## **Kern County Employees' Retirement Association**

Actuarial Valuation and Review 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.

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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 Actuarial Valuation and Review as of June 30, 2015. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2016-2017 and analyzes the preceding year's experience.

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist in administering the Plan. The census information on which our calculations were based was prepared by KCERA and the financial information was provided by the Retirement Association. 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; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); 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 the expectations for the Plan.

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

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

*B*v:

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

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

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### **Purpose**

This report has been prepared by Segal Consulting to present a valuation of the Kern County Employees' Retirement Association as of June 30, 2015. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- > The benefit provisions of the Retirement Association, as administered by the Board of Retirement;
- > The characteristics of covered active members, vested terminated members, retired members and beneficiaries as of June 30, 2015, 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.

One of the general goals of an actuarial valuation is to establish contributions that fully fund the Association's liabilities, and that, as a percentage of payroll, remain as level as possible for each generation of active members. Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.

In preparing this valuation, we have employed generally accepted actuarial methods and assumptions to evaluate the Association's assets, liabilities and future contribution requirements. Our calculations are based upon member data and financial information provided to us by the Association's staff. This information has not been audited by us, but it has been reviewed and found to be reasonably consistent, both internally and with prior year's information.

The 7.50% investment return assumption used in this valuation has been developed without taking into consideration any impact of the 50/50 excess earnings allocation between the retirement and Supplemental Retiree Benefits (SRBR) Reserve asset pools. This is based on our understanding that Article 5.5 of the Statute, which authorizes the allocation of 50% allocation of excess earnings to the SRBR, does not allow for the use of a different investment return for funding than is used for interest crediting. This would appear in effect to preclude the prefunding of the SRBR through the use of an assumption lower than the market earnings assumption of 7.50%.

Actuarial Standard of Practice (ASOP) No. 4 ("Measuring Pension Obligations and Determining Pension Plan Costs or Contributions") was recently revised and adopted in December 2013. 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 mentions 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."

Accordingly, we performed stochastic modeling to estimate the impact of the 50% allocation of future excess earnings to the SRBR. The results of our model indicated that the 50/50 allocation of future excess earnings would have the same impact as an "outflow" (i.e., assets not available to fund the benefits included in this valuation) that would average approximately 0.3% of assets over time.

Applying the results of our stochastic model to this valuation (for informational purposes only), we have estimated that such an annual outflow would increase the Actuarial Accrued Liability measured in this valuation using a 7.50% investment return assumption from \$5.66 billion to \$5.86 billion (for a difference of about \$200 million) and would increase the employer's contribution rate by about 3.3% of payroll.

The contribution requirements are determined as a percentage of payroll. The Association's employer rates provide for both normal cost and a contribution to amortize any unfunded or overfunded actuarial accrued liabilities. Effective with the June 30, 2012 valuation, the Board of Retirement's funding policy is to amortize the Association's unfunded actuarial accrued liability as of June 30, 2011 over a declining 24.5-year period (20.5 years as of June 30, 2015). Any change in unfunded actuarial accrued liability that arises due to actuarial gains or losses or due to changes in actuarial assumptions or methods at each valuation after June 30, 2011 is amortized over its own declining 18-year period. Any change in unfunded actuarial accrued liability that arises due to plan amendments is amortized over its own declining 15-year period (with the exception of a change due to retirement incentives, which is amortized over its own declining period of up to 5 years). A schedule of current

The rates calculated in this report may be adopted by the Board for the fiscal year that extends from July 1, 2016 through June 30, 2017.

### **Significant Issues in This Valuation**

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

amortization amounts may be found in Section 3, Exhibit I.

> The market value of assets earned a return of 2.3% for the July 1, 2014 to June 30, 2015 plan year. The valuation value of assets earned a return of 6.5% for the same period due to the deferral of most of the current year investment losses and the recognition of prior investment gains and losses. This resulted in an actuarial loss when measured against the assumed rate of return of 7.50%. This actuarial investment loss increased the average employer contribution rate by 0.48% of payroll.

\* Segal Consulting

Reference: Pg. 11

Reference: Pg. 63

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Reference: Pg. 35 Reference: Pg. 62 The ratio of the valuation value of assets to actuarial accrued liabilities increased from 60.8% to 62.4%. The Association's Unfunded Actuarial Accrued Liability (UAAL) decreased from \$2.15 billion as of June 30, 2014 to \$2.13 billion as of June 30, 2015. The decrease in the UAAL is mainly due to lower than expected salary increases, lower than expected COLA increases and other actuarial gains, offset to some extent by the investment loss and contributions less than expected. A reconciliation of the Association's unfunded actuarial accrued liability is provided in Section 3, Exhibit H.

Reference: Pg. 32

> The average recommended employer contribution rate decreased from 45.64% of payroll as of June 30, 2014 to 45.11% of payroll in the June 30, 2015 valuation. This decrease was mainly the result of lower than expected individual salary increases, lower than expected COLA increases, changes in demographics amongst the tiers, scheduled member contribution rate increases and other actuarial gains, offset to some extent by lower than expected total payroll growth, the investment loss and contributions less than expected. A reconciliation of the average recommended employer contribution rate is provided in Section 2, Subsection D (see Chart 16).

Reference: Pg. 33

> The average recommended member contribution rate increased from 5.58% of payroll in the June 30, 2014 valuation to 6.01% of payroll in the June 30, 2015 valuation. This increase was mainly the result of scheduled contribution rate increases and other demographic changes. A reconciliation of the average recommended member contribution rate is provided in Section 2, Subsection D (see Chart 17).

Reference: Pg. 22, 26

> This valuation reflects the adoption of changes to member contribution rates for Tier I members of the San Joaquin Valley Unified Air Pollution Control District (SJVAPCD). Effective July 11, 2015 Tier I members pay 28% of the total Normal Cost rate. That percent increases to 39% effective 2016/2017. There is a further increase to 50% of the total Normal Cost rate that will be reflected in the 2016 valuation. Due to this change, there are different District Category III Tier I employer contribution rates shown in this report for SJVAPCD and the Buttonwillow Recreation & Park District. Those employers should no longer use the combined District Category III employer contribution rate and should use their own Tier I specific employer rate shown in the report along with the Tier IIA and Tier IIB employer rates.

Reference: Pg. 6

- As indicated in Section 2, Subsection B (see Chart 7) of this report, the total unrecognized investment <u>loss</u> as of June 30, 2015 is \$26 million (as compared to an unrecognized <u>gain</u> of \$114 million in the June 30, 2014 valuation). This deferred investment loss will be recognized in the determination of the actuarial value of assets for funding purposes over the next few years. This means that if the plan earns the assumed rate of investment return of 7.50% per year (net of investment expense) on a market value basis then the deferred losses will be recognized over the next few years as shown in the footnote on Chart 7.
- > The unrecognized investment losses represent about 1% of the market value of assets. Unless offset by future investment gains or other favorable experience, the recognition of the \$26 million market losses is expected to have an impact on the Association's future funded ratio and the aggregate employer contribution rate. This potential impact may be illustrated as follows:



- If the deferred losses were recognized immediately in the valuation value of assets, the funded ratio would decrease from 62.4% to 61.9%.
  - For comparison purposes, if all the deferred gains in the June 30, 2014 valuation had been recognized immediately in the June 30, 2014 valuation, the funded percentage would have increased from 60.8% to 62.9%.
- If the deferred losses were recognized immediately in the valuation value of assets, the aggregate employer contribution rate would increase from 45.11% to 45.49%.
  - For comparison purposes, if all of the deferred gains in the June 30, 2014 valuation had been recognized immediately in the June 30, 2014 valuation, the aggregate employer contribution rate would decrease from 45.64% to 43.95%.
- > During 2014/2015 there were no "excess earnings" credited to the valuation reserves or the SRBR. Also, at June 30, 2015, the COLA Contribution Reserve was zero and therefore not available to offset the 2% COLA contribution rate. Since the Contingency Reserve is still negative as of June 30, 2015, it is not excluded from the valuation value of assets per the Board's Interest Crediting Policy. A complete presentation of the Association's reserves is in Section 3, Exhibit G.
- > The actuarial valuation report as of June 30, 2015 is based on financial information as of that date. Changes in the value of assets subsequent to that date, to the extent that they exist, are not reflected. Declines in asset values will increase the actuarial cost of the plan, while increases will decrease the actuarial cost of the plan.

### **Impact of Future Experience on Contribution Rates**

Future contribution requirements may differ from those determined in the valuation because of:

- > Difference between actual experience and anticipated experience;
- Changes in actuarial assumptions or methods;
- > Changes in statutory provisions; and
- > Difference between the contribution rates determined by the valuation and those adopted by the Board.



Reference: Pg. 61

SECTION 1: Valuation Summary for the Kern County Employees' Retirement Association

Summary of Key Valuation Results (Dollar amounts in thousands)						
	June	e 30, 2015	June	e 30, 2014		
Funded Status:						
Actuarial accrued liability (AAL)	\$3	5,657,173		\$5,492,440		
Valuation value of assets (VVA)	\$3	3,529,786		\$3,342,122		
Market value of assets (MVA) <sup>(1)</sup>	\$3	3,625,093	9	\$3,576,112		
Funded ratio on VVA basis (VVA/AAL)		62.39%		60.85%		
Funded ratio on MVA basis (MVA/AAL)		64.08%		65.11%		
Unfunded Actuarial Accrued Liability (UAAL) on VVA basis	\$2	2,127,387	9	\$2,150,318		
Unfunded Actuarial Accrued Liability (UAAL) on MVA basis	\$2	2,032,080	\$1,916,328			
Employer Contribution Rates:(3)	Estimated		Estimated			
	Total Rate	Annual Amount <sup>(2)</sup>	Total Rate	Annual Amount <sup>(2)</sup>		
County General without Courts	38.77%	\$137,693	39.23%	\$139,721		
Courts	37.80	8,797	41.31	8,687		
County Safety	62.97	91,550	62.74	91,153		
District Category I	43.85	2,903	43.38	2,802		
District Category II	43.32	1,025	42.86	991		
District Category III	38.20	8,505	42.13	9,510		
District Category IV	41.72	224	41.21	241		
District Category V	34.09	284	34.61	298		
District Category VI	48.21	174	47.42	181		
All employers combined	45.11	251,155	45.64	253,584		

<sup>(1)</sup> Includes non-valuation reserves.



<sup>(2)</sup> Based on projected annual compensation for each valuation date.

<sup>(3)</sup> In practice, these blended employer contribution rates for combined Tier I, Tier IIA, Tier IIB and Tier III (as applicable) are used for each category (with the exception of District Category III). Charts 14 and 15 show the employer contribution rates for each tier separately for these categories.

**SECTION 1:** Valuation Summary for the Kern County Employees' Retirement Association

Summary of Key Valuation Results (Dollar amounts in thousands) - continued

	June	30, 2015	June 30, 2014	
Average Member Contribution Rates:		Estimated		Estimated
	Total Rate	Annual Amount <sup>(1)</sup>	Total Rate	Annual Amount <sup>(1)</sup>
County General Tier I without Courts	4.85%	\$10,658	4.78%	\$11,314
County General Tier IIA without Courts	6.34	4,976	6.30	5,215
County General Tier IIB without Courts	5.83	3,319	5.77	2,116
Courts Tier I	8.25	1,426	4.47	760
Courts Tier IIA	6.08	95	6.03	85
Courts Tier IIB	5.83	259	5.77	151
County Safety Tier I	6.43	8,151	6.31	8,128
County Safety Tier IIA	9.08	652	8.94	608
County Safety Tier IIB	13.59	1,556	13.33	1,290
District Category I Tier I	2.65	153	2.53	146
District Category I Tier IIA	5.99	37	5.91	34
District Category I Tier IIB	5.83	13	5.77	8
District Category II Tier I	3.65	77	3.42	72
District Category II Tier IIB	5.83	13	5.77	10
District Category II Tier III	11.40	4	11.56	4
District Category III Tier I (Buttonwillow)	4.28	4	4.31	6
District Category III Tier I (SJVAPCD)	9.37	1,865	4.31	889
District Category III Tier IIA	6.39	56	6.26	53
District Category III Tier IIB	5.83	81	5.77	56
District Category IV Tier I	3.65	20	3.35	20
District Category IV Tier IIB	5.83	0	5.77	0
District Category V Tier I	3.83	7	6.00	20
District Category V Tier IIA	5.82	22	5.94	25
District Category V Tier IIB	5.83	15	5.77	5
District Category VI Tier I	0.00	0	0.00	0
District Category VI Tier IIB	5.83	0	5.77	0
All employers combined	6.01	33,459	5.58	31,015

<sup>(1)</sup> Based on projected annual compensation for each valuation date.



**SECTION 1:** Valuation Summary for the Kern County Employees' Retirement Association

	June 30, 2015	June 30, 2014	Percentage Change
Active Members:			
Number of members	8,481	8,512	-0.4%
Average age	42.8	42.8	N/A
Average service	10.4	10.3	N/A
Projected total compensation	\$556,824,248	\$555,635,031	0.2%
Average projected compensation	\$65,655	\$65,277	0.6%
Retired Members and Beneficiaries:			
Number of members:			
Service retired	5,535	5,359	3.3%
Disability retired	957	970	-1.3%
Beneficiaries	1,107	1,068	3.7%
Total	7,599	7,397	2.7%
Average age	68.2	68.0	N/A
Average monthly benefit <sup>(1)</sup>	\$3,000	\$2,914	3.0%
Vested Terminated Members:			
Number of vested terminated members <sup>(2)</sup>	2,053	1,949	5.3%
Average age	43.5	43.7	N/A
Summary of Financial Data (dollar amounts in thousands):			
Market value of assets <sup>(3)</sup>	\$3,625,093	\$3,576,112	1.4%
Return on market value of assets	2.30%	15.57%	N/A
Actuarial value of assets <sup>(3)</sup>	\$3,651,053	\$3,461,787	5.5%
Return on actuarial value of assets	6.45%	7.28%	N/A
Valuation value of assets	\$3,529,786	\$3,342,122	5.6%
Return on valuation value of assets	6.46%	7.28%	N/A

<sup>(1)</sup> Excludes monthly benefits paid from the Supplemental Retiree Benefit Reserve.
(2) Includes terminated members due a refund of member contributions.



<sup>(3)</sup> Includes non-valuation reserves.

### **Important Information about Actuarial Valuations**

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

- > <u>Plan of benefits</u> 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 to confirm that Segal has correctly interpreted the plan of benefits.
- > <u>Participant data</u> 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 KCERA. 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.



### A. MEMBER DATA

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, vested terminated members, retired members and beneficiaries. This section presents a summary of significant statistical data on these member groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A, B, and C.

A historical perspective of how the member population has changed over the past ten valuations can be seen in this chart.

CHART 1 Member Population: 2006–2014

Year Ended June 30 <sup>(2)</sup>	Active Members	Vested Terminated Members <sup>(1)</sup>	Retired Members and Beneficiaries	Ratio of Non-Actives to Actives
2006	8,547	1,548	5,355	0.81
2007	8,928	1,694	5,552	0.81
2008	9,057	1,747	5,651	0.82
2009	9,020	1,775	5,927	0.85
2010	8,567	1,839	6,170	0.93
2011	8,187	1,700	6,570	1.01
2012	8,253	1,748	6,890	1.05
2013	8,485	1,855	7,171	1.06
2014	8,512	1,949	7,397	1.10
2015	8,481	2,053	7,599	1.14

<sup>(1)</sup> Includes terminated members due a refund of member contributions.

<sup>(2)</sup> Data for 2006-2007 is as of December 31.



### **Active Members**

Plan costs are affected by the age, years of service and compensation of active members. In this year's valuation, there were 8,481 active members with an average age of 42.8, average years of service of 10.4 years and average projected compensation of \$65,655. The 8,512 active members in the prior valuation had an average age of 42.8, average service of 10.3 years and average projected compensation of \$65,277.

Among the active members, there were none with unknown age information.

### **Vested Terminated Members**

In this year's valuation, there were 2,053 members with a vested right to a deferred or immediate vested benefit or entitled to a return of their member contributions versus 1,949 in the prior valuation.

These graphs show a distribution of active members by age and by years of service.

CHART 2
Distribution of Active Members by Age as of June 30, 2015

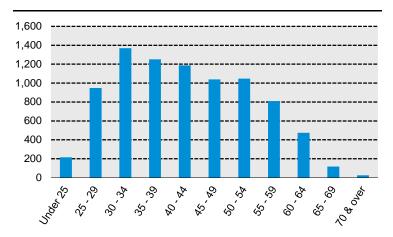
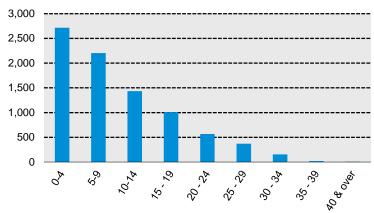


CHART 3
Distribution of Active Members by Years of Service as of June 30, 2015





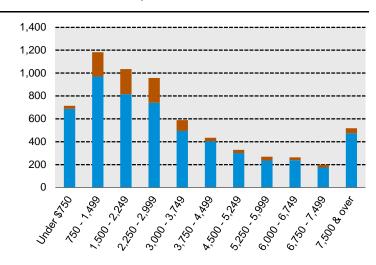
### **Retired Members and Beneficiaries**

As of June 30, 2015, 6,492 retired members and 1,107 beneficiaries were receiving total monthly benefits of \$22,793,300. For comparison, in the previous valuation, there were 6,329 retired members and 1,068 beneficiaries receiving monthly benefits of \$21,557,965. These monthly benefits exclude benefits paid from the Supplemental Retiree Benefit Reserve.

These graphs show a distribution of the current retired members based on their monthly amount and age, by type of pension.



# CHART 4 Distribution of Retired Members by Type and by Monthly Amount as of June 30, 2015



## CHART 5 Distribution of Retired Members by Type and by Age as

of June 30, 2015

1,400 1,200 1,000 800 600 400 200



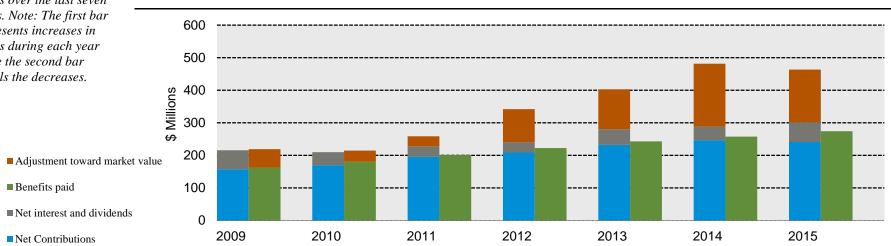
### **B. FINANCIAL INFORMATION**

Retirement plan funding anticipates that, over the long term, both contributions (net of administrative expenses starting 2015) and net investment earnings (less investment fees) will be needed to cover benefit payments.

Retirement plan assets change as a result of the net impact of these income and expense components. The adjustment toward market value shown in the chart is the "non-cash" earnings on investments implicitly included in the actuarial value of assets. Additional financial information, including a summary of these transactions for the valuation year, is presented in Section 3, Exhibits D, E and F.

The chart depicts the components of changes in the actuarial value of assets over the last seven years. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

## CHART 6 Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 2009 – 2015





It is generally considered desirable to have level and predictable plan costs from one year to the next. For this reason, the Board of Retirement has approved an asset valuation method that gradually adjusts to market value. Under this method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

The determination of the actuarial and valuation value of assets is provided on the following page.



The chart shows the determination of the actuarial and valuation value of assets as of the valuation date.

CHART 7

Determination of Actuarial and Valuation Value of Assets for Year Ended June 30, 2015

Six Month Period*		Total Actual Market	Expected Market	Investment Gain	Deferred	Deferred Return		
	From	To	Return (net)	Return (net)	(Loss)	Factor	Deferred Return	
	1/2007	6/2011			\$(161,618,914)	0.1111	(\$17,957,657)	
	7/2011	12/2011	\$(141,648,758)	\$109,911,118	(251,559,875)	0.2	(50,311,975)	
	1/2012	6/2012	159,330,623	104,159,050	55,171,573	0.3	16,551,472	
	7/2012	12/2012	202,039,690	110,423,036	91,616,654	0.4	36,646,662	
	1/2013	6/2013	113,375,851	118,045,356	(4,669,505)	0.5	(2,334,753)	
	7/2013	12/2013	275,580,944	122,272,452	153,308,491	0.6	91,985,095	
	1/2014	6/2014	207,051,913	132,732,440	74,319,473	0.7	52,023,631	
	7/2014	12/2014	(31,552,640)	135,927,248	(167,479,888)	0.8	(133,983,910)	
	1/2015	6/2015	113,483,725	134,126,222	(20,642,498)	0.9	(18,578,248)	
1.	Total Deferred Return	**					(\$25,959,684)	
2.	Market Value of Asset	S					3,625,093,183	
3.	Preliminary Actuarial	Value of Assets (Iter	n 2 – Item 1)				3,651,052,866	
4.	Corridor Around Mark	et Value						
	a. Minimum – 50%	of Market Value					1,812,546,591	
	b. Maximum – 150%	of Market Value					5,437,639,774	
5.	a. Final Actuarial V	alue of Assets					\$3,651,052,866	
	b. Ratio of Actuarial	Value of Assets to	Market Value of Assets (1	(tem 5a / Item 2)			100.72%	
6.	6. Non-valuation reserves***							
	a. Supplemental Ret	iree Benefit Reserve	(SRBR) Unallocated to 0	0.5% COLA benefits			121,267,176	
	b. COLA Contributi	on Reserve					0	
	c. Subtotal						\$121,267,176	
7.	7. Valuation Value of Assets (Item 5a – Item 6c)							

<sup>\*</sup> Net deferred loss as of June 30, 2011 was combined and will be recognized over four and a half years in nine level semi-annual amounts.

<sup>\*\*</sup> Deferred returns as of June 30, 2015 to be recognized in each of the next five years:

(a) Amount Recognized during 2015/2016	(\$31,944,772)
(b) Amount Recognized during 2016/2017	30,807,703
(c) Amount Recognized during 2017/2018	7,434,165
(d) Amount Recognized during 2018/2019	(30,192,530)
(e) Amount Recognized during 2019/2020	(2,064,250)
	(\$25,959,684)

<sup>\*\*\*</sup>Because the Contingency Reserve is negative as of June 30, 2015, it is not excluded from the valuation value of assets per the Board's Interest Crediting Policy.

Note: Results may not add due to rounding.



## CHART 8 Allocation of Valuation Value of Assets as of June 30, 2015

The allocation of the valuation reserves among General, District and Safety is provided below:

	County General	District	County Safety	Total
Member Deposit Reserves	\$194,640,899	\$19,626,634	\$81,179,935	\$295,447,467
Employer Advance Reserves	325,738,645	36,403,179	318,064,170	680,205,995
Cost-of-Living Reserves – 2%	572,231,566	39,508,980	403,014,776	1,014,755,323
Cost-of-Living Reserves $-0.5\%^{(1)}$	35,352,782	2,440,887	24,898,475	62,692,144
Retired Member Reserves	$952,053,190^{(2)}$	59,708,886 <sup>(2)</sup>	481,277,421	1,493,039,496
Contingency Reserve <sup>(3)</sup>	(9,599,666)	(728,885)	(6,026,182)	(16,354,734)
Total Valuation Value of Assets	\$2,070,417,416	\$156,959,681	\$1,302,408,595	\$3,529,785,691

<sup>(1)</sup> Allocated in proportion to the 2% Cost-of-Living Reserve.

Note: Results may not add due to rounding.



<sup>(2)</sup> Allocated in proportion to the retired member and beneficiary Actuarial Accrued Liability for these groups.

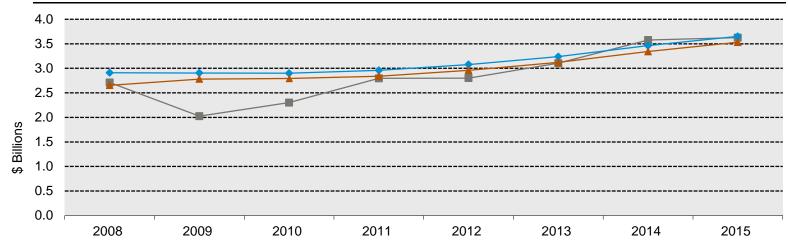
<sup>(3)</sup> Allocated in proportion to the above valuation reserves (excluding Cost-of-Living Reserves – 0.5%).

The market value, actuarial value, and valuation value of assets are representations of KCERA's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets, but with less volatility. The valuation value of assets is the actuarial value, excluding any non-valuation reserves. The valuation asset value is significant because KCERA's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.

This chart shows the change in market value, actuarial value and valuation value over the past eight years.

CHART 9

Market Value, Actuarial Value and Valuation Value of Assets as of June 30, 2008 – 2015







### C. ACTUARIAL EXPERIENCE

To calculate the required contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

The total experience gain was \$30.2 million, a loss of \$34.7 million from investments and a gain of \$64.9 million from all other sources. The gain from all other sources was 1.1% of the actuarial accrued liability. A discussion of the major components of the actuarial experience is on the following pages.

This chart provides a summary of the actuarial experience during the past year.

## CHART 10 Actuarial Experience for Year Ended June 30, 2015

1.	Net gain/(loss) from investments on valuation value of assets <sup>(1)</sup>	(\$34,742,000)
2.	Net gain/(loss) from other experience <sup>(2)</sup>	64,928,000
3.	Net experience gain/(loss): $(1) + (2)$	\$30,186,000

<sup>(1)</sup> Details in Chart 11



<sup>(2)</sup> See Section 3, Exhibit H. Does not include the effect of plan or assumption changes, if any.

### **Investment Rate of Return**

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on KCERA's investment policy. For valuation purposes, the assumed rate of return on the valuation value of assets was 7.50%. The actual rate of return on the valuation value of assets for the 2014/2015 plan year was 6.46%.

Since the actual return for the year was less than the assumed return, KCERA experienced an actuarial loss on the valuation value of assets during the year ended June 30, 2015 with regard to its investments.

CHART 11
Investment Experience for Year Ended June 30, 2015 – Market, Actuarial and Valuation Value of Assets

This chart shows the gain/(loss) due to investment experience.

	Market Value	Actuarial Value	Valuation Value
Actual return	\$81,931,170	\$222,215,376	\$214,895,554
2. Average value of assets	3,559,636,770	3,445,312,247	3,328,505,907
3. Actual rate of return: $(1) \div (2)$	2.30%	6.45%	6.46%
4. Assumed rate of return	7.50%	7.50%	7.50%
5. Expected return: (2) x (4)	\$266,972,758	\$258,398,419	\$249,637,943
6. Actuarial gain/(loss): (1) – (5)	<u>(\$185,041,588)</u>	(\$36,183,043)	(\$34,742,389)



Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. The chart below shows the rate of return on an actuarial, valuation and market basis for the last seven years.

CHART 12
Investment Return – Market Value, Actuarial Value and Valuation Value: 2009 – 2015

_	Market \ Investmen		Actuaria Investmen		Valuation Value Investment Return		
Year Ended June 30	Amount	Percent	Amount	Percent	Amount	Percent	
2009	-\$680,408,313	-25.12%	\$1,904,894	0.07%	-\$3,689,033	-0.14%	
2010	287,578,945	14.24%	6,357,420	0.22%	-27,057	0.00%	
2011	499,791,014	21.74%	62,849,280	2.17%	43,965,998	1.57%	
2012	17,681,865	0.63%	133,360,035	4.52%	128,187,974	4.52%	
2013	315,415,541	11.29%	171,131,798	5.57%	164,826,838	5.57%	
2014	482,632,857	15.57%	235,294,994	7.28%	227,040,629	7.28%	
2015	81,931,170	2.30%	222,215,376	6.45%	214,895,554	6.46%	
ive-Year Average Return		9.60%		5.29%		5.18%	
even-Year Average Return		5.21%		3.93%		3.79%	

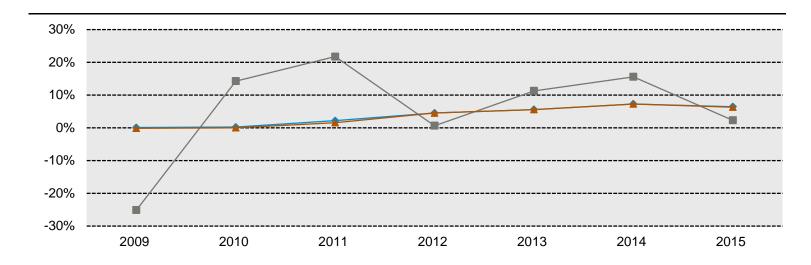


Subsection B described the actuarial asset valuation method that gradually takes into account fluctuations in the market value rate of return. The effect of this is to stabilize the actuarial rate of return, which contributes to leveling pension plan costs.

This chart illustrates how this leveling effect has actually worked over the years 2009 - 2015.

CHART 13

Market, Actuarial and Valuation Rates of Return for Years Ended June 30, 2009 - 2015





### **Other Experience**

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation.

### These include:

- > the extent of turnover among the participants,
- > retirement experience (earlier or later than expected),
- mortality (more or fewer deaths than expected),
- > the number of disability retirements,
- > salary increases different than assumed, and
- > COLA increases for retirees different than assumed.

The net gain from this other experience for the year ended June 30, 2015 amounted to \$64.9 million, which was 1.1% of the actuarial accrued liability. This gain is mainly the result of lower individual salary increases than expected. See Exhibit H for a detailed development of the Unfunded Actuarial Accrued Liability.

### D. EMPLOYER AND MEMBER CONTRIBUTIONS

Employer contributions consist of two components:

Normal Cost

The annual contribution rate that, if paid annually from a member's first year of membership through the year of retirement, would accumulate to the amount necessary to fully fund the member's retirement-related benefits. Accumulation includes annual crediting of interest at the assumed investment earning rate. The contribution rate is determined as a level percentage of the member's compensation.

Contribution to the Unfunded Actuarial Accrued Liability (UAAL)

The annual contribution rate that, if paid annually over the UAAL amortization period, would accumulate to the amount necessary to fully fund the UAAL. Accumulation includes annual crediting of interest at the assumed investment earning rate. The contribution (or rate credit in the case of a negative UAAL) is calculated to remain level as a percentage of future active member payroll (including payroll for new members as they enter the Association) assuming a constant number of active members. In order to remain as a level percentage of payroll, amortization payments (credits) are scheduled to increase along with expected payroll at the combined annual inflation and "across the board" salary increase rate of 3.75%. Effective with the June 30, 2012 valuation, the June 30, 2011 UAAL is being amortized over a 24.5-year declining period (20.5 years as of June 30, 2015). The change in unfunded liability that arises due to actuarial gains or losses or due to changes in actuarial assumptions or methods at each valuation is amortized over its own declining 18-year period. Any change in unfunded actuarial accrued liability that arises due to plan amendments is amortized over its own declining 15-year period (with the exception of retirement incentives which are amortized over its own declining period of up to 5 years).

The UAAL contribution rates have been adjusted to account for the one-year delay between the valuation date and the date that the contribution rates become effective.

The recommended employer contribution rates are shown in Chart 14. The current employer contribution rates are provided in Chart 15. The rates are shown for each tier/cost group and are separated into Normal Cost and UAAL components into each of these three benefit categories:

**>** The Basic benefits are the retirement benefits excluding all COLAs.

**Employer Contribution Rates** 



- ➤ The COLA benefits adopted prior to the Ventura Settlement are referred to as the "2.0% COLA benefits".
- > The COLA benefits provided under the Ventura settlement are referred to as the "0.5% COLA benefits".

These breakdowns are used for allocating employer contributions to specific reserves and, in the case of the 2% COLA contributions, providing the amounts that may be offset by the COLA Contribution Reserve.

Member Contributions General Tiers I and IIA, Safety Tiers I and IIA

Articles 6 and 6.8 of the 1937 Act define the methodology to be used in the calculation of member basic contribution rates for General and Safety members, respectively. The basic contribution rate is determined as that percentage of compensation which if paid annually from a member's first year of membership through the prescribed retirement age would accumulate to the amount necessary to fund a prescribed annuity.

The prescribed annuity is equal to:

- > 1/100 of one year Final Average Salary per year of service at age 55 for General Tier I members
- ➤ 1/120 of one year Final Average Salary per year of service at age 60 for General Tier IIA members
- ➤ 1/100 of one year Final Average Salary per year of service at age 50 for Safety Tier I and Safety Tier IIA members

Safety Tier I members also pay a supplemental contribution rate such that the aggregate amount of the supplemental and basic contribution rates will provide an annuity equal to 3/200 of one year Final Average Salary per year of service at age 50.

Members in these non-CalPEPRA tiers do not contribute towards the cost-of-living benefits.

Effective July 11, 2015, San Joaquin Valley Unified Air Pollution Control District Tier 1 members pay 28% of the total Normal Cost rate. That percent increases to 39% effective 2016/2017.



Member Contributions General Tiers IIB and III, Safety Tier IIB

Pursuant to Section 7522.30(a) of the Government Code, General Tier IIB, General Tier III and Safety Tier IIB members are required to contribute at least 50% of the Normal Cost rate. In addition, there are certain additional requirements that would have to be met such as requiring the new employees to pay the contribution rate of "similarly situated employees", if it is greater. (reference: Section 7522.30(c)). We further understand that different rules may have to be applied for collectively bargained employees, non-represented, managerial or other supervisory employees. (reference: section 7522.30(e)). In preparing the Normal Cost rates in this report, we have assumed that exactly 50% of the Normal Cost would be paid by the new members and we have taken into account in this valuation only the requirements of Section 7522.30(c), but not requirements of Section 7522.30(e). Also of note is that based on our discussions with KCERA, we have used the discretion made available by Section 31620.5(a) of AB 1380 to no longer round the member contribution rates to the nearest quarter of one percent as previously required by CalPEPRA. This is consistent with established practice for the non-CalPEPRA tiers and should allow for exactly one-half of the normal cost for the CalPEPRA tiers to be paid by the employees and one-half by the employers. In addition, Section 31620.5(b) of AB 1380 also provides that the "one percent" rule under Section 7022.30(d) does not apply. This section formerly limited the circumstances under which the member rate would change.

Member contributions are accumulated at an annual interest rate adopted annually by the Board.

For some employers, benefits are integrated with Social Security. In those cases, non-General Tier III members pay two-thirds of the full rate on the first \$350 of pay each month. (The General Tier III formula, as valued, is not integrated with Social Security.)

The tables on pages 20 through 23 summarize the specific member contribution rate arrangements for each employer as they have been reflected in this valuation. For valuation purposes, the member contribution levels that are assumed to be in place are those for the fiscal year that begins one year after the valuation date. Any future changes in member contribution rates after that would be reflected in future valuations



Administrative Expense

in determining the allocation of the total costs payable between the employers and the members.

The Board adopted an explicit administrative expense assumption of 0.90% of payroll effective with the June 30, 2014 valuation. This assumption will be reviewed as part of each regular triennial experience study. This explicit administrative expense is allocated to both the employer and member based on the components of the total average contribution rate (before expenses) for the employer and member. This results in an administrative expense load shown in the following table:

### Allocation of Administrative Expense Load of 0.90% of Payroll as of June 30, 2015

<u>Component</u>	% of Payrol
Employer Basic Normal Cost Rate	0.11%
Employer Basic UAAL Rate	0.68%
Member Basic Rate	0.11%

This allocation as of June 30, 2015 is based on the following total average contribution rates before including administrative expenses:

	<b>Total Average Rate Before</b>		<b>Total</b>
	Administrative Expense	Weighting	Loading
Employer Total	44.32%	88.25%	0.79%
Member	5.90%	11.75%	0.11%
		100.00%	0.90%

Note that the employer Normal Cost rate has been increased by the same percent of payroll as the member rate with the remaining employer loading allocated to the employer UAAL rate. The administrative expense load has been added to the Basic rates.

**Transfers** 

When employees transfer from one participating employer to another KCERA participating employer, recognition needs to be made of the employee's prior service within KCERA on an equitable basis. For each employee that transfers within KCERA the funding for the employee's benefits will be determined as follows:



- The employee will be reported and funded as a vested terminated employee for the former participating employer with reciprocal benefits the same as any other vested terminated employee who moves to a reciprocal retirement system other than KCERA.
- The employee will be reported and funded as an active employee for the new participating employer but with reciprocal service credits for the prior service in KCERA for purposes of benefit eligibility and entry age. Benefit amounts will be funded only for the service provided to the new participating employer.
- > Upon retirement from KCERA, the employee's total retirement benefit will be determined based on service with each KCERA participating employer and the employee's Final Average Salary.
- ➤ The entire liability for the retired employee's KCERA benefit payments will be allocated to the latest participating employer's cost group. The employee will be reported as a retired employee for the latest participating employer with the full KCERA retirement benefit amount.

KCERA's Normal Cost is determined separately for each group of members that have the same benefit formula (on a prospective basis). The seven Normal Cost cost sharing groups are as follows:

- > General Tier I
- > General Tier IIA
- > General Tier IIB
- > General Tier III
- > Safety Tier I
- > Safety Tier IIA
- Safety Tier IIB

KCERA's UAAL is determined separately for each cost sharing group depending on the assets for that cost group. The three UAAL cost sharing groups are as follows:

➤ General County and Courts

Cost Sharing Adjustments



- > General Districts
- > Safety

The tables on pages 20 through 23 contain more benefit and contribution information for each employer participating in KCERA.

There is a further adjustment made to the UAAL contribution rates to account for District Category IV adopting the 3% @ 60 formula on a prospective basis only. The District Category IV rates exclude the <u>fixed</u> portion of the UAAL contribution rates attributable to retroactive adoption of the 3% @ 60 formula as a percentage of compensation, which are as follows:

	General District Members
Basic Benefits	2.31%
2% COLA	0.47%
0.5% COLA	0.13%
Total	2.91%

Other Adjustments

Summary of KCERA Employers, Benefit Formulas and Member Contribution Rates - County and Courts

			Member	Member Contribution	Adopted			5-yr
			Contribution	Provides Average	1997	Soc Sec		Contribution
Plan	Valuation Report Label	Benefit Formula	<b>Code Section</b>	Annuity of:	MOU	Integration	Pre-Tax	Stop
General – County Tier I	County General Tier I	31676.17 (3% @ 60)	31621.8	1/100 of FAS1 at age 55	Yes	Yes	Yes	Varies <sup>1</sup>
General – County – Court Employees Tier I	Courts Tier I	31676.17 (3% @ 60)	31621.8	1/100 of FAS1 at age 55	Yes	Yes	Yes	3/12/2011 <sup>3</sup>
				plus supplemental 8.0% <sup>2</sup>				
Safety – County Tier I	County Safety Tier I	31664.1 (3% @ 50)	31639.25	3/200 of FAS1 at age 50 <sup>4</sup>	Yes	Yes	Yes	Varies <sup>1</sup>

			Member Contribution	Member Contribution Provides Average	Tier Adoption	Soc Sec	
Plan	Valuation Report Label	Benefit Formula	<b>Code Section</b>	Annuity of:	Date	Integration	Pre-Tax
General – County Tier IIA	County General Tier IIA	31676.01 (1.62% @ 65)	31621	1/120 of FAS1 at age 60	10/27/2007 <sup>5</sup>	Yes	Yes
General – County – Court Employees Tier IIA	Courts Tier IIA	31676.01 (1.62% @ 65)	31621	1/120 of FAS1 at age 60	3/12/2011	Yes	Yes
Safety – County Tier IIA	County Safety Tier IIA	31664 (2% @ 50)	31639.25	1/100 of FAS1 at age 50 <sup>4</sup>	3/27/2012	Yes	Yes

			Member Contribution		Tier Adoption	Soc Sec	
Plan	Valuation Report Label	Benefit Formula	<b>Code Section</b>	Member Contribution:	Date	Integration	Pre-Tax
General – County Tier IIB	County General Tier IIB	31676.01 (1.62% @ 65)	7522.30(a)	50% of Normal Cost rate	1/1/2013	Yes	Yes
General – County – Court Employees Tier IIB	Courts Tier IIB	31676.01 (1.62% @ 65)	7522.30(a)	50% of Normal Cost rate	1/1/2013	Yes	Yes
Safety – County Tier IIB	County Safety Tier IIB	31664 (2% @ 50)	7522.30(a)	50% of Normal Cost rate	1/1/2013	Yes	Yes

FAS1 = 1-Year Final Average Salary

<sup>&</sup>lt;sup>5</sup> KCPA (Prosecutors) employee association adopted Tier IIA effective July 5, 2008.



<sup>&</sup>lt;sup>1</sup> See next page for member contribution rates by employee association and bargaining unit.

 $<sup>^2</sup>$  Court employees in Tier I pay an additional 8% of the base salary for their entire career.

<sup>&</sup>lt;sup>3</sup> Court employees in Tier I hired prior to this date pay the full member contribution rates for only the first five years of service as a result of the 2010 Memorandum of Understanding (MOU).

<sup>&</sup>lt;sup>4</sup> Safety Tier I and Safety Tier IIA members stop paying contributions upon attaining 30 years of continuous county service.

**Summary of KCERA Member Contribution Rates – County Bargaining Units** 

		Summary of IXeEIM Member Contribution		8		_
Disco	F1 A	Daniel Van II.	5-yr Contribution	1/cth D - 4 - 6441	1/2rd D - 4 - 64 - 41	((C) - 0 - 4 - 211 F-00 - 4 D - 4 -
Plan	Employee Association	Bargaining Unit	Stop <sup>1</sup>	1/6 <sup>th</sup> Rate Start <sup>1</sup>	1/3 <sup>rd</sup> Rate Start <sup>1</sup>	"Safety 3" Effective Date
County General	SEIU	1 – Supervisory, 2 – Professional, 3 – Technical Services,	8/7/2004	5/4/2013	5/3/2014	N/A
		4 – Clerical, 5 – Administrative, 6 – Trade/Crafts/Labor				
County General		D – Mid-management, M – Management,	$9/4/2004^2$	7/13/2013	7/12/2014	N/A
		X – Confidential				
County General	KCPA	P – Prosecutors	2/8/2005	8/10/2013	8/9/2014	N/A
County Safety	KCFFU	F – Firefighters, 7 – Supervisors	3/31/2007 <sup>3</sup>	5/4/2013	5/3/2014	3/31/2007 <sup>4</sup>
County Safety	KLEA	L – Sheriff Law Enforcement, 8 – Supervisors	11/10/2007	5/4/2013	5/3/2014	N/A
County Safety	KCSCA	N – Sheriff Lieutenants, R – Commanders	3/17/2007	5/4/2013	5/3/2014	N/A
County Safety	SEIU-CJU	J – Criminal Justice, S – Supervisors	12/8/2007	5/4/2013	5/3/2014	N/A
County Safety	KCPMA	O – Probation Management	4/7/2004	5/4/2013	5/3/2014	N/A
County Safety	KCPOA	Q – Probation Officers, Y – Supervisors	9/18/2007	8/10/2013	8/9/2014	9/18/2007 <sup>4</sup>
County Safety	KCDOA	T – Detention Officers, V – Supervisors	6/23/2007	5/4/2013	5/3/2014	N/A
County Safety	KCSCA II	W – Detention Officers Lieutenants	9/15/2009	5/4/2013	5/3/2014	12/8/2007 to 9/14/2009 <sup>5</sup>

<sup>&</sup>lt;sup>5</sup> Effective December 8, 2007 through September 14, 2009, this flat rate applied to KCSCA II employees.



<sup>&</sup>lt;sup>1</sup> Tier I members hired prior to this date pay the full member contributions for only the first five years of service. These members will start paying one-sixth of their full member contributions on the "1/6th Rate Start" date, and will start paying one-third of their full member contributions on the "1/3rd Rate Start" date.

<sup>&</sup>lt;sup>2</sup> Elected officials hired prior to this date do not pay member contributions. These members will start paying one-third of their full member contributions on the first day of the first biweekly payroll period in January 2015.

<sup>&</sup>lt;sup>3</sup> Firefighters hired prior to this date pay 1% of their base salary after the first five years of service. These members will start paying one-sixth of their full member contributions (not to exceed 2% of base salary) on the "1/6th Rate Start" date, and will start paying one-third of their full member contributions (not to exceed 4% of base salary) on the "1/3rd Rate Start" date.

<sup>&</sup>lt;sup>4</sup> Members hired after this date pay a uniform "Safety 3" rate for all entry ages. The uniform rate continues to be integrated with Social Security.

**Summary of KCERA Employers, Benefit Formulas and Member Contribution Rates – Districts** 

			Member	Member Contribution	Adopted			5-yr
			Contribution	Provides Average	1997	Soc Sec		Contribution
Plan (Tier I)	Valuation Report Label	Benefit Formula	Code Section	Annuity of:	MOU	Integration	Pre-Tax	Stop <sup>1</sup>
District – Berrenda Mesa Water Tier I	District Category IV Tier I	$31676.17 (3\% @ 60)^2$	31621.8	1/100 of FAS1 at age 55	Yes	No	Yes	1/1/2004
District – Buttonwillow Recreation & Park	District Category III Tier I	31676.17 (3% @ 60)	31621.8	1/100 of FAS1 at age 55	No	No	No	N/A
Tier I				(Member pays 50%) <sup>3</sup>				
District – East Kern Cemetery Tier I	District Category II Tier I	31676.17 (3% @ 60)	31621.8	1/100 of FAS1 at age 55	Yes	Yes	Yes	1/1/2004
District – Inyokern Community Services Tier I	District Category IV Tier I	$31676.17 (3\% @ 60)^2$	31621.8	1/100 of FAS1 at age 55	Yes	No	No	1/1/2004
District – Kern County Water Agency Tier I	District Category I Tier I	31676.17 (3% @ 60)	31621.8	1/100 of FAS1 at age 55	Yes	Yes	Yes	N/A
				(100% employer pickup if				
				hired prior to 8/22/2004) <sup>4</sup>				
District – Kern Mosquito & Vector Control Tier I	District Category II Tier I	31676.17 (3% @ 60)	31621.8	1/100 of FAS1 at age 55	Yes	Yes	Yes	1/8/2005
District – North of River Sanitation Tier I	District Category V Tier I	31676.17 (3% @ 60)	31621.8	1/100 of FAS1 at age 55	Yes	Yes	Yes	8/7/2004
District – San Joaquin Valley Unified Air Pollution	District Category III Tier I	31676.17 (3% @ 60)	31621.8	1/100 of FAS1 at age 55	No	No	Yes	N/A
Control Tier I				(Member pays 50%) <sup>3</sup>				
District – Shafter Recreation & Park Tier I	District Category II Tier I	31676.17 (3% @ 60)	31621.8	1/100 of FAS1 at age 55	Yes	No	Yes	1/1/2004
District – West Side Cemetery Tier I	District Category VI Tier I	31676.17 (3% @ 60)	31621.8	1/100 of FAS1 at age 55	Yes	Yes	No	N/A <sup>5</sup>
District – West Side Mosquito Abatement Tier I	District Category II Tier I	31676.17 (3% @ 60)	31621.8	1/100 of FAS1 at age 55	Yes	Yes	No	1/1/2004
District – West Side Recreation & Park Tier I	District Category II Tier I	31676.17 (3% @ 60)	31621.8	1/100 of FAS1 at age 55	Yes	Yes	No	1/1/2004

			Member	Member Contribution	Tier		
			Contribution	Provides Average	Adoption	Soc Sec	
Plan (Tier IIA)	Valuation Report Label	Benefit Formula	<b>Code Section</b>	Annuity of:	Date	Integration	Pre-Tax
District – Berrenda Mesa Water Tier IIA <sup>6</sup>	District Category IV Tier IIA	31676.01 (1.62% @ 65)	31621	1/120 of FAS1 at age 60	1/12/2010	No	Yes
District – Kern County Water Agency Tier IIA	District Category I Tier IIA	31676.01 (1.62% @ 65)	31621	1/120 of FAS1 at age 60	1/1/2010	Yes	Yes
District – North of River Sanitation Tier IIA	District Category V Tier IIA	31676.01 (1.62% @ 65)	31621	1/120 of FAS1 at age 60	10/29/2007	Yes	Yes
District – San Joaquin Valley Unified Air	District Category III Tier IIA	31676.01 (1.62% @ 65)	31621	1/120 of FAS1 at age 60	7/31/2012	No	Yes
Pollution Control Tier IIA				_			

FAS1 = 1-Year Final Average Salary

<sup>&</sup>lt;sup>6</sup> Berrenda Mesa Water adopted Tier IIA, but had no Tier IIA employees as of the valuation date.



<sup>&</sup>lt;sup>1</sup> Tier I Members hired prior to this date pay the full member contribution rates for only the first five years of service as a result of the 1997 Memorandum of Understanding (MOU).

<sup>&</sup>lt;sup>2</sup> District Category IV adopted the 3% @ 60 Formula on a prospective basis only. Member contribution rates are the same as General Tier I.

Buttonwillow and San Joaquin Valley Unified Air Pollution Control District Tier I (District Category III) did not adopt the 1997 MOU. Members in those districts pay 50% of the full rates, regardless of hire date. Effective July 11, 2015, San Joaquin Valley Unified Air Pollution Control District Tier I members pay 28% of the total Normal Cost rate. That percent increases to 39% effective 2016/2017.

<sup>&</sup>lt;sup>4</sup> For Kern County Water Agency (District Category I) employees hired prior to August 22, 2004, the employer picks up 100% of all member contributions.

<sup>&</sup>lt;sup>5</sup> West Side Cemetery (District Category VI) employees pay the full member contribution rates for only the first five years of service, regardless of hire date.

**Summary of KCERA Employers, Benefit Formulas and Member Contribution Rates – Districts (continued)** 

_			Member		Tier		
	Valuation Report		Contribution		Adoption	Soc Sec	
Plan (Tiers IIB and III)	Label	Benefit Formula	Code Section	Member Contribution:	Date	Integration	Pre-Tax
District – Berrenda Mesa Water Tier IIB <sup>1</sup>	District Category IV	31676.01 (1.62% @ 65)	7522.30(a)	50% of Normal Cost rate	1/1/2013	No	Yes
District – Buttonwillow Recreation & Park Tier IIB <sup>1</sup>	District Category III	31676.01 (1.62% @ 65)	7522.30(a)	50% of Normal Cost rate	1/1/2013	No	No
District – East Kern Cemetery Tier IIB <sup>1</sup>	District Category II	31676.01 (1.62% @ 65)	7522.30(a)	50% of Normal Cost rate	1/1/2013	Yes	Yes
District – Inyokern Community Services Tier IIB <sup>1</sup>	District Category IV	31676.01 (1.62% @ 65)	7522.30(a)	50% of Normal Cost rate	1/1/2013	No	No
District – Kern County Water Agency Tier IIB <sup>1</sup>	District Category I	31676.01 (1.62% @ 65)	7522.30(a)	50% of Normal Cost rate	1/1/2013	Yes	Yes
District – Kern Mosquito & Vector Control Tier IIB <sup>1</sup>	District Category II	31676.01 (1.62% @ 65)	7522.30(a)	50% of Normal Cost rate	1/1/2013	Yes	Yes
District – North of River Sanitation Tier IIB	District Category V	31676.01 (1.62% @ 65)	7522.30(a)	50% of Normal Cost rate	1/1/2013	Yes	Yes
District – San Joaquin Valley Unified Air Pollution	District Category III	31676.01 (1.62% @ 65)	7522.30(a)	50% of Normal Cost rate	1/1/2013	No	Yes
Control Tier IIB							
District – Shafter Recreation & Park Tier IIB <sup>1</sup>	District Category II	31676.01 (1.62% @ 65)	7522.30(a)	50% of Normal Cost rate	1/1/2013	No	Yes
District – West Side Cemetery Tier IIB <sup>1</sup>	District Category VI	31676.01 (1.62% @ 65)	7522.30(a)	50% of Normal Cost rate	1/1/2013	Yes	No
District – West Side Mosquito Abatement Tier IIB <sup>1</sup>	District Category II	31676.01 (1.62% @ 65)	7522.30(a)	50% of Normal Cost rate	1/1/2013	Yes	No
District – West Side Recreation & Park Tier III <sup>1</sup>	District Category II	7522.20(a) (2.50% @ 67)	7522.30(a)	50% of Normal Cost rate	1/1/2013	No	No

<sup>&</sup>lt;sup>1</sup> These districts adopted Tier IIB or Tier III, but had no employees in those tiers as of the valuation date.



CHART 14
Recommended Employer Contribution Rates (Current Valuation)

		June 30, 2015 Actuarial Valuation							
	Basic		2% COLA		0.5% COLA		Total		
		Estimated Annual	_	Estimated Annual		Estimated Annual		Estimated Annual	
County General Tier I without Courts	Rate	Amount*	Rate	Amount*	Rate	Amount*	Rate	Amount*	
Normal Cost	13.88%	\$30,503	3.93%	\$8,637	1.21%	\$2,658	19.02%	\$41,798	
UAAL	18.69%	41,073	2.80%	6,153	3.15%	6,923	24.64%	54,149	
Total Contribution	32.57%	\$71,576	6.73%	\$14,790	4.36%	\$9,581	43.66%	\$95,947	
County General Tier IIA without Courts									
Normal Cost	3.95%	\$3,100	1.92%	\$1,507	0.58%	\$455	6.45%	\$5,062	
UAAL	18.69%	14,669	2.80%	2,198	3.15%	2,472	24.64%	19,339	
Total Contribution	22.64%	\$17,769	4.72%	\$3,705	3.73%	\$2,927	31.09%	\$24,401	
County General Tier IIB without Courts									
Normal Cost	4.63%	\$2,636	0.92%	\$524	0.28%	\$159	5.83%	\$3,319	
UAAL	18.69%	10,639	2.80%	1,594	3.15%	1,793	24.64%	14,026	
Total Contribution	23.32%	\$13,275	3.72%	\$2,118	3.43%	\$1,952	30.47%	\$17,345	
County General without Courts -									
Combined									
Normal Cost	10.20%	\$36,239	3.00%	\$10,668	0.93%	\$3,272	14.13%	\$50,179	
UAAL	18.69%	66,381	2.80%	9,945	3.15%	11,188	24.64%	87,514	
Total Contribution	28.89%	\$102,620	5.80%	\$20,613	4.08%	\$14,460	38.77%	\$137,693	
Courts Tier I									
Normal Cost	10.48%	\$1,811	3.93%	\$679	1.21%	\$209	15.62%	\$2,699	
UAAL	18.69%	3,230	2.80%	484	3.15%	544	24.64%	4,258	
Total Contribution	29.17%	\$5,041	6.73%	\$1,163	4.36%	\$753	40.26%	\$6,957	
Courts Tier IIA		++,+		7-,		7.77		+ 0,2 0	
Normal Cost	4.21%	\$66	1.92%	\$30	0.58%	\$8	6.71%	\$104	
UAAL	18.69%	291	2.80%	44	3.15%	49	24.64%	384	
Total Contribution	22.90%	\$357	4.72%	\$74	3.73%	\$57	31.35%	\$488	
Courts Tier IIB		7227	=,+	7		77.		4.00	
Normal Cost	4.63%	\$205	0.92%	\$41	0.28%	\$13	5.83%	\$259	
UAAL	18.69%	829	2.80%	124	3.15%	140	24.64%	1,093	
Total Contribution	23.32%	\$1,034	3.72%	\$165	3.43%	\$153	30.47%	\$1,352	
Courts - Combined	20.0270	Ψ1,05.	3.7270	Ψ105	21.1270	Ψ100	50,0	ψ1,55 <b>2</b>	
Normal Cost	8.95%	\$2,082	3.22%	\$750	0.99%	\$230	13.16%	\$3,062	
UAAL	18.69%	4,350	2.80%	652	3.15%	733	24.64%	5,735	
Total Contribution	27.64%	\$6,432	6.02%	\$1,402	4.14%	\$963	37.80%	\$8,797	
County Safety Tier I	27.0170	ψ0,132	0.0270	\$1,102	1.1 170	Ψ,03	37.0070	Ψο,τοτ	
Normal Cost	18.55%	\$23,515	6.21%	\$7,872	1.96%	\$2,485	26.72%	\$33,872	
UAAL	25.56%	32,402	5.99%	7,593	6.15%	7,796	37.70%	47,791	
Total Contribution	44.11%	\$55,917	12.20%	\$15,465	8.11%	\$10,281	64.42%	\$81,663	
County Safety Tier IIA	TT.11/U	Ψυυ,νιι	12.2070	Ψ13,703	0.11/0	Ψ10,201	07.72/0	ψ01,003	
Normal Cost	11.74%	\$843	4.90%	\$352	1.55%	\$112	18.19%	\$1,307	
UAAL	25.56%	1,836	5.99%	430	6.15%	442	37.70%	2,708	
Total Contribution	37.30%	\$2,679	10.89%	\$782	7.70%	\$554	55.89%	\$4,015	



CHART 14 (continued)
Recommended Employer Contribution Rates (Current Valuation)

	June 30, 2015 Actuarial Valuation							
	Basic		2	2% COLA	0.	5% COLA	Total	
		Estimated Annual		Estimated Annual		Estimated Annual		Estimated Annual
County Safety Tier IIB	Rate	Amount*	Rate	Amount*	Rate	Amount*	Rate	Amount*
Normal Cost	10.39%	\$1,189	2.43%	\$278	0.77%	\$89	13.59%	\$1,556
UAAL	25.56%	2,926	5.99%	686	6.15%	704	37.70%	4,316
Total Contribution	35.95%	\$4,115	8.42%	\$964	6.92%	\$793	51.29%	\$5,872
County Safety - Combined								
Normal Cost	17.57%	\$25,547	5.85%	\$8,502	1.85%	\$2,686	25.27%	\$36,735
UAAL	25.56%	37,164	5.99%	8,709	6.15%	8,942	37.70%	54,815
Total Contribution	43.13%	\$62,711	11.84%	\$17,211	8.00%	\$11,628	62.97%	\$91,550
All County with Courts - Combined								
Normal Cost	12.19%	\$63,868	3.80%	\$19,920	1.19%	\$6,188	17.18%	\$89,976
UAAL	20.60%	107,895	3.69%	19,306	3.98%	20,863	28.27%	148,064
Total Contribution	32.79%	\$171,763	7.49%	\$39,226	5.17%	\$27,051	45.45%	\$238,040
District Category I Tier I								
Normal Cost	16.08%	\$931	3.93%	\$228	1.21%	\$70	21.22%	\$1,229
UAAL	18.32%	1,061	3.20%	185	2.93%	170	24.45%	1,416
Total Contribution	34.40%	\$1,992	7.13%	\$413	4.14%	\$240	45.67%	\$2,645
District Category I Tier IIA		. ,						
Normal Cost	4.30%	\$26	1.92%	\$12	0.58%	\$4	6.80%	\$42
UAAL	18.32%	112	3.20%	20	2.93%	18	24.45%	150
Total Contribution	22.62%	\$138	5.12%	\$32	3.51%	\$22	31.25%	\$192
District Category I Tier IIB		7-2-3						T-7-
Normal Cost	4.63%	\$10	0.92%	\$2	0.28%	\$1	5.83%	\$13
UAAL	18.32%	40	3.20%	7	2.93%	6	24.45%	53
Total Contribution	22.95%	\$50	4.12%	\$9	3.21%	\$7	30.28%	\$66
District Category I - Combined	22.5070	420	2,0	Ψ,	5.2170	Ψ,	20.2070	Ψ00
Normal Cost	14.61%	\$967	3.66%	\$242	1.13%	\$75	19.40%	\$1,284
UAAL	18.32%	1,213	3.20%	212	2.93%	194	24.45%	1,619
Total Contribution	32.93%	\$2,180	6.86%	\$454	4.06%	\$269	43.85%	\$2,903
		<del>+ -,</del>	0.007	7		+		7-7-7-
District Category II Tier I Normal Cost	15.08%	¢220	2.020/	<b>\$92</b>	1.21%	#26	20.22%	\$429
		\$320	3.93%	\$83		\$26		
UAAL	18.32%	388	3.20%	68	2.93%	62	24.45%	518
Total Contribution	33.40%	\$708	7.13%	\$151	4.14%	\$88	44.67%	\$947
District Category II Tier IIB	4.500/	410	0.020/	0.2	0.2007	<b>.</b>	~ 020 <i>i</i>	0.10
Normal Cost	4.63%	\$10	0.92%	\$2	0.28%	\$1	5.83%	\$13
UAAL	18.32%	39	3.20%	7	2.93%	7	24.45%	53
Total Contribution	22.95%	\$49	4.12%	\$9	3.21%	\$8	30.28%	\$66
District Category II Tier III						**	44.40	**
Normal Cost	9.74%	\$3	1.66%	\$1	0.00%	\$0	11.40%	\$4
UAAL	18.32%	6	3.20%	1	2.93%	1	24.45%	8
Total Contribution	28.06%	\$9	4.86%	\$2	2.93%	\$1	35.85%	\$12
District Category II - Combined	440						10.5-	
Normal Cost	14.06%	\$333	3.65%	\$86	1.16%	\$27	18.87%	\$446
UAAL	18.32%	433	3.20%	76	2.93%	70	24.45%	579
Total Contribution	32.38%	\$766	6.85%	\$162	4.09%	\$97	43.32%	\$1,025



CHART 14 (continued)
Recommended Employer Contribution Rates (Current Valuation)

			J	une 30, 2015 Actu	ıarial Valuat	tion							
	Ва	asic		% COLA		5% COLA		Total					
District Category III Tier I	Estimated An	Estimated Annual		Estimated Annual		Estimated Annual		Estimated Annual					
(Buttonwillow)	Rate	Amount*	Rate	Amount*	Rate	Amount*	Rate	Amount*					
Normal Cost	14.45%	\$14	3.93%	\$4	1.21%	\$1	19.59%	\$19					
UAAL	18.32%	18	3.20%	3	2.93%	3	24.45%	24					
Total Contribution	32.77%	\$32	7.13%	\$7	4.14%	\$4	44.04%	\$43					
District Category III Tier I (SJVAPCD)													
Normal Cost	11.43%	\$2,275	2.42%	\$482	0.74%	\$148	14.59%	\$2,905					
UAAL	18.32%	3,647	3.20%	637	2.93%	584	24.45%	4,868					
Total Contribution	29.75%	\$5,922	5.62%	\$1,119	3.67%	\$732	39.04%	\$7,773					
District Category III Tier IIA				. , -				,					
Normal Cost	3.90%	\$34	1.92%	\$17	0.58%	\$5	6.40%	\$56					
UAAL	18.32%	160	3.20%	28	2.93%	26	24.45%	214					
Total Contribution	22.22%	\$194	5.12%	\$45	3.51%	\$31	30.85%	\$270					
District Category III Tier IIB		4-7		7		7		7-14					
Normal Cost	4.63%	\$64	0.92%	\$13	0.28%	\$4	5.83%	\$81					
UAAL	18.32%	253	3.20%	44	2.93%	41	24.45%	338					
Total Contribution	22.95%	\$317	4.12%	\$57	3.21%	\$45	30.28%	\$419					
District Category III - Combined		7	,,	44.		7.2		7,					
Normal Cost	10.72%	\$2,387	2.32%	\$516	0.71%	\$158	13.75%	\$3,061					
UAAL	18.32%	4,078	3.20%	712	2.93%	654	24.45%	5,444					
Total Contribution	29.04%	\$6,465	5.52%	\$1,228	3.64%	\$812	38.20%	\$8,505					
District Category IV Tier I	27.0170	ψο, 103	3.3270	Ψ1,220	5.0170	Ψ012	30.2070	ψ0,505					
Normal Cost	15.08%	\$81	3.93%	\$21	1.21%	\$7	20.22%	\$109					
UAAL	15.98%	86	2.71%	15	2.81%	14	21.50%	115					
Total Contribution	31.06%	\$167	6.64%	\$36	4.02%	\$21	41.72%	\$224					
District Category IV Tier IIB	31.0070	Ψ107	0.0170	Ψ30	1.0270	Ψ21	11.7270	Ψ221					
Normal Cost	4.63%	\$0	0.92%	\$0	0.28%	\$0	5.83%	\$0					
UAAL	15.98%	0	2.71%	0	2.81%	0	21.50%	0					
Total Contribution	20.61%	\$0	3.63%	<u>\$0</u>	3.09%	\$0	27.33%	\$0					
		**		**		**		**					
District Category IV - Combined	15.000/	<b>#01</b>	2.020/	\$21	1.010/	67	20.220/	\$109					
Normal Cost UAAL	15.08% 15.98%	\$81	3.93%	\$21	1.21%	\$7	20.22% 21.50%						
		86	2.71%	<u>15</u> \$36	2.81%	14 \$21		115					
Total Contribution	31.06%	\$167	6.64%	\$36	4.02%	\$21	41.72%	\$224					
District Category V Tier I Normal Cost	14.90%	\$28	3.93%	\$7	1.21%	\$3	20.04%	\$38					
UAAL	18.32%		3.20%		2.93%		24.45%	1					
		34		6		<u>6</u> \$9		46					
Total Contribution	33.22%	\$62	7.13%	\$13	4.14%	\$9	44.49%	\$84					
District Category V Tier IIA	4.470/	017	1.000/	47	0.500/	Φ2	6.070/	<b>#27</b>					
Normal Cost	4.47%	\$17	1.92%	\$7 12	0.58%	\$3	6.97%	\$27					
UAAL	18.32%	71	3.20%	12	2.93%	11	24.45%	94					
Total Contribution	22.79%	\$88	5.12%	\$19	3.51%	\$14	31.42%	\$121					
District Category V Tier IIB	4.620/	<b>#12</b>	0.020/	Φ2	0.200/	φ.•	5.020/	A 4 =					
Normal Cost	4.63%	\$12	0.92%	\$2	0.28%	\$1	5.83%	\$15					
UAAL	18.32%	48	3.20%	8	2.93%	8	24.45%	64					
Total Contribution	22.95%	\$60	4.12%	\$10	3.21%	\$9	30.28%	\$79					



**CHART 14 (continued)** 

# **Recommended Employer Contribution Rates (Current Valuation)**

				June 30, 2015 Ac	tuarial Valu	ation		
		Basic		2% COLA	0	0.5% COLA		Total
		Estimated Annual		Estimated Annual		Estimated Annual		Estimated Annual
	Rate	Amount*	Rate	Amount*	Rate	Amount*	Rate	Amount*
District Category V - Combin	ned							
Normal Cost	6.89%	\$57	1.84%	\$16	0.91%	\$7	9.64%	\$80
UAAL	18.32%	153	3.20%	26	2.93%	25	24.45%	204
Total Contribution	25.21%	\$210	5.04%	\$42	3.84%	\$32	34.09%	\$284
District Category VI Tier I								
Normal Cost	18.62%	\$67	3.93%	\$14	1.21%	\$5	23.76%	\$86
UAAL	18.32%	66	3.20%	12	2.93%	10	24.45%	88
Total Contribution	36.94%	\$133	7.13%	\$26	4.14%	\$15	48.21%	\$174
District Category VI Tier IIB	<b>;</b>							
Normal Cost	4.63%	\$0	0.92%	\$0	0.28%	\$0	5.83%	\$0
UAAL	18.32%	0	3.20%	0	2.93%	0	24.45%	0
Total Contribution	22.95%	\$0	4.12%	\$0	3.21%	\$0	30.28%	\$0
District Category VI - Combi	ned							
Normal Cost	18.62%	\$67	3.93%	\$14	1.21%	\$5	23.76%	\$86
UAAL	18.32%	66	3.20%	12	2.93%	10	24.45%	88
Total Contribution	36.94%	\$133	7.13%	\$26	4.14%	\$15	48.21%	\$174
All Districts - Combined								
Normal Cost	11.80%	\$3,892	2.71%	\$895	0.85%	\$279	15.36%	\$5,066
UAAL	18.28%	6,029	3.19%	1,053	2.93%	967	24.40%	8,049
Total Contribution	30.08%	\$9,921	5.90%	\$1,948	3.78%	\$1,246	39.76%	\$13,115
All Employers - Combined								
Normal Cost	12.17%	\$67,760	3.74%	\$20,815	1.16%	\$6,467	17.07%	\$95,042
UAAL	20.46%	113,924	3.66%	20,359	3.92%	21,830	28.04%	156,113
Total Contribution	32.63%	\$181,684	7.40%	\$41,174	5.08%	\$28,297	45.11%	\$251,155
*	Amounts are in thousands and ar	e based on June 30, 201	5 projected comp	pensation (also in thousands):				
C	County General Tier I without Cour	ts \$2	19,759	District Category I Tier I		5,792		
C	County General Tier IIA without Co	ourts	78,488	District Category I Tier IIA		612		

* Amounts are in thousands and are based on Ju	ne 30, 2015 projected co	ompensation (also in thousands):	
County General Tier I without Courts	\$219,759	District Category I Tier I	5,792
County General Tier IIA without Courts	78,488	District Category I Tier IIA	612
County General Tier IIB without Courts	56,925	District Category I Tier IIB	216
Courts Tier I	17,280	District Category II Tier I	2,120
Courts Tier IIA	1,557	District Category II Tier IIB	215
Courts Tier IIB	4,436	District Category II Tier III	31
County Safety Tier I	126,767	District Category III Tier I (Buttonwillow)	99
County Safety Tier IIA	7,183	District Category III Tier I (SJVAPCD)	19,908
County Safety Tier IIB	11,447	District Category III Tier IIA	876
		District Category III Tier IIB	1,383
		District Category IV Tier I	537
		District Category IV Tier IIB	0
		District Category V Tier I	188
		District Category V Tier IIA	385
		District Category V Tier IIB	260
		District Category VI Tier I	360
		District Category VI Tier IIB	0
All County with Courts	\$523,842	All Districts	\$32,982
		Total	\$556,824

Note: As of June 30, 2015, the COLA Contribution Reserve was zero and therefore not available to offset the 2% COLA contribution rate.



CHART 15
Recommended Employer Contribution Rates (Prior Valuation)

		June 30, 2014 Actuarial Valuation									
		Basic	2	% COLA		% COLA		Total			
		Estimated Annual		Estimated Annual		Estimated Annual		Estimated Annual			
County General Tier I without Courts	Rate	Amount*	Rate	Amount*	Rate	Amount*	Rate	Amount*			
Normal Cost	13.94%	\$32,996	3.95%	\$9,350	1.20%	\$2,840	19.09%	\$45,186			
UAAL	18.33%	43,387	3.15%	7,456	2.98%	7,054	24.46%	57,897			
Total Contribution	32.27%	\$76,383	7.10%	\$16,806	4.18%	\$9,894	43.55%	\$103,083			
County General Tier IIA without Courts											
Normal Cost	3.92%	\$3,245	1.91%	\$1,581	0.58%	\$480	6.41%	\$5,306			
UAAL	18.33%	15,174	3.15%	2,608	2.98%	2,466	24.46%	20,248			
Total Contribution	22.25%	\$18,419	5.06%	\$4,189	3.56%	\$2,946	30.87%	\$25,554			
County General Tier IIB without Courts											
Normal Cost	4.58%	\$1,679	0.91%	\$334	0.28%	\$103	5.77%	\$2,116			
UAAL	18.33%	6,721	3.15%	1,155	2.98%	1,092	24.46%	8,968			
Total Contribution	22.91%	\$8,400	4.06%	\$1,489	3.26%	\$1,195	30.23%	\$11,084			
County General without Courts -											
Combined											
Normal Cost	10.65%	\$37,920	3.16%	\$11,265	0.96%	\$3,423	14.77%	\$52,608			
UAAL	18.33%	65,282	3.15%	11,219	2.98%	10,612	24.46%	87,113			
Total Contribution	28.98%	\$103,202	6.31%	\$22,484	3.94%	\$14,035	39.23%	\$139,721			
Courts Tier I											
Normal Cost	14.25%	\$2,423	3.95%	\$672	1.20%	\$203	19.40%	\$3,298			
UAAL	18.33%	3,116	3.15%	536	2.98%	506	24.46%	4,158			
Total Contribution	32.58%	\$5,539	7.10%	\$1,208	4.18%	\$709	43.86%	\$7,456			
Courts Tier IIA											
Normal Cost	4.19%	\$59	1.91%	\$27	0.58%	\$9	6.68%	\$95			
UAAL	18.33%	260	3.15%	45	2.98%	41	24.46%	346			
Total Contribution	22.52%	\$319	5.06%	\$72	3.56%	\$50	31.14%	\$441			
Courts Tier IIB											
Normal Cost	4.58%	\$120	0.91%	\$24	0.28%	\$7	5.77%	\$151			
UAAL	18.33%	479	3.15%	82	2.98%	78	24.46%	639			
Total Contribution	22.91%	\$599	4.06%	\$106	3.26%	\$85	30.23%	\$790			
Courts - Combined											
Normal Cost	12.37%	\$2,602	3.44%	\$723	1.04%	\$219	16.85%	\$3,544			
UAAL	18.33%	3,855	3.15%	663	2.98%	625	24.46%	5,143			
Total Contribution	30.70%	\$6,457	6.59%	\$1,386	4.02%	\$844	41.31%	\$8,687			
County Safety Tier I		, , , , ,		, ,				, -,			
Normal Cost	18.64%	\$24,009	6.21%	\$7,999	1.96%	\$2,525	26.81%	\$34,533			
UAAL	24.95%	32,137	6.51%	8,385	5.77%	7,432	37.23%	47,954			
Total Contribution	43.59%	\$56,146	12.72%	\$16,384	7.73%	\$9,957	64.04%	\$82,487			
County Safety Tier IIA		TT "," . "		T1		Tr 10 T	~	T,			
Normal Cost	11.82%	\$804	4.90%	\$333	1.53%	\$104	18.25%	\$1,241			
UAAL	24.95%	1,696	6.51%	443	5.77%	392	37.23%	2,531			
Total Contribution	36.77%	\$2,500	11.41%	\$776	7.30%	\$496	55.48%	\$3,772			



CHART 15 (continued)
Recommended Employer Contribution Rates (Prior Valuation)

	June 30, 2014 Actuarial Valuation								
	-	Basic		2% COLA	0.5	5% COLA		Total	
		Estimated Annual		Estimated Annual		Estimated Annual		Estimated Annual	
County Safety Tier IIB	Rate	Amount*	Rate	Amount*	Rate	Amount*	Rate	Amount*	
Normal Cost	10.16%	\$984	2.42%	\$234	0.75%	\$72	13.33%	\$1,290	
UAAL	24.95%	2,415	6.51%	630	5.77%	559	37.23%	3,604	
Total Contribution	35.11%	\$3,399	8.93%	\$864	6.52%	\$631	50.56%	\$4,894	
County Safety - Combined									
Normal Cost	17.76%	\$25,797	5.90%	\$8,566	1.85%	\$2,701	25.51%	\$37,064	
UAAL	24.95%	36,248	6.51%	9,458	5.77%	8,383	37.23%	54,089	
Total Contribution	42.71%	\$62,045	12.41%	\$18,024	7.62%	\$11,084	62.74%	\$91,153	
All County with Courts - Combined		4-2-,		7-3,3-1		+,		42 -,	
Normal Cost	12.69%	\$66,319	3.93%	\$20,554	1.22%	\$6,343	17.84%	\$93,216	
UAAL	20.17%	105,385	4.08%	21,340	3.76%	19,620	28.01%	146,345	
Total Contribution	32.86%	\$171,704	8.01%	\$41,894	4.98%	\$25,963	45.85%	\$239,561	
District Category I Tier I	22.0070	Ψ1/1,/01	0.0170	\$ .1,05 .	11,5070	425,705	1210270	\$200,001	
Normal Cost	16.19%	\$932	3.95%	\$227	1.20%	\$69	21.34%	\$1,228	
UAAL	17.68%	1,017	3.33%	192	2.64%	152	23.65%	1,361	
Total Contribution	33.87%	\$1,949	7.28%	\$419	3.84%	\$221	44.99%	\$2,589	
District Category I Tier IIA	33.0770	Ψ1,515	7.2070	Ψ117	3.0170	Ψ221	11.2270	Ψ2,309	
Normal Cost	4.31%	\$24	1.91%	\$11	0.58%	\$4	6.80%	\$39	
UAAL	17.68%	100	3.33%	19	2.64%	15	23.65%	134	
Total Contribution	21.99%	\$124	5.24%	\$30	3.22%	\$19	30.45%	\$173	
District Category I Tier IIB	21.77/0	Ψ124	3.2470	\$30	3.2270	ψ1)	30.4370	\$175	
Normal Cost	4.58%	\$6	0.91%	\$1	0.28%	\$1	5.77%	\$8	
UAAL	17.68%	24	3.33%	5	2.64%	3	23.65%	32	
Total Contribution	22.26%	\$30	4.24%	\$6	2.92%	<u> </u>	29.42%	\$40	
District Category I - Combined	22.2070	\$30	4.2470	φυ	2.9270	94	29.4270	\$ <del>4</del> 0	
Normal Cost	14.88%	\$962	3.71%	\$239	1.14%	\$74	19.73%	\$1,275	
UAAL	17.68%	1,141	3.33%	216	2.64%	170	23.65%	1,527	
Total Contribution	32.56%	\$2,103	7.04%	\$455	3.78%	\$244	43.38%	\$2,802	
	32.30%	\$2,103	7.04%	\$433	3./8%	\$244	43.38%	\$2,802	
District Category II Tier I  Normal Cost	15.30%	\$323	3.95%	\$83	1.20%	\$25	20.45%	\$431	
UAAL	17.68%	373	3.33%		2.64%	56	23.65%	499	
Total Contribution	32.98%	\$696	7.28%	\$153	3.84%	\$81	44.10%	\$930	
District Category II Tier IIB	4.500/	Φ0.	0.010/	<b>#2</b>	0.200/	Φ0.	5.770/	010	
Normal Cost	4.58%	\$8	0.91%	\$2	0.28%	\$0	5.77%	\$10	
UAAL	17.68%	30	3.33%	6	2.64%	4	23.65%	40	
Total Contribution	22.26%	\$38	4.24%	\$8	2.92%	\$4	29.42%	\$50	
District Category II Tier III				**		**			
Normal Cost	9.88%	\$3	1.68%	\$1	0.00%	\$0	11.56%	\$4	
UAAL	17.68%	5	3.33%	1	2.64%	1	23.65%	7	
Total Contribution	27.56%	\$8	5.01%	\$2	2.64%	\$1	35.21%	\$11	
District Category II - Combined		***		***	4.00	***		***	
Normal Cost	14.41%	\$334	3.72%	\$86	1.08%	\$25	19.21%	\$445	
UAAL	17.68%	408	3.33%	77	2.64%	61	23.65%	546	
Total Contribution	32.09%	\$742	7.05%	\$163	3.72%	\$86	42.86%	\$991	



CHART 15 (continued)
Recommended Employer Contribution Rates (Prior Valuation)

	June 30, 2014 Actuarial Valuation									
		Basic		2% COLA	0.5	5% COLA		Total		
		Estimated Annual		Estimated Annual		Estimated Annual		Estimated Annual		
District Category III Tier I**	Rate	Amount*	Rate	Amount*	Rate	Amount*	Rate	Amount*		
Normal Cost	14.41%	\$2,992	3.95%	\$820	1.20%	\$249	19.56%	\$4,061		
UAAL	17.68%	3,670	3.33%	691	2.64%	549	23.65%	4,910		
Total Contribution	32.09%	\$6,662	7.28%	\$1,511	3.84%	\$798	43.21%	\$8,971		
District Category III Tier IIA										
Normal Cost	3.96%	\$33	1.91%	\$16	0.58%	\$5	6.45%	\$54		
UAAL	17.68%	149	3.33%	28	2.64%	23	23.65%	200		
Total Contribution	21.64%	\$182	5.24%	\$44	3.22%	\$28	30.10%	\$254		
District Category III Tier IIB										
Normal Cost	4.58%	\$44	0.91%	\$9	0.28%	\$3	5.77%	\$56		
UAAL	17.68%	171	3.33%	32	2.64%	26	23.65%	229		
Total Contribution	22.26%	\$215	4.24%	\$41	2.92%	\$29	29.42%	\$285		
District Category III - Combined										
Normal Cost	13.59%	\$3,069	3.74%	\$845	1.15%	\$257	18.48%	\$4,171		
UAAL	17.68%	3,990	3.33%	751	2.64%	598	23.65%	5,339		
Total Contribution	31.27%	\$7.059	7.07%	\$1,596	3.79%	\$855	42.13%	\$9,510		
District Category IV Tier I		, , , , , ,		. ,				1-7-		
Normal Cost	15.37%	\$90	3.95%	\$23	1.20%	\$7	20.52%	\$120		
UAAL	15.33%	90	2.85%	17	2.51%	14	20.69%	121		
Total Contribution	30.70%	\$180	6.80%	\$40	3.71%	\$21	41.21%	\$241		
District Category IV Tier IIB	2017070	Ψ100	0.0070	Ψ.0	21,170	Ψ=1	.1.21/0	<b>42.1</b>		
Normal Cost	4.58%	\$0	0.91%	\$0	0.28%	\$0	5.77%	\$0		
UAAL	15.33%	0	2.85%	0	2.51%	0	20.69%	0		
Total Contribution	19.91%	<u> </u>	3.76%	<u>\$0</u>	2.79%	\$0	26.46%	\$0		
District Category IV - Combined	17.7170	ΨΟ	3.7070	ΨΟ	2.77/0	Ψ0	20.4070	ΨΟ		
Normal Cost	15.37%	\$90	3.95%	\$23	1.20%	\$7	20.52%	\$120		
UAAL	15.33%	90	2.85%	17	2.51%	14	20.69%	121		
Total Contribution	30.70%	\$180	6.80%	\$40	3.71%	\$21	41.21%	\$241		
District Category V Tier I	30.7070	Ψ100	0.0070	ΨΨΟ	3.7170	Ψ21	41.21/0	Ψ2-41		
Normal Cost	12.72%	\$43	3.95%	\$13	1.20%	\$5	17.87%	\$61		
UAAL	17.68%	60	3.33%	11	2.64%	9	23.65%	80		
Total Contribution	30.40%	\$103	7.28%	\$24	3.84%	\$14	41.52%	\$141		
District Category V Tier IIA	30.4070	\$103	7.2070	\$24	3.0470	\$14	41.5270	\$141		
Normal Cost	4.28%	\$18	1.91%	\$8	0.58%	\$3	6.77%	\$29		
UAAL	17.68%	76	3.33%	14	2.64%	11	23.65%	101		
Total Contribution	21.96%	<del></del>	5.24%	\$22	3.22%	\$14	30.42%	\$130		
District Category V Tier IIB	21.90%	\$94	3.24%	\$22	3.22%	\$14	30.42%	\$130		
Normal Cost	4.58%	\$4	0.91%	\$1	0.28%	\$0	5.77%	\$5		
UAAL	4.58% 17.68%	54 17	3.33%	3	2.64%	2	23.65%	\$3 22		
Total Contribution	22.26%	\$21	4.24%	<u> </u>	2.92%	\$2	23.65%	\$27		
	22.20%	\$21	4.24%	54	2.92%	\$2	29.42%	\$27		
District Category V - Combined	7.640/	\$65	2 490/	\$22	0.84%	¢0	10.060/	005		
Normal Cost	7.64%	\$65 153	2.48%	\$22		\$8	10.96%	\$95 202		
UAAL	17.68%	153	3.33%	28	2.64%	<u>22</u>	23.65%	203		
Total Contribution	25.32%	\$218	5.81%	\$50	3.48%	\$30	34.61%	\$298		



**CHART 15 (continued)** 

# **Recommended Employer Contribution Rates (Prior Valuation)**

	June 30, 2014 Actuarial Valuation									
		Basic		2% COLA		0.5% COLA		Total		
		Estimated Annual		Estimated Annual		Estimated Annual	<u> </u>	Estimated Annua		
District Category VI Tier I	Rate	Amount*	Rate	Amount*	Rate	Amount*	Rate	Amount*		
Normal Cost	18.62%	\$71	3.95%	\$15	1.20%	\$5	23.77%	\$91		
UAAL	17.68%	68	3.33%	13	2.64%	9	23.65%	90		
Total Contribution	36.30%	\$139	7.28%	\$28	3.84%	\$14	47.42%	\$181		
District Category VI Tier IIB										
Normal Cost	4.58%	\$0	0.91%	\$0	0.28%	\$0	5.77%	\$0		
UAAL	17.68%	0	3.33%	0	2.64%	0	23.65%	0		
Total Contribution	22.26%	\$0	4.24%	\$0	2.92%	\$0	29.42%	\$0		
District Category VI										
Normal Cost	18.62%	\$71	3.95%	\$15	1.20%	\$5	23.77%	\$91		
UAAL	17.68%	68	3.33%	13	2.64%	9	23.65%	90		
Total Contribution	36.30%	\$139	7.28%	\$28	3.84%	\$14	47.42%	\$181		
All Districts - Combined										
Normal Cost	13.84%	\$4,591	3.71%	\$1,230	1.13%	\$376	18.68%	\$6,197		
UAAL	17.64%	5,850	3.32%	1,102	2.63%	874	23.59%	7,826		
Total Contribution	31.48%	\$10,441	7.03%	\$2,332	3.76%	\$1,250	42.27%	\$14,023		
All Employers - Combined										
Normal Cost	12.76%	\$70,910	3.92%	\$21,784	1.21%	\$6,719	17.89%	\$99,413		
UAAL	20.02%	111,235	4.04%	22,442	3.69%	20,494	27.75%	154,171		
Total Contribution	32.78%	\$182,145	7.96%	\$44,226	4.90%	\$27,213	45.64%	\$253,584		

* Amounts are in thousands and are based on Ju.	ne 30. 2014 projected compen	sation (also in thousands):	
County General Tier I without Courts	\$236,702	District Category I Tier I	\$5,755
County General Tier IIA without Courts	82,780	District Category I Tier IIA	568
County General Tier IIB without Courts	36,665	District Category I Tier IIB	136
Courts Tier I	17,001	District Category II Tier I	2,110
Courts Tier IIA	1,416	District Category II Tier IIB	171
Courts Tier IIB	2,614	District Category II Tier III	31
County Safety Tier I	128,805	District Category III Tier I	20,760
County Safety Tier IIA	6,798	District Category III Tier IIA	844
County Safety Tier IIB	9,681	District Category III Tier IIB	969
		District Category IV Tier I	585
		District Category IV Tier IIB	0
		District Category V Tier I	339
		District Category V Tier IIA	428
		District Category V Tier IIB	94
		District Category VI Tier I	382
		District Category VI Tier IIB	0
All County with Courts	\$522,462	All Districts	\$33,172

<sup>\*\*</sup> Before change to SJVAPCD Normal Cost rates.

Note: As of June 30, 2014, the COLA Contribution Reserve was zero and therefore not available to offset the 2% COLA contribution rate.

Total

\$555,634



The employer contribution rates as of June 30, 2015 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

# **Reconciliation of Recommended Average Employer Contribution**

The chart below details the changes in the recommended average employer contribution from the prior valuation to the current year's valuation.

The chart reconciles the contribution from the prior valuation to the amount determined in this valuation.

CHART 16
Reconciliation of Recommended Average Employer Contribution from June 30, 2014 to June 30, 2015 (Dollar Amounts in Thousands)

	Contribution Rate	Estimated Annual Dollar Cost <sup>(1)</sup>
Recommended Average Employer Contribution Rate in June 30, 2014 Valuation	45.64%	\$253,584
Effect of investment loss <sup>(2)</sup>	0.48%	2,673
Effect of difference between actual and expected contributions	0.55%	3,063
Effect of lower than expected individual salary increases for actives	-0.75%	-4,176
Effect of amortizing prior year's UAAL over a smaller than expected projected total payroll	0.95%	5,290
Effect of lower than expected COLA benefit increase for retirees and beneficiaries	-0.46%	-2,561
Effect of different demographics of members amongst tiers	-0.51%	-2,840
Effect of scheduled member rate increases	-0.31%	-1,726
Effect of other experience (gains)/losses <sup>(3)</sup>	<u>-0.48%</u>	<u>-2,152</u>
Total change	<u>-0.53%</u>	<u>-\$2,429</u>
Recommended Average Employer Contribution Rate in June 30, 2015 Valuation	45.11%	\$251,155

<sup>(1)</sup> Based on projected compensation for each valuation date shown.



<sup>(2)</sup> Return on the valuation value of assets of 6.46% was less than the 7.50% assumed rate of return.

Other differences in actual versus expected experience. Estimated annual dollar cost also reflects the change in total projected compensation from the prior valuation.

The member contribution rates as of June 30, 2015 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

# **Reconciliation of Recommended Average Member Contribution Rate**

The chart below details the changes in the recommended average member contribution rate from the prior valuation to the current year's valuation.

The chart reconciles the member contribution from the prior valuation to the amount determined in this valuation.

# CHART 17 Reconciliation of Recommended Average Member Contribution from June 30, 2014 to June 30, 2015 (Dollar Amounts in Thousands)

	Contribution Rate	Estimated Annual Dollar Cost <sup>(1)</sup>
Recommended Average Member Contribution Rate in June 30, 2014 Valuation	5.58%	\$31,015
Effect of different demographics of members amongst tiers	0.05%	278
Effect of scheduled contribution rate increases	0.31%	1,726
Effect of other changes <sup>(2)</sup>	0.07%	<u>439</u>
Total change	<u>0.43%</u>	<u>2,444</u>
Recommended Average Member Contribution Rate in June 30, 2015 Valuation	6.01%	\$33,459

<sup>(1)</sup> Based on projected compensation for each valuation date shown.

<sup>(2)</sup> Other differences in actual versus expected experience. Estimated annual dollar cost also reflects the change in total projected compensation from the prior valuation.



#### E. FUNDED RATIO

A critical piece of information regarding the Plan's financial status is the funded ratio. These ratios compare the actuarial value of assets and market value of assets to the actuarial accrued liabilities of the plan. High ratios indicate a well-funded plan with assets sufficient to cover the plan's actuarial liabilities. Lower ratios may indicate recent changes to benefit structures, funding of the plan below actuarial requirements, poor asset performance, or a variety of other changes.

The chart below depicts a history of the funded ratios for the Plan. Chart 19 on the next page shows the Plan's schedule of funding progress for the last seven years.

The funded status measures shown in this valuation are appropriate for assessing the need for or amount of future contributions. However, they are not necessarily appropriate for assessing the sufficiency of Plan assets to cover the estimated cost of settling the Plan's benefit obligations. As the chart below shows, the measures are different depending on whether the valuation or market value of assets is used.

CHART 18
Funded Ratio for Plan Years Ending June 30, 2006 – 2015

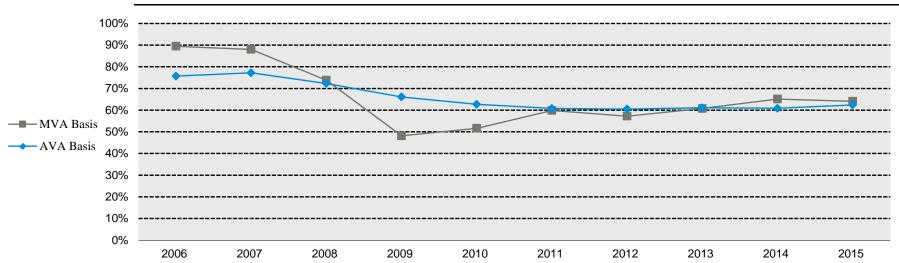


CHART 19
Schedule of Funding Progress

Actuarial Valuation Date	Valuation Value of Assets <sup>(1)</sup> (a)	Actuarial Accrued Liability (AAL) <sup>(2)</sup> (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)] / (c)
06/30/2009	\$2,780,215,000	\$4,205,200,000	\$1,424,985,000	66.1%	\$559,872,000	254.5%
06/30/2010	2,794,644,000	4,457,038,000	1,662,395,000	62.7%	559,380,000	297.2%
06/30/2011	2,839,747,000	4,672,348,000	1,832,601,000	60.8%	539,836,000	339.5%
06/30/2012	2,960,507,000	4,894,990,000	1,934,483,000	60.5%	543,558,000	355.9%
06/30/2013	3,120,632,000	5,108,619,000	1,987,987,000	61.1%	555,752,000	357.7%
06/30/2014	3,342,122,000	5,492,440,000	2,150,318,000	60.8%	555,634,000	387.0%
06/30/2015	3,529,786,000	5,657,173,000	2,127,387,000	62.4%	556,824,000	382.1%

<sup>(1)</sup> Excludes assets for SRBR Reserves Unallocated to 0.5% COLA benefits and COLA Contribution Reserve. Excludes assets for Contingency Reserve (unless the Contingency Reserve is negative).



<sup>(2)</sup> Excludes liabilities held for SRBR Reserves Unallocated to 0.5% COLA benefits.

#### F. VOLATILITY RATIOS

Retirement plans are subject to volatility in the level of required contributions. This volatility tends to increase as retirement plans become more mature.

The Asset Volatility Ratio (AVR), which is equal to the market value of assets divided by total payroll, provides an indication of the potential contribution volatility for any given level of investment volatility. A higher AVR indicates that the plan is subject to a greater level of contribution volatility. This is a current measure since it is based on the current level of assets.

For KCERA, the current AVR is about 6.5. This means that a 1% asset gain/(loss) (relative to the assumed investment return) translates to about 6.5% of one-year's payroll. Since KCERA amortizes actuarial gains and losses over a period of 18 years, there would be a 0.5% of payroll decrease/(increase) in the required contribution for each 1% asset gain/(loss).

The Liability Volatility Ratio (LVR), which is equal to the Actuarial Accrued Liability divided by payroll, provides an indication of the longer-term potential for contribution volatility for any given level of investment volatility. This is because, over an extended period of time, the plan's assets should track the plan's liabilities. For example, if a plan is 50% funded on a market value basis, the liability volatility ratio would be double the asset volatility ratio and the plan sponsor should expect contribution volatility to increase over time as the plan becomes better funded.

The LVR also indicates how volatile contributions will be in response to changes in the Actuarial Accrued Liability due to actual experience or to changes in actuarial assumptions.

For KCERA, the current LVR is about 10.2. This is about 57% higher than the AVR. Therefore, we would expect that contribution volatility will increase over the long term.

This chart shows how the asset and liability volatility ratios have varied over time, both for the plan in total and separately for General and Safety.

CHART 20 Volatility Ratios for Years Ended June 30, 2009 – 2015

	<b>Asset Volatility Ratios</b>			Liability V	olatility Rati	<u>os</u>
Year Ended June 30	General	Safety	Total	General	Safety	Total
2009	2.9	5.7	3.6	6.3	11.1	7.5
2010	3.4	6.4	4.1	6.7	11.7	7.9
2011	4.3	7.9	5.2	7.4	12.5	8.7
2012	4.3	7.7	5.2	7.7	12.8	9.0
2013	4.7	8.0	5.6	8.0	12.7	9.2
2014	5.5	9.1	6.4	8.5	13.7	9.9
2015	5.6	9.2	6.5	8.8	14.1	10.2



SECTION 3: Supplemental Information for the Kern County Employees' Retirement Association

EXHIBIT A

Table of Plan Coverage

i. General Tier I County with Courts

	Year End	Year Ended June 30		
Category	2015	2014	– Change From Prior Year	
Active members in valuation:				
Number	3,532	3,853	-8.3%	
Average age	49.0	48.6	N/A	
Average service	15.4	14.8	N/A	
Projected total compensation	\$237,039,123	\$253,703,271	-6.6%	
Projected average compensation	\$67,112	\$65,846	1.9%	
Account balances	\$131,320,794	\$124,745,061	5.3%	
Total active vested members	3,510	3,822	-8.2%	
Vested terminated members: <sup>(1)</sup>	1,104	1,114	-0.9%	
Retired members:				
Number in pay status	4,271	4,126	3.5%	
Average age	68.7	68.7	N/A	
Average monthly benefit <sup>(2)</sup>	\$2,735	\$2,644	3.4%	
Disabled members:				
Number in pay status	502	516	-2.7%	
Average age	65.0	64.3	N/A	
Average monthly benefit <sup>(2)</sup>	\$1,775	\$1,729	2.7%	
Beneficiaries:	_		_	
Number in pay status	742	723	2.6%	
Average age	74.7	74.3	N/A	
Average monthly benefit <sup>(2)</sup>	\$1,301	\$1,234	5.4%	

<sup>(1)</sup> Includes terminated members due a refund of member contributions.



<sup>(2)</sup> Excludes monthly benefits paid from the Supplemental Retiree Benefit Reserve.

SECTION 3: Supplemental Information for the Kern County Employees' Retirement Association

EXHIBIT A

Table of Plan Coverage

ii. General Tier IIA County with Courts

	Year Ende		
Category	2015	2014	– Change From Prior Year
Active members in valuation:			
Number	1,381	1,499	-7.9%
Average age	40.5	39.3	N/A
Average service	4.9	3.9	N/A
Projected total compensation	\$80,045,709	\$84,196,322	-4.9%
Projected average compensation	\$57,962	\$56,168	3.2%
Account balances	\$23,421,171	\$19,187,716	22.1%
Total active vested members	581	497	16.9%
Vested terminated members: <sup>(1)</sup>	362	345	4.9%
Retired members:			
Number in pay status	8	5	60.0%
Average age	66.7	68.3	N/A
Average monthly benefit <sup>(2)</sup>	\$511	\$471	8.5%
Disabled members:			
Number in pay status	1	0	N/A
Average age	53.9	0.0	N/A
Average monthly benefit <sup>(2)</sup>	\$2,282	\$0	N/A
Beneficiaries:			
Number in pay status	2	1	100.0%
Average age	55.0	53.9	N/A
Average monthly benefit <sup>(2)</sup>	\$592	\$739	-19.9%

<sup>(1)</sup> Includes terminated members due a refund of member contributions.



<sup>(2)</sup> Excludes monthly benefits paid from the Supplemental Retiree Benefit Reserve.

SECTION 3: Supplemental Information for the Kern County Employees' Retirement Association

EXHIBIT A

Table of Plan Coverage

iii. General Tier IIB County with Courts

	Year Ende		
Category	2015	2014	– Change From Prior Year
Active members in valuation:			
Number	1,320	860	53.5%
Average age	34.8	33.8	N/A
Average service	1.3	0.9	N/A
Projected total compensation	\$61,360,604	\$39,279,276	56.2%
Projected average compensation	\$46,485	\$45,674	1.8%
Account balances	\$4,497,267	\$1,930,312	133.0%
Total active vested members	7	5	40.0%
Vested terminated members: <sup>(1)</sup>	182	98	85.7%
Retired members:			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A
Disabled members:			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A
Beneficiaries:			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A

<sup>(1)</sup> Includes terminated members due a refund of member contributions.



<sup>(2)</sup> Excludes monthly benefits paid from the Supplemental Retiree Benefit Reserve.

SECTION 3: Supplemental Information for the Kern County Employees' Retirement Association

EXHIBIT A

Table of Plan Coverage
iv. Districts Tier I

	Year Ende	Year Ended June 30		
Category	2015	2014	– Change From Prior Year	
Active members in valuation:				
Number	335	360	-6.9%	
Average age	45.6	45.0	N/A	
Average service	13.0	12.1	N/A	
Projected total compensation	\$29,002,818	\$29,931,834	-3.1%	
Projected average compensation	\$86,576	\$83,144	4.1%	
Account balances	\$14,576,982	\$13,967,695	4.4%	
Total active vested members	302	311	-2.9%	
Vested terminated members: <sup>(1)</sup>	166	162	2.5%	
Retired members:				
Number in pay status	205	191	7.3%	
Average age	66.0	65.4	N/A	
Average monthly benefit <sup>(2)</sup>	\$3,438	\$3,377	1.8%	
Disabled members:				
Number in pay status	12	11	9.1%	
Average age	60.9	60.5	N/A	
Average monthly benefit <sup>(2)</sup>	\$2,228	\$2,164	3.0%	
Beneficiaries:				
Number in pay status	29	29	0.0%	
Average age	72.3	72.1	N/A	
Average monthly benefit <sup>(2)</sup>	\$2,342	\$2,278	2.8%	

<sup>(1)</sup> Includes terminated members due a refund of member contributions.



<sup>(2)</sup> Excludes monthly benefits paid from the Supplemental Retiree Benefit Reserve.

SECTION 3: Supplemental Information for the Kern County Employees' Retirement Association

# EXHIBIT A Table of Plan Coverage v. Districts Tier IIA

	Year Ende	Year Ended June 30			
Category	2015	2014	– Change From Prior Year		
Active members in valuation:					
Number	26	28	-7.1%		
Average age	36.3	35.3	N/A		
Average service	4.1	3.0	N/A		
Projected total compensation	\$1,873,161	\$1,839,787	1.8%		
Projected average compensation	\$72,045	\$65,707	9.6%		
Account balances	\$337,959	\$234,311	44.2%		
Total active vested members	4	2	100.0%		
Vested terminated members: (1)	3	3	0.0%		
Retired members:					
Number in pay status	0	0	N/A		
Average age	N/A	N/A	N/A		
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A		
Disabled members:					
Number in pay status	0	0	N/A		
Average age	N/A	N/A	N/A		
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A		
Beneficiaries:					
Number in pay status	0	0	N/A		
Average age	N/A	N/A	N/A		
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A		

<sup>(1)</sup> Includes terminated members due a refund of member contributions.



<sup>(2)</sup> Excludes monthly benefits paid from the Supplemental Retiree Benefit Reserve.

SECTION 3: Supplemental Information for the Kern County Employees' Retirement Association

EXHIBIT A

Table of Plan Coverage
vi. Districts Tier IIB

	Year Ende		
Category	2015	2014	– Change From Prior Year
Active members in valuation:			
Number	42	28	50.0%
Average age	35.7	32.8	N/A
Average service	1.2	0.8	N/A
Projected total compensation	\$2,074,654	\$1,369,169	51.5%
Projected average compensation	\$49,397	\$48,899	1.0%
Account balances	\$145,563	\$64,544	125.5%
Total active vested members	0	0	N/A
Vested terminated members: (1)	2	2	0.0%
Retired members:			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A
Disabled members:			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A
Beneficiaries:			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A

<sup>(1)</sup> Includes terminated members due a refund of member contributions.



<sup>(2)</sup> Excludes monthly benefits paid from the Supplemental Retiree Benefit Reserve.

SECTION 3: Supplemental Information for the Kern County Employees' Retirement Association

EXHIBIT A

Table of Plan Coverage
vii. Districts Tier III

	Year Ended	Year Ended June 30		
Category	2015	2014	– Change From Prior Year	
Active members in valuation:				
Number	1	1	0.0%	
Average age	54.0	53.0	N/A	
Average service	1.2	0.2	N/A	
Projected total compensation	\$31,243	\$31,225	0.1%	
Projected average compensation	\$31,243	\$31,225	0.1%	
Account balances	\$2,854	\$443	544.2%	
Total active vested members	0	0	N/A	
Vested terminated members: (1)	0	0	N/A	
Retired members:				
Number in pay status	0	0	N/A	
Average age	N/A	N/A	N/A	
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A	
Disabled members:				
Number in pay status	0	0	N/A	
Average age	N/A	N/A	N/A	
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A	
Beneficiaries:				
Number in pay status	0	0	N/A	
Average age	N/A	N/A	N/A	
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A	

<sup>(1)</sup> Includes terminated members due a refund of member contributions.



<sup>(2)</sup> Excludes monthly benefits paid from the Supplemental Retiree Benefit Reserve.

SECTION 3: Supplemental Information for the Kern County Employees' Retirement Association

EXHIBIT A

Table of Plan Coverage
viii. Safety Tier I

	Year End	Year Ended June 30		
Category	2015	2014	– Change From Prior Year	
Active members in valuation:				
Number	1,509	1,564	-3.5%	
Average age	40.1	39.4	N/A	
Average service	13.2	12.5	N/A	
Projected total compensation	\$126,767,002	\$128,805,453	-1.6%	
Projected average compensation	\$84,007	\$82,356	2.0%	
Account balances	\$71,835,551	\$63,019,035	14.0%	
Total active vested members	1,384	1,399	-1.1%	
Vested terminated members: (1)	199	201	-1.0%	
Retired members:				
Number in pay status	1,051	1,037	1.4%	
Average age	65.1	64.6	N/A	
Average monthly benefit <sup>(2)</sup>	\$5,613	\$5,488	2.3%	
Disabled members:				
Number in pay status	442	443	-0.2%	
Average age	63.8	63.2	N/A	
Average monthly benefit <sup>(2)</sup>	\$4,065	\$3,958	2.7%	
Beneficiaries:				
Number in pay status	334	315	6.0%	
Average age	70.1	69.6	N/A	
Average monthly benefit <sup>(2)</sup>	\$2,252	\$2,168	3.9%	

<sup>(1)</sup> Includes terminated members due a refund of member contributions.



<sup>(2)</sup> Excludes monthly benefits paid from the Supplemental Retiree Benefit Reserve.

SECTION 3: Supplemental Information for the Kern County Employees' Retirement Association

EXHIBIT A

Table of Plan Coverage
ix. Safety Tier IIA

	Year Ende	Year Ended June 30		
Category	2015	2014	Change From Prior Year	
Active members in valuation:				
Number	121	120	0.8%	
Average age	31.1	29.9	N/A	
Average service	3.4	2.4	N/A	
Projected total compensation	\$7,182,609	\$6,797,710	5.7%	
Projected average compensation	\$59,360	\$56,648	4.8%	
Account balances	\$1,713,554	\$1,092,038	56.9%	
Total active vested members	17	9	88.9%	
Vested terminated members: (1)	11	9	22.2%	
Retired members:				
Number in pay status	0	0	N/A	
Average age	N/A	N/A	N/A	
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A	
Disabled members:				
Number in pay status	0	0	N/A	
Average age	N/A	N/A	N/A	
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A	
Beneficiaries:				
Number in pay status	0	0	N/A	
Average age	N/A	N/A	N/A	
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A	

<sup>&</sup>lt;sup>(1)</sup>Includes terminated members due a refund of member contributions.



<sup>&</sup>lt;sup>(2)</sup>Excludes monthly benefits paid from the Supplemental Retiree Benefit Reserve.

SECTION 3: Supplemental Information for the Kern County Employees' Retirement Association

EXHIBIT A

Table of Plan Coverage
x. Safety Tier IIB

	Year Ende		
Category	2015	2014	– Change From Prior Year
Active members in valuation:			
Number	214	199	7.5%
Average age	29.7	28.7	N/A
Average service	1.8	0.9	N/A
Projected total compensation	\$11,447,325	\$9,680,984	18.2%
Projected average compensation	\$53,492	\$48,648	10.0%
Account balances	\$2,437,955	\$1,069,462	128.0%
Total active vested members	5	0	N/A
Vested terminated members: <sup>(1)</sup>	24	15	60.0%
Retired members:			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A
Disabled members:			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A
Beneficiaries:			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A

<sup>&</sup>lt;sup>(1)</sup>Includes terminated members due a refund of member contributions.



<sup>(2)</sup> Excludes monthly benefits paid from the Supplemental Retiree Benefit Reserve.

**EXHIBIT B** 

# i. General Tier I County with Courts

	Years of Service									
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	1	1								
	\$41,370	\$41,370								
25 - 29	31	1	30							
	46,063	39,693	\$46,275							
30 - 34	260	5	214	40	1					
	61,081	74,500	61,497	\$57,104	\$64,006					
35 - 39	436	4	213	181	38					
	62,524	34,857	59,642	66,448	62,905					
40 - 44	519	2	162	209	124	22				
	68,797	61,191	64,406	71,339	70,711	\$66,885				
45 - 49	571	5	115	170	145	100	34	2		
	65,670	63,697	58,277	64,264	69,534	72,732	\$60,736	\$65,795		
50 - 54	688	2	128	128	141	124	110	53	2	
	68,646	89,091	59,635	64,611	70,687	73,732	73,404	72,404	\$62,795	
55 - 59	568	2	78	119	116	104	83	54	12	
	70,427	63,593	60,705	62,057	67,108	76,983	78,654	85,021	70,460	
60 - 64	350		71	82	84	60	39	12	1	1
	69,005		61,846	64,696	65,818	71,876	85,266	85,827	134,478	\$124,696
65 - 69	90		21	20	23	13	10	1		2
	70,643		59,956	78,830	65,867	77,484	76,488	61,252		86,942
70 & over	18		4	4	8	1				1
	82,437		105,702	58,412	91,088	36,200				62,501
Total	3,532	22	1,036	953	680	424	276	122	15	4
	\$67,112	\$60,874	\$60,646	\$66,019	\$68,866	\$73,702	\$75,210	\$79,109	\$73,706	\$90,270



**EXHIBIT B** 

# ii. General Tier IIA County with Courts

		Years of Service											
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over			
Under 25	16	16							-				
	\$38,113	\$38,113							-				
25 - 29	190	150	40						-				
	49,450	48,770	\$52,001						-				
30 - 34	332	195	135	2					-				
	57,817	53,557	63,815	\$68,301					-				
35 - 39	223	130	92	1					-				
	58,293	51,118	68,541	48,258					-				
40 - 44	194	101	91	2					_				
	60,775	57,334	64,835	49,750					_				
45 - 49	142	77	64		1				-				
	61,338	52,553	72,169		\$44,644				-				
50 - 54	115	65	47	1	2				_				
	60,361	56,486	67,195	37,959	36,862				_				
55 - 59	101	53	48						-				
	64,144	61,659	66,888						-				
60 - 64	55	31	23	1					-				
	58,209	50,221	68,685	64,902					_				
65 - 69	11	2	9						-				
	55,141	77,888	50,086						-				
70 & over	2	2							_				
	58,718	58,718							-				
Total	1,381	822	549	7	3								
	\$57,962	\$53,067	\$65,426	\$55,317	\$39,455				_				



**EXHIBIT B** 

# iii. General Tier IIB County with Courts

					Years of	Service				
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	122	122							-	
	\$39,305	\$39,305							-	
25 - 29	398	397	1						-	
	45,494	45,464	\$57,317						-	
30 - 34	310	309	1						-	
	48,278	48,303	40,689						-	
35 - 39	171	171							-	
	46,554	46,554							-	
40 - 44	105	105							-	
	47,617	47,617							-	
45 - 49	85	84	1						-	
	48,300	48,464	34,513						_	
50 - 54	60	60							_	
	46,294	46,294							_	
55 - 59	47	46	1						-	
	51,577	51,044	76,054						_	
60 - 64	18	17		1					_	
	53,950	55,310		\$30,843					-	
65 - 69	3	3							-	
	73,767	73,767							-	
70 & over	1	1							-	
	32,373	32,373							-	
Total	1,320	1,315	4	1						
	\$46,485	\$46,480	\$52,143	\$30,843					-	



**EXHIBIT B** 

iv. Districts Tier I

					Years of \$	Service				
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	2	1	1							
	\$41,504	\$33,157	\$49,850							
25 - 29	11	9	2							
	70,317	65,521	91,901							
30 - 34	53	11	38	4						
	73,781	59,696	77,025	\$81,695						
35 - 39	56	2	33	19	2					
	86,186	60,471	78,370	96,419	\$143,632					
40 - 44	55	6	21	22	6					
	88,210	82,165	75,839	100,631	92,007					
45 - 49	33	1	5	10	7	9	1			
	94,786	180,157	64,695	85,215	102,018	\$98,853	\$168,367			
50 - 54	52	1	11	17	6	10	4	3		
	95,308	84,330	69,672	107,443	109,203	98,288	99,308	\$81,142		
55 - 59	33		7	5	6	9	4	2		
	100,534		74,031	84,573	68,887	129,330	119,987	159,651		
60 - 64	29	2	4	3	7	7	2	2	2	!
	80,507	43,962	72,583	68,981	84,416	99,052	82,390	63,936	\$86,293	
65 - 69	9	1		3		3	1	1		
	76,239	51,733		83,955		76,757	103,163	49,121		
70 & over	2		1		1					
	67,797		81,644		53,950					
Total	335	34	123	83	35	38	12	8	2	!
	\$86,576	\$67,576	\$75,768	\$95,578	\$93,338	\$104,215	\$109,457	\$92,465	\$86,293	



**EXHIBIT B** 

# v. Districts Tier IIA

		Years of Service											
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over			
Under 25									-				
									-				
25 - 29	5	5							-				
	\$62,268	\$62,268							-				
30 - 34	9	8	1						-				
	67,705	67,160	\$72,060						-				
35 - 39	4	4							-				
	80,703	80,703							-				
40 - 44	4	3	1						_				
	69,757	55,018	113,976						_				
45 - 49	2	2							-				
	65,361	65,361							_				
50 - 54	2	2							_				
	109,958	109,958							_				
55 - 59		´							_				
									_				
60 - 64									_				
									_				
65 - 69									_				
									_				
70 & over									_				
									_				
Total	26	24	2										
Total	\$72,045	\$70,297	\$93,018						-				
	Ψ12,043	Ψ10,291	Ψ73,016						-				



SECTION 3: Supplemental Information for the Kern County Employees' Retirement Association

#### **EXHIBIT B**

Members in Active Service and Projected Average Compensation as of June 30, 2015 By Age and Years of Service

# vi. Districts Tier IIB

		Years of Service											
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over			
Under 25	4	4							-				
	\$40,031	\$40,031							-				
25 - 29	10	10							-				
	47,602	47,602							-				
30 - 34	10	10							-				
	51,664	51,664							_				
35 - 39	6	6							_				
	46,295	46,295							_				
40 - 44	2	2							_				
	40,531	40,531							_				
45 - 49	3	3							_				
	77,061	77,061							_				
50 - 54	5	5							_				
	47,993	47,993							_				
55 - 59	2	2							_				
	45,948	45,948							_				
60 - 64		, 							_				
									_				
65 - 69									_				
									_				
70 & over									_				
									_				
Total	42	42											
20.01	\$49,397	\$49,397							_				



#### **EXHIBIT B**

Members in Active Service and Projected Average Compensation as of June 30, 2015 By Age and Years of Service

vii. Districts Tier III

	Years of Service											
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over		
Under 25									-			
									-			
25 - 29									-			
									-			
30 - 34									-			
									-			
35 - 39									-			
									-			
40 - 44									-			
									-			
45 - 49									-			
									-			
50 - 54	1	1							-			
	\$31,243	\$31,243							-			
55 - 59									-			
-0 -1									-			
60 - 64									-			
									-			
65 - 69									-			
70.0									-			
70 & over									-			
									-			
Total	1	1							-			
	\$31,243	\$31,243							-			



**EXHIBIT B** 

viii. Safety Tier I

	Years of Service												
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over			
Under 25	15	15											
	\$64,982	\$64,982											
25 - 29	151	64	87										
	72,640	66,745	\$76,976										
30 - 34	315	33	199	83									
	79,624	66,022	77,328	\$90,537									
35 - 39	333	13	105	155	60								
	83,120	66,577	80,047	84,481	\$88,570								
40 - 44	297	5	51	90	126	25							
	86,204	65,332	75,972	84,175	92,394	\$87,354							
45 - 49	197	2	21	35	65	49	25						
	90,493	53,353	79,065	84,729	88,934	90,056	\$116,038						
50 - 54	117	1	9	17	21	21	38	10					
	94,085	59,566	74,171	83,880	86,083	89,096	105,461	\$116,866					
55 - 59	58	1	4	7	10	7	17	10	2	:			
	93,154	97,832	93,433	81,180	86,190	81,533	98,537	103,814	\$108,600				
60 - 64	20		2	3	7		2	4	1	. 1			
	87,958		78,498	78,988	84,493		87,111	102,581	78,850	\$110,363			
65 - 69	4					3	1						
	68,842					67,610	72,536						
70 & over	2			1			1						
	93,995			107,037			80,952						
Total	1,509	134	478	391	289	105	84	24	3	1			
	\$84,007	\$66,279	\$77,873	\$85,649	\$89,957	\$88,011	\$106,087	\$109,047	\$98,683	\$110,363			



**EXHIBIT B** 

ix. Safety Tier IIA

					Years of	Service				
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	11	11							-	
	\$57,514	\$57,514							-	
25 - 29	56	53	3						-	
	59,121	59,156	\$58,495						-	
30 - 34	36	32	4						-	
	58,797	58,750	59,173						_	
35 - 39	7	7							_	
	59,282	59,282							_	
40 - 44	5	5							-	
	79,054	79,054							-	
45 - 49	3	3							-	
	55,316	55,316							_	
50 - 54									-	
									_	
55 - 59									_	
									_	
60 - 64	3	3							_	
	48,776	48,776							_	
65 - 69									_	
									_	
70 & over									_	
									_	
Total	121	114	7						_	
10.01	\$59,360	\$59,390	\$58,882						_	



**EXHIBIT B** 

# x. Safety Tier IIB

		Years of Service											
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over			
Under 25	44	44							-				
	\$51,954	\$51,954							-				
25 - 29	95	95							-				
	52,091	52,091							-				
30 - 34	44	41	3						-				
	52,433	52,425	\$52,529						-				
35 - 39	15	14	1						-				
	55,067	55,123	54,291						-				
40 - 44	6	5	1						-				
	52,112	53,144	46,952						-				
45 - 49	2	2							-				
	50,843	50,843							-				
50 - 54	8	8							-				
	83,169	83,169							-				
55 - 59									-				
									-				
60 - 64									-				
									_				
65 - 69									-				
									-				
70 & over									_				
									-				
Total	214	209	5						_				
	\$53,492	\$53,533	\$51,766						_				



EXHIBIT C
Reconciliation of Member Data – June 30, 2014 to June 30, 2015

	Active Members	Vested Terminated Members <sup>(1)</sup>	Retired Members	Disabled Members	Beneficiaries	Total
Number as of June 30, 2014	8,512	1,949	5,359	970	1,068	17,858
New members	715	0	N/A	N/A	92	807
Terminations – with vested rights	-319	319	0	0	0	0
Contribution refunds	-156	-117	N/A	N/A	N/A	-273
Retirements	-276	-66	342	N/A	N/A	0
New disabilities	-6	0	-5	11	N/A	0
Return to work	26	-26	0	0	N/A	0
Died with or without beneficiary	-15	-6	-161	-24	-49	-255
Data adjustments	0	0	0	_0	4	4
Number as of June 30, 2015	8,481	2,053	5,535	957	1,107	18,133

<sup>(1)</sup> Includes terminated members due a refund of member contributions.



EXHIBIT D
Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended J	une 30, 2015	Year Ended J	une 30, 2014
Net contribution income:				
Employer contributions	\$215,476,956		\$220,393,167	
Employee contributions	30,324,848		25,810,310	
Less administrative expenses <sup>(1)</sup>	-4,886,637		<u>N/A</u>	
Total contribution income		\$240,915,167		\$246,203,477
Investment income:				
Interest, dividends and other income	\$70,753,460		\$55,315,068	
Adjustment toward market value(2)	161,841,953		193,312,485	
Less investment expenses <sup>(1)</sup>	-10,380,037		<u>-13,332,560</u>	
Net investment income		<u>222,215,376</u>		235,294,993
Total income available for benefits		\$463,130,543		\$481,498,470
Less benefit payments:				
Retirement and survivor benefits	\$257,153,049		\$241,501,929	
Supplemental retirement benefits	13,213,574		12,881,285	
Refunds of member contributions	3,498,057		3,111,847	
Net benefit payments		-\$273,864,680		-\$257,495,061
Change in assets held for future benefits		\$189,265,863		\$224,003,409

<sup>(1)</sup> Prior to 2015, administrative expenses were shown as an offset to investment income in this exhibit.



<sup>&</sup>lt;sup>(2)</sup> Equals the "non-cash" earnings on investments implicitly included in the Actuarial Value of Assets. Note: Results may not add due to rounding.

EXHIBIT E
Summary Statement of Plan Assets

	Year Ended J	lune 30, 2015	Year Ended J	lune 30, 2014
Cash equivalents		\$66,429,810		\$85,777,006
Capital assets		5,181,830		5,548,813
Accounts receivable:				
Investments sold	\$143,181,643		\$69,005,777	
Interest and dividends	7,675,223		7,818,374	
Contributions and other receivables	<u>2,371,417</u>		<u>2,431,109</u>	
Total accounts receivable		\$153,228,283		\$79,255,260
Investments:				
Domestic equities and securities	\$956,246,001		\$929,291,036	
International equities and securities	846,186,396		862,137,093	
Bonds	998,669,137		958,217,588	
Collateral held for securities lending	0		230,103,850	
Other investments	<u>819,908,523</u>		745,516,758	
Total investments at market value		3,621,010,058		3,725,266,325
Total assets		\$3,845,849,980		\$3,895,847,404
Less accounts payable:				
Securities purchased	-\$213,072,267		-\$86,906,592	
Collateral held for securities lent	0		-230,103,850	
Contributions and other	<u>-7,684,530</u>		<u>-2,725,436</u>	
Total accounts payable		-\$220,756,797		-\$319,735,878
Net assets at market value		<u>\$3,625,093,183</u>		\$3,576,111,526
Net assets at actuarial value		<u>\$3,651,052,866</u>		\$3,461,787,003
Net assets at valuation value		\$3,529,785,691		\$3,342,121,678

Note: Results may not add due to rounding.



#### **EXHIBIT F**

#### **Actuarial Balance Sheet**

An overview of the Plan's funding is given by an Actuarial Balance Sheet. In this approach, we first determine the amount and timing of all future payments that are anticipated to be made by the Plan for current participants. We then discount these payments at the valuation interest rate to the date of the valuation, thereby determining their present value. We refer to this present value as the "liability" of the Plan.

*Includes terminated members due a refund of member contributions.* 

Second, we determine how this liability will be met. These actuarial "assets" include the net amount of assets already accumulated by the Plan, the present value of future member contributions, the present value of future employer normal cost contributions, and the present value of future employer amortization payments.

Total KCFRA (\$ in 000s)

	TOTAL NOLINA (\$ III 0003)	
<u>Assets</u>	June 30, 2015	June 30, 2014
1 Total valuation value of assets	\$3,529,786	\$3,342,122
2 Present value of future contributions by members	286,244	276,881
3 Present value of future employer contributions for:		
a. entry age normal cost	709,809	745,840
b. unfunded actuarial accrued liability	2,127,387	2,150,318
4 Total current and future assets	\$6,653,226	\$6,515,161
<u>Liabilities</u>		
5 Present value of benefits for retirees and beneficiaries	\$3,452,471	\$3,294,221
6 Present value of benefits for active members	3,045,715	3,068,199
7 Present value of benefits for vested terminated members <sup>(1)</sup>	155,040	152,741
8 Total liabilities	\$6,653,226	\$6,515,161



#### SECTION 3: Supplemental Information for the Kern County Employees' Retirement Association

EXHIBIT G
Summary of Reported Reserve Information

Reserves	3	
	June 30, 2015	June 30, 2014
Member Deposit Reserve – General & Courts <sup>(1)</sup>	\$194,640,899	\$180,028,853
Member Deposit Reserve – Safety <sup>(1)</sup>	81,179,935	70,494,562
Member Deposit Reserve – Special Districts <sup>(1)</sup>	19,626,634	18,302,272
Employers Advance Reserve – General & Courts <sup>(1)</sup>	325,738,645	319,022,842
Employers Advance Reserve – Safety <sup>(1)</sup>	318,064,170	283,825,888
Employers Advance Reserve – Special Districts <sup>(1)</sup>	36,403,179	31,160,427
Cost-of-Living Reserve – General & Courts <sup>(1)</sup>	572,231,566	528,573,119
Cost-of-Living Reserve – Safety <sup>(1)</sup>	403,014,776	373,547,219
Cost-of-Living Reserve – Special Districts <sup>(1)</sup>	39,508,980	35,295,430
Retired Members – General, Courts & Special Districts <sup>(1)</sup>	1,011,762,075	962,264,768
Retired Members – Safety <sup>(1)</sup>	481,277,421	489,759,539
Supplemental Retiree Benefit Reserve (SRBR) – 0.5% COLA <sup>(1)</sup>	62,692,144	66,201,495
Contingency Reserve <sup>(1) (3)</sup>	(16,354,734)	(16,354,734)
Valuation Reserves	\$3,529,785,691	\$3,342,121,678
Supplemental Retiree Benefit Reserve (SRBR) <sup>(2)</sup>	121,267,176	119,665,326
COLA Contribution Reserve <sup>(2)</sup>	0	0
Total Reserves	\$3,651,052,866	\$3,461,787,003
Market Stabilization Reserve <sup>(2)</sup>	(25,959,684)	114,324,522
Net Market Value	\$3,625,093,183	\$3,576,111,526

<sup>(1)</sup> Included in valuation value of assets.

Note: Results may not add due to rounding.



<sup>(2)</sup> Not included in valuation value of assets.

<sup>(3)</sup> Since the Contingency Reserve is negative, it is included as part of (i.e., as an offset to) the valuation value of assets.

#### SECTION 3: Supplemental Information for the Kern County Employees' Retirement Association

EXHIBIT H

Development of Unfunded Actuarial Accrued Liability for Year Ended June 30, 2015

		(Amounts in Thousands)
1.	Unfunded actuarial accrued liability at beginning of year	\$2,150,318
2.	Total normal cost at middle of year <sup>(1)</sup>	129,316
3.	Expected administrative expenses	5,000
4.	Expected employer and member contributions (2)	-284,599
5.	Interest for whole year on $(1)$ and half year on $(2) + (3) + (4)$	<u>157,538</u>
6.	Expected unfunded actuarial accrued liability	<u>\$2,157,573</u>
7.	Actuarial (gain)/loss due to all changes:	
	(a) Investment return less than expected	\$34,742
	(b) Actual contributions less than expected	40,253
	(c) Lower than expected individual salary increases	-55,020
	(d) Lower than expected COLA increases	-33,595
	(e) Other experience	<u>-16,566</u>
	(f) Total changes	<u>-\$30,186</u>
8.	Unfunded actuarial accrued liability at end of year	<u>\$2,127,387</u>

<sup>(1)</sup> Excludes administrative expense load.

Note: The sum of items 7(b), (c), (d) and (e) equals the "net gain/(loss) from other experience" shown in Section 2, Chart 10.



<sup>(2)</sup> Includes contributions towards administration expenses.

SECTION 3: Supplemental Information for the Kern County Employees' Retirement Association

EXHIBIT I

Table of Amortization Bases

	Date Established	Source	Initial Amount	Outstanding Balance	Years Remaining	Annual Payment <sup>(1)</sup>
General County						
with Courts	December 31, 2005	Restart Amortization	\$1,137,894,000(2)	\$1,181,734,000	20.5	\$82,905,000
	June 30, 2012	Actuarial Loss	36,175,000	35,501,000	15	3,119,000
	June 30, 2013	Actuarial Loss	13,512,000	13,387,000	16	1,120,000
	June 30, 2014	Actuarial Gain	(37,659,000)	(37,496,000)	17	(3,001,000
	June 30, 2014	Assumption Change	103,045,000	102,599,000	17	8,213,000
	June 30, 2015	Actuarial Gain	(21,641,000)	(21,641,000)	18	(1,662,000
Subtotal	,		, , ,	\$1,274,084,000		\$90,694,000
Districts	December 31, 2005	Restart Amortization	\$88,675,000 <sup>(2)</sup>	\$92,089,000	20.5	\$6,461,000
	June 30, 2012	Actuarial Loss	4,561,000	4,476,000	15	393,000
	June 30, 2013	Actuarial Loss	1,667,000	1,649,000	16	138,000
	June 30, 2014	Actuarial Loss	2,660,000	2,644,000	17	212,000
	June 30, 2014	Assumption Change	7,607,000	7,569,000	17	606,000
	June 30, 2015	Actuarial Gain	(32,000)	(32,000)	18	(2,000
Subtotal	,		, ,	\$108,395,000		\$7,808,000
Safety	December 31, 2005	Restart Amortization	\$606,032,000(2)	\$629,377,000	20.5	\$44,154,000
	June 30, 2012	Actuarial Loss	37,591,000	36,882,000	15	3,240,000
	June 30, 2013	Actuarial Loss	17,808,000	17,639,000	16	1,476,000
	June 30, 2014	Actuarial Gain	(23,991,000)	(23,887,000)	17	(1,912,000
	June 30, 2014	Assumption Change	93,817,000	93,410,000	17	7,477,000
	June 30, 2015	Actuarial Gain	(8,513,000)	(8,513,000)	18	(654,000
Subtotal				\$744,908,000		\$53,781,000
Total KCERA	December 31, 2005	Restart Amortization	\$1,832,601,000(2)	\$1,903,200,000	20.5	\$133,520,000
	June 30, 2012	Actuarial Loss	78,327,000	76,859,000	15	6,752,000
	June 30, 2013	Actuarial Loss	32,987,000	32,675,000	16	2,734,000
	June 30, 2014	Actuarial Gain	(58,990,000)	(58,739,000)	17	(4,701,000
	June 30, 2014	Assumption Change	204,469,000	203,578,000	17	16,296,000
	June 30, 2015	Actuarial Gain	(30,186,000)	(30,186,000)	18	(2,318,000
Grand Total				\$2,127,387,000		\$152,283,000
(1) As of middle o	fugar					

<sup>(1)</sup> As of middle of year.

<sup>(2)</sup> As of June 30, 2011.



## EXHIBIT J Section 415 Limitations

Section 415 of the Internal Revenue Code (IRC) specifies the maximum benefits that may be paid to an individual from a defined benefit plan and the maximum amounts that may be allocated each year to an individual's account in a defined contribution plan.

A qualified pension plan may not pay benefits in excess of the Section 415 limits. The ultimate penalty for noncompliance is disqualification: active participants could be taxed on their vested benefits and the IRS may seek to tax the income earned on the plan's assets.

In particular, Section 415(b) of the IRC limits the maximum annual benefit payable at the Normal Retirement Age to a dollar amount indexed for inflation. The amount of that limit is \$210,000 for 2015 and 2016. Normal Retirement Age for these purposes is age 62. These are the limits in simplified terms. They must be adjusted based on each participant's circumstances for such things as age at retirement, form of benefits chosen and after-tax contributions. Limits could also be affected by the "grandfather" election under Section 415(b)(10).

Benefits for members in the legacy tiers in excess of the limits may be paid through a qualified governmental excess plan that meets the requirements of Section 415(m).

Legal Counsel's review and interpretation of the law and regulations should be sought on any questions in this regard.

Contributions rates determined in this valuation have not been reduced for the Section 415 limitations. Actual limitations will result in gains as they occur.



#### **EXHIBIT K**

#### **Definitions of Pension Terms**

The following list defines certain technical terms for the convenience of the reader:

## Assumptions or Actuarial Assumptions:

The estimates on which the cost of the Plan is calculated including:

- (a) <u>Investment return</u> the rate of investment yield that the Plan will earn over the long-term future;
- (b) <u>Mortality rates</u> the death rates of employees and pensioners; life expectancy is based on these rates;
- (c) <u>Retirement rates</u> the rate or probability of retirement at a given age; and
- (d) <u>Turnover rates</u> the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.

#### Normal Cost:

The amount of contributions required to fund the cost allocated to the current year of service.

### Actuarial Accrued Liability For Actives:

The equivalent of the accumulated normal costs allocated to the years before the valuation date.

## Actuarial Accrued Liability For Pensioners:

The single sum value of lifetime benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.

## Unfunded Actuarial Accrued Liability:

The extent to which the actuarial accrued liability of the Plan exceeds (or is exceeded by) the assets of the Plan.



#### SECTION 3: Supplemental Information for the Kern County Employees' Retirement Association

Amortization of the Unfunded Actuarial Accrued Liability:

Payments made over a period of years equal in value to the Plan's unfunded actuarial

accrued liability.

**Investment Return:** 

The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the market gains and losses to avoid significant swings in the value of assets from one year to the next.



EXHIBIT I		
Summary of Actuarial Valuation Results		
The valuation was made with respect to the following data supplied to us:		
1. Retired members as of the valuation date (including 1,107 beneficiaries in pay status)		7,599
2. Members inactive during year ended June 30, 2015 with vested rights*		2,053
3. Members active during the year ended June 30, 2015		8,481
The actuarial factors as of the valuation date are as follows (amounts in 000s):		
1. Normal cost		\$128,501
2. Present value of future benefits		6,653,226
3. Present value of future normal costs		996,053
4. Actuarial accrued liability**		5,657,173
Retired members and beneficiaries	\$3,452,471	
Inactive members with vested rights*	155,040	
Active members	2,049,662	
5. Valuation value of assets*** (\$3,625,093 at market value as reported by Retirement Association)		3,529,786
6. Unfunded actuarial accrued liability		\$2,127,387

<sup>\*</sup> Includes terminated members due a refund of member contributions.



<sup>\*\*</sup> Excludes liabilities held for SRBR Reserves Unallocated to 0.5% COLA benefits.

<sup>\*\*\*</sup>Excludes assets for SRBR Reserves Unallocated to 0.5% COLA benefits and COLA Contribution Reserve. Excludes assets for Contingency Reserve (unless the Contingency Reserve is negative).

#### **EXHIBIT I (continued)**

#### **Summary of Actuarial Valuation Results**

Th	e determination of the recommended average employer contribution is as follows		
(ar	mounts in 000s):	Dollar Amount	% of Payroll
1.	Total normal cost	\$128,501	23.08%
2.	Expected employee contributions	<u>-33,459</u>	<u>-6.01%</u>
3.	Employer normal cost: $(1) + (2)$	\$95,042	17.07%
4.	Amortization of unfunded actuarial accrued liability	156,113	<u>28.04%</u>
5.	Total recommended average employer contribution: (3) + (4)	\$251,155	45.11%
6.	Projected compensation	\$556,824	



#### **EXHIBIT II**

#### **Actuarial Assumptions and Methods**

**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, 2010 through June 30, 2013 Actuarial Experience Study and June 30, 2014 Economic Actuarial Assumptions

Reports both dated June 30, 2014.

**Economic Assumptions** 

**Net Investment Return:** 7.50%, 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:** 7.50%, compounded semi-annually.

**Consumer Price Index:** 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.



#### **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:

<b>Years of Service</b>	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.



#### **Demographic Assumptions**

#### **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.

The RP-2000 mortality tables projected with Scale BB to 2012 and adjusted as shown above reasonable reflects the projected future mortality experience of the measurement date. The additional projection to 2023 is a provision for future mortality improvement.

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.



#### **Termination Rates Before Retirement:**

Rate (%)
Mortality

		wortanty		
General		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.



#### **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	0.38	1.35
55	0.33	2.50
60	0.38	3.60
65	0.40	0.00
70	0.00	0.00

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

<sup>(2) 100%</sup> of Safety disabilities are assumed to be service connected (duty) disabilities.

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

Rate (%)
Withdrawal\*

	tnarawai <sup>-</sup>	
Years of Service	General	Safety
0	18.00	8.00
1	14.00	5.00
2	10.00	3.50
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>\*</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

williurawai	
General	Safety
100	100
100	100
100	100
100	100
100	100
50	60
47	46
44	44
41	36
38	34
35	32
32	27
30	24
28	21
26	18
24	15
22	12
20	9
18	7
16	5
14	0
12	0
10	0
8	0
6	0
4	0
2	0
0	0
	General       100       100       100       100       100       50       47       44       41       38       35       32       30       28       26       24       22       20       18       16       14       12       10       8       6       4



#### **Retirement Rates:**

			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	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



#### **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 55% and 60% of future General and Safety deferred vested members, respectively, will continue to work for a reciprocal employer. For reciprocals, we

assume 4.25% compensation increases per annum.

**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 KCERA as of the valuation date.

75% of male members and 55% of female members are assumed to be married at pre-**Percent Married:** 

retirement death or retirement. There is no explicit assumption for children's benefits.

**Age of Spouse:** Female (or male) spouses are 3 years younger (or older) than their spouses.



#### **Actuarial Methods**

Actuarial Cost Method: Entry Age Actuarial Cost

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, as if the current benefit formulas for each individual have always been

in effect (i.e., "replacement life within a tier").

**Actuarial Value of Assets:** Market value of assets (MVA) less unrecognized returns in each of the last nine semi-

annual accounting periods. Unrecognized returns are equal to the difference between the actual market return and the expected return on the market value, and are

recognized semi-annually over a five-year period. The actuarial value of assets (AVA)

is limited by a 50% corridor; the AVA cannot be less than 50% of MVA, nor greater than 150% of MVA. 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.

**Valuation Value of Assets:** The Actuarial Value of Assets reduced by the value of the non-valuation reserves

(excluding the Contingency Reserve if it is negative).

**Amortization Policy:** The UAAL, (i.e., the difference between the Actuarial Accrued Liability and the

Valuation Value of Assets), as of June 30, 2011 shall be amortized separately from

any future changes in UAAL over a period of 24.5 years from June 30, 2011.

Any new UAAL as a result of actuarial gains or losses identified in the annual

valuation as of June 30 will be amortized over a period of 18 years.

Any new UAAL as a result of change in actuarial assumptions or methods will be

amortized over a period of 18 years.

Unless an alternative amortization period is recommended by the Actuary and accepted by the Board based on the results of an actuarial analysis:

a. with the exception noted in b., below, the change in UAAL as a result of any plan amendments will be amortized over a period of 15 years or less;



- b. the increase in UAAL resulting from a temporary retirement incentive, including the impact of benefits resulting from additional service permitted in Section 31641.04 of the 1937 CERL (Golden Handshake), will be funded over a period of up to 5 years. For Golden Handshakes, the employer has the choice of two methods:
  - i. Payment in full for the UAAL attributable to the Golden Handshake in the first month of the fiscal year following the fiscal year in which the Golden Handshake was granted.
  - ii. Payment according to a five-year amortization period which will be invoiced (payable in 30 days) to the employer in the first month of the fiscal year following the fiscal year in the which the Golden Handshake was granted. The amortization schedule will be based upon the valuation interest rate used in the most recently completed valuation at the time that the amortization schedule is created. The employer may complete payment of the Golden Handshake at any time during the five-year amortization period.

If the amortization method is used, then the outstanding balance will generally be recorded as a receivable asset to be included with the Actuarial Value of Assets. All Golden Handshakes provided by an employer during any fiscal year will be bundled together and will be invoiced in one transaction in the first month following the fiscal year in which the Golden Handshakes were granted.

UAAL shall be amortized over "closed" amortization periods so that the amortization period for each layer decreases by one year with each actuarial valuation.

UAAL shall be amortized as a level percentage of payroll so that the amortization amount in each year during the amortization period shall be expected to be a level percentage of covered payroll, taking into consideration the current assumption for general payroll increase.

If an overfunding or "surplus" exists (i.e., the Valuation Value of Assets exceeds the Actuarial Accrued Liability, so that the total of all UAAL amortization layers becomes negative), such surplus and any subsequent surpluses will be amortized over an "open" amortization period of 30 years. Any prior UAAL amortization layers will be considered fully amortized, and any subsequent UAAL will be amortized over 18 years as the first of a new series of amortization layers.

These amortization policy components will apply separately to each of KCERA's UAAL cost sharing groups.

## Changes in Actuarial Assumptions and Methods:

There have been no changes in actuarial assumptions or methods since the previous valuation.

#### **EXHIBIT III**

#### **Summary of Plan Provisions**

This exhibit summarizes the major provisions of the KCERA included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

, ,	
Membership Eligibility:	All permanent employees of Kern County or participating Special Districts scheduled to work 50% or more of the required regular standard hours are eligible to become a member of the Retirement Association subject to classification below:
General Tier I	All General members hired by the County prior to October 27, 2007 (prior to July 5, 2008 for Prosecutors), hired by North of the River Sanitation District prior to October 29, 2007, hired by the Kern County Water Agency prior to January 1, 2010, hired by Berrenda Mesa Water District prior to January 12, 2010, hired by San Joaquin Valley Unified Air Pollution Control District prior to July 31, 2012, hired by the Courts prior to March 12, 2011, or hired by all other districts prior to January 1, 2013.
General Tier IIA	All General members hired by the County on or after October 27, 2007, hired by North of the River Sanitation District on or after October 29, 2007, hired by the Kern County Water Agency on or after January 1, 2010, hired by Berrenda Mesa Water District on or after January 12, 2010, hired by San Joaquin Valley Unified Air Pollution Control District on or after July 31, 2012, or hired by the Courts on or after March 12, 2011; and hired prior to January 1, 2013.
General Tier IIB	All General members hired by the County or districts (other than West Side Recreation & Park) on or after January 1, 2013.
General Tier III	All General members hired by West Side Recreation & Park on or after January 1, 2013.
Safety Tier I	All members employed in active law enforcement, active fire suppression, probation, detention or criminal investigation hired prior to March 27, 2012.



Safety Tier IIA	All members employed in active law enforcement, active fire suppression, probation, detention or criminal investigation hired on or after March 27, 2012 and prior to January 1, 2013.
Safety Tier IIB	All member employee in active law enforcement, active fire suppression, probation, detention or criminal investigation hired on or after January 1, 2013.
Final Compensation for Benefit Determination:	
General Tiers I and IIA, Safety Tiers I and IIA	Highest consecutive twelve months of compensation earnable (§31462.1) (FAS1).
General Tier IIB, General Tier III and Safety Tier IIB	Highest consecutive thirty-six months of pensionable compensation (§7522.32 and §7522.34) (FAS3).
<b>Compensation Limit:</b>	
Non-General Tier III	For members with membership dates on or after July 1, 1996, Compensation Earnable is limited to Internal Revenue Code Section 401(a)(17). The limit for the Plan Year beginning July 1, 2015 is \$265,000. The limit is indexed for inflation on an annual basis.
General Tier III	Pensionable Compensation is limited to \$117,020 for 2015 (\$140,424, if not enrolled in Social Security). The limit is indexed for inflation on an annual basis.
Service:	Years of service. (Yrs)
<b>Service Retirement Eligibility:</b>	
General Tiers I, IIA and IIB	Age 50 with 10 years of service credit, or age 70 regardless of service credit, or after 30 years of service credit, regardless of age (§31672).
General Tier III	Age 52 with 5 years of service (§7522.20(a)).
Safety Tiers I, IIA and IIB	Age 50 with 10 years of service credit, or age 70 regardless of service credit, or after 20 years of service credit, regardless of age (§31663.25).



#### **Benefit Formula:**

	Retirement Age	Benefit Formula*
General Tier I (§31676.17)	50	(2.00%xFAS1 – 1/3%x2.00%x\$350 x 12) x Yrs
	55	(2.50%xFAS1 – 1/3%x2.50%x\$350 x 12) x Yrs
	60	(3.00% xFAS1 – 1/3% x3.00% x\$350 x 12) x Yrs
	62 and over	(3.00%xFAS1 – 1/3%x3.00%x\$350 x 12) x Yrs
	Retirement Age	Benefit Formula
General Tier I** (§31676.14)	50	1.48% x FAS1 x Yrs
	55	1.95% x FAS1 x Yrs
	60	2.44% x FAS1 x Yrs
	62 and over	2.61% x FAS1 x Yrs
	Retirement Age	Benefit Formula*
General Tier IIA (§31676.01)	50	(0.79%xFAS1 – 1/3x0.79%x\$350 x 12) x Yrs
	55	(0.99% xFAS1 – 1/3x1.00% x\$350 x 12) x Yrs
	60	(1.28%xFAS1 – 1/3x1.28%x\$350 x 12) x Yrs
	62	(1.39% xFAS1 – 1/3x1.39% x\$350 x 12) x Yrs
	65 and over	(1.62% xFAS1 – 1/3x1.62% x\$350 x 12) x Yrs
	Retirement Age	Benefit Formula*
General Tier IIB (§31676.01)	50	(0.79% xFAS3 – 1/3x0.79% x\$350 x 12) x Yrs
	55	(0.99%xFAS3 – 1/3x1.00%x\$350 x 12) x Yrs
	60	(1.28% xFAS3 – 1/3x1.28% x\$350 x 12) x Yrs
	62	(1.39%xFAS3 – 1/3x1.39%x\$350 x 12) x Yrs
* Panafita for some District Mom	65 and over	(1.62%xFAS3 – 1/3x1.62%x\$350 x 12) x Yrs

<sup>\*</sup> Benefits for some District Members are not integrated with Social Security.

<sup>\*\*</sup> Two General Districts, Berrenda Mesa and Inyokern, have adopted Section 31676.17 on a prospective basis only as of January 1, 2005, but have Section 31676.14 for service prior to January 1, 2005.



	Retirement Age	Benefit Formula
General Tier III (§7522.20(a))	52	1.00% x FAS3 x Yrs
	55	1.30% x FAS3 x Yrs
	60	1.80% x FAS3 x Yrs
	62	2.00% x FAS3 x Yrs
	65	2.30% x FAS3 x Yrs
	67 and over	2.50% x FAS3 x Yrs
	Retirement Age	Benefit Formula
Safety Tier I (§31664.1)	50	(3.00% x FAS1 - 1/3 x 3.00% x \$350 x 12) x Yrs
	55	(3.00% x FAS1 - 1/3 x 3.00% x \$350 x 12) x Yrs
	60 and over	(3.00% x FAS1 - 1/3 x 3.00% x \$350 x 12) x Yrs
	Retirement Age	Benefit Formula
Safety Tier IIA (§31664)	50	(2.00% x FAS1 - 1/3 x 2.00% x \$350 x 12) x Yrs
	55	(2.62% x FAS1 - 1/3 x 2.62% x \$350 x 12) x Yrs
	60 and over	(2.62% x FAS1 - 1/3 x 2.62% x \$350 x 12) x Yrs
	Retirement Age	Benefit Formula
Safety Tier IIB (§31664)	50	(2.00% x FAS3 - 1/3 x 2.00% x \$350 x 12) x Yrs
	55	(2.62% x FAS3 - 1/3 x 2.62% x \$350 x 12) x Yrs
	60 and over	(2.62% x FAS3 - 1/3 x 2.62% x \$350 x 12) x Yrs

#### **Maximum Benefit:**

Non-General Tier III 100% of final compensation (§31676.14, §31676.17, §31676.01, §31664.1,§31664).

General Tier III None



**Non-Service Connected Disability:** 

Eligibility Five years of service (§31720).

Benefit Formula 20% of Final Compensation plus 2% of Final Compensation for each full year of

service in excess of five years, not to exceed 40% of Final Compensation (§31727.7).

**Service Connected Disability:** 

Eligibility No age or service requirements (§31720).

Benefit Formula 50% of Final Compensation (§31727.4).

**Pre-Retirement Death:** 

Non Service Connected (Not Vested) Before Eligible to Retire

Eligibility None.

Benefit Refund of employee contributions with interest plus one month's eligible

compensation for each year of service to a maximum of six months' compensation

(§31781).

Non Service Connected (Vested)

Eligibility Five years of service.

Benefit 60% of the greater of Service Retirement or Non Service Connected Disability

Retirement benefit payable to surviving eligible spouse or eligible children (§31765.1, §31781.1), in lieu of above. Additionally, the spouse may choose a combined benefit

of:

• A lump sum payment of up to six months' compensation (see above), and

• A monthly (60%) benefit reduced by actuarial equivalent of the lump sum

payment (§31781.3).

Service Connected Death 50% of Final Compensation or 100% of Service Retirement benefit, if greater,

payable to spouse or minor children (§31787). In addition, Safety members are

entitled to benefits under Sections 31787.5 and 31787.6.



<b>Death After Retirement:</b>	
Service Retirement or Non Service	
Connected Disability Retirement	Unless another option was selected at retirement, 60% of member's unmodified allowance continued to eligible spouse (§31760.1). An eligible spouse is a surviving spouse who was married to the member at least one year prior to the day of retirement (§31760.1), or, at least two years prior to the date of death and has attained age 55 on or prior to the date of death (§31760.2).
Service Connected Disability	
Retirement	Unless another option was selected at retirement, 100% of member's unmodified allowance continued to eligible spouse (§31786).
Withdrawal Benefits:	
	Refund of accumulated employee contributions with interest (§31628); or if accumulated employee contributions left on deposit, entitled to earned benefits commencing at any time after meeting eligibility criteria to retire (§31629.5 and §31700).
Post-retirement	
Cost-of-Living Benefits:	Future changes based on changes to the Consumer Price Index to a maximum of 2.50% per year. (§31870.4)
Supplemental Retiree Benefit	
Reserve:	The Association provides Supplemental Retiree Benefit Reserve benefits for eligible retirees. These benefits have been excluded from this valuation.



<b>Member Contributions:</b>	Please refer to Appendix A for the specific rates. Members in General Tiers I (excluding San Joaquin Valley Unified Air Pollution Control District) and IIA and Safety Tiers I and IIA do not contribute towards the cost-of-living benefits.	
General Tier I (non-SJVAPCD)		
Basic	Entry age based rates that provide for an average annuity at age 55 equal to 1/100 of FAS. (§31621.8)	
General Tier I (SJVAPCD)		
Basic	Entry age based rates that provide for 39% of total Normal Cost Rate.	
General Tier IIA		
Basic	Entry age based rates that provide for an average annuity at age 60 equal to 1/120 of FAS. (§31621)	
General Tiers IIB and III	Non-entry age based rates that provide for 50% of total Normal Cost Rate.	
Safety Tier I		
Basic	Entry age based rates that provide for an average annuity at age 50 equal to 1/100 of FAS. (§31639.25)	
Supplemental	Entry age based rates that provide for an average annuity at age 50 equal to 1/200 of FAS. (Resolution #2004-144)	
Safety "3" Tier I		
Basic and Supplemental	At all entry ages, the member contribution rate for the above Safety Tier I members who enter the plan at age 27.	
Safety Tier IIA		
Basic	Entry age based rates that provide for an average annuity at age 50 equal to 1/100 of FAS. (§31639.25)	
Safety "3" Tier IIA		
Basic	At all entry ages, the member contribution rate for the above Safety Tier IIA members who enter the plan at age 27.	
Safety Tier IIB	Non-entry age based rates that provide for 50% of total Normal Cost Rate.	



Other Information:	Safety Tier I and Tier IIA members with 30 or more years of service are exempt from paying member contributions. Various other exemptions for member contributions are outlined on pages 20 through 23.
Plan Changes:	There has been a change in plan provisions since the previous valuation. The member contribution rates for the SJVAPCD were previously the same as those for non-SJVAPCD members described on the previous page.

#### **NOTE:**

The summary of major plan provisions is designed to outline principal plan benefits as interpreted for purposes of the actuarial valuation. If the Association should find the plan summary not in accordance with the actual provisions, the Association should alert the actuary so they can both be sure the proper provisions are valued.

Appendix A
Member Contribution Rates

# General Tier I Members' (non-SJVAPCD) Contribution Rates from the June 30, 2015 Actuarial Valuation (Expressed as a Percentage of Monthly Compensation)

	Integ	Non-integrated	
Entry Age	First \$350 of Monthly Compensation	Over \$350 of Monthly Compensation	All Compensation
16	4.14%	6.21%	6.21%
17	4.22%	6.33%	6.33%
18	4.30%	6.45%	6.45%
19	4.38%	6.57%	6.57%
20	4.46%	6.69%	6.69%
21	4.54%	6.81%	6.81%
22	4.63%	6.94%	6.94%
23	4.71%	7.06%	7.06%
24	4.79%	7.19%	7.19%
25	4.89%	7.33%	7.33%
26	4.97%	7.46%	7.46%
27	5.07%	7.60%	7.60%
28	5.16%	7.74%	7.74%
29	5.25%	7.88%	7.88%
30	5.35%	8.02%	8.02%
31	5.45%	8.17%	8.17%
32	5.55%	8.32%	8.32%
33	5.65%	8.47%	8.47%
34	5.75%	8.63%	8.63%
35	5.86%	8.79%	8.79%
36	5.97%	8.96%	8.96%
37	6.09%	9.13%	9.13%
38	6.20%	9.30%	9.30%
39	6.32%	9.48%	9.48%
40	6.45%	9.67%	9.67%
40	6.45%	9.67%	9.67%



## General Tier I Members' (non-SJVAPCD) Contribution Rates from the June 30, 2015 Actuarial Valuation (Expressed as a Percentage of Monthly Compensation)

	Integ	Non-integrated	
Entry Age	First \$350 of Monthly Compensation	Over \$350 of Monthly Compensation	All Compensation
41	6.57%	9.85%	9.85%
42	6.69%	10.04%	10.04%
43	6.81%	10.22%	10.22%
44	6.93%	10.40%	10.40%
45	7.05%	10.58%	10.58%
46	7.17%	10.75%	10.75%
47	7.27%	10.91%	10.91%
48	7.37%	11.05%	11.05%
49	7.46%	11.19%	11.19%
50	7.54%	11.31%	11.31%
51	7.59%	11.38%	11.38%
52	7.61%	11.42%	11.42%
53	7.62%	11.43%	11.43%
54 & Over	7.56%	11.34%	11.34%

Interest: 7.50% COLA: None

Administrative Expense: 0.11% of payroll added to the Basic rates.

Salary Increase: See Exhibit II.

Mortality: 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.

Note: These rates are determined before any pickups by the employer.



# General Tier I Members' (SJVAPCD) Contribution Rates from the June 30, 2015 Actuarial Valuation (Expressed as a Percentage of Monthly Compensation)

Entry Age	All Compensation	
16	6.88%	
17	7.02%	
18	7.02%	
19	7.13%	
20	7.42%	
21		
22	7.55%	
23	7.69%	
24	7.83%	
	7.97%	
25	8.13%	
26	8.27%	
27	8.43%	
28	8.58%	
29	8.74%	
30	8.89%	
31	9.06%	
32	9.23%	
33	9.39%	
34	9.57%	
35	9.75%	
36	9.94%	
37	10.13%	
38	10.31%	
39	10.51%	
40	10.72%	
41	10.92%	
42	11.14%	
43	11.34%	



## General Tier I Members' (SJVAPCD) Contribution Rates from the June 30, 2015 Actuarial Valuation (Expressed as a Percentage of Monthly Compensation)

Entry	All	
Age	Compensation	
44	11.54%	
45	11.73%	
46	11.92%	
47	12.10%	
48	12.26%	
49	12.41%	
50	12.55%	
51	12.62%	
52	12.67%	
53	12.68%	
54 & Over	12.58%	

Interest: 7.50% COLA: None

Administrative Expense: 0.11% of payroll added to the Basic rates.

Salary Increase: See Exhibit II.

Mortality: 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.

Note: These rates are determined before any pickups by the employer.



## General Tier IIA Members' Contribution Rates from the June 30, 2015 Actuarial Valuation (Expressed as a Percentage of Monthly Compensation)

	Integ	Integrated		
Entry Age	First \$350 of Monthly Compensation	Over \$350 of Monthly Compensation	All Compensation	
16	2.97%	4.45%	4.45%	
17	3.03%	4.54%	4.54%	
18	3.08%	4.62%	4.62%	
19	3.14%	4.71%	4.71%	
20	3.19%	4.79%	4.79%	
21	3.25%	4.88%	4.88%	
22	3.31%	4.97%	4.97%	
23	3.37%	5.06%	5.06%	
24	3.44%	5.16%	5.16%	
25	3.50%	5.25%	5.25%	
26	3.57%	5.35%	5.35%	
27	3.63%	5.45%	5.45%	
28	3.70%	5.55%	5.55%	
29	3.77%	5.65%	5.65%	
30	3.83%	5.75%	5.75%	
31	3.91%	5.86%	5.86%	
32	3.97%	5.96%	5.96%	
33	4.05%	6.07%	6.07%	
34	4.12%	6.18%	6.18%	
35	4.20%	6.30%	6.30%	
36	4.27%	6.41%	6.41%	
37	4.35%	6.53%	6.53%	
38	4.43%	6.65%	6.65%	
39	4.51%	6.77%	6.77%	
40	4.60%	6.90%	6.90%	
41	4.69%	7.03%	7.03%	
42	4.77%	7.16%	7.16%	
43	4.87%	7.30%	7.30%	
44	4.96%	7.44%	7.44%	



## General Tier IIA Members' Contribution Rates from the June 30, 2015 Actuarial Valuation (Expressed as a Percentage of Monthly Compensation)

	Integ	Non-integrated	
Entry Age	First \$350 of Monthly Compensation	Over \$350 of Monthly Compensation	All Compensation
45	5.05%	7.58%	7.58%
46	5.15%	7.73%	7.73%
47	5.25%	7.87%	7.87%
48	5.34%	8.01%	8.01%
49	5.43%	8.15%	8.15%
50	5.53%	8.30%	8.30%
51	5.62%	8.43%	8.43%
52	5.70%	8.55%	8.55%
53	5.77%	8.66%	8.66%
54	5.85%	8.77%	8.77%
55	5.91%	8.87%	8.87%
56	5.95%	8.92%	8.92%
57	5.97%	8.95%	8.95%
58	5.97%	8.96%	8.96%
59 & Over	5.93%	8.89%	8.89%

Interest: 7.50% COLA: None

Administrative Expense: 0.11% of payroll added to the Basic rates.

Salary Increase: See Exhibit II.

Mortality: 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.

Note: These rates are determined before any pickups by the employer.



## General Tier IIB Members' Contribution Rates from the June 30, 2015 Actuarial Valuation (Expressed as a Percentage of Monthly Compensation)

	Integrated		Non-integrated	
All Members	First \$350 of Monthly Compensation	Over \$350 of Monthly Compensation	All Compensation	
Basic	3.18%	4.77%	4.77%	
2% COLA	0.63%	0.95%	0.95%	
0.5% COLA	0.19%	<u>0.29%</u>	0.29%	
Total	4.01%	6.01%	6.01%	

The General Tier IIB member contribution rate is 50% of the Normal Cost rate. The Basic rates shown above also includes an administrative expense load of 0.11% of payroll.

## General Tier III Members' Contribution Rates from the June 30, 2015 Actuarial Valuation (Expressed as a Percentage of Monthly Compensation)

All	
Members	All Compensation <sup>(1)</sup>
 Basic	9.74%
2% COLA	1.66%
0.5% COLA	0.00%
Total	11.40%

The General Tier III member contribution rate is 50% of the Normal Cost rate. The Basic rates shown above also includes an administrative expense load of 0.11% of payroll.



<sup>(1)</sup> It is our understanding that in the determination of pension benefits under the General Tier III formula, the compensation that can be taken into account for 2016 is \$117,020 (reference: Section 7522.10). These amounts should be adjusted for changes to the Consumer Price Index for All Urban Consumers after 2016 (reference: Section 7522.10(d)).

Safety Tier I Members' (Excluding "Safety 3" Members) Contribution Rates from the June 30, 2015 Actuarial Valuation (Expressed as a Percentage of Monthly Compensation)

#### Integrated

Entry Age	First \$350 of Monthly Compensation	Over \$350 of Monthly Compensation
16	7.36%	11.04%
17	7.50%	11.25%
18	7.64%	11.46%
19	7.79%	11.68%
20	7.94%	11.91%
21	8.09%	12.14%
22	8.25%	12.37%
23	8.41%	12.61%
24	8.57%	12.85%
25	8.73%	13.10%
26	8.91%	13.36%
27	9.08%	13.62%
28	9.27%	13.90%
29	9.45%	14.18%
30	9.64%	14.46%
31	9.83%	14.74%
32	10.02%	15.03%
33	10.21%	15.32%
34	10.41%	15.62%
35	10.62%	15.93%
36	10.83%	16.24%
37	11.04%	16.56%
38	11.26%	16.89%
39	11.47%	17.21%
40	11.67%	17.51%
41	11.87%	17.80%
42	11.99%	17.99%
43	12.09%	18.14%
44	12.18%	18.27%
45	12.26%	18.39%
46	12.32%	18.48%



## Safety Tier I Members' (Excluding "Safety 3" Members) Contribution Rates from the June 30, 2015 Actuarial Valuation (Expressed as a Percentage of Monthly Compensation)

#### Integrated

Entry Age	First \$350 of Monthly Compensation	Over \$350 of Monthly Compensation	
47	12.27%	18.40%	
48	12.14%	18.21%	
49 & Over	11.91%	17.87%	
Interest:	7.50%		
COLA:	None		
Administrative Expenses:	0.11% of payroll added to the Basic rates.		
Salary Increase:	See Exhibit II.		
Mortality:	RP-2000 Combined Healthy Mortality Table projected with scale BB to 2023 set back one year for males and females weighted 30% male and 70% female.		
Note:	These rates are determined before any pickups by the employer.		



#### "Safety 3" Safety Tier I Members' Contribution Rates from the June 30, 2015 Actuarial Valuation (Expressed as a Percentage of Monthly Compensation)

#### Integrated

Entry Age
First \$350 of Monthly
Compensation

Every
9.08%
Over \$350 of Monthly Compensation
13.62%

Interest: 7.50% COLA: None

Administrative Expenses: 0.11% of payroll added to the Basic rates.

Salary Increase: See Exhibit II.

Mortality: RP-2000 Combined Healthy Mortality Table projected with scale BB to 2023 set back one year for males and females

weighted 30% male and 70% female.

Note: Beginning at various dates throughout 2007, certain Safety bargaining units converted to a new schedule of contribution

rates, referred to as "Safety 3" contribution rates. For employees falling under this category and hired after the appropriate date (which varies by bargaining unit), the contribution rate will be a flat percentage of pay regardless of entry age. Based on the most recent Actuarial Experience Study, the contribution rates shown above are based on an entry age of 27. This is expected to provide for the same value of contributions that would be made based on the specific entry age based rates shown

on the previous two pages. These rates are determined before any pickups by the employer.



## Safety Tier IIA Members' (Excluding "Safety 3" Members) Contribution Rates from the June 30, 2015 Actuarial Valuation (Expressed as a Percentage of Monthly Compensation)

#### Integrated

	•	•
Entry Age	First \$350 of Monthly Compensation	Over \$350 of Monthly Compensation
16	4.93%	7.40%
17	5.03%	7.54%
18	5.12%	7.68%
19	5.22%	7.83%
20	5.32%	7.98%
21	5.42%	8.13%
22	5.52%	8.28%
23	5.63%	8.44%
24	5.74%	8.61%
25	5.85%	8.77%
26	5.96%	8.94%
27	6.08%	9.12%
28	6.20%	9.30%
29	6.33%	9.49%
30	6.45%	9.68%
31	6.58%	9.87%
32	6.71%	10.06%
33	6.83%	10.25%
34	6.97%	10.45%
35	7.10%	10.65%
36	7.24%	10.86%
37	7.39%	11.08%
38	7.53%	11.30%
39	7.67%	11.51%
40	7.81%	11.71%
41	7.93%	11.90%
42	8.02%	12.03%
43	8.09%	12.13%
44	8.14%	12.21%
45	8.20%	12.30%
46	8.24%	12.36%



## Safety Tier IIA Members' (Excluding "Safety 3" Members) Contribution Rates from the June 30, 2015 Actuarial Valuation (Expressed as a Percentage of Monthly Compensation)

#### Integrated

Entry Age	First \$350 of Monthly Compensation	Over \$350 of Monthly Compensation
47	8.20%	12.30%
48	8.12%	12.18%
49 & Over	7.97%	11.95%
Interest:	7.50%	
COLA:	None	
Administrative Expenses:	0.11% of payroll added to the Basic rates.	
Salary Increase:	See Exhibit II.	
Mortality:	RP-2000 Combined Healthy Mortality Table projected with scale BB to 2023 set back one year for males and females weighted 30% male and 70% female.	
Note:	These rates are determined before any pickups by the employer.	

## "Safety 3" Safety Tier IIA Members' Contribution Rates from the June 30, 2015 Actuarial Valuation (Expressed as a Percentage of Monthly Compensation)

### Integrated

Entry Age	First \$350 of Monthly Compensation	Over \$350 of Monthly Compensation
Every	6.08%	9.12%
Interest:	7.50%	
COLA:	None	
Administrative Expenses:	0.11% of payroll added to the Basic rates.	
Salary Increase:	See Exhibit II.	
Mortality:	RP-2000 Combined Healthy Mortality Table projected with so weighted 30% male and 70% female.	ale BB to 2023 set back one year for males and females
Note:	Beginning at various dates throughout 2007, certain Safety bargaining units converted to a new schedule of contribution rates, referred to as "Safety 3" contribution rates. For employees falling under this category and hired after the appropriate date (which varies by bargaining unit), the contribution rate will be a flat percentage of pay regardless of entry age. Based on the most recent Actuarial Experience Study, the contribution rates shown above are based on an entry age of 27. This is expected to provide for the same value of contributions that would be made based on the specific entry age based rates shown on the previous page. These rates are determined before any pickups by the employer.	



#### Safety Tier IIB Members' Contribution Rates from the June 30, 2015 Actuarial Valuation (Expressed as a Percentage of Monthly Compensation)

#### Integrated

All Members	First \$350 of Monthly Compensation	Over \$350 of Monthly Compensation
Basic	7.11%	10.67%
2% COLA	1.67%	2.50%
0.5% COLA	<u>0.53%</u>	<u>0.79%</u>
Total	9.31%	13.96%

The Safety Tier IIB member contribution rate is 50% of the Normal Cost rate. The Basic rates shown above also includes an administrative expense load of 0.11% of payroll.

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