Bickmore Risk Services

October 21, 2011

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

Re: July 1, 2011 Actuarial Report on GASB 45 Retiree Benefit Valuation

Dear Wes:

We are pleased to enclose our report providing the results of the July 1, 2011 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 on the assumption that the District will continue to follow its previously established policy of prefunding OPEB liabilities through the irrevocable trust account within the CalPERS OPEB trust, CERBT. Accordingly, liabilities were calculated with an amortization of the unfunded actuarial liability determined on an open 30 year period with payments on a level percent of pay basis. The discount rate for valuing benefits was lowered from 7.75% to 6.0%, reflecting the District's elected asset allocation strategy for funds held in the CERBT.

We have assumed that the District will continue to follow its previously established resolutions on file with PEMHCA. We encourage the District to review our summary of the benefits described in Table 3A to be comfortable that we have captured these provisions correctly.

We appreciate the opportunity to work on this analysis and acknowledge the efforts of the 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,

Catherine L. MacLeod

Catherine L. MacLeod, FSA, EA, MAAA
Manager, Health and Benefit Actuarial Services

Enclosure

Bickmore Risk Services & Consulting

Napa County
Mosquito Abatement District

Actuarial Valuation of Other Post-Employment Benefit Programs as of

July 1, 2011

October 2011

800.541.4591
www.BRSrisk.com

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A. Executive Summary

This report presents the results of the July 1, 2011 actuarial valuation of the Napa County Mosquito Abatement District (the District) other post-employment benefit (OPEB) programs. The purpose of this valuation was to assess the OPEB liabilities and provide disclosure information as required by Statement No. 45 of the Governmental Accounting Standards Board (GASB 45).

The valuation was prepared using a 6.0% discount rate, reflecting the current asset allocation strategy selected by the District for its investments in the CalPERS OPEB trust, CERBT, in which the District participates. We note that this rate is not a guarantee of future investment performance.

Results presented in this report assume the District will continue to follow its previously established policy of prefunding OPEB liabilities. This includes amortization of the unfunded actuarial accrued liability over an open 30 year period with payments determined on a level percent of pay basis. We have assumed the District will report a net OPEB Asset of $26,027 as of June 30, 2011.

As of July 1, 2011, we calculate the GASB 45 actuarial accrued liability (AAL) to be $1,449,495. The District reported assets in CERBT of $1,288,250 to offset these liabilities. Thus, the unfunded actuarial accrued liability (UAAL) on this date is $161,245.

The following summarizes the results for the fiscal year ending June 30, 2012:

- We calculate the annual required contribution (ARC) to be $68,746.
- Contributions are assumed to total $98,671, consisting of the retiree premiums of $29,925 during the period and contributions totaling $68,746 to CERBT.
- Based on the calculations and contributions as described above, we believe the net OPEB asset to be $56,202 as of June 30, 2012.
- Results for fiscal year ending June 30, 2013 are also illustrated in exhibits beginning on page 8.

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.

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

The next valuation is scheduled for June 30, 2013, as required by CERBT. An earlier date may be required if there are any significant changes to the benefits or employee group eligible for benefits.

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.

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 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 Risk Services (BRS) 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 leave[1] or COBRA benefits, which fall under other GASB accounting statements.

A direct employer payment toward the cost of OPEB benefits 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, this 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 either a "community-rated" or "cost-sharing" 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 to reasonably conclude that any change in their group's mix of retirees and active 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. This report, therefore, does not make age-related premium adjustments or compute an implicit rate subsidy for employees covered under this program.

[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 is based on employee census data initially submitted to us by the District in June 2011 and clarified in subsequent communications. Summaries of employee data are provided in Table 2. While 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. Plan benefits are summarized in Table 3A, based on information supplied to BRS by the District. The valuation has been prepared 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 premiums as of the valuation date.

- These present value determinations reflect assumptions for the likelihood that an employee may not continue in service with the District 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 benefit will cease. The final payments for currently active employees may not be made for 75 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".

Where contributions have been made to an irrevocable OPEB trust, the accumulated value of trust assets is applied to offset the AAL. Assets in the District's OPEB trust as of July 1, 2011 were reported to be $1,288,250. The portion of the AAL not covered by assets is referred to as the unfunded actuarial accrued liability (UAAL).

Changes Since the Prior Valuation

The principal changes reflected in this valuation, from the valuation as of July 1, 2009, are:

- Updates in employee data, medical plan premiums and the maximum benefit levels,
- Assumption changes: (a) a decrease in the discount rate to 6.0%, from 7.75%, (b) updates to the demographic assumptions to match those used for the most recent actuarial valuation of the pension plan covering District employees and (c) a modest change in the assumed trend in medical costs.
- We included the benefits provided on disability retirement and to dependents of retirees.

The combined impact of these changes is a substantial increase in OPEB liabilities and in the annual required contribution. The change in discount rate is the major reason for this increase.

E. 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 by active employees in the current fiscal year (the normal cost) and
- Amortization of the unfunded actuarial accrued liability (UAAL).

These results are summarized 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 District's prefunding policy includes amortization of the unfunded AAL over an open 30-year period. Amortization payments are determined on a level percent of pay basis.

F. 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 included 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 OPEB trust, CERBT.

Factors Affecting the Selection of Assumptions

Special considerations apply to the selection of actuarial funding methods and assumptions for the District. In particular, CalPERS has issued a set of standardized actuarial methods and assumptions to be used by entities participating in the CalPERS prefunding vehicle for OPEB liabilities, the California Employers Retiree Benefit Trust (CERBT). 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 District has expressed its decision to elect CERBT's Asset Allocation Strategy 3; the discount rate of 6.0% applied in this valuation reflects the long term expected yield for this investment strategy.

G. Certification

We certify that this report has been prepared in accordance with our understanding of GASB 45, and that the figures in Tables 1A and 1B 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: October 21, 2011

Catherine L. MacLeod   Francis M. Schauer, Jr.

Catherine L. MacLeod, FSA, EA, MAAA   Francis M. Schauer Jr., FSA, FCA, EA, MAAA

Table 1A
Summary of Valuation Results
Prefunding Basis

In the following exhibit, Column 1 provides the results of the July 1, 2009 valuation, here for comparison only. Column 2 summarizes the results of the July 1, 2011 valuation of OPEB obligations for the District calculated on a prefunding basis as provided under GASB 45. This valuation is assumed to first be applied to the District's fiscal year ending June 30, 2012.

- The results in Column 2 are used to develop the ARC and annual OPEB expense for the fiscal year ending June 30, 2012.
- The valuation results have been adjusted (rolled forward) and presented in column 3 to be applicable to the fiscal year ending June 30, 2013.

	Prefunding Basis		
Valuation date	**7/1/2009**	**7/1/2011**	
For fiscal year beginning	7/1/2009	7/1/2011	7/1/2012
For fiscal year ending	6/30/2010	6/30/2012	6/30/2013
Discount rate	7.75%	6.00%	6.00%
Number of Covered Employees			
Actives	9	8	8
Retirees	4	3	3
Total Participants	13	11	11
Actuarial Present Value of Projected Benefits			
Actives	$ 770,241	$ 1,559,779	$ 1,647,579
Retirees	230,431	354,583	351,720
Total APVPB	1,000,672	1,914,362	1,999,299
Actuarial Accrued Liability (AAL)			
Actives	391,643	1,094,912	1,215,437
Retirees	230,431	354,583	351,720
Total AAL	622,074	1,449,495	1,567,157
Actuarial Value of Assets	825,391	1,288,250	1,434,291
Unfunded AAL (UAAL)	(203,317)	161,245	132,866
Normal Cost	42,494	57,186	59,045
Benefit Payments			
Actives (in retirement)	1,344	5,787	12,709
Retirees	17,049	24,138	22,148
Total	18,393	29,925	34,857

Table 1B
Calculation of the Annual Required Contribution
Prefunding Basis

The following exhibit develops the amortization payment and the annual required contribution (ARC) on a prefunding basis for the fiscal years ending June 30, 2012 and June 30, 2013.

	Prefunding Basis	
Fiscal Year End	**6/30/2012**	**6/30/2013**
Funding Policy		
Discount rate	6.00%	6.00%
Amortization method	Level % of Pay	Level % of Pay
Initial amortization period (in years)	30	30
Remaining period (in years)	30	30
Determination of Amortization Payment		
UAAL	161,245	132,866
Factor	21.0269	21.0269
Payment	7,669	6,319
Annual Required Contribution (ARC)		
Normal Cost	57,186	59,045
Amortization of UAAL	7,669	6,319
Interest to 06/30	3,891	3,922
ARC, adjusted to fiscal year end	68,746	69,286

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:

Projected covered payroll	617,960	638,044
Normal Cost as a percent of payroll	9.3%	9.3%
ARC as a percent of payroll	11.1%	10.9%
ARC per active ee	8,593	8,661

Table 1C
Expected OPEB Disclosures
Prefunding Basis

The following exhibit displays the expected June 30, 2012 and 2013 disclosures assuming the District continues its previously established prefunding policy provided under GASB 45.

	Prefunding Basis	
Fiscal Year End	**6/30/2012**	**6/30/2013**
Calculation of Expected Contribution		
Expected payments on behalf of retirees	$ 29,925	$ 34,857
Expected contribution to OPEB trust	68,746	69,286
Expected Employer Contribution	98,671	104,143
Change in Net OPEB Obligation		
1 Projected Annual OPEB Cost		
a. Interest on Net OPEB Obligation at beginning of year	(1,562)	(3,372)
b. ARC for current fiscal year	68,746	69,286
c. ARC adjustment for current fiscal year	1,312	2,833
d. **Projected Annual OPEB Cost** (a. + b. + c.)	68,496	68,747
2 *Less* Net Employer Contribution	(98,671)	(104,143)
3 Change in Net OPEB Obligation (1 + 2)	(30,175)	(35,396)
Net OPEB Obligation at beginning of year	(26,027)	(56,202)
Expected Net OPEB Obligation (Asset) At fiscal year end	(56,202)	(91,598)

It is our expectation that the District will replace the figures for *expected* payments to retirees (shown both columns above) with the *actual* payments in the financial statements.

In addition, if total contributions are different than assumed, some of the figures shown above will need to be modified. We are available to assist with those adjustments at the District's request.

Table 2
Summary of Employee Data

The District reported 8 active employees; of these, all are currently participating in the medical program. 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							0	0%
40 to 44			1				1	13%
45 to 49			1	1	1		3	38%
50 to 54			1			1	2	25%
55 to 59			1			1	2	25%
60 to 64							0	0%
65 to 69							0	0%
70 & Up							0	0%
Total	0	0	4	1	1	2	**8**	**100%**
Percent	0%	0%	50%	13%	13%	25%	**100%**	

(Percentages adjusted to total 100%)

Annual Covered Payroll	$617,960
Average Attained Age for Actives	50.0
Average Years of Service	15.1

There are also 1 retiree and 2 beneficiaries of deceased retirees who are receiving benefits. The following chart summarizes the ages of current retirees in the District plan.

Retirees by Age		
Current Age	**Number**	**Percent**
Below 50	0	0%
50 to 54	0	0%
55 to 59	0	0%
60 to 64	0	0%
65 to 69	2	67%
70 to 74	0	0%
75 to 79	1	33%
80 & up	0	0%
Total	**3**	**100%**
Average Attained Age for Retirees:		71.1

Table 3A
Summary of Retiree Benefit Provisions

OPEB provided: The District has indicated that the only OPEB provided are medical and dental plan coverage.

Access to coverage: This coverage is available for employees who satisfy the requirements for retirement under CalPERS. CalPERS retirement requires attainment of age 50 with 5 years of State or public agency service or approved disability retirement. An otherwise eligible 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. Eligible employees who are not already enrolled in the medical plan may enroll within 60 days of retirement or during any future open enrollment period. Employees who leave the District before retirement age are not entitled to coverage through the District beyond the end of the COBRA period.

Subsidy provided by the District: Medical coverage is currently provided through CalPERS as permitted under the Public Employees' Medical and Hospital and Care Act (PEMHCA). As such, 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 2011 CalPERS monthly medical plan rates applicable to covered employees and retirees are shown in the table below.

Bay Area 2011 Health Plan Rates						
	Actives and Pre-Med Retirees			Medicare Eligible		
Plan	Ee Only	Ee & 1	Ee & 2+	Ee Only	Ee & 1	Ee & 2+
Blue Shield HMO	$675.51	$1,351.02	$1,756.33	$337.88	$675.76	$1,013.64
Blue Shield NetValue HMO	581.24	1162.48	1511.22	337.88	675.76	1013.64
Kaiser HMO	568.99	1137.98	1479.37	282.30	564.60	846.90
PERS Choice PPO	563.40	1126.80	1464.84	375.88	751.76	1127.64
PERS Select PPO	492.68	985.36	1280.97	375.88	751.76	1127.64
PERS Care PPO	893.95	1787.90	2324.27	433.66	867.32	1300.98
PORAC Association Plan	527.00	987.00	1254.00	418.00	833.00	1331.00

The tables above illustrate the rates for residents of the Bay Area rate group. A different rate may apply for the same coverage where the member resides outside of this area. These variances, if any, are reflected in the valuation, but not listed here. CalPERS also charges an administrative fee; these expenses are not separately analyzed in this valuation.

The monthly dental premium for retired employees is $60.90 (single coverage rate) as of June 2011.

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, 2010, issued March 2011, 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 employer 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 who have been married
- 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
OPEB Valuation Actuarial Methods and Assumptions

Valuation Date	July 1, 2011
Funding Method	Entry Age Normal Cost, level percent of pay
Asset Valuation Method	Market value of assets
Discount Rate	6.0%
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		
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

Mortality After Retirement — Illustrative Rates:

CalPERS Public Agency Miscellaneous, Police & Fire Post Retirement Mortality		
Age	Male	Female
40	0.00093	0.00062
50	0.00239	0.00125
60	0.00720	0.00431
70	0.01675	0.01244
80	0.05270	0.03749
90	0.16747	0.12404
100	0.34551	0.31876
110	1.00000	1.00000

CalPERS Public Agency Miscellaneous Disability Post Retirement Mortality		
Age	Male	Female
20	0.00664	0.00478
30	0.00790	0.00512
40	0.01666	0.00674
50	0.01632	0.01245
60	0.02293	0.01628
70	0.03870	0.03019
80	0.08388	0.05555
90	0.21554	0.14949

Table 4 - Actuarial Methods and Assumptions (Continued)

Disability

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

Termination Rates

CalPERS Public District Miscellaneous: sum of Terminated Refund and Terminated Vested rates – Illustrative rates

Current 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

Retirement Rates

CalPERS Public District Miscellaneous
2.7% @ 55 – Illustrative rates

Current 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 (Concluded)

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
2012	9.00%	2016	7.00%
2013	8.50%	2017	6.50%
2014	8.00%	2018	5.50%
2015	7.50%	2019 & Later	4.50%

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 through retirement until death.

Spouse Coverage

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

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

Surviving spouses are assumed to retain coverage until their death.

Dependent children

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 become eligible for Medicare Parts A and B at age 65.

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	Current Retirees	Future Retirees	Total
2012	24,138	5,787	29,925
2013	22,148	12,709	34,857
2014	23,565	21,031	44,596
2015	24,918	32,542	57,460
2016	26,173	40,449	66,622
2017	27,300	52,527	79,827
2018	28,270	66,408	94,678
2019	28,930	72,865	101,795
2020	29,248	85,699	114,947
2021	29,461	100,474	129,935

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

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

Non-Industrial Disability (NID) – Unless specifically contracted by the individual District, 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 District be equal to the medical insurance contributions paid for its active employees, and that a contracting District 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 District 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