Segal Consulting

Kern County Employees' Retirement Association

Governmental Accounting Standards (GAS) 67
Actuarial Valuation as of June 30, 2015

This report has been prepared at the request of the Board of Retirement to assist in administering the Fund. 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.

Segal Consulting
100 Montgomery Street Suite 500 San Francisco, CA 94104-4308
T 415.263.8200 www.segalco.com

December 1, 2015

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) 67 Actuarial Valuation as of June 30, 2015. It contains various information that will need to be disclosed in order to comply with GAS 67.

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist in administering the Association. The census and financial information on which our calculations were based was prepared 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 the Association.

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

Sincerely,

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

By:

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

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

MYM/bqb

SECTION 1

VALUATION SUMMARY

SECTION 2

GAS 67 INFORMATION

Purpose

This report has been prepared by Segal Consulting to present certain disclosure information required by Governmental Accounting Standard (GAS) 67 as of June 30, 2015. This valuation is based on:

- The benefit provisions of the Retirement Association, as administered by the Board of Retirement;
- The characteristics of covered active members, inactive vested members, and retired members and beneficiaries as of June 30, 2014, provided by the Retirement Association;
- The assets of the Plan as of June 30, 2015, provided by the Retirement Association;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

Significant Issues in Valuation Year

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

- GAS 67 and 68 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 GAS 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 on generally 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 date for the Plan is June 30, 2015. The NPL was measured as of June 30, 2015. The Plan's Fiduciary Net Position (plan assets) was valued as of the measurement date while the TPL was determined based upon rolling forward the results of the actuarial valuation as of June 30, 2014. In addition, any changes in actuarial assumptions or plan provisions that occurred between the valuation date and the measurement date have been reflected.
- The NPL increased from $2,069 million as of June 30, 2014 to $2,203 million as of June 30, 2015. Changes in these values during the last two fiscal years ending June 30, 2014 and June 30, 2015 can be found in Exhibit 3 of Section 2. In particular the June 30, 2015 NPL was measured using the new $5,000 SRBR death benefit approved by the Retirement Board for use in the next SRBR valuation as of June 30, 2015 and the NPL would have been lower by about $5.0 million if measured using the previous $3,000 SRBR death benefit. We have included the impact of this benefit change by (1) revaluing the actuarial valuation TPL as of June 30, 2014 (before the roll forward) and (2) using this revalued TPL in rolling forward the results from June 30, 2014 to June 30, 2015.
- For purposes of illustration, a split of the TPL, Plan's Fiduciary Net Position and NPL by the regular benefits (non-SRBR) and the SRBR benefits as of June 30, 2015 is shown in the table below:

	Regular Benefits (Non-SRBR)	SRBR Benefits	Total KCERA
Total Pension Liability (TPL)	$5,760,253,390	$67,937,732	$5,828,191,122
Plan's Fiduciary Net Position	3,503,826,007	121,267,176	3,625,093,183
Net Pension Liability (NPL)	2,256,427,383	(53,329,444)	2,203,097,939

- The discount rate used to determine the TPL and NPL as of June 30, 2015 and 2014 was 7.50%, following the same assumption used by the Association in the funding valuations as of the same dates. The detailed derivation of the discount rate of 7.50% used in the calculation of the TPL and NPL as of June 30, 2015 can be found in Exhibit 5 of Section 2. 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.
- As discussed in 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 the Governmental Accounting Standards Board (GASB) staff, it was 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[1] (see Appendix A).

However, as noted earlier, the Plan's Fiduciary Net Position includes assets held for the SRBR, and the TPL includes 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.

- Various other information that is required to be disclosed can be found throughout Exhibits 1 through 4 in Section 2.

[1] *The purpose of the GASB crossover test is to determine if the full expected return (or 7.50% 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 7.50% investment rate of return assumption can be used as the discount rate to determine the TPL and the resulting NPL.*

Summary of Key Valuation Results

	2015	2014
Disclosure elements for fiscal year ending June 30:		
Service cost[1]	$125,160,810	$125,117,810
Total Pension Liability	5,828,191,122	5,645,345,607
Plan's Fiduciary Net Position	3,625,093,183	3,576,111,526
Net Pension Liability	2,203,097,939	2,069,234,081
Schedule of contributions for fiscal year ending June 30:		
Actuarially determined contributions	$215,477,000	$220,393,000
Actual contributions	$215,477,000	$220,393,000
Contribution deficiency (excess)	0	0
Demographic data for plan year ending June 30:[2]		
Number of retired members and beneficiaries	7,599	7,397
Number of vested terminated members[3]	2,053	1,949
Number of active members	8,481	8,512
Key assumptions as of June 30:		
Investment rate of return	7.50%	7.50%
Inflation rate	3.25%	3.25%
Projected salary increases[4]	General: 4.25% to 9.25% and Safety: 4.25% to 11.75%	General: 4.25% to 9.25% and Safety: 4.25% to 11.75%

(1) Please note that service cost is always based on the previous year's assumptions, meaning each of these values is based on the assumptions as of the preceding June 30.

(2) Data as of June 30, 2014 is used in the measurement of the TPL as of June 30, 2015.

(3) Includes terminated members due a refund of member contributions.

(4) Includes inflation at 3.25% plus real across-the-board salary increase of 0.50% plus merit and promotional increases.

Important Information about Actuarial Valuations

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 KCERA in preparing items related to the pension plan in their financial report. 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.

EXHIBIT 1

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.). KCERA is a cost-sharing multiple employer defined benefit public employee retirement system whose main function is to provide service retirement, disability, death and survivor 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, Shafter Recreation and Park District, West Side Cemetery District, West Side Mosquito and Vector Control District, West Side Recreation and Park District, and the Kern County Superior Court.

The management of KCERA is vested with the KCERA Board of Retirement. The Board consists of nine members and two alternates. 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 are elected by the safety membership; one member and one alternate 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, 2015, pension plan membership consisted of the following:

Retired members or beneficiaries currently receiving benefits	7,599
Vested terminated members entitled to, but not yet receiving benefits[(1)]	2,053
Active members	8,481
Total	18,133

[(1)] *Includes terminated members due a refund of member contributions.*

Note: Data as of June 30, 2015 is not used in the measurement of the TPL as of June 30, 2015.

Benefits provided. KCERA provides service retirement, disability, death, survivor and supplemental 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 payroll period following the date of hire. 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 compensation times years of accrued retirement service credit times age factor from Section 31676.17 (Tier I) or 1/90th of final 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 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 compensation times years of accrued retirement service credit times age factor from 31664.1 (Tier I) or 1/50th (or 2%) of final 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 compensation. There is no final compensation limit on the maximum retirement benefit for General Tier III members.

The maximum amount of compensation earnable that can be taken into account for 2015 for members with membership dates on or after July 1, 1996 but before January 1, 2013 is $265,000. For members with membership dates on or after January 1, 2013 the maximum amount of pensionable compensation that can be taken into account for 2015 is equal to $117,020 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 for a General Tier I or Tier IIA member or a Safety Tier I or Tier IIA member and the highest 36 consecutive months 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.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, 2015 for 2014-2015 (based on the June 30, 2013 valuation) was 42.00% 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, 2015 for 2014-2015 (based on the June 30, 2013 valuation) was 5.14% of compensation.

EXHIBIT 2

Net Pension Liability

The components of the Net Pension Liability are as follows:

	June 30, 2015	June 30, 2014
Total Pension Liability	$5,828,191,122	$5,645,345,607
Plan's Fiduciary Net Position	(3,625,093,183)	(3,576,111,526)
Net Pension Liability	$2,203,097,939	$2,069,234,081
Plan's Fiduciary Net Position as a percentage of the Total Pension Liability	62.20%	63.35%

The Net Pension Liability (NPL) for the plan was measured as of June 30, 2015 and 2014. The Plan's Fiduciary Net Position (plan assets) was valued as of the measurement date while the Total Pension Liability (TPL) was determined based upon rolling forward the TPL from actuarial valuations as of June 30, 2014 and 2013, respectively.

Plan provisions. The plan provisions used in the measurement of the NPL are the same as those used in the KCERA actuarial valuations as of June 30, 2015 and June 30, 2014, 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, 2015 that was measured by an actuarial valuation as of June 30, 2014 used the same actuarial assumptions as the June 30, 2015 funding valuation. In particular, the following actuarial assumptions were applied to all periods included 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 expense, including inflation
Other assumptions	Same as those used in the June 30, 2015 funding valuation. These assumptions were developed in the analysis of actuarial experience for the period July 1, 2010 through June 30, 2013.

The TPL as of June 30, 2014 that was measured by an actuarial valuation as of June 30, 2013 used the same actuarial assumptions as the June 30, 2014 funding valuation. In particular, the following actuarial assumptions were applied to all periods included 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 expense, including inflation
Other assumptions	Same as those used in the June 30, 2014 funding valuation. These assumptions were developed in the analysis of actuarial experience study 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.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which expected future real rates of return (expected returns, net of inflation) are developed for each major asset class. These returns are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage, adding expected inflation and subtracting expected investment expenses and a risk margin. The target allocation and projected arithmetic real rates of return for each major asset class, after deducting inflation, but before investment expenses, used in the derivation of the 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	19%	5.92%
Small/Mid Cap U.S. Equity	4%	6.49%
Developed International Equity	18%	6.90%
Emerging Markets Equity	4%	8.34%
Core Bonds	18%	0.73%
High Yield Bonds	4%	2.67%
Emerging Market Debt	4%	4.00%
TIPS	3%	0.35%
Real Estate	5%	4.96%
Commodities	6%	4.35%
Hedge Funds	10%	4.30%
Private Equity	5%	8.10%
Total	100%	

Discount rate: The discount rate used to measure the TPL was 7.50% as of June 30, 2015 and June 30, 2014. 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, 2015 and June 30, 2014.

The discount rate assumption has 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.

Sensitivity of the Net Pension Liability to changes in the discount rate. The following presents the NPL of the KCERA as of June 30, 2015, calculated using the discount rate of 7.50%, as well as what the KCERA's NPL would be if it were calculated using a discount rate that is 1-percentage-point lower (6.50%) or 1-percentage-point higher (8.50%) than the current rate:

	1% Decrease (6.50%)	Current Discount Rate (7.50%)	1% Increase (8.50%)
Net Pension Liability as of June 30, 2015	$2,961,388,125	$2,203,097,939	$1,575,839,487

EXHIBIT 3

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

	2015	2014
Total Pension Liability		
Service cost	$125,160,810	$125,117,810
Interest	415,820,074	400,558,398
Change of benefit terms	5,035,737	0
Differences between expected and actual experience	-89,306,426	-57,033,870
Changes of assumptions	0	205,039,279
Benefit payments, including refunds of member contributions	-273,864,680	-257,495,061
Net change in Total Pension Liability	$182,845,515	$416,186,556
Total Pension Liability – beginning	5,645,345,607	5,229,159,051
Total Pension Liability – ending (a)	$5,828,191,122	$5,645,345,607
Plan's Fiduciary Net Position		
Contributions – employer	$215,476,956	$220,393,167
Contributions – employee	30,324,848	25,810,310
Net investment income	81,931,170	487,591,494
Benefit payments, including refunds of member contributions	-273,864,680	-257,495,061
Administrative expense	-4,886,637	-4,958,637
Other	0	0
Net change in Plan's Fiduciary Net Position	$48,981,657	$471,341,273
Plan's Fiduciary Net Position – beginning	3,576,111,526	3,104,770,253
Plan's Fiduciary Net Position – ending (b)	$3,625,093,183	$3,576,111,526
Net Pension Liability – ending (a) – (b)	$2,203,097,939	$2,069,234,081
Plan's Fiduciary Net Position as a percentage of the Total Pension Liability	62.20%	63.35%
Covered employee payroll[1]	$531,598,183	$533,850,811
Net Pension Liability as percentage of covered employee payroll	414.43%	387.61%

Notes to Schedule:

Benefit changes: The SRBR death benefit increased from $3,000 to $5,000.

(1) *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.*

EXHIBIT 4

Schedule of Employer Contributions – Last Seven Fiscal Years ($ in millions)

Year Ended June 30	Actuarially Determined Contributions[1]	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered-Employee Payroll[2]	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%

See accompanying notes to this schedule on next page.

(1) *All "Actuarially Determined Contributions" through June 30, 2014 were determined as the "Annual Required Contribution" under GAS 25 and 27.*

(2) *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 4

Methods and used assumptions to establish "actuarially determined contribution" rates:		
Valuation date	Actuarially determined contribution rates are calculated as of June 30, two years prior to the end of the fiscal year in which contributions are reported	
Actuarial cost method	Entry Age Actuarial Cost Method	
Amortization method	Level percent of payroll for total unfunded liability (assuming a 3.75% payroll increase)	
Remaining amortization period	20.5 years as of June 30, 2015 for all UAAL as of June 30, 2011. Effective June 30, 2012, any changes in UAAL due to actuarial gains or losses or due to changes in actuarial assumptions or methods will be amortized over a 18-year closed period effective with each valuation. Any change in unfunded actuarial accrued liability that arises due to plan amendments is amortized over its own declining 15-year period (with exception of a change due to retirement incentives, which is amortized over a declining period of up to 5 years).	
Asset valuation method	Market value of assets less unrecognized returns in each of the last five years. Unrecognized returns are equal to the difference between the actual market return and the expected return on a market value basis and are recognized semi-annually over a five-year period. The Actuarial Value of Assets is reduced by the value of the non-valuation reserves. Deferred gains and losses as of June 30, 2011 have been combined and will be recognized in nine equal semi-annual amounts over a period of four and a half years from that date.	
Actuarial assumptions:	June 30, 2014	June 30, 2015
Investment rate of return	7.50%, net of pension plan investment expenses, including inflation	7.50%, net of pension plan investment expenses, including inflation
Inflation rate	3.25%	3.25%
Real across-the-board salary increase	0.50%	0.50%
Projected salary increases[1]	General: 4.25% to 9.25% and Safety: 4.25% to 11.75%	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 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 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, 2014 funding actuarial valuation	Same as those used in the June 30, 2015 funding actuarial valuation

[1] *Includes inflation at 3.25% plus real across-the-board salary increase of 0.75% plus merit and promotional increases.*

EXHIBIT 5

Projection of Pension Plan's Fiduciary Net Position for Use in Calculation of Discount Rate as of June 30, 2015

Year Beginning July 1,	Projected Beginning Plan Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Plan Fiduciary Net Position (f) = (a) + (b) - (c) - (d) + (e)
2014	$3,576	$246	$274	$5	$82	$3,625
2015	3,625	275	304	4	270	3,862
2016	3,862	280	321	4	287	4,102
2017	4,102	280	339	4	304	4,343
2018	4,343	281	357	4	321	4,585
2019	4,585	287	375	4	339	4,832
2020	4,832	291	393	4	357	5,082
2021	5,082	294	412	4	375	5,337
2022	5,337	298	430	4	394	5,595
2023	5,595	303	449	3	412	5,857
2024	5,857	307	468	3	431	6,123
2032	8,128	312	625	2	595	8,408
2033	8,408	318	645	2	616	8,695
2034	8,695	323	663	2	637	8,990
2050	8,015	2	733	0	571	7,855
2051	7,855	2	722	0	559	7,694
2052	7,694	1	709	0	548	7,534
2079	8,717	0	132	0	648	9,233
2080	9,233	0	114	0	688	9,806
2081	9,806	0	97	0	731	10,440
2101	39,982	0	0 *	0	2,999	42,980
2102	42,980	0	0 *	0	3,224	46,204
2103	46,204	0	0 *	0	3,465	49,669
2117	127,172	0	0 *	0	9,538	136,709
2118	136,709					
2118	Discounted Value: 74 **					

* Less than $1 million, when rounded.

** $136,709 million when discounted with interest at the rate of 7.50% per annum has a value of $74 million (or 2.07% of the plan's Fiduciary Net Postion) as of June 30, 2014.

Notes:

(1) Amounts may not total exactly due to rounding.

(2) Amounts shown in the year beginning July 1, 2014 row are actual amounts, based on the financial statements provided by KCERA.

(3) Years 2025-2031, 2035-2049, 2053-2078, 2082-2100, and 2104-2116 have been omitted from this table.

(4) Column (a): Except for the "discounted value" shown for 2118, none of the projected beginning Plan's Fiduciary Net Position amounts shown have been adjusted for the time value of money.

(5) Column (b): Projected total contributions include employee and employer normal cost contributions based on closed group projections (based on covered active members as of June 30, 2014); plus employer contributions to the unfunded actuarial accrued liability; plus employer contributions to fund each year's annual administrative expenses. Contributions are assumed to occur halfway through the year, on average.

(6) Column (c): Projected benefit payments have been determined in accordance with paragraph 39 of GASB Statement No. 67, and are based on the closed group of active, inactive vested, retired members, and beneficiaries as of June 30, 2014. 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) Column (d): Projected administrative expenses are calculated as approximately 0.90% of the closed group payoll. Administrative expenses are assumed to occur halfway through the year, on average.

(8) Column (e): Projected investment earnings are based on the assumed investment rate of return of 7.50% 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, 2015 shown earlier in this report, pursuant to Paragraph 44 of GASB Statement No. 67.

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