

### **Actuarial Valuation**

December 31, 2006

Ву

Karen I. Steffen

Fellow, Society of Actuaries
Enrolled Actuary
Member, American Academy of Actuaries

and

Daniel R. Wade

Fellow, Society of Actuaries
Enrolled Actuary
Member, American Academy of Actuaries



1301 Fifth Avenue, Suite 3800 Seattle, WA 98101-2605 Tel +1 206 624.7940 Fax +1 206 623.3485 www.milliman.com

April 4, 2007

Retirement Board Kern County Employees' Retirement Association 1115 Truxtun Avenue, First Fl. Bakersfield, CA 93301

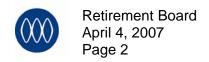
#### Dear Members of the Board:

At your request, we have made an actuarial valuation as of December 31, 2006 of the Kern County Employees' Retirement Association (KCERA). The major findings of the valuation are contained in this report, which reflects the benefit provisions and contribution rates in effect as of December 31, 2006.

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the KCERA staff. This information includes, but is not limited to, statutory provisions, employee data and financial information. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the principles prescribed by the Actuarial Standards Board (ASB) and the Code of Professional Conduct and Qualification Standards for Public Statements of Actuarial Opinion of the American Academy of Actuaries.

We further certify that all costs, liabilities, rates of interest, and other factors for the programs have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the programs and reasonable expectations). The assumptions used in this report, as summarized in Appendix A, are based on the 2005 Experience Study report adopted by the Board on April 12, 2006. These assumptions are the same as our December 31, 2005 report except for the deferral age for vested termination. The Retirement Board has the final decision regarding the appropriateness of the assumptions. The emerging costs will vary from those presented in this report to the extent that actual experience differs from that projected by the actuarial assumptions.



Actuarial computations presented in this report are for purposes of determining the recommended funding amounts for the Association. Actuarial computations under GASB Statements No. 25 and 27 are for purposes of fulfilling financial accounting requirements and are found in Section 7 of this report. The computations for these two purposes may differ as disclosed in our report. The calculations in this report have been made on a basis consistent with our understanding of the Association's funding requirements and goals, as well as of GASB Statements No. 25 and 27. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes. Any distribution of the enclosed report must be in its entirety including this cover letter, unless prior written consent is obtained from Milliman.

Milliman's work product was prepared exclusively for the use or benefit of KCERA for a specific and limited purpose. It is a complex, technical analysis that assumes a high level of knowledge concerning KCERA's operations, and uses KCERA's data, which Milliman has not audited. Any third party recipient of Milliman's work product who desires professional guidance should not rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs.

We would like to express our appreciation to Anne Holdren, Executive Director of the Association, and to members of her staff, who gave substantial assistance in supplying the data on which this report is based.

We respectfully submit the following report, and we look forward to discussing it with you.

We, Daniel R. Wade and Karen I. Steffen are members of the American Academy of Actuaries, Enrolled Actuaries and Fellows of the Society of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,

Daniel R. Wade, FSA, EA, MAAA Consulting Actuary

DRW/KIS/nlo

Karen I. Steffen, FSA, EA, MAAA Consulting Actuary

Kan D. Sty

#### **Table of Contents**

		Page
Section 1:	Summary of the Findings	1
Exhibit 1:	Summary of Recommendations	3
Section 2:	Scope of the Report	10
Section 3:	Assets	12
Exhibit 2:	Statement of Plan Net Assets For the Years Ended December 31, 2005 and 2006	16
Exhibit 3:	Statement of Changes in Plan Net Assets For the Years Ended December 31, 2005 and 2006	17
Exhibit 4:	5-Year Smoothing of Gains and Losses on Market Value - History	18
Exhibit 5:	5-Year Smoothing – Development of Actuarial Valuation Assets	19
Exhibit 6:	Allocation of Assets by Accounting Reserve Amounts	20
Exhibit 7:	Reconciliation of Assets	21
Exhibit 8:	Allocation of Valuation Assets	22
Section 4:	Actuarial Liabilities	23
Exhibit 9:	Actuarial Value of Benefits – December 31, 2006	25
Exhibit 10:	Actuarial Accrued Liability	29
Exhibit 11:	Unfunded Actuarial Accrued Liability and Funded Percentage	30
Exhibit 12:	Liability by District	31
Section 5:	Member Contributions	32
Exhibit 13:	Member Contribution Rates	34
Section 6:	Employer Contributions	35
Exhibit 14:	Basic Benefits	37
Exhibit 15:	COLA Benefits – 2%	38
Exhibit 16:	COLA Benefits – 0.5%	39
Exhibit 17:	Total Benefits	40
Exhibit 18:	Gain and Loss Analysis by Employer Contribution Rates and Funded Percentage	42
Section 7:	Accounting Information	43
Exhibit 19:	Schedule of Funding Progress	44
Exhibit 20:	Schedule of Contributions from the Employer	45
Exhibit 21:	Solvency Test	46
Section 8:	SRBR – Supplemental Retirement Benefit Reserve	47
Exhibit 22:	Supplemental Retiree Benefit Reserve	52
Exhibit 23:	Projected Cash Flow for SRBR Tier 3 Payments	53
Section 9:	Benefit Payment Projections	54

#### **Table of Contents**

(continued)

		Page
Appendix A	Actuarial Assumptions	A-1
Appendix B	Benefit Summaries	B-1
Appendix C	Membership Data	C-1
Appendix D	Member Contribution Rates	D-1
Appendix E	Glossary	E-1

**Section 1: Summary of the Findings** 



Overview:

Before delving into the finer points of this report, it may be instructive to take a high level look at the results. The following chart presents a summary of the calculated Employer contribution rates as of last year (the top line) and this year (the bottom line). The numbers in between explain the changes that have occurred during the year. The rate shown for the General Members include the costs for the District General members as well as those employed by the County.

	_	Employer Contribution Rate			
		General Members	Safety Members		
2005 Valuation		30.11%	37.69%		
	Benefit Changes Experience Changes Assumption Changes	N/A -0.36% <u>0.36%</u>	N/A 1.13% <u>0.41%</u>		
2006 Valuation (prior to application of CCR)		30.11%	39.23%		
Application of CCR		<u>-2.49%</u>	<u>-3.71%</u>		
2006 Valuation after app	plication of CCR	27.62%	35.52%		

A brief summary of each of the changes is shown below.

- Benefit Changes: There were no benefit changes that affected the Employer Contribution Rate for Regular Benefits. However, the Supplemental Retirement Benefit Reserve (SRBR) death benefit was increased from \$1,000 to \$3,000.
- Experience During the Year: Actual experience during 2006 lead to changes in the contribution rates, a decrease of 0.36% for General members and a 1.13% increase for Safety members from that expected based on the 2005 valuation. Some experience gains and losses are to be expected as part of the normal variation between actual and expected experience. The changes due to actual experience are described in further detail in the gain and loss summary, Exhibit 18, Section 6, and were well within a reasonable level of fluctuation.
- Revised Milliman Assumptions: The assumed deferral age for terminated participants with a vested benefit was changed from age 55 to age 50 for safety members and from age 62 to age 60 for general members. This revised assumption reflects the age at which members are entitled to full benefits.

COLA Contribution Reserve: At the time of each annual actuarial valuation, any funds in the COLA Contribution Reserve (CCR) as of the valuation date are used to offset the required 2.0% COLA contributions for the subsequent fiscal year, commencing on July 1 following the valuation date. For the first time since the introduction of this policy, there is a positive CCR balance. The full amount of this reserve, as of December 31, 2006, will be used to offset COLA contributions for July 1, 2007 through June 30, 2008.

#### Summary of Recommendations

The following exhibit summarizes our recommendations to the Board. These are the recommended employer contribution rates for the fiscal year, commencing July 1, 2007, shown for each employer cost group. Member contributions, also effective July 1, 2007 are shown in Appendix D.

#### **Funding Status**

The Funded Ratio for the Regular Benefits remained flat, at 76%. The funding status for the SRBR approved benefits decreased from 154% in the 2005 valuation to 142% for this 2006 valuation. A funding ratio over 100% indicates the SRBR unallocated reserve assets are more than sufficient to meet the expected benefit obligations. The portion of the assets greater than the present value of the approved benefits is referred to as the Funding Excess Amount.

In accordance with the Board's funding policy, the funding status is measured using the Actuarial Value of Assets (AVA). As of December 31, 2006, the Market Value of Assets is 111% of the AVA. Thus, on a market value basis, the Funded Ratio for the Regular Benefit would be about 84% and the SRBR approved benefits would be about 157%.

The remainder of this section, as well as Sections 2-7, discusses KCERA's financial status as of December 31, 2006.

**Exhibit 1:** Summary of Recommendations

(All dollar amounts in millions)

	December 31, 2005	Decembe	r 31, 2006
<b>Employer Contribution</b>	·	Before CCR	After CCR
General – County	30.00%	30.09%	27.65%
General – County -Court Employees only	26.06%	27.28%	24.84%
General - Kern County Water Agency	33.94%	35.00%	31.96%
General – Districts Electing 1997 MOU	33.13%	34.65%	31.61%
General – Districts Not Electing 1997 MOU	30.51%	31.81%	28.77%
General - Districts Adopting 3%@60	31.02%	30.06%	27.03%
prospectively only			
Safety	37.69%	39.23%	35.52%
Total Plan	31.70%	32.26%	29.49%
Funded Status – Regular Benefits			
Actuarial Accrued Liability	\$2,861.9	\$3,1	09.0
Actuarial Value of Assets	\$2,164.3	\$2,3	52.0
UAAL	\$697.6	\$75	7.0
Funded Percentage	75.6%	75.	7%
Funded Status – SRBR			
Present Value of Approved Benefits	\$58.3	-	4.3
Actuarial Value of Assets	\$89.5	\$9	1.0
Funding Excess Amount	(\$31.3)	(\$2	6.7)
Funded Percentage	154%	14	1%
Key Assumptions			
Interest Rate	8.00%	8.0	0%
Wage Inflation	4.00%	4.0	0%
Price Inflation	3.50%	3.5	0%

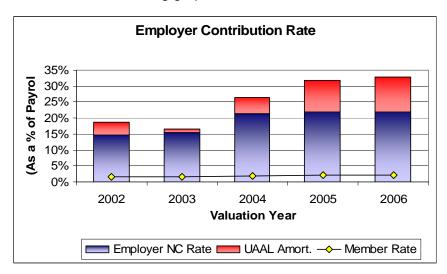
### Employer Contribution Rate

Under the Board's current funding objectives, the total calculated Employer contribution rate is 32.26% of payroll, prior to the application of the CCR credits. This is equal to the payment of the normal cost rate plus a 29-year amortization of the Unfunded Actuarial Accrued Liability (UAAL). It should be noted that the 32.26% is a weighted average for all KCERA employers and for both General and Safety members. The actual percent of payroll to be contributed by each employer for each member varies by their benefits and member contributions. See Exhibits 14-17 for normal cost rates by employer groups and class.

After application of the credit for the CCR, the total weighted employer contribution rate is 29.49%.

The new rates are effective for the fiscal year beginning July 1, 2007. The 32.26% contribution rate (29.49% employer contribution plus 2.77% for the CCR credits) is adequate to maintain the funding of the retirement system based on the current actuarial methods and assumptions and satisfies the funding policy objectives that call for the UAAL to be paid off by December 31, 2035. See Exhibit 17 for the total employer contribution rates by group and class.

A historical perspective of the total Employer contribution rate is shown in the following graph.



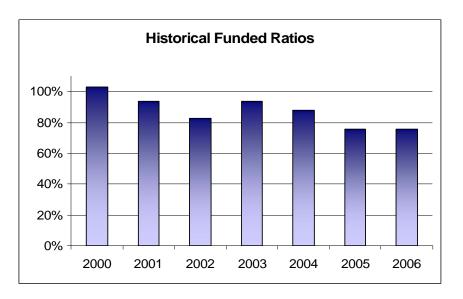
#### **Member Rates**

The member contribution rates are projected to average about 2.3% of pay for contributory cost groups. This rate should increase over time as new members contribute at a higher rate and for a longer period of time. See the description of changes in member contribution rates in Appendix B.

#### **Funding Progress**

One measure of the funding adequacy of the plan is the Funded Ratio which compares the value of the Actuarial Value of Assets (net of certain non-valuation reserves) to the Actuarial Accrued Liability (AAL), for all KCERA employers combined. KCERA's Funded ratio increased rapidly in the last half of the 1990s, reaching 103.3% in 2000. However, due primarily to asset losses early in this decade, the Funded Ratio has decreased significantly since then. Currently, the Funded Ratio is 75.7%; that is, the actuarial value of the Valuation Assets of \$2.4 billion is about 24% less than the actuarial accrued liabilities of \$3.1 billion.

	M	larket	Va	Valuation		ccrued	Funding	
Year	V	/alue	Д	ssets	Li	iability	Ratio	
2000	\$	1,619	\$	1,435	\$	1,389	103.3%	
2001	\$	1,511	\$	1,508	\$	1,612	93.6%	
2002	\$	1,385	\$	1,570	\$	1,899	82.7%	
2003	\$	2,016	\$	1,928	\$	2,059	93.6%	
2004	\$	2,225	\$	2,013	\$	2,336	86.1%	
2005	\$	2,396	\$	2,164	\$	2,862	75.6%	
2006	\$	2,782	\$	2,352	\$	3,109	75.7%	



**Assets** 

For the fiscal year ending December 31, 2006, we estimate that KCERA earned 15.83%, net of all expenses, on its market value of assets.

KCERA uses an asset-smoothing method in the determination of valuation assets used in the calculation of UAAL contribution. Under this method, the market value returns are smoothed over a five-year period. Due to the recognition of prior losses, the return on the actuarial valuation assets was lower, returning 8.05%.

### Allocation of Assets and Cost Sharing

Currently, both the normal cost and UAAL portions of the employer contribution rate are calculated separately for each cost group. Cost sharing in setting the normal cost rate occurs across all General members, regardless of employer, and is based on the expected future benefit accruals.

Member contribution rates vary widely between different employer groups. Beginning with the 2005 valuation, the Court employees, formerly reported as part of the larger County General membership, are reported as a separate employer group, since they are now paying a higher member rate than the other County General members. These higher member contributions are viewed as member contributions towards the employer's cost and thus would not normally impact the value of benefits. However, since these higher contributions are also refundable to the member, the value of future refunds is greater. Unless a separate cost group, which requires a separate accounting of reserve funds, is set up for the Court employees, the cost sharing with other County General members is assumed to continue. Therefore, only those higher member contributions actually made as of the valuation date will be reflected in the probability of refund payments for the Court employees.

The Board's funding policy creates certain cost groups for determining the UAAL contribution rates. The UAAL contribution rate varies by General, District and Safety cost groups. To determine the UAAL amount by cost group, the valuation assets are allocated by these different employer cost groups. Currently the reserve funds are separated between the County General members, the Districts in aggregate, and the County Safety members.

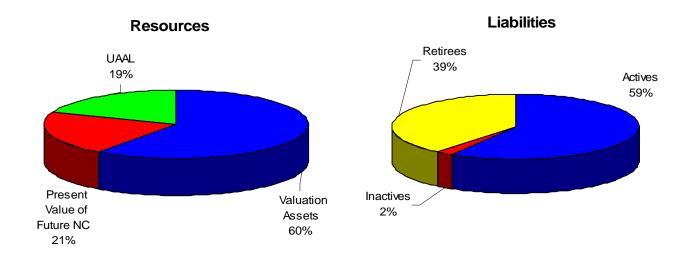
However, the Retired Member Reserves are not separated between the County and the District General members. Starting with the 2004 valuation, those assets are allocated based on the value of the total actuarial value of benefits for those two groups. Thus, the final allocation of the actuarial value of assets can not be determined until the valuation of liabilities has been determined.

In addition, the portion of the SRBR fund allocated to the 0.5% COLA benefits under the Ventura settlement is not allocated among cost groups. Those funds have also been allocated based on the value of the total actuarial value of the 0.5% benefits for those three major cost groups.

#### Actuarial Balance Sheet

The first step in the valuation process is to compare the total actuarial value of assets of KCERA with its total liabilities for all cost groups. In this analysis, KCERA's resources equal the assets currently on hand, at the actuarial value, and also expected future contributions by both the employers and members. Liabilities reflect benefits already earned in the past and those expected to be earned in the future by current members. This relationship is shown in the following chart. The AAL is the total of the benefit liabilities less expected future normal cost contributions.

Comparing the current and future resources to the current and future liabilities, we then determine the annual contribution amount for the coming fiscal year.



#### SRBR

The Supplemental Retirement Benefit Reserve (SRBR) is a separate reserve allocation of the KCERA actuarial value of assets. Additions are made to the SRBR if "Excess Earnings" occurs and the SRBR receives regular annual interest credits. The benefits payable from the SRBR is limited to the funds available in the SRBR.

As part of the Ventura legal settlement in 2001, a portion of the SRBR funds, \$64.7 million, was set aside to be used to pay for the additional 0.5% COLA benefits to retired members. The actuarial value of this special allocation of the SRBR fund on December 31, 2006 is \$77.3 million. The remaining SRBR funds are equal to \$91.0 million.

The Board measures the future SRBR benefits under three scenarios:

- a) Approved benefits: Represents the value of the SRBR benefits approved by the Board as of the valuation date and does not include any future additional SRBR benefits to either retired or active members.
- b) Target benefits: The Board has established a measurement under a policy commonly referred to as the "20/20" policy where the value of certain approved benefits: death benefits, SRBR1 and SRBR2 are valued along with a 20% additional reserve for future experience. The SRBR3 benefits are projected for both active and retired members for the next 20 years.
- c) Future benefits: this represents the actuarial value as of the valuation of all levels of SRBR benefits to all current retired and active members.

The following chart indicates the funding ratio of the SRBR benefits under these three measurements as of December 31, 2006:

	Funded Percentage
Approved Benefits	141.5%
Target Benefits, including 20% reserve amounts	104.3%
Future Benefits	81.6%

The SRBR Funded Percentage decreased since the 2005 valuation for two reasons. First, the Retirement Board approved an increase in the death benefit from \$1,000 to \$3,000. Second, actual inflation was higher than expected.

Detailed information on the SRBR benefits is described in Section 8 of this report.

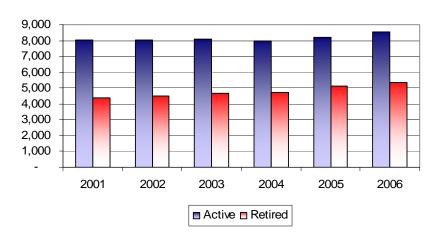


#### **Member Information**

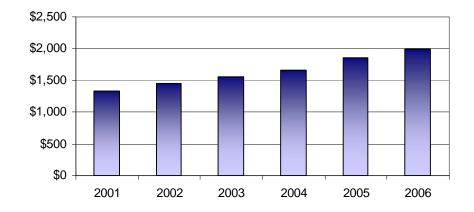
The number of active members included in the valuation increased by 4.3% from 8,195 in 2005 to 8,547 in 2006.

Retired member counts and average retirement benefit amounts continue to increase steadily. For 2006, there were 5,355 retired members and beneficiaries with an average benefit of \$1,989 per month. This represents a 4.3% increase in count and a 7.1% increase in the average monthly benefit.

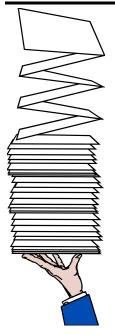
#### **Membership Count**



#### **Average Monthly Retirement Benefit**



#### Section 2: Scope of the Report



In reading our cover letter, please pay particular attention to the guidelines employed in the preparation of this report. We also comment on the sources and reliability of both the data and the actuarial assumptions upon which our findings depend. Those comments are the basis for our certification that this report is complete and accurate to the best of our knowledge and belief.

A summary of the findings resulting from this valuation is presented in the previous section. Section 3 describes the assets and investment experience of KCERA. The assets and investment income are presented in Exhibits 2-4. Exhibits 5-7 develop the Actuarial Value of Assets as of December 31, 2006.

Section 4 describes the benefit obligations of KCERA. Exhibit 8 is the Actuarial Balance Sheet. Additional analysis on the change in UAAL is also provided in this section.

Section 5 discusses the Member contribution rates.

Section 6 discusses the County contributions needed to fund the benefits under the actuarial cost method in use.

Section 7 discloses the information required under Statement No. 25 of the Governmental Accounting Standards Board (GASB).

Section 8 provides the valuation of the SRBR funds and benefit obligations.

Section 9 illustrates the expected level of benefit payments to be paid to current members.

This report includes several appendices:

- Appendix A A summary of the actuarial procedures, and assumptions used to estimate liabilities and contributions.
- Appendix B A summary of the current benefit structure, as determined by the provisions of governing law on December 31, 2006.
- Appendix C Schedules of valuation data classified by various categories of plan members.
- Appendix D Member contribution rates by plan.
- Appendix E A glossary of actuarial terms used in this report.

#### Section 3: Assets



In many respects, an actuarial valuation can be thought of as an inventory process. The inventory is taken as of the actuarial valuation date which, for this valuation, is December 31, 2006. On that date, the assets available for the payment of retirement benefits are appraised. These assets are compared with the actuarial liabilities, which are generally well in excess of the actuarial assets. The purpose of the valuation is to determine what future contributions by the members and employers are needed to pay all expected future benefits.

This section of the report deals with the determination of assets used for funding purposes. In the next section, the actuarial liabilities will be discussed. Sections 5 and 6 deal with the process for determining required contributions based on the relationship between the actuarial assets and the actuarial liabilities. A historical summary of the KCERA's assets is presented below:

		All	dollar amounts	in millions		
		Market	Actu	ıarial Value		Market Value as Percentage
						•
	-	alue of	Non-Valuation	Valuation		of Actuarial
December 31	To	tal Assets	Reserves*	<u>Assets</u>	<u>Total</u>	<u>Value</u>
1997	\$	1,306.9		\$1,113.9		
1998		1,449.4		1,203.7		
1999		1,673.4		1,325.9		
2000		1,618.7		1,434.9		
2001		1,511.3	\$163.6	1,508.3	\$1,671.9	90%
2002		1,384.9	91.6	1,570.3	1,661.9	83%
2003		2,016.2	114.0	1,927.6	2,041.6	99%
2004		2,224.9	119.5	2,012.5	2,132.0	104%
2005		2,395.6	113.5	2,164.3	2,277.8	105%
2006		2,781.8	158.2	2,352.0	2,510.2	111%

\*Non-valuation reserves are the SRBR funds not allocated to the 0.5% COLA, the Contingency Reserve and the COLA Contribution Reserve, if any.

On December 31, 2006, the total market value of the fund was \$2.78 billion. The actuarial value of the fund was determined to be \$2.51 billion, including the non-valuation reserves. The Market Value of Assets includes all plan assets including those allocated to the Supplemental Retiree Benefit Reserve, the Contingency Reserve and the COLA Contribution Reserve, if any. The Actuarial Value of Valuation Assets of \$2.35 billion, includes only those assets that are taken into account in

determining employer contribution rates for the Regular Benefits. These exclude the unallocated portion of the Supplemental Retiree Benefit Reserve, the Contingency Reserve and the COLA Contribution Reserve, if any.

#### **Financial Exhibits**

Exhibit 2 presents a Statement of Plan Net Assets and Exhibit 3 presents a Statement of Changes in Plan Net Assets. Exhibit 4 shows the determination of the asset gains and losses over each six-month period for the past five years. It describes the allocation of KCERA's assets by the various reserve values determined for accounting purposes as reported to us by KCERA. Exhibit 5 computes the Market Stabilization Reserve from the smoothed gains and losses over the past five years.

Exhibits 2-4 are taken directly from data furnished to us by KCERA in their annual financial report. We have accepted these tables for use in this report without audit, but we have reviewed them for reasonableness and consistency with previous reports.

#### **Actuarial Asset Method**

The actuarial asset method computes the expected market value of assets based on the prior year's market value of assets, the actual cash flow of contributions and benefit payments, and the assumed investment rate of return. The current assumed rate of return, as recommended for this valuation, is 8.00%, net of all expenses. The difference between the actual market value and the computed expected market value is smoothed, or recognized over a five-year period.

#### Actuarial Value of Assets

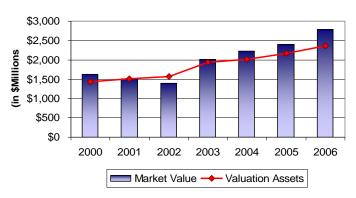
The development of the December 31, 2006 actuarial value of assets is shown in Exhibit 5. Note the smoothing process has not recognized much of the investment gains since 2003. The result is an actuarial value of assets that is significantly lower than the market value.

The Market Stabilization Reserve is the portion of prior year's asset gains or losses not recognized in the Actuarial Value of Assets.

#### **Valuation Reserves**

Valuation Assets are the actuarial value of the fund, less the value of any reserves which have been set aside for current liabilities and special benefits that are to be funded outside of the actuarially determined contribution rates. These are the Contingency Reserve, the SRBR Reserve not allocated to the 0.50% COLA and the COLA Contribution Reserve, if any. Exhibit 6 shows the allocation of the Actuarial Value of Assets by accounting reserve accounts and then determines the total value of the Valuation Reserves.

#### **Applicable Valuation Assets**



#### **Allocation of Assets**

Exhibit 7 reconciles the beginning of the year assets to the end of the year on both the market value and the actuarial value basis.

The allocation of valuation assets by cost group is shown in Exhibit 8.

### Interest Crediting Policy

In 2003, the Retirement Board established a policy to determine the crediting of interest to reserves under KCERA. Interest credits are based on the smoothed actuarial value of assets and are determined for each six-month calendar year period ending June 30 and December 31. This is a brief summary of the order of precedence if interest credits remain to be allocated:

- 1. Credit the Contingency Reserve until it is equal to 1% of the market value of assets.
- Credit the Valuation Reserves (Member Deposit, Employer Advance, COLA and Retired Member reserves) and the SRBR Reserves and the COLA Contribution Reserve (CCR), if any, at a rate equal to one-half of the assumed valuation interest rate.
- 3. Credit the Contingency Reserve until it is equal to 2% of the market value of assets.
- Credit the CCR with a dollar amount equal to the 2% COLA contributions payable by all employers for the six-month period ending on the date of the interest determination.
- 5. Any remaining interest credits are split 50/50 to the SRBR (the unallocated portion of the SRBR reserve, not the portion set aside for the 0.5% COLA benefits) and all the Valuation Reserves, excluding the assets set aside for the 0.5% COLA benefits, but including the CCR fund amount, if any, at the beginning of the interest determination period.

Thus, for purposes of crediting interest, the CCR is treated the same as the Valuation Reserves. For purposes of determining contribution rates, the CCR is excluded from Valuation Assets, since it is used later as contribution credits.

At the time of each annual actuarial valuation, any funds in the CCR as of the valuation date will be used to offset the required 2.0% COLA contributions for the subsequent fiscal year, commencing on July 1 following the valuation date. For the first time since the introduction of this policy, there is a CCR. This reserve will be used to offset COLA contributions for July 1, 2007 through June 30, 2008.

If at any time the interest credits are less than zero, then the Board has in the past established a Negative Contingency Account and all other reserves receive zero interest credits.

Exhibit 2: **Statement of Plan Net Assets** For the Years Ended December 31, 2005 and 2006

	2006	2005
Assets		
Current Assets		
Cash	\$ 116,722,554	\$ 73,140,352
Accounts Receivable	85,242,161	118,800,005
Total Commant Assats	204 004 745	404 040 057
Total Current Assets	201,964,715	191,940,357
Investments	2,723,739,132	2,417,204,789
Property, Fixtures and Equipment, Net	92,519	50,440
Total Assets	2,925,796,366	2,609,195,586
Liabilities		
Current Liabilities	(143,969,702)	(213,570,517)
Net Assets Held in Trust for Pension Benefits	\$ 2,781,826,664	\$ 2,395,625,069

Exhibit 3: **Statement of Changes in Plan Net Assets** For the Years Ended December 31, 2005 and 2006

			2006	2005
Additions				
	Contributions			
		Employer	\$ 124,735,089	\$ 98,284,215
		Member	10,695,530	9,562,621
		Service Credit Purchases	1,338,572	1,447,891
		Total Contributions	136,769,191	109,294,728
	Net Appreciation (Depreciation) in Fair V	alue of Investments	323,787,537	132,749,305
	Investment Income	and of investments	81,387,052	61,450,430
	Less Investment Expenses (including se	curities lending expenses)	22,609,544	13,812,648
		<b>3</b> 1 ,		
		Net Investment Income	382,565,044	180,387,086
				000 004 044
		Total Additions	519,334,236	289,681,814
Deductions				
Deductions	•			
		Benefit Payments	\$ 119,448,345	\$ 106,195,725
		SRBR Payments (Tiers 1, 2, & 3)	6,519,513	6,544,348
		SRBR Payments (0.5% COLA)	2,150,152	1,605,324
		Refunds	2,062,112	1,913,683
		SRBR Death Benefits	119,167	113,200
		Active Death Benefits	98,312	120,406
		Administrative Expense	2,735,041	2,462,778
			100 100 011	440.055.405
		Total Deductions	133,132,641	118,955,465
Net Increase	e (Decrease)		386,201,595	170,726,348
Net Assets H	Held in Trust for Pension Benefits			
	Beginning of Year		2,395,625,069	2,224,898,721
	End of Year		2,781,826,664	2,395,625,069
Estimated Re	eturn, Net of all Expenses on Market Value	basis	15.83%*	8.01%*

<sup>\*</sup> May differ from return reported in CAFR due to timing of contributions and benefit payments.

#### Exhibit 4: 5-Year Smoothing of Gains and Losses on Market Value – History

Six-Month Period Ended	 arket Value of sets (Beginning of Period)	 orket Value of ssets (End of Period)	Co	ontributions	Benefit Payments	ctual Investment Return (Net of Expenses)	Assumed Rate of Return	ected Return of Expenses)	Un	expected Gain (Loss)
12/31/2006	\$ 2,458,256,056	\$ 2,781,826,664	\$	122,571,166	\$ 66,538,268	\$ 267,537,710	8.00%	\$ 99,450,900	\$	168,086,809
6/30/2006	2,395,625,069	2,458,256,056		14,198,025	63,859,332	112,292,294	8.00%	94,831,777		17,460,517
12/31/2005	2,212,271,078	2,395,625,069		98,310,989	59,906,157	144,949,159	8.00%	89,258,940		55,690,220
6/30/2005	2,224,898,721	2,212,271,078		10,983,739	56,586,530	32,975,149	8.00%	88,083,893		(55,108,744)
12/31/2004	2,030,719,406	2,224,898,721		59,635,395	54,419,552	188,963,472	8.00%	81,333,093		107,630,379
6/30/2004	2,016,236,085	2,030,719,406		9,159,416	55,488,271	60,812,177	8.00%	79,722,866		(18,910,690)
12/31/2003	1,782,946,667	2,016,236,085		50,051,399	49,472,104	232,710,123	8.00%	71,329,453		161,380,670
6/30/2003	1,384,882,245	1,782,946,667		295,135,493	48,275,833	151,204,762	8.00%	60,332,483		90,872,279
12/31/2002	1,436,172,964	1,384,882,245		60,952,148	46,026,227	(66,216,641)	8.00%	57,745,437		(123,962,078)
6/30/2002		1,436,172,964								

Exhibit 5: 5-Year Smoothing – Development of Actuarial Valuation Assets (All dollar amounts in thousands)

#### **Calculation of Market Stabilization Reserve**

Six-Month Period Ended	Unexpected Gain (Loss)	•		Gain (Loss) Excluded
12/31/2006	\$ 168,086,809	90%	\$	151,278,128
6/30/2006 12/31/2005	17,460,517 55.690.220	80% 70%		13,968,414 38,983,154
6/30/2005	(55,108,744)	60%		(33,065,247)
12/31/2004	107,630,379	50%		53,815,189
6/30/2004	(18,910,690)	40%		(7,564,276)
12/31/2003	161,380,670	30%		48,414,201
6/30/2003	90,872,279	20%		18,174,456
12/31/2002	(123,962,078)	10%		(12,396,208)
Total			\$	271,607,812

#### **Calculation of Actuarial Value of Assets and Valuation Assets**

Market Value of Assets	\$ 2,781,826,664
Unrecognized Gain/Loss     (Market Stabilization Reserve)	\$ 271,607,812
3. Preliminary Actuarial Value (1) - (2)	\$ 2,510,218,852
Corridor Around Market Value	
(a) Minimum - 80% of Market Value	\$ 2,225,461,331
(b) Maximum - 120% of Market Value	\$ 3,338,191,997
5. Computed Actuarial Value of Assets	\$ 2,510,218,852
6. Non-Valuation Reserves and Designations	
(a) SRBR unallocated to 0.5% COLA benefits	\$ 90,980,473
(b) Contingency Reserve	55,636,533
(c) COLA Contribution Reserve	11,573,825
(d) Total	\$ 158,190,832
7. Total Valuation Reserves (5) - (6)	\$ 2,352,028,020



Exhibit 6: Allocation of Assets by Accounting Reserve Amounts For the Years Ended December 31, 2005 and 2006

	RESERVES	Dece	mber 31, 2006	Decer	mber 31, 2005
Α	Market Stabilization Reserve	\$	271,607,812	\$	117,827,783
	Members Deposit Reserve-General	\$	131,173,166	\$	123,987,910
	Members Deposit Reserve-Safety		54,875,056		54,034,696
	Members Deposit Reserve-Special Districts		11,458,654		10,788,292
	Employers Advance Reserve-General		363,821,060		340,693,365
	Employers Advance Reserve-Safety		278,342,350		272,941,662
	Employers Advance Reserve-Special Districts		12,355,579		10,820,419
	Cost-of-Living Reserve-General		307,163,393		275,889,068
	Cost-of-Living Reserve-Safety		237,418,459		216,965,604
	Cost-of-Living Reserve-Special Districts Retired Members-General		13,473,989		11,203,605
			515,222,419		457,914,965
	Retired Members-Safety SRBR		349,390,023 90,980,473		315,540,028 89,536,767
	SRBR 0.5% COLA		77,333,873		73,524,653
	COLA Contribution Reserve		11,573,825		73,324,033
	Contingency Reserve		55,636,533		23,956,251
	Current Earnings				23,930,231
В	Total Reserves for Actuarial Value of Assets	\$	2,510,218,852	\$	2,277,797,286
С	Total Fund Balance = A + B	\$	2,781,826,664	\$	2,395,625,069
D	Non-Valuation Reserves and Designations				
	(a) SRBR unallocated to 0.5% COLA benefits		90,980,473		89,536,767
	(b) Contingency Reserve		55,636,533		23,956,251
	(c) COLA Contribution Reserve		11,573,825		
	(d) Total		158,190,832		113,493,018
Ε	Valuation Reserves = B - D	\$	2,352,028,020	\$	2,164,304,268

### Exhibit 7: Reconciliation of Assets For the Year Ended December 31, 2006

Amounts may not add exactly due to rounding.

	Market Value Of Total Fund	Actuarial Value Of Valuation Reserves*					
Beginning of Year	\$ 2,395,625,069	\$	2,164,304,268				
Contributions - Employers	124,735,089		124,735,089				
Contributions - Members	12,034,102		12,034,102				
Gross Investment Income	405,174,588		177,448,522				
Investment Expenses	(22,609,544)		n/a				
Benefits paid to participants	(130,397,600)		(123,758,921)				
Administrative Expenses	(2,735,041)		(2,735,041)				
End of the Year	\$ 2,781,826,664	\$	2,352,028,020				
Estimated Return (net of all expenses)	15.83%		8.05%				

<sup>\*</sup>Excludes SRBR unallocated for 0.5% COLA, Contingency Reserve, and COLA Contribution Reserve, if any. It does include the SRBR for 0.5% COLA

Exhibit 8: **Allocation of Valuation Assets** 

Allocation of Valuation Assets	Gen	eral Members	Distri	District Members		ty Members	Total
Member Deposit Reserves	\$	131,173,166	\$	11,458,654	\$	54,875,056	\$ 197,506,875
Employer Advance Reserves		363,821,060		12,355,579		278,342,350	654,518,989
Cost-of-Living Reserves - 2%		307,163,393		13,473,989		237,418,459	558,055,840
Cost- of- Living Reserves - 0.5%		42,565,874		1,867,189		32,900,809	77,333,873
Retired Member Reserves		490,620,943		24,601,476		349,390,023	 864,612,443
Total Valuation Assets	\$	1,335,344,435	\$	63,756,887	\$	952,926,698	\$ 2,352,028,020
COLA Contribution Reserve (CCR)	\$	7,205,426	\$	719,325	\$	3,649,074	\$ 11,573,825
Total Valuation Assets & CCR	\$	1,342,549,862	\$	64,476,212	\$	956,575,772	\$ 2,363,601,846

The SRBR Cost-of-Living Reserves - 0.5% are allocated in proportion to the 2.0% COL Reserves.

The Retired Member Reserves for General Members are allocated based on the present value of the benefit obligations.



#### Section 4: Actuarial Liabilities



In the previous section, an actuarial valuation was compared with an inventory process, and an analysis was given of the inventory of KCERA's assets as of the valuation date, December 31, 2006. In this section, the discussion will focus on the commitments of KCERA for retirement benefits, which are referred to as its actuarial liabilities. The SRBR benefits are determined separately and are discussed in Section 8.

In an active system, the actuarial liabilities will almost always exceed the actuarial assets. This is usually expected in all but a fully closed down fund, where no further contributions of any sort are anticipated. This deficiency has to be provided by future contributions and investment returns. An actuarial valuation method sets out a schedule of future contributions that will deal with this deficiency in an orderly fashion. The determination of the level of future contributions needed is discussed in the next section.

#### Actuarial Balance Sheet – Liabilities

First, we need to determine the amount of the deficiency. We compare the Actuarial Value of the Valuation Assets to the Actuarial Liabilities. The difference is the amount that needs to be funded by the Member and Employer contributions in the future. Both the current and future assets (contributions) are compared to the actuarial liabilities in the Actuarial Balance Sheet.

Exhibit 9 contains an analysis of the actuarial present value of all future benefits for inactive members, (both retired and terminated vested members), and active members. The analysis is given by class of membership and by type of benefit. Basic or COLA.

The actuarial liabilities include the actuarial present value of all future benefits expected to be paid with respect to each member. For an active member, this value includes measures of both benefits already earned and future benefits to be earned. For all members, active and inactive, the value extends over the rest of their lives and for the lives of any surviving beneficiaries. All liabilities reflect the benefits effective through December 31, 2006.

#### Actuarial Balance Sheet – Liabilities (continued)

Due to the adoption of Section 31617 of the County Employees Retirement Law of 1937 (CERL), and the Ventura settlement, the actuarial value of benefits needs to be valued in total and also into three major subtotals:

- The Basic benefits are the retirement benefits excluding all COLA benefits.
- b) The COLA benefits adopted prior to the Ventura settlement are referred to as the "2.0% COLA benefits".
- c) The COLA benefits provided under the Ventura settlement are referred to as the "0.5% COLA benefits".

Exhibit 9 shows the present value of both the 2.0% COLA benefits and the 0.5% COLA benefits separately.

Milliman

Exhibit 9: Actuarial Value of Benefits - December 31, 2006

#### **Present Value of Projected Benefits**

		Basic		COLA - 2%		COLA - 0.5%		Total
<ol> <li>Retirees and Beneficiaries</li> <li>A. General</li> </ol>								
i. County								
a. Regular Benefits	\$	555,743,561	\$	212,329,463	\$	50,531,031	\$	818,604,056
b. Golden Handshake	•	369,140	•	99,488	•	30,173	•	498,800
c. Subtotal		556,112,701		212,428,951		50,561,204		819,102,856
ii. Districts								
a. Regular Benefits		28,252,760		9,695,667		2,505,399		40,453,826
b. Golden Handshake	_	463,531	_	119,010	_	36,359	_	618,900
c. Subtotal	_	28,716,291	_	9,814,677	_	2,541,758	_	41,072,726
iii. Total General		584,828,992		222,243,628		53,102,962		860,175,582
B. Safety a. Regular Benefits		441,411,578		185,261,265		45,617,888		672,290,731
b. Golden Handshake		473,466		132,492		40,754		646,712
c. Subtotal		441,885,044		185,393,757		45,658,642	_	672,937,443
C. All Retirees and Beneficiaries	\$	1,026,714,036	\$	407,637,385	\$	98,761,604	\$	1,533,113,025
	•		•		•		•	
2. Terminated Members A. General								
i. County								
a. Deferred Vested	\$	56,587,747	\$	11,707,980	\$	3,537,636	\$	71,833,363
b. Pending Refunds	Ψ	1,603,320	Ψ	-	Ψ	-	Ψ	1,603,320
c. Subtotal		58,191,066		11,707,980		3,537,636		73,436,683
ii. Districts								
a. Deferred Vested		6,219,037		1,312,254		392,496		7,923,787
<ul> <li>b. Pending Refunds</li> </ul>		102,975		_		_		102,975
c. Subtotal		6,322,012		1,312,254		392,496		8,026,762
iii. Total General		64,513,079		13,020,234		3,930,132		81,463,445
B. Safety								
a. Deferred Vested		10,755,010		2,644,295		820,318		14,219,623
b. Pending Refunds		207,254		2.644.205		- 020 240	_	207,254
c. Subtotal C. All Terminated Members	\$	10,962,264 75,475,343	\$	2,644,295 15,664,529	\$	820,318 4,750,450	\$	14,426,877 95,890,322
	Φ	73,473,343	φ	10,004,029	φ	4,730,430	φ	93,090,322
3. Active Members								
A. General	æ	4 450 000 454	æ	240 657 075	Φ.	70 746 050	φ	1 405 667 070
i. County ii. Districts	\$	1,152,293,154 85,672,024	\$	240,657,975 18,260,611	\$	72,716,850 5,539,345	\$	1,465,667,979 109,471,980
iii. Total General		1,237,965,178	_	258,918,586		78,256,195	_	1,575,139,959
B. Safety		553,209,618		129,403,301		40,035,908		722,648,827
C. All Active Members	\$	1,791,174,796	\$	388,321,887	\$	118,292,103	\$	2,297,788,786
4. All Members	•		•		•		•	
A. General								
i. County								
a. Regular Benefits	\$	1,766,227,782	\$	464,695,418	\$	126,785,518	\$	2,357,708,718
b. Golden Handshake	•	369,140	•	99,488	•	30,173	•	498,800
c. All Benefits		1,766,596,921		464,794,906		126,815,690		2,358,207,518
ii. Districts								
<ul> <li>a. Regular Benefits</li> </ul>		120,246,796		29,268,532		8,437,239		157,952,568
b. Golden Handshake	_	463,531	_	119,010	_	36,359	_	618,900
c. All Benefits	_	120,710,327	_	29,387,542	_	8,473,599	_	158,571,468
iii. Total General		1,887,307,249		494,182,448		135,289,289		2,516,778,986
B. Safety		1 00E E92 462		247 200 004		06 474 44 4		1 400 200 425
a. Regular Benefits b. Golden Handshake		1,005,583,460		317,308,861		86,474,114		1,409,366,435
c. All Benefits		473,466 1,006,056,926		132,492 317,441,353		40,754 86,514,868		646,712 1,410,013,147
C. Grand Total	\$	2,893,364,175	\$	811,623,801	\$	221,804,157	\$	3,926,792,133
	Ψ	_,,,	Ψ	2.1,220,001	4	,,	Ψ	=,===,: <b>32</b> ,: <b>30</b>

#### **Actuarial Resources**

KCERA's resources to fund benefits are equal to the sum of:

- (a) assets currently available to pay benefits and considered for funding purposes, the Valuation Reserves, and
- (b) the present value of future contributions expected to be made by current active Members and the employers.

#### **Actuarial Cost Method**

The method used to determine the incidence of when future contributions are yet to be made in future years is called the "actuarial cost method". For this valuation, the entry age actuarial cost method has been used. Under this method – or essentially any actuarial cost method – the contributions required to meet the difference between current assets and current actuarial liabilities are allocated each year between two elements:

- A normal cost amount; and
- Whatever amount is left over, which is used to amortize what is called the UAAL, or the Unfunded Actuarial Accrued Liability.

#### **Normal Cost**

The normal cost is the theoretical contribution rate that will meet the ongoing costs of a group of average new employees. Suppose that a group of new employees was covered under a separate fund from which all benefits and to which all contributions and associated investment returns were paid.

Under the entry age actuarial cost method, the normal cost contribution rate maintains the funding of benefits as a level percentage of pay. If experience follows the actuarial assumptions precisely, the fund would be completely liquidated when the last payment to the last survivor of the group was made.

### Normal Cost (continued)

By applying the normal cost contribution rate to the present value of salaries expected to be paid in the future, we determine the present value of future normal cost contributions. Future contributions are expected to be made by both the Members and the Employers.

The following table indicates the level of normal cost contributions required in the future to fund the current benefits.

In Dollars	Basic	COLA - 2%	COLA - 0.5%	Total
1. General	\$ 56,793,619	\$ 11,524,436	\$ 3,493,237	\$ 71,811,291
2. Safety	21,877,408	 5,235,416	 1,636,181	 28,749,005
3. All Members	\$ 78,671,027	\$ 16,759,851	\$ 5,129,418	\$ 100,560,296
As a Percent of Pay	Basic	COLA - 2%	COLA - 0.5%	Total
1. General	17.81%	3.61%	1.10%	22.52%
2. Safety	22.22%	5.32%	1.66%	29.19%
3. All Members	18.85%	4.02%	1.23%	24.09%

### Actuarial Accrued Liability

The difference between the present value of all future obligations and the present value of the future normal cost contributions is referred to as the "actuarial accrued liability" (AAL). The AAL is then compared to the value of assets available to fund benefits, and the difference is referred to as the UAAL. The results for KCERA for all benefits and all cost groups are summarized below:

(Dollars in millions)	2006	2005	Percent Change
<ul> <li>A. Actuarial present value of all future benefits for contributing members, former contributing members, and their survivors</li> </ul>	\$ 3,927	\$ 3,612	8.7%
<ul> <li>B. Actuarial present value of total future normal costs for current members</li> </ul>	<u>818</u>	<u>750</u>	9.1%
C. Actuarial accrued liability [A-B]	\$ 3,109	\$ 2,862	8.6%
D. Valuation Reserves	<u>2,352</u>	<u>2,164</u>	8.7%
E. UAAL or Surplus Funding [C-D]	\$ 757	\$ 698	8.5%
F. Funded Ratio [D/C]	75.7%	75.6%	0.0%

# Unfunded Actuarial Accrued Liability/ Surplus Funding

The portion allocated to service already rendered or accrued is called the Actuarial Accrued Liability (AAL). The difference between the AAL and the Valuation Assets is called the UAAL. If a UAAL amount exists, it usually results from prior years' benefit or assumption changes and the net effect of accumulated gains and losses. If the County had always contributed the current Normal Cost, if there were no prior benefit or assumption changes and if actual experience exactly matched the actuarial assumptions, the present value of all future Normal Cost contributions would be sufficient to fund all benefits and there would be no UAAL.

Exhibit 10 shows the AAL for the Basic and each of the COLA Benefits by the three major cost groups.

Exhibit 11 shows how the UAAL was derived for each cost group.

Exhibit 12 shows the development of the UAAL for each district. The District Reserves have been allocated to each district based on the proportion of its AAL to the total District AAL.

Due to the adoption of Section 31617 of the CERL, and the Ventura settlement, just as the actuarial value of benefits needs to be valued in total and also into three major cost group subtotals, so the UAAL needs to be valued separately for the Basic benefits, the UAAL for the 2.0% COLA, and the UAAL for the 0.5% COLA benefits using the portion of the SRBR funds allocated to those benefits.

#### **Funding Adequacy**

A key consideration in determining the adequacy of the funding of KCERA is how the UAAL is being funded. If the UAAL amount is positive, that is, the actuarial accrued liability to be funded is greater than the Valuation Assets, then the UAAL is amortized. Under the current funding method, the UAAL is amortized over a fixed period ending December 31, 2035. Thus, the UAAL contribution rate is funding the UAAL over 29 years from the valuation date.

### Analysis of Change in UAAL

The UAAL, at any date after establishment of a system, is affected by any actuarial gains or losses arising when the actual experience of the system varies from the experience anticipated by the actuarial assumptions used in the valuations. To the extent actual experience, as it develops, differs from that expected according to the assumptions used, so also will the emerging costs differ from the estimated costs.

The 2006 actuarial valuation reflects an increase in the UAAL of \$59 million for the plan year just ended.

#### Exhibit 10: **Actuarial Accrued Liability**

		Basic		COLA - 2%	(	COLA - 0.5%		Total
1. Retirees and Beneficiaries								
A. General								
i. County					_		_	
a. Regular Benefits	\$	555,743,561	\$	212,329,463	\$	50,531,031	\$	818,604,056
<ul><li>b. Golden Handshake</li><li>c. Subtotal</li></ul>		369,140 556,112,701		99,488		30,173 50,561,204		498,800 819,102,856
ii. Districts		556,112,701		212,420,931		50,561,204		019,102,000
a. Regular Benefits		28,252,760		9,695,667		2,505,399		40,453,826
b. Golden Handshake		463,531		119,010		36,359		618,900
c. Subtotal	_	28,716,291	_	9,814,677		2,541,758	_	41,072,726
iii. Total General	_	584,828,992	_	222,243,628		53,102,962		860,175,582
B. Safety								
a. Regular Benefits		441,411,578		185,261,265		45,617,888		672,290,731
b. Golden Handshake		473,466		132,492		40,754		646,712
c. Subtotal		441,885,044		185,393,757		45,658,642		672,937,443
C. All Retirees and Beneficiaries	\$	1,026,714,036	\$	407,637,385	\$	98,761,604	\$	1,533,113,025
2. Terminated Members								
A. General								
i. County	_		_		_		_	_,
a. Deferred Vested	\$	56,587,747	\$	11,707,980	\$	3,537,636	\$	71,833,363
b. Pending Refunds		1,603,320		-				1,603,320
c. Subtotal ii. Districts		58,191,066		11,707,980		3,537,636		73,436,683
a. Deferred Vested		6,219,037		1,312,254		392,496		7,923,787
b. Pending Refunds		102,975		-		-		102,975
c. Subtotal	-	6,322,012		1,312,254		392,496		8,026,762
iii. Total General		64,513,079		13,020,234		3,930,132	_	81,463,445
B. Safety		- ,,		-,, -		-,,		- ,,
a. Deferred Vested		10,755,010		2,644,295		820,318		14,219,623
b. Pending Refunds		207,254		-		-		207,254
c. Subtotal		10,962,264		2,644,295		820,318		14,426,877
C. All Terminated Members	\$	75,475,343	\$	15,664,529	\$	4,750,450	\$	95,890,322
3. Active Members								
A. General								
i. County	\$	739,160,007	\$	156,130,882	\$	47,054,881	\$	942,345,770
ii. Districts	_	51,620,403		11,047,287		3,342,274	_	66,009,964
iii. Total		790,780,410		167,178,169		50,397,155		1,008,355,734
B. Safety	_	362,292,476	_	83,653,741		25,732,308	_	471,678,525
C. All Active Members	\$	1,153,072,886	\$	250,831,910	\$	76,129,463	\$	1,480,034,259
4. All Members								
A. General								
i. County								
<ul> <li>a. Regular Benefits</li> </ul>	\$	1,353,094,635	\$	380,168,325	\$	101,123,549	\$	1,834,386,509
b. Golden Handshake	_	369,140		99,488		30,173		498,800
c. All Benefits		1,353,463,774		380,267,813		101,153,721		1,834,885,309
ii. Districts		00 405 475		00.055.000		-		444 400 550
a. Regular Benefits		86,195,175		22,055,208		6,240,168		114,490,552
b. Golden Handshake	_	463,531		119,010	_	36,359	_	618,900
c. All Benefits	_	86,658,706	_	22,174,218		6,276,528	_	115,109,452 1,949,994,761
iii. Total General B. Safety		1,440,122,481		402,442,031		107,430,249		1,343,334,701
a. Regular Benefits		814,666,318		271,559,301		72,170,514		1,158,396,133
b. Golden Handshake		473,466		132,492		40,754		646,712
c. All Benefits	_	815,139,784		271,691,793		72,211,268	_	1,159,042,845
C. Grand Total	<b>\$</b>	2,255,262,265	<b>\$</b>	674,133,824	<u>\$</u>	179,641,517	<b>\$</b>	3,109,037,606
	Ψ	,,,	Ψ	- ,,	~	-,,	Ψ	,,,,

#### Exhibit 11: Unfunded Actuarial Accrued Liability and Funded Percentage

Basic Benefits								
		General – County		General - Districts		Safety		Totals
Actuarial Accrued Liability     a. Regular Benefits	\$	1,353,094,635	\$	86,195,175	\$	814,666,318	\$	2.253.956.128
b. Golden Handshakes	Ф	369,140	Ф	463,531	Ф	473,466	Þ	1,306,137
c. Total		1,353,463,774		86,658,706		815,139,784		2,255,262,265
2. Actuarial Value of Assets		985,615,169		48,415,709		682,607,430		1,716,638,307
Actuarial Value of Assets     Unfunded Actuarial Accrued Liability		905,015,109		40,415,709		002,007,430		1,710,030,307
a. Regular Benefits		367,479,466		37,779,466		132,058,888		537,317,821
b. Golden Handshakes		369,140		463,531		473,466		1,306,137
c. Total	•	367,848,606	\$	38,242,997	\$	132,532,354		538,623,957
Funded Percentage	Ψ	72.8%	Ψ	55.9%	Ψ	83.7%	φ	76.1%
4. Funded Fercentage		12.070		33.370		03.7 70		70.170
COLA Benefits - 2%								
4.4.4.14.		General – County		General – Districts		Safety		Totals
Actuarial Accrued Liability	•	000 400 005	•	00.055.000	•	074 550 004	Φ.	272 722 225
a. Regular Benefits	\$	380,168,325	\$	22,055,208	\$	271,559,301	\$	673,782,835
b. Golden Handshakes	_	99,488	\$	119,010	\$	132,492	_	350,989
c. Total	\$	380,267,813	\$	22,174,218	\$	271,691,793	\$	674,133,824
2. Actuarial Value of Assets		307,163,393		13,473,989		237,418,459		558,055,840
Unfunded Actuarial Accrued Liability     Departure Reportities	\$	70.004.000	\$	0.504.040	\$	24 4 40 0 40	¢.	445 700 004
a. Regular Benefits     b. Golden Handshakes	Ф	73,004,933	Ф	8,581,219	Ф	34,140,842	\$	115,726,994
c. Total	\$	99,488 73,104,420	\$	119,010 8,700,229	\$	132,492 34,273,334		350,989 116,077,984
4. Funded Percentage	Φ	80.8%	Φ	60.8%	Ф	87.4%	Þ	82.8%
4. Fullued Fercellage		00.070		00.0 /0		07.470		02.070
COLA Benefits - 0.5%								
		General - County		General - Districts		Safety		Totals
Actuarial Accrued Liability		-				-		
a. Regular Benefits	\$	101,123,549	\$	6,240,168	\$	72,170,514	\$	179,534,231
b. Golden Handshakes		30,173		36,359		40,754		107,286
c. Total	\$	101,153,721	\$	6,276,528	\$	72,211,268	\$	179,641,517
<ol><li>Actuarial Value of Assets</li></ol>		42,565,874		1,867,189		32,900,809		77,333,873
<ol><li>Unfunded Actuarial Accrued Liability</li></ol>								
a. Regular Benefits	\$	58,557,675	\$	4,372,979	\$	39,269,705	\$	102,200,359
b. Golden Handshakes		30,173		36,359		40,754		107,286
c. Total	\$	58,587,847	\$	4,409,339	\$	39,310,459	\$	102,307,644
4. Funded Percentage		42.1%		29.7%		45.6%		43.0%
Total Regular Benefits								
-		General – County		General – Districts		Safety		Totals
Actuarial Accrued Liability	•	_				-		
Actuarial Accrued Liability     a. Regular Benefits	\$	1,834,386,509	\$	114,490,552	\$	1,158,396,133	\$	3,107,273,194
Actuarial Accrued Liability     a. Regular Benefits     b. Golden Handshakes	_	1,834,386,509 498,800		114,490,552 618,900		1,158,396,133 646,712		3,107,273,194 1,764,412
Actuarial Accrued Liability     a. Regular Benefits     b. Golden Handshakes     c. Total	\$	1,834,386,509 498,800 1,834,885,309	\$	114,490,552 618,900 115,109,452	\$	1,158,396,133 646,712 1,159,042,845	\$	3,107,273,194 1,764,412 3,109,037,606
Actuarial Accrued Liability     a. Regular Benefits     b. Golden Handshakes     c. Total     Actuarial Value of Assets	_	1,834,386,509 498,800		114,490,552 618,900		1,158,396,133 646,712		3,107,273,194 1,764,412
1. Actuarial Accrued Liability a. Regular Benefits b. Golden Handshakes c. Total 2. Actuarial Value of Assets 3. Unfunded Actuarial Accrued Liability	\$	1,834,386,509 498,800 1,834,885,309 1,335,344,435	\$	114,490,552 618,900 115,109,452 63,756,887	\$	1,158,396,133 646,712 1,159,042,845 952,926,698	\$	3,107,273,194 1,764,412 3,109,037,606 2,352,028,020
1. Actuarial Accrued Liability a. Regular Benefits b. Golden Handshakes c. Total 2. Actuarial Value of Assets 3. Unfunded Actuarial Accrued Liability a. Regular Benefits	_	1,834,386,509 498,800 1,834,885,309 1,335,344,435 499,042,074		114,490,552 618,900 115,109,452 63,756,887 50,733,665		1,158,396,133 646,712 1,159,042,845 952,926,698 205,469,435		3,107,273,194 1,764,412 3,109,037,606 2,352,028,020 755,245,174
1. Actuarial Accrued Liability a. Regular Benefits b. Golden Handshakes c. Total 2. Actuarial Value of Assets 3. Unfunded Actuarial Accrued Liability a. Regular Benefits b. Golden Handshakes	\$	1,834,386,509 498,800 1,834,885,309 1,335,344,435 499,042,074 498,800	\$	114,490,552 618,900 115,109,452 63,756,887 50,733,665 618,900	\$	1,158,396,133 646,712 1,159,042,845 952,926,698 205,469,435 646,712	\$	3,107,273,194 1,764,412 3,109,037,606 2,352,028,020 755,245,174 1,764,412
1. Actuarial Accrued Liability a. Regular Benefits b. Golden Handshakes c. Total 2. Actuarial Value of Assets 3. Unfunded Actuarial Accrued Liability a. Regular Benefits b. Golden Handshakes c. Total	\$	1,834,386,509 498,800 1,834,885,309 1,335,344,435 499,042,074 498,800 499,540,873	\$	114,490,552 618,900 115,109,452 63,756,887 50,733,665 618,900 51,352,565	\$	1,158,396,133 646,712 1,159,042,845 952,926,698 205,469,435 646,712 206,116,147	\$	3,107,273,194 1,764,412 3,109,037,606 2,352,028,020 755,245,174 1,764,412 757,009,585
1. Actuarial Accrued Liability a. Regular Benefits b. Golden Handshakes c. Total 2. Actuarial Value of Assets 3. Unfunded Actuarial Accrued Liability a. Regular Benefits b. Golden Handshakes	\$	1,834,386,509 498,800 1,834,885,309 1,335,344,435 499,042,074 498,800	\$	114,490,552 618,900 115,109,452 63,756,887 50,733,665 618,900	\$	1,158,396,133 646,712 1,159,042,845 952,926,698 205,469,435 646,712	\$	3,107,273,194 1,764,412 3,109,037,606 2,352,028,020 755,245,174 1,764,412

Exhibit 12: **Liability by District** 

		Α		В		С		D		E Unfunded	
<u>District Name</u>	Member Count		resent Value of Projected Benefits		resent Value of Future ormal Cost	Actuarial Accrued Liability (AAL) (A-B)		Actuarial Value of Assets (AVA) (Pro-rated by AAL)		Actuarial Accrued Liability (UAAL (C-D)	
Kern Mosquito Control	30	\$	9,370,646	\$	1,224,707	\$	8,145,939	\$	4,511,877	\$	3,634,062
Kern Water Agency	125		46,232,992		8,595,735		37,637,257		20,846,545		16,790,712
Berrenda Mesa	19		6,215,544		1,009,322		5,206,222		2,883,625		2,322,597
San Joaquin	409		79,012,098		29,601,261		49,410,837		27,367,701		22,043,135
West Side Mosquito Control	17		5,458,722		528,405		4,930,317		2,730,807		2,199,510
Buttonwillow	3		306,540		186,070		120,470		66,726		53,744
Shafter Recreation & Park	2		131,550		-		131,550		72,863		58,687
West Side Cemetery	14		3,322,182		569,291		2,752,891		1,524,773		1,228,118
West Side Recreation & Park	31		2,846,868		772,824		2,074,044		1,148,773		925,271
North of the River Sanitation	16		4,927,434		747,315		4,180,119		2,315,287		1,864,832
Inyokern Community Services	3		342,152		108,427		233,725		129,456		104,269
East Kern Cemetery	2		404,740		118,659		286,081		<u> 158,455</u>		127,626
Total District	671	\$	158,571,468	\$	43,462,016	\$	115,109,452	\$	63,756,887	\$	51,352,565

#### **Section 5: Member Contributions**



### Basic Contributions

For KCERA, member contributions vary by employer, age at hire, and by date of hire.

Basic contributions for each employer group as reported to us are summarized in the chart at the end of this section. Member contributions are defined in the noted sections of the 1937 County Employees' Retirement Law, but modified by MOU agreements as noted in the footnotes to the table.

Basic member contributions are determined using the Entry Age Normal Funding Method and the following actuarial assumptions:

- 1. Expected rate of return on assets
- 2. Individual salary increase rate (wage growth + merit)
- 3. Mortality for members on service retirement
- 4. No COLAs are assumed

For valuation purposes, current member contribution levels are assumed to be in place for the subsequent fiscal year. Any future changes in member contribution rates would be reflected in future valuations in determining the portion of the total costs payable between the employers and the members.

Members do not contribute towards the cost-of-living benefits.

Note that for some employers, benefits are integrated with Social Security. In those cases, members pay 2/3 of the full rate on the first \$350 of pay each month.

Full disclosure of the member contribution rates by entry age into the System, can be found in Appendix D.

#### **General Members**

The Basic contribution rates are designed to provide an average annuity, payable at age 55, equal to 1/100 of the final average salary for General members, in compliance with CERL 31621.8.

Aside from the exceptions noted below, General members hired prior to August 22, 2004 pay the full member contribution rates for the first five years of service. Those hired after that date pay the full member contribution rates for 30 years.

Court employees pay an additional 2.5% of base salary toward the employer's cost of the benefits.

# General Members (continued)

Two districts, Buttonwillow RPD and San Joaquin Valley Unified Air Pollution Control District, did not adopt the 1997 MOU. Members in those districts pay 50% of the full rates for the first 30 years of service, regardless of hire date.

For Kern County Water Agency employees hired prior to August 22, 2004, the employer picks up 100% of all member contributions.

#### **Safety Members**

The Basic contribution rates are designed to provide an average annuity, payable at age 50, equal to 1/100 of the final average salary for Safety members, in compliance with CERL 31639.25.

Effective July 10, 2004, all Safety employees began paying a supplemental contribution rate:

- a) If hired after July 10, 2004, an additional rate equal to the total employee rate sufficient to provide an average annuity payable at age 50, equal to 3/200 of final compensation. This amount is equal to 150% of the rate specified in Section 31639.25 of the CERL.
- b) If hired before July 10, 2004, the supplemental rate will increase 1% each fiscal year until the full rate as described in a) is reached.

Safety members pay contributions for the first five years of service.

#### Exhibit 13: **Member Contribution Rates**

Plan	Valuation Report Label	Code Section	Contribution Provides Average Annuity of	Adopted 1997 MOU	Soc Sec Integration	Pre-Tax
General - County	General - County	31621.8	1/100 of FAS at age 55	Yes	Yes	Yes
General - County - Court Employees	General - County G - D Electing 1997 MOU	31621.8	1/100 of FAS at age 55 plus supplemental 2.5% <sup>(1)</sup>	Yes	Yes	Yes
District - Berrenda Mesa WD	G - D Electing 3% @ 60 Prospectively Only	31621.8	1/100 of FAS at age 55	Yes	No	Yes
District - Buttonwillow RPD	G - D Not Electing 1997 MOU	31621.8	1/100 of FAS at age 55 (Member pays 50%) <sup>(2)</sup>	No	No	No
District - East Kern CD	G - D Electing 1997 MOU	31621.8	1/100 of FAS at age 55	Yes	Yes	Yes
District - Inyokern CSD	G-District Electing 3% @ 60 Prospectively Only	31621.8	1/100 of FAS at age 55	Yes	No	No
			1/100 of FAS at age 55 (100% employer pickup if			
District - Kern County Water Agency	GD - KCWA G - D Electing 1997 MOU	31621.8 31621.8	hired prior to 8/22/2004) <sup>(3)</sup> 1/100 of FAS at age 55	Yes	Yes	Yes Yes
District - Kern Mosquito and VCD District - North of River SD	G - D Electing 1997 MOU	31621.8	1/100 of FAS at age 55	Yes Yes	Yes Yes	Yes
District - San Joaquin Valley UAPCD	G - District Not Electing 1997 MOU	31621.8	1/100 of FAS at age 55 (Member pays 50%) <sup>(2)</sup>	No	No	Yes
District - Shafter RPD	G - D Electing 1997 MOU	31621.8	1/100 of FAS at age 55	Yes	No	Yes
District - West Side CD	G - D Electing 1997 MOU	31621.8	1/100 of FAS at age 55	Yes	Yes	No
District - West Side Mosquito AD	G - D Electing 1997 MOU	31621.8	1/100 of FAS at age 55	Yes	Yes	No
District - West Side RPD	G - D Electing 1997 MOU	31621.8	1/100 of FAS at age 55	Yes	Yes	No
Safety - County	Safety	31639.25	1/100 of FAS at age 50 plus phased special supplement of an additional 50%	Yes	Yes	Yes

#### FAS = Final Average Salary

Aside from the exceptions noted below, General members hired prior to August 22, 2004 pay the full member contribution rates for the first five years of service. Those hired after that date pay the full member contirbution rates for 30 years of service.

#### Notes:

- 1. Court employees pay an additional 2.5% of the base salary toward the employer's cost of the benefits.
- 2. Buttonwillow and San Joaquin Valley Unified Air Pollution Control District did not adopt the 1997 MOU. Members in those districts pay 50% of the full rates for 30 years of service, regardless of hire date.
- 3. For Kern County Water Agency employees hired prior to August 22, 2004, the employer picks up 100% of all member contributions.



## Section 6: Employer Contributions



Calculated
Contribution Rate

Contributions to KCERA are determined using the Entry Age Normal Cost Funding Method. The portion of the actuarial present value of retirement benefits allocated to a valuation year by the Actuarial Cost Method is called the Normal Cost. These amounts are usually expressed as a percentage of payroll and called the Normal Cost Contribution Rate. Section 4 illustrated the Normal Cost Rates by type of benefit and for each cost group based on this valuation.

It should be noted that when we use the term "Gross Normal Cost Rate," we are referring to the value of benefits earned by active members allocated to the valuation year. The employer Normal Cost is the portion of the annual cost for which the employer is responsible. This is simply the Gross Normal Cost rate less the expected contributions made by the members for the subsequent fiscal year.

The total calculated employer contribution rates for each cost sharing group can be found in Exhibits 14-17. These results are expressed as a percentage of payroll and annual contribution dollars.

Due to the adoption of Section 31617 of the CERL, and the Ventura settlement, the contribution rates need to be valued in total and also into three major subtotals:

- The Basic benefits are the retirement benefits excluding all COLA benefits and the rates for those benefits are shown in Exhibit 14.
- b) The COLA benefits adopted prior to the Ventura settlement are referred to as the "2.0% COLA benefits" and the rates for those benefits are shown in Exhibit 15.
- c) The COLA benefits provided under the Ventura settlement are referred to as the "0.5% COLA benefits" and the rates for those benefits are shown in Exhibit 16.

This break out of the rates into the three subgroups and in total is needed for allocation of the employer contributions and in case a COLA Contribution Reserve should exist to be credited against the 2% COLA contributions.

Exhibit 17 shows the total contribution rates for all cost sharing groups.

# Contribution Rate (continued)

Note that KCERA's UAAL is determined separately for each cost sharing group depending on both assets (prior Pension Obligation Bond funds from the County) and benefit provisions (adoption of either prospective only or prospective and retrospective application of the new 3% at 60 benefit formula on January 1, 2006). Thus, KCERA funds the UAAL as a percentage of pay over salaries for all members within a cost sharing group.

In accordance with the Board's funding policy, for each employer cost sharing group, the new UAAL established due to the adoption of the 3% at 60 benefit formula for General members is established as of January 1, 2006 and then determined as of the December 31, 2005 valuation date. The UAAL contribution rate needed to amortize this portion of the UAAL increase due to the benefit enhancements is computed as of December 31, 2005 as a fixed percentage of pay. Thus, the UAAL contributions are split between those attributable to the 3% at 60 benefits and all other UAAL amounts starting with the 2005 valuation. This split is shown in Exhibits 14-17.

Additional UAAL incurred through the granting of Golden Handshake agreements made in 2004 and 2005 was amortized over a three-year period from the year in which they were granted. Beginning January 1, 2006, any liability attributable to Golden Handshakes is paid by the employer at the time the handshake is granted.

### **Court Employees**

Per Article VI, Section 2-E of the Court Memorandum of Understanding (MOU), ratified in January 2005, all court employees began contributing 2.5% of their base salary in May 2005 to partially offset the Court's additional costs in adopting the 3% @ 60 retirement enhancement.

The reduction in the employer contribution rate for court employees is less than the 2.50% contributed by members, since the additional member contributions result in additional refunds of member contributions. Those additional refunds are reflected in our calculations. Total employee contributions are calculated for the court employees group. Depending on the demographic makeup of this group, the base member contribution rate could be either higher or lower than the rate calculated for the General County group excluding the court members.

Exhibit 14: **Basic Benefits** 

		General- County	General-District	General-District	General-District	General District 3%@60		
	General-County	Courts	KCWA	Electing 1997 MOU	Not Electing 1997 MOU	Prospectively Only	Safety	Totals
				Contributions in I	Dollars			
Total Normal Cost     Projected Employee Contributions     Employer Normal Cost (1-2)	\$ 48,978,345 \$ 5,762,553 43,215,792	3,599,099 990,709 2,608,390	\$ 880,221 34,682 845,539	\$ 487,413 28,618 458,795	\$ 2,734,137 <u>597,278</u> 2,136,859	\$ 114,403 17,492 96,911	\$ 21,877,408 2,021,318 19,856,090	\$ 78,671,027 9,452,650 69,218,377
4. Amortization of Unfunded Actuarial Accrued Liability	19,571,450	1,438,178	485,400	268,785	1,507,744	48,287	7,670,449	30,990,293
5. Total Employer Contribution (3+4)	\$ 62,787,243 \$	4,046,568	\$ 1,330,939	\$ 727,580	\$ 3,644,604	\$ 145,198	\$ 27,526,539	\$ 100,208,670
			Cor	ntributions as a Per	cent of Pay			
Total Normal Cost     Projected Employee Contributions     Employer Normal Cost (1-2)	17.81% 2.10% 15.72%	17.81% 4.90% 12.91%	17.81% 0.70% 17.11%	17.81% 1.05% 16.76%	17.81% 3.89% 13.92%	17.81% 2.72% 15.09%	22.22% 2.05% 20.16%	18.85% 2.26% 16.59%
<ol> <li>Amortization of Unfunded Actuarial Accrued Liability         <ul> <li>a.) 30 Year Fixed for Benefit Change to 3% @ 60 Form</li> <li>b.) Remaining UAAL</li> <li>c.) Total UAAL Rate</li> </ul> </li> </ol>	ula 2.43% 4.69% 7.12%	2.43% 4.69% 7.12%	2.30% 7.52% 9.82%	2.30% 7.52% 9.82%	2.30% 7.52% 9.82%	0.00% 7.52% 7.52%	0.00% 7.79% 7.79%	7.43%
5. Total Employer Contribution (3+4)	22.83%	20.02%	26.93%	26.59%	23.74%	22.60%	27.95%	24.01%

Exhibit 15: **COLA Benefits – 2%** 

	General-County	General-County Courts	General-District KCWA	General-District Electing 1997 MOU	General-District Not Electing 1997 MOU	General District 3%@60 Prospectively Only	Safety	Totals
				Contributions in D	Oollars			
Total Normal Cost     Projected Employee Contributions	\$ 9,938,578 0	\$ 730,321 0	\$ 178,613 0	\$ 98,905 0	\$ 554,805	\$ 23,214	\$ 5,235,416 0	\$ 16,759,851 0
Employer Normal Cost (1-2)	9,938,578	730,321	178,613	98,905	554,805	23,214	5,235,416	16,759,851
4. Amortization of Unfunded Actuarial Accrued Liability	3,896,745	286,346	111,200	61,576	345,408	11,405	1,986,583	6,699,263
5. Total Employer Contribution (3+4)	13,835,323	\$ 1,016,667	\$ 289,812	\$ 160,480	\$ 900,213	\$ 34,619	\$ 7,221,999	\$ 23,459,114
6. COLA Contribution Reserve	6,712,191	493,235	150,175	83,158	466,473	19,518	3,649,074	11,573,825
7. Remaining Employer Contribution (5-6)	\$ 7,123,131	\$ 523,432	\$ 139,637	\$ 77,323	\$ 433,740	\$ 15,101	\$ 3,572,925	\$ 11,885,289
			С	contributions as a Per	cent of Pay			
Total Normal Cost     Projected Employee Contributions     Employer Normal Cost (1-2)	3.61% 0.00% 3.61%	3.61% 0.00% 3.61%	3.61% 0.00% 3.61%	3.61% 0.00% 3.61%	3.61% 0.00% 3.61%	3.61% 0.00% 3.61%	5.32% 0.00% 5.32%	4.02% 0.00% 4.02%
<ol> <li>Amortization of Unfunded Actuarial Accrued Liability</li> <li>30 Year Fixed for Benefit Change to 3% @ 60 Formula</li> <li>Remaining UAAL</li> <li>Total UAAL Rate</li> </ol>	0.51% 0.91% 1.42%	0.51% 0.91% 1.42%	0.47% 	0.47% 1.78% 2.25%	0.47% 1.78% 2.25%	0.00% <u>1.78%</u> 1.78%	0.00% 2.02% 2.02%	1.61%
5. Total Employer Contribution (3+4)	5.03%	5.03%	5.86%	5.86%	5.86%	5.39%	7.33%	5.62%
6. COLA Contribution Reserve	2.44%	2.44%	3.04%	3.04%	3.04%	3.04%	3.71%	2.77%
7. Remaining Employer Contribution (5-6)	2.59%	2.59%	2.83%	2.83%	2.83%	2.35%	3.63%	2.85%

Exhibit 16: COLA Benefits - 0.5%

	General-County	General-County Courts	General-District KCWA	General-District Electing 1997 MOU	General-District Not Electing 1997 MOU	General District 3%@60 Prospectively Only	Safety	Totals
				Contributions in D	ollars			
Total Normal Cost     Projected Employee Contributions     Employer Normal Cost (1-2)	\$ 3,012,538 0 3,012,538	\$ 221,372 0 221,372	\$ 54,140 0 54,140	\$ 29,980 0 29,980	\$ 168,170 0 168,170	\$ 7,037 0 7,037	\$ 1,636,181 0 1,636,181	\$ 5,129,418 0 5,129,418
4. Amortization of Unfunded Actuarial Accrued Liability	3,109,277	228,480	54,730	30,306	170,003	6,262	2,245,599	5,844,657
5. Total Employer Contribution (3+4)	\$ 6,121,815	449,852	\$ 108,871	\$ 60,286	\$ 338,173	\$ 13,298	\$ 3,881,780	\$ 10,974,075
			С	ontributions as a Perd	cent of Pay			
Total Normal Cost     Projected Employee Contributions     Employer Normal Cost (1-2)	1.10% 0.00% 1.10%	1.10% 0.00% 1.10%	1.10% 0.00% 1.10%	1.10% 0.00% 1.10%	1.10% 0.00% 1.10%	1.10% 0.00% 1.10%	1.66% 0.00% 1.66%	1.23% 0.00% 1.23%
Amortization of Unfunded Actuarial Accrued Liability     a.) 30 Year Fixed for Benefit Change to 3% @ 60 Formula     b.) Remaining UAAL     c.) Total UAAL Rate	0.13% 1.00% 1.13%	0.13% 1.00% 1.13%	0.13% 0.97% 1.11%	0.13% 0.97% 1.11%	0.13% 	0.00% 0.97% 0.97%	0.00% 2.28% 2.28%	1.40%
5. Total Employer Contribution (3+4)	2.23%	2.23%	2.20%	2.20%	2.20%	2.07%	3.94%	2.63%

Exhibit 17: **Total Benefits** 

	General-County	General-County Courts	General-District KCWA	General-District Electing 1997 MOU	General-District Not Electing 1997 MOU	General District 3%@60 Prospectively Only	Safety	Totals
				Contributions in	n Dollars			
Total Normal Cost     Projected Employee Contributions     Employer Normal Cost (1-2)	\$ 61,929,461 5,762,553 56,166,908	\$ 4,550,792 990,709 3,560,083	\$ 1,112,974 34,682 1,078,292	\$ 616,298 28,618 587,680	\$ 3,457,113 597,278 2,859,835	\$ 144,654 17,492 127,162	\$ 28,749,005 2,021,318 26,727,687	\$ 100,560,296 9,452,650 91,107,646
4. Amortization of Unfunded Actuarial Accrued Liability	26,577,472	1,953,005	651,330	360,667	2,023,155	65,953	11,902,631	43,534,213
5. Total Employer Contribution (3+4)	\$ 82,744,381	\$ 5,513,087	\$ 1,729,622	\$ 948,346	\$ 4,882,990	\$ 193,115	\$ 38,630,319	\$ 134,641,860
6. COLA Contribution Reserve	6,712,191	493,235	150,175	83,158	466,473	19,518	3,649,074	11,573,825
7. Remaining Employer Contribution (5-6)	\$ 76,032,189	\$ 5,019,852	\$ 1,579,447	\$ 865,189	\$ 4,416,516	\$ 173,597	\$ 34,981,245	\$ 123,068,035
				Contributions as a P	ercent of Pay			
Total Normal Cost     Projected Employee Contributions     Employer Normal Cost (1-2)	22.52% 2.10% 20.42%	22.52% 4.90% 17.62%	22.52% 0.70% 21.82%	22.52% 1.05% 21.47%	22.52% 3.89% 18.63%	22.52% 2.72% 19.80%	29.19% 2.05% 27.14%	24.09% 2.26% 21.83%
<ul> <li>4. Amortization of Unfunded Actuarial Accrued Liability</li> <li>a.) 30 Year Fixed for Benefit Change to 3% @ 60 Formula*</li> <li>b.) Remaining UAAL</li> <li>c.) Total UAAL Rate</li> </ul>	3.07% 6.59% 9.66%	3.07% 6.59% 9.66%	2.91% 10.27% 13.18%	2.91% 10.27% 13.18%	2.91% 	0.00% 10.27% 10.27%	0.00% 12.09% 12.09%	10.43%
5. Total Employer Contribution (3+4)	30.09%	27.28%	35.00%	34.65%	31.81%	30.06%	39.23%	32.26%
6. COLA Contribution Reserve	2.44%	2.44%	3.04%	3.04%	3.04%	3.04%	3.71%	2.77%
7. Remaining Employer Contribution (5-6)	27.65%	24.84%	31.96%	31.61%	28.77%	27.03%	35.52%	29.49%

<sup>\*</sup>In accordance with the Funding Policy, calculated as a fixed UAAL Rate for Benefit Change effective January 1, 2005.



# Changes in the Contribution Rates

The following Exhibit 18 illustrates the various sources of changes that impacted both the employer contribution rates and the funded rate. It shows the analysis of change both in aggregate for all of KCERA, as well as for the General and Safety cost sharing groups. The most significant changes that occurred during the year are due to:

- Experience during the 2006 year included variations resulting in a 0.36% decrease in the contribution rate for General members and a 1.13% increase for Safety members from what was expected, based on the actuarial assumptions used for the 2005 valuation. Some experience gains and losses are to be expected as part of the normal variation between actual and expected experience. The changes due to actual experience are described in further detail in the gain and loss summary, Exhibit 18 in this section, and were well within a reasonable level of fluctuation.
- As part of our ongoing effort to improve the valuation process, we modified the assumption regarding the age at which terminated vested members are assumed to retire. This new assumption reflects the earliest age at which the benefit factor is no longer reduced due to age.

By accepting and adopting the recommended contribution rates in this report, we ask the Board to also approve this change in assumptions.

#### Exhibit 18: Gain and Loss Analysis by Employer Contribution Rates and Funded **Percentage**

	Changes in Employer Co Rate Due to	ontribution	Changes ir Percentage Due to:	
As of December 31, 2005 Experience:		31.70%		75.6%
Passage of Time, Salary, and Demographics	0.12%		0.5%	
Investment Experience	-0.06%		0.1%	
Service Purchases	<u>0.13%</u>		<u>-0.2%</u>	
Subtotal for Experience	0.19%	0.19%	0.4%	0.4%
Assumption Change		<u>0.37%</u>		<u>-0.3%</u>
Total Changes		0.56%		0.1%
As of December 31, 2006 prior to CCR credit		32.26%		75.7%
COLA Contribution Reserve		<u>-2.77%</u>		
Total as of December 31, 2006		29.49%		
Changes in Average Employer Contribution R	ate - General	County and Districts		
As of December 31, 2005 Experience:		30.11%		70.8%
Passage of Time, Salary, and Demographics	-0.42%		1.4%	
Investment Experience	-0.04%		0.1%	
Service Purchases	0.10%		-0.2%	
Subtotal for Experience	-0.36%	-0.36%	1.3%	1.3%
Assumption Changes		<u>0.36%</u>		<u>-0.4%</u>
Total Changes		0.00%		0.9%
As of December 31, 2006 prior to CCR credit		30.11%		71.7%
COLA Contribution Reserve		<u>-2.49%</u>		, ,
Total as of December 31, 2006		27.62%		
Changes in Employer Contribution Rate - Safe	ety			
As of December 31, 2005		37.69%		83.8%
Experience: Passage of Time, Salary, and Demographics	1.01%		-1.2%	
Investment Experience	-0.09%		0.1%	
Service Purchases	0.21%		-0.3%	
Subtotal for Experience	1.13%	1.13%	-1.4%	-1.4%
Assumption Changes		<u>0.41%</u>		<u>-0.2%</u>
Total Changes		1.54%		-1.6%
As of December 31, 2006 prior to CCR credit		39.23%		82.2%
COLA Contribution Reserve		-3.71%		UL.L /0
Total as of December 31, 2006		35.52%		



## **Section 7: Accounting Information**



The Governmental Accounting Standards Board (GASB) sets standards for defined benefit pension plan reporting and disclosures (Statement No. 25). The reporting requirements for Statement No. 25 include certain supplementary information that must be added to the financial statements. These include:

- (1) A Schedule of Funding Progress
- (2) A Schedule of Employer Contributions

The Schedule of Funding Progress, Exhibit 19, compares actuarial assets and liabilities of KCERA, based on the actuarial funding method used. The required Schedule of Employer Contributions, Exhibit 20, compares the employer contributions required based on the actuarial valuation (the actuarial required contribution, or ARC) with the employer contributions actually made. The ARC must be calculated based on certain parameters required for disclosure purposes.

We believe the actuarial methods and assumptions used in this valuation to determine the employer's contribution for funding purposes satisfy the GASB reporting requirements.

GASB Statement No. 27 specifies required reporting for pension accounting by state and local governmental employers.

The comparability of the data from year-to-year can be affected by changes in actuarial assumptions, benefit provisions, accounting policies, etc.

Please refer to Section 6 of this report which discloses the financial impact of any benefit changes or assumption changes that may have occurred in 2006.

Exhibit 21 compares the Actuarial Value of Valuation Assets to the types of Actuarial Accrued Liabilities, applying them first to Active Member contributions, then to retirees and beneficiaries, and then the remaining amount to the Active Members benefits. This is referred to as the Solvency Test. Although not required under GASB, this test is part of the CAFR guidelines specified by the Government Finance Officers Association (GFOA).

Exhibit 19: **Schedule of Funding Progress** (Dollars in Thousands)

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	(	nfunded AAL UAAL) 3) - (2)	Funded Ratio (2) / (3)	C	Annual overed Payroll	UAAL as a % of Annual Payroll (4) / (6)
(1)	(2)	(3)		(4)	(5)		(6)	(7)
12/31/1996	\$ 1,003,076	\$ 1,029,574	\$	26,498	97.43%	\$	273,351	9.69%
12/31/1997	1,113,914	1,140,019		26,105	97.71%		266,640	9.79%
12/31/1998	1,203,670	1,179,753		(23,917)	102.03%		282,251	-8.47%
12/31/1999	1,325,928	1,324,662		(1,266)	100.10%		297,738	-0.43%
12/31/2000	1,434,873	1,388,984		(45,889)	103.30%		283,283	-16.20%
12/31/2001	1,508,291	1,611,960		103,669	93.57%		333,791	31.06%
12/31/2002	1,570,278	1,899,031		328,753	82.69%		344,871	95.33%
12/31/2003	1,927,585	2,059,286		131,701	93.60%		353,444	37.26%
12/31/2004	2,012,521	2,336,406		323,885	86.14%		374,951	86.38%
12/31/2005	2,164,304	2,861,872		697,568	75.63%		391,381	178.23%
12/31/2006	2,352,028	3,109,038		757,010	75.65%		417,351	181.38%

#### Exhibit 20: **Schedule of Contributions from the Employer**

Fiscal Year Ending	Annual Required Contribution (ARC)	Percentage of ARC Contributed
6/30/1998	\$ 35,420,517	100%
6/30/1999	40,159,103	100%
6/30/2000	37,575,583	100%
6/30/2001	41,067,487	100%
6/30/2002	41,881,569	100%
6/30/2003	58,246,726	682% *
6/30/2004	48,759,946	100%
6/30/2005	60,286,141	100%
6/30/2006	100,734,230	100%

<sup>\*</sup> Reflects pension obligation bond proceeds.

Exhibit 21: **Solvency Test** 

Actuarial Accrued Liabilities for						Portion of A	AL Covered by Assets	<u> </u>
Valuation Date	Active Member Contributions	Retire/Vested Members	Active Members (Employer-Financed Portion)	Total	Actuarial  Value of Assets	Active Member	Retire/Vested Members	Active Members (Employer-Financed Portion)
December 31, 2003	\$ 182,161,145	\$ 1,067,016,084	\$ 810,108,722	\$ 2,059,285,951	\$ 1,927,584,527	100%	100%	84%
December 31, 2004	191,485,223	1,147,205,842	997,714,664	2,336,405,729	2,012,520,879	100%	100%	68%
December 31, 2005	188,810,897	1,437,046,916	1,236,014,189	2,861,872,002	2,164,304,268	100%	100%	44%
December 31, 2006	197,506,875	1,629,003,347	1,282,527,384	3,109,037,606	2,352,028,020	100%	100%	41%

Milliman

### Section 8: SRBR – Supplemental Retirement Benefit Reserve



Additional benefits may be provided to KCERA active and retired members under the plan provisions adopted by the County as provided under Article 5.5 of the County Employees Retirement Law of 1937 (CERL). These are the Supplemental Retiree Benefit Reserve (SRBR) benefits, and the Board of Retirement has defined these as:

- ▶ Approved Benefits These are the SRBR benefits that have already been approved by the Retirement Board. They include all Tier I, Tier II and Death Benefits, as well as the Tier III benefits approved through December 31, 2006.
- Future Benefits These are the SRBR Tier III benefits expected to be approved in future years in order to maintain the 80% purchasing power goal.

Article 5.5 governs the crediting of interest to reserves and the allocation of Undistributed Earnings. Undistributed Earnings are the amount that remains after earnings have been used to credit interest to the Plan's reserves. They are generally thought of as earnings in excess of those assumed to be earned under the actuarial valuation assumptions.

Under the provisions of Article 5.5, and in accordance with the Board's interest crediting policy, if Undistributed Earnings remain then 50% of those Earnings are credited to the SRBR fund and the remaining 50% are allocated as additional interest credits to all other reserve funds except the Contingency Reserve, the SRBR and the CCR, if any. See Section 3 Assets for a description of the Board's interest crediting policy.

The funding status of the SRBR benefits changed since the 2005 valuation due to:

- 1. Experience losses since the COLA for the Tier 3 benefits was 4.3% rather than the 3.5% assumed.
- 2. The death benefits were increased from \$1,000 to \$3,000 since the 2005 Valuation.
- 3. The assets experienced "Excess Earnings" as of December 31, 2006 and an additional \$0.9 million dollars was allocated to the unallocated portion of the SRBR assets.

# Determination of SRBR Benefits

The SRBR currently provides four categories of supplemental retiree benefits:

- Tier 1 \$35.50 per month payable to retirees who were hired on or before July 1, 1994.
- Tier 2 Three additional monthly stipends payable to retirees:
  - ▶ \$1.372 per year of service for Participants who retired prior to 1985. This was granted July 1, 1994.
  - ➤ \$5.470 per year of service for Participants who retired prior to 1985. This was granted July 1, 1996.
  - ➤ \$10.276 per year of service for Participants who retired prior to 1981. This was granted July 1, 1997.
- Tier 3 Additional benefits to maintain 80% purchasing power protection.
- Death Benefit A one-time payment of \$3,000 to a Participant's beneficiary is made upon the death of the Participant. Prior to 2007, the death benefit payment was \$1,000.

In addition, the KCERA Board has set aside a portion of the SRBR Reserve to help pay for an additional 0.5% COLA adopted under the Ventura Settlement.

By their very nature, Undistributed Earnings are produced on an inconsistent basis and cannot be counted on to appear in any single period. Because of this, the funding for SRBR Benefits is set up differently than funding for Regular Benefits. Undistributed Earnings are the only source of funding for these benefits. For this reason, KCERA compares the SRBR Reserve against three liability measures to understand its short-term, medium-term and long-term funding position. All of these funding targets are based on the Present Value of Benefits for SRBR Benefits.

### Determination of SRBR Benefits (continued)

The **Present Value of Benefits (PVB)** represents the amount of money, at the valuation date, which would be sufficient to pay for all SRBR Benefits for all current Plan Participants if all plan assumptions are met in future years. In other words,

- If Plan Assets are equal to the Present Value of Benefits, and
- If current plan benefits remain in place, and
- If there are no new Plan Participants, and
- If plan experience in all future years matches the assumptions,

---- then ----

There will be enough money to pay for all approved and future SRBR benefits for all Plan Participants and their beneficiaries for the rest of their lives without another dollar being added to the SRBR Reserve from Undistributed Earnings.

### **Approved Benefits**

Approved Benefits are the SRBR benefits that have already been approved by the Retirement Board. They include all Tier I, Tier II and Death Benefits, as well as the Tier III benefits approved through December 31, 2006. The Present Value of Approved Benefits is the short-term funding target for the SRBR.

The Plan's funded percentage for Approved SRBR Benefits is 141.5%. It is calculated by dividing the Actuarial Value of Assets (\$91.0 million) by the Present Value of Approved SRBR Benefits (\$64.3 million).

The funded percentage is developed in the following table:

#### 1. Present Value of Approved Benefits

a. Death Benefits	\$ 6,668,661
b. SRBR1	28,559,626
c. SRBR2	13,095,814
d. SRBR3	 15,992,828
e. Total	\$ 64,316,929

#### 2. Available SRBR Reserves

a. Total SRBR	\$ 168,314,346

b. 0.5% COLA Account	77,333,873
c. Available SRBR Reserve	\$ 90,980,473

3. Funded Percentage 141.5%

### **Targeted Funding**

In 2001, KCERA did an extensive review of the benefits provided through the SRBR and the financial strength of the SRBR. The Board decided to use a target based on a combination of Approved and Projected SRBR Benefits. The target liability is the Present Value of Benefits for Tier I, Tier II and Death Benefits. For Tier III Benefits, the target liability is the Present Value of projected payments for the twenty-year period beginning with the valuation date.

On this basis, the Plan's funded percentage for Target SRBR Liabilities is 117.3%. It is calculated by dividing the Actuarial Value of Assets (\$91.0 million) by the Present Value of SRBR Target Liabilities (\$77.5 million).

The funding target is to have a 20% reserve for the death benefits, SRBR1 and SRBR2 benefits and 20 years of expected SRBR3 payments as shown at the end of this section.

#### 1. Present Value of Targeted Funding

	Liabilities	With Reserves
<ul> <li>a. Death Benefits</li> </ul>	\$ 6,668,661	\$ 8,002,393
b. SRBR1	28,559,626	34,271,551
c. SRBR2	13,095,814	15,714,977
d. SRBR3 (20 years)	29,212,897	29,212,897
e. Total	\$ 77,536,998	\$ 87,201,818
2. Available SRBR Reserves		
a. Total SRBR	\$ 168,314,346	\$ 168,314,346
b. 0.5% COLA Account	77,333,873	77,333,873
c. Available SRBR Reserve	\$ 90,980,473	\$ 90,980,473
3. Funded Percentage	117.3%	104.3%

Under the Board's "20/20" policy, if the liabilities of the targeted benefits with a 20% reserve on all but the SRBR3 20-year projection of benefits are more than 100% funded, the Board may consider increasing the SRBR approved benefits. As of December 31, 2006, the funding ratio is just over the 100% benchmark, at 104.3%.

#### **Total SRBR Benefits**

KCERA's long-term funding target for the SRBR is based on the Present Value of all SRBR Benefits. The Plan's funded percentage for all SRBR Benefits is 81.6%. It is calculated by dividing the Actuarial Value of Assets (\$91.0 million) by the Present Value of all SRBR Benefits (\$111.5 million).

The funded percentage is developed in the following table:

1. Present Value of SRBR	
<ul> <li>a. Approved Benefits</li> </ul>	\$ 64,316,929
b. Future Benefits	 47,167,820
c. Total	\$ 111,484,749
2. Available SRBR Reserves	
a. Total SRBR	\$ 168,314,346
b. 0.5% COLA Account	 77,333,873
c. Available SRBR Reserve	\$ 90,980,473
3. Funded Percentage	81.6%

The funded percentage dropped to 81.6% from 88.1% in our last valuation. The following table quantifies the impact of various changes.

	Funded Status	Change
Prior Year	88.1%	
Passage of Time		-0.8%
Asset Gain (Transfer from Excess Earnings)		1.2%
Increased Death Benefit		-3.7%
Inflation higher than expected Liability Loss (including Salaries higher than		-2.1%
expected)		-1.1%
Total Change:		-6.5%
Current Year	81.6%	

Exhibits 22 and 23 on the following pages show further detail on the SRBR present value of benefits by member status, and the present value of the year-by-year projected SRBR3 benefit payments for both active and retired members for the next 20 years.

#### Exhibit 22: **Supplemental Retiree Benefit Reserve**

#### **Present Value of Projected Benefits**

Approved Benefits					
	Death Ben	SRBR1	SRBR2	SRBR3	Total
Active Members	\$ 1,903,915	\$ 8,562,854	\$	\$	\$ 10,466,769
Deferred Vested Members	272,948	1,488,653			1,761,601
Retirees and Beneficiaries	4,491,798	18,508,119	13,095,814	15,992,828	52,088,559
Total	\$ 6,668,661	\$ 28,559,626	\$ 13,095,814	\$ 15,992,828	\$ 64,316,929
Future Benefits					
	Death Ben	SRBR1	SRBR2	SRBR3	Total
Active Members				\$ 15,713,644	\$ 15,713,644
Deferred Vested Members				530,125	530,125
Retirees and Beneficiaries		 	 	 30,924,051	 30,924,051
Total	0	 0	0	\$ 47 167 820	\$ 47 167 820

#### **Available Reserves**

Total SRBR	\$ 168,314,346
Additional 0.5% COLA Account	 77,333,873
Available SRBR	\$ 90,980,473

#### Exhibit 23: **Projected Cash Flow for SRBR Tier 3 Payments**

Calendar Year	:	rojected SRBR 3 ayments
2007	\$	2,386,850
2008		2,517,566
2009		2,607,257
2010		2,712,294
2011		2,794,240
2012		2,869,018
2013		2,936,846
2014		3,021,791
2015		3,072,512
2016		3,113,296
2017		3,141,413
2018		3,154,458
2019		3,156,098
2020		3,145,619
2021		3,119,315
2022		3,083,163
2023		3,042,518
2024		3,032,938
2025		3,129,568
2026		3,405,234

Present Value of Projected 20-Year Cash Flow:

\$29,212,897

### **Section 9: Benefit Payment Projections**

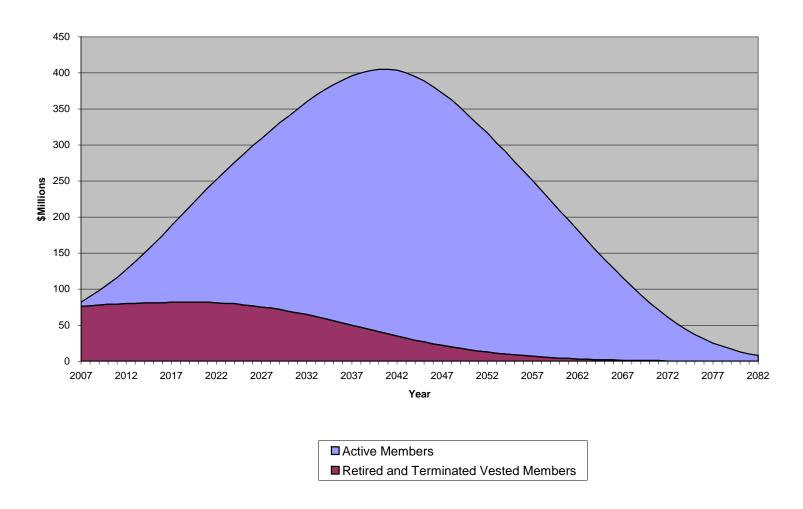
# Cash Flow Projection



The graphs on the next two pages illustrate the expected dollar amount of future annual benefit payments. These projected payments are based on:

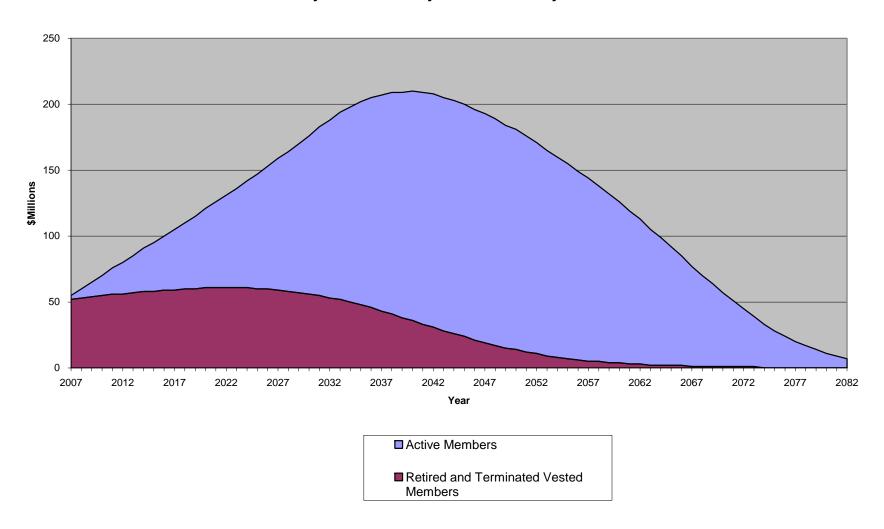
- 1. Current members, both active and inactive; no new members are included in these projections.
- 2. Current actuarial assumptions regarding the demographic changes in the membership; future salary increases and future COLA benefit increases based on price inflation.
- 3. The assumption that no additional benefit changes occur during the 75-year projection period.

# **General Members- Projected Benefit Payments**





# **Safety Members- Projected Benefit Payments**



### Appendix A

### **Actuarial Assumptions**

The actuarial procedures and assumptions recommended to be used in the December 31, 2006 valuation are described in this section.

The actuarial assumptions used in the valuations are intended to estimate the future experience of the members of KCERA in areas that affect the projected benefit flow and anticipated investment earnings. Any variations in future experience from that expected from these assumptions will result in corresponding changes in the estimated costs of KCERA's benefits.

The assumption regarding the Deferred Retirement Age for Vested Terminated was changed in 2006 to reflect the age at which full benefit are available. All other assumptions were reviewed during the 2005 Investigation of Experience study. The next study is expected as of December 31, 2008.

The major assumptions and methods used in this valuation are as follows:

#### **ECONOMIC ASSUMPTIONS**

Investment Earnings and Expenses: The future investment earnings of the assets of

KCERA are assumed to accrue at an annual rate of 8.00%, compounded annually, net of both investment and administrative expenses.

Post-retirement Benefit Increases: Post-retirement increases are assumed for the

valuation in accordance with the benefits provided as described in Appendix B of the valuation report. These adjustments are assumed payable each year in the future as they are less than the

expected increase in the Consumer Price Index of

3.5% per year.

Salary Increase – Total Payroll: 4.0% per year.

Salary Increase – Individual: Rates varying by service, as shown in Schedule 1.

Inflation (CPI): 3.5% per year.

Interest on Member Contributions: The annual credited interest rate on member

contributions is assumed to be 8.0% compounded

semi-annually.



#### **DEMOGRAPHIC ASSUMPTIONS**

Post-retirement mortality:

Service Retirement – General: RP-2000 Healthy Annuitant Mortality, with

adjustment for white collar workers.

Rates for females are set back one year; no

adjustment is made for males.

Mortality rates for the standard table are shown in

Schedule 2.

Life expectancies for the adjusted tables are shown

in Schedule 3.

Service Retirement – Safety: Rates are the same as General.

Disability Retirement – General: RP-2000 Healthy Annuitant Mortality, with

adjustment for white collar workers.

Rates set forward four years for males and

females. Rates are not less than 1.25% for males

and 1.0% for females.

Life expectancies for the adjusted tables are shown

in Schedule 4.

Disability Retirement – Safety: Rates are the same as General, except that set

forward is two years.

Life expectancies for the adjusted tables are shown

in Schedule 4.

Beneficiary: Rates are the same as a service retiree of the

opposite gender.

Other Termination: Rates varying by years of service, as shown in

Schedule 5 (for General males), 6 (for General females) and 7 (for Safety). Note that these decrements are not applied after eligibility for

retirement.

Probability of Refund: Rates varying by years of service, as shown in

Schedule 8.

Reciprocal Agency: For current active members, the probability of

joining a reciprocal agency immediately after termination is 60% for Safety members and 60% for General members. For members who have already terminated vested with a deferred

commencement, we use the code provided by the KCERA to determine if the person has joined a

reciprocal agency. All terminating members are

assumed to not be rehired.



Deferred Retirement Age for Vested Termination:

Age 50 for Safety members. Age 60 for General members.

This assumption was changed from our previous valuation. The new assumption reflects the age at which members are entitled to full benefits.

Salary Projection for Vested Termination with Reciprocity:

Salaries are assumed to increase with wage inflation from termination with KCERA to benefit commencement. The assumed annual increase after termination of employment is 4.52% for General members and 4.78% for Safety members.

Pre-retirement Mortality: Rates varying by age, as shown in Schedule 5 (for

General males), 6 (for General females) and 7 (for Safety). Separate rates are used for ordinary death, service related death, and death while

eligible to retire.

Service Disability: Rates varying by age, as shown in Schedule 5

(for General males), 6 (for General females)

and 7 (for Safety).

Ordinary Disability: Rates varying by age, as shown in Schedule 5 (for

General males), 6 (for General females) and 7 (for

Safety).

Service Retirement: Rates varying by age, as shown in Schedule 5 (for

General males), 6 (for General females) and 7 (for Safety). All general members who attain or who have attained age 70 in active service and all safety members who have attained age 60 in active service are assumed to retire immediately.

The assumptions regarding termination of employment and service retirement are treated as a single set of decrements in regards to a particular

member.

For example, a general member hired at age 30 has a probability to withdraw from KCERA due to death, disability or other termination of employment until age 50. After age 50, the member could still withdraw due to death, disability or retirement. Thus, in no year during the member's projected employment would they be eligible for both a probability of other termination of employment and

a probability of retirement.



Form of Payment: Life annuity for single members. 60% contingent

annuity for married members (100% contingent annuity if receiving service-related disability).

SRBR benefits for married members are all assumed to be paid as a 60% contingent annuity.

Percentage Married at Retirement: 80% of male active members and 60% of female

active members are assumed to have a spouse or qualified domestic partner eligible for the 60% continuance at retirement. There is no explicit assumption for children's benefits. We believe the

survivor benefits based on this marriage assumption are sufficient to cover children's

benefits as they occur.

Spouse Ages: For active members reaching retirement, wives are

assumed to be three years younger than

husbands.

Where spousal information was included for retirees, that information was used. If the age of the spouse was not provided, we have assumed that all spouses are still alive, and that female spouses are four years younger than their

husbands.

#### **ACTUARIAL METHODS**

Funding Method: Entry Age Funding Method, with costs allocated as

a level percent of salary.

Actuarial Cost Method: The actuarial valuation is prepared using the entry

age actuarial cost method (CERL 31453.5). Under the principles of this method, the actuarial present value of the projected benefits of each individual included in the valuation is allocated as a level

percentage of the individual's projected

compensation between entry age and assumed

exit (until maximum retirement age).

The portion of this actuarial present value allocated to a valuation year is called the normal cost. The portion of this actuarial present value not provided for at a valuation date by the sum of (a) the actuarial value of the assets, and (b) the actuarial present value of future normal costs is called the Unfunded Actuarial Accrued Liability (UAAL).



**Amortization Period:** 

The UAAL due to the change to the benefit formula for General Members is amortized as a level percentage of payroll over a 30-year period beginning with the December 31, 2005 valuation, or 29 years as of December 31, 2006.

The UAAL due to all other sources is amortized as a level percentage of payroll over a 29-year period beginning with the December 31, 2006 valuation.

Additional UAAL incurred through the granting of Golden Handshake agreements made in 2004 and 2005 was amortized over a three-year period from the year in which they were granted. Beginning January 1, 2006, any liability attributable to Golden Handshakes is paid by the employer at the time the handshake is granted.

Actuarial Value of Assets:

The market value of assets is adjusted to recognize, over a five-year period, investment earnings greater than (or less than) the assumed investment return. Details are shown in Section 2, Assets, of this report.

The actuarial value, market value and book value are net of amounts allocated to the Supplemental Retiree Benefit Reserve and the Contingency Reserve.

Replacement of Terminated Members:

The ages and relative salaries at entry of future members are assumed to follow a new entrant distribution based on the pattern of current members. Under this assumption, the normal cost rates for active members will remain fairly stable in future years unless there are changes in the governing law, the actuarial assumptions or the pattern of the new entrants.

Growth in Membership:

For benefit determination purposes, no growth in the membership of KCERA is assumed. For funding purposes, if amortization is required, the total payroll of covered members is assumed to grow due to the combined effects of future wage increases of current active members and the replacement of the current active members by new employees. No growth in the total number of active members is assumed.

Internal Revenue Code Section 415 Limit:

The Internal Revenue Code Section 415 maximum benefit limitations are not reflected in the valuation for funding purposes. Any limitation is reflected in a member's benefit after retirement.

**Employer Contributions:** 

The employer contribution rate is set by the Retirement Board based on actuarial valuations.

Member Contributions:

The member contribution rates vary by entry age and are described in the law. Code references are shown in Appendix C of this report. The methods and assumptions used are detailed below.

The individual member rates by entry age, plan and class are illustrated in Appendix C.

Member Contribution Rate Assumptions:

The following assumptions summarize the procedures used to compute member contribution rates based on entry age:

In general, the member rate is determined by the present value of the future benefit (PVFB) payable at retirement age, divided by the present value of all future salaries payable between age at entry and retirement age. For these purposes, per the CERL, the:

- A. Annuity factor used for general members is based on a one-third / two-thirds blend of the male and female mortality tables using current valuation assumptions. For Safety members it is based on a five-sixths / one-sixth blend.
- B. The annuity factor used in determining the present value of future benefits (PVFB) at entry age is equal to the life only annuity factor at 8%.
- C. The Final Compensation is based on the salary paid in the year prior to attaining the retirement age.

Example: For a General member who enters at age 59 or earlier, the Final Compensation at retirement (age 60) will be the monthly average of the annual salaries during age 59.

D. Member Rates are assumed to increase with entry age. There are a few exceptions at the higher entry ages where the calculated rate is less than the previous entry age. In these cases the member contribution rate is adjusted so that it is no less than the value for the previous entry age.

#### **DATA SOURCES**

Asset Data: The asset information is taken directly from

statements furnished by the Retirement Office and

used without audit.

Member Data: The member data is supplied by the Retirement

Office. It is reviewed for reasonableness and consistency, but no audit was performed. Milliman is not aware of any errors or omissions in the data that would have a significant effect on the results of

our calculations.

# Schedule 1 Assumed Rate of Salary Increase

### Annual Increase in Salary (before wage inflation)

Years of Service	General Members	Safety Members
0	6.00%	6.00%
1	5.00%	5.00%
2	4.00%	4.00%
3	3.00%	3.00%
4	2.50%	2.50%
5	2.25%	2.25%
6	2.00%	2.00%
7	1.75%	1.75%
8	1.50%	1.50%
9	1.30%	1.30%
10	1.10%	1.10%
11	0.90%	0.90%
12	0.80%	0.80%
13	0.70%	0.75%
14	0.60%	0.75%
15 or More	0.50%	0.75%

### Annual Increase in Salary (with wage inflation)

Years of Service	General Members	Safety Members
0	10.24%	10.24%
1	9.20%	9.20%
2	8.16%	8.16%
3	7.12%	7.12%
4	6.60%	6.60%
5	6.34%	6.34%
6	6.08%	6.08%
7	5.82%	5.82%
8	5.56%	5.56%
9	5.35%	5.35%
10	5.14%	5.14%
11	4.94%	4.94%
12	4.83%	4.83%
13	4.73%	4.78%
14	4.62%	4.78%
15 or More	4.52%	4.78%

# Schedule 2 Standard RP-2000 Table with White Collar Adjustment\*

Age	Male Male	Female
20	0.035%	0.019%
25	0.038%	0.021%
30	0.035%	0.028%
35	0.059%	0.047%
40	0.089%	0.065%
45	0.134%	0.102%
50	0.198%	0.159%
55	0.330%	0.259%
60	0.558%	0.468%
65	1.106%	0.865%
70	1.928%	1.519%
75	3.363%	2.572%
80	5.941%	4.308%
85	10.467%	7.419%
90	17.827%	12.615%

<sup>\*</sup>Actual mortality rates used in the valuation are adjusted as described in this appendix.

## Schedule 3 **Life Expectancies at Sample Ages Non-Disabled General & Safety Members**

Age	Male	Female
50	31.62	35.12
51	30.68	34.17
52	29.75	33.22
53	28.83	32.28
54	27.90	31.34
55	26.98	30.41
56	26.07	29.48
57	25.17	28.55
58	24.27	27.63
59	23.38	26.73
60	22.49	25.82
61	21.62	24.93
62	20.75	24.04
63	19.90	23.17
64	19.07	22.31
65	18.25	21.46
66	17.45	20.62
67	16.66	19.80
68	15.89	18.99
69	15.14	18.19
70	14.40	17.41
71	13.67	16.64
72	12.96	15.89
73	12.26	15.16
74	11.59	14.44
75	10.93	13.74
76	10.30	13.05
77	9.68	12.38
78	9.09	11.73
79	8.52	11.10
80	7.97	10.49
81	7.45	9.89
82	6.95	9.32
83	6.47	8.76
84	6.03	8.23
85	5.60	7.72
86	5.20	7.24
87	4.83	6.78
88	4.48	6.35
89	4.17	5.95
90	3.88	5.58

Schedule 4 Life Expectancies at Sample Ages **Disabled General and Safety Members** 

	General		Safety		
Age	Male	Female	Male	Female	
50	26.14	28.84	27.46	30.25	
51	25.46	28.13	26.80	29.55	
52	24.78	27.41	26.14	28.84	
53	24.08	26.68	25.46	28.13	
54	23.38	25.95	24.78	27.41	
55	22.67	25.20	24.08	26.68	
56	21.96	24.45	23.38	25.95	
57	21.23	23.70	22.67	25.20	
58	20.49	22.93	21.96	24.45	
59	19.74	22.16	21.23	23.70	
60	18.99	21.38	20.49	22.93	
61	18.22	20.59	19.74	22.16	
62	17.45	19.79	18.99	21.38	
63	16.66	18.99	18.22	20.59	
64	15.89	18.19	17.45	19.79	
65	15.14	17.41	16.66	18.99	
66	14.40	16.64	15.89	18.19	
67	13.67	15.89	15.14	17.41	
68	12.96	15.16	14.40	16.64	
69	12.26	14.44	13.67	15.89	
70	11.59	13.74	12.96	15.16	
71	10.93	13.05	12.26	14.44	
72	10.30	12.38	11.59	13.74	
73	9.68	11.73	10.93	13.05	
74	9.09	11.10	10.30	12.38	
75	8.52	10.49	9.68	11.73	
76	7.97	9.89	9.09	11.10	
77	7.45	9.32	8.52	10.49	
78	6.95	8.76	7.97	9.89	
79	6.47	8.23	7.45	9.32	
80	6.03	7.72	6.95	8.76	
81	5.60	7.24	6.47	8.23	
82	5.20	6.78	6.03	7.72	
83	4.83	6.35	5.60	7.24	
84	4.48	5.95	5.20	6.78	
85	4.17	5.59	4.83	6.35	
86	3.88	5.25	4.48	5.95	
87	3.62	4.94	4.17	5.59	
88	3.39	4.66	3.88	5.25	
89	3.18	4.41	3.62	4.94	
90	2.98	4.18	3.39	4.66	

### Schedule 5 Probability of Separation from Active Service (Number separating at each age per 10,000 working at that age) **General Members - Male**

Age	Ordinary Death	Service Death	Ordinary Disability	Service Disability	Service Retirement	Years of Service	Other Terminations
20	10	0	2	3	0	0	2000
21	10	0	2	3	0	1	1400
22	10	0	2	3	0	2	1000
23	10	0	2	3	0	3	700
24	11	0	2	3	0	4	500
25	11	0	2	3	0	5	433
26	11	0	2	3	0	6	367
27	11	0	2	3	0	7	300
28	11	0	2	3	0	8	280
29	12	0	2	4	0	9	260
30	12	0	3	4	0	10	240
31	14	0	3	4	0	11	220
32	16	0	3	5	0	12	200
33	18	0	3	5	0	13	190
34	20	0	4	6	0	14	180
35	22	0	4	6	0	15	170
36	24	0	5	7	0	16	160
37	25	0	5	8	0	17	150
38	27	0	6	8	0	18	144
39	29	0	6	9	0	19	138
40	30	0	7	10	0	20	132
41	32	0	7	11	0	21	126
42	34	0	8	12	0	22	120
43	36	0	9	13	0	23	116
44	39	0	10	14	0	24	112
45	42	0	10	16	0	25	108
46	45	0	11	17	0	26	104
47	49	0	12	18	0	27	100
48	52	0	14	22	0	28	100
49	56	0	17	25	0	29	100
50	60	0	19	29	600	30 & Above	100
51	60	0	22	32	500		
52	59	0	24	36	500		
53	57	0	24	36	500		
54	56	0	24	36	500		
55	54	0	24	36	1400		
56	54	0	24	36	1100		
57	55	0	24	36	1400		
58	57	0	23	35	1700		
59	61	0	22	34	2000		
60	66	0	22	32	2500		
61	73	0	21	31	2500		
62	82	0	20	30	2500		
63	92	0	19	29	2500		
64	104	0	18	28	2500		
65	116	0	18	26	3000		
66	130	0	17	25	3000		
67	144	0	16	24	3000		
68	158	0	15	23	3000		
69	174	0	14	22	3000		
70	0	0	0	0	10000		

### Schedule 6 **Probability of Separation from Active Service** (Number separating at each age per 10,000 working at that age) **General Members - Female**

Age	Ordinary Death	Service Death	Ordinary Disability	Service Disability	Service Retirement	Years of Service	Other Terminations
20	3	0	2	3	0	0	2000
21	3	0	2	3	0	1	1400
22	3	0	2	3	0	2	1000
23	3	0	2	3	0	3	700
24	3	Ö	2	3	0	4	500
25	3	0	2	3	0	5	433
26	3	0	2	3	Ö	6	367
27	3	0	2	3	0	7	300
28	3	0	2	3	Ö	8	280
29	4	0	2	4	0	9	260
30	4	0	3	4	Ö	10	240
31	4	0	3	4	Ő	11	220
32	5	0	3	5	Ő	12	200
33	6	0	3	5	Ö	13	190
34	6	0	4	6	0	14	180
35	7	0	4	6	0	15	170
36	8	0	5	7	0	16	160
37	8	0	5	8	0	17	150
3 <i>1</i> 38	9	0	6	8	0	18	144
				9			
39	9 10	0	6 7	9 10	0	19	138 132
40		0			0	20	
41	11	0	7	11	0	21	126
42	12	0	8	12	0	22	120
43	14	0	9	13	0	23	116
44	15	0	10	14	0	24	112
45	16	0	10	16	0	25	108
46	18	0	11	17	0	26	104
47	19	0	12	18	0	27	100
48	21	0	14	22	0	28	100
49	23	0	17	25	0	29	100
50	24	0	19	29	600	30 & Above	100
51	25	0	22	32	600		
52	27	0	24	36	600		
53	29	0	24	36	600		
54	32	0	24	36	600		
55	35	0	24	36	800		
56	39	0	24	36	1000		
57	43	0	24	36	1200		
58	47	0	23	35	1500		
59	51	0	22	34	1800		
60	56	0	22	32	2200		
61	61	0	21	31	2000		
62	67	0	20	30	3000		
63	74	0	19	29	3000		
64	82	0	18	28	3000		
65	91	0	18	26	3000		
66	101	0	17	25	3000		
67	112	0	16	24	3000		
68	124	0	15	23	3000		
69	137	0	14	22	3000		
70	0	0	0	0	10000		

# Schedule 7 Probability of Separation from Active Service (Number separating at each age per 10,000 working at that age) Safety Members

Age	Ordinary Death*	Service Death	Ordinary Disability	Service Disability	Service Retirement	Years of Service	Other Terminations
20	10	2	0	3	0	0	800
21	10	2	Ö	5	0	1	600
22	10	2	0	7	0	2	450
23	10	2	Ö	9	0	3	300
24	11	2	0	11	0	4	250
25	11	2	0	13	0	5	233
26	11	2	0	16	0	6	217
27	11	2	0	19	0	7	200
28	11	2	0	22	0	8	190
29	12	2	0	25	0	9	180
30	12	2	0	28	0	10	170
31	14	2	0	32	0	11	160
32	16	2	0	36	0	12	150
33	18	2	0	40	0	13	140
34	20	2	0	44	0	14	130
35	22	2	0	48	0	15	120
36	24	2	0	54	0	16	110
37	25	2	0	60	0	17	100
38	27	2	0	66	0	18	100
39	29	2	0	72	0	19	100
40	30	2	0	78	0	20 & Above	0
41	32	2	0	90	0		
42	34	2	0	102	0		
43	36	2	0	114	0		
44	39	2	0	126	0		
45	42	2	0	138	100		
46	45	2	0	150	50		
47	49	2	0	162	50		
48	52	2	0	174	100		
49	56	2	0	186	200		
50	60	2	0	198	1200		
51	60	2	0	216	1200		
52	59	2	0	234	1200		
53	57	2	0	252	1200		
54	56	2	0	270	1500		
55	54	2	0	288	2500		
56	54	2	0	306	3000		
57	55	2	0	324	3000		
58	57	2	0	342	3000		
59	61	2	0	360	3000		
60	66	2	0	0	10000		
61	73	0	0	0	0		
62	82	0	0	0	0		
63	92	0	0	0	0		
64	104	0	0	0	0		
65 66	116	0	0	0	0		
66 67	130	0	0	0	0		
67	144	0	0	0	0		
68 69	158 174	0 0	0	0 0	0 0		
70	0	0	0 0	0	0		
10	U	U	U	U	U		

<sup>\*</sup> Ordinary death rates for female Safety members are assumed to be the same as for female General members.



### Schedule 8 **Immediate Refund of Contributions** upon Termination of Employment

### Years of

10013 01		
Service	General	Safety
0	100%	100%
1	100%	100%
2	100%	100%
3	100%	100%
4	100%	100%
5	40%	30%
6	40%	30%
7	40%	30%
8	37%	27%
9	34%	24%
40	0.407	040/
10	31%	21%
11	28%	18%
12	25%	15%
13	23%	13%
14	21%	11%
15	19%	9%
16	17%	7%
17	15%	5%
18	13%	4%
19	11%	3%
20	9%	0%
21	7%	0%
22	5%	0%
23	4%	0%
24	3%	0%
25	2%	0%
26	1%	0%
20 27	0%	0%
28	0%	0%
26 29	0% 0%	0% 0%
30 & Up	0%	0%

### Appendix B

### **Benefit Summaries**

### **GENERAL AND SAFETY MEMBERS**

**Membership:** Employment (at least 50% of full-time) with

County or participating District. Enter on first day of the first pay period after

entrance into service.

Final Average Salary (FAS): Highest one-year average.

### SERVICE RETIREMENT SPECIFIC TO GENERAL MEMBERS

**Code Section:** 31676.17 (3% at 60).\*

31676.14 (1.667% at 52).\*\*

Eligibility: 10 years of service and age 50, or 30

years of service regardless of age, or age

70 regardless of service.

Benefit: 2.0%, or one-fiftieth (1/50) of FAS per year

of service times Retirement Adjustment

Factor (RAF).

Retirement Age Factor (RAF): Adjustment factor for benefit commencing

at age other than 60. Sample factors:

 Age
 Factor

 50
 1.0000

 55
 1.2500

 60 and older
 1.5000

**Integration with Social Security:**Benefits based on first \$350 of monthly

FAS are reduced by 1/3. Benefits for some District members are not integrated with

Social Security.

Maximum Benefit: 100% of FAS.

Normal Form of Benefit: Life annuity; 60% continuance to spouse

after death of retiree. If there is no surviving spouse, the benefit is paid to

eligible children.

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



<sup>\*</sup> Note: CERL 31676.17 (3% at 60) was adopted by the Board of Supervisors, effective January 1, 2005.

### SERVICE RETIREMENT SPECIFIC TO SAFETY MEMBERS

**Code Section:** 31664.1 effective January 1, 2001.

Eligibility: 10 years of service and age 50, or 20

years of service regardless of age.

**Benefit:** 3.000% of FAS per year of service times

Retirement Adjustment Factor (RAF).

Retirement Age Factor (RAF): Adjustment factor for benefit commencing

prior to age 50. Sample factors:

 Age
 Factor

 41
 0.6258

 45
 0.7805

 50 and above
 1.0000

**Integration with Social Security:**Benefits based on first \$350 of monthly

FAS are reduced by 1/3.

Maximum Benefit: 100% of FAS.

Normal Form of Benefit: Life annuity; 60% continuance to spouse

after death of retiree. If there is no surviving spouse, the benefit is paid to

eligible children.

### **GENERAL AND SAFETY MEMBERS**

#### NONSERVICE-CONNECTED DISABILITY

**Eligibility:** Five years of service.

**Disabled Definition:** Unable to perform his/her own job.

**Benefit:** 20% of FAS, plus 2% of FAS for each full

year of service in excess of five, but not

more than 40% of FAS.

Normal Form of Benefit: Life annuity; 60% continuance to spouse

after death of retiree. If there is no surviving spouse, the benefit is paid to

eligible children.



#### SERVICE-CONNECTED DISABILITY

**Eligibility:** First day of work.

**Disabled Definition:** Disability is substantially caused by

employment and unable to perform his/her

own job.

Benefit: 50% of salary, but not less than Service

Retirement benefit (if eligible at time of

commencement).

Normal Form of Benefit: Life annuity; 100% continuance to spouse

> after death of participant. If there is no surviving spouse, the benefit is paid to

eligible children.

### NONSERVICE-CONNECTED DEATH

Before eligible for Nonservice-**Connected Disability or Service** Retirement:

Refund of employee contributions with interest, plus one month's salary for each year of service (maximum six months'

salary).

After eligible for Nonservice-Connected **Disability or Service Retirement:** 

60% of Nonservice-Connected Disability Benefit or Service Retirement Benefit the member would have received for retirement on day of death payable to surviving eligible spouse for the life of the spouse. If there is no surviving spouse, the

benefit is paid to eligible children.

### **SERVICE-CONNECTED DEATH**

**Eligibility:** First day of work.

Benefit: 50% of salary, but not less than Service

Retirement benefit (if eligible at time of

commencement).

Normal Form of Benefit: Life annuity to spouse after death of

participant. If there is no surviving spouse,

the benefit is paid to eligible children.



**DEFERRED SERVICE RETIREMENT** 

**Eligibility:** Five years of service.

Additional requirement: Must leave contributions on deposit.

Benefit: Same as service retirement benefit.

FAS: If reciprocity provisions apply, includes

compensation earned at reciprocal

agency.

Normal Form of Benefit: Same as service retirement benefit.

**WITHDRAWAL** 

**Eligibility:** First day of work.

Other Requirement: Forfeits right to receive other benefit from

retirement system.

**Benefit:** Accumulated contributions with interest.

Form of Benefit: Lump sum.

**COST-OF-LIVING BENEFITS** 

Timing: Annually, effective April 1 based on

change in Consumer Price Index for the

preceding calendar year.

**Maximum:** 2.5% per year.

SUPPLEMENTAL RETIREE BENEFIT

**RESERVE** 

See Section 8 of this report for a description of the SRBR benefits.



### Appendix C

### **Membership Data**

		Dec	ember 31, 2005	Dec	ember 31, 2006	Change
General	Members					
	County Number Average Age Average Service Percent Male Average Annual Pay Total Covered Payroll Valuation Payroll	\$ \$ \$	6,163 45.2 10.4 29.40% 45,222 278,700,398 277,659,983	\$ \$ \$	6,449 44.8 10.0 29.03% 45,962 296,405,823 295,202,659	4.64% -0.82% -4.07% -1.27% 1.64% 6.35% 6.32%
	Districts Electing 1997 MOU Number Average Age Average Service Percent Male Average Annual Pay Total Covered Payroll Valuation Payroll	\$ \$ \$	128 45.7 12.4 74.22% 59,289 7,589,012 7,589,012	\$ \$ \$	136 45.0 11.6 75.00% 61,184 8,321,088 8,321,088	6.25% -1.52% -6.10% 1.05% 3.20% 9.65% 9.65%
	Districts Not Electing 1997 MOU Number Average Age Average Service Percent Male Average Annual Pay Total Covered Payroll Valuation Payroll	\$ \$ \$	261 42.2 6.6 63.22% 55,678 14,531,974 14,531,974	\$ \$ \$	277 41.9 6.6 63.90% 55,419 15,351,157 15,351,157	6.13% -0.80% -1.03% 1.08% -0.46% 5.64% 5.64%
	Total General Number Average Age Average Service Percent Male Average Annual Pay Total Covered Payroll Valuation Payroll	\$ \$ \$	6,552 45.1 10.3 31.62% 45,913 300,821,384 299,780,969	\$ \$ \$	6,862 44.7 9.9 31.35% 46,645 320,078,067 318,874,904	4.73% -0.84% -4.06% -0.88% 1.59% 6.40% 6.37%
-	Members* Number Average Age Average Service Percent Male Average Annual Pay Total Covered Payroll Valuation Payroll	\$ \$ \$	1,643 40.1 12.4 82.47% 56,409 92,679,367 91,600,023	\$ \$ \$	1,685 39.5 12.0 82.61% 59,558 100,355,950 98,475,860	2.56% -1.65% -3.93% 0.17% 5.58% 8.28% 7.51%
Total Asi	tiva Mambara					
	Number Average Age Average Service Percent Male Average Annual Pay Total Covered Payroll Valuation Payroll	\$ \$ \$	8,195 44.1 10.7 41.82% 48,017 393,500,751 391,380,992	\$ \$ \$	8,547 43.7 10.3 41.45% 49,191 420,434,017 417,350,764	4.30% -0.95% -4.09% -0.87% 2.44% 6.84% 6.64%
includes 3	Suspended members.					



### **Terminated Participants with Pending Refunds**

	December 31, 2005	<b>December 31, 2006</b>	Change
General Members			
Number	262	428	63.36%
Average Age	36.6	37.2	1.81%
Percent Male	25.57%	30.84%	20.60%
Safety Members			
Number	26	32	23.08%
Average Age	29.4	31.1	5.71%
Percent Male	84.62%	84.38%	-0.28%
All Members			
Number	288	460	59.72%
Average Age	35.9	36.8	2.46%
Percent Male	30.90%	34.57%	11.85%

### **Terminated Vested Participants**

	December 31, 2005	December 31, 2006	Change
General Members			
Number	875	965	10.29%
Average Age	46.9	47.4	0.99%
Average Service	15.8	15.8	-0.37%
Percent Male	40.91%	40.83%	-0.21%
Safety Members			
Number	116	123	6.03%
Average Age	41.8	41.1	-1.78%
Average Service	15.4	14.5	-5.71%
Percent Male	81.03%	80.49%	-0.67%
All Members			
Number	991	1,088	9.79%
Average Age	46.3	46.6	0.75%
Average Service	15.8	15.6	-0.95%
Percent Male	45.61%	45.31%	-0.65%

### **Retired Participants**

		De	ecember 31, 2005	Decer	nber 31, 2006	Change
General	Members					
	Service Retirements					
	Number		2,747		2,878	4.77%
	Average Age		70.2		69.8	-0.58%
	Percent Male		37.57%		37.98%	1.09%
	Average Monthly Benefit*	\$	1,624	\$	1,754	8.01%
	Beneficiaries					
	Number		632		629	-0.47%
	Average Age		73.60		73.83	0.30%
	Percent Male		22.94%		22.26%	-2.99%
	Average Monthly Benefit*	\$	781	\$	843	7.94%
	Disabled					
	Number		519		535	3.08%
	Average Age		59.7		59.9	0.44%
	Percent Male		36.99%		36.07%	-2.49%
	Average Monthly Benefit*	\$	1,346	\$	1,394	3.49%
	Total General					
	Number		3,898		4,042	3.69%
	Average Age		69.3		69.1	-0.34%
	Percent Male		35.12%		35.28%	0.45%
	Average Monthly Benefit*	\$	1,450	\$	1,565	7.87%
Safety N	<i>l</i> lembers					
	Service Retirements					
	Number		619		673	8.72%
	Average Age		64.9		64.4	-0.71%
	Percent Male		91.28%		90.79%	-0.71%
		¢		œ		
	Average Monthly Benefit*	\$	3,901	\$	4,059	4.06%
	Beneficiaries		000		000	4.400/
	Number		226		236	4.42%
	Average Age		67.2		67.86	1.03%
	Percent Male	•	5.31%	•	4.24%	-20.20%
	Average Monthly Benefit*	\$	1,514	\$	1,622	7.12%
	Disabled					
	Number		389		404	3.86%
	Average Age		57.8		58.2	0.71%
	Percent Male		82.78%		81.93%	-1.02%
	Average Monthly Benefit*	\$	2,875	\$	3,000	4.35%
	Total Safety					
	Number		1,234		1,313	6.40%
	Average Age		63.1		63.1	0.09%
	Percent Male		72.85%		72.51%	-0.48%
	Average Monthly Benefit*	\$	3,140	\$	3,295	4.94%
· · ·	ODDD					

<sup>\*</sup>Excludes SRBR amounts.



### **Retired Participants (continued)**

	Dece	mber 31, 2005	Decen	nber 31, 2006	Change
Total Members					
Service Retirements					
Number		3,366		3,551	5.50%
Average Age		69.2		68.7	-0.65%
Percent Male		47.45%		47.99%	1.14%
Average Monthly Benefit*	\$	2,043	\$	2,191	7.26%
Beneficiaries					
Number		858		865	0.82%
Average Age		71.9		72.2	0.40%
Percent Male		18.30%		17.34%	-5.23%
Average Monthly Benefit*	\$	974	\$	1,055	8.36%
Disabled					
Number		908		939	3.41%
Average Age		58.9		59.2	0.55%
Percent Male		56.61%		55.80%	-1.42%
Average Monthly Benefit*	\$	2,001	\$	2,085	4.17%
Total Retirees					
Number		5,132		5,355	4.35%
Average Age		67.8		67.6	-0.29%
Percent Male		44.19%		44.41%	0.48%
Average Monthly Benefit*	\$	1,857	\$	1,989	7.12%

<sup>\*</sup>Excludes SRBR amounts.

### **General Members**

<u>.</u>	Actives	Terminated Vested	Terminated Pending Refund	Service Retirees	Disability Retirees	Beneficiaries	
As of December 31, 2005	6,552	875	262	2,747	519	632	
New Hires/Rehires	971	25	104	(1)		•	
Net Transfers to Safety	(9)	-	(1)				
Terminated - Contributions Refunded	(203)	(22)	(50)				
Terminated, Pending Refund	(121)		121		-		
Vested Terminations	(119)	129	(10)				
Suspended							
Service Retirements	(185)	(40)		225		(1)	
Disability Retirements	(19)	(2)	-	(6)	27		
Active Deaths	(6)						
Deaths Or Ceased Payments		(1)	-	(105)	(12)	(41)	
Beneficiaries of Retirees Who Died						34	
Data Corrections	1	1	2	18	1	5	
As of December 31, 2006	6,862	965	428	2,878	535	629	

### **Safety Members**

<u>-</u>	Actives	Terminated Vested	Terminated Pending Refund	Service Retirees	Disability Retirees	Beneficiaries
As of December 31, 2005	1,643	116	26	619	389	226
New Hires/Rehires	148	(2)	6	-	-	
Net Transfers from General	13	(2)	(2)		1	-
Terminated - Contributions Refunded	(13)	-	(6)	-	-	
Terminated, Pending Refund	(8)	-	8	-	-	
Vested Terminations	(21)	22	(1)	-	-	
Suspended	0					
Service Retirements	(61)	(11)		72	-	
Disability Retirements	(15)		-	(7)	22	
Active Deaths	(2)					
Deaths Or Ceased Payments		-		(13)	(8)	(6)
Beneficiaries of Retirees Who Died						15
Data Corrections	(2)	-	1	2	-	1
As of December 31, 2006	1,682 *	123	32	673	404	236

<sup>\*</sup> Liabilities for 3 suspended members were also valued.

### Summary of Active General Members by Age and Service

#### Number of Members by Age and Service Groups

					Years o	of Service					
<u>Age</u>	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25-29</u>	<u>30-34</u>	<u>35-39</u>	40&Up	<u>Total</u>
0-24	116	58									174
25-29	215	310	75	1							601
30-34	178	293	250	23	2						746
35-39	121	212	299	104	39	1					776
40-44	93	161	236	146	138	47	2				823
45-49	76	154	261	182	222	142	85	1			1,123
50-54	80	123	226	149	245	173	149	37	2		1,184
55-59	36	97	207	130	153	112	95	45	11		886
60-64	17	44	107	63	94	46	35	16	3		425
65-69	1	12	28	18	28	6	7	1		2	103
70&Up		3	3	3	6	1	1	3	1		21
Total	933	1,467	1,692	819	927	528	374	103	17	2	6,862

### Average Annual Compensation for General Members by Age and Service at December 31, 2006

### Average Compensation by Age and Service Groups

					Years o	of Service					
<u>Age</u>	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25-29</u>	<u>30-34</u>	<u>35-39</u>	40&Up	Total
0-24	30.150	33,581									31,294
25-29	32,609	38,589	40,547	33,572							36,686
30-34	34,822	42,289	46,534	39,441	44,609						41,848
35-39	36,199	43,259	49,023	52,954	48,447	39,496					45,934
40-44	35,450	41,909	49,239	47,492	50,003	43,418	42,648				45,717
45-49	33,060	42,644	47,280	52,610	52,833	53,154	50,458	50,911			48,630
50-54	41,542	42,834	48,041	54,329	51,069	56,579	55,507	55,266	66,067		50,922
55-59	46,563	47,401	48,085	48,079	53,210	54,437	55,678	64,011	38,850		51,144
60-64	34,923	49,626	48,513	52,937	47,330	58,892	59,106	60,528	58,058		50,994
65-69	52,795	59,380	48,660	41,256	44,868	66,263	45,077	31,407		66,192	48,579
70&Up		66,150	49,084	45,833	54,346	66,035	27,587	88,869	33,679		57,295
Total	34,879	42,091	47,757	50,693	51,017	54,329	54,401	60,609	45,137	66,192	46,645

Note that the compensation in this chart is the Final Average Salary as of December 31, 2006.

### Summary of Active Safety Members by Age and Service

#### Number of Members by Age and Service Groups

					Years o	of Service					
<u>Age</u>	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>35-39</u>	40&Up	<u>Total</u>
0-24	48	36	1								85
25-29	44	128	70								242
30-34	22	76	173	31							302
35-39	11	28	141	64	16						260
40-44	7	15	51	30	73	33	3				212
45-49	2	5	20	26	55	103	24				235
50-54		3	5	12	22	62	82	28			214
55-59		3	8	12	16	19	23	21			102
60-64		1	2	5	10	4	4		1		27
65-69			2			1					3
70&Up											-
Total	134	295	473	180	192	222	136	49	1	-	1,682

### Average Annual Compensation for Safety Members by Age and Service at December 31, 2006

### Average Compensation by Age and Service Groups

					Years of	of Service					
<u>Age</u>	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>35-39</u>	40&Up	<u>Total</u>
0-24	38,146	47,307	63,922								42,329
25-29	38,842	47,699	55,450								48,331
30-34	38,102	48,033	57,841	57,151							53,864
35-39	39,421	51,301	59,492	57,908	68,021						57,895
40-44	38,751	49,445	60,002	55,766	69,537	71,896	83,947				63,427
45-49	40,499	56,752	56,844	56,451	67,083	73,154	75,628				68,123
50-54		52,472	58,023	57,155	68,523	68,220	78,256	80,981			72,687
55-59		44,743	49,088	52,654	63,739	67,006	75,241	79,494			67,173
60-64		46,970	50,390	55,887	52,217	68,084	69,353		103,300		59,348
65-69			66,962			49,881					61,268
70&Up											
Total	38,539	48,337	58,044	56,754	67,206	70,867	77,146	80,343	103,300		59,609

Note that the compensation in this chart is the Final Average Salary as of December 31, 2006.

### Appendix D

### **Member Contribution Rates**

Member contribution rates are calculated as a percentage of the member's pay, on the basis of the member's age at entry into System, the classification of the member, the Plan's economic assumptions and the member's life expectancy at the retirement age specified for this purpose in the County Employees Retirement Law of 1937 (1937 Act).

The recommended contribution rates for General and Safety Members are presented on the following page.

### December 31, 2006 Valuation

### **General Member Contribution Rates**

### Member Rates as a Percentage of Salary

### Contribution Rates (Fiscal Year 2007-8) 1/100th @ 55

	Integra	Non-Integrated			
	First \$350 of	Excess of \$350	All		
Entry Age	Monthly Comp.	Monthly Comp.	Compensation		
18	3.93%	5.89%	5.89%		
19	4.01%	6.01%	6.01%		
20	4.09%	6.13%	6.13%		
21	4.17%	6.26%	6.26%		
22	4.26%	6.38%	6.38%		
23	4.34%	6.51%	6.51%		
24	4.43%	6.64%	6.64%		
25	4.52%	6.78%	6.78%		
26	4.61%	6.91%	6.91%		
27	4.70%	7.05%	7.05%		
28	4.80%	7.19%	7.19%		
29	4.89%	7.34%	7.34%		
30	4.99%	7.48%	7.48%		
31	5.09%	7.64%	7.64%		
32	5.19%	7.79%	7.79%		
33	5.30%	7.95%	7.95%		
34	5.41%	8.11%	8.11%		
35	5.52%	8.27%	8.27%		
36	5.63%	8.44%	8.44%		
37	5.75%	8.62%	8.62%		
38	5.87%	8.80%	8.80%		
39	5.99%	8.99%	8.99%		
40	6.12%	9.17%	9.17%		
41	6.24%	9.36%	9.36%		
42	6.37%	9.55%	9.55%		
43	6.49%	9.74%	9.74%		
44	6.61%	9.92%	9.92%		
45	6.73%	10.09%	10.09%		
46	6.84%	10.26%	10.26%		
47	6.94%	10.41%	10.41%		
48	7.03%	10.55%	10.55%		
49	7.12%	10.68%	10.68%		
50	7.20%	10.80%	10.80%		
51	7.27%	10.90%	10.90%		
52	7.30%	10.95%	10.95%		
53	7.30%	10.95%	10.95%		
54 and older	7.30%	10.95%	10.95%		

### **December 31, 2006 Valuation**

Safety Member Contribution Rates Fiscal Year 2007-8

Member Rates as a Percentage of Salary

Hired Prior to July 10, 2004 Hired Prior to July 10, 2004 (Basic) Including 4.0% Supplemental\* Hired After July 10, 2004 Integrated Integrated Integrated First \$350 of Excess of \$350 First \$350 of Excess of \$350 First \$350 of Excess of \$350 **Entry Age** Monthly Comp. Monthly Comp. Entry Age Monthly Comp. Monthly Comp. Monthly Comp. Monthly Comp. 4.81% 7.22% 10.83% 7.22% 10.83% 7.22% 20 21 4.90% 7.35% 7.35% 11.03% 21 7.35% 11.03% 22 4.99% 7.48% 7.48% 11.22% 22 7.48% 11.22% 23 5.08% 7.62% 7.62% 11.43% 23 7.62% 11.43% 24 5.17% 7.76% 7.76% 11.64% 24 7.76% 11.64% 25 25 11.85% 5.27% 7.90% 7.90% 11.85% 7.90% 26 12.04% 5.36% 8.04% 8.03% 26 8.04% 12.06% 27 5.46% 8.19% 8.13% 12.19% 27 8.19% 12.29% 28 5.56% 8.34% 8.23% 12.34% 28 8.34% 12.51% 29 5.66% 8.49% 8.33% 12.49% 29 8.49% 12.74% 30 5.77% 8.65% 8.43% 12.65% 30 8.65% 12.98% 31 5.87% 8.81% 8.54% 12.81% 31 8.81% 13.22% 32 5.98% 8.97% 8.65% 12.97% 32 8.97% 13.46% 33 6.09% 9.14% 8.76% 13.14% 33 9.14% 13.71% 34 6.21% 9.31% 8.87% 13.31% 34 9.31% 13.97% 35 6.33% 9.49% 8.99% 13.49% 35 9.49% 14.24% 36 6.45% 9.68% 9.12% 13.68% 36 9.68% 14.52% 37 6.58% 9.87% 9.25% 13.87% 37 9.87% 14.81% 38 6.71% 10.06% 9.37% 14.06% 38 10.06% 15.09% 39 6.83% 10.25% 9.50% 14.25% 39 10.25% 15.38% 40 6.95% 10.43% 9.62% 14.43% 40 10.43% 15.65% 41 7.07% 10.60% 9.73% 14.60% 41 10.60% 15.90% 42 7.17% 10.75% 9.83% 14.75% 42 10.75% 16.13% 43 7.27% 10.90% 9.93% 14.90% 43 10.90% 16.35% 44 7.35% 11.03% 10.02% 15.03% 44 11.03% 16.55% 45 7.43% 15.15% 45 11.15% 10.10% 11.15% 16.73% 46 7.51% 11.26% 10.17% 15.26% 46 11.26% 16.89% 47 7.55% 11.32% 10.21% 15.32% 47 11.32% 16.98%

\*Beginning July 10, 2004, contribution rates for safety members are divided into "basic" and "supplemental" components. The basic component is calculated to provide for an average annuity at age 50 of 1% of final compensation. For employees hired on or after July 10, 2004, the supplemental component is defined so as to bring the total contribution rate to a level which provides for an average annuity at age 50 of 1.5% of final compensation. For employees hired before July 10, 2004, the supplemental contribution rate is defined to be 1.0% in the first year, increasing by 1.0% each year until the total contribution rate provides for an average annuity at age 50 of 1.5% of final compensation. As an example, for someone with entry age 40 and hired prior to July 10, 2004, the rate on compensation in excess of \$350 per month in fiscal year ending 2008 is 14.43% = 10.43% for basic + 4.0% for supplemental. In fiscal year 2010, that rate will be 15.65%, the ultimate rate for someone with entry age 40.

For an employee with entry age 20 and hired after July 10, 2004, it is the full rate of 10.83%.

10.21%

10.21%



15.32%

15.32%

48

49 and older

11.32%

11.32%

16.98%

16.98%

48

49 and older

7.55%

7.55%

11.32%

11.32%

### Appendix E

### **Glossary**

The following definitions include excerpts from a list adopted by the major actuarial organizations in the United States. In some cases, the definitions have been modified for specific applicability to KCERA and include terms used exclusively by KCERA. Defined terms are capitalized throughout this Appendix.

Accrued Benefit The amount of an individual's benefit (whether or not vested) as of a

specific date, determined in accordance with the terms of a pension

plan and based on compensation and service to that date.

**Actuarial Accrued** 

Liability

That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of pension plan benefits and

expenses which is not provided for by future Normal Costs.

Actuarial Assumptions

Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement, and retirement; changes in compensation; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the

Actuarial Value of Assets; and other relevant items.

**Actuarial Gain** 

(Loss)

A measure of the difference between actual experience and that expected based on a set of Actuarial Assumptions during the period

between two Actuarial Valuation dates, as determined in accordance with a particular Actuarial Cost Method.

**Actuarial Present** 

Value

The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of

a particular set of Actuarial Assumptions.

Actuarial Valuation

The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related

Actuarial Present Values for a pension plan.

**Actuarial Value of** 

**Assets** 

The value of cash, investments and other property belonging to a pension plan, as used by the actuary for the purpose of an Actuarial

Valuation.

Actuarially Equivalent

Of equal Actuarial Present Value, determined as of a given date with each value based on the same set of Actuarial Assumptions.

Amortization Payment

That portion of the pension plan contribution which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued

Liability.



### Approved SRBR Benefits

These are the SRBR benefits that have already been approved by the Retirement Board. They include all Tier I, Tier II and Death Benefits, as well as the Tier III benefits approved through the valuation date.

#### **Basic Benefits**

All formula benefits provided under the Regular portion of KCERA. These include service retirement benefits, survivor continuance, disability benefits, and refunds of member contributions. Basic Benefits do not include cost-of-living adjustments.

#### **COLA Benefits**

These are the cost-of-living adjustments provided under the Regular portion of KCERA. They include cost-of-living increases paid on service retirement benefits, disability benefits and survivor benefits. The funding of the permanent additional 0.5% COLA benefit that was granted as part of the Ventura court settlement is included in the regular benefits, for a total COLA benefit of 2.5%. For funding purposes and to determine the COLA Contributions Reserve, the COLA benefits are split between the "2.0%" COLA benefits and the "0.50%" COLA benefits.

### Contingency Reserve

The Contingency Reserve is used to satisfy the California Government Code requirement for Section 31616 requirement for KCERA to reserve at least 1% of assets, up to a maximum of 3% of assets. KCERA has adopted a goal to reserve 2.0% of the assets against earning deficiencies, investment losses, and other contingencies, if available.

### Cost-of-Living Reserve

The accumulation of employer contributions for future annual costof –living increases for retirees and continuance beneficiaries. Additions include contributions from employers and related earnings and deductions include monthly cost-of-living benefit payments.

### COLA Contribution Reserve

This CCR refers to the amount of excess investment earnings that have been set aside to reduce future employer COLA contributions as provided under Section 31617 of Article 5.5 under the CERL. If no earnings are allocated under 31617 or they have already been allocated as a credit for future employer COLA contributions, the CCR value is zero.

### Employers' Advance Reserve

The accumulation of employer contributions for future retirement benefit payments. Additions include contributions from employers and related earnings and deductions include transfers to the Retired Members' Reserve.

### Entry Age Actuarial Cost Method

A method under which the Actuarial Present Value of the Projected Benefits of each individual included in an Actuarial Valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit ages. The portion of this Actuarial Present Value allocated to a valuation year is called the Normal Cost. The portion of this Actuarial Present Value not provided for at a valuation date by the Actuarial Present Value of future Normal Costs is called the Actuarial Accrued Liability.

**Funded Ratio** A measurement of the funded status of the system. The Funded

Ratio is calculated by dividing the Valuation Assets by the Actuarial Accrued Liability. For example, a Funded Ratio of 90% indicates

assets are 10% less than liabilities.

**Funding Excess** The excess, if any, of the Actuarial Value of Assets over the

Actuarial Accrued Liability.

Future SRBR Benefits

These are the SRBR benefits expected to be approved in future years in order to maintain the 80% purchasing power goal.

Members' Deposit Reserve The accumulation of member contributions. Additions include member contributions and related earnings and deductions include transfers to the Retired Members' Reserve and refunds to

members.

Non-Valuation Reserves

Those funds not available to fund the Regular Benefits. These are the Contingency Reserve, the Unallocated SRBR Reserve and the COLA Contribution Reserve.

**Normal Cost** That portion of the Actuarial Present Value of pension plan benefits

and expenses which is allocated to a valuation year by the Actuarial

Cost Method.

Plan Year A 12-month period beginning January 1 and ending December 31.

**Projected Benefits** Those pension plan benefit amounts which are expected to be paid

at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation

and service credits.

**Regular Benefits** The benefits provided under the non-SRBR section of KCERA.

These will include both Basic Benefits and COLA Benefits, including

the supplemental 0.5% COLA provisions.

Supplemental Retiree Benefit Reserve (SRBR)

Supplemental benefit payments that are additional payments to retired participants and to restore purchasing power at a specified percentage level, as described in California Government Code Section 31618, under Article 5.5 of CERL. These are non-vested benefits to both current and future retired participants and their

beneficiaries.

Unfunded Actuarial Accrued Liability The excess, if any, of the Actuarial Accrued Liability over the

Actuarial Value of Assets.

Valuation Date The date upon which the Normal Cost, Actuarial Accrued Liability,

and Actuarial Value of Assets are determined. Generally, the Valuation Date will coincide with the ending of a Plan Year.

Valuation Reserves All reserves excluding the Non-Valuation Reserves.

