

## Actuarial Valuation December 31, 2005

By

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May 1, 2006

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

Dear Members of the Board:

At your request, we have made an actuarial valuation as of December 31, 2005 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, 2005.

Based on discussions with the Board in November and with the Audit and Actuarial Committee on April 4, 2006, it is expected that along with this valuation report the Board will amend their Funding Policy to adopt a 30-year amortization period for all Unfunded Actuarial Accrued Liability (UAAL) amounts, as of December 31, 2005. This report reflects this expected change in the funding policy.

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. 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.



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Actuarial computations presented in this report are for purposes of determining the recommended funding amounts for the programs. Actuarial computations for purposes of fulfilling financial accounting requirements may differ from those disclosed in our report. 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,

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DRW/KIS/nlo

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#### 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 Cor	Employer Contribution Rate		
	General Members	Safety Members		
2004 Valuation	23.47%	35.65%		
Benefit Changes	6.56%	NA		
Experience Changes	0.18%	-0.08%		
Assumption Changes	-0.10% .	2.12%		
2005 Valuation	30.11%	37.69%		

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

- Benefit Changes: The benefit formula for all General members changed effective January 1, 2005 to the 3% at 60 level of benefits. In accordance with the Board's funding policy, this is the first valuation that reflects the costs of these higher benefits in the contribution rates.
- Experience During the Year: Following the 2004 valuation, the Board had an audit performed on the results. As a result of the audit, the COLA liabilities were adjusted and increased by \$ 7.5 million from those reported in the 2004 valuation report. As discussed in our February 16, 2006 letter, we estimated that the total employer contribution rate would have been approximately 0.11% higher, had the adjusted liabilities been reflected in the costs.

In addition, a review of the 2004 Interest Credits revealed an increase in the SRBR reserves allocated to the 0.50% COLA benefit by \$7.5 million. Thus, these two adjustments from the 2004 valuation were offsetting for costs for the regular benefits.

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Overview (continued)	Actual experience during 2005 lead to slight changes in the contribution rates, an increase of 0.18% for General members and a 0.08% decrease for Safety members from that expected based on the 2004 valuation, after benefit changes. 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 17, Section 6, and were well within a reasonable level of fluctuation.
	• <b>Revised Milliman Assumptions:</b> We recommended revised assumptions which were adopted by the Board on April 12, 2006. In particular, the mortality assumption was strengthened (i.e., increase life expectancy), particularly for the Safety male members. Except for the Safety members, the rate increases due to this change were fully offset by adjustments made in the termination rates and the expected salary increases which both produced rate decreases.
	As a result of changes to the mortality and salary increase assumptions, the member contribution rates are also impacted. In general, the rates for members with older entry ages increased, while all other member rates decreased.
	<ul> <li>The remainder of this section, as well as Sections 2-7, discusses KCERA's financial status as of December 31, 2005. The recommended assumptions are discussed in further detail in a separate report presented to the Board on April 12, 2006.</li> </ul>
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, 2006, shown for each employer cost group. New Member contributions, also effective July 1, 2006 are shown in Appendix D.



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#### Exhibit 1: Summary of Recommendations

	December 31, 2004	December 31, 2005
Employer Contribution		
General – County	23.26%	30.00%
General – County -Court Employees only	23.26%	26.06%
General - Kern County Water Agency	28.26%	33.94%
General – Districts Electing 1997 MOU	27.50%	33.13%
General – Districts Not Electing 1997 MOU	25.04%	30.51%
General - Districts Adopting 3%@60	N/A	31.02%
prospectively only		
Safety	35.65%	37.69%
Total Plan	26.36%	31.70%
Funded Status – Regular Benefits		
Actuarial Accrued Liability	\$2,336.41	\$2,861.87
Actuarial Value of Assets	\$2,012.52	\$2,164.30
UAAL	\$323.89	\$697.57
Funded Percentage	86%	76%
Funded Status – SRBR		
Present Value of Approved Benefits	\$58.4	\$58.3
Actuarial Value of Assets	\$97.2	\$89.5
UAAL	(\$38.8)	(\$31.3)
Funded Percentage	166%	154%
Key Assumptions		
Interest Rate	8.00%	8.00%
Wage Inflation	4.00%	4.00%
Price Inflation	4.00%	3.50%



**Employer Contribution Rate** Under the Board's current funding objectives, the total calculated Employer contribution rate is 31.89% of payroll. This is equal to the payment of the normal cost rate plus a 30year amortization of the Unfunded Actuarial Accrued Liability (UAAL). It should be noted that the 31.89% 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 13-16 for normal cost rates by employer groups and class.

The new rates are effective for the fiscal year beginning July 1, 2006. The 31.89% contribution rate is adequate to maintain the funding of the retirement system benefits 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 16 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 2.0% 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.



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**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 75.6%; that is, the actuarial value of assets of \$2.2 billion is about 24% less than the actuarial accrued liabilities of \$2.9 billion. The General member benefit changes decreased the funding ratio by 5.3%. Prior to the change in assumptions, but after the benefit changes, the funding ratio was 77.5%. With the adoption of the new assumptions, the funding ratio on December 31, 2005 decreased to 75.6%.

#### **History of Funded Position**

**Dollar Amounts in Millions** 

	Actuarial	Actuarial	Funded
	Accrued Liability	Value of Assets	Percentage
December 31, 2005	\$2,861.9	\$2,164.3	75.6%
December 31, 2004	\$2,336.4	\$2,012.5	86.1%
December 31, 2003	\$2,059.3	\$1,927.6	93.6%
December 31, 2002	\$1,899.0	\$1,570.3	82.7%
December 31, 2001	\$1,612.0	\$1,508.3	93.6%
December 31, 2000	\$1,389.0	\$1,434.9	103.3%





Assets	For the fiscal year ending December 31, 2005, we estimate that KCERA earned 8.01%, net of investment expenses, on its market 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 somewhat lower, returning 7.57%.
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 under the new 3% at 60 formula.
	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, will be 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



Allocation of Assets and Cost Sharing (continued)	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 all 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.





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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, 2005 is \$73.5 million. The remaining SRBR funds are equal to \$89.5 million.

The Board measures the future SRBR benefits under three scenarios:

- 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, 2005:

	Funded Percentage
Approved Benefits	153.6%
Target Benefits, including 20% reserve amounts	110.3%
Future Benefits	88.1%

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



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## **Member Information** The number of active members included in the valuation increased by 2.6% from 7,986 in 2004 to 8,195 in 2005.

Retired member counts and average retirement benefit amounts continue to increase steadily. For 2005, there were 5,132 retired members and beneficiaries with an average benefit of \$1,857 per month. This represents an 8.3% increase in count and an 11.4% 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, 2005.

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.



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, 2005.
- 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, 2005. 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	А	ctuarial Value		Market Value as Perecentage
	Value of	Non-Valuation	Valuation		of Actuarial
	Total Assets	Reserves*	Assets**	<u>Total</u>	Value
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		1,508.3		
2002	1,511.3		1,507.1		
2003	1,384.9		1,863.8		
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%

\* Non-valuation reserves are the unallocated SRBR funds, the Contingency Reserve and the COLA Contribution Reserve, if any.

\*\* Years prior to 2004 exclude the portion of the SRBR allocated to the 0.5% COLA portion of the SRBR used to fund regular benefits.

On December 31, 2005, the total market value of the fund was \$2.4 billion. The actuarial value of the fund was determined to be \$2.3 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 \$2.2 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 6 computes the Market Stabilization Reserve from the smoothed gains and losses over the past five years.
	Exhibits 2-5 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, 2005 actuarial value of assets is shown in Exhibit 5. Note the smoothing process has recognized much of the investment losses from 2002 and earlier over the last few years. The result is an actuarial value of assets that is approximately equal to the market value.



**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 and the SRBR Reserve and the County Contribution Reserve, if any. Exhibit 7 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

Interest Crediting Policy The allocation of valuation assets by cost group is shown in Exhibit 7.

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.
- 2. Credit the Valuation Reserves (Member Deposit, Employer Advance, COLA and Retired Member reserves) and the SRBR Reserves 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 COLA Contribution Reserve (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.



Interest Crediting Policy (continued) 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.

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



#### Exhibit 2: Statement of Plan Net Assets For the Years Ended December 31, 2004 and 2005

		2005		2004
Assets				
Current Assets				
Cash		\$ 73,140,	352 \$	104,843,812
Accounts Receivable		118,800,	005	103,966,239
Тс	otal Current Assets	191,940,	357	208,810,050
Investments		2,417,204,	789	2,076,213,617.84
Property, Fixtures and Equipmer	nt, net	50,	440	59,276
Total Assets	-	2,609,195,	586	2,285,082,944
Liabilities				
Current Liabilities		(213,570,516	5.50)	(60,184,223.26)
Net Assets Held in Trust for Pension Benefit	ts	\$ 2,395,625,	069 \$	2,224,898,721



#### Exhibit 3: Statement of Changes in Plan Net Assets For the Years Ended December 31, 2004 and 2005

STATEMENT OF CHANGES IN PLA	N NE	T ASSETS	
For the Year Ended December 31, 2004 and 2005			
		2005	2004
Additions		2003	2004
Contributions			
Employer	\$	98.284.215	\$ 58.605.259
Member	·	9,562,621	\$ 8,092,271
Service Credit Purchases		1,447,891	2,097,282
Total Contributions		109,294,728	60,702,540
Net Appreciation (Depreciation) in Fair Value of Investments		132,749,305	88.466.582
Investment Income		61,450,430	171,226,191.60
Less Investment Expenses (including securities lending expenses)		13,812,648	7,366,961.24
Net Investment Income		180,387,086	252,325,813
Total Additions		289,681,814	313,028,353
Deductions			
Benefit Payments	\$	106,195,725	\$ 99,809,737
SRBR Payments (Tiers 1, 2, & 3)		6,544,348	6,690,713
SRBR Payments (0.5% COLA)		1,605,324	1,129,218
Refunds		1,913,683	1,951,945
SRBR Death Benefits		113,200	113,200
Active Death Benefits		120,406	213,010
Administrative Expense		2,462,778	2,550,164
			718,772
Total Deductions		118,955,465	112,457,988
Net Increase (Decrease)		170,726,348	200,570,365
Net Assets Held in Trust for Pension Benefits			
Beginning of Year		2,224,898,721	2,016,236,085
End of Year		2,395,625,069	2,216,806,450
Estimated Return, Net of all Expenses on Market Value basis		8.13%*	12.68%*

\* May differ from return reported in CAFR due to timing of contributions and benefit payments and treatment of expenses.

\*\* December 31, 2004 Actuarial Value of Assets were revised after the actuarial valuation.



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

Six-Month Period Ended	 Market Value at Beginning of Period	 Market Value at End of Period	C	ontributions	 Benefit Payments	Actual Investment Return (Net of Expenses)	As R F	sumed Rate of Return	(Net	Expected Return of Expenses)	( (	Unexpected Gain / (Loss)
12/31/2005	\$ 2,212,271,078	\$ 2,395,625,069	\$	98,310,989	\$ 59,906,157	144,949,159	9	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	9	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	2	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	60,812,17	7	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	3	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	2	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	(66,216,64	1)	8.00%		57,745,437		(123,962,078)
6/30/2002	1,511,318,766	1,436,172,964		26,550,714	41,384,998	(60,311,518	8)	8.00%		60,156,065		(120,467,583)
12/31/2001	1,542,081,043	1,511,318,766		26,618,452	39,228,015	(18,152,714	4)	8.00%		61,431,050		(79,583,764)
6/30/2001 12/31/2000	1,618,685,190	1,542,081,043 1,618,685,190		7,705,824	37,266,469	(47,043,502	2)	8.00%		64,156,195		(111,199,696)



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

#### **Calculation of Market Stabilzation Reserve**

Six-Month	Unexpected	Percent Not Yet	Gain (Loss)
Period Ended	Gain (Loss)	Phased In	Excluded
12/31/2005	55,690,220	90%	\$ 50,121,198
6/30/2005	(55,108,744)	80%	(44,086,996)
12/31/2004	107,630,379	70%	75,341,265
6/30/2004	(18,910,690)	60%	(11,346,414)
12/31/2003	161,380,670	50%	80,690,335
6/30/2003	90,872,279	40%	36,348,911
12/31/2002	(123,962,078)	30%	(37,188,623)
6/30/2002	(120,467,583)	20%	(24,093,517)
12/31/2001 6/30/2001	(79,583,764) (111,199,696)	10%	(7,958,376)
Total			\$ 117,827,783

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

1. Market Value of Assets	\$	2,395,625,069
2. Unrecognized Gain/Loss (Market Stablilization Reserve)	\$	117,827,783
3. Preliminary Actuarial Value (1) - (2)	\$	2,277,797,286
<ul> <li>4. Corridor Around Market Value</li> <li>(a) Minimum - 80% of Market Value</li> <li>(b) Maximum - 120% of Market Value</li> </ul>	\$ \$	1,916,500,055 2,874,750,083
5. Computed Actuarial Value of Assets	\$	2,277,797,286
<ul> <li>6. Non-Valuation Reserves and Designations</li> <li>(a) SRBR unallocated to 0.5% COLA benefits</li> <li>(b) Contingency Reserve</li> <li>(c) COLA Contribution Reserve</li> <li>(d) Total</li> </ul>		0



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#### Exhibit 6: Allocation of Assets by Accounting Reserve Amounts For the Years Ended December 31, 2004 and 2005

	RESERVES	Decer	mber 31, 2005	December 31, 2004			
Α	Market Stabilization Reserve	\$	117,827,783	\$	92,945,485		
	Members Deposit Reserve-General		123,987,910		125,395,069		
	Members Deposit Reserve-Safety		54,034,696		55,016,530		
	Members Deposit Reserve-Special Districts		10,788,292		11,073,624		
	Employers Advance Reserve-General		340,693,365		371,304,221		
	Employers Advance Reserve-Safety		272,941,662		273,745,773		
	Employers Advance Reserve-Special Districts		10,820,419		14,490,624		
	Cost-of-Living Reserve-General		275,889,068		253,624,756		
	Cost-of-Living Reserve-Safety		216,965,604		200,633,871		
	Cost-of-Living Reserve-Special Districts		11,203,605		9,656,850		
	Retired Members-General		457,914,965		354,972,848		
	Retired Members-Safety		315,540,028		279,998,644		
	SRBR		89,536,767		97,183,370		
	SRBR 0.5% COLA		73,524,653		62,608,071		
	Contingency Reserve Current Earnings		23,956,251		22,248,987		
в	Total Reserves for Actuarial Value of Assets	\$	2,277,797,286	\$	2,131,953,236		
с	Total Fund Balance = A + B	\$	2,395,625,069	\$	2,224,898,721		
D	Non-Valuation Reserves and Designations						
	(a) SRBR unallocated to 0.5% COLA benefits		89,536,767		97,183,370		
	(b) Contingency Reserve		23,956,251		22,248,987		
	(c) COLA Contribution Reserve		- 112 402 019		- 110 422 257		
	(u) Totai		113,493,016		119,432,357		
Е	Valuation Reserves = B - D	\$	2,164,304,268	\$	2,012,520,879		

#### Reconciliation of Assets for the Year Ended December 31, 2005

Amounts may not add exactly due to rounding.

		Actuarial Value Of Valuation Reserves*		
Beginning of Year Contributions - Employers Contributions - Members Gross Investment Income Investment Expenses Benefits paid to participants Administrative Expenses End of the Year	\$	2,224,898,721	\$	2,012,520,879
Contributions - Employers		98,284,215		98,284,215
Contributions - Members		11,010,513		11,010,513
Gross Investment Income		194,199,734		152,323,801
Investment Expenses		(13,812,648)		n/a
Benefits paid to participants		(116,492,687)		(109,835,139)
Administrative Expenses		(2,462,778)		
End of the Year	\$	2,395,625,069	\$	2,164,304,268
Estimated Return		8.01%		7.57%

\* Excludes SRBR unallocated for 0.5% COLA, Contingency Reserve , or COLA Contribution Reserve, if any. It does include SRBR for 0.5% COLA



#### Exhibit 7: Allocation of Valuation Assets

Allocation of Valuation Assets	Gen	eral Members	Distric	District Members Safety Members		Total	
Member Deposit Reserves	\$	123,987,910	\$	10,788,292	\$	54,034,696	\$ 188,810,897
Employer Advance Reserves		340,693,365		10,820,419		272,941,662	624,455,447
Cost-of-Living Reserves - 2%		275,889,068		11,203,605		216,965,604	504,058,277
Cost- of- Living Reserves - 0.5%		40,242,664		1,634,218		31,647,771	73,524,653
Retired Member Reserves		435,612,004		22,302,961		315,540,028	 773,454,993
Total Valuation Reserves	\$	1,216,425,012	\$	56,749,496	\$	891,129,761	\$ 2,164,304,268

Shaded Reserve amounts are allocated based on the present value of the appropriate benefit obligations.



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#### Section 4: Actuarial Liabilities

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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, 2005. 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 8 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, 2005.



Actuarial Balance Sheet – Liabilities (continued) Due to the adoption of Section 31617 of the CERL, and the Ventura settlement, the actuarial value of benefits needs to be valued in total and also into three major subtotals:

- a) 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 8 shows the present value of both the 2.0% COLA benefits and the 0.5% COLA benefits separately.

The change to the 3% @ 60 benefit formula for General members increased the UAAL on December 31, 2004 by \$152.2 million, or by \$164.3 million on December 31, 2005. In addition, the change in actuarial assumptions resulted in an increase of \$71 million in the AAL, which directly increases the UAAL. The remaining increase in the UAAL dollar amount is due to experience during 2005 and the passage of time.



#### Exhibit 8: Actuarial Balance Sheet – December 31, 2005

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

		Basic		COLA - 2%		COLA - 0.5%		Total
1. Retirees and Beneficiaries								
A. General								
i. County								
a. Regular Benefits	\$	491,995,499	\$	189,896,933	\$	42,766,558	\$	724,658,989
b. Golden Handshake		474,328		115,405		34,579		624,313
c. Subtotal		492,469,827		190,012,338		42,801,137		725,283,302
ii. Districts								
a. Regular Benefits		25,734,198		8,663,491		2,162,834		36,560,523
b. Golden Handshake		435,107		105,867		32,386		573,360
c. Subtotal	-	26,169,305		8,769,358	-	2,195,220	-	37,133,883
iii. Total General	-	518,639,132		198,781,696		44,996,357	_	762,417,185
B. Safety								
a. Regular Benefits		397,044,497		165,602,913		39,199,504		601,846,914
b. Golden Handshake		616,443		160,813		49,436		826,692
c. Subtotal		397.660.940		165.763.726		39.248.940	_	602.673.606
C. All Retirees and Beneficiaries	\$	916,300,072	\$	364,545,422	\$	84,245,297	\$	1,365,090,791
2 Terminated Members								
A. General								
I. County	۴	40.000.750	¢	0.000.700	¢	0 7 4 7 7 0 7	¢	EZ 4 4E 004
a. Deterred Vested	\$	46,060,759	\$	8,336,768	\$	2,747,797	\$	57,145,324
b. Pending Refunds		1,160,091		-		-		1,160,091
c. Subtotal		47,220,850		8,336,768		2,747,797		58,305,415
II. Districts								
a. Deterred Vested		2,054,809		293,288		97,179		2,445,276
b. Pending Refunds		75,759				-		75,759
c. Subtotal		2,130,568		293,288		97,179		2,521,035
iii. Total General		49,351,418		8,630,056		2,844,976		60,826,450
B. Safety								
a. Deferred Vested		8,529,410		1,819,313		608,390		10,957,113
<ul> <li>b. Pending Refunds</li> </ul>		172,562		-		-		172,562
c. Subtotal		8,701,972		1,819,313		608,390		11,129,675
C. All Terminated Members	\$	58,053,390	\$	10,449,369	\$	3,453,366	\$	71,956,125
3. Active Members								
A. General								
i. County	\$	1,100,105,942	\$	230,144,035	\$	69,543,646	\$	1,399,793,623
ii. Districts		80,217,126		17,108,008		5,189,684		102,514,818
iii. Total General		1,180,323,068		247,252,043		74,733,330		1,502,308,441
B. Safety		515,216,030		120,432,625		37,223,520		672,872,175
C. All Active Members	\$	1,695,539,098	\$	367,684,668	\$	111,956,850	\$	2,175,180,616
4 All Members								
A General								
i County								
a Regular Benefits	\$	1 639 322 291	¢	428 377 736	\$	115 058 001	\$	2 182 758 027
h Goldon Handshako	Ψ	474 328	Ψ	115 405	Ψ	34 579	Ψ	624 313
c All Bonofits		1 639 796 619		428 493 141		115 092 580		2 183 382 340
ii. Districts		1,000,700,010		420,430,141		110,002,000		2,100,002,040
a Pogular Popofito		108 081 802		26 064 787		7 449 697		1/1 506 376
a. Regulai Benenits		100,001,092		105 967		22 296		572 260
D. GOIGEIT HATIGSTIAKE	-	435,107		26 170 654	-	7 492 092	-	142 160 726
C. All Denenits	-	1 749 212 619	-	454 662 705	-	122 574 662	-	142,109,730
		1,740,313,018		404,000,790		122,074,003		2,323,352,076
D. Salely		020 062 400		207 054 054		77 024 444		1 205 040 704
a. Regular Benefits		920,902,499		201,004,001		11,031,414		1,200,848,764
		021 570 042		160,813		49,436		826,692
	*	921,578,942	-	288,015,664	-	11,080,850	-	1,280,675,456
C. Grand Lotal	\$	2,669,892,560	\$	742,679,459	\$	199,655,513	\$	3,612,227,532



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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	In preparing the 2005 valuation, we reviewed the data used for valuation purposes and the application of the entry age cost method. As a result of the revised determination of members' entry ages, the allocation between the normal cost rate and the UAAL (Unfunded Actuarial Accrued Liability) was adjusted, but this did not impact the value of total benefits. See the discussion for Exhibit 17, explaining the experience gains and losses between the 2004 and 2005 valuations.
	The two items described above – the normal cost and UAAL – are the keys to understanding the actuarial cost method.
	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	\$ 52,827,264	\$ 10,803,465	\$ 3,250,151	\$ 66,880,880
2. Safety	20,050,801	 4,775,556	 1,490,647	 26,317,004
3. All Members	\$ 72,878,065	\$ 15,579,021	\$ 4,740,798	\$ 93,197,884
As a Percent of Pay	Basic	COLA - 2%	COLA - 0.5%	Total
1. General	17.62%	3.60%	1.08%	22.31%
2. Safety	21.89%	5.21%	1.63%	28.73%
3. All Members	18.62%	3.98%	1.21%	23.81%

#### 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)	2005	2004	Percent Change
A. Actuarial present value of all future benefits for contributing members, former contributing members, and their survivors	\$ 3,612	\$ 3,088	17.0%
<ul> <li>B. Actuarial present value of total future normal costs for current members</li> </ul>	<u>750</u>	<u>752</u>	0.0%
C. Actuarial accrued liability [A-B]	\$ 2,862	\$ 2,336	22.5%
D. Valuation Reserves	<u>2,164</u>	<u>2,013</u>	7.5%
E. UAAL or Surplus Funding [C-D]	\$ 698	\$ 323	216.0%
F. Funded Ratio [D/C]	75.6%	86.1%	(12.2%)



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 9 shows the AAL for the Basic and the COLA Benefits by the three major cost groups.				
	Exhibit 10 shows how the UAAL was derived for each cost group.				
	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 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 30 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 2005 actuarial valuation reflects an increase in the UAAL of \$375 million for the plan year just ended.				



#### Exhibit 9: Actuarial Accrued Liability

		Basic		COLA - 2%		COLA - 0.5%		Total
1. Retirees and Beneficiaries								
A. General								
i. County								
a. Regular Benefits	\$	491,995,499	\$	189,896,933	\$	42,766,558	\$	724,658,989
b. Golden Handshake		474,328		115,405		34,579		624,313
c. Subtotal		492,469,827		190,012,338		42,801,137		725,283,302
ii. Districts								
a. Regular Benefits		25,734,198		8,663,491		2,162,834		36,560,523
b. Golden Handshake	_	435,107	_	105,867		32,386		573,360
c. Subtotal	_	26,169,305		8,769,358		2,195,220	_	37,133,883
iii. Total General		518,639,132		198,781,696		44,996,357		762,417,185
B. Safety								
a. Regular Benefits		397,044,497		165,602,913		39,199,504		601,846,914
b. Golden Handshake		616,443		160,813		49,436		826,692
c. Subtotal	•	397,660,940	<u>_</u>	165,763,726	<b>^</b>	39,248,940	<u>^</u>	602,673,606
C. All Retirees and Beneficiaries	\$	916,300,072	\$	364,545,422	\$	84,245,297	\$	1,365,090,791
2. Terminated Members								
A. General								
i. County								
a. Deferred Vested	\$	46,060,759	\$	8,336,768	\$	2,747,797	\$	57,145,324
b. Pending Refunds		1,160,091		-		-		1,160,091
c. Subtotal		47,220,850		8,336,768		2,747,797		58,305,415
ii. Districts								
a. Deferred Vested		2,054,809		293,288		97,179		2,445,276
b. Pending Refunds		75,759		-		-		75,759
c. Subtotal		2,130,568		293,288		97,179		2,521,035
iii. Total General		49,351,418		8,630,056		2,844,976		60,826,450
B. Safety								
a. Deferred Vested		8,529,410		1,819,313		608,390		10,957,113
b. Pending Refunds		172,562		-		-		172,562
c. Subtotal	-	8,701,972	-	1,819,313	-	608,390	-	11,129,675
C. All Terminated Members	\$	58,053,390	\$	10,449,369	\$	3,453,366	\$	71,956,125
3. Active Members								
A. General								
i. County	\$	715,731,456	\$	151,616,792	\$	45,709,346	\$	913,057,594
ii. Districts		48,207,000		10,339,521		3,129,019	_	61,675,540
iii. Total		763,938,456		161,956,313		48,838,365		974,733,134
B. Safety	_	345,560,627		79,950,086	_	24,581,239	_	450,091,952
C. All Active Members	\$	1,109,499,083	\$	241,906,399	\$	73,419,604	\$	1,424,825,086
4. All Members								
A. General								
i. County								
a. Regular Benefits	\$	1,254,947,805	\$	349,850,493	\$	91,223,701	\$	1,696,021,998
b. Golden Handshake	+	474,328	Ŧ	115,405	*	34,579	+	624,313
c. All Benefits	-	1,255,422,133		349,965,898		91,258,280	_	1,696,646,311
ii. Districts						-		
a. Regular Benefits		76,071,766		19,296,300		5,389,032		100,757,098
b. Golden Handshake		435,107		105,867		32,386		573,360
c. All Benefits		76,506,873		19,402,167		5,421,418	_	101,330,458
iii. Total General		1,331,929,006		369,368,065		96,679,698	_	1,797,976,769
B. Safety						-		
a. Regular Benefits		751,307,096		247,372,312		64,389,133		1,063,068,541
b. Golden Handshake		616,443		160,813		49,436		826,692
c. All Benefits		751,923,539		247,533,125	_	64,438,569	_	1,063,895,233
C. Grand Total	\$	2,083,852,545	\$	616,901,190	\$	161,118,267	\$	2,861,872,002



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#### Exhibit 10: Funded Percentage

#### **Basic Benefits**

		General – County		General - Districts		Safety		Totals
1 Actuarial Accrued Liability		General – County		General – Districts		Salety		10(015
a. Regular Benefits	\$	1.254.947.805	\$	76.071.766	\$	751.307.096	\$	2.082.326.667
b. Golden Handshakes	Ŧ	474.328	+	435.107	+	616.443	Ŧ	1.525.878
c. Total		1,255,422,133		76,506,873		751,923,539		2,083,852,545
2. Actuarial Value of Assets		900,293,280		43,911,672		642,516,386		1,586,721,338
3. Unfunded Actuarial Accrued Liability								
a. Regular Benefits		354,654,525		32,160,094		108,790,710		495,605,329
b. Golden Handshakes		474,328		435,107		616,443		1,525,878
c. Total	\$	355,128,853	\$	32,595,201	\$	109,407,153	\$	497,131,207
4. Funded Percentage		71.7%		57.4%		85.4%		76.1%
COLA Benefits - 2%								
		General – County		General – Districts		Safety		Totals
1. Actuarial Accrued Liability								
a. Regular Benefits	\$	349,850,493	\$	19,296,300	\$	247,372,312	\$	616,519,104
b. Golden Handshakes		115,405		105,867		160,813		382,086
c. Total	\$	349,965,898	\$	19,402,167	\$	247,533,125	\$	616,901,190
2. Actuarial Value of Assets		275,889,068		11,203,605		216,965,604		504,058,277
3. Unfunded Actuarial Accrued Liability	•	70 004 405	•	0 000 005	•	00 400 707	٩	440 400 007
a. Regular Benefits	\$	73,961,425	\$	8,092,695	\$	30,406,707	\$	112,460,827
b. Golden Handshakes		115,405		105,867	•	160,813	-	382,086
C. I Otal	\$	74,076,830	\$	8,198,562	\$	30,567,521	\$	112,842,913
4. Funded Percentage		18.8%		57.7%		87.7%		81.7%
COLA Benefits - 0.5%								
		General – County		General – Districts		Safety		Totals
1. Actuarial Accrued Liability		·····,				<b>,</b>		
a. Regular Benefits	\$	91,223,701	\$	5,389,032	\$	64,389,133	\$	161,001,866
b. Golden Handshakes		34,579		32,386		49,436		116,401
c. Total	\$	91,258,280	\$	5,421,418	\$	64,438,569	\$	161,118,267
		40 242 664		1,634,218		31,647,771		73,524,653
<ol><li>Actuarial Value of Assets</li></ol>		-0,2-2,00-						
<ol> <li>Actuarial Value of Assets</li> <li>Unfunded Actuarial Accrued Liability</li> </ol>		40,242,004						
<ol> <li>Actuarial Value of Assets</li> <li>Unfunded Actuarial Accrued Liability         <ol> <li>Regular Benefits</li> </ol> </li> </ol>	\$	50,981,036	\$	3,754,814	\$	32,741,363	\$	87,477,213
<ol> <li>Actuarial Value of Assets</li> <li>Unfunded Actuarial Accrued Liability         <ul> <li>Regular Benefits</li> <li>Golden Handshakes</li> </ul> </li> </ol>	\$	50,981,036 <u>34,579</u>	\$	3,754,814 32,386	\$	32,741,363 49,436	\$	87,477,213 116,401
<ul> <li>2. Actuarial Value of Assets</li> <li>3. Unfunded Actuarial Accrued Liability</li> <li>a. Regular Benefits</li> <li>b. Golden Handshakes</li> <li>c. Total</li> </ul>	\$	50,981,036 34,579 51,015,616	\$	3,754,814 32,386 3,787,200	\$	32,741,363 49,436 32,790,798	\$	87,477,213 <u>116,401</u> 87,593,614
<ol> <li>Actuarial Value of Assets</li> <li>Unfunded Actuarial Accrued Liability         <ul> <li>Regular Benefits</li> <li>Golden Handshakes</li> <li>Total</li> </ul> </li> <li>Funded Percentage</li> </ol>	\$	50,981,036 34,579 51,015,616 44.1%	\$	3,754,814 32,386 3,787,200 30.1%	\$	32,741,363 49,436 32,790,798 49.1%	\$	87,477,213 <u>116,401</u> 87,593,614 45.6%
<ol> <li>Actuarial Value of Assets</li> <li>Unfunded Actuarial Accrued Liability         <ul> <li>Regular Benefits</li> <li>Golden Handshakes</li> <li>Total</li> </ul> </li> <li>Funded Percentage</li> </ol>	\$	50,981,036 34,579 51,015,616 44.1%	\$	3,754,814 32,386 3,787,200 30.1%	\$	32,741,363 49,436 32,790,798 49.1%	\$	87,477,213 <u>116,401</u> 87,593,614 45.6%
<ol> <li>Actuarial Value of Assets</li> <li>Unfunded Actuarial Accrued Liability         <ul> <li>Regular Benefits</li> <li>Golden Handshakes</li> <li>Total</li> </ul> </li> <li>Funded Percentage</li> </ol>	\$	50,981,036 34,579 51,015,616 44.1%	\$	3,754,814 <u>32,386</u> 3,787,200 30.1%	\$	32,741,363 49,436 32,790,798 49.1%	\$	87,477,213 <u>116,401</u> 87,593,614 45.6%
<ol> <li>Actuarial Value of Assets</li> <li>Unfunded Actuarial Accrued Liability         <ul> <li>Regular Benefits</li> <li>Golden Handshakes</li> <li>Total</li> </ul> </li> <li>Funded Percentage</li> </ol> Total Regular Benefits <ol> <li>Actuarial Accrued Liability</li> </ol>	\$	50,981,036 34,579 51,015,616 44.1%	\$	3,754,814 32,386 3,787,200 30.1% General – Districts	\$	32,741,363 49,436 32,790,798 49.1% Safety	\$	87,477,213 <u>116,401</u> 87,593,614 45.6% Totals
<ol> <li>Actuarial Value of Assets</li> <li>Unfunded Actuarial Accrued Liability         <ul> <li>Regular Benefits</li> <li>Golden Handshakes</li> <li>Total</li> </ul> </li> <li>Funded Percentage</li> </ol> Total Regular Benefits <ol> <li>Actuarial Accrued Liability</li> <li>Benular Benefits</li> </ol>	\$	50,981,036 34,579 51,015,616 44.1% General – County	\$	3,754,814 32,386 3,787,200 30.1% General – Districts	\$	32,741,363 49,436 32,790,798 49.1% Safety 1.063.068.541	\$	87,477,213 <u>116,401</u> 87,593,614 45.6% <b>Totals</b> 2 859 847 637
<ol> <li>Actuarial Value of Assets</li> <li>Unfunded Actuarial Accrued Liability         <ul> <li>Regular Benefits</li> <li>Golden Handshakes</li> <li>Total</li> </ul> </li> <li>Funded Percentage</li> </ol> Total Regular Benefits <ol> <li>Actuarial Accrued Liability</li> <li>Regular Benefits</li> </ol> Actuarial Accrued Liability <ol> <li>Regular Benefits</li> </ol> Giden Handshakes	\$	50,981,036 34,579 51,015,616 44.1% General – County 1,696,021,998 624 313	\$	3,754,814 32,386 3,787,200 30.1% General – Districts 100,757,098 573,360	\$ \$ \$	32,741,363 49,436 32,790,798 49.1% Safety 1,063,068,541 826,692	\$ \$	87,477,213 116,401 87,593,614 45.6% Totals 2,859,847,637 2,024,365
<ol> <li>Actuarial Value of Assets</li> <li>Unfunded Actuarial Accrued Liability         <ul> <li>Regular Benefits</li> <li>Golden Handshakes</li> <li>Total</li> </ul> </li> <li>Funded Percentage</li> </ol> Total Regular Benefits <ol> <li>Actuarial Accrued Liability</li> <li>Regular Benefits</li> <li>Golden Handshakes</li> <li>Cotal</li> </ol>	\$	50,981,036 34,579 51,015,616 44.1% General – County 1,696,021,998 624,313 1 696 646 311	\$ \$	3,754,814 32,386 3,787,200 30.1% General – Districts 100,757,098 573,360 101 330 458	\$	32,741,363 49,436 32,790,798 49.1% Safety 1,063,068,541 826,692 1,063,895,233	\$ \$ \$	87,477,213 116,401 87,593,614 45.6% Totals 2,859,847,637 2,024,365 2,861,872,002
<ol> <li>Actuarial Value of Assets</li> <li>Unfunded Actuarial Accrued Liability         <ul> <li>Regular Benefits</li> <li>Golden Handshakes</li> <li>Total</li> </ul> </li> <li>Funded Percentage</li> </ol> Total Regular Benefits <ol> <li>Actuarial Accrued Liability         <ul> <li>Regular Benefits</li> <li>Golden Handshakes</li> <li>Total Regular Benefits</li> </ul> </li> <li>Actuarial Accrued Liability         <ul> <li>Regular Benefits</li> <li>Golden Handshakes</li> <li>Total</li> </ul> </li> </ol>	\$	50,981,036 34,579 51,015,616 44.1% General – County 1,696,021,998 624,313 1,696,646,311 1 216 425 012	\$ \$ \$	3,754,814 32,386 3,787,200 30.1% General – Districts 100,757,098 573,360 101,330,458 56 749,496	\$ \$ \$	32,741,363 49,436 32,790,798 49.1% Safety 1,063,068,541 826,692 1,063,895,233 891 129 761	\$ \$ \$ \$	87,477,213 116,401 87,593,614 45.6% Totals 2,859,847,637 2,024,365 2,861,872,002 2,164,304,268
<ol> <li>Actuarial Value of Assets</li> <li>Unfunded Actuarial Accrued Liability         <ul> <li>Regular Benefits</li> <li>Golden Handshakes</li> <li>Total</li> </ul> </li> <li>Funded Percentage</li> </ol> Total Regular Benefits <ol> <li>Actuarial Accrued Liability         <ul> <li>Regular Benefits</li> <li>Golden Handshakes</li> <li>Total Regular Benefits</li> </ul> </li> <li>Actuarial Accrued Liability         <ul> <li>Regular Benefits</li> <li>Golden Handshakes</li> <li>Total</li> </ul> </li> </ol>	\$	40,242,004         50,981,036         34,579         51,015,616         44.1%         General – County         1,696,021,998         624,313         1,696,646,311         1,216,425,012	\$	3,754,814 32,386 3,787,200 30.1% General – Districts 100,757,098 573,360 101,330,458 56,749,496	\$	32,741,363 49,436 32,790,798 49.1% Safety 1,063,068,541 826,692 1,063,895,233 891,129,761	\$ \$ \$ \$	87,477,213 116,401 87,593,614 45.6% <b>Totals</b> 2,859,847,637 2,024,365 2,861,872,002 2,164,304,268
<ol> <li>Actuarial Value of Assets</li> <li>Unfunded Actuarial Accrued Liability         <ul> <li>Regular Benefits</li> <li>Golden Handshakes</li> <li>Total</li> </ul> </li> <li>Funded Percentage</li> </ol> Total Regular Benefits <ol> <li>Actuarial Accrued Liability</li> <li>Regular Benefits</li> <li>Golden Handshakes</li> <li>Total</li> <li>Actuarial Accrued Liability</li> <li>Regular Benefits</li> <li>Golden Handshakes</li> <li>Total</li> <li>Actuarial Value of Assets</li> <li>Unfunded Actuarial Accrued Liability</li> <li>Regular Benefits</li> </ol>	\$ \$	50,981,036 34,579 51,015,616 44.1% General – County 1,696,021,998 624,313 1,696,646,311 1,216,425,012 479,596,987	\$ \$ \$ \$	3,754,814 32,386 3,787,200 30.1% General – Districts 100,757,098 573,360 101,330,458 56,749,496 44,007,602	\$ \$ \$	32,741,363 49,436 32,790,798 49.1% Safety 1,063,068,541 826,692 1,063,895,233 891,129,761 171,938,780	\$ \$ \$ \$	87,477,213 <u>116,401</u> 87,593,614 45.6% <b>Totals</b> 2,859,847,637 <u>2,024,365</u> 2,861,872,002 2,164,304,268 695,543,369
<ol> <li>Actuarial Value of Assets</li> <li>Unfunded Actuarial Accrued Liability         <ul> <li>Regular Benefits</li> <li>Golden Handshakes</li> <li>Total</li> </ul> </li> <li>Funded Percentage</li> </ol> Total Regular Benefits <ol> <li>Actuarial Accrued Liability</li> <li>Regular Benefits</li> <li>Golden Handshakes</li> <li>Total</li> <li>Actuarial Value of Assets</li> <li>Unfunded Actuarial Accrued Liability</li> <li>Regular Benefits</li> <li>Jotal</li> <li>Actuarial Value of Assets</li> <li>Unfunded Actuarial Accrued Liability</li> <li>Regular Benefits</li> <li>Golden Handshakes</li> </ol>	\$ \$ \$ \$	50,981,036 34,579 51,015,616 44.1% General – County 1,696,021,998 624,313 1,696,646,311 1,216,425,012 479,596,987 624,313	\$ \$ \$	3,754,814 32,386 3,787,200 30.1% General – Districts 100,757,098 573,360 101,330,458 56,749,496 44,007,602 573,360	\$ \$ \$ \$	32,741,363 49,436 32,790,798 49.1% Safety 1,063,068,541 826,692 1,063,895,233 891,129,761 171,938,780 826,692	\$ \$ \$ \$	87,477,213 <u>116,401</u> 87,593,614 45.6% <b>Totals</b> 2,859,847,637 <u>2,024,365</u> 2,861,872,002 2,164,304,268 695,543,369 <u>2,024,365</u>
<ol> <li>Actuarial Value of Assets</li> <li>Unfunded Actuarial Accrued Liability         <ul> <li>Regular Benefits</li> <li>Golden Handshakes</li> <li>Total</li> </ul> </li> <li>Funded Percentage</li> </ol> Total Regular Benefits <ol> <li>Actuarial Accrued Liability         <ul> <li>Regular Benefits</li> <li>Actuarial Accrued Liability             <ul> <li>Regular Benefits</li> <li>Actuarial Accrued Liability                     <ul> <li>Actuarial Accrued Liability</li> <li>Regular Benefits</li> <li>Golden Handshakes</li> <li>Total</li> <li>Actuarial Value of Assets</li></ul></li></ul></li></ul></li></ol>	\$ \$ \$ \$ \$	50,981,036 34,579 51,015,616 44.1% General – County 1,696,021,998 624,313 1,696,646,311 1,216,425,012 479,596,987 624,313 480,221,299	\$ \$ \$ \$	3,754,814 32,386 3,787,200 30.1% General – Districts 100,757,098 573,360 101,330,458 56,749,496 44,007,602 573,360 44,580,962	\$ \$ \$ \$ \$ \$	32,741,363 49,436 32,790,798 49.1% Safety 1,063,068,541 826,692 1,063,895,233 891,129,761 171,938,780 826,692 172,765,472	\$ \$ \$ \$	87,477,213 116,401 87,593,614 45.6% Totals 2,859,847,637 2,024,365 2,861,872,002 2,164,304,268 695,543,369 2,024,365 697,567,734
<ol> <li>Actuarial Value of Assets</li> <li>Unfunded Actuarial Accrued Liability         <ul> <li>Regular Benefits</li> <li>Golden Handshakes</li> <li>Total</li> </ul> </li> <li>Funded Percentage</li> </ol> Total Regular Benefits <ol> <li>Actuarial Accrued Liability</li> <li>Regular Benefits</li> <li>Golden Handshakes</li> <li>Total</li> </ol> Actuarial Accrued Liability <ol> <li>Regular Benefits</li> <li>Golden Handshakes</li> <li>Total</li> </ol> Actuarial Value of Assets <ol> <li>Unfunded Actuarial Accrued Liability</li> <li>Regular Benefits</li> <li>Golden Handshakes</li> <li>Total</li> </ol> Solden Handshakes <ol> <li>Total</li> </ol> 4. Funded Percentage	\$ \$ \$ \$	50,981,036 34,579 51,015,616 44.1% General – County 1,696,021,998 624,313 1,696,646,311 1,216,425,012 479,596,987 624,313 480,221,299 71.7%	\$ \$ \$ \$	3,754,814 32,386 3,787,200 30.1% General – Districts 100,757,098 573,360 101,330,458 56,749,496 44,007,602 573,360 44,580,962 56.0%	\$ \$ \$ \$ \$	32,741,363 49,436 32,790,798 49.1% <b>Safety</b> 1,063,068,541 826,692 1,063,895,233 891,129,761 171,938,780 826,692 172,765,472 83.8%	\$ \$ \$ \$ \$ \$	87,477,213 116,401 87,593,614 45.6% Totals 2,859,847,637 2,024,365 2,861,872,002 2,164,304,268 695,543,369 2,024,365 697,567,734 75.6%



This work product was prepared solely for the KCERA. It may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. 29 **UAAL for 3% @ 60** Under the Board's Funding Policy, any time a benefit enhancement is adopted, the increase in the UAAL shall be determined and the amortization of the increase over 30 years shall be fixed as a frozen percentage of pay. Any future changes in the total UAAL will not impact the UAAL contribution established for the benefit increases. Accordingly, the following Exhibit 11 discloses the determination of the fixed UAAL contribution rate for those employers that adopted the 3% @ 60 benefits for their General members on a retrospective basis. Note that the Berrenda Mesa and Inyokern Districts only adopted the 3% @ 60 formula prospectively. Thus, they have cost sharing with other Districts for determining the normal cost rates, but not for the UAAL rates.



## Exhibit 11: Change in Actuarial Accrued Liability (AAL) due to Benefit Formula Change

	Districts Excluding Berrenda Mesa/Inyokern	County
12/31/2004 Active AAL - Old Formula	48,900,966	718,933,859
12/31/2004 Active AAL 3% @ 60 Formula	58,747,696	854,934,156
Change in Active AAL as of 12/31/2004	9,846,730	136,000,297
12/31/2004 Vested Terminated AAL - Old Formula	4,177,746	38,174,019
12/31/2004 Vested Terminated AAL 3% @ 60 Formula	4,799,555	43,855,779
Change in Vested Terminated AAL as of 12/31/2004	621,809	5,681,760
Total Change in AAL as of 12/31/2004	10,468,539	141,682,057
Change rolled forward to 12/31/2005	11,306,022	153,016,621
12/31/2005 Payroll for General (excludes Inyokern/Barrenda Mesa)	21,661,643	277,659,983
PV of Payroll for 30 years	\$388,353,440	\$4,977,933,089
Change in UAAL amortization as a percentage of pay at 12/31/2005	2.91%	3.07%
Basic (without COLA) Active AAL increase as of 12/31/2004	7,791,167	107,609,429
Basic VT AAL increase as of 12/31/2004	494,433	4,517,870
Basic Total AAL increase as of 12/31/2004	8,285,600	112,127,299
Basic Total AAL increase rolled to 12/31/2005	8,948,448	121,097,483
Change in UAAL amortization Basic as of 12/31/2005	2.30%	2.43%
2% COLA AAL increase as of 12/31/2004	1,706,190	23,441,955
2% COLA AAL increase rolled to 12/31/2005	1,842,685	25,317,311
Change in UAAL - 2% COLA only as of 12/31/2005	0.47%	0.51%
0.5% COLA AAL increase as of 12/31/2004	476,749	6,112,803
0.5% COLA AAL increase rolled to 12/31/2005	514,889	6,601,827
Change in UAAL - COLA only as of 12/31/2005	0.13%	0.13%



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# 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:
	<ul> <li>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.</li> </ul>
	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 12: 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	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 G-District Electing 3% @ 60	31621.8	1/100 of FAS at age 55	Yes	Yes	Yes
District - Inyokern CSD	Prospectively Only	31621.8	1/100 of FAS at age 55 1/100 of FAS at age 55	Yes	No	No
District - Kern County Water Agency	GD - KCWA	31621.8	(100% employer pickup if hired prior to 8/22/2004) <sup>(3)</sup>	Yes	Yes	Yes
District - Kern Mosquito and VCD District - North of River SD	G - D Electing 1997 MOU G - D Electing 1997 MOU	31621.8 31621.8	1/100 of FAS at age 55 1/100 of FAS at age 55	Yes 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 District - West Side CD	G - D Electing 1997 MOU G - D Electing 1997 MOU	31621.8 31621.8	1/100 of FAS at age 55 1/100 of FAS at age 55	Yes Yes	No Yes	Yes No
District - West Side Mosquito AD District - West Side RPD	G - D Electing 1997 MOU G - D Electing 1997 MOU	31621.8 31621.8	1/100 of FAS at age 55 1/100 of FAS at age 55	Yes Yes	Yes Yes	No No
Safety - County	Safety	31639 25	1/100 of FAS at age 50 plus phased special sumpplement 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 contribution 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.



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# 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 (or County) Normal Cost is the portion of the annual cost that the employer is responsible for. 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 13-16. 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:

- a) The Basic benefits are the retirement benefits excluding all COLA benefits and the rates for those benefits are shown in Exhibit 13.
- 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 14.
- 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 15.

This break out of the rates into the four subgroups 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 16 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 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 wit the 2005 valuation. This split is shown in Exhibits 13-16.	to , ;					
	In addition to these factors, the modification in the determination of the members' entry age for valuation purpose resulted in a slight increase in the normal cost rates as well as a slight decrease in the accrued liability. This is a one-time adjustment in methods and would not be expected to impact the normal cost rates in future valuations.	es S					
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 Ma 2005 to partially offset the Court's additional costs in adopting the 3% @ 60 retirement enhancement.	ay I					
	In future years, the reduction in the employer contribution rate for court employees will be 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. Because the employees began contributing in May 2005, a special one-tim adjustment was made for the first year employer contributions to reflect the value of contributions collected prior to the valuation date. This adjustment will not be made in subseque years. The derivation of the employer rate for Court employer is summarized in the following chart:	e e ent es					
	12/31/05 valuation contribution rate for County General Group Less Reduction for Court employees supplemental contributions Addition for refunds on the supplemental contributions Less Special one time, first year adjustment Total County contribution for Court employees for July 1, 2006	30.00% -2.50% 0.13% -1.58% 26.06%					



### Exhibit 13: Basic 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 D	ollars			
<ol> <li>Total Normal Cost</li> <li>Projected Employee Contributions</li> <li>Employer Normal Cost (1-2)</li> <li>Amortization of Unfunded Actuarial Accrued Liability</li> </ol>	\$ 45,608,648 5,238,833 40,369,815 18,595,645	\$ 3,320,467 <u>1,123,811</u> * 2,196,656 1,353,827	\$ 789,993 19,668 770,325 396,817	\$ 466,394 33,163 433,231 234,272	\$ 2,560,818 563,008 1,997,810 1,286,310	\$ 80,945 2,082 78,863 30,075	\$ 20,050,801 1,671,444 18,379,357 6,285,821	\$ 72,878,065 8,652,009 64,226,056 28,182,766
5. Total Employer Contribution (3+4)	\$ 58,965,459	\$ 3,550,483	\$ 1,167,142	\$ 667,503	\$ 3,284,120	\$ 108,938	\$ 24,665,178	\$ 92,408,823
			Con	tributions as a Pero	cent of Pay			
<ol> <li>Total Normal Cost</li> <li>Projected Employee Contributions</li> <li>Employer Normal Cost (1-2)</li> </ol>	17.62% 2.02% 15.60%	17.62% <u>5.96%</u> * 11.66%	17.62% 0.44% 17.18%	17.62% <u>1.25%</u> 16.37%	17.62% <u>3.87%</u> 13.75%	17.62% 0.45% 17.17%	21.89% <u>1.82%</u> 20.06%	18.62% 2.21% 16.41%
<ol> <li>Amortization of Unfunded Actuarial Accrued Liability         <ol> <li>a.) 30 Year Fixed for Benefit Change to 3% @ 60 Formula</li> <li>b.) Remaining UAAL</li> <li>c.) Total UAAL Rate</li> </ol> </li> </ol>	a 2.43% <u>4.75%</u> 7.18%	2.43% <u>4.75%</u> 7.18%	2.30% 6.55% 8.85%	2.30% 6.55% 8.85%	2.30% <u>6.55%</u> 8.85%	0.00% <u>6.55%</u> 6.55%	0.00% <u>6.86%</u> 6.86%	7.20%
5. Total Employer Contribution (3+4)	22.78%	18.84%	26.03%	25.22%	22.60%	23.72%	26.93%	23.61%

\*Includes credit for member contributions paid in 2005.



### Exhibit 14: 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	ollars			
1. Total Normal Cost 2. Projected Employee Contributions 3. Employer Normal Cost (1-2)	\$ 9,327,218 0 9,327,218	679,054 0 679,054	\$ 161,558 0 161,558	\$ 95,380 0 95,380	\$ 523,701 0 523,701	\$ 16,554 	\$ 4,775,556 0 4,775,556	\$ 15,579,021 0 15,579,021
4. Amortization of Unfunded Actuarial Accrued Liability	3,883,455	282,729	99,497	58,741	322,526	8,015	1,752,816	6,407,779
5. Total Employer Contribution (3+4)	\$ 13,210,674	961,783	\$ 261,055	\$ 154,121	\$ 846,227	\$ 24,569	\$ 6,528,372	\$ 21,986,800
			с	ontributions as a Perc	ent of Pay			
1. Total Normal Cost 2. Projected Employee Contributions 3. Employer Normal Cost (1-2)	3.60% 0.00% 3.60%	3.60% 0.00% 3.60%	3.60% 0.00% 3.60%	3.60% 0.00% 3.60%	3.60% 0.00% 3.60%	3.60% 0.00% 3.60%	5.21% 0.00% 5.21%	3.98% 0.00% 3.98%
<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>	0.51% 0.99% 1.50%	0.51% <u>0.99%</u> 1.50%	0.47% <u>1.74%</u> 2.22%	0.47% <u>1.74%</u> 2.22%	0.47% <u>1.74%</u> 2.22%	0.00% <u>1.74%</u> 1.74%	0.00% <u>1.91%</u> 1.91%	1.64%
5. Total Employer Contribution (3+4)	5.10%	5.10%	5.82%	5.82%	5.82%	5.35%	7.13%	5.62%



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### Exhibit 15: 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			
1. Total Normal Cost 2. Projected Employee Contributions 3. Employer Normal Cost (1-2)	\$ 2,806,032 0 2,806,032	\$ 204,289 0 204,289	\$ 48,604 0 48,604	\$ 28,694 0 28,694	\$ 157,552 0 157,552	\$ 4,980 0 4,980	\$ 1,490,647 0 1,490,647	\$ 4,740,798 0 4,740,798
4. Amortization of Unfunded Actuarial Accrued Liability	2,662,034	193,805	44,885	26,499	145,498	3,990	1,843,710	4,920,421
5. Total Employer Contribution (3+4)	\$ 5,468,066	\$ 398,094	\$ 93,489	\$ 55,194	\$ 303,050	\$ 8,970	\$ 3,334,357	\$ 9,661,219
			c	Contributions as a Perc	cent of Pay			
1. Total Normal Cost 2. Projected Employee Contributions 3. Employer Normal Cost (1-2)	1.08% 0.00% 1.08%	1.08% 0.00% 1.08%	1.08% <u>0.00%</u> 1.08%	1.08% 0.00% 1.08%	1.08% 0.00% 1.08%	1.08% <u>0.00%</u> 1.08%	1.63% 0.00% 1.63%	1.21% 0.00% 1.21%
<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>	0.13% <u>0.90%</u> 1.03%	0.13% <u>0.90%</u> 1.03%	0.13% <u>0.87%</u> 1.00%	0.13% <u>0.87%</u> 1.00%	0.13% 	0.00% 0.87% 0.87%	0.00% 2.01% 2.01%	1.26%
5. Total Employer Contribution (3+4)	2.11%	2.11%	2.09%	2.09%	2.09%	1.95%	3.64%	2.47%



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### Exhibit 16: 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 Dollars			
1. Total Normal Cost 2. Projected Employee Contributions 3. Employer Normal Cost (1-2)	\$ 57,741,898 5,238,833 52,503,065	\$ 4,203,809 <u>1,123,811</u> * 3,079,998	\$ 1,000,154 <u>19,668</u> 980,486	\$ 590,469 <u>33,163</u> 557,306	\$ 3,242,071 <u>563,008</u> 2,679,063	\$ 102,479 2,082 100,397	\$ 26,317,004 <u>1,671,444</u> 24,645,560	\$ 93,197,884 8,652,009 84,545,875
4. Amortization of Unfunded Actuarial Accrued Liability	25,141,134	1,830,361	541,199	319,512	1,754,334	42,080	9,882,347	39,510,967
5. Total Employer Contribution (3+4)	\$ 77,644,199	\$ 4,910,359	\$ 1,521,685	\$ 876,817	\$ 4,433,397	\$ 142,477	\$ 34,527,907	\$ 124,056,842
				Contributions as a	Percent of Pay			
1. Total Normal Cost 2. Projected Employee Contributions 3. Employer Normal Cost (1-2)	22.31% 2.02% 20.29%	22.31% 5.96% * 16.35%	22.31% 0.44% 21.87%	22.31% <u>1.25%</u> 21.06%	22.31% <u>3.87%</u> 18.44%	22.31% 0.45% 21.86%	28.73% <u>1.82%</u> 26.91%	23.81% 2.21% 21.60%
<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% <u>6.64%</u> 9.71%	3.07% 6.64% 9.71%	2.91% 9.16% 12.07%	2.91% <u>9.16%</u> 12.07%	2.91% 	0.00% 9.16% 9.16%	0.00% <u>10.79%</u> 10.79%	10.10%
5. Total Employer Contribution (3+4)	30.00%	26.06%	33.94%	33.13%	30.51%	31.02%	37.69%	31.70%

\* Includes credit for member contributions paid in 2005.

\*\* 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 17 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:

- Benefit Changes: The benefit formula for all General members changed effective January 1, 2005 to the 3% at 60 level of benefits. In accordance with the Board's funding policy, this is the first valuation that reflects the costs of these higher benefits in the contribution rates.
- Experience During the Year: Following the 2004 valuation, the Board had an audit performed on the results. As a result of the audit, the COLA liabilities were adjusted and increased by \$ 7.5 million from those reported in the 2004 valuation report. As discussed in our February 18, 2006 letter, we estimated that the total employer contribution rate would have been approximately 0.11% higher, had the adjusted liabilities been reflected in the costs.

In addition, a review of the 2004 Interest Credits revealed an increase in the SRBR reserves allocated to the 0.50% COLA benefit by \$7.5 million. Thus, these two adjustments from the 2004 valuation were offsetting for costs for the regular benefits.

• Other experience during the 2005 year included slight variations resulting in a 0.18% increase in the contribution rate for General members and a 0.08% decrease for Safety members from what was expected, based on the actuarial assumptions used for the 2004 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 17 in this section, and were well within a reasonable level of fluctuation.

**Revised Milliman Assumptions:** We recommended revised assumptions which were adopted by the Board on April 12, 2006. In particular, the mortality assumption was strengthened (i.e., increased life expectancy), particularly for the Safety male members. Except for the Safety members, the rate increases due to this change were offset by adjustments made in the termination rates and the expected salary increases which both produced rate decreases.



Changes in the Contribution Rates (continued)

As a result of changes to the mortality and salary increase assumptions, the member contribution rates are also impacted. In general, the rates for members with older entry ages increased, while all other member rates decreased.



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	Percentage	1 9	
		Changes in Average Employer Contribution Rate Due to:	Changes in Fundeo Pecentage
As of Decemb	All Employer Cost Sharing Groups	26.36%	86.1%
Benefit Change	es		
	Move to 3% @ 60 (31676.17)	5.01%	-5.3%
Experience:	Passage of Time	0.13%	0.2%
	Investment Experience	0.02%	-0.1%
	Demographic Experience	0.73%	-1.4%
	Golden Handshakes	0.04%	0.0%
	Service Purchases	-0.77%	-2.2%
	Salary Increases Less than Expected	-0.26%	0.7%
	Subtotal for Experience	0.11%	-3.3%
Assumption Cl	hanges		
	Based on 2005 Experience Study	<u>0.41%</u>	<u>-1.9%</u>
Total Change	s	5.53%	-10.509
As of Decemb	ber 31, 2005	31.89%	75.6%
	General County and Districts Cost Sharing G	roups	
As of Decemb	ber 31, 2004	23.47%	84.0%
Benefit Change	es Move to 3% @ 60 (31676.17)	6.56%	-8.2%
Experience:	Passage of Time	0.22%	0.1%
-	Investment Experience	0.02%	-0.1%
	Demographic Experience	0.77%	-1.5%
	Golden Handshakes	0.06%	0.0%
	Service Purchases	0.17%	-0.4%
	Salary Increases Less than Expected	-0.20%	0.6%
	Subtotal for Experience	0.18%	-3.9%
Assumption Cl	hanges	0.40%	4.40/
	Based on 2005 Experience Study	<u>-0.10%</u>	<u>-1.1%</u>
Total Change	es	6.64%	-13.2%
As of Decemb	ber 31, 2005	30.11%	70.8%
	Safety Cost Sharing Group		
As of Decemb	ber 31, 2004	35.65%	89.4%
Benefit Change	Move to 3% @ 60 (31676.17)	0.00%	0.0%
Experience:	Passage of Time	-0.15%	0.5%
	Investment Experience	0.04%	-0.1%
	Demographic Experience	0.67%	-1.1%
	Guiuen Hanusnakes Data Corrections and Changes in Methodology	-0.57%	0.0% -1 5%
	Service Purchases	0.38%	-0.6%
	Salary Increases Less than Expected Subtotal for Experience	<u>-0.45%</u> -0.08%	<u>0.8%</u> -2.0%
Assumption C	- hanges		
	Based on 2005 Experience Study	<u>2.12%</u>	<u>-3.6%</u>
Total Change	s	2.04%	-5.6%
As of Decemb	ber 31, 2005	37.69%	83.8%

#### Exhibit 17: Gain and Loss Analysis by Employer Contribution Rates and Funded Percentage



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# 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 18, compares actuarial assets and liabilities of KCERA, based on the actuarial funding method used. The required Schedule of Employer Contributions, Exhibit 19, 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 the benefit changes and assumption changes that occurred in 2005.

Exhibit 20 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 18: Schedule of Funding Progress (Dollars in Thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c))
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%



### Exhibit 19: Schedule of Contributions from the Employer

Fiscal Year Ending	Ann C	ual Required ontribution (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%

\* Reflects pension obligation bond proceeds.



# Exhibit 20: Solvency Test

(Dollars in Millions)

				Actuarial Accrue							
Actuarial	Actuarial Value of Valuation	Active Member Contributions	I	Retirees and Beneficiaries(1)	Active Me (Employer-F Portic	mbers Financed on)	Total	Portio	n of AAL Co	overed by A	Assets
Valuation Date	Reserves	(A)		(B)	(C)		(D)	(A)	(B)	(C)	(D)
December 31, 2003	\$ 1,927.6	\$ 182.1	\$	1,067.0	\$ 810	.2 \$	2,059.3	100%	100%	84%	94%
December 31, 2004	\$ 2,012.5	\$ 191.5	\$	1,147.2	\$ 997	.7 \$	2,336.4	100%	100%	68%	86%
December 31, 2005	\$ 2,164.3	\$ 188.8	\$	1,437.0	\$ 1,236	.0 \$	2,861.9	100%	100%	44%	76%



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# Section 8: SRBR – Supplemental Retirement Benefit Reserve



Determination of SRBR Benefits 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, 2005.
- 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 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.



Determination of SRBR Benefits (continued)

- Tier 3 Additional benefits to maintain 80% purchasing power protection.
- Death Benefit A one-time payment of \$1,000 to a Participant's beneficiary is made upon the death of the Participant.

In addition, the KCERA Board has set aside a portion of the SRBR Reserve to help pay for an additional 0.5% cost-of-living adjustment (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.

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.

Note that the change in actuarial assumptions resulted in a significant change in the present value of the SRBR benefits. The strengthened mortality assumption tended to increase the present value of all SRBR benefits (except other death benefits). However, the decrease in the assumed price inflation assumption from 4.0% to 3.5% resulted in a decrease of more than \$89 million for the present value of the SRBR Pier 3 liabilities.



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, 2004. 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 153.6%. It is calculated by dividing the Actuarial Value of Assets (\$89.5 million) by the Present Value of Approved SRBR Benefits (\$58.3 million).							
	The funded percentage is developed i	n the following table:						
	1. Present Value of Approved	Benefits						
	a. Death Benefits b. SRBR1 c. SRBR2 d. SRBR3 e. Total	\$ 2,148,302 27,996,967 14,630,525 13,508,081 \$ 58,283,875						
	2. Available SRBR Reserves							
	a. Total SRBR	\$ 163,061,420						
	b. 0.5% COLA Account c. Available SRBR Reserve	73,524,653 \$ 89,536,767						
	3. Funded Percentage	153.6%						
Targeted Funding	In 2001, KCERA did an extensive review of the benefits provided through the SRBR and the financial strength of SRBR. The Board decided to use a target based on a combination of Approved and Projected SRBR Benefits. target liability is the Present Value of Benefits for Tier I, T and Death Benefits. For Tier III Benefits, the target liabil the Present Value of projected payments for the twenty-y period beginning with the valuation date.							
	On this basis, the Plan's funded percentage for Target SRBR Liabilities is 123.9%. It is calculated by dividing the Actuarial Value of Assets (\$89.5 million) by the Present Value of SRBF Target Liabilities (\$72.3 million).							
	The funding target is to have a 20% re benefits, SRBR1 and SRBR2 benefits expected SRBR3 payments as shown section.	eserve for the death and 20 years of at the end of this						



# Targeted Funding (continued)

#### 1. Present Value of Targeted Funding

	Liabilities	With reserves
a. Death Benefits	\$ 2,148,302	\$ 2,577,962
b. SRBR1	27,996,967	33,596,360
c. SRBR2	14,630,525	17,556,630
d. SRBR3	27,478,660	27,478,660
e. Total	\$ 72,254,454	\$ 81,209,613
2. Available SRBR Reserves		
a. Total SRBR	\$ 163,061,420	\$ 163,061,420
b. 0.5% COLA Account	73,524,653	73,524,653
c. Available SRBR Reserve	\$ 89,536,767	\$ 89,536,767
3. Funded Percentage	123.9%	110.3%

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 benefit are more than 100% funded, the Board may consider increasing the SRBR approved benefits. As of December 31, 2005, the funding ratio is just over the 100% benchmark, at 110.3%

**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 88.1%. It is calculated by dividing the Actuarial Value of Assets (\$89.5 million) by the Present Value of all SRBR Benefits (\$101.6 million).

The funded percentage is developed in the following table:

<ol> <li>Present Value of SRBR         <ul> <li>Approved Benefits</li> <li>Future Benefits</li> </ul> </li> </ol>	\$ 58,283,875 43,331,440
c. Total 2. Available SRBR Reserves	\$ 101,615,315
a. Total SRBR b. 0.5% COLA Account	\$ 163,061,420 73,524,653
c. Available SRBR Reserve	\$ 89,536,767
3. Funded Percentage	88.1%

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



### Exhibit 21: Supplemental Retiree Benefit Reserve

#### Present Value of Projected Benefits

Approved Benefits					
	Death Ben	SRBR1	SRBR2	SRBR3	Total
Active Members	\$ 621,580	\$ 9,112,105	\$	\$	\$ 9,733,685
Deferred Vested Members	80,797	1,249,314			1,330,111
Retirees and Beneficiaries	1,445,925	17,635,548	14,630,525	13,508,081	47,220,079
Total	\$ 2,148,302	\$ 27,996,967	 14,630,525	13,508,081	 58,283,875
Future Benefits					
	Death Ben	SRBR1	SRBR2	SRBR3	Total
Active Members				\$ 14,740,315	\$ 14,740,315
Deferred Vested Members				290,880	290,880
Retirees and Beneficiaries				28,300,245	28,300,245
Total	 0	 0	 0	43,331,440	 43,331,440
Available Reserves					
Total SRBR	\$ 163,061,420				
Additional 0.5% COLA Account	 /3,524,653				
AVailable SKBK	\$ 89,536,767				

As part of a court settlement, the County has increased the maximum cost-of-living increase that can be provided from Regular Plan reserves from the prior level of 2% per year, up to 2.5% per year. This benefit increase will be partly funded using money set aside for this purpose within the Supplemental Retiree Benefit Reserve by the Retirement Board.



### Exhibit 22: Projected Cash Flow

Calendar	Projected SRBR3
Year	Payments
2006	2,230,594
2007	2,365,189
2008	2,445,746
2009	2,527,582
2010	2,622,267
2011	2,693,145
2012	2,759,925
2013	2,843,314
2014	2,897,145
2015	2,942,511
2016	2,977,405
2017	3,002,403
2018	3,013,682
2019	3,012,033
2020	3,000,607
2021	2,976,782
2022	2,939,235
2023	2,895,347
2024	2,851,258
2025	2,856,805

Present Value of Projected 20-Year Cash Flow: \$27,478,660

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# Appendix A

### **Actuarial Assumptions**

The actuarial procedures and assumptions recommended to be used in the December 31, 2005 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 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

PC	ost-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 (instead of four).		
		Life expectancies for the adjusted tables are shown in Schedule 4.		
•	Beneficiary:	Rates are the same as a service retiree of the opposite gender.		
Ot	her 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.		
Pr	obability of Refund:	Rates varying by years of service, as shown in Schedule 8.		
Re	eciprocal Agency:	For current active members, the probability of joining a reciprocal agency immediately after termination is 60% (was 50%) for Safety members and 60% (was 40%) 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.		



Deferral age for Vested Termination:	Age 55 for Safety members. Age 62 for General members.
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 <i>other termination of employment</i> until age 50. After age 50, the member could still withdraw due to death, disability or <i>retirement</i> . 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.



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Percentage Married at Retirement:	80% of male active members and 60% (was 50%) 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 (was four 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 Unfunded Actuarial Accrued Liability due to the change in funding method is amortized as a level percentage of payroll over a 30-year period beginning with the December 31, 2005 valuation.
	The Unfunded Actuarial Accrued Liability due to all other sources is amortized as a level percentage of payroll over a 30-year period beginning with the December 31, 2005 valuation.



Amortization Period: (continued)	Additional UAAL incurred through the granting of Golden Handshake agreements was amortized over a three-year period from the year in which they were 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.
County Contributions:	The County 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 33% / 67% blend of the male and female mortality tables using current valuation assumptions. For Safety members it is based on an 83% / 17% 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<br/>statements furnished by the Retirement Office and<br/>used without audit.Member Data:The member data is supplied by the Retirement<br/>Office. It is reviewed for reasonableness and<br/>consistency, but no audit was performed. Milliman<br/>is not aware of any errors or omissions in the data<br/>that would have a significant effect on the results of<br/>our calculations.



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### 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%



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Age	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%

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

\*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
~~	20.00	20.44
00 50	20.90	30.41
50	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	12.00	15.00
76	11.59	14.44
75	10.02	10 74
75	10.93	13.74
70	10.30	13.03
70	9.00	12.30
70	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



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

	Ger	neral	Sa	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	



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### 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	0.2000
21	10	0	2	3	0	1	0.1400
22	10	0	2	3	0	2	0.1000
23	10	0	2	3	0	3	0.0700
24	11	0	2	3	0	4	0.0500
25	11	0	2	3	0	5	0.0433
26	11	0	2	3	0	6	0.0367
27	11	0	2	3	0	7	0.0300
28	11	0	2	3	0	8	0.0280
29	12	0	2	4	0	9	0.0260
30	12	0	3	4	0	10	0.0240
31	14	0	3	4	0	10	0.0220
32	16	0	3	5	0	12	0.0200
33	18	0	3	5	0	13	0.0190
34	20	0	4	6	0	14	0.0180
35	22	0	4	6	0	15	0.0170
36	24	0	5	7	0	16	0.0160
37	25	0	5	8	0	17	0.0150
38	20	0	6	8	0	18	0.0100
39	29	0	6	9	0	19	0.0138
40	30	0	7	10	0	20	0.0132
41	32	0	7	11	0	21	0.0126
42	34	0	8	12	0	22	0.0120
43	36	0	9	13	0	23	0.0116
44	39	0	10	14	0	24	0.0112
45	42	0	10	16	0	25	0.0108
46	45	0	11	17	0	26	0.0104
47	49	0	12	18	0	20	0.0100
48	52	0	14	22	0	28	0.0100
49	56	0	17	25	0	29	0.0100
50	60	0	19	29	600	30 & Above	0.0100
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		



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### 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	0.2000
21	3	0	2	3	0	1	0.1400
22	3	0	2	3	0	2	0.1000
23	3	0	2	3	0	3	0.0700
24	3	0	2	3	0	4	0.0500
25	3	0	2	3	0	5	0.0433
26	3	0	2	3	0	6	0.0367
27	3	0	2	3	0	7	0.0300
28	3	0	2	3	0	8	0.0280
29	4	0	2	4	0	9	0.0260
30	4	0	3	4	0	10	0.0240
31	4	0	3	4	0	11	0.0220
32	5	0	3	5	0	12	0.0200
33	6	0	3	5	0	13	0.0190
34	6	0	4	6	0	14	0.0180
35	7	0	4	6	0	15	0.0170
36	8	Õ	5	7	0	16	0.0160
37	8	0	5	8	0	17	0.0150
38	9	0	6	8	0	18	0.0144
39	9	0	6	9	0	19	0.0138
40	10	Õ	7	10	0	20	0.0132
41	10	Õ	7	10	0	21	0.0126
42	12	0	8	12	0	21	0.0120
42	14	0	9	12	0	23	0.0120
40	15	0	10	14	0	20	0.0112
45	16	0	10	16	0	25	0.0108
40	18	0	10	10	0	25	0.0100
40	10	0	12	18	0	20	0.0100
47	21	0	1/	22	0	28	0.0100
40	21	0	17	25	0	20	0.0100
50	20	0	19	20	600	30 & Above	0.0100
51	25	0	22	32	600	00 0 10000	0.0100
52	23	0	22	36	600		
53	20	0	24	36	600		
54	32	0	24	36	600		
55	35	0	24	36	800		
56	30	0	24	36	1000		
57	13	0	24	36	1200		
58	43	0	27	35	1500		
50	-1/ 51	0	20	34	1800		
60	56	0	22	32	2200		
61	50 61	0	22	31	2200		
62	67	0	20	30	2000		
63	74	0	20	20	3000		
64	82	0	18	23	3000		
65	02	0	10	20	3000		
60	91	0	10	20 25	3000		
67	110	0	17	20	3000		
69	104	0	10	∠4 22	3000		
00	124	0	10	∠ <i></i> 3	2000		
09	137	U	14	22	3000		
10	U	U	0	0	10000		



This work product was prepared solely for the KCERA. It may not be appropriate to use for other purposes. A-12 Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

### 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	0.0800
21	10	2	0	5	0	1	0.0600
22	10	2	0	7	0	2	0.0450
23	10	2	0	9	0	3	0.0300
24	11	2	0	11	0	4	0.0250
25	11	2	0	13	0	5	0.0233
26	11	2	0	16	0	6	0.0217
27	11	2	0	19	0	7	0.0200
28	11	2	0	22	0	8	0.0190
29	12	2	0	25	0	9	0.0180
30	12	2	0	28	0	10	0.0170
31	14	2	0	32	0	11	0.0160
32	16	2	0	36	0	12	0.0150
33	18	2	0	40	0	13	0.0140
34	20	2	0	44	0	14	0.0130
35	22	2	0	48	0	15	0.0120
36	24	2	0	54	0	16	0.0110
37	25	2	0	60	0	17	0.0100
38	27	2	0	66	0	18	0.0100
39	29	2	0	72	0	19	0.0000
40	30	2	0	78	0	20	0.0000
41	32	2	0	90	0	21	0.0000
42	34	2	0	102	0	22	0.0000
43	36	2	0	114	0	23	0.0000
44	39	2	0	126	0	24	0.0000
45	42	2	0	138	100	25	0.0000
46	45	2	0	150	50	26	0.0000
47	49	2	0	162	50	27	0.0000
48	52	2	0	174	100	28	0.0000
49	56	2	0	186	200	29	0.0000
50	60	2	0	198	1200	30 & Above	0.0000
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	116	0	0	0	0		
66	130	0	0	0	0		
67	144	0	0	0	0		
68	158	0	0	0	0		
69	174	0	0	0	0		
70	0	0	0	0	0		

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



This work product was prepared solely for the KCERA. It may not be appropriate to use for other purposes. A-13 Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

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

Years of		
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%
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%
27	0%	0%
28	0%	0%
29	0%	0%
30 & Up	0%	0%



This work product was prepared solely for the KCERA. It may not be appropriate to use for other purposes. A-14 Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.
## Appendix **B**

## **Benefit Summaries**

GENERAL AND SAFETY MEMBERS					
Membership:	Employment (at least 50% of full-time) w 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 GE					
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 ag 70 regardless of service.				
Benefit:	2.0%, or one-fiftieth (1/50) of FAS per yea of service times Retirement Adjustment Factor (RAF).				
Retirement Age Factor (RAF):	Adjustment factor for benefit commencing at age other than 60. Sample factors:AgeFactor501.0000551.250060 and older1.5000				
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.				

\* Note: CERL 31676.17 (3% at 60) was adopted by the Board of Supervisors, effective January 1, 2005. However, under current Board policy, benefit changes are only reflected in the actuarial valuation <u>following</u> the effective date. Therefore, this report is the first valuation to reflect this benefit change.

\*\*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.



|--|

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 commencir prior to age 50. Sample factors:			
	<b>Age</b> 41 45 50 and above	Factor 0.6258 0.7805 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:	5 years of service.			
Disabled Definition:	Unable to perform his/her own job.			

20% of FAS, plus 2% of FAS for each full year of service in excess of 5, but not more than 40% of FAS.

Life annuity; 60% continuance to spouse after death of retiree. If there is no surviving spouse, the benefit is paid to eligible children.



**Benefit:** 

Normal Form of Benefit:

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 1 month's salary for each year of service (maximum 6 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:	5 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**

### **Active Participants**

	D	ecember 31, 2004	De	cember 31, 2005	Change
General Members					
County					
Number		5.995		6.163	2.80%
Average Age		45.5		45.2	-0.65%
Average Service		10.7		10.4	-3.08%
Percent Male		29.44%		29.40%	-0.14%
Average Annual Pay	\$	44,271	\$	45,222	2.15%
Total Covered Payroll	\$	265,404,027	\$	278,700,398	5.01%
Valuation Payroll	\$	264,223,647	\$	277,659,983	5.09%
Districts Electing 1997	7 MOU				
Number		134		128	-4.48%
Average Age		47.2		45.7	-3.21%
Average Service		13.3		12.4	-7.34%
Percent Male		73.13%		74.22%	1.48%
Average Annual Pay	\$	58,370	\$	59,289	1.57%
Total Covered Payroll	\$	7,821,589	\$	7,589,012	-2.97%
Valuation Payroll	\$	7,821,589	\$	7,589,012	-2.97%
Districts Not Electing	1997 MOU				
Number		260		261	0.38%
Average Age		41.8		42.2	1.01%
Average Service		6.7		6.6	-1.03%
Percent Male		64.62%		63.22%	-2.16%
Average Annual Pay	\$	53,996	\$	55,678	3.11%
Total Covered Payroll	\$	14,039,029	\$	14,531,974	3.51%
Valuation Payroll	\$	14,007,887	\$	14,531,974	3.74%
Total General					
Number		6,389		6,552	2.55%
Average Age		45.4		45.1	-0.64%
Average Service		10.6		10.3	-3.13%
Percent Male		31.79%		31.62%	-0.52%
Average Annual Pay	\$	44,962	\$	45,913	2.11%
Total Covered Payroll	\$	287,264,645	\$	300,821,384	4.72%
Valuation Payroll	\$	286,053,123	\$	299,780,969	4.80%
Safaty Mambars*					
Number		1 597		1 643	2 88%
		40.6		40 1	-1 16%
Average Service		40.0 12 Q		12.4	-3 36%
Percent Male		83 34%		82 47%	-1.05%
Average Annual Pay	\$	56 257	\$	56 409	0.27%
Total Covered Pavroll	\$	89 841 674	\$	92,679,367	3.16%
Valuation Payroll	\$	88,897,821	\$	91,600,023	3.04%
Total Active Members					
Number		7,986		8,195	2.62%
Average Age		44.4		44.1	-0.74%
Average Service		11.1		10.7	-3.18%
Percent Male	•	42.10%	¢	41.82%	-0.67%
Average Annual Pay	\$	47,221	¢	48,017	1.69%
I Utal Covered Payroll	\$	311,106,319	¢	393,500,757	4.35%
valuation Payroli	\$	374,950,944	Ф	391,380,992	4.38%

\*Includes 2 Suspended members.



## **Terminated Participants with Pending Refunds**

	December 31, 2004	December 31, 2005	Change
General Members			-
Number	140	262	87.14%
Average Age	37.5	36.6	-2.39%
Percent Male	27.86%	25.57%	-8.20%
Safety Members			
Number	9	26	188.89%
Average Age	30.4	29.4	-3.40%
Percent Male	66.67%	84.62%	26.92%
All Members			
Number	149	288	93.29%
Average Age	37.1	35.9	-3.02%
Percent Male	30.20%	30.90%	2.32%

## **Terminated Vested Participants**

	December 31, 2004	December 31, 2005	Change
General Members		,	Ū
Number	814	875	7.49%
Average Age	47.1	46.9	-0.52%
Average Service	16.0	15.8	-1.15%
Percent Male	41.65%	40.91%	-1.76%
Safety Members			
Number	107	116	8.41%
Average Age	42.2	41.8	-0.94%
Average Service	15.9	15.4	-3.09%
Percent Male	78.50%	81.03%	3.22%
All Members			
Number	921	991	7.60%
Average Age	46.6	46.3	-0.58%
Average Service	16.0	15.8	-1.38%
Percent Male	45.93%	45.61%	-0.69%



## **Retired Participants**

		Dece	mber 31, 2004	Decer	nber 31, 2005	Change
Genera	Members					
	Service Retirements					
	Number		2,494		2,747	10.14%
	Average Age		70.9		70.2	-1.02%
	Percent Male		37.41%		37.57%	0.42%
	Average Monthly Benefit*	\$	1,395	\$	1,624	16.41%
	Beneficiaries					
	Number		598		632	5.69%
	Average Age		74.15		73.60	-0.74%
	Percent Male		22.41%		22.94%	2.39%
	Average Monthly Benefit*	\$	699	\$	781	11.65%
	Disabled					
	Number		499		519	4.01%
	Average Age		59.5		59.7	0.38%
	Percent Male		38.28%		36.99%	-3.35%
	Average Monthly Benefit*	\$	1,278	\$	1,346	5.36%
	Total General					
	Number		3591		3898	8.55%
	Average Age		69.9		69.3	-0.74%
	Percent Male		35.03%		35.12%	0.25%
	Average Monthly Benefit*	\$	1,263	\$	1,450	14.84%
Safety M	Members					
	Service Retirements					
	Number		596		619	3.86%
	Average Age		64.8		64.9	0.04%
	Percent Male		87.92%		91.28%	3.82%
	Average Monthly Benefit*	\$	3,517	\$	3,901	10.93%
	Beneficiaries					
	Number		186		226	21.51%
	Average Age		68.5		67.17	-1.88%
	Percent Male		5.38%		5.31%	-1.24%
	Average Monthly Benefit*	\$	1,507	\$	1,514	0.46%
	Disabled					
	Number		368		389	5.71%
	Average Age		57.5		57.8	0.57%
	Percent Male		83.70%		82.78%	-1.10%
	Average Monthly Benefit*	\$	2,693	\$	2,875	6.77%
	Total Safety		4.450		4 00 4	7 000/
			1,150		1,234	7.30%
	Average Age		63.1		63.1	-0.01%
	Percent Male	•	/3.22%	<b>^</b>	/2.85%	-0.50%
	Average Monthly Benefit*	\$	2,928	\$	3,140	7.26%

\*Excludes SRBR amounts.



## **Retired Participants (continued)**

		Dece	mber 31, 2004	Decen	nber 31, 2005	Change
Total Members						-
Service F	Retirements					
Number			3,090		3,366	8.93%
Average /	Age		69.7		69.2	-0.76%
Percent N	lale		47.15%		47.45%	0.62%
Average I	Monthly Benefit*	\$	1,804	\$	2,043	13.22%
Beneficia	ries					
Number			784		858	9.44%
Average /	∖ge		72.8		71.9	-1.22%
Percent N	lale		18.37%		18.30%	-0.38%
Average I	Monthly Benefit*	\$	891	\$	974	9.31%
Disabled						
Number			867		908	4.73%
Average /	∖ge		58.6		58.9	0.45%
Percent N	lale		57.55%		56.61%	-1.65%
Average I	Monthly Benefit*	\$	1,879	\$	2,001	6.54%
Total Ret	irees					
Number			4,741		5,132	8.25%
Average /	∖ge		68.2		67.8	-0.56%
Percent N	lale		44.29%		44.19%	-0.23%
Average I	Monthly Benefit*	\$	1,667	\$	1,857	11.39%

\*Excludes SRBR amounts.



## **General Members**

-	Actives	Terminated Vested	Terminated Pending Refund	Service Retirees	Disability Retirees	Beneficiaries
As of December 31, 2004	6,389	814	140	2,464	499	628
New Hires/Rehires	760	(5)	(7)			
Net Transfers from Safety	(10)	(3)	(1)			
Terminated - Contributions Refunded	(152)	(16)	(37)			
Terminated, Pending Refund	(88)		88			
Vested Terminations	(91)	95	(4)			
Suspended						
Service Retirements	(219)	(41)		260		
Disability Retirements	(23)	(1)		(3)	27	
Active Deaths	(14)					
Deaths Or Ceased Payments			(1)	(79)	(12)	(42)
Beneficiaries of Retirees Who Died						40
Data Corrections		32	84	105	5	6
As of December 31, 2005	6,552	875	262	2,747	519	632



## **Safety Members**

_	Actives	Terminated Vested	Terminated Pending Refund	Service Retirees	Disability Retirees	Beneficiaries
As of December 31, 2004	1,597	107	9	570	368	212
New Hires/Rehires	135	(1)	(1)			
Net Transfers from General	11	1	1	1		
Terminated - Contributions Refunded	(7)	(2)				
Terminated, Pending Refund	(9)		9			
Vested Terminations	(11)	11				
Suspended						
Service Retirements	(50)	(3)		53		
Disability Retirements	(22)			(3)	25	
Active Deaths	(3)					
Deaths Or Ceased Payments				(15)	(7)	(8)
Beneficiaries of Retirees Who Died						10
Data Corrections	2	3	8	13	3	12
As of December 31, 2005	1,643 *	116	26	619	389	226

\* Liabilities for 2 suspended members were also valued.



# Summary of Active General Members by Age and Service

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

					Years	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>	<u>40&amp;Up</u>	Total
0-24	73	44	1								118
25-29	179	293	54	2							528
30-34	140	293	221	24	1						679
35-39	92	244	240	127	35						738
40-44	81	170	223	159	156	61	4				854
45-49	60	191	214	208	216	162	59	1			1111
50-54	47	139	201	190	229	167	137	39	4		1153
55-59	35	121	185	129	166	123	80	59	9		907
60-64	12	40	77	71	72	44	25	15	2		358
65-69	2	11	20	16	19	5	10	1	1	2	87
70&Up		2	3	2	8		2	2			19
Total	721	1548	1439	928	902	562	317	117	16	2	6552

#### Average Annual Compensation for General Members by Age and Service at December 31, 2005

#### 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>	25-29	<u>30-34</u>	<u>35-39</u>	<u>40&amp;Up</u>	<u>Total</u>
0-24	32,104	26,876	25,873								30,102
25-29	33,515	34,281	38,134	35,037							34,419
30-34	33,793	38,956	43,654	36,812	41,928						39,349
35-39	34,552	38,691	44,957	47,476	41,138						41,841
40-44	36,321	40,877	44,166	44,738	47,548	41,465	38,777				43,274
45-49	38,681	36,573	43,441	48,031	49,418	50,482	46,691	40,439			45,221
50-54	32,544	42,460	42,328	46,172	48,987	53,571	53,486	50,439	55,584		47,176
55-59	37,049	45,050	44,187	47,221	49,995	48,629	51,859	58,048	39,588		47,656
60-64	39,018	40,915	46,309	45,418	44,666	51,247	52,527	58,790	60,017		46,595
65-69	53,567	55,981	44,290	39,855	51,327	45,561	45,070	36,499	32,220	58,103	46,955
70&Up		42,100	43,592	50,225	49,109		35,141	106,622			52,201
Total	34,559	38,570	43,734	46,243	48,420	50,032	51,168	56,103	45,680	58,103	43,635

Note that the compensation in this chart is the Final Average Salary as of December 31, 2005.



# Summary of Active Safety Members by Age and Service

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

					Years	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>	<u>40&amp;Up</u>	<u>Total</u>
0-24	33	30									63
25-29	47	106	65								218
30-34	23	70	175	23							291
35-39	11	35	109	59	22						236
40-44	8	16	42	31	93	31					221
45-49	1	7	24	25	72	92	29				250
50-54	1	2	9	13	27	62	91	32			237
55-59		3	12	7	25	20	21	14	1		103
60-64		3	3	5	6	1	2				20
65-69			1		2						3
70&Up				1							1
Total	124	272	440	164	247	206	143	46	1	0	1643

#### Average Annual Compensation for Safety Members by Age and Service at December 31, 2005

#### 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>	<u>40&amp;Up</u>	Total
0-24	35,574	43,153									39,183
25-29	35,981	42,041	48,507								42,662
30-34	36,992	44,392	50,993	51,308							48,323
35-39	36,483	47,135	51,989	51,796	61,712						51,405
40-44	35,561	44,843	50,575	51,108	62,008	67,767					56,914
45-49	32,310	47,462	50,763	49,533	60,747	63,250	68,441				59,995
50-54	38,243	40,039	48,370	49,579	59,878	63,050	70,843	68,470			64,817
55-59		32,703	43,285	49,777	55,200	64,770	62,626	68,657	94,158		58,368
60-64		35,738	47,587	46,581	45,928	36,351	65,168				46,257
65-69			77,397		43,293						54,661
70&Up				49,712							49,712
Total	36,066	43,541	50,593	50,819	60,150	63,887	69,070	68,527	94,158		53,592

Note that the compensation in this chart is the Final Average Salary as of December 31, 2005.



## 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, 2005 Valuation General Member Contribution Rates

Member Rates as a Percentage of Salary

	Prior Contribution I 1/10	Rates (Fiscal Year 20 00th @ 55	New Contribution Rates (Fiscal Year 2006-7)* 1/100th @ 55					
	Integrated First \$350 of Excess of \$350		Non-Integrated All		Integ First \$350 of	rated Excess of \$350	Non-Integrated All	
Entry Age	Monthly Comp.	Monthly Comp.	Compensation	Entry Age	Monthly Comp.	Monthly Comp.	Compensation	
18	4.13%	6.20%	6.20%	18	3.93%	5.89%	5.89%	
19	4.13%	6.20%	6.20%	19	4.01%	6.01%	6.01%	
20	4.13%	6.20%	6.20%	20	4.09%	6.13%	6.13%	
21	4.20%	6.30%	6.30%	21	4.17%	6.26%	6.26%	
22	4.28%	6.42%	6.42%	22	4.26%	6.38%	6.38%	
23	4.36%	6.54%	6.54%	23	4.34%	6.51%	6.51%	
24	4.44%	6.66%	6.66%	24	4.43%	6.64%	6.64%	
25	4.52%	6.78%	6.78%	25	4.52%	6.78%	6.78%	
26	4.60%	6.90%	6.90%	26	4.61%	6.91%	6.91%	
27	4.69%	7.04%	7.04%	27	4.70%	7.05%	7.05%	
28	4.77%	7.16%	7.16%	28	4.80%	7.19%	7.19%	
29	4.87%	7.30%	7.30%	29	4.89%	7.34%	7.34%	
30	4.95%	7.42%	7.42%	30	4.99%	7.48%	7.48%	
31	5.04%	7.56%	7.56%	31	5.09%	7.64%	7.64%	
32	5.13%	7.70%	7.70%	32	5.19%	7.79%	7.79%	
33	5.23%	7.84%	7.84%	33	5.30%	7.95%	7.95%	
34	5.32%	7.98%	7.98%	34	5.41%	8.11%	8.11%	
35	5.43%	8.14%	8.14%	35	5.52%	8.27%	8.27%	
36	5.52%	8.28%	8.28%	36	5.63%	8.44%	8.44%	
37	5.63%	8.44%	8.44%	37	5.75%	8.62%	8.62%	
38	5.73%	8.60%	8.60%	38	5.87%	8.80%	8.80%	
39	5.84%	8.76%	8.76%	39	5.99%	8.99%	8.99%	
40	5.95%	8.92%	8.92%	40	6.12%	9.17%	9.17%	
41	6.07%	9.10%	9.10%	41	6.24%	9.36%	9.36%	
42	6.19%	9.28%	9.28%	42	6.37%	9.55%	9.55%	
43	6.31%	9.46%	9.46%	43	6.49%	9.74%	9.74%	
44	6.44%	9.66%	9.66%	44	6.61%	9.92%	9.92%	
45	6.57%	9.86%	9.86%	45	6.73%	10.09%	10.09%	
46	6.73%	10.10%	10.10%	46	6.84%	10.26%	10.26%	
47	6.89%	10.34%	10.34%	47	6.94%	10.41%	10.41%	
48	7.08%	10.62%	10.62%	48	7.03%	10.55%	10.55%	
49	7.08%	10.62%	10.62%	49	7.12%	10.68%	10.68%	
50	7.08%	10.62%	10.62%	50	7.20%	10.80%	10.80%	
51	7.08%	10.62%	10.62%	51	7.27%	10.90%	10.90%	
52	7.08%	10.62%	10.62%	52	7.30%	10.95%	10.95%	
53	7.08%	10.62%	10.62%	53	7.30%	10.95%	10.95%	
54 and older	7.08%	10.62%	10.62%	54 and older	7.30%	10.95%	10.95%	

\*New contribution rates reflect new assumptions as recommended in the 12/31/2005 Kern County Study of Experience, including new mortality and new salary increase assumptions.



## December 31, 2005 Valuation

Safety Member Contribution Rates Fiscal Year 2005-6

Member Rates as a Percentage of Salary

		Hired Prior to	July 10, 2004				
Hire	d Prior to July 10, 20	004 (Basic)	Including 2.0%	Supplemental*		Hired After July 10, 2004	
	Integ	grated	In	tegrated		Integ	grated
	First \$350 of	Excess of \$350	First \$350 of	Excess of \$350		First \$350 of	Excess of \$350
Entry Age	Monthly Comp.	Monthly Comp.	Monthly Comp.	Monthly Comp.	Entry Age	Monthly Comp.	Monthly Comp.
20	5.06%	7.59%	6.39%	9.59%	20	7.59%	11.38%
21	5.14%	7.71%	6.47%	9.71%	21	7.71%	11.56%
22	5.22%	7.83%	6.55%	9.83%	22	7.83%	11.74%
23	5.31%	7.96%	6.64%	9.96%	23	7.96%	11.94%
24	5.39%	8.08%	6.72%	10.08%	24	8.08%	12.12%
25	5.48%	8.21%	6.81%	10.21%	25	8.21%	12.32%
26	5.56%	8.35%	6.90%	10.35%	26	8.35%	12.52%
27	5.65%	8.48%	6.99%	10.48%	27	8.48%	12.72%
28	5.75%	8.62%	7.08%	10.62%	28	8.61%	12.92%
29	5.84%	8.76%	7.17%	10.76%	29	8.76%	13.14%
30	5.94%	8.91%	7.27%	10.91%	30	8.91%	13.36%
31	6.04%	9.06%	7.37%	11.06%	31	9.05%	13.58%
32	6.14%	9.21%	7.48%	11.21%	32	9.21%	13.82%
33	6.25%	9.37%	7.58%	11.37%	33	9.37%	14.06%
34	6.36%	9.54%	7.69%	11.54%	34	9.53%	14.30%
35	6.47%	9.71%	7.80%	11.71%	35	9.71%	14.56%
36	6.60%	9.90%	7.93%	11.90%	36	9.89%	14.84%
37	6.73%	10.09%	8.06%	12.09%	37	10.09%	15.14%
38	6.87%	10.30%	8.20%	12.30%	38	10.31%	15.46%
39	7.02%	10.53%	8.36%	12.53%	39	10.53%	15.80%
40	7.03%	10.55%	8.36%	12.55%	40	10.55%	15.82%
41	7.05%	10.58%	8.39%	12.58%	41	10.57%	15.86%
42	7.07%	10.60%	8.40%	12.60%	42	10.60%	15.90%
43	7.08%	10.63%	8.42%	12.63%	43	10.63%	15.94%
44	7.10%	10.65%	8.44%	12.65%	44	10.65%	15.98%
45	7.12%	10.68%	8.45%	12.68%	45	10.68%	16.02%
46	7.13%	10.70%	8.47%	12.70%	46	10.71%	16.06%
47	7.15%	10.73%	8.49%	12.73%	47	10.72%	16.08%
48	7.16%	10.75%	8.50%	12.75%	48	10.75%	16.12%
49 and older	7.19%	10.78%	8.52%	12.78%	49 and older	10.77%	16.16%

\*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 20 and hired prior to July 10, 2004, the rate on compensation in excess of \$350 per month in fiscal year ending 2005 is 8.59% = 7.59% for basic + 1.0% for supplemental. In fiscal year 2006, that rate was 9.59% = 7.59% + 2.0%. For an employee with entry age 20 and hired after July 10, 2004, it is the full rate of 11.38%.



# December 31, 2005 Valuation Safety Member Contribution Rates

Fiscal Year 2006-7\*

#### Member Rates as a Percentage of Salary

		Hired Prior to	July 10, 2004				
Hire	ed Prior to July 10, 20	004 (Basic)	Including 3.0%	Supplemental**		Hired After July 10, 2004	
	Integ	grated	In	Integrated		Integ	grated
	First \$350 of	Excess of \$350	First \$350 of	Excess of \$350		First \$350 of	Excess of \$350
Entry Age	Monthly Comp.	Monthly Comp.	Monthly Comp.	Monthly Comp.	Entry Age	Monthly Comp.	Monthly Comp.
20	4.81%	7.22%	6.81%	10.22%	20	7.22%	10.83%
21	4.90%	7.35%	6.90%	10.35%	21	7.35%	11.03%
22	4.99%	7.48%	6.99%	10.48%	22	7.48%	11.22%
23	5.08%	7.62%	7.08%	10.62%	23	7.62%	11.43%
24	5.17%	7.76%	7.17%	10.76%	24	7.76%	11.64%
25	5.27%	7.90%	7.27%	10.90%	25	7.90%	11.85%
26	5.36%	8.04%	7.36%	11.04%	26	8.04%	12.06%
27	5.46%	8.19%	7.46%	11.19%	27	8.19%	12.29%
28	5.56%	8.34%	7.56%	11.34%	28	8.34%	12.51%
29	5.66%	8.49%	7.66%	11.49%	29	8.49%	12.74%
30	5.77%	8.65%	7.77%	11.65%	30	8.65%	12.98%
31	5.87%	8.81%	7.87%	11.81%	31	8.81%	13.22%
32	5.98%	8.97%	7.98%	11.97%	32	8.97%	13.46%
33	6.09%	9.14%	8.09%	12.14%	33	9.14%	13.71%
34	6.21%	9.31%	8.21%	12.31%	34	9.31%	13.97%
35	6.33%	9.49%	8.33%	12.49%	35	9.49%	14.24%
36	6.45%	9.68%	8.45%	12.68%	36	9.68%	14.52%
37	6.58%	9.87%	8.58%	12.87%	37	9.87%	14.81%
38	6.71%	10.06%	8.71%	13.06%	38	10.06%	15.09%
39	6.83%	10.25%	8.83%	13.25%	39	10.25%	15.38%
40	6.95%	10.43%	8.95%	13.43%	40	10.43%	15.65%
41	7.07%	10.60%	9.07%	13.60%	41	10.60%	15.90%
42	7.17%	10.75%	9.17%	13.75%	42	10.75%	16.13%
43	7.27%	10.90%	9.27%	13.90%	43	10.90%	16.35%
44	7.35%	11.03%	9.35%	14.03%	44	11.03%	16.55%
45	7.43%	11.15%	9.43%	14.15%	45	11.15%	16.73%
46	7.51%	11.26%	9.51%	14.26%	46	11.26%	16.89%
47	7.55%	11.32%	9.55%	14.32%	47	11.32%	16.98%
48	7.55%	11.32%	9.55%	14.32%	48	11.32%	16.98%
49 and older	7.55%	11.32%	9.55%	14.32%	49 and older	11.32%	16.98%

\*New contribution rates reflect new assumptions as recommended in the 12/31/2005 Kern County Study of Experience, including new mortality and salary increase assumptions.

\*\*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 20 and hired prior to July 10, 2004, the rate on compensation in excess of \$350 per month in fiscal year ending 2007 is 10.22% = 7.22% for basic + 3.0% for supplemental. In fiscal year 2008, that rate will be 10.83%, the ultimate rate for someone with entry age 20. For an employee with entry age 20 and hired after July 10, 2004, it is the full rate of 10.83%.



## 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.

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

