

**San Bernardino County Employees'
Retirement Association**

A Cost-Sharing Multiple-Employer
Defined Benefit Pension Plan

Schedules of Employer Allocations and
Schedules of Pension Amounts by Employer

As of and for the Years Ended
June 30, 2018 and 2017



Certified
Public
Accountants

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**San Bernardino County Employees' Retirement Association
A Cost-Sharing Multiple-Employer Defined Benefit Pension Plan
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As of and for the Years Ended June 30, 2018 and 2017**

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Independent Auditor's Report

To the Members of the
San Bernardino County Employees' Retirement Association
Board of Retirement
San Bernardino, California

We have audited the accompanying schedules of employer allocations of the San Bernardino County Employees' Retirement Association (SBCERA) Cost-Sharing Multiple-Employer Defined Benefit Pension Plan (the Plan), as of and for the years ended June 30, 2018 and 2017, and the related notes. We have also audited the total for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense (specified column totals) included in the accompanying schedules of pension amounts by employer of the Plan as of and for the years ended June 30, 2018 and 2017, and the related notes.

Management's Responsibility for the Schedules

Management is responsible for the preparation and fair presentation of the schedules of employer allocations and the specified column totals included in the schedules of pension amounts by employer in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the schedules of employer allocations and the specified column totals included in the schedules of pension amounts by employer that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on the schedules of employer allocations and the specified column totals included in the schedules of pension amounts by employer based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the schedules of employer allocations and the specified column totals included in the schedules of pension amounts by employer are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the schedules of employer allocations and the specified column totals included in the schedules of pension amounts by employer. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the schedules of employer allocations and the specified column totals included in the schedules of pension amounts by employer, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the schedules of employer allocations and the specified column totals included in the schedules of pension amounts by employer in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control.

Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the schedules of employer allocations and specified column totals included in the schedules of pension amounts by employer.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinion

In our opinion, the schedules referred to above present fairly, in all material respects, the employer allocations and net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense for the total of all participating entities for the San Bernardino County Employees' Retirement Association Cost Sharing Multiple-Employer Defined Benefit Pension Plan as of and for the years ended June 30, 2018 and 2017, in accordance with accounting principles generally accepted in the United States of America.

Other Matters

We have audited, in accordance with auditing standards generally accepted in the United States of America, the financial statements of SBCERA as of and for the years ended June 30, 2018 and 2017, and our reports thereon, dated November 27, 2018 and November 28, 2017, expressed unmodified opinions on those financial statements.

Restriction on Use

Our report is intended solely for the information and use of the SBCERA management, the Board of Retirement, the Plan employers and their auditors and is not intended to be and should not be used by anyone other than these specified parties.



Los Angeles, California
July 29, 2019

San Bernardino County Employees' Retirement Association
A Cost-Sharing Multiple-Employer Defined Benefit Pension Plan
Schedules of Employer Allocations
For the Years Ended June 30, 2018 and 2017

Employer	June 30, 2018 ¹			
	Employer Contributions	Employer Contribution Percentage	Total Allocated Net Pension Liability	Employer Proportionate Share
Barstow Fire Protection District	\$ 1,709,250	0.451%	\$ 12,626,176	0.498%
Big Bear Fire Authority ²	1,355,181	0.358%	9,948,458	0.393%
California Electronic Recording Transaction Network Authority	71,948	0.019%	444,603	0.018%
California State Association of Counties	3,909,040	1.032%	27,725,018	1.094%
City of Big Bear Lake	2,871,706	0.758%	20,730,712	0.818%
City of Chino Hills	4,582,320	1.210%	32,402,609	1.279%
County of San Bernardino	316,695,131	83.608%	2,066,050,234	81.547%
Crestline Sanitation District	288,325	0.076%	1,750,781	0.069%
Department of Water and Power of the City of Big Bear Lake	889,627	0.235%	6,277,538	0.248%
Hesperia Recreation and Park District	394,123	0.104%	2,759,326	0.109%
Inland Library System	13,753	0.004%	95,680	0.004%
Law Library for San Bernardino County	95,745	0.025%	668,824	0.026%
Local Agency Formation Commission	125,543	0.033%	885,247	0.035%
Mojave Desert Air Quality Management District	1,399,966	0.370%	9,922,632	0.392%
San Bernardino County Transportation Authority	2,113,915	0.558%	14,988,102	0.592%
South Coast Air Quality Management District	25,332,734	6.688%	218,228,092	8.613%
Superior Court of California County of San Bernardino	16,938,112	4.472%	108,075,968	4.266%
Total	\$ 378,786,420	100.000%	\$ 2,533,580,002	100.000%

Employer	June 30, 2017 ¹			
	Employer Contributions	Employer Contribution Percentage	Total Allocated Net Pension Liability	Employer Proportionate Share
Barstow Fire Protection District	\$ 1,248,324	0.347%	\$ 9,958,070	0.378%
California Electronic Recording Transaction Network Authority	73,871	0.021%	507,723	0.019%
California State Association of Counties	3,461,330	0.963%	26,292,053	0.998%
City of Big Bear Lake	2,410,983	0.671%	18,653,622	0.708%
City of Chino Hills	4,383,343	1.220%	33,213,659	1.260%
County of San Bernardino	303,843,225	84.552%	2,180,860,158	82.749%
Crestline Sanitation District	298,547	0.083%	2,023,707	0.077%
Department of Water and Power of the City of Big Bear Lake	795,632	0.221%	6,020,247	0.228%
Hesperia Recreation and Park District	438,461	0.122%	3,284,987	0.125%
Inland Library System	13,209	0.004%	98,682	0.004%
Law Library for San Bernardino County	89,241	0.025%	668,517	0.025%
Local Agency Formation Commission	114,405	0.032%	864,960	0.033%
Mojave Desert Air Quality Management District	1,329,598	0.370%	10,094,423	0.383%
San Bernardino County Transportation Authority	1,964,977	0.547%	14,926,497	0.566%
South Coast Air Quality Management District	23,319,256	6.489%	214,076,570	8.123%
Superior Court of California County of San Bernardino	15,570,697	4.333%	113,960,482	4.324%
Total	\$ 359,355,096	100.000%	\$ 2,635,504,357	100.000%

(1) Date listed is the measurement date. See Note 2-Summary of Significant Accounting and Financial Reporting Policies for further information.

(2) Contributions annualized for allocation purposes and include an additional amount of \$1,303,059. The accompanying notes are an integral part of these schedules. Results may not total due to rounding.

San Bernardino County Employees' Retirement Association
A Cost-Sharing Multiple-Employer Defined Benefit Pension Plan
Schedules of Pension Amounts by Employer
As of and for the Years Ended June 30, 2018 and 2017

6/30/2018

Employer	Deferred Outflows of Resources				Deferred Inflows of Resources				Pension Expense				
	Employer Proportionate Share	Net Pension Liability	Differences Between Actual Experience and Expected Experience	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Share of Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Employer Pension Expense
Baislow Fire Protection District	0.498%	\$ 12,626,176	\$ 82,513	\$ 2,560,741	\$ 4,001,458	\$ 6,644,712	\$ 894,946	\$ 229,877	\$ 3,628,382	\$ 4,753,205	\$ 2,283,033	\$ 427,689	\$ 2,710,722
Big Bear Fire Authority	0.393%	9,948,458	65,014	2,017,667	5,860,659	7,943,340	705,149	181,126	-	886,275	1,798,855	1,144,660	2,943,515
California Electronic Recording Transaction Network Authority	0.018%	444,603	2,906	90,171	53,419	146,495	31,514	8,095	29,717	69,325	80,392	13,798	94,190
California State Association of Counties	1.094%	27,725,018	181,185	5,622,968	2,351,854	8,156,007	1,965,156	504,772	1,228,529	3,698,457	5,013,168	145,374	5,158,542
City of Big Bear Lake	0.818%	20,730,712	135,476	4,204,439	1,877,454	6,217,369	1,469,398	377,431	1,231,419	3,078,248	3,748,475	32,820	3,781,295
City of Chino Hills	1.279%	32,402,609	211,753	6,571,640	1,328,321	8,111,714	2,296,704	589,935	1,280,712	4,167,351	5,858,958	322,279	6,181,237
County of San Bernardino	81.547%	2,066,050,234	13,501,758	419,019,917	5,093,791	437,615,466	146,442,124	37,615,316	25,275,026	209,332,466	373,577,996	(3,899,235)	369,678,761
Crestline Sanitation District	0.069%	1,750,781	11,441	355,080	134,544	501,065	124,096	31,875	226,252	382,223	316,572	(4,455)	312,117
Department of Water and Power of the City of Big Bear Lake	0.248%	6,277,538	41,024	1,273,160	484,270	1,798,454	444,953	114,291	453,717	1,012,962	1,135,089	137,308	1,272,397
Hesperia Recreation and Park District	0.109%	2,759,326	18,032	559,625	274,154	851,811	195,582	50,237	976,095	1,221,914	498,934	11,689	510,623
Inland Library System	0.004%	95,680	625	19,405	284	20,314	6,782	1,742	7,739	16,263	17,301	(3,462)	13,839
Law Library for San Bernardino County	0.026%	668,824	4,371	135,646	19,161	159,177	47,406	12,177	126,338	185,921	120,935	(27,753)	93,182
Local Agency Formation Commission	0.035%	885,247	5,785	179,539	85,835	271,159	62,747	16,117	41,280	120,144	160,068	32,080	192,148
Mojave Desert Air Quality Management District	0.392%	9,922,632	64,845	2,012,430	404,366	2,481,641	703,318	180,655	432,166	1,316,140	1,794,185	225,036	2,019,221
San Bernardino County Transportation Authority	0.592%	14,988,102	97,948	3,039,768	1,484,839	4,622,555	1,062,360	272,879	433,862	1,769,101	2,710,111	718,173	3,428,284
South Coast Air Quality Management District	8.613%	218,228,092	1,426,133	44,259,290	12,538,745	58,224,168	15,468,058	3,973,146	10,296,984	29,738,188	39,459,454	(1,726,510)	37,732,944
Superior Court of California County of San Bernardino	4.266%	108,075,968	706,283	21,919,110	11,223,358	33,848,751	7,660,450	1,967,673	1,548,292	11,176,415	19,542,024	2,450,509	21,992,533
Total	100.000%	\$ 2,533,580,002	\$ 16,557,092	\$ 513,840,595	\$ 47,216,506	\$ 577,614,199	\$ 179,580,743	\$ 46,127,345	\$ 47,216,506	\$ 272,924,998	\$ 458,115,550	\$ -	\$ 458,115,550

(1) Date listed is the measurement date. See Note 2-Summary of Significant Accounting and Financial Reporting Policies for further information. The accompanying notes are an integral part of these schedules. Results may not total due to rounding.

San Bernardino County Employees' Retirement Association
A Cost-Sharing Multiple-Employer Defined Benefit Pension Plan
Schedules of Pension Amounts by Employer
As of and for the Years Ended June 30, 2018 and 2017

6/30/2017

Employer	Employer Proportionate Share	Net Pension Liability	Deferred Outflows of Resources				Deferred Inflows of Resources				Pension Expense	
			Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Employer Contributions and Expected and Actual Experience	Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportionate Share of Contributions	Total Employer Pension Expense
Barstow Fire Protection District	0.378%	\$ 9,958,070	\$ 361,568	\$ 2,544,767	\$ 2,983,907	\$ 5,890,241	\$ 1,065,309	\$ 4,600,059	\$ 5,665,369	\$ 1,401,103	\$ 32,768	\$ 1,433,871
California Electronic Recording Transaction Network Authority	0.019%	507,723	18,435	129,748	75,988	224,181	54,316	7,332	61,648	71,437	18,891	90,328
California State Association of Counties	0.998%	26,292,053	954,638	6,718,888	1,140,581	8,814,107	2,812,710	1,727,311	4,540,020	3,699,298	(157,800)	3,541,498
City of Big Bear Lake	0.708%	18,653,622	677,294	4,786,900	284,837	5,729,031	1,995,555	1,761,856	3,757,410	2,624,569	(319,447)	2,305,123
City of Chino Hills	1.260%	33,213,659	1,205,955	8,487,692	1,997,646	11,691,293	3,553,180	1,783,783	5,336,963	4,673,170	296,785	4,969,955
County of San Bernardino	82.749%	2,180,860,158	79,184,838	557,314,965	9,235,085	645,734,888	233,307,263	16,351,073	249,658,336	306,847,553	(1,127,261)	305,720,292
Crestline Sanitation District Department of Water and Power of the City of Big Bear Lake	0.077%	2,023,707	73,479	517,155	206,012	796,645	216,495	164,591	381,087	284,736	18,026	302,762
Hesperia Recreation and Park District	0.228%	6,020,247	218,589	1,538,464	409,447	2,166,500	644,043	611,485	1,255,528	847,050	76,867	923,917
Inland Library System	0.125%	3,284,987	119,275	839,473	531,512	1,490,259	351,426	866,775	1,218,202	462,198	69,683	531,892
Law Library for San Bernardino County	0.004%	98,682	3,583	25,218	157	28,958	10,557	11,262	21,819	13,885	(3,493)	10,392
Local Agency Formation Commission	0.025%	668,517	24,273	170,838	14,926	210,038	71,518	168,135	239,652	94,061	(30,740)	63,320
Mojave Desert Air Quality Management District	0.033%	864,960	31,406	221,039	91,441	343,886	92,533	54,020	146,553	121,700	25,672	147,373
San Bernardino County Transportation Authority	0.383%	10,094,423	366,518	2,579,612	675,970	3,622,100	1,079,896	585,658	1,665,554	1,420,288	207,565	1,627,852
South Coast Air Quality Management District	0.566%	14,926,497	541,966	3,814,440	1,965,124	6,321,530	1,596,829	618,485	2,215,313	2,100,162	649,136	2,749,297
Superior Court of California County of San Bernardino	8.123%	214,076,570	7,772,905	54,706,890	13,868,933	76,348,727	22,901,798	16,712,262	39,614,060	30,120,625	(2,275,298)	27,845,327
Total	100.000%	\$ 2,635,504,357	\$ 95,692,511	\$ 673,498,488	\$ 48,053,292	\$ 817,244,291	\$ 281,944,858	\$ 48,053,292	\$ 329,998,150	\$ 370,816,102	\$ -	\$ 370,816,102

(1) Date listed is the measurement date. See Note 2-Summary of Significant Accounting and Financial Reporting Policies for further information. The accompanying notes are an integral part of these schedules. Results may not total due to rounding.

San Bernardino County Employees' Retirement Association
A Cost-Sharing Multiple-Employer Defined Benefit Pension Plan
Notes to the Schedules of Employer Allocations and
Schedules of Pension Amounts by Employer
As of and for the Years Ended June 30, 2018 and 2017

Note 1 – Plan Description

The San Bernardino County Employees' Retirement Association (SBCERA) administers the SBCERA pension plan - a cost-sharing multiple-employer defined benefit pension plan (the Plan). SBCERA provides retirement, disability, death, and survivor benefits to General and Safety (law enforcement and fire suppression) Plan members (members), who are employed by 18 active participating employers (including SBCERA), and 3 withdrawn employers. SBCERA operates under the provisions of the California County Employees Retirement Law of 1937, the California Public Employees' Pension Reform Act of 2013, and the regulations, procedures, and policies adopted by SBCERA's Board of Retirement (Board).

Fiduciary oversight of SBCERA is vested with the SBCERA Board, which consists of nine voting members and three alternate members. Four members are appointed by the County of San Bernardino's Board of Supervisors, six members (which include two alternates) are elected by the members of SBCERA (General members elect two members, Safety members elect one member and one alternate, and retired members elect one member and one alternate), and the County of San Bernardino Treasurer is an ex-officio member who has designated one alternate. SBCERA publishes its own Comprehensive Annual Financial Report (CAFR) which is available on SBCERA's website at www.SBCERA.org.

SBCERA administers benefits for two membership classifications, General and Safety, and those benefits are tiered based upon date of SBCERA membership. Generally, those who become members prior to January 1, 2013 are Tier 1 members. All other members are Tier 2. Employees become eligible for membership on their first day of employment (when appointed to a regular position, whose service is greater than fifty percent of the full standard of hours), and members become fully vested after earning five years of service credit or attaining the age of 70. Additional information regarding SBCERA's benefits is available on SBCERA's website at www.SBCERA.org.

NOTE 2 – Summary of Significant Accounting and Financial Reporting Policies

Employers participating in SBCERA are required to report pension information in their financial statements in accordance with Governmental Accounting Standards Board (GASB) Statement No. 68 (GASB 68), *Accounting and Financial Reporting for Pensions*. The Schedules of Employer Allocations, Schedules of Pension Amounts by Employer, and the accompanying notes to these schedules (Pension Schedules) provide SBCERA participating employers with the required pension information for financial reporting.

The underlying financial information used to prepare the Pension Schedules is based on SBCERA's financial statements, which are prepared using the accrual basis of accounting, in accordance with accounting principles generally accepted in the United States of America, as applicable to governmental organizations. In doing so, SBCERA adheres to the reporting requirements established by GASB. Employer and member contributions are recognized in the period in which the contributions are due, pursuant to statutory requirements. Benefits and refunds are recognized when due and payable in accordance with the terms of the Plan.

San Bernardino County Employees' Retirement Association
A Cost-Sharing Multiple-Employer Defined Benefit Pension Plan
Notes to the Schedules of Employer Allocations and
Schedules of Pension Amounts by Employer
As of and for the Years Ended June 30, 2018 and 2017
(Continued)

NOTE 2 – Summary of Significant Accounting and Financial Reporting Policies (Continued)

For the Pension Schedules, the net pension liability (NPL) was measured as of June 30, 2018 and 2017, for the SBCERA employer reporting dates of June 30, 2019 and 2018, respectively. The NPL was determined based upon the results of an actuarial valuation as of June 30, 2018 and 2017, respectively. Plan fiduciary net position and the total pension liability (TPL) were valued as of the measurement dates. Consistent with the provisions of GASB 68, the fiduciary net position and liabilities measured as of June 30, 2018 and 2017 are not adjusted or rolled forward to June 30, 2019 and 2018 reporting dates, respectively.

Results shown in the Pension Schedules exclude any employer contributions made after the measurement dates of June 30, 2018 and 2017, respectively.

NOTE 3 - Net Pension Liability

The components of NPL of participating employers as of June 30, 2018 and 2017 are shown as follows:

Net Pension Liability of Participating Employers

		Measurement Date	
		June 30, 2018	June 30, 2017
Total pension liability	(a)	\$ 12,600,570,218	\$ 11,923,945,718
Plan fiduciary net position	(b)	10,066,990,216	9,288,441,361
Net pension liability	(a-b)	<u>\$ 2,533,580,002</u>	<u>\$ 2,635,504,357</u>
Plan fiduciary net position as a percentage of the total pension liability	(b/a)	79.89%	77.90%

Actuarial Assumptions

The actuarial assumptions used to determine TPL as of June 30, 2018 and 2017, were based on the results of the June 30, 2017 Actuarial Experience Study, which covered the periods from July 1, 2013 through June 30, 2016. They are the same assumptions used in the June 30, 2018 and 2017 actuarial valuations. Key assumptions used in the actuarial valuations are presented on the next page.

**San Bernardino County Employees' Retirement Association
A Cost-Sharing Multiple-Employer Defined Benefit Pension Plan
Notes to the Schedules of Employer Allocations and
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As of and for the Years Ended June 30, 2018 and 2017
(Continued)**

NOTE 3 – Net Pension Liability (Continued)

Key Methods and Assumptions Used in Valuation of Total Pension Liability

Valuation Date	June 30, 2018 and 2017
Actuarial Experience Study	3 Year Period Ended June 30, 2016
Actuarial Assumptions:	
Discount Rate ¹	7.25%
Inflation	3.00%
Projected Salary Increases ²	General: 4.50% to 14.50% Safety: 4.70% to 14.50%
Cost-of-Living Adjustments	Contingent upon consumer price index with a 2.00% maximum
Administrative Expenses	0.70% of payroll

(1) Includes inflation at 3.00% and is net of pension plan investment expense.

(2) Includes inflation at 3.00%, real "across the board" salary increases of 0.50%, and merit and promotional increases. Amounts vary by service.

Mortality Rates

Mortality rates used in the June 30, 2018 and 2017 actuarial valuations are based on the RP 2014 Healthy Annuitant Mortality Table projected generationally with the two-dimensional MP-2016 projection scale. For healthy General male members, the ages are set forward one year. No adjustment is made for healthy General female members. For all healthy and disabled Safety members, the ages are set back one year. For all General members that are disabled, the ages are set forward seven years. Beneficiaries are assumed to have the same mortality as a General member of the opposite sex who is receiving a service (non-disability) retirement.

NOTE 4 – Proportionate Share

For the years ended June 30, 2018 and 2017, the South Coast Air Quality Management District and Superior Court of California County of San Bernardino actuarial cost groups (cost group) have only one active employer each, so the entire NPL for those cost groups has been allocated to those employers. For all other cost groups, the NPL is allocated based on the actual employer contributions within the cost group.

On June 23, 2018, Big Bear Fire Authority (BBFA) transferred active members from California Public Employees' Retirement System (CalPERS) to SBCERA. Accordingly, both assets and liabilities for these members were transferred from CalPERS to SBCERA. An allocation was determined by adjusting BBFA contributions to an annual amount so that each employer's proportionate share is determined using a measure of required contributions over the same period of time.

San Bernardino County Employees' Retirement Association
A Cost-Sharing Multiple-Employer Defined Benefit Pension Plan
Notes to the Schedules of Employer Allocations and
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As of and for the Years Ended June 30, 2018 and 2017
(Continued)

NOTE 4 – Proportionate Share (Continued)

The steps used to determine each employer's proportionate share of pension amounts are as follows:

1. The NPL for each cost group is the TPL minus the Plan's fiduciary net position. The TPL for each cost group is determined by actuarial valuation results calculated by SBCERA's actuary, based on the actual participants in each cost group. The Plan's fiduciary net position for each cost group was estimated by adjusting the Valuation Value of Assets (VVA) for each cost group by the ratio of the total Plan fiduciary net position to total Plan VVA. Any non-valuation reserves (such as the Burial Allowance Reserve), and the Survivor Benefit reserve, are allocated amongst the cost groups based on each cost groups VVA.
2. Calculate ratio of employer's contributions to the total contributions for the cost group, including annualized contributions for any new employer during the fiscal year.
3. The ratio is then multiplied by the NPL for the cost group to determine the employer's proportionate share of the NPL for the cost group.
4. The NPL associated with SBCERA (as the employer), and any surplus or remaining unfunded liability from the withdrawn employers (after taking into account their fixed payment agreement) have been reallocated to the remaining active employers, based on each employer's NPL prior to the reallocation.
5. The total allocated NPL for each employer is the sum of items 3 and 4 above.
6. Proportionate share percentages are calculated by dividing each employer's allocated NPL in item 5 by the total NPL for the Plan.

San Bernardino County Employees' Retirement Association
A Cost-Sharing Multiple-Employer Defined Benefit Pension Plan
Notes to the Schedules of Employer Allocations and
Schedules of Pension Amounts by Employer
As of and for the Years Ended June 30, 2018 and 2017
(Continued)

NOTE 5 – Employer Contributions

The employer contributions used for each measurement date is a component of total employer contributions presented in SBCERA's Statements of Changes in Fiduciary Net Position as follows:

Employer Contributions
(Amounts in Thousands)

	Measurement Date	
	June 30, 2018	June 30, 2017
Actuarially determined contributions	\$ 378,667	\$ 360,478
Less SBCERA's employer contributions	(1,184)	(1,123)
Actual employer contributions	377,483	359,355
Add BBFA's annualized employer contributions ¹	1,303	-
Annualized employer contributions used as the basis for allocating employers' proportionate share by actuarial cost group	\$ 378,786	\$ 359,355

(1) Annualized contributions were added to the actual contributions made by Big Bear Fire Authority (BBFA) to properly allocate the Net Pension Liability.

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NOTE 6 – Long-Term Expected Real Rate of Return and Discount Rate

The long-term expected rate of return on Plan investments was determined using a building block method in which expected future real rates of return (expected returns, net of inflation) are developed for each major asset class. This information is combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage, and by adding expected inflation and subtracting expected investment expenses and a risk margin. The target allocations approved by the Board, and projected arithmetic real rates of return for each major asset class, after deducting inflation, but before deducting investment expenses, used in the derivation of the long-term expected investment rate of return assumptions as of June 30, 2018 and 2017, are summarized in the table below.

Long-Term Expected Real Rate of Return
As of June 30, 2018 and 2017

Asset Class	Investment Classification	Target Allocation¹	Long-Term Expected Real Rate of Return (Arithmetic)
Large Cap U.S. Equity	Domestic Common and Preferred Stock	8.00%	5.61%
Small Cap U.S. Equity	Domestic Common and Preferred Stock	2.00%	6.37%
Developed International Equity	Foreign Common and Preferred Stock	6.00%	6.96%
Emerging Market Equity	Foreign Common and Preferred Stock	6.00%	9.28%
U.S. Core Fixed Income	U.S. Government and Municipals/Domestic Bonds	2.00%	1.06%
High Yield/Credit Strategies	Domestic Bonds/Foreign Bonds	13.00%	3.65%
Global Core Fixed Income	Foreign Bonds	1.00%	0.07%
Emerging Market Debt	Emerging Market Debt	6.00%	3.85%
Real Estate	Real Estate	9.00%	4.37%
International Credit	Foreign Alternatives	11.00%	6.75%
Absolute Return	Domestic Alternatives/Foreign Alternatives	13.00%	3.56%
Real Assets	Domestic Alternatives/Foreign Alternatives	5.00%	6.35%
Long/Short Equity	Domestic Alternatives/Foreign Alternatives	0.00%	0.00%
Private Equity	Domestic Alternatives/Foreign Alternatives	16.00%	8.47%
Cash and Equivalents	Short-Term Cash Investment Funds	2.00%	(0.17%)
TOTAL		<u>100.00%</u>	

(1) For actuarial purposes, target allocations only change once every three years based on the triennial actuarial experience study.

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NOTE 6 – Long-Term Expected Real Rate of Return and Discount Rate (Continued)

Discount Rate

The discount rate used to measure the TPL was 7.25% for the years ended June 30, 2018 and 2017. The projection of cash flows used to determine the discount rates assumed that contributions from participating employers and active members are made at the actuarially determined contribution rates. For this purpose, only employer and member contributions that are intended to fund benefits of current members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs of future members and their beneficiaries, as well as projected contributions from future members, are not included.

Based on those assumptions, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current members. Therefore, the long-term expected rate of return on Plan investments, of 7.25% was applied to all periods of projected benefit payments to determine the TPL as of June 30, 2018 and 2017.

The two tables presented on the following two pages present the allocated NPL of participating employers calculated using the discount rate of 7.25% as of June 30, 2018 and 2017, as well as what the allocated NPL would be if it were calculated using a discount rate that is 1.00% lower or 1.00% higher than the current rate.

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NOTE 6 – Long-Term Expected Real Rate of Return and Discount Rate (Continued)

Discount Rate (Continued)

**Sensitivity of Net Pension Liability to Changes in the Discount Rate
As of June 30, 2018**

Employer	Employer Proportionate Share	1% Decrease 6.25%	Current Discount Rate 7.25%	1% Increase 8.25%
Barstow Fire Protection District	0.498%	\$ 19,048,588	\$ 12,626,176	\$ 7,358,229
Big Bear Fire Authority	0.393%	14,986,453	9,948,458	5,816,075
California Electronic Recording Transaction Network Authority	0.018%	815,646	444,603	140,257
California State Association of Counties	1.094%	40,865,216	27,725,018	16,946,845
City of Big Bear Lake	0.818%	30,921,150	20,730,712	12,372,063
City of Chino Hills	1.279%	47,807,231	32,402,609	19,767,054
County of San Bernardino	81.547%	3,538,746,604	2,066,050,234	858,079,449
Crestline Sanitation District	0.069%	3,237,210	1,750,781	531,546
Department of Water and Power of the City of Big Bear Lake	0.248%	9,268,404	6,277,538	3,824,297
Hesperia Recreation and Park District	0.109%	4,084,609	2,759,326	1,672,271
Inland Library System	0.004%	141,932	95,680	57,740
Law Library for San Bernardino County	0.026%	990,797	668,824	404,730
Local Agency Formation Commission	0.035%	1,307,324	885,247	539,042
Mojave Desert Air Quality Management District	0.392%	14,628,685	9,922,632	6,062,517
San Bernardino County Transportation Authority	0.592%	22,094,064	14,988,102	9,159,475
South Coast Air Quality Management District	8.613%	342,591,348	218,228,092	116,219,842
Superior Court of California County of San Bernardino	4.266%	176,415,307	108,075,968	52,021,018
Total	100.000%	\$ 4,267,950,568	\$ 2,533,580,002	\$ 1,110,972,450

Note: Results may not total due to rounding.

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NOTE 6 – Long-Term Expected Real Rate of Return and Discount Rate (Continued)

Discount Rate (Continued)

Sensitivity of Net Pension Liability to Changes in the Discount Rate
As of June 30, 2017

Employer	Employer Proportionate Share	1% Decrease 6.25%	Current Discount Rate 7.25%	1% Increase 8.25%
Barstow Fire Protection District	0.378%	\$ 14,721,578	\$ 9,958,070	\$ 6,039,973
California Electronic Recording Transaction Network Authority	0.019%	883,790	507,723	198,400
California State Association of Counties	0.998%	38,043,918	26,292,053	16,625,869
City of Big Bear Lake	0.708%	27,250,127	18,653,622	11,582,795
City of Chino Hills	1.260%	48,097,184	33,213,659	20,971,611
County of San Bernardino	82.749%	3,589,635,684	2,180,860,158	1,022,109,306
Crestline Sanitation District	0.077%	3,543,167	2,023,707	773,916
Department of Water and Power of the City of Big Bear Lake	0.228%	8,721,925	6,020,247	3,798,054
Hesperia Recreation and Park District	0.125%	4,774,341	3,284,987	2,059,958
Inland Library System	0.004%	143,555	98,682	61,772
Law Library for San Bernardino County	0.025%	971,650	668,517	419,184
Local Agency Formation Commission	0.033%	1,253,448	864,960	545,420
Mojave Desert Air Quality Management District	0.383%	14,608,735	10,094,423	6,381,295
San Bernardino County Transportation Authority	0.566%	21,597,951	14,926,497	9,439,070
South Coast Air Quality Management District	8.123%	332,228,066	214,076,570	116,894,198
Superior Court of California County of San Bernardino	4.324%	178,170,877	113,960,482	61,145,930
Total	100.000%	\$ 4,284,645,997	\$ 2,635,504,357	\$ 1,279,046,750

Note: Results may not total due to rounding.

The NPL under the 1% decrease and 1% increase scenarios reflect an estimate of the actual proportionate share allocation that would be calculated for each employer under each scenario as follows: Total plan TPL calculated under each scenario divided by the total plan TPL based on a 7.25% discount rate, multiplied by each employer's allocated TPL based on a 7.25% discount rate less the Plan's fiduciary net position.

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NOTE 7 – Collective Pension Expense and Deferred Outflows/Inflows of Resources

Changes in the collective NPL are included in collective pension expense in the measurement period except as follows:

Average Expected Remaining Service Life

The average expected remaining service life of all employees that are provided with benefits through the Plan is measured as of the beginning of the measurement period as follows:

1. Calculate each active employee's expected remaining service life as the present value of \$1 per year of future service at zero percent interest.
2. Set the remaining service life to zero for each non-active or retired member.
3. Divide the sum of the above amounts by the total number of active employee, non-active, and retired members.

The average expected remaining service life is 6.12 and 6.20 years as of the measurement dates of June 30, 2018 and 2017, respectively. The amounts calculated from the items below are included in collective pension expense over the average expected remaining service life of all employees that are provided with benefits through the Plan, over a closed period, beginning in the current measurement period. The unamortized amounts not included in collective pension expense are reported as collective deferred outflows of resources or deferred inflows of resources.

1. Changes of assumptions.
2. Changes in proportion and differences between actual employer contributions and the proportionate share of employer contributions.
3. Differences between expected and actual experience.

Investment Earnings on Plan Investments

The difference between projected and actual earnings on plan investments is included in collective pension expense over a closed five-year period, beginning in the current measurement period. The unamortized amount not included in collective pension expense is reported as deferred outflows of resources or deferred inflows of resources.

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NOTE 8 – Components of Collective Pension Expense

The components of collective pension expense, allocated to employers based on their proportionate share, for the years ended June 30, 2018 and 2017, are as follows:

Components of Collective Pension Expense

	Measurement Date	
	June 30, 2018	June 30, 2017
Service cost	\$ 321,930,580	\$ 300,779,648
Interest on TPL	868,276,521	803,777,972
Current period benefit changes (Liability transfer from outside plan) ¹	5,923,347	-
Amortization of current period difference between expected and actual experience in the TPL	3,233,807	(1,715,152)
Amortization of current period changes of assumptions or other inputs	-	106,889,355
SBCERA employer contributions	(1,183,947)	(1,122,793)
Member contributions	(149,478,284)	(143,858,526)
Projected earnings on plan investments	(672,621,127)	(614,520,648)
Amortization of current period differences between actual and projected earnings on plan investments	(24,971,901)	(96,735,477)
Administrative expense	12,092,067	13,163,171
Other (Asset transfer from outside plan) ¹	(4,311,546)	-
Amortization of prior period differences between actual and projected earnings on plan investments, expected and actual experience in the TPL, and changes of assumptions for deferred outflows	201,590,148	104,807,514
Amortization of prior period differences between actual and projected earnings on plan investments, and expected and actual experience in the TPL for deferred inflows	(102,364,114)	(100,648,961)
Total Collective Pension Expense	\$ 458,115,550	\$ 370,816,102

(1) Represents transfer of Big Bear Fire Authority's active members from CalPERS to SBCERA.

Note: Results may not total due to rounding.

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NOTE 9 – Amortization of Deferred Outflows of Resources and Deferred Inflows of Resources

The following components of outstanding deferred outflows of resources and deferred inflows of resources are amortized pursuant to GASB 68, as of June 30, 2018 and 2017 as follows:

Deferred Outflows of Resources and Deferred Inflows of Resources

	Measurement Date	
	June 30, 2018	June 30, 2017
Deferred Outflows of Resources:		
Changes of assumptions ¹	\$ 513,840,595	\$ 673,498,488
Net difference between projected and actual investment earnings on pension plan investments ²	-	95,692,511
Changes in proportion and differences between employer contributions and proportionate share of contributions ¹	47,216,506	48,053,292
Difference between expected and actual experience ¹	16,557,092	-
Total Deferred Outflows of Resources	\$ 577,614,193	\$ 817,244,291
Deferred Inflows of Resources:		
Difference between expected and actual experience ¹	\$ 179,580,743	\$ 281,944,859
Net difference between projected and actual investment earnings on pension plan investments ²	46,127,345	-
Changes in proportion and differences between employer contributions and proportionate share of contributions ¹	47,216,506	48,053,292
Total Deferred Inflows of Resources	\$ 272,924,594	\$ 329,998,151

Note: Results may not total due to rounding.

(1) Amortized over the average of the expected remaining service lives of all employees.

(2) Amortized over a closed five-year period.

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NOTE 9 – Amortization of Deferred Outflows of Resources and Deferred Inflows of Resources (Continued)

Deferred outflows of resources and deferred inflows of resources related to the Plan will be recognized as components of pension expense as follows:

Recognition of Deferred Outflows of Resources and Deferred Inflows of Resources

For the Reporting Date June 30:	Measurement Date	
	June 30, 2018	June 30, 2017
2019	N/A	\$ 99,226,033
2020	\$ 152,646,438	174,384,532
2021	91,507,830	113,245,920
2022	(41,730,835)	(19,992,743)
2023	77,609,467	99,347,559
2024	24,268,644	21,034,840
2025	388,057	-

Note: Results may not total due to rounding.

NOTE 10 – Additional Financial and Actuarial Information

Additional information supporting the preparation of the Pension Schedules is located in SBCERA's CAFR, which contains audited financial statements and required supplementary information, as well as information on the Plan's actuarial valuations. The CAFR and actuarial valuations are available on SBCERA's website at www.SBCERA.org, or a copy may be obtained by submitting a request to:

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San Bernardino, CA 92415