

# **Sacramento County Employees' Retirement System (SCERS)**

**Governmental Accounting Standards Board  
Statement 68 (GASBS 68) Actuarial Valuation  
Based on June 30, 2017 Measurement Date for  
Employer Reporting as of June 30, 2018**



This report has been prepared at the request of the Board of Retirement to assist the sponsors of the Fund in preparing their financial report for their liabilities associated with the SCERS pension plan. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Board of Retirement and may only be provided to other parties in its entirety. The measurements shown in this actuarial valuation may not be applicable for other purposes.

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*July 9, 2018*

*Board of Retirement  
Sacramento County Employees' Retirement System  
980 9<sup>th</sup> Street, Suite 1900  
Sacramento, CA 95814*

*Dear Board Members:*

*We are pleased to submit this Governmental Accounting Standards Board Statement 68 (GASBS 68) Actuarial Valuation based on a June 30, 2017 measurement date for employer reporting as of June 30, 2018. It contains various information that will need to be disclosed in order for SCERS employers to comply with GASBS 68.*

*This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist the sponsors in preparing their financial report for their liabilities associated with the SCERS pension plan. The census and financial information on which our calculations were based was provided by SCERS. That assistance is gratefully acknowledged.*

*The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and changes in plan provisions or applicable law.*

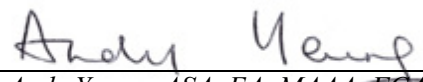
*The actuarial calculations were completed under the supervision of Andy Yeung, ASA, MAAA, Enrolled Actuary. We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of our knowledge, the information supplied in the actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and expectations for SCERS.*

*We look forward to reviewing this report with you and to answering any questions.*

*Sincerely,*

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

By:   
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*Paul Angelo, FSA, EA, MAAA, FCA  
Senior Vice President and Actuary*

  
\_\_\_\_\_  
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## **SECTION 1: Valuation Summary for Sacramento County Employees' Retirement System**

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### **Purpose**

This report has been prepared by Segal Consulting to present certain disclosure information required by Governmental Accounting Standards Board Statement 68 (GASBS 68) for employer reporting as of June 30, 2018. The results used in preparing this GASBS 68 report are comparable to those used in preparing the Governmental Accounting Standards Board Statement 67 (GASBS 67) report for the plan based on a reporting date and a measurement date as of June 30, 2017. This valuation is based on:

- The benefit provisions of SCERS, as administered by the Board;
- The characteristics of covered active members, terminated vested members, and retired members and beneficiaries as of June 30, 2017, provided by SCERS;
- The assets of the Plan as of June 30, 2017, provided by SCERS;
- Economic assumptions regarding future salary increases and investment earnings adopted by the Board for the June 30, 2017 valuation; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc. adopted by the Board for the June 30, 2017 valuation.

### **General Observations on GASBS 68 Actuarial Valuation**

The following points should be considered when reviewing this GASBS 68 report:

- The Governmental Accounting Standard Board (GASB) rules only define pension liability and expense for financial reporting purposes, and do not apply to contribution amounts for pension funding purposes. Employers and plans still develop and adopt funding policies under current practices.
- When measuring pension liability GASB uses the same actuarial cost method (Entry Age method) and the same type of discount rate (expected return on assets) as SCERS uses for funding. This means that the Total Pension Liability (TPL) measure for financial reporting shown in this report is determined on the same basis as SCERS' Actuarial Accrued Liability (AAL) measure for funding. We note that the same is generally true for the Normal Cost component of the annual plan cost for funding and financial reporting.

## SECTION 1: Valuation Summary for Sacramento County Employees' Retirement System

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- The Net Pension Liability (NPL) is equal to the difference between the TPL and the Plan Fiduciary Net Position. The Plan Fiduciary Net Position is equal to the market value of assets and therefore, the NPL measure is very similar to an Unfunded Actuarial Accrued Liability (UAAL) on a market value basis.
- For this report, the reporting dates for the employer are June 30, 2018 and June 30, 2017. The NPL was measured as of June 30, 2017 and June 30, 2016 and determined based upon the results of the actuarial valuations as of June 30, 2017 and June 30, 2016, respectively.

The Plan Fiduciary Net Position (plan assets) was valued as of the measurement dates. Consistent with the provisions of GASBS 68, the assets and liabilities measured as of June 30, 2017 and June 30, 2016 are not adjusted or rolled forward to the June 30, 2018 and June 30, 2017 reporting dates, respectively.

### Significant Issues in Valuation Year

The following key findings were the result of this actuarial valuation:

- The NPL increased from \$1,755.2 million as of June 30, 2016 to \$2,096.8 million as of June 30, 2017 primarily as a result of changes in actuarial assumptions (an increase in the liability by about \$823.7 million) offset to some extent by favorable investment return. Changes in these values during the last two fiscal years ending June 30, 2016 and June 30, 2017 can be found in Exhibit 5.
- The discount rate used to determine the TPL and NPL as of June 30, 2017 and June 30, 2016 was 7.00% and 7.50%, respectively. Details on the derivation of the discount rate as of June 30, 2017 can be found in Appendix A of Section 3. Various other information that is required to be disclosed can be found throughout Exhibits 1 through 13 in Section 2.
- The NPL as of June 30, 2017 excludes a liability of \$41.8 million that is attributable to members of Florin Fire District based on an estimate of the asset shortfall for this withdrawn employer available as of June 30, 2016 adjusted with interest at the assumed rate of investment return (i.e., 7.50% as of June 30, 2016) to June 30, 2017. (This estimate was previously applied when we prepared the NPL in our GASBS 67 report as of June 30, 2017.)

The Plan Fiduciary Net Position includes \$18.4 million that is available to offset a portion of the members' future COLA contribution rates. Since the \$18.4 million can only be used in the future to reduce contribution rates for the employees, we have included a liability of the same amount so that the employer's net NPL is unchanged by the availability of this amount.

## SECTION 1: Valuation Summary for Sacramento County Employees' Retirement System

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- The Safety membership class has only one active employer (the County) that was making contributions in 2015/2016 and 2016/2017, so all of the NPLs for Safety as of both June 30, 2016 and June 30, 2017 are allocated to the County.

For Miscellaneous, the NPLs as of June 30, 2016 and June 30, 2017 are allocated based on the actual employer contributions within the Miscellaneous membership class made during 2015/2016 and 2016/2017, respectively. The steps we used are as follows:

- First calculate ratio of employer's contributions to the total contributions for the membership class.
- This ratio is multiplied by the NPL for the membership class to determine the employer's proportionate share of the NPL for the membership class.

The NPL allocation can be found in Exhibit 7 in Section 2.

## SECTION 1: Valuation Summary for Sacramento County Employees' Retirement System

### Summary of Key Valuation Results

Reporting Date for Employer under GASBS 68	6/30/2018 <sup>(1)</sup>	6/30/2017 <sup>(2)</sup>
Measurement Date for Employer under GASBS 68	6/30/2017	6/30/2016
<b>Disclosure elements for fiscal year ending June 30:</b>		
Service Cost <sup>(3)</sup>	\$193,490,288	\$186,437,969
Total Pension Liability	10,680,998,000	9,436,090,000
Plan Fiduciary Net Position	8,584,225,000	7,680,865,000
Net Pension Liability	2,096,773,000	1,755,225,000
<b>Schedule of contributions<sup>(4)</sup> for fiscal year ending June 30:</b>		
Actuarially determined contributions	\$203,928,296	\$209,020,162
Actual contributions	203,928,296	209,020,162
Contribution deficiency (excess)	0	0
<b>Demographic data for plan year ending June 30:</b>		
Number of retired members and beneficiaries	11,396	10,960
Number of vested terminated members <sup>(5)</sup>	3,425	3,301
Number of active members	12,587	12,393
<b>Key assumptions:</b>		
Investment rate of return	7.00%	7.50%
Inflation rate	3.00%	3.25%
Projected salary increases <sup>(6)</sup>	4.50% - 10.75%, varying by service, including inflation	4.50% - 11.50%, varying by service, including inflation

<sup>(1)</sup> The reporting date and measurement date for the plan are June 30, 2017.

<sup>(2)</sup> The reporting date and measurement date for the plan are June 30, 2016.

<sup>(3)</sup> The Service Cost is based on the previous year's valuation, meaning the 2017 and 2016 values are based on the valuations as of June 30, 2016 and June 30, 2015, respectively.

<sup>(4)</sup> Includes contributions made by Florin Fire.

<sup>(5)</sup> Includes terminated members with member contributions on deposit.

<sup>(6)</sup> Includes inflation at 3.00% plus real across the board salary increase of 0.25% plus merit and promotional increases for 2017 and includes inflation at 3.25% plus real across the board salary increase of 0.25% plus merit and promotional increases for 2016.

## SECTION 1: Valuation Summary for Sacramento County Employees' Retirement System

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### Important Information about Actuarial Valuations

An actuarial valuation is a budgeting tool with respect to the financing of future projected obligations of a pension plan. It is an estimated forecast – the actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan

In order to prepare an actuarial valuation, Segal Consulting (“Segal”) relies on a number of input items. These include:

- **Plan of benefits** Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. It is important to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan description in this report (as well as the plan summary included in our funding valuation report) to confirm that Segal has correctly interpreted the plan of benefits.
- **Participant data** An actuarial valuation for a plan is based on data provided to the actuary by SCERS. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
- **Assets** This valuation is based on the market value of assets as of the valuation date, as provided by SCERS.
- **Actuarial assumptions** In preparing an actuarial valuation, Segal projects the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This projection requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of each participant for each year. In addition, the benefits projected to be paid for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments. The projected benefits are then discounted to a present value, based on the assumed rate of return that is expected to be achieved on the plan’s assets. There is a reasonable range for each assumption used in the projection and the results may vary materially based on which assumptions are selected. It is important for any user of an actuarial valuation to understand this concept. Actuarial assumptions are periodically reviewed to ensure that future valuations reflect emerging plan experience. While future changes in actuarial assumptions may have a significant impact on the reported results, that does not mean that the previous assumptions were unreasonable.

The user of Segal’s actuarial valuation (or other actuarial calculations) should keep the following in mind:

- The valuation is prepared at the request of the Board to assist the sponsors of the Fund in preparing items related to the pension plan in their financial reports. Segal is not responsible for the use or misuse of its report, particularly by any other party.



## SECTION 1: Valuation Summary for Sacramento County Employees' Retirement System

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- An actuarial valuation is a measurement of the plan's assets and liabilities at a specific date. Accordingly, except where otherwise noted, Segal did not perform an analysis of the potential range of future financial measures. The actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.
- If SCERS is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.
- Segal does not provide investment, legal, accounting, or tax advice. Segal's valuation is based on our understanding of applicable guidance in these areas and of the plan's provisions, but they may be subject to alternative interpretations. The Board should look to their other advisors for expertise in these areas.

As Segal Consulting has no discretionary authority with respect to the management or assets of SCERS, it is not a fiduciary in its capacity as actuaries and consultants with respect to SCERS.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

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**EXHIBIT 1**

**General Information – “Financial Statements”, Note Disclosures and Required Supplementary Information for a Cost-Sharing Pension Plan**

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**Plan Description**

*Plan administration.* The Sacramento County Employees' Retirement System (SCERS) was established by the County of Sacramento in 1941. SCERS is administered by the Board of Retirement and governed by the County Employees' Retirement Law of 1937 (California Government Code Section 31450 et. seq). SCERS is a cost-sharing multiple employer public employee retirement system whose main function is to provide service retirement, disability, death and survivor benefits to the Safety and Miscellaneous members employed by the County of Sacramento. SCERS also provides retirement benefits to the employee members of the Superior Court of California (County of Sacramento) and eleven Special Districts.

The management of SCERS is vested with the Sacramento County Board of Retirement. The Board consists of nine members and two alternates. Four members are appointed by the Board of Supervisors, two members are elected by the Miscellaneous membership, one member and one alternate are elected by the Safety membership, one member and one alternate are elected by the retired members of the System; and the County Director of Finance serves as ex officio member. All members of the Board of Retirement serve terms of three years except for the County Director of Finance whose term runs concurrent with his term as Director of Finance.

*Plan membership.* At June 30, 2017, pension plan membership consisted of the following:

Retired members or beneficiaries currently receiving benefits	11,396
Vested terminated members entitled to but not yet receiving benefits	3,425
Active members	<u>12,587</u>
Total	27,408

*Benefits provided.* SCERS provides service retirement, disability, death and survivor benefits to eligible employees. All permanent full-time or part-time employees of the County of Sacramento or contracting district become members of SCERS upon employment. There are separate retirement plans for Safety and Miscellaneous member employees. Safety membership is extended to those involved in active law enforcement, fire suppression, and certain other classifications. There are four tiers applicable to Safety members. Those hired prior to January 1, 2012 are included in either Tier 1 or Tier 2 depending on date of hire and bargaining unit. Those hired after that date but prior to January 1, 2013 are included in Tier 3. Any new Safety member who becomes a member on or after January 1, 2013 is designated PEPRA Safety (Tier

## SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System

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4) and is subject to the provisions of California Public Employees' Pension Reform Act of 2013 (PEPRA), California Government Code 7522 et seq. and Assembly Bill (AB) 197. All other employees are classified as Miscellaneous members. There are five tiers applicable to Miscellaneous members. Those hired prior to September 27, 1981 are included in Tier 1. Those hired after that date but prior to January 1, 2012 are included in Tier 2 or Tier 3 depending on date of hire and bargaining unit. County members hired after that date but prior to January 1, 2013 are included in Tier 4. New members hired on or after January 1, 2013 are designated as PEPRA Miscellaneous (Tier 5) and are subject to the provisions of California Government Code 7522 et seq. and AB 197.

Safety members hired prior to January 1, 2013, are eligible to retire once they attain the age of 50 and have acquired 10 or more years of retirement service credit. A member with 20 years of service is eligible to retire regardless of age. Safety members who are first hired on or after January 1, 2013, are eligible to retire once they have attained the age of 50, and have acquired five years of retirement service credit.

Miscellaneous members hired prior to January 1, 2013, are eligible to retire once they attain the age of 50 and have acquired 10 or more years of retirement service credit. A member with 30 years of service is eligible to retire regardless of age. Miscellaneous members who are first hired on or after January 1, 2013, are eligible to retire once they have attained the age of 52, and have acquired five years of retirement service credit.

The retirement benefit the member will receive is based upon age at retirement, final average compensation, years of retirement service credit and retirement plan and tier.

Safety member benefits for Tier 1 and Tier 2 are calculated pursuant to the provisions of California Government Code Section 31664.1. Safety member benefits for Tier 3 are calculated pursuant to the provision of California Government Code Section 31664.2. The monthly allowance is equal to 2% of the first \$350 of final compensation, plus 3% of the excess final compensation times years of accrued retirement service credit times age factor from either Section 31664.1 (Tier 1 and 2) or 31664.2 (Tier 3). Safety member benefits for those who are first hired on or after January 1, 2013, are calculated pursuant to the provision of California Government Code Section 7522.25(d). The monthly allowance is equal to the final compensation multiplied by years of accrued retirement credit multiplied by the age factor from Section 7522.25(d).

Miscellaneous member benefits for Tier 1, Tier 2 and Tier 3 are calculated pursuant to the provisions of California Government Code Section 31676.14. Miscellaneous member benefits for Tier 4 are calculated pursuant to the provisions of California Government Code Section 31676.1. The monthly allowance is equal to 1/90th of the first \$350 of final compensation, plus 1/60th of the excess final compensation times years of accrued retirement service credit times age factor from either Section 31676.14 (Tier 1, Tier 2 and Tier 3) or Section 31676.1 (Tier 4). Miscellaneous member benefits for those who are first hired on or after January 1, 2013, are calculated pursuant to the provision of California Government

## SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System

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Code Section 7522.20(a). The monthly allowance is equal to the final compensation multiplied by years of accrued retirement credit multiplied by the age factor from Section 7522.20(a).

For members with membership dates before January 1, 2013, the maximum monthly retirement allowance is 100% of final compensation. There is no maximum for members with membership dates on or after January 1, 2013.

Final average compensation consists of the highest 12 consecutive months for a Tier 1 Safety or Tier 1 Miscellaneous member and the highest 36 consecutive months for a Tier 2, Tier 3, Tier 4 or Tier 5 member.

The member may elect an unmodified retirement allowance, or choose an optional retirement allowance. The unmodified retirement allowance provides the highest monthly benefit and a 60% continuance to an eligible surviving spouse. An eligible surviving spouse is one married to the member one year prior to the effective retirement date. There are four optional retirement allowances the member may choose. Each of the optional retirement allowances requires a reduction in the unmodified retirement allowance in order to allow the member the ability to provide certain benefits to a surviving spouse or named beneficiary having an insurable interest in the life of the member.

SCERS provides an annual cost-of-living benefit to Safety Tier 1, Tier 2, Tier 3 and Tier 4 member retirees and Miscellaneous Tier 1, Tier 3, Tier 4 and Tier 5 member retirees. The cost-of-living adjustment, based upon the Consumer Price Index for the San Francisco-Oakland-San Jose area, is capped at 4.0% for Tier 1 members and 2% for all other members eligible for a cost-of-living adjustment.

The County of Sacramento and contracting districts contribute to the retirement plan based upon actuarially determined contribution rates adopted by the Board of Retirement. Employer contribution rates are adopted annually based upon recommendations received from SCERS' actuary after the completion of the annual actuarial valuation. The average employer contribution rate as of June 30, 2017 for 2016/2017 (based on the June 30, 2015 valuation) was 21.27% of compensation.

All members are required to make contributions to SCERS regardless of the retirement plan or tier in which they are included. The average member contribution rate as of June 30, 2017 for 2016/2017 (based on the June 30, 2015 valuation) was 9.33% of compensation.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 2**

**Net Pension Liability**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
The components of the Net Pension Liability of the SCERS as follows:		
Total Pension Liability	\$10,680,998,000	\$9,436,090,000
Plan Fiduciary Net Position	<u>(8,584,225,000)</u>	<u>(7,680,865,000)</u>
Net Pension Liability	\$2,096,773,000	\$1,755,225,000
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	80.37%	81.40%

The Net Pension Liability (NPL) was measured as of June 30, 2017 and 2016 and determined based upon the Total Pension Liability (TPL) from actuarial valuations as of June 30, 2017 and 2016, respectively.

*Plan Provisions.* The plan provisions used in the measurement of the NPL as of June 30, 2017 and 2016 are the same as those used in the SCERS actuarial valuation as of June 30, 2017 and 2016, respectively.

*Actuarial assumptions.* The TPL that was measured by an actuarial valuation as of June 30, 2017 used the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.00%
Salary increases	4.50% to 10.75%, varying by service, including inflation
Investment rate of return	7.00%, net of pension plan investment expense, including inflation
Other assumptions	See the analysis of actuarial experience study for the period July 1, 2013 through June 30, 2016.

The TPL that was measured by an actuarial valuation as of June 30, 2016 used the following actuarial assumptions, applied to all periods included in the measurement

Inflation	3.25%
Salary increases	4.50% to 11.50%, varying by service, including inflation
Investment rate of return	7.50%, net of pension plan investment expense, including inflation
Other assumptions	See the analysis of actuarial experience study for the period July 1, 2010 through June 30, 2013.

## SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System

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### EXHIBIT 3

#### Target Asset Allocation

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The long-term expected rate of return on pension 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. These returns are 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, adding expected inflation and subtracting expected investment expenses and a risk margin. The target allocation (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 assumption as of June 30, 2017 are summarized in the following table:

<b>Asset Class</b>	<b>Target Allocation</b>	<b>Long-Term Expected Real Rate of Return</b>
U.S. Large Cap Equity	17.00%	5.61%
U.S. Small Cap Equity	4.00%	6.37%
International Developed Equity	16.00%	6.96%
Emerging Markets Equity	4.00%	9.28%
High Yield Bonds	1.00%	3.65%
Bank Loans	1.00%	2.96%
Growth Oriented Abs. Return	3.00%	4.97%
Private Equity	9.00%	8.70%
Private Credit/Private Debt	4.00%	5.10%
Core/Core Plus Bonds	10.00%	1.06%
Global Bonds	3.00%	0.07%
U.S. Treasury	5.00%	0.16%
Diversifying Abs. Return	7.00%	3.04%
Private Real Estate	7.00%	4.37%
Private Assets	7.00%	7.74%
Commodities	2.00%	3.76%
<b>Total</b>	<b>100.00%</b>	

## SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System

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*Discount rate:* The discount rate used to measure the Total Pension Liability (TPL) was 7.00% as of June 30, 2017 and 7.50% as of June 30, 2016. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the actuarially determined contribution rates. For this purpose, only employer contributions that are intended to fund benefits for current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs for future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included. Based on those assumptions, the Plan Fiduciary Net Position was projected to be available to make all projected future benefit payments for current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the TPL as of both June 30, 2017 and June 30, 2016.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 4**

**Discount Rate Sensitivity**

*Sensitivity of the Net Pension Liability to changes in the discount rate.* The following presents the Net Pension Liability (NPL) of SCERS as of June 30, 2017, which is allocated to all employers, calculated using the discount rate of 7.00%, as well as what SCERS' NPL would be if it were calculated using a discount rate that is 1-percentage-point lower (6.00%) or 1-percentage-point higher (8.00%) than the current rate. The determination of the NPL by employer is shown later in Exhibit 7.

<b>Net Pension Liability</b>	<b>1% Decrease (6.00%)</b>	<b>Current Discount Rate (7.00%)</b>	<b>1% Increase (8.00%)</b>
Carmichael Recreation and Park District	\$4,627,352	\$2,686,756	\$1,102,896
County of Sacramento	3,331,187,619	1,934,170,514	793,964,713
Elk Grove Cosumnes Cemetery District	942,297	547,121	224,590
Fair Oaks Cemetery District	1,026,430	595,971	244,642
Galt-Arno Cemetery District	218,747	127,010	52,137
Mission Oaks Recreation and Park District	5,552,824	3,224,108	1,323,476
Orangevale Recreation and Park District	2,507,183	1,455,733	597,569
Sacramento Employment and Training Agency (S.E.T.A.)	103,198,378	59,919,549	24,596,594
Sunrise Recreation and Park District	10,045,563	5,832,704	2,394,288
Superior Court of California, County of Sacramento	<u>151,928,607</u>	<u>88,213,534</u>	<u>36,211,095</u>
<b>Total for all Employers</b>	<b>\$3,611,235,000</b>	<b>\$2,096,773,000</b>	<b>\$860,712,000</b>



**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 5**

**Schedule of Changes in Net Pension Liability – Last Two Fiscal Years**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Total Pension Liability</b>		
Service Cost <sup>(1)</sup>	\$193,490,288	\$186,437,969
Interest	706,016,047	675,919,948
Change of benefit terms	0	0
Differences between expected and actual experience	-46,244,335	-49,244,917
Changes of assumptions	823,712,000	0
Benefit payments, including refunds of employee contributions	<u>-432,066,000</u>	<u>-405,702,000</u>
Net change in Total Pension Liability	\$1,244,908,000	\$407,411,000
Total Pension Liability – beginning	<u>9,436,090,000</u>	<u>9,028,679,000</u>
Total Pension Liability – ending (a)	<u>\$10,680,998,000</u>	<u>\$9,436,090,000</u>
<b>Plan Fiduciary Net Position</b>		
Contributions – employer	\$201,251,000 <sup>(2)</sup>	\$207,884,000
Contributions – employee	89,489,000	77,494,000
Net investment income	1,048,915,000	-72,399,000
Benefit payments, including refunds of employee contributions	-432,066,000	-405,702,000
Administrative expense	-6,906,000	-6,362,000
Other	<u>2,677,000<sup>(3)</sup></u>	<u>1,136,000<sup>(4)</sup></u>
Net change in Plan Fiduciary Net Position	\$903,360,000	-\$197,949,000
Plan Fiduciary Net Position – beginning	<u>7,680,865,000</u>	<u>7,878,814,000</u>
Plan Fiduciary Net Position – ending (b)	<u>\$8,584,225,000</u>	<u>\$7,680,865,000</u>
Net Pension Liability – ending (a) – (b)	<u>\$2,096,773,000</u>	<u>\$1,755,225,000</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	80.37%	81.40%
Covered employee payroll <sup>(5)</sup>	\$958,934,000	\$912,421,000
Plan Net Pension Liability as percentage of covered employee payroll	218.66%	192.37%

## SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System

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### EXHIBIT 5

#### Schedule of Changes in Net Pension Liability – Last Two Fiscal Years (continued)

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- (1) *The Service Cost is based on the previous year's valuation, meaning the 2017 and 2016 values are based on the valuations as of June 30, 2016 and June 30, 2015, respectively.*
- (2) *This is different from \$201,928,000 included in our GASBS 67 report as of June 30, 2017. We have reclassified \$677,000 made by Mission Oaks Recreation and Park District in the "Other" category due to a self-correction relating to prior years' contributions.*
- (3) *In addition to the \$677,000 made by Mission Oaks Recreation and Park District discussed in (2), we have also classified the \$2,000,000 contribution made by Florin Fire District during 2016/2017 in the "Other" category. This is done to recognize the fact that the NPL for the non-active employer in this year's GASBS 68 report has been calculated by adjusting with interest only the latest withdrawal liability amount determined for that non-active employer (and without adjusting for the \$2,000,000 contribution made during 2016/2017).*  
*Throughout the rest of this report, those contributions are included in the Actuarially Determined Contributions for the System's active and non-active employers.*
- (4) *In last year's report, we classified the \$1,136,000 contribution made by Florin Fire District during 2015/2016 in the "Other" category. This was done because the NPL for the non-active employer in last year's GASBS 68 report was calculated by adjusting with interest only the latest withdrawal liability amount determined for that non-active employer (and without adjusting for the \$1,136,000 contribution made during 2015/2016).*  
*Throughout the rest of this report, those contributions are included in the Actuarially Determined Contributions for the System's active and non-active employers.*
- (5) *Covered employee payroll represents compensation earnable and pensionable compensation. Only compensation earnable and pensionable compensation that would possibly go into the determination of the retirement benefits are included.*

#### **Notes to Schedule:**

*Benefit changes: None*

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 6**

**Schedule of SCERS' Contributions – Last Ten Fiscal Years**

<b>Year Ended June 30</b>	<b>Actuarially Determined Contributions<sup>(1)</sup></b>	<b>Contributions in Relation to the Actuarially Determined Contributions</b>	<b>Contribution Deficiency (Excess)</b>	<b>Covered-Employee Payroll<sup>(2),(3)</sup></b>	<b>Contributions as a Percentage of Covered Employee Payroll</b>
2008	\$167,054,356	\$167,054,356	\$0	\$851,016,000	19.63%
2009	177,011,005	177,011,005	0	923,375,000	19.17%
2010	167,141,893	167,141,893	0	872,804,000	19.15%
2011	182,920,751	182,920,751	0	818,804,000	22.34%
2012	179,098,469	179,098,469	0	835,737,000	21.43%
2013	189,663,720	189,663,720	0	858,551,000	22.09%
2014	210,503,324	210,503,324	0	858,343,000	24.52%
2015	222,959,365	222,959,365	0	873,328,000	25.53%
2016	209,020,162	209,020,162	0	912,421,000	22.91%
2017	203,928,296	203,928,296	0	958,934,000	21.27%

See accompanying notes to this schedule on next page.

<sup>(1)</sup> All "Actuarially Determined Contributions" through June 30, 2015 were determined as the "Annual Required Contribution" under GASBS 25 and 27.

<sup>(2)</sup> Payroll for the years ending 2005 through 2012 are calculated by dividing the contribution dollar amount by the contribution as a percentage of payroll.

<sup>(3)</sup> Covered employee payroll represents compensation earnable and pensionable compensation. Only compensation earnable and pensionable compensation that would possibly go into the determination of the retirement benefits are included.

## SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System

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### Notes to Exhibit 6

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#### Methods and assumptions used to establish "actuarially determined contribution" rates:

<b>Valuation date</b>	Actuarially determined contribution rates are calculated as of June 30, two years prior to the end of the fiscal year in which contributions are reported
<b>Actuarial cost method</b>	Entry Age Actuarial Cost Method
<b>Amortization method</b>	Level percent of payroll (3.50% payroll growth assumed)
<b>Remaining amortization period</b>	
June 30, 2015 valuation	20 years (declining) as of June 30, 2015 for the outstanding balance of the June 30, 2012 UAAL. The UAAL established as a result of the Early Retirement Incentive Program for LEMA members is amortized over a 10-year period, beginning June 30, 2010. Effective June 30, 2013, any changes in UAAL due to actuarial gains or losses or due to changes in actuarial assumptions or methods will be amortized over a 20-year closed period effective with each valuation. Any change in UAAL that arises due to plan amendments will be amortized over its own declining 15-year period and any change in UAAL due to retirement incentive programs will be amortized over a declining period of up to 5 years.
<b>Asset valuation method</b>	The market value of assets less unrecognized returns in each of the last six years. Unrecognized return is equal to the difference between actual and expected returns on a market value basis and is recognized over a seven-year period. The deferred return is further adjusted, if necessary, so that the actuarial value of assets will stay within 30% of the market value of assets. Deferred gains and losses as of June 30, 2013 have been combined and will be recognized in equal amounts over a six-year period starting July 1, 2013.
<b>Actuarial assumptions:</b>	
June 30, 2015 valuation (used for the year ended (June 30, 2017 ADC)	
<i>Investment rate of return</i>	7.50%, net of pension plan investment expense, including inflation
<i>Inflation rate</i>	3.25%
<i>Projected salary increases</i>	4.50% - 11.50%, varying by age, including inflation
<i>Cost of living adjustments</i>	3.25% of Miscellaneous and Safety Tier 1 retirement income, 2.00% of Miscellaneous Tier 3, Tier 4 and Tier 5 and Safety Tier 2, Tier 3 and Tier 4 retirement income, and 0.00% of Miscellaneous Tier 2 retirement income.
<i>Other assumptions</i>	Same as those used in the June 30, 2015 funding actuarial valuation.
<b>Other information:</b>	All members with membership dates on or after January 1, 2013 enter the new tiers created by the California Public Employees' Pension Reform Act of 2013 (PEPRA).

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**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 7**

**Determination of Proportionate Share**

<b>Actual Employer Contributions by Employer and Membership Class June 30, 2015 to June 30, 2016</b>						
<b>Employer</b>	<b>Miscellaneous</b>	<b>Miscellaneous Percentage<sup>(1)</sup></b>	<b>Safety</b>	<b>Safety Percentage</b>	<b>Total Contributions</b>	<b>Total Percentage</b>
Carmichael Recreation and Park District	\$310,000	0.242%	\$0	0.000%	\$310,000	0.149%
County of Sacramento	111,361,000	86.792%	79,576,000	100.000%	190,937,000	91.848%
Elk Grove Cosumnes Cemetery District	56,000	0.044%	0	0.000%	56,000	0.027%
Fair Oaks Cemetery District	46,000	0.036%	0	0.000%	46,000	0.022%
Galt-Arno Cemetery District	7,000	0.005%	0	0.000%	7,000	0.004%
Mission Oaks Recreation and Park District	221,000	0.172%	0	0.000%	221,000	0.106%
Orangevale Recreation and Park District	165,000	0.129%	0	0.000%	165,000	0.079%
Sacramento Employment and Training Agency (S.E.T.A.)	6,351,000	4.950%	0	0.000%	6,351,000	3.055%
Sunrise Park Recreation and Park District	419,000	0.326%	0	0.000%	419,000	0.202%
Superior Court of California, County of Sacramento	<u>9,372,000</u>	<u>7.304%</u>	<u>0</u>	<u>0.000%</u>	<u>9,372,000</u>	<u>4.508%</u>
<b>Total for all Employers</b>	<b>\$128,308,000</b>	<b>100.000%</b>	<b>\$79,576,000</b>	<b>100.000%</b>	<b>\$207,884,000<sup>(2)</sup></b>	<b>100.000%</b>

<sup>(1)</sup> The unrounded percentages are used in the allocation of the Net Pension Liability (NPL) amongst the Miscellaneous employers.

<sup>(2)</sup> Excludes a contribution of \$1,136,000 made by Florin Fire District that has previously withdrawn from SCERS as an active employer.

Note: Results may not total due to rounding.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 7 (continued)**

**Determination of Proportionate Share**

<b>Allocation of June 30, 2016 Net Pension Liability</b>						
<b>Employer</b>	<b>Miscellaneous</b>	<b>Miscellaneous Percentage</b>	<b>Safety</b>	<b>Safety Percentage</b>	<b>Total NPL</b>	<b>Total Percentage</b>
Carmichael Recreation and Park District	\$2,457,342	0.242%	\$0	0.000%	\$2,457,342	0.140%
County of Sacramento	882,748,731	86.792%	738,138,909	100.000%	1,620,887,640	92.346%
Elk Grove Cosumnes Cemetery District	443,907	0.044%	0	0.000%	443,907	0.025%
Fair Oaks Cemetery District	364,638	0.036%	0	0.000%	364,638	0.021%
Galt-Arno Cemetery District	55,488	0.005%	0	0.000%	55,488	0.003%
Mission Oaks Recreation and Park District	1,751,847	0.172%	0	0.000%	1,751,847	0.100%
Orangevale Recreation and Park District	1,307,940	0.129%	0	0.000%	1,307,940	0.075%
Sacramento Employment and Training Agency (S.E.T.A.)	50,343,812	4.950%	0	0.000%	50,343,812	2.868%
Sunrise Park Recreation and Park District	3,321,376	0.326%	0	0.000%	3,321,376	0.189%
Superior Court of California, County of Sacramento	<u>74,291,010</u>	<u>7.304%</u>	<u>0</u>	<u>0.000%</u>	<u>74,291,010</u>	<u>4.233%</u>
<b>Total for all Employers</b>	<b>\$1,017,086,091</b>	<b>100.000%</b>	<b>\$738,138,909</b>	<b>100.000%</b>	<b>\$1,755,225,000<sup>(3)</sup></b>	<b>100.000%</b>

<sup>(3)</sup> Excludes a liability of \$34,503,755 for Florin Fire District that has previously withdrawn from SCERS as an active employer. This is based on an estimate as of June 30, 2015 adjusted with interest at the assumed rate of investment return to June 30, 2016.

Note: Results may not total due to rounding.

## SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System

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### EXHIBIT 7 (continued)

#### Determination of Proportionate Share

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**Notes:**

Based on the July 1, 2015 through June 30, 2016 employer contributions as provided by SCERS.

The Net Pension Liability (NPL) for each membership class is the Total Pension Liability (TPL) minus the Plan Fiduciary Net Position (plan assets). The TPL for each membership class is obtained from internal valuation results. The Plan Fiduciary Net Position for each membership class was estimated by adjusting the valuation value of assets for each membership class by the ratio of the total SCERS Plan Fiduciary Net Position to total SCERS valuation value of assets.

The Safety membership class has only one active employer (the County of Sacramento) that was making contributions in 2015/2016, so all of the NPL for Safety is allocated to the County of Sacramento.

For Miscellaneous, the NPL is allocated based on the actual employer contributions within the Miscellaneous membership class.

- First calculate ratio of employer's contributions to the total contributions for the membership class.
- This ratio is multiplied by the NPL for the membership class to determine the employer's proportionate share of the NPL for the membership class.

If the employer is in both membership classes, the employer's total allocated NPL is the sum of its allocated NPL from each membership class. Proportionate share of total plan NPL is then the ratio of the employer's total allocated NPL to the total NPL of all employers.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 7 (continued)**

**Determination of Proportionate Share**

<b>Actual Employer Contributions by Employer and Membership Class June 30, 2016 to June 30, 2017</b>						
<b>Employer</b>	<b>Miscellaneous</b>	<b>Miscellaneous Percentage<sup>(1)</sup></b>	<b>Safety</b>	<b>Safety Percentage</b>	<b>Total Contributions</b>	<b>Total Percentage</b>
Carmichael Recreation and Park District	\$275,000	0.226%	\$0	0.000%	\$275,000	0.137%
County of Sacramento	104,981,000	86.316%	79,627,000	100.000%	184,608,000	91.730%
Elk Grove Cosumnes Cemetery District	56,000	0.046%	0	0.000%	56,000	0.028%
Fair Oaks Cemetery District	61,000	0.050%	0	0.000%	61,000	0.030%
Galt-Arno Cemetery District	13,000	0.011%	0	0.000%	13,000	0.007%
Mission Oaks Recreation and Park District	330,000	0.271%	0	0.000%	330,000	0.164%
Orangevale Recreation and Park District	149,000	0.123%	0	0.000%	149,000	0.074%
Sacramento Employment and Training Agency (S.E.T.A.)	6,133,000	5.043%	0	0.000%	6,133,000	3.047%
Sunrise Park Recreation and Park District	597,000	0.490%	0	0.000%	597,000	0.297%
Superior Court of California, County of Sacramento	<u>9,029,000</u>	<u>7.424%</u>	<u>0</u>	<u>0.000%</u>	<u>9,029,000</u>	<u>4.486%</u>
<b>Total for all Employers</b>	<b>\$121,624,000</b>	<b>100.000%</b>	<b>\$79,627,000</b>	<b>100.000%</b>	<b>\$201,251,000<sup>(2)</sup></b>	<b>100.000%</b>

<sup>(1)</sup> The unrounded percentages are used in the allocation of the NPL amongst the Miscellaneous employers.

<sup>(2)</sup> Excludes a contribution of \$2,000,000 made by Florin Fire District that has previously withdrawn from SCERS as an active employer and \$677,000 made by Mission Oaks Recreation and Park District due to a self-correction relating to prior years' contributions.

Note: Results may not total due to rounding.



**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 7 (continued)**

**Determination of Proportionate Share**

<b>Allocation of June 30, 2017 Net Pension Liability</b>						
<b>Employer</b>	<b>Miscellaneous</b>	<b>Miscellaneous Percentage</b>	<b>Safety</b>	<b>Safety Percentage</b>	<b>Total NPL</b>	<b>Total Percentage</b>
Carmichael Recreation and Park District	\$2,686,756	0.226%	\$0	0.000%	\$2,686,756	0.128%
County of Sacramento	1,025,666,741	86.316%	908,503,773	100.000%	1,934,170,514	92.245%
Elk Grove Cosumnes Cemetery District	547,121	0.046%	0	0.000%	547,121	0.026%
Fair Oaks Cemetery District	595,971	0.050%	0	0.000%	595,971	0.028%
Galt-Arno Cemetery District	127,010	0.011%	0	0.000%	127,010	0.006%
Mission Oaks Recreation and Park District	3,224,108	0.271%	0	0.000%	3,224,108	0.154%
Orangevale Recreation and Park District	1,455,733	0.123%	0	0.000%	1,455,733	0.070%
Sacramento Employment and Training Agency (S.E.T.A.)	59,919,549	5.043%	0	0.000%	59,919,549	2.858%
Sunrise Park Recreation and Park District	5,832,704	0.490%	0	0.000%	5,832,704	0.278%
Superior Court of California, County of Sacramento	<u>88,213,534</u>	<u>7.424%</u>	<u>0</u>	<u>0.000%</u>	<u>88,213,534</u>	<u>4.207%</u>
Total for all Employers	\$1,188,269,227	100.000%	\$908,503,773	100.000%	\$2,096,773,000 <sup>(3)</sup>	100.000%

<sup>(3)</sup> Excludes a liability of \$41,829,227 for Florin Fire District that has previously withdrawn from SCERS as an active employer. This is based on an estimate as of June 30, 2016 adjusted with interest at the assumed rate of investment return to June 30, 2017.

Note: Results may not total due to rounding.

## SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System

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### EXHIBIT 7 (continued)

#### Determination of Proportionate Share

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##### Notes:

Based on the July 1, 2016 through June 30, 2017 employer contributions as provided by SCERS.

The Net Pension Liability (NPL) for each membership class is the Total Pension Liability (TPL) minus the Plan Fiduciary Net Position (plan assets). The TPL for each membership class is obtained from internal valuation results. The Plan Fiduciary Net Position for each membership class was estimated by adjusting the valuation value of assets for each membership class by the ratio of the total SCERS Plan Fiduciary Net Position to total SCERS valuation value of assets.

The Safety membership class has only one active employer (the County of Sacramento) that was making contributions in 2016/2017, so all of the NPL for Safety is allocated to the County of Sacramento.

For Miscellaneous, the NPL is allocated based on the actual employer contributions within the Miscellaneous membership class.

- First calculate ratio of employer's contributions to the total contributions for the membership class.
- This ratio is multiplied by the NPL for the membership class to determine the employer's proportionate share of the NPL for the membership class.

If the employer is in both membership classes, the employer's total allocated NPL is the sum of its allocated NPL from each membership class. Proportionate share of total plan NPL is then the ratio of the employer's total allocated NPL to the total NPL of all employers.

For purposes of the above results, we have assumed that the reporting date for the employer under GASBS 68 is June 30, 2018. The reporting date and measurement date for the plan under GASBS 67 are assumed to be June 30, 2017. This means that assets and liabilities are determined as of June 30, 2017 and are not adjusted or "rolled forward" to June 30, 2018. Other results, such as the total deferred inflows and outflows would also be allocated based on the same proportionate shares determined above.

The following items are allocated based on the corresponding proportionate share within each membership class:

- 1) Net Pension Liability
- 2) Service Cost
- 3) Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability
- 4) Expensed portion of current-period changes of assumptions or other inputs
- 5) Member contributions
- 6) Projected earnings on plan investments
- 7) Expensed portion of current-period differences between actual and projected earnings on plan investments
- 8) Administrative expense
- 9) Other
- 10) Recognition of beginning of year deferred outflows of resources as pension expense
- 11) Recognition of beginning of year deferred inflows of resources as pension expense

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 8**

**Pension Expense – Total for all Employers**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Components of Pension Expense</b>		
1. Service Cost	\$193,490,288	\$186,437,969
2. Interest on the Total Pension Liability	706,016,047	675,919,948
3. Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	0	0
4. Expensed portion of current-period benefit changes	0	0
5. Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(9,797,529)	(10,522,418)
6. Expensed portion of current-period changes of assumptions or other inputs	174,515,254	0
7. Member contributions	(89,489,000)	(77,494,000)
8. Projected earnings on plan investments	(576,489,413)	(592,267,688)
9. Expensed portion of current-period differences between actual and projected earnings on plan investments	(94,485,117)	(132,933,338)
10. Administrative expense	6,906,000	6,362,000
11. Other <sup>(1)</sup>	(2,677,000)	(1,136,000)
12. Recognition of beginning of year deferred outflows of resources as pension expense	235,274,338	102,341,000
13. Recognition of beginning of year deferred inflows of resources as pension expense	(167,058,732)	(156,536,314)
14. Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	0	0
<b>Pension Expense excluding that Attributable to Employer-Paid Member Contributions</b>	<b><u>\$376,205,136</u></b>	<b><u>\$266,037,835</u></b>

<sup>(1)</sup> This represents the \$2,000,000 contribution made by a non-active employer (Florin Fire District) plus the \$677,000 made by Mission Oaks Recreation and Park District due to a self-correction relating to prior years' contributions during 2016/2017. For 2015/2016, this represents the \$1,136,000 contribution made by a non-active employer (Florin Fire District) during 2015/2016.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 8 (continued)**

**Pension Expense – Carmichael Recreation and Park District**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Components of Pension Expense</b>		
1. Service Cost	\$285,097	\$293,998
2. Interest on the Total Pension Liability	1,024,296	1,047,547
3. Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	(23,752)	24,950
4. Expensed portion of current-period benefit changes	0	0
5. Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(10,007)	(13,049)
6. Expensed portion of current-period changes of assumptions or other inputs	223,652	0
7. Member contributions	(128,171)	(113,618)
8. Projected earnings on plan investments	(853,218)	(939,260)
9. Expensed portion of current-period differences between actual and projected earnings on plan investments	(136,456)	210,955
10. Administrative expense	9,527	9,407
11. Other <sup>(1)</sup>	(1,594)	(43)
12. Recognition of beginning of year deferred outflows of resources as pension expense	327,495	138,990
13. Recognition of beginning of year deferred inflows of resources as pension expense	(256,342)	(260,865)
14. Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>80,265</u>	<u>55,315</u>
<b>Pension Expense excluding that Attributable to Employer-Paid Member Contributions</b>	<b><u>\$540,792</u></b>	<b><u>\$454,327</u></b>

<sup>(1)</sup> This represents the employer's proportional share of the \$28,000 out of a total \$2,000,000 contribution made by a non-active employer (Florin Fire District) and allocated to the Miscellaneous membership class plus the employer's proportional share of the \$677,000 made by Mission Oaks Recreation and Park District due to a self-correction relating to prior years' contributions during 2016/2017. For 2015/2016, this represents the employer's proportional share of the \$18,000 out of a total \$1,136,000 contribution made by a non-active employer (Florin Fire District) during 2015/2016.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 8 (continued)**

**Pension Expense – County of Sacramento**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Components of Pension Expense</b>		
1. Service Cost	\$176,236,402	\$170,365,703
2. Interest on the Total Pension Liability	644,025,630	618,652,917
3. Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	(729,297)	(1,269,223)
4. Expensed portion of current-period benefit changes	0	0
5. Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(9,191,930)	(9,809,053)
6. Expensed portion of current-period changes of assumptions or other inputs	160,979,858	0
7. Member contributions	(81,732,101)	(71,282,777)
8. Projected earnings on plan investments	(524,852,683)	(540,920,466)
9. Expensed portion of current-period differences between actual and projected earnings on plan investments	(86,226,769)	(121,400,919)
10. Administrative expense	6,329,441	5,847,723
11. Other <sup>(1)</sup>	(2,580,527)	(1,133,623)
12. Recognition of beginning of year deferred outflows of resources as pension expense	215,454,313	94,742,716
13. Recognition of beginning of year deferred inflows of resources as pension expense	(151,544,929)	(142,275,432)
14. Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	(1,234,078)	35,145
<b>Pension Expense excluding that Attributable to Employer-Paid Member Contributions</b>	<b><u>\$344,933,330</u></b>	<b><u>\$244,354,549</u></b>

<sup>(1)</sup> This represents the employer's proportional share of the \$28,000 out of a total \$2,000,000 contribution made by a non-active employer (Florin Fire District) and allocated to the Miscellaneous membership class plus the employer's proportional share of the \$1,972,000 out of a total \$2,000,000 contribution made by a non-active employer (Florin Fire District) and allocated to the Safety membership class plus the employer's proportional share of the \$677,000 made by Mission Oaks Recreation and Park District due to a self-correction relating to prior years' contributions during 2016/2017. For 2015/2016, this represents the employer's proportional share of the \$18,000 of a total \$1,136,000 contribution made by a non-active employer (Florin Fire District) and allocated to the Miscellaneous membership class plus the employer's proportional share of the \$1,118,000 out of a total \$1,136,000 contribution made by a non-active employer (Florin Fire District) and allocated to the Safety membership class.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 8 (continued)**

**Pension Expense – Elk Grove Cosumnes Cemetery District**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Components of Pension Expense</b>		
1. Service Cost	\$58,057	\$53,108
2. Interest on the Total Pension Liability	208,584	189,234
3. Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	3,675	14,509
4. Expensed portion of current-period benefit changes	0	0
5. Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(2,038)	(2,357)
6. Expensed portion of current-period changes of assumptions or other inputs	45,544	0
7. Member contributions	(26,100)	(20,524)
8. Projected earnings on plan investments	(173,746)	(169,673)
9. Expensed portion of current-period differences between actual and projected earnings on plan investments	(27,787)	38,108
10. Administrative expense	1,940	1,699
11. Other <sup>(1)</sup>	(325)	(8)
12. Recognition of beginning of year deferred outflows of resources as pension expense	66,690	25,108
13. Recognition of beginning of year deferred inflows of resources as pension expense	(52,200)	(47,124)
14. Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>(8,913)</u>	<u>(23,422)</u>
<b>Pension Expense excluding that Attributable to Employer-Paid Member Contributions</b>	<b><u>\$93,381</u></b>	<b><u>\$58,658</u></b>

<sup>(1)</sup> This represents the employer's proportional share of the \$28,000 out of a total \$2,000,000 contribution made by a non-active employer (Florin Fire District) and allocated to the Miscellaneous membership class plus the employer's proportional share of the \$677,000 made by Mission Oaks Recreation and Park District due to a self-correction relating to prior years' contributions during 2016/2017. For 2015/2016, this represents the employer's proportional share of the \$18,000 out of a total \$1,136,000 contribution made by a non-active employer (Florin Fire District) during 2015/2016.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 8 (continued)**

**Pension Expense – Fair Oaks Cemetery District**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Components of Pension Expense</b>		
1. Service Cost	\$63,242	\$43,624
2. Interest on the Total Pension Liability	227,207	155,443
3. Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	21,919	(3,275)
4. Expensed portion of current-period benefit changes	0	0
5. Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(2,220)	(1,936)
6. Expensed portion of current-period changes of assumptions or other inputs	49,610	0
7. Member contributions	(28,431)	(16,859)
8. Projected earnings on plan investments	(189,259)	(139,374)
9. Expensed portion of current-period differences between actual and projected earnings on plan investments	(30,269)	31,303
10. Administrative expense	2,113	1,396
11. Other <sup>(1)</sup>	(354)	(6)
12. Recognition of beginning of year deferred outflows of resources as pension expense	72,644	20,624
13. Recognition of beginning of year deferred inflows of resources as pension expense	(56,861)	(38,709)
14. Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>3,080</u>	<u>6,355</u>
<b>Pension Expense excluding that Attributable to Employer-Paid Member Contributions</b>	<b><u>\$132,421</u></b>	<b><u>\$58,586</u></b>

<sup>(1)</sup> This represents the employer's proportional share of the \$28,000 out of a total \$2,000,000 contribution made by a non-active employer (Florin Fire District) and allocated to the Miscellaneous membership class plus the employer's proportional share of the \$677,000 made by Mission Oaks Recreation and Park District due to a self-correction relating to prior years' contributions during 2016/2017. For 2015/2016, this represents the employer's proportional share of the \$18,000 out of a total \$1,136,000 contribution made by a non-active employer (Florin Fire District) during 2015/2016.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 8 (continued)**

**Pension Expense – Galt-Arno Cemetery District**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Components of Pension Expense</b>		
1. Service Cost	\$13,476	\$6,641
2. Interest on the Total Pension Liability	48,421	23,654
3. Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	8,019	912
4. Expensed portion of current-period benefit changes	0	0
5. Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(473)	(295)
6. Expensed portion of current-period changes of assumptions or other inputs	10,573	0
7. Member contributions	(6,059)	(2,566)
8. Projected earnings on plan investments	(40,334)	(21,209)
9. Expensed portion of current-period differences between actual and projected earnings on plan investments	(6,451)	4,763
10. Administrative expense	450	212
11. Other <sup>(1)</sup>	(75)	(1)
12. Recognition of beginning of year deferred outflows of resources as pension expense	15,482	3,138
13. Recognition of beginning of year deferred inflows of resources as pension expense	(12,118)	(5,890)
14. Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>880</u>	<u>(32)</u>
<b>Pension Expense excluding that Attributable to Employer-Paid Member Contributions</b>	<b><u>\$31,791</u></b>	<b><u>\$9,327</u></b>

<sup>(1)</sup> This represents the employer's proportional share of the \$28,000 out of a total \$2,000,000 contribution made by a non-active employer (Florin Fire District) and allocated to the Miscellaneous membership class plus the employer's proportional share of the \$677,000 made by Mission Oaks Recreation and Park District due to a self-correction relating to prior years' contributions during 2016/2017. For 2015/2016, this represents the employer's proportional share of the \$18,000 out of a total \$1,136,000 contribution made by a non-active employer (Florin Fire District) during 2015/2016.



**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 8 (continued)**

**Pension Expense – Mission Oaks Recreation and Park District**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Components of Pension Expense</b>		
1. Service Cost	\$342,113	\$209,592
2. Interest on the Total Pension Liability	1,229,156	746,800
3. Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	151,841	(9,310)
4. Expensed portion of current-period benefit changes	0	0
5. Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(12,008)	(9,303)
6. Expensed portion of current-period changes of assumptions or other inputs	268,382	0
7. Member contributions	(153,805)	(80,998)
8. Projected earnings on plan investments	(1,023,861)	(669,601)
9. Expensed portion of current-period differences between actual and projected earnings on plan investments	(163,748)	150,390
10. Administrative expense	11,432	6,707
11. Other <sup>(1)</sup>	(1,913)	(31)
12. Recognition of beginning of year deferred outflows of resources as pension expense	392,995	99,087
13. Recognition of beginning of year deferred inflows of resources as pension expense	(307,610)	(185,971)
14. Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>16,701</u>	<u>26,011</u>
<b>Pension Expense excluding that Attributable to Employer-Paid Member Contributions</b>	<b><u>\$749,675</u></b>	<b><u>\$283,373</u></b>

<sup>(1)</sup> This represents the employer's proportional share of the \$28,000 out of a total \$2,000,000 contribution made by a non-active employer (Florin Fire District) and allocated to the Miscellaneous membership class plus the employer's proportional share of the \$677,000 made by Mission Oaks Recreation and Park District due to a self-correction relating to prior years' contributions during 2016/2017. For 2015/2016, this represents the employer's proportional share of the \$18,000 out of a total \$1,136,000 contribution made by a non-active employer (Florin Fire District) during 2015/2016.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 8 (continued)**

**Pension Expense – Orangevale Recreation and Park District**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Components of Pension Expense</b>		
1. Service Cost	\$154,470	\$156,484
2. Interest on the Total Pension Liability	554,982	557,565
3. Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	(9,329)	6,053
4. Expensed portion of current-period benefit changes	0	0
5. Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(5,422)	(6,945)
6. Expensed portion of current-period changes of assumptions or other inputs	121,178	0
7. Member contributions	(69,445)	(60,474)
8. Projected earnings on plan investments	(462,289)	(499,929)
9. Expensed portion of current-period differences between actual and projected earnings on plan investments	(73,935)	112,282
10. Administrative expense	5,162	5,007
11. Other <sup>(1)</sup>	(864)	(23)
12. Recognition of beginning of year deferred outflows of resources as pension expense	177,443	73,979
13. Recognition of beginning of year deferred inflows of resources as pension expense	(138,891)	(138,847)
14. Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>(3,568)</u>	<u>(9,621)</u>
<b>Pension Expense excluding that Attributable to Employer-Paid Member Contributions</b>	<b><u>\$249,492</u></b>	<b><u>\$195,531</u></b>

<sup>(1)</sup> This represents the employer's proportional share of the \$28,000 out of a total \$2,000,000 contribution made by a non-active employer (Florin Fire District) and allocated to the Miscellaneous membership class plus the employer's proportional share of the \$677,000 made by Mission Oaks Recreation and Park District due to a self-correction relating to prior years' contributions during 2016/2017. For 2015/2016, this represents the employer's proportional share of the \$18,000 out of a total \$1,136,000 contribution made by a non-active employer (Florin Fire District) during 2015/2016.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 8 (continued)**

**Pension Expense – Sacramento Employment and Training Agency (S.E.T.A.)**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Components of Pension Expense</b>		
1. Service Cost	\$6,358,110	\$6,023,190
2. Interest on the Total Pension Liability	22,843,672	21,461,198
3. Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	142,180	395,077
4. Expensed portion of current-period benefit changes	0	0
5. Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(223,165)	(267,339)
6. Expensed portion of current-period changes of assumptions or other inputs	4,987,838	0
7. Member contributions	(2,858,443)	(2,327,697)
8. Projected earnings on plan investments	(19,028,304)	(19,242,710)
9. Expensed portion of current-period differences between actual and projected earnings on plan investments	(3,043,228)	4,321,850
10. Administrative expense	212,464	192,729
11. Other <sup>(1)</sup>	(35,550)	(891)
12. Recognition of beginning of year deferred outflows of resources as pension expense	7,303,744	2,847,507
13. Recognition of beginning of year deferred inflows of resources as pension expense	(5,716,887)	(5,344,360)
14. Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>(197,253)</u>	<u>(592,330)</u>
<b>Pension Expense excluding that Attributable to Employer-Paid Member Contributions</b>	<b><u>\$10,745,178</u></b>	<b><u>\$7,466,224</u></b>

<sup>(1)</sup> This represents the employer's proportional share of the \$28,000 out of a total \$2,000,000 contribution made by a non-active employer (Florin Fire District) and allocated to the Miscellaneous membership class plus the employer's proportional share of the \$677,000 made by Mission Oaks Recreation and Park District due to a self-correction relating to prior years' contributions during 2016/2017. For 2015/2016, this represents the employer's proportional share of the \$18,000 out of a total \$1,136,000 contribution made by a non-active employer (Florin Fire District) during 2015/2016.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 8 (continued)**

**Pension Expense – Sunrise Recreation and Park District**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Components of Pension Expense</b>		
1. Service Cost	\$618,914	\$397,373
2. Interest on the Total Pension Liability	2,223,655	1,415,878
3. Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	251,774	13,405
4. Expensed portion of current-period benefit changes	0	0
5. Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(21,723)	(17,637)
6. Expensed portion of current-period changes of assumptions or other inputs	485,527	0
7. Member contributions	(278,247)	(153,567)
8. Projected earnings on plan investments	(1,852,258)	(1,269,516)
9. Expensed portion of current-period differences between actual and projected earnings on plan investments	(296,235)	285,129
10. Administrative expense	20,682	12,715
11. Other <sup>(1)</sup>	(3,461)	(59)
12. Recognition of beginning of year deferred outflows of resources as pension expense	710,963	187,861
13. Recognition of beginning of year deferred inflows of resources as pension expense	(556,495)	(352,588)
14. Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>9,083</u>	<u>(4,322)</u>
<b>Pension Expense excluding that Attributable to Employer-Paid Member Contributions</b>	<b><u>\$1,312,179</u></b>	<b><u>\$514,672</u></b>

<sup>(1)</sup> This represents the employer's proportional share of the \$28,000 out of a total \$2,000,000 contribution made by a non-active employer (Florin Fire District) and allocated to the Miscellaneous membership class plus the employer's proportional share of the \$677,000 made by Mission Oaks Recreation and Park District due to a self-correction relating to prior years' contributions during 2016/2017. For 2015/2016, this represents the employer's proportional share of the \$18,000 out of a total \$1,136,000 contribution made by a non-active employer (Florin Fire District) during 2015/2016.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 8 (continued)**

**Pension Expense – Superior Court of California, County of Sacramento**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Components of Pension Expense</b>		
1. Service Cost	\$9,360,407	\$8,888,256
2. Interest on the Total Pension Liability	33,630,444	31,669,712
3. Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	182,970	826,902
4. Expensed portion of current-period benefit changes	0	0
5. Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(328,543)	(394,504)
6. Expensed portion of current-period changes of assumptions or other inputs	7,343,092	0
7. Member contributions	(4,208,198)	(3,434,920)
8. Projected earnings on plan investments	(28,013,461)	(28,395,950)
9. Expensed portion of current-period differences between actual and projected earnings on plan investments	(4,480,239)	6,377,639
10. Administrative expense	312,789	284,405
11. Other <sup>(1)</sup>	(52,337)	(1,315)
12. Recognition of beginning of year deferred outflows of resources as pension expense	10,752,569	4,201,990
13. Recognition of beginning of year deferred inflows of resources as pension expense	(8,416,399)	(7,886,528)
14. Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>1,333,803</u>	<u>506,901</u>
<b>Pension Expense excluding that Attributable to Employer-Paid Member Contributions</b>	<b><u>\$17,416,897</u></b>	<b><u>\$12,642,588</u></b>

<sup>(1)</sup> This represents the employer's proportional share of the \$28,000 out of a total \$2,000,000 contribution made by a non-active employer (Florin Fire District) and allocated to the Miscellaneous membership class plus the employer's proportional share of the \$677,000 made by Mission Oaks Recreation and Park District due to a self-correction relating to prior years' contributions during 2016/2017. For 2015/2016, this represents the employer's proportional share of the \$18,000 out of a total \$1,136,000 contribution made by a non-active employer (Florin Fire District) during 2015/2016.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 9**

**Deferred Outflows of Resources and Deferred Inflows of Resources – Total for all Employers**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Deferred Outflows of Resources</b>		
1. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$7,171,793	\$6,618,022
2. Changes of assumptions or other inputs	657,685,690	21,963,458
3. Net difference between projected and actual earnings on pension plan investments	571,116,720	790,208,411
4. Difference between expected and actual experience in the Total Pension Liability	<u>4,712,150</u>	<u>7,420,283</u>
5. Total Deferred Outflows of Resources	\$1,240,686,353	\$826,210,174
<b>Deferred Inflows of Resources</b>		
6. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$7,171,793	\$6,618,022
7. Changes of assumptions or other inputs	6,341,636	16,407,727
8. Net difference between projected and actual earnings on pension plan investments	496,982,842	238,084,744
9. Difference between expected and actual experience in the Total Pension Liability	<u>86,442,253</u>	<u>87,945,716</u>
10. Total Deferred Inflows of Resources	\$596,938,524	\$349,056,209

Net deferred outflows of resources and deferred (inflows) of resources related to pension will be recognized as follows:

<b>Reporting Date for Employer under GASBS 68 Year Ended June 30:</b>		
2018	N/A	\$68,215,606
2019	\$145,830,131	75,597,523
2020	277,795,353	207,562,745
2021	196,010,699	125,778,091
2022	24,111,646	0
2023	0	0
Thereafter	<u>0</u>	<u>0</u>
Total	\$643,747,829	\$477,153,965

<sup>(1)</sup> Calculated in accordance with Paragraphs 54 and 55 of GASBS 68.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 9 (continued)**

**Deferred Outflows of Resources and Deferred Inflows of Resources – Carmichael Recreation and Park District**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Deferred Outflows of Resources</b>		
1. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$131,986	\$212,251
2. Changes of assumptions or other inputs	831,984	0
3. Net difference between projected and actual earnings on pension plan investments	852,412	1,260,790
4. Difference between expected and actual experience in the Total Pension Liability	<u>0</u>	<u>0</u>
5. Total Deferred Outflows of Resources	\$1,816,382	\$1,473,041
<b>Deferred Inflows of Resources</b>		
6. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$88,356	\$0
7. Changes of assumptions or other inputs	14,339	39,642
8. Net difference between projected and actual earnings on pension plan investments	714,885	361,296
9. Difference between expected and actual experience in the Total Pension Liability	<u>113,119</u>	<u>150,042</u>
10. Total Deferred Inflows of Resources	\$930,699	\$550,980

Net deferred outflows of resources and deferred (inflows) of resources related to pension will be recognized as follows:

<b>Reporting Date for Employer under GASBS 68 Year Ended June 30:</b>		
2018	N/A	\$156,296
2019	\$218,851	171,963
2020	407,044	374,753
2021	259,521	219,049
2022	267	0
2023	0	0
Thereafter	<u>0</u>	<u>0</u>
Total	\$885,683	\$922,061

<sup>(1)</sup> Calculated in accordance with Paragraphs 54 and 55 of GASBS 68.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 9 (continued)**

**Deferred Outflows of Resources and Deferred Inflows of Resources – County of Sacramento**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Deferred Outflows of Resources</b>		
1. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$265,052	\$417,379
2. Changes of assumptions or other inputs	607,334,018	21,963,458 <sup>(2)</sup>
3. Net difference between projected and actual earnings on pension plan investments	519,528,713	721,283,877
4. Difference between expected and actual experience in the Total Pension Liability	<u>4,712,150<sup>(2)</sup></u>	<u>7,420,283<sup>(2)</sup></u>
5. Total Deferred Outflows of Resources	\$1,131,839,933	\$751,084,997
<b>Deferred Inflows of Resources</b>		
6. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$6,188,321	\$4,861,739
7. Changes of assumptions or other inputs	5,473,847	14,240,585
8. Net difference between projected and actual earnings on pension plan investments	453,717,992	218,333,505
9. Difference between expected and actual experience in the Total Pension Liability	<u>79,596,303</u>	<u>79,743,242</u>
10. Total Deferred Inflows of Resources	\$544,976,463	\$317,179,071
Net deferred outflows of resources and deferred (inflows) of resources related to pension will be recognized as follows:		
	<b>Reporting Date for Employer under GASBS 68 Year Ended June 30:</b>	
	2018	N/A
	2019	\$133,457,414
	2020	252,569,116
	2021	178,301,497
	2022	22,535,443
	2023	0
	Thereafter	<u>0</u>
	Total	\$586,863,470
		\$62,825,072
		68,826,620
		188,386,542
		113,867,692
		0
		0
		<u>0</u>
		\$433,905,926

<sup>(1)</sup> Calculated in accordance with Paragraphs 54 and 55 of GASBS 68.

<sup>(2)</sup> Applies only to Safety members at the County.



**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 9 (continued)**

**Deferred Outflows of Resources and Deferred Inflows of Resources – Elk Grove Cosumnes Cemetery District**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Deferred Outflows of Resources</b>		
1. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$52,555	\$53,391
2. Changes of assumptions or other inputs	169,422	0
3. Net difference between projected and actual earnings on pension plan investments	173,582	227,756
4. Difference between expected and actual experience in the Total Pension Liability	<u>0</u>	<u>0</u>
5. Total Deferred Outflows of Resources	\$395,559	\$281,147
<b>Deferred Inflows of Resources</b>		
6. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$27,917	\$51,339
7. Changes of assumptions or other inputs	2,920	7,161
8. Net difference between projected and actual earnings on pension plan investments	145,577	65,266
9. Difference between expected and actual experience in the Total Pension Liability	<u>23,035</u>	<u>27,104</u>
10. Total Deferred Inflows of Resources	\$199,449	\$150,870

Net deferred outflows of resources and deferred (inflows) of resources related to pension will be recognized as follows:

<b>Reporting Date for Employer under GASBS 68 Year Ended June 30:</b>		
2018	N/A	\$4,822
2019	\$34,213	13,806
2020	87,944	65,279
2021	67,769	46,370
2022	6,184	0
2023	0	0
Thereafter	<u>0</u>	<u>0</u>
Total	\$196,110	\$130,277

<sup>(1)</sup> Calculated in accordance with Paragraphs 54 and 55 of GASBS 68.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 9 (continued)**

**Deferred Outflows of Resources and Deferred Inflows of Resources – Fair Oaks Cemetery District**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Deferred Outflows of Resources</b>		
1. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$88,055	\$12,873
2. Changes of assumptions or other inputs	184,549	0
3. Net difference between projected and actual earnings on pension plan investments	189,080	187,085
4. Difference between expected and actual experience in the Total Pension Liability	<u>0</u>	<u>0</u>
5. Total Deferred Outflows of Resources	\$461,684	\$199,958
<b>Deferred Inflows of Resources</b>		
6. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$8,779	\$12,054
7. Changes of assumptions or other inputs	3,181	5,882
8. Net difference between projected and actual earnings on pension plan investments	158,574	53,612
9. Difference between expected and actual experience in the Total Pension Liability	<u>25,092</u>	<u>22,264</u>
10. Total Deferred Inflows of Resources	\$195,626	\$93,812

Net deferred outflows of resources and deferred (inflows) of resources related to pension will be recognized as follows:

<b>Reporting Date for Employer under GASBS 68 Year Ended June 30:</b>		
2018	N/A	\$14,362
2019	\$61,797	16,714
2020	105,867	47,313
2021	78,761	27,757
2022	19,633	0
2023	0	0
Thereafter	<u>0</u>	<u>0</u>
Total	\$266,058	\$106,146

<sup>(1)</sup> Calculated in accordance with Paragraphs 54 and 55 of GASBS 68.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 9 (continued)**

**Deferred Outflows of Resources and Deferred Inflows of Resources – Galt-Arno Cemetery District**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Deferred Outflows of Resources</b>		
1. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$33,547	\$5,356
2. Changes of assumptions or other inputs	39,330	0
3. Net difference between projected and actual earnings on pension plan investments	40,296	28,469
4. Difference between expected and actual experience in the Total Pension Liability	<u>0</u>	<u>0</u>
5. Total Deferred Outflows of Resources	\$113,173	\$33,825
<b>Deferred Inflows of Resources</b>		
6. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$478	\$1,239
7. Changes of assumptions or other inputs	678	895
8. Net difference between projected and actual earnings on pension plan investments	33,794	8,158
9. Difference between expected and actual experience in the Total Pension Liability	<u>5,347</u>	<u>3,388</u>
10. Total Deferred Inflows of Resources	\$40,297	\$13,680

Net deferred outflows of resources and deferred (inflows) of resources related to pension will be recognized as follows:

<b>Reporting Date for Employer under GASBS 68 Year Ended June 30:</b>		
2018	N/A	\$2,597
2019	\$17,347	3,468
2020	27,703	8,896
2021	21,229	5,184
2022	6,597	0
2023	0	0
Thereafter	<u>0</u>	<u>0</u>
Total	\$72,876	\$20,145

<sup>(1)</sup> Calculated in accordance with Paragraphs 54 and 55 of GASBS 68.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 9 (continued)**

**Deferred Outflows of Resources and Deferred Inflows of Resources – Mission Oaks Recreation and Park District**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Deferred Outflows of Resources</b>		
1. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$596,466	\$57,629
2. Changes of assumptions or other inputs	998,381	0
3. Net difference between projected and actual earnings on pension plan investments	1,022,895	898,821
4. Difference between expected and actual experience in the Total Pension Liability	<u>0</u>	<u>0</u>
5. Total Deferred Outflows of Resources	\$2,617,742	\$956,450
<b>Deferred Inflows of Resources</b>		
6. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$24,951	\$34,261
7. Changes of assumptions or other inputs	17,207	28,261
8. Net difference between projected and actual earnings on pension plan investments	857,862	257,569
9. Difference between expected and actual experience in the Total Pension Liability	<u>135,743</u>	<u>106,966</u>
10. Total Deferred Inflows of Resources	\$1,035,763	\$427,057

Net deferred outflows of resources and deferred (inflows) of resources related to pension will be recognized as follows:

<b>Reporting Date for Employer under GASBS 68 Year Ended June 30:</b>		
2018	N/A	\$70,904
2019	\$371,253	84,923
2020	615,483	235,833
2021	465,077	137,733
2022	130,166	0
2023	0	0
Thereafter	<u>0</u>	<u>0</u>
Total	\$1,581,979	\$529,393

<sup>(1)</sup> Calculated in accordance with Paragraphs 54 and 55 of GASBS 68.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 9 (continued)**

**Deferred Outflows of Resources and Deferred Inflows of Resources – Orangevale Recreation and Park District**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Deferred Outflows of Resources</b>		
1. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$16,222	\$22,275
2. Changes of assumptions or other inputs	450,784	0
3. Net difference between projected and actual earnings on pension plan investments	461,853	671,065
4. Difference between expected and actual experience in the Total Pension Liability	<u>0</u>	<u>0</u>
5. Total Deferred Outflows of Resources	\$928,859	\$693,340
<b>Deferred Inflows of Resources</b>		
6. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$43,776	\$18,691
7. Changes of assumptions or other inputs	7,769	21,100
8. Net difference between projected and actual earnings on pension plan investments	387,338	192,303
9. Difference between expected and actual experience in the Total Pension Liability	<u>61,290</u>	<u>79,861</u>
10. Total Deferred Inflows of Resources	\$500,173	\$311,955

Net deferred outflows of resources and deferred (inflows) of resources related to pension will be recognized as follows:

<b>Reporting Date for Employer under GASBS 68 Year Ended June 30:</b>		
2018	N/A	\$36,900
2019	\$83,238	53,317
2020	203,680	179,493
2021	139,076	111,675
2022	2,692	0
2023	0	0
Thereafter	<u>0</u>	<u>0</u>
Total	\$428,686	\$381,385

<sup>(1)</sup> Calculated in accordance with Paragraphs 54 and 55 of GASBS 68.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 9 (continued)**

**Deferred Outflows of Resources and Deferred Inflows of Resources – Sacramento Employment and Training Agency (S.E.T.A.)**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Deferred Outflows of Resources</b>		
1. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$1,587,716	\$1,453,882
2. Changes of assumptions or other inputs	18,554,756	0
3. Net difference between projected and actual earnings on pension plan investments	19,010,350	25,829,924
4. Difference between expected and actual experience in the Total Pension Liability	<u>0</u>	<u>0</u>
5. Total Deferred Outflows of Resources	\$39,152,822	\$27,283,806
<b>Deferred Inflows of Resources</b>		
6. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$398,860	\$991,190
7. Changes of assumptions or other inputs	319,783	812,151
8. Net difference between projected and actual earnings on pension plan investments	15,943,239	7,401,907
9. Difference between expected and actual experience in the Total Pension Liability	<u>2,522,755</u>	<u>3,073,932</u>
10. Total Deferred Inflows of Resources	\$19,184,637	\$12,279,180

Net deferred outflows of resources and deferred (inflows) of resources related to pension will be recognized as follows:

<b>Reporting Date for Employer under GASBS 68 Year Ended June 30:</b>		
2018	N/A	\$1,360,406
2019	\$4,007,381	2,104,557
2020	9,121,158	7,130,951
2021	6,349,939	4,408,712
2022	489,707	0
2023	0	0
Thereafter	<u>0</u>	<u>0</u>
Total	\$19,968,185	\$15,004,626

<sup>(1)</sup> Calculated in accordance with Paragraphs 54 and 55 of GASBS 68.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 9 (continued)**

**Deferred Outflows of Resources and Deferred Inflows of Resources – Sunrise Recreation and Park District**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Deferred Outflows of Resources</b>		
1. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$1,054,498	\$178,419
2. Changes of assumptions or other inputs	1,806,162	0
3. Net difference between projected and actual earnings on pension plan investments	1,850,510	1,704,100
4. Difference between expected and actual experience in the Total Pension Liability	<u>0</u>	<u>0</u>
5. Total Deferred Outflows of Resources	\$4,711,170	\$1,882,519
<b>Deferred Inflows of Resources</b>		
6. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$32,406	\$83,842
7. Changes of assumptions or other inputs	31,128	53,581
8. Net difference between projected and actual earnings on pension plan investments	1,551,951	488,332
9. Difference between expected and actual experience in the Total Pension Liability	<u>245,571</u>	<u>202,799</u>
10. Total Deferred Inflows of Resources	\$1,861,056	\$828,554

Net deferred outflows of resources and deferred (inflows) of resources related to pension will be recognized as follows:

<b>Reporting Date for Employer under GASBS 68 Year Ended June 30:</b>		
2018	N/A	\$111,848
2019	\$654,835	166,078
2020	1,137,285	493,789
2021	839,014	282,250
2022	218,980	0
2023	0	0
Thereafter	<u>0</u>	<u>0</u>
Total	\$2,850,114	\$1,053,965

<sup>(1)</sup> Calculated in accordance with Paragraphs 54 and 55 of GASBS 68.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 9 (continued)**

**Deferred Outflows of Resources and Deferred Inflows of Resources – Superior Court of California, County of Sacramento**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Deferred Outflows of Resources</b>		
1. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$3,345,696	\$4,204,567
2. Changes of assumptions or other inputs	27,316,304	0
3. Net difference between projected and actual earnings on pension plan investments	27,987,029	38,116,524
4. Difference between expected and actual experience in the Total Pension Liability	<u>0</u>	<u>0</u>
5. Total Deferred Outflows of Resources	\$58,649,029	\$42,321,091
<b>Deferred Inflows of Resources</b>		
6. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$357,949	\$563,667
7. Changes of assumptions or other inputs	470,784	1,198,469
8. Net difference between projected and actual earnings on pension plan investments	23,471,630	10,922,796
9. Difference between expected and actual experience in the Total Pension Liability	<u>3,713,998</u>	<u>4,536,118</u>
10. Total Deferred Inflows of Resources	\$28,014,361	\$17,221,050

Net deferred outflows of resources and deferred (inflows) of resources related to pension will be recognized as follows:

<b>Reporting Date for Employer under GASBS 68 Year Ended June 30:</b>		
2018	N/A	\$3,632,399
2019	\$6,923,802	4,156,077
2020	13,520,073	10,639,896
2021	9,488,816	6,671,669
2022	701,977	0
2023	0	0
Thereafter	<u>0</u>	<u>0</u>
Total	\$30,634,668	\$25,100,041

<sup>(1)</sup> Calculated in accordance with Paragraphs 54 and 55 of GASBS 68.



## SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System

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### EXHIBIT 9 (continued)

#### Deferred Outflows of Resources and Deferred Inflows of Resources

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There are changes in each employer's proportionate share of the total Net Pension Liability (NPL) during the measurement period ended June 30, 2017. The net effect of the change on the employer's proportionate share of the collective NPL and collective deferred outflows of resources and deferred inflows of resources is recognized over the average of the expected remaining service lives of all employees that are provided with pensions through SCERS which is 4.72 years determined as of June 30, 2016 (the beginning of the measurement period ending June 30, 2017).

In addition, the difference between the actual employer contributions and the proportionate share of the employer contributions during the measurement period ended June 30, 2017 is recognized over the same period. This is zero because the proportionate share was determined using the actual employer contributions.

The average of the expected service lives of all employees is determined by:

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

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 10**

**Schedule of Proportionate Share of the Net Pension Liability – Total for all Employers**

<b>Reporting Date for Employer under GASBS 68 as of June 30</b>	<b>Proportion of the Net Pension Liability</b>	<b>Proportionate share of Net Pension Liability</b>	<b>Covered-employee payroll<sup>(1)</sup></b>	<b>Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll</b>	<b>Plan Fiduciary Net Position as a percentage of the Total Pension Liability</b>
2014	100.000%	\$1,422,985,000	\$858,551,000	165.74%	82.67%
2015	100.000%	770,927,000	858,343,000	89.82%	91.02%
2016	100.000%	1,149,865,000	873,328,000	131.66%	87.26%
2017	100.000%	1,755,225,000	912,421,000	192.37%	81.40%
2018	100.000%	2,096,773,000	958,934,000	218.66%	80.37%

<sup>(1)</sup> Covered employee payroll represents compensation earnable and pensionable compensation. Only compensation earnable and pensionable compensation that would possibly go into the determination of the retirement benefits are included.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 10 (continued)**

**Schedule of Proportionate Share of the Net Pension Liability – Carmichael Recreation and Park District**

<b>Reporting Date for Employer under GASBS 68 as of June 30</b>	<b>Proportion of the Net Pension Liability</b>	<b>Proportionate share of Net Pension Liability</b>	<b>Covered-employee payroll<sup>(1)</sup></b>	<b>Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll</b>	<b>Plan Fiduciary Net Position as a percentage of the Total Pension Liability</b>
2014	0.117%	\$1,661,884	\$934,000	177.93%	83.94%
2015	0.102%	787,256	1,040,000	75.70%	93.16%
2016	0.119%	1,373,257	1,096,000	125.30%	89.46%
2017	0.140%	2,457,342	1,138,000	215.94%	83.21%
2018	0.128%	2,686,756	1,039,000	258.59%	82.52%

<sup>(1)</sup> Covered employee payroll represents compensation earnable and pensionable compensation. Only compensation earnable and pensionable compensation that would possibly go into the determination of the retirement benefits are included.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 10 (continued)**

**Schedule of Proportionate Share of the Net Pension Liability – County of Sacramento**

<b>Reporting Date for Employer under GASBS 68 as of June 30</b>	<b>Proportion of the Net Pension Liability</b>	<b>Proportionate share of Net Pension Liability</b>	<b>Covered-employee payroll<sup>(1)</sup></b>	<b>Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll</b>	<b>Plan Fiduciary Net Position as a percentage of the Total Pension Liability</b>
2014	92.514%	\$1,316,472,721	\$784,729,000	167.76%	82.55%
2015	93.899%	723,888,442	786,364,000	92.06%	90.83%
2016	93.437%	1,074,403,473	803,586,000	133.70%	87.08%
2017	92.346%	1,620,887,640	838,533,000	193.30%	81.23%
2018	92.245%	1,934,170,514	883,259,000	218.98%	80.16%

<sup>(1)</sup> Covered employee payroll represents compensation earnable and pensionable compensation. Only compensation earnable and pensionable compensation that would possibly go into the determination of the retirement benefits are included.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 10 (continued)**

**Schedule of Proportionate Share of the Net Pension Liability – Elk Grove Cosumnes Cemetery District**

<b>Reporting Date for Employer under GASBS 68 as of June 30</b>	<b>Proportion of the Net Pension Liability</b>	<b>Proportionate share of Net Pension Liability</b>	<b>Covered-employee payroll<sup>(1)</sup></b>	<b>Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll</b>	<b>Plan Fiduciary Net Position as a percentage of the Total Pension Liability</b>
2014	0.029%	\$406,851	\$229,000	177.66%	83.94%
2015	0.020%	155,234	209,000	74.27%	93.16%
2016	0.018%	207,045	162,000	127.81%	89.46%
2017	0.025%	443,907	209,000	212.40%	83.21%
2018	0.026%	547,121	227,000	241.02%	82.52%

<sup>(1)</sup> Covered employee payroll represents compensation earnable and pensionable compensation. Only compensation earnable and pensionable compensation that would possibly go into the determination of the retirement benefits are included.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 10 (continued)**

**Schedule of Proportionate Share of the Net Pension Liability – Fair Oaks Cemetery District**

<b>Reporting Date for Employer under GASBS 68 as of June 30</b>	<b>Proportion of the Net Pension Liability</b>	<b>Proportionate share of Net Pension Liability</b>	<b>Covered-employee payroll<sup>(1)</sup></b>	<b>Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll</b>	<b>Plan Fiduciary Net Position as a percentage of the Total Pension Liability</b>
2014	0.021%	\$296,519	\$194,000	152.84%	83.94%
2015	0.018%	138,601	199,000	69.65%	93.16%
2016	0.020%	232,397	206,000	112.81%	89.46%
2017	0.021%	364,638	211,000	172.81%	83.21%
2018	0.028%	595,971	261,000	228.34%	82.52%

<sup>(1)</sup> Covered employee payroll represents compensation earnable and pensionable compensation. Only compensation earnable and pensionable compensation that would possibly go into the determination of the retirement benefits are included.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 10 (continued)**

**Schedule of Proportionate Share of the Net Pension Liability – Galt-Arno Cemetery District**

<b>Reporting Date for Employer under GASBS 68 as of June 30</b>	<b>Proportion of the Net Pension Liability</b>	<b>Proportionate share of Net Pension Liability</b>	<b>Covered-employee payroll<sup>(1)</sup></b>	<b>Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll</b>	<b>Plan Fiduciary Net Position as a percentage of the Total Pension Liability</b>
2014	0.003%	\$41,375	\$26,000	159.13%	83.94%
2015	0.002%	16,632	26,000	63.97%	93.16%
2016	0.003%	29,578	26,000	113.76%	89.46%
2017	0.003%	55,488	28,000	198.17%	83.21%
2018	0.006%	127,010	63,000	201.60%	82.52%

<sup>(1)</sup> Covered employee payroll represents compensation earnable and pensionable compensation. Only compensation earnable and pensionable compensation that would possibly go into the determination of the retirement benefits are included.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 10 (continued)**

**Schedule of Proportionate Share of the Net Pension Liability – Mission Oaks Recreation and Park District**

<b>Reporting Date for Employer under GASBS 68 as of June 30</b>	<b>Proportion of the Net Pension Liability</b>	<b>Proportionate share of Net Pension Liability</b>	<b>Covered-employee payroll<sup>(1)</sup></b>	<b>Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll</b>	<b>Plan Fiduciary Net Position as a percentage of the Total Pension Liability</b>
2014	0.099%	\$1,406,740	\$790,000	178.07%	83.94%
2015	0.083%	643,111	826,000	77.86%	93.16%
2016	0.095%	1,090,155	851,000	128.10%	89.46%
2017	0.100%	1,751,847	782,000	224.02%	83.21%
2018	0.154%	3,224,108	1,116,000	288.90%	82.52%

<sup>(1)</sup> Covered employee payroll represents compensation earnable and pensionable compensation. Only compensation earnable and pensionable compensation that would possibly go into the determination of the retirement benefits are included.



**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 10 (continued)**

**Schedule of Proportionate Share of the Net Pension Liability – Orangevale Recreation and Park District**

<b>Reporting Date for Employer under GASBS 68 as of June 30</b>	<b>Proportion of the Net Pension Liability</b>	<b>Proportionate share of Net Pension Liability</b>	<b>Covered-employee payroll<sup>(1)</sup></b>	<b>Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll</b>	<b>Plan Fiduciary Net Position as a percentage of the Total Pension Liability</b>
2014	0.079%	\$1,117,117	\$575,000	194.28%	83.94%
2015	0.062%	476,789	611,000	78.03%	93.16%
2016	0.066%	760,573	592,000	128.48%	89.46%
2017	0.075%	1,307,940	593,000	220.56%	83.21%
2018	0.070%	1,455,733	590,000	246.73%	82.52%

<sup>(1)</sup> Covered employee payroll represents compensation earnable and pensionable compensation. Only compensation earnable and pensionable compensation that would possibly go into the determination of the retirement benefits are included.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 10 (continued)**

**Schedule of Proportionate Share of the Net Pension Liability – Sacramento Employment and Training Agency (S.E.T.A.)**

<b>Reporting Date for Employer under GASBS 68 as of June 30</b>	<b>Proportion of the Net Pension Liability</b>	<b>Proportionate share of Net Pension Liability</b>	<b>Covered-employee payroll<sup>(1)</sup></b>	<b>Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll</b>	<b>Plan Fiduciary Net Position as a percentage of the Total Pension Liability</b>
2014	3.025%	\$43,043,483	\$25,873,000	166.36%	83.94%
2015	2.303%	17,754,845	23,035,000	77.08%	93.16%
2016	2.488%	28,610,225	22,744,000	125.79%	89.46%
2017	2.868%	50,343,812	23,077,000	218.16%	83.21%
2018	2.858%	59,919,549	22,917,000	261.46%	82.52%

<sup>(1)</sup> Covered employee payroll represents compensation earnable and pensionable compensation. Only compensation earnable and pensionable compensation that would possibly go into the determination of the retirement benefits are included.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 10 (continued)**

**Schedule of Proportionate Share of the Net Pension Liability – Sunrise Recreation and Park District**

<b>Reporting Date for Employer under GASBS 68 as of June 30</b>	<b>Proportion of the Net Pension Liability</b>	<b>Proportionate share of Net Pension Liability</b>	<b>Covered-employee payroll<sup>(1)</sup></b>	<b>Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll</b>	<b>Plan Fiduciary Net Position as a percentage of the Total Pension Liability</b>
2014	0.191%	\$2,723,835	\$1,525,000	178.61%	83.94%
2015	0.142%	1,092,179	1,406,000	77.68%	93.16%
2016	0.169%	1,939,461	1,521,000	127.51%	89.46%
2017	0.189%	3,321,376	1,495,000	222.17%	83.21%
2018	0.278%	5,832,704	2,278,000	256.04%	82.52%

<sup>(1)</sup> Covered employee payroll represents compensation earnable and pensionable compensation. Only compensation earnable and pensionable compensation that would possibly go into the determination of the retirement benefits are included.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 10 (continued)**

**Schedule of Proportionate Share of the Net Pension Liability – Superior Court of California, County of Sacramento**

<b>Reporting Date for Employer under GASBS 68 as of June 30</b>	<b>Proportion of the Net Pension Liability</b>	<b>Proportionate share of Net Pension Liability</b>	<b>Covered-employee payroll<sup>(1)</sup></b>	<b>Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll</b>	<b>Plan Fiduciary Net Position as a percentage of the Total Pension Liability</b>
2014	3.922%	\$55,814,475	\$43,676,000	127.79%	83.94%
2015	3.369%	25,973,911	44,627,000	58.20%	93.16%
2016	3.585%	41,218,836	42,543,000	96.89%	89.46%
2017	4.233%	74,291,010	46,355,000	160.27%	83.21%
2018	4.207%	88,213,534	47,184,000	186.96%	82.52%

<sup>(1)</sup> Covered employee payroll represents compensation earnable and pensionable compensation. Only compensation earnable and pensionable compensation that would possibly go into the determination of the retirement benefits are included.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 11**

**Schedule of Reconciliation of Net Pension Liability – Total for all Employers**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Reconciliation of Net Pension Liability</b>		
1. Beginning Net Pension Liability	\$1,755,225,000	\$1,149,865,000
2. Pension Expense excluding that Attributable to Employer-Paid Member Contributions	376,205,136	266,037,835
3. Employer Contributions <sup>(1)</sup>	(201,251,000)	(207,884,000)
4. New Net Deferred Inflows/Outflows	234,809,470	493,010,851
5. Change in Allocation of Prior Deferred Inflows/Outflows	0	0
6. New Net Deferred Flows Due to Change in Proportion	0	0
7. Recognition of Prior Deferred Inflows/Outflows	(68,215,606)	54,195,314
8. Recognition of Prior Deferred Flows Due to Change in Proportion	<u>0</u>	<u>0</u>
9. Ending Net Pension Liability	\$2,096,773,000	\$1,755,225,000

<sup>(1)</sup> This represents the \$2,000,000 contribution made by a non-active employer (Florin Fire District) plus the \$677,000 made by Mission Oaks Recreation and Park District due to a self-correction relating to prior years' contributions during 2016/2017. For 2015/2016, this represents the \$1,136,000 contribution made by a non-active employer (Florin Fire District) during 2015/2016.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 11 (continued)**

**Schedule of Reconciliation of Net Pension Liability – Carmichael Recreation and Park District**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Reconciliation of Net Pension Liability</b>		
1. Beginning Net Pension Liability	\$2,457,342	\$1,373,257
2. Pension Expense excluding that Attributable to Employer-Paid Member Contributions	540,792	454,327
3. Employer Contributions	(275,000)	(310,000)
4. New Net Deferred Inflows/Outflows	248,931	795,799
5. Change in Allocation of Prior Deferred Inflows/Outflows	(45,535)	(14,418)
6. New Net Deferred Flows Due to Change in Proportion	(88,356)	91,817
7. Recognition of Prior Deferred Inflows/Outflows	(71,153)	121,875
8. Recognition of Prior Deferred Flows Due to Change in Proportion	<u>(80,265)</u>	<u>(55,315)</u>
9. Ending Net Pension Liability	\$2,686,756	\$2,457,342

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 11 (continued)**

**Schedule of Reconciliation of Net Pension Liability – County of Sacramento**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Reconciliation of Net Pension Liability</b>		
1. Beginning Net Pension Liability	\$1,620,887,640	\$1,074,403,473
2. Pension Expense excluding that Attributable to Employer-Paid Member Contributions	344,933,330	244,354,549
3. Employer Contributions	(184,608,000)	(190,937,000)
4. New Net Deferred Inflows/Outflows	219,744,018	449,506,356
5. Change in Allocation of Prior Deferred Inflows/Outflows	(1,398,181)	733,426
6. New Net Deferred Flows Due to Change in Proportion	(2,712,987)	(4,670,735)
7. Recognition of Prior Deferred Inflows/Outflows	(63,909,384)	47,532,716
8. Recognition of Prior Deferred Flows Due to Change in Proportion	<u>1,234,078</u>	<u>(35,145)</u>
9. Ending Net Pension Liability	\$1,934,170,514	\$1,620,887,640

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

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**EXHIBIT 11 (continued)**

**Schedule of Reconciliation of Net Pension Liability – Elk Grove Cosumnes Cemetery District**

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<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Reconciliation of Net Pension Liability</b>		
1. Beginning Net Pension Liability	\$443,907	\$207,045
2. Pension Expense excluding that Attributable to Employer-Paid Member Contributions	93,381	58,658
3. Employer Contributions	(56,000)	(56,000)
4. New Net Deferred Inflows/Outflows	50,690	143,759
5. Change in Allocation of Prior Deferred Inflows/Outflows	7,047	(8,384)
6. New Net Deferred Flows Due to Change in Proportion	13,673	53,391
7. Recognition of Prior Deferred Inflows/Outflows	(14,490)	22,016
8. Recognition of Prior Deferred Flows Due to Change in Proportion	<u>8,913</u>	<u>23,422</u>
9. Ending Net Pension Liability	\$547,121	\$443,907



**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 11 (continued)**

**Schedule of Reconciliation of Net Pension Liability – Fair Oaks Cemetery District**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Reconciliation of Net Pension Liability</b>		
1. Beginning Net Pension Liability	\$364,638	\$232,397
2. Pension Expense excluding that Attributable to Employer-Paid Member Contributions	132,421	58,586
3. Employer Contributions	(61,000)	(46,000)
4. New Net Deferred Inflows/Outflows	55,217	118,086
5. Change in Allocation of Prior Deferred Inflows/Outflows	42,021	1,893
6. New Net Deferred Flows Due to Change in Proportion	81,537	(12,054)
7. Recognition of Prior Deferred Inflows/Outflows	(15,783)	18,085
8. Recognition of Prior Deferred Flows Due to Change in Proportion	<u>(3,080)</u>	<u>(6,355)</u>
9. Ending Net Pension Liability	\$595,971	\$364,638

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

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**EXHIBIT 11 (continued)**

**Schedule of Reconciliation of Net Pension Liability – Galt-Arno Cemetery District**

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<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Reconciliation of Net Pension Liability</b>		
1. Beginning Net Pension Liability	\$55,488	\$29,578
2. Pension Expense excluding that Attributable to Employer-Paid Member Contributions	31,791	9,327
3. Employer Contributions	(13,000)	(7,000)
4. New Net Deferred Inflows/Outflows	11,769	17,969
5. Change in Allocation of Prior Deferred Inflows/Outflows	15,374	(527)
6. New Net Deferred Flows Due to Change in Proportion	29,832	3,357
7. Recognition of Prior Deferred Inflows/Outflows	(3,364)	2,752
8. Recognition of Prior Deferred Flows Due to Change in Proportion	<u>(880)</u>	<u>32</u>
9. Ending Net Pension Liability	\$127,010	\$55,488

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 11 (continued)**

**Schedule of Reconciliation of Net Pension Liability – Mission Oaks Recreation and Park District**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Reconciliation of Net Pension Liability</b>		
1. Beginning Net Pension Liability	\$1,751,847	\$1,090,155
2. Pension Expense excluding that Attributable to Employer-Paid Member Contributions	749,675	283,373
3. Employer Contributions	(330,000) <sup>(1)</sup>	(221,000)
4. New Net Deferred Inflows/Outflows	298,720	567,327
5. Change in Allocation of Prior Deferred Inflows/Outflows	291,104	5,380
6. New Net Deferred Flows Due to Change in Proportion	564,848	(34,261)
7. Recognition of Prior Deferred Inflows/Outflows	(85,385)	86,884
8. Recognition of Prior Deferred Flows Due to Change in Proportion	<u>(16,701)</u>	<u>(26,011)</u>
9. Ending Net Pension Liability	\$3,224,108	\$1,751,847

<sup>(1)</sup> Excludes a contribution of \$677,000 made by Mission Oaks Recreation and Park District due to a self-correction relating to prior years' contributions.

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 11 (continued)**

**Schedule of Reconciliation of Net Pension Liability – Orangevale Recreation and Park District**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Reconciliation of Net Pension Liability</b>		
1. Beginning Net Pension Liability	\$1,307,940	\$760,573
2. Pension Expense excluding that Attributable to Employer-Paid Member Contributions	249,492	195,531
3. Employer Contributions	(149,000)	(165,000)
4. New Net Deferred Inflows/Outflows	134,877	423,570
5. Change in Allocation of Prior Deferred Inflows/Outflows	(17,886)	(3,498)
6. New Net Deferred Flows Due to Change in Proportion	(34,706)	22,275
7. Recognition of Prior Deferred Inflows/Outflows	(38,552)	64,868
8. Recognition of Prior Deferred Flows Due to Change in Proportion	<u>3,568</u>	<u>9,621</u>
9. Ending Net Pension Liability	\$1,455,733	\$1,307,940

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 11 (continued)**

**Schedule of Reconciliation of Net Pension Liability – Sacramento Employment and Training Agency (S.E.T.A.)**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Reconciliation of Net Pension Liability</b>		
1. Beginning Net Pension Liability	\$50,343,812	\$28,610,225
2. Pension Expense excluding that Attributable to Employer-Paid Member Contributions	10,745,178	7,466,224
3. Employer Contributions	(6,133,000)	(6,351,000)
4. New Net Deferred Inflows/Outflows	5,551,670	16,303,595
5. Change in Allocation of Prior Deferred Inflows/Outflows	272,582	(228,297)
6. New Net Deferred Flows Due to Change in Proportion	528,911	1,453,882
7. Recognition of Prior Deferred Inflows/Outflows	(1,586,857)	2,496,853
8. Recognition of Prior Deferred Flows Due to Change in Proportion	<u>197,253</u>	<u>592,330</u>
9. Ending Net Pension Liability	\$59,919,549	\$50,343,812

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 11 (continued)**

**Schedule of Reconciliation of Net Pension Liability – Sunrise Recreation and Park District**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Reconciliation of Net Pension Liability</b>		
1. Beginning Net Pension Liability	\$3,321,376	\$1,939,461
2. Pension Expense excluding that Attributable to Employer-Paid Member Contributions	1,312,179	514,672
3. Employer Contributions	(597,000)	(419,000)
4. New Net Deferred Inflows/Outflows	540,411	1,075,611
5. Change in Allocation of Prior Deferred Inflows/Outflows	482,691	(7,746)
6. New Net Deferred Flows Due to Change in Proportion	936,598	49,329
7. Recognition of Prior Deferred Inflows/Outflows	(154,468)	164,727
8. Recognition of Prior Deferred Flows Due to Change in Proportion	<u>(9,083)</u>	<u>4,322</u>
9. Ending Net Pension Liability	\$5,832,704	\$3,321,376

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 11 (continued)**

**Schedule of Reconciliation of Net Pension Liability – Superior Court of California, County of Sacramento**

<b>Reporting Date for Employer under GASBS 68</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
<b>Measurement Date for Employer under GASBS 68</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Reconciliation of Net Pension Liability</b>		
1. Beginning Net Pension Liability	\$74,291,010	\$41,218,836
2. Pension Expense excluding that Attributable to Employer-Paid Member Contributions	17,416,897	12,642,588
3. Employer Contributions	(9,029,000)	(9,372,000)
4. New Net Deferred Inflows/Outflows	8,173,167	24,058,779
5. Change in Allocation of Prior Deferred Inflows/Outflows	350,783	(477,829)
6. New Net Deferred Flows Due to Change in Proportion	680,650	3,042,999
7. Recognition of Prior Deferred Inflows/Outflows	(2,336,170)	3,684,538
8. Recognition of Prior Deferred Flows Due to Change in Proportion	<u>(1,333,803)</u>	<u>(506,901)</u>
9. Ending Net Pension Liability	\$88,213,534	\$74,291,010

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 12**

**Schedule of Recognition of Changes in Total Net Pension Liability**

**Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences between Expected and Actual Experience on Total Pension Liability**

Reporting Date for Employer under GASBS 68 Year Ended June 30	Differences between Expected and Actual Experience	Recognition Period (Years)	Reporting Date for Employer under GASBS 68 Year Ended June 30:								
			2015	2016	2017	2018	2019	2020	2021	2022	Thereafter
			2015	\$(108,154,688)	4.63	\$(23,359,544)	\$(23,359,544)	\$(23,359,544)	\$(23,359,544)	\$(14,716,512)	-
2016	(6,447,226)	4.74	N/A	(1,360,174)	(1,360,174)	(1,360,174)	(1,360,174)	\$(1,006,530)	-	-	-
2017	(49,244,917)	4.68	N/A	N/A	(10,522,418)	(10,522,418)	(10,522,418)	(10,522,418)	\$(7,155,245)	-	-
2018	(46,244,335)	4.72	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>(9,797,529)</u>	<u>(9,797,529)</u>	<u>(9,797,529)</u>	<u>(9,797,529)</u>	<u>\$(7,054,219)</u>	-
Net increase (decrease) in pension expense			\$(23,359,544)	\$(24,719,718)	\$(35,242,136)	\$(45,039,665)	\$(36,396,633)	\$(21,326,477)	\$(16,952,774)	\$(7,054,219)	-

**Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Assumption Changes**

Reporting Date for Employer under GASBS 68 Year Ended June 30	Assumption Changes	Recognition Period (Years)	Reporting Date for Employer under GASBS 68 Year Ended June 30:								
			2015	2016	2017	2018	2019	2020	2021	2022	Thereafter
			2015	\$15,781,000	4.63	\$3,408,423	\$3,408,423	\$3,408,423	\$3,408,423	\$2,147,308	-
2016	0	4.74	N/A	-	-	-	-	-	-	-	-
2017	0	4.68	N/A	N/A	-	-	-	-	-	-	-
2018	823,712,000	4.72	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>174,515,254</u>	<u>174,515,254</u>	<u>\$174,515,254</u>	<u>\$174,515,254</u>	<u>\$125,650,984</u>	-
Net increase (decrease) in pension expense			\$3,408,423	\$3,408,423	\$3,408,423	\$177,923,677	\$176,662,562	\$174,515,254	\$174,515,254	\$125,650,984	-

As described in Exhibit 9, the average of the expected remaining service lives of all employees that are provided with pensions through SCERS (active and inactive employees) determined as of June 30, 2016 (the beginning of the measurement period ending June 30, 2017) is 4.72 years.



**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 12 (continued)**

**Schedule of Recognition of Changes in Total Net Pension Liability**

Reporting Date for Employer under GASBS 68 Year Ended June 30	Differences between Projected and Actual Earnings	Recognition Period (Years)	Increase (Decrease) in Pension Expense Arising from the Recognition of Differences between Projected and Actual Earnings on Pension Plan Investments								
			Reporting Date for Employer under GASBS 68 Year Ended June 30:								
			2015	2016	2017	2018	2019	2020	2021	2022	Thereafter
2015	\$(595,211,860)	5.00	\$(119,042,372)	\$(119,042,372)	\$(119,042,372)	\$(119,042,372)	\$(119,042,372)	-	-	-	-
2016	430,791,767	5.00	N/A	86,158,353	86,158,353	86,158,353	86,158,353	\$86,158,355	-	-	-
2017	664,666,688	5.00	N/A	N/A	132,933,338	132,933,338	132,933,338	132,933,338	\$132,933,336	-	-
2018	(472,425,587)	5.00	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>(94,485,117)</u>	<u>(94,485,117)</u>	<u>(94,485,117)</u>	<u>(94,485,117)</u>	<u>\$(94,485,119)</u>	<u>-</u>
Net increase (decrease) in pension expense			\$(119,042,372)	\$(32,884,019)	\$100,049,319	\$5,564,202	\$5,564,202	\$124,606,576	\$38,448,219	\$(94,485,119)	-

Reporting Date for Employer under GASBS 68 Year Ended June 30	Total Differences	Increase (Decrease) in Pension Expense								
		Reporting Date for Employer under GASBS 68 Year Ended June 30:								
		2015	2016	2017	2018	2019	2020	2021	2022	Thereafter
2015	\$(687,585,548)	\$(138,993,493)	\$(138,993,493)	\$(138,993,493)	\$(138,993,493)	\$(131,611,576)	-	-	-	-
2016	424,344,541	N/A	84,798,179	84,798,179	84,798,179	84,798,179	\$85,151,825	-	-	-
2017	615,421,771	N/A	N/A	122,410,920	122,410,920	122,410,920	122,410,920	\$125,778,091	-	-
2018	305,042,078	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>70,232,608</u>	<u>70,232,608</u>	<u>70,232,608</u>	<u>70,232,608</u>	<u>70,232,608</u>	<u>\$24,111,646</u>
Net increase (decrease) in pension expense		\$(138,993,493)	\$(54,195,314)	\$68,215,606	\$138,448,214	\$145,830,131	\$277,795,353	\$196,010,699	\$24,111,646	-

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

**EXHIBIT 13**

**Allocation of Changes in Total Net Pension Liability**

In addition to the amounts shown in Exhibit 12, there are changes in proportionate share of the total Net Pension Liability (NPL) between the measurement periods ending on June 30, 2016 and June 30, 2017 as a result of change in allocation percentage (the actual contributions made by an employer as a percentage of total contributions).

The difference in proportionate share of the total NPL due to change in allocation percentage during the measurement period ending on June 30, 2017 is recognized over the average of the expected remaining service lives of all employees determined as of June 30, 2016 (4.72 years as described in Exhibits 9 and 12). These amounts are shown below. While these amounts are different for each employer, they sum to zero over the entire SCERS.

**Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for the Year Ended June 30, 2017**

	Total Change to be Recognized	Recognition Period (Years)	Reporting Date for Employer under GASBS 68 Year Ended June 30:					2023
			2018	2019	2020	2021	2022	
Carmichael Recreation and Park District	\$(112,108)	4.72	\$(23,752)	\$(23,752)	\$(23,752)	\$(23,752)	\$(17,100)	\$0
County of Sacramento	(3,442,284)	4.72	(729,297)	(729,297)	(729,297)	(729,297)	(525,096)	0
Elk Grove Cosumnes Cemetery District	17,348	4.72	3,675	3,675	3,675	3,675	2,648	0
Fair Oaks Cemetery District	103,456	4.72	21,919	21,919	21,919	21,919	15,780	0
Galt-Arno Cemetery District	37,851	4.72	8,019	8,019	8,019	8,019	5,775	0
Mission Oaks Recreation and Park District	716,689	4.72	151,841	151,841	151,841	151,841	109,325	0
Orangevale Recreation and Park District	(44,035)	4.72	(9,329)	(9,329)	(9,329)	(9,329)	(6,719)	0
Sacramento Employment and Training Agency (S.E.T.A.)	671,091	4.72	142,180	142,180	142,180	142,180	102,371	0
Sunrise Recreation and Park District	1,188,372	4.72	251,774	251,774	251,774	251,774	181,276	0
Superior Court of California, County of Sacramento	<u>863,620</u>	4.72	<u>182,970</u>	<u>182,970</u>	<u>182,970</u>	<u>182,970</u>	<u>131,740</u>	<u>0</u>
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0	\$0

**SECTION 2: GASBS 68 Information for the Sacramento County Employees' Retirement System**

The amounts as of June 30, 2016 are as follows:

**Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for the Year Ended June 30, 2016**

	Total Change to be Recognized	Recognition Period (Years)	Reporting Date for Employer under GASBS 68 Year Ended June 30:					
			2017	2018	2019	2020	2021	2022
Carmichael Recreation and Park District	\$116,767	4.68	\$24,950	\$24,950	\$24,950	\$24,950	\$16,967	\$0
County of Sacramento	(5,939,958)	4.68	(1,269,223)	(1,269,223)	(1,269,223)	(1,269,223)	(863,066)	0
Elk Grove Cosumnes Cemetery District	67,900	4.68	14,509	14,509	14,509	14,509	9,864	0
Fair Oaks Cemetery District	(15,329)	4.68	(3,275)	(3,275)	(3,275)	(3,275)	(2,229)	0
Galt-Arno Cemetery District	4,269	4.68	912	912	912	912	621	0
Mission Oaks Recreation and Park District	(43,571)	4.68	(9,310)	(9,310)	(9,310)	(9,310)	(6,331)	0
Orangevale Recreation and Park District	28,328	4.68	6,053	6,053	6,053	6,053	4,116	0
Sacramento Employment and Training Agency (S.E.T.A.)	1,848,959	4.68	395,077	395,077	395,077	395,077	268,651	0
Sunrise Recreation and Park District	62,734	4.68	13,405	13,405	13,405	13,405	9,114	0
Superior Court of California, County of Sacramento	<u>3,869,901</u>	4.68	<u>826,902</u>	<u>826,902</u>	<u>826,902</u>	<u>826,902</u>	<u>562,293</u>	<u>0</u>
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0	\$0

**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Sacramento County Employees' Retirement System**

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**Actuarial Assumptions and Methods**

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<b>Rationale for Assumptions:</b>	The information and analysis used in selecting each assumption that has a significant effect on this actuarial valuation is shown in the July 1, 2013 through June 30, 2016 Actuarial Experience Study report dated May 8, 2017.
<b><u>Economic Assumptions</u></b>	
<b>Net Investment Return:</b>	7.00%; net of administration and investment expenses.
<b>Employee Contribution Crediting Rate<sup>1</sup>:</b>	3.00% (assumed rate of inflation); compounded semi-annually.
<b>Cost-of-Living Adjustment for Retirees:</b>	Miscellaneous and Safety Tier 1 benefits are assumed to increase at 3.0% per year. Miscellaneous Tier 3, Tier 4 and Tier 5 and Safety Tier 2, Tier 3 and Tier 4 benefits are assumed to increase at 2.0% per year. Miscellaneous Tier 2 receive no COLA increases.
<b>Payroll Growth</b>	Inflation of 3.00% per year plus real “across the board” salary increases of 0.25% per year.
<b>Increase in Section 7522.10 Compensation Limit</b>	Increase of 3.00% per year from the valuation date.

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<sup>1</sup> *Current policy is to credit the member contribution account with interest up to the current 5-year Treasury rate, if such earnings are available. However, the difference in earnings between the 5-year Treasury rate and the target crediting rate will be applied to the other valuation reserves so that the overall valuation reserve target crediting rate is maintained at 7.00%.*

**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Sacramento County Employees' Retirement System**

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**Salary Increases:**

Annual Rate of Compensation Increase (%)		
Inflation: 3.00%, plus “across the board” salary increases of 0.25% per year; plus the following merit and promotional increases.		
Years of Service	Miscellaneous	Safety
0-1	5.00	7.50
1-2	4.75	7.25
2-3	4.50	6.50
3-4	4.00	5.50
4-5	3.50	5.00
5-6	2.75	4.25
6-7	2.25	3.75
7-8	2.00	3.25
8-9	1.75	3.00
9-10	1.50	2.50
10 or more	1.25	2.00

**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Sacramento County Employees' Retirement System**

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**Demographic Assumptions**

**Post – Retirement Mortality Rates:**

*Healthy:*

For Miscellaneous Members and Beneficiaries: Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table projected generationally with the two-dimensional scale MP-2016 set forward one year for males and no age adjustment for females

For Safety Members: Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table projected generationally with the two-dimensional scale MP-2016 set back four years for males and females

*Disabled:*

For Miscellaneous Members: Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table projected generationally with the two-dimensional scale MP-2016 set forward seven years for males and set forward eight years for females

For Safety members: Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table projected generationally with the two-dimensional scale MP-2016 set forward four years for males and females

The RP-2014 tables and adjustments as shown above reflect the mortality experience, based on a review of mortality experience in the June 30, 2016 Actuarial Experience Study. The generational projection is a provision for future mortality improvement.

*Member Contribution Rates:*

For Miscellaneous members: Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table projected 20 years with the two-dimensional scale MP-2016 set forward one year for males and no age adjustment for females weighted 40% male and 60% female

For Safety members: Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table projected generationally with the two-dimensional scale MP-2016 set back four years for males and females weighted 75% male and 25% female

**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Sacramento County Employees' Retirement System**

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**Termination Rates before Retirement:**

Age	Rate (%)			
	Mortality			
	Miscellaneous		Safety	
	Male	Female	Male	Female
25	0.03	0.01	0.03	0.01
30	0.03	0.01	0.03	0.01
35	0.03	0.02	0.03	0.02
40	0.04	0.02	0.04	0.02
45	0.06	0.04	0.06	0.04
50	0.10	0.06	0.10	0.06
55	0.17	0.10	0.17	0.10
60	0.28	0.15	0.28	0.15
65	0.49	0.22	0.49	0.22

Note that the generational projections are not reflected in the above mortality rates.

All Miscellaneous pre-retirement deaths are assumed to be non-duty. For Safety, 50% of pre-retirement deaths are assumed to be non-duty and the rest are assumed to be duty.

**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Sacramento County Employees' Retirement System**

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**Termination Rates before Retirement (continued):**

<b>Age</b>	<b>Rate (%) Disability</b>	
	<b>Miscellaneous<sup>(1)</sup></b>	<b>Safety<sup>(2)</sup></b>
20	0.00	0.10
25	0.01	0.10
30	0.03	0.16
35	0.05	0.32
40	0.08	0.43
45	0.13	0.51
50	0.21	0.76
55	0.34	0.96
60	0.46	1.30

<sup>(1)</sup> 30% of Miscellaneous disabilities are assumed to be duty disabilities. The other 70% are assumed to be non-duty disabilities.

<sup>(2)</sup> 90% of Safety disabilities are assumed to be duty disabilities. The other 10% are assumed to be non-duty disabilities.



**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Sacramento County Employees' Retirement System**

**Termination Rates before Retirement (continued):**

<b>Rate (%)</b>		
<b>Withdrawal (&lt; 5 Years of Service)<sup>(1)</sup></b>		
<b>Years of Service</b>	<b>Miscellaneous</b>	<b>Safety</b>
0 – 1	13.00	6.00
1 – 2	8.00	5.00
2 – 3	7.00	4.00
3 – 4	6.00	3.00
4 – 5	5.50	3.00

<b>Withdrawal (5+ Years of Service)<sup>(2)</sup></b>		
<b>Age</b>	<b>Miscellaneous</b>	<b>Safety</b>
20	5.50	2.50
25	5.50	2.50
30	5.20	2.20
35	4.40	1.70
40	3.40	1.35
45	2.70	1.10
50	2.44	1.00
55	2.34	1.00
60	2.24	1.00
65	1.48	0.00

<sup>(1)</sup> 65% of the Miscellaneous members and 50% of the Safety members are assumed to elect a refund of contribution balance while the remaining 35% and 50% of Miscellaneous and Safety members, respectively, are assumed to elect a deferred retirement benefit. No withdrawal is assumed after a member is assumed to retire.

<sup>(2)</sup> 40% of the Miscellaneous members and 15% of the Safety members are assumed to elect a refund of contribution balance while the remaining 60% and 85% of Miscellaneous and Safety members, respectively, are assumed to elect a deferred retirement benefit. No withdrawal is assumed after a member is assumed to retire.

**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Sacramento County Employees' Retirement System**

**Retirement Rates:**

Age	Rate (%)						
	Miscellaneous Tier 1	Miscellaneous Tiers 2 & 3	Miscellaneous Tier 4	Miscellaneous Tier 5	Safety Tiers 1 & 2	Safety Tier 3	Safety Tier 4
45	0.00	0.00	0.00	0.00	2.00	1.50	0.00
46	0.00	0.00	0.00	0.00	2.00	1.50	0.00
47	0.00	0.00	0.00	0.00	2.00	1.50	0.00
48	0.00	0.00	0.00	0.00	2.00	1.50	0.00
49	0.00	0.00	0.00	0.00	5.00	4.00	0.00
50	6.00	2.00	2.00	0.00	22.00	10.00	15.00
51	4.50	2.00	2.00	0.00	16.00	12.00	10.50
52	4.50	2.00	2.00	4.00	16.00	14.00	12.00
53	4.50	3.00	2.00	1.50	20.00	16.00	14.00
54	5.50	4.00	3.00	2.50	20.00	18.00	15.50
55	12.00	6.00	4.00	3.50	20.00	50.00	40.00
56	18.00	6.00	5.00	4.50	25.00	25.00	25.00
57	18.00	8.00	6.00	5.50	25.00	25.00	25.00
58	18.00	10.00	7.00	6.50	25.00	25.00	25.00
59	20.00	12.00	8.00	7.50	30.00	30.00	25.00
60	28.00	12.00	9.00	8.50	45.00	45.00	45.00
61	35.00	14.00	10.00	9.50	55.00	55.00	55.00
62	35.00	25.00	18.00	17.00	70.00	70.00	70.00
63	35.00	25.00	16.00	15.00	70.00	70.00	70.00
64	35.00	30.00	20.00	19.00	70.00	70.00	70.00
65	35.00	35.00	25.00	24.00	100.00	100.00	100.00
66	40.00	40.00	20.00	20.00	100.00	100.00	100.00
67	40.00	40.00	20.00	20.00	100.00	100.00	100.00
68	50.00	50.00	30.00	30.00	100.00	100.00	100.00
69	60.00	60.00	40.00	40.00	100.00	100.00	100.00
70	100.00	100.00	100.00	100.00	100.00	100.00	100.00

**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Sacramento County Employees' Retirement System**

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**Retirement Age and Benefit for Deferred Vested Members:**

For deferred vested members, we make the following retirement assumption:

Miscellaneous Age: 59

Safety Age: 53

We assume that 35% of future Miscellaneous and 45% of future Safety deferred vested members will continue to work for a reciprocal employer. For reciprocals, we assume 4.50% and 5.25% compensation increases per annum, respectively.

**Future Benefit Accruals:**

1.0 year of service per year for the full-time employees. Continuation of current partial service accrual for part-time employees.

**Unknown Data for Members:**

Same as those exhibited by members with similar known characteristics. If not specified, members are assumed to be male.

**Definition of Active Members:**

All active members of SCERS as of the valuation date.

**Form of Payment:**

All members are assumed to elect the unmodified option at retirement.

**Percent Married:**

80% of male members; 55% of female members.

**Age of Spouse:**

Female spouses are 3 years younger than their spouses. Male spouses are 2 years older than their spouses.

**Service from Unused Sick Leave Conversion:**

The following assumptions for service converted from unused sick leave as a percentage of service at retirement are used:

Service Retirements:

Miscellaneous: 1.50%

Safety: 2.25%

Disability Retirements:

Miscellaneous: 0.25%

Safety: 0.25%

Pursuant to Section 31641.01, the cost of this benefit will be charged only to employers and will not affect member contribution rates.

### **SECTION 3: Actuarial Assumptions and Methods and Appendices for the Sacramento County Employees' Retirement System**

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#### **Actuarial Methods**

##### **Actuarial Cost Method:**

Entry Age Actuarial Cost Method. Entry Age is the age at the member's hire date. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are based on costs allocated as a level percentage of compensation.

##### **Expected Remaining Service Lives:**

The average of the expected service lives of all employees is determined by:

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

**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Sacramento County Employees' Retirement System**

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<b>Changes in Actuarial Assumptions</b>	Based on our Actuarial Experience Study, the following assumptions have changed. Previously, those assumptions were as follows:
<b><u>Economic Assumptions</u></b>	
<b>Net Investment Return:</b>	7.50%; net of administration and investment expenses.
<b>Employee Contribution Crediting Rate<sup>1</sup>:</b>	3.25% (assumed rate of inflation); compounded semi-annually.
<b>Cost-of-Living Adjustment for Retirees:</b>	Miscellaneous and Safety Tier 1 benefits are assumed to increase at 3.25% per year. Miscellaneous Tier 3, Tier 4 and Tier 5 and Safety Tier 2, Tier 3 and Tier 4 benefits are assumed to increase at 2.0% per year. Miscellaneous Tier 2 receive no COLA increases.
<b>Payroll Growth</b>	Inflation of 3.25% per year plus real “across the board” salary increases of 0.25% per year.
<b>Increase in Section 7522.10 Compensation Limit</b>	Increase of 3.25% per year from the valuation date.

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<sup>1</sup> Current policy is to credit the member contribution account with interest up to the current 5-year Treasury rate, if such earnings are available. However, the difference in earnings between the 5-year Treasury rate and the target crediting rate will be applied to the other valuation reserves so that the overall valuation reserve target crediting rate is maintained at 7.50%.

**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Sacramento County Employees' Retirement System**

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**Changes in Actuarial Assumptions (previous assumptions – continued)**

**Salary Increases:**

Annual Rate of Compensation Increase (%)		
Inflation: 3.25%, plus “across the board” salary increases of 0.25% per year; plus the following merit and promotional increases.		
Years of Service	Miscellaneous	Safety
0-1	5.00	8.00
1-2	4.50	7.00
2-3	3.75	6.00
3-4	3.50	5.00
4-5	3.00	4.00
5-6	2.50	3.50
6-7	2.25	3.25
7-8	2.00	3.00
8-9	1.75	2.75
9-10	1.00	2.00
10 or more	1.00	1.75

**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Sacramento County Employees' Retirement System**

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**Changes in Actuarial Assumptions (previous assumptions – continued)**

**Demographic Assumptions**

**Post – Retirement Mortality Rates:**

*Healthy:*

For Miscellaneous Members and Beneficiaries: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2022

For Safety Members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2022 set back one year for males and set forward two years for females

*Disabled:*

For Miscellaneous Members: RP-2000 Disabled Retiree Mortality Table projected with Scale BB to 2022 with no age adjustment for males and set forward three years for females

For Safety members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2022 set forward two years

The above mortality tables contain about a 10% margin, based on actual to expected deaths, as a provision to reflect future mortality improvement, based on a review of mortality experience in the June 30, 2013 Actuarial Experience Study.

*Member Contribution Rates:*

For Miscellaneous members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2022 weighted 40% male and 60% female

For Safety members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2022 set back one year for males and set forward two years for females weighted 70% male and 30% female

**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Sacramento County Employees' Retirement System**

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**Changes in Actuarial Assumptions (previous assumptions – continued)**

**Termination Rates before Retirement:**

<b>Age</b>	<b>Rate (%)</b>			
	<b>Mortality</b>			
	<b>Miscellaneous</b>		<b>Safety</b>	
	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>
25	0.04	0.02	0.04	0.02
30	0.04	0.02	0.04	0.03
35	0.07	0.04	0.07	0.05
40	0.10	0.07	0.10	0.08
45	0.14	0.11	0.13	0.12
50	0.20	0.16	0.19	0.19
55	0.34	0.24	0.30	0.30
60	0.58	0.41	0.52	0.51
65	0.98	0.74	0.88	0.93

All Miscellaneous pre-retirement deaths are assumed to be non-duty. For Safety, 50% of pre-retirement deaths are assumed to be non-duty and the rest are assumed to be duty.



**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Sacramento County Employees' Retirement System**

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**Changes in Actuarial Assumptions (previous assumptions – continued)**

**Termination Rates before Retirement (continued):**

<b>Age</b>	<b>Rate (%)</b>	
	<b>Disability</b>	
	<b>Miscellaneous<sup>(1)</sup></b>	<b>Safety<sup>(2)</sup></b>
20	0.00	0.10
25	0.01	0.10
30	0.03	0.16
35	0.05	0.26
40	0.08	0.45
45	0.16	0.61
50	0.26	0.80
55	0.36	1.26
60	0.52	2.10

<sup>(1)</sup> 25% of Miscellaneous disabilities are assumed to be duty disabilities. The other 75% are assumed to be non-duty disabilities.

<sup>(2)</sup> 90% of Safety disabilities are assumed to be duty disabilities. The other 10% are assumed to be non-duty disabilities.

**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Sacramento County Employees' Retirement System**

**Changes in Actuarial Assumptions (previous assumptions – continued)**

**Termination Rates before Retirement (continued):**

<b>Rate (%)</b>		
<b>Withdrawal (&lt; 5 Years of Service)<sup>(1)</sup></b>		
<b>Years of Service</b>	<b>Miscellaneous</b>	<b>Safety</b>
0 – 1	13.00	8.00
1 – 2	8.00	6.00
2 – 3	7.00	5.00
3 – 4	6.00	4.00
4 – 5	5.50	3.00

<b>Withdrawal (5+ Years of Service)<sup>(2)</sup></b>		
<b>Age</b>	<b>Miscellaneous</b>	<b>Safety</b>
20	5.00	2.50
25	5.00	2.50
30	4.70	2.50
35	4.20	2.20
40	3.40	1.85
45	2.70	1.60
50	2.20	1.50
55	1.85	1.50
60	1.30	1.50
65	1.00	0.00

<sup>(1)</sup> 75% of the Miscellaneous members and 50% of the Safety members are assumed to elect a refund of contribution balance while the remaining 25% and 50% of Miscellaneous and Safety members, respectively, are assumed to elect a deferred retirement benefit. No withdrawal is assumed after a member is assumed to retire.

<sup>(2)</sup> 50% of the Miscellaneous members and 20% of the Safety members are assumed to elect a refund of contribution balance while the remaining 50% and 80% of Miscellaneous and Safety members, respectively, are assumed to elect a deferred retirement benefit. No withdrawal is assumed after a member is assumed to retire.

**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Sacramento County Employees' Retirement System**

**Changes in Actuarial Assumptions (previous assumptions – continued)**

**Retirement Rates:**

Age	Rate (%)						
	Miscellaneous Tier 1	Miscellaneous Tiers 2 & 3	Miscellaneous Tier 4	Miscellaneous Tier 5	Safety Tiers 1 & 2	Safety Tier 3	Safety Tier 4
45	0.00	0.00	0.00	0.00	2.00	1.50	0.00
46	0.00	0.00	0.00	0.00	2.00	1.50	0.00
47	0.00	0.00	0.00	0.00	2.00	1.50	0.00
48	0.00	0.00	0.00	0.00	2.00	1.50	0.00
49	0.00	0.00	0.00	0.00	5.00	4.00	0.00
50	6.00	2.00	2.00	0.00	25.00	10.00	15.00
51	4.00	2.00	2.00	0.00	18.00	12.00	10.50
52	4.00	2.00	2.00	4.00	18.00	14.00	12.00
53	4.00	3.00	2.00	1.50	22.00	16.00	14.00
54	7.00	4.00	3.00	2.50	22.00	18.00	15.50
55	10.00	6.00	4.00	3.50	22.00	50.00	40.00
56	15.00	6.00	5.00	4.50	25.00	25.00	25.00
57	16.00	8.00	6.00	5.50	25.00	25.00	25.00
58	18.00	12.00	7.00	6.50	25.00	25.00	25.00
59	22.00	14.00	8.00	7.50	30.00	30.00	25.00
60	28.00	14.00	9.00	8.50	45.00	45.00	45.00
61	30.00	14.00	10.00	9.50	55.00	55.00	55.00
62	35.00	25.00	18.00	17.00	70.00	70.00	70.00
63	35.00	30.00	16.00	15.00	70.00	70.00	70.00
64	40.00	35.00	20.00	19.00	70.00	70.00	70.00
65	50.00	40.00	25.00	24.00	100.00	100.00	100.00
66	45.00	45.00	20.00	20.00	100.00	100.00	100.00
67	45.00	45.00	20.00	20.00	100.00	100.00	100.00
68	50.00	50.00	30.00	30.00	100.00	100.00	100.00
69	60.00	60.00	40.00	40.00	100.00	100.00	100.00
70	100.00	100.00	100.00	100.00	100.00	100.00	100.00

**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Sacramento County Employees' Retirement System**

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**Changes in Actuarial Assumptions (previous assumptions – continued)**

**Retirement Age and Benefit for  
Deferred Vested Members:**

For deferred vested members, we make the following retirement assumption:

Miscellaneous Age:	59
Safety Age:	53

We assume that 40% of future Miscellaneous and 50% of future Safety deferred vested members will continue to work for a reciprocal employer. For reciprocals, we assume 4.50% and 5.25% compensation increases per annum, respectively.

**Age of Spouse:**

Female (or male) spouses are 3 years younger (or older) than their spouses.

**Service from Unused  
Sick Leave Conversion:**

The following assumptions for service converted from unused sick leave as a percentage of service at retirement are used:

Service Retirements:

Miscellaneous:	1.50%
Safety:	2.25%

Disability Retirements:

Miscellaneous:	0.00%
Safety:	0.25%

Pursuant to Section 31641.01, the cost of this benefit will be charged only to employers and will not affect member contribution rates.

**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Sacramento County Employees' Retirement System**

**APPENDIX A**

**Calculation of Discount Rate as of June 30, 2017  
Projection of Plan Fiduciary Net Position (\$ in millions)**

<b>Year Beginning July 1,</b>	<b>Projected Beginning Plan Fiduciary Net Position (a)</b>	<b>Projected Total Contributions (b)</b>	<b>Projected Benefit Payments (c)</b>	<b>Projected Administrative Expense (d)</b>	<b>Projected Investment Earnings (e)</b>	<b>Projected Ending Plan Fiduciary Net Position (f) = (a) + (b) - (c) - (d) + (e)</b>
2017	\$8,584	\$374	\$490	\$8	\$595	\$9,055
2018	9,055	372	517	8	627	9,529
2019	9,529	373	548	9	659	10,003
2020	10,003	372	581	9	691	10,476
2021	10,476	380	616	9	723	10,953
2022	10,953	381	651	10	755	11,428
2023	11,428	373	689	10	786	11,889
2024	11,889	373	726	11	817	12,341
2025	12,341	372	765	11	847	12,784
2026	12,784	371	804	11	877	13,216
2044	15,817	54 <sup>(1)</sup>	1,330	14	1,057	15,584
2045	15,584	50 <sup>(1)</sup>	1,337	14	1,041	15,324
2046	15,324	47 <sup>(1)</sup>	1,341	14	1,022	15,039
2064	8,088	24 <sup>(1)</sup>	966	7	530	7,667
2065	7,667	23 <sup>(1)</sup>	926	7	502	7,259
2066	7,259	22 <sup>(1)</sup>	886	7	475	6,863
2084	3,426	10 <sup>(1)</sup>	203	3	232	3,462
2085	3,462	9 <sup>(1)</sup>	178	3	236	3,526
2086	3,526	9 <sup>(1)</sup>	155	3	241	3,618
2104	9,699	9 <sup>(1)</sup>	2	9	679	10,376
2105	10,376	10 <sup>(1)</sup>	2	9	726	11,101
2106	11,101	10 <sup>(1)</sup>	1	10	777	11,878
2135	78,959	71 <sup>(1)</sup>	0 <sup>(2)</sup>	71	5,527	84,486
2136	84,486					
2136	Discounted Value: 27 <sup>(3)</sup>					

(1) Mainly attributable to employer contributions to fund each year's annual administrative expenses.

(2) Less than \$1 million, when rounded.

(3) \$84,486 million when discounted with interest at the rate of 7.00% per annum has a value of \$27 million (or 0.31% of the Plan Fiduciary Net Position) as of June 30, 2017.

**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Sacramento County Employees' Retirement System**

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**APPENDIX A (continued)**

**Calculation of Discount Rate as of June 30, 2017  
Projection of Plan Fiduciary Net Position (\$ in millions)**

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**Notes:**

- (1) Amounts may not total exactly due to rounding.
  - (2) Years 2027-2043, 2047-2063, 2067-2083, 2087-2103, and 2107-2134 have been omitted from this table.
  - (3) Column (a): Except for the "discounted value" shown for 2136, all of the projected beginning Plan Fiduciary Net Position amounts shown have not been adjusted for the time value of money.
  - (4) Column (b): Projected total contributions include employee and employer normal cost contributions based on closed group projections (based on covered active members as of June 30, 2017); plus employer contributions to the unfunded actuarial accrued liability. Contributions are assumed to occur halfway through the year, on average.
  - (5) Column (c): Projected benefit payments have been determined in accordance with paragraph 39 of GASB Statement No. 67, and are based on the closed group of active, inactive vested, retired members, and beneficiaries as of June 30, 2017. The projected benefit payments reflect the cost of living increase assumptions used in the June 30, 2017 report.
  - (6) Column (d): Projected administrative expenses are calculated as approximately 0.09% of the beginning Plan Fiduciary Net Position amount. The 0.09% portion was based on the actual fiscal year 2016-2017 administrative expenses as a percentage of the beginning Plan Fiduciary Net Position amount as of July 1, 2016. Administrative expenses are assumed to occur halfway through the year, on average.
  - (7) Column (e): Projected investment earnings are based on the assumed investment rate of return of 7.00% per annum.
  - (8) As illustrated in this Exhibit, the Plan Fiduciary Net Position was projected to be available to make all projected future benefit payments for current Plan members. In other words, there is no projected "cross-over date" when projected benefits are not covered by projected assets. Therefore, the long-term expected rate of return on Plan investments of 7.00% per annum was applied to all periods of projected benefit payments to determine the Total Pension Liability as of June 30, 2017 shown earlier in this report, pursuant to paragraph 44 of GASB Statement No. 67.
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### **SECTION 3: Actuarial Assumptions and Methods and Appendices for the Sacramento County Employees' Retirement System**

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#### **APPENDIX B**

#### **GLOSSARY**

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Definitions of certain terms *as they are used in Statement 68*; the terms may have different meanings in other contexts.

#### **Active employees**

Individuals employed at the end of the reporting or measurement period, as applicable.

#### **Actual contributions**

Cash contributions recognized as additions to a Plan Fiduciary Net Position.

#### **Actuarial present value of projected benefit payments**

Projected benefit payments discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.

#### **Actuarial valuation**

The determination, as of a point in time (the actuarial valuation date), of the service cost, Total Pension Liability, and related actuarial present value of projected benefit payments for pensions performed in conformity with Actuarial Standards of Practice unless otherwise specified by the GASB.

#### **Actuarial valuation date**

The date as of which an actuarial valuation is performed.

#### **Actuarially determined contribution**

A target or recommended contribution to a defined benefit pension plan for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.

#### **Ad hoc cost-of-living adjustments (ad hoc COLAs)**

Cost-of-living adjustments that require a decision to grant by the authority responsible for making such decisions.

### **SECTION 3: Actuarial Assumptions and Methods and Appendices for the Sacramento County Employees' Retirement System**

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#### **APPENDIX B (continued)**

#### **GLOSSARY**

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##### **Ad hoc postemployment benefit changes**

Postemployment benefit changes that require a decision to grant by the authority responsible for making such decisions.

##### **Agent employer**

An employer whose employees are provided with pensions through an agent multiple-employer defined benefit pension plan.

##### **Agent multiple-employer defined benefit pension plan (agent pension plan)**

A multiple-employer defined benefit pension plan in which pension plan assets are pooled for investment purposes but separate accounts are maintained for each individual employer so that each employer's share of the pooled assets is legally available to pay the benefits of only its employees.

##### **Allocated insurance contract**

A contract with an insurance company under which related payments to the insurance company are currently used to purchase immediate or deferred annuities for individual employees. Also may be referred to as an annuity contract.

##### **Automatic cost-of-living adjustments (automatic COLAs)**

Cost-of-living adjustments that occur without a requirement for a decision to grant by a responsible authority, including those for which the amounts are determined by reference to a specified experience factor (such as the earnings experience of the pension plan) or to another variable (such as an increase in the consumer price index).

##### **Automatic postemployment benefit changes**

Postemployment benefit changes that occur without a requirement for a decision to grant by a responsible authority, including those for which the amounts are determined by reference to a specified experience factor (such as the earnings experience of the pension plan) or to another variable (such as an increase in the consumer price index).

##### **Closed period**

A specific number of years that is counted from one date and declines to zero with the passage of time. For example, if the recognition period initially is five years on a closed basis, four years remain after the first year, three years after the second year, and so forth.



**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Sacramento County Employees' Retirement System**

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**APPENDIX B (continued)**

**GLOSSARY**

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**Collective deferred outflows of resources and deferred inflows of resources related to pensions**

Deferred outflows of resources and deferred inflows of resources related to pensions arising from certain changes in the collective Net Pension Liability.

**Collective Net Pension Liability**

The Net Pension Liability for benefits provided through (1) a cost-sharing pension plan or (2) a single-employer or agent pension plan in circumstances in which there is a special funding situation.

**Collective pension expense**

Pension expense arising from certain changes in the collective Net Pension Liability.

**Contributions**

Additions to a Plan Fiduciary Net Position for amounts from employers, nonemployer contributing entities (for example, state government contributions to a local government pension plan), or employees. Contributions can result from cash receipts by the pension plan or from recognition by the pension plan of a receivable from one of these sources.

**Cost-of-living adjustments**

Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.

**Cost-sharing employer**

An employer whose employees are provided with pensions through a cost-sharing multiple-employer defined benefit pension plan.

**Cost-sharing multiple-employer defined benefit pension plan (cost-sharing pension plan)**

A multiple-employer defined benefit pension plan in which the pension obligations to the employees of more than one employer are pooled and pension plan assets can be used to pay the benefits of the employees of any employer that provides pensions through the pension plan.

**Covered-employee payroll**

The payroll of employees that are provided with pensions through the pension plan.

### **SECTION 3: Actuarial Assumptions and Methods and Appendices for the Sacramento County Employees' Retirement System**

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#### **APPENDIX B (continued)**

#### **GLOSSARY**

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##### **Deferred retirement option program (DROP)**

A program that permits an employee to elect a calculation of benefit payments based on service credits and salary, as applicable, as of the DROP entry date. The employee continues to provide service to the employer and is paid for that service by the employer after the DROP entry date; however, the pensions that would have been paid to the employee (if the employee had retired and not entered the DROP) are credited to an individual employee account within the defined benefit pension plan until the end of the DROP period.

##### **Defined benefit pension plans**

Pension plans that are used to provide defined benefit pensions.

##### **Defined benefit pensions**

Pensions for which the income or other benefits that the employee will receive at or after separation from employment are defined by the benefit terms. The pensions may be stated as a specified dollar amount or as an amount that is calculated based on one or more factors such as age, years of service, and compensation. (A pension that does not meet the criteria of a defined contribution pension is classified as a defined benefit pension for purposes of Statement 68.)

##### **Defined contribution pension plans**

Pension plans that are used to provide defined contribution pensions.

##### **Defined contribution pensions**

Pensions having terms that (1) provide an individual account for each employee; (2) define the contributions that an employer is required to make (or the credits that it is required to provide) to an active employee's account for periods in which that employee renders service; and (3) provide that the pensions an employee will receive will depend only on the contributions (or credits) to the employee's account, actual earnings on investments of those contributions (or credits), and the effects of forfeitures of contributions (or credits) made for other employees, as well as pension plan administrative costs, that are allocated to the employee's account.

### SECTION 3: Actuarial Assumptions and Methods and Appendices for the Sacramento County Employees' Retirement System

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#### APPENDIX B (continued)

#### GLOSSARY

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##### **Discount rate**

The single rate of return that, when applied to all projected benefit payments, results in an actuarial present value of projected benefit payments equal to the total of the following:

1. The actuarial present value of benefit payments projected to be made in future periods in which (a) the amount of the Plan Fiduciary Net Position is projected (under the requirements of Statement 68) to be greater than the benefit payments that are projected to be made in that period and (b) pension plan assets up to that point are expected to be invested using a strategy to achieve the long-term expected rate of return, calculated using the long-term expected rate of return on pension plan investments.
2. The actuarial present value of projected benefit payments not included in (1), calculated using the municipal bond rate.

##### **Entry age 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 on a level basis over the earnings or service of the individual between entry age and assumed exit age(s). The portion of this actuarial present value allocated to a valuation year is called the *normal cost*. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is called the *actuarial accrued liability*.

##### **Inactive employees**

Terminated individuals that have accumulated benefits but are not yet receiving them, and retirees or their beneficiaries currently receiving benefits.

##### **Measurement period**

The period between the prior and the current measurement dates.

##### **Multiple-employer defined benefit pension plan**

A defined benefit pension plan that is used to provide pensions to the employees of more than one employer.

**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Sacramento County Employees' Retirement System**

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**APPENDIX B (continued)**

**GLOSSARY**

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**Net Pension Liability**

The liability of employers and nonemployer contributing entities to employees for benefits provided through a defined benefit pension plan.

**Nonemployer contributing entities**

Entities that make contributions to a pension plan that is used to provide pensions to the employees of other entities. For purposes of Statement 68, employees are not considered nonemployer contributing entities.

**Other postemployment benefits**

All postemployment benefits other than retirement income (such as death benefits, life insurance, disability, and long-term care) that are provided separately from a pension plan, as well as postemployment healthcare benefits, regardless of the manner in which they are provided. Other postemployment benefits do not include termination benefits.

**Pension plans**

Arrangements through which pensions are determined, assets dedicated for pensions are accumulated and managed, and benefits are paid as they come due.

**Pensions**

Retirement income and, if provided through a pension plan, postemployment benefits other than retirement income (such as death benefits, life insurance, and disability benefits). Pensions do not include postemployment healthcare benefits and termination benefits.

**Plan members**

Individuals that are covered under the terms of a pension plan. Plan members generally include (1) employees in active service (active plan members) and (2) terminated employees who have accumulated benefits but are not yet receiving them and retirees or their beneficiaries currently receiving benefits (inactive plan members).

**Postemployment**

The period after employment.

**Postemployment benefit changes**

Adjustments to the pension of an inactive employee.

**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Sacramento County Employees' Retirement System**

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**APPENDIX B (continued)**

**GLOSSARY**

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**Postemployment healthcare benefits**

Medical, dental, vision, and other health-related benefits paid subsequent to the termination of employment.

**Projected benefit payments**

All benefits estimated to be payable through the pension plan to current active and inactive employees as a result of their past service and their expected future service.

**Public employee retirement system**

A special-purpose government that administers one or more pension plans; also may administer other types of employee benefit plans, including postemployment healthcare plans and deferred compensation plans.

**Real rate of return**

The rate of return on an investment after adjustment to eliminate inflation.

**Service costs**

The portions of the actuarial present value of projected benefit payments that are attributed to valuation years.

**Single employer**

An employer whose employees are provided with pensions through a single-employer defined benefit pension plan.

**Single-employer defined benefit pension plan (single-employer pension plan)**

A defined benefit pension plan that is used to provide pensions to employees of only one employer.

**Special funding situations**

Circumstances in which a nonemployer entity is legally responsible for making contributions directly to a pension plan that is used to provide pensions to the employees of another entity or entities and either of the following conditions exists:

1. The amount of contributions for which the nonemployer entity legally is responsible is *not* dependent upon one or more events or circumstances unrelated to the pensions.
2. The nonemployer entity is the only entity with a legal obligation to make contributions directly to a pension plan.

**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Sacramento County Employees' Retirement System**

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**APPENDIX B (continued)**

**GLOSSARY**

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**Termination benefits**

Inducements offered by employers to active employees to hasten the termination of services, or payments made in consequence of the early termination of services. Termination benefits include early-retirement incentives, severance benefits, and other termination-related benefits.

**Total Pension Liability**

The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service in conformity with the requirements of Statement 68.

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