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May 6, 2009

Ms. Anne Holdren Executive Director Kern County Employees' Retirement Association 1115 Truxtun Avenue Bakersfield, CA 93301

Re: Employer Contribution Rates to Reflect December 31, 2008 COLA Contribution Reserve

Dear Anne:

Per your request, attached are the exhibits to provide the detail for the contribution rates adopted by the Board at its April 22, 2009 meeting. These rates reflect the December 31, 2008 COLA Contribution Reserve (CCR), using the expanded asset corridor of 50% to 150% as adopted at that meeting. The rates also reflect the correction to District rates as explained below. Note that the attached exhibits correspond to Exhibits 14 through 16 of the June 30, 2008 actuarial valuation report.

Based upon the Board's interest crediting policy, any credits in the CCR fund as of December 31 will be used to determine the amount of the employer contributions that will be reduced for the subsequent fiscal year commencing July 1. This provision was added to the policy when the valuation date was moved up to June 30. There was a concern that any additional credits in the CCR as of December 31 would not be available to reduce contribution rates for the subsequent fiscal year. Thus, the intention of section IV (2) of the policy was to recompute the contribution rates determined by the prior June 30 valuation. It was anticipated that there would be an adjustment to the final contribution rates to reflect the asset statements as of December 31.

Due to the market conditions, the actual CCR fund balance as of December 31, 2008 was less than the balance was expected to be, based upon the June 30, 2008 valuation. The CCR was not credited with the full expected actuarial rate as of December 31, 2008. As a result, the recalculated contribution rates (after application of the CCR credit) are more than those estimated in the June 30, 2008 valuation following the interest crediting policy. Note that the employer contribution rates are still reduced compared to what they would be without applying any CCR credits.

The changes from the valuation report would have been much more significant if the asset corridor had remained at 20%. Under prior practice, the Actuarial Value of Assets (AVA) was restricted to be within 20% of the Market Value of Assets (MVA). Per the Board's action on April 22, the new policy is to restrict the AVA to be within 50% of the MVA.

#### Further Changes in the July 1, 2009 Contribution Rates for District Employers

As the June 30, 2008 valuation was being completed, an accounting error was found in the allocation of excess earnings to the CCR for the District employer group during 2007. The

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correction to this error resulted in very minor adjustments for the non-District cost groups as well due to a redistribution of the interest credits. At its April 22, 2009 meeting, the Board voted to correct the accounting error and adopt the rates that reflect the adjustments to the CCR credits available as of December 31, 2008. The adjustment lowered the CCR credit and thus raised the net contribution rates for the Districts.

#### Certification

In preparing this analysis and the June 30, 2008 valuation 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, asset information, statutory provisions, and employee data. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes. Since these results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. 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, the attached information is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Actuarial Standards of Practice promulgated by the Actuarial Standards Board and the applicable Guides to Professional Conduct, amplifying Opinions, and supporting Recommendations of the American Academy of Actuaries.

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

As you are aware, we are not attorneys and cannot give legal advice on such issues. We suggest that before you take any action with regard to the information provided in this letter, you discuss it with your legal counsel.

We are consulting actuaries for Milliman, Inc. We are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Sincerely,

Daniel Wade, FSA, EA, MAAA

) and Wool

**Consulting Actuary** 

DRW/KIS/nlo Enclosures Karen I. Steffen, FSÅ, EA, MAAA Consulting Actuary

Kan D. Stell

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	General County with Courts	General District	Safety	Total
A. Basic Benefits			******	40.054
1. Total Normal Cost	17.83%	18.25%	22.83%	19,05%
Projected Employee Contributions     Employer Normal Cost (1-2)	2.71% 15.12%	3.22% 15.04%	2.92% 19.91%	2.79% 16.26%
				•
Amortization of Unfunded Actuarial Accrued Liability	8.27%	9.99%	9.15%	8.57%
5. Employer Contribution (3+4)	23.38%	25.03%	29.07%	24.83%
B. COLA Benefits 2% 1. Employer Normal Cost	3.63%	3.73%	5.45%	4.07%
2. Amortization of Unfunded Actuarial Accrued Liability	1.63%	2.22%	2.31%	1.82%
3. Employer Contribution (1+2)	5.26%	5.95%	7.76%	5.89%
C. COLA Benefits 0.5%				
1. Employer Normal Cost	1.10%	1.13%	1.70%	1.25%
2. Amortization of Unfunded Actuarial Accrued Liability	1,43%	1.34%	2.83%	1.76%
3. Employer Contribution (1+2)	2.53%	2.47%	4.53%	3.00%
D. Total Benefits				
1. Total Normal Cost	22.56%	23.11%	29.98%	24.36%
Projected Employee Contributions	2.71%	3.22%	2.92%	2.79%
3. Employer Normal Cost (1-2)	19.85%	19.90%	27.06%	21.58%
4. Amortization of Unfunded Actuarial Accrued Liability	11.32%	13.56%	14.30%	12.15%
5. Total Employer Contribution (3+4)	31.17%	33.45%	41.36%	33.73%
6. COLA Contribution Reserve Adjustments				
a.) CCR Credits*	3,32%	4.42%	5.68%	
b.) Max CCR Credits (B.3)	5.26%	5.95%	7.76%	
c.) CCR Adjustments (Minimum of a. and b.)	3.32%	4.42%	5.68%	3.94%
7. Adjusted Employer Contribution (5-6c.)	27.86%	29.04%	35,68%	29.79%
Estimated Payroll for Fiscal Year beginning July 1, 2009	\$ 354,992,455	\$ 27,144,840	\$ 120,056,612	\$ 502,193,907
	General County			
Estimated Dollar Amounts	with Courts	District	Safety	Total
A. Basic Benefits	\$ 9,616,159	\$ 872,902	\$ 3,505,653	\$ 13,994,714
Projected Employee Contributions Employer Contribution	83,013,326	6,794,697	34,900,457	124,708,480
B. COLA Benefits 2% Employer Contribution	18,651,239	1,614,337	9,316,393	29,581,969
C. COLA Benefits 0.5% Employer Contribution	8,982,786	672,225	5,438,565	15,093,576
D. Total Benefits Projected Employee Contributions	9,616,159	872,902	3,505,653	13,994,714
Total Employer Contribution	110,647,350	9,081,259	49,655,415	169,384,024
COLA Contribution Reserve Adjustments	0 44 705 755	* ****	* 6010010	e 40.004.707
a.) CCR Credits*	\$ 11,785,750	\$ 1,199,802	\$ 6,819,216	\$ 19,804,767
b.) Max CCR Credits (B.)     c.) CCR Adjustments (Minimum of a. and b.)	18,651,239 \$ 11,785,750	1,614,337 \$ 1,199,802	9,316,393 \$ 6,819,216	29,581,969 \$ 19,804,767
Adjusted Employer Contribution	\$ 98,861,601	\$ 7,881,457	\$ 42,836,199	\$ 149,579,257

<sup>\*</sup> Based upon the COLA Contribution Reserve as of December 31, 2008. Updated May 6, 2009 from the estimate in the June 30, 2008 actuarial valuation report.

	Tier i w/o Courts		Tier II w/o Courts	Total neral County w/o Courts		Courts
A. Basic Benefits 1. Total Normal Cost	 18.25%	_	10.03%	17.80%		18.25%
Projected Employee Contributions     Employer Normal Cost (1-2)	 2.36% 15.89%		5.72% 4.31%	 2.55% 15.25%	_	5.08% 13.17%
4. Amortization of Unfunded Actuarial Accrued Liability	 8.27%		8.27%	 8.27%		8.27%
5. Employer Contribution (3+4)	24.16%		12.58%	23.52%		21.44%
B. COLA Benefits 2% 1. Employer Normal Cost	3.73%		1.87%	3.62%		3.73%
2. Amortization of Unfunded Actuarial Accrued Liability	1.63%		1.63%	 1.63%	_	1.63%
3. Employer Contribution (1+2)	5.35%		3.50%	5.25%		5.35%
C. COLA Benefits 0.5% 1. Employer Normal Cost	1.13%		0.56%	1.10%		1.13%
2. Amortization of Unfunded Actuarial Accrued Liability	 1.43%		1.43%	 1.43%	_	1.43%
3. Employer Contribution (1+2)	2.56%		1.99%	2.53%		2.56%
D. Total Benefits 1. Total Normal Cost	23.11%		12.47%	22.52%		23.11%
Projected Employee Contributions     Employer Normal Cost (1-2)	 2.36% 20.75%		5.72% 6.74%	 2.55% 19.98%		5,08%
3. Employer Normal Cost (1-2)	20.73%		0.1476	19.90%		18.03%
4. Amortization of Unfunded Actuarial Accrued Liability	 11.32%		11.32%	 11,32%		11.32%
5. Total Employer Contribution (3+4)	32.07%		18.06%	31.30%		29.35%
6. COLA Contribution Reserve Adjustments						
a.) CCR Credits*	3.32%		3.32%	3.32%		3.32%
b.) Max CCR Credits (B.3)     c.) CCR Adjustments (Minimum of a, and b,)	 5.35% 3.32%		3.50% 3.32%	 5.25% 3.32%		5.35% 3.32%
, , , , , , , , , , , , , , , , , , , ,				3.32 %		3,3270
7. Adjusted Employer Contribution (5-6c.)	28.76%		14.75%	27.98%		26.03%
Estimated Payroll for Fiscal Year beginning July 1, 2009	\$ 313,800,579	\$	18,424,744	\$ 332,225,323	\$	22,767,132
Estimated Dollar Amounts	Tier I w/o Courts		Tier II w/o Courts	Total eneral County w/o Courts		Courts
Basic Benefits     Projected Employee Contributions     Employer Contribution	\$ 7,405,694 75,814,220	\$	1,053,895 2,317,833	\$ 8,459,589 78,132,053	\$	1,156,570 4,881,273
B. COLA Benefits 2% Employer Contribution	16,788,331		644,866	17,433,197		1,218,042
C. COLA Benefits 0.5% Employer Contribution	8,033,295		366,652	8,399,947		582,839
D. Total Benefits Projected Employee Contributions Total Employer Contribution	7,405,694 100,635,846		1,053,895 3,329,351	8,459,589 103,965,197		1,156,570 6,682,153
COLA Contribution Reserve Adjustments a.) CCR Credits* b.) Max CCR Credits (B.)	\$ 10,418,179 16,788,331	\$	611,702 644,866	\$ 11,029,881 17,433,197	\$	755,869 1,218,042
c.) CCR Adjustments (Minimum of a. and b.)	\$ 10,418,179	\$	611,702	\$ 11,029,881	\$	755,869
Adjusted Employer Contribution	\$ 90,217,666	\$	2,717,650	\$ 92,935,316	\$	5,926,284

<sup>\*</sup> Based upon the COLA Contribution Reserve as of December 31, 2008. Updated May 6, 2009 from the estimate in the June 30, 2008 actuarial valuation report.

		eneral County w/o Courts		Safety		Total County w/o Courts
A. Basic Benefits		47 000/		00.000		40.40%
Total Normal Cost     Projected Employee Contributions		17.80% 2.55%		22,83% 2.92%		19,13% 2,64%
3. Employer Normal Cost (1-2)		15.25%		19.91%		16.49%
4. Amortization of Unfunded Actuarial Accrued Liability		8,27%		9.15%		8.50%
5. Employer Contribution (3+4)		23.52%		29.07%		24.99%
B. COLA Benefits 2%						
Employer Normal Cost		3.62%		5,45%		4.11%
2. Amortization of Unfunded Actuarial Accrued Liability		1.63%		2.31%		1.81%
3. Employer Contribution (1+2)		5.25%		7.76%		5.92%
C. COLA Benefits 0.5%						
Employer Normal Cost		1.10%		1.70%		1.26%
2. Amortization of Unfunded Actuarial Accrued Liability		1.43%	_	2.83%		1.80%
3. Employer Contribution (1+2)		2.53%		4.53%		3.06%
D. Total Benefits						
1. Total Normal Cost		22,52%		29,98%		24.50%
Projected Employee Contributions		2.55%		2.92%		2.64%
3. Employer Normal Cost (1-2)		19,98%		27,06%		21.86%
4. Amortization of Unfunded Actuarial Accrued Liability		11.32%		14.30%		12.11%
5. Total Employer Contribution (3+4)		31.30%		41.36%		33.97%
6. COLA Contribution Reserve Adjustments						
a.) CCR Credits*		3.32%		5.68%		
b.) Max CCR Credits (B.3)		5.25%		7.76%		
c.) CCR Adjustments (Minimum of a. and b.)		3.32%		5.68%		3.94%
7. Adjusted Employer Contribution (5-6c.)		27.98%		35.68%		30.02%
Estimated Payroll for Fiscal Year beginning July 1, 2009	\$	332,225,323	\$	120,056,612	\$	452,281,935
	Ge	eneral County				Total
Estimated Dollar Amounts		w/o Courts		Safety		w/o Courts
A. Basic Benefits     Projected Employee Contributions	\$	8,459,589	\$	2 505 652	\$	44 005 040
Employer Contribution	Ψ	78,132,053	Ψ	3,505,653 34,900,457	Φ	11,965,242 113,032,510
B. COLA Benefits 2%						
Employer Contribution		17,433,197		9,316,393		26,749,590
C. COLA Benefits 0.5%						
Employer Contribution		8,399,947		5,438,565		13,838,512
D. Total Benefits						
Projected Employee Contributions		8,459,589		3,505,653		11,965,242
Total Employer Contribution		103,965,197		49,655,415		153,620,612
COLA Contribution Reserve Adjustments						
a.) CCR Credits*	\$	11,029,881	\$	6,819,216	\$	17,849,096
b.) Max CCR Credits (B.)		17,433,197		9,316,393	·	26,749,590
c.) CCR Adjustments (Minimum of a. and b.)	\$	11,029,881	\$	6,819,216	\$	17,849,096
Adjusted Employer Contribution	\$	92,935,316	\$	42,836,199	\$	135,771,515

<sup>\*</sup> Based upon the COLA Contribution Reserve as of December 31, 2008. Updated May 6, 2009 from the estimate in the June 30, 2008 actuarial valuation report.

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	Category I	Category II	Category III	Category iV**	Total
A. Basic Benefits 1. Total Normal Cost	18.25%	18.25%	18.25%	18.25%	18.25%
2. Projected Employee Contributions	1.35%	2.01%	4,10%	2.01%	3.22%
3. Employer Normal Cost (1-2)	16.90%	16.25%	14.15%	16.25%	15,04%
4. Amortization of Unfunded Actuarial Accrued Liability	10.06%	10.06%	10.06%	7.75%	9.99%
5. Employer Contribution (3+4)	26.96%	26,30%	24.21%	24.00%	25.03%
B. COLA Benefits 2% 1. Employer Normal Cost	3.73%	3.73%	3.73%	3.73%	3.73%
2. Amortization of Unfunded Actuarial Accrued Liability	2.23%	2.23%	2.23%	1.76%	2.22%
3. Employer Contribution (1+2)	5.96%	5.96%	5.96%	5.49%	5,95%
C. COLA Benefits 0.5%  1. Employer Normal Cost	1.13%	1.13%	1.13%	1.13%	1.13%
2. Amortization of Unfunded Actuarial Accrued Liability	1.34%	1.34%	1.34%	1.21%	1.34%
3. Employer Contribution (1+2)	2.48%	2.48%	2,48%	2.35%	2.47%
D. Total Benefits					
Total Normai Cost	23.11%	23.11%	23.11%	23.11%	23.11%
Projected Employee Contributions	1.35%	2.01%	4.10%	2.01%	3.22%
Employer Normal Cost (1-2)	21.76%	21.10%	19.01%	21,10%	19.90%
4. Amortization of Unfunded Actuarial Accrued Liability	13.64%	13.64%	13,64%	10.73%	13.56%
5. Total Employer Contribution (3+4)	35.40%	34.74%	32.65%	31.83%	33.45%
6. COLA Contribution Reserve Adjustments					
a.) CCR Credits*	4.42%	4.42%	4.42%	4.42%	4.42%
b.) Max CCR Credits (B.3)	5,96%	5.96%	5.96%	5.49%	5.95%
c.) CCR Adjustments (Minimum of a. and b.)	4.42%	4.42%	4.42%	4.42%	4.42%
7. Adjusted Employer Contribution (5-6c.)	30.98%	30.32%	28.23%	27.41%	29.04%
Estimated Payroll for Fiscal Year beginning July 1, 2009	\$ 5,823,852	\$ 3,078,313	\$ 17,498,957	\$ 743,719	\$ 27,144,840
Estimated Dollar Amounts A. Basic Benefits	Category I	Category II	Category III	Category IV**	Total
Projected Employee Contributions	\$ 78,622	\$ 61,874	\$ 717,457	\$ 14,949	\$ 872,902
Employer Contribution	1,570,110	809,596	4,236,497	178,493	6,794,697
B. COLA Benefits 2%					
Employer Contribution	347,102	183,467	1,042,938	40,830	1,614,337
C. COLA Benefits 0.5% Employer Contribution	144,432	76 242	433,974	17 477	670.005
Employer Contribution	144,432	76,342	433,974	17,477	672,225
D. Total Benefits					
Projected Employee Contributions	78,622	61,874	717,457	14,949	872,902
Total Employer Contribution	2,061,644	1,069,406	5,713,409	236,800	9,081,259
COLA Contribution Reserve Adjustments					
a.) CCR Credits*	\$ 257,414	\$ 136,061	\$ 773,454	\$ 32,872	\$ 1,199,802
b.) Max CCR Credits (B.)	347,102	183,467	1,042,938	40,830	1,614,337
c.) CCR Adjustments (Minimum of a. and b.)	\$ 257,414	\$ 136,061	\$ 773,454	\$ 32,872	\$ 1,199,802
Adjusted Employer Contribution	\$ 1,804,229	\$ 933,345	\$ 4,939,956	\$ 203,928	\$ 7,881,457

Based upon the COLA Contribution Reserve as of December 31, 2008. Updated May 6, 2009 from the estimate in the June 30, 2008 ectuarial valuation report.
 District Category IV adopted the 3% at 60 benefit formula prospectively only, reducing their share of the UAAL.



# **Actuarial Valuation**

June 30, 2008

Ву

Karen I. Steffen

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

and

Daniel R. Wade

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



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February 3, 2009

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

#### Dear Members of the Board:

In accordance with your request, we have performed an actuarial valuation as of June 30, 2008 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 June 30, 2008.

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

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

We further certify that all costs, liabilities, rates of interest, and other factors for the programs have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the programs and reasonable expectations). The assumptions used in this report, as summarized in Appendix A, are based on the 2008 Experience Study report adopted by the Board at its November 2008 meeting. The Retirement Board has the final decision regarding the appropriateness of the assumptions.

The emerging costs will vary from those presented in this report to the extent that actual experience differs from that projected by the actuarial assumptions. Future actuarial measurements may differ significantly from the current measurements presented in this report due to factors such as the following:

- Plan experience differing from the actuarial assumptions,
- Future changes in the actuarial assumptions,



- Increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as potential additional contribution requirements due to changes in the plan's funded status), and
- Changes in the plan provisions or accounting standards.

Due to the scope of this assignment, we did not perform an analysis of the potential range of such measurements.

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

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

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

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

We, Karen I. Steffen and Daniel R. Wade, 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,

Kan J. Steff

Karen I. Steffen, FSA, EA, MAAA

Consulting Actuary

KIS/DRW/nlo

Daniel R. Wade, FSA, EA, MAAA

Daniel Woole

Consulting Actuary

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# **Section 1: Summary of Findings**



The following chart presents a summary of the calculated Employer contribution rates as of last year (the middle two columns) and this year (the far left two columns). The two columns on the far right indicate the net change in contributions. Reasons for the changes are discussed in this report.

#### Overview

Employer Contribution Boton												
Employer Contribution Rates:		June 30	2008			Decembe	r 31 :	2007		Increase (	Decre	(226
	7	Fotal Calcul				otal Calcul			Increase (Decrease) Total Calculated Rates			
		re CCR		r CCR		ore CCR		er CCR		ore CCR		CCR
General - County Tiers I&II		31.30%		27.95%	:	29.13%	:	24.35%		2.17%		3.60%
Safety		41.36%		35.60%		37.75%		30.81%		3.61%		4.79%
General - County - Court Employees		29.35%		26.00%	:	26.40%	:	21.62%		2.95%		4.38%
General - Districts Category I		35.40%		29.44%	;	33.57%	:	27.92%		1.83%		1.52%
General - Districts Category II		34.74%		28.78%	;	33.40%	:	27.75%		1.34%		1.03%
General - Districts Category III		32.65%		26.69%	;	30.91%	:	25.26%		1.74%		1.43%
General - Districts Category IV		31.83%		26.34%	:	29.14%	2	23.97%		2.69%		2.37%
Total Plan		33.73%		29.66%	:	31.22%	:	25.88%		2.51%		3.78%
Projected Employer Contribution Dollar	s:											
(all amounts in millions)		June 30	, 2008			December	r 31, 2	2007		Increase (	Decre	ase)
	1	Total Calcul	ated Ra	ates	To	otal Calcul	ated I	Rates	Total Calculated Rates			
	Befo	re CCR	Afte	r CCR	Bef	ore CCR	Afte	er CCR	Before CCR After CCR			CCR
General - County Tiers I&II	\$	104.0	\$	92.8	\$	86.5	\$	72.3	\$	17.5	\$	20.5
Safety	\$	49.7	\$	42.7	\$	41.3	\$	33.7	\$	8.4	\$	9.0
Total County excluding Court Employees	\$	153.7	\$	135.5	\$	127.8	\$	106.0	\$	25.8	\$	29.5
General - County - Court Employees	\$	6.7	\$	5.9	\$	5.8	\$	4.7	\$	0.9	\$	1.2
General - Districts Category I	\$	2.1	\$	1.7	\$	1.9	\$	1.5	\$	0.2	\$	0.2
General - Districts Category II	\$	1.1	\$	0.9	\$	0.9	\$	8.0	\$	0.2	\$	0.1
General - Districts Category III	\$	5.7	\$	4.7	\$	4.9	\$	4.0	\$	0.8	\$	0.7
General - Districts Category IV	\$	0.2	\$	0.2	\$	0.2	\$	0.2	\$	-	\$	-
Total Plan	\$	169.4	\$	148.9	\$	141.6	\$	117.3	\$	27.8	\$	31.6

#### Summary of Changes

The following discusses significant changes since the last valuation. The financial impact of these changes is shown in detail in Exhibit 17 on pages 49 and 50.

Tier II: Effective October 27, 2007, the County Board of Supervisors adopted new retirement benefits for most KCERA County General members hired on or after that date. Members covered by the new level of benefits are referred to as "Tier II" members and the members covered by the prior level of retirement benefits are referred to as "Tier I" members. See Appendix B for a more detailed description of the benefits provided under Tier I and Tier II for General members.

Per the updated Funding Policy adopted November 19. 2008, separate total Normal Cost and total member contribution offset calculations are performed for Tier I and Tier II categories.

It is our understanding that some Special Districts have adopted the new Tier II retirement benefits after June 30, 2008. In accordance with the Funding Policy, these benefits were not reflected.

- Timing of Valuation: Prior actuarial valuations were performed as of December 31 of each year, through and including December 31, 2007, to determine the contribution rate for the following fiscal year, beginning July 1. Beginning with this report, the valuations will be performed annually, as of June 30 to determine the contribution rate for the fiscal year beginning one year and one day later.
- **Investigation of Experience:** An investigation of experience was performed for KCERA for the period through January 1, 2006 through June 30, 2008. The recommended assumptions from our November 11, 2008 report were adopted by the Board of Retirement at its November 19, 2008 meeting. In particular, the investment earnings assumption was reduced from 8.00% to 7.75% and accounted for the majority of the contribution rate increases due to the changes in assumptions.

All actuarial assumptions were reviewed at that time and changes were made to the assumptions for investment return, mortality, and the probabilities for retirement, disability, terminations, refunds, and reciprocity. Please see Appendix A for a summary of all assumptions used for this actuarial valuation.

#### **Summary of** Changes (continued)

**Investment Returns:** KCERA's investment returns were negative since the prior valuation on a Market Value basis. However, due to the asset smoothing method, only 10% of the losses from those six months are recognized with this valuation. Meanwhile, deferred gains from 2004 through 2006 are being recognized, as well as the deferred loss from 2007.

After applying the asset-smoothing method, the rate of return on the Actuarial Value of Assets was slightly higher than the assumed rate. Note that as of the valuation date, a \$197.5 million net investment return loss is being deferred. These deferred losses will be reflected in future valuations.

**Experience since prior valuation:** Demographic and salary experience during the first half of 2008 led to changes in the employer contribution rates. Some experience gains and losses are to be expected as part of the normal variation between actual and expected experience. The changes due to actual experience were well within a reasonable level of expected fluctuation.

Total experience, including gains from the assets, resulted in contribution rate decrease of 0.12% for County General members, a 0.60% increase for District General members. and a 0.31% increase for Safety members. Salary increases were the primary reason for the net increases while the weighting of new employees under Tier II contributed to the net gain for the County General group.

- COLA Contribution Reserve (CCR): Any funds in the COLA Contribution Reserve (CCR) as of December 31 are used to offset the required 2.0% COLA contributions for the subsequent fiscal year, commencing on July 1. Because the final December 31, 2008 CCR account balance is not known at this time, an estimate is used. Please see Exhibit 9 for an allocation and estimate of the December 31, 2008 CCR.
- **Combined Categories for Member Contribution Offset:** For the District groups, Categories II and IV have been combined for purposes of calculating the member contribution offset. The employer Normal Cost contributions are calculated by taking the Total Normal Cost and subtracting the expected contributions made by the members in the cost sharing group. The formulas for determining member contributions are the same for all members in each category.

#### **Summary of** Recommendations

Exhibit 1, found at the end of this Section, summarizes this year's valuation results and compares them to the prior valuation report. The recommended employer contribution rates for the fiscal year commencing July 1, 2009 are shown by contributing employer groups on page 1. Member contributions, also effective July 1, 2009 are shown in Appendix D.

#### **Funding Status**

The Funded Ratio for the Regular Benefits decreased from 77% to 72%.

In accordance with the Board's funding policy, the funding status is measured using the Actuarial Value of Valuation Assets. As of June 30, 2008, the Market Value of Assets is 93% of the Actuarial Value of Valuation Assets. Thus, on a market value basis, the Funded Ratio for the Regular Benefits would be about 67%.

The funding status for the Supplemental Retirement Benefit Reserve (SRBR) approved benefits increased from 199% in the 2007 valuation to 203% for this June 30, 2008 valuation. A funded ratio over 100% indicates the SRBR unallocated reserve assets are more than sufficient to meet the expected benefit obligations. The portion of the assets greater than the present value of the approved benefits is referred to as the Funding Excess Amount.

The remainder of this Section and Sections 2-7 discuss KCERA's financial status as of June 30, 2008.

#### **Employer Contribution Rate**

Under the Board's current funding objectives, the total calculated Employer contribution rate is 33.73% of payroll, prior to the application of the CCR credits. This is equal to the payment of the normal cost rate plus a 27.5-year amortization of the Unfunded Actuarial Accrued Liability (UAAL). It should be noted that the 33.73% is a weighted average for all KCERA employers and for both General and Safety members. The actual percent of payroll to be contributed by each employer for each member varies by their benefits and member contributions.

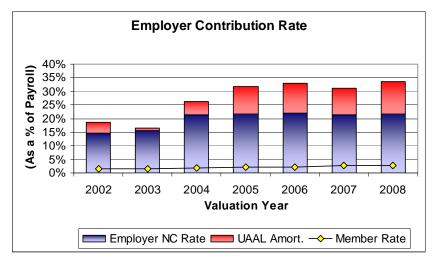
After application of the credit for the CCR, the total weighted employer contribution rate is 29.66%.

The new rates are effective for the fiscal year beginning July 1, 2009. The 33.73% total contribution rate (29.66% employer contributions plus 4.06% for the CCR credits) is adequate to maintain the funding of the retirement system based on the current actuarial methods and assumptions and satisfies the funding policy objectives that call for the UAAL to be paid off by December 31, 2035.

See Exhibits 14-16 for the employer contribution rates by group and class.

#### **Employer Contribution Rate** (continued)

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



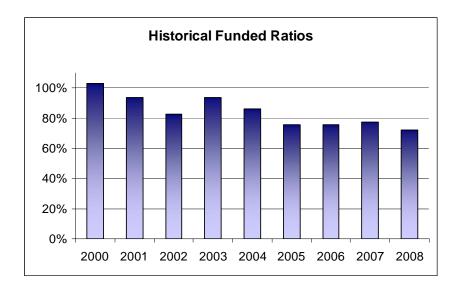
#### **Member Rates**

The member contribution rates are projected to average about 2.8% of pay for contributory cost groups. This rate should increase over time as new members contribute at a higher rate and for a longer period of time. See the description of changes in member contribution rates in Section 5. Member contribution rates will change effective July 1, 2009 based on the results of the 2008 Experience Study and changes in the actuarial assumptions.

## **Funding Progress**

One measure of the funding adequacy of the plan is the Funded Ratio which compares the value of the Actuarial Value of Assets (net of certain non-valuation reserves) to the Actuarial Accrued Liability (AAL), for all KCERA employers combined. KCERA's Funded Ratio increased rapidly in the last half of the 1990s. reaching 103.3% in 2000. However, due primarily to asset losses and benefit improvements, the Funded Ratio has decreased significantly since then. Currently, the Funded Ratio is 72.3%; that is, the actuarial value of the Valuation Assets of \$2.7 billion is about 28% less than the actuarial accrued liabilities of \$3.7 billion.

	Ν	/larket	Va	aluation	Accrued		Funded	lı	nactive	P	Active
Year	١	√alue	Α	ssets	Liability		Ratio		PVB	AAL	
2000	\$	1,619	\$	1,435	\$	1,389	103.3%				
2001	\$	1,511	\$	1,508	\$	1,612	93.6%				
2002	\$	1,385	\$	1,570	\$	1,899	82.7%	\$	925	\$	974
2003	\$	2,016	\$	1,928	\$	2,059	93.6%	\$	1,067	\$	992
2004	\$	2,225	\$	2,013	\$	2,336	86.1%	\$	1,147	\$	1,189
2005	\$	2,396	\$	2,164	\$	2,862	75.6%	\$	1,437	\$	1,425
2006	\$	2,782	\$	2,352	\$	3,109	75.7%	\$	1,629	\$	1,480
2007	\$	2,955	\$	2,590	\$	3,356	77.2%	\$	1,774	\$	1,582
2008	\$	2,711	\$	2,654	\$	3,672	72.3%	\$	1,914	\$	1,758



#### **Assets**

For the six month period ending June 30, 2008, we estimate that KCERA earned -6.74%, net of all expenses, on its market value of assets.

KCERA uses an asset-smoothing method in the determination of valuation assets used in the calculation of UAAL contribution. Under this method, the market value returns are smoothed over a five-year period. Due to the recognition of prior gains, the return on the actuarial valuation assets was higher, returning 4.42%.

### **Allocation of Assets** and Cost Sharing

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

Member contribution rates vary widely between different employer groups. Beginning with the 2005 valuation, the Court employees, formerly reported as part of the larger County General membership, are reported as a separate employer cost group, since they are now paying a higher member rate than the other County General members. Other cost groups use a weighted average of expected member contributions to set the Employer's net Normal Cost rate.

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

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

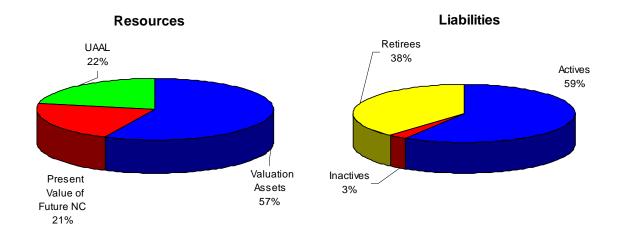
In addition, the portion of the SRBR fund allocated to the 0.5% COLA benefits under the Ventura settlement is not allocated among cost groups. Those funds have also been allocated based on the value of the total actuarial value of the 0.5% benefits for the three major cost groups: County General, District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

Note that the 0.5% COLA benefits have a current AAL of \$229.4 million compared to the allocated SRBR fund for those benefits of \$82.4 million. The difference is included in each cost group's UAAL contribution rate.

#### **Actuarial Balance** Sheet

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

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



#### **SRBR**

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

As part of the Ventura legal settlement in 2001, a portion of the SRBR funds, \$64.7 million, was set aside to be used to pay for the additional 0.5% COLA benefits to retired members. The actuarial value of this special allocation of the SRBR fund on June 30, 2008 is \$82.5 million. The remaining SRBR funds are equal to \$130.3 million.

The Board measures the future SRBR benefits under three scenarios:

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

The following chart indicates the funded ratio of the SRBR benefits under these three measurements as of June 30, 2008:

	Funded Ratio
Approved Benefits	202.5%
Target Benefits, including 20% reserve amounts	155.8%
Future Benefits	151.9%

The SRBR Funded Ratio increased since the 2007 valuation primarily due to lowering the assumed inflation rate from 3.5% to 3.25% and an additional \$4.3 million was allocated to the unallocated portion of the SRBR assets.

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



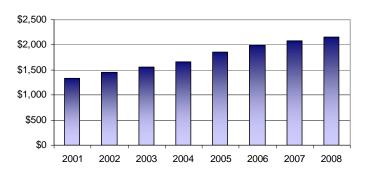
#### **Member Information**

The number of active members included in the valuation increased by 1.4% from 8,928 in 2007 to 9,057 in 2008.

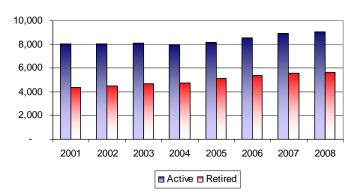
Retired member counts and average retirement benefit amounts continue to increase steadily. For 2008, there were 5,651 retired members and beneficiaries with an average benefit of \$2,150 per month. This represents a 1.8% increase in count and a 3.0% increase in the average monthly benefit.

The average actuarial present value of all future benefits per person for General Actives and Retirees (including beneficiaries) were \$271,838 and \$240,547 respectively while the average present value of future benefits per person for Safety Actives and Retirees were \$482,428 and \$553,730.

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



#### Membership Count



#### Present Value of Benefits per Person

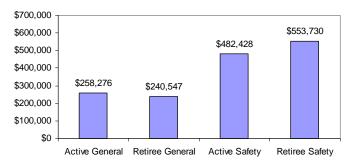




Exhibit 1: **Summary of Recommendations** (All dollar amounts in millions)

	Decembe	r 31, 2007	June 3	0, 2008	Change		
I. Total Membership							
A. Active Members B. Retired Members & Beneficiaries	5,5	928 552	5,6	9,057 5,651			
C. Vested Terminated Members D. Terminated Members Pending Refund E. Total	<u>5</u> (	185 <u>09</u> 174	40	286 <u>61</u> 455	8.52% -9.43% 1.74%		
II. Pay Rate as of January 1, 2008							
A. Annual Total Covered Payroll B. Annual Average (\$ not in millions)	*	56.7 ,157	* .	37.0 ,775	6.63% 5.12%		
III. Average Monthly Benefits Paid to Current Retirees and Beneficiaries							
A. Service Retirement     B. Disability Retirement     C. Surviving Spouse and Dependents     D. Total	\$2, <u>\$1,</u>	299 169 <u>123</u> 088	\$2, <u>\$1,</u>	368 214 <u>158</u> 150	3.00% 2.07% 3.12% 2.97%		
IV. Funded Status- Regular Benefits							
A. Actuarial Accrued Liability     B. Valuation Assets		356 590	\$3, \$2,	9.40% 2.48%			
C. Unfunded Actuarial Accrued Liability D. Funded Ratio based on Valuation Assets	\$766		. ,	017	32.79%		
E. Market Value of Assets F. Funded Ratio on Market Value of Assets	\$2,	2% 955 1%	72. \$2, 73.	-6.35% -8.25% -16.14%			
	00.	1 70	73.	.0 70	-10.1470		
V. Funded Status- SRBR  A. Present Value of Approved Benefits	\$6	2.7	\$6	4.3	2.62%		
B. SRBR Assets not allocated to 0.5% COLA	\$12	24.5	\$13	30.3	4.68%		
C. Unfunded Approved SRBR D. Funded Ratio		1.8) 9%	•	6.0) 3%	6.77% 1.78%		
VI. Required Employer Contribution	Before CCR	After CCR	Before CCR	After CCR			
Total Plan	31.22%	25.88%	33.73%	29.66%			
VII. Key Assumptions							
Interest Rate		0%		7.75%			
Wage Inflation Price Inflation		0% 0%		1.00% 3.25%			

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#### Section 2: Scope of Report



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

A summary of the findings resulting from this valuation is presented in the previous section. Section 3 describes the assets and investment experience of KCERA. The assets and investment income are presented in Exhibits 2-4. Exhibits 5-7 develop the Actuarial Value of Assets as of June 30, 2008.

Section 4 describes the benefit obligations of KCERA. Exhibit 10 presents the actuarial value of projected benefits. We also discuss the normal cost, actuarial accrued liability, and funded ratios.

Section 5 discusses the Member contribution rates.

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

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

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

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

This report includes several appendices:

•	Appendix A	A summary of the actuarial procedures, and
		assumptions used to estimate liabilities and
		contributions.

•	Appendix B	A summary of the current benefit structure, as
		determined by the provisions of governing law
		on June 30, 2008.

- Appendix C Schedules of valuation data classified by various categories of plan members.
- Appendix D Member contribution rates by plan.
- Appendix E A glossary of actuarial terms used in this report.



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#### Section 3: Assets



In many respects, an actuarial valuation can be thought of as an inventory process. The inventory is taken as of the actuarial valuation date which, for this valuation, is June 30, 2008. On that date, the assets available for the payment of retirement benefits are appraised. These assets are compared with the actuarial liabilities, which are generally well in excess of the actuarial assets. The purpose of the valuation is to determine what future contributions by the members and employers are needed to pay all expected future benefits.

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

	amounts		

		ΛII	uoliai arriourits	11 11111110113		
		Market	Actu	arial Value		Market Value as Percentage
		/alue of	Non-Valuation	Valuation		of Actuarial
		tal Assets	Reserves*	Assets	Total	Value
December 31	10	<u>tai 7133013</u>	110301103	<u>/100010</u>	<u>10tai</u>	<u>value</u>
1999	\$	1,673.4		\$1,325.9		
2000		1,618.7		1,434.9		
2001		1,511.3	\$163.6	1,508.3	\$1,671.9	90%
2002		1,384.9	91.6	1,570.3	1,661.9	83%
2003		2,016.2	114.0	1,927.6	2,041.6	99%
2004		2,224.9	119.5	2,012.5	2,132.0	104%
2005		2,395.6	113.5	2,164.3	2,277.8	105%
2006		2,781.8	158.2	2,352.0	2,510.2	111%
2007		2,954.9	240.8	2,589.8	2,830.6	104%
June 30, 2008		2,711.1	254.3	2,654.3	2,908.6	93%

<sup>\*</sup>Non-valuation reserves are the SRBR funds not allocated to the 0.5% COLA. the Contingency Reserve and the COLA Contribution Reserve.

On June 30, 2008, the total market value of the fund was \$2,71 billion. The actuarial value of the fund was determined to be \$2.91 billion, including the non-valuation reserves. The Market Value of Assets includes all plan assets. The Actuarial Value of Valuation Assets of \$2.65 billion includes only those assets that are taken into account in determining employer contribution rates for the Regular Benefits. These exclude the unallocated portion of the Supplemental Retiree Benefit Reserve, the Contingency Reserve and the COLA Contribution Reserve.

#### **Financial Exhibits**

Exhibit 2 presents a Statement of Plan Net Assets and Exhibit 3 presents a Statement of Changes in Plan Net Assets. Exhibit 4 shows the determination of the asset gains and losses over each six-month period for the past five years. Exhibit 5 displays the Market Stabilization Reserve from the smoothed gains and losses over the past five years. Exhibit 6 presents the allocation of KCERA's assets by the various reserve values determined for accounting purposes as reported to us by KCERA.

Exhibit 7 has the reconciliation of asset values between the prior actuarial valuation and the current valuation. It has this for market value, actuarial vale of assets, and the valuation asset loss.

Exhibits 8a and 8b are discussed below.

Exhibits 2-6 are taken directly from data furnished to us by KCERA in their annual financial report. We have accepted these tables for use in this report without audit, but we have reviewed them for reasonableness and consistency with previous reports.

#### **Actuarial Asset** Method

The actuarial value of assets is calculated every six months. The expected market value of assets is based on the prior period's market value of assets, the actual cash flow of contributions and benefit payments, and the assumed investment rate of return. The assumed rate of return used is one-half of the annual rate. For prior valuations, this was 4.00% (one-half of 8.00%), net of all expenses. The difference between the actual market value and the computed expected market value is smoothed, or recognized over ten six-month periods.

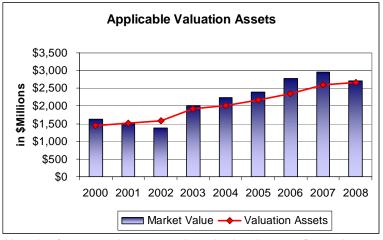
#### **Actuarial Value of Assets**

The development of the June 30, 2008 actuarial value of assets is shown in Exhibit 5. The result is an actuarial value of assets that is higher than the market value, indicating past investment losses exceed the past investment gains yet to be recognized.

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

#### **Valuation Reserves**

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



Note that for years prior to 2008, the valuation date was December 31.

#### Allocation of Assets

The allocation of valuation assets by cost group (County General, District General, and Safety) is shown in Exhibit 8. This is done because UAAL contribution rates are determined separately by cost group.

The Member Deposit Reserves, Employer Advance Reserves, and Cost-of-Living -2% Reserves are allocated by Cost Group by KCERA. The SRBR 0.5% COLA reserves are allocated in proportion to the Cost-of-Living reserves. The Retired Member reserves for General and District members are allocated based on the present value of benefits for each group.

#### Interest Crediting **Policy**

The Retirement Board has established a policy to determine the crediting of interest to reserves under KCERA. Interest credits are based on the smoothed actuarial value of assets and are determined for each six-month calendar year period ending June 30 and December 31. This is a brief summary of the order of precedence if interest credits remain to be allocated when earnings are positive, as they have been in the prior year. The numbers in brackets refer to the applicable section of the County Employees Retirement Law of 1937 (CERL).

1. Credit the Contingency Reserve until it is equal to 1% of the market value of assets. [31616]

#### **Interest Crediting Policy** (continued)

- 2. Credit the Valuation Reserves (Member Deposit, Employer Advance, COLA and Retired Member reserves) and the SRBR Reserves and the COLA Contribution Reserve (CCR) at a rate up to one-half of the assumed valuation interest rate. [31615]
- 3. Credit the Contingency Reserve until it is equal to 3% of the market value of assets. [31616]
- 4. Credit the CCR with a dollar amount equal to the 2% COLA contributions payable by all employers for the six-month period ending on the date of the interest determination. This allocation is made even if CCR funds were used rather than actual contributions made for the six-month period. [31617]
- 5. 50% of any remaining interest credits are applied to the SRBR (the unallocated portion of the SRBR reserve, not the portion set aside for the 0.5% COLA benefits). [31618]
- 6. The other 50% of the remaining interest credits are applied to all the Valuation Reserves and the CCR in proportion to the amounts in each of those reserves, on the balance in the fund for at least six full months. The allocated SRBR fund amount does not participate in this allocation of remaining earnings. [31619]

Per Section 31617 of the CERL, the "cost- of-living" contribution shall come from excess earnings on the fund. Thus, the CCR results are used as an offset to the employer contributions otherwise payable as a contribution rather than as an offset to the liability for the 2% cost-of living benefits. For purposes of crediting interest, the CCR is treated the same as the Valuation Reserves. For purposes of determining contribution rates, the CCR is excluded from Valuation Assets, since it is used later as contribution credits.

Any funds in the CCR as of the December 31 before the fiscal year will be used to offset the required 2.0% COLA contributions for the subsequent fiscal year, commencing on July 1. Such amounts will be transferred from the CCR to the 2.0% COLA Reserves on July 1. Any interest earned on the CCR after December 31 will remain in the CCR account and used towards the subsequent year's determination of the credits.

Because the December 31, 2008 balance is not known at this time, we have estimated the amount. When the amount is known in the Spring, a revision will be made if necessary. Please see Exhibit 9 for the allocation of the CCR into cost groups and the projection to December 31, 2008.

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

The allocation of Excess Earnings for the first six months of 2008 is summarized as follows:

# Allocation of Excess Earnings for the first six months of 2008

(amounts in millions)

Total Earnings to be allocated after regular interest credits					
2. Decrease Contingency Reserve to 3% of market value		7.3			
3. Credits to CCR based on prior six months of 2% COLA contributions		(13.8)			
4. Remaining Excess Earnings (1) + (2) + (3)					
5. 50% Allocation to SRBR Unallocated Fund					
6. Allocation to other valuation reserves					
Member Deposit Reserves \$ 0.4					
Employer Advance Reserves 1.2					
2% Cost of Living Reserves 1.1					
Retired Member Reserves 1.6					
CCR 0.0					

Total

4.3

Exhibit 2: **Statement of Plan Net Assets** As of June 30, 2008 and 2007\*

	June 30, 2008	June 30, 2007
Appete		
Assets Cash in County Pool	\$6,261,261	\$10,677,466
Short-Term Investment Funds	113,780,597	130,843,512
Total Cash and Short-Term Investment Funds	120,041,858	141,520,978
Total Cash and Short-Term investment Funds	120,041,030	141,320,370
Receivables:		
Investments Sold	66,051,213	78,460,549
Interest and Dividends	9,789,330	8,844,008
Contributions and Other Receivables	1,416,621	1,028,808
Mark to Market Receivables	129,695	0
Total Receivables	77,386,859	88,333,365
_		
Investments at Fair Value:	700 000 070	700 100 551
U.S. Government Debt Securities and Corporate Bonds	798,263,973	738,163,554
International Bonds	65,662,747	56,425,242
Domestic Stocks	864,318,110	1,068,136,672
International Stocks	687,198,369	753,151,429
Real Estate Investments	53,474,171	36,466,586
Alternative Investments	235,395,053	178,410,319
Collateral Held for Securities Lending	260,650,054	318,117,639
Total Investments	2,964,962,477	3,148,871,441
Capital Assets, net of accumulated depreciation		
of \$117,977 and \$78,701, respectively	82,805	82,754
	02,000	<u> </u>
Total Assets	3,162,473,999	3,378,808,538
Liabilities		
Liabilities		
Securities Purchased	188,266,824	145,163,594
Collateral Held for Securities Lent	260,650,054	318,117,639
Other Liabilities	2,448,582	3,041,667
Mark to Market Payables	0	207,870
Total Liabilities	451,365,460	466,530,770
Market Mallita Tourist Book 1 - Book	<b>AO 744 400 500</b>	00.040.077.763
Net Assets Held in Trust for Pension Benefits	\$2,711,108,539	\$2,912,277,768

<sup>\*</sup>Prior actuarial valuations reported financial data on a calendar year basis.

Exhibit 3: **Statement of Changes in Plan Net Assets** For the Years Ended June 30, 2008 and 2007

	June 30, 2008	June 30, 2007
Additions		•
Contributions:	\$137,263,673	\$128,134,672
Employer	15,031,419	12,633,790
Member	152,295,092	140,768,462
Total Contributions		
Investment Income:		
Net Appreciation in Fair Value of Investments	(281,625,951)	390,236,551
Interest	64,315,286	54,265,426
Dividends	19,962,893	13,611,508
Real Estate Investments	3,282,781	2,407,415
Other Investment Income	335	478
Total Investment Income	(194,064,656)	460,521,378
Less: Investment Expenses	8,995,490	7,885,266
Net Investment Income	(203,060,146)	452,636,112
THE HIVESUITER HISSING	(200,000,140)	402,000,112
Securities Lending Income:		
Earnings	12,255,345	16,700,929
Less: Rebates & Bank Fees	10,757,676	15,974,295
Net Securities Lending Income	1,497,669	726,634
Total Additions	(49,267,385)	594,131,208
Dadwatiana		
Deductions Retirement and Survivor Benefits	136,189,351	125,416,661
Supplemental Retirement Benefits	9,997,296	9,147,994
Refunds of Member Contributions	2,374,071	2,513,648
Administrative Expenses	3,341,021	3,030,488
Miscellaneous Expenses	105	705
Total Deductions	151,901,844	140,109,496
Net Increase (Decrease)	(201,169,229)	454,021,712
Net Assets Held in Trust for Pension Benefits		
Beginning of Year	2,912,277,768	2,458,256,056
End of Year	\$2,711,108,539	\$2,912,277,768

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

									Ac	tual Investment	Assumed			
Six-Month	Ma	arket Value of	ı	Market Value of						Return	<b>Annual Rate</b>	Е	xpected Return	Unexpected
Period Ended	Asse	ets (Beginning)		Assets (End)	С	ontributions	Ben	efit Payments	(No	et of Expenses)	of Return	(N	let of Expenses)	Gain (Loss)
06/30/2008	\$	2,954,936,919	\$	2,711,108,540	\$	29,447,062	\$	75,611,714	\$	(197,663,727)	8.00%	\$	117,274,184	\$ (314,937,911)
12/31/2007	\$	2,912,277,768	\$	2,954,936,919	\$	122,848,031	\$	72,949,005	\$	(7,239,875)	8.00%	\$	117,489,091	\$ (124,728,966)
06/30/2007	\$	2,781,826,664	\$	2,912,277,768	\$	18,197,296	\$	70,540,035	\$	182,793,843	8.00%	\$	110,226,212	\$ 72,567,632
12/31/2006	\$	2,458,256,056	\$	2,781,826,664	\$	122,571,166	\$	66,538,268	\$	267,537,710	8.00%	\$	99,450,900	\$ 168,086,809
06/30/2006	\$	2,395,625,069	\$	2,458,256,056	\$	14,198,025	\$	63,859,332	\$	112,292,294	8.00%	\$	94,831,777	\$ 17,460,517
12/31/2005	\$	2,212,271,078	\$	2,395,625,069	\$	98,310,989	\$	59,906,157	\$	144,949,159	8.00%	\$	89,258,940	\$ 55,690,220
06/30/2005	\$	2,224,898,721	\$	2,212,271,078	\$	10,983,739	\$	56,586,530	\$	32,975,149	8.00%	\$	88,083,893	\$ (55,108,744)
12/31/2004	\$	2,030,719,406	\$	2,224,898,721	\$	59,635,395	\$	54,419,552	\$	188,963,472	8.00%	\$	81,333,093	\$ 107,630,379
06/30/2004	\$	2,016,236,085	\$	2,030,719,406	\$	9,159,416	\$	55,488,271	\$	60,812,177	8.00%	\$	79,722,866	\$ (18,910,690)
12/31/2003	\$	1,782,946,667	\$	2,016,236,085	\$	50,051,399	\$	49,472,104	\$	232,710,123	8.00%	\$	71,329,453	\$ 161,380,670

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

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

Six-Month Period Ended	Unexpected Gain (Loss)	Percent Not Yet Phased In	Gain (Loss) Excluded
06/30/2008	\$ (314,937,911)	90%	\$ (283,444,120)
12/31/2007	(124,728,966)	80%	(99,783,173)
06/30/2007	72,567,632	70%	50,797,342
12/31/2006	168,086,809	60%	100,852,086
06/30/2006	17,460,517	50%	8,730,259
12/31/2005	55,690,220	40%	22,276,088
06/30/2005	(55,108,744)	30%	(16,532,623)
12/31/2004	107,630,379	20%	21,526,076
06/30/2004	(18,910,690)	10%	(1,891,069)
Total			\$ (197,469,135)

# Calculation of Actuarial Value of Assets and Valuation Assets

1. Market Value of Assets	\$ 2,711,108,540
Unrecognized Gain/Loss     (Market Stabilization Reserve)	\$ (197,469,135)
3. Preliminary Actuarial Value (1) - (2)	\$ 2,908,577,675
<ul><li>4. Corridor Around Market Value</li><li>(a) Minimum - 80% of Market Value</li><li>(b) Maximum - 120% of Market Value</li></ul>	\$ 2,168,886,832 \$ 3,253,330,248
5. Computed Actuarial Value of Assets	\$ 2,908,577,675
<ul> <li>6. Non-Valuation Reserves and Designations</li> <li>(a) SRBR unallocated to 0.5% COLA benefits</li> <li>(b) Contingency Reserve</li> <li>(c) COLA Contribution Reserve</li> <li>(d) Total</li> </ul>	\$ 130,328,390 81,333,256 42,600,264 \$ 254,261,910
7. Total Valuation Reserves (5) - (6)	\$ 2,654,315,765



Exhibit 6: **Allocation of Assets by Accounting Reserve Amounts** For June 30, 2008 and December 31, 2007

	RESERVES	Ju	ne 30, 2008	Dece	mber 31, 2007
Α	Market Stabilization Reserve	\$	(197,469,135)	\$	124,381,767
	Members Deposit Reserve-General & Courts	\$	147,060,917	\$	142,004,563
	Members Deposit Reserve-Safety		61,906,822		60,283,260
	Members Deposit Reserve-Special Districts		13,450,224		12,993,717
	Employers Advance Reserve-General & Courts		389,677,114		400,504,967
	Employers Advance Reserve-Safety		316,679,942		315,938,462
	Employers Advance Reserve-Special Districts Cost-of-Living Reserve-General & Courts		18,289,614 355,864,851		17,349,423 346,110,967
	Cost-of-Living Reserve-Safety		271,963,887		263,817,828
	Cost-of-Living Reserve-Special Districts		17,834,264		16,718,819
	Retired Members-General, Courts & Special Districts		605,439,615		573,095,795
	Retired Members-Safety		373,694,673		360,161,259
	SRBR		130,328,390		124,480,825
	SRBR 0.5% COLA		82,453,842		80,838,238
	COLA Contribution Reserve		42,600,264		27,608,922
	Contingency Reserve Current Earnings		81,333,256 -		88,648,108 -
В	Total Reserves for Actuarial Value of Assets	\$	2,908,577,675	\$	2,830,555,151
С	Total Fund Balance = A + B	\$	2,711,108,540	\$	2,954,936,919
D	Non-Valuation Reserves and Designations		420 220 200		424 400 005
	(a) SRBR unallocated to 0.5% COLA benefits		130,328,390 81,333,256		124,480,825 88,648,108
	(b) Contingency Reserve (c) COLA Contribution Reserve		42,600,264		27,608,922
	(d) Total		254,261,910	-	240,737,855
E	Valuation Reserves = B - D	\$	2,654,315,765	\$	2,589,817,297

Exhibit 7: **Reconciliation of Assets** For the Year Ended June 30, 2008

	Valuation Assets*	Actuarial Assets	Market Value of Assets
1. Total December 31, 2007 valuation	\$ 2,589,817,297	\$ 2,830,555,151	\$ 2,954,936,919
2. Changes Between Valuations			
a. Contributions	29,447,062	29,447,062	29,447,062
b. Benefit Payments	(72,199,007)	(75,611,714)	(75,611,714)
c. Transfer from Contingency Reserves	7,314,851	· · · · · · · · · · · · · · · · · · ·	-
d. Transfer to CCR	(13,840,389)	-	-
e. Investment Return, net of expenses	113,775,952	124,187,175	(197,663,727)
f. Total Changes	\$ 64,498,468	\$ 78,022,523	\$ (243,828,379)
3. Total June 30, 2008 valuation	\$ 2,654,315,765	\$ 2,908,577,675	\$ 2,711,108,540
4. Expected Return	\$ 102,737,653	\$ 112,298,913	\$ 117,274,184
5. Gain/(Loss) = 2e 4	11,038,299	11,888,262	(314,937,911)
6. Six-Month Return (net of all expenses)	4.43%	4.42%	-6.74%

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

## Exhibit 8: Allocation of Valuation Assets

Allocation of Valuation Assets	Gen	eral Members	District Members Safety Members		ety Members		Total	
Member Deposit Reserves	\$	147,060,917	\$	13,450,224	\$	61,906,822	;	\$ 222,417,963
Employer Advance Reserves		389,677,114		18,289,614		316,679,942		724,646,670
Cost-of-Living Reserves - 2%		355,864,851		17,834,264		271,963,887		645,663,002
Cost-of-Living Reserves - 0.5%		45,445,417		2,277,509		34,730,916		82,453,842
Retired Member Reserves		575,249,136		30,190,479		373,694,673	_	979,134,288
Total Valuation Assets	\$	1,513,297,435	\$	82,042,091	\$	1,058,976,239	;	\$ 2,654,315,765

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

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

# Exhibit 9: COLA Contribution Reserve – Allocation and Estimate for December 31, 2008

		Gene	ral Members	Distri	ct Members	Safe	ty Members	Total
1.	December 31, 2007 Values	\$	16,441,160	\$	2,370,042	\$	8,797,720	\$ 27,608,922
2.	June 30, 2008 Regular Interest Credit		657,646		94,802		351,909	1,104,357
3.	June 30, 2008 Excess Earnings Credit		27,748		4,000		14,848	46,596
4.	2% COLA Contribution Credit <sup>(1)</sup>		8,501,544		803,564		4,535,281	 13,840,389
5.	June 30, 2008 Values (1.+ 2.+ 3.)	\$	25,628,098	\$	3,272,408	\$	13,699,758	\$ 42,600,264
6.	COLA Contribution Credit for FY 2008-09 <sup>(2)</sup>		(15,224,807)		(1,411,039)		(7,602,394)	(24,238,240)
7.	Estimated Interest on December 31, 2008 <sup>(3)</sup>		1,025,124		130,896		547,990	 1,704,010
8.	Estimated Value as of December 31, 2008 <sup>(4)</sup> (4.+ 5.+ 6.)	\$	11,428,415	\$	1,992,265	\$	6,645,354	\$ 20,066,034

<sup>(1)</sup> Based upon 2% COLA Contributions due January 1, 2008 through June 30, 2008.



<sup>(2)</sup> Transfer to Employer Advance Reserves on July 1, 2008 based upon December 31, 2007 Actuarial Valuation Report

<sup>(3)</sup> Estimate based upon one-half of prior actuarial valuation assumption of 8.00% applied to June 30, 2008 values.

<sup>(4)</sup> This value can only be estimated until the interest allocation is complete for December 31, 2008. This estimate is used in this valuation, but a refinement may be necessary in the Spring of 2009.

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#### **Actuarial Liabilities** Section 4:



In the previous section, an actuarial valuation was compared with an inventory process, and an analysis was given of the inventory of KCERA's assets as of the valuation date, June 30, 2008. In this section, the discussion will focus on the commitments of KCERA for retirement benefits, which are referred to as its actuarial liabilities. The SRBR benefits are determined separately and are discussed in Section 8.

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

## **Actuarial Balance** Sheet - Liabilities

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

Exhibit 10 contains an analysis of the actuarial present value of all future benefits for inactive members, (both retired and terminated vested members), and active members.

The actuarial liabilities include the actuarial present value of all future benefits expected to be paid with respect to each member. For an active member, this value includes measures of both benefits already earned and future benefits to be earned. For all members, active and inactive, the value extends over the rest of their lives and for the lives of any surviving beneficiaries. All liabilities reflect the benefits effective through June 30, 2008.

#### **Actuarial Resources**

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

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



Exhibit 10: Actuarial Value of Benefits - June 30, 2008 (Dollars in millions)

		<b>.</b>				
		Resource	es			
	<u>General -</u> <u>County</u>	<u>-</u>	<u>General -</u> <u>Districts</u>		<u>Safety</u>	<u>Total</u>
Valuation Assets (Actuarial)	\$ 1,513,286,7	77 \$	82,042,091	\$ 1,05	58,976,239	\$ 2,654,305,106
Present Value of Future Member Contributions	86,177,8	49	7,658,415	2	20,311,683	114,147,947
Present Value of Future Employer Contributions to the Fund: a) Normal Cost	524,747,3	21	42,072,965	3.	11,942,655	878,762,941
b) Unfunded Actuarial Accrued Liability	670,236,0	<u>28</u>	61,598,279	_ 28	85,320,589	1,017,154,897
Total Resources	\$ 2,794,447,9	75 \$	193,371,750	\$ 1,67	76,551,166	\$ 4,664,370,891
		Liabilitie	s			
	General - County	<u>-</u>	General - Districts		<u>Safety</u>	<u>Total</u>
Present Value of Future Benefits						
1. Present Retired Members	\$ 973,176,2	49 \$	51,074,666	\$ 77	71,345,966	\$ 1,795,596,881
2. Current Inactive Members	89,629,6	29	10,216,115		18,503,339	118,349,083
3. Current Active Members	1,731,642,0	97	132,080,969	88	86,701,861	2,750,424,927
Total Actuarial Liabilities	\$ 2,794,447,9	75 \$	193,371,750	\$ 1,67	76,551,166	\$ 4,664,370,891

## **Actuarial Cost** Method

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

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

Due to the adoption of Section 31617 of the CERL, and the Ventura settlement, the normal costs and the UAAL contribution rates need to be valued in total and also into three major cost group subtotals: the Basic benefits, the 2.0% COLA, and the 0.5% COLA benefits. The latter group also uses the portion of the SRBR funds allocated to those benefits.

### **Normal Cost**

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

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

# **Normal Cost** (continued)

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

Under the KCERA funding policy adopted by the Board, separate normal cost rates are determined for different cost sharing groups based on the level of future benefits.

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

Entry Age Total Normal Co	st			
(In Dollars)	Basic	COLA - 2%	COLA - 0.5%	Total
1. General - Tier I	\$ 63,832,620	\$ 13,033,772	\$ 3,960,152	\$ 80,826,545
2. General - Tier II	1,777,527	\$ 331,167	\$ 99,692	\$ 2,208,386
3. Safety	26,356,632	6,289,528	1,965,088	34,611,248
4. All Members	\$ 91,966,779	\$ 19,654,467	\$ 6,024,932	\$ 117,646,179
As a Percent of Pay	Basic	COLA - 2%	COLA - 0.5%	Total
1. General - Tier I	18.25%	3.73%	1.13%	23.11%
2. General - Tier II	10.03%	1.87%	0.56%	12.47%
3. Safety	22.83%	5.45%	1.70%	29.98%
4. All Members	19.05%	4.07%	1.25%	24.36%

## **Actuarial Accrued** Liability

The difference between the present value of all future obligations and the present value of the future normal cost contributions is referred to as the "actuarial accrued liability" (AAL). The AAL is then compared to the value of assets available to fund benefits. and the difference is referred to as the UAAL.

# **Unfunded Actuarial Accrued Liability/ Surplus Funding**

If a UAAL amount exists, it usually results from prior years' benefit or assumption changes and the net effect of accumulated gains and losses. If the County had always contributed the current Normal Cost, if there were no prior benefit or assumption changes and if actual experience exactly matched the actuarial assumptions, the present value of all future Normal Cost contributions would be sufficient to fund all benefits and there would be no UAAL.

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

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

## **Funding Adequacy**

A key consideration in determining the adequacy of the funding of KCERA is how the UAAL is being funded. If the UAAL amount is positive, that is, the AAL to be funded is greater than the Valuation Assets, then the UAAL is amortized. Under the current funding method, the UAAL is amortized over a fixed period ending December 31, 2035. Thus, the UAAL contribution rate is funding the UAAL over 27.5 years from the valuation date.

## **Analysis of Change** in UAAL

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

The 2008 actuarial valuation reflects an increase in the UAAL of \$251.3 million for the plan year just ended.

The following table reconciles the change in the UAAL since the last valuation.

## Sources of UAAL (in millions)

Source of Change	County	District	Safety	Total Plan
December 31, 2007 Actuarial Valuation	\$504.6	\$49.8	\$211.4	\$765.8
Experience Study Changes Expected Year-to-Year Change	77.3 44.6	6.0 2.4	43.1 16.7	126.6 63.5
Expected June 30, 2008 Actuarial Valuation	\$626.5	\$58.2	\$271.2	\$955.9
Asset Gain/Loss Salary and Demographic Changes Total Experience Change	(6.2) 50.0 \$43.8	(0.4) 3.7 \$3.3	(4.4) 18.5 \$14.1	(11.0) 72.2 \$61.2
Actual June 30, 2008 Actuarial Valuation	\$670.3	\$61.5	\$285.3	\$1,017.1
Net change since December 31, 2007	\$165.7	\$11.7	\$73.9	\$251.3

Exhibit 11: Unfunded Actuarial Accrued Liability and Funded Ratio (Dollars in millions)

Basic Benefits									
		eneral – County		eneral – istricts	8	Safety		Total	
1. Actuarial Accrued Liability	\$	1,601.4	\$	107.3	\$	935.0	\$	2,643.7	
2. Valuation Assets		1,112.0		61.9		752.3		1,926.2	
<ol><li>Unfunded Actuarial Accrued Liability</li></ol>	\$	489.4	\$	45.4	\$	182.7	\$	717.5	
4. Funded Ratio		69.4%		57.7%		80.5%		72.9%	
COLA Benefits - 2%									
	G	eneral –	Ge	neral –	5	Safety		Total	
	C	ounty	Di	stricts					
Actuarial Accrued Liability	\$	452.3	\$	27.9	\$	318.1	\$	798.3	
2. Valuation Assets		355.9		17.8		272.0		645.7	
<ol><li>Unfunded Actuarial Accrued Liability</li></ol>	\$	96.4	\$	10.1	\$	46.1	\$	152.6	
4. Funded Ratio		78.7%		63.8%		85.5%		80.9%	
COLA Benefits - 0.5%									
	-	eneral – County	General – Districts		Safety		Total		
1. Actuarial Accrued Liability	\$	129.9	\$	8.4	\$	91.2	\$	229.5	
2. Valuation Assets		45.4		2.3		34.7		82.4	
3. Unfunded Actuarial Accrued Liability	\$	84.5	\$	6.1	\$	56.5	\$	147.1	
4. Funded Ratio		34.9%		27.4%		38.0%		35.9%	
Total Regular Benefits									
Total Regular Belletits	G	eneral –	Ge	eneral –	5	Safety	-	Γotals	
	C	County	Di	stricts					
Actuarial Accrued Liability	\$	2,183.5	\$	143.6	\$	1,344.3	\$	3,671.4	
2. Valuation Assets		1,513.3		82.0		1,059.0		2,654.3	
3. Unfunded Actuarial Accrued Liability	\$	670.2	\$	61.6	\$	285.3	\$	1,017.1	
a. Regular Benefits	\$	670.2	\$	61.6	\$	285.3	\$	1,017.1	
b. Golden Handshakes		<u>-</u>		0.0		<u> </u>		0.0	
c. Total	\$	670.2	\$	61.6	\$	285.3	\$	1,017.1	
4. Funded Ratio		69.3%		57.1%		78.8%		72.3%	



# **Exhibit 12:** Liability by District

<u>Category</u>	<u>District Name</u>	Member Count*		Present Value of Projected Benefits		resent Value of Future ormal Cost **	L	Actuarial Accrued iability (AAL) (A-B)	0	Actuarial Value f Assets (AVA) ro-rated by AAL)		Unfunded Actuarial Accrued bility (UAAL) (C-D)
IV	Berrenda Mesa Water	18	\$	6,086,720	\$	1,152,274	\$	4,934,446	\$	2,818,374	\$	2,116,072
III	Buttonwillow Recreation & Park	3		352,052		188,858		163,194		93,210		69,984
II	East Kern Cemetery	2		458,962		128,004		330,958		189,031		141,927
IV	Inyokern Community Services	3		405,994		117,726		288,268		164,648		123,620
I	Kern County Water Agency	136		56,048,331		10,066,018		45,982,313		26,263,404		19,718,909
II	Kern Mosquito & Vector Control	31		11,153,096		1,376,258		9,776,838		5,584,170		4,192,668
II	North of the River Sanitation	18		6,721,384		1,040,191		5,681,193		3,244,888		2,436,305
III	San Joaquin Valley Unified Air Pollution Control	446		98,328,521		33,483,574		64,844,947		37,037,046		27,807,900
II	Shafter Recreation & Park	4		380,009		-		380,009		217,047		162,962
II	West Side Cemetery	15		3,786,468		647,113		3,139,355		1,793,084		1,346,271
II	West Side Mosquito Abatement	19		6,240,582		648,139		5,592,443		3,194,198		2,398,245
II	West Side Recreation & Park	33	_	3,409,631	_	883,225	_	2,526,406	_	1,442,990	_	1,083,416
	Total District	728	\$	193,371,750	\$	49,731,380	\$	143,640,370	\$	82,042,091	\$	61,598,279

#### District Category Descriptions:



l losti in ale al

I. Kern County Water Agency: Employer picks up 100% member contributions for those hired prior to August 22, 2004.

II. Kern Mosquito & Vector Control, West Side Mosquito Abatement, Shafter Recreation & Park, West Side Cemetery, West Side Recreation & Park, North of the River Sanitation, and East Kern Cemetery: Adopted 1997 MOU. Members hired prior to August 7, 2004 (January 8, 2005 for Kern Mosquito & Vector Control) only contribute for first five years of service.

III. San Joaquin Valley Unified Air Pollution Control and Buttonwillow Recreation & Park: Did not adopt 1997 MOU. Members contribute 50% of rates shown on page D-2 for 30 years of service, regardless of hire date.

IV. Berrenda Mesa Water and Inyokern Community Services: Adopted 3% at 60 formula on a prospective basis only.

<sup>\*</sup> Includes both active and inactive members.

<sup>\*\*</sup> Includes both employer and employee contributions.

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



**Basic** Contributions For KCERA, member contributions vary by employer, age at hire, and by date of hire. For Safety members, they can also vary by bargaining unit.

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

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

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

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

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

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

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

### **General Members**

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

Aside from the exceptions noted below, General members hired prior to August 7, 2004 (January 8, 2005 for Kern Mosquito and Vector Control District) pay the full member contribution rates for the first five years of service. Those hired after that date pay the full member contribution rates for 30 years.

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

# **General Members** (continued)

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

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

For Tier II members (County members hired on or after October 27, 2007), the contribution rates are designed to provide an average annuity, payable at age 60, equal to 1/120 of the final average salary, in compliance with CERL 31621.

### Safety Members

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

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

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

Safety members hired prior to 2007 pay contributions for the first five years of service. Those hired after 2007 will contribute for 30 years of service. For those hired in 2007, the length of contribution depends upon hire date and bargaining unit.

For members in certain bargaining units hired after collectively bargained dates in 2007, the rates described above have been replaced by one uniform rate for all entry ages. That rate is designed to result in average contribution rates comparable to the rates based upon the 3/200 described above. The new rates effective July 1, 2009 will be 12.30% for salary above \$350/month and 8.20% for the first \$350.

#### Exhibit 13: Member Contribution Rates

	Member		0 0			
	Valuation	Contribution	Contribution Provides	Adopted	Soc Sec	
Plan	Report Label	Code Section	Average Annuity of	1997 MOU	Integration	Pre-Tax
General - County Tier I	General - County Tier I	31621.8	1/100 of FAS at age 55	Yes	Yes	Yes
General - County Tier II	General - County Tier II	31621	1/120 of FAS at age 60	NA	Yes	Yes
	General - County - Court		1/100 of FAS at age 55 plus			
General - County - Court Employees	Employees	31621.8	supplemental 2.5% <sup>(5)</sup>	Yes	Yes	Yes
District - Berrenda Mesa Water	District Category IV	31621.8	1/100 of FAS at age 55	Yes	No	Yes
			1/100 of FAS at age 55			
District - Buttonwillow Recreation & Park	District Category III	31621.8	(Member pays 50%) <sup>(3)</sup>	No	No	No
District - East Kern Cemetery	District Category II	31621.8	1/100 of FAS at age 55 <sup>(2)</sup>	Yes	Yes	Yes
District - Inyokern Community Services	District Category IV	31621.8	1/100 of FAS at age 55	Yes	No	No
			1/100 of FAS at age 55			
			(100% employer pickup if			
District - Kern County Water Agency	District Category I	31621.8	hired prior to 8/22/2004) <sup>(1)</sup>	Yes	Yes	Yes
District - Kern Mosquito & Vector Control	District Category II	31621.8	1/100 of FAS at age 55	Yes	Yes	Yes
District - North of River Sanitation	District Category II	31621.8	1/100 of FAS at age 55	Yes	Yes	Yes
District - San Joaquin Valley Unified Air			1/100 of FAS at age 55			
Pollution Control	District Category III	31621.8	(Member pays 50%) <sup>(3)</sup>	No	No	Yes
District - Shafter Recreation & Park	District Category II	31621.8	1/100 of FAS at age 55	Yes	No	Yes
District - West Side Cemetery	District Category II	31621.8	1/100 of FAS at age 55	Yes	Yes	No
District - West Side Mosquito Abatement	District Category II	31621.8	1/100 of FAS at age 55	Yes	Yes	No
District - West Side Recreation & Park	District Category II	31621.8	1/100 of FAS at age 55	Yes	Yes	No
			1/100 of FAS at age 50 plus		1	
			phased special supplement			
Safety - County	Safety	31639.25	of an additional 50% <sup>(6)</sup>	Yes	Yes	Yes

#### FAS = Final Average Salary

Aside from the exceptions noted below, General members hired prior to August 7, 2004 (January 8, 2005 for Kern Mosquito and Vector) pay the full member contribution rates for the first five years of service as a result of the 1997 MOU. Those hired after that date pay the full member contribution rates for 30 years of service.

#### Notes:

- 1. Kern County Water Agency (District Category I) employees hired prior to August 22, 2004, the employer picks up 100% of all member contributions.
- 2. District Category II adopted the 1997 MOU. Member contribution rules the same as General Tier I.
- Buttonwillow and San Joaquin Valley Unified Air Pollution Control District (District Category III) did not adopt the 1997 MOU.
   Members in those districts pay 50% of the full rates for 30 years of service, regardless of hire date.
- 4. District Category IV adopted the 3% at 60 Formula on a prospective basis only. Member contribution rules the same as General Tier I.
- 5. Court employees pay contributions based upon 31621.8 for only the first five years of service, regardless of hire date. Court employees pay an additional 2.5% of the base salary for their entire career.
- 6. For Safety members hired prior to May 15, 2004, the contribution rates were based upon a target of 1/100 of FAS at age 50 plus a special supplement up to a maximum of 3/200 of FAS at age 50. For Safety members hired prior to 2007, members contribute only for the first five years of service. For Safety members hired after 2007, members contribute for 30 years of service. For Safety members hired in 2007, the contribution rate depends upon hire date and bargaining unit. For members hired in certain bargaining units, the rates by entry age have been replaced by a uniform rate for all entry ages. The uniform rate continues to be integrated with social security.



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#### **Employer Contributions** Section 6:



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

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

The total calculated employer contribution rates for each cost sharing group can be found in Exhibits 14-16. These results are expressed as a percentage of payroll and annual contribution dollars.

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

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

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

Exhibit 14 shows the contribution rates for the County, District, and Safety groups. Exhibit 15 further breaks down the County rates between Tier I. Tier II. and the Courts. Exhibit 16 further breaks down the District rates between the four District categories.

# **Contribution Rate** (continued)

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

The UAAL contributions are split between those attributable to the 3% at 60 benefits and all other UAAL amounts starting with the 2005 valuation. The fixed portion of the UAAL rates attributable to the 3% @ 60 benefit enhancements are:

	County General	District General
	members	members
Basic Benefits	2.43%	2.31%
2% COLA	0.51%	0.47%
0.5% COLA	0.13%	0.13%
Total	3.07%	2.91%

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

#### **Court Employees**

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

Exhibit 14: **Total Plan Contributions by UAAL Cost Sharing Group** 

	General County with Courts	General District	Safety	Total
A. Basic Benefits				
Total Normal Cost     Projected Employee Contributions	17.83% 2.71%	18.25% 3.22%	22.83% 2.92%	19.05% 2.79%
3. Employer Normal Cost (1-2)	15.12%	15.04%	19.91%	16.26%
4. Amortization of Unfunded Actuarial Accrued Liability	8.27%	9.99%	9.15%	8.57%
5. Employer Contribution (3+4)	23.38%	25.03%	29.07%	24.83%
<ul><li>B. COLA Benefits 2%</li><li>1. Employer Normal Cost</li></ul>	3.63%	3.73%	5.45%	4.07%
2. Amortization of Unfunded Actuarial Accrued Liability	1.63%	2.22%	2.31%	1.82%
3. Employer Contribution (1+2)	5.26%	5.95%	7.76%	5.89%
<ul><li>C. COLA Benefits 0.5%</li><li>1. Employer Normal Cost</li></ul>	1.10%	1.13%	1.70%	1.25%
2. Amortization of Unfunded Actuarial Accrued Liability	1.43%	1.34%	2.83%	1.76%
3. Employer Contribution (1+2)	2.53%	2.47%	4.53%	3.00%
<ul><li>D. Total Benefits</li><li>1. Total Normal Cost</li></ul>	22.56%	23.11%	29.98%	24.36%
Projected Employee Contributions     Employer Normal Cost (1-2)	2.71% 19.85%	3.22% 19.90%	2.92% 27.06%	2.79% 21.58%
Amortization of Unfunded Actuarial Accrued Liability	11.32%	13.56%	14.30%	12.15%
5. Total Employer Contribution (3+4)	31.17%	33.45%	41.36%	33.73%
COLA Contribution Reserve Adjustments				
a.) CCR Credits*	3.35%	7.63%	5.76%	
b.) Max CCR Credits (B.3) c.) CCR Adjustments (Minimum of a. and b.)	5.26% 3.35%	5.95% 5.95%	7.76% 5.76%	4.06%
, ,				
7. Adjusted Employer Contribution (5-6c.)	27.82%	27.50%	35.60%	29.66%
Estimated Payroll for Fiscal Year beginning July 1, 2009	\$ 354,992,455	\$ 27,144,840	\$ 120,056,612	\$ 502,193,907
Estimated Dollar Amounts A. Basic Benefits	General County with Courts	District	Safety	Total
Projected Employee Contributions Employer Contribution	\$ 9,616,159 83,013,326	\$ 872,902 6,794,697	\$ 3,505,653 34,900,457	\$ 13,994,714 124,708,480
B. COLA Benefits 2% Employer Contribution	18,651,239	1,614,337	9,316,393	29,581,969
C. COLA Benefits 0.5% Employer Contribution	8,982,786	672,225	5,438,565	15,093,576
D. Total Benefits	0.040.450	070.000	2 505 050	12 004 744
Projected Employee Contributions Total Employer Contribution	9,616,159 110,647,350	872,902 9,081,259	3,505,653 49,655,415	13,994,714 169,384,024
COLA Contribution Reserve Adjustments				
a.) CCR Credits* b.) Max CCR Credits (B.)			\$ 6,915,261 9,316,393	
c.) CCR Adjustments (Minimum of a. and b.)	\$ 11,892,247	\$ 1,614,337	\$ 6,915,261	\$ 20,421,845 **
Adjusted Employer Contribution	\$ 98,755,103	\$ 7,466,922	\$ 42,740,154	\$ 148,962,179

<sup>\*</sup> Based upon the estimated COLA Contribution Reserve as of December 31, 2008. This estimate may need to be refined in Spring 2009.
\*\* CCR Adjustments are based on the individual Category. The Total column is the sum of General County, General District, and Safety.

#### Exhibit 15a: **County General Contributions**

		Tier I w/o Courts		Tier II w/o Courts	Total General County ts w/o Courts			Courts		Total eneral County with Courts
A. Basic Benefits										
1. Total Normal Cost		18.25%		10.03%		17.80%		18.25%		17.83%
Projected Employee Contributions     Employer Normal Cost (1-2)		2.36% 15.89%		5.72% 4.31%		2.55% 15.25%		5.08% 13.17%		2.71% 15.12%
3. Employer Normal Cost (1-2)		15.09%		4.31%		15.25%		13.17%		13.12%
4. Amortization of Unfunded Actuarial Accrued Liability		8.27%		8.27%		8.27%	_	8.27%		8.27%
5. Employer Contribution (3+4)		24.16%		12.58%		23.52%		21.44%		23.38%
<ul><li>B. COLA Benefits 2%</li><li>1. Employer Normal Cost</li></ul>		3.73%		1.87%		3.62%		3.73%		3.63%
2. Amortization of Unfunded Actuarial Accrued Liability		1.63%		1.63%		1.63%	_	1.63%		1.63%
3. Employer Contribution (1+2)		5.35%		3.50%		5.25%		5.35%		5.26%
<ul><li>C. COLA Benefits 0.5%</li><li>1. Employer Normal Cost</li></ul>		1.13%		0.56%		1.10%		1.13%		1.10%
2. Amortization of Unfunded Actuarial Accrued Liability		1.43%		1.43%		1.43%		1.43%		1.43%
3. Employer Contribution (1+2)		2.56%		1.99%		2.53%		2.56%		2.53%
D. Total Benefits 1. Total Normal Cost		23.11%		12.47%		22.52%		23.11%		22.56%
Projected Employee Contributions		2.36%		5.72%		2.55%		5.08%		2.71%
3. Employer Normal Cost (1-2)		20.75%		6.74%		19.98%		18.03%		19.85%
4. Amortization of Unfunded Actuarial Accrued Liability		11.32%		11.32%		11.32%	_	11.32%		11.32%
5. Total Employer Contribution (3+4)		32.07%		18.06%		31.30%		29.35%		31.17%
6. COLA Contribution Reserve Adjustments										
a.) CCR Credits*		3.35%		3.35%		3.35%		3.35%		3.35%
b.) Max CCR Credits (B.3)		5.35%		3.50%		5.25%		5.35%		5.26%
c.) CCR Adjustments (Minimum of a. and b.)		3.35%		3.35%		3.35%		3.35%		3.35%
7. Adjusted Employer Contribution (5-6c.)		28.72%		14.71%		27.95%		26.00%		27.82%
Estimated Payroll for Fiscal Year beginning July 1, 2009	\$	313,800,579	\$	18,424,744	\$	332,225,323	\$	22,767,132	\$	354,992,455
Estimated Dollar Amounts		Tier I w/o Courts		Tier II w/o Courts	G	Total eneral County w/o Courts		Courts		Total eneral County with Courts
A. Basic Benefits								. <u></u>		·
Projected Employee Contributions Employer Contribution	\$	7,405,694 75,814,220	\$	1,053,895 2,317,833	\$	8,459,589 78,132,053	\$	1,156,570 4,881,273	\$	9,616,159 83,013,326
B. COLA Benefits 2%										
Employer Contribution		16,788,331		644,866		17,433,197		1,218,042		18,651,239
C. COLA Benefits 0.5%										
Employer Contribution		8,033,295		366,652		8,399,947		582,839		8,982,786
D. Total Benefits										
Projected Employee Contributions		7,405,694		1,053,895		8,459,589		1,156,570		9,616,159
Total Employer Contribution		100,635,846		3,329,351		103,965,197		6,682,153		110,647,350
OOLA Oostelle flee Beere e A.E. steerede										
COLA Contribution Reserve Adjustments a.) CCR Credits*	\$	10 512 210	¢	617,229			\$	762,699		
a.) CCR Credits* b.) Max CCR Credits (B.)	Ф	10,512,319 16,788,331	\$	617,229 644,866			Ф	762,699 1,218,042		
c.) CCR Adjustments (Minimum of a. and b.)	\$	10,512,319	\$	617.229	\$	11.129.548	\$	762,699	\$	11.892.247
	•			,		, -,-	•	•	•	,,
Adjusted Employer Contribution	\$	90,123,526	\$	2,712,122	\$	92,835,649	\$	5,919,454	\$	98,755,103

<sup>\*</sup> Based upon the estimated COLA Contribution Reserve as of December 31, 2008. This estimate may need to be refined in Spring 2009.
\*\* CCR Adjustments are based on the individual Category.

#### **County Total Contributions** Exhibit 15b:

		eneral County w/o Courts		Safety		Total County w/o Courts
A. Basic Benefits						
Total Normal Cost     Projected Employee Contributions		17.80% 2.55%		22.83% 2.92%		19.13% 2.64%
3. Employer Normal Cost (1-2)		15.25%	_	19.91%	_	16.49%
4. Amortization of Unfunded Actuarial Accrued Liability		8.27%	_	9.15%		8.50%
5. Employer Contribution (3+4)		23.52%		29.07%		24.99%
B. COLA Benefits 2%  1. Employer Normal Cost		3.62%		5.45%		4.11%
Amortization of Unfunded Actuarial Accrued Liability		1.63%		2.31%	_	1.81%
3. Employer Contribution (1+2)		5.25%		7.76%		5.92%
<ul><li>C. COLA Benefits 0.5%</li><li>1. Employer Normal Cost</li></ul>		1.10%		1.70%		1.26%
2. Amortization of Unfunded Actuarial Accrued Liability		1.43%		2.83%		1.80%
3. Employer Contribution (1+2)		2.53%		4.53%		3.06%
D. Total Benefits						
Total Normal Cost     Section 1		22.52%		29.98%		24.50%
Projected Employee Contributions     Employer Normal Cost (1-2)	-	2.55% 19.98%	_	2.92% 27.06%	_	2.64% 21.86%
4. Amortization of Unfunded Actuarial Accrued Liability		11.32%		14.30%		12.11%
5. Total Employer Contribution (3+4)		31.30%		41.36%		33.97%
6. COLA Contribution Reserve Adjustments						
a.) CCR Credits*		3.35%		5.76%		
b.) Max CCR Credits (B.3)		5.25% 3.35%		7.76%		3.99%
c.) CCR Adjustments (Minimum of a. and b.)		3.33%		5.76%		3.99%
7. Adjusted Employer Contribution (5-6c.)		27.95%		35.60%		29.98%
Estimated Payroll for Fiscal Year beginning July 1, 2009	\$	332,225,323	\$	120,056,612	\$	452,281,935
Estimated Dollar Amounts		eneral County w/o Courts		Safety		Total w/o Courts
A. Basic Benefits     Projected Employee Contributions	\$	8,459,589	\$	3,505,653	\$	11,965,242
Employer Contribution	Ψ	78,132,053	Ψ	34,900,457	Ψ	113,032,510
B. COLA Benefits 2% Employer Contribution		17,433,197		9,316,393		26,749,590
C. COLA Benefits 0.5% Employer Contribution		8,399,947		5,438,565		13,838,512
D. Total Benefits						
Projected Employee Contributions Total Employer Contribution		8,459,589 103,965,197		3,505,653 49,655,415		11,965,242 153,620,612
COLA Contribution Reserve Adjustments						
a.) CCR Credits*			\$	6,915,261		
b.) Max CCR Credits (B.)			_	9,316,393		
c.) CCR Adjustments (Minimum of a. and b.)	\$	11,129,548	\$	6,915,261	\$	18,044,809 **
Adjusted Employer Contribution	\$	92,835,649	\$	42,740,154	\$	135,575,802

<sup>\*</sup> Based upon the estimated COLA Contribution Reserve as of December 31, 2008. This estimate may need to be refined in Spring 2009.

<sup>\*\*</sup> CCR Adjustments are based on the individual Category.



#### Exhibit 16: **District Contributions**

		ategory I		ategory II		Category III	Ca	tegory IV**		Total
A. Basic Benefits     1. Total Normal Cost		18.25%		18.25%		18.25%		18.25%		18.25%
2. Projected Employee Contributions		1.35%		2.01%		4.10%		2.01%		3.22%
3. Employer Normal Cost (1-2)		16.90%		16.25%		14.15%		16.25%		15.04%
4. Amortization of Unfunded Actuarial Accrued Liability	_	10.06%		10.06%	_	10.06%		7.75%		9.99%
5. Employer Contribution (3+4)		26.96%		26.30%		24.21%		24.00%		25.03%
<ul><li>B. COLA Benefits 2%</li><li>1. Employer Normal Cost</li></ul>		3.73%		3.73%		3.73%		3.73%		3.73%
2. Amortization of Unfunded Actuarial Accrued Liability		2.23%		2.23%		2.23%		1.76%		2.22%
3. Employer Contribution (1+2)		5.96%		5.96%		5.96%		5.49%		5.95%
C. COLA Benefits 0.5%  1. Employer Normal Cost		1.13%		1.13%		1.13%		1.13%		1.13%
2. Amortization of Unfunded Actuarial Accrued Liability		1.34%		1.34%		1.34%		1.21%		1.34%
3. Employer Contribution (1+2)		2.48%		2.48%		2.48%		2.35%		2.47%
D. Total Benefits										
Total Normal Cost		23.11%		23.11%		23.11%		23.11%		23.11%
2. Projected Employee Contributions		1.35%		2.01% 21.10%		4.10% 19.01%		2.01%		3.22% 19.90%
3. Employer Normal Cost (1-2)		21.76%		21.10%		19.01%		21.10%		19.90%
4. Amortization of Unfunded Actuarial Accrued Liability		13.64%		13.64%		13.64%		10.73%		13.56%
5. Total Employer Contribution (3+4)		35.40%		34.74%		32.65%		31.83%		33.45%
6. COLA Contribution Reserve Adjustments										
a.) CCR Credits*		7.63%		7.63%		7.63%		7.63%		7.63%
b.) Max CCR Credits (B.3)		5.96%		5.96%		5.96%		5.49%		5.95%
c.) CCR Adjustments (Minimum of a. and b.)		5.96%		5.96%		5.96%		5.49%		5.95%
7. Adjusted Employer Contribution (5-6c.)		29.44%		28.78%		26.69%		26.34%		27.50%
Estimated Payroll for Fiscal Year beginning July 1, 2009	\$	5,823,852	\$	3,078,313	\$	17,498,957	\$	743,719	\$	27,144,840
Estimated Dollar Amounts A. Basic Benefits		ategory I		ategory II	_	Category III	Ca	tegory IV**		Total
Projected Employee Contributions Employer Contribution	\$	78,622 1,570,110	\$	61,874 809,596	\$	717,457 4,236,497	\$	14,949 178,493	\$	872,902 6,794,697
B. COLA Benefits 2% Employer Contribution		347,102		183,467		1,042,938		40,830		1,614,337
C. COLA Benefits 0.5% Employer Contribution		144,432		76,342		433,974		17,477		672,225
D. Total Benefits		78,622		61,874		717,457		14,949		872,902
Projected Employee Contributions Total Employer Contribution		2,061,644		1,069,406		5,713,409		236,800		9,081,259
COLA Contribution Reserve Adjustments										
a.) CCR Credits*	\$	444,360	\$	234,875	\$	1,335,170	\$	40,830		***
b.) Max CCR Credits (B.)	\$	347,102	\$	183,467	\$	1,042,938	\$	40,830	\$	1 614 227
c.) CCR Adjustments (Minimum of a. and b.)	Ф	347,102	Ф	183,467	Ф	1,042,938	Ф	40,830	Ф	1,614,337
Adjusted Employer Contribution	\$	1,714,542	\$	885,938	\$	4,670,472	\$	195,970	\$	7,466,922

<sup>\*</sup> Based upon the estimated COLA Contribution Reserve as of December 31, 2008. This estimate may need to be refined in Spring 2009.

<sup>\*\*\*</sup> District Category IV adopted the 3% at 60 benefit formula prospectively only, reducing their share of the UAAL.

\*\*\* CCR Adjustments are based on the individual Category. The Total column is the sum of the four categories.

## Changes in the **Contribution Rates**

The following Exhibit 17 illustrates the various sources of changes that impacted both the employer contribution rates and the funded ratio. It shows the analysis of change both in aggregate for all of KCERA, as well as for the County General, District General and Safety cost sharing groups.

Experience during the 2008 year resulted in an overall 2.51% increase in the employer contribution rate. Some experience gains and losses are to be expected as part of the normal variation between actual and expected experience. The changes due to actual experience were well within a reasonable level of fluctuation. The primary reasons for the changes are summarized as follows:

- **Experience Study Changes:** The Investigation of Experience that covered the period January 1, 2006 to June 30, 2008 indicated that certain actuarial assumptions needed to be changed. The major changes included a decrease in the underlying cost of living assumption which in turn reduced the expected investment return rate from 8.00% to 7.75%. This was expected to increase the overall total contribution rate by 2.38%. The second major assumption change was to strengthen the mortality assumption and this was expected to increase the overall contribution rate by 0.70%. Offsetting these increases, other changes in demographic assumptions were expected to decrease the contribution rates by 1.20% for a net impact of a 1.89% increase due to the change in assumptions.
- **Expected Year to Year Change:** Normally we would expect a slight increase or decrease in the contribution rates based on the expected experience, depending on whether or not a significant decrease in the UAAL amount occurred based on the current amortization schedule. However for this short six-month period between the December 31, 2007 and the June 30, 2008 valuations, the normal expected pattern of employer contributions did not materialize. This is because the County normally makes a substantially large payment at the beginning of the fiscal year and then 'trues' up the required dollar contributions at the end of the fiscal year period. During this short valuation cycle, no significant employer contributions were paid and thus an expected increase in contribution rates occurred.
- Asset Gain/Loss: Under the actuarial asset valuation method, gains and losses are recognized over a five year period. For this valuation, there was a recognition of deferred gains that resulted in small experience gains over the returns expected.

# Changes in the **Contribution Rates** (continued)

- Change in Member Contribution Rates: The County is phasing in higher contribution rates for Safety members. In addition, more Safety and General members are now required to make contributions after five years of service. As a result, the total expected member contributions are increasing. This resulted in a decrease to the employer contribution rate.
- Effect of Tier II: The County adopted a less costly benefit level under Tier II. As more employees are covered under Tier II rather than Tier I, the required aggregate County General employer contribution rate will decline.
- Salary and Demographic Changes: When the salary, termination, retirement, death, and disability experience does not match expectations, gains and losses occur. The 2008 salary and demographic experience resulted in small changes to the employer contribution rates and decreased the funded ratio.
- Adjustment for contribution change timing: The actuarial valuation date is 12 months before the employer contribution rates determined by the valuation are implemented. Therefore either an experience gain or loss will occur as the actual contributions already budgeted to be paid in the current fiscal year are higher or lower than those computed in the new valuation.

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

#### Total Plan

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Sources of Change	Employer Contribution Rate	Funded Ratio
December 31, 2007 Actuarial Valuation	31.22%	77.18%
Experience Study Changes Expected Year-to-Year Change	1.89% 0.63%	-2.80% -0.93%
Expected June 30, 2008 Actuarial Valuation	33.74%	73.44%
Asset Gain/Loss Change in Member Contribution Rates Effect of Tier II Salary and Demographic Changes Adjustment for contribution change timing Total Experience Change	-0.14% -0.03% -0.36% 0.39% <u>0.13%</u> -0.01%	0.31% 0.00% 0.00% -1.45% 0.00% -1.14%
Actual June 30, 2008 Actuarial Valuation	33.73%	72.30%
Net change since December 31, 2007	2.51%	-4.88%

## **General - County**

Sources of Change	Employer Contribution Rate	Funded Ratio
December 31, 2007 Actuarial Valuation	28.94%	74.54%
Experience Study Changes Expected Year-to-Year Change	1.68% 0.67%	-2.80% -1.11%
Expected June 30, 2008 Actuarial Valuation	31.29%	70.63%
Asset Gain/Loss Change in Member Contribution Rates Effect of Tier II Salary and Demographic Changes Adjustment for contribution change timing Total Experience Change	-0.11% -0.02% -0.44% 0.34% 0.11% -0.12%	0.29% 0.00% 0.00% -1.62% 0.00%
Actual June 30, 2008 Actuarial Valuation	31.17%	69.30%
Net change since December 31, 2007	2.23%	-5.23%

Gain and Loss Analysis by Employer Contribution Rates and Funded Ratio Exhibit 17: (continued)

Genera	al - D	istr	ict
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Sources of Change	Employer Contribution Rate	Funded Ratio
December 31, 2007 Actuarial Valuation	31.73%	61.04%
Experience Study Changes Expected Year-to-Year Change	1.57% -0.45%	-2.75% 0.09%
Expected June 30, 2008 Actuarial Valuation	32.85%	58.38%
Asset Gain/Loss Change in Member Contribution Rates Effect of Tier II Salary and Demographic Changes Adjustment for contribution change timing Total Experience Change	-0.08% -0.07% 0.00% 0.66% 0.09% 0.60%	0.24% 0.00% 0.00% -1.51% 0.00% -1.26%
Actual June 30, 2008 Actuarial Valuation	33.45%	57.12%
Net change since December 31, 2007	1.72%	-3.92%

### Safety

Sources of Change	Employer Contribution Rate	Funded Ratio
December 31, 2007 Actuarial Valuation	37.75%	83.03%
Experience Study Changes Expected Year-to-Year Change	2.58% 0.72%	-2.78% -0.70%
Expected June 30, 2008 Actuarial Valuation	41.05%	79.55%
Asset Gain/Loss Change in Member Contribution Rates Effect of Tier II Salary and Demographic Changes Adjustment for contribution change timing Total Experience Change	-0.22% -0.04% 0.00% 0.39% 0.18% 0.31%	0.33% 0.00% 0.00% -1.10% 0.00% -0.77%
Actual June 30, 2008 Actuarial Valuation	41.36%	78.78%
Net change since December 31, 2007	3.61%	-4.25%

#### **Accounting Information** Section 7:



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

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

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

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

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

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

Please refer to Section 6 of this report which discloses the financial impact of any benefit changes or assumption changes that may have occurred in 2008.

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

**Exhibit 19:** Schedule of Funding Progress

(Dollars in Thousands)

Actuarial Value of Valuation Assets	Actuarial Accrued Liability (AAL)	Unfunded  AAL Funded (UAAL) Ratio (3) - (2) (2) / (3)		Annual Covered Payroll	UAAL as a % of Annual Payroll (4) / (6)
(2)	(3)	(4)	(5)	(6)	(7)
\$ 1,003,076	\$ 1,029,574	\$ 26,498	97.4%	\$ 273,351	9.7%
1,113,914	1,140,019	26,105	97.7%	266,640	9.8%
1,203,670	1,179,753	(23,917)	102.0%	282,251	-8.5%
1,325,928	1,324,662	(1,266)	100.1%	297,738	-0.4%
1,434,873	1,388,984	(45,889)	103.3%	283,283	-16.2%
1,508,291	1,611,960	103,669	93.6%	333,791	31.1%
1,570,278	1,899,031	328,753	82.7%	344,871	95.3%
1,927,585	2,059,286	131,701	93.6%	353,444	37.3%
2,012,521	2,336,406	323,885	86.1%	374,951	86.4%
2,164,304	2,861,872	697,568	75.6%	391,381	178.2%
2,352,028 2,589,817 2,654,305	3,109,038 3,355,755 3,671,460	757,010 765,938 1,017,155	75.7% 77.2% 72.3%	453,412	168.9%
	Value of Valuation Assets  (2) \$ 1,003,076 1,113,914 1,203,670 1,325,928 1,434,873  1,508,291 1,570,278 1,927,585 2,012,521 2,164,304  2,352,028 2,589,817	Value of Valuation Assets         Accrued Liability (AAL)           (2)         (3)           \$ 1,003,076         \$ 1,029,574           1,113,914         1,140,019           1,203,670         1,179,753           1,325,928         1,324,662           1,434,873         1,388,984           1,508,291         1,611,960           1,570,278         1,899,031           1,927,585         2,059,286           2,012,521         2,336,406           2,164,304         2,861,872           2,352,028         3,109,038           2,589,817         3,355,755	Value of Valuation Assets         Accrued Liability (AAL)         AAL (UAAL)           (2)         (3)         (4)           \$ 1,003,076         \$ 1,029,574         \$ 26,498           1,113,914         1,140,019         26,105           1,203,670         1,179,753         (23,917)           1,325,928         1,324,662         (1,266)           1,434,873         1,388,984         (45,889)           1,508,291         1,611,960         103,669           1,570,278         1,899,031         328,753           1,927,585         2,059,286         131,701           2,012,521         2,336,406         323,885           2,164,304         2,861,872         697,568           2,352,028         3,109,038         757,010           2,589,817         3,355,755         765,938	Value of Valuation Assets         Accrued Liability (AAL)         AAL (UAAL) (2)         Funded Ratio (2) / (3)           (2)         (3)         (4)         (5)           \$ 1,003,076         \$ 1,029,574         \$ 26,498         97.4%           1,113,914         1,140,019         26,105         97.7%           1,203,670         1,179,753         (23,917)         102.0%           1,325,928         1,324,662         (1,266)         100.1%           1,434,873         1,388,984         (45,889)         103.3%           1,508,291         1,611,960         103,669         93.6%           1,570,278         1,899,031         328,753         82.7%           1,927,585         2,059,286         131,701         93.6%           2,012,521         2,336,406         323,885         86.1%           2,164,304         2,861,872         697,568         75.6%           2,352,028         3,109,038         757,010         75.7%           2,589,817         3,355,755         765,938         77.2%	Value of Valuation Assets         Accrued (AAL)         AAL (UAAL)         Funded Ratio (Covered Payroll)           (2)         (3)         (4)         (5)         (6)           \$ 1,003,076         \$ 1,029,574         \$ 26,498         97.4%         \$ 273,351           1,113,914         1,140,019         26,105         97.7%         266,640           1,203,670         1,179,753         (23,917)         102.0%         282,251           1,325,928         1,324,662         (1,266)         100.1%         297,738           1,434,873         1,388,984         (45,889)         103.3%         283,283           1,508,291         1,611,960         103,669         93.6%         333,791           1,570,278         1,899,031         328,753         82.7%         344,871           1,927,585         2,059,286         131,701         93.6%         353,444           2,012,521         2,336,406         323,885         86.1%         374,951           2,164,304         2,861,872         697,568         75.6%         391,381           2,352,028         3,109,038         757,010         75.7%         417,351           2,589,817         3,355,755         765,938         77.2%         453,412

<sup>\*</sup> Reflects Safety member benefit increases



<sup>\*\*</sup> Reflects General member benefit increases

Exhibit 20: Schedule of Contributions from the Employer

Fiscal Year Ending	Annual Required Contribution (ARC)	Percentage of ARC Contributed
06/30/1998	\$35,421,000	100%
06/30/1999	40,159,000	100%
06/30/2000	37,576,000	100%
06/30/2001	41,067,000	100%
06/30/2002	41,882,000	100%
06/30/2003	58,247,000	682% *
06/30/2004	48,760,000	100%
06/30/2005	60,286,000	100%
06/30/2006	100,734,000	100%
06/30/2007	128,135,000	100%
06/30/2007	137,264,000	100%
00/30/2000	131,204,000	100%

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

# **Exhibit 21:** Solvency Test

(dollars in thousands)

Actuarial Accrued Liabilities for						Portion of AAL Covered by Valuation Assets						
Valuation Date		ve Member atributions		Retired/Vested Members	tive Members bloyer-Financed Portion)		Total		uarial Value f Valuation Assets	Active Member	Retired/Vested Members	Active Members (Employer-Financed Portion)
December 31, 2003	\$	182,161	\$	1,067,016	\$ 810,109	\$	2,059,286	\$	1,927,585	100%	100%	84%
December 31, 2004		191,485		1,147,206	997,715		2,336,406		2,012,521	100%	100%	68%
December 31, 2005		188,811		1,437,047	1,236,014		2,861,872		2,164,304	100%	100%	44%
December 31, 2006		197,507		1,629,003	1,282,527		3,109,037		2,352,028	100%	100%	41%
December 31, 2007		215,281		1,773,557	1,366,917		3,355,755		2,589,817	100%	100%	44%
June 30, 2008		222,418		1,913,946	1,535,096		3,671,460		2,654,316	100%	100%	34%

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



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

- > Approved Benefits These are the SRBR benefits that have already been approved by the Retirement Board. They include all SRBR Tier I, SRBR Tier II and SRBR Death Benefits, as well as the SRBR Tier III benefits approved through June 30, 2008.
- > Future Benefits These are the SRBR Tier III benefits expected to be approved in future years in order to maintain the 80% purchasing power goal.

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

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

The funding status of the SRBR benefits changed since the 2006 valuation due to the fact that the assets experienced "Excess Earnings" in 2007 and an additional \$32.2 million dollars was allocated to the unallocated portion of the SRBR assets.

## **Determination of SRBR Benefits**

The SRBR currently provides four categories of supplemental retiree benefits:

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

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

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

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 June 30, 2008. The Present Value of Approved Benefits is the short-term funding target for the SRBR.

The Plan's funded ratio for Approved SRBR Benefits is 202.5%. It is calculated by dividing the Actuarial Value of Assets (\$130.3) million) by the Present Value of Approved SRBR Benefits (\$64.3 million).

The funded ratio is developed in the following table:

## **Approved Benefits**

## 1. Present Value of Approved Benefits

<ul> <li>a. Death Benefits</li> </ul>	\$ 7,175,966
b. SRBR1	29,237,329
c. SRBR2	11,586,989
d. SRBR3	 16,345,229
e. Total	\$ 64,345,513

#### 2. Available SRBR Reserves

a. Total SRBR	\$ 212,782,232
b. 0.5% COLA Account	 82,453,842
c. Available SRBR Reserve	\$ 130,328,390
3. Funded Ratio	202.5%

## **Targeted Funding**

In 2001, KCERA did an extensive review of the benefits provided through the SRBR and the financial strength of the SRBR. The Board decided to use a target based on a combination of Approved and Projected SRBR Benefits. The target liability is the Present Value of Benefits for SRBR Tier I, SRBR Tier II and SRBR Death Benefits. For SRBR Tier III Benefits, the target liability is the Present Value of projected payments for the 20-year period beginning with the valuation date.

On this basis, the Plan's funded ratio for Target SRBR Liabilities is 167.4%. It is calculated by dividing the Actuarial Value of Assets (\$130.3 million) by the Present Value of SRBR Target Liabilities (\$77.9 million).

## **Targeted Funding** (continued)

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

### Target Liabilities Under "20/20" Policy

### 1. Present Value of Targeted Funding

	Liabilities	With Reserves
a. Death Benefits	\$ 7,175,966	\$ 8,611,159
b. SRBR1	29,237,329	35,084,795
c. SRBR2	11,586,989	13,904,387
d. SRBR3 (20 years)	26,068,958	 26,068,958
e. Total	\$ 74,069,242	\$ 83,669,299
2. Available SRBR Reserves		
a. Total SRBR	\$ 212,782,232	\$ 212,782,232
b. 0.5% COLA Account	 82,453,842	 82,453,842
c. Available SRBR Reserve	\$ 130,328,390	\$ 130,328,390
3. Funded Ratio	176.0%	155.8%

Under the Board's "20/20" policy, if the liabilities of the targeted benefits with a 20% reserve on all but the SRBR3 20-year projection of benefits are more than 100% funded, the Board may consider increasing the SRBR approved benefits. As of June 30, 2008, the funded ratio is over the 100% benchmark, at 149.0%.

#### **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 ratio for all SRBR Benefits is 151.9%. It is calculated by dividing the Actuarial Value of Assets (\$130.3 million) by the Present Value of all SRBR Benefits (\$85.8 million).

The funded ratio is developed in the following table:

#### **Total Benefits**

# 1. Present Value of SRBR

a. Approved Benefits	\$ 64,345,513
b. Future Benefits	 21,447,647
c. Total	\$ 85,793,160

#### 2. Available SRBR Reserves

a. Total SRBR	\$ 212,782,232
b. 0.5% COLA Account	82,453,842
c. Available SRBR Reserve	\$ 130,328,390

#### 3. Funded Ratio 151.9%

# **Total SRBR Benefits** (continued)

The funded ratio increased to 151.9% from 110.7% in our last valuation. The following table quantifies the impact of various changes.

	Funded Status	Change
Prior Year	110.7%	
Passage of Time		0.3%
Asset Gain (Transfer from Excess Earnings)		4.0%
Inflation higher than expected		-0.8%
Assumption Change		43.3%
Liability Gain		-5.5%
Total Change:		41.2%
Current Year	151.9%	

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

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

Present	Value	of	<b>Projected</b>	Benefits

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	Deat	h Ben		SRBR1	SRBR2		SRBR3		Total
Active Members	\$ 2,0	061,917	\$	8,045,633	\$	\$		\$	10,107,550
Deferred Vested Members	3	332,593		1,565,933					1,898,526
Retirees and Beneficiaries	4,7	781,456		19,625,763	11,586,989		16,345,229		52,339,437
Total	\$ 7,	175,966	\$	29,237,329	\$ 11,586,989	\$	16,345,229	\$	64,345,513
Future Benefits									
	Deat	h Ben		SRBR1	SRBR2		SRBR3		Total
Active Members						\$	3,573,480	\$	3,573,480
Deferred Vested Members							125,000		125,000
Retirees and Beneficiaries			_			_	17,724,167	_	17,724,167
Total		0		0	0	\$	21,422,647	\$	21,422,647
Total Approved and Future Ber	nefits								

		Death Ben		SRBR1	SRBR2		SRBR3		Total
Active Members	\$	2,061,917	\$	8,045,633	\$ 0	\$	3,573,480	\$	13,681,030
Deferred Vested Members		332,593		1,565,933	0		125,000		2,023,526
Retirees and Beneficiaries	_	4,781,456	_	19,625,763	11,586,989	_	34,069,396	_	70,063,604
Total	\$	7,175,966	\$	29,237,329	\$ 11,586,989	\$	37,767,876	\$	85,768,160

#### **Available Reserves**

Total SRBR	\$ 212,782,232
Additional 0.5% COLA Account	82,453,842
Available SRBR	\$ 130,328,390

#### **Funded Ratios**

Approved Benefits	202.5%
Total Approved and Future Benefits	152.0%

## Members Eligible for Approved Benefits

	Death Ben	SRBR1	SRBR2	SRBR3
Active Members	9,054	2,726		
Deferred Vested Members	1,226	606		
Retirees and Beneficiaries	4,738	5,316	871	644
Total	15,018	8,648	871	644

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

Calendar Year	Projected SRBR 3 Payments
2008	\$ 2,371,179
2009	2,448,824
2010	2,516,680
2011	2,551,453
2012	2,583,156
2013	2,609,851
2014	2,626,608
2015	2,669,656
2016	2,669,076
2017	2,659,317
2018	2,638,834
2019	2,610,465
2020	2,574,561
2021	2,528,868
2022	2,473,842
2023	2,413,568
2024	2,348,757
2025	2,278,426
2026	2,202,927
2027	2,125,152

Value of Non-Discounted 20-Year Cash Flow: \$49,901,200

\$26,068,958 Present Value of Projected 20-Year Cash Flow:

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

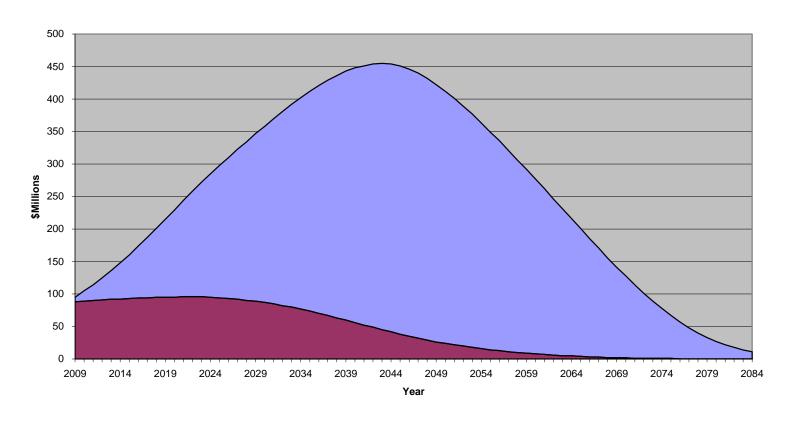


**Cash Flow Projection** 

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

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

# **General Members- Projected Benefit Payments**

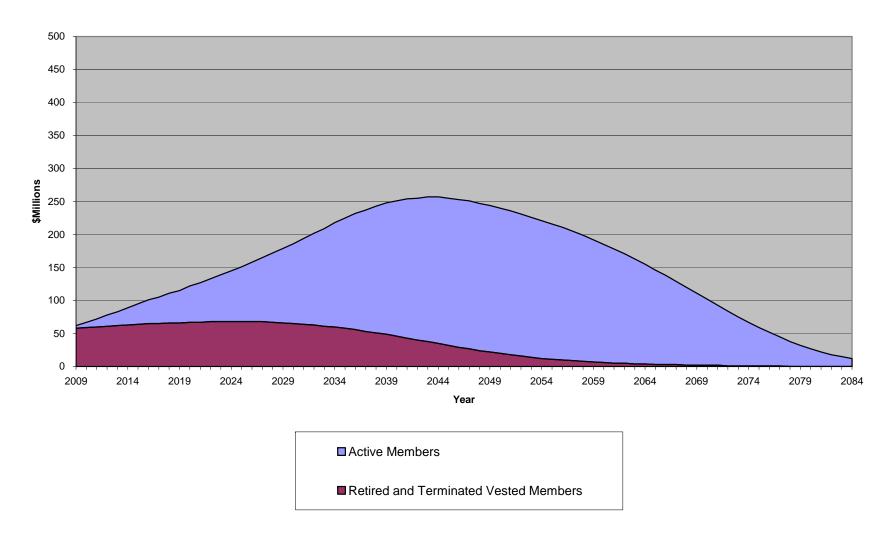




■ Retired and Terminated Vested Members



# **Safety Members- Projected Benefit Payments**





### Appendix A

### **Actuarial Assumptions**

The actuarial procedures and assumptions recommended to be used in the June 30, 2008 valuation are described in this section. The actuarial assumptions used in the valuations are intended to estimate the future experience of the members of KCERA in areas that affect the projected benefit flow and anticipated investment earnings. Any variations in future experience from that expected from these assumptions will result in corresponding changes in the estimated costs of KCERA's benefits. All assumptions were reviewed during the 2008 Investigation of Experience study. The next study is expected as of June 30, 2011.

Table A-1 summarizes the assumptions. The mortality rates are taken from the sources listed.

Schedule 1 presents the expected annual percentage increase in salaries.

Schedules 2 and 3 show how members are expected to leave retired status due to death.

Schedules 4, 5 and 6 present the probabilities a member will leave the system for various reasons.

Schedule 7 presents the probability of refund of contributions upon termination of employment while vested.

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

7.75%, compounded annually, net of both investment and administrative expenses.

Postretirement Benefit Increases: Postretirement increases are assumed for the

> valuation in accordance with the benefits provided as described in Appendix B of the valuation report. These adjustments are assumed payable each year in the future as they are less than the expected increase in the Consumer Price Index of 3.5% per

vear.

Salary Increase – Total Payroll: 4.0% per year.

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

Inflation (CPI): 3.25% per year.



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

contributions is assumed to be 7.75% compounded

semi-annually.

### **DEMOGRAPHIC ASSUMPTIONS**

Mortality:

 Service Retirement – General: RP-2000 Combined Healthy Mortality.

Rates are set back two years for females and one

year for males.

Mortality rates for the adjusted table are shown in

Schedule 2.

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

Disability Retirement – General: RP-2000 Combined Healthy Mortality.

> Rates set forward four years for females and two years for males. Rates are not less than 1.00% for

both males and females.

Mortality rates for the adjusted table are shown in

Schedule 3.

Disability Retirement – Safety: RP-2000 Combined Healthy Mortality.

Rates are not less than 0.50% for both males and

females.

Mortality rates for the adjusted table are shown in

Schedule 3.

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

gender.

Unisex Mortality For optional benefit forms and member contribution

rate calculations, a unisex mortality assumption must

be used to calculate annuity factors.

For General members, the annuity factors are based

on a one-third/two-thirds blend of the male and female mortality tables using current valuation

assumptions.

For Safety members, the annuity factors are based upon a five-sixths/one-sixth blend of the male and female mortality tables using current valuation

assumptions.

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

Schedule 4 (for General males), 5 (for General females) and 6 (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 7.

Reciprocal Agency: For current active members, the probability of joining

> a reciprocal agency immediately after termination is 50% for Safety members and 50% for General members. For members who have already terminated vested with a deferred commencement. we use the code provided by the KCERA to determine if the person has joined a reciprocal

agency. All terminating members are assumed to not be rehired.

Deferred Retirement Age for Vested Termination:

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

Salaries are assumed to increase with wage inflation Salary Projection for Vested Termination with Reciprocity: from termination with KCERA to benefit

commencement. The assumed annual increase after termination of employment is 4.52% for General

members and 4.78% for Safety members.

Service Disability: Rates varying by age, as shown in Schedule 4

(for General males), 5 (for General females) and

6 (for Safety).

Ordinary Disability: Rates varying by age, as shown in Schedule 4 (for

General males), 5 (for General females) and 6 (for

Safety).

Service Retirement: Rates varying by age, as shown in Schedule 4 (for

> General males), 5 (for General females) and 6 (for Safety). All General members who attain or who have attained age 70 in active service and all Safety members who have attained age 60 in active service

are assumed to retire immediately.

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

member.

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

probability of retirement.



Form of Payment:

Life annuity for single members. 60% contingent annuity for married members (100% contingent annuity if receiving service-related disability).

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

Percentage Married at Retirement:

80% of male active members and 55% of female active members are assumed to have a spouse or qualified domestic partner eligible for the 60% continuance at retirement. There is no explicit assumption for children's benefits. We believe the survivor benefits based on this marriage assumption are sufficient to cover children's benefits as they occur.

Spouse Ages:

For active members reaching retirement, wives are assumed to be three years younger than husbands.

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

### **ACTUARIAL METHODS**

**Actuarial Cost Method:** 

The actuarial valuation is prepared using the entry age actuarial cost method (CERL 31453.5). Under the principles of this method, the actuarial present value of the projected benefits of each individual included in the valuation is allocated as a level percentage of the individual's projected compensation between entry age and assumed exit (until maximum retirement age).

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



**Amortization Period:** The UAAL due to the change to the benefit formula

for General members is amortized as a level percentage of payroll over a 30-year period

beginning with the December 31, 2005 valuation, or

27.5 years as of June 30, 2008.

The UAAL due to all other sources is amortized as a level percentage of payroll over a 27.5-year period

beginning with the June 30, 2008 valuation.

Beginning January 1, 2006, any liability attributable to Golden Handshakes is paid by the employer at the

time the handshake is granted.

Actuarial Value of Assets: The market value of assets is adjusted to recognize,

over a five-year period, investment earnings greater than (or less than) the assumed investment return. Details are shown in Section 2, Assets, of this report.

The actuarial value, market value and book value are

net of amounts allocated to the Supplemental Retiree Benefit Reserve and the Contingency

Reserve.

Replacement of Terminated Members: The ages and relative salaries at entry of future

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

entrants.

Growth in Membership: For benefit determination purposes, no growth in the

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

the total number of active members is assumed.

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

member's benefit after retirement.

Internal Revenue Code Section 415 Limit:

#### **Employer Contributions:**

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

The rates will be effective for the fiscal year commencing one year after the actuarial valuation date. The rates are adjusted to reflect the expected changes in the UAAL between the valuation date and implementation date.

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 a one-third / two-thirds blend of the male and female mortality tables using current valuation assumptions. For Safety members it is based on a five-sixths / one-sixth blend.
- B. The annuity factor used in determining the present value of future benefits (PVFB) at entry age is equal to the life only annuity factor at 8%.
- C. The Final Compensation is based on the salary paid in the year prior to attaining the retirement age.
  - Example: For a General member who enters at age 59 or earlier, the Final Compensation at retirement (age 60) will be the monthly average of the annual salaries during age 59.
- D. Member Rates are assumed to increase with entry age. There are a few exceptions at the higher entry ages where the calculated rate is less than the previous entry age. In these cases the member contribution rate is adjusted so that it is no less than the value for the previous entry age. Also, the new Safety 3 rates do not vary by entry age.



### **DATA SOURCES**

The asset information is taken directly from Asset Data:

statements furnished by the Retirement Office and

used without audit.

Member Data: The member data is supplied by the Retirement

Office. It is reviewed for reasonableness and

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

calculations.

## Table A-1 Summary of Valuation Assumptions as of June 30, 2008

I.	Economic	assum	ptions

A.	General wage increases	4.00%
B.	Investment earnings	7.75%
C.	Growth in active membership	0.00%
D.	CPI inflation assumption	3.25%

#### II. Demographic assumptions

A.	Salary increases due to service	Schedule 1
B.	Retirement	Schedules 4-6
C.	Disablement	Schedules 4-6

D. Mortality for active members after termination and service retired members

Schedule 2

Basis – RP-2000 Combined Healthy Mortality:

Age

Class of Members	<u>Adjustment</u>
General – Males	-1 years
General – Females	-2 years
Safety – Males	-1 years
Safety – Females	-2 years

### E. Mortality among disabled members

Schedule 3

Basis – RP-2000 Combined Healthy Mortality:

Class of Members	Age <u>Adjustment</u>	Minimum <u>Rate</u>
General – Males	+2 years	1.00%
General – Females	+4 years	1.00%
Safety – Males	none	0.50%
Safety – Females	none	0.50%

### F. Mortality for beneficiaries

Schedule 3

Basis – Beneficiaries are assumed to be of the opposite sex and have the same mortality as General members.

G. Other terminations of employment

Schedules 4-6

H. Refund of contributions on vested termination

Schedule 7



# Schedule 1 Assumed Rate of Salary Increase

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

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

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

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



# Schedule 2 **Mortality for Members Retired for Service**

Age	General/Safety Male	General/Safety Female
20	0.033%	0.019%
25	0.038%	0.020%
30	0.041%	0.024%
35	0.070%	0.039%
40	0.102%	0.060%
45	0.140%	0.094%
50	0.200%	0.143%
55	0.320%	0.221%
60	0.595%	0.392%
65	1.128%	0.765%
70	1.980%	1.345%
75	3.390%	2.297%
80	5.793%	3.760%
85	9.978%	6.251%
90	16.642%	10.730%

## Schedule 3 **Mortality for Members Retired for Disability**

General General <u>Male</u> <u>Female</u> Safe		Safety Male	Safety Female
1.000%	1.000%	0.500%	0.500%
1.000%	1.000%	0.500%	0.500%
1.000%	1.000%	0.500%	0.500%
1.000%	1.000%	0.500%	0.500%
1.000%	1.000%	0.500%	0.500%
1.000%	1.000%	0.500%	0.500%
1.000%	1.000%	0.500%	0.500%
1.000%	1.000%	0.500%	0.500%
1.000%	1.000%	0.675%	0.506%
1.608%	1.486%	1.274%	0.971%
2.728%	2.546%	2.221%	1.674%
4.691%	4.151%	3.783%	2.811%
8.049%	6.952%	6.437%	4.588%
13.604%	11.915%	11.076%	7.745%
21.660%	18.280%	18.341%	13.168%
	1.000% 1.000% 1.000% 1.000% 1.000% 1.000% 1.000% 1.000% 1.000% 1.000% 1.608% 2.728% 4.691% 8.049% 13.604%	Male         Female           1.000%         1.000%           1.000%         1.000%           1.000%         1.000%           1.000%         1.000%           1.000%         1.000%           1.000%         1.000%           1.000%         1.000%           1.000%         1.000%           1.000%         1.000%           1.608%         1.486%           2.728%         2.546%           4.691%         4.151%           8.049%         6.952%           13.604%         11.915%	Male         Female         Safety Male           1.000%         1.000%         0.500%           1.000%         1.000%         0.500%           1.000%         1.000%         0.500%           1.000%         1.000%         0.500%           1.000%         1.000%         0.500%           1.000%         1.000%         0.500%           1.000%         1.000%         0.500%           1.000%         1.000%         0.675%           1.608%         1.486%         1.274%           2.728%         2.546%         2.221%           4.691%         4.151%         3.783%           8.049%         6.952%         6.437%           13.604%         11.915%         11.076%

## Schedule 4 **Probability of Separation from Active Service General Members - Male**

(Number separating at each age per 10,000 working at that age)

					Service F	Retirement		
Age	Ordinary Death	Service Death	Ordinary Disability	Service Disability	Tier I	Tier II	Years of Service	Other Terminations
20	3	0	2	3	0	0	0	2,000
21	3	0	2	3	0	0	1	1,400
22	4	0	2	3	0	0	2	1,000
23	4	0	2	3	0	0	3	700
24	4	0	2	3	0	0	4	620
25	4	0	2	3	0	0	5	553
26	4	0	2	3	0	0	6	487
27	4	0	2	3	0	0	7	420
28	4	0	2	3	0	0	8	386
29	4	0	2	4	0	0	9	352
30	4	0	3	4	0	0	10	318
31	4	0	3	4	0	0	11	284
32	5	0	3	5	0	0	12	250
33	6	0	3	5	0	0	13	240
34	6	0	4	6	0	0	14	230
35	7	0	4	6	0	0	15	220
36	8	0	5	7	0	0	16	210
37	8	0	5	8	0	0	17	200
38	9	0	6	8	0	0	18	180
39	10	0	6	9	0	0	19	160
40	10	0	7	10	0	0	20	140
41	11	0	7	11	0	0	21	120
42	11	0	8	12	0	0	22	100
43	12	0	8	13	0	0	23	100
44	13	0	9	13	0	0	24	100
45	14	0	9	14	0	0	25	100
46	15	0	10	14	0	0	26	100
47	16	0	10	15	0	0	27	100
48	17	0	11	16	0	0	28	100
49	19	0	12	17	0	0	29	100
50	20	0	12	19	600	300	30 & Above	100
51	21	0	13	20	300	300		
52	23	0	14	21	400	300		
53	24	0	15	22	500	300		
54	26	0	16	23	500	300		
55	28	0	16	25	1000	800		
56	30	0	17	26	1100	600		
57	33	0	18	27	1400	800		
58	36	0	19	28	1700	1200		
59	40	0	20	29	1800	1300		
60	44	0	20	31	2000	1500		
61	49	0	21	32	2600	2000		
62	54	0	22	33	3200	3200		
63	59	0	23	34	3000	3000		
64	65	0	24	35	3000	3000		
65	70	0	24	37	3000	3000		
66	76	0	25	38	3000	3000		
67	81	0	26	39	3000	3000		
68	86	0	27	40	3000	3000		
69	91	0	28	41	3000	3000		
70	95	0	0	0	10000	10000		

## Schedule 5 **Probability of Separation from Active Service General Members - Female**

(Number separating at each age per 10,000 working at that age)

Age	Ordinary Death	Service Death	Ordinary Disability	Service Disability	Service Retirement	Service Retirement	Years of Service	Other Terminations
20	2	0	2	3	0	0	0	2,000
21	2	0	2	3	0	0	1	1,400
22	2	0	2	3	0	0	2	1,000
23	2	0	2	3	0	0	3	700
24	2	0	2	3	0	0	4	620
25	2	0	2	3	0	0	5	553
26	2	0	2	3	0	0	6	487
27	2	0	2	3	0	0	7	420
28	2	0	2	3	0	0	8	386
29	2	0	2	4	0	0	9	352
30	2	0	3	4	0	0	10	318
31	2	0	3	4	0	0	11	284
32	3	0	3	5	0	0	12	250
33	3	0	3	5	0	0	13	240
34	4	0	3	5	0	0	14	230
35	4	0	4	5	0	0	15	220
36	4	0	4	6	0	0	16	210
37	5	0	4	6	0	0	17	200
38	5	0	4	7	0	0	18	180
39	6	0	5	7	0	0	19	160
40	6	0	5	8	0	0	20	140
41	6	0	6	8	0	0	21	120
42	7	0	6	9	0	0	22	100
43	8	0	6	10	0	0	23	100
44	9	0	7	10	0	0	24	100
45	9	0	7	11	0	0	25	100
46	10	0	8	11	0	0	26	100
47	11	0	8	12	0	0	27	100
48	12	0	8	13	0	0	28	100
49	13	0	9	13	0	0	29	100
50	14	0	9	14	600	300	30 & Above	100
51	16	0	10	14	600	300		
52	17	0	10	15	600	300		
53	18	0	10	16	600	300		
54	20	0	11	16	600	300		
55	21	0	11	17	800	400		
56	23	0	12	17	1000	600		
57	25	0	12	18	1200	700		
58	28	0	13	20	1500	900		
59	30	0	14	22	1800	1000		
60	33	0	16	23	2200	1200		
61	36	0	17	25	2000	1400		
62	39	0	18	27	3000	3000		
63	43	0	19	29	3000	3000		
64	47	0	20	31	3000	3000		
65	50	0	22	32	3000	3000		
66	54	0	23	34	3000	3000		
67	58	0	24	36	3000	3000		
68	62	0	25	38	3000	3000		
69	66	0	26	40	3000	3000		
70	69	0	0	0	10000	10000		

# Schedule 6 Probability of Separation from Active Service Safety Members

(Number separating at each age per 10,000 working at that age)

Age	Ordinary Death*	Service Death	Ordinary Disability	Service Disability	Service Retirement	Years of Service	Other Terminations
20	3	2	0	10	0	0	700
21	3	2	0	10	0	1	500
22	4	2	0	10	0	2	400
23	4	2	0	10	0	3	300
24	4	2	0	10	0	4	300
25	4	2	0	10	0	5	283
26	4	2	0	10	0	6	267
27	4	2	0	10	0	7	250
28	4	2	0	12	0	8	240
29	4	2	0	14	0	9	230
30	4	2	0	16	0	10	220
31	4	2	0	18	0	11	210
32	5	2	0	20	0	12	200
33	6	2	0	24	0	13	170
34	6	2	0	28	0	14	140
35	7	2	0	32	0	15	110
36	8	2	0	36	0	16	80
37	8	2	0	40	0	17	50
38	9	2	0	44	0	18	50
39	10	2	0	48	0	19	50
40	10	2	0	52	0	20 & Above	0
41	11	2	0	56	0		
42	11	2	0	60	0		
43	12	2	0	66	0		
44	13	2	0	72	0		
45	14	2	0	78	100		
46	15	2	0	84	50		
47	16	2	0	90	50		
48	17	2	0	108	100		
49	19	2	0	126	200		
50	20	2	0	144	1200		
51	21	2	0	162	1200		
52	23	2	0	180	1200		
53	24	2	0	204	1200		
54 55	26	2 2	0	228 252	1500 1700		
55 56	28		0				
56 57	30	2	0	276	2000		
57 50	33	2 2	0	300	2300		
58 59	36 40	2	0 0	300 300	2500 2500		
59 60	40 44	2	0	300	2500 10000		
00	44	2	U	300	10000		

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

Schedule 7 **Immediate Refund of Contributions upon Termination of Employment** 

V	 re	Ωf

Service	General	Safety
0	100%	100%
1	100%	100%
2	100%	100%
3	100%	100%
4	100%	100%
5	45%	40%
6	45%	40%
7	45%	40%
8	42%	36%
9	39%	32%
10	36%	28%
11	33%	24%
12	30%	20%
13	28%	17%
14	26%	14%
15	24%	11%
16	22%	8%
17	20%	5%
18	18%	4%
19	16%	3%
20	14%	0%
21	12%	0%
22	10%	0%
23	8%	0%
24	6%	0%
25	4%	0%
26	2%	0%
27	0%	0%
28	0%	0%
29	0%	0%
30 & Up	0%	0%

# Appendix B

### **Benefit Summaries**

### **GENERAL AND SAFETY MEMBERS**

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

> County or participating District. Enter on first day of the first pay period after entrance into service.

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

### SERVICE RETIREMENT SPECIFIC TO GENERAL TIER I MEMBERS

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

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

**Eligibility:** Tier I generally applies to KCERA General

members hired by the County prior to

October 27, 2007 and all district employees.

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

service regardless of age, or age 70 regardless

of service.

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

service times Retirement Adjustment Factor

(RAF).

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

other than 60. Sample factors:

**Factor** Age 50 1.0000 55 1.2500 60 and older 1.5000

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

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.

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



Note: CERL 31676.17 (3% at 60) was adopted by the Board of Supervisors, effective January 1, 2005.

### SERVICE RETIREMENT SPECIFIC TO GENERAL TIER II MEMBERS

**Code Section:** 31676.01 (1.62% at 65).\*

Eligibility: Tier II generally applies to most KCERA General

members hired by the County on or after October 27, 2007. This tier does not apply for

any district employees.

Retirement Eligibility: Retirement eligibility with 10 years of service and

age 50, or 30 years of service regardless of age,

or age 70 regardless of service.

Benefit: 1.11%, or one-ninetieth (1/90) of FAS per year of

service times Retirement Adjustment Factor

(RAF).

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

other than 65. Sample factors:

 Age
 Factor

 55
 0.8954

 60
 1.1500

 65 and older
 1.4593

**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 31676.01 (1.62% at 65) was adopted by the Board of Supervisors, effective October 27, 2007.



### SERVICE RETIREMENT SPECIFIC TO SAFETY MEMBERS

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

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

service regardless of age.

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

Retirement Adjustment Factor (RAF).

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

age 50. Sample factors:

 Age
 Factor

 41
 0.6258

 45
 0.7805

 50 and above
 1.0000

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

reduced by 1/3.

Maximum Benefit: 100% of FAS.

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

death of retiree. If there is no surviving spouse,

the benefit is paid to eligible children.

### **GENERAL TIER I, GENERAL TIER II, AND SAFETY MEMBERS**

### NONSERVICE-CONNECTED DISABILITY

**Eligibility:** Five years of service.

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

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

service in excess of five, but not more than 40%

of FAS.

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

death of retiree. If there is no surviving spouse,

the benefit is paid to eligible children.



#### SERVICE-CONNECTED DISABILITY

**Eligibility:** First day of work.

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

and unable to perform his/her own job.

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

Retirement benefit (if eligible at time of

commencement).

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

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

#### NONSERVICE-CONNECTED DEATH

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

Retirement:

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

(maximum six months' salary).

After eligible for Nonservice-Connected

**Disability or Service Retirement:** 

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

benefit is paid to eligible children.

### SERVICE-CONNECTED DEATH

**Eligibility:** First day of work.

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

Retirement benefit (if eligible at time of

commencement).

Normal Form of Benefit: Life annuity to spouse after death of participant. If

there is no surviving spouse, the benefit is paid to

eligible children.



**DEFERRED SERVICE RETIREMENT** 

**Eligibility:** Five years of service.

Additional requirement: Must leave contributions on deposit.

**Benefit:** Same as service retirement benefit.

FAS: If reciprocity provisions apply, includes

compensation earned at reciprocal agency.

Normal Form of Benefit: Same as service retirement benefit.

**WITHDRAWAL** 

**Eligibility:** First day of work.

Other Requirement: Forfeits right to receive other benefit from

retirement system.

Benefit: Accumulated contributions with interest.

Form of Benefit: Lump sum.

**COST-OF-LIVING BENEFITS** 

Timing: Annually, effective April 1 based on change in

Consumer Price Index for the preceding calendar

year.

**Maximum:** 2.5% per year.

SUPPLEMENTAL RETIREE BENEFIT

**RESERVE** 

See Section 8 of this report for a description of

the SRBR benefits.



# Appendix C

# **Membership Data**

### **Active Participants**

Gonoral	Members	Dec	cember 31, 2007		June 30, 2008	Change
General						
	County Tier I		0.577		0.050	0.000/
	Number		6,577		6,358	-3.33%
	Average Age		44.6		45.1	1.00%
	Average Service		9.9		10.4	4.67%
	Percent Male	\$	28.52%	\$	28.69%	0.58%
	Average Annual Pay Total Covered Payroll	\$ \$	47,911 315,111,815	\$ \$	51,160 325,276,730	6.78% 3.23%
	Valuation Payroll	\$	313,724,774	\$	323,622,799	3.23%
	valuation Fayion	Φ	313,724,774	Φ	323,022,799	
	County Tier II					
	Number	\$	136	\$	435	219.85%
	Average Age		36.0	\$	36.3	0.84%
	Average Service		0.1		0.4	273.06%
	Percent Male		36.76%		31.26%	-14.96%
	Average Annual Pay	\$	37,891	\$	40,727	7.48%
	Total Covered Payroll	\$	5,153,231	\$	17,716,112	243.79%
	Valuation Payroll	\$	5,153,231	\$	17,716,100	
	Districts Electing 1997 MOU					
	Number		141		140	-0.71%
	Average Age		45.2		45.1	-0.30%
	Average Service		11.1		11.9	6.99%
	Percent Male		73.76%		75.71%	2.65%
	Average Annual Pay	\$	64,123	\$	66,249	3.32%
	Total Covered Payroll	\$	9,041,361	\$	9,274,885	2.58%
	Valuation Payroll	\$	9,041,361	\$	9,274,888	2.58%
	•	•	0,011,001	Ψ	0,27 1,000	2.0070
	Districts Not Electing 1997 MOU					
	Number		273		283	3.66%
	Average Age		42.3		42.0	-0.57%
	Average Service		7.0		7.3	3.67%
	Percent Male		61.90%		61.13%	-1.25%
	Average Annual Pay	\$	58,615	\$	59,456	1.43%
	Total Covered Payroll	\$	16,001,953	\$	16,825,926	5.15%
	Valuation Payroll	\$	16,001,953	\$	16,825,920	5.15%
	Total General					
	Number		7,127		7,216	1.25%
	Average Age		44.4		44.4	0.10%
	Average Service		9.6		9.7	0.46%
	Percent Male		30.85%		31.03%	0.56%
	Average Annual Pay	\$	48,451	\$	51,149	5.57%
	Total Covered Payroll	\$	345,308,360	\$	369,093,653	6.89%
	Valuation Payroll	\$	343,921,319	\$	367,439,707	6.84%
Safety M	lembers*					
	Number		1,801		1,841	2.22%
	Average Age		39.0		38.7	-0.69%
	Average Service		11.5		11.3	-1.91%
	Percent Male		82.29%		81.53%	-0.92%
	Average Annual Pay	\$	61,865	\$	64,067	3.56%
	Total Covered Payroll	\$	111,418,703	\$	117,947,008	5.86%
	Valuation Payroll	\$	109,490,298	\$	115,439,050	5.43%
	•					
Total Ac	tive Members					
	Number		8,928		9,057	1.44%
	Average Age		43.3		43.3	-0.07%
	Average Service		10.0		10.0	-0.07%
	Percent Male		41.23%		41.29%	0.16%
	Average Annual Pay	\$	51,157	\$	53,775	5.12%
	Total Covered Payroll	\$	456,727,063	\$	487,040,661	6.64%
	Valuation Payroll	\$	453,411,617	\$	482,878,757	6.50%
**					•	

\*Includes 3 Suspended members.



# **Terminated Participants with Pending Refunds**

	December 31, 2007	June 30, 2008	Change
General Members - Tier I			
Number	474	386	-18.57%
Average Age	37.0	23.5	-36.35%
Percent Male	29.96%	27.98%	-6.60%
General Members - Tier II			
Number	N/A	39	N/A
Average Age	N/A	14.5	N/A
Percent Male	N/A	41.03%	N/A
Safety Members			
Number	35	36	2.86%
Average Age	31.4	17.8	-43.35%
Percent Male	82.86%	86.11%	3.93%
All Members			
Number	509	461	-9.43%
Average Age	36.6	22.3	-38.99%
Percent Male	33.60%	33.62%	0.08%

# **Terminated Vested Participants**

	December 31, 2007	June 30, 2008	Change
General Members - Tier I			
Number	1,053	1,136	7.88%
Average Age	47.2	46.8	-0.76%
Average Service Percent Male	15.6	15.3	-1.59%
	40.74%	39.61%	-2.77%
General Members - Tier II			
Number	N/A	1	N/A
Average Age	N/A	23.0	N/A
Average Service	N/A	0.1	N/A
Percent Male	N/A	0.09%	N/A
Safety Members			
Number	132	149	12.88%
Average Age	41.1	40.7	-0.77%
Average Service	14.1	14.4	2.05%
Percent Male	78.79%	79.87%	1.37%
All Members			
Number	1,185	1,286	8.52%
Average Age	46.5	46.1	-0.86%
Average Service	15.4	15.2	-1.32%
Percent Male	44.98%	44.25%	-1.63%

# **Retired Participants**

		December 31, 2007	June 30, 2008	Change
General	Members			
	Service Retirements			
	Number	3,000	3,069	2.30%
	Average Age	69.6	69.5	-0.06%
	Percent Male	37.43%	37.47%	0.10%
	Average Monthly Benefit*	\$ 1,863	\$ 1,923	3.20%
	Beneficiaries			
	Number	637	642	0.78%
	Average Age	74.1	73.9	-0.20%
	Percent Male	20.72%	21.81%	5.23%
	Average Monthly Benefit*	\$ 896	\$ 924	3.17%
	Disabled			
	Number	541	547	1.11%
	Average Age	60.2	60.5	0.40%
	Percent Male	36.60%	36.38%	-0.60%
	Average Monthly Benefit*	\$ 1,443	\$ 1,468	1.73%
	Total General			
	Number	4,178	4,258	1.91%
	Average Age	69.0	69.0	-0.03%
	Percent Male	34.78%	34.97%	0.55%
	Average Monthly Benefit*	\$ 1,661	\$ 1,714	3.16%
Safety N	lembers			
	Service Retirements			
	Number	698	713	2.15%
	Average Age	64.8	64.9	0.17%
	Percent Male	90.69%	90.32%	-0.40%
	Average Monthly Benefit*	\$ 4,173	\$ 4,285	2.69%
	Beneficiaries			
	Number	251	253	0.80%
	Average Age	67.8	67.8	0.05%
	Percent Male	5.18%	5.14%	-0.79%
	Average Monthly Benefit*	\$ 1,702	\$ 1,753	3.00%
	Disabled			
	Number	425	427	0.47%
	Average Age	58.8	59.3	0.87%
	Percent Male	81.65%	81.97%	0.39%
	Average Monthly Benefit*	\$ 3,092	\$ 3,169	2.48%
	Total Safety			
	Number	1,374	1,393	1.38%
	Average Age	63.5	63.7	0.37%
	Percent Male	72.27%	72.29%	0.03%
	Average Monthly Benefit*	\$ 3,387	\$ 3,483	2.83%

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



# **Retired Participants (continued)**

	Dece	mber 31, 2007	June 30, 2008	Change
Total Members				
Service Retirements				
Number		3,698	3,782	2.27%
Average Age		68.7	68.6	-0.02%
Percent Male		47.49%	47.44%	-0.11%
Average Monthly Benefit*	\$	2,299	\$ 2,368	3.00%
Beneficiaries				
Number		888	895	0.79%
Average Age		72.3	72.2	-0.13%
Percent Male		16.33%	17.09%	4.69%
Average Monthly Benefit*	\$	1,123	\$ 1,158	3.10%
Disabled				
Number		966	974	0.83%
Average Age		59.6	59.9	0.61%
Percent Male		56.42%	56.37%	-0.09%
Average Monthly Benefit*	\$	2,169	\$ 2,214	2.08%
Total Retirees				
Number		5,552	5,651	1.78%
Average Age		67.7	67.7	0.07%
Percent Male		44.06%	44.17%	0.26%
Average Monthly Benefit*	\$	2,088	\$ 2,150	2.94%

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

# **SRBR Approved Benefits**

Total Members		December 31, 2007 June 30, 2008		une 30, 2008	Change	
SRBR Death Benefits Retirees Eligible Total Benefits Average Benefit	\$ \$	4,664 13,992,000 3,000	\$ \$	4,756 14,268,000 3,000	1.97% 1.97% 0.00%	
SRBR 1 Retirees and Beneficiaries Eligible Total Monthly Benefits Average Monthly Benefit	\$ \$	5,254 173,032 32.93	\$ \$	5,316 174,937 32.91	1.18% 1.10% -0.08%	
SRBR 2 Retirees and Beneficiaries Eligible Total Monthly Benefits Average Monthly Benefit	\$ \$	912 167,866 184.06	\$ \$	871 159,420 183.03	-4.50% -5.03% -0.56%	
SRBR 3 Retirees and Beneficiaries Eligible Total Monthly Benefits Average Monthly Benefit	\$ \$	635 200,519 315.78	\$ \$	644 208,458 323.69	1.42% 3.96% 2.51%	
	SRBR Death Benefits Retirees Eligible Total Benefits Average Benefit  SRBR 1 Retirees and Beneficiaries Eligible Total Monthly Benefits Average Monthly Benefit  SRBR 2 Retirees and Beneficiaries Eligible Total Monthly Benefits Average Monthly Benefits Average Monthly Benefits Average Monthly Benefits Total Monthly Benefits  SRBR 3 Retirees and Beneficiaries Eligible Total Monthly Benefits	SRBR Death Benefits Retirees Eligible Total Benefits \$ Average Benefit \$  SRBR 1 Retirees and Beneficiaries Eligible Total Monthly Benefits \$ Average Monthly Benefit \$  SRBR 2 Retirees and Beneficiaries Eligible Total Monthly Benefits \$  SRBR 2 Retirees and Beneficiaries Eligible Total Monthly Benefit \$  SRBR 3 Retirees and Beneficiaries Eligible Total Monthly Benefit \$  SRBR 3 Retirees and Beneficiaries Eligible Total Monthly Benefits \$	SRBR Death Benefits Retirees Eligible 4,664 Total Benefits \$ 13,992,000 Average Benefit \$ 3,000  SRBR 1 Retirees and Beneficiaries Eligible 5,254 Total Monthly Benefits \$ 173,032 Average Monthly Benefit \$ 32.93  SRBR 2 Retirees and Beneficiaries Eligible 912 Total Monthly Benefits \$ 167,866 Average Monthly Benefit \$ 184.06  SRBR 3 Retirees and Beneficiaries Eligible 635 Total Monthly Benefits \$ 200,519	SRBR Death Benefits Retirees Eligible 4,664 Total Benefits \$ 13,992,000 \$ Average Benefit \$ 3,000 \$  SRBR 1 Retirees and Beneficiaries Eligible 5,254 Total Monthly Benefits \$ 173,032 \$ Average Monthly Benefit \$ 32.93 \$  SRBR 2 Retirees and Beneficiaries Eligible 912 Total Monthly Benefits \$ 167,866 \$ Average Monthly Benefit \$ \$ 184.06 \$  SRBR 3 Retirees and Beneficiaries Eligible 635 Total Monthly Benefits \$ 200,519 \$	SRBR Death Benefits         Retirees Eligible       4,664       4,756         Total Benefits       \$ 13,992,000       \$ 14,268,000         Average Benefit       \$ 3,000       \$ 3,000         SRBR 1         Retirees and Beneficiaries Eligible       5,254       5,316         Total Monthly Benefits       \$ 173,032       \$ 174,937         Average Monthly Benefit       \$ 32.93       \$ 32.91         SRBR 2         Retirees and Beneficiaries Eligible       912       871         Total Monthly Benefits       \$ 167,866       \$ 159,420         Average Monthly Benefit       \$ 184.06       \$ 183.03         SRBR 3       Retirees and Beneficiaries Eligible       635       644         Total Monthly Benefits       \$ 200,519       \$ 208,458	



### **General Members**

_	Actives	Terminated Vested	Terminated Pending Refund	Service Retirees	Disability Retirees	Beneficiaries
As of December 31, 2007	7,127	1,053	474	3,000	541	637
New Hires/Rehires	377	(9)	24	-	-	· -
Net Transfers (to)/from Safety	1	-	-	-	-	-
Terminated - Contributions Refunded	(58)	(11)	(76)	-	-	-
Terminated - Pending Refund	(93)	-	93	-	-	-
Vested Terminations	(38)	130	(92)	(1)	-	-
Suspended	-	-	-	-	-	-
Service Retirements	(90)	(26)	-	116	-	-
Disability Retirements	(5)	(5)	-	(3)	13	-
Active Deaths	(5)	-	-	-	-	-
Deaths Or Ceased Payments	-	-	-	(45)	(7)	(27)
Beneficiaries of Retirees Who Died	-	-	-	-	-	29
Data Corrections	-	5	2	2	-	3
As of June 30, 2008	7,216	1,137	425	3,069	547	642



# **Safety Members**

	Actives	Terminated Vested	Terminated Pending Refund	Service Retirees	Disability Retirees	Beneficiaries
As of December 31, 2007	1,798 *	132	35	698	425	251
New Hires/Rehires	98	(1)	2	-	-	-
Net Transfers (to)/from General	(1)	-	-	-	-	-
Terminated - Contributions Refunded	(5)	(2)	(5)	-	-	-
Terminated - Pending Refund	(13)	-	13	-	-	-
Vested Terminations	(14)	23	(9)	-	-	-
Suspended	-	-	-	-	-	-
Service Retirements	(22)	(2)	-	24	-	-
Disability Retirements	(2)	-	-	(3)	5	-
Active Deaths	(1)	-	-	-	-	-
Deaths Or Ceased Payments	-	-	-	(6)	(3)	(6)
Beneficiaries of Retirees Who Died	-	-	-	-	-	8
Data Corrections	-	(1)	-	-	-	-
As of June 30, 2008	1,838 *	149	36	713	427	253

<sup>\*</sup> Liabilities for three suspended members were also valued. total actives =1801 with extra three



# Summary of Active General Members by Age and Service

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

					Years of	of Service					
<u>Age</u>	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>35-39</u>	40&Up	Total
0-24	108	104	_	_	_	_	_	_	_	_	212
25-29	225	419	61	-	-	-	_	_	-	_	705
30-34	137	415	229	23	-	-	_	_	-	-	804
35-39	104	294	311	104	26	-	-	-	-	-	839
40-44	82	206	233	146	106	34	-	-	-	-	807
45-49	76	203	247	174	193	160	58	2	-	-	1,113
50-54	80	141	188	180	219	170	142	41	1	-	1,162
55-59	34	111	203	144	156	123	113	61	11	-	956
60-64	17	47	112	88	87	60	40	16	5	-	472
65-69	-	8	37	24	21	16	9	3	-	3	121
70&Up	-	2	7	2	7	3	1	3	-	-	25
Total	863	1,950	1,628	885	815	566	363	126	17	3	7,216

# Average Annual Compensation for General Members by Age and Service at June 30, 2008

#### Average Compensation by Age and Service Groups

					Years o	of Service					
<u>Age</u>	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	20-24	<u>25-29</u>	<u>30-34</u>	<u>35-39</u>	40&Up	<u>Total</u>
0-24	31,606	33,876	-	-	-	-	-	-	-	-	32,720
25-29	38,220	42,211	40,436	-	-	-	-	-	-	-	40,784
30-34	40,164	44,180	53,637	46,966	-	-	-	-	-	-	46,269
35-39	40,159	46,120	56,690	57,521	46,795	-	-	-	-	-	50,733
40-44	42,027	45,306	51,395	55,322	55,988	51,195	-	-	-	-	50,194
45-49	41,354	46,262	51,632	56,424	57,292	58,387	51,116	51,463	-	-	52,625
50-54	47,518	47,756	51,244	57,591	57,983	62,581	61,183	59,834	38,822	-	55,983
55-59	49,945	51,361	55,981	50,510	55,738	65,006	63,086	68,802	46,371	-	57,075
60-64	49,105	52,680	53,663	56,190	56,243	57,779	66,104	79,572	47,520	-	56,738
65-69	-	60,378	50,475	56,578	45,039	63,582	51,846	40,473	-	83,652	53,807
70&Up	-	56,831	71,668	51,203	43,430	88,745	28,503	112,444	-	-	66,153
Total	40,110	44,787	53,124	55,370	56,129	60,896	60,388	67,341	46,265	83,652	51,149

Note that the compensation in this chart is the Final Average Salary as of June 30, 2008.



# Summary of Active Safety Members by Age and Service

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

					Years of	of Service					
<u>Age</u>	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>35-39</u>	40&Up	<u>Total</u>
0-24	65	39	-	-	-	-	-	-	-	-	104
25-29	70	182	73	-	-	-	-	-	-	-	325
30-34	20	97	164	47	-	-	-	-	-	-	328
35-39	12	43	118	106	21	-	-	-	-	-	300
40-44	5	20	32	53	59	24	-	-	-	-	193
45-49	1	9	18	34	57	89	40	-	-	-	248
50-54	1	3	5	18	25	43	72	32	-	-	199
55-59	2	1	5	10	6	27	24	32	1	-	108
60-64	-	1	3	6	6	8	3	2	1	-	30
65-69	-	-	2	2	2	-	-	-	-	-	6
Total	176	395	420	276	176	191	139	66	2	-	1,841

# Average Annual Compensation for Safety Members by Age and Service at June 30, 2008

#### Average Compensation by Age and Service Groups

				Years of	of Service					
<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>35-39</u>	<u>40&amp;Up</u>	<u>Total</u>
41,161	49,547	-	-	-	-	-	-	-	-	44,306
40,783	51,394	63,259	-	-	-	-	-	-	-	51,774
41,553	52,208	62,079	64,942	-	-	-	-	-	-	58,319
41,515	51,530	65,426	64,918	67,362	-	-	-	-	-	62,434
40,579	52,640	68,212	65,115	73,543	84,662	-	-	-	-	68,707
36,139	55,793	60,991	62,957	72,219	80,114	83,069	-	-	-	73,976
71,213	61,699	64,582	64,256	73,962	79,054	81,504	98,678	_	-	80,453
52,491	50,816	47,512	57,584	60,405	77,691	87,419	91,012	183,746	-	79,847
-	41,721	53,003	58,355	66,133	69,964	73,095	89,932	130,234	-	67,892
-	-	72,811	62,693	53,155	-	· -	-	-	-	62,886
41,334	51,642	63,488	64,250	71,504	79,679	82,794	94,696	156,990	-	64,067
	41,161 40,783 41,553 41,515 40,579 36,139 71,213 52,491	41,161 49,547 40,783 51,394 41,553 52,208 41,515 51,530 40,579 52,640 36,139 55,793 71,213 61,699 52,491 50,816 - 41,721	41,161       49,547         40,783       51,394       63,259         41,553       52,208       62,079         41,515       51,530       65,426         40,579       52,640       68,212         36,139       55,793       60,991         71,213       61,699       64,582         52,491       50,816       47,512         -       41,721       53,003         -       72,811	41,161       49,547       -       -         40,783       51,394       63,259       -         41,553       52,208       62,079       64,942         41,515       51,530       65,426       64,918         40,579       52,640       68,212       65,115         36,139       55,793       60,991       62,957         71,213       61,699       64,582       64,256         52,491       50,816       47,512       57,584         -       41,721       53,003       58,355         -       72,811       62,693	≤1         1-4         5-9         10-14         15-19           41,161         49,547         -         -         -           40,783         51,394         63,259         -         -           41,553         52,208         62,079         64,942         -           41,515         51,530         65,426         64,918         67,362           40,579         52,640         68,212         65,115         73,543           36,139         55,793         60,991         62,957         72,219           71,213         61,699         64,582         64,256         73,962           52,491         50,816         47,512         57,584         60,405           -         41,721         53,003         58,355         66,133           -         72,811         62,693         53,155	≤1         1-4         5-9         10-14         15-19         20-24           41,161         49,547         -	≤1         1-4         5-9         10-14         15-19         20-24         25-29           41,161         49,547         -         -         -         -         -         -           40,783         51,394         63,259         -         -         -         -         -           41,553         52,208         62,079         64,942         -         -         -         -           41,515         51,530         65,426         64,918         67,362         -         -         -           40,579         52,640         68,212         65,115         73,543         84,662         -           36,139         55,793         60,991         62,957         72,219         80,114         83,069           71,213         61,699         64,582         64,256         73,962         79,054         81,504           52,491         50,816         47,512         57,584         60,405         77,691         87,419           -         41,721         53,003         58,355         66,133         69,964         73,095           -         72,811         62,693         53,155         -         -         -	≤1         1-4         5-9         10-14         15-19         20-24         25-29         30-34           41,161         49,547         -         -         -         -         -         -         -           40,783         51,394         63,259         -         -         -         -         -         -           41,553         52,208         62,079         64,942         -         -         -         -         -           41,515         51,530         65,426         64,918         67,362         -         -         -         -           40,579         52,640         68,212         65,115         73,543         84,662         -         -         -           36,139         55,793         60,991         62,957         72,219         80,114         83,069         -           71,213         61,699         64,582         64,256         73,962         79,054         81,504         98,678           52,491         50,816         47,512         57,584         60,405         77,691         87,419         91,012           -         41,721         53,003         58,355         66,133         69,964         73,095 <td>41,161       49,547       -       <td< td=""><td>&lt;1         1-4         5-9         10-14         15-19         20-24         25-29         30-34         35-39         40&amp;Up           41,161         49,547         -<!--</td--></td></td<></td>	41,161       49,547       - <td< td=""><td>&lt;1         1-4         5-9         10-14         15-19         20-24         25-29         30-34         35-39         40&amp;Up           41,161         49,547         -<!--</td--></td></td<>	<1         1-4         5-9         10-14         15-19         20-24         25-29         30-34         35-39         40&Up           41,161         49,547         - </td

Note that the compensation in this chart is the Final Average Salary as of June 30, 2008.



### 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 pages.

### **General Tier I Member Contribution Rates**

# Member Rates as a Percentage of Salary Contribution Rates (Fiscal Year 2009-2010) 1/100<sup>th</sup> @ 55

	Integ	Non-Integrated	
	First \$350 of	Excess of \$350	All
Entry Age	Monthly Comp.	Monthly Comp.	Compensation
18	4.23%	6.34%	6.34%
19	4.31%	6.46%	6.46%
20	4.39%	6.58%	6.58%
21	4.47%	6.70%	6.70%
22	4.55%	6.83%	6.83%
23	4.63%	6.95%	6.95%
24	4.72%	7.08%	7.08%
25	4.81%	7.21%	7.21%
26	4.90%	7.35%	7.35%
27	4.99%	7.48%	7.48%
28	5.08%	7.62%	7.62%
29	5.17%	7.76%	7.76%
30	5.27%	7.91%	7.91%
31	5.37%	8.06%	8.06%
32	5.47%	8.21%	8.21%
33	5.57%	8.36%	8.36%
34	5.68%	8.52%	8.52%
35	5.79%	8.68%	8.68%
36	5.90%	8.85%	8.85%
37	6.01%	9.02%	9.02%
38	6.13%	9.19%	9.19%
39	6.25%	9.38%	9.38%
40	6.37%	9.56%	9.56%
41	6.50%	9.75%	9.75%
42	6.62%	9.93%	9.93%
43	6.74%	10.11%	10.11%
44	6.85%	10.28%	10.28%
45	6.97%	10.45%	10.45%
46	7.07%	10.61%	10.61%
47	7.17%	10.75%	10.75%
48	7.26%	10.89%	10.89%
49	7.34%	11.01%	11.01%
50	7.41%	11.12%	11.12%
51	7.47%	11.21%	11.21%
52	7.50%	11.25%	11.25%
53	7.50%	11.25%	11.25%
54	7.50%	11.25%	11.25%

### **General Tier II Member Contribution Rates**

# Member Rates as a Percentage of Salary Contribution Rates (Fiscal Year 2009-2010) 1/120<sup>th</sup> @ 60

	Integ	Non-Integrated		
	First \$350 of	Excess of \$350	All	
Entry Age	Monthly Comp.	Monthly Comp.	Compensation	
18	3.01%	4.51%	4.51%	
19	3.06%	4.59%	4.59%	
20	3.12%	4.68%	4.68%	
21	3.18%	4.77%	4.77%	
22	3.24%	4.86%	4.86%	
23	3.30%	4.95%	4.95%	
24	3.36%	5.04%	5.04%	
25	3.43%	5.14%	5.14%	
26	3.49%	5.23%	5.23%	
27	3.55%	5.33%	5.33%	
28	3.62%	5.43%	5.43%	
29	3.69%	5.53%	5.53%	
30	3.75%	5.63%	5.63%	
31	3.83%	5.74%	5.74%	
32	3.90%	5.85%	5.85%	
33	3.97%	5.95%	5.95%	
34	4.04%	6.06%	6.06%	
35	4.12%	6.18%	6.18%	
36	4.19%	6.29%	6.29%	
37	4.27%	6.41%	6.41%	
38	4.35%	6.53%	6.53%	
39	4.43%	6.65%	6.65%	
40	4.52%	6.78%	6.78%	
41	4.61%	6.91%	6.91%	
42	4.69%	7.04%	7.04%	
43	4.79%	7.18%	7.18%	
44	4.88%	7.32%	7.32%	
45	4.98%	7.47%	7.47%	
46	5.07%	7.61%	7.61%	
47	5.17%	7.75%	7.75%	
48	5.27%	7.90%	7.90%	
49	5.35%	8.03%	8.03%	
50	5.44%	8.16%	8.16%	
51	5.53%	8.29%	8.29%	
52	5.60%	8.40%	8.40%	
53	5.67%	8.50%	8.50%	
54	5.73%	8.60%	8.60%	

### Member Contribution Rates – Excluding "Safety 3" Members

### Member Rates as a Percentage of Pensionable Earnings **Contribution Rates (Fiscal Year 2009-2010)**

	Integrated						
	First \$350 of	Excess of \$350					
Entry Age	Monthly Comp.	Monthly Comp.					
18	7.42%	11.14%					
19	7.55%	11.32%					
20	7.68%	11.51%					
21	7.80%	11.71%					
22	7.93%	11.90%					
23	8.07%	12.10%					
24	8.20%	12.30%					
25	8.34%	12.51%					
26	8.48%	12.72%					
27	8.62%	12.93%					
28	8.77%	13.15%					
29	8.91%	13.37%					
30	9.07%	13.60%					
31	9.22%	13.83%					
32	9.38%	14.07%					
33	9.54%	14.31%					
34	9.71%	14.57%					
35	9.88%	14.83%					
36	10.06%	15.10%					
37	10.25%	15.38%					
38	10.44%	15.66%					
39	10.62%	15.93%					
40	10.79%	16.19%					
41	10.95%	16.43%					
42	11.10%	16.66%					
43	11.24%	16.86%					
44	11.36%	17.04%					
45	11.48%	17.22%					
46	11.57%	17.36%					
47	11.62%	17.42%					
48	11.62%	17.42%					
49 and Older	11.62%	17.42%					

Note: Beginning at various dates throughout 2007, certain Safety bargaining units converted to a new schedule of contribution rates, referred to as "Safety 3" contribution rates. For employees falling under this category and hired after the appropriate date (which varies by bargaining unit), the contribution rate will be a flat percentage of pay regardless of entry age.



### Member Contribution Rates - "Safety 3" Members

### Member Rates as a Percentage of Pensionable Earnings Contribution Rates (Fiscal Year 2009-2010)

	Integ	rated
Entry Age	First \$350 of Monthly Comp.	Excess of \$350 Monthly Comp.
Every Entry Age	8.20%	12.30%

Note: Beginning at various dates throughout 2007, certain Safety bargaining units converted to a new schedule of contribution rates, referred to as "Safety 3" contribution rates. For employees falling under this category and hired after the appropriate date (which varies by bargaining unit), the contribution rate will be a flat percentage of pay regardless of entry age.

### 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

Market Value of Assets, adjusted to defer unexpected assets gains and

losses over 10 six-month periods.

Actuarially **Equivalent**  Of equal Actuarial Present Value, determined as of a given date with

each value based on the same set of Actuarial Assumptions.

**Amortization Payment** 

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

**Approved SRBR** 

**Benefits** 

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

well as the Tier III benefits approved through the valuation date.



### **Basic Benefits**

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

### **COLA Benefits**

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

### Contingency Reserve

The Contingency Reserve is used to satisfy the California Government Code requirement for Section 31616 requirement for KCERA to reserve at least 1% of assets, up to a maximum of 3% of assets. KCERA has adopted a goal to reserve 3.0% of the assets against earning deficiencies, investment losses, and other contingencies, if available.

### **Cost-of-Living** Reserve

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

### COLA Contribution Reserve

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

### **Employers**' Advance Reserve

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

### **Entry Age Actuarial Cost** Method

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

#### **Funded Ratio**

A measurement of the funded status of the system. The Funded Ratio is calculated by dividing the Valuation Assets by the Actuarial Accrued Liability. For example, a Funded Ratio of 90% indicates assets are 10% less than liabilities.



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

Accrued Liability.

**Future SRBR** Benefits

These are the SRBR benefits expected to be approved in future years in

order to maintain the 80% purchasing power goal.

**Market Value of** Assets

The value of cash, investments and other property belonging to a

pension plan.

**Members' Deposit** Reserve

The accumulation of member contributions. Additions include member contributions and related earnings and deductions include transfers to

the Retired Members' Reserve and refunds to members.

Non-Valuation Reserves

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

Contribution Reserve.

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

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

Method.

**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.

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

will include both Basic Benefits and COLA Benefits, including the

supplemental 0.5% COLA provisions.

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

future retired participants and their beneficiaries.

Unfunded **Actuarial Accrued** Liability

The excess, if any, of the Actuarial Accrued Liability over the Actuarial Value of Assets.

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

Actuarial Value of Assets are determined. Generally, the Valuation Date

will coincide with the ending of a Plan Year.

**Valuation Assets** The actuarial value of the Valuation Reserves. This is calculated by

subtracting the Non-Valuation reserves from the Actuarial Value of

Assets.

Valuation Reserves

All reserves excluding the Non-Valuation Reserves.

