Bickmore

July 9, 2015

Dr. Dawnalyn Murakawa-Leopard
Assistant Superintendent
Manhattan Beach Unified School District
325 S. Peck Ave.
Manhattan Beach, CA 90266

Re: July 1, 2014 Actuarial Report on GASB 45 Retiree Benefit Valuation

Dear Ms. Murakawa-Leopard:

We are pleased to enclose our report providing the results of the July 1, 2014 actuarial valuation of other post-employment benefit (OPEB) liabilities for the Manhattan Beach Unified School District (the District). The report's text describes our analysis and assumptions in detail.

The primary purposes of the report are to develop:

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

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

We have based our valuation on employee data and plan information provided by the District. We encourage the District to review our summary of the benefits described in Table 3 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
Director, Health and Benefit Actuarial Services

Enclosure

Bickmore

Manhattan Beach Unified School District

Actuarial Valuation of the Other Post-Employment Benefit Programs As of July 1, 2014

Submitted July 2015

Table of Contents

A. Executive Summary

This report presents the results of the July 1, 2014 actuarial valuation of the Manhattan Beach Unified School District (the District) other post-employment benefit (OPEB) programs. Briefly, benefits include subsidized medical, dental, and vision coverage for eligible retirees. 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). Note that allowing retirees to continue medical coverage to retirees at the same premium rates as are charged for active employees is considered a benefit subsidy under GASB 45.

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

Prefunding the plan generally supports use of a higher discount rate and often produces substantially lower liabilities than a pay-as-you-go financing approach. This valuation uses a discount rate of 4.0% for pay-as-you-go calculations, and illustrates prefunding results using a 6.5% discount rate. Neither rate is a guarantee of future investment performance, but rather an assumption about the long term rate of return. We have selected these rates for illustrative purposes, though the ultimate decision for these rates lies with the District.

In its financial report for the period ending June 30, 2014, the District reported a net OPEB obligation of $595,196. Exhibits presented in the body of this report have been developed assuming that the results of this July 1, 2014 valuation will be applied in determining the annual OPEB expense for the fiscal years ending June 30, 2015 and June 30, 2016.

The District confirmed it has not yet established an irrevocable OPEB trust and is unlikely to do so in the immediate future. In other words, OPEB financing is expected to continue on a pay-as-you-go basis for the years to which this report will likely be applied. On this basis, we calculate the GASB 45 actuarial accrued liability (AAL) to be $4,321,268 as of July 1, 2014. With no trust assets to offset these liabilities, the unfunded accrued liability as of this date is also $4,321,268, and the funding ratio is 0%.

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

- We calculate the annual required contribution (ARC) to be $403,872.
- We project District contributions totaling $284,479 for the fiscal year ending June 30, 2015, equal to $58,724 for retiree premium payments plus $225,755 for the current year’s implicit subsidy (i.e., the estimated excess of retiree claims over the total premiums charged for retirees’ coverage).
- Based on the calculations and contributions described above, we project a net OPEB obligation of $700,297 on June 30, 2015.

Executive Summary
(Concluded)

These results are shown in tables beginning on page 12. Projected results for the fiscal year ending June 30, 2016 are also shown in these tables. An illustration of results on a prefunding basis is provided in Appendix 1 and additional information to facilitate OPEB reporting in the District's financial statements is provided in Appendix 3.

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. In accordance with GASB 45, this valuation has been prepared on a closed group basis; no provision is generally made for new employees until the valuation date following their employment.

We have included a comparison of results to those from the prior valuation and a brief description of assumption changes beginning on page 6. An actuarial valuation is, by its nature, a projection and to the extent that actual experience is not what we assumed, future results will be different. Some possible sources of future differences may include:

- A significant change in the number of covered or eligible plan members;
- A significant increase or decrease in the future medical premium rates or in the subsidy provided by the District toward retiree medical premiums;
- Significant changes in expected retiree healthcare claims by age, relative to healthcare claims for active employees and their dependents;
- Establishment of an irrevocable OPEB trust with recurring District contributions made thereto;
- Implementation of GASB 75, the new OPEB accounting standard, with many provisions similar to those adopted in GASB 68 for defined benefit retirement plan liabilities. Among other changes, reporting of the unfunded OPEB liability will be shifted from a footnote to the balance sheet.

Details of our valuation process and the various disclosures required by GASB 45 are provided on the succeeding pages. The date of the next actuarial valuation should be scheduled for July 1, 2016. If there are any significant changes in the employee data, benefits provided or the funding policy, please contact us to discuss whether an earlier valuation is appropriate.

Important Notices

This report is intended to be used only to present the actuarial information relating to other postemployment benefits for the District's financial statements and to provide the annual contribution information with respect to the District's current OPEB funding policy. The results of this report may not be appropriate for other purposes, where other assumptions, methodology and/or actuarial standards of practice may be required or more suitable. We note that various issues in this report may involve legal analysis of applicable law or regulations. The 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.

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.

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

- If the District's OPEB contributions had been equal to the ARC each year, the net OPEB obligation would 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).

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

The decision whether or not to prefund, and at what level, is at the discretion of the 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.

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 non-pension disability benefits. OPEB does not generally include vacation, sick leave, COBRA or other cash payments[1], which fall under other GASB accounting statements.

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

An exception may exist when the plan is part of a "community-rated" program. Current GASB guidance[2] provides that an agency whose membership is a small portion (e.g., less than 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 currently required to be disclosed.

OPEB Obligations of the District

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

- **Explicit Subsidy Liabilities**: The District contributes directly to the cost of retiree medical coverage for certain qualifying retirees. These benefits are described in Table 3 and liabilities have been included in this valuation.
- **Implicit Subsidy Liabilities**: Where applicable, as described below, we determine the difference between projected retiree claim costs by age and premiums expected to be charged to retirees (see Addendum 1: Bickmore Age Rating Methodology).
    - District retirees eligible for Medicare coverage are offered coverage through a supplemental Secure Horizons plan. Premiums are based solely on the experience of Medicare retirees; there is no implicit subsidy of these retiree premiums by active employee premiums.
    - Active and pre-Medicare retiree claims experience is co-mingled in the plans offered by the District which results in an implicit subsidy of retiree premiums.

[1] The District provides "Cash In Lieu Benefits" for some retirees. These payments are not contingent upon confirmation of healthcare coverage or reimbursable expenses, so are reportable under GASB 27 or 68.

[2] A change in Actuarial Standards of Practice was recently adopted and a new GASB Statement for reporting of OPEB liabilities is under development which will impact the OPEB liability to be reported in future years.

D. Valuation Process

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

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

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

We then calculate a present value of these benefits by discounting the value of each future expected benefit payment, multiplied by the assumed expectation that it will be paid, back to the valuation date using the discount rate. These benefit projections and liabilities have a very long time horizon. The final benefit subsidies for currently active employees may not be made for 40 years or more.

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

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

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

E. Basic Valuation Results

The following chart compares the results of the July 1, 2014 valuation of OPEB liabilities to the results of the July 1, 2009 valuation.

	Pay-As-You-Go Basis			
Valuation date	**7/1/2009**	**7/1/2014**		
	Total	**Explicit**	**Implicit**	**Total**
Discount rate	5.0%	4.0%	4.0%	4.0%
Number of Covered Employees				
Actives	-	610	610	610
Retirees	10	19	17	30
Total Participants	10	629	627	640
Actuarial Present Value of Projected Benefits				
Actives	$ -	$ 69,734	$ 3,149,687	$ 3,219,421
Retirees	1,121,452	381,614	2,460,729	2,842,343
Total APVPB	1,121,452	451,348	5,610,416	6,061,764
Actuarial Accrued Liability (AAL)				
Actives	-	39,045	1,439,880	1,478,925
Retirees	1,121,452	381,614	2,460,729	2,842,343
Total AAL	1,121,452	420,659	3,900,609	4,321,268
Actuarial Value of Assets	-	-	-	-
Unfunded AAL (UAAL)	1,121,452	420,659	3,900,609	4,321,268
Normal Cost	-	2,611	119,753	122,364
Benefit Payments				
Actives (in retirement)	-	976	12,684	13,660
Retirees	91,129	57,748	213,071	270,819
Total	91,129	58,724	225,755	284,479

The funded ratio (the ratio of the Actuarial Value of Assets divided by the Actuarial Accrued Liability) is 0.0% as of July 1, 2014. Covered payroll as of July 1, 2014 was reported to be $35,245,351. The Unfunded Actuarial Accrued Liability, expressed as a percentage of payroll, is 12.3% as of this date.

Changes Since the Prior Valuation

Given the uncertainties involved and the long term nature of these projections, it is highly unlikely that the actuary's prior assumptions will ever be exactly realized. Nonetheless, it is helpful to review why results may be different than anticipated. Bickmore did not prepare the July 2009 OPEB valuation. However, we believe the following factors contribute to the difference in liabilities as of July 1, 2014:

Basic Valuation Results (Concluded)

- A change in number of employees and retirees included in the valuation. The 2009 valuation included only 10 South Bay Union High School (SBUHS) retirees; no other District retirees or potential future retirees were included. This 2014 valuation includes remaining SBUHS retirees/survivors as well as other currently covered District retirees and potential future retirees. See Table 3 for a description of benefits valued and Table 2 for details on the number of active and retirees included in this report.
- Introduction of assumptions relating to the percentage of future retirees who will elect to continue coverage through the District and the percentage of electing future retirees who will elect to cover a spouse on the plan;
- A decrease in the discount rate used to value projected liabilities, from 5.0% to 4.0%;
- Revised assumptions for mortality, termination and retirement, now based assumptions recommended in the 2014 CalPERS experience study report and on assumptions used in the most recent CalSTRS retirement valuation;
- Changes to the assumed future increases in medical premiums;
- A decrease in dental and vision trend, from 5% to 4.5% per year;
- Introduction of Bickmore's Age Rating Methodology to develop expected retiree claim costs prior to age 65; and
- Plan experience relative to prior assumptions.

F. Funding Policy

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

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

Determination of the ARC

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

The ARCs for the fiscal years ending June 30, 2015 and June 30, 2016 are developed in Table 1B.

Decisions Affecting the Amortization Payment

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

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

It is our understanding that the District's pay-as-you-go policy includes amortization of the unfunded AAL over a closed 30-year period initially effective July 1, 2009; the remaining period applicable in determining the ARC for the fiscal year ending June 30, 2015 is 25 years. Amortization payments are determined on a level dollar basis.

Funding Policy (Concluded)

Funding of the Implicit Subsidy

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

G. Choice of Actuarial Funding Method and Assumptions

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

Factors Impacting the Selection of Funding Method

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

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

Factors Affecting the Selection of Assumptions

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

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 approved calculation of liabilities on a pay-as-you-go basis using a 4.0% discount rate, somewhat lower than the 5.0% rate used in the prior valuation. Since no OPEB trust has yet been established, for illustrative purposes, we have used a 6.5% discount rate in developing results on a funded basis. The actual discount rate, should the District decide to establish an irrevocable OPEB trust, will depend on the particular investments and asset allocation strategy selected.

H. Certification

This report presents the results of our actuarial valuation of the other post employment benefits provided by the Manhattan Beach Unified School 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: July 9, 2015

Catherine L. MacLeod

J. Kevin Watts

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

J. Kevin Watts, FSA, FCA, MAAA

Table 1A
Summary of Valuation Results
Pay-As-You-Go Basis

The basic valuation results are presented in Section E. 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, 2015 as well as projected amounts for the fiscal year ending June 30, 2016.

	Pay-As-You-Go Basis	
Valuation date	**7/1/2014**	
For fiscal year beginning	7/1/2014	7/1/2015
For fiscal year ending	6/30/2015	6/30/2016
Discount rate	4.0%	4.0%
Number of Covered Employees*		
Actives	610	610
Retirees	30	30
Total Participants	640	640
Actuarial Present Value of Projected Benefits		
Actives	$ 3,219,421	$ 3,334,538
Retirees	2,842,343	2,685,218
Total APVPB	6,061,764	6,019,756
Actuarial Accrued Liability (AAL)		
Actives	1,478,925	1,651,681
Retirees	2,842,343	2,685,218
Total AAL	4,321,268	4,336,899
Actuarial Value of Assets	-	-
Unfunded AAL (UAAL)	4,321,268	4,336,899
Normal Cost	122,364	126,341
Benefit Payments		
Actives (in retirement)	13,660	27,644
Retirees	270,819	252,633
Total	284,479	280,277

* 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. Based on assumptions outlined in Table 4, these liabilities already anticipate the likelihood that some active employees may leave employment forfeiting benefits, some may retire and elect benefits and coverage for some of the retired employees may cease.

Table 1B
Calculation of the Annual Required Contribution
Pay-As-You-Go Basis

The following exhibit calculates the amortization payments and the annual required contribution (ARC) on a pay-as-you-go basis for the fiscal year ending June 30, 2015 and June 30, 2016.

	Pay-As-You-Go Basis	
Fiscal Year End	**6/30/2015**	**6/30/2016**
Funding Policy		
Discount rate	4.0%	4.0%
Amortization method	Level Dollar	Level Dollar
Initial amortization period (in years)	30	30
Remaining period (in years)	25	24
Determination of Amortization Payment		
UAAL	$ 4,321,268	$ 4,336,899
Factor	16.2470	15.8568
Payment	265,974	273,503
Annual Required Contribution (ARC)		
Normal Cost	122,364	126,341
Amortization of UAAL	265,974	273,503
Interest to 06/30	15,534	15,994
Total ARC at fiscal year end	403,872	415,838

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:

Valuation date	**7/1/2014**	
Fiscal Year End	**6/30/2015**	**6/30/2016**
Projected covered payroll	$ 35,245,351	$ 36,390,825
Normal Cost as a percent of payroll	0.3%	0.3%
ARC as a percent of payroll	1.1%	1.1%
ARC per active ee	662	682

Table 1C
Expected OPEB Disclosures
Pay-As-You-Go Basis

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, 2015 and June 30, 2016. The calculations assume the District continues to follow the Pay-As-You-Go funding approach outlined on the prior page.

	Pay-As-You-Go Basis	
Fiscal Year End	**6/30/2015**	**6/30/2016**
1. Calculation of the Annual OPEB Expense		
a. ARC for current fiscal year	$ 403,872	$ 415,838
b. Interest on Net OPEB Obligation (Asset) at beginning of year	23,808	28,012
c. Adjustment to the ARC	(38,100)	(45,930)
d. **Annual OPEB Expense (a. + b. + c.)**	389,580	397,920
2. Calculation of Expected Contribution		
a. Estimated payments on behalf of retirees	58,724	55,767
b. Estimated current year's implicit subsidy	225,755	224,510
c. Estimated contribution to OPEB trust	-	-
d. **Total Expected Employer Contribution**	284,479	280,277
3. Change in Net OPEB Obligation *(1.d. minus 2.d.)*	105,101	117,643
Net OPEB Obligation (Asset), beginning of fiscal year	595,196	700,297
Net OPEB Obligation (Asset) at fiscal year end	700,297	817,940

Table 2
Summary of Employee Data

The District reported 610 active employees in a benefits-eligible position who may potentially qualify for coverage in retirement. Of these, 437 are currently participating in the medical program while 173 employees were waiving coverage as of the valuation date. Age and service information for the reported individuals is provided below:

Distribution of Benefits-Eligible Active Employees								
Current Age	**Years of Service**						**Total**	**Percent**
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 & Up		
Under 25	9	4	1				14	2%
25 to 29	27	22	2	2			53	9%
30 to 34	19	32	33	11	1		96	16%
35 to 39	17	8	34	17	7		83	14%
40 to 44	9	11	13	22	17	7	79	13%
45 to 49	6	12	15	22	21	10	86	14%
50 to 54		7	18	21	16	21	83	14%
55 to 59			6	19	21	26	72	12%
60 to 64				8	13	23	44	7%
65 to 69							0	0%
70 & Up							0	0%
Total	87	96	122	122	96	87	**610**	**100%**
Percent	14%	16%	20%	20%	16%	14%	**100%**	

	July 2009 Valuation	July 2013 Valuation
Annual Covered Payroll	None included	$35,245,351
Average Attained Age for Actives		43.8
Average Years of Service		10.7

There are also 28 retirees and 2 surviving spouses receiving benefits under this program. Their 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	2	7%
60 to 64	15	50%
65 to 69	1	3%
70 to 74	1	3%
75 to 79	1	3%
80 & up	10	33%
Total	**30**	**100%**
Average Attained Age for Retirees:		70.6

Table 2- Summary of Employee Data (Concluded)

The July 1, 2009 valuation did not evaluate any potential future benefits for current or potential future District retirees other than 10 retirees of the South Bay Union High School.

The following two charts summarize those included in the July 2014 valuation, first by level of potential benefit and then by employee group.

Counts by Benefit Group				
Group	Actives	Pre-65 Retirees	Post-65 Retirees	Total
Actives potentially eligible for the $400/year Benefit	610	-	-	610
Retirees currently receiving the $400/year benefit	-	8	-	8
Retirees paying full premium for District medical	-	7	1	8
South Bay retirees on District medical	-	1	10	11
Retirees receiving special benefit	-	2	1	3
Total included July 2014 valuation	**610**	**18**	**12**	**640**

Participants by Employee Group			
Group	Actives	Retired	Total
CSEA	255	3	258
MBUTA	330	14	344
MGMT/CONF	25	2	27
SBUHS	0	11	11
Total	**610**	**30**	**640**

Table 3
Summary of Retiree Benefit Provisions

OPEB provided: The District reported that the only OPEB provided are medical, dental and vision.

Access to coverage: This coverage is available for employees who retire from the District with PERS or STRS at age 55 with 15 or more years of District service. If a retiree does not meet these requirements, he or she is not eligible for continuation of healthcare through the District beyond what COBRA or Cal-COBRA offers. Upon eligibility for Medicare, coverage under the plans available to active employees and pre-Medicare retirees ends and, instead, retirees have the option to join a Secure Horizons plan made available through the District. Dependents and/or survivors of eligible retirees are also eligible for coverage.

Benefits provided: The District provides an annual contribution of $400 to eligible retirees who elect coverage on the District's medical plan. The benefit continues for 5 years, but not beyond the earlier of the retiree's death or age 65. When the subsidy ends, the retiree may elect to continue his or her medical coverage as described under "Access to Coverage".

There are 9 current retirees entitled to a different subsidy from the District:

- 6 retirees from South Bay Union High School receive lifetime benefits of (a) fully paid District dental and/or vision coverage and (b) up to $3,186.50 per year toward medical coverage.[3]
- 2 others received modified benefits between $4,500 and $5,500 per year, ending prior to 2017 and 1 other entitled to $6,000 per year for life.

Current premium rates: The District's monthly healthcare premium rates in effect between October 1, 2014 and September 30, 2015 are shown below:

Plan Name	Ee Only	Ee + 1	Ee + 2+
UHC PPO - Opt #1 (8CA)	$ 1,437.89	$ 2,875.78	$ 3,738.47
UHC PPO - Opt #2 (8CN)	1,210.96	2,421.94	3,148.50
United Healthcare HMO (HTX)	736.79	1,473.55	2,026.25
Kaiser Permanente (KTX)	682.63	1,365.27	1,931.85
Delta Dental Plan (DDP or DD5)	100.77	171.32	262.00
Vision Service Plan (VSP or VP5)	18.03	26.15	46.91

The premium rates for the Medicare Secure Horizons plan are shown below. These rates are also effective between October 1, 2014 and September 30, 2015.

Plan Name	Ee Only	Ee + 1	Ee + 2+
Secure Horizons w/ Part D	$ 398.11	$ 796.22	n/a

[3] There are 9 other retirees from South Bay Unified High School not covered by the District's medical plans who are receiving an annual cash benefit of $3,186.50. Because payment of this benefit is not contingent upon proof of coverage or eligible healthcare expense, it has been excluded from this GASB 45 valuation. We believe it should be valued as a pension benefit under GASB 68.

Table 4
Actuarial Methods and Assumptions

Valuation Date	July 1, 2014
Funding Method	Entry Age Normal Cost, level percent of pay[4]
Asset Valuation Method	Market value of assets ($0; no OPEB trust has been established)
Discount Rate	4.0% if unfunded; 6.5% if funded
Participants Valued	Only current active employees and retired participants and covered dependents are valued. No future entrants are considered in this valuation.
Salary Increase	3.25% per year, used only to allocate the cost of benefits between service years
Assumed Wage Inflation	3.0% per year; used to determine amortization payments if developed on a level percent of pay basis
General Inflation Rate	2.75% per year

The demographic actuarial assumptions used in this valuation are based on the 2014 (demographic) experience study of the California Public Employees Retirement System using data from 1997 to 2011 (with the exception of the basis for projection of mortality improvement; see below). 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.

Death before retirement eliminates retiree medical benefits.

An active miscellaneous male age 40 in 2008, is assumed to have a .091% chance of dying prior to his 41st birthday.

CalPERS Public Agency Miscellaneous Non-Industrial Deaths			CalSTRS Active Member Mortality		
Age	Male	Female	Age	Male	Female
15	0.00027	0.00020	15	0.00017	0.00011
20	0.00037	0.00024	20	0.00018	0.00011
30	0.00057	0.00030	30	0.00033	0.00014
40	0.00091	0.00062	40	0.00057	0.00034
50	0.00192	0.00121	50	0.00103	0.00063
60	0.00374	0.00224	60	0.00238	0.00179
70	0.00667	0.00470	70	0.00907	0.00677
80	0.01270	0.01039	80	0.02815	0.02145

[4] 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.

Death after retirement signals the end of benefits for the retiree, though benefits may continue for a surviving spouse. A female CalPERS employee who took a service retirement, and reached age 80 in 2008, is assumed to have a 3.703% chance of dying before her 81st birthday. If she had taken a disability retirement, the assumed chance of her death between ages 80 and 81 would increase to 6.029%.

Healthy Lives

CalPERS Public Agency Miscellaneous, Police & Fire Post Retirement Mortality		
Age	Male	Female
40	0.00133	0.00112
50	0.00621	0.00565
60	0.00862	0.00536
70	0.01662	0.01271
80	0.05003	0.03703
90	0.16176	0.12237
100	0.37218	0.34337
110	1.00000	1.00000

Disabled Lives

CalPERS Public Agency Disabled Miscellaneous Post Retirement Mortality		
Age	Male	Female
20	0.00716	0.00446
30	0.00803	0.00506
40	0.01150	0.00746
50	0.02083	0.01405
60	0.02779	0.01518
70	0.03660	0.02830
80	0.07806	0.06029
90	0.18457	0.15954

CalSTRS Retired and Beneficiary Mortality - Healthy		
Age	Male	Female
50	0.00114	0.00073
55	0.00164	0.00118
60	0.00300	0.00254
65	0.00596	0.00468
70	0.01095	0.00864
75	0.01886	0.01451
80	0.03772	0.02758
85	0.07619	0.05596
90	0.14212	0.11702

Termination Rates

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

For example, an active miscellaneous employee, exactly age 35, with 3 prior years of CalPERS service is assumed to have a 9.87% chance of leaving the Agency's employ in the next 12 months. If an employee terminates service before retirement, benefits are forfeited.

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

Table 4 - Actuarial Methods and Assumptions (continued)

Service Retirement Rates *For Classic miscellaneous CalPERS employees:* CalPERS Public Agency 2% @ 55 – Illustrative rates

Current Age	Years of Service					
	5	10	15	20	25	30
50	0.0140	0.0180	0.0210	0.0250	0.0270	0.0310
55	0.0480	0.0610	0.0740	0.0880	0.1000	0.1170
60	0.0670	0.0860	0.1030	0.1230	0.1390	0.1640
65	0.1550	0.1970	0.2380	0.2850	0.3250	0.3860
70	0.1300	0.1650	0.2000	0.2400	0.2720	0.3230
75 & over	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

For PEPRA miscellaneous employees: CalPERS Public Agency 2% @ 62 – Illustrative rates

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

Classic CalSTRS employees: CalSTRS 2% @ 60 – Males

Current Age	Years of Service					
	5	10	15	20	25	30
50	0.0000	0.0000	0.0000	0.0000	0.0000	0.0150
55	0.0270	0.0270	0.0270	0.0270	0.0540	0.0800
60	0.0630	0.0630	0.0630	0.0630	0.1260	0.2700
65	0.1350	0.1350	0.1350	0.1350	0.2700	0.3250
70	0.1080	0.1080	0.1080	0.1080	0.2160	0.3000
75	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Classic CalSTRS employees: CalSTRS 2% @ 60 – Females

Current Age	Years of Service					
	5	10	15	20	25	30
50	0.0000	0.0000	0.0000	0.0000	0.0000	0.0250
55	0.0450	0.0450	0.0450	0.0450	0.0900	0.0900
60	0.0900	0.0900	0.0900	0.0900	0.1800	0.3100
65	0.1440	0.1440	0.1440	0.1440	0.2880	0.3750
70	0.1350	0.1350	0.1350	0.1350	0.2700	0.3500
75	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Table 4 - Actuarial Methods and Assumptions (Continued)

Service retirement rates (concluded)

CalSTRS PEPRA employees: CalSTRS Public Agency 2% @ 62
Illustrative rates

Current Age	Years of Service					
	5	10	15	20	25	30
50	0.0050	0.0090	0.0130	0.0150	0.0160	0.0180
55	0.0240	0.0480	0.0670	0.0790	0.0880	0.0990
60	0.0370	0.0730	0.1020	0.1210	0.1340	0.1500
65	0.0910	0.1800	0.2510	0.2970	0.3310	0.3700
70	0.0660	0.1310	0.1830	0.2160	0.2410	0.2700
65	0.0550	0.1080	0.1510	0.1790	0.1990	0.2230
79	0.0930	0.1850	0.2580	0.3050	0.3400	0.3800
80	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Employer Cost Sharing

Where the District contributes a fixed dollar amount toward the cost of District plan medical coverage, we have assumed no increases in these amounts. There have been no increases since at least 1999.

Healthcare Trend

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 below:

Effective July 1	Premium Increase	Effective July 1	Premium Increase
2015	9.00%	2021	6.00%
2016	8.50%	2022	5.50%
2017	8.00%	2023	5.00%
2018	7.50%	2024	5.00%
2019	7.00%	2025	4.64%
2020	6.50%	& later	4.64%

Dental and vision premiums are assumed to increase by 4.5% annually.

Participation Rate

Active employees: 25% are assumed to continue their current plan election in retirement if eligible for continuation of coverage and to receive the direct (explicit) benefit from the District. If currently waiving coverage, the employee is assumed to elect coverage in the UHC HMO plan.

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

Table 4 - Actuarial Methods and Assumptions (Continued)

Spouse Coverage

Active employees: 40% are assumed to be married and elect coverage for their spouse in retirement. Surviving spouses are assumed to retain coverage until the earlier of age 65 or their death. Husbands are assumed to be 3 years older than their wives.

Retired participants: Existing elections for spouse coverage are assumed to continue until the earlier of the spouse's death or age 65. Actual spouse ages are used, where known; if not, husbands are assumed to be 3 years older than their wives.

Medicare Eligibility

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

Development of Age-related Medical Premiums

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

Representative claims costs derived for retirees not currently covered or not expected to be eligible for Medicare appear below:

Kaiser			UHC HMO			UHC PPO		
Retiree Age	Males	Females	Retiree Age	Males	Females	Retiree Age	Males	Females
55	$ 829	$ 909	55	$ 733	$ 803	55	$ 1,019	$ 1,117
60	1,041	1,036	60	920	916	60	1,279	1,274
65	1,289	1,235	65	1,139	1,091	65	1,584	1,518
70	1,557	1,460	70	1,376	1,290	70	1,914	1,794
75	1,809	1,683	75	1,598	1,487	75	2,223	2,068
80	2,034	1,892	80	1,797	1,672	80	2,499	2,325
85	2,176	2,084	85	1,922	1,841	85	2,673	2,561
90	2,267	2,231	90	2,003	1,971	90	2,785	2,742
95	2,354	2,280	95	2,080	2,014	95	2,892	2,802
100	2,386	2,284	100	2,108	2,018	100	2,931	2,806

Table 4 - Actuarial Methods and Assumptions (Concluded)

Age-related medical premiums (continued)	In developing these factors, the assumed average number of children per participant covering children was 1.65, with an average age of 14.6. Actual spouse ages were used if available. Otherwise husbands were assumed to be 3 years older than their wives. Spouse gender was assumed to be the opposite of the employee. Current and future Medicare-eligible retirees are assumed to be covered by plans that are rated based solely on the experience of Medicare retirees. Therefore, no age-based premiums were developed for Medicare eligible retirees.

Changes Since the Prior Valuation:

Discount rate	*Unfunded rate*: decreased from 5.0% to 4.0%
Demographic assumptions	For CalPERS participants: Rates of assumed mortality, termination, disability and retirement rates were updated to those developed from the CalPERS 2014 experience study. Future improvement in mortality rates (longer life expectancies) were developed using Scale AA rather than Scale BB applied by CalPERS. For CalSTRS participants: rates were updated to reflect those in the most recent actuarial valuation for the CalSTRS retirement system (based on the 2011 CalSTRS experience study).
Healthcare trend	Medical plan premium rates are assumed to increase at higher rates between 2015 and 2022 than were assumed in the prior valuation and slightly lower rates thereafter. Dental and vision premiums are assumed to increase at an average rate of 4.5% per year, down from 5.0% assumed previously.
Age-Related Medical Premiums	We modified the basis for developing age-related medical premiums based on updated research and data sponsored by the Society of Actuaries.

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. Expected annual benefits have been projected on the basis of the actuarial assumptions outlined in Table 4.

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

Projected Annual Benefit Payments							
Fiscal Year Ending June 30	Explicit Subsidy			Implicit Subsidy			Total
	Current Retirees	Future Retirees	Total	Current Retirees	Future Retirees	Total	
2015	$ 57,748	$ 976	$ 58,724	$ 213,071	$ 12,684	$ 225,755	$ 284,479
2016	53,954	1,813	55,767	198,679	25,831	224,510	280,277
2017	41,857	2,630	44,487	186,145	40,646	226,791	271,278
2018	38,172	3,346	41,518	172,522	57,935	230,457	271,975
2019	35,481	3,548	39,029	175,845	64,964	240,809	279,838
2020	32,782	3,456	36,238	167,886	73,896	241,782	278,020
2021	30,087	3,655	33,742	164,033	90,263	254,296	288,038
2022	27,313	3,442	30,755	156,259	97,448	253,707	284,462
2023	24,517	3,609	28,126	155,627	114,189	269,816	297,942
2024	21,778	3,565	25,343	153,426	115,060	268,486	293,829

Appendix 1: Prefunding Illustration for the FYE 2015

The following table compares an illustration of prefunding results to those developed on a pay-as-you-go financing basis for the fiscal year ending June 30, 2015.

Valuation date	**7/1/2014**			
Funding Approach	**Pay-As-You-Go**	**Prefunding**		
For fiscal year beginning	7/1/2014	7/1/2014	7/1/2014	7/1/2014
For fiscal year ending	6/30/2015	6/30/2015	6/30/2015	6/30/2015
Discount rate	4.0%	6.5%	6.5%	6.5%
Subsidy Type	**Combined**	**Explicit**	**Implicit**	**Combined**
Actuarial Present Value of Projected Benefits				
Actives	$ 3,219,421	$ 49,791	$ 1,998,041	$ 2,047,832
Retirees	2,842,343	334,544	1,989,476	2,324,020
Total APVPB	6,061,764	384,335	3,987,517	4,371,852
Actuarial Accrued Liability (AAL)		-	-	-
Actives	1,478,925	33,159	1,141,317	1,174,476
Retirees	2,842,343	334,544	1,989,476	2,324,020
Total AAL	4,321,268	367,703	3,130,793	3,498,496
Actuarial Value of Assets	-	-	-	-
Unfunded AAL (UAAL)	4,321,268	367,703	3,130,793	3,498,496
Amortizaton factor to be used in ARC development	16.24696	12.99074	12.99074	12.99074
Annual Required Contribution (ARC)				
Normal Cost	122,364	1,763	76,371	78,134
Amortization of UAAL	265,974	28,305	241,002	269,307
Interest to 6/30	15,534	1,954	20,629	22,584
Total ARC at fiscal year end	403,872	32,022	338,002	370,025
1. Calculation of the Annual OPEB Expense				
a. ARC for current fiscal year	$ 403,872	$ 32,022	$ 338,002	$ 370,025
b. Interest on Net OPEB Obligation (Asset) at beginning of year	23,808	4,066	34,622	38,688
c. Adjustment to the ARC	(38,100)	(5,128)	(43,667)	(48,795)
d. **Annual OPEB Expense (a. + b. + c.)**	389,580	30,960	328,957	359,918
2. Calculation of Expected Contribution				
a. Estimated payments on behalf of retirees	58,724	58,724	-	58,724
b. Estimated contribution to OPEB trust	-	(26,702)	112,247	85,546
c. Estimated current year's implicit subsidy	225,755	-	225,755	225,755
c. **Total Expected Employer Contribution**	284,479	32,022	338,002	370,025
3. Change in Net OPEB Obligation *(1.d. minus 2.c.)*	105,101	(1,062)	(9,045)	(10,107)
Net OPEB Obligation (Asset), beginning of fiscal year	595,196	62,557	532,639	595,196
Net OPEB Obligation (Asset) at fiscal year end	700,297	61,495	523,594	585,089

The “Explicit” prefunding above illustrates that the District is “paying off” the OPEB liability relating to these benefits more quickly than the expense for these benefits is being recognized under GASB 45. No contribution to an OPEB trust would be required for the explicit benefits and use of this higher discount rate would not appear justified. Whether or not the District has any interest in prefunding the implicit subsidy portion of the OPEB liability is a separate issue.

Appendix 2
Breakout of Valuation Results by Group

The chart below breaks out the valuation results for 4 employee groups for the fiscal year ending June 30, 2015. Amortization of the unfunded actuarial accrued liability is on the same basis as described in Section F and in Table 1B.

	CSEA	MBUTA	Mgmt/Conf	South Bay Retirees	Total
Approach	**Pay-As-You-Go Financing**				
Interest Rate	4.00%	4.00%	4.00%	4.00%	4.00%
Amortization method	Level Dollar	Level Dollar	Level Dollar	Level Dollar	Level Dollar
Remaining amortization period (in years)	25	25	25	25	25
Number of Covered Employees					
Actives	255	330	25	-	610
Retirees	3	14	2	11	30
Total Participants	258	344	27	11	640
Actuarial Present Value of Projected Benefits					
Actives	$ 1,162,912	$ 1,945,420	$ 111,089	$ -	$ 3,219,421
Retirees	75,750	760,713	720,233	1,285,647	2,842,343
Total APVPB	1,238,662	2,706,133	831,322	1,285,647	6,061,764
Actuarial Accrued Liability (AAL)					
Actives	665,401	758,938	54,586	-	1,478,925
Retirees	75,750	760,713	720,233	1,285,647	2,842,343
Total AAL	741,151	1,519,651	774,819	1,285,647	4,321,268
Actuarial Value of Assets	-	-	-	-	-
Unfunded Actuarial Accrued Liability (UAAL)	741,151	1,519,651	774,819	1,285,647	4,321,268
Amortization Factor	16.2470	16.2470	16.2470	16.2470	22.9515
Annual Required Contribution (ARC)					
Normal Cost	46,017	71,773	4,574	-	122,364
Amortization of UAAL	45,618	93,534	47,690	79,132	265,974
Interest to 6/30/2015	3,665	6,613	2,091	3,165	15,534
ARC for Fiscal Year End 6/30/2015	95,300	171,920	54,355	82,297	403,872

Appendix 3
General OPEB Disclosure and Required Supplementary Information

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

Summary of Plan Provisions:	See Table 3A
OPEB Funding Policy:	See Section F; details are provided also at the top of the exhibit in Table 1B
Annual OPEB Cost and Net OPEB Obligation:	See Table 1C
Actuarial Methods and Assumptions:	See Table 4.
Funding Status and Funding Progress:	See Section E – Basic Valuation Results

Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (b)	Unfunded Actuarial Accrued Liability (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
7/1/2002	$ 1,649,937	$ 658,054	$ (991,883)	250.7%	N/A	N/A
7/1/2009	$ -	$ 1,121,452	$ 1,121,452	0.0%	N/A	N/A
7/1/2014	$ -	$ 4,321,268	$ 4,321,268	0.0%	$35,245,351	12.3%

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

OPEB Cost Contributed

Fiscal Year Ended	Annual OPEB Cost	Employer OPEB Contributions	Percentage of Annual OPEB Cost Contributed	Net OPEB Obligation (Asset)
6/30/2012	$ 47,232	$ 119,391	252.8%	$ 654,489
6/30/2013	$ 42,542	$ 96,555	227.0%	$ 600,476
6/30/2014	$ 39,031	$ 44,311	113.5%	$ 595,196
6/30/2015	$ 389,580	$ 284,479	73.0%	$ 700,297
6/30/2016	$ 397,920	$ 280,277	70.4%	$ 817,940

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

Addendum 1: Bickmore Age Rating Methodology

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

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

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

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

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

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

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