

Santa Barbara County Employees' Retirement System

Other Post-Employment Benefits Actuarial Valuation as of June 30, 2017

Produced by Cheiron

February 2018

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Via Electronic Mail

February 21, 2018

Board of Retirement Santa Barbara County Employees' Retirement System 3916 State Street, Suite 210 Santa Barbara, CA 93105

Re: Santa Barbara County Employees' Retirement System - Other Post-Employment Benefits Valuation

Dear Members of the Board:

At your request, we have conducted an actuarial valuation for the Santa Barbara County Employees' Retirement System (SBCERS, the System, the Fund, the Plan) to complete its Other Post-Employment Benefits (OPEB) actuarial valuation as of June 30, 2017. The following report contains our findings, as well as commentary about disclosures required by the Governmental Account Standards Board (GASB).

The purpose of this report is to present the actuarial valuation of the Santa Barbara County Employees' Retirement System's Other Post-Employment Benefits. This report is for the use of the County and its auditors in preparing financial reports in accordance with applicable law and accounting requirements.

Appendix A describes the member data, assumptions and methods used in calculating the figures throughout the report. In preparing our report, we relied on information (some oral and some written) supplied by SBCERS. This information includes, but is not limited to the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

Appendix B contains a summary of the substantive plan provisions based on documentation provided by and discussions with the SBCERS staff.

The results of this report are based on future experience conforming to the actuarial assumptions used. The results will change to the extent that future experience differs from the assumptions. This valuation report does not reflect future changes in benefits, penalties, taxes, or administrative costs that may be required as a result of the Patient Protection and Affordable Care Act of 2010, related legislation, or regulations.

Board of Retirement February 21, 2018 Page ii

The results of this valuation reflect only the financial condition of the Plan as of the valuation date. We recommend reviewing forecasts of the Plan's financial condition under alternative scenarios. Such forecasts, however, are beyond the scope of this assignment.

To the best of our knowledge, this report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys and our firm does not provide any legal services or advice.

This valuation report was prepared exclusively for SBCERS for the purposes described herein and for the use by the plan auditor in completing an audit related to the matters herein. This valuation report is not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

Sincerely, Cheiron

Graham Schmidt, ASA, FCA, MAAA

Consulting Actuary

Michael W. Schionning, FSA, MAAA

Principal Consulting Actuary



SECTION I – SUMMARY OF RESULTS

The Santa Barbara County Employees' Retirement System has engaged Cheiron to provide a valuation of the County's Other Post-Employment Benefits. The primary purpose of the actuarial valuation and this report is to measure, describe, and identify the following as of the valuation date:

- The funded status of the System and of each Employer individually,
- The contribution necessary to maintain the current funded level of the System and of each Employer individually, and
- Past trends in funding progress

We have determined costs, liabilities, and trends for the substantive Plan using actuarial assumptions and methods that we consider reasonable.

GASB's OPEB Requirements:

The Governmental Accounting Standards Board (GASB) released Statement Nos. 74 and 75 which replaced GASB Statement Nos. 43 and 45. GASB 74 is effective June 30, 2017 for the Plan and GASB 75 will become effective for the fiscal year ending June 30, 2018 for the Employers. The disclosures needed to satisfy the GASB requirements can be found in the SBCERS GASB 74/75 Report as of June 30, 2017.

Implicit Subsidy

GASB 75 requires that the valuation of OPEB plans take into consideration the liability associated with the implicit subsidy that exists when the premium rates charged to active and retired employees are the same, or "blended". This provides the users of SBCERS's financial statement an estimate of the total value of the promised retiree benefit.

The employer's share of the current coverage costs for active and retired employees is typically calculated based on the claim costs or age-adjusted premiums for the employer. However, for this plan the benefit is a fixed payment per year of service that is currently lower than the premiums paid for coverage for all but a handful of individuals, and is expected to remain so into the future, so no age related costs are required to be developed.

It is our opinion that Actuarial Standard of Practice 6 (ASOP 6) requires the recognition of the age-related costs and any implicit subsidy that may exist in the SBCERS health benefit plan offered by the Santa Barbara County Employees' Retirement System. However, we believe that any implicit subsidy that may exist is limited to the dental and vision benefits and is immaterial to the valuation results for the following reasons:

- Retirees and active employees are covered by separate medical and prescription drug plans, and are thus rated separately for purposes of determining premium rates.
- The flat dollar nature of the benefit, which is not expected to increase and is expected to remain less than the cost of retiree premiums.



SECTION I – SUMMARY OF RESULTS

• While the premiums for Dental and Vision benefits are developed by combining the active and retired participants, these benefits are relatively small and the expected claims are impacted by participant age much less than for medical and prescription drug benefits.



SECTION I – SUMMARY OF RESULTS

Valuation Results

The table below presents the key results of the June 30, 2017 and June 30, 2016 valuations on an aggregate basis. The June 30, 2016 valuation results are calculated using a 7.00% discount rate because the blended discount rate utilized during the prior valuation is no longer valid under GASB 74/75. The *tread water* indicator gives the level of contributions needed to prevent the unfunded liability from increasing from one valuation date to the next. This metric is the sum of the benefits earned during the year (the normal cost) and one year of interest on the unfunded liability. If contributions are greater than or equal to the tread water indicator, then, so long as all actuarial assumptions are met during the year, the unfunded liability should not grow between valuation dates.

Table I-1 Summary of Key Valuation Results									
Valuation Date		6/30/2017		6/30/2016					
Discount Rate (per annum)		Varies ¹		7.00%					
Actuarial Accrued Liability									
- Active Employees	\$	45,958,746	\$	45,279,685					
- Terminated Vested Participants		7,328,090		7,231,510					
- Retirees, Disableds, and Beneficiaries		93,564,837		89,777,102					
- Total		146,851,673		142,288,297					
Assets	\$	13,987,713	\$	8,030,695					
Unfunded Accrued Liability (UAL)		132,863,960		134,257,602					
Interest on UAL to End of Year	\$	8,835,962	\$	9,398,032					
Normal Cost with Interest to End of Year		2,111,869	_	2,032,143					
Tread Water Indicator		10,947,831		11,430,175					
Normal Cost % of Pay ²		0.83%		0.76%					
Tread Water Indicator as % of pay ²		4.40%		4.39%					
Expected/ Actual Funding Policy Contribution Amount	\$	13,838,801	\$	14,639,554					
Expected Implicit Subsidy Amount ³		N/A		N/A					

¹The discount rate used varies by employer with SB County and APCD valued at 7.00%, Courts valued at 3.606%, and all other employers valued at 3.581%.

Table I-1 shows little change in the valuation results since the June 30, 2016 valuation.



² Expressed as a percentage of pay for members eligible for OPEB.

³Due to the nature of the benefit provided and the separate premium rating process used for Active and Retired participants, any possible Implicit Subsidy is considered immaterial.

SECTION I – SUMMARY OF RESULTS

The table below shows the expected net benefit payments for the next 20 years for the current active and retired members. These payments do not include any projected new hires.

	Table I-2 Expected Net Benefit Payments															
Fiscal Year Ending June 30	Santa Barbara County		arpinteria- mmerland- FPO		nta Maria emetery		Goleta emetery		B County Assoc of Govts		mmerland Sanitary	arpinteria Semetery	(Air ollution Control District	Courts	Total
2018	\$ 8,718,535	\$	156,613	\$	17,683	\$	3,394	\$	7,718	\$	4,840	\$ 2,200	\$	96,470	\$ 411,696	\$9,419,150
2019	8,947,520		161,536		18,755		4,970		9,115		5,566	2,252		99,348	431,757	9,680,818
2020	9,174,198		164,568		20,175		5,636		12,297		6,211	2,320		102,506	455,950	9,943,861
2021	9,400,641		167,067		21,366		6,211		14,131		6,739	2,403		105,479	478,321	10,202,359
2022	9,647,830		170,984		22,241		6,787		16,464		7,377	2,501		110,978	499,665	10,484,827
2023	9,887,806		172,386		22,894		7,308		19,149		8,116	2,595		115,538	518,629	10,754,421
2024	10,119,898		173,289		23,377		8,048		21,809		9,000	2,687		119,296	538,086	11,015,491
2025	10,322,117		174,035		23,823		8,282		24,136		9,768	2,831		121,394	556,562	11,242,948
2026	10,516,431		175,531		24,446		8,479		26,016		10,212	3,080		125,704	574,822	11,464,720
2027	10,691,615		176,705		25,141		8,628		29,281		10,451	3,296		128,249	591,705	11,665,073
2028	10,857,914		176,830		25,943		8,832		32,350		10,578	3,462		128,269	606,017	11,850,196
2029	10,991,208		176,635		26,715		8,848		34,637		10,639	3,638		127,594	621,644	12,001,557
2030	11,114,321		175,830		27,190		8,831		36,476		10,658	3,763		126,682	633,764	12,137,515
2031	11,226,708		174,854		27,323		8,787		39,467		10,841	3,878		125,134	647,278	12,264,269
2032	11,322,186		173,173		27,312		8,702		41,379		10,810	3,991		125,164	659,787	12,372,503
2033	11,405,040		170,109		27,217		8,614		42,882		10,733	4,078		123,030	669,494	12,461,197
2034	11,455,631		167,308		27,346		8,423		44,504		10,694	4,143		120,992	680,097	12,519,138
2035	11,470,333		164,170		27,140		8,205		45,224		10,752	4,190		119,332	683,644	12,532,990
2036	11,473,473		160,717		27,182		7,960		46,531		10,759	4,241		116,767	687,741	12,535,372
2037	11,456,980		157,055		26,845		7,689		47,214		10,753	4,305		114,901	689,286	12,515,027

The remainder of this report provides additional detail.



SECTION II – ASSETS

Table II-1 below shows the changes in the market value of assets, for each employer and in aggregate, for the last year.

	Table II-1 Changes in Market Value of Assets by Employer, 2016 to 2017										
	Santa Barbara	Carpinteria- Summerland-	Santa Maria	Goleta	SB County Assoc of	Summerland		Air Pollution Control	G 4	Tr. 4.1	
Market Value of Assets, June 30, 2016	County \$ 6,876,750	FPO \$ 0	Cemetery \$ 0	Cemetery \$ 0	Govts \$ 0	Sanitary \$ 0	Cemetery \$ 0	District \$ 1,154,114	Courts \$ (168) :	Total \$ 8,030,695	
Employer Contributions	12,289,959	146,542	17,299	2,455	3,637	4,614	2,179	157,255	1,635,654	14,259,593	
Interest and Investment Income	589,251	0	0	0	0	0	0	93,589	0	682,840	
Administrative Expenses	(352,257)	(4,755)	(687)	(190)	(488)	(233)	(168)	(5,617)	(15,566)	(379,962)	
Benefit Payments	(8,341,842)	(146,542)	(17,299)	(2,455)	(3,637)	(4,614)	(2,179)	(91,292)	(375,556)	(8,985,416)	
Admin. Expense Reimbursement	352,257	4,755	687	190	488	233	168	5,617	15,566	379,962	
Market Value of Assets, June 30, 2017	\$11,414,118	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 1,313,666	\$ 1,259,929	\$ 13,987,712	



SECTION III - GASB VALUATION RESULTS

The implementation of GASB Statements Nos. 74 and 75 significantly changed accounting requirement for OPEB plans. Virtually none of the previously required GASB benchmarks, including the Actuarially Required Contribution (ARC), are tracked under the new statements. However, it is still useful to analyze the funded percentage of the Plan as well as that of each Employer individually. In addition, for plans not funding OPEB benefits, a valuable benchmark to follow is the tread water indicator. This indicator gives the level of contributions needed to prevent the unfunded liability from increasing from one valuation date to the next. The tread water indicator is the sum of the benefits earned during the year (the normal cost) and one year of interest on the unfunded liability. If contributions are greater than or equal to the tread water indicator, then, so long as all actuarial assumptions are met during the year, the unfunded liability should not grow between valuation dates.

			Dew	elop	Table ment of Tre		ato	r					
Group	Santa Barbara County	rpinteria- nmerland- FPO	nta Maria Cemetery	(Goleta Cemetery	B County soc of Govts		ımmerland Sanitary	arpinteria Cemetery	r Pollution Control District	Courts		Total
Single Equivalent Discount Rate	7.00%	3.58%	3.58%		3.58%	3.58%		3.58%	3.58%	7.00%	3.61%		Various
Fully Projected Liability	\$ 142,868,263	\$ 3,374,191	\$ 504,229	\$	139,029	\$ 796,832	\$	204,671	\$ 92,922	\$ 1,558,018	\$ 13,175,068	\$ 1	62,713,223
Actuarial Accrued Liability (AAL) Actuarial Value of Assets	\$ 130,459,724 11,414,118	\$ 2,943,008 <u>0</u>	\$ 427,982 <u>0</u>	\$	111,808 <u>0</u>	\$ 581,496 <u>0</u>	\$	160,913 <u>0</u>	\$ 64,326 <u>0</u>	\$ 1,477,243 1,313,665	\$ 10,625,173 1,259,929		46,851,673 13,987,712
Unfunded Actuarial Accrued Liability (UAAL)	119,045,606	2,943,008	427,982		111,808	581,496		160,913	64,326	163,578	9,365,244	1	32,863,961
Funded Percentage	8.7%	0.0%	0.0%		0.0%	0.0%		0.0%	0.0%	88.9%	11.9%		9.5%
Interest on UAAL Normal Cost at end of year Tread Water Indicator for Fiscal Year 2017-18	\$ 8,333,192 1,731,468 10,064,660	\$ 105,389 <u>49,561</u> 154,950	\$ 15,326 9,465 24,791	\$	4,004 5,693 9,697	\$ 20,823 22,870 43,693	\$	5,762 5,272 11,034	\$ 2,304 2,429 4,733	\$ 11,450 12,680 24,130	\$ 337,711 272,431 610,142	\$	8,835,962 <u>2,111,869</u> 10,947,831
Projected Contribution for Fiscal 2017-18	\$ 13,076,742	\$ 156,613	\$ 17,683	\$	3,394	\$ 7,718	\$	4,840	\$ 2,200	\$ 157,915	\$ 411,696	\$	13,838,801

Estimated figures shown in italics

As shown in Table III-1 above, only those Employers actively funding their OPEB liabilities are expected to meet the tread water level of contributions in the coming year, with the exception of the Carpinteria-Summerland-FPO. However, Santa Barbara County is one of the Employers prefunding their liabilities. Because the County holds such a large portion of the total liability for the plan, the unfunded liability of the plan as a whole should decrease between valuation dates if all actuarial assumptions are met.



SECTION III – GASB VALUATION RESULTS

Reconciliation

The table below provides an estimate of the major factors contributing to the change in liability since the last valuation. The expected liability shown is derived from valuation results as of June 30, 2016 calculated at a 7.00% discount rate for all employers, rolled forward one year.

Table III-3	
Reconciliation of Actuarial Liability	
Expected Actuarial Liability at 6/30/2017	\$ 144,862,244
Actual Liability as of 6/30/2017	\$ 146,851,673
(Gain) or Loss	\$ 1,989,429
Changes due to:	
Changes in Actuarial Assumptions	4,898,336
Plan Amendments	0
Method Change	0
Other Changes	(2,908,907)
Total Changes	\$ 1,989,429

- Changes in Actuarial Assumptions includes the effects of changes to the discount rates for the Employers. There was no change in discount rate for Santa Barbara County or the Air Pollution Control District. The discount rate used for the Courts changed from 7.00% to 3.606%. The discount rate for all other Employers decreased from 7.00% to 3.581%.
- *Plan Amendments* includes the effects of plan changes that impact the benefits provided. There have been no changes to the plan benefits that affect the actuarial liabilities since the prior valuation.
- *Method Change* refers to the change in any of the actuarial methods used to calculate the benefits. There have been no changes to the actuarial methods that affect the actuarial liabilities since the prior valuation.
- Other Changes includes the effect of changes in the demographics of the covered members and any other change not captured in the above items. The main cause of the demographic gain was a change in the benefit election from the \$15 per month subsidy to the \$4 per month supplemental benefit for a number of current retirees.



SECTION IV – SENSITIVITY OF RESULTS

Since the dollar amounts of the benefits provided are not expected to increase and are below the current premiums for health benefits, no trend assumptions are used in calculating the liabilities produced in this report. Therefore, the results are not affected by any increase or decrease in the healthcare trend rates that may apply to the underlying benefit premiums in the future.



SECTION V – ACCOUNTING DISCLOSURES

Schedule of Funding Progress

The schedule of funding progress compares the assets used for funding purposes to the comparable liabilities to determine how well the Plan is funded and how this status has changed over the past year. The actuarial liability is compared to the actuarial value of assets to determine the funding ratio. The actuarial liability under GASB is determined assuming that the Plan is ongoing and participants continue to terminate employment, retire, etc., in accordance with the actuarial assumptions.

				Schedu		Table V-1 of Funding	Pro	ogress					
Group	Sa	nta Barbara County	arpinteria- immerland- FPO	nta Maria emetery	(Goleta Cemetery		B County Assoc of Govts	mmerland Sanitary	rpinteria emetery	r Pollution Control District	Courts	Total
Actuarial Value of Assets (a)	\$	11,414,118	\$ 0	\$ 0	\$	0	\$	0	\$ 0	\$ 0	\$ 1,313,666	\$ 1,259,929	\$ 13,987,713
Actuarial Accrued Liabilities (b)	\$	130,459,724	\$ 2,943,008	\$ 427,982	\$	111,808	\$	581,496	\$ 160,913	\$ 64,326	\$ 1,477,243	\$ 10,625,173	\$ 146,851,673
Unfunded Actuarial Liabilities (UAL) [b-a]	\$	119,045,606	\$ 2,943,008	\$ 427,982	\$	111,808	\$	581,496	\$ 160,913	\$ 64,326	\$ 163,577	\$ 9,365,244	\$ 132,863,960
Funded Ratio (a/b)		8.75%	0.00%	0.00%		0.00%		0.00%	0.00%	0.00%	88.93%	11.86%	9.53%
Annual Covered Payroll ¹ (c)	\$	235,572,598	3,383,894	361,346		260,409		1,736,805	363,085	133,804	2,014,363	14,092,041	\$ 257,918,345
(UAL) as Percentage of Covered Payroll [(b-a)/c]		50.53%	86.97%	118.44%		42.94%		33.48%	44.32%	48.07%	8.12%	66.46%	51.51%

¹Projected Payroll shown is that for those covered under the OPEB plan.



SECTION V – ACCOUNTING DISCLOSURES

History of Employer Contributions

The history of employer contributions shows how the contributions made by the plan have historically compared to the tread water indicator.

	Table V-2 Schedule of Employer Contributions										
Fiscal Year Ending		read Water icator (TWI)		Actual Contributions	Percentage of TWI Contributed						
2018	\$	10,947,831	\$	13,838,801	126.4%						
2017		11,565,144		14,639,554	126.6%						
2016		13,267,201		12,105,886	91.2%						
2015		12,975,477		9,436,450	72.7%						
2014		13,376,293		9,222,130	68.9%						
2013 ¹		13,001,703		8,367,493	64.4%						

Estimated figures shown in italics



¹Developed based on liabilities calculated by the prior Actuary.

SECTION V - ACCOUNTING DISCLOSURES

We have also provided a *Note to Required Supplementary Information* for the financial statements.

Table V-3 Note to Required Supplementary Information

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the date indicated. Additional information as of the latest actuarial valuation follows.

Valuation Date June 30, 2017

Actuarial Cost Method Entry Age Normal

Asset Valuation Method Market value

Actuarial Assumptions:

Payroll Growth Rate 3.00%

Discount Rate 7.00% for SB County and APCD,

3.606% for Courts and 3.581% for all others

Ultimate Rate of Medical Inflation N/A



APPENDIX A – MEMBER DATA, ASSUMPTIONS AND METHODS

Member Data Comparisons

	June 30, 2016	June 30, 2017	% Change
Active Employees ¹			
Count	3,346	3,112	(6.99%)
Average Age	47.4	47.6	0.55%
Average Service	14.9	15.3	3.23%
Total Payroll	\$ 269,244,794	\$ 257,918,346	(4.21%)
Count of Terminated Vested Participants	926	923	(0.32%)
Average Age	48.9	48.8	(0.23%)
Count of Retired Participants	3,247	3,399	4.68%
Average Age	69.9	69.9	(0.04%)
Count of Disabled Participants	240	250	4.17%
Average Age	66.8	66.5	(0.42%)
Count of Surviving Spouses	489	512	4.70%
Average Age	72.5	72.8	0.40%
Total Count of Inactive Participants	3,976	4,161	4.65%

¹Active census and salary information includes only those eligible for the OPEB benefit, and as a result will not the SBCERS pension census information for the same period.



APPENDIX A – MEMBER DATA, ASSUMPTIONS AND METHODS

Detailed Census Counts by Employer:

			(Counts by Emp	ployer					
June 30, 2017	Santa Barbara County	Carpinteria- Summerland- FPO	Santa Maria Cemetery	Goleta Cemetery	SB County Assoc of Govts	Summerland Sanitary	Carpinteria Cemetery	Air Pollution Control District	Courts	Total
Active employees Vested Terminated Employees Retirees and Surviving Spouses	2,808 859 3,873	32 6 44	7 0 6	4 1 4	17 10 14	4 0 1	2 0 2	22 15 62	216 32 155	3,112 923 4,161
Fotal	7,540	82	13	9	41	5	4	99	403	8,196
June 30, 2016	Santa Barbara County	Carpinteria- Summerland- FPO	Santa Maria Cemetery	Goleta Cemetery	SB County Assoc of Govts	Summerland Sanitary	Carpinteria Cemetery	Air Pollution Control District	Courts	Total
Active employees	3,029	33	6	4	18	4	2	28	222	3,346
Vested Terminated Employees	865	6	0	1	11	0	0	13	30	926
Retirees and Surviving Spouses	3,715	38	6	2	11	2	2	61	139	3,976
Fotal	7,609	77	12	7	40	6	4	102	391	8,248

Note: Oak Hill Cemetery and Mosquito & Vector Control do not participate in the plan. They are excluded from this table and the calculations in this report.



APPENDIX A – MEMBER DATA, ASSUMPTIONS AND METHODS

Economic Assumptions:

1. Expected Return on Trust Assets: 7.00% per year

2. Payroll Growth Rate: 3.00% per year

3. Per Person Cost Trends: N/A

4. Postretirement Benefit Increases: None



APPENDIX A – MEMBER DATA, ASSUMPTIONS AND METHODS

Demographic Assumptions:

1. Retirement Rates for active employees:

Rates of retirement are based on age and service according to the following table. The rates for Safety PEPRA members are the same as the Safety Plan 4 rates.

	Rates of Retirement												
						Safety							
	Gen	eral	General -	PEPRA	Pla	ın 4		lan 6					
Age	Svc < 30	Svc >= 30	Male	Female	Svc < 20	Svc >= 20	Svc < 20	Svc >= 20					
< 34	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%					
35	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	1.00%					
36	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	1.00%					
37	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	1.00%					
38	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	1.00%					
39	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	1.00%					
40	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	1.00%					
41	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	1.00%					
42	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	1.00%					
43 44	0.00% 0.00%	0.00% 0.00%	0.00% 0.00%	0.00% 0.00%	0.00% 0.00%	1.00% 1.00%	0.00% 0.00%	1.00% 1.00%					
45	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	1.00%					
46	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	2.00%					
47	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	5.00%					
48	0.00%	4.00%	0.00%	0.00%	0.00%	1.00%	0.00%	5.00%					
49	0.00%	4.00%	0.00%	0.00%	0.00%	3.00%	0.00%	17.00%					
50	3.00%	4.00%	0.00%	0.00%	4.00%	4.00%	20.00%	25.00%					
51	3.00%	4.00%	0.00%	0.00%	4.00%	4.00%	15.00%	15.00%					
52	3.00%	4.00%	2.40%	1.80%	4.00%	4.00%	15.00%	20.00%					
53	3.00%	4.00%	2.40%	1.80%	5.00%	5.00%	15.00%	20.00%					
54	3.00%	5.00%	2.40%	5.40%	10.00%	20.00%	15.00%	30.00%					
55	5.00%	10.00%	2.40%	5.40%	10.00%	35.00%	25.00%	35.00%					
56	5.00%	10.00%	3.60%	5.40%	10.00%	20.00%	15.00%	25.00%					
57	7.00%	10.00%	3.60%	5.40%	10.00%	25.00%	15.00%	25.00%					
58	7.00%	10.00%	3.60%	5.40%	10.00%	25.00%	15.00%	25.00%					
59	7.00%	10.00%	7.20%	7.20%	10.00%	25.00%	15.00%	25.00%					
60	7.00%	15.00%	9.00%	9.00%	25.00%	25.00%	15.00%	25.00%					
61 62	15.00% 25.00%	30.00% 40.00%	15.00% 20.00%	10.80% 20.00%	15.00% 30.00%	25.00% 25.00%	15.00% 15.00%	25.00% 25.00%					
63	15.00%	40.00%	20.00%	20.00%	20.00%	30.00%	15.00%	25.00%					
64	26.00%	40.00%	20.00%	20.00%	20.00%	30.00%	15.00%	25.00%					
65	26.00%	40.00%	25.00%	25.00%	100.00%	100.00%	100.00%	100.00%					
66	26.00%	40.00%	25.00%	25.00%									
67	26.00%	40.00%	40.00%	40.00%									
68	26.00%	40.00%	25.00%	25.00%									
69	26.00%	40.00%	25.00%	25.00%									
70	26.00%	40.00%	25.00%	25.00%									
71	26.00%	40.00%	25.00%	25.00%									
72	26.00%	40.00%	25.00%	25.00%									
73	26.00%	40.00%	25.00%	25.00%									
74	26.00%	40.00%	25.00%	25.00%									
75	100.00%	100.00%	100.00%	100.00%									



APPENDIX A – MEMBER DATA, ASSUMPTIONS AND METHODS

2. Retirement Rates for terminated vested participants:

The table below shows the assumed retirement ages for terminated vested participants.

Plan	Assumed Retirement Age
APCD 1,2 / General 5A,B,C / Plan 7 / Plan 8 (PEPRA)	58
General Plan 2	65
Safety Plan 4A,B,C, Safety Plan 8 (PEPRA)	54
Safety Plan 6A,B,C	52

3. Rates of Termination:

Sample rates of termination are show in the following table below. The 1.30% rate of termination continues for Safety PEPRA members with 20 or more years of service who are not eligible to retire.

Rates of Termination							
Service	General	Safety					
0	20.00%	9.00%					
1	14.00%	9.00%					
2	10.00%	3.50%					
3	8.00%	3.00%					
4	7.00%	3.00%					
5	6.00%	5.00%					
6	6.00%	2.75%					
7	5.00%	2.75%					
8	5.00%	2.75%					
9	4.50%	2.75%					
10	4.50%	2.00%					
11	3.50%	1.50%					
12	3.50%	1.30%					
13	3.00%	1.30%					
14	2.50%	1.30%					
15	2.50%	1.30%					
16	2.50%	1.30%					
17	1.50%	1.30%					
18	1.50%	1.30%					
19	1.50%	1.30%					
20	1.50%	0.00%					
21	1.50%						
22	1.50%						
23	1.50%						
24	1.50%						
25	1.50%						
26	1.50%						
27	1.50%						
28	1.50%						
29	1.50%						
30	0.00%						

Note: Termination rates do not apply once a member is eligible for retirement.



APPENDIX A – MEMBER DATA, ASSUMPTIONS AND METHODS

4. Rates of Mortality:

Healthy Lives:

Mortality rates for retirees, beneficiaries, terminated vested, and reciprocals are based on the sex distinct CalPERS Healthy Annuitant Mortality Tables adjusted by 0.95 for males and 0.90 for females, with Generational improvement using Projection Scale MP-2016 from a base year of 2009.

Non-duty related morality rates for active members are based on the sex distinct CalPERS Preretirement Non-Industrial Mortality Table, with no adjustment, with Generational improvement using Projection Scale MP-2016 from a base year of 2009. Safety members are also subject to the CalPERS Preretirement Industrial Mortality Table for duty-related deaths, with the same Generational improvements applied.

Disabled Lives:

Mortality rates for disabled retirees are based on CalPERS Industrial Disabled Annuitant Mortality, with no adjustment (Safety only), CalPERS Non-Industrial Disabled Annuitant Mortality, with no adjustment (General only), with Generational improvement using Projection Scale MP-2016 from a base year of 2009.



APPENDIX A – MEMBER DATA, ASSUMPTIONS AND METHODS

5. Disability Rates:

Disability rates of active participants are shown below.

Rates of Disability								
General Safety								
	Years of		Years of Service					
Age	Less than 5	5 or More	Less than 5	5 or More				
29 or less	0.004%	0.010%	0.045%	0.050%				
30	0.004%	0.010%	0.054%	0.060%				
31	0.004%	0.010%	0.054%	0.060%				
32	0.004%	0.010%	0.054%	0.060%				
33	0.004%	0.010%	0.054%	0.060%				
34	0.004%	0.010%	0.054%	0.060%				
35	0.004%	0.010%	0.090%	0.100%				
36	0.008%	0.020%	0.090%	0.100%				
37	0.008%	0.020%	0.090%	0.100%				
38	0.008%	0.020%	0.090%	0.100%				
39	0.008%	0.020%	0.090%	0.100%				
40	0.008%	0.020%	0.117%	0.130%				
41	0.008%	0.020%	0.117%	0.130%				
42	0.012%	0.030%	0.117%	0.130%				
43	0.016%	0.040%	0.117%	0.130%				
44	0.020%	0.050%	0.117%	0.130%				
45	0.024%	0.060%	0.135%	0.150%				
46	0.024%	0.060%	0.162%	0.180%				
47	0.024%	0.060%	0.180%	0.200%				
48	0.024%	0.060%	0.225%	0.250%				
49	0.024%	0.060%	0.225%	0.250%				
50	0.028%	0.070%	0.252%	0.280%				
51	0.028%	0.070%	0.270%	0.300%				
52	0.028%	0.070%	0.450%	0.500%				
53	0.028%	0.070%	0.450%	0.500%				
54	0.028%	0.070%	0.450%	0.500%				
55	0.040%	0.100%	0.450%	0.500%				
56	0.040%	0.100%	0.450%	0.500%				
57	0.040%	0.100%	0.450%	0.500%				
58	0.040%	0.100%	0.450%	0.500%				
59	0.040%	0.100%	0.450%	0.500%				
60	0.060%	0.150%	0.720%	0.800%				
61	0.060%	0.150%	0.720%	0.800%				
62	0.060%	0.150%	0.720%	0.800%				
63	0.060%	0.150%	0.720%	0.800%				
64	0.060%	0.150%	0.720%	0.800%				
65	0.060%	0.150%	0.000%	0.000%				
66	0.060%	0.150%						
67	0.060%	0.150%						
68	0.060%	0.150%						
69	0.060%	0.150%						
70	0.060%	0.150%						
71 72	0.060%	0.150%						
72 73	0.060%	0.150%						
	0.060%	0.150%						
74 75	0.060%	0.150%						
75	0.000%	0.000%						

40% of General disabilities and 90% of Safety disabilities where the member has five or more years of service are assumed to be service-related. All disabilities for those with less than five years or service are assumed to be service-related.



APPENDIX A – MEMBER DATA, ASSUMPTIONS AND METHODS

6. Salary Increase Rate:

Wage inflation component 3.00% Additional longevity and promotion component:

Longevity and Promotion Increases						
Service	General	Safety				
0	4.75%	6.00%				
1	4.00%	5.00%				
2	3.25%	4.00%				
3	2.50%	3.25%				
4	2.00%	2.50%				
5	1.50%	2.00%				
6	1.25%	1.60%				
7	1.00%	1.30%				
8	0.90%	1.20%				
9	0.80%	1.10%				
10	0.78%	1.00%				
11	0.75%	0.95%				
12	0.70%	0.92%				
13	0.65%	0.89%				
14	0.60%	0.87%				
15	0.55%	0.85%				
16	0.50%	0.82%				
17	0.48%	0.80%				
18	0.46%	0.77%				
19	0.44%	0.74%				
20	0.42%	0.72%				
21	0.40%	0.69%				
22	0.38%	0.67%				
23	0.36%	0.64%				
24	0.34%	0.62%				
25	0.32%	0.59%				
26	0.30%	0.57%				
27	0.28%	0.54%				
28	0.26%	0.52%				
29	0.25%	0.50%				
30+	0.25%	0.50%				

Increases are compound rather than additive.



APPENDIX A – MEMBER DATA, ASSUMPTIONS AND METHODS

- **7. Plan Election:** We assumed that 55% of future retirees will select a monthly subsidy for employer health plan benefits of \$15 per year of service, while 45% will select the \$4 cash benefit option.
- **8. Family Composition:** Percentage married for all active members who retire, become disabled, or die during active service is shown in the table below.

Percentage Married				
Gender	Percentage			
Males	75%			
Females	55%			

- **9. Dependent Age:** For current retirees, actual spouse date of birth was used when available. For future retirees, male retirees are assumed to be three years older than their partner, and female retirees are assumed to be two years younger than their partner.
- **10. Payment Form Election:** We assumed that future retirees will select a 60% Joint and Survivor annuity upon retirement.

Changes Since Last Valuation

The discount rate used for the Courts was changed from 7.00% to 3.606% to reflect the single equivalent discount rate derived from the crossover test for that Employer. For all Employers on a pay-as-you go funding method, a discount rate of 3.581% was used to reflect the current municipal bond rate applicable to the Plan.

Methodology:

The Entry Age Normal actuarial funding method was used for active employees, whereby the normal cost is computed as the level annual percentage of pay required to fund the postemployment benefits between each member's date of hire and assumed retirement. The actuarial liability is the difference between the present value of future benefits and the present value of future normal cost. The unfunded actuarial liability is the difference between the actuarial liability and the actuarial value of assets.



APPENDIX A – MEMBER DATA, ASSUMPTIONS AND METHODS

Amortization Cost

The actuarial value of the assets on hand to pay future benefits is subtracted from the *Actuarial Liability*, producing the *Unfunded Actuarial Liability* (*UAL*).

Beginning with this valuation report, the UAL determined from this valuation is no longer being amortized. Instead, we have computed the payment that would be anticipated to be needed – the tread water amount – to prevent the UAL from increasing, if all assumptions are met. This payment is equal to the sum of the normal cost and the interest (calculated using the GASB 74/75 discount rate for each employer) on the UAL as of the valuation date.

Actuarial Value of Plan Assets

The participating employers of the Santa Barbara County Employees' Retirement System contribute to a 401(h) account. It is assumed these assets will be used to pay for the retiree health benefits. As of June 30, 2017, the market value of assets was \$13,987,713. The actuarial value of assets is equal to the market value.

Funding

The cost of the benefits provided by the Plan is currently being funded by the participating employers as shown in the chart below.

Group	Funding Policy
Santa Barbara County	4.00% of total pension plan payroll
Carpinteria Summerland FPD	Pay-as-you-go
Santa Maria Cemetery	Pay-as-you-go
Goleta Cemetery	Pay-as-you-go
SBCAG	Pay-as-you-go
Summerland Sanitary	Pay-as-you-go
Carpinteria Cemetery	Pay-as-you-go
APCD	Pre-fund 401(h) up to IRS 25% limit
Courts	Pay-as-you-go

Changes Since The Last Valuation:

Previously, the OPEB report for SBCERS included a calculation of an Annual Required Contribution (ARC), calculated under the standards of GASB Statement 45. This calculation included the development of an amortization rate for the UAL, and was based on the amortization policy for each employer (a closed 19-year period for the County as of 2016, and an open/rolling period of 30 years for all other employers).



APPENDIX B – SUBSTANTIVE PLAN PROVISIONS

Summary of Key Substantive Plan Provisions:

All actuarial calculations are based on our understanding of the statutes governing SBCERS as contained in the County Employees Retirement Law (CERL) of 1937, with provisions adopted by the County Board of Supervisors, a district Board of Directors, or the SBCERS Board, effective through June 30, 2017. The benefits are summarized briefly below. This summary does not attempt to cover all the detailed provisions of the law.

This report does not reflect future changes in benefits, penalties, taxes, or administrative costs that may be required as a result of the Patient Protection and Affordable Care Act of 2010 related legislation and regulations.

Eligibility: Participation is based upon eligibility for pension benefits from SBCERS, and employers' election to participate in the 401(h) Subsidy/Supplement program

Plan Participation by Employer ¹										
Benefit Plans	APCD 1	APCD 2	APCD 8	General 2	General 5	General 7	General 8	Safety 4	Safety 6	Safety 8
Santa Barbara County				Yes	Yes	No	No	Yes	Yes	Yes ²
Carpinteria-Summerland-FPO					Yes		Yes	Yes		Yes
Santa Maria Cemetery					Yes					
Goleta Cemetery					Yes					
SB County Assoc of Govts					Yes		No			
Summerland Sanitary					Yes		Yes			
Carpinteria Cemetery					Yes					
Air Pollution Control District ³	Yes	Yes	No		Yes	No				
Courts				Yes	Yes		Yes			
Oak Hill Cemetery					No					
Mosquito & Vector Control					No					

¹ Yes = Employer had members enrolled in the plan and were eligible for benefits.

Benefits:

Eligible members can choose a monthly subsidy for County health plan benefits of \$15 per year of service. If the monthly premium for the health plan selected is less than \$15 times the member's years of service, the subsidy is limited to the entire premium. The health plans can include coverage for eligible spouses and dependents.

If a member does not elect a County health plan, the member receives a monthly cash benefit equal to \$4 per year of service.

If a member is eligible for a disability retirement benefit, the member can receive a monthly health plan subsidy of \$187 per month or \$15 per year of service, whichever is greater.



 $No = Employer \ had \ members \ enrolled \ in \ the \ plan, \ but \ they \ were \ not \ eligible \ for \ benefits.$

Empty = Employer did not have members enrolled in the Plan.

² Benefits were phased out for all new employees hired into Santa Barbara County Safety positions after January 16, 2017.

³ Employees hired into the Air Polution Control District after August 16, 2012 are not eligible for benefits.

APPENDIX B – SUBSTANTIVE PLAN PROVISIONS

After the member's death, a surviving spouse is eligible to continue health plan coverage. The monthly subsidy benefit will be equal to \$15 per year of service times the survivor continuation percentage applicable for pension benefits.

SBCAG employees have a different benefit plan; active members hired on or after January 1, 2010 are ineligible for the County plan; they have a separate plan administered by SBCAG that provides benefits through CalPERS and are not part of this plan and are not included in this valuation.

Changes Since The Last Valuation:

There have been no changes to the plan provisions since the last valuation.



APPENDIX C – GLOSSARY OF TERMS

1. Actuarial Assumptions

Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, and retirement; changes in compensation; rates of investment earnings, and asset appreciation or depreciation; procedures used to determine the actuarial value of assets; and, other relevant items.

2. Actuarial Cost Method

A procedure for determining the actuarial present value of pension plan benefits and expenses and for developing an allocation of such value to each year of service, usually in the form of a normal cost and an actuarial liability.

3. Actuarial Gain (Loss)

A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

4. Actuarial Liability

The portion of the actuarial present value of projected benefits which will not be paid by future normal costs. It represents the value of the past normal costs with interest to the valuation date.

5. Actuarial Present Value (Present Value)

The value as of a given date of a future amount or series of payments. The actuarial present value discounts the payments to the given date at the assumed investment return and includes the probability of the payment being made. As a simple example: assume you owe \$100 to a friend one year from now. Also, assume there is a 1% probability of your friend dying over the next year, in which case you will not be obligated to pay him. If the assumed investment return is 10%, the actuarial present value is:

		Probability	11		
Amount		of Payment	(1+Discount Rate)		
\$100	X	(101)	1/(1+.1)	=	\$90

6. Actuarial Valuation

The determination, as of a specified date, of the normal cost, actuarial liability, actuarial value of assets, and related actuarial present values for a pension plan.

7. Actuarial Value of Assets

The value of cash, investments and other property belonging to a pension or post-retirement benefit plan as used by the actuary for the purpose of an actuarial valuation. The purpose of an actuarial value of assets is to smooth out fluctuations in market values. This way, long-term costs are not distorted by short-term fluctuations in the market.



APPENDIX C – GLOSSARY OF TERMS

8. Amortization Payment

The portion of a plan contribution, which is designed to pay interest and principal on the unfunded actuarial liability in order to pay for that liability in a given number of years.

9. Entry Age Normal Actuarial Cost Method

A method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated as a level percentage of pay from the individual's date of entry into the plan to the individual's assumed cessation of employment.

10.Normal Cost

That portion of the actuarial present value of pension plan benefits and expenses which is allocated to a valuation year by the actuarial cost method.

11. Unfunded Actuarial Liability

The excess of the actuarial liability over the actuarial value of assets.

12.Funded Percentage

The ratio of the actuarial value of assets to the actuarial liability.

13. Mortality Table

A set of percentages, which estimate the probability of death at a particular point in time. Typically, the rates are annual and based on age and sex.

14.Discount Rate

The assumed interest rate used for converting projecting dollar related values to a present value as of the valuation date.

15.Medical Trend

The assumed increase in dollar related values in the future due to the increase in the cost of health care.



APPENDIX D – LIST OF ABBREVIATIONS

Actuarial Accrued Liability (AAL)

Actuarial Valuation Report (AVR)

Annual Required Contribution (ARC)

Coordination of Benefits (COB)

Deductible and Coinsurance (DC)

Deferred Retirement Option Plan (DROP)

Durable Medical Equipment (DME)

Employee Assistance Program (EAP)

Employee Benefits Division (EBD)

Fiscal Year Ending (FYE)

Governmental Accounting Standards Board (GASB)

Hospital Emergency Room (ER)

In-Network (INN)

Inpatient (IP)

Medicare Eligible (ME)

Net Other Postemployment Benefit (NOO)

Non-Medicare Eligible (NME)

Not Applicable (NA)

Office Visit (OV)

Other Postemployment Benefit (OPEB)

Out-of-Network (OON)

Out-of-Pocket (OOP)

Outpatient (OP)

Pay-as-you-go (PAYGo)

Per Person Per Month (PPPM)

Pharmacy (Rx)

Preferred Provider Organization (PPO)

Primary Care Physician (PCP)

Specialist Care Provider (SCP)

Summary Plan Description (SPD)

Unfunded Actuarial Accrued Liability (UAAL)

Unfunded Actuarial Liability (UAL)

Urgent Care (UC)



