because the City has contributed previously to the trust for City employees, and expects to contribute \$250,000 annually for them going forward, in addition to the pay-as-you-go benefit payments, it is partially prefunding its OPEB obligations. Accordingly, we developed and used a blended discount rate of 5.11% for this valuation for City employees.
- For employees assigned to work with SASM, we used a pay-as-you-go discount rate of 4.25%.

Additional discussion of funding policy, including discount rates, is found on page 7 and determination of the blended discount rate is provided in Appendix 1 on page 24. We note that none of the rates used are to be considered a guarantee of future investment performance, but rather an assumption about the expected long term rate of return for assets used to pay future retiree benefits.

*The following summarizes results for the fiscal year ending June 30, 2012, shown separately for City employees and employees assigned to SASM:*

Group	City	SASM
Discount Rate	5.11%	4.25%
Actuarial accrued liability (AAL)	\$ 28,099,682	\$ 4,113,233
Actuarial value of assets *	3,617,703	0
Unfunded AAL (UAAL)	24,481,979	4,113,233
Annual required contribution (ARC)	2,216,511	294,736
Expected City paid benefits for retirees	492,230	56,366
Expected contribution to OPEB trust	300,000	0
Current year's implicit subsidy credit	158,793	27,170
Expected net OPEB obligation at fiscal year end	6,170,476	644,134

*\* The market value of assets have been reduced by contributions made prior to 6/30/2012.*

These results are shown in tables beginning on page 11. Projected results for the fiscal years ending June 30, 2013 and June 30, 2014 are also shown in these tables.

## Executive Summary (Concluded)

The liabilities shown in the report reflect assumptions regarding continued future employment, rates of retirement and survival, and elections by future retirees to retain coverage for themselves and their dependents. To the extent that actual experience is not what we assumed, future results will be different. We also note that this valuation has been prepared on a closed group basis; no provision is made for new employees.

The AAL and ARC are roughly 20% and 12% higher, respectively, than in the previous valuation conducted by the prior actuary. The chart below provides a comparison of the primary results of the current and prior valuations.

Comparison of Results - City Plan Only	2012 Valuation	2009 Valuation
Discount Rate	5.11%	Graded by year
Active employees	127	132
Retired members	52	39
<b>Total members</b>	<b>179</b>	<b>171</b>
Actuarial accrued liability (AAL) - actives	\$ 12,925,625	\$ 14,130,000
Actuarial accrued liability (AAL) - retirees	15,174,057	9,196,000
<b>Actuarial accrued liability (AAL) - Total</b>	<b>28,099,682</b>	<b>23,326,000</b>
Actuarial value of assets	3,617,703	3,044,000
Unfunded AAL (UAAL)	24,481,979	20,282,000
<b>Annual required contribution (ARC)</b>	<b>2,216,511</b>	<b>1,971,000</b>

While we did not have sufficient details to verify each of the differences conclusively, the primary reasons for the increase appear to be:

- (1) Higher than projected retirements (note the substantial increase in retiree liability);
- (2) The passage of time. As each year goes by, the remaining benefits get 1 year closer to being paid and thus increase in value by the discount rate; compounding the increase for 3 years accounts for a substantial portion of the liability increase; and
- (3) The planned increase in the ARC. Both the 2009 and 2012 valuations develop the ARC on a basis intended to increase as payroll is *assumed* to increase, which for both valuations would have been in the neighborhood of 3.25% per year.

There were also changes in some of the actuarial assumptions used to value benefits, which are described in the "Changes Since the Prior Valuation" section of Table 4. In particular, the discount rate used appears to be somewhat more conservative than the equivalent discount rate used in the 2009 valuation.

Details of our valuation process and the various disclosures required by GASB 45 are provided on the succeeding pages. The date of the next actuarial valuation should not be later than July 1, 2014 (July 1, 2013, if the City should decide to join the CalPERS OPEB trust, CERBT). If there are any significant changes in the employee data, benefits provided or the funding policy, please contact us to discuss whether an earlier valuation is appropriate.

## **B. Requirements of GASB 45**

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

GASB 45 disclosures include the determination of an annual OPEB cost. For the first year, the annual OPEB cost is equal to the annual required contribution (ARC) as determined by the actuary. If the City's OPEB contributions equal the ARC each year, the net OPEB obligation will equal \$0. If the City's actual contribution is less than (greater than) the ARC, then a net OPEB obligation (asset) amount is established. In subsequent years, the annual OPEB expense will reflect adjustments made to the net OPEB obligation, in addition to the ARC (see Table 1C).

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

We note that various issues in this report may involve legal analysis of applicable law or regulations. The City should consult counsel on these matters; Bickmore Risk Services (Bickmore) does not practice law and does not intend anything in this report to constitute legal advice. In addition, we recommend the City consult with their internal accounting staff or external auditor or accounting firm about the accounting treatment of OPEB liabilities.

## C. Sources of OPEB Liabilities

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

- Medical
- Dental
- Prescription drug
- Vision
- Life insurance

Other possible post-employment benefits may include outside group legal, long-term care, or disability benefits outside of a pension plan. OPEB does not generally include vacation, sick leave<sup>1</sup> or COBRA benefits, which fall under other GASB accounting statements.

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

Exceptions may exist when the plan is part of a “community-rated” program. GASB guidance indicates that an agency whose membership is a small portion (in the neighborhood of 1%) of the total coverage of a multiple employer plan, may reasonably conclude that any change in their group’s mix of retirees and active employees would not affect the premium rates for the plan. In those circumstances, while an implicit subsidy may exist, it is not required to be disclosed.

### OPEB Obligations of the City

The City provides continuation of medical and dental coverage to its retiring employees. For retirees and their dependent(s) who have chosen to retain this coverage:

- The City contributes directly to the cost of retiree medical coverage. These benefits are described in Table 3 and liabilities have been included in this valuation.
- We believe that medical coverage for retirees is provided at premium rates less than the expected claims for these retirees, giving rise to an implicit subsidy liability as described above. Because the City’s plans do not meet the community-rated plan exception, this implicit subsidy is an OPEB liability which must be valued.

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

## D. Valuation Process

The valuation has been based on employee census data initially submitted to us by the City in October 2012 and clarified in various related communications. Summaries of that data are provided in Table 2. While the individual employee records have been reviewed to verify that it is reasonable in various respects, the data has not been audited and we have otherwise relied on the City as to its accuracy. A summary of the benefits provided under the Plan is provided in Table 3, based on information supplied to Bickmore by the City. The valuation described below has been performed in accordance with the actuarial methods and assumptions described in Table 4.

In the specific development of the projected benefit values and liabilities, we first determine an expected premium or benefit stream over the employee's future retirement. We then calculate a present value of these benefits as of the valuation date.

- These present value determinations discount the value of each future expected benefit payment back to the valuation date, using the discount rate. The present value calculations also reflect assumptions for the likelihood that an employee may not continue in service with the City to receive benefits.
- For those that do, appropriate assumptions are made to reflect the probability of retirement at various ages.
- After reduction for the probability an employee may not receive a benefit, for the remaining probability he or she does, those benefits reflect assumptions as to whether they will elect coverage for themselves and/or dependents.
- The cost of benefits payable, once they begin for each employee, reflect expected trends in the cost of those benefits and the assumptions as to the expected date(s) those benefits will cease. These benefit projections and liabilities have a very long time horizon. The final payments for currently active employees may not be made for 70 years or more.

The resulting present value for each employee is allocated as a level percent of payroll each year over the employee's career using the entry age normal cost method. This creates a cost expected to increase each year as payroll increases. Amounts attributed to prior fiscal years form the "actuarial accrued liability" (AAL). The amount of future OPEB cost allocated to the current year is referred to as the "normal cost". The remaining cost to be assigned to future years is called the "present value of future normal costs".

In summary:

Actuarial Accrued Liability <i>plus</i> Normal Cost <u><i>plus</i> Present Value of Future Normal Costs</u> <i>equals</i> Present Value of Future Benefits	Past Years' Costs Current Year's Cost <u>Future Years' Costs</u> Total Benefit Costs
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Where contributions have been made to an irrevocable OPEB trust, the accumulated value of trust assets is applied to offset the AAL. The value assets in the City's OPEB trust at ICMA were reported to be \$3,917,703 as of June 30, 2012; we reduced this amount by the \$300,000 in contributions deposited by the City for the 2012 fiscal year in order to derive the actuarial value of assets for valuation purposes of \$3,617,703. The portion of the AAL not covered by assets is referred to as the unfunded actuarial accrued liability (UAAL).

### E. Basic Valuation Results

The following charts present the results of the June 30, 2012 valuation of OPEB liabilities, separately for explicit and implicit liabilities, and also separately for City employees and employees assigned to SASM.

**For City employees:**

Valuation date	Partial Prefunding		
	6/30/2012		
	Explicit	Implicit	Total
Subsidy			
For fiscal year beginning	7/1/2011	7/1/2011	7/1/2011
For fiscal year ending	6/30/2012	6/30/2012	6/30/2012
Discount rate	5.11%	5.11%	5.11%
Expected return on assets	7.00%	7.00%	7.00%
<b>Number of Covered Employees</b>			
Actives	127	127	127
Retirees	51	48	52
Total Participants	178	175	179
<b>Actuarial Present Value of Projected Benefits</b>			
Actives	\$ 18,761,467	\$ 6,598,287	\$ 25,359,754
Retirees	10,507,682	4,666,375	15,174,057
Total APVPB	29,269,149	11,264,662	40,533,811
<b>Actuarial Accrued Liability (AAL)</b>			
Actives	9,380,725	3,544,900	12,925,625
Retirees	10,507,682	4,666,375	15,174,057
Total AAL	19,888,407	8,211,275	28,099,682
<b>Actuarial Value of Assets</b>	2,560,540	1,057,163	3,617,703
<b>Unfunded AAL (UAAL)</b>	17,327,867	7,154,111	24,481,979
<b>Normal Cost</b>	809,273	274,595	1,083,868
<b>Benefit Payments</b>			
Actives (in retirement)	-	-	-
Retirees	492,230	158,793	651,023
Total	492,230	158,793	651,023

The funded ratio (the ratio of the Actuarial Value of Assets divided by the Actuarial Accrued Liability) is 12.9% as of June 30, 2012. Covered payroll for City employees as of June 30, 2012 was reported to be \$9,552,745. The Unfunded Actuarial Accrued Liability, expressed as a percentage of payroll, is 256.3% as of this date.

Assets were allocated between explicit and implicit costs in proportion to the explicit and implicit Actuarial Accrued Liabilities.



## Basic Valuation Results (Concluded)

For employees assigned to SASM:

Valuation date	Pay-As-You-Go Basis		
	6/30/2012		
	Explicit	Implicit	Total
Subsidy			
For fiscal year beginning	7/1/2011	7/1/2011	7/1/2011
For fiscal year ending	6/30/2012	6/30/2012	6/30/2012
Discount rate	4.25%	4.25%	4.25%
<b>Number of Covered Employees</b>			
Actives	13	13	13
Retirees	5	5	5
Total Participants	18	18	18
<b>Actuarial Present Value of Projected Benefits</b>			
Actives	\$ 2,067,111	\$ 1,125,956	\$ 3,193,067
Retirees	1,463,710	853,993	2,317,703
Total APVPB	3,530,821	1,979,949	5,510,770
<b>Actuarial Accrued Liability (AAL)</b>			
Actives	1,084,478	711,052	1,795,530
Retirees	1,463,710	853,993	2,317,703
Total AAL	2,548,188	1,565,045	4,113,233
<b>Actuarial Value of Assets</b>	-	-	-
<b>Unfunded AAL (UAAL)</b>	2,548,188	1,565,045	4,113,233
<b>Normal Cost</b>	83,005	39,538	122,543
<b>Benefit Payments</b>			
Actives (in retirement)	-	-	-
Retirees	56,366	27,170	83,536
Total	56,366	27,170	83,536

The funded ratio (the ratio of the Actuarial Value of Assets divided by the Actuarial Accrued Liability) is 0.0% as of June 30, 2012. Covered payroll for employees assigned to SASM as of June 30, 2012 was reported to be \$957,984. The Unfunded Actuarial Accrued Liability, expressed as a percentage of payroll, is 429.4% as of this date.

### Changes Since the Prior Valuation

A number of the assumptions used in this valuation were changed since the prior report was prepared. Please see the "Changes Since the Prior Valuation" section of Table 4 for a description of these changes.

## F. Funding Policy

The specific calculation of the ARC and annual OPEB expense for an employer depends on how the employer elects to fund these benefits. Contributing an amount greater than or equal to the ARC each year is referred to as “prefunding”. Prefunding generally allows the employer to have the liability calculated using a higher discount rate, which in turn lowers the liability. In addition, following a prefunding policy does not build up a net OPEB obligation because the contribution equals or exceeds the annual OPEB cost each year.

### Determination of the ARC

The Annual Required Contribution (ARC) consists of two basic components, which have been adjusted with interest to the City’s fiscal year end:

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

ARCs for the fiscal years ending June 30, 2012, 2013 and 2014 are developed in Table 1B.

### Decisions Affecting the Amortization Payment

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

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

It is our understanding that the City’s funding policy includes amortization of the unfunded AAL over a closed 30-year period initially effective July 1, 2009; the remaining period applicable in determining the ARC for the fiscal year ending June 30, 2012 is 27 years. Amortization payments are determined on a level percent of pay basis.

### Funding of the Implicit Subsidy

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

## **G. Choice of Actuarial Funding Method and Assumptions**

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

### **Factors Impacting the Selection of Funding Method**

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

We believe it is most appropriate for the plan sponsor to adopt a theory of funding and consistently apply the funding method representing that theory. This valuation was prepared using the entry age normal cost method with normal cost determined on a level percent of pay basis. The entry age normal cost method often produces initial contributions between those of the other more common methods and is generally regarded by pension actuaries as the most stable of the funding methods and is one of the most commonly used methods for GASB 45 compliance. In addition, it is the method required for plans participating in the CalPERS prefunding vehicle for OPEB liabilities, the California Employers Retiree Benefit Trust (CERBT).

### **Factors Affecting the Selection of Assumptions**

Special considerations apply to the selection of actuarial funding methods and assumptions for the City. The actuarial assumptions used in this report were chosen, for the most part, to be the same as the actuarial assumptions used for the most recent actuarial valuations of the retirement plans covering City employees. Several of these assumptions were updated since the last valuation was prepared. In addition, the actuarial assumptions used in this report for GASB 45 analysis are intended to comply with CERBT requirements.

In selecting an appropriate discount rate, GASB states that the discount rate should be based on the expected long-term yield of investments used to finance the benefits. The City approved calculation of liabilities on a pay-as-you-go basis using a 4.25% discount rate, the same rate used in the prior valuation. A full funding discount rate of 7% was selected.

- We used the pay-as-you-go discount rate of 4.25% for the valuation of employees assigned to SASM.
- Based on these two discount rates, existing trust assets and an expected contribution level going forward for City employees of \$250,000 annually, we developed a "blended" discount rate of 5.11%, as set forth in Appendix 1, and used this for the valuation of City employees.

## H. Certification

We certify that this report has been prepared in accordance with our understanding of GASB 45, and that the figures in Section E and in Tables 1A, 1B and 1C accurately present our analysis of the actuarial calculations for this plan required by GASB 45. Each signing individual is a Manager in the Health & Benefits Actuarial Unit at Bickmore Risk Services and a Member of the American Academy of Actuaries who satisfies the qualification requirements for rendering this opinion.

Signed: February 8, 2013



Catherine L. MacLeod, FSA, EA, MAAA



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

**Table 1A**  
**Summary of Valuation Results**

**City Plan:**

The basic valuation results are presented in Section E. The following summarizes the results of our valuation of OPEB liabilities for City employees calculated under GASB 45 for the fiscal year ending June 30, 2012, as well as projected amounts for the fiscal years ending June 30, 2013 and June 30, 2014.

Valuation date	Partial Prefunding		
	6/30/2012		
For fiscal year beginning	7/1/2011	7/1/2012	7/1/2013
For fiscal year ending	6/30/2012	6/30/2013	6/30/2014
Discount rate	5.11%	5.11%	5.11%
Expected return on assets	7.00%	7.00%	7.00%
<b>Number of Covered Employees</b>			
Actives	127	127	127
Retirees	52	52	52
Total Participants	179	179	179
<b>Actuarial Present Value of Projected Benefits</b>			
Actives	\$ 25,359,754	\$ 26,655,637	\$ 27,999,438
Retirees	15,174,057	15,298,428	15,412,551
Total APVPB	40,533,811	41,954,066	43,411,988
<b>Actuarial Accrued Liability (AAL)</b>			
Actives	12,925,625	14,725,378	16,635,822
Retirees	15,174,057	15,298,428	15,412,551
Total AAL	28,099,682	30,023,806	32,048,373
<b>Actuarial Value of Assets</b>	3,617,703	4,191,942	4,752,878
<b>Unfunded AAL (UAAL)</b>	24,481,979	25,831,864	27,295,494
<b>Normal Cost</b>	1,083,868	1,119,094	1,155,465
<b>Benefit Payments</b>			
Actives (in retirement)	-	18,303	44,709
Retirees	651,023	667,627	732,476
Total	651,023	685,930	777,185

The results shown above and in Table 1C reflect our understanding that the City has contributed \$300,000 for the fiscal year ended June 30, 2012 and intends to contribute \$250,000 annually for City employees going forward. Should actual contributions differ by more than an immaterial amount, some of the results in this report will need to be revised.

**Table 1A  
(Concluded)**

**SASM Plan:**

The basic valuation results are presented in Section E. The following summarizes the results of our valuation of OPEB liabilities for the employees assigned to SASM calculated under GASB 45 for the fiscal year ending June 30, 2012 as well as projected amounts for the fiscal years ending June 30, 2013 and June 30, 2014.

Valuation date	Pay-As-You-Go Basis		
	6/30/2012		
For fiscal year beginning	7/1/2011	7/1/2012	7/1/2013
For fiscal year ending	6/30/2012	6/30/2013	6/30/2014
Discount rate	4.25%	4.25%	4.25%
<b>Number of Covered Employees</b>			
Actives	13	13	13
Retirees	5	5	5
Total Participants	18	18	18
<b>Actuarial Present Value of Projected Benefits</b>			
Actives	\$ 3,193,067	\$ 3,328,772	\$ 3,462,952
Retirees	2,317,703	2,332,669	2,329,991
Total APVPB	5,510,770	5,661,442	5,792,943
<b>Actuarial Accrued Liability (AAL)</b>			
Actives	1,795,530	1,999,591	2,209,184
Retirees	2,317,703	2,332,669	2,329,991
Total AAL	4,113,233	4,332,260	4,539,175
<b>Actuarial Value of Assets</b>			
	-	-	-
<b>Unfunded AAL (UAAL)</b>	4,113,233	4,332,260	4,539,175
<b>Normal Cost</b>	122,543	126,526	130,638
<b>Benefit Payments</b>			
Actives (in retirement)	-	7,293	12,876
Retirees	83,536	101,817	105,299
Total	83,536	109,110	118,175

**Table 1B**  
**Calculation of the Annual Required Contribution**

**City Plan:**

The following exhibit calculates the amortization payments and the annual required contribution (ARC) on a partial prefunding basis for City employees for the fiscal years ending June 30, 2012, June 30, 2013, and June 30, 2014.

Fiscal Year End	Partial Prefunding		
	6/30/2012	6/30/2013	6/30/2014
<b>Funding Policy</b>			
Discount rate	5.11%	5.11%	5.11%
Amortization method	Level % of Pay	Level % of Pay	Level % of Pay
Initial amortization period (in years)	30	30	30
Remaining period (in years)	27	26	25
<b>Determination of Amortization Payment</b>			
UAAL	\$ 24,481,979	\$ 25,831,864	\$ 27,295,494
Factor	21.6149	20.9863	20.3463
Payment	1,132,643	1,230,893	1,341,545
<b>Annual Required Contribution (ARC)</b>			
Normal Cost	1,083,868	1,119,094	1,155,465
Amortization of UAAL	1,132,643	1,230,893	1,341,545
Interest to 06/30	-	-	-
<b>Total ARC at fiscal year end</b>	<b>2,216,511</b>	<b>2,349,987</b>	<b>2,497,010</b>

While the following is not intended to be used to determine the normal cost or ARC in future years, this information may be of value for planning purposes:

Fiscal Year End	6/30/2012	6/30/2013	6/30/2014
Projected covered payroll	\$ 9,552,745	\$ 9,863,209	\$ 10,183,764
Normal Cost as a percent of payroll	11.3%	11.3%	11.3%
ARC as a percent of payroll	23.2%	23.8%	24.5%
ARC per active ee	17,453	18,504	19,661

**Table 1B  
(Concluded)**

**SASM Plan:**

The following exhibit calculates the amortization payments and the annual required contribution (ARC) on a pay-as-you-go basis for employees assigned to SASM for the fiscal years ending June 30, 2012, June 30, 2013, and June 30, 2014.

Fiscal Year End	Pay-As-You-Go Basis		
	6/30/2012	6/30/2013	6/30/2014
<b>Funding Policy</b>			
Discount rate	4.25%	4.25%	4.25%
Amortization method	Level % of Pay	Level % of Pay	Level % of Pay
Initial amortization period (in years)	30	30	30
Remaining period (in years)	27	26	25
<b>Determination of Amortization Payment</b>			
UAAL	\$ 4,113,233	\$ 4,332,260	\$ 4,539,175
Factor	23.8874	23.10907	22.3232
Payment	172,193	187,470	203,339
<b>Annual Required Contribution (ARC)</b>			
Normal Cost	122,543	126,526	130,638
Amortization of UAAL	172,193	187,470	203,339
Interest to 06/30	-	-	-
<b>Total ARC at fiscal year end</b>	<b>294,736</b>	<b>313,996</b>	<b>333,977</b>

While the following is not intended to be used to determine the normal cost or ARC in future years, this information may be of value for planning purposes:

Fiscal Year End	6/30/2012	6/30/2013	6/30/2014
Projected covered payroll	\$ 957,984	\$ 989,118	\$ 1,021,265
Normal Cost as a percent of payroll	12.8%	12.8%	12.8%
ARC as a percent of payroll	30.8%	31.7%	32.7%
ARC per active ee	22,672	24,154	25,691



**Table 1C  
Expected OPEB Disclosures**

**City Plan:**

The exhibit below develops the annual OPEB expense, estimates the expected OPEB contributions and projects the net OPEB obligation for the City employees for fiscal years ending June 30, 2012, June 30, 2013, and June 30, 2014. The calculations assume the City continues to follow the partial prefunding approach outlined on the prior pages.

Fiscal Year End	Partial Prefunding		
	6/30/2012	6/30/2013	6/30/2014
<b>1. Calculation of the Annual OPEB Expense</b>			
a. ARC for current fiscal year	\$ 2,216,511	\$ 2,349,987	\$ 2,497,010
b. Interest on Net OPEB Obligation (Asset) at beginning of year	250,027	315,311	387,890
c. Adjustment to the ARC	(237,934)	(309,049)	(392,144)
d. <b>Annual OPEB Expense (a. + b. + c.)</b>	2,228,604	2,356,249	2,492,756
<b>2. Calculation of Expected Contribution</b>			
a. Estimated payments on behalf of retirees	492,230	508,772	563,868
b. Estimated contribution to OPEB trust	300,000	250,000	250,000
c. Implicit subsidy for the current year	158,793	177,158	213,317
d. <b>Total Expected Employer Contribution</b>	951,023	935,930	1,027,185
<b>3. Change in Net OPEB Obligation (1.d. minus 2.c.)</b>	1,277,581	1,420,319	1,465,571
Net OPEB Obligation (Asset), beginning of fiscal year	4,892,895	6,170,476	7,590,795
<b>Net OPEB Obligation (Asset) at fiscal year end</b>	6,170,476	7,590,795	9,056,366

Please note that the expected payments to retirees shown in columns 2 and 3 above are projections and should be replaced with the actual payments in order to determine the Net OPEB Obligation at fiscal year end.

Should total City contributions (the sum of actual premiums paid, implicit subsidy credits and contributions to the trust) be significantly less than shown here, the next valuation will likely require use of a lower discount rate for valuing the liabilities.

**Table 1C  
(Concluded)**

**SASM Plan:**

The exhibit below develops the annual OPEB expense, estimates the expected OPEB contributions and projects the net OPEB obligation for the employees assigned to SASM for fiscal years ending June 30, 2012, June 30, 2013, and June 30, 2014. The calculations assume the City continues to follow the pay-as-you-go approach for employees assigned to SASM outlined on the prior pages.

Fiscal Year End	Pay-As-You-Go Basis		
	6/30/2012	6/30/2013	6/30/2014
<b>1. Calculation of the Annual OPEB Expense</b>			
a. ARC for current fiscal year	\$ 294,736	\$ 313,996	\$ 333,977
b. Interest on Net OPEB Obligation (Asset) at beginning of year	18,421	27,376	36,012
c. Adjustment to the ARC	(18,916)	(29,058)	(39,571)
d. <b>Annual OPEB Expense (a. + b. + c.)</b>	294,241	312,314	330,418
<b>2. Calculation of Expected Contribution</b>			
a. Estimated payments on behalf of retirees	56,366	77,195	82,416
b. Estimated contribution to OPEB trust	-	-	-
c. Implicit subsidy for the current year	27,170	31,915	35,759
d. <b>Total Expected Employer Contribution</b>	83,536	109,110	118,175
<b>3. Change in Net OPEB Obligation (1.d. minus 2.c.)</b>	210,705	203,204	212,243
Net OPEB Obligation (Asset), beginning of fiscal year	433,429	644,134	847,338
<b>Net OPEB Obligation (Asset) at fiscal year end</b>	644,134	847,338	1,059,581

Please note that the expected payments to retirees shown in columns 2 and 3 above are projections and should be replaced with the actual payments in order to determine the Net OPEB Obligation at fiscal year end.

**Table 2**  
**Summary of Employee Data**

**City employees:** The City reported 127 active City plan employees; of these, 122 are currently participating in the medical program while 5 employees were waiving coverage as of the valuation date. Their age and service information is provided below:

Distribution of Benefits-Eligible Active Employees								
Current Age	Years of Service						Total	Percent
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 & Up		
Under 25	3	1					4	3%
25 to 29	4	8	1				13	10%
30 to 34	3	6	10	3			22	17%
35 to 39	1	2	7	2	1		13	10%
40 to 44	2	5	6	2	4	1	20	16%
45 to 49		2	2	5		6	15	12%
50 to 54		1	3	2	2	7	15	12%
55 to 59		3	2	7		1	13	10%
60 to 64		1	4	3		1	9	7%
65 to 69		1	1	1			3	2%
70 & Up							0	0%
<b>Total</b>	13	30	36	25	7	16	<b>127</b>	<b>100%</b>
<b>Percent</b>	10%	24%	28%	20%	6%	13%	<b>100%</b>	

(Percentages adjusted to total 100%)

Annual Covered Payroll	\$9,552,745
Average Attained Age for Actives	43.7
Average Years of Service	9.3

There are also 52 City plan retirees or their beneficiaries receiving benefits, whose ages are summarized below:

Retirees by Age		
Current Age	Number	Percent
Below 50	3	6%
50 to 54	3	6%
55 to 59	11	21%
60 to 64	11	21%
65 to 69	13	25%
70 to 74	5	10%
75 to 79	5	10%
80 & up	1	2%
<b>Total</b>	<b>52</b>	<b>100%</b>
Average Attained Age for Retirees:		64.3

**Table 2  
(Continued)**

**Employees assigned to SASM:** The City also reported 13 active employees assigned to SASM currently participating in the medical program as of the valuation date whose age and service are shown in the chart below:

Distribution of Benefits-Eligible Active Employees								
Current Age	Years of Service						Total	Percent
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 & Up		
Under 25							0	0%
25 to 29							0	0%
30 to 34		2					2	15%
35 to 39							0	0%
40 to 44		1	1			1	3	23%
45 to 49		1		1		1	3	23%
50 to 54		1	1			1	3	23%
55 to 59			1				1	8%
60 to 64						1	1	8%
65 to 69							0	0%
70 & Up							0	0%
<b>Total</b>	0	5	3	1	0	4	<b>13</b>	<b>100%</b>
<b>Percent</b>	0%	38%	23%	8%	0%	31%	<b>100%</b>	

(Percentages adjusted to total 100%)

Annual Covered Payroll	\$957,984
Average Attained Age for Actives	48.5
Average Years of Service	13.4

There are currently 4 SASM retirees receiving benefits whose ages are summarized below:

Retirees by Age		
Current Age	Number	Percent
Below 50	0	0%
50 to 54	0	0%
55 to 59	3	75%
60 to 64	1	25%
65 to 69	0	0%
70 to 74	0	0%
75 to 79	0	0%
80 & up	0	0%
<b>Total</b>	<b>4</b>	<b>100%</b>
Average Attained Age for Retirees:		58.8

**Table 2  
(Continued)**

The following provides separate age and service statistics for City miscellaneous and safety employees, followed by a reconciliation of employees included in the prior and current valuations and information on current employee medical plan elections.

Status	Active City Employees			Retired City Employees		
	Misc	Safety	Total	Misc	Safety	Total
Employee Type						
Count	95	45	140	38	5	43
Average age now	46.5	38.85	44.04	65.23	64.85	65.18
Average service years	9.16	10.42	9.57	19.94	29.85	21.09
Average retirement age	Not applicable			57.8	55.9	57.57

Reconciliation of Employees	City Employees				SASM Employees			
	Active	Retired	Surv Sp	Total	Active	Retired	Surv Sp	Total
As of June 30, 2009	132	39	2	173	11	2	0	13
Data Corrections					2	-	-	2
New hires	25	-	-	25	2	-	-	2
Terminations/deaths/transfers	(18)	(1)	-	(19)	1	-	-	1
New retiree, joined plan	(12)	12	0	0	(3)	3	-	0
New retiree, waiving plan	-	-	-	0	-	-	-	0
As of June 30, 2012	127	50	2	179	13	5	0	18

Employees by Medical Plan Coverage				
	Actives	Pre-65 Retirees	Post-65 Retirees	Total
<b>Health Net HMO</b>				
Employee Only	9	5	1	15
Employee & Spouse	6	2	0	8
Employee & Children	6	0	0	6
Employee & Family	4	1	0	5
<i>Total</i>	25	8	1	34
<b>Health Net PPO</b>				
Employee Only	8	2	1	11
Employee & Spouse	0	0	0	0
Employee & Children	0	0	0	0
Employee & Family	0	0	0	0
<i>Total</i>	8	2	1	11
<b>Kaiser</b>				
Employee Only	27	5	11	43
Employee & Spouse	24	14	7	45
Employee & Children	7	0	0	7
Employee & Family	44	2	1	47
<i>Total</i>	102	21	19	142
Outside Coverage	0	1	2	3

**Table 3**  
**Summary of Retiree Benefit Provisions**

**OPEB provided:** The City has indicated that the only OPEB provided are medical and dental coverage.

**Access to coverage:** This coverage is available for employees who retire from the City with PERS. Eligibility for retirement through PERS is at least age 50 with 5 years of PERS membership service.

**Benefits provided:** The City provides the following benefits to eligible retirees.

	AFSCME	Management, Technical, Confidential	Fire and Police
Eligibility	Retire directly from the City with 15 years of City service	Retire directly from the City with 15 years of City service (7.5 years for department heads)	Retire directly from the City with 15 years of City service
Medical Benefit	City pays retiree and spouse premiums up to the pre-Medicare two party Kaiser premium rate (Health Plan B)		
Dental Benefit	None	City pays 100% retiree and spouse dental premiums	City pays 100% retiree and spouse dental premiums
Term of Benefits	Lifetime of retiree & spouse		

**Current premium rates:** The 2012 monthly healthcare premium rates are shown below:

City of Mill Valley Health Plan Rates						
Plan	Actives and Pre-Med Retirees			Medicare Eligible		
	Ee Only	Ee & 1	Ee & 2+	Ee Only	Ee & 1	Ee & 2+
Kaiser HMO	\$ 584.17	\$ 1,168.34	\$ 1,653.20	\$ 284.88	\$ 569.76	\$ 1,353.91
Health Net HMO	817.13	1,756.82	2,410.58	same as pre-Medicare		
Health Net PPO	1,036.13	2,227.66	3,056.56	1,019.01	2,038.02	
Dental Plan	64.74	115.63	163.59	same as pre-Medicare		

**Table 4  
OPEB Valuation Actuarial  
Methods and Assumptions**

Valuation Date	June 30, 2012
Funding Method	Entry Age Normal Cost, level percent of pay <sup>2</sup>
Asset Valuation Method	Market value of assets
Expected Return on Assets	7%
Discount Rate	For City employees: 5.11% (blended rate; see Appendix 1) For employees assigned to SASM: 4.25% (unfunded rate)
Participants Valued	Only current active employees and retired participants and covered dependents are valued. No future entrants are considered in this valuation.
Salary Increase	3.25% per year
Assumed Increase for Amortization Payments	3.25% per year where determined on a percent of pay basis

*The demographic actuarial assumptions used in this valuation are based on the (demographic) experience study of the California Public Employees Retirement System using data from 1997 to 2007. Rates for selected age and service are shown below and on the following pages.*

Mortality Before Retirement                      Illustrative rates:

CalPERS Public Agency Miscellaneous Non-Industrial Deaths only Projected to 2015			CalPERS Public Agency Fire & Police Combined Industrial & Non- Industrial Deaths Projected to 2015		
Age	Male	Female	Age	Male	Female
15	0.00041	0.00006	15	0.00041	0.00006
20	0.00043	0.00015	20	0.00045	0.00018
30	0.00052	0.00034	30	0.00061	0.00044
40	0.00084	0.00060	40	0.00096	0.00072
50	0.00161	0.00116	50	0.00174	0.00129
60	0.00364	0.00259	60	0.00380	0.00276
70	0.00848	0.00633	70	0.00865	0.00652
80	0.01452	0.01070	80	0.01472	0.01090

<sup>2</sup> The level percent of pay aspect of the funding method refers to how the normal cost is determined. Use of level percent of pay cost allocations in the funding method is separate from and has no effect on a decision regarding use of a level percent of pay or level dollar basis for determining amortization payments.

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

Mortality After Retirement  
Illustrative rates:

Healthy Lives

Disabled Lives

CalPERS Public Agency Miscellaneous, Police & Fire Post Retirement Mortality Projected to 2015		
Age	Male	Female
40	0.00089	0.00058
50	0.00218	0.00115
60	0.00664	0.00420
70	0.01553	0.01213
80	0.05012	0.03620
90	0.16415	0.12219
100	0.34379	0.31717
110	1.00000	1.00000

CalPERS Public Agency Miscellaneous Disability Post Retirement Mortality Projected to 2015		
Age	Male	Female
40	0.01600	0.00625
50	0.01490	0.01143
60	0.02115	0.01588
70	0.03588	0.02944
80	0.07977	0.05363
90	0.21126	0.14726
100	0.45676	0.37474
110	1.00000	1.00000

Disabled Lives (continued)

CalPERS Public Agency Fire Disability Post Retirement Mortality Projected to 2015		
Age	Male	Female
40	0.00347	0.00235
50	0.00508	0.00404
60	0.00827	0.00842
70	0.02176	0.01760
80	0.06671	0.04432
90	0.16543	0.13640
100	0.41015	0.35141
110	1.00000	1.00000

CalPERS Public Agency Police Disability Post Retirement Mortality Projected to 2015		
Age	Male	Female
40	0.00261	0.00208
50	0.00459	0.00368
60	0.00780	0.00814
70	0.02136	0.01727
80	0.06642	0.04411
90	0.16441	0.13616
100	0.40912	0.35089
110	1.00000	1.00000

Termination Rates

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

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



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

Termination Rates  
(continued)

*For safety employees: sum of CalPERS Terminated Refund and Terminated Vested rates for police officers – Illustrative rates*

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

Service Retirement Rates

*For miscellaneous employees hired before 3/25/11  
CalPERS Public Agency 2% @ 55 – Illustrative rates*

Attained Age	Years of Service					
	5	10	15	20	25	30
50	0.0150	0.0200	0.0240	0.0290	0.0330	0.0390
55	0.0500	0.0640	0.0780	0.0940	0.1070	0.1270
60	0.0720	0.0920	0.1120	0.1340	0.1530	0.1820
65	0.1740	0.2210	0.2690	0.3230	0.3690	0.4390
70	0.1380	0.1760	0.2140	0.2570	0.2930	0.3490
75 & over	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

*For miscellaneous employees hired on or after 3/25/11  
CalPERS Public Agency 2.5% @ 55 – Illustrative rates*

Attained Age	Years of Service					
	5	10	15	20	25	30
50	0.0261	0.0333	0.0404	0.0475	0.0546	0.0618
55	0.0880	0.1120	0.1360	0.1600	0.1840	0.2080
60	0.0880	0.1120	0.1360	0.1600	0.1840	0.2080
65	0.1430	0.1820	0.2210	0.2600	0.2990	0.3380
70	0.1254	0.1596	0.1938	0.2280	0.2622	0.2964
75 & over	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

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

Service Retirement Rates  
(continued)

*For police employees*  
CalPERS Public Agency 3% @ 55 – Illustrative rates

Attained Age	Years of Service					
	5	10	15	20	25	30
50	0.0190	0.0190	0.0190	0.0190	0.0400	0.0600
52	0.0240	0.0240	0.0240	0.0240	0.0510	0.0770
55	0.1160	0.1160	0.1160	0.1160	0.2400	0.3630
57	0.0580	0.0580	0.0580	0.0580	0.1200	0.1810
60	0.1410	0.1410	0.1410	0.1410	0.2895	0.4380
62	0.1175	0.1175	0.1175	0.1175	0.2413	0.3650
65 & over	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

*For fire employees*  
CalPERS Public Agency 3% @ 55 – Illustrative rates

Attained Age	Years of Service					
	5	10	15	20	25	30
50	0.0120	0.0120	0.0120	0.0180	0.0280	0.0330
52	0.0180	0.0180	0.0180	0.0270	0.0420	0.0500
55	0.0920	0.0920	0.0920	0.1340	0.2110	0.2460
57	0.1000	0.1000	0.1000	0.1460	0.2300	0.2680
60	0.1170	0.1170	0.1170	0.1695	0.2670	0.3120
62	0.0975	0.0975	0.0975	0.1413	0.2225	0.2600
65 & over	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Disability Retirement Rates

Illustrative rates:

CalPERS Public Agency Miscellaneous Disability		
Age	Male	Female
25	0.00010	0.00010
30	0.00021	0.00020
35	0.00063	0.00088
40	0.00145	0.00164
45	0.00252	0.00243
50	0.00331	0.00311
55	0.00366	0.00306
60	0.00377	0.00253

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

Disability Retirement Rates (continued)

CalPERS Public Agency Fire Combined Disability		CalPERS Public Agency Police Combined Disability	
Age	Unisex	Age	Unisex
20	0.00034	20	0.00079
25	0.00130	25	0.00332
30	0.00262	30	0.00664
35	0.00382	35	0.00996
40	0.00502	40	0.01327
45	0.00632	45	0.01659
50	0.00794	50	0.01999
55	0.07305	55	0.06803
60	0.07351	60	0.06869

Healthcare Trend Rate

Medical plan premiums are assumed to increase once each year. The increases over the prior year's levels are assumed to be effective on the dates shown in the chart below:

Effective July 1	Premium Increase	Effective July 1	Premium Increase
2013	8.50%	2018	6.00%
2014	8.00%	2019	5.50%
2015	7.50%	2020	5.00%
2016	7.00%	2021 & Later	4.50%
2017	6.50%		

Dental premiums are assumed to increase annually by 3.5%.

Participation Rate

*Participating actives:* 100% are assumed to continue their coverage in retirement if expected to qualify for City-paid premiums upon retirement; 5% are assumed to continue on the plan if not eligible for a subsidy in retirement.

*Non-participating actives:* If expected to qualify for City-paid premiums upon retirement, 80% are assumed to elect Kaiser HMO coverage at a later date, thus gaining access to coverage in retirement. If not expected to qualify for City-paid premiums upon retirement, 4% are assumed to elect coverage in the Kaiser HMO plan and to continue this coverage in retirement at their expense.

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

*Retired participants:* Existing medical plan elections are assumed to be continued until retiree’s death.

Spouse Coverage

*Active employees:* 60% of future retirees are assumed to be married and to elect coverage for their spouse when they retire. Surviving spouses are assumed to retain coverage until their death. Husbands are assumed to be 3 years older than their wives. 80% of active employees with Healthnet coverage who are assumed to elect coverage for their spouse in retirement are assumed to switch to Kaiser coverage at that time.

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

Medicare Eligibility

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

Development of Age-related Premiums

Actual premium rates were adjusted to an age-related basis by applying the rates per the “Representative Curve for General Use” as presented by Petertil, August 2003, Society of Actuaries. Rates between 50 and 64 were averaged and rounded to the nearest .5%. A uniform rate was developed and applied prior to age 50 following analysis of plans offered for pre-Medicare eligible individuals.

Age	1 year Aging Factor	Age	1 year Aging Factor
Before 65	3.50%	80	1.00%
65	3.00%	85	0.50%
70	2.50%	90	0.00%
75	2.00%	and over	

Medical claims after Medicare eligibility are assumed to be 42.31% of those prior to eligibility.

**Changes Since the Prior Valuation:** Because Bickmore did not prepare the prior actuarial valuation, we are unsure of some of the assumptions made for the prior valuation, but the principal changes from the prior valuation are:

Discount rates

*Partial prefunding rate:* changed to a blended rate of 5%.

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

Demographic assumptions	Rates of assumed mortality, termination, disability and retirement rates were updated from those provided in the CalPERS 2002 experience study to those developed from the CalPERS 2007 experience study.
Healthcare trend	Medical plan premium rates are assumed to increase at slightly different rates than were assumed in the prior valuation. Dental premium rates are assumed to increase at 3.5% per year, a decrease from the 4% assumed in the prior valuation.
Participation rate	We are uncertain whether or the extent to which future retirees who do not qualify for City-paid premiums were assumed to elect coverage in retirement. Our assumptions are described above under Participation Rate and Spouse Coverage.
Medical plan at retirement	Rather than assume active employees will continue in the same medical plan at retirement, we made the assumptions described above under Participation Rate and Spouse Coverage.
Actuarial value of assets	With the City's approval, this valuation sets the actuarial value of assets equal to the market value of assets on the valuation date (adjusted, as appropriate for the timing of contributions received); this is a change from the prior two valuations which included a 5-year graded recognition of the difference between actual and expected asset returns each year.

**Table 5**  
**Projected Benefit Payments**

The following is an estimate of other post-employment benefits to be paid on behalf of current retirees and current employees expected to retire from the City.

- No benefits expected to be paid on behalf of current active employees prior to retirement are considered in this projection.
- No benefits for potential future employees have been included.

Expected annual benefits have been projected on the basis of the actuarial assumptions outlined in Table 4 and are shown separately for City and employees assigned to SASM.

**City employees:**

Projected Annual Benefit Payments							
Fiscal Year Ending June 30	Explicit Subsidy			Implicit Subsidy			Total
	Current Retirees	Future Retirees	Total	Current Retirees	Future Retirees	Total	
2012	\$ 492,230	\$ -	\$ 492,230	\$ 158,793	\$ -	\$ 158,793	\$ 651,023
2013	493,749	15,023	508,772	173,878	3,280	177,158	685,930
2014	526,565	37,303	563,868	205,911	7,406	213,317	777,185
2015	534,196	66,763	600,959	202,976	14,630	217,606	818,565
2016	550,928	104,768	655,696	210,949	24,611	235,560	891,256
2017	564,718	162,925	727,643	229,513	37,488	267,001	994,644
2018	575,369	226,880	802,249	247,474	57,373	304,847	1,107,096
2019	597,489	300,932	898,421	233,082	79,739	312,821	1,211,242
2020	606,754	365,309	972,063	236,643	92,778	329,421	1,301,484
2021	606,701	436,898	1,043,599	231,530	123,389	354,919	1,398,518

**Employees assigned to SASM:**

Projected Annual Benefit Payments							
Fiscal Year Ending June 30	Explicit Subsidy			Implicit Subsidy			Total
	Current Retirees	Future Retirees	Total	Current Retirees	Future Retirees	Total	
2012	\$ 56,366	\$ -	\$ 56,366	\$ 27,170	\$ -	\$ 27,170	\$ 83,536
2013	72,066	5,129	77,195	29,751	2,164	31,915	109,110
2014	73,399	9,017	82,416	31,900	3,859	35,759	118,175
2015	78,300	12,783	91,083	37,857	5,861	43,718	134,801
2016	78,765	15,138	93,903	40,162	6,323	46,485	140,388
2017	78,558	19,412	97,970	42,156	8,628	50,784	148,754
2018	82,562	24,331	106,893	48,542	11,367	59,909	166,802
2019	75,871	31,511	107,382	27,944	14,236	42,180	149,562
2020	78,903	38,240	117,143	32,418	15,916	48,334	165,477
2021	75,986	45,982	121,968	31,623	19,972	51,595	173,563

## Appendix 1 Determination of Blended Discount Rate

The following outlines the methodology used to determine a “blended” discount rate for determining value of the agency’s OPEB obligations and Annual Required Contribution for City employees. The calculation takes into account the value of funds already accumulated in an irrevocable OPEB trust account assumed to earn an average of 7.0% per year. The portion of benefits not funded through the trust is assumed to be funded by local agency investments earning a long term average rate of return of 4.25% per year. The City intends to contribute \$250,000 annually to the OPEB trust in future years.

<b>Step 1: Calculation of Blended Discount Rate Based on Funded Ratio on the Valuation Date</b>	
Trust assets, June 30, 2012	\$ 3,617,703
Assumed pay-as-you-go discount rate	4.25%
Assumed prefunding discount rate	7.00%
PVFB on 6/30/2012 determined using pre-funding rate	28,057,159
Assets as % of prefunding PFVB	12.89%
Blended discount rate based on funded ratio:	
a. 7.00% times 12.89%	0.90%
b. (100% - 12.89%) times 4.25%	3.70%
c. Sum of a. plus b.	4.60%

<b>Step 2: Determination of Blended Discount Rate Based on Expected Contributions in Future Years</b>			
Basis for contribution	Pay-As-You-Go	Prefunding	Additional
Contribution	\$ 492,230	\$ 1,666,834	\$ 250,000
Additional contribution as % of the difference between the contributions for Pay-As-You-Go and Pre-Funding			21.28%
Discount rate from Step 1			4.60%
Blended discount rate:			
a. 7.0% times 21.28%			1.49%
b. (100% - 21.28%) times 4.50%			3.62%
c. Sum of a. plus b.			5.11%

## Glossary

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

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

Actuarial Present Value (APV) – The amount presently required to fund a payment or series of payments in the future, it is determined by discounting the future payments by an appropriate interest rate and the probability of nonpayment.

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

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

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

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

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

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

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

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



## **Glossary (Continued)**

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

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

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

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

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

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

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

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

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

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

## **Glossary (Concluded)**

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

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

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

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

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

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

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