

# Kern County Employees' Retirement Association

Governmental Accounting Standard (GAS) 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 KCERA 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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100 Montgomery Street Suite 500 San Francisco, CA 94104-4308 T 415.263.8200 www.segalco.com

July 31, 2018

Board of Retirement Kern County Employees' Retirement Association 11125 River Run Blvd. Bakersfield, CA 93311

Dear Board Members:

We are pleased to submit this Governmental Accounting Standard (GAS) 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 Kern County Employees' Retirement Association (KCERA) employers to comply with GAS 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 KCERA pension plan. The census and financial information on which our calculations were based was provided by KCERA. 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 John Monroe, 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 KCERA.

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

Sincerely,

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

Bv:

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

John Monroe, ASA, EA, MAAA Vice President and Actuary

JAC/bbf

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### Purpose

This report has been prepared by Segal Consulting to present certain disclosure information required by Governmental Accounting Standard (GAS) 68 for employer reporting as of June 30, 2018. The results used in preparing this GAS 68 report are comparable to those used in preparing the Governmental Accounting Standard (GAS) 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 KCERA, as administered by the Board of Retirement;
- > The characteristics of covered active members, terminated vested members, and retired members and beneficiaries as of June 30, 2016, provided by KCERA;
- > The assets of the Plan as of June 30, 2017, provided by KCERA;
- > Economic assumptions regarding future salary increases and investment earnings; and
- > Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

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

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

- The Governmental Accounting Standards Board (GASB) rules only define pension liability and expense for financial reporting purposes, and do not apply to contribution amounts for actual pension funding purposes. Employers and plans can 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 KCERA uses for funding. This means that the Total Pension Liability (TPL) measure for financial reporting shown in this report is determined generally on the same basis as KCERA's 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.
- > The Plan's Fiduciary Net Position includes assets held for the Supplemental Retiree Benefit Reserve (SRBR). The TPL reflects all future projected benefits expected to be paid from the SRBR for members as of the valuation date.
- The Net Pension Liability (NPL) is equal to the difference between the TPL and the Plan's Fiduciary Net Position. The Plan's 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) calculated on a market value basis. The exception is that the NPL is reduced by the excess of the SRBR assets over the TPL associated with the SRBR benefits.

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, respectively, and determined by rolling forward the TPL from actuarial valuations as of June 30, 2016 and June 30, 2015, respectively. In addition, any changes in actuarial assumptions or plan provisions that occurred between the valuation date and measurement date have been reflected. The Plan's Fiduciary Net Position (plan assets) was valued as of the measurement dates. Consistent with the provisions of GAS 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 decreased from \$2.41 billion as of June 30, 2016 to \$2.36 billion as of June 30, 2017 primarily due to the 12.00% return on the market value of assets during 2016-2017 (that was more than the assumed return of 7.50%). That gain was offset to some degree by the changes in actuarial assumptions, which increased the liability by about \$196 million. Changes in these values during the last two fiscal years ending June 30, 2016 and June 30, 2017 can be found in Exhibit 5 of Section 2.
- All results shown in this report are on a combined basis including both the regular statutory (non-Supplemental Retirement Benefit Reserve (SRBR)) benefits and the SRBR benefits. For purposes of illustration, separate values for the TPL, Plan's Fiduciary Net Position and NPL for the regular statutory (non-SRBR) benefits and the SRBR benefits as of June 30, 2017 are shown in the table below:

	Regular Benefits (Non-SRBR)	SRBR Benefits	Total KCERA
Total Pension Liability (TPL)	\$6,270,652,272	\$56,218,046	\$6,326,870,318
Plan's Fiduciary Net Position	3,838,665,847	124,229,329	3,962,895,176
Net Pension Liability (NPL)	2,431,986,425	(68,011,283)	2,363,975,142

The discount rate used to originally determine the TPL and NPL as of June 30, 2017 and June 30, 2016 was 7.50%, following the same assumptions used by the Association in the funding valuations as of June 30, 2016 and June 30, 2015. However, as the Retirement Board has approved a new discount rate of 7.25% (together with other new actuarial assumptions) for use in the pension funding valuation as of June 30, 2017, we have included the impact of this assumption change by (1) revaluing the actuarial valuation TPL as of June 30, 2016 (before the roll forward) and

(2) using this revalued TPL in rolling forward the results from June 30, 2016 to June 30, 2017. The detailed derivation of the discount rate of 7.25% used in the calculation of the TPL and NPL as of June 30, 2017 can be found in Appendix A of Section 3. The discount rate assumptions have been developed without taking into consideration any impact of the 50/50 allocation of future excess earnings between the retirement and SRBR asset pools. Various other information that is required to be disclosed can be found in Exhibits 1 through 13 in Section 2.

As discussed previously our separate letter regarding the treatment of the SRBR for financial reporting purposes, the Actuarial Standard of Practice (ASOP) No. 4 ("Measuring Pension Obligations and Determining Pension Plan Costs or Contributions") was revised in December 2013, effective for measurement dates on or after December 31, 2014. The revised ASOP states that some plan provisions, including "gain sharing" provisions, "may create pension obligations that are difficult to appropriately measure using traditional valuation procedures." ASOP No. 4 now indicates that "for such plan provisions, the actuary should consider using alternative valuation procedures, such as stochastic modeling... to reflect the impact of variations in experience from year to year." The 50% allocation of future excess earnings to the SRBR for KCERA is a clear example of the gain sharing provisions referenced by ASOP No. 4.

After several meetings with KCERA and its auditors, and based on information regarding another SRBR system that included discussions with GASB staff, it was previously determined that future allocations to the SRBR should be treated as an additional "outflow" (i.e., assets not available to fund the benefits included in the determination of the TPL) against the Plan's Fiduciary Net Position in the GASB crossover test<sup>1</sup> (see Appendix A).

However, as noted earlier, the Plan's Fiduciary Net Position <u>includes</u> assets held for the SRBR, and the TPL <u>includes</u> all projected future benefits expected to be paid from the SRBR for members as of the valuation date. This treatment was also discussed with KCERA and its auditors and determined to be appropriate. Therefore, any outflows due to the 50/50 excess earnings allocation would not affect the outcome of the crossover test since the crossover test is performed based on the combined results of the statutory (non-SRBR) benefits and the SRBR.

Based on discussions with KCERA and their auditors, starting with the June 30, 2016 measurement date for the employers, employer paid member contributions are excluded from employer contributions in the determination of the amounts shown in Exhibits 1 through 13 in Section 2. The employer paid member contributions are also excluded from

<sup>&</sup>lt;sup>1</sup> The purpose of the GASB crossover test is to determine if the full expected return (or 7.25% in this case) can be used as the discount rate to determine the TPL and the NPL. That is, if there is no crossover point where the projected benefit payments would exceed the Plan's Fiduciary Net Position, then the full expected return assumption can be used. As detailed later in this report, KCERA does pass the crossover test, which means that the full 7.25% investment rate of return assumption can be used as the discount rate to determine the TPL and the resulting NPL.

the Actuarially Determined Contribution (ADC). The amount of employer paid member contributions was estimated by first determining what the employer contribution rates would have been during the year, excluding any employer paid member contributions. The actual employer contribution rates were then adjusted by the ratio of the employer contribution rates determined above and the employer contribution rates determined in the annual actuarial valuation. The result is the employer contributions excluding any employer paid member contributions. This change has not been applied on a retroactive basis prior to the 2015-2016 fiscal year.

- Results shown in this report exclude any employer contributions made after the measurement date of June 30, 2017. Employers should consult with their auditors to determine the deferred outflow that should be created for these contributions.
- The Safety membership class has only one employer (Kern County), so all of the NPL for Safety as of both June 30, 2016 and June 30, 2017 is allocated to the County.

For General and District, the NPL as of June 30, 2016 and June 30, 2017 is allocated based on the actual payroll within the General and District membership classes for 2015-2016 and 2016-2017, respectively. The steps we used are as follows:

- Calculate ratio of employer's payroll to the total payroll 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 negative NPL associated with the SRBR is allocated based on the actual total payroll for each employer within KCERA.

Proportionate share of total plan NPL is then the ratio of the employer's total allocated NPL to the total NPL of all employers. The NPL allocation can be found in Exhibit 7 in Section 2.

Since our last GAS 68 report, it has come to our attention that Kern County has been calculating a proportionate share of their NPL that is being reported by the Kern County Hospital Authority in their financial statements. Based on discussions with KCERA, we have separated Kern County Hospital Authority from Kern County in this report as if they have always been a separate employer. The NPL allocated to the Kern County Hospital Authority as of June 30, 2017 was calculated based on the methodology described above. For prior years, we have used the NPL's previously reported by the Kern County Hospital Authority. Note that this change mainly impacts the historical NPL's for Kern County.

Summary of Key	Valuation Results
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Repo	rting Date for Employer under GAS 68	6/30/2018 <sup>(1)</sup>	6/30/2017 <sup>(1)</sup>
Meas	urement Date for Employer under GAS 68	6/30/2017	6/30/2016
Disclo	sure elements for fiscal year ending June 30:		
1.	Service Cost <sup>(2)</sup>	\$122,184,336	\$123,181,283
2.	Total Pension Liability	6,326,870,318	5,985,226,950
3.	Plan's Fiduciary Net Position	3,962,895,176	3,571,587,594
4.	Net Pension Liability	2,363,975,142	2,413,639,356
5.	Pension Expense	270,303,861	270,835,291
Sched	ule of contributions for fiscal year ending June 30:		
6.	Actuarially determined contributions <sup>(3)</sup>	\$224,351,000	\$216,229,000
7.	Actual contributions	224,351,000	216,229,000
8.	Contribution deficiency (excess): $(6) - (7)$	0	0
Demog	graphic data for plan year ending June 30: <sup>(4)</sup>		
9.	Number of retired members and beneficiaries	8,093	7,847
10.	Number of vested terminated members <sup>(5)</sup>	2,363	2,218
11.	Number of active members	8,728	8,627
Key as	sumptions as of June 30:		
12.	Investment rate of return	7.25%	7.50%
13.	Inflation rate	3.00%	3.25%
14.	Projected salary increases <sup>(6)</sup>	General: 4.00% to 9.00% and Safety: 4.00% to 12.50%	General: 4.25% to 9.25% and Safety: 4.25% to 11.75%

<sup>(1)</sup> The reporting dates and measurement dates for the plan are June 30, 2017 and June 30, 2016, respectively.

<sup>(2)</sup> Excludes administrative expense load. The service cost is based on the previous year's valuation, meaning the June 30, 2017 and June 30, 2016 values are based on the valuations as of June 30, 2016 and June 30, 2015, respectively. Furthermore, the actuarial assumptions used to determine the service cost in the June 30, 2015 valuation were the same as those used in the June 30, 2016 valuation.

<sup>(3)</sup> See footnote (1) under Exhibit 6 on page 10.

<sup>(4)</sup> Data as of June 30, 2016 is used in the measurement of the TPL as of June 30, 2017.

<sup>(5)</sup> Includes terminated members due a refund of member contributions.

<sup>(6)</sup> Includes inflation at 3.00% plus real across-the-board salary increase of 0.50% plus merit and promotional increases that vary by service for 2017 and includes inflation at 3.25% plus real across-the-board salary increase of 0.50% plus merit and promotional increases that vary by service for 2016.

### **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 KCERA. 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 KCERA.
- 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.

- > 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 KCERA 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 KCERA, it is not a fiduciary in its capacity as actuaries and consultants with respect to KCERA.



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

### **Plan Description**

*Plan administration.* The Kern County Employees' Retirement Association (KCERA) was established by the County of Kern in 1945. KCERA is administered by the Board of Retirement and governed by the County Employees' Retirement Law of 1937 (California Government Code Section 31450 et. seq.), the California Public Employees' Pension Reform Act (CalPEPRA) and the bylaws, procedures and policies adopted by the KCERA Board. KCERA is a cost-sharing multiple employer defined benefit public employee retirement system whose main function is to provide retirement, disability, death, beneficiary, cost-of-living and supplemental retirement benefits to the General and Safety members employed by the County of Kern. KCERA also provides retirement benefits to the employee members of the Berrenda Mesa Water District, Buttonwillow Recreation and Park District, East Kern Cemetery District, Inyokern Community Services District, Kern County Water Agency, Kern Mosquito and Vector Control District, North of the River Sanitation District, San Joaquin Valley Unified Air Pollution Control District, West Side Recreation and Park District, and the Kern County Superior Court, and the Kern County Hospital Authority.

The management of KCERA is vested with the KCERA Board of Retirement. The Board consists of nine members and two alternate members. The County Treasurer is elected by the general public and is a member of the Board of Retirement by law. Four members are appointed by the Board of Supervisors, one of whom may be a County Supervisor; two members are elected by the general membership; one member and one alternate member are elected by the safety membership; and one member and one alternate member are elected by the retired members of the Association. All members of the Board of Retirement serve terms of three years except for the County Treasurer whose term runs concurrent with his term as County Treasurer.

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

Retired members or beneficiaries currently receiving benefits	8,093
Vested terminated members entitled to, but not yet receiving benefits <sup>(1)</sup>	2,363
Active members	<u>8,728</u>
Total	19,184
<sup>(1)</sup> Includes terminated members due a refund of member contributions.	

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Note: Data as of June 30, 2017 is not used in the measurement of the TPL as of June 30, 2017.



*Benefits provided.* KCERA provides retirement, disability, beneficiary, cost-of-living and supplemental retirement benefits to eligible employees. All regular full-time employees of the County of Kern or contracting districts who work 50% or more of the regular standard hours required become members of KCERA effective on the first day of the first full biweekly payroll period following the date of employment. There are separate retirement benefits for General and Safety members. Safety membership is extended to those involved in active law enforcement, fire suppression, and certain probation officers.

General members (excluding Tier III) are eligible to retire once they attain the age of 70 regardless of service or at age 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. General Tier III members are eligible to retire once they have attained the age of 70 regardless of service or at age 52 and have acquired 5 or more years of retirement service credit.

Safety members are eligible to retire once they attain the age of 70 regardless of service or at age 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.

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.

General member benefits for Tier I and Tier II are calculated pursuant to the provisions of California Government Code Sections 31676.17 and 31676.01, respectively. The monthly allowance is equal to 1/50th of final average compensation times years of accrued retirement service credit times age factor from Section 31676.17 (Tier I) or 1/90th of final average compensation times years of accrued retirement service credit times age factor from Section 31676.01 (Tier II). General Tier III member benefits are calculated pursuant to the provisions found in California Government Code Section 7522.20(a). The monthly allowance is equal to the final average compensation multiplied by years of accrued retirement credit multiplied by the age factor from Section 7522.20(a).

Safety member benefits for Tier I and Tier II are calculated pursuant to the provisions of California Government Code Sections 31664.1 and 31664, respectively. The monthly allowance is equal to 3% of final average compensation times years of accrued retirement service credit times age factor from 31664.1 (Tier I) or 1/50th (or 2%) of final average compensation times years of accrued retirement service credit times age factor from Section 31664 (Tier II).

For members in Tier I or Tier II, the maximum monthly retirement allowance is 100% of final average compensation. There is no final average compensation limit on the maximum retirement benefit for General Tier III members. However, the maximum amount of compensation earnable that can be taken into account for 2017 for members with membership dates on or after July 1, 1996 but before January 1, 2013 is \$270,000. For members with membership dates on or after January 1, 2013 the maximum amount of pensionable compensation that can be taken into account for 2017 is equal to \$118,775 for those enrolled in Social Security. These limits are adjusted on an annual basis. Members are exempt from



paying member contributions and employers are exempt from paying employer contributions on compensation in excess of the annual cap.

Final average compensation consists of the highest 12 consecutive months of pensionable pay for a General Tier I or Tier IIA member or a Safety Tier I or Tier IIA member and the highest 36 consecutive months of pensionable pay for a General Tier IIB or Tier III member or a Safety Tier IIB 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 or domestic partner. An eligible surviving spouse or domestic partner is one married to or registered with the member one year prior to the effective retirement date. Certain surviving spouses or domestic partners may also be eligible if marriage or domestic partnership was at least two years prior to the date of death and the surviving spouse or domestic partner has attained age 55 on or prior to the date of death. 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, domestic partner, or named beneficiary having an insurable interest in the life of the member.

KCERA provides an annual cost-of-living benefit to all retirees. The cost-of-living adjustment, based upon the Consumer Price Index for the Los Angeles-Riverside-Orange County Area, is capped at 2.5%.

The County of Kern 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 KCERA's 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 45.11% of compensation.

Members are required to make contributions to KCERA 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 6.01% of compensation.

**Net Pension Liability** 

Reporting Date for Employer under GAS 68	June 30, 2018	June 30, 2017
Measurement Date for Employer under GAS 68	June 30, 2017	June 30, 2016
The components of the Net Pension Liability are as follows:		
Total Pension Liability	\$6,326,870,318	\$5,985,226,950
Plan's Fiduciary Net Position	<u>(3,962,895,176)</u>	<u>(3,571,587,594)</u>
Net Pension Liability	\$2,363,975,142	\$2,413,639,356
Plan's Fiduciary Net Position as a percentage of the Total Pension Liability	62.64%	59.67%

The Net Pension Liability (NPL) for the plan was measured as of June 30, 2017 and 2016. The Plan's Fiduciary Net Position (plan assets) was valued as of the measurement date while the Total Pension Liability (TPL) was determined by rolling forward the TPL from actuarial valuations as of June 30, 2016 and 2015, 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 KCERA actuarial valuations as of June 30, 2017 and June 30, 2016, respectively. The TPL and the Plan's Fiduciary Net Position include liabilities and assets held for the Supplemental Retiree Benefit Reserve (SRBR).

Actuarial assumptions and methods. The TPL as of June 30, 2017 that was measured by an actuarial valuation as of June 30, 2016, was re-measured as of June 30, 2016 to reflect the actuarial assumptions that the Retirement Board has approved for use in the KCERA actuarial valuation as of June 30, 2017. Those actuarial assumptions were based on the results of an experience study for the period from July 1, 2013 through June 30, 2016. They are the same as the assumptions used in the June 30, 2017 funding valuation. In particular, the following actuarial assumptions were applied to all periods included in the measurement:

Inflation	3.00%
Salary increases	General: 4.00% to 9.00% and Safety: 4.00% to 12.50%, varying by service, including inflation
Investment rate of return	7.25%, net of pension plan investment expenses, including inflation
Administrative expenses	0.90% of payroll allocated to both the employer and the member based on the components of the total average contribution rate (before expenses) for the employer and the member

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Other assumptions	Same as those used in the June 30, 2017 funding valuation. These
	assumptions were developed in the analysis of actuarial experience
	for the period July 1, 2013 through June 30, 2016.

The TPL as of June 30, 2016 that was measured by an actuarial valuation as of June 30, 2015 used the following actuarial assumptions, applied to all periods in the measurement.

Inflation	3.25%
Salary increases	General: 4.25% to 9.25% and Safety: 4.25% to 11.75%, varying by service, including inflation
Investment rate of return	7.50%, net of pension plan investment expenses, including inflation
Administrative expenses	0.90% of payroll allocated to both the employer and the member based on the components of the total average contribution rate (before expenses) for the employer and the member
Other assumptions	Same as those used in the June 30, 2016 funding valuation. These assumptions were developed in the analysis of actuarial experience for the period July 1, 2010 through June 30, 2013.

The Entry Age Actuarial Cost Method used in KCERA's annual actuarial valuation has also been applied in measuring the service cost and TPL with one exception. For purposes of measuring the service cost and TPL, we have reflected the same plan provisions used in determining the member's Actuarial Present Value of Projected Benefits. This is different from the version of this method applied in KCERA's annual funding valuation, where the Normal Cost is determined as if the current benefit accrual rate had always been in effect.

### **Target Asset Allocation**

The long-term expected rate of return on pension plan investments was determined in 2017 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 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 June 30, 2017 long-term expected investment rate of return assumption are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Large Cap U.S. Equity	15%	5.61%
Small Cap U.S. Equity	4%	6.37%
Global Equity	6%	6.50%
Developed International Equity	8%	6.96%
Emerging Market Equity	4%	9.28%
U.S. Core Fixed Income	19%	1.06%
High Yield/Specialty	6%	3.65%
Emerging Market Debt	4%	3.85%
Core Real Estate	5%	4.37%
Value Added Real Estate	5%	6.00%
Commodities	4%	3.76%
Hedge Funds	10%	4.70%
Private Equity	5%	8.70%
Private Credit	<u>5%</u>	5.10%
Total	100%	

*Discount rate:* The discount rates used to measure the Total Pension Liability (TPL) were 7.25% and 7.50% as of June 30, 2017 and June 30, 2016, respectively. The projection of cash flows used to determine the discount rates 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 employee and 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's 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.

The discount rate assumptions have been developed without taking into consideration any impact of the 50/50 allocation of future excess earnings between the retirement and Supplement Retirement Benefit Reserve (SRBR) asset pools.

### **Discount Rate Sensitivity**

Sensitivity of the Net Pension Liability to changes in the discount rate. The following presents the Net Pension Liability (NPL) of the KCERA as of June 30, 2017, calculated using the discount rate of 7.25%, as well as what the KCERA's NPL would be if it were calculated using a discount rate that is 1-percentage-point lower (6.25%) or 1-percentage-point higher (8.25%) than the current rate:

Net Pension Liability	1% Decrease (6.25%)	Current Discount Rate (7.25%)	1% Increase (8.25%)
Kern County	\$2,496,841,561	\$1,836,401,634	\$1,294,191,336
Kern County Hospital Authority	398,721,283	293,255,458	206,669,753
Kern County Superior Courts	137,794,620	101,346,545	71,423,276
Berrenda Mesa Water District	1,468,037	1,079,726	760,929
Buttonwillow Recreation and Park District	737,666	542,546	382,356
East Kern Cemetery District	609,299	448,133	315,819
Inyokern Community Services District	0	0	0
Kern County Water Agency	33,757,685	24,828,435	17,497,668
Kern Mosquito and Vector Control District	6,000,516	4,413,319	3,110,256
North of the River Sanitation District	5,042,301	3,708,561	2,613,583
San Joaquin Valley Unified Air Pollution Control District	124,886,456	91,852,721	64,732,569
Shafter Recreation and Park District	399,530	293,850	207,089
West Side Cemetery District	2,019,491	1,485,315	1,046,765
West Side Mosquito and Vector Control District	2,901,700	2,134,171	1,504,042
West Side Recreation and Park District	2,970,439	<u>2,184,728</u>	<u>1,539,672</u>
Total for all Employers	\$3,214,150,584	\$2,363,975,142	\$1,665,995,113

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

Reporti	ng Date for Employer under GAS 68	June 30, 2018	June 30, 2017
Measur	ement Date for Employer under GAS 68	June 30, 2017	June 30, 2016
Total Per	ision Liability		
1. Serv	ice Cost	\$122,184,336	\$123,181,283
2. Inter	rest	438,385,093	427,646,235
3. Char	nge of benefit terms	0	0
	erences between expected and actual experience	(109,367,980)	(105,053,516)
5. Char	nges of assumptions	196,259,373	0
6. Bene	efit payments, including refunds of member contributions	<u>(305,817,454)</u>	<u>(288,738,174)</u>
7. Net o	change in Total Pension Liability	\$341,643,368	\$157,035,828
8. Tota	l Pension Liability – beginning	5,985,226,950	5,828,191,122
	l Pension Liability – ending	\$6,326,870,318	<u>\$5,985,226,950</u>
Plan's Fi	duciary Net Position		
10. Cont	tributions – employer <sup>(1)</sup>	\$224,351,019	\$216,228,558
11. Cont	tributions – employee <sup>(1)</sup>	51,410,469	51,763,636
12. Net i	investment income	426,606,857	(27,535,157)
13. Bene	efit payments, including refunds of member contributions	(305,817,454)	(288,738,174)
14. Adm	ninistrative expense	(5,243,309)	(5,224,452)
15. Othe	r	0	0
16. Net o	change in Plan's Fiduciary Net Position	\$391,307,582	\$(53,505,589)
17. Plan	's Fiduciary Net Position – beginning	3,571,587,594	3,625,093,183
18. Plan	's Fiduciary Net Position – ending	\$3,962,895,176	<u>\$3,571,587,594</u>
19. Net	Pension Liability – ending (9) – (18)	<u>\$2,363,975,142</u>	<u>\$2,413,639,356</u>
20. Plan	's Fiduciary Net Position as a percentage of the Total Pension Liability	62.64%	59.67%
	ered employee payroll <sup>(2)</sup>	\$546,671,003	\$537,539,991
	Pension Liability as percentage of covered employee payroll	432.43%	449.02%

### Notes to Schedule:

Benefit changes: None.

<sup>(1)</sup> See footnote (1) under Exhibit 6 on page 10.

<sup>(2)</sup> Covered employee payroll represents compensation earnable and pensionable compensation. Only compensation earnable and pensionable compensation that would possibly go into the determination of retirement benefits are included.



Schedule of Employer Contributions – Last Nine Fiscal Years

Year Ended June 30	Actuarially Determined Contributions <sup>(1)</sup>	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered-Employee Payroll <sup>(2)</sup>	Contributions as a Percentage of Covered Employee Payroll
2009	\$138,815,000	\$138,815,000	\$0	\$482,879,000	28.74%
2010	151,127,000	151,127,000	0	559,872,000	26.99%
2011	177,444,000	177,444,000	0	559,380,000	31.72%
2012	189,837,000	189,837,000	0	526,079,162	36.09%
2013	211,677,000	211,677,000	0	516,465,189	40.99%
2014	220,393,000	220,393,000	0	533,850,811	41.28%
2015	215,477,000	215,477,000	0	531,598,183	40.53%
2016	216,229,000	216,229,000	0	537,539,991	40.23%
2017	224,351,000	224,351,000	0	546,671,003	41.04%

See accompanying notes to this schedule on next page.

<sup>(1)</sup> All "Actuarially Determined Contributions" through June 30, 2014 were determined as the "Annual Required Contribution" under GAS 25 and 27. Starting from 2016, actuarially determined contributions exclude employer paid member contributions.

<sup>(2)</sup> Covered employee payroll represents compensation earnable and pensionable compensation. Only compensation earnable and pensionable compensation that would possibly go into the determination of retirement benefits are included.

Notes to Exhibit 6		
Methods and used assumptions to establish "actuarially determined contribution" rates:		
Valuation date	Actuarially determined contribution rates are calculate year in which contributions are reported	d as of June 30, two years prior to the end of the fiscal
Actuarial cost method	Entry Age Actuarial Cost Method	
Amortization method	Level percent of payroll for total unfunded liability	
Remaining amortization period	18.5 years as of June 30, 2017 for all UAAL as of June UAAL due to actuarial gains or losses or due to chang amortized over a 18-year closed period effective with accrued liability that arises due to plan amendments is exception of a change due to retirement incentives, why years).	es in actuarial assumptions or methods will be each valuation. Any change in unfunded actuarial amortized over its own declining 15-year period (with
Asset valuation method	Market value of assets (MVA) less unrecognized retur are equal to the difference between the actual market r and are recognized semi-annually over a five-year peri greater than 150% of MVA. The Actuarial Value of A valuation reserves.	eturn and the expected return on a market value basis iod. The AVA cannot be less than 50% of MVA, nor
Actuarial assumptions:	June 30, 2017 Valuation Date	June 30, 2016 Valuation Date
Investment rate of return	7.25%, net of pension plan investment expenses, including inflation	7.50%, net of pension plan investment expenses, including inflation
Inflation rate	3.00%	3.25%
Real across-the-board salary increase	0.50%	0.50%
Projected salary increases <sup>(1)</sup>	General: 4.00% to 9.00% and Safety: 4.00% to 12.50%	General: 4.25% to 9.25% and Safety: 4.25% to 11.75%
Administrative Expenses	0.90% of payroll allocated to both the employer and member based on the components of the total average contribution rate (before expenses) for the employer and member.	0.90% of payroll allocated to both the employer and member based on the components of the total average contribution rate (before expenses) for the employer and member.
Cost of living adjustments	2.50% (actual increases contingent upon CPI increases with a 2.50% maximum)	2.50% (actual increases contingent upon CPI increases with a 2.50% maximum)
Other assumptions	Same as those used in the June 30, 2017 funding actuarial valuation	Same as those used in the June 30, 2016 funding actuarial valuation

<sup>(1)</sup> Includes inflation at 3.00% plus real across-the-board salary increase of 0.50% plus merit and promotional increases for 2017 and inflation at 3.25% plus real across-the-board salary increase of 0.50% plus merit and promotional increases for 2016.

## **Determination of Proportionate Share**

Actual Payroll by Employer and Membership Class July 1, 2015 to June 30, 2016 For Proportionate Share as of June 30, 2016 Measurement Date								
	гогтор	General	e as of Julie 30,	Safety	ment Date	District		Total
Employer	General	Percentage*	Safety	Percentage	District	Percentage*	Total	Percentage
Kern County	\$339,308,567	93.147%	\$140,580,471	100.000%	\$0	0.000%	\$479,889,038	89.275%
Kern County Superior Courts	24,964,019	6.853%	0	0.000%	0	0.000%	24,964,019	4.644%
Berrenda Mesa Water District	0	0.000%	0	0.000%	338,001	1.034%	338,001	0.063%
Buttonwillow Recreation and Park District	0	0.000%	0	0.000%	135,355	0.414%	135,355	0.025%
East Kern Cemetery District	0	0.000%	0	0.000%	94,080	0.288%	94,080	0.017%
Inyokern Community Services District	0	0.000%	0	0.000%	56,396	0.173%	56,396	0.010%
Kern County Water Agency	0	0.000%	0	0.000%	6,342,198	19.403%	6,342,198	1.180%
Kern Mosquito and Vector Control District	0	0.000%	0	0.000%	1,061,688	3.248%	1,061,688	0.198%
North of the River Sanitation District	0	0.000%	0	0.000%	869,712	2.661%	869,712	0.162%
San Joaquin Valley Unified Air Pollution								
Control District	0	0.000%	0	0.000%	22,163,475	67.805%	22,163,475	4.123%
Shafter Recreation and Park District	0	0.000%	0	0.000%	94,569	0.289%	94,569	0.018%
West Side Cemetery District	0	0.000%	0	0.000%	371,112	1.135%	371,112	0.069%
West Side Mosquito and Vector Control								
District	0	0.000%	0	0.000%	557,694	1.706%	557,694	0.104%
West Side Recreation and Park District	0	0.000%	0	0.000%	602,654	1.844%	602,654	0.112%
Total for all Employers	\$364,272,586	100.000%	\$140,580,471	100.000%	\$32,686,934	100.000%	\$537,539,991	100.000%

\* The unrounded percentages are used in the allocation of the NPL amongst the General and District employers.

### **Determination of Proportionate Share**

		General		Safety		District		Subtotal
Employer	General	Percentage	Safety	Percentage	District	Percentage	Subtotal	Percentage
Kern County	\$1,375,366,137	93.147%	\$865,996,559	100.000%	\$0	0.000%	\$2,241,362,696	90.765%
Kern County Superior Courts	101,188,274	6.853%	0	0.000%	0	0.000%	101,188,274	4.098%
Berrenda Mesa Water District	0	0.000%	0	0.000%	1,311,631	1.034%	1,311,631	0.053%
Buttonwillow Recreation and Park District	0	0.000%	0	0.000%	525,160	0.414%	525,160	0.021%
East Kern Cemetery District	0	0.000%	0	0.000%	365,328	0.288%	365,328	0.015%
Inyokern Community Services District	0	0.000%	0	0.000%	219,451	0.173%	219,451	0.009%
Kern County Water Agency	0	0.000%	0	0.000%	24,612,745	19.403%	24,612,745	0.997%
Kern Mosquito and Vector Control District	0	0.000%	0	0.000%	4,120,095	3.248%	4,120,095	0.167%
North of the River Sanitation District	0	0.000%	0	0.000%	3,375,484	2.661%	3,375,484	0.137%
San Joaquin Valley Unified Air Pollution								
Control District	0	0.000%	0	0.000%	86,010,781	67.805%	86,010,781	3.483%
Shafter Recreation and Park District	0	0.000%	0	0.000%	366,597	0.289%	366,597	0.015%
West Side Cemetery District	0	0.000%	0	0.000%	1,439,750	1.135%	1,439,750	0.058%
West Side Mosquito and Vector Control								
District	0	0.000%	0	0.000%	2,164,064	1.706%	2,164,064	0.087%
West Side Recreation and Park District	0	0.000%	0	0.000%	2,339,118	<u>1.844%</u>	2,339,118	<u>0.095%</u>
Total for all Employers	\$1,476,554,411	100.000%	\$865,996,559	100.000%	\$126,850,204	100.000%	\$2,469,401,174	100.000%

### **Determination of Proportionate Share**

Allocation of June 30, 2016 Net Pension Liability (NPL)								
Employer	SRBR	SRBR Percentage	Total	Total Percentage				
Kern County	\$(49,781,385)	89.275%	\$2,191,581,311*	90.800%				
Kern County Superior Courts	(2,589,648)	4.644%	98,598,626	4.085%				
Berrenda Mesa Water District	(35,063)	0.063%	1,276,568	0.053%				
Buttonwillow Recreation and Park District	(14,041)	0.025%	511,119	0.021%				
East Kern Cemetery District	(9,759)	0.017%	355,569	0.015%				
Inyokern Community Services District	(5,850)	0.010%	213,601	0.009%				
Kern County Water Agency	(657,909)	1.180%	23,954,836	0.992%				
Kern Mosquito and Vector Control District	(110,134)	0.198%	4,009,961	0.166%				
North of the River Sanitation District	(90,220)	0.162%	3,285,264	0.136%				
San Joaquin Valley Unified Air Pollution								
Control District	(2,299,133)	4.123%	83,711,648	3.468%				
Shafter Recreation and Park District	(9,810)	0.018%	356,787	0.015%				
West Side Cemetery District	(38,497)	0.069%	1,401,253	0.058%				
West Side Mosquito and Vector Control								
District	(57,853)	0.104%	2,106,211	0.087%				
West Side Recreation and Park District	(62,516)	0.112%	2,276,602	0.094%				
Total for all Employers	\$(55,761,818)	100.000%	\$2,413,639,356	100.000%				

\*Since our last GAS 68 report, we have separated Kern County Hospital Authority from Kern County. The NPL allocated to Kern County Hospital Authority and Kern County as of June 30, 2016 is \$329,935,445 and \$1,861,645,866, respectively.

### **Determination of Proportionate Share**

#### Notes:

Based on the July 1, 2015 through June 30, 2016 actual payroll as provided by KCERA.

The Net Pension Liability (NPL) for each membership class is the Total Pension Liability (TPL) minus the Plan's Fiduciary Net Position (plan assets). The TPL for each membership class is obtained from internal valuation results based on the actual participants in each membership class. The Plan's Fiduciary Net Position for each membership was estimated by adjusting the valuation value of assets for each membership class by the ratio of the total KCERA Plan's Fiduciary Net Position (excluding the SRBR) to total KCERA valuation value of assets. Based on this methodology, any non-valuation reserves are allocated amongst the membership classes based on each membership class' valuation value of assets.

The Safety membership class has only one employer (Kern County), so all of the NPL for Safety is allocated to the County.

For General and District, the NPL is allocated based on the actual payroll within the General and District membership classes, respectively.

- Calculate ratio of employer's payroll to the total payroll 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 associated with the SRBR is allocated based on the actual total payroll for each employer within KCERA.

If the employer is in several 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, the reporting date for the employer under GAS 68 is June 30, 2017. The reporting date and measurement date for the plan under GAS 67 are June 30, 2016. Consistent with the provisions of GAS 68, the assets and liabilities measured as of June 30, 2016 are not adjusted or "rolled forward" to June 30, 2017. 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) Interest on the Total Pension Liability
- -4) Expensed portion of the current-period benefit changes
- -5) Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability
- 6) Expensed portion of current-period changes of assumptions or other inputs
- 7) Member contributions
- -8) Projected earnings on plan investments
- -9) Expensed portion of current-period differences between actual and projected earnings on plan investments
- -10) Administrative expense
- -11) Recognition of beginning of year deferred outflows of resources as pension expense
- 12) Recognition of beginning of year deferred inflows of resources as pension expense



## EXHIBIT 7 (continued) Determination of Proportionate Share

		-	by Employer an	-	Class			
			y 1, 2016 to June	·				
For Proportionate Share as of June 30, 2017 Measurement Date								
Employer	General	General Percentage*	Safety	Safety Percentage	District	District Percentage*	Total	Total Percentage
Kern County	\$269,844,894	71.787%	\$137,488,821	100.000%		0.000%	\$407,333,715	74.512%
Kern County Hospital Authority	78,815,070	20.967%	\$157, <del>4</del> 00,021 0	0.000%	30 0	0.000%	78,815,070	14.417%
Kern County Superior Courts	27,236,241	7.246%	0	0.000%	0	0.000%	27,236,241	4.982%
Berrenda Mesa Water District	0	0.000%	0	0.000%	270,303	0.812%	270,303	0.049%
Buttonwillow Recreation and Park District	0	0.000%	0	0.000%	135,623	0.408%	135,623	0.025%
East Kern Cemetery District	0	0.000%	0	0.000%	112,019	0.337%	112,019	0.021%
Inyokern Community Services District	0	0.000%	0	0.000%	0	0.000%	0	0.000%
Kern County Water Agency	0	0.000%	0	0.000%	6,215,199	18.672%	6,215,199	1.137%
Kern Mosquito and Vector Control District	0	0.000%	0	0.000%	1,104,807	3.319%	1,104,807	0.202%
North of the River Sanitation District	0	0.000%	0	0.000%	928,465	2.789%	928,465	0.170%
San Joaquin Valley Unified Air Pollution					,		,	
Control District	0	0.000%	0	0.000%	22,993,004	69.077%	22,993,004	4.206%
Shafter Recreation and Park District	0	0.000%	0	0.000%	73,697	0.221%	73,697	0.013%
West Side Cemetery District	0	0.000%	0	0.000%	371,617	1.117%	371,617	0.068%
West Side Mosquito and Vector Control								
District	0	0.000%	0	0.000%	534,406	1.605%	534,406	0.098%
West Side Recreation and Park District	0	0.000%	0	0.000%	546,838	<u>1.643%</u>	546,838	0.100%
Total for all Employers	\$375,896,205	100.000%	\$137,488,821	100.000%	\$33,285,978	100.000%	\$546,671,004	100.000%

\* The unrounded percentages are used in the allocation of the NPL amongst the General and District employers.

## EXHIBIT 7 (continued) Determination of Proportionate Share

	Allocation	n of June 30, 20	17 Net Pension I	Liability (NPL)				
		General		Safety		District		Subtotal
Employer	General	Percentage	Safety	Percentage	District	Percentage	Subtotal	Percentage
Kern County	\$1,037,622,360	71.787%	\$849,455,619	100.000%	\$0	0.000%	\$1,887,077,979	77.594%
Kern County Hospital Authority	303,060,833	20.967%	0	0.000%	0	0.000%	303,060,833	12.461%
Kern County Superior Courts	104,735,003	7.246%	0	0.000%	0	0.000%	104,735,003	4.307%
Berrenda Mesa Water District	0	0.000%	0	0.000%	1,113,354	0.812%	1,113,354	0.046%
Buttonwillow Recreation and Park District	0	0.000%	0	0.000%	559,419	0.408%	559,419	0.023%
East Kern Cemetery District	0	0.000%	0	0.000%	462,069	0.337%	462,069	0.019%
Inyokern Community Services District	0	0.000%	0	0.000%	0	0.000%	0	0.000%
Kern County Water Agency	0	0.000%	0	0.000%	25,601,667	18.672%	25,601,667	1.053%
Kern Mosquito and Vector Control District	0	0.000%	0	0.000%	4,550,768	3.319%	4,550,768	0.187%
North of the River Sanitation District	0	0.000%	0	0.000%	3,824,071	2.789%	3,824,071	0.157%
San Joaquin Valley Unified Air Pollution								
Control District	0	0.000%	0	0.000%	94,713,278	69.077%	94,713,278	3.894%
Shafter Recreation and Park District	0	0.000%	0	0.000%	303,019	0.221%	303,019	0.012%
West Side Cemetery District	0	0.000%	0	0.000%	1,531,548	1.117%	1,531,548	0.063%
West Side Mosquito and Vector Control								
District	0	0.000%	0	0.000%	2,200,657	1.605%	2,200,657	0.091%
West Side Recreation and Park District	0	0.000%	0	<u>0.000%</u>	2,252,760	1.643%	2,252,760	0.093%
Total for all Employers	\$1,445,418,196	100.000%	\$849,455,619	100.000%	\$137,112,610	100.000%	\$2,431,986,425	100.000%

## **Determination of Proportionate Share**

Employer	SRBR	SRBR Percentage	Total	Total Percentage	
Kern County	\$(50,676,345)	74.512%	\$1,836,401,634	77.683%	
Kern County Hospital Authority	(9,805,375)	14.417%	293,255,458	12.405%	
Kern County Superior Courts	(3,388,458)	4.982%	101,346,545	4.287%	
Berrenda Mesa Water District	(33,628)	0.049%	1,079,726	0.046%	
Buttonwillow Recreation and Park District	(16,873)	0.025%	542,546	0.023%	
East Kern Cemetery District	(13,936)	0.021%	448,133	0.019%	
Inyokern Community Services District	0	0.000%	0	0.000%	
Kern County Water Agency	(773,232)	1.137%	24,828,435	1.050%	
Kern Mosquito and Vector Control District	(137,449)	0.202%	4,413,319	0.187%	
North of the River Sanitation District	(115,510)	0.170%	3,708,561	0.157%	
San Joaquin Valley Unified Air Pollution					
Control District	(2,860,557)	4.206%	91,852,721	3.886%	
Shafter Recreation and Park District	(9,169)	0.013%	293,850	0.012%	
West Side Cemetery District	(46,233)	0.068%	1,485,315	0.063%	
West Side Mosquito and Vector Control					
District	(66,486)	0.098%	2,134,171	0.090%	
West Side Recreation and Park District	(68,032)	<u>0.100%</u>	2,184,728	0.092%	
Total for all Employers	\$(68,011,283)	100.000%	\$2,363,975,142	100.000%	

## EXHIBIT 7 (continued) Determination of Proportionate Share

#### Notes:

Based on the July 1, 2016 through June 30, 2017 actual payroll as provided by KCERA.

The Net Pension Liability (NPL) for each membership class is the Total Pension Liability (TPL) minus the Plan's Fiduciary Net Position (plan assets). The TPL for each membership class is obtained from internal valuation results based on the actual participants in each membership class. The Plan's Fiduciary Net Position for each membership was estimated by adjusting the valuation value of assets for each membership class by the ratio of the total KCERA Plan's Fiduciary Net Position (excluding the SRBR) to total KCERA valuation value of assets. Based on this methodology, any non-valuation reserves are allocated amongst the membership classes based on each membership class' valuation value of assets.

The Safety membership class has only one employer (Kern County), so all of the NPL for Safety is allocated to the County.

For General and District, the NPL is allocated based on the actual payroll within the General and District membership classes, respectively.

- Calculate ratio of employer's payroll to the total payroll 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 associated with the SRBR is allocated based on the actual total payroll for each employer within KCERA.

If the employer is in several 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, the reporting date for the employer under GAS 68 is June 30, 2018. The reporting date and measurement date for the plan under GAS 67 are June 30, 2017. Consistent with the provisions of GAS 68, the assets and liabilities measured as of June 30, 2017 are <u>not</u> 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) Interest on the Total Pension Liability
- -4) Expensed portion of the current-period benefit changes
- -5) Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability
- 6) Expensed portion of current-period changes of assumptions or other inputs
- 7) Member contributions
- -8) Projected earnings on plan investments
- -9) Expensed portion of current-period differences between actual and projected earnings on plan investments
- -10) Administrative expense
- -11) Recognition of beginning of year deferred outflows of resources as pension expense
- -12) Recognition of beginning of year deferred inflows of resources as pension expense



Pension Expense – Total for all Employers

Reporting Date for Employer under GAS 68 Aeasurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Components of Pension Expense		
. Service Cost	\$122,184,336	\$123,181,283
. Interest on the Total Pension Liability	438,385,093	427,646,235
. Expensed portion of current-period changes in proportion and differences between employer's		
contributions and proportionate share of contributions	0	0
. Expensed portion of current-period benefit changes	0	0
. Expensed portion of current-period difference between expected and actual experience in the		
Total Pension Liability	(21,402,736)	(20,598,729)
. Expensed portion of current-period changes of assumptions or other inputs	38,406,922	0
. Member contributions	(51,410,469)	(51,763,636)
Projected earnings on plan investments	(266,545,347)	(270,908,098)
Expensed portion of current-period differences between actual and projected earnings on		
plan investments	(32,012,302)	59,688,651
0. Administrative expense	5,243,309	5,224,452
1. Other	0	0
2. Recognition of beginning of year deferred outflows of resources as pension expense	135,603,853	75,915,202
3. Recognition of beginning of year deferred inflows of resources as pension expense	(98,148,798)	(77,550,069)
4. Net amortization of deferred amounts from changes in proportion and differences between		,
employer's contributions and proportionate share of contributions	0	0
Pension Expense	<u>\$270,303,861</u>	\$270,835,291

Pension Expense – Kern County

ne 30, 2018 ne 30, 2017	June 30, 2017 June 30, 2016
94,916,194	\$95,010,016
40,549,731	329,844,574
- ) )	)- )- ·
2,417,519	7,789,917
0	0
6,626,240)	(15,887,848)
29,835,565	0
9,937,081)	(39,925,415)
7,059,840)	(208,952,070)
,	
4,868,048)	46,038,000
4,073,147	4,029,633
0	0
)5,340,843	58,553,578
6,244,714)	(59,814,557)
-	
8,501,578	711,661
20,898,654	<u>\$217,397,489</u>

<sup>(1)</sup> Restated from our prior GAS 68 report, due to excluding Kern County Hospital Authority from Kern County.

## Pension Expense – Kern County Hospital Authority

Me	orting Date for Employer under GAS 68 asurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016		
Components of Pension Expense         1. Service Cost       \$15,157,192       \$16,83					
1.		\$15,157,192	\$16,838,420		
2.	Interest on the Total Pension Liability	54,382,476	58,457,636		
3.	Expensed portion of current-period changes in proportion and differences between employer's				
	contributions and proportionate share of contributions	(5,425,446)	(9,550,695)		
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	(2,655,049)	(2,815,769)		
6.	Expensed portion of current-period changes of assumptions or other inputs	4,764,449	0		
7.	Member contributions	(6,377,563)	(7,075,895)		
8.	Projected earnings on plan investments	(33,065,440)	(37,032,121)		
9.	Expensed portion of current-period differences between actual and projected earnings on				
	plan investments	(3,971,185)	8,159,215		
10.	Administrative expense	650,442	714,163		
11.	Other	0	0		
12.	Recognition of beginning of year deferred outflows of resources as pension expense	16,821,907	10,377,323		
13.	Recognition of beginning of year deferred inflows of resources as pension expense	(12,175,539)	(10,600,803)		
14.	Net amortization of deferred amounts from changes in proportion and differences between				
	employer's contributions and proportionate share of contributions	(12,517,735)	<u>(2,967,040)</u>		
Pen	sion Expense	<u>\$15,588,509</u>	<u>\$24,504,434</u>		

### Pension Expense – Kern County Superior Courts

Reporting Date for Employer under GAS 68 Aeasurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Components of Pension Expense		
. Service Cost	\$5,238,195	\$5,032,030
. Interest on the Total Pension Liability	18,794,112	17,469,607
. Expensed portion of current-period changes in proportion and differences between employer's		
contributions and proportionate share of contributions	774,964	1,411,251
. Expensed portion of current-period benefit changes	0	0
. Expensed portion of current-period difference between expected and actual experience in the		
Total Pension Liability	(917,562)	(841,471)
. Expensed portion of current-period changes of assumptions or other inputs	1,646,552	0
. Member contributions	(2,204,031)	(2,114,576)
. Projected earnings on plan investments	(11,427,129)	(11,066,759)
. Expensed portion of current-period differences between actual and projected earnings on		
plan investments	(1,372,407)	2,438,317
0. Administrative expense	224,787	213,422
1. Other	0	0
2. Recognition of beginning of year deferred outflows of resources as pension expense	5,813,505	3,101,182
3. Recognition of beginning of year deferred inflows of resources as pension expense	(4,207,761)	(3,167,967)
4. Net amortization of deferred amounts from changes in proportion and differences between	,	
employer's contributions and proportionate share of contributions	2,375,657	964,406
Pension Expense	<u>\$14,738,882</u>	\$13,439,442

### Pension Expense – Berrenda Mesa Water District

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Components of Pension Expense		
1. Service Cost	\$55,805	\$65,152
2. Interest on the Total Pension Liability	200,229	226,181
3. Expensed portion of current-period changes in proportion and differences between employer's	,	
contributions and proportionate share of contributions	(32,390)	(55,222)
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	(9,776)	(10,895)
6. Expensed portion of current-period changes of assumptions or other inputs	17,542	0
7. Member contributions	(23,481)	(27,378)
8. Projected earnings on plan investments	(121,742)	(143,283)
9. Expensed portion of current-period differences between actual and projected earnings on		
plan investments	(14,621)	31,569
10. Administrative expense	2,395	2,763
11. Other	0	0
12. Recognition of beginning of year deferred outflows of resources as pension expense	61,936	40,151
13. Recognition of beginning of year deferred inflows of resources as pension expense	(44,829)	(41,016)
14. Net amortization of deferred amounts from changes in proportion and differences between		. ,
employer's contributions and proportionate share of contributions	(87,830)	(32,608)
Pension Expense	<u>\$3,238</u>	\$55,414

Pension Expense – Buttonwillow Recreation and Park District

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Components of Pension Expense		
. Service Cost	\$28,043	\$26,085
2. Interest on the Total Pension Liability	100,612	90,560
Expensed portion of current-period changes in proportion and differences between employer's		
contributions and proportionate share of contributions	7,805	13,192
Expensed portion of current-period benefit changes	0	0
Expensed portion of current-period difference between expected and actual experience in the		
Total Pension Liability	(4,912)	(4,362)
5. Expensed portion of current-period changes of assumptions or other inputs	8,815	0
7. Member contributions	(11,799)	(10,962)
8. Projected earnings on plan investments	(61,174)	(57,368)
Expensed portion of current-period differences between actual and projected earnings on		
plan investments	(7,347)	12,640
0. Administrative expense	1,203	1,106
1. Other	0	0
2. Recognition of beginning of year deferred outflows of resources as pension expense	31,122	16,076
3. Recognition of beginning of year deferred inflows of resources as pension expense	(22,526)	(16,422)
4. Net amortization of deferred amounts from changes in proportion and differences between		
employer's contributions and proportionate share of contributions	<u>(13,831)</u>	<u>(27,023)</u>
Pension Expense	<u>\$56,011</u>	<u>\$43,522</u>

### Pension Expense – East Kern Cemetery District

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Components of Pension Expense		
1. Service Cost	\$23,161	\$18,147
2. Interest on the Total Pension Liability	83,104	62,999
3. Expensed portion of current-period changes in proportion and differences between employer's		
contributions and proportionate share of contributions	18,164	18,427
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	(4,057)	(3,035)
6. Expensed portion of current-period changes of assumptions or other inputs	7,281	0
7. Member contributions	(9,746)	(7,626)
8. Projected earnings on plan investments	(50,528)	(39,909)
9. Expensed portion of current-period differences between actual and projected earnings on		
plan investments	(6,068)	8,793
10. Administrative expense	994	770
11. Other	0	0
12. Recognition of beginning of year deferred outflows of resources as pension expense	25,706	11,184
13. Recognition of beginning of year deferred inflows of resources as pension expense	(18,606)	(11,424)
14. Net amortization of deferred amounts from changes in proportion and differences between		
employer's contributions and proportionate share of contributions	<u>20,759</u>	2,332
Pension Expense	<u>\$90,164</u>	<u>\$60,658</u>

Pension Expense – Inyokern Community Services District

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Components of Pension Expense		
1. Service Cost	\$0	\$10,902
2. Interest on the Total Pension Liability	0	37,846
3. Expensed portion of current-period changes in proportion and differences between employer's		
contributions and proportionate share of contributions	(38,767)	(4,381)
<ol> <li>Expensed portion of current-period benefit changes</li> </ol>	0	0
5. Expensed portion of current-period difference between expected and actual experience in the		
Total Pension Liability	0	(1,823)
6. Expensed portion of current-period changes of assumptions or other inputs	0	0
7. Member contributions	0	(4,581)
8. Projected earnings on plan investments	0	(23,975)
P. Expensed portion of current-period differences between actual and projected earnings on		
plan investments	0	5,282
0. Administrative expense	0	462
11. Other	0	0
12. Recognition of beginning of year deferred outflows of resources as pension expense	0	6,718
13. Recognition of beginning of year deferred inflows of resources as pension expense	0	(6,863)
4. Net amortization of deferred amounts from changes in proportion and differences between		
employer's contributions and proportionate share of contributions	(3,755)	626
Pension Expense	<u>\$(42,522)</u>	<u>\$20,213</u>

#### Pension Expense – Kern County Water Agency

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Components of Pension Expense		
1. Service Cost	\$1,283,282	\$1,222,547
2. Interest on the Total Pension Liability	4,604,285	4,244,294
3. Expensed portion of current-period changes in proportion and differences between employer's		
contributions and proportionate share of contributions	263,510	(21,985)
<ol> <li>Expensed portion of current-period benefit changes</li> </ol>	0	0
5. Expensed portion of current-period difference between expected and actual experience in the		
Total Pension Liability	(224,789)	(204,438)
6. Expensed portion of current-period changes of assumptions or other inputs	403,381	0
7. Member contributions	(539,956)	(513,743)
8. Projected earnings on plan investments	(2,799,481)	(2,688,703)
9. Expensed portion of current-period differences between actual and projected earnings on		
plan investments	(336,220)	592,397
10. Administrative expense	55,070	51,852
11. Other	0	0
2. Recognition of beginning of year deferred outflows of resources as pension expense	1,424,225	753,442
13. Recognition of beginning of year deferred inflows of resources as pension expense	(1,030,840)	(769,667)
14. Net amortization of deferred amounts from changes in proportion and differences between		
employer's contributions and proportionate share of contributions	479,623	501,608
Pension Expense	<u>\$3,582,090</u>	<u>\$3,167,604</u>

Pension Expense – Kern Mosquito and Vector Control District

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Components of Pension Expense		
I. Service Cost	\$228,107	\$204,650
2. Interest on the Total Pension Liability	818,424	710,481
8. Expensed portion of current-period changes in proportion and differences between employer's		
contributions and proportionate share of contributions	92,965	33,866
<ol> <li>Expensed portion of current-period benefit changes</li> </ol>	0	0
5. Expensed portion of current-period difference between expected and actual experience in the		
Total Pension Liability	(39,957)	(34,222)
5. Expensed portion of current-period changes of assumptions or other inputs	71,702	0
7. Member contributions	(95,979)	(85,999)
3. Projected earnings on plan investments	(497,615)	(450,080)
P. Expensed portion of current-period differences between actual and projected earnings on		
plan investments	(59,764)	99,165
0. Administrative expense	9,789	8,680
1. Other	0	0
2. Recognition of beginning of year deferred outflows of resources as pension expense	253,160	126,124
3. Recognition of beginning of year deferred inflows of resources as pension expense	(183,235)	(128,840)
4. Net amortization of deferred amounts from changes in proportion and differences between		
employer's contributions and proportionate share of contributions	57,764	23,898
Pension Expense	<u>\$655,361</u>	\$507,723

Pension Expense – North of the River Sanitation District

2.       Interest on the Total Pension Liability       687,731       58         3.       Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions       79,457       (8         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       (33,576)       (28         6.       Expensed portion of current-period changes of assumptions or other inputs       60,252       7         7.       Member contributions       (80,652)       (70	\$167,665 582,080 (8,136)
2. Interest on the Total Pension Liability       687,731       58         3. Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions       79,457       (8         4. Expensed portion of current-period benefit changes       0       0       6         5. Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability       (33,576)       (28         6. Expensed portion of current-period changes of assumptions or other inputs       60,252       7         7. Member contributions       (80,652)       (70	582,080
<ol> <li>Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions</li> <li>Expensed portion of current-period benefit changes</li> <li>Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability</li> <li>Expensed portion of current-period changes of assumptions or other inputs</li> <li>Member contributions</li> <li>(80,652)</li> </ol>	,
contributions and proportionate share of contributions79,457(84. Expensed portion of current-period benefit changes005. Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability(33,576)(286. Expensed portion of current-period changes of assumptions or other inputs60,252(707. Member contributions(80,652)(70	(8,136)
4. Expensed portion of current-period benefit changes       0         5. Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability       (33,576)       (24)         6. Expensed portion of current-period changes of assumptions or other inputs       60,252       (30,652)       (70)         7. Member contributions       (80,652)       (70)       (70)	(8,136)
5. Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability       (33,576)       (28         6. Expensed portion of current-period changes of assumptions or other inputs       60,252       (80,652)       (70         7. Member contributions       (80,652)       (70	0
Total Pension Liability(33,576)(286. Expensed portion of current-period changes of assumptions or other inputs60,25277. Member contributions(80,652)(70	0
6. Expensed portion of current-period changes of assumptions or other inputs60,2527. Member contributions(80,652)	
7. Member contributions (80,652) (70	(28,037)
	0
8 Projected earnings on plan investments (A10.151) (200	(70,457)
8. Projected earnings on plan investments (418,151) (368	368,740)
9. Expensed portion of current-period differences between actual and projected earnings on	
plan investments (50,220) 8	81,244
10. Administrative expense 8,226	7,111
11. Other 0	0
12. Recognition of beginning of year deferred outflows of resources as pension expense 212,733 10	103,330
13. Recognition of beginning of year deferred inflows of resources as pension expense (153,974) (105	105,555)
14. Net amortization of deferred amounts from changes in proportion and differences between	
employer's contributions and proportionate share of contributions <u>43,906</u> <u>5</u>	52,042
Pension Expense <u>\$547,411</u> <u>\$41</u>	\$412,547

Pension Expense – San Joaquin Valley Unified Air Pollution Control District

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Components of Pension Expense		
. Service Cost	\$4,747,496	\$4,272,266
2. Interest on the Total Pension Liability	17,033,539	14,831,947
B. Expensed portion of current-period changes in proportion and differences between employer's		
contributions and proportionate share of contributions	1,770,944	325,934
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	(831,608)	(714,421)
5. Expensed portion of current-period changes of assumptions or other inputs	1,492,309	0
7. Member contributions	(1,997,564)	(1,795,305)
<ol><li>Projected earnings on plan investments</li></ol>	(10,356,672)	(9,395,838)
D. Expensed portion of current-period differences between actual and projected earnings on		
plan investments	(1,243,844)	2,070,167
0. Administrative expense	203,730	181,198
1. Other	0	0
2. Recognition of beginning of year deferred outflows of resources as pension expense	5,268,914	2,632,948
3. Recognition of beginning of year deferred inflows of resources as pension expense	(3,813,591)	(2,689,650)
4. Net amortization of deferred amounts from changes in proportion and differences between	. ,	
employer's contributions and proportionate share of contributions	879,331	553,397
Pension Expense	<u>\$13,152,984</u>	<u>\$10,272,643</u>

Pension Expense – Shafter Recreation and Park District

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Components of Pension Expense		
. Service Cost	\$15,187	\$18,210
2. Interest on the Total Pension Liability	54,493	63,215
8. Expensed portion of current-period changes in proportion and differences between employer's		
contributions and proportionate share of contributions	43,030	57,032
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	(2,660)	(3,045)
5. Expensed portion of current-period changes of assumptions or other inputs	4,774	0
7. Member contributions	(6,390)	(7,652)
8. Projected earnings on plan investments	(33,132)	(40,046)
D. Expensed portion of current-period differences between actual and projected earnings on		
plan investments	(3,979)	8,823
0. Administrative expense	652	772
1. Other	0	0
2. Recognition of beginning of year deferred outflows of resources as pension expense	16,856	11,222
3. Recognition of beginning of year deferred inflows of resources as pension expense	(12,200)	(11,464)
4. Net amortization of deferred amounts from changes in proportion and differences between		
employer's contributions and proportionate share of contributions	57,032	0
Pension Expense	<u>\$133,663</u>	<u>\$97,067</u>

#### Pension Expense – West Side Cemetery District

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Components of Pension Expense		
1. Service Cost	\$76,771	\$71,513
2. Interest on the Total Pension Liability	275,443	248,273
3. Expensed portion of current-period changes in proportion and differences between employer's		
contributions and proportionate share of contributions	22,535	7,125
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	(13,448)	(11,959)
6. Expensed portion of current-period changes of assumptions or other inputs	24,132	0
7. Member contributions	(32,302)	(30,052)
8. Projected earnings on plan investments	(167,474)	(157,277)
9. Expensed portion of current-period differences between actual and projected earnings on		
plan investments	(20,114)	34,653
10. Administrative expense	3,294	3,033
11. Other	0	0
12. Recognition of beginning of year deferred outflows of resources as pension expense	85,202	44,073
13. Recognition of beginning of year deferred inflows of resources as pension expense	(61,668)	(45,022)
14. Net amortization of deferred amounts from changes in proportion and differences between		
employer's contributions and proportionate share of contributions	31,948	24,823
Pension Expense	<u>\$224,319</u>	<u>\$189,183</u>

#### Pension Expense – West Side Mosquito and Vector Control District

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Components of Pension Expense		
1. Service Cost	\$110,307	\$107,492
2. Interest on the Total Pension Liability	395,769	373,176
3. Expensed portion of current-period changes in proportion and differences between employer's		
contributions and proportionate share of contributions	11,901	(49,501)
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	(19,322)	(17,975)
6. Expensed portion of current-period changes of assumptions or other inputs	34,673	0
7. Member contributions	(46,413)	(45,170)
8. Projected earnings on plan investments	(240,634)	(236,402)
9. Expensed portion of current-period differences between actual and projected earnings on		
plan investments	(28,900)	52,086
10. Administrative expense	4,734	4,559
11. Other	0	0
12. Recognition of beginning of year deferred outflows of resources as pension expense	122,422	66,246
13. Recognition of beginning of year deferred inflows of resources as pension expense	(88,608)	(67,672)
14. Net amortization of deferred amounts from changes in proportion and differences between		
employer's contributions and proportionate share of contributions	80,519	130,020
Pension Expense	<u>\$336,448</u>	<u>\$316,859</u>

Pension Expense – West Side Recreation and Park District

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Components of Pension Expense		
1. Service Cost	\$112,917	\$116,188
2. Interest on the Total Pension Liability	405,145	403,366
3. Expensed portion of current-period changes in proportion and differences between employer's		
contributions and proportionate share of contributions	(6,191)	33,176
<ol> <li>Expensed portion of current-period benefit changes</li> </ol>	0	0
5. Expensed portion of current-period difference between expected and actual experience in the		
Total Pension Liability	(19,780)	(19,429)
6. Expensed portion of current-period changes of assumptions or other inputs	35,495	0
7. Member contributions	(47,512)	(48,825)
8. Projected earnings on plan investments	(246,335)	(255,527)
P. Expensed portion of current-period differences between actual and projected earnings on		,
plan investments	(29,585)	56,300
10. Administrative expense	4,846	4,928
11. Other	0	0
2. Recognition of beginning of year deferred outflows of resources as pension expense	125,322	71,605
13. Recognition of beginning of year deferred inflows of resources as pension expense	(90,707)	(73,147)
14. Net amortization of deferred amounts from changes in proportion and differences between	/	
employer's contributions and proportionate share of contributions	95,034	61,858
Pension Expense	<u>\$338,649</u>	<u>\$350,493</u>

## **EXHIBIT 9**

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

	Date for Employer under GAS 68 nt Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Deferred Ou	utflows of Resources		
. Change share of	s in proportion and differences between employer's contributions and proportionate f $contributions^{(1)}$	\$61,531,583	\$53,431,287 <sup>(2)</sup>
. Change	s of assumptions or other inputs	207,264,194	88,318,627
. Net exc	ess of projected over actual earnings on pension plan investments (if any)	75,513,080	250,738,958
	nce between expected and actual experience in the Total Pension Liability	0	0
	eferred Outflows of Resources	\$344,308,857	\$392,488,872(2)
Deferred In	flows of Resources		
	s in proportion and differences between employer's contributions and proportionate f contributions $^{(1)}$	\$61,531,583	\$53,431,287 <sup>(2)</sup>
. Change	s of assumptions or other inputs	0	0
. Net exc	ess of actual over projected earnings on pension plan investments (if any)	0	0
. Differei	nce between expected and actual experience in the Total Pension Liability	203,249,922	163,913,177
0. Total D	eferred Inflows of Resources	\$264,781,505	\$217,344,464 <sup>(2)</sup>
Deferred out	flows of resources and deferred inflows of resources related to pension will be reco	gnized as follows:	
	Reporting Date for Employer under GAS 68 Year Ended June 30	):	
	201	8 N/A	\$37,455,055
	201	9 \$22,446,939	37,455,055
	202	0 51,465,537	66,473,653
	202	1 20,812,400	35,820,516
	202	2 (17,067,987)	(2,059,871)
	202	3 1,870,463	0
	Thereafte	er 0	0

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

<sup>(2)</sup> Restated from our prior GAS 68 report, due to excluding Kern County Hospital Authority from Kern County.



## Deferred Outflows of Resources and Deferred Inflows of Resources – Kern County

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Deferred Outflows of Resources		
<ol> <li>Changes in proportion and differences between employer's contributions and proportionat share of contributions<sup>(1)</sup></li> </ol>	te \$36,234,522	\$35,781,160 <sup>(2)</sup>
2. Changes of assumptions or other inputs	161,008,590	68,120,370 <sup>(2)</sup>
3. Net excess of projected over actual earnings on pension plan investments (if any)	58,660,660	193,395,563 <sup>(2)</sup>
4. Difference between expected and actual experience in the Total Pension Liability	0	0
5. Total Deferred Outflows of Resources	\$255,903,772	\$297,297,093 <sup>(2)</sup>
Deferred Inflows of Resources		
<ol> <li>Changes in proportion and differences between employer's contributions and proportional share of contributions<sup>(1)</sup></li> </ol>	te \$2,148,535	\$3,129,600 <sup>(2)</sup>
7. Changes of assumptions or other inputs	0	0
8. Net excess of actual over projected earnings on pension plan investments (if any)	0	0
9. Difference between expected and actual experience in the Total Pension Liability	<u>157,890,191</u>	<u>126,426,630<sup>(2)</sup></u>
10. Total Deferred Inflows of Resources	\$160,038,726	\$129,556,230 <sup>(2)</sup>
Deferred outflows of resources and deferred inflows of resources related to pension will be rec	cognized as follows:	
Reporting Date for Employer under GAS 68 Year Ended June 3	30:	
20	018 N/A	\$37,390,751 <sup>(2)</sup>
20	\$28,356,505	37,390,751 <sup>(2)</sup>
20	49,663,275	58,537,181 <sup>(2)</sup>
20	26,188,683	35,231,963(2)
20	022 (10,062,369)	$(809,783)^{(2)}$
20	1,718,952	0
Thereat	fter 0	0

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

(2) Restated from our prior GAS 68 report, due to excluding Kern County Hospital Authority from Kern County.



## Deferred Outflows of Resources and Deferred Inflows of Resources – Kern County Hospital Authority

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68 Deferred Outflows of Resources	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	e \$0	\$0
2. Changes of assumptions or other inputs	25,711,504	12,072,825
. Net excess of projected over actual earnings on pension plan investments (if any)	9,367,536	34,275,075
. Difference between expected and actual experience in the Total Pension Liability	0	0
. Total Deferred Outflows of Resources	\$35,079,040	\$46,347,900
eferred Inflows of Resources		
. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$57,467,686	\$47,686,839
Changes of assumptions or other inputs	0	0
Net excess of actual over projected earnings on pension plan investments (if any)	0	0
Difference between expected and actual experience in the Total Pension Liability	25,213,526	22,406,316
0. Total Deferred Inflows of Resources	\$82,681,212	\$70,093,155
Deferred outflows of resources and deferred inflows of resources related to pension will be reco	•	
<b>Reporting Date for Employer under GAS 68 Year Ended June 3</b>	0:	
201	18 N/A	\$(7,397,769)
201	19 \$(15,158,597)	(7, 397, 769)

2018	N/A	\$(7,397,769)
2019	\$(15,158,597)	(7,397,769)
2020	(10,816,196)	(2,688,445)
2021	(12,764,785)	(5,024,625)
2022	(8,497,831)	(1,236,647)
2023	(364,763)	0
Thereafter	0	0

## Deferred Outflows of Resources and Deferred Inflows of Resources – Kern County Superior Courts

	orting Date for Employer under GAS 68 asurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Def	erred Outflows of Resources		
1.	Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$11,364,480	\$11,327,844
2.	Changes of assumptions or other inputs	8,885,673	3,607,869
3.	Net excess of projected over actual earnings on pension plan investments (if any)	3,237,339	10,242,838
4.	Difference between expected and actual experience in the Total Pension Liability	0	0
5.	Total Deferred Outflows of Resources	\$23,487,492	\$25,178,551
Def	erred Inflows of Resources		
6.	Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$981,466	\$1,754,275
7.	Changes of assumptions or other inputs	0	0
8.	Net excess of actual over projected earnings on pension plan investments (if any)	0	0
9.	Difference between expected and actual experience in the Total Pension Liability	8,713,576	6,695,952
10.	Total Deferred Inflows of Resources	\$9,695,042	\$8,450,227
Def	erred outflows of resources and deferred inflows of resources related to pension will be recognize	ed as follows:	
	Reporting Date for Employer under GAS 68 Year Ended June 30:		
	2018	N/A	\$3,905,719
	2019	\$4,112,949	3,905,719
	2020	5,921,164	5,655,298
	2021	3,408,537	3,204,610
	2022	184,364	56,978
	2023	165,436	0
	Thereafter	0	0



## Deferred Outflows of Resources and Deferred Inflows of Resources – Berrenda Mesa Water District

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Deferred Outflows of Resources		
<ol> <li>Changes in proportion and differences between employer's contributions and proportionate share of contributions<sup>(1)</sup></li> </ol>	\$0	\$0
2. Changes of assumptions or other inputs	94,666	46,712
3. Net excess of projected over actual earnings on pension plan investments (if any)	34,490	132,615
4. Difference between expected and actual experience in the Total Pension Liability	0	0
5. Total Deferred Outflows of Resources	\$129,156	\$179,327
Deferred Inflows of Resources		
<ol> <li>Changes in proportion and differences between employer's contributions and proportionate share of contributions<sup>(1)</sup></li> </ol>	\$374,873	\$329,578
7. Changes of assumptions or other inputs	0	0
8. Net excess of actual over projected earnings on pension plan investments (if any)	0	0
9. Difference between expected and actual experience in the Total Pension Liability	92,833	86,693
0. Total Deferred Inflows of Resources	\$467,706	\$416,271
Deferred outflows of resources and deferred inflows of resources related to pension will be reco	gnized as follows:	
Reporting Date for Employer under GAS 68 Year Ended June 30	0:	
201	.8 N/A	\$(68,020)
201	9 \$(109,968)	(68,020)
202	.0 (96,039)	(51,997)
202	.1 (84,124)	(42,295)
202	(45,709)	(6,612)
202	23 (2,710)	0
Thereafte	er 0	0



## Deferred Outflows of Resources and Deferred Inflows of Resources – Buttonwillow Recreation and Park District

	orting Date for Employer under GAS 68 isurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Def	erred Outflows of Resources		
1.	Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$72,972	\$54,086
2.	Changes of assumptions or other inputs	47,568	18,703
3.	Net excess of projected over actual earnings on pension plan investments (if any)	17,331	53,097
4.	Difference between expected and actual experience in the Total Pension Liability	0	0
5.	Total Deferred Outflows of Resources	\$137,871	\$125,886
Def	erred Inflows of Resources		
5.	Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$55,755	\$82,778
7.	Changes of assumptions or other inputs	0	0
8.	Net excess of actual over projected earnings on pension plan investments (if any)	0	0
9.	Difference between expected and actual experience in the Total Pension Liability	46,647	34,711
10.	Total Deferred Inflows of Resources	\$102,402	\$117,489
Def	erred outflows of resources and deferred inflows of resources related to pension will be recogniz	ed as follows:	
	Reporting Date for Employer under GAS 68 Year Ended June 30:		
	2018	N/A	\$(5,899)
	2019	\$(874)	(5,899)
	2020	8,503	2,963
	2021	21,348	16,351
	2022	5,206	881
	2023	1,286	0
	Thereafter	0	0



## Deferred Outflows of Resources and Deferred Inflows of Resources – East Kern Cemetery District

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Deferred Outflows of Resources		
<ol> <li>Changes in proportion and differences between employer's contributions and proportionate share of contributions<sup>(1)</sup></li> </ol>	\$138,436	\$85,250
2. Changes of assumptions or other inputs	39,291	13,011
8. Net excess of projected over actual earnings on pension plan investments (if any)	14,315	36,938
Difference between expected and actual experience in the Total Pension Liability	0	0
5. Total Deferred Outflows of Resources	\$192,042	\$135,199
Deferred Inflows of Resources		
5. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$902	\$1,611
7. Changes of assumptions or other inputs	0	0
3. Net excess of actual over projected earnings on pension plan investments (if any)	0	0
9. Difference between expected and actual experience in the Total Pension Liability	<u>38,530</u>	<u>24,147</u>
10. Total Deferred Inflows of Resources	\$39,432	\$25,758
Deferred outflows of resources and deferred inflows of resources related to pension will be recognize	ed as follows:	
Reporting Date for Employer under GAS 68 Year Ended June 30:		
2018	N/A	\$26,277
2019	\$43,178	26,277
2020	49,195	31,068
2021	41,112	24,280
2022	16,771	1,539
2023	2,354	0
Thereafter	0	0



## Deferred Outflows of Resources and Deferred Inflows of Resources – Inyokern Community Services District

eporting Date for Employer under GAS 68 Ieasurement Date for Employer under GAS 68		June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
eferred Outflows of Resources			
Changes in proportion and differences between employer's contributions and p	roportionate	¢4 104	¢C 004
share of contributions <sup>(1)</sup>		\$4,184	\$6,094
Changes of assumptions or other inputs		0	7,816
Net excess of projected over actual earnings on pension plan investments (if an	• ·	0	22,190
Difference between expected and actual experience in the Total Pension Liabil	ity	0	0
Total Deferred Outflows of Resources		\$4,184	\$36,100
eferred Inflows of Resources			
Changes in proportion and differences between employer's contributions and p	roportionate	<b>174547</b>	<b>*2</b> 0.0 <b>7</b> 0
share of contributions <sup>(1)</sup>		\$174,547	\$20,878
Changes of assumptions or other inputs		0	0
Net excess of actual over projected earnings on pension plan investments (if an	y)	0	0
Difference between expected and actual experience in the Total Pension Liabil	ity	0	<u>14,506</u>
0. Total Deferred Inflows of Resources		\$174,547	\$35,384
eferred outflows of resources and deferred inflows of resources related to pension	will be recognized	l as follows:	
Reporting Date for Employer under GAS 68 Year En	ded June 30:		
	2018	N/A	\$(440)
	2019	\$(42,522)	(440)
	2020	(41,586)	3,064
	2021	(42,784)	(847)
	2022	(39,205)	(621)
	2023	(4,266)	0
	Thereafter	0	0



## Deferred Outflows of Resources and Deferred Inflows of Resources – Kern County Water Agency

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Deferred Outflows of Resources		
<ol> <li>Changes in proportion and differences between employer's contributions and proportionat share of contributions<sup>(1)</sup></li> </ol>	te \$2,125,250	\$1,543,834
2. Changes of assumptions or other inputs	2,176,861	876,543
3. Net excess of projected over actual earnings on pension plan investments (if any)	793,101	2,488,529
4. Difference between expected and actual experience in the Total Pension Liability	0	0
5. Total Deferred Outflows of Resources	\$5,095,212	\$4,908,906
Deferred Inflows of Resources		
<ol> <li>Changes in proportion and differences between employer's contributions and proportionat share of contributions<sup>(1)</sup></li> </ol>	te \$68,155	\$90,140
7. Changes of assumptions or other inputs	0	0
8. Net excess of actual over projected earnings on pension plan investments (if any)	0	0
9. Difference between expected and actual experience in the Total Pension Liability	2,134,700	1,626,802
10. Total Deferred Inflows of Resources	\$2,202,855	\$1,716,942
Deferred outflows of resources and deferred inflows of resources related to pension will be rec	cognized as follows:	
Reporting Date for Employer under GAS 68 Year Ended June 3	30:	
20	018 N/A	\$851,356
20	\$978,889	851,356
20	1,238,999	1,094,691
20	543,792	417,204
20	82,048	(22,643)
20	48,629	0
Thereaf	fter 0	0

## Deferred Outflows of Resources and Deferred Inflows of Resources – Kern Mosquito and Vector Control District

	orting Date for Employer under GAS 68 isurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Defe	erred Outflows of Resources		
1.	Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$548,414	\$228,207
2.	Changes of assumptions or other inputs	386,943	146,730
3.	Net excess of projected over actual earnings on pension plan investments (if any)	140,976	416,572
4.	Difference between expected and actual experience in the Total Pension Liability	0	0
5.	Total Deferred Outflows of Resources	\$1,076,333	\$791,509
Defe	erred Inflows of Resources		
5.	Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$5,225	\$9,338
7.	Changes of assumptions or other inputs	0	0
8.	Net excess of actual over projected earnings on pension plan investments (if any)	0	0
9.	Difference between expected and actual experience in the Total Pension Liability	<u>379,448</u>	272,321
10.	Total Deferred Inflows of Resources	\$384,673	\$281,659
Defe	erred outflows of resources and deferred inflows of resources related to pension will be recognize	ed as follows:	
	Reporting Date for Employer under GAS 68 Year Ended June 30:		
	2018	N/A	\$119,991
	2019	\$192,635	119,991
	2020	249,811	171,203
	2021	171,010	98,701
	2022	64,487	(36)
	2023	13,717	0
	Thereafter	0	0



## Deferred Outflows of Resources and Deferred Inflows of Resources – North of the River Sanitation District

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Deferred Outflows of Resources		
<ol> <li>Changes in proportion and differences between employer's contributions and proportional share of contributions<sup>(1)</sup></li> </ol>	te \$414,125	\$139,596
2. Changes of assumptions or other inputs	325,152	120,213
3. Net excess of projected over actual earnings on pension plan investments (if any)	118,464	341,287
4. Difference between expected and actual experience in the Total Pension Liability	0	0
5. Total Deferred Outflows of Resources	\$857,741	\$601,096
Deferred Inflows of Resources		
<ol> <li>Changes in proportion and differences between employer's contributions and proportionat share of contributions<sup>(1)</sup></li> </ol>	te \$25,224	\$33,360
7. Changes of assumptions or other inputs	0	0
8. Net excess of actual over projected earnings on pension plan investments (if any)	0	0
9. Difference between expected and actual experience in the Total Pension Liability	<u>318,855</u>	223,106
10. Total Deferred Inflows of Resources	\$344,079	\$256,466
Deferred outflows of resources and deferred inflows of resources related to pension will be rec	ognized as follows:	
<b>Reporting Date for Employer under GAS 68 Year Ended June 3</b>	30:	
20	018 N/A	\$94,887
20	\$158,577	94,887
20	183,140	113,424
20	108,402	45,051
20	51,865	(3,619)
20	11,678	0
Thereaf	fter 0	0



Deferred Outflows of Resources and Deferred Inflows of Resources – San Joaquin Valley Unified Air Pollution Control District

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Deferred Outflows of Resources		
<ol> <li>Changes in proportion and differences between employer's contributions and proportionate share of contributions<sup>(1)</sup></li> </ol>	\$9,587,681	\$3,228,052
2. Changes of assumptions or other inputs	8,053,291	3.063.133
<ol> <li>Net excess of projected over actual earnings on pension plan investments (if any)</li> </ol>	2,934,076	8,696,316
<ul> <li>Difference between expected and actual experience in the Total Pension Liability</li> </ul>	2,55 1,676	0,050,010
5. Total Deferred Outflows of Resources	\$20,575,048	\$14,987,501
Deferred Inflows of Resources		
6. Changes in proportion and differences between employer's contributions and proportionate		
share of contributions <sup>(1)</sup>	\$50,317	\$89,937
7. Changes of assumptions or other inputs	0	0
8. Net excess of actual over projected earnings on pension plan investments (if any)	0	0
9. Difference between expected and actual experience in the Total Pension Liability	7,897,316	5,684,960
10. Total Deferred Inflows of Resources	\$7,947,633	\$5,774,897
Deferred outflows of resources and deferred inflows of resources related to pension will be reco	gnized as follows:	
Reporting Date for Employer under GAS 68 Year Ended June 30	):	
201	8 N/A	\$2,178,375
201	9 \$3,522,455	2,178,375
202	4,678,902	3,213,743
202	3,018,221	1,680,961
202	1,140,356	(38,850)
202	267,481	0
Thereafte	er 0	0



## Deferred Outflows of Resources and Deferred Inflows of Resources – Shafter Recreation and Park District

Mea	orting Date for Employer under GAS 68 surement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Defe	rred Outflows of Resources		
1.	Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$353,649	\$233,829
2.	Changes of assumptions or other inputs	25,764	13,055
3.	Net excess of projected over actual earnings on pension plan investments (if any)	9,387	37,065
1.	Difference between expected and actual experience in the Total Pension Liability	0	0
5.	Total Deferred Outflows of Resources	\$388,800	\$283,949
Defe	rred Inflows of Resources		
5.	Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$0	\$0
7.	Changes of assumptions or other inputs	0	0
8.	Net excess of actual over projected earnings on pension plan investments (if any)	0	0
9.	Difference between expected and actual experience in the Total Pension Liability	25,265	24,230
10.	Total Deferred Inflows of Resources	\$25,265	\$24,230
Defe	rred outflows of resources and deferred inflows of resources related to pension will be recognize	ed as follows:	
	Reporting Date for Employer under GAS 68 Year Ended June 30:		
	2018	N/A	\$62,569
	2019	\$102,852	62,569
	2020	106,459	66,858
	2021	102,649	62,327
	2022	46,609	5,396
	2023	4,966	0
	Thereafter	0	0

## Deferred Outflows of Resources and Deferred Inflows of Resources – West Side Cemetery District

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Deferred Outflows of Resources		
1. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$158,858	\$98,185
2. Changes of assumptions or other inputs	130,227	51,274
8. Net excess of projected over actual earnings on pension plan investments (if any)	47,446	145,568
4. Difference between expected and actual experience in the Total Pension Liability	0	0
5. Total Deferred Outflows of Resources	\$336,531	\$295,027
Deferred Inflows of Resources		
5. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$0	\$0
7. Changes of assumptions or other inputs	0	0
8. Net excess of actual over projected earnings on pension plan investments (if any)	0	0
9. Difference between expected and actual experience in the Total Pension Liability	127,704	95,161
0. Total Deferred Inflows of Resources	\$127,704	\$95,161
Deferred outflows of resources and deferred inflows of resources related to pension will be recognize	zed as follows:	
<b>Reporting Date for Employer under GAS 68 Year Ended June 30:</b>		
2018	N/A	\$53,693
2019	\$68,587	53,693
2020	78,713	62,434
2021	45,346	30,530
2022	12,524	(484)
2023	3,657	0
Thereafter	0	0



## Deferred Outflows of Resources and Deferred Inflows of Resources – West Side Mosquito and Vector Control District

Measur	ng Date for Employer under GAS 68 ement Date for Employer under GAS 68 d Outflows of Resources	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
1. Cha	anges in proportion and differences between employer's contributions and proportionate	¢201 720	¢272.924
	re of contributions <sup>(1)</sup>	\$291,720	\$372,824
	anges of assumptions or other inputs	187,116	77,069
	t excess of projected over actual earnings on pension plan investments (if any)	68,172	218,802
4. Dif	ference between expected and actual experience in the Total Pension Liability	0	0
5. Tot	tal Deferred Outflows of Resources	\$547,008	\$668,695
Deferre	d Inflows of Resources		
	anges in proportion and differences between employer's contributions and proportionate re of contributions <sup>(1)</sup>	\$153,452	\$202,953
7. Cha	anges of assumptions or other inputs	0	0
8. Net	t excess of actual over projected earnings on pension plan investments (if any)	0	0
9. Dif	ference between expected and actual experience in the Total Pension Liability	183,492	143,035
10. Tot	tal Deferred Inflows of Resources	\$336,944	\$345,988
Deferred	d outflows of resources and deferred inflows of resources related to pension will be recognized	zed as follows:	
	Reporting Date for Employer under GAS 68 Year Ended June 30:		
	2018	N/A	\$113,203
	2019	\$112,685	113,203
	2020	105,603	105,246
	2021	(2,767)	(2,199)
	2022	(8,457)	(6,746)
	2023	3,000	0
	Thereafter	0	0



## Deferred Outflows of Resources and Deferred Inflows of Resources – West Side Recreation and Park District

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016	
Deferred Outflows of Resources			
<ol> <li>Changes in proportion and differences between employer's contributions and proportionate share of contributions<sup>(1)</sup></li> </ol>	\$237,292	\$332,327	
2. Changes of assumptions or other inputs	191,548	83,304	
8. Net excess of projected over actual earnings on pension plan investments (if any)	69,787	236,503	
4. Difference between expected and actual experience in the Total Pension Liability	0	0	
5. Total Deferred Outflows of Resources	\$498,627	\$652,134	
Deferred Inflows of Resources			
<ol> <li>Changes in proportion and differences between employer's contributions and proportionate share of contributions<sup>(1)</sup></li> </ol>	\$25,446	\$0	
7. Changes of assumptions or other inputs	0	0	
8. Net excess of actual over projected earnings on pension plan investments (if any)	0	0	
D. Difference between expected and actual experience in the Total Pension Liability	187,839	154,607	
0. Total Deferred Inflows of Resources	\$213,285	\$154,607	
Deferred outflows of resources and deferred inflows of resources related to pension will be reco	gnized as follows:		
Reporting Date for Employer under GAS 68 Year Ended June 30	):		
201	8 N/A	\$130,362	
201	9 \$109,588	130,362	
202	0 135,594	156,922	
202	1 57,760	78,505	
202	2 (18,646)	1,376	
202	3 1,046	0	
Thereafte	er 0	0	



# EXHIBIT 9 (continued) Deferred Outflows of Resources and Deferred Inflows of Resources

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 for the current period is recognized over the average of the expected remaining service lives of all employees that are provided with pensions through KCERA which is 5.11 years determined as of June 30, 2016 (the beginning of the measurement period ending June 30, 2017). This is described in Paragraph 33a. of GASB 68.

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.

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 and the difference between the actual employer contributions and the proportionate share of the employer contributions for prior periods continue to be recognized based on the expected remaining service lives of all employees calculated as of those prior measurement dates.

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.



#### EXHIBIT 10

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

Reporting Date for Employer under GAS 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered- employee payroll <sup>(1)</sup>	Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll	1 8
2014	100.0%	\$2,124,388,798	\$516,465,189	411.33%	59.37%
2015	100.0%	2,069,234,081	533,850,811	387.61%	63.35%
2016	100.0%	2,203,097,939	531,598,183	414.43%	62.20%
2017	100.0%	2,413,639,356	537,539,991	449.02%	59.67%
2018	100.0%	2,363,975,142	546,671,003	432.43%	62.64%



Schedule of Proportionate Share of the Net Pension Liability – Kern County

Reporting Date for Employer under GAS 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered- employee payroll <sup>(1)</sup>	Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll	
2014 <sup>(2)</sup>	75.501%	\$1,603,942,340	\$390,174,808	411.08%	59.80%
2015 <sup>(2)</sup>	75.942%	1,571,423,351	405,150,369	387.86%	63.60%
2016 <sup>(2)</sup>	75.618%	1,665,934,895	395,298,960	421.44%	62.46%
2017 <sup>(2)</sup>	77.130%	1,861,645,866	401,455,839	463.72%	59.90%
2018	77.683%	1,836,401,634	407,333,715	450.83%	62.97%

<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 retirement benefits are included.

<sup>(2)</sup> Restated from our prior GAS 68 report, due to excluding Kern County Hospital Authority from Kern County.

Schedule of Proportionate Share of the Net Pension Liability – Kern County Hospital Authority

		Proportionate			
Reporting Date for Employer under GAS 68	Proportion of the Net Pension	share of Net Pension	Covered- employee	Proportionate share of the Net Pension Liability as a percentage	
as of June 30	Liability	Liability	payroll <sup>(1)</sup>	of its covered-employee payroll	the Total Pension Liability
2014	16.181%	\$343,748,412	\$75,331,439	456.31%	58.53%
2015	15.972%	330,492,938	77,008,989	429.16%	62.95%
2016	15.672%	345,262,534	81,925,123	421.44%	61.87%
2017	13.670%	329,935,445	78,433,199	420.66%	59.37%
2018	12.405%	293,255,458	78,815,070	372.08%	62.49%

Schedule of Proportionate Share of the Net Pension Liability – Kern County Superior Courts

Reporting Date for Employer under GAS 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered- employee payroll <sup>(1)</sup>	Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
2014	3.439%	\$73,060,039	\$19,799,274	369.00%	58.53%
2015	3.247%	67,189,363	19,571,588	343.30%	62.95%
2016	3.649%	80,394,021	21,864,229	367.70%	61.87%
2017	4.085%	98,598,626	24,964,019	394.96%	59.37%
2018	4.287%	101,346,545	27,236,241	372.10%	62.49%

Schedule of Proportionate Share of the Net Pension Liability – Berrenda Mesa Water District

Reporting Date for Employer under GAS 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered- employee payroll <sup>(1)</sup>	Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll	1 0
2014	0.076%	\$1,606,392	\$482,951	332.62%	55.64%
2015	0.075%	1,542,994	494,815	311.83%	60.66%
2016	0.066%	1,456,264	424,688	342.90%	59.25%
2017	0.053%	1,276,568	338,001	377.68%	57.15%
2018	0.046%	1,079,726	270,303	399.45%	57.90%

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

Reporting Date for Employer under GAS 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered- employee payroll <sup>(1)</sup>	Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll	1 0
2014	0.026%	\$543,066	\$163,245	332.67%	55.64%
2015	0.024%	500,655	160,470	311.99%	60.66%
2016	0.018%	402,524	117,500	342.57%	59.25%
2017	0.021%	511,119	135,355	377.61%	57.15%
2018	0.023%	542,546	135,623	400.04%	57.90%



Schedule of Proportionate Share of the Net Pension Liability – East Kern Cemetery District

Reporting Date for Employer under GAS 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered- employee payroll <sup>(1)</sup>	Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll	
2014	0.010%	\$220,750	\$66,356	332.68%	55.64%
2015	0.010%	207,281	66,341	312.45%	60.66%
2016	0.011%	231,931	67,647	342.85%	59.25%
2017	0.015%	355,569	94,080	377.94%	57.15%
2018	0.019%	448,133	112,019	400.05%	57.90%



Schedule of Proportionate Share of the Net Pension Liability – Inyokern Community Services District

Reporting Date for Employer under GAS 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered- employee payroll <sup>(1)</sup>	Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll	
2014	0.010%	\$212,471	\$63,752	333.28%	55.64%
2015	0.010%	198,239	63,752	310.95%	60.66%
2016	0.010%	218,549	63,752	342.81%	59.25%
2017	0.009%	213,601	56,396	378.75%	57.15%
2018	0.000%	0	0	N/A	N/A

Schedule of Proportionate Share of the Net Pension Liability – Kern County Water Agency

Reporting Date for Employer under GAS 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered- employee payroll <sup>(1)</sup>	Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
2014	0.926%	\$19,672,558	\$5,914,803	332.60%	55.64%
2015	0.925%	19,135,553	6,138,341	311.74%	60.66%
2016	1.011%	22,263,402	6,490,763	343.00%	59.25%
2017	0.992%	23,954,836	6,342,198	377.71%	57.15%
2018	1.050%	24,828,435	6,215,199	399.48%	57.90%



Schedule of Proportionate Share of the Net Pension Liability – Kern Mosquito and Vector Control District

Reporting Date for Employer under GAS 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered- employee payroll <sup>(1)</sup>	Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll	1 0
2014	0.161%	\$3,423,153	\$1,029,309	332.57%	55.64%
2015	0.157%	3,248,181	1,041,816	311.78%	60.66%
2016	0.161%	3,538,099	1,031,557	342.99%	59.25%
2017	0.166%	4,009,961	1,061,688	377.70%	57.15%
2018	0.187%	4,413,319	1,104,807	399.47%	57.90%



Schedule of Proportionate Share of the Net Pension Liability – North of the River Sanitation District

Reporting Date for Employer under GAS 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered- employee payroll <sup>(1)</sup>	Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll	. 0
2014	0.122%	\$2,599,247	\$781,428	332.63%	55.64%
2015	0.130%	2,698,448	865,760	311.69%	60.66%
2016	0.137%	3,017,365	879,725	342.99%	59.25%
2017	0.136%	3,285,264	869,712	377.74%	57.15%
2018	0.157%	3,708,561	928,465	399.43%	57.90%



Schedule of Proportionate Share of the Net Pension Liability – San Joaquin Valley Unified Air Pollution Control District

Reporting Date for Employer under GAS 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered- employee payroll <sup>(1)</sup>	Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll	
2014	3.345%	\$71,067,704	\$21,366,973	332.61%	55.64%
2015	3.297%	68,213,462	21,882,301	311.73%	60.66%
2016	3.404%	74,985,888	21,862,199	342.99%	59.25%
2017	3.468%	83,711,648	22,163,475	377.70%	57.15%
2018	3.886%	91,852,721	22,993,004	399.48%	57.90%

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

Reporting Date for Employer under GAS 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered- employee payroll <sup>(1)</sup>	Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll	
2014	0.000%	\$0	\$0	N/A	N/A
2015	0.000%	0	0	N/A	N/A
2016	0.000%	0	0	N/A	N/A
2017	0.015%	356,787	94,569	377.28%	57.15%
2018	0.012%	293,850	73,697	398.73%	57.90%



Schedule of Proportionate Share of the Net Pension Liability – West Side Cemetery District

Reporting Date for Employer under GAS 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered- employee payroll <sup>(1)</sup>	Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll	1 0
2014	0.054%	\$1,152,443	\$346,618	332.48%	55.64%
2015	0.055%	1,147,467	368,139	311.69%	60.66%
2016	0.057%	1,261,130	367,764	342.92%	59.25%
2017	0.058%	1,401,253	371,112	377.58%	57.15%
2018	0.063%	1,485,315	371,617	399.69%	57.90%



Schedule of Proportionate Share of the Net Pension Liability – West Side Mosquito and Vector Control District

Reporting Date for Employer under GAS 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered- employee payroll <sup>(1)</sup>	Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll	1 0
2014	0.071%	\$1,517,265	\$456,135	332.64%	55.64%
2015	0.081%	1,680,139	539,127	311.64%	60.66%
2016	0.100%	2,192,225	639,073	343.03%	59.25%
2017	0.087%	2,106,211	557,694	377.66%	57.15%
2018	0.090%	2,134,171	534,406	399.35%	57.90%



Schedule of Proportionate Share of the Net Pension Liability - West Side Recreation and Park District

Reporting Date for Employer under GAS 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered- employee payroll <sup>(1)</sup>	Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
2014	0.076%	\$1,622,958	\$488,098	332.51%	55.64%
2015	0.075%	1,556,010	499,003	311.82%	60.66%
2016	0.088%	1,939,112	565,203	343.08%	59.25%
2017	0.094%	2,276,602	602,654	377.76%	57.15%
2018	0.092%	2,184,728	546,838	399.52%	57.90%



#### EXHIBIT 11

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

Reconciliation of Net Pension Liability           1. Beginning Net Pension Liability	\$2,413,639,356	\$2,203,097,939
1 Beginning Net Pension Lighility	\$2,413,639,356	\$2 202 007 020
1. Deginning Net Tension Liability		\$2,205,097,959
2. Pension Expense	270,303,861	270,835,291
3. Employer Contributions	(224,351,019)	(216,228,558)
4. New Net Deferred Inflows/Outflows	(58,162,001)	154,299,817
5. Change in Allocation of Prior Deferred Inflows/Outflows	0	0
6. New Net Deferred Flows Due to Change in Proportion <sup>(1)</sup>	0	0
7. Recognition of Prior Deferred Inflows/Outflows	(37,455,055)	1,634,867
8. Recognition of Prior Deferred Flows Due to Change in Proportion <sup>(1)</sup>	0	0
9. Ending Net Pension Liability	\$2,363,975,142	\$2,413,639,356

Schedule of Reconciliation of Net Pension Liability – Kern County

	rting Date for Employer under GAS 68 urement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Reco	nciliation of Net Pension Liability		
1. 1	Beginning Net Pension Liability	\$1,861,645,866	\$1,665,934,895 <sup>(2)</sup>
2. 1	Pension Expense	220,898,654	217,397,489 <sup>(2)</sup>
3. 1	Employer Contributions	(174,267,066)	$(173, 476, 854)^{(2)}$
4. ]	New Net Deferred Inflows/Outflows	(45,181,860)	119,011,822 <sup>(2)</sup>
5. 0	Change in Allocation of Prior Deferred Inflows/Outflows	967,742	290,530 <sup>(2)</sup>
6. ]	New Net Deferred Flows Due to Change in Proportion <sup>(1)</sup>	9,936,005	31,938,666 <sup>(2)</sup>
7. ]	Recognition of Prior Deferred Inflows/Outflows	(29,096,129)	$1,260,979^{(2)}$
8. 1	Recognition of Prior Deferred Flows Due to Change in Proportion <sup>(1)</sup>	(8,501,578)	(711,661) <sup>(2)</sup>
9. ]	Ending Net Pension Liability	\$1,836,401,634	\$1,861,645,866 <sup>(2)</sup>

<sup>(1)</sup> Includes differences between employer contributions and proportionate share of contributions.

<sup>(2)</sup> Restated from our prior GAS 68 report, due to excluding Kern County Hospital Authority from Kern County.

Schedule of Reconciliation of Net Pension Liability – Kern County Hospital Authority

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Reconciliation of Net Pension Liability		
1. Beginning Net Pension Liability	\$329,935,445	\$345,262,534
2. Pension Expense	15,588,509	24,504,434
3. Employer Contributions	(28,411,580)	(24,571,809)
4. New Net Deferred Inflows/Outflows	(7,215,103)	21,092,206
5. Change in Allocation of Prior Deferred Inflows/Outflows	(2,214,598)	(384,590)
6. New Net Deferred Flows Due to Change in Proportion <sup>(1)</sup>	(22,298,582)	(39,157,850)
7. Recognition of Prior Deferred Inflows/Outflows	(4,646,368)	223,480
8. Recognition of Prior Deferred Flows Due to Change in Proportion <sup>(1)</sup>	12,517,735	2,967,040
9. Ending Net Pension Liability	\$293,255,458	\$329,935,445

#### Schedule of Reconciliation of Net Pension Liability – Kern County Superior Courts

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Reconciliation of Net Pension Liability		
1. Beginning Net Pension Liability	\$98,598,626	\$80,394,021
2. Pension Expense	14,738,882	13,439,442
3. Employer Contributions	(9,055,090)	(6,510,327)
4. New Net Deferred Inflows/Outflows	(2,493,477)	6,303,241
5. Change in Allocation of Prior Deferred Inflows/Outflows	353,903	83,740
6. New Net Deferred Flows Due to Change in Proportion <sup>(1)</sup>	3,185,102	5,786,130
7. Recognition of Prior Deferred Inflows/Outflows	(1,605,744)	66,785
8. Recognition of Prior Deferred Flows Due to Change in Proportion <sup>(1)</sup>	(2,375,657)	(964,406)
9. Ending Net Pension Liability	\$101,346,545	\$98,598,626

#### Schedule of Reconciliation of Net Pension Liability – Berrenda Mesa Water District

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Reconciliation of Net Pension Liability		
1. Beginning Net Pension Liability	\$1,276,568	\$1,456,264
2. Pension Expense	3,238	55,414
3. Employer Contributions	(98,475)	(121,243)
4. New Net Deferred Inflows/Outflows	(26,565)	81,609
5. Change in Allocation of Prior Deferred Inflows/Outflows	(12,638)	(2,538)
6. New Net Deferred Flows Due to Change in Proportion <sup>(1)</sup>	(133,125)	(226,411)
7. Recognition of Prior Deferred Inflows/Outflows	(17,107)	865
8. Recognition of Prior Deferred Flows Due to Change in Proportion <sup>(1)</sup>	87,830	32,608
9. Ending Net Pension Liability	\$1,079,726	\$1,276,568

Schedule of Reconciliation of Net Pension Liability – Buttonwillow Recreation and Parks

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Reconciliation of Net Pension Liability		
. Beginning Net Pension Liability	\$511,119	\$402,524
2. Pension Expense	56,011	43,522
B. Employer Contributions	(51,656)	(49,615)
l. New Net Deferred Inflows/Outflows	(13,349)	32,675
5. Change in Allocation of Prior Deferred Inflows/Outflows	3,108	558
5. New Net Deferred Flows Due to Change in Proportion <sup>(1)</sup>	32,078	54,086
7. Recognition of Prior Deferred Inflows/Outflows	(8,596)	346
8. Recognition of Prior Deferred Flows Due to Change in Proportion <sup>(1)</sup>	13,831	27,023
D. Ending Net Pension Liability	\$542,546	\$511,119

#### Schedule of Reconciliation of Net Pension Liability – East Kern Cemetery District

eporting Date for Employer under GAS 68 Ieasurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
econciliation of Net Pension Liability		
Beginning Net Pension Liability	\$355,569	\$231,931
Pension Expense	90,164	60,658
Employer Contributions	(40,769)	(34,018)
New Net Deferred Inflows/Outflows	(11,026)	22,731
Change in Allocation of Prior Deferred Inflows/Outflows	7,400	808
New Net Deferred Flows Due to Change in Proportion <sup>(1)</sup>	74,654	75,551
Recognition of Prior Deferred Inflows/Outflows	(7,100)	240
Recognition of Prior Deferred Flows Due to Change in Proportion <sup>(1)</sup>	(20,759)	(2,332)
Ending Net Pension Liability	\$448,133	\$355,569

Schedule of Reconciliation of Net Pension Liability – Inyokern Community Services District

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Reconciliation of Net Pension Liability		
1. Beginning Net Pension Liability	\$213,601	\$218,549
2. Pension Expense	(42,522)	20,213
3. Employer Contributions	0	(20,167)
4. New Net Deferred Inflows/Outflows	0	13,655
5. Change in Allocation of Prior Deferred Inflows/Outflows	(15,500)	(206)
6. New Net Deferred Flows Due to Change in Proportion <sup>(1)</sup>	(159,334)	(17,962)
7. Recognition of Prior Deferred Inflows/Outflows	0	145
8. Recognition of Prior Deferred Flows Due to Change in Proportion <sup>(1)</sup>	3,755	(626)
9. Ending Net Pension Liability	\$0	\$213,601

Schedule of Reconciliation of Net Pension Liability – Kern County Water Agency

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016		
Reconciliation of Net Pension Liability				
1. Beginning Net Pension Liability	\$23,954,836	\$22,263,402		
2. Pension Expense	3,582,090	3,167,604		
3. Employer Contributions	(2,408,884)	(2,428,568) 1,531,392		
4. New Net Deferred Inflows/Outflows	(610,866)			
5. Change in Allocation of Prior Deferred Inflows/Outflows	101,243	(3,471)		
6. New Net Deferred Flows Due to Change in Proportion <sup>(1)</sup>	1,083,024	(90,140)		
7. Recognition of Prior Deferred Inflows/Outflows	(393,385)	16,225		
8. Recognition of Prior Deferred Flows Due to Change in Proportion <sup>(1)</sup>	(479,623)	(501,608)		
9. Ending Net Pension Liability	\$24,828,435	\$23,954,836		

Schedule of Reconciliation of Net Pension Liability – Kern Mosquito and Vector Control District

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016		
Reconciliation of Net Pension Liability				
1. Beginning Net Pension Liability	\$4,009,961	\$3,538,099		
2. Pension Expense	655,361	507,723		
3. Employer Contributions	(433,813)	(410,943)		
4. New Net Deferred Inflows/Outflows	(108,583)	256,350		
5. Change in Allocation of Prior Deferred Inflows/Outflows	35,998	1,064		
6. New Net Deferred Flows Due to Change in Proportion <sup>(1)</sup>	382,084	138,850		
7. Recognition of Prior Deferred Inflows/Outflows	(69,925)	2,716		
8. Recognition of Prior Deferred Flows Due to Change in Proportion <sup>(1)</sup>	(57,764)	(23,898)		
9. Ending Net Pension Liability	\$4,413,319	\$4,009,961		

Schedule of Reconciliation of Net Pension Liability – North of the River Sanitation District

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Reconciliation of Net Pension Liability		
1. Beginning Net Pension Liability	\$3,285,264	\$3,017,365
2. Pension Expense	547,411	412,547
3. Employer Contributions	(293,147)	(271,329)
4. New Net Deferred Inflows/Outflows	(91,243)	210,021
5. Change in Allocation of Prior Deferred Inflows/Outflows	36,370	(163)
6. New Net Deferred Flows Due to Change in Proportion <sup>(1)</sup>	326,571	(33,360)
7. Recognition of Prior Deferred Inflows/Outflows	(58,759)	2,225
8. Recognition of Prior Deferred Flows Due to Change in Proportion <sup>(1)</sup>	(43,906)	(52,042)
9. Ending Net Pension Liability	\$3,708,561	\$3,285,264

Schedule of Reconciliation of Net Pension Liability – San Joaquin Valley Unified Air Pollution Control District

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Reconciliation of Net Pension Liability	,	,
1. Beginning Net Pension Liability	\$83,711,648	\$74,985,888
2. Pension Expense	13,152,984	10,272,643
3. Employer Contributions	(8,426,722)	(7,750,471)
4. New Net Deferred Inflows/Outflows	(2,259,896)	5,351,542
5. Change in Allocation of Prior Deferred Inflows/Outflows	730,781	12,413
6. New Net Deferred Flows Due to Change in Proportion <sup>(1)</sup>	7,278,580	1,336,328
7. Recognition of Prior Deferred Inflows/Outflows	(1,455,323)	56,702
8. Recognition of Prior Deferred Flows Due to Change in Proportion <sup>(1)</sup>	(879,331)	(553,397)
9. Ending Net Pension Liability	\$91,852,721	\$83,711,648

Schedule of Reconciliation of Net Pension Liability – Shafter Recreation and Park District

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Reconciliation of Net Pension Liability		,
1. Beginning Net Pension Liability	\$356,787	\$0
2. Pension Expense	133,663	97,067
3. Employer Contributions	(300,415)	0
4. New Net Deferred Inflows/Outflows	(7,230)	22,809
5. Change in Allocation of Prior Deferred Inflows/Outflows	(4,119)	2,840
6. New Net Deferred Flows Due to Change in Proportion <sup>(1)</sup>	176,852	233,829
7. Recognition of Prior Deferred Inflows/Outflows	(4,656)	242
8. Recognition of Prior Deferred Flows Due to Change in Proportion <sup>(1)</sup>	(57,032)	0
9. Ending Net Pension Liability	\$293,850	\$356,787

Schedule of Reconciliation of Net Pension Liability – West Side Cemetery District

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016		
Reconciliation of Net Pension Liability				
1. Beginning Net Pension Liability	\$1,401,253	\$1,261,130		
2. Pension Expense	224,319	189,183		
3. Employer Contributions	(149,216)	(144,135)		
4. New Net Deferred Inflows/Outflows	(36,544)	89,580		
5. Change in Allocation of Prior Deferred Inflows/Outflows	8,364	156		
6. New Net Deferred Flows Due to Change in Proportion <sup>(1)</sup>	92,621	29,213		
7. Recognition of Prior Deferred Inflows/Outflows	(23,534)	949		
8. Recognition of Prior Deferred Flows Due to Change in Proportion <sup>(1)</sup>	(31,948)	(24,823)		
9. Ending Net Pension Liability	\$1,485,315	\$1,401,253		

Schedule of Reconciliation of Net Pension Liability – West Side Mosquito and Vector Control District

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016
Reconciliation of Net Pension Liability	2	,
. Beginning Net Pension Liability	\$2,106,211	\$2,192,225
2. Pension Expense	336,448	316,859
B. Employer Contributions	(195,845)	(203,620)
I. New Net Deferred Inflows/Outflows	(52,508)	134,646
5. Change in Allocation of Prior Deferred Inflows/Outflows	5,282	(2,352)
5. New Net Deferred Flows Due to Change in Proportion <sup>(1)</sup>	48,916	(202,953)
7. Recognition of Prior Deferred Inflows/Outflows	(33,814)	1,426
8. Recognition of Prior Deferred Flows Due to Change in Proportion <sup>(1)</sup>	(80,519)	(130,020)
D. Ending Net Pension Liability	\$2,134,171	\$2,106,211

Schedule of Reconciliation of Net Pension Liability – West Side Recreation and Park District

Reporting Date for Employer under GAS 68 Measurement Date for Employer under GAS 68	June 30, 2018 June 30, 2017	June 30, 2017 June 30, 2016		
Reconciliation of Net Pension Liability				
. Beginning Net Pension Liability	\$2,276,602	\$1,939,112		
2. Pension Expense	338,649	350,493		
B. Employer Contributions	(218,341)	(235,459)		
. New Net Deferred Inflows/Outflows	(53,751)	145,538		
5. Change in Allocation of Prior Deferred Inflows/Outflows	(3,336)	1,211		
5. New Net Deferred Flows Due to Change in Proportion <sup>(1)</sup>	(25,446)	136,023		
7. Recognition of Prior Deferred Inflows/Outflows	(34,615)	1,542		
8. Recognition of Prior Deferred Flows Due to Change in Proportion <sup>(1)</sup>	(95,034)	(61,858)		
<ol> <li>Ending Net Pension Liability</li> </ol>	\$2,184,728	\$2,276,602		

#### **EXHIBIT 12**

Schedule of Recognition of Changes in Total Net Pension Liability

Reporting Date for Employer under	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 GAS 68 Year Ended June 30: Differences											
GAS 68 Year Ended June 30	between Expected and Actual Experience	Recognition Period (Years)	2015	2016	2017	2018	2019	2020	2021	2022	2023	Thereafter
2015	\$(57,033,870)	5.27	\$(10,822,366)	\$(10,822,366)	\$(10,822,366)	\$(10,822,366)	\$(10,822,366)	\$(2,922,040)	-	-	-	-
2016	(89,306,426)	5.19	N/A	(17,207,404)	(17,207,404)	(17,207,404)	(17,207,404)	(17,207,404)	\$(3,269,406)	-	-	-
2017	(105,053,516)	5.10	N/A	N/A	(20,598,729)	(20,598,729)	(20,598,729)	(20,598,729)	(20,598,729)	\$(2,059,871)	-	-
2018	(109,367,980)	5.11	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	(21,402,736)	(21,402,736)	(21,402,736)	(21,402,736)	(21,402,736)	<u>\$(2,354,300)</u>	
Net increase (d	decrease) in pension	expense	\$(10,822,366)	\$(28,029,770)	\$(48,628,499)	\$(70,031,235)	\$(70,031,235)	\$(62,130,909)	\$(45,270,871)	\$(23,462,607)	\$(2,354,300)	-
Reporting Date for Employer			Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Assumption Changes Reporting Date for Employer under GAS 68 Year Ended June 30:									
under GAS 68 Year Ended June 30	Effect of Assumption Changes	Recognition Period (Years)	2015	2016	2017	2018	2019	2020	2021	2022	2023	Thereafter
2015	\$205,039,279	5.27	\$38,906,884	\$38,906,884	\$38,906,884	\$38,906,884	\$38,906,884	\$10,504,859	-	-	-	-
2016	0	5.19	N/A	-	-	-	-	-	-	-	-	-
2017	0	5.10	N/A	N/A	-	-	-	-	-	-	-	-
2018	196,259,373	5.11	<u>N/A</u>	<u>N/A</u>	<u>N/.</u>	<u>A 38,406,92</u>	<u>2</u> <u>38,406,92</u>	<u>38,406,922</u>	\$38,406,922	\$38,406,922	<u>\$4,224,763</u>	
Net increase (o	decrease) in pension	expense	\$38,906,884	\$38,906,884	\$38,906,884	\$77,313,806	\$77,313,800	6 \$48,911,781	\$38,406,922	\$38,406,922	2 \$4,224,763	-

As described in Exhibit 9, the average of the expected remaining service lives of all employees that are provided with pensions through KCERA (active and inactive employees) is 5.11 years determined as of June 30, 2016 (the beginning of the measurement period ending June 30, 2017).



Schedule of Recognition of Changes in Total Net Pension Liability

#### 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 GAS 68 Year Ended	Differences between Projected and Actual	Recognition Period			Rep	orting Date for E	mployer under GA	AS 68 Year Ended	June 30:			
June 30	Earnings	(Years)	2015	2016	2017	2018	2019	2020	2021	2022	2023	Thereafter
2015	\$(247,601,495)	5.00	\$(49,520,299)	\$(49,520,299)	\$(49,520,299)	\$(49,520,299)	\$(49,520,299)	-	-	-		
2016	185,041,588	5.00	N/A	37,008,318	37,008,318	37,008,318	37,008,318	\$37,008,316	-	-		
2017	298,443,255	5.00	N/A	N/A	59,688,651	59,688,651	59,688,651	59,688,651	\$59,688,651	-		
2018	(160,061,510)	5.00	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>(32,012,302)</u>	(32,012,302)	<u>(32,012,302)</u>	<u>(32,012,302)</u>	<u>\$(32,012,302)</u>		<u> </u>
Net increase (d	ecrease) in pension	expense	\$(49,520,299)	\$(12,511,981)	\$47,176,670	\$15,164,368	\$15,164,368	\$64,684,665	\$27,676,349	\$(32,012,302)		

	Total Increase (Decrease) in Pension Expense										
Reporting Date for Employer under GAS 68 Year Ended June 30	Total Differences	2015	2016	Rep 2017	orting Date for E 2018	mployer under G 2019	AS 68 Year Ender 2020	d June 30: 2021	2022	2023	Thereafter
2015	\$(99,596,086)	\$(21,435,781)	\$(21,435,781)	\$(21,435,781)	\$(21,435,781)	\$(21,435,781)	\$7,582,819	-	-	-	-
2016	95,735,162	N/A	19,800,914	19,800,914	19,800,914	19,800,914	19,800,912	\$(3,269,406)	-	-	-
2017	193,389,739	N/A	N/A	39,089,922	39,089,922	39,089,922	39,089,922	39,089,922	\$(2,059,871)	-	-
2018	(73,170,117)	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>(15,008,116)</u>	<u>(15,008,116)</u>	<u>(15,008,116)</u>	<u>(15,008,116)</u>	<u>(15,008,116)</u>	<u>\$1,870,463</u>	
Net increase (de	ecrease) in pension expense	\$(21,435,781)	\$(1,634,867)	\$37,455,055	\$22,446,939	\$22,446,939	\$51,465,537	\$20,812,400	\$(17,067,987)	\$1,870,463	-



#### EXHIBIT 13 Allocation of Changes in Total Net Pension Liability

In addition to the amounts shown in Exhibit 12, there are changes in each location's proportionate share of the total Net Pension Liability (NPL) during the measurement period ending on June 30, 2017. The net effect of the change on the location's proportionate share of the collective NPL and collective deferred outflows of resources and deferred inflows of resources is also recognized over the average of the expected remaining service lives of all employees shown previously. The differences between the actual employer contributions and the proportionate share of the employer contributions during the measurement period ending on June 30, 2017 are recognized over the same period. These amounts are shown on the following page, with the corresponding amounts for the measurement periods ending on June 30, 2016, June 30, 2015 and June 30, 2014 shown on the pages after that. While these amounts are different for each employer, they sum to zero over the entire KCERA.



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

	Total Change to be	Recognition Period		Reporting Da	te for Employer u	nder GAS 68 Year	Ended June 30	
	Recognized	(Years)	2018	2019	2020	2021	2022	2023
Kern County	\$12,353,524	5.11	\$2,417,519	\$2,417,519	\$2,417,519	\$2,417,519	\$2,417,519	\$265,929
Kern County Hospital Authority	(27,724,028)	5.11	(5,425,446)	(5,425,446)	(5,425,446)	(5,425,446)	(5,425,446)	(596,798)
Kern County Superior Courts	3,960,066	5.11	774,964	774,964	774,964	774,964	774,964	85,246
Berrenda Mesa Water District	(165,515)	5.11	(32,390)	(32,390)	(32,390)	(32,390)	(32,390)	(3,565)
Buttonwillow Recreation and								
Park District	39,883	5.11	7,805	7,805	7,805	7,805	7,805	858
East Kern Cemetery District	92,818	5.11	18,164	18,164	18,164	18,164	18,164	1,998
Inyokern Community Services								
District	(198,101)	5.11	(38,767)	(38,767)	(38,767)	(38,767)	(38,767)	(4,266)
Kern County Water Agency	1,346,534	5.11	263,510	263,510	263,510	263,510	263,510	28,984
Kern Mosquito and Vector								
Control District	475,049	5.11	92,965	92,965	92,965	92,965	92,965	10,224
North of the River Sanitation								
District	406,028	5.11	79,457	79,457	79,457	79,457	79,457	8,743
San Joaquin Valley Unified Air								
Pollution Control District	9,049,524	5.11	1,770,944	1,770,944	1,770,944	1,770,944	1,770,944	194,804
Shafter Recreation and Park								
District	219,882	5.11	43,030	43,030	43,030	43,030	43,030	4,732
West Side Cemetery District	115,156	5.11	22,535	22,535	22,535	22,535	22,535	2,481
West Side Mosquito and Vector								
Control District	60,817	5.11	11,901	11,901	11,901	11,901	11,901	1,312
West Side Recreation and Park								
District	(31,637)	5.11	<u>(6,191)</u>	(6,191)	(6,191)	(6,191)	(6,191)	<u>(682)</u>
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0	\$0

## EXHIBIT 13 (continued) Allocation of Changes in Total Net Pension Liability

The corresponding amounts for the measurement period ending on June 30, 2016 are as follows:

	Total Change to be	Recognition Period		Reporting Date for Employer under GAS 68 Year Ended June 30				
	Recognized	(Years)	2017	2018	2019	2020	2021	2022
Kern County	\$39,728,583	5.10	7,789,917	7,789,917	7,789,917	7,789,917	7,789,917	778,998
Kern County Hospital								
Authority	(48,708,545)	5.10	(9,550,695)	(9,550,695)	(9,550,695)	(9,550,695)	(9,550,695)	(955,070)
Kern County Superior Courts	7,197,381	5.10	1,411,251	1,411,251	1,411,251	1,411,251	1,411,251	141,126
Berrenda Mesa Water District	(281,633)	5.10	(55,222)	(55,222)	(55,222)	(55,222)	(55,222)	(5,523)
Buttonwillow Recreation and								
Park District	67,278	5.10	13,192	13,192	13,192	13,192	13,192	1,318
East Kern Cemetery District	93,978	5.10	18,427	18,427	18,427	18,427	18,427	1,843
Inyokern Community Services								
District	(22,343)	5.10	(4,381)	(4,381)	(4,381)	(4,381)	(4,381)	(438)
Kern County Water Agency	(112,125)	5.10	(21,985)	(21,985)	(21,985)	(21,985)	(21,985)	(2,200)
Kern Mosquito and Vector								
Control District	172,716	5.10	33,866	33,866	33,866	33,866	33,866	3,386
North of the River Sanitation								
District	(41,496)	5.10	(8,136)	(8,136)	(8,136)	(8,136)	(8,136)	(816)
San Joaquin Valley Unified								
Air Pollution Control District	1,662,262	5.10	325,934	325,934	325,934	325,934	325,934	32,592
Shafter Recreation and Park								
District	290,861	5.10	57,032	57,032	57,032	57,032	57,032	5,701
West Side Cemetery District	36,338	5.10	7,125	7,125	7,125	7,125	7,125	713
West Side Mosquito and								
Vector Control District	(252,454)	5.10	(49,501)	(49,501)	(49,501)	(49,501)	(49,501)	(4,949)
West Side Recreation and Park								
District	<u>169,199</u>	5.10	<u>33,176</u>	<u>33,176</u>	<u>33,176</u>	<u>33,176</u>	<u>33,176</u>	<u>3,319</u>
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0	\$0

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

## EXHIBIT 13 (continued) Allocation of Changes in Total Net Pension Liability

The corresponding amounts for the measurement period ending on June 30, 2015 are as follows:

	Total Change to be	Recognition Period	Reporting Date for Employer under GAS 68 Year Ended June 30						
	Recognized	(Years)	2016	2017	2018	2019	2020	2021	
Kern County	\$(15,211,146)	5.19	\$(2,930,856)	\$(2,930,856)	\$(2,930,856)	\$(2,930,856)	\$(2,930,856)	\$(556,866)	
Kern County Superior Courts	9,016,144	5.19	1,737,215	1,737,215	1,737,215	1,737,215	1,737,215	330,069	
Berrenda Mesa Water District	(164,423)	5.19	(31,681)	(31,681)	(31,681)	(31,681)	(31,681)	(6,018)	
Buttonwillow Recreation and									
Park District	(120,946)	5.19	(23,304)	(23,304)	(23,304)	(23,304)	(23,304)	(4,426)	
East Kern Cemetery District	15,781	5.19	3,041	3,041	3,041	3,041	3,041	576	
Inyokern Community Services									
District	9,914	5.19	1,910	1,910	1,910	1,910	1,910	364	
Kern County Water Agency	2,285,783	5.19	440,421	440,421	440,421	440,421	440,421	83,678	
Kern Mosquito and Vector									
Control District	145,379	5.19	28,011	28,011	28,011	28,011	28,011	5,324	
North of the River Sanitation									
District	121,086	5.19	23,331	23,331	23,331	23,331	23,331	4,431	
San Joaquin Valley Unified									
Air Pollution Control District	3,077,758	5.19	593,017	593,017	593,017	593,017	593,017	112,673	
Shafter Recreation and Park			0	0	0	0	0	0	
District	0	5.19							
West Side Cemetery District	71,204	5.19	13,719	13,719	13,719	13,719	13,719	2,609	
West Side Mosquito and									
Vector Control District	438,204	5.19	84,432	84,432	84,432	84,432	84,432	16,044	
West Side Recreation and Park									
District	<u>315,262</u>	5.19	60,744	60,744	60,744	60,744	60,744	<u>11,542</u>	
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0	\$0	

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, 2015

## ★ Segal Consulting

## EXHIBIT 13 (continued) Allocation of Changes in Total Net Pension Liability

The corresponding amounts for the measurement period ending on June 30, 2014 are as follows:

	Total Change to be	Recognition Period	Reporting Date for Employer under GAS 68 Year Ended June 30						
	Recognized	(Years)	2015	2016	2017	2018	2019	2020	
Kern County	\$3,559,769	5.27	\$675,477	\$675,477	\$675,477	\$675,477	\$675,477	\$182,384	
Kern County Superior Courts	(4,072,702)	5.27	(772,809)	(772,809)	(772,809)	(772,809)	(772,809)	(208,657)	
Berrenda Mesa Water District	(4,887)	5.27	(927)	(927)	(927)	(927)	(927)	(252)	
Buttonwillow Recreation and									
Park District	(19,597)	5.27	(3,719)	(3,719)	(3,719)	(3,719)	(3,719)	(1,002)	
East Kern Cemetery District	(3,738)	5.27	(709)	(709)	(709)	(709)	(709)	(193)	
Inyokern Community Services									
District	(6,768)	5.27	(1,284)	(1,284)	(1,284)	(1,284)	(1,284)	(348)	
Kern County Water Agency	322,454	5.27	61,187	61,187	61,187	61,187	61,187	16,519	
Kern Mosquito and Vector									
Control District	(21,677)	5.27	(4,113)	(4,113)	(4,113)	(4,113)	(4,113)	(1,112)	
North of the River Sanitation									
District	151,305	5.27	28,711	28,711	28,711	28,711	28,711	7,750	
San Joaquin Valley Unified									
Air Pollution Control District	(208,797)	5.27	(39,620)	(39,620)	(39,620)	(39,620)	(39,620)	(10,697)	
Shafter Recreation and Park									
District	0	5.27	0	0	0	0	0	0	
West Side Cemetery District	58,518	5.27	11,104	11,104	11,104	11,104	11,104	2,998	
West Side Mosquito and									
Vector Control District	240,248	5.27	45,588	45,588	45,588	45,588	45,588	12,308	
West Side Recreation and Park									
District	<u>5,872</u>	5.27	<u>1,114</u>	<u>1,114</u>	<u>1,114</u>	<u>1,114</u>	<u>1,114</u>	<u>302</u>	
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0	\$0	

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, 2014

Actuarial Assumptions and Method For June 30, 2017 Measurement Da	ls te and Employer Reporting as of June 30, 2018
Rationale for Assumptions:	The information and analysis used in selecting each assumption that has a significant effect on this actuarial valuation is shown in the July 1, 2013 through June 30, 2016 Actuarial Experience Study dated June 21, 2017.
<b>Economic Assumptions</b>	
Net Investment Return:	7.25%, net of investment expenses.
Administration Expenses:	0.90% of payroll allocated to both the employer and the member based on the components of the total average contribution rate (before expenses) for the employer and the member.
Employee Contribution Crediting Rate:	7.25%, compounded semi-annually.
Consumer Price Index:	Increase of 3.00% per year; retiree COLA increases due to CPI are assumed to be 2.50% per year.
Payroll Growth:	Inflation of 3.00% per year plus "across the board" real salary increases of 0.50% per year.
Increase in Internal Revenue Code Section 401(a)(17) Compensation Limit:	Increase of 3.00% per year from the valuation date.
Increase in Section 7522.10 Compensation Limit:	Increase of 3.00% per year from the valuation date.

#### **Individual Salary Increases:**

Annual Rate	e of Compensation	n Increase							
Inflation: 3.00% per	year; plus "across	the board" salary							
increases of 0.50% pe	er year; plus the fo	llowing							
promotional and merit increases:									
Years of Service	General	Safety							
Less than 1	5.50%	9.00%							
1	4.00	6.50							
2	3.50	5.50							
3	3.00	4.25							
4	2.50	3.75							
5	2.25	3.25							
6	2.00	3.00							
7	1.50	2.50							
8	1.25	1.75							
9	1.00	1.50							
10	0.90	1.25							
11	0.80	1.00							
12	0.70	0.90							
13	0.60	0.85							
14	0.50	0.80							
15	0.50	0.75							
16	0.50	0.70							
17	0.50	0.65							
18	0.50	0.60							
19	0.50	0.55							
20 & Over	0.50	0.50							

*Note:* The promotional and merit increases are added to the sum of the inflationary and "across the board" increases.

## **Demographic Assumptions Mortality Rates:** *Healthy:* For General Members: Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table set forward one year for males and set forward two years for females projected generationally with the two-dimensional MP-2016 projection scale. For Safety Members: Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table set back one year for males and females projected generationally with the twodimensional MP-2016 projection scale. Disabled: For General Members: Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table set forward seven years for males and set forward eight years for females projected generationally with the two-dimensional MP-2016 projection scale. For Safety Members: Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table set forward three years for males and females projected generationally with the two-dimensional MP-2016 projection scale. Beneficiaries: Beneficiaries are assumed to have the same mortality as a General Member of the opposite sex who is receiving a service (non-disability) retirement.

The RP-2014 mortality tables and adjustments as shown above reflect the mortality experience as of the measurement date. The generational projection is a provision for future mortality improvement.

Member Contribution Rates:	For General Members: Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table set forward one year for males and set forward two years for females, projected to 2034 with the two-dimensional MP-2016 projection scale, weighted 30% male and 70% female.
	For Safety Members: Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table set back one year for males and females, projected to 2034 with the two- dimensional MP-2016 projection scale, weighted 80% male and 20% female.

<b>Pre-Retirement Mortality Rates:</b>	For General and Safety Members: Headcount-Weighted RP-2014 Employee
	Mortality Table times 80%, projected generationally with the two-dimensional
	MP-2016 projection scale.

**Termination Rates Before Retirement:** 

		Rate (%)		
		Mortality		
	Ge	neral	Sa	fety
Age	Male	Female	Male	Female
25	0.05	0.02	0.05	0.02
30	0.05	0.02	0.05	0.02
35	0.05	0.03	0.05	0.03
40	0.06	0.04	0.06	0.04
45	0.10	0.07	0.10	0.07
50	0.17	0.11	0.17	0.11
55	0.27	0.17	0.27	0.17
60	0.45	0.24	0.45	0.24
65	0.78	0.36	0.78	0.36
03	0.78	0.30	0.78	(

All pre-retirement deaths are assumed to be non-service connected. Note that generational projections beyond the base year (2014) are not reflected in the above mortality tables.



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#### **Termination Rates Before Retirement (continued):**

	Rate (%)							
	Disability							
Age	General <sup>(1)</sup>	Safety <sup>(2)</sup>						
20	0.02	0.05						
25	0.03	0.07						
30	0.04	0.12						
35	0.08	0.24						
40	0.11	0.36						
45	0.17	0.46						
50	0.23	1.10						
55	0.28	2.55						
60	0.36	3.70						
65	0.40	4.00						
70	0.00	0.00						

<sup>(1)</sup> 50% of General disabilities are assumed to be service connected (duty) disabilities and the other 50% are assumed to be non-service connected (ordinary) disabilities.

<sup>(2)</sup> 90% of Safety disabilities are assumed to be service connected (duty) disabilities and the other 10% are assumed to be non-service connected (ordinary) disabilities.



Termination Rates Before Retirement (continued):						
	Rate (%) Withdrawal <sup>(1)</sup>					
	Years of Service	General	Safety			
	0	17.00	8.00			
	1	13.00	6.00			
	2	10.00	4.50			
	3	9.00	4.00			
	4	7.50	3.50			
	5	6.50	3.00			
	6	5.50	2.50			
	7	5.00	2.20			
	8	4.50	2.10			
	9	4.00	2.00			
	10	3.25	1.90			
	11	3.00	1.80			
	12	2.80	1.60			
	13	2.60	1.40			
	14	2.40	1.20			
	15	2.30	1.00			
	16	2.20	0.90			
	17	2.10	0.75			
	18	1.90	0.75			
	19	1.70	0.75			
	20	1.50	0.00			
	21	1.30	0.00			
	22	1.10	0.00			
	23	1.00	0.00			
	24	1.00	0.00			
	25	1.00	0.00			
	26	1.00	0.00			
	27	1.00	0.00			
	28	1.00	0.00			
	29	1.00	0.00			
	30 & Over	0.00	0.00			

<sup>(1)</sup> Refer to the next table that contains rates for electing a refund of contributions upon withdrawal. No withdrawal is assumed after a member is first assumed to retire.

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

Rate (%) Electing a Refund of Contributions upon Withdrawal		
0	100	100
1	100	100
	100	100
2 3	100	100
4	100	100
5	45	50
6	42	46
7	40	44
8	36	36
9	32	32
10	30	28
11	28	25
12	26	21
13	24	18
14	22	15
15	20	12
16	18	10
17	16	8
18	14	6
19	13	4
20	12	0
21	11	0
22	10	0
23	8	0
24	6	0
25	4	0
26	2	0
27 & Over	0	0

			Rate (%	)	
	_	General Tiers IIA			Safety Tiers IIA
Age	General Tier I	and IIB	General Tier III	Safety Tier I	and IIB
45	0.00	0.00	0.00	2.00	0.00
46	0.00	0.00	0.00	2.00	0.00
47	0.00	0.00	0.00	2.00	0.00
48	0.00	0.00	0.00	3.00	0.00
49	0.00	0.00	0.00	9.00	0.00
50	6.00	3.00	0.00	20.00	6.00
51	6.00	3.00	0.00	15.00	6.00
52	6.00	3.00	3.00	18.00	6.00
53	6.00	3.00	3.00	18.00	8.00
54	8.00	3.50	3.50	20.00	18.00
55	10.00	5.50	5.50	24.00	22.00
56	12.00	6.50	6.50	24.00	20.00
57	14.00	7.50	7.50	24.00	20.00
58	15.00	9.50	9.50	30.00	20.00
59	19.00	11.50	11.50	20.00	20.00
60	23.00	13.50	13.50	20.00	20.00
61	23.00	15.50	15.50	20.00	20.00
62	25.00	25.00	25.00	40.00	40.00
63	25.00	25.00	25.00	40.00	40.00
64	25.00	25.00	25.00	40.00	40.00
65	32.00	32.00	32.00	100.00	100.00
66	35.00	35.00	35.00	100.00	100.00
67	35.00	35.00	35.00	100.00	100.00
68	40.00	40.00	40.00	100.00	100.00
69	40.00	40.00	40.00	100.00	100.00
70	100.00	100.00	100.00	100.00	100.00

Retirement Age and Benefit for Deferred Vested Members:	For deferred vested members, we make the following retirement assumption:			
	General Age:	57		
	Safety Age:	53		
	We assume that 50% and 55% of future General and Safety deferred vested members, respectively, will continue to work for a reciprocal employer. For reciprocals, we assume 4.00% compensation increases per annum.			
Future Benefit Accruals:	Future Benefit Accruals:1.0 year of service per year.			
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 KCE	RA as of the valuation date.		
Percent Married:	<b>ercent Married:</b> 75% of male members and 60% of female members are assumed to be married pre-retirement death or retirement. There is no explicit assumption for child benefits.			
Age of Spouse:	Male retirees are 3 years old younger than their spouses.	er than their spouses, and female retirees are 2 years		

Actuarial Methods	
Actuarial Cost Method:	Entry Age Actuarial Cost Method. Entry Age is the age on the valuation date minus years of service. 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:	<ul> <li>The average of the expected service lives of all employees is determined by:</li> <li>Calculating each active employee's expected remaining service life as the present value of \$1 per year of future service at zero percent interest.</li> <li>Setting the remaining service life to zero for each nonactive or retired member.</li> <li>Dividing the sum of the above amounts by the total number of active employee, nonactive and retired members.</li> </ul>
Changes in Actuarial Assumptions and Methods: <u>Economic Assumptions</u>	The Board adopted changes in demographic and economic assumptions as recommended by Segal in the July 1, 2013 through June 30, 2016 Actuarial Experience Study. Previously, these assumptions were as follows:
Net Investment Return:	7.50%, net of investment expenses.
Employee Contribution Crediting Rate:	7.50%, compounded semi-annually.
<b>Consumer Price Index:</b>	Increase of 3.25% per year; retiree COLA increases due to CPI are assumed to be 2.50% per year.
Payroll Growth:	Inflation of 3.25% per year plus "across the board" real salary increases of 0.50% per year.
Increase in Internal Revenue Code Section 401(a)(17) Compensation Limit:	Increase of 3.25% per year from the valuation date.
Increase in Section 7522.10 Compensation Limit:	Increase of 3.25% per year from the valuation date.



**Changes in Actuarial Assumptions and Methods (continued):** 

**Individual Salary Increases:** 

## **Annual Rate of Compensation Increase**

Inflation: 3.25% per year; plus "across the board" salary increases of 0.50% per year; plus the following promotional and merit increases:

Years of Service	General	Safety
Less than 1	5.50%	8.00%
1	4.00	6.50
2	3.50	5.50
3	3.00	4.00
4	2.25	3.50
5	2.00	3.25
6	1.75	3.00
7	1.50	2.50
8	1.25	1.75
9	1.00	1.50
10	0.90	1.25
11	0.80	1.00
12	0.70	0.90
13	0.60	0.85
14	0.50	0.80
15	0.50	0.75
16	0.50	0.70
17	0.50	0.65
18	0.50	0.60
19	0.50	0.55
20 & Over	0.50	0.50

*Note:* The promotional and merit increases are added to the sum of the inflationary and "across the board" increases.

Changes in Actuarial Assumptions and Methods (continued):				
<b>Demographic Assumptions</b>				
Mortality Rates:				
Healthy:	For General Members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2023 set forward one year for males and females.			
	For Safety Members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2023 set back one year for males and females.			
Disabled:	For General Members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2023 set forward eight years for males and females.			
	For Safety Members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2023 set forward four years for males and females.			
Beneficiaries:	Beneficiaries are assumed to have the same mortality as a General Member of the opposite sex who has taken a service (non-disability) retirement.			
Member Contribution Rates:	For General Members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2023 set forward one year for males and females weighted 30% male and 70% female.			
	For Safety Members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2023 set back one year for males and females weighted 80% male and 20% female.			



Changes in Actuarial Assumptions and Methods (continued):

**Termination Rates Before Retirement:** 

		Rate (%) Mortality		
	Gei	neral	Sa	fety
Age	Male	Female	Male	Female
25	0.04	0.02	0.04	0.02
30	0.05	0.03	0.04	0.02
35	0.08	0.05	0.07	0.04
40	0.11	0.07	0.10	0.06
45	0.15	0.11	0.13	0.10
50	0.23	0.17	0.19	0.14
55	0.39	0.27	0.30	0.22
60	0.64	0.45	0.52	0.36
65	1.07	0.83	0.87	0.65

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



Changes in Actuarial Assumptions and Methods (continued):

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

Rate (%) Disability					
Age	General <sup>(1)</sup>	Safety <sup>(2)</sup>			
20	0.02	0.05			
25	0.03	0.08			
30	0.05	0.16			
35	0.10	0.29			
40	0.14	0.50			
45	0.21	0.69			
50	0.28	1.35			
55	0.33	2.50			
60	0.38	3.60			
65	0.40	0.00			
70	0.00	0.00			

- <sup>(1)</sup> 55% of General disabilities are assumed to be service connected (duty) disabilities and the other 45% are assumed to be nonservice connected (ordinary) disabilities.
- <sup>(2)</sup> 100% of Safety disabilities are assumed to be service connected (duty) disabilities.



SECTION 3:	Actuarial Assumptions and Methods and Appendices for the Kern County Employees' Retirement
	Association

Changes in Actuarial Assumptions and Methods (continued)	):
<b>Termination Rates Before Retirement (continued):</b>	

Rate (%) Withdrawal <sup>(1)</sup>				
Years of Service	General	Safety		
0	18.00	8.00		
1	14.00	5.00		
	10.00	3.50		
2 3	8.00	3.25		
4	6.50	3.00		
5	6.00	2.60		
6	5.00	2.30		
7	4.50	2.20		
8	4.00	2.10		
9	3.50	2.05		
10	3.25	2.00		
11	3.00	1.90		
12	2.80	1.70		
13	2.60	1.50		
14	2.40	1.30		
15	2.30	1.10		
16	2.20	0.90		
17	2.10	0.75		
18	1.90	0.75		
19	1.70	0.75		
20	1.50	0.00		
21	1.30	0.00		
22	1.10	0.00		
23	1.00	0.00		
24	1.00	0.00		
25	1.00	0.00		
26	1.00	0.00		
27	1.00	0.00		
28	1.00	0.00		
29	1.00	0.00		
30 & Over	0.00	0.00		

<sup>(1)</sup> *Refer to the next table that contains rates for electing a refund of contributions upon withdrawal. No withdrawal is assumed after a member is first assumed to retire.* 



## Changes in Actuarial Assumptions and Methods (continued): Termination Rates Before Retirement (continued):

	Rate (%)					
_	fund of Contribu Withdrawal	itions				
upon Withdrawal Years of Service General Safety						
0	100	100				
1	100	100				
	100	100				
2 3	100	100				
4	100	100				
5	50	60				
6	47	46				
7	44	44				
8	41	36				
9	38	34				
10	35	32				
11	32	27				
12	30	24				
13	28	21				
14	26	18				
15	24	15				
16	22	12				
17	20	9				
18	18	7				
19	16	5				
20	14	0				
21	12	0				
22	10	0				
23	8	0				
24	6	0				
25	4	0				
26	2	0				
27 & Over	0	0				

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			Rate (%)		
		<b>General Tiers IIA</b>			Safety Tiers IIA
Age	General Tier I	and IIB	General Tier III	Safety Tier I	and IIB
45	0.00	0.00	0.00	2.00	0.00
46	0.00	0.00	0.00	2.00	0.00
47	0.00	0.00	0.00	2.00	0.00
48	0.00	0.00	0.00	2.00	0.00
49	0.00	0.00	0.00	8.00	0.00
50	6.00	3.00	0.00	20.00	6.00
51	6.00	3.00	0.00	16.00	6.00
52	6.00	3.00	3.00	18.00	6.00
53	6.00	3.00	3.00	18.00	8.00
54	8.00	3.50	3.50	20.00	18.00
55	11.00	6.00	6.00	24.00	22.00
56	12.00	6.50	6.50	28.00	22.00
57	15.00	8.00	8.00	28.00	22.00
58	16.00	10.00	10.00	35.00	22.00
59	19.00	11.50	11.50	20.00	20.00
60	23.00	13.50	13.50	20.00	20.00
61	25.00	17.00	17.00	20.00	20.00
62	30.00	30.00	30.00	50.00	50.00
63	30.00	30.00	30.00	50.00	50.00
64	30.00	30.00	30.00	50.00	50.00
65	30.00	30.00	30.00	100.00	100.00
66	40.00	40.00	40.00	100.00	100.00
67	40.00	40.00	40.00	100.00	100.00
68	40.00	40.00	40.00	100.00	100.00
69	40.00	40.00	40.00	100.00	100.00
70	100.00	100.00	100.00	100.00	100.00

Changes in Actuarial Assumptions and Methods (continued):

**Retirement Rates:** 

## Changes in Actuarial Assumptions and Methods (continued):

Retirement Age and Benefit for Deferred Vested Members:	For deferred vested m	embers, we make the following retirement assumption:			
	General Age:	57			
	Safety Age:	53			
	members, respectively	assume that 55% and 60% of future General and Safety deferred vested bers, respectively, will continue to work for a reciprocal employer. For rocals, we assume 4.25% compensation increases per annum.			
Age of Spouse:	Female (or male) spouses are 3 years younger (or older) than their spouses.				



#### APPENDIX A

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

Year Beginning July 1,	Projected Beginning Plan's Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expense (d)	Projected Investment Earnings (e)	Projected Ending Plan's Fiduciary Net Position (f) = (a) + (b) - (c) - (d) + (e)
2016	\$3,572	\$276	\$306	\$5	\$427	\$3,963
2017	3,963	300	345	4	285	4,197
2018	4,197	304	347	4	302	4,452
2019	4,452	311	364	4	320	4,715
2020	4,715	318	380	4	339	4,987
2021	4,987	319	397	4	358	5,263
2022	5,263	321	414	4	377	5,544
2023	5,544	325	431	4	397	5,831
2024	5,831	330	450	4	418	6,125
2025	6,125	334	468	4	438	6,426
2026	6,426	339	486	3	460	6,735
2044	9,688	16	759	1	674	9,619
2045	9,619	13	762	1	669	9,539
2046	9,539	11	763	1	663	9,449
2064	7,757	0 *	576	0 *	541	7,722
2065	7,722	0 *	558	0 *	539	7,703
2066	7,703	0 *	539	0 *	538	7,703
2084	12,996	0	137	0	937	13,796
2085	13,796	0	119	0	996	14,672
2086	14,672	0	102	0	1,060	15,630
2104	50,227	0	1	0	3,641	53,868
2105	53,868	0	0	* 0	3,905	57,773
2106	57,773	0	0	* 0	4,189	61,961
2125	218,408	0	0	0	15,835	234,243
2126	234,243					
2126	Discounted Value: 106 *	*				

Less than \$1 million, when rounded.
 \$234,243 million when discounted w

\$234,243 million when discounted with interest at the rate of 7.25% per annum has a value of \$106 million (or 2.97% of the Plan's Fiduciary Net Position) as of June 30, 2016.



#### **APPENDIX A (continued)**

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

#### Notes:

- (1) Amounts may not total exactly due to rounding.
- (2) Amounts shown in the year beginning July 1, 2016 row are actual amounts, based on the financial statements provided by KCERA.
- (3) Years 2027-2043, 2047-2063, 2067-2083, 2087-2103, and 2107-2124 have been omitted from this table.
- (4) <u>Column (a)</u>: Except for the "discounted value" shown for 2126, none of the projected beginning Plan's Fiduciary Net Position amounts shown have been adjusted for the time value of money.
- (5) <u>Column (b)</u>: Projected total contributions include employee and employer normal cost contributions based on closed group projections (based on covered active members as of June 30, 2016); plus employer contributions to the unfunded actuarial accrued liability; plus employer and employee contributions to fund each year's annual administrative expenses. Contributions are assumed to occur halfway through the year, on average.
- (6) <u>Column (c)</u>: 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, 2016. The projected benefit payments reflect the cost of living increase assumption of 2.50% per annum and include projected benefits associated with the Supplemental Retiree Benefit Reserve. Benefit payments are assumed to occur halfway through the year, on average.
- (7) <u>Column (d)</u>: Projected administrative expenses are calculated as approximately 0.90% of the closed group payroll. Administrative expenses are assumed to occur halfway through the year, on average.
- (8) <u>Column (e)</u>: Projected investment earnings are based on the assumed investment rate of return of 7.25% per annum.
- (9) As illustrated in this Exhibit, the Plan's 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 7.50% 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.



#### **APPENDIX B**

#### **Glossary of Terms**

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 pension Plan's 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.



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

#### **Glossary of Terms**

#### 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.



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

#### **Glossary of Terms**

### 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 pension Plan's 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.



#### APPENDIX B (continued)

#### **Glossary of Terms**

#### 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.



## **APPENDIX B (continued)**

## **Glossary of Terms**

### **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 pension Plan's 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.



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

#### **Glossary of Terms**

#### **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.



## **APPENDIX B** (continued)

#### **Glossary of Terms**

### Postemployment benefit changes

Adjustments to the pension of an inactive employee.

#### 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.



## **APPENDIX B** (continued)

#### **Glossary of Terms**

#### **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.

### **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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