Bickmore

January 4, 2016

Ms. Arleicka Conley
Director of Finance and Administrative Services
Association of Monterey Bay Area Governments
445 Reservation Road, Suite G
Marina, CA 93933

Re: July 1, 2015 Actuarial Report on GASB 45 Retiree Benefit Valuation

Dear Ms. Conley:

We are pleased to enclose our report providing the results of the July 1, 2015 actuarial valuation of other post-employment benefit (OPEB) liabilities for the Association of Monterey Bay Area Governments (AMBAG). 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 AMBAG, and the current OPEB liability and the annual OPEB expense to be reported in AMBAG's financial statements for the fiscal years ending June 30, 2016 and June 30, 2017. The report is required to be submitted to the California Employers' Retiree Benefit Trust (CERBT) to satisfy filing requirements for the trust.

This valuation was prepared with the understanding that:

- AMBAG will continue to follow its previously established policy of prefunding OPEB liabilities by contributing at least 100% of the ARC each year.
- AMBAG will continue to invest in CERBT Asset Allocation Strategy 1. The 7.28% discount rate used in this valuation is slightly lower than the 7.5% discount used in the prior valuation, reflecting a decrease in the expected long term return on trust assets.
- There have been no changes to benefits since the 2013 valuation was prepared. A summary of the benefits, as we understand them, is provided in Table 3 of the report.

This report includes an "implicit subsidy" liability, which was not previously required to be valued by AMBAG under GASB 45. Discussion of this change is included in the report.

We appreciate the opportunity to work on this analysis and acknowledge the efforts of AMBAG'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, FCA, EA, MAAA
Director, Health and Benefit Actuarial Service

Enclosure

Bickmore

Association of Monterey Bay Area Governments

Actuarial Valuation of the Other Post-Employment Benefit Programs As of July 1, 2015

Submitted January 2016

Table of Contents

A. Executive Summary

This report presents the results of the July 1, 2015 actuarial valuation of the Association of Monterey Bay Area Governments (AMBAG) other post-employment benefit (OPEB) programs. Briefly, benefits include subsidized medical coverage for eligible retirees. Note that allowing retirees to continue medical coverage at the same premium rates as are charged for active employees is itself considered a benefit subsidy under GASB 45. The purposes of this valuation are (1) to assess the OPEB liabilities and provide disclosure information as required by Statement No. 45 of the Governmental Accounting Standards Board (GASB 45) and (2) to provide information to be reported to the California Employers' Retiree Benefit Trust (CERBT).

How much AMBAG contributes each year affects the calculation of liabilities. In recent years, AMBAG has been prefunding its OPEB obligations by consistently making contributions greater than or equal to the Annual Required Contribution (ARC) each year. Trust assets are currently invested in the CERBT with Asset Allocation Strategy 1. While the 2013 valuation used a discount rate of 7.5%, this valuation was prepared using a 7.28% discount rate. This lower rate reflects a change in the projected long term rate of return on trust assets. Please note that use of this rate is an assumption and is not a guarantee of future investment performance.

Exhibits presented in this report are based on the assumption that the results of this July 1, 2015 valuation will be applied in determining the annual OPEB expense for the fiscal years ending June 30, 2016 and 2017. Appendix 1 provides an updated development of the results for the fiscal year ending June 30, 2015, based on the July 1, 2013 valuation and on OPEB contributions made prior to June 30, 2015.

The Actuarial Accrued Liability and Assets as of July 1, 2015 are shown below:

Discount Rate	**7.28%**
Actuarial Accrued Liability	$ 350,156
Actuarial Value of Assets	341,337
Unfunded Actuarial Accrued Liability	8,819
Funded Ratio	97.5%

Assuming AMBAG continues to follow its previously established policy of prefunding its OPEB liabilities, the following summarizes results for the fiscal year ending June 30, 2016:

Annual Required Contribution (ARC) for FYE 2016	**$ 54,245**
Expected employer paid benefits for retirees	6,844
Current year's implicit subsidy credit	1,252
Expected contribution to OPEB trust	46,723
Expected net OPEB obligation at June 30, 2016	-

These results are shown in tables beginning on page 13. Projected results for the fiscal year ending June 30, 2017 are also shown in these tables. Additional information to facilitate OPEB reporting in AMBAG's financial statements is provided in Appendix 2.

Executive Summary (Concluded)

The liabilities shown in the report reflect assumptions regarding continued future employment, rates of retirement and survival, and elections by future retirees to retain coverage for themselves and their dependents. Please note that 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.

The results of this valuation reflect, for the first time, an implicit subsidy liability for retirees prior to qualifying for Medicare. Some other assumption changes are also reflected. An exhibit comparing current valuation results to those from the prior valuation is provided on page 6, followed by a description of changes. 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 AMBAG toward retiree medical premiums;
- Longer life expectancies of retirees;
- Significant changes in expected retiree healthcare claims by age, relative to healthcare claims for active employees and their dependents;
- Higher or lower returns on plan assets than were assumed; and
- Implementation of GASB 75, the new OPEB accounting standard. Many provisions are similar to those adopted in GASB 68 for defined benefit retirement plan liabilities, including a shift in reporting the unfunded OPEB liability 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 next valuation is scheduled to be prepared as of July 1, 2017 as required for continued participation in CERBT. If there are any significant changes in the employee data, benefits provided or the funding policy, please contact us to discuss whether an earlier valuation is appropriate.

Important Notices

This report is intended to be used only to present the actuarial information relating to other postemployment benefits for AMBAG's financial statements and to provide the annual contribution information with respect to AMBAG'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. AMBAG 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 AMBAG 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. We understand that AMBAG implemented GASB 45 for the fiscal year ended June 30, 2010.

For agencies with fewer than 200 members covered by or eligible for plan benefits, GASB 45 requires that a valuation be prepared no less frequently than every three years. However, participation in CERBT requires that valuations be performed 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 AMBAG's OPEB contributions had been equal to the ARC each year, the net OPEB obligation would equal $0.
- If AMBAG'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, such as AMBAG's OPEB trust account with CERBT. 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 AMBAG, as are the manner and term for paying down the unfunded actuarial accrued liability. Once a funding policy has been established, however, AMBAG'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

General Types of OPEB

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

- Medical
- Vision
- Dental
- Life Insurance
- Prescription drug

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 or other direct payments to a retiree 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 insurance, this results in an "implicit subsidy" of retiree premiums by active employee premiums since the retiree premiums are lower than they would have been if 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.

For actuarial valuations dated prior to March 31, 2015, an exception existed for plan employers with a very small membership in a large "community-rated" healthcare program. Following a change in Actuarial Standards of Practice, GASB no longer offers this exception. *This change had a modest impact on this valuation of AMBAG's OPEB liability*.

OPEB Obligations of AMBAG

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

- **Explicit subsidy liabilities**: AMBAG contributes directly toward retiree medical premiums. This benefit is described in Table 3 and liabilities are included in this valuation.
- **Implicit subsidy liabilities**: Employees are covered by the CalPERS medical program. The same monthly premiums are charged for active employees and for pre-Medicare retirees. CalPERS has confirmed that the claims experience of these members is considered together in setting these premium rates. We determined the implicit rate subsidy for pre-Medicare retirees as the difference between (a) projected retiree medical claim costs by age and (b) premiums expected to be charged for retirees. For details, see Table 4 and Addendum 1: Bickmore Healthcare Claims Age Rating Methodology.

  Different monthly premiums are charged for Medicare-eligible members and CalPERS has confirmed that only the claims experience of these Medicare eligible members is considered in setting these premium rates. We have assumed that this premium structure is adequate to cover the expected claims of these retirees and believe that there is no implicit subsidy of premiums for these members by active employees.

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

D. Valuation Process

The valuation has been based on employee census data and benefits initially submitted to us by AMBAG in July 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 3A. While individual employee records have been reviewed to verify that they are reasonable in various respects, the data has not been audited and we have otherwise relied on AMBAG as to its accuracy. The valuation described below has been performed in accordance with the actuarial methods and assumptions described in Table 4.

In projecting 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 AMBAG to receive benefits.
- To the extent assumed to retire from AMBAG, the probability of various possible retirement dates 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 payments for currently active employees may not be made for 50 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 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	$ 350,156
plus Normal Cost	Current Year's Cost	50,000
plus Present Value of Future Normal Costs	Future Years' Costs	245,092
equals Present Value of Projected Benefits	Total Benefit Costs	$ 645,248

Where contributions have been made to an irrevocable OPEB trust, the accumulated value of trust assets is applied to offset the AAL. In this valuation, we set the Actuarial Value of Assets equal to the market value of assets invested in in AMBAG's CERBT account. The market value reported as of June 30, 2015 was $341,337. 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, 2015 valuation of OPEB liabilities to the results of the July 1, 2013 valuation.

	Prefunding Basis	
Valuation date	**7/1/2013**	**7/1/2015**
Discount rate	7.5%	7.28%
Number of Covered Employees		
Actives	14	9
Retirees	1	1
Total Participants	15	10
Actuarial Present Value of Projected Benefits		
Actives	$ 494,551	$ 564,964
Retirees	84,306	80,284
Total APVPB	578,857	645,248
Actuarial Accrued Liability (AAL)		
Actives	191,340	269,872
Retirees	84,306	80,284
Total AAL	275,646	350,156
Actuarial Value of Assets	81,665	341,337
Unfunded AAL (UAAL)	193,981	8,819
Normal Cost	51,447	50,000
Percent funded	29.6%	97.5%
Reported covered payroll	1,164,424	873,428
UAAL as percent of payroll	16.7%	1.0%

Changes Since the Prior Valuation

Even if all of our previous assumptions were met exactly as projected, liabilities generally increase over time as active employees get closer to the date their benefits are expected to begin. Given the uncertainties involved and the long term nature of these projections, our prior assumptions were *not* and are likely never to be exactly realized. The relatively small size of AMBAG's employee group makes it more likely that differences from what we anticipate will occur. Nonetheless, it is helpful to review why results are different than we anticipated.

In comparing results shown in the exhibit above, we can see that the total Unfunded Actuarial Accrued Liability (UAAL) decreased by about $185,000 between July 1, 2013 and July 1, 2015. However, over this two year period, we expected the UAAL to *decrease* by $36,000 (from about $194,000 to about $158,000), as a result of new contributions expected to the trust and benefits expected to be paid to retirees offset by new costs accrued and increases

Basic Valuation Results (Concluded)

on prior liabilities for the passage of time. Thus, the actual UAAL is $149,000 lower than expected. The primarily factors which account for this result are:

- A $38,000 increase in the AAL to begin recognizing the implicit subsidy of medical coverage for current and future retirees prior to becoming eligible for Medicare. In developing this liability, we added assumptions regarding expected claims cost by age and gender as well as expected future increases in medical premiums.
- A $10,000 increase in the AAL from a decrease in the discount rate used to develop the OPEB liability, from 7.5% to 7.28%, corresponding to a decrease in the expected long term return on trust assets
- A $13,000 decrease in the AAL from a change in the criteria used to select the employees included in the valuation;
- A $7,000 decrease in the AAL due to revised assumptions for future service and disability retirements, based on the 2014 CalPERS retirement plan experience study covering AMBAG employees; except termination rates and
- A $177,000 decrease in the UAAL from plan experience relative to prior assumptions. Plan experience includes asset performance relative to the expected contributions and rate of return, and accounts for about $91,000 of this decrease:
    - Actual plan assets were greater than projected, primarily because contributions to CERBT were $88,000 more than we projected during this two year period.
    - In addition, the return on trust assets appears to be about $3,000 better than the expected long term rate of return of 7.5% per year, with the actual return closer to 8.6% per year over this period.

  Plan experience also includes factors such as changes in plan membership, retiree elections and changes in medical premiums and limits on benefits other than previously projected and accounts for about $86,000 of this favorable plan experience.

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 7.28%.
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.
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 AMBAG's fiscal year end:

- The amounts attributed to active employee 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, 2016 and June 30, 2017 are developed in Tables 1A and 1C.

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).

Funding Policy Illustrated in This Report

It is our understanding that AMBAG's prefunding 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, 2016 is 24 years. Amortization payments are determined on a level percent of pay basis.

Funding Policy (Concluded)

Funding of the Implicit Subsidy

The implicit subsidy liability created when expected retiree medical insurance claims exceed the retiree premiums was described earlier in Section C. In practical terms, when AMBAG pays the premiums for active employees each year, their premiums include an amount expected to be transferred to cover the portion of the retirees' claims not covered by their premiums. This transfer represents the current year's implicit subsidy. Paragraph 13.g. of GASB 45 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 Tables 1B and 1D).

There is a larger question about whether or not AMBAG will want to prefund the implicit subsidy liability or not. Some possible options include:

- Prefunding 100% of the ARC relating to both the explicit subsidy and implicit subsidy liabilities. *AMBAG has confirmed that this is its intended approach and the report exhibits were prepared accordingly.*
- Prefunding 100% of the ARC relating to both the explicit subsidy and implicit subsidy liabilities, but intentionally allocate the entire trust contribution to more quickly pay-off the explicit subsidy liability, rather than allocating any toward the implicit subsidy liability.
- Prefunding 100% of the ARC developed for the explicit subsidy liability, but financing the implicit subsidy liability on a pay-as-you-go basis. We believe this approach would require determining the implicit subsidy liability using a pay-as-you-go discount rate (e.g., 4% rather than the 7.28%).

We are available to review these options further with AMBAG.

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 AMBAG. The actuarial assumptions used in this report were chosen, for the most part, to be the same as the actuarial assumptions used for the most recent actuarial valuations of the retirement plans covering AMBAG employees. We did exclude certain employees expected to have a negligible expectation of retirement from AMBAG and modified other assumed rates of termination based on observed Agency experience. Other assumptions, such as age related healthcare claims, retiree participation rates and spouse coverage, were selected based on demonstrated 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. CERBT provides participating employers with three possible asset allocation strategies; a maximum discount rate is assigned to each of these strategies, which may be rounded or reduced to include a margin for adverse deviation. As requested by AMBAG and permitted by CERBT where its asset allocation Strategy #1 is employed, the discount rate used in this valuation is 7.28%. This rate is slightly lower than the 7.5% rate used in the prior valuation.

H. Certification

This report presents the results of our actuarial valuation of the other post employment benefits provided by the Association of Monterey Bay Area Governments. The purpose of this valuation was to provide the actuarial information required for AMBAG'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 AMBAG. 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: January 4, 2016

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

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

Table 1

The basic results of our July 1, 2015 valuation of OPEB liabilities for calculated under GASB 45 were summarized in Section E. Those results are applied to develop the annual required contribution (ARC), annual OPEB expense (AOE) and the net OPEB obligation (NOO) or net OPEB asset (NOA) to be reported by AMBAG for its fiscal years ending June 30, 2016 and June 30, 2017.

The ARC and AOE for AMBAG's fiscal year ending June 30, 2015 were developed as part of the July 2013 valuation, but the financial statement for that period has not yet been finalized. We have illustrated what we anticipate will be reported for OPEB under GASB 45 and included this information in Appendix 1. We use the net OPEB asset projected from this Appendix as the starting point for developing the net OPEB asset as of June 30, 2016, shown in Table 1B.

The ARC calculations reflect our assumption that AMBAG intends to contribute at least 100% of the ARC in each fiscal year.[2] If contributions differ by more than an immaterial amount, some of the results in this report will need to be revised.

While the ARC calculations are not expected to change until the next valuation is prepared, because actual contributions may differ from our estimates, the results in Tables 1B and 1D are subject to change. We are happy to assist AMBAG in making appropriate adjustments for reporting in its financial statements.

The counts of active employees and retirees shown in Table 1C are the same as the counts of active and retired employees on the valuation date. While we do not adjust these counts between valuation dates, the liabilities and costs developed for those years 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. However, because this valuation has been prepared on a closed group basis, no potential future employees are included. We will incorporate any new employees in the next valuation, in the same way we included new employees hired after July 2013 in this July 2015 valuation.

[2] For the fiscal year ending June 30, 2016, we assumed that AMBAG would contribute a small additional amount to reduce the net OPEB obligation to $0 as of June 30, 2016.

Table 1A
ARC Calculation for FYE 2016

The following exhibit restates the basic valuation results presenting earlier in Section E and, from these results, then develops the annual required contribution (ARC) for the fiscal year ending June 30, 2016.

Funding Policy	**Prefunding Basis**
Valuation date	**7/1/2015**
For fiscal year beginning	7/1/2015
For fiscal year ending	6/30/2016
Expected long-term return on assets	7.28%
Discount rate	7.28%
Number of Covered Employees	
Actives	9
Retirees	1
Total Participants	10
Actuarial Present Value of Projected Benefits	
Actives	$ 564,964
Retirees	80,284
Total APVPB	645,248
Actuarial Accrued Liability (AAL)	
Actives	269,872
Retirees	80,284
Total AAL	350,156
Actuarial Value of Assets	341,337
Unfunded AAL (UAAL)	8,819
Normal Cost	50,000
Amortization method	Level % of Pay
Initial amortization period (in years)	30
Remaining period (in years)	24
Determination of Amortization Payment	
UAAL	$ 8,819
Factor	15.6309
Payment	564
Annual Required Contribution (ARC)	
Normal Cost	50,000
Amortization of UAAL	564
Interest to fiscal year end	3,681
Total ARC at fiscal year end	54,245
Projected covered payroll	$ 873,428
Normal Cost as a percent of payroll	5.7%
ARC as a percent of payroll	6.2%
ARC per active ee	6,027

Table 1B
Expected OPEB Disclosures for FYE 2016

The following exhibit develops the annual OPEB expense, estimates the expected OPEB contributions and projects the net OPEB obligation as of June 30, 2016 based on the prefunding policy described in this report. We assumed that AMBAG would contribute 100% of the ARC. If a different approach is followed, some of the results above will change.

Fiscal Year End	Prefunding Basis 6/30/2016
1. Calculation of the Annual OPEB Expense	
a. ARC for current fiscal year	$ 54,245
b. Interest on Net OPEB Obligation (Asset)	42
c. Adjustment to the ARC	(39)
d. **Annual OPEB Expense (a. + b. + c.)**	54,248
2. Calculation of Expected Contribution	
a. Estimated payments on behalf of retirees	6,844
b. Estimated current year's implicit subsidy	1,252
c. Estimated contribution to OPEB trust	46,723
d. **Total Expected Employer Contribution**	54,819
3. Change in Net OPEB Obligation *(1.d. minus 2.d.)*	(571)
Net OPEB Obligation (Asset), beginning of fiscal year	571
Net OPEB Obligation (Asset) at fiscal year end	-

AMBAG should replace the estimated amounts shown in item 2a. above with the *actual* payments, once known. We assume that contributions to CERBT will be adjusted so the total OPEB contribution (retiree payments plus implicit subsidy credits plus contributions to the trust) will equal $54,819 for this fiscal year, paying the full ARC plus a small additional amount to reduce the net OPEB obligation to $0 as of June 30, 2016.

Notes on calculations above:

- Interest on the net OPEB obligation (or asset), shown above in item 1.b. is equal to the discount rate (7.28%) multiplied by the net OPEB obligation (or asset) at the beginning of the year. This entry should not be replaced by actual earnings on trust assets; expected trust earnings have already been taken into account earlier in the process, when developing the ARC.
- The Adjustment to the ARC, shown above in item 1.c., is always the opposite sign of the net OPEB obligation or asset and exists to avoid double-counting of the amounts previously expensed but imbedded in the current ARC. This adjustment is calculated as the opposite of net OPEB obligation (or asset) at the beginning of the year, plus interest on that amount (item 1.b.) with the sum then divided by the same amortization factor used to determine the ARC for this year (see the prior page for this factor).

Table 1C
ARC Calculation for FYE 2017

The July 1, 2015 valuation results have been adjusted (rolled forward) one year based on the underlying actuarial assumptions, then used to develop the amortization payment and the annual required contribution (ARC) for the fiscal year ending June 30, 2017.

Funding Policy	**Prefunding Basis**
Valuation date	**7/1/2015**
For fiscal year beginning	7/1/2016
For fiscal year ending	6/30/2017
Expected long-term return on assets	7.28%
Discount rate	7.28%
Number of Covered Employees	
Actives	9
Retirees	1
Total Participants	10
Actuarial Present Value of Projected Benefits	
Actives	$ 602,071
Retirees	82,055
Total APVPB	684,126
Actuarial Accrued Liability (AAL)	
Actives	339,137
Retirees	82,055
Total AAL	421,192
Actuarial Value of Assets	412,909
Unfunded AAL (UAAL)	8,282
Normal Cost	51,625
Amortization method	Level % of Pay
Initial amortization period (in years)	30
Remaining period (in years)	23
Determination of Amortization Payment	
UAAL	$ 8,282
Factor	15.2389
Payment	544
Annual Required Contribution (ARC)	
Normal Cost	51,625
Amortization of UAAL	544
Interest to fiscal year end	3,798
Total ARC at fiscal year end	55,967
Projected covered payroll	$ 901,814
Normal Cost as a percent of payroll	5.7%
ARC as a percent of payroll	6.2%
ARC per active ee	6,219

Table 1D
Expected OPEB Disclosures for FYE 2017

The following exhibit develops the annual OPEB expense, estimates the expected OPEB contributions and projects the net OPEB obligation as of June 30, 2017 based on the prefunding policy described in this report. We assumed that AMBAG would contribute 100% of the ARC. If a different approach is followed, some of the results above will change.

	Prefunding Basis
Fiscal Year End	**6/30/2017**
1. Calculation of the Annual OPEB Expense	
a. ARC for current fiscal year	$ 55,967
b. Interest on Net OPEB Obligation (Asset)	-
c. Adjustment to the ARC	-
d. **Annual OPEB Expense (a. + b. + c.)**	55,967
2. Calculation of Expected Contribution	
a. Estimated payments on behalf of retirees	10,683
b. Estimated current year's implicit subsidy	3,063
c. Estimated contribution to OPEB trust	42,221
d. **Total Expected Employer Contribution**	55,967
3. Change in Net OPEB Obligation *(1.d. minus 2.d.)*	-
Net OPEB Obligation (Asset), beginning of fiscal year	-
Net OPEB Obligation (Asset) at fiscal year end	-

AMBAG should replace the estimated amounts shown in item 2a. above with the *actual* payments, once known. We assume that contributions to CERBT will be adjusted so the total OPEB contribution (retiree payments plus the current year's implicit subsidy credit plus contributions to the trust) will equal the total ARC of $55,967 for this fiscal year.

For details on how items 1.b., Interest on the beginning of year net OPEB obligation and 1.c., Adjustment to the ARC, are calculated, please refer to the notes below Table 1B.

Table 2
Summary of Employee Data

AMBAG reported 13 active employees; of these, 10 are currently participating in the medical program while 3 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							0	0%
25 to 29	1						1	8%
30 to 34		2					2	15%
35 to 39		2	2				4	31%
40 to 44		1	1				2	15%
45 to 49							0	0%
50 to 54							0	0%
55 to 59		1	2				3	23%
60 to 64			1				1	8%
65 to 69							0	0%
70 & Up							0	0%
Total	1	6	6	0	0	0	**13**	**100%**
Percent	8%	46%	46%	0%	0%	0%	**100%**	

Valuation	July 2013	July 2015
Annual Covered Payroll	$1,164,424	$1,126,208
Average Attained Age for Actives	41.6	42.5
Average Years of Service	3.4	5.0

However, 4 of the employees included in the chart above will be under age 40 and are projected to have less than 10 years of PERS service prior to June 30, 2017. We assumed that all 4 will terminate service with AMBAG before reaching the minimum age and service for retirement and, accordingly, excluded them from the valuation.

Current retirees: AMBAG reported only 1 current retiree receiving healthcare benefits. The retiree's attained age as of the valuation date was 65.4.

The chart below reconciles the number of actives and retirees reported for the July 1, 2013 valuation of AMBAG plan with those reported for the July 1, 2015 valuation.

Reconciliation of AMBAG Plan Members Between Valuation Dates				
Status	Covered Actives	Waiving Actives	Covered Retirees	Total
Number reported as of July 1, 2013	10	4	1	15
New employees	2	-	-	2
Terminated employees	(2)	(1)	-	(3)
Number reported as of July 1, 2015	**10**	**3**	**1**	**14**

Table 3A
Summary of Retiree Benefit Provisions

OPEB provided: AMBAG has indicated that the only OPEB provided is medical, dental and vision coverage.

Access to coverage: Medical coverage is currently provided through CalPERS as permitted under the Public Employees' Medical and Hospital Care Act (PEMHCA). This coverage requires the employee to satisfy the requirements for a CalPERS service retirement or approved disability retirement. CalPERS service retirement requires attainment of age 50, or age 52 if a miscellaneous PEPRA employee, and 5 years of State or public agency service.

If an eligible employee is not already enrolled in the medical plan, he or she may enroll within 60 days of retirement or during any future open enrollment period. Coverage may be continued at the retiree's option for his or her lifetime. A surviving spouse and other eligible dependents may also continue coverage. The employee must begin his or her retirement warrant within 120 days of terminating employment with AMBAG to be eligible to continue medical coverage through AMBAG and be entitled to the employer subsidy described below.

Benefits provided: As a PEMHCA employer, AMBAG is obligated to contribute toward the cost of retiree medical coverage for the retiree's lifetime or until coverage is discontinued. AMBAG's current PEMHCA resolution provides for the agency to contribute 100% of the premium for employee only coverage, not to exceed the PERS Choice premium in the Other Northern California region[3]. If the retiree's spouse is covered and survives the retiree, he or she continues to receive this single coverage premium subsidy for the balance of his or her lifetime (or until coverage is discontinued).

Current premium rates: The 2015 CalPERS monthly medical plan rates applicable to AMBAG employees and retirees are shown in the chart below. Note that the additional CalPERS administration fee is not included in this valuation.

2015 CalPERS Health Plan Rates						
	Actives and Pre-Med Retirees			**Medicare Eligible**		
Plan	**Ee Only**	**Ee & 1**	**Ee & 2+**	**Ee Only**	**Ee & 1**	**Ee & 2+**
PERSCare PPO - Other Northern	$ 725.54	$1,451.08	$1,886.40	$ 368.76	$ 737.52	$1,172.84
PERS Choice PPO - Bay Area	700.84	1,401.68	1,822.18	339.47	678.94	1,099.44
PERS Choice PPO - Other Northern	656.08	1,312.16	1,705.81	339.47	678.94	1,072.59
PERS Choice - Sacramento Area	679.26	1,358.52	1,766.08	339.47	678.94	1,086.50
PERS Select - Bay Area	690.43	1,380.86	1,795.12	339.47	678.94	1,093.20

[3] In some instances, AMBAG may provide additional contributions toward healthcare coverage for active employees and their dependents. In this event, such additional contributions are provided through a pre-tax flexible benefit plan and are not required to be considered as contributions for PEMHCA purposes.

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, 2014, issued December 2014, to the State Controller from Gabriel Roeder & Smith. It is provided here as a brief summary of general annuitant and survivor coverage.

Health Care Coverage

Retired Employees

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

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

- Children age 26 or older
- Children's spouses
- Former spouses
- Disabled children over age 26 who were never enrolled or were deleted from coverage
- Grandparents
- Parents
- Children of former spouses
- Other relatives

Coordination with Medicare

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

Survivors of an Annuitant

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

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

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

Table 4
Actuarial Methods and Assumptions

Valuation Date	July 1, 2015
Funding Method	Entry Age Normal Cost, level percent of pay[4]
Asset Valuation Method	Market value of assets
Long Term Return on Assets	7.28%
Discount Rate	7.28%
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 experience study of the California Public Employees Retirement System using data from 1997 to 2011, except for a different basis used to project future mortality improvements. Rates for selected age and service are shown below and on the following pages.

Mortality Before Retirement

Representative mortality rates as of the CalPERS study's central year (2008) are shown in the chart below.

CalPERS Public Agency Miscellaneous Non-Industrial Deaths		
Age	Male	Female
15	0.00027	0.00020
20	0.00037	0.00024
30	0.00057	0.00030
40	0.00091	0.00062
50	0.00192	0.00121
60	0.00374	0.00224
70	0.00667	0.00470
80	0.01270	0.01039

These rates were then adjusted on a generational basis by Scale AA to anticipate future mortality improvement.

In laymen's terms, this means mortality is projected to improve each year until the payments anticipated in any future year occur.

[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

Representative mortality rates as of the CalPERS study's central year (2008) are shown in the charts below. These rates were then adjusted on a generational basis by Scale AA to anticipate future mortality improvement.

Healthy Lives

CalPERS Public Agency Miscellaneous, Police & Fire Post Retirement		
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

Termination Rates

For miscellaneous employees included in the valuation: sum of CalPERS Terminated Refund and Terminated Vested rates for miscellaneous employees – Illustrative rates

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

Employees under age 40 who are projected to have less than 10 years of PERS service prior to June 30, 2017 were excluded from the valuation.

Table 4 - Actuarial Methods and Assumptions (Continued)

Service Retirement Rates

For miscellaneous employees hired before 1/1/2013: 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 miscellaneous employees joining CalPERS on or after 1/1/2013: 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

Disability Retirement Rates

Illustrative rates:

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

Medicare Eligibility

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

Table 4 - Actuarial Methods and Assumptions (Continued)

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 January 1	Premium Increase	Effective January 1	Premium Increase
2016	8.00%	2022	5.00%
2017	7.50%	2023	4.50%
2018	7.00%	2024	4.50%
2019	6.50%	2025	4.64%
2020	6.00%	2026	4.64%
2021	5.50%	& later	

Participation Rate

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

Non-participating actives: 90% are assumed to elect coverage in the PERS Choice Other Northern California region at a later date, thus gaining access to subsidized coverage in retirement.

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

Spouse Coverage

Active employees: 85% of employees are assumed to be married at retirement and 50% of married retirees are assumed to elect coverage for their spouse in retirement. Surviving spouses are assumed to retain coverage until their death. Husbands are assumed to be 3 years older than their wives.

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

Spouse gender is assumed to be the opposite of the employee.

Development of Age-related Medical Premiums

Actual premium rates for retirees and their spouses were adjusted to an age-related basis by applying medical claim cost factors developed from the data presented in the report, "Health Care Costs – From Birth to Death", sponsored by the Society of Actuaries. A description of the use of claims cost curves can be found in Bickmore's

Table 4 - Actuarial Methods and Assumptions (Concluded)

Age Rating Methodology provided in Addendum 1 to this report.

All 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 implicit subsidy is calculated for Medicare-eligible retirees.

Representative claims costs derived from the dataset provided by CalPERS for retirees not currently covered or not expected to be eligible for Medicare appear in the chart at the top of the following page. The chart summarizes the expected monthly claims by medical plan and gender for selected ages.

Region	Other Northern		Sacramento		Bay					
Plan	PERS Choice		PERS Choice		PERS Choice		PERS Select		Other HMO	
Retiree Age	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
50	$ 620	$ 769	$ 602	$ 746	$ 629	$ 779	$ 727	$ 901	$ 758	$ 939
53	732	845	710	820	741	855	857	989	893	1,031
56	850	909	825	882	861	920	995	1,064	1,038	1,110
59	974	982	945	953	987	995	1,141	1,150	1,189	1,199
62	1,107	1,083	1,075	1,051	1,122	1,096	1,297	1,268	1,352	1,322

Changes Since the Prior Valuation:

Discount rate — Decreased from 7.5% to 7.28%

Assumed Wage Inflation — Decreased from 3.25% to 3.0%

General Inflation Rate — Decreased from 3.0% to 2.75%

Demographic assumptions — Rates of assumed disability and retirement were updated from those provided in the CalPERS 2010 experience study report to those provided in the CalPERS 2014 experience study report.

Rates of mortality were updated to those in the CalPERS 2014 experience study and then projected from the midpoint year (2008) on a generational basis by Scale AA.

Based on observed rates of AMBAG employee terminations, employees who will be under age 40 with less than 10 years of service by June 30, 2017 were excluded from this valuation.

Age-Related Medical Premiums — We implemented a model for developing age-related medical premiums based on 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 AMBAG. 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	
2016	$ 4,074	$ 2,770	$ 6,844	$ -	$ 1,252	$ 1,252	$ 8,096
2017	4,554	6,129	10,683	-	3,063	3,063	13,746
2018	4,874	9,802	14,676	-	5,377	5,377	20,053
2019	5,131	12,294	17,425	-	4,827	4,827	22,252
2020	5,415	16,801	22,216	-	7,508	7,508	29,724
2021	5,684	21,668	27,352	-	10,967	10,967	38,319
2022	5,933	26,437	32,370	-	14,881	14,881	47,251
2023	6,158	26,937	33,095	-	12,670	12,670	45,765
2024	6,369	26,338	32,707	-	7,800	7,800	40,507
2025	6,586	23,183	29,769	-	183	183	29,952
2026	6,807	25,527	32,334	-	334	334	32,668
2027	7,025	27,657	34,682	-	347	347	35,029
2028	7,240	30,087	37,327	-	605	605	37,932
2029	7,445	33,175	40,620	-	972	972	41,592
2030	7,638	36,088	43,726	-	1,586	1,586	45,312

The amounts shown in the Explicit Subsidy section reflect the expected payment by AMBAG toward retiree medical premiums in each of the years shown. The amounts are shown separately, and in total, for those retired on the valuation date ("current retirees") and those expected to retire after the valuation date ("future retirees").

The amounts shown in the Implicit Subsidy section reflect the expected excess of retiree medical (and prescription drug) claims over the premiums expected to be charged during the year for retirees' coverage. These amounts are also shown separately and in total for those currently retired on the valuation date and for those expected to retire in the future.

Appendix 1
Expected Disclosures for Fiscal Year End June 30, 2015

The annual OPEB expense and net OPEB obligation for the fiscal year ending June 30, 2015 were projected in the July 1, 2013 valuation and reflected Bickmore's understanding of OPEB contributions prior to that date. Since that valuation was prepared, AMBAG has adjusted and updated its payments toward retiree premiums through June 30, 2015.

The following exhibit updates the development of the annual OPEB expense and net OPEB obligation, providing the information assumed to be reported in AMBAG's financial statement for the fiscal year ending June 30, 2015.

Fiscal Year End	**6/30/2015**
1. Calculation of the Annual OPEB Expense	
a. ARC for current fiscal year	$ 67,593
b. Interest on Net OPEB Obligation (Asset) at beginning of year	5,294
c. Adjustment to the ARC	(4,723)
d. **Annual OPEB Expense (a. + b. + c.)**	68,164
2. Calculation of Expected Contribution	
a. Estimated payments on behalf of retirees	7,409
b. Estimated current year's implicit subsidy	n/a
c. Estimated contribution to OPEB trust	130,772
d. **Total Expected Employer Contribution**	138,181
3. Change in Net OPEB Obligation *(1.d. minus 2.d.)*	(70,017)
Net OPEB Obligation (Asset), beginning of fiscal year	70,588
Net OPEB Obligation (Asset) at fiscal year end	571

Appendix 2
General OPEB Disclosure and Required Supplementary Information

The Information necessary to complete the OPEB footnote in AMBAG'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)
1/1/2010	$ -	$ 199,639	$ 199,639	0.0%	$ 1,092,916	18.27%
7/1/2011	$ 44,728	$ 360,089	$ 315,361	12.4%	$ 780,166	40.4%
7/1/2013	$ 81,665	$ 275,646	$ 193,981	29.6%	$ 1,164,424	16.7%
7/1/2015	$ 341,337	$ 350,156	$ 8,819	97.5%	$ 873,428	1.0%

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	$ 62,541	$ 7,851	12.6%	$ 91,156
6/30/2013	$ 67,005	$ 40,516	60.5%	$ 117,645
6/30/2014	$ 69,123	$ 116,180	168.1%	$ 70,588
6/30/2015	*$ 68,164*	*$ 138,181*	*202.7%*	*$ 571*
6/30/2016	*$ 54,248*	*$ 54,819*	*101.1%*	*$ -*
6/30/2017	*$ 55,967*	*$ 55,967*	*100.0%*	*$ -*

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

Addendum 1: Bickmore Healthcare Claims 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 to better approximate what the insurer might be expecting in actual claims costs.

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 old 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 your plan.
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 the underlying claims cost curve. These methodologies and assumptions can be found in the referenced paper cited in Table 4.

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 Projected Benefits (APVPB) – The amount presently required to fund all projected plan benefits 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 the last age at which benefits can be paid

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