



December 5, 2013

Mr. Wesley A. Maffei
Manager
Napa County Mosquito Abatement District
15 Melvin Road
American Canyon, CA 94503

Re: July 1, 2013 Actuarial Report on GASB 45 Retiree Benefit Valuation

Dear Wes:

We are pleased to enclose our report providing the results of the July 1, 2013 actuarial valuation of "other post-employment benefits" (OPEB) liabilities for the Napa County Mosquito Abatement District (the District). The report's text describes our analysis and assumptions in detail.

This valuation was prepared with the understanding that:

- The results of this valuation will be applied to determine the annual OPEB expense for the District's fiscal years ending June 30, 2014 and June 30, 2015.
- The District will continue to follow its previously established policy of prefunding OPEB liabilities through the irrevocable trust account with the California Employers' Retiree Benefit Trust (CERBT).
- The District intends to change from CERBT asset allocation Strategy 3 to Strategy 2, using a Margin for Adverse Deviation of 1.05%. Accordingly, liabilities were calculated based on a 6.0% discount rate.
- The District will continue to follow the terms of its current PEMHCA resolution on file with CalPERS.
- The District has chosen to recognize the implicit subsidy of retiree premiums as a liability.

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

Sincerely,

A handwritten signature in black ink that reads "Francis M. Schauer, Jr." in a cursive script.

Francis M. Schauer, Jr., FSA, FCA, EA, MAAA
Manager, Health and Benefit Actuarial Services

Enclosure



Napa County
Mosquito Abatement District

Actuarial Valuation of the Other
Post-Employment Benefit Programs
As of July 1, 2013

Submitted December 2013

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A. Executive Summary

This report presents the results of the July 1, 2013 actuarial valuation of the Napa County Mosquito Abatement District (the District) other post-employment benefit (OPEB) programs. Briefly, benefits include subsidized medical and dental insurance 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).

How much the District contributes each year affects the calculation of liabilities. The District is prefunding its OPEB obligations by consistently making contributions greater than or equal to the Annual Required Contribution (ARC) each year. At the time the 2011 valuation was prepared, a discount rate of 6.0% was used. The District has indicated to Bickmore that a change is planned to utilize asset allocation strategy 2 under California Employers' Retiree Benefit Trust (CERBT) instead of the previously-elected strategy 3. This valuation was also prepared using a 6.0% discount rate, however, leaving a larger Margin for Adverse Deviation. Use of this rate is not a guarantee of future investment performance, but rather an assumption about the expected long term rate of return.

Exhibits presented in this report are based on the assumption that the results of this July 1, 2013 valuation will be applied in determining the annual OPEB expense for the fiscal years ending June 30, 2014 and 2015. We have assumed the District will report a net OPEB Asset of \$(468,847) as of June 30, 2013. We have included a summary of the information we anticipate to be reported for the District's fiscal year ended June 30, 2013 in Appendix 1 of this report.

We calculate the GASB 45 actuarial accrued liability (AAL) to be \$1,718,630 for the explicit subsidies provided to retirees, and an additional \$773,765, if the implicit subsidy of retiree premiums is recognized. The District reported assets in CERBT as of July 1, 2013 of \$1,906,731. The explicit subsidy AAL is, therefore, more than fully funded, but there is an unfunded actuarial accrued liability (UAAL) of \$585,664, when the implicit AAL is included.

The following summarizes results for the fiscal year ending June 30, 2014:

Subsidy	Explicit	Implicit	Total
Actuarial Accrued Liability (AAL)	\$ 1,718,630	\$ 773,765	\$ 2,492,395
Actuarial Value of Assets	1,906,731	-	1,906,731
Unfunded AAL (UAAL)	(188,101)	773,765	585,664
Annual Required Contribution (ARC)	61,967	67,714	129,681
Expected Contributions			
a. Estimated payments on behalf of retirees	36,303	-	36,303
b. Estimated contribution to OPEB trust	25,664	57,495	83,159
c. Current year's implicit subsidy	-	10,219	10,219
Total Expected Employer Contribution	61,967	67,714	129,681
Net OPEB Obligation (Asset) at fiscal year end	(473,343)	-	(473,343)

Executive Summary (Concluded)

Additional detail is provided in tables beginning on page 11. Projected results for the fiscal year ending June 30, 2015 are also shown in these tables.

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. Due to the relatively small size of the District's employee group, differences from what we project are more likely to occur. These variances, unfortunately, lead to more volatility in results from one valuation to the next. We also note that this valuation has been prepared on a closed group basis; no provision is made for new employees.

Details of our valuation process and the various disclosures required by GASB 45 are provided on the succeeding pages.

The next valuation is scheduled to be prepared as of July 1, 2015 as required for continued participation in 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 District implemented GASB 45 for the fiscal year ended June 30, 2008.

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

- If the District's OPEB contributions equal the ARC each year, the net OPEB obligation will equal \$0.
- If the District'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 District, as are the manner and term for paying down the unfunded actuarial accrued liability. Once a funding policy has been established, however, the District'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 District should consult counsel on these matters; Bickmore does not practice law and does not intend anything in this report to constitute legal advice. In addition, we recommend the District 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 leave¹ 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. 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. Current 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 District

The District 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 District contributes directly to the cost of retiree medical coverage. These benefits are described in Table 3 and liabilities have been included in this valuation.
- Employees are covered by the CalPERS medical program. The experience of public agency employer membership in this program is community-rated (“OPEB Assumption Model”, April 2010) and the District’s membership in this program is incidental relative to the total number of members covered. Under current GASB 45 guidance, therefore, we believe the inclusion of an implicit subsidy liability is not required. However, this guidance is currently being reviewed by GASB, and it is likely that they will require the calculation and disclosure of the implicit subsidy liability even for governmental entities participating in large community-rated plans. In anticipation of this requirement, we have calculated and included liabilities for the implicit subsidy of retiree premiums inherent in the premiums for active employees.

¹ When a terminating employee’s unused sick leave credits are converted to provide or enhance a defined benefit OPEB, e.g., healthcare 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 District in July 2013 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 District 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 District. 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 District to receive benefits.
- For those that do continue in service with the District, assumptions are made regarding the probability of retirement at various ages.
- After adjustments for the probabilities of whether and when an employee may retire from the District, we then apply an assumption about whether or not the retiree will elect coverage for themselves and/or dependents.
- To the extent an employee is assumed to qualify and elect coverage in retirement, the calculated liability reflects expected trends in the cost of those benefits and the assumptions as to the expected date(s) those benefit 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 60 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	Past Years' Costs
<i>plus</i> Normal Cost	Current Year's Cost
<u><i>plus</i> Present Value of Future Normal Costs</u>	<u>Future Years' Costs</u>
<i>equals</i> Present Value of Future Benefits	Total Benefit Costs

Where contributions have been made to an irrevocable OPEB trust, the accumulated value of trust assets is applied to offset the AAL. The value of assets invested in the District's CERBT account on June 30, 2013 was reported to be \$1,906,731. The portion of the AAL not covered by assets is referred to as the unfunded actuarial accrued liability (UAAL).

E. Basic Valuation Results

The following chart compares the results of the July 1, 2013 valuation of OPEB liabilities to the results of the July 1, 2011 valuation.

Valuation date	Prefunding Basis			
	7/1/2011	7/1/2013		
Subsidy	Explicit	Explicit	Implicit	Total
Discount rate	6.00%	6.00%	6.00%	6.00%
Number of Covered Employees				
Actives	8	8	8	8
Retirees	3	4	4	4
Total Participants	11	12	12	12
Actuarial Present Value of Projected Benefits				
Actives	\$ 1,559,779	\$ 1,744,064	\$ 709,422	\$ 2,453,486
Retirees	354,583	498,497	273,356	771,853
Total APVPB	1,914,362	2,242,561	982,778	3,225,339
Actuarial Accrued Liability (AAL)				
Actives	1,094,912	1,220,133	500,409	1,720,542
Retirees	354,583	498,497	273,356	771,853
Total AAL	1,449,495	1,718,630	773,765	2,492,395
Actuarial Value of Assets	1,288,250	1,906,731	-	1,906,731
Unfunded AAL (UAAL)	161,245	(188,101)	773,765	585,664
Normal Cost	57,186	67,405	27,082	94,487
Benefit Payments				
Actives (in retirement) - explicit	-	5,817	-	5,817
Actives (in retirement) - implicit	-	-	-	-
Retirees - explicit	22,954	30,486	-	30,486
Retirees - implicit	-	-	10,219	10,219
Total	22,954	36,303	10,219	46,522

In total, the funded ratio (the ratio of the Actuarial Value of Assets divided by the Actuarial Accrued Liability) is 76.5% as of July 1, 2013. Covered payroll as of July 1, 2013 was reported to be \$680,305. The Unfunded Actuarial Accrued Liability, expressed as a percentage of payroll, is 86.1% as of this date.

Changes Since the Prior Valuation

Even if all of our previous assumptions were met exactly as projected, liabilities generally increase over time as active employees get closer to the date their benefits are expected to begin. Of course, our prior assumptions were *not* exactly realized.

Basic Valuation Results (Concluded)

In comparing results shown in the exhibit on the prior page, we can see that the Actuarial Accrued Liability (AAL) increased by approximately \$1,043,000 since the prior valuation. The addition of the implicit liability to the valuation accounts for \$774,000. The remaining difference of \$269,000 is the increase in the explicit only AAL between July 1, 2011 and July 1, 2013. Most of this increase in the explicit AAL (\$239,000) was expected as the accumulation of costs accrued for active employees and the passage of time, offset by benefits expected to be paid to retirees. The remaining difference of \$30,000 is due to the following:

- Plan experience relative to prior assumptions, including actual premium rate increases and population changes;
- A change in the mortality assumption to reflect assumed future improvements in mortality; and
- An increase in assumed future increase in medical premium levels.

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 District’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, 2014 and June 30, 2015 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, where the expected employer contribution is shown as the interest-adjusted sum of the normal cost and the entire amount of the unfunded accrued liability. Expected contributions in future years are then reduced to the expected normal cost (as a percentage of payroll) plus amortization of any new changes in the unfunded AAL.
- 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 District’s prefunding policy includes amortization of the unfunded AAL on a level percent of pay basis over an open 30-year period.

Funding of the Implicit Subsidy

The implicit subsidy liability created when expected retiree medical or life insurance claims exceed the retiree premiums was described earlier in Section C. In practical terms, when the Client 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 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 seven 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 District. 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 District employees. CalPERS has previously issued a set of standardized actuarial methods and assumptions to be used by entities participating in CERBT and many assumptions used in this report for GASB 45 analysis are also consistent with that assumption model. Other assumptions were selected based on demonstrated plan experience and/or our best estimate of expected future experience.

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. CERBT provides participating employers with three possible asset allocation strategies; a maximum discount rate is assigned to each of these strategies, which may be rounded or reduced to include a margin for adverse deviation. As requested by the District and permitted by CERBT where its Asset Allocation Strategy 2 is employed, the discount rate used in this valuation is 6.0%.

H. Certification

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

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

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

Signed: December 5, 2013



Catherine L. MacLeod, FSA, EA, MAAA



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

Table 1A
Summary of Valuation Results
Prefunding Basis

The following summarizes the results of our valuation of OPEB liabilities for the District calculated under GASB 45 for the fiscal year ending June 30, 2014 as well as projected amounts for the fiscal year ending June 30, 2015.

The results shown below and on the following two pages reflect our understanding that the District intends to contribute 100% of the ARC for each fiscal year up to and including the years to which this report is expected to be applied. Should those contributions differ by more than an immaterial amount, some of the results in this report will need to be revised.

Valuation date	Prefunding Basis			
	7/1/2013			
Subsidy	Explicit	Implicit	Total	Total
For fiscal year beginning	7/1/2013	7/1/2013	7/1/2013	7/1/2014
For fiscal year ending	6/30/2014	6/30/2014	6/30/2014	6/30/2015
Discount rate	6.00%	6.00%	6.00%	6.00%
Number of Covered Employees*				
Actives	8	8	8	8
Retirees	4	4	4	4
Total Participants	12	12	12	12
Actuarial Present Value of Projected Benefits				
Actives	\$ 1,744,064	\$ 709,422	2,453,486	\$ 2,595,165
Retirees	498,497	273,356	771,853	777,459
Total APVPB	2,242,561	982,778	3,225,339	3,372,624
Actuarial Accrued Liability (AAL)				
Actives	\$ 1,220,133	\$ 500,409	\$ 1,720,542	1,918,401
Retirees	498,497	273,356	771,853	777,459
Total AAL	1,718,630	773,765	2,492,395	2,695,860
Actuarial Value of Assets	1,906,731	-	1,906,731	2,104,294
Unfunded AAL (UAAL)	(188,101)	773,765	585,664	591,566
Normal Cost	67,405	27,082	94,487	97,558
Benefit Payments				
Actives (in retirement) - explicit	5,817	-	5,817	15,286
Actives (in retirement) - implicit	-	-	-	-
Retirees - explicit	30,486	-	30,486	31,389
Retirees - implicit	-	10,219	10,219	11,348
Total	36,303	10,219	46,522	58,023

* The numbers of active employees and retirees shown above are as of the valuation date and are not necessarily the number expected in the following year. Because this valuation has been prepared on a closed group basis, no potential future employees are included and, based on assumptions outlined in Table 4, we recognize the possibility that active employees may leave employment, some may retire and elect benefits and coverage for some of the retired employees may cease.

Table 1B
Calculation of the Annual Required Contribution

The following exhibit calculates the amortization payments and the annual required contribution (ARC) on a prefunding basis for the fiscal years ending June 30, 2014 and June 30, 2015.

Fiscal Year End	Prefunding Basis			
	6/30/2014	6/30/2014	6/30/2014	6/30/2015
Subsidy	Explicit	Implicit	Total	Total
Funding Policy				
Discount rate	6.00%	6.00%	6.00%	6.00%
Amortization method	Level % of Pay	Level % of Pay	Level % of Pay	Level % of Pay
Initial amortization period (in years)	30	30	30	30
Remaining period (in years)	30	30	30	30
Determination of Amortization Payment				
UAAL	\$ (188,101)	773,765	585,664	\$ 591,566
Factor	21.0269	21.0269	21.0269	21.0269
Payment	(8,946)	36,799	27,853	28,134
Annual Required Contribution (ARC)				
Normal Cost	67,405	27,082	94,487	97,558
Amortization of UAAL	(8,946)	36,799	27,853	28,134
Interest to 06/30	3,508	3,833	7,341	7,542
Total ARC at fiscal year end	61,967	67,714	129,681	133,234

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	6/30/2014	6/30/2014	6/30/2014	6/30/2015
Projected covered payroll	\$ 680,305	680,305	\$ 680,305	\$ 702,415
Normal Cost as a percent of payroll	9.9%	4.0%	13.9%	13.9%
ARC as a percent of payroll	9.1%	10.0%	19.1%	19.0%
ARC per active ee	7,746	8,464	16,210	16,654

Table 1C
Expected OPEB Disclosures

The exhibit below develops the annual OPEB expense, estimates the expected OPEB contributions and projects the net OPEB obligation for the fiscal years ending June 30, 2014 and June 30, 2015. The calculations assume the District continues to follow the prefunding approach outlined on the prior page.

Fiscal Year End	Prefunding Basis			
	6/30/2014	6/30/2014	6/30/2014	6/30/2015
Subsidy	Explicit	Implicit	Total	Total
1. Calculation of the Annual OPEB Expense				
a. ARC for current fiscal year	\$ 61,967	67,714	129,681	\$ 133,234
b. Interest on Net OPEB Obligation (Asset) at beginning of year	(28,131)	-	(28,131)	(28,401)
c. Adjustment to the ARC	23,635	-	23,635	23,862
d. Annual OPEB Expense (a. + b. + c.)	57,471	67,714	125,185	128,695
2. Calculation of Expected Contribution				
a. Estimated payments on behalf of retirees	36,303	-	36,303	46,675
b. Estimated contribution to OPEB trust	25,664	57,495	83,159	75,211
c. Current year's implicit subsidy	-	10,219	10,219	11,348
d. Total Expected Employer Contribution	61,967	67,714	129,681	133,234
3. Change in Net OPEB Obligation (1.d. minus 2.c.)	(4,496)	-	(4,496)	(4,539)
Net OPEB Obligation (Asset), beginning of fiscal year	(468,847)	-	(468,847)	(473,343)
Net OPEB Obligation (Asset) at fiscal year end	(473,343)	-	(473,343)	(477,882)

Please note that the expected payments to retirees for the fiscal year ending June 30, 2014 and 2015 shown above are projections and should be replaced with the actual payments in order to determine the portion of the ARC to be contributed to the OPEB trust.

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

Table 2
Summary of Employee Data

The District reported 8 active employees, all of whom are currently participating in the medical program as of the valuation date. Age and service information for the reported individuals is provided below:

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

(Percentages adjusted to total 100%)

Annual Covered Payroll	\$680,305
Average Attained Age for Actives	48.9
Average Years of Service	13.0

There are currently 2 retirees and 2 surviving spouses covered by the plan, whose ages are summarized in the chart below.

Retirees by Age		
Current Age	Number	Percent
Below 50	0	0%
50 to 54	0	0%
55 to 59	1	25%
60 to 64	0	0%
65 to 69	1	25%
70 to 74	1	25%
75 to 79	1	25%
80 & up	0	0%
Total	4	100%
Average Attained Age for Retirees:		69.8

* Includes 2 surviving spouses

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

The chart below tracks active and retired employee changes between the last valuation date of July 1, 2011 and the current valuation date of July 1, 2013.

Reconciliation of District Plan Members Between Valuation Dates					
Status	Covered Actives	Waiving Actives	Covered Retirees	Surviving Spouses	Total
Number reported as of July 1, 2011	8	0	1	2	11
New employees	1	-	-	-	1
New retiree, elected coverage	(1)	-	1	-	0
Number reported as of July 1, 2013	8	0	2	2	12

Table 3A Summary of Retiree Benefit Provisions

OPEB provided: The District has indicated that the only OPEB provided is medical and dental insurance coverage.

Access to coverage: Medical coverage is currently provided through CalPERS as permitted under the Public Employees' Medical and Hospital Care Act (PEMHCA).

- This coverage requires the employee to satisfy the requirements for retirement under CalPERS, which requires attainment of age 50 (age 52, if a new member on or after January 1, 2013) with 5 years of State or public agency service or approved disability retirement.
- If an eligible employee is not already enrolled in the medical plan, he or she may enroll within 60 days of retirement or during any future open enrollment period.
- Coverage may be continued at the retiree's option for his or her lifetime. A surviving spouse and other eligible dependents may also continue coverage.
- The employee must commence his or her retirement warrant within 120 days of terminating employment with the District to be eligible to continue medical coverage through the District and be entitled to the employer subsidy described below.

Benefits provided: As a PEMHCA employer, the District is obligated to contribute toward the cost of retiree medical coverage for the retiree's lifetime or until coverage is discontinued. As defined in a resolution with CalPERS, the District contributes 100% of the premium for active and retired employees and their dependents, not to exceed an amount which varies by coverage level. The cap amount is the pre-Medicare premium level for single, two-party or family coverage, as applicable, for the CalPERS Kaiser HMO plan in the Bay area region. The District also pays 100% of the dental premium to management retirees and their eligible dependents.

Current premium rates: The 2014 CalPERS monthly medical plan rates in the Bay Area rate group are shown in the table below. If different rates apply where the member resides outside of this area, those rates are reflected in the valuation, but not listed here.

Bay Area 2014 Health Plan Rates						
Plan	Actives and Pre-Med Retirees			Medicare Eligible		
	Ee Only	Ee & 1	Ee & 2+	Ee Only	Ee & 1	Ee & 2+
Blue Shield Access/ Adv HMO	\$836.59	\$1,673.18	\$2,175.13	\$298.21	\$596.42	\$1,098.37
Blue Shield NetValue/ Adv HMO	704.01	1408.02	1830.43	298.21	596.42	1018.83
Kaiser HMO	742.72	1485.44	1931.07	294.97	589.94	1035.57
PERS Choice PPO	690.77	1381.54	1796.00	307.23	614.46	1028.92
PERS Select PPO	661.52	1323.04	1719.95	307.23	614.46	1011.37
PERSCare PPO	720.04	1440.08	1872.10	327.36	654.72	1086.74
PORAC Association Plan	634.00	1186.00	1507.00	397.00	791.00	1112.00

Note that the additional CalPERS administration fee is not included in this valuation.

The monthly dental premium for retired employees is \$72.80 (single coverage rate) as of July 2013.

Table 3B

General CalPERS Annuitant Eligibility Provisions

The content of this section has been drawn from Section C, Summary of Plan Provisions, of the State of California OPEB Valuation as of June 30, 2012, issued February 2013, to the State Controller from Gabriel Roeder & Smith. It is provided here as a brief summary of general annuitant and survivor coverage.

Health Care Coverage

Retired Employees

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

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

- Children age 26 or older
- Children's spouses
- Former spouses
- Never enrolled or disabled children over age 26
- Grandparents
- Parents
- Children of former spouses
- Other relatives

Coordination with Medicare

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

Survivors of an Annuitant

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

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

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

Table 4
Actuarial Methods and Assumptions

Valuation Date	July 1, 2013
Funding Method	Entry Age Normal Cost, level percent of pay ²
Asset Valuation Method	Market value of assets
Long Term Return on Assets	6.0%
Discount Rate	6.0%
Participants Valued	Only current active employees and retired participants and covered dependents are valued. No future entrants are considered in this valuation.
Salary Increase	3.25% per year, used only to allocate the cost of benefits between service years
Assumed Increase for Amortization Payments	3.25% per year where determined on a percent of pay basis
General Inflation Rate	3.0% per year

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 Mortality rates in each of the tables below were projected by applying Scale AA on a fully generational basis.

CalPERS Public Agency Miscellaneous Non- Industrial Deaths only		
Age	Male	Female
15	0.00045	0.00006
20	0.00047	0.00016
30	0.00053	0.00036
40	0.00087	0.00065
50	0.00176	0.00126
60	0.00395	0.00266
70	0.00914	0.00649
80	0.01527	0.01108

² 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 Mortality rates in each of the tables below were projected by applying Scale AA on a fully generational basis.

Healthy Lives			Disabled Lives		
CalPERS Public Agency Miscellaneous, Police & Fire Post Retirement Mortality			CalPERS Public Agency Disabled Miscellaneous Post Retirement Mortality		
Age	Male	Female	Age	Male	Female
40	0.00093	0.00062	20	0.00664	0.00478
50	0.00239	0.00125	30	0.00790	0.00512
60	0.00720	0.00431	40	0.01666	0.00674
70	0.01675	0.01244	50	0.01632	0.01245
80	0.05270	0.03749	60	0.02293	0.01628
90	0.16747	0.12404	70	0.03870	0.03019
100	0.34551	0.31876	80	0.08388	0.05555
110	1.00000	1.00000	90	0.21554	0.14949

Termination Rates

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

Service Retirement Rates

For miscellaneous employees: CalPERS Public Agency 2.7% @ 55 – Illustrative rates

Attained Age	Years of Service					
	5	10	15	20	25	30
50	0.0275	0.0350	0.0425	0.0500	0.0575	0.0650
55	0.0908	0.1155	0.1403	0.1650	0.1898	0.2145
60	0.0880	0.1120	0.1360	0.1600	0.1840	0.2080
65	0.1458	0.1855	0.2253	0.2650	0.3048	0.3445
70	0.1288	0.1638	0.1990	0.2340	0.2692	0.3042
75 & over	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

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

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

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 Jan 1	Premium Increase	Effective Jan 1	Premium Increase
2014	Actual	2021	5.50%
2015	8.50%	2022	5.00%
2016	8.00%	2023	4.50%
2017	7.50%	2024	4.50%
2018	7.00%	2025	4.64%
2019	6.50%	& later	
2020	6.00%		

Dental premiums are assumed to increase 4.5% annually.

Participation Rate

Participating actives: 100% are assumed to continue their current plan election in retirement.

Retired participants: Existing medical plan elections are assumed to be maintained until the retiree's death.

Spouse Coverage

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

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

Retired participants: Existing elections for spouse coverage are assumed to be maintained 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.

Dependent Coverage 60% of future retirees are assumed to cover dependent children in retirement for 10 years.

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 medical 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.

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 42.3% of those prior to eligibility.

Changes Since the Prior Valuation:

Mortality Future improvement in mortality rates was projected by applying Scale AA on a fully generational basis to the rates published in the 1997-2007 CalPERS Experience Study.

Healthcare trend Medical plan premiums are assumed to increase at slightly higher rates than were assumed in the prior valuation.

Implicit subsidy A liability for the implicit subsidy of retiree premiums inherent in the premiums for active employees was calculated and included.

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 District.

- 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.

Projected Annual Benefit Payments							
Fiscal Year Ending June 30	Explicit Subsidy			Implicit Subsidy			Total
	Current Retirees	Future Retirees	Total	Current Retirees	Future Retirees	Total	
2014	\$ 30,486	\$ 5,817	\$ 36,303	\$ 10,219	\$ -	\$ 10,219	\$ 46,522
2015	31,389	15,286	46,675	11,348	-	11,348	58,023
2016	33,475	23,670	57,145	13,032	-	13,032	70,177
2017	35,501	35,219	70,720	14,830	506	15,336	86,056
2018	37,430	49,410	86,840	16,647	1,611	18,258	105,098
2019	31,952	61,607	93,559	16,283	2,592	18,875	112,434
2020	33,191	77,033	110,224	17,620	4,890	22,510	132,734
2021	34,246	95,029	129,275	18,917	7,843	26,760	156,035
2022	35,100	109,220	144,320	20,148	10,072	30,220	174,540
2023	35,726	126,295	162,021	21,140	14,548	35,688	197,709

Appendix 1 Expected Disclosures for Fiscal Year End June 30, 2013

The annual OPEB expense and net OPEB obligation (asset) for the fiscal year ending June 30, 2013 were projected in the July 1, 2011 valuation and reflected Bickmore's understanding of OPEB contributions prior to that date. Since that valuation was prepared, the District has adjusted and updated its payments toward retiree premiums and contributions to CERBT through June 30, 2013.

The following exhibit updates the development of the annual OPEB expense and net OPEB obligation, providing the information assumed to be reported in the District's financial statement for the fiscal year ending June 30, 2013.

Fiscal Year End	6/30/2013
Subsidy	Roll Forward
1. Calculation of the Annual OPEB Expense	
a. ARC for current fiscal year	\$ 69,286
b. Interest on Net OPEB Obligation (Asset) at beginning of year	(30,329)
c. Adjustment to the ARC	25,482
d. Annual OPEB Expense (a. + b. + c.)	64,439
2. Calculation of Expected Contribution	
a. Estimated payments on behalf of retirees	27,801
b. Estimated contribution to OPEB trust	-
c. Current year's implicit subsidy	-
d. Total Expected Employer Contribution	27,801
3. Change in Net OPEB Obligation (1.d. minus 2.c.)	36,638
Net OPEB Obligation (Asset), beginning of fiscal year	(505,485)
Net OPEB Obligation (Asset) at fiscal year end	(468,847)

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