

Actuarial Valuation

December 31, 2004

Revised July 5, 2005

By

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July 5, 2005

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, 2004 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, 2004. Note that, in accordance with Board policy, it does <u>not</u> reflect the benefits adopted effective January 1, 2005 for General employees. Also, employee contribution rates for members hired after August 3, 2004 were modified for several General employee groups. Per our discussion with the Board on May 25, 2005, this report does not reflect the changes in those rates as they are associated with the benefit increase effective January 1, 2005.

Subsequent to the completion of our original 2004 valuation work dated June 2, 2005, we were informed that the Safety employees had negotiated changes in the member contribution rates that were effective July 10, 2004. In addition, the Board amended their Funding Policy on June 22, 2005 and adopted a 30-year amortization period for all Unfunded Actuarial Accrued Liability (UAAL) amounts, except for the Golden Handshake liabilities for the 2004 valuation. This revised report reflects the two changes and replaces our original report, dated June 2, 2005.

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). With the exception of the termination rate assumptions, all other actuarial



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assumptions and methods were recommended by the prior actuary and adopted by the Board in June 2003. Based on a special experience study, the termination assumptions for both withdrawals (refunds) and vested deferred terminations were revised and adopted by the Board at its May 25, 2005 meeting. The probability of reciprocity for vested deferred members was also modified and adopted at that time.

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. The Retirement Board has the final decision regarding the appropriateness of the assumptions and has previously adopted them as indicated in Appendix A.

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.

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,

and Woole

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DRW/KIS/nlo

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Section 1

Executive Summary

This report presents the results of the December 31, 2004 actuarial valuation of the Kern County Employees' Retirement Association (KCERA). Results from the prior valuation are shown for comparison. All dollar amounts are in millions.

	December 31, 2003*	December 31, 2004
Employer Contribution		
General – County	13.73%	23.26%
General - Districts Electing Full Pickup	18.25%	28.26%
General – Districts Electing MOU	17.93%	27.50%
General – Districts Not Electing MOU	17.17%	25.04%
Safety	24.31%	35.65%
Total Plan	16.45%	26.36%
Funded Status – Regular Benefits		
Actuarial Accrued Liability	\$2,059.30	\$2,336.41
Actuarial Value of Assets	\$1,927.60	\$2,012.52
UAAL	\$131.70	\$323.88
Funded Percentage	93%	86%
Funded Status – SRBR		
Present Value of Approved Benefits	\$59.8	\$58.4
Actuarial Value of Assets	\$93.9	\$97.2
UAAL	(\$34.1)	(\$38.8)
Funded Percentage	157%	166%
Key Assumptions		
Interest Rate	8.00%	8.00%
Inflation	4.00%	4.00%

* Kern County issued Pension Obligation Bonds (POBs) in early 2003, prior to the beginning of Fiscal Year 2003-2004. Upon receipt of the POB proceeds, the County contribution rates for Fiscal Year 2003-2004 were reduced to 10.96% for General and 21.03% for Safety.



This actuarial valuation report has been prepared primarily to review KCERA's funded status and determine the contributions required of the Plan Members and Participating Employers. This is done annually by taking a snapshot of the Plan on the basis of the plan provisions, plan membership, and investments as of the end of each plan year.

A. Major Events

The major events affecting the contribution rates and funded position of the Plan primarily fall into four categories:

- Investments,
- Demographics,
- Assumptions and Methodology, and
- Benefits.

INVESTMENTS

Empirical evidence suggests that over 90% of the return achieved by a portfolio is due to the allocation of assets within that portfolio. As of December 31, 2004, KCERA's target asset allocation was:

Domestic Equities	34%
International Equities	20%
Fixed Income	31%
Real Estate	6%
Alternative Investments	6%
Hedge Funds	3%
Cash & Equivalents	0%

The investment markets continued to improve in 2004. During the year ended December 31, 2004, Plan investments earned a return on a market value basis of approximately 12.5%. This return was significantly better than the 8.00% return assumed. This resulted in an actuarial gain to the Retirement Plan due to investments of approximately \$88.7 million on a market-value basis.

KCERA uses an asset smoothing method to determine contribution rates and the Plan's funded position. This method spreads market gains greater than the assumed rate (or less than the assumed rate) over a five year period. Using the asset smoothing method, KCERA assets achieved a return for the fiscal year of approximately 6.46% due to the spreading of previous losses into the current year. This resulted in an actuarial loss of approximately \$25.9 million.

Detailed information regarding plan investments are shown in Section 2 Assets of this report.



DEMOGRAPHICS

The number of active members decreased by 1.46% from 8,104 to 7,986, while the average pay increased by 7.7% from \$3,654 per month to \$3,935 per month. This resulted in an increase in total covered payroll of approximately 6.1%. However, the KCERA systems were modified between the 2003 and the 2004 valuations to provide slightly different salary data. Some of the reported increase in salaries was attributable to these reporting changes made during the year.

The number of retirees and beneficiaries receiving pension checks increased from 4,657 to 4,741, while the average monthly benefit check went from \$1,567 to \$1,667. This combination increased monthly payments from KCERA by approximately 8.3%.

ASSUMPTIONS AND METHODOLOGY

KCERA hired Milliman as the new retained actuary effective with the 2004 valuation. As part of the transition process, we reproduced the 2003 valuation results prepared by the prior actuary. The results of this replication transition process are described in detail in our letter to the Board dated April 18, 2005. As part of this transition, some methodology changes occurred, which in total have relatively little impact.

However, upon review of the actuarial assumptions, Milliman felt a change in the termination rate assumption was recommended. This proposed change was discussed with the Audit/Actuarial Committee on April 12, 2005. As a result, the Board approved a special experience study on termination experience covering the five calendar year periods 2000-2004. The results of this study were presented in Milliman's letter report dated May 23, 2005. At its May 25, 2005 meeting, the Board adopted new termination and reciprocity assumptions to be used for this valuation. The change in the termination rate assumption resulted in a significant increase in the total aggregate contribution rate of 8.69%.

The Board amended their Funding Policy on June 22, 2005 and adopted a 30-year amortization period for all UAAL amounts, except for the Golden Handshake liabilities for the 2004 valuation. This revised report reflects the new 30-year amortization period.

BENEFITS

No changes have been made since the prior valuation. However, the Board of Supervisors adopted CERL 31676.17 (3% at 60) for KCERA's General employees effective January 1, 2005. Per the Board of Retirement's policy, these benefit changes will not be reflected in this valuation report but will be reflected in the valuation following the effective date of the benefit change or the December 31, 2005 actuarial valuation.

Under the Actuarial Standards of Practice No. 4, Measuring Pension Obligations, any benefits adopted prior to a valuation calculation date may, but need not, be reflected in the current year funding. Thus, the costs presented in this December 31, 2004 valuation will be significantly less than those expected for the December 31, 2005 valuation with the new benefits for General employees.



The County also adopted a Memorandum of Understanding (MOU) with its General member employees, which requires all employees hired on or after August 3, 2004 to contribute 100% of normal contributions for all years of service. Employees hired before August 3, 2004 with less than five years of service, pay 100% of normal contributions until they attain five years of service, with no contributions after five years of service. On January 8, 2005, General member contribution rates increased to include the higher employee rates attributable to the 3% at 60 benefit change.

The Board has agreed with our recommendation that the General member contribution changes occurring between August 3, 2004 and the valuation date, December 31, 2004, will be reflected only to the extent actual contributions are received. To adjust the new 2004 member rates for this valuation without recognizing the new benefit levels would tend to artificially decrease the employer rates for the fiscal year starting July 1, 2005. Therefore, we will wait until the December 31, 2005 valuation to fully reflect both benefit changes and increased contribution rates for employees and employers.

Subsequent to the completion of our original 2004 valuation work dated June 2, 2005, we were informed that the Safety employees had negotiated changes in the member contribution rates that were effective July 10, 2004. These changes are described in more detail in Appendix D.

B. Benefit Terminology

For purposes of this report, certain terms are used to distinguish between several types of benefits provided to KCERA participants under the plan provisions adopted by the County and those provided under Article 5.5. In order to limit the repetition of benefit descriptions and sources of payments, these benefits are referred by the following names:

- **SRBR Benefits** These are the Supplemental Retiree Benefit Reserve benefits provided under Article 5.5. These will include both Approved Benefits and Future Benefits.
 - 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, 2004.
 - Future Benefits These are the SRBR benefits expected to be approved in future years in order to maintain the 80% purchasing power goal.
- **Regular Benefits** The benefits provided under the non-SRBR section of KCERA. These will include both Basic Benefits and COLA Benefits.
 - 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%.

Additional terms are defined in the Glossary provided in Appendix E of this report.



C. Funded Position

REGULAR BENEFITS

The primary target liability for KCERA is the Actuarial Accrued Liability for Regular Plan Benefits. The **Actuarial Accrued Liability (AAL)** is the portion of the Present Value of Benefits attributed to the past. In other words,

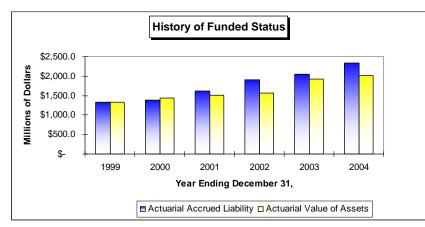
- If current plan benefits had always been in place, and
- If the current assumptions had always been in place, and
- If the plan had always been funded under the current funding method, and
- If plan experience had always matched the assumptions, then

The Actuarial Value of Assets would be equal to the Actuarial Accrued Liability. It is the value often used as a funding target.

The Plan's funded percentage for Regular Benefits is 86.1%. It is calculated by dividing the Actuarial Value of Assets (\$2,012.5 million) by the Actuarial Accrued Liability (\$2,336.4 million).

Dollar amounts in Millions						
	Actuarial Accrued Liability	Actuarial Value of Assets	Funded Percentage			
2004	\$2,336.4	\$2,012.5	86.1%			
2003	\$2,059.3	\$1,927.6	93.6%			
2002	\$1,899.0	\$1,570.3	82.7%			
2001	\$1,612.0	\$1,508.3	93.6%			
2000	\$1,389.0	\$1,434.9	103.3%			
1999	\$1,324.7	\$1,325.9	100.1%			

History of Funded Position



This work product was prepared solely for the Kern County Employees' Retirement Association. It may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other 5 parties who receive this work.

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IMPACT OF MAJOR EVENTS ON FUNDED PERCENTAGE

The funded percentage decreased from 93.6% in 2003 to 86.1% in 2004. The most significant reasons for this decrease were:

- Investment losses on an actuarial asset basis decreased the funded percentage by 1.1%.
- Demographic losses decreased the funded percentage by 0.7%.
- Salary increase greater than expected decreased the funded percentage by 1.2%
- Transition between actuarial firms decreased the funded percentage by 2.4%
- Assumption and method changes decreased the funded percentage by 2.1%.

Further details on the total liabilities and the AAL are shown in Section 3 of this report. Section 3 also discusses the financial impact of experience and other changes between 2003 and 2004.



D. Contribution Rates

Each year, recommended contribution rates are determined separately for members and employers. 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). A list of the member rates by age at entry for each of the classifications is included in Appendix D of this report.

Employer contributions are determined as the sum of two elements: the Normal Cost and an Amortization of the Unfunded Actuarial Accrued Liability.

The **Normal Cost (NC)** is the portion of the Present Value of Benefits attributed to the current year. In other words,

- If current plan benefits had always been in place, and
- If the current assumptions had always been in place, and
- If plan experience had always matched the assumptions, then

A contribution equal to the NC would be sufficient to keep the plan right on target, at 100% funding.

In the normal course of operating a retirement plan, there are a number of reasons why the plan may be some place other than at 100% funding.

- **Plan Amendments** These are changes in the benefits that are to be paid to plan participants, such as the improvement to the 2.5% COLA.
- Assumption Changes Periodically, the plan actuaries and trustees adjust their expectation for the future. This occurred in 2002 when the triennial experience study was performed. In addition, with the transition to a new actuary, new termination rates were recommended and adopted for the 2004 valuation in advance of the next 2005 experience study.
- Methodology Changes Every few years, the actuary recommends a refinement in its actuarial methodology. Some changes in methodology occurred along with the change in actuarial firms. Most of these changes impacted the vested terminated participants' liabilities and had a comparatively small impact on total contribution rates.
- Gain or Loss Each year actual plan experience is different than the experience expected under the plan assumptions. When actual experience reduces the Unfunded Actuarial Accrued Liability, it is called a gain. When plan experience increases the Unfunded Actuarial Accrued Liability, it is called a loss.

The amount that the funding is off target is added to the NC (when behind target) or reduced from the NC (when ahead of target) over a series of years.



Changes in the UAAL due to Golden Handshakes are amortized as a level percentage of payroll over a three-year period beginning with the valuation following the Golden Handshake. All other changes in UAAL are amortized as a level percentage of payroll over a 30-year period beginning with this valuation.

The detailed development of the contribution rates are shown in Sections 3 and 5 of this report.

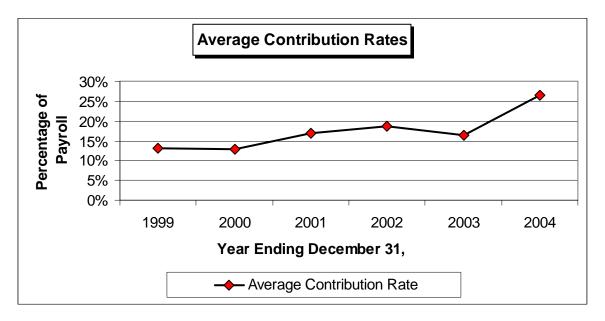
History of Contribution Rates

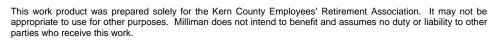
The average contribution rate for the 2005-2006 Fiscal Year will be approximately 26.36% of covered payroll. The rates, broken down by classification for the past few years are shown in the table below.

Valuation as of 12/31	General – County	General – District Full Pickup	General – District Electing 1997 MOU	General – District Not Electing 1997 MOU	Safety	All Members
2004*	23.26%	28.26%	27.50%	25.04%	35.65%	26.36%
2003	13.73%	18.25%	17.93%	17.17%	24.31%	16.45%
2002	14.56%**	N/A	15.88%	14.26%	31.83%*	18.74%
2001	13.28%	N/A	17.82%	13.68%	27.66%	16.96%
2000	12.29%	N/A	15.04%	9.51%	14.66%	12.89%
1999	11.60%	N/A	13.92%	9.90%	17.05%	13.09%

* Reflects changes in the termination rate assumptions, the amortization period and employee contribution rates.

**Kern County issued Pension Obligation Bonds (POBs) in early 2003, prior to the beginning of Fiscal Year 2003-2004. Upon receipt of the POB proceeds, the County contribution rates for Fiscal Year 2003-2004 were reduced to 10.96% for General and 21.03% for Safety.





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IMPACT OF MAJOR EVENTS ON EMPLOYER CONTRIBUTION RATE 2003 TO 2004

The average Employer Contribution rate increased from 16.45% of pay for Fiscal Year 2004-2005 to 26.36% for Fiscal Year 2005-2006. This increase in contribution rates can largely be attributed to the following events.

- Changes in funding methodology and actuarial assumptions due to a change in actuarial firms increased the contribution rate by 0.85% of pay.
- Investment losses on an actuarial asset basis raised the contributions by 0.45% of pay.
- Demographic losses raised the contribution rate by 0.45% of pay.
- Changes in salaries reported and in actual salary increases from 2003 to 2004 increased the contribution rate by 0.36% of pay.
- Changes in the termination and reciprocity rate assumptions increased the contribution rate by 8.69%.
- Changes in Safety employee contribution rates decreased the contribution rate by 0.08%.
- Change in the UAAL amortization period from 23 years to 30 years from December 31, 2004 decreased the contribution rate by 0.81%.



E. Supplemental Retiree Benefit Reserves (SRBR)

KCERA operates under Article 5.5 of the County Employees Retirement Law of 1937. This article 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.

The SRBR currently provides four categories of supplemental retiree benefits:

- Tier 1 \$35.50 per month payable to retirees who were hired on or before July 1, 1994.
- Tier 2 Three additional monthly stipends payable to retirees:
 - \$1.372 per year of service for Participants who retired prior to 1985. This was granted July 1, 1994.
 - \$5.470 per year of service for Participants who retired prior to 1985. This was granted July 1, 1996.
 - \$10.276 per year of service for Participants who retired prior to 1981. This was granted July 1, 1997.
- Tier 3 Additional benefits to maintain 80% purchasing power protection.
- Death Benefit A one-time payment of \$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 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.



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 166.4%. It is calculated by dividing the Actuarial Value of Assets (\$97.2 million) by the Present Value of Approved SRBR Benefits (\$58.4 million).

The funded percentage is developed in the following table:

1. Present Value of Approved Benefits

••	
a. Death Benefits	\$ 2,720,790
b. SRBR1	26,522,549
c. SRBR2	15,719,435
d. SRBR3	 13,427,350
e. Total	\$ 58,390,124
2. Available SRBR Reserves	
a. Total SRBR	\$ 159,791,441
b. 0.5% COLA Account	 62,608,071
c. Available SRBR Reserve	\$ 97,183,370
3. Funded Percentage	166.4%



Target Liabilities

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

On this basis, the Plan's funded percentage for Target SRBR Benefits is 120.2%. It is calculated by dividing the Actuarial Value of Assets (\$97.2 million) by the Present Value of Target SRBR Benefits (\$80.8 million).

The funded percentage is developed in the following table:

1. Present Value of Target Liabilities

a. Death Benefits	\$	2,720,790
b. SRBR1	Ψ	26,522,549
c. SRBR2		15,719,435
d. SRBR3		35,864,711
e. Total	\$	80,827,485
2. Available SRBR Reserves		
a. Total SRBR	\$	159,791,441
b. 0.5% COLA Account		62,608,071
c. Available SRBR Reserve	\$	97,183,370
3. Funded Percentage		120.2%

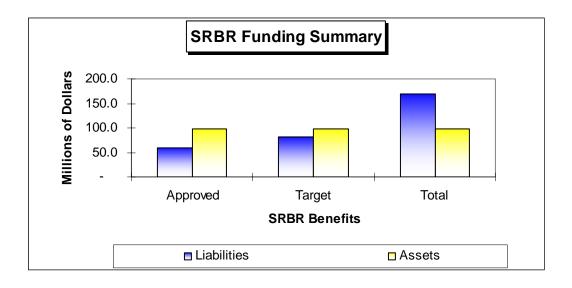


Total SRBR Benefits

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 57.2%. It is calculated by dividing the Actuarial Value of Assets (\$97.2 million) by the Present Value of all SRBR Benefits (\$169.9 million). Further information regarding the SRBR benefits is shown in Section 5 of this report.

The funded percentage is developed in the following table:

1. Present Value of SRBR	
a. Approved Benefits	\$ 58,390,124
b. Future Benefits	 111,485,670
c. Total	\$ 169,875,794
2. Available SRBR Reserves	
a. Total SRBR	\$ 159,791,441
b. 0.5% COLA Account	 62,608,071
c. Available SRBR Reserve	\$ 97,183,370
3. Funded Percentage	57.2%





Section 2

Assets

A. Statement of Plan Net Assets

Current Assets		
Cash	\$ 104,843,812	
Accounts Receivable	\$ 103,966,239	
Total Current Assets		\$ 208,810,050
Investments		\$ 2,076,213,618
Property, Fixtures and Equipment, net		\$ 59,276
Total Assets		\$ 2,285,082,944
LIABILITIES		
Current Liabilities		\$ (60,184,223)
Net Assets Held in Trust for Pensi	on Benefits	\$ 2,224,898,721

B. Asset Allocation

Net Plan Assets at Market Value as of December 31, 2004

(Amounts may not add exactly due to rounding. All amounts in thousands of dollars.)

	Actual Allocations*		Target Allo		ocations	
	Dollars		% of Dollars net assets		Dollars	% of net assets
Cash and Cash Equivalents	\$	59,212	3%	\$	-	0%
Fixed Income		672,947	30%		689,719	31%
Domestic Equity		897,179	40%		756,466	34%
International Equity		479,615	22%		444,980	20%
Real Estate		89,160	4%		133,494	6%
Alternative Investments		26,787	1%		133,494	6%
Hedge Funds					66,747	3%
Other Assets			0%			0%
Net Assets	\$ 2	2,224,899	100%	\$	2,224,899	100%

*Based on distribution of investments as of 12/31/2004.



C. Calculation of Unexpected Gains and Losses

For the Six-Month Period Ended	June 30, 2004	December 31, 2004
 Market Value of Assets - Beginning of Period Contributions Benefit Payments Assumed Interest on items (1), (2), and (3) 	\$ 2,016,236,085 9,159,415.61 (55,488,271.00) 79,722,866.29	\$ 2,030,719,406 59,635,395.21 (54,419,552.25) 81,333,093.10
5. Expected Value of Assets at End of Period	\$ 2,049,630,096	\$ 2,117,268,342
6. Actual Market Value of Assets at End of Period	\$ 2,030,719,406	\$ 2,224,898,721
7. Gain (Loss) for PlanYear = (6) - (5)	\$ (18,910,689.68)	\$ 107,630,378.66

D. Calculation of Market Stabilization Reserve

Six-Month	Unexpected	Percent Not Yet	Gain (Loss)
Period Ended	Gain (Loss)	Phased In	Excluded
12/31/2004	107,630,379	90%	\$ 96,867,341
06/30/2004	(18,910,690)	80%	(15,128,552)
12/31/2003	161,380,670	70%	112,966,469
06/30/2003	90,872,279	60%	54,523,367
12/31/2002	(123,962,078)	50%	(61,981,039)
06/30/2002 12/31/2001 06/30/2001 12/31/2000 06/30/2000	(120,467,583) (79,583,764) (111,199,696) - -	40% 30% 20% 10%	(48,187,033) (23,875,129) (22,239,939) -
Total			\$ 92,945,485



E. Development of Actuarial Value of Assets

	December 31, 2004				
1. Market Value of Assets	\$	2,224,898,721			
2. Unrecognized Gain (Loss)	\$	92,945,485			
3. Preliminary Actuarial Value: (1) - (2)	\$	2,131,953,236			
 4. Corridor Around Market Value (a) Minimum = 80% of Market (b) Maximum = 120% of Market 	\$ \$	1,779,918,977 2,669,878,465			
5. Gross Actuarial Value of Assets	\$	2,131,953,236			

F. Allocation of Actuarial Value of Assets for Valuation Purposes

(Amounts may not add exactly due to rounding)

	De	cember 31, 2003	De	cember 31, 2004
Basic General Members District Members Safety Members Subtotal	\$	802,789,424 34,006,905 588,638,689 1,425,435,018	\$	836,768,016 40,468,369 608,760,947 1,485,997,331
<i>Cost-of-Living</i> General Members District Members Safety Members Subtotal <i>Total Valuation Reserves</i>	\$	239,904,309 8,570,945 189,936,965 438,412,219 1,863,847,237	\$	253,624,756 9,656,850 200,633,871 463,915,477 1,949,912,808
SRBR Special 1/2% Allocation Remaining SRBR funds Subtotal	\$	63,737,289 93,874,537 157,611,826	\$	62,608,071 97,183,370 159,791,441
Contingency Reserve Total Actuarial Value of Assets	\$	20,162,361 2,041,621,424	\$	22,248,987 2,131,953,236



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G. Reconciliation of Assets for the Year Ended December 31, 2004

(Amounts may not add exactly due to rounding)

	Market Value		A	Actuarial Value
Beginning of Year	\$ 2,016,236,085		\$	1,863,847,237
Contributions - Employers Contributions - Members Gross Investment Income Investment Expenses Benefits paid to participants Administrative Expenses		58,605,259 10,189,552 259,692,774 (7,366,961) (109,907,823) (2,550,164)		58,605,259 10,189,552 121,795,616 n/a (101,974,692) (2,550,164)
End of the Year	\$	2,224,898,721	\$	1,949,912,808
Estimated Return (net of expenses)		12.52%		6.46%

The Market Value of Assets includes all plan assets including those allocated to the Supplemental Retiree Benefit Reserve and the Contingency Reserve. The Actuarial Value of Assets includes only those assets that are taken into account in determining employer contribution rates. These exclude the Supplemental Retiree Benefit Reserve and the Contingency Reserve.



H. Historical Asset Values

Year 2004	Market Value \$ 2,224,898,721	Actuarial Value \$ 1,949,912,808	Market Value as percent of Actuarial Value 114.1%
2003	2,016,236,085	1,863,847,237	108.2
2002	1,384,882,245	1,507,068,249	91.9
2001	1,511,318,766	1,508,291,483	100.2
2000	1,618,685,190	1,434,872,718	112.8
1999	1,673,422,215	1,325,928,243	126.2
1998	1,449,358,816	1,203,670,449	120.4
1997	1,306,925,405	1,113,914,418	117.3

(Asset Values as of December 31)

The Market Value of Assets includes all plan assets including those allocated to the Supplemental Retiree Benefit Reserve and the Contingency Reserve. The Actuarial Value of Assets includes only those assets that are taken into account in determining employer contribution rates. These exclude the Supplemental Retiree Benefit Reserve and the Contingency Reserve.

I. Historical Rates of Investment Return

(Estimated Investment Return for the Year Ended December 31)

Year	Market Value	Actuarial Value
2004	12.52%	6.46%
2003	25.45%	6.21%
2002	-8.37%	-0.81%
2001	-4.08%	7.67%
2000	-2.92%	8.69%
1999	17.41%	13.29%
1998	12.93%	11.54%
1997	16.46%	16.75%
1996	14.26%	11.95%
1995	20.24%	13.46%

The estimated rates of investment return for the years 1995 through 1999 are taken from the reports of the prior actuary, and have been calculated gross of investment expenses. The rates of return for the years 2000 through 2002 have been calculated net of investment fees.



J. Statement of Reserves and Fund Balances

Member Deposit Reserves	D	ecember 31, 2003	D	ecember 31, 2004		
General Members		\$117,517,017	\$125,395,06			
District Members		10,183,868		11,073,624		
Safety Members		54,460,260		55,016,530		
Subtotal		\$182,161,145		\$191,485,223		
Employers Advance Reserves						
General Members		\$345,595,923		\$371,304,221		
District Members		12,280,332		14,490,624		
Safety Members		277,443,007		273,745,772		
Subtotal		\$635,319,262		\$659,540,617		
Cost-of-Living Reserves						
General Members		\$239,904,309		\$253,624,756		
District Members		8,570,945		9,656,850		
Safety Members		189,936,965		200,633,871		
Subtotal		\$438,412,219		\$463,915,477		
Retired Member Reserves						
General Members*		\$339,676,485		\$340,068,726		
District Members*		11,542,705		14,904,121		
Safety Members		256,735,422		279,998,644		
Subtotal		\$607,954,612		\$634,971,491		
Supplemental Retiree Benefit Reserves						
Remaining SRBR		\$93,874,537		\$97,183,370		
Special 1/2% Account		63,737,289		62,608,071		
Subtotal		\$157,611,826		\$159,791,441		
Contingency Reserve		20,162,361		22,248,987		
Market Stabilization Reserve		(25,385,339)		92,945,485		
Total Fund Balance	\$	2,016,236,086	\$	2,224,898,721		

* The allocation of Member Deposit Reserves, Employers Advance Reserves and Cost-of-Living Reserves was supplied by KCERA. KCERA also split the Retired Member Reserves between General and Safety Members. The allocation of Retired Member Reserves between General and District Members for 2003 was performed by the prior actuary. The allocation of Retired Member Reserves between General and District Members for 2004 was calculated to be the same ratio as the total actuarial values of benefits for retired participants for each group.

Total Reserves By Group:	2003	2004
General Members	\$1,042,693,734	\$1,090,392,772
District Members	42,577,850	50,125,219
Safety Members	778,575,654	809,394,817
Special 1/2% Account	63,737,289	62,608,071
Total Valuation Reserves	\$1,927,584,527	\$2,012,520,879
For Regular Benefits		



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Section 3

Liabilities

Present Value of Projected Benefits

Present Value of Projected	Bene	fits				
		Basic		COLA		Total
1. Retirees and Beneficiaries						
A. General						
i. County						
a. Regular Benefits	\$	379,934,296	\$	182,248,153	\$	562,182,449
b. Golden Handshake		678,638		193,083		871,721
c. Subtotal		380,612,934		182,441,236		563,054,170
ii. Districts		17,382,583		7,294,275		24,676,858
iii. Total		397,995,517		189,735,511		587,731,028
B. Safety						
a. Regular Benefits		339,550,376		166,548,427		506,098,803
b. Golden Handshake		174,876		47,951		222,827
c. Subtotal		339,725,252		166,596,378		506,321,630
C. All Retirees and Beneficiaries	\$	737,720,769	\$	356,331,889	\$	1,094,052,658
	•	, ,	•		•	
2. Terminated Members						
A. General						
i. County	•		^		•	~~
a. Deferred Vested	\$	30,354,197	\$	7,819,822	\$	38,174,019
b. Pending Refunds		675,391		-		675,391
c. Subtotal		31,029,588		7,819,822		38,849,410
ii. Districts						
a. Deferred Vested		3,318,640		859,106		4,177,746
b. Pending Refunds		31,284		-		31,284
c. Subtotal		3,349,924		859,106		4,209,030
iii. Total		34,379,512		8,678,928		43,058,440
B. Safety						
a. Deferred Vested		7,736,470		2,291,916		10,028,386
b. Pending Refunds		66,359		-		66,359
c. Subtotal		7,802,829	-	2,291,916	-	10,094,745
C. All Terminated Members	\$	42,182,340	\$	10,970,844	\$	53,153,184
3. Active Members						
A. General						
i. County	\$	937,077,026	\$	240,589,251	\$	1,177,666,277
ii. Districts		72,943,270		19,130,361		92,073,631
iii. Total		1,010,020,296		259,719,612		1,269,739,908
B. Safety		519,835,651		151,463,911		671,299,562
C. All Active Members	\$	1,529,855,947	\$	411,183,523	\$	1,941,039,470
4. All Members						
A. General						
i. County	¢	1 249 040 010	¢	120 657 226	¢	1 770 600 106
a. Regular Benefits	\$	1,348,040,910 678,638	\$	430,657,226	\$	1,778,698,136
b. Golden Handshake		1,348,719,548		193,083 430,850,309		871,721 1,779,569,857
c. All Benefits						
ii. Districts		93,675,777 1,442,395,325		27,283,742 458,134,051		120,959,519 1,900,529,376
iii. Total		1,442,395,325		456,154,051		1,900,529,576
B. Safety		967 400 056		220 204 254		1 107 102 110
a. Regular Benefits		867,188,856		320,304,254		1,187,493,110
b. Golden Handshake c. All Benefits		174,876		47,951		222,827
	¢	867,363,732	¢	320,352,205	¢	1,187,715,937
C. Grand Total	\$	2,309,759,056	\$	778,486,256	\$	3,088,245,312



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Actuarial Accrued Liability

		Basic		COLA		Total
1. Retirees and Beneficiaries						
A. General						
i. County	•		•		•	
a. Regular Benefits	\$	379,934,296	\$	182,248,153	\$	562,182,449
b. Golden Handshake		678,638 380,612,934		193,083		871,721
c. Subtotal ii. Districts		17,382,583		182,441,236 7,294,275		563,054,170 24,676,858
iii. Total		397,995,517		189,735,511		587,731,028
B. Safety		007,000,017		100,700,011		507,751,020
a. Regular Benefits		339,550,376		166,548,427		506,098,803
b. Golden Handshake		174,876		47,951		222,827
c. Subtotal		339,725,252		166,596,378	_	506,321,630
C. All Retirees and Beneficiaries	\$	737,720,769	\$	356,331,889	\$	1,094,052,658
2. Terminated Members			·		·	
A. General						
i. County						
a. Deferred Vested	\$	30,354,197	\$	7,819,822	\$	38,174,019
b. Pending Refunds		675,391		0		675,391
c. Subtotal		31,029,588		7,819,822		38,849,410
ii. Districts						
a. Deferred Vested		3,318,640		859,106		4,177,746
b. Pending Refunds		31,284		0		31,284
c. Subtotal		3,349,924		859,106		4,209,030
iii. Total		34,379,512		8,678,928		43,058,440
B. Safety a. Deferred Vested		7 726 470		2,291,916		10 029 296
b. Pending Refunds		7,736,470 66,359		2,291,910		10,028,386 66,359
c. Subtotal		7,802,829		2,291,916		10,094,745
C. All Terminated Members	\$	42,182,340	\$	10,970,844	\$	53,153,184
	Ŷ	,,	Ŷ		Ψ	00,100,101
3. Active Members A. General						
i. County	\$	568,852,155	\$	150,081,704	\$	718,933,859
ii. Districts	Ψ	40,254,578	Ψ	10,841,701	Ψ	51,096,279
iii. Total		609,106,733		160,923,405		770,030,138
B. Safety		325,055,911		94,113,838		419,169,749
C. All Active Members	\$	934,162,644	\$	255,037,243	\$	1,189,199,887
4. All Members						
A. General						
i. County						
a. Regular Benefits	\$	979,816,039	\$	340,149,679	\$	1,319,965,718
b. Golden Handshake		678,638	·	193,083	·	871,721
c. All Benefits		980,494,677		340,342,762		1,320,837,439
ii. Districts		60,987,085		18,995,082		79,982,167
iii. Total		1,041,481,762		359,337,844		1,400,819,606
B. Safety						
a. Regular Benefits		672,409,116		262,954,181		935,363,297
b. Golden Handshake		174,876		47,951		222,827
c. All Benefits	<u> </u>	672,583,992	<u> </u>	263,002,132	_	935,586,124
C. Grand Total	\$	1,714,065,753	\$	622,339,976	\$	2,336,405,729



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Funded Percentage

Basic Benefits								
		General – County		General – Districts		Safety		Totals
1. Actuarial Accrued Liability								
a. Regular Benefits	\$	979,816,039	\$	60,987,085	\$	672,409,116	\$	1,713,212,239
b. Golden Handshakes		678,638		0		174,876		853,514
c. Total		980,494,677		60,987,085		672,583,992		1,714,065,753
Actuarial Value of Assets		836,768,016		40,468,369		608,760,947		1,485,997,331
Unfunded Actuarial Accrued Liability								
a. Regular Benefits		143,048,023		20,518,716		63,648,169		227,214,908
b. Golden Handshakes		678,638		0		174,876		853,514
c. Total	\$	143,726,661	\$	20,518,716	\$	63,823,045	\$	228,068,422
4. Funded Percentage		85.3%		66.4%		90.5%		86.7%
COL Benefits								
		General – County		General – Districts		Safety		Totals
1. Actuarial Accrued Liability						•		
a. Regular Benefits	\$	340,149,679	\$	18,995,082	\$	262,954,181	\$	622,098,942
b. Golden Handshakes		193,083		0		47,951		241,034
c. Total	\$	340.342.762	\$	18,995,082	\$	263,002,132	\$	622,339,976
2. Actuarial Value of Assets	Ŧ	287,852,880	•	10,960,097	•	227,710,570	+	526,523,548
3. Unfunded Actuarial Accrued Liability		,,						,,
a. Regular Benefits	\$	52,296,799	\$	8,034,985	\$	35,243,611	\$	95,575,394
b. Golden Handshakes	Ŷ	193,083	Ŷ	0	Ŷ	47,951	+	241,034
c. Total	\$	52.489.882	\$	8.034.985	\$	35.291.562	\$	95,816,428
4. Funded Percentage	Ŷ	84.6%	Ŷ	57.7%	Ŷ	86.6%	Ψ	84.6%
4. Funded Fereenlage		04.070		51.170		00.070		04.070
Total Regular Benefits								
-		General – County		General – Districts		Safety		Totals
1. Actuarial Accrued Liability								
a. Regular Benefits	\$	1,319,965,718	\$	79,982,167	\$	935,363,297	\$	2,335,311,181
b. Golden Handshakes		871,721		0		222,827		1,094,548
c. Total	\$	1,320,837,439	\$	79,982,167	\$	935,586,124	\$	2,336,405,729
Actuarial Value of Assets		1,124,620,896		51,428,466		836,471,517		2,012,520,879
Unfunded Actuarial Accrued Liability								
a. Regular Benefits	\$	195,344,822	\$	28,553,701	\$	98,891,780	\$	322,790,302
b. Golden Handshakes		871,721		0		222,827		1,094,548
c. Total	\$	196,216,543	\$	28,553,701	\$	99,114,607	\$	323,884,850
4. Funded Percentage	•	85.1%		64.3%	·	89.4%		86.1%
5.								



Changes in Funded Percentage – Aggregate
--

As of Prior Valuation		93.6%
Changes in Funded Percentage due to:		
Salary Increases	(1.2%)	
Investment Losses	(1.1%)	
Demographic Losses	(0.7%)	
Transition in actuarial firms	(2.4%)	
Assumption changes	(2.1%)	
Total Changes	(7.5%)	
As of Current Valuation		86.1%
<u> Changes in Funded Percentage – Gener</u>	al County & Dis	trict Members
As of Prior Valuation		91.6%
Changes in Funded Percentage due to:		
Salary Increases	(1.1%)	
Investment Losses	(1.1%)	
Demographic Gains	(0.3%)	
Transition in actuarial firms	(2.6%)	
Assumption changes	(3.1%)	
Total Changes	(7.6%)	
As of Current Valuation		(84.0%)
<u>Changes in Funded Percentage – Safety</u>	Members	
As of Prior Valuation		96.5%
Changes in Funded Percentage due to:		
Salary Increases	(1.5%)	
Investment Losses	(1.2%)	
Demographic Losses	(2.2%)	
Transition in actuarial firms	(2.1%)	
Assumption changes	(0.2%)	
Total Changes	(7.1%)	
As of Current Valuation		(89.4%)



Section 4

Employer Contribution Rates

Entry Age Total Normal Cost

In Dollars	Basic	COLA	Total
1. General	\$ 48,052,356 21,561,526	\$ 11,908,934 6,342,239	\$ 59,961,290 27,002,765
 Safety All Members 	<u>21,561,526</u> \$ 69,613,882	\$ 18,251,173	27,903,765 \$ 87,865,055
3. All Members	φ 00,010,002	φ 10,201,170	φ 07,000,000
As a Percent of Pay	Basic	COLA	Total
1. General	16.80%	4.16%	20.96%
2. Safety	24.25%	7.13%	31.39%
3. All Members	18.57%	4.87%	23.43%



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Basic Benefits

	General-County	General-District Full Pickup	General-District Electing 1997 MOU	District Not Electing	Safety	Totals
		Contr	ibutions in Dollars			
 Total Normal Cost Projected Employee Contributions Employer Normal Cost (1-2) 	\$ 44,385,353 5,134,340 39,251,013	\$ 781,077 0 781,077	\$ 532,825 23,922 508,903	\$ 2,353,101 450,375 1,902,726	21,561,526 1,809,931 19,751,595	\$ 69,613,882 7,418,568 62,195,314
4. Amortization of Unfunded Actuarial Accrued Liability	8,218,593	243,779	166,298	734,419	3,611,929	12,975,019
5. Total Employer Contribution (3+4)	\$ 47,469,606	\$ 1,024,857	\$ 675,201	\$ 2,637,145	23,363,524	\$ 75,170,333
		Contributi	ons as a Percent of	f Pay		
 Total Normal Cost Projected Employee Contributions Employer Normal Cost (1-2) 	16.80% <u>1.94%</u> 14.86%	16.80% 0.00% 16.80%	16.80% 0.75% 16.04%	16.80% <u>3.22%</u> 13.58%	24.25% 2.04% 22.22%	18.57% <u>1.98%</u> 16.59%
4. Amortization of Unfunded Actuarial Accrued Liability	3.11%	5.24%	5.24%	5.24%	4.06%	3.46%
5. Total Employer Contribution (3+4)	17.97%	22.04%	21.29%	18.83%	26.28%	20.05%



COLA Benefits

	General-County	General-District Full Pickup	General-District Electing 1997 MOU	District Not Electing 1997 MOU	Safety	Totals
			Contributions in Dol	llars		
1. Total Normal Cost 2. Projected Employee Contributions	\$ 11,000,132 0	\$ 193,576 0	\$ 132,051 0	\$ 583,175 0	\$ 6,342,239 0	\$ 18,251,173 0
3. Employer Normal Cost (1-2)	11,000,132	193,576	132,051	583,175	6,342,239	18,251,173
4. Amortization of Unfunded Actuarial Accrued Liability	2,985,200	95,462	65,121	287,593	1,982,756	5,416,133
5. Total Employer Contribution (3+4)	\$ 13,985,332	\$ 289,039	\$ 197,173	\$ 870,768	\$ 8,324,995	\$ 23,667,306
		Cor	ntributions as a Perce	nt of Pay		
 Total Normal Cost Projected Employee Contributions Employer Normal Cost (1-2) 	4.16% 0.00% 4.16%	4.16% 0.00% 4.16%	4.16% 0.00% 4.16%	4.16% 0.00% 4.16%	7.13% 0.00% 7.13%	4.87% 0.00% 4.87%
4. Amortization of Unfunded Actuarial Accrued Liability	1.13%	2.05%	2.05%	2.05%	2.23%	1.44%
5. Total Employer Contribution (3+4)	5.29%	6.22%	6.22%	6.22%	9.36%	6.31%



Total Benefits

	General-County	General-District Full Pickup	General-District Electing 1997 MOU	District Not Electing 1997 MOU	Safety	Totals
			Contributions in Do	ollars		
 Total Normal Cost Projected Employee Contributions Employer Normal Cost (1-2) 	\$ 55,385,484 5,134,340 50,251,144	\$ 974,653 0 974,653	\$ 664,876 23,922 640,954	\$ 2,936,276 <u>450,375</u> 2,485,901	\$ 27,903,765 1,809,931 26,093,834	\$ 87,865,055 7,418,568 80,446,487
4. Amortization of Unfunded Actuarial Accrued Liability	11,203,794	339,242	231,419	1,022,012	5,594,686	18,391,152
5. Total Employer Contribution (3+4)	\$ 61,454,938	\$ 1,313,895	\$ 872,374	\$ 3,507,913	\$ 31,688,520	\$ 98,837,639
		Con	tributions as a Perc	ent of Pay		
 Total Normal Cost Projected Employee Contributions Employer Normal Cost (1-2) 	20.96% <u>1.94%</u> 19.02%	20.96% 0.00% 20.96%	20.96% 0.75% 20.21%	20.96% <u>3.22%</u> 17.75%	31.39% 2.04% 29.35%	23.43% 1.98% 21.46%
4. Amortization of Unfunded Actuarial Accrued Liability	4.24%	7.30%	7.30%	7.30%	6.29%	4.90%
5. Total Employer Contribution (3+4)	23.26%	28.26%	27.50%	25.04%	35.65%	26.36%



Changes in Average Employer Contribution Rate – Aggregate						
As of Prior Valuation						
Changes in Average Contribution Rate due to:						
Transition in actuarial firms	0.85%					
Investment Losses	0.45%					
Demographic Losses	0.45%					
Salary Losses	0.36%					
Assumption changes	8.69%					
Change in Safety Employee Contribution Rates	(0.08)%					
Extension of Amortization Period	(0.81)%					
Total Changes	9.91%					
As of Current Valuation						

<u>Changes in Average Employer Contribution Rate –</u> <u>General County & District Members</u>					
As of Prior Valuation					
Changes in Average Contribution Rate due to:					
Transition in actuarial firms	0.05%				
Investment Losses	0.34%				
Demographic Losses	0.07%				
Salary Losses	0.20%				
Assumption changes	9.54%				
Extension of Amortization Period	(0.74)%				
Total Changes9.46%					
As of Current Valuation					



Changes in Average Employer Contribution Rate – Safety Members					
As of Prior Valuation	24.31%				
Changes in Average Contribution Rate due to:					
Transition in actuarial firms	3.39%				
Investment Losses	0.79%				
Demographic Losses	1.92%				
Salary Losses	0.68%				
Assumption changes	5.93%				
Change in Safety Employee Contribution Rates	(0.34)%				
Extension of Amortization Period	(1.04)%				
Total Changes	11.34%				
As of Current Valuation		35.65%			



Section 5

Supplemental Retiree Benefit Reserve

PRESENT VALUE OF PROJECTED BENEFITS

Approved Benefits					
	Death Ben	SRBR1	SRBR2	SRBR3	Total
Active Members	\$ 892,246	\$ 9,258,774	\$	\$	\$ 10,151,020
Deferred Vested Members	105,374	1,213,243			1,318,617
Retirees and Beneficiaries	 1,723,170	 16,050,532	 15,719,435	 13,427,350	 46,920,487
Total	\$ 2,720,790	\$ 26,522,549	 15,719,435	 13,427,350	 58,390,124
Future Benefits					
	Death Ben	SRBR1	SRBR2	SRBR3	Total
Active Members				\$ 59,276,854	\$ 59,276,854
Deferred Vested Members				1,132,056	1,132,056
Retirees and Beneficiaries	 	 	 	 51,076,760	 51,076,760
Total	0	0	0	111,485,670	111,485,670
Available Reserves					
Total SRBR	\$ 159,791,441				
Additional 0.5% COLA Account	62,608,071				
Available SRBR	\$ 97,183,370				

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.



PROJECTED CASH FLOW

Calendar	Projected SRBR3
Year	Payments
2005	2,176,710
2006	2,254,027
2007	2,364,425
2008	2,479,501
2009	2,596,773
2010	2,727,447
2011	2,874,451
2012	3,106,002
2013	3,358,964
2014	3,610,458
2015	3,843,193
2016	4,066,230
2017	4,272,948
2018	4,462,483
2019	4,669,613
2020	5,090,037
2021	5,937,876
2022	7,122,757
2023	8,477,721
2024	9,972,149

Present Value of Projected 20-Year Cash Flow:

\$35,864,711



Section 6

Accounting Information

Accounting standards for governmental entities are set by the Governmental Accounting Standards Board (GASB). Statement Number 25 (GAS25) describes the disclosure requirements for the financial statements of the Kern County Employees' Retirement Association (KCERA). These include a Schedule of Funding Progress and a Schedule of Employer Contributions.

The disclosure requirements for the County's financial statements are described in Statement Number 27 (GAS27). These include the development of the Annual Pension Cost and the Net Pension Obligation.

A. Schedule of Funding Progress

All dollar amounts are 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))
12/31/1995	\$920,750	\$952,880	\$32,130	96.63%	\$270,454	11.88%
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%

Information in the above schedule for Plan Years ended December 31, 1999 and before is based on information prepared by Watson Wyatt Worldwide. For Plan Years ending between 2000 and 2003, information was prepared by Public Pension Professionals.



The new 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, shown above, compares actuarial assets and liabilities of KCERA, based on the actuarial funding method used. The required Schedule of Employer Contributions, shown below, 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.

The comparability of the data from year to year can be affected by changes in actuarial assumptions, benefit provisions, accounting policies, etc. For example, between the 2001 and the 2002 valuations many actuarial assumptions were changed based on the 2002 triennial Investigation of Experience Study.

The Solvency Test 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). The following information was reported in the June 30, 2004 CAFR:

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

B. Schedule of Contributions from the Employer

(All Dollars In Thousands)

*Reflects pension obligation bond proceeds of \$285.1 million.



C. Solvency Test

(Dollars in Millions)

		Actuarial Accrued Liabilities for											
Actuarial	Actuarial Valuation				Retirees and eneficiaries(1)	(=)		Total		Portion of AAL Covered by Assets			
Valuation Date	of Assets		(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%

(1) Includes deferred vested members.



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Appendix A

Actuarial Assumptions

With the exception of the new termination and reciprocity rate assumptions, all other actuarial assumptions and methods were recommended by the prior actuary and adopted by the Board in June 2003. We have reviewed these current assumptions and believe they may be reasonable to use for this valuation, except for the termination rates. However, upon review of the actuarial assumptions, Milliman felt a change in the termination rate assumption was recommended. This proposed change was discussed with the Audit/Actuarial Committee on April 12, 2005. As a result, the Board approved a special experience study on termination experience covering the five calendar year periods 2000-2004. The results of this study were presented in Milliman's letter report dated May 23, 2005. At its May 25, 2005 meeting, the Board adopted new termination and reciprocity assumptions to be used for this valuation. The change in assumptions in 2005 resulted in an increase in the aggregate normal cost rate of 7.81% and an increase in the aggregate total contribution rate of 8.69%.

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. The Retirement Board has the final decision regarding the appropriateness of the assumptions and has previously adopted them as indicated above.

The actuarial assumptions used in the valuations are intended to estimate the future experience of the participants 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.

This actuarial valuation report has been prepared in accordance with generally accepted actuarial principles and practices. 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. These adjustments are assumed payable each year in the future as they are less than the expected increase in the Consumer Price Index of 4.0% per year.



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Salary Increase – Total Payroll:	4.0 % per year
Salary Increase – Individual:	Rates varying by service, as shown in Schedule 1.
Inflation (CPI):	4.0% per year.
Interest on Member Contributions	The annual credited interest rate on member contributions is assumed to be 8.0% compounded semi-annually.
DEMOGRAPHIC ASSUMPTIONS	
Post-retirement mortality	
 Service Retirement – General: 	RP-2000 Healthy Annuitant Mortality, with adjustment for white collar workers. Life expectancies are shown in Schedule 2.
Service Retirement – Safety:	RP-2000 Healthy Annuitant Mortality, with adjustment for blue collar workers. Life expectancies are shown in Schedule 3.
Disability Retirement:	RP-2000 Disabled Annuitant Mortality. Life expectancies are shown in Schedule 4.
Spouse:	RP-2000 Healthy Annuitant Mortality, with adjustment for white collar workers. Life expectancies are shown in Schedule 2.
Other Termination:	Rates varying by years of service, as shown in Schedule 5 (for General males), 6 (for General females) and 7 (for Safety). Note that these decrements are not applied after eligibility for retirement.
Probability of Refund:	Rates varying by years of service, as shown in Schedule 8. The probability of joining a reciprocal agency immediately after termination is 50% for Safety members and 40% for General members.
Reciprocal Agency:	For members who have already terminated vested with a deferred commencement, we use the code provided by the Association 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 some wage inflation from termination with KCERA to benefit commencement. The assumed annual increase after termination of employment is 4.78% for General participants and 5.30% for Safety participants.



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 participants. 60% contingent annuity for married participants (100% contingent annuity if receiving service-related disability).
	SRBR benefits for married participants are all assumed to be paid as a 60% contingent annuity.
Percentage Married at Retirement:	80% of male active members and 50% of female active members assumed married 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 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, 2004 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, 2004 valuation.		
	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 participant'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 D 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 D.



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 an assumed blend of the male and female annuity factors using current valuation assumptions. The current base employee contribution rates were computed by Public Pension Professional. We reviewed the rates for reasonableness.
- 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.



DATA SOURCES

Asset Data:	The asset information is taken directly from statements furnished by the Retirement Office and used without audit.
Participant Data:	The participant data is supplied by the Retirement Office. It is reviewed for reasonableness and consistency, but no audit was performed. Milliman is not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations, except for a change in the way the salary data is reported.
	The KCERA systems were modified between the 2003 and the 2004 valuations to provide slightly different salary data. We estimate that about 4% of the reported increase in salaries was attributable to the reporting changes made during the year.



Years of Service	General Members	Safety Members
0	4.00%	3.50%
1	4.00%	3.50%
2	4.00%	3.50%
3	4.00%	3.50%
4	4.00%	3.50%
5	4.00%	3.50%
6	0.75%	3.50%
7	0.75%	3.50%
8	0.75%	3.50%
9	0.75%	3.50%
10 or more	0.75%	1.25%

Assumed Rate of Salary Increase (before inflation)

Assumed Rate of Salary Increase (with inflation)

Years of Service	General Members	Safety Members
0	8.16%	7.64%
1	8.16%	7.64%
2	8.16%	7.64%
3	8.16%	7.64%
4	8.16%	7.64%
5	8.16%	7.64%
6	4.78%	7.64%
7	4.78%	7.64%
8	4.78%	7.64%
9	4.78%	7.64%
10 or more	4.78%	5.30%



Life Expectancies at Sample Ages

Nondisabled General Participants

				•	
Age	Male	Female	Age	Male	Female
20	58.04	63.01	70	14.48	16.98
21	57.09	62.03	71	13.76	16.23
22	56.15	61.05	72	13.04	15.26
23	55.21	60.06	73	12.35	14.54
24	54.26	59.08	73	11.67	13.84
25	53.32	58.10	75	11.07	13.16
26	52.38	57.12	75	10.38	12.49
20	52.38 51.43		70	9.77	
		56.13			11.84
28	50.49	55.15	78	9.18	11.21
29	49.54	54.17	79	8.61	10.59
30	48.60	53.19	80	8.06	10.00
31	47.66	52.21	81	7.54	9.43
32	46.72	51.23	82	7.04	8.87
33	45.80	50.26	83	6.56	8.34
34	44.88	49.29	84	6.11	7.84
35	43.96	48.32	85	5.69	7.35
36	43.06	47.35	86	5.29	6.90
37	42.16	46.39	87	4.92	6.47
38	41.26	45.42	88	4.58	6.08
39	40.37	44.46	89	4.26	5.72
40	39.49	43.51	90	3.97	5.38
41	38.61	42.55	91	3.72	5.08
42	37.73	41.60	92	3.49	4.81
43	36.85	40.65	93	3.28	4.57
44	35.99	39.70	94	3.09	4.36
45	35.13	38.76	95	2.93	4.17
46	34.27	37.83	96	2.78	4.01
47	33.43	36.89	97	2.65	3.86
48	32.59	35.96	98	2.53	3.72
49	31.75	35.04	99	2.43	3.59
50	30.93	34.12	100	2.33	3.47
51	30.11	33.20	101	2.25	3.33
52	29.29	32.28	102	2.19	3.19
53	28.46	31.37	103	2.14	3.05
54	27.62	30.46	104	2.11	2.91
55	26.77	29.55	105	2.09	2.78
56	25.91	28.65	106	2.08	2.65
57	25.05	27.76	107	2.08	2.54
58	24.19	26.88	108	2.08	2.44
59	23.32	26.00	109	2.08	2.35
60	22.46	25.13	110	2.07	2.28
61	21.61	24.27	111	2.07	2.21
62	20.76	23.42	112	2.05	2.16
63	19.93	22.57	113	2.04	2.11
64	19.11	21.74	114	2.01	2.06
65	18.30	20.91	115	1.96	2.00
66	17.51	20.10	116	1.87	1.91
67	16.74	19.30	117	1.74	1.77
68	15.97	18.51	118	1.52	1.54
69	15.22	17.74	119	1.15	1.16

General Participants – RP-2000 Healthy Mortality, with adjustment for white collar workers



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Life Expectancies at Sample Ages

Nondisabled Safety Participants

_			,		
Age	Male	Female	Age	Male	Female
20	56.26	61.99	70	13.31	15.77
21	55.31	61.00	71	12.66	15.05
22	54.36	60.02	72	12.03	14.36
23	53.42	59.03	73	11.41	13.69
24	52.47	58.04	74	10.81	13.03
25	51.52	57.06	75	10.23	12.40
26	50.57	56.07	76	9.66	11.77
27	49.62	55.08	77	9.12	11.17
28	48.67	54.10	78	8.60	10.57
29	47.72	53.11	79	8.09	10.00
30	46.77	52.13	80	7.61	9.43
31	45.82	51.15	81	7.15	8.89
32	44.88	50.16	82	6.71	8.37
33	43.95	49.19	83	6.29	7.87
34	43.02	48.21	84	5.89	7.40
35	42.10	47.23	85	5.52	6.95
36	41.18	46.26	86	5.17	6.53
37	40.27	45.29	87	4.83	6.14
38	39.36	44.32	88	4.53	5.78
39	38.46	43.35	89	4.24	5.45
40	37.56	42.38	90	3.98	5.15
41	36.67	41.42	91	3.74	4.88
42	35.78	40.45	92	3.52	4.64
43	34.89	39.49	93	3.32	4.42
44	34.01	38.54	94	3.14	4.23
45	33.13	37.58	95	2.97	4.05
46	32.26	36.63	96	2.82	3.89
47	31.39	35.69	97	2.69	3.75
48	30.53	34.74	98	2.57	3.62
49	29.68	33.80	99	2.47	3.49
50	28.83	32.86	100	2.37	3.37
51	27.99	31.93	101	2.29	3.24
52	27.16	30.99	102	2.23	3.10
53	26.32	30.05	103	2.18	2.96
54	25.49	29.12	104	2.14	2.82
55	24.67	28.19	105 106	2.12	2.69
56	23.84	27.27		2.12	2.57
57	23.02	26.36	107	2.12	2.46 2.36
58 59	22.21 21.40	25.45	108	2.11 2.11	
59 60	21.40	24.56 23.69	109 110	2.11	2.28 2.20
61	19.82	22.83	111	2.11	2.20
62	19.02	21.98	112	2.10	2.14
63			112	2.09	2.09
63 64	18.28 17.53	21.16 20.34	113	2.07 2.04	2.04 2.00
65	16.79	19.55	114	2.04 1.98	2.00 1.94
66	16.06	18.76	115	1.90	1.94
67	15.35	17.99	117	1.90	1.73
68	14.65	17.24	118	1.53	1.73
69	13.97	16.49	119	1.15	1.15
09	13.97	10.43	119	1.15	1.15

Safety Participants – RP-2000 Healthy Mortality, with adjustment for blue collar workers



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Life Expectancies at Sample Ages

	Diou		Curcty		panto
Age	Male	Female	Age	Male	Female
20	30.81	46.81	70	9.81	12.98
21	30.51	46.16	71	9.43	12.46
22	30.20	45.50	72	9.05	11.96
23	29.89	44.84	73	8.69	11.47
24	29.57	44.17	74	8.33	11.00
25	29.24	43.50	75	7.99	10.53
26	28.90	42.82	76	7.65	10.09
20	28.55	42.14	70	7.33	9.65
28	28.20	41.45	78	7.02	9.23
29	27.84	40.76	79	6.72	8.81
30	27.47	40.06	80	6.43	8.42
31	27.09	39.36	81	6.16	8.03
32	26.70	38.65	82	5.89	7.66
33	26.31	37.93	83	5.63	7.29
34	25.90	37.22	84	5.38	6.94
35	25.49	36.49	85	5.14	6.61
36	25.07	35.76	86	4.90	6.28
37	24.63	35.03	87	4.66	5.97
38	24.19	34.28	88	4.41	5.67
39	23.73	33.54	89	4.16	5.39
40	23.27	32.78	90	3.90	5.12
41	22.79	32.03	91	3.65	4.87
42	22.31	31.26	92	3.43	4.63
43	21.81	30.49	93	3.23	4.40
44	21.30	29.72	94	3.04	4.20
45	20.78	28.94	95	2.88	4.02
46	20.25	28.15	96	2.73	3.85
47	19.73	27.38	97	2.60	3.71
48	19.23	26.62	98	2.49	3.58
49	18.73	25.88	99	2.38	3.46
50	18.25	25.15	100	2.29	3.33
51	17.78	24.44	101	2.21	3.20
52	17.32	23.74	102	2.15	3.07
53	16.86	23.06	103	2.10	2.93
54	16.42	22.39	104	2.06	2.79
55	15.98	21.73	105	2.05	2.66
56	15.55	21.09	106	2.04	2.54
57	15.12	20.46	107	2.04	2.43
58	14.69	19.83	108	2.04	2.34
59	14.27	19.22	109	2.04	2.25
60	13.86	18.62	110	2.03	2.18
61	13.44	18.02	111	2.03	2.11
62	13.03	17.43	112	2.02	2.06
63	12.61	16.85	113	2.02	2.02
64	12.20	16.27	114	1.97	1.98
65	11.80	15.70	115	1.93	1.93
66	11.39	15.14	116	1.85	1.85
67	10.99	14.58	117	1.72	1.72
68	10.59	14.04	118	1.50	1.50
69	10.39	13.50	119	1.14	1.14
00	10.20	10.00	110	1.17	1.17

Disabled General and Safety Participants

Disabled Participants – RP-2000 Disabled Mortality



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	1800
21	10	-	-	-	-	1	750
22	10	-	-	-	-	2	550
23	10	-	-	-	-	3	400
24	11	-	-	-	-	4	300
25	11	-	2	3	-	5	283
26	11	-	2	3	-	6	267
27	11	-	2	3	-	7	250
28	11	-	2	3	-	8	240
29	12	-	2	3	-	9	230
30	12	-	2	3	-	10	220
31	14	-	3	5	-	11	210
32	16	-	3	5	-	12	200
33	18	-	3	5	-	13	190
34	20	-	4	6	-	14	180
35	22	-	4	6	-	15	170
36	24	-	5	8	-	16	160
37	25	-	5	8	-	17	150
38	27	_	6	9	_	18	144
39	29	_	7	11	_	10	138
40	30	_	8	13	_	20	132
40	32	_	10	13	_	20	126
42	34		10	17		21	120
43	36	_	13	19		22 23	116
44	39	_	13	22		23	110
44	42	_		22		24	108
45 46	42 45	-	16 18	24 27	-	25	108
40 47	43	-	20	30	-	20 27	104
		-			-	27 28	100
48	52	-	22	33	-	28 29	
49	56	-	24	36	-		100
50	60	-	26	39	500	30 & Above	0
51	60	-	28	42	400		
52	59	-	30	45	400		
53	57	-	34	51	400		
54	56	-	38	57	400		
55	54	-	42	63	1200		
56	54	-	47	71	900		
57	55	-	52	78	1,200		
58	57	-	57	86	1,400		
59	61	-	61	92	1,600		
60	66	-	65	98	2,000		
61	73	-	70	105	2,500		
62	82	-	74	111	2,500		
63	92	-	77	116	2,500		
64	104	-	81	122	2,500		
65	116	-	-	-	3,000		
66	130	-	-	-	3,000		
67	144	-	-	-	3,000		
68	158	-	-	-	3,000		
69	174	-	-	-	3,000		
70	-	-	-	-	10,000		



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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	-	1	1	-	0	1800
21	3	-	1	1	-	1	750
22	3	-	1	1	-	2	550
23	3	-	1	1	-	3	400
24	3	-	1	1	-	4	300
25	3	-	2	2	-	5	283
26	3	-	2	2	-	6	267
27	3	-	2	2	-	7	250
28	3	-	2	2	-	8	240
29	4	-	2	2	-	9	230
30	4	-	2	3	-	10	220
31	4	-	2	3	-	11	210
32	5	-	2	3	-	12	200
33	6	-	2	3	-	13	190
34	6	-	2	3	-	14	180
35	7	-	4	6	-	15	170
36	8	_	6	8	-	16	160
37	8	_	7	11	_	10	150
38	9	_	9	13	_	18	144
39	9	-	10	16	-	18	138
40	10		10	18		20	138
40	10	-	12	20	-	20	126
41	11	-		20	-	21	120
	12 14	-	14		-	22 23	
43		-	16	23	-		116
44	15	-	17	25	-	24	112
45	16	-	18	27	-	25	108
46	18	-	19	29	-	26	104
47	19	-	20	31	-	27	100
48	21	-	22	32	-	28	100
49	23	-	23	34	-	29	100
50	24	-	24	36	500	30 & Above	0
51	25	-	24	37	500		
52	27	-	25	37	500		
53	29	-	25	38	500		
54	32	-	26	38	500		
55	35	-	26	39	600		
56	39	-	26	40	800		
57	43	-	27	40	1,000		
58	47	-	27	41	1,200		
59	51	-	28	41	1,400		
60	56	-	28	42	1,700		
61	61	-	28	43	2,000		
62	67	-	29	43	3,000		
63	74	-	29	44	3,000		
64	82	-	30	44	3,000		
65	91	-	30	45	3,000		
66	101	-	-	-	3,000		
67	112	-	-	-	3,000		
68	124	-	-	-	3,000		
69	137	-	-	-	3,000		
70	-	-	-	-	10,000		



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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	9	2	-	3	-	0	800
21	9	2	-	5	-	1	200
22	10	2	-	7	-	2	200
23	10	2	-	9	-	3	200
24	10	2	-	11	-	4	200
25	10	2	-	13	-	5	192
26	10	2	-	16	-	6	183
27	10	2	-	19	-	7	175
28	10	2	-	22	-	8	170
29	11	2	-	25	-	9	165
30	12	2	-	28	-	10	160
31	13	2	-	32	-	11	155
32	15	2	-	36	-	12	150
33	17	2	-	40	-	13	140
34	18	2	-	44	-	14	130
35	20	2	-	48	-	15	120
36	22	2	-	54	-	16	110
37	24	2	-	60	-	17	100
38	25	2	-	66	-	18	100
39	27	2	-	72	-	19	100
40	28	2	-	78	-	20 & Above	0
41	30	2	-	90	-		
42	32	2	-	102	-		
43	34	2	-	114	-		
44	37	2	-	126	-		
45	39	2	-	138	100		
46	42	2	-	150	50		
47	45	2	-	162	50		
48	49	2	-	174	100		
49	52	2	-	186	200		
50	56	2	-	198	1000		
51	59	2	-	216	600		
52	63	2	-	234	700		
53	66	2	-	252	800		
54	69	2	-	270	1500		
55	72	2	-	288	2500		
56	77	2	-	306	2500		
57	82	2	-	324	2,500		
58	89	2	-	342	2,500		
59	97	2	-	360	2,500		
60	-	_	-	-	10,000		



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Schedule 8 Probability of Immediate Refund of Contributions Upon Termination of Employment

Years of		
Service	Safety	General
0	100%	100%
1	100%	100%
2	100%	100%
3	100%	100%
4	100%	100%
5	36%	43%
6	33%	39%
7	30%	35%
8	27%	31%
9	24%	27%
10	21%	23%
11	18%	19%
12	15%	15%
13	14%	14%
14	13%	13%
15	12%	12%
16	11%	11%
17	10%	10%
18	8%	9%
19	6%	8%
20	0%	7%
21	0%	6%
22	0%	5%
23	0%	4%
24	0%	3%
25	0%	2%
26	0%	1%
27	0%	0%
28	0%	0%
29	0%	0%
30	0%	0%



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Appendix B

Benefit Summaries

GENERAL AND S	AFETY MEMBERS
Membership:	Employment (at least 50% of full-time) with County or participating District. Enter on first day of the first pay period after entrance into service.
Final Average Salary (FAS):	Highest one-year average
SERVICE RETIREMENT SPECIFIC TO GE	ENERAL MEMBERS
Code Section:	31676.14 (1.667% at 52).*
Eligibility:	10 years of service and age 50, or 30 years of service regardless of age, or age 70 regardless of service.
Benefit:	1.667%, or one-sixtieth (1/60) of FAS per year of service times Retirement Adjustment Factor (RAF)
Retirement Age Factor (RAF):	Adjustment factor for benefit commencing at age other than 52. Sample factors:AgeFactor50.8850551.1686601.4638621.5668
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. This report does not reflect this benefit change.



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Code Section:	31664.1 effective January 1, 2001.
Eligibility:	10 years of service and age 50, or 20 years of service regardless of age.
Benefit:	3.000% of FAS per year of service times Retirement Adjustment Factor (RAF)
Retirement Age Factor (RAF):	Adjustment factor for benefit commencing prior to age 50. Sample factors:
	AgeFactor410.6258450.780550 and above1.0000
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.	
Benefit:	20% of FAS, plus 2% of FAS for each full year of service in excess of 5, but not more than 40% of FAS	
Normal Form of Benefit:	Life annuity; 60% continuance to spouse after death of retiree. If there is no	



eligible children.

surviving spouse, the benefit is paid to

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 5 of this report for a description of the SRBR benefits.



EMPLOYEE CONTRIBUTIONS

Full Contribution Rate:	Equals the sum of the Basic, Supplemental and COLA rates.
Basic:	Contribution is set by a table adopted by the Retirement Board designed to be sufficient to provide an average annuity, payable at age 55, equal to 1/120 of the final compensation for General employees and payable at age 50, equal to 1/100 of the final compensation for Safety employees. CERL 31639.25
Supplemental Contribution Rate:	Effective July 10, 2004, all Safety employees will pay a supplemental contribution rate:
	 a) If hired after July 10, 2004, an additional rate equal to the total employee rate sufficient to provide an average annuity payable at age 50, equal to 3/200 of final compensation.
	 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.
COLA:	None
Percentage of Full Contribution Payable by Member:	 For County employees (and employees of Districts adopting the MOU) hired on or after Payroll Period 97-14: 100% of the Full Contribution Rate for their first 5 years of service. No employee contributions are required after attaining 5 years of service.
	 For County employees (and employees of Districts adopting the MOU) hired before Payroll Period 97-14: 50% of the Full Contribution Rate for their first 5 years of service. No employee contributions are required after attaining 5 years of service.
	 for their first 5 years of service. No employee contributions are required after attaining 5 years of service. For County employees (and employees of Districts adopting the MOU) hired before Payroll Period 97-14: 50% of the Full Contribution Rate for their first 5 years of service. No employee contributions are required after attaining 5 years of



Percentage of Full Contribution Payable by Member (continued)	For General employees of Districts not adopting the MOU, 50% of Full Contribution Rate for first 30 years of service.				
	Commencing August 3, 2004, all new General employees will be required to contribute 100% of the Full Contribution Rate for all years of service. Effective January 8, 2005, the General employees' contribution rates will increase to reflect the adoption of CERL 31676.17, in accordance with the Board of Retirement' policy. These new General employee rates will be reflected in the December 31 2005 valuation.				
Integration with Social Security:	Members integrated with Social Security pay 2/3 of the full rate on first \$350 of pay each month.				
Other Provisions:	Rates based on age at entry into System.				



Appendix C

Membership Data

Active Participants

		Dec	ember 31, 2003	Dec	ember 31, 2004	Change	
General	Members						
	County						
	Number Average Age Average Service Percent Male Average Annual Pay Total Covered Payroll Valuation Payroll	\$ \$ \$	6,042 45.3 10.2 29.50% 41,358 250,714,654 249,818,742	\$	5,995 45.5 10.7 29.44% 44,271 265,404,027 264,223,647	-0.78% 0.41% 5.36% -0.20% 7.04% 5.86% 5.77%	
	Districts Electing 1997 MOU						
	Number Average Age Average Service Percent Male Average Annual Pay Total Covered Payroll Valuation Payroll	\$ \$ \$	138 46.8 11.3 73.90% 55,300 7,631,344 7,631,344	\$ \$ \$	134 47.2 13.3 73.13% 58,370 7,821,589 7,821,589	-2.90% 0.84% 17.99% -1.04% 5.55% 2.49% 2.49%	
	Districts Not Electing 1997 MOU						
	Number Average Age Average Service Percent Male Average Annual Pay Total Covered Payroll Valuation Payroll	\$\$\$	246 41.5 6.5 90% 49,163 12,094,102 12,065,531	\$\$	260 41.8 6.7 64.62% 53,996 14,039,029 14,007,887	5.69% 0.67% 3.07% -1.95% 9.83% 16.08% 16.10%	
	Total General						
	Number Average Age Average Service Percent Male Average Annual Pay Total Covered Payroll Valuation Payroll	\$\$	6,446 45.2 10.1 31.80% 41,955 270,440,100 269,515,617	\$ \$	6,389 45.4 10.6 31.79% 44,962 287,264,645 286,053,123	-0.88% 0.37% 5.31% -0.03% 7.17% 6.22% 6.14%	
Safety M	embers						
	Number Average Age Average Service Percent Male Average Annual Pay Total Covered Payroll Valuation Payroll	\$\$\$	1,658 40.4 12.1 82.50% 51,189 84,871,617 83,928,766	\$ \$	1,597 40.6 12.9 83.34% 56,257 89,841,674 88,897,821	-3.68% 0.54% 6.42% 1.02% 9.90% 5.86% 5.92%	
Total Act	tive Members						
	Number Average Age Average Service Percent Male Average Annual Pay Total Covered Payroll Valuation Payroll	\$\$\$	8,104 44.2 10.5 42.20% 43,844 355,311,717 353,444,383	\$ \$	7,986 44.4 11.1 42.10% 47,221 377,106,319 374,950,944	-1.46% 0.49% 5.56% -0.24% 7.70% 6.13% 6.08%	



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Terminated Participants with Pending Refunds

	December 31, 2003	December 31, 2004	Change
General Members			
Number	138	140	1.45%
Average Age	27.5	37.5	36.29%
Percent Male	24.60%	27.86%	13.24%
Safety Members			
Number	12	9	-25.00%
Average Age	32.4	30.4	-6.11%
Percent Male	91.70%	66.67%	-27.30%
All Members			
Number	150	149	-0.67%
Average Age	37.1	37.1	-0.13%
Percent Male	30.00%	30.20%	0.67%

Terminated Vested Participants

		December 31, 2003	December 31, 2004	Change
General Men	nbers			
Aver	ber age Age age Service ent Male	787 46.9 15.3 41.20%	814 47.1 16.0 41.65%	3.43% 0.52% 4.66% 1.08%
Safety Memb	bers			
Aver	age Age age Service ent Male	102 43.4 16.1 74.50%	107 42.2 15.9 78.50%	4.90% -2.71% -1.26% 5.38%
Aver	ber age Age age Service ent Male	889 46.9 15.4 45.00%	921 46.6 16.0 45.93%	3.60% -0.70% 3.89% 2.06%



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Retired Participants

		December	31, 2003	December	Change	
General	Members					
	Service Retirements**					
	Number		2983		2494	-16.39%
	Average Age		71.2		70.9	-0.42%
	Percent Male		35.00%		37.41%	6.89%
	Average Monthly Benefit*	\$	1,215	\$	1,395	14.83%
	Beneficiaries**					
	Number				598	
	Average Age				74.15	
	Percent Male			•	22.41%	
	Average Monthly Benefit*			\$	699	
	Disabled**					
	Number		593		499	-15.85%
	Average Age		61.4		59.5	-3.17%
	Percent Male		34.90%		38.28%	9.67%
	Average Monthly Benefit*	\$	1,144	\$	1,278	11.72%
	Total General					
	Number		3576		3591	0.42%
	Average Age		69.6		69.9	0.36%
	Percent Male		35.00%		35.03%	0.09%
	Average Monthly Benefit*	\$	1,203	\$	1,263	4.99%
Safety N	/ embers					
	Service Retirements**					
	Number		695		596	-14.24%
	Average Age		65.3		64.8	-0.72%
	Percent Male		74.50%		87.92%	18.01%
	Average Monthly Benefit*	\$	2,979	\$	3,517	18.05%
	Beneficiaries**					
	Number				186	
	Average Age				68.5	
	Percent Male				5.38%	
	Average Monthly Benefit*			\$	1,507	
	Disabled**					
	Number		386		368	-4.66%
	Average Age		58.7		57.5	-2.12%
	Percent Male		72.60%		83.70%	15.28%
	Average Monthly Benefit*	\$	2,356	\$	2,693	14.30%
	Total Safety					
	Number		1,081		1,150	6.38%
	Average Age		63.0		63.1	0.09%
	Percent Male		74%	÷	73.22%	-0.92%
	Average Monthly Benefit*	\$	2,757	\$	2,928	6.20%

*Excludes SRBR amounts.

**For December 31, 2003 valuation, beneficiaries were included with Disabled or Service Retirements.



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Retired Participants

	ĸ	December	•	December	Change	
Total Members						
Service Retiremen	nts**					
Number			3,678		3,090	-15.99%
Average Age			70.1		69.7	-0.53%
Percent Male			42.40%		47.15%	11.21%
Average Monthly Be	enefit*	\$	1,548	\$	1,804	16.56%
Beneficiaries**						
Number					784	
Average Age					72.8	
Percent Male					18.37%	
Average Monthly Be	enefit*			\$	891	
Disabled**						
Number			979		867	-11.44%
Average Age			60.4		58.6	-2.97%
Percent Male			49.80%		57.55%	15.57%
Average Monthly Be	enefit*	\$	1,622	\$	1,879	15.82%
Total Retirees						
Number			4,657		4,741	1.80%
Average Age			68.1		68.2	0.15%
Percent Male			44.00%		44.29%	0.67%
Average Monthly Be	enefit*	\$	1,564	\$	1,667	6.58%

*Excludes SRBR amounts.

**For December 31, 2003 valuation, beneficiaries were included with Disabled or Service Retirements.



_	Actives	Terminated Vested	Terminated Pending Refund	Service Retirees	Disability Retirees	Beneficiaries
As of December 31, 2003	6,446	787	138	2,500	483	593
New Hires/Rehires	526	(5)				
Net Transfers from Safety	(2)		1			
Terminated - Contributions Refunded	(312)	(22)	(98)			
Terminated, Pending Refund	(99)		99			
Vested Terminations	(74)	74				
Suspended						
Service Retirements	(71)	(20)		97		
Disability Retirements	(25)			(7)	43	
Active Deaths						
Deaths Or Ceased Payments				(96)	(21)	(39)
Beneficiaries of Retirees Who Died					6	45
Other					(12)	(1)
As of December 31, 2004	6,389	814	140	2,494	499	598

General Members



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_	Actives	Terminated Vested	Terminated Pending Refund	Service Retirees	Disability Retirees	Beneficiaries	
As of December 31, 2003	1,658	102	12	562	343	176	
New Hires/Rehires	69						
Net Transfers From General	2	(1)					
Terminated - Contributions Refunded	(43)	(2)	(9)				
Terminated, Pending Refund	(6)		6				
Vested Terminations	(13)	13					
Suspended	-						
Service Retirements	(49)	(4)		53			
Disability Retirements	(21)			(8)	29		
Active Deaths							
Deaths Or Ceased Payments				(11)	(4)	(5)	
Beneficiaries of Retirees Who Died						15	
Differences From Prior Actuary		(1)					
As of December 31, 2004	1,597	107	9	596	368	186	

Safety Members



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Summary of Active Safety Participants by Age and Service

	Number of Participarties by Age and Service Groups										
Years of Service											
Age	<u><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&Up</u>	Total
0-24	21	54	2	-	-	-	-	-	-	-	77
25-29	11	126	63	1	-	-	-	-	-	-	201
30-34	7	89	159	29	-	-	-	-	-	-	284
35-39	2	38	72	59	20	1	-	-	-	-	192
40-44	1	13	42	49	95	37	-	-	-	-	237
45-49	-	9	16	28	59	99	52	1	-	-	264
50-54	1	2	12	15	28	53	82	33	-	-	226
55-59	-	4	13	8	24	16	15	18	1	-	99
60-64	-	3	4	3	3	-	1	-	-	-	14
65-69	-	-	-	1	2	-	-	-	-	-	3
70&Up	-	-	-	-	-	-	-	-	-	-	-
Total	43	338	383	193	231	206	150	52	1	-	1,597

Number of Participants by Age and Service Groups

Average Annual Compensation for Safety Participants by Age and Service at December 31, 2004

Average Compensation by Age and Service Groups											
Years of Service											
<u>Age</u>	<u><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&Up</u>	<u>Average</u>
0-24	34,644	41,429	46,918	-	-	-	-	-	-	-	39,721
25-29	35,283	41,610	47,016	45,063	-	-	-	-	-	-	42,975
30-34	35,144	43,782	49,408	48,944	-	-	-	-	-	-	47,246
35-39	36,681	45,880	49,466	53,364	61,017	59,743	-	-	-	-	51,078
40-44	36,996	43,610	47,368	54,129	60,774	64,392	-	-	-	-	56,547
45-49	-	41,932	50,734	53,015	57,999	61,778	68,825	54,452	-	-	60,018
50-54	36,996	35,352	47,642	49,619	59,943	62,616	67,887	68,225	-	-	63,004
55-59	-	31,087	42,404	50,453	52,419	59,836	63,424	60,966	91,745	-	54,900
60-64	-	47,952	48,587	44,903	39,969	-	66,512	-	-	-	47,095
65-69	-	-	-	49,712	43,940	-	-	-	-	-	45,864
70&Up	-	-	-	-	-	-	-	-	-	-	-
Average	35,093	42,613	48,542	52,238	58,701	62,302	67,757	65,448	91,745	-	52,999

Note that the compensation in this chart is the Final Average Salary as of December 31, 2004.



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Summary of Active General Participants by Age and Service

Years of Service											
<u>Age</u>	<u><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&Up</u>	<u>Total</u>
0-24	69	71	3	-	-	-	-	-	-	-	143
25-29	116	293	48	1	-	-	-	-	-	-	458
30-34	78	363	176	27	-	-	-	-	-	-	644
35-39	63	259	209	154	41	-	-	-	-	-	726
40-44	34	221	217	199	172	74	6	-	-	-	923
45-49	39	175	207	240	203	164	61	3	-	-	1,092
50-54	38	168	226	196	182	175	122	43	2	-	1,152
55-59	21	114	144	134	158	105	79	69	7	-	831
60-64	2	42	70	74	65	36	22	12	4	2	329
65-69	1	7	19	18	13	5	5	4	2	-	74
70&Up	-	3	2	5	3	2	-	2	-	-	17
Total	461	1,716	1,321	1,048	837	561	295	133	15	2	6,389

Number of Participants by Age and Service Groups

Average Annual Compensation for General Participants by Age and Service at December 31, 2004

Years of Service											
Age	<u><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&Up</u>	Average
0-24	27,206	28,152	32,268	-	-	-	-	-	-	-	27,782
25-29	30,143	34,776	35,820	45,978	-	-	-	-	-	-	33,736
30-34	31,179	38,943	43,537	39,081	-	-	-	-	-	-	39,264
35-39	33,323	37,681	42,150	44,109	37,374	-	-	-	-	-	39,936
40-44	32,332	38,034	43,238	46,477	44,230	41,491	41,443	-	-	-	42,322
45-49	29,767	35,287	42,559	46,740	47,909	49,056	46,573	43,405	-	-	44,053
50-54	36,268	44,267	41,842	44,182	51,300	49,265	54,244	48,538	37,399	-	46,587
55-59	39,066	41,166	43,181	43,769	49,601	50,583	52,214	56,853	43,696	-	47,050
60-64	45,946	40,884	44,913	45,178	45,348	41,568	35,377	47,120	54,709	57,619	43,824
65-69	27,196	61,743	35,162	39,574	43,091	41,984	51,161	34,658	54,577	-	42,074
70&Up	-	37,951	37,305	27,687	55,340	30,826	-	102,961	-	-	44,735
Average	31,416	37,912	42,423	44,923	47,447	47,800	50,394	53,009	47,244	57,619	42,562

Note that the compensation in this chart is the Final Average Salary as of December 31, 2004.



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.



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General Members Full Member Contribution Rates

Integrated

Non-Integrated

	Rate on First \$350 of	Rate on Compensation in Excess of \$350 per	Contribution
Age	Monthly Compensation	Month	Rate
20	3.44%	5.16%	5.16%
21	3.50%	5.25%	5.25%
22	3.57%	5.35%	5.35%
23	3.63%	5.45%	5.45%
24	3.70%	5.55%	5.55%
25	3.77%	5.65%	5.65%
26	3.84%	5.76%	5.76%
27	3.91%	5.86%	5.86%
28	3.98%	5.97%	5.97%
29	4.05%	6.08%	6.08%
30	4.13%	6.19%	6.19%
31	4.20%	6.30%	6.30%
32	4.28%	6.42%	6.42%
33	4.36%	6.53%	6.53%
34	4.44%	6.65%	6.65%
35	4.52%	6.78%	6.78%
36	4.60%	6.90%	6.90%
37	4.69%	7.03%	7.03%
38	4.77%	7.16%	7.16%
39	4.86%	7.30%	7.30%
40	4.96%	7.43%	7.43%
41	5.05%	7.58%	7.58%
42	5.15%	7.73%	7.73%
43	5.26%	7.88%	7.88%
44	5.37%	8.05%	8.05%
45	5.48%	8.22%	8.22%
46	5.61%	8.41%	8.41%
47	5.75%	8.62%	8.62%
48	5.90%	8.85%	8.85%
49	5.90%	8.85%	8.85%
50	5.90%	8.85%	8.85%
51	5.90%	8.85%	8.85%
52	5.90%	8.85%	8.85%
53	5.90%	8.85%	8.85%
54	5.90%	8.85%	8.85%



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Safety Members Full Member Contribution Rates

Basic Rates for Safety Members Hired Prior to July 10, 2004

Safety Members Hired On or After July 10, 2004

	Integra	ated	Non-Integrated		Integ	rated	Non- Integrated
	integri	non mogratou		integ	integratea		
	Rate on First \$350 of	Rate on Compensation in			Rate on First	Rate on Compensation	
	Monthly	Excess of \$350			\$350 of Monthly	in Excess of	Contribution
Age	Compensation	per Month	Contribution Rate	Age	Compensation	\$350 per Month	Rate
20	5.06%	7.59%	7.59%	20	7.59%	11.38%	11.38%
21	5.14%	7.71%	7.71%	21	7.71%	11.56%	11.56%
22	5.22%	7.83%	7.83%	22	7.83%	11.74%	11.74%
23	5.30%	7.96%	7.96%	23	7.96%	11.94%	11.94%
24	5.39%	8.08%	8.08%	24	8.08%	12.12%	12.12%
25	5.48%	8.21%	8.21%	25	8.21%	12.32%	12.32%
26	5.56%	8.35%	8.35%	26	8.35%	12.52%	12.52%
27	5.65%	8.48%	8.48%	27	8.48%	12.72%	12.72%
28	5.75%	8.62%	8.62%	28	8.61%	12.92%	12.92%
29	5.84%	8.76%	8.76%	29	8.76%	13.14%	13.14%
30	5.94%	8.91%	8.91%	30	8.91%	13.36%	13.36%
31	6.04%	9.06%	9.06%	31	9.05%	13.58%	13.58%
32	6.14%	9.21%	9.21%	32	9.21%	13.82%	13.82%
33	6.25%	9.37%	9.37%	33	9.37%	14.06%	14.06%
34	6.36%	9.54%	9.54%	34	9.53%	14.30%	14.30%
35	6.47%	9.71%	9.71%	35	9.71%	14.56%	14.56%
36	6.60%	9.90%	9.90%	36	9.89%	14.84%	14.84%
37	6.73%	10.09%	10.09%	37	10.09%	15.14%	15.14%
38	6.87%	10.30%	10.30%	38	10.31%	15.46%	15.46%
39	7.02%	10.53%	10.53%	39	10.53%	15.80%	15.80%
40	7.03%	10.55%	10.55%	40	10.55%	15.82%	15.82%
41	7.05%	10.58%	10.58%	41	10.57%	15.86%	15.86%
42	7.07%	10.60%	10.60%	42	10.60%	15.90%	15.90%
43	7.08%	10.63%	10.63%	43	10.63%	15.94%	15.94%
44	7.10%	10.65%	10.65%	44	10.65%	15.98%	15.98%
45	7.12%	10.68%	10.68%	45	10.68%	16.02%	16.02%
46	7.13%	10.70%	10.70%	46	10.71%	16.06%	16.06%
47	7.15%	10.73%	10.73%	47	10.72%	16.08%	16.08%
48	7.17%	10.75%	10.75%	48	10.75%	16.12%	16.12%
49	7.18%	10.78%	10.78%	49	10.77%	16.16%	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 will be 9.59% = 7.59% + 2.0%. For an employee hired after July 10, 2004, it is the full basic and supplemental rate of 11.38%.



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Appendix E

Glossary

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

Accrued Benefit	The amount of an individual's benefit (whether or not vested) as of a specific date, determined in accordance with the terms of a pension plan and based on compensation and service to that date.
Actuarial Accrued Liability	That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of pension plan benefits and expenses which is not provided for by future Normal Costs.
Actuarial Assumptions	Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement, and retirement; changes in compensation; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; and other relevant items.
Actuarial Gain (Loss)	A measure of the difference between actual experience and that expected based on a set of Actuarial Assumptions during the period between two Actuarial Valuation dates, as determined in accordance with a particular Actuarial Cost Method.
Actuarial Present Value	The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions.
Actuarial Valuation	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a pension plan.
Actuarial Value of Assets	The value of cash, investments and other property belonging to a pension plan, as used by the actuary for the purpose of an Actuarial Valuation.
Actuarially Equivalent	Of equal Actuarial Present Value, determined as of a given date with each value based on the same set of Actuarial Assumptions.
Amortization Payment	That portion of the pension plan contribution which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.



Contingency The Contingency Reserve is used to satisfy the California Reserve 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 The accumulation of employer contributions for future annual costof -living increases for retirees and continuance beneficiaries. Reserve Additions include contributions from employers and related earnings and deductions include monthly cost-of-living benefit payments. Employers' The accumulation of employer contributions for future retirement **Advance Reserve** benefit payments. Additions include contributions from employers and related earnings and deductions include transfers to the Retired Members' Reserve. Entry Age A method under which the Actuarial Present Value of the Projected Actuarial Cost Benefits of each individual included in an Actuarial Valuation is Method 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. The accumulation of member contributions. Additions include Members' Deposit Reserve 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.



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. 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.

