Alameda County Employees' Retirement Association

GASB Statement No. 43 (OPEB) and non-OPEB Actuarial Valuation of the Benefits Provided by the Supplemental Retiree Benefits Reserve, Including Sufficiency of Funds, as of December 31, 2015

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October 24, 2016

Board of Retirement
Alameda County Employees' Retirement Association
475 14th Street, Suite 1000
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Dear Members of the Board:

We are pleased to submit this report on our actuarial valuation of sufficiency of funds for benefits provided by the Supplemental Retiree Benefits Reserve (SRBR) and to satisfy ACERA's accounting disclosure requirements under Statement No. 43 of the Governmental Accounting Standards Board (GASB) for retiree health benefits. ACERA's accounting disclosure requirements under GASB Statement No. 67 for non-vested supplemental COLA and retired member death benefits provided by the SRBR were included in our GASB 67 report dated May 6, 2016, together with the statutory pension benefits.

The December 31, 2015 census and financial information was prepared by ACERA. We gratefully acknowledge that assistance. The actuarial projections were based on the assumptions and methods described in Exhibit I and on the plan of benefits as summarized in Exhibit II.

The actuarial calculations were completed under the supervision of Eva Yum, FSA, MAAA, Enrolled Actuary and Thomas Bergman, ASA, MAAA, Enrolled Actuary. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

We look forward to discussing this material with you at your convenience.

Sincerely,

Segal Consulting, a Member of The Segal Group, Inc.

By:

Andy Yeung, ASA, MAAA, FCA, EA	*Eva Yum, FSA, MAAA, EA*	*Thomas Bergman, ASA, MAAA, EA*
Vice President and Actuary	*Associate Actuary*	*Associate Actuary*

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Segal Consulting

PURPOSE

I. Other Postemployment Benefits (OPEB)

This report presents the results of our actuarial valuation as of December 31, 2015 of the Alameda County Employees' Retirement Association (ACERA) postretirement medical, dental and vision benefits provided through ACERA's 401(h) account. ACERA has allocated a portion of the Supplemental Retiree Benefits Reserve (SRBR) to be treated as pension contributions if the employers make contributions to the 401(h) account. The results have been prepared with the goal of conforming to those disclosures required by Statement No. 43 of the Governmental Accounting Standards, which establishes accounting requirements for all "Other Postemployment Benefit" (OPEB) Plans of state and local governments. Among its other requirements, GASB Statement No. 43 prescribes an accrual methodology for accumulating the value of OPEB over participants' active working lifetimes.

The actuarial calculations used to prepare this report have been made on a basis consistent with our understanding of GASB Statement No. 43 and the "substantive plan designs" of the OPEB Plan provided by ACERA using guidelines provided by the Board. Actuarial calculations for other purposes may differ significantly from the results reported here.

The most important plan design assumption incorporated in our valuation is that the future monthly medical allowance (MMA) will increase at one-half of our anticipated medical trend assumptions for all years after 2017. However, the SRBR OPEB Plan will reimburse the fully indexed premium required for dental, vision, and enrollment in the Medicare Part B program.

Another key assumption for preparing the accounting results is that ACERA's OPEB liabilities are limited to the portion of the December 31, 2015 SRBR expected to be used to provide postretirement medical, dental and vision benefits through ACERA's 401(h) account.[1] Our summary of results shows the liabilities before and after this limit.

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[1] *It should be noted that as part of the transition to the new financial reporting requirements under GASB Statement No. 74, the Association's auditor recommended that the liabilities of the OPEB no longer be limited by the current SRBR assets. That recommendation has been approved by the Board. However, we have continued to use the old basis (to limit the liabilities to the current SRBR assets) to prepare this report under the current GASB Statement No. 43.*

II. Non-OPEB Benefits

The SRBR currently provides benefits in addition to those that qualify as OPEB. These "non-OPEB" benefits include supplemental COLAs and death benefits related to the underlying statutory defined benefit pension plan. It is our understanding that GASB requires such benefits to be reported under GASB Statement No. 67 together with the underlying statutory defined benefit pension plan and accordingly they have been included in our GASB 67 report dated May 6, 2016. These non-OPEB benefits are also valued in this report on the same basis as previously reported under GASB 25.

Similar to the OPEB, a key assumption for preparing the accounting results is that ACERA's non-OPEB liabilities are limited to the portion of the December 31, 2015 SRBR expected to be used to provide supplemental COLA and a $1,000 lump sum retiree death benefit.[2] Again, our summary of results shows the liabilities before and after this limit.

Special Note Pertaining to OPEB and Non-OPEB Benefits

The calculation of benefit obligations pursuant to prescribed accounting requirements does not, in and of itself, imply that ACERA has any legal liability to provide the benefits valued.

Actuarial valuations involve estimates of benefit amounts and assumptions about the probability of their payment far into the future, and the actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future.

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[2] *As similarly stated in footnote 1, we have continued to limit the non-OPEB liabilities to the current SRBR assets until we prepare our next report for pension liabilities under GASB Statement No. 67 (and for OPEB liabilities under GASB Statement No. 74).*

ACCOUNTING REQUIREMENTS

OPEB

The Governmental Accounting Standards Board (GASB) has issued Statement Number 43 -- *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans.* This statement provides the financial reporting requirements for all plans of state and local government entities that provide OPEB. The effective date of these requirements for ACERA is in its financial statement for the year ended December 31, 2006.

The statement applies to plans that provide postemployment benefits such as health, prescription drug, dental, vision and life insurance coverage for retirees; long-term care coverage, life insurance and death benefits that are *not* offered as part of a pension plan; and long-term disability insurance for employees. These benefits, referred to as OPEB, are typically financed on a pay-as-you-go basis. GASB No. 43 introduces an accrual-basis accounting requirement; thereby recognizing OPEB cost over an employee's working career. The standard applies accounting requirements for OPEB plans consistent with those that apply to pension plans.

The total cost of providing future postemployment benefits is projected, taking into account various actuarial assumptions such as plan demographics (e.g., turnover, mortality, disability, and retirement) and health care trends. The future cost is then discounted to determine an actuarial present value of projected benefits (APB). The actuarial accrued liability (AAL) is the portion of the present value of the total projected benefits allocated to years of employment prior to the measurement date. The unfunded actuarial accrued liability (UAAL) is the difference between the AAL and actuarial value of assets in the Plan allocated to these benefits.

Once the UAAL is determined, the Annual Required Contribution (ARC) is determined as the normal cost (the portion of the APB allocated to the current year of service) and the amortization of the UAAL. This ARC is compared to actual contributions made and any difference is reported as the net OPEB obligation (NOO). In addition, required supplementary information (RSI) is required. This information includes historical information about the UAAL and the progress in funding the Plan.

Non-OPEB

The accounting standard that governs the non-OPEB benefits (i.e. GASB No. 67) is the same standard that currently governs the statutory retirement benefit.

When measuring pension liability under GASB No. 67, the Total Pension Liability (TPL) is determined on generally the same basis as ACERA's AAL measure used for measuring liabilities for statutory pension benefits. However, the Plan's Fiduciary Net Position is equal to the market value of assets and therefore, the Net Pension Liability (NPL) measure, which is equal to the difference between the TPL and the Plan's Fiduciary Net Position, is very similar to a UAAL calculated on a market value basis.

HIGHLIGHTS OF THE VALUATION

- The actuarial assumptions used in this study are consistent with those assumptions applied by the Retirement Board for the December 31, 2015 pension valuation, including the use of a 7.60% investment return assumption.
- In the last SRBR valuation, we utilized the following medical trend assumptions:
  - All non-Medicare plans and Medicare Advantage plans: starting at 7.00% for 2015 to 2016, reduced by 0.25% for each year until it reaches 5.00%.

  For this valuation, we have recommended to the Board in our letter dated April 12, 2016 that the medical trend assumptions be revised to the following:
  - All non-Medicare plans and Medicare Advantage plans: starting at 6.75% for 2016 to 2017[3], reduced by 0.25% for each year until it reaches 5.00%.
- The Board acted to leave the 2016 MMA unchanged for 2017. The maximum MMA for ACERA sponsored plans and individual (out-of-area) non-Medicare plans remains at $540.44 and the maximum MMA for individual Medicare plans remains at $414.00, for 2017[4].
- For years after 2017, we have assumed that the MMA will increase with 50% of medical trend.
- These and the other OPEB assumptions are provided in Exhibit I.
- The determination of the "substantive plan" underlying ACERA's OPEB was based upon prior directions provided by ACERA, its auditors, as well as the administrative staff, auditors and consultants representing the County of Alameda, along with changes to the plan adopted by the Board on July 19, 2012 to allow retirees to select medical benefits available through the Medicare Exchange. These directions are provided in Exhibit III.
- Based on action taken by the Board in February 2014, we continue to exclude the non-OPEB lump sum retiree death benefit from the pension valuation and have included this death benefit in the results presented herein.
- For this valuation, the Association has continued to provide to us the breakdown of the OPEB and non-OPEB assets as of December 31, 2015.
- The terminal year of the SRBR was determined by projecting how long the SRBR can provide for all non-OPEB and OPEB benefits under the substantive plan outlined in Exhibit III. OPEB benefits can be paid through 2038[5], while non-OPEB benefits can be paid through 2035[5]. Last year, it was projected that OPEB benefits could be paid through 2037 and non-OPEB benefits could be paid through 2034.

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[3] *After we released our preliminary high-level summary letter dated April 27, 2016, the Association approved premiums for 2017. We have used those actual 2017 premiums in this study in lieu of estimating those premiums by using the 6.75% assumption.*

[4] *In 2013, the Board adopted a monthly subsidy of $400 for retirees with 20 or more years of service, $300 for retirees with 15-19 years of service, and $200 for retirees with 10-14 years of service. These amounts were increased by 3.5% in 2016 to $414.00, $310.50, and $207.00, respectively, and will remain at these levels for 2017. These amounts are used as the MMA for members enrolled in the individual Medicare plans.*

[5] *Assets would only be sufficient to pay benefits for a part of the year indicated.*

The main reason that the terminal year of the SRBR for OPEB benefits is projected to be one year later than it was in last year's study is that the rate of return on the SRBR assets was about 13.6%[6], which was greater than the expected return of 7.6% assumed in the December 31, 2014 SRBR valuation for 2015, offset somewhat by the larger than expected implicit subsidy for retirees[7].

Note that the OPEB sufficiency period did not change from that shown in our April 27, 2016 preview letter. As noted earlier, the Board opted to maintain the MMA for 2017 at the 2016 levels. Subsequent to our issuing of the preview letter, we were informed that the actual Kaiser Senior Advantage premiums (covering about 70% of Medicare retirees) increased more than expected from 2016 to 2017 (i.e., a 7.53% increase compared with 6.75% assumed in the preview letter). Leaving the MMA unchanged for one additional year did not reduce the projected short-term cash flows for retirees enrolled in plans like Kaiser Senior Advantage, which have premiums under the MMA limits. Therefore, the greater than expected Kaiser Senior Advantage premiums slightly offset the effect of maintaining the MMA at 2016 levels for 2017. The projected partial OPEB amount available in terminal year 2038 did increase from about $6.0 million as shown in our preview letter to about $32.2 million as shown herein.

- The main reasons the terminal year of the SRBR for non-OPEB benefits is projected to be one year later than last year's study are: (a) the rate of return on the SRBR assets of about 13.6%, which was greater than the expected return of 7.6% assumed in the December 31, 2014 SRBR valuation for 2015, and (b) the gain due to the actual inflation of 3.00% for 2015 being less than the assumed inflation rate of 3.25%, which reduced the expected supplemental COLA benefits projected to be paid (effective April 1, 2016).
- Before applying the cap to limit the Actuarial Accrued Liability (AAL) to be no greater than the Actuarial Value of Assets (AVA), the funding ratio of the OPEB liabilities is 91.3%. The funding ratio of the non-OPEB liabilities is 21.0%. The comparable funding ratios were 91.3% and 21.1% for the OPEB and non-OPEB liabilities, respectively, as of December 31, 2014.
- The terminal years the SRBR can be paid as well as the funding ratios have been developed to reflect only the actuarial value of assets allocated to the SRBR through December 31, 2015. As we indicated on page 6 of our December 31, 2015 actuarial valuation report for the Pension Plan, the Association had deferred investment losses of $346.4 million that were not yet recognized in determining the combined actuarial value of assets for the Pension Plan and the SRBR Plan as of that date. The deferred losses of $346.4 million represent 5.2% of the

[6] Estimated based on a June 30, 2015 interest crediting rate of 9.4418% and a December 31, 2015 interest crediting rate of 3.8000% for the SRBR.

[7] The increase in the estimated implicit subsidy amounts from $5.3 million in 2015 to $8.9 million in 2016, both provided by ACERA, shortened the projected sufficiency period by about two years. After we were instructed by ACERA to use the estimated transfer amount (i.e., $5,324,502) in our December 31, 2015 valuation for the Pension Plan, we understand that the calculation of the actual transfer amount (i.e., $6,021,451) was subsequently finalized. For consistency purposes, we have continued to use the estimated transfer amount in this report. We note that the continued use of the estimated transfer amount herein does not have an impact on the projected year that the OPEB assets would be exhausted.

market value of assets as of December 31, 2015, and will decrease the rate of return on the actuarial value of assets over the next few years.

- The funding ratio for the non-OPEB benefits is lower than for OPEB benefits because the AVA was initially allocated based on the benefit outflows for the OPEB and non-OPEB benefits. The benefit outflows for non-OPEB (in particular, the supplemental COLA) are "back loaded", i.e., they are expected to be larger in later years than in earlier years. This results in a smaller asset allocation relative to liabilities for the non-OPEB benefits.
- When applying the cap to limit the AAL to the AVA, the Actuarial Present Value of Projected Benefits (APB) also cannot be greater than the AVA. Since the AAL and the APB are both capped at the AVA, the plan's future normal cost is zero. The Annual Required Contribution (ARC) is zero because there is no unfunded AAL to amortize and no normal cost to accrue. Also note that the funding ratio is 100.0% after limiting the AAL to the AVA.
- Although it does not affect the SRBR sufficiency calculation, we have refined the treatment of the implicit subsidy when calculating the actuarial accrued liability (AAL) before applying the cap to limit it to the SRBR assets for this valuation. In prior valuations, the AAL reflected only the implicit subsidy payments that were commensurate with employer contribution offsets expected from ACERA to the County for the payments of implicit subsidy by the County. Even though the other non-County employers would not be expected to receive such employer contribution offsets from ACERA, we have increased the AAL for OPEB in this valuation by 1.6% (or about $14 million) to approximate the implicit subsidy expected to be paid to the non-County employers. This approach is more consistent with our understanding of GASB's guidance on accounting for the implicit subsidy, which is independent of any contribution offset arrangement.[8]
- Note that in preparing the 401(h) contribution letter for 2016/2017, we had included an additional allocation for expense related to the administration of the health benefits for retirees. However, as we previously demonstrated to the Association during our discussion with the Board on SB 1479, the values in both the employer reserves and the SRBR would remain unchanged relative to the values prior to that allocation, through the operation of SB 1479. For that reason, we have not included the explicit payment of administrative expense out of the 401(h) in preparing the cash flow requirements of the SRBR.
- The projected payments do not include any excise tax that may be imposed in 2020 (implementation deferred from 2018) by the Affordable Care Act and related statutes. Under these acts, health plans that provide a subsidy above certain thresholds beginning in 2018 may be subject to a 40% excise tax. We have not included any excise tax because the MMA subsidy is expressed in terms of a dollar amount (and not as a percent of the premium required to obtain medical coverage) and the future MMA, when adjusted by 50% of medical trend,

[8] *As no contribution offsets would be made to the non-County employers, there would be an actuarial gain each year that equals the projected implicit subsidy payments made by these employers in future valuations of about $1 million.*

would result in an amount that would fall below the cost thresholds for a "Cadillac" plan (i.e., a plan subject to the excise tax) for all future years.

- As stated earlier in this report, it is our understanding that GASB requires the non-OPEB benefits to be reported under GASB Statement No. 67 together with the underlying statutory defined benefit pension plan and accordingly they have been included in our GASB 67 report dated May 6, 2016. These non-OPEB benefits are also valued in this report on the same basis as previously reported under GASB 25.

SUMMARY OF GASB NO. 43 (OPEB) VALUATION RESULTS

	December 31, 2015	December 31, 2014
Before Applying Limit on Liability[(1)]		
Actuarial Present Value of Projected Benefits		
Medical	$1,018,945,000	$923,558,000
Dental and Vision	115,920,000	107,283,000
Total	$1,134,865,000	$1,030,841,000
Actuarial Accrued Liability		
Medical[(2)]	$808,496,000	$746,237,000
Dental and Vision[(3)]	92,485,000	85,097,000
Total	$900,981,000	$831,334,000
Actuarial Value of Assets (Exhibit B)	822,858,000	759,200,000
Unfunded Actuarial Accrued Liability	78,123,000	72,134,000
Funded Ratio Before Applying Limit on Liability	91.3%	91.3%
After Applying Limit on Liability		
Year Assets will be Exhausted[(4)]	2038	2037
Unfunded Actuarial Accrued Liability	$0	$0
Funded Ratio After Applying Limit on Liability	100%	100%
Annual Required Contribution After Applying Limit on Liability		
Normal Cost	$0	$0
Amortization of Unfunded Actuarial Accrued Liability	$0	$0
As a Percentage of Pay	0%	0%

(1) *Before limiting the actuarial present value of projected benefits and the actuarial accrued liability to the actuarial value of assets. With the limit, the actuarial present value of projected benefits and the actuarial accrued liability are equal to each other and the unfunded actuarial accrued liability is $0.*

(2) *Of the amount shown, $436.5 million is attributable to members currently receiving this benefit as of December 31, 2015 and $422.7 million is attributable to members receiving this benefit as of December 31, 2014.*

(3) *Of the amount shown, $50.4 million is attributable to members currently receiving this benefit as of December 31, 2015 and $46.5 million is attributable to members receiving this benefit as of December 31, 2014.*

(4) *Full benefits will be paid through the year prior to the year shown in the table. Full benefits will be paid for part of the year indicated.*

Note: The above results have been calculated using our understanding of the "substantive plan" as described in Exhibit III. The liabilities provided in this report will have to be revised if our understanding of the "substantive plan" is inaccurate.

SUMMARY OF NON-OPEB VALUATION RESULTS

	December 31, 2015	December 31, 2014
Before Applying Limit on Liability[(1)]		
Actuarial Present Value of Projected Benefits		
Supplemental COLA	$212,386,000	$198,426,000
Retiree Death Benefit	3,954,000	3,872,000
Total	$216,340,000	$202,298,000
Actuarial Accrued Liability		
Supplemental COLA[(2)]	$164,025,000	$150,558,000
Retiree Death Benefit	3,626,000	3,541,000
Total	$167,651,000	$154,099,000
Actuarial Value of Assets (Exhibit B)	35,194,000	32,570,000
Unfunded Actuarial Accrued Liability	132,457,000	121,529,000
Funded Ratio Before Applying Limit on Liability	21.0%	21.1%
After Applying Limit on Liability		
Year Assets will be Exhausted[(3)]	2035	2034
Unfunded Actuarial Accrued Liability	$0[(4)]	$0
Funded Ratio After Applying Limit on Liability	100%	100%
Annual Required Contribution After Applying Limit on Liability		
Normal Cost	$0	$0
Amortization of Unfunded Actuarial Accrued Liability	$0	$0
As a Percentage of Pay	0.0%	0.0%

(1) *Before limiting the actuarial present value of projected benefits and the actuarial accrued liability to the actuarial value of assets. With the limit, the actuarial present value of projected benefits and the actuarial accrued liability are equal to each other and the unfunded actuarial accrued liability is $0.*

(2) *Of the amount shown, $7.3 million is attributable to members currently receiving this benefit as of December 31, 2015 and $7.9 million is attributable to members receiving this benefit as of December 31, 2014.*

(3) *Full benefits will be paid through the year prior to the year shown in the table. Full benefits will be paid for part of the year indicated.*

(4) *As stated earlier in this report, it is our understanding that GASB requires the non-OPEB benefits to be reported under GASB Statement No. 67 together with the underlying statutory defined benefit pension plan. Accordingly, these benefits have been included in our GASB 67 report dated May 6, 2016.*

PROJECTED CASH FLOW AND PRESENT VALUE OF PROJECTED BENEFITS PROVIDED BY THE SUPPLEMENTAL RETIREE BENEFITS RESERVE AS OF DECEMBER 31, 2015

	Annual Benefit Cash Flows			Present Value as of December 31, 2015 of Projected Benefits through Year End		
Year Ending December 31	Medical(1)	Dental and Vision	Non-OPEB(2)	OPEB(3)	Non-OPEB	Total
2016	$ 41,488,140	$ 3,944,326	$ 1,300,415	$ 43,798,595	$ 1,253,649	$ 45,052,244
2017	44,209,375	4,347,946	1,237,125	87,303,308	2,362,045	89,665,353
2018	47,639,525	4,685,647	1,198,731	130,872,548	3,360,185	134,232,733
2019	50,772,620	5,038,961	1,174,756	174,062,366	4,269,270	178,331,636
2020	54,224,569	5,412,385	1,165,189	216,952,780	5,107,265	222,060,045
2021	58,036,216	5,801,474	1,175,517	259,621,505	5,892,974	265,514,479
2022	61,746,053	6,212,205	1,203,903	301,836,085	6,640,819	308,476,904
2023	65,728,714	6,639,174	1,259,649	343,614,683	7,368,025	350,982,708
2024	69,379,789	7,074,929	1,304,668	384,635,092	8,068,021	392,703,113
2025	72,879,707	7,527,554	1,525,851	424,729,028	8,828,865	433,557,893
2026	76,485,878	7,989,683	2,105,067	463,876,366	9,804,387	473,680,753
2027	80,072,967	8,463,914	3,309,965	502,007,797	11,229,936	513,237,733
2028	83,516,626	8,931,629	4,882,729	539,011,511	13,184,317	552,195,828
2029	86,991,179	9,412,404	6,690,317	574,872,934	15,673,066	590,546,000
2030	90,615,476	9,898,642	8,668,025	609,622,480	18,669,759	628,292,239
2031	93,974,749	10,379,648	10,844,459	643,151,476	22,154,076	665,305,552
2032	97,215,199	10,864,573	13,187,926	675,424,669	26,092,061	701,516,730
2033	100,565,658	11,343,593	15,693,058	706,481,078	30,447,107	736,928,185
2034	103,163,653	11,812,937	18,389,226	736,135,018	35,189,925	771,324,943
2035	105,706,440	12,278,394	15,261(4)	764,415,506	35,193,583	799,609,089
2036	107,759,264	12,736,177	-	791,257,765	35,193,583	826,451,348
2037	109,539,329	13,176,451	-	816,663,781	35,193,583	851,857,364
2038	28,691,888(4)	3,502,609(4)	-	822,858,271	35,193,583	858,051,854

(1) *Includes Medicare Part B and Implicit Subsidy Reimbursement made to the County.*

(2) *Includes Supplemental COLA and $1,000 Lump Sum Death Benefit.*

(3) *Includes Medical, Dental, and Vision.*

(4) *Full benefits will be paid through the year prior to the year shown in the table. Full benefits will be paid for part of the year indicated.*

ACTUARIAL CERTIFICATION

October 24, 2016

This is to certify that Segal Consulting has conducted an actuarial valuation of certain benefit obligations of the Alameda County Employees' Retirement Association provided by the Supplemental Retiree Benefits Reserve for the year ending December 31, 2015, in accordance with generally accepted actuarial principles and practices. The actuarial calculations presented in this report have been made on a basis consistent with our understanding of GASB Statement No. 43.

The actuarial valuation is based on the plan of benefits verified by the ACERA and on participant, claims and expense data provided by the ACERA.

The actuarial computations made are for purposes of fulfilling plan accounting requirements. Determinations for purposes other than meeting financial accounting requirements may be significantly different from the results reported here. Accordingly, additional determinations may be needed for other purposes such as judging benefit security at plan termination.

To the best of our knowledge, this report is complete and accurate and in our opinion presents the information necessary to comply with the plan's GASB Statement No. 43 requirements with respect to the benefit obligations addressed. The undersigned are members of the American Academy of Actuaries and meet the qualification standards of the American Academy of Actuaries to render the actuarial opinion herein.

Eva Yum, FSA, MAAA, EA
Associate Actuary

Thomas Bergman, ASA, MAAA, EA
Associate Actuary

EXHIBIT A

Table of Plan Coverage – Members Receiving SRBR Benefits as of December 31, 2015

	Current Retirees
Category 1 – Medical	
Number	5,853*
Average in force monthly medical reimbursements for 2016 (excluding Medicare Part B)	$379
Average maximum (based on service at retirement) monthly medical reimbursements for 2016 (excluding Medicare Part B)	$470
Monthly Medicare Part B premium for 2016	$105
Category 1 - Supplemental COLA	
Number	376
Average monthly supplemental COLA for 2016(1)	$317
Category 2 – Dental and Vision	
Number	6,989
Average monthly medical reimbursements for 2016	$44
Category 2 – Retiree Death Benefit	
Number(2)	Not Available
Average lump sum benefits for 2016	$1,000

(1) *Estimate of supplemental COLA payable as of December 31, 2015. The average benefit does not take into account any adjustments to the members' COLA banks as of April 2016.*

(2) *Beneficiaries who received the $1,000 lump sum retiree death benefit were not separately identified in the data provided for the pension valuation.*

* *The prior valuation count of 6,111 included 443 out-of-area retirees expected to receive an MMA in 2016. Based on updated data provided for this valuation, most of the out-of-area retirees were reported as not having have an MMA.*

EXHIBIT B

Determination of Actuarial Value of Assets

	December 31, 2015	December 31, 2014
Reserves Supporting SRBR Benefits		
401(h) Account	$ 9,534,000	$ 7,158,000
Supplemental Retiree Benefits Reserve	848,518,000[1]	784,612,000[2]
Total	**$858,052,000**	**$791,770,000**
Present Value of Projected OPEB Payable Through Terminal Year of the SRBR		
Medical	$744,545,000	$686,236,000
Dental and Vision	78,313,000	72,964,000
Total	$822,858,000	$759,200,000
Present Value of Projected Non-OPEB Payable Through Terminal Year of the SRBR		
Supplemental COLA	$ 32,435,000	$ 29,838,000
Retiree Death Benefit	2,759,000	2,732,000
Total	$ 35,194,000	$ 32,570,000
Total Present Value of Projected SRBR Benefits Payable Through Terminal Year of the SRBR	$858,052,000	$791,770,000
Actuarial Asset Allocation		
GAS 43 Actuarial Assets Allocated to OPEB	$822,858,000	$759,200,000
Reserves Allocated to Non-OPEB	35,194,000	32,570,000
Total	**$858,052,000**	**$791,770,000**

(1) *Adjusted to reflect estimated transfer of $5,324,502 (provided by ACERA) from SRBR to employer advance reserve for reimbursement of implicit retiree health benefit subsidy for calendar year 2015.*

(2) *Adjusted to reflect estimated transfer of $5,215,355 (provided by ACERA) from SRBR to employer advance reserve for reimbursement of implicit retiree health benefit subsidy for calendar year 2014.*

EXHIBIT I

Actuarial Assumptions and Actuarial Cost Method

Data: Detailed census data and summary plan descriptions for postretirement benefits were provided by ACERA.

Rationale for Assumptions: The information and analysis used in selecting each assumption that has a significant effect on this actuarial valuation is shown in the December 1, 2010 through November 30, 2013 Actuarial Experience Study report dated September 9, 2014, and in our letter dated April 12, 2016 regarding the assumptions recommended for the December 31, 2015 SRBR retiree health actuarial valuation. In addition, the Board adopted a 7.60% investment return assumption for this valuation. Unless otherwise noted, all actuarial assumptions and methods shown below apply to all tiers. These assumptions were adopted by the Board.

Post-Retirement Mortality Rates

Healthy: For General members and all beneficiaries: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set back one year for males and females.

For Safety members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, with no setback for males and set back two years for females.

Disabled: For General members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set forward seven years for males and set forward four years for females.

For Safety members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set forward six years for males and set forward three years for females.

The above mortality tables contain a margin of about 10% for General and Safety members and beneficiaries combined, based on actual to expected deaths, as a provision appropriate to reasonably reflect future mortality improvement, based on a review of mortality experience as of the measurement date.

Termination Rates Before Retirement:

	Rate (%) Mortality			
	General		Safety	
Age	Male	Female	Male	Female
25	0.04	0.02	0.04	0.02
30	0.04	0.02	0.04	0.02
35	0.07	0.04	0.07	0.04
40	0.10	0.06	0.10	0.06
45	0.13	0.10	0.14	0.09
50	0.19	0.15	0.20	0.14
55	0.30	0.22	0.34	0.21
60	0.53	0.37	0.59	0.33
65	0.90	0.68	1.00	0.60

All pre-retirement deaths are assumed to be non-service connected.

Termination Rates Before Retirement (continued):

	Rate (%)	
	Disability	
Age	General[1]	Safety[2]
20	0.00	0.00
25	0.01	0.03
30	0.03	0.23
35	0.08	0.41
40	0.13	0.48
45	0.21	0.65
50	0.31	1.35
55	0.38	1.90
60	0.43	2.15

(1) 60% of General disabilities are assumed to be service connected disabilities. The other 40% are assumed to be non-service connected disabilities.

(2) 100% of Safety disabilities are assumed to be service connected disabilities.

Termination Rates Before Retirement (continued):

	Rate (%)	
	Termination (< 5 Years of Service)[1]	
Years of Service	General	Safety
0	10.00	5.00
1	9.00	4.00
2	7.00	3.00
3	6.00	2.00
4	5.00	1.00

	Termination (5+ Years of Service)[2]	
Age	General	Safety
20	5.00	2.00
25	5.00	2.00
30	5.00	1.70
35	4.40	1.20
40	3.40	1.00
45	2.70	1.00
50	2.50	1.00
55	2.50	1.00
60	2.50	0.40

(1) 60% of terminated members will choose a refund of contributions and 40% will choose a deferred vested benefit.

(2) 40% of terminated members will choose a refund of contributions and 60% will choose a deferred vested benefit. No termination is assumed after a member is eligible for retirement.

Retirement Rates:

	Rate (%)							
Age	General Tier 1	General Tier 2	General Tier 3	General Tier 4	Safety Tier 1[(1)]	Safety Tier 2, 2D[(1)]	Safety Tier 2C[(1)]	Safety Tier 4
50	4.00	2.00	6.00	0.00	35.00	15.00	4.00	4.00
51	4.00	2.00	3.00	0.00	30.00	15.00	2.00	2.00
52	4.00	2.00	5.00	4.00	25.00	15.00	2.00	2.00
53	4.00	2.00	6.00	1.50	35.00	15.00	3.00	3.00
54	4.00	2.00	6.00	1.50	45.00	15.00	6.00	6.00
55	7.00	2.00	12.00	2.50	45.00	15.00	10.00	10.00
56	9.00	3.00	13.00	2.50	45.00	20.00	12.00	12.00
57	12.00	4.00	13.00	3.50	45.00	25.00	20.00	20.00
58	12.00	4.00	14.00	4.50	45.00	25.00	10.00	10.00
59	16.00	5.00	16.00	4.50	45.00	25.00	15.00	15.00
60	24.00	6.00	21.00	4.50	100.00	30.00	60.00	60.00
61	24.00	9.00	20.00	7.50	100.00	30.00	60.00	60.00
62	40.00	18.00	30.00	19.00	100.00	30.00	60.00	60.00
63	35.00	18.00	25.00	15.00	100.00	30.00	60.00	60.00
64	35.00	20.00	25.00	17.00	100.00	100.00	100.00	100.00
65	35.00	25.00	30.00	21.00	100.00	100.00	100.00	100.00
66	35.00	25.00	25.00	20.00	100.00	100.00	100.00	100.00
67	30.00	25.00	25.00	20.00	100.00	100.00	100.00	100.00
68	25.00	30.00	25.00	30.00	100.00	100.00	100.00	100.00
69	35.00	35.00	50.00	35.00	100.00	100.00	100.00	100.00
70	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

(1) Retirement rate is 100% after a member accrues a benefit of 100% of final average earnings.

Retirement Age and Benefit for Deferred Vested Members:	For deferred vested members, retirement age assumptions are as follows: General Age: 60 Safety Age: 56 For future deferred vested members who terminate with less than five years of service and who are not vested, we assume that they will retire at age 70 for both General and Safety if they decide to leave their contributions on deposit. We assume that 30% of future General and 60% of future Safety deferred vested members will continue to work for a reciprocal employer. For reciprocals, we assume 4.15% and 4.45% compensation increases per annum for General and Safety, respectively.
Measurement Date:	December 31, 2015
Discount Rate:	7.60%
Amortization Period:	A 20-year (declining) amortization period is used in this SRBR valuation as a result of the use of a maximum 30-year amortization period to determine the UAAL rate for the first GASB compliant valuation for the SRBR as of December 31, 2005.
Future Benefit Accruals:	1.0 year of service per year of employment plus 0.005 year of additional service to anticipate conversion of unused sick leave for each year of employment.
Unknown Data for Members:	Same as those exhibited by members with similar known characteristics. If not specified, members are assumed to be male.
Inclusion of Deferred Vested Members:	All deferred vested members are included in the valuation.
Consumer Price Index:	Increase of 3.25% per year, retiree COLA increases due to CPI subject to a 3% maximum change per year for General Tier 1, General Tier 3, and Safety Tier 1 and 2% maximum change per year for General Tier 2, General Tier 4, Safety Tier 2, Safety Tier 2C, Safety Tier 2D, and Safety Tier 4.
Actuarial Cost Method:	Entry Age Cost Method.

Salary Increases:

Annual Rate of Compensation Increase (%)

Inflation: 3.25%; an additional 0.50% "across the board" salary increases (other than inflation); plus the following Merit and Promotional increases based on service.

Service	General	Safety
0-1	3.70	6.70
1-2	3.70	6.70
2-3	3.20	5.90
3-4	2.10	3.80
4-5	1.70	3.30
5-6	1.40	2.50
6-7	1.30	1.40
7-8	1.10	0.90
8-9	0.70	0.80
9-10	0.60	0.80
10-11	0.50	0.70
11+	0.40	0.70

Terminal Pay Assumptions:

Additional pay elements are expected to be received during a member's final average earnings period. The percentages, added to the final year salary, used in this valuation are:

	Service Retirement	Disability Retirement
General Tier 1	8.0%	6.5%
General Tier 2	3.0%	1.4%
General Tier 3	8.0%	6.5%
General Tier 4	N/A	N/A
Safety Tier 1	8.5%	6.4%
Safety Tier 2	4.0%	2.1%
Safety Tier 2C	4.0%	2.1%
Safety Tier 2D	4.0%	2.1%
Safety Tier 4	N/A	N/A

Per Capita Health Costs:

The combined monthly per capita dental and vision claims cost for plan year 2016 was assumed to be $43.73. The monthly Medicare Part B premium for 2016 is $104.90 for retirees enrolled in Medicare on the valuation date, $121.80 for retirees enrolling in Medicare after the valuation date. For calendar year 2016, medical costs for a retiree were assumed to be as follows:

Medical Plan	Election Assumption	Monthly Premium	Maximum Monthly Medical Allowance*
Under Age 65			
Kaiser HMO	85%	$671.82	$540.44
United Healthcare HMO	15%	$982.06	$540.44
Age 65 and Older			
Kaiser Senior Advantage	70%	$329.90	$540.44
OneExchange Individual Insurance Exchange	30%	$281.78**	$414.00

* The Maximum Monthly Medical Allowance of $540.44 ($414 for retirees purchasing individual insurance from the Medicare exchange) is subject to the following subsidy schedule:

Completed Years of Service	Percentage Subsidized
10-14	50%
15-19	75%
20+	100%

**The derivation of amount expected to be paid out in 2016 from the Health Reimbursement Account for members with 20 or more years of service is provided in the table on the following page. In the table, we have also provided the amount expected to be paid for members with 10-14 and 15-19 years of service.

Derivation of OneExchange Monthly Per Capita Costs

	(Years of Service Category)	10-14	15-19	20+
		(Year of Service Category)		
1.	Maximum MMA for 2015*	$200.00	$300.00	$400.00
2.	Total of Maximum MMA** (From Jan. 2015 to Dec. 2015)	$338,000	$598,200	$3,982,800
3.	Total of Actual Reimbursement (From Jan. 2015 to Dec. 2015)**	$274,610	$432,929	$2,383,728
4.	Ratio of Actual Reimbursement to Maximum 2015 MMA [(3) / (2)]	81.25%	72.37%	59.85%
5.	Average Monthly Per Capita Cost for 2015 [(1) x (4)]	$162.50	$217.11	$239.40
6.	Increased for Expected Medical Trend (7.00%) from 2015 to 2016 [(5) x 1.07]	$173.88	$232.31	$256.16
7.	Increased for Additional 10% Margin for 2015 Expenses Incurred in 2015 but Reimbursed after December 2015 [(6) x 1.10]	**$191.27**	**$255.54**	**$281.78**

* *These are the original amounts adopted by the Board in 2013. The maximum MMA increased from $400.00 in 2015 to $414.00 in 2016, as noted on page 4.*

** *For retirees participating in OneExchange for all 12 months of 2015.*

Per Capita Health Costs (continued): Implicit Subsidy

We have estimated the average per capita premium for retirees under age 65 to be $8,620 per year. Because premiums for retirees under age 65 include active participants for purposes of underwriting, the retirees receive an implicit subsidy from the actives. Had the retirees under age 65 been underwritten as a separate group, their age-based premiums would be higher for most individuals. The excess of the age-based premium over the per capita premium charged makes up the subsidy. Below is a sample of the age-based costs for the retirees under age 65.

Average Medical

	Retiree		Spouse	
Age	**Male**	**Female**	**Male**	**Female**
50	$10,250	$11,675	$7,160	$9,375
55	12,173	12,568	9,581	10,851
60	14,457	13,547	12,826	12,585
64	16,586	14,371	16,191	14,165

Not all ACERA employers are receiving an implicit subsidy reimbursement from the Association. For SRBR sufficiency purposes, we have adjusted (about 11% reduction of costs shown above) our projected implicit subsidy payments to account for this fact, based on data provided by the County of Alameda's health consultant.

For calculating the AAL before applying the cap to limit it to the value of SRBR assets, we have not applied the adjustment.

Participation and Coverage Election: Based on proportion of current retirees receiving a medical benefit subsidy, we estimate that 85% of employees eligible to retire and receive subsidized postretirement medical coverage will elect to participate in the plan.

Health Care Cost Trend Rates: Health care trend measures the anticipated overall rate at which health plan costs are expected to increase in future years. The rates shown below are "net" and are applied to the net per capita costs shown above. The trend shown for a particular plan year is the rate that is to be applied to the premium for the shown calendar year to calculate the next calendar year's projected premium. For example, the projected 2017 calendar year premium for Kaiser (under age 65) is $729.08 per month ($671.82 increased by 8.52%).

	Non-Medicare Plans		Medicare Advantage Plan	Dental, Vision and Medicare Part B	
Calendar Year	Kaiser HMO Early Retiree	United Healthcare HMO Early Retiree	OneExchange & Kaiser Senior Advantage	Dental and Vision	Medicare Part B
2016	6.75%[1]	6.75%[1]	6.75%[1]	5.00%[1]	5.00%
2017	6.50	6.50	6.50	5.00	5.00
2018	6.25	6.25	6.25	5.00	5.00
2019	6.00	6.00	6.00	5.00	5.00
2020	5.75	5.75	5.75	5.00	5.00
2021	5.50	5.50	5.50	5.00	5.00
2022	5.25	5.25	5.25	5.00	5.00
2023 & Later	5.00	5.00	5.00	5.00	5.00

(1) *The actual trends are shown below, based on premium renewals for 2017 as reported by ACERA.*

Kaiser HMO Early Retiree	United Healthcare HMO Early Retiree	Kaiser Senior Advantage	Dental and Vision
8.52%	1.25%	7.53%	7.25%

Assumed Increase in Annual Maximum Benefits: For the "substantive plan design" shown in this report, we have assumed:

a) Maximum medical allowance for 2017 will remain at the 2016 levels, then increase with 50% of trend for medical plans, or 3.25%, graded down to the ultimate rate of 2.5% over 6 years.

b) Dental and vision premium reimbursement will increase with full trend.

c) Medicare B premium reimbursement will increase with full trend.

Dependents: Demographic data was available for spouses of current retirees. For future retirees, husbands were assumed to be three years older than their wives. Of the future retirees who elect to continue their medical coverage at retirement, 40% males and 20% females were assumed to have an eligible spouse who also opts for health coverage at that time.

Please note that these assumptions are only used to determine the cost of the implicit subsidy.

Plan Design: Development of plan liabilities was based on the plan of benefits in effect as described in Exhibit III.

Administrative Expenses: An administrative expense load was not added to projected incurred claim costs in developing per capita health costs.

Missing Participant Data: Any missing census items for a given participant was set to equal to the average value of that item over all other participants of the same membership status for whom the item is known.

EXHIBIT II

Summary of Benefits

This exhibit summarizes the major benefit provisions as included in the valuation. To the best of our knowledge, the summary represents the substantive plan provisions as of the measurement date. It is not intended to be, nor should it be interpreted as, a complete statement of all benefit provisions.

Eligibility:

Service Retirees: Retired with at least 10 years of service (including deferred vested members who terminate employment and receive a retirement benefit from ACERA)

Disabled Retirees: A minimum of 10[1] years of service is required for non-duty disability.

There is no minimum service requirement for duty disability.

Other Postemployment Benefits (OPEB):

1. Monthly Medical Allowance

Service Retirees: For retirees, a Maximum Monthly Medical Allowance of $540.44 per month is provided, effective January 1, 2016 and through December 31, 2016. For the period January 1, 2017 through December 31, 2017, the maximum allowance will remain at the 2016 levels for retirees who are not purchasing individual insurance through the Medicare exchange. For those purchasing individual insurance through the Medicare exchange, the Monthly Medical Allowance will be $414 per month for 2016 and will remain at the 2016 levels for 2017. These Allowances are subject to the following subsidy schedule:

Completed Years of Service	Percentage Subsidized
10-14	50%
15-19	75%
20+	100%

1 *The 10 years of service requirement is only used for determining eligibility for health benefits. For pension benefits, the eligibility requirement is 5 years of service.*

Disabled Retirees:	Non-duty disabled retirees receive the same Monthly Medical Allowance as service retirees. Duty disabled retirees receive the same Monthly Medical Allowance as those service retirees with 20 or more years of service.

2. Medicare Benefit Reimbursement Plan:

The SRBR reimburses the full Medicare Part B premium to qualified retired members.

To qualify for reimbursement, a retiree must:

- Have at least 10 years of ACERA service,
- Be eligible for Monthly Medical Allowance,
- Provide proof of enrollment in Medicare Part B.

3. Dental and Vision Plans:

The SRBR provides dental and vision benefits for retirees only. The maximum combined monthly dental and vision premiums will be $43.73 in 2016 ($46.90 in 2017). The eligibility for these premiums is as follows:

Service Retirees:	Retired with at least 10 years of service.
Disabled Retirees:	For non-duty disabled retirees, 10 years of service is required. For grandfathered non-duty disabled retirees (with effective retirement dates on or before January 31, 2014), there is no minimum service requirement. For duty disabled retirees, there is no minimum service requirement.

Note about Monthly Medical Allowance:

The maximum levels of subsidy are reviewed by the Board annually and are not indexed to increase automatically.

In addition, the Monthly Medical Allowance can only be used to pay for retiree medical benefits. There is no benefit payable to beneficiaries, current spouses, former spouses or dependents.

If the actual cost of coverage is less than the Monthly Medical Allowance, the difference is not paid in cash or applied towards the coverage for beneficiaries, current spouses, former spouses or dependents.

Deferred Benefit: Members who terminate employment with 10 or more years of service before reaching Pension eligibility commencement age may elect deferred MMA and/or dental/vision benefits.

Death Benefit: Surviving spouses/domestic partners of members who die before the member commences retiree health benefits may enroll in an ACERA group medical plan on the date that the member would have been eligible to commence benefits. The surviving spouse/domestic partner must pay 100% of the premium. Because premiums for surviving spouses/domestic partners under age 65 include active participants for purposes of underwriting, the surviving spouses/domestic partners receive an implicit subsidy from the actives, which creates a liability for the SRBR.

Non-OPEB Benefits:

1. Supplemental COLA

    When inflation is higher than the ACERA cost of living allowance for a year, the excess of inflation over the cost of living allowance (3% for Tier 1 and Tier 3, and 2% for Tier 2, Tier 2C, Tier 2D, and Tier 4) is banked for future years when inflation may be less than the cost of living allowance. In 1998, the Board of Retirement approved a supplemental COLA payable through the SRBR for members whose COLA banks exceeded 15%. The supplemental COLA for a year is equal to the percentage of excess of the member's COLA bank over 15% times the member's current annual retirement allowance.

    The cost of living adjustment and any supplemental COLA must be approved yearly by the ACERA Board of Retirement. For this valuation, we have assumed the Board will maintain its current level of supplemental COLA (i.e., COLA banks will not exceed 15%) during the projection period.

2. Retired Member Death Benefit

    A one-time $1,000 lump sum retiree death benefit is payable to the beneficiary of a retiree. This benefit is only paid upon the death of a retiree; it is not paid upon the death of a beneficiary.

EXHIBIT III

Assumptions About the "Substantive Plan"

The determination of the "substantive plan" underlying ACERA's OPEB was based upon prior directions provided by ACERA, its auditors, as well as the administrative staff, auditors and consultants representing the County of Alameda. Those directions are provided below.

1. *Commitment to provide benefits currently paid out of the SRBR*

We understand that health and other supplemental benefits currently paid out of the SRBR will continue to be paid as long as there are assets available in the SRBR. However, when the assets in the SRBR are fully depleted, no additional health and other supplemental benefits will be paid by the Association and the employer. To our knowledge, the employer has not made any implicit or explicit commitment to continue those benefits.

2. *Continuation of coverage in the employer's active employee medical plans for the Association's retirees*

Currently, the Association's retirees are enrolled in the same medical plans as the employer's active employees. The retiree experience is pooled and used in setting the medical plan premium rates for active employee. The Association has begun in 2007 to reimburse the employer for the adverse premium experience created by the retirees.

In this study, we have included the liability associated with reimbursing the employer for the adverse premium experience but only through the period up to the exhaustion of assets in the SRBR. In other words, there may be a residual liability to the employer if the Association's retirees continue to participate, and are rated together in the employer's active employee medical plans.

3. *Fully indexed subsidies for dental, vision and Medicare Part B premium and increase at one-half of the rate of increase for monthly medical allowance (MMA)*

Following guidelines provided by the Board and ACERA, we have assumed in this study that the OPEB plan will reimburse the fully indexed premium required for dental, vision and for a retiree to enroll in Medicare Part B. In addition, we have assumed in this study that future MMA will increase at one-half of the rate of our anticipated medical inflation assumptions.