

Contra Costa County Employees'  
Retirement Association

*Actuarial Valuation and Review  
as of December 31, 2005*

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*June 29, 2006*

*Board of Retirement  
Contra Costa County Employees' Retirement Association  
1335 Willow Way, Suite 221  
Concord, CA 94520*

*Dear Board Members:*

*We are pleased to submit this Actuarial Valuation and Review as of December 31, 2005. The report summarizes the actuarial data used in the valuation, establishes the funding requirements for the fiscal year beginning July 1, 2007 and analyzes the preceding year's experience.*

*The census information on which our calculations were based was prepared by the CCCERA and the financial information was provided by the Association's staff. That assistance is gratefully acknowledged. The actuarial calculations were completed under the supervision of John Monroe, ASA, MAAA, Enrolled Actuary.*

*This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board of Retirement are reasonably related to the experience of and the expectations for the Plan.*

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

*Sincerely,*

*THE SEGAL COMPANY*

*By:*

*Paul Angelo, FSA, EA, MAAA, FCA  
Vice President and Actuary*

*John Monroe, EA, ASA, MAAA  
Associate Actuary*

*JZM/bqb*

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## **SECTION 1: Valuation Summary for the Contra Costa County Employees' Retirement Association**

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### **PURPOSE AND SCOPE**

This report has been prepared by The Segal Company to present a valuation of the Contra Costa County Employees' Retirement Association (CCCERA) as of December 31, 2005. The valuation was performed to determine contribution rates that, in combination with current assets, are sufficient to provide the prescribed benefits. The contribution rate requirements presented in this report are based on:

- The benefit provisions of the Retirement Association, as administered by the Board;
- The characteristics of covered active members, vested terminated members, and retired members and beneficiaries as of December 31, 2005, provided by the Association's staff;
- The assets of the Plan as of December 31, 2005, provided by the Association's staff;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

Contra Costa County Employees' Retirement Association's basic financial goal is to establish contributions that fully fund the system's liabilities, and that, as a percentage of payroll, remain as level as possible for each generation of active members. Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.

The actuarial valuation required for the Contra Costa County Employees' Retirement Association has been prepared as of December 31, 2005 by The Segal Company. In preparing this valuation, we have employed generally accepted actuarial methods and assumptions to evaluate the Association's assets, liabilities and future contribution requirements. Our calculations are based upon member data and financial information provided to us by the Association's staff. This information has not been audited by us, but it has been reviewed and found to be reasonably consistent, both internally and with prior years' information.

## SECTION 1: Valuation Summary for the Contra Costa County Employees' Retirement Association

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The contribution requirements are determined as a percentage of payroll. The Association's employer rates provide for both normal cost and a contribution to amortize any unfunded or overfunded actuarial accrued liabilities. The Association's unfunded actuarial accrued liability(UAAL) is being amortized over a decreasing 20-year period starting with the December 31, 2002 valuation. There are 17 years left in the amortization period as of December 31, 2005.

We recommend that the rates calculated in this report be adopted by the Board for the fiscal year that extends from July 1, 2007 through June 30, 2008.

### **SIGNIFICANT ISSUES IN VALUATION YEAR**

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

- The ratio of the valuation value of assets to actuarial accrued liabilities increased from 82.0% to 84.8%. The Association's UAAL has decreased from \$807 million to \$730 million. This decrease is mainly due to the proceeds from pension obligation bonds (POBs) that were deposited by two districts (Contra Costa County Fire Protection District and Moraga-Orinda Fire District) during 2005 offset by an investment return on actuarial value, less than the 7.90% assumed in the valuation. A reconciliation of the Association's UAAL is provided in Section 3, Exhibit I.
- The aggregate employer rate (before any employer subvention of member rates and member subvention of employer rates) calculated in this valuation has decreased from 29.33% of payroll to 28.63% of payroll. The primary reason for this is the proceeds from pension obligation bonds deposited by two districts offset by lower than expected return on investments and the delay in implementing contribution rates. Note that the prior year (December 31, 2004) employer contribution rates shown in this report are all before issuance of the recent POBs. A complete reconciliation of the Association's aggregate employer rate is provided in Section 2, Subsection D (see Chart 15).
- Even though the individual entry age based member rates have remained unchanged or decreased slightly in this valuation, the aggregate member rate (before any employer subvention of these rates or member subvention of employer rates) calculated in this valuation has increased slightly from 11.40% of payroll to 11.42% of payroll. This is primarily due to the change in demographics of the active members since the prior valuation. A complete reconciliation of the Association's aggregate member rate is provided in Section 2, Subsection D (see Chart 16).
- The results of this valuation reflect two changes in economic actuarial assumptions as recommended by Segal and adopted by the Association for the December 31, 2005 valuation. The inflation assumption was lowered from 4.00% to 3.75% and the "across the board" salary increase assumption was increased from 0.25% to 0.50%. There is no impact on employer or member contribution rates due to the combined effect of these two assumption changes.

## SECTION 1: Valuation Summary for the Contra Costa County Employees' Retirement Association

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- The Summary of Key Valuation Results (page iv) and the employer and member rate reconciliations (Charts 15 and 16) do not reflect any employer subvention of member rates or member subvention of employer rates. The Summary of Contribution Rates with Employer Subvention (page v) is an illustration of what the rates would be if all employers (except for Safety Districts) subvented 50% of the member basic rates. The detailed rate tables (Charts 13 and 14) also include the 50% subvention line (except for Safety Districts).
- As indicated on page 5 of this valuation report, the total unrecognized investment gain as of December 31, 2005 is about \$147 million. This investment gain will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years, and will serve to offset any investment losses that may occur after December 31, 2005. This implies that if the Association earns the assumed rate of investment return of 7.90% per year (net of expenses) on a **market value** basis, that will result in investment gains on the actuarial value of assets in the next few years.
- This valuation reflects the impact of Contra Costa Mosquito Abatement District members transferring from Tier 2 to Tier 3. Contra Costa Mosquito Abatement District members with non-enhanced benefits will be eligible for enhanced benefits starting February 1, 2006. Also, East Contra Costa Fire District members became eligible for enhanced benefits starting July 1, 2005.

### Impact of Future Experience on Contribution Rates

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

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

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

**Summary of Key Valuation Results**

	December 31, 2005		December 31, 2004	
<b>Employer Contribution Rates (County and District combined) <sup>(1)</sup>:</b>				
		Estimated		Estimated
	Total Rate	Annual Amount	Total Rate	Annual Amount
General Tier 1 Non-enhanced	30.79%	\$1,802,537	28.77%	\$1,930,495
General Tier 1 Enhanced	27.60%	22,721,842	26.90%	24,232,164
General Tier 2	N/A	N/A	24.88%	259,110
General Tier 3 Non-enhanced	N/A	N/A	26.76%	77,315
General Tier 3 Enhanced	23.06%	90,344,445	22.06%	82,517,745
Safety Non-enhanced	36.79%	698,430	36.28%	1,761,478
Safety Enhanced	44.03%	64,126,320	49.81%	70,814,427
All Employers combined	28.63%	\$179,693,574	29.33%	\$181,592,734
<b>Average Member Contribution Rates <sup>(1)</sup>:</b>				
		Estimated		Estimated
	Total Rate	Annual Amount	Total Rate	Annual Amount
General Tier 1 Non-enhanced	11.24%	\$658,022	11.34%	\$760,925
General Tier 1 Enhanced	10.01%	8,240,059	9.93%	8,944,995
General Tier 2	N/A	N/A	4.45%	46,344
General Tier 3 Non-enhanced	N/A	N/A	10.52%	30,394
General Tier 3 Enhanced	9.97%	39,066,692	9.96%	37,248,338
Safety Non-enhanced	14.12%	268,058	14.32%	695,269
Safety Enhanced	16.10%	23,446,910	16.09%	22,876,233
All Categories Combined	11.42%	\$71,679,741	11.40%	\$70,602,498
<b>Refundability Factors</b>				
	Non-enhanced	Enhanced	Non-enhanced	Enhanced
General Tier 1	.9949	.9983	.9956	.9985
General Tier 2	N/A	N/A	.9964	N/A
General Tier 3	N/A	.9960	1.0000	.9962
Safety	.9999	.9985	.9974	.9980
<b>Funded Status:</b>				
Actuarial accrued liability	\$4,792,428,024		\$4,481,242,899	
Valuation value of assets	\$4,062,057,143		\$3,673,858,074	
Funded percentage	84.8%		82.0%	
Unfunded Actuarial Accrued Liability (UAAL)	\$730,370,881		\$807,384,825	
<b>Key Assumptions:</b>				
Interest rate	7.90%		7.90%	
Inflation rate	3.75%		4.00%	

<sup>(1)</sup> Based on projected payroll as of each valuation date shown. These rates do not include any employer subvention of member contributions or any member subvention of employer contributions.

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

**Summary of Contribution Rates with Employer Subvention**

	<b>December 31, 2005</b>		<b>December 31, 2004</b>	
<b>Employer Contribution Rates (County and District combined)<sup>(1)</sup>:</b>	Estimated		Estimated	
	Total Rate	Annual Amount	Total Rate	Annual Amount
General Tier 1 Non-enhanced	34.59%	\$2,025,000	32.56%	\$2,184,807
General Tier 1 Enhanced	30.74%	25,306,636	30.01%	27,033,668
General Tier 2	N/A	N/A	26.37%	274,628
General Tier 3 Non-enhanced	N/A	N/A	30.53%	88,208
General Tier 3 Enhanced	26.39%	103,392,799	25.39%	94,971,255
Safety Non-enhanced	36.79%	698,430	36.28%	1,761,478
Safety Enhanced	46.77%	68,115,581	52.65%	74,849,920
All Employers combined	31.80%	\$199,538,446	32.49%	\$201,163,964
<b>Average Member Contribution Rates<sup>(1)</sup>:</b>	Estimated		Estimated	
	Total Rate	Annual Amount	Total Rate	Annual Amount
General Tier 1 Non-enhanced	7.42%	\$434,388	7.54%	\$505,941
General Tier 1 Enhanced	6.86%	5,647,033	6.82%	6,143,491
General Tier 2	N/A	N/A	2.96%	30,827
General Tier 3 Non-enhanced	N/A	N/A	6.76%	19,531
General Tier 3 Enhanced	6.63%	25,979,154	6.62%	24,757,430
Safety Non-enhanced	14.12%	268,058	14.32%	695,269
Safety Enhanced	13.36%	19,456,566	13.25%	18,838,415
All Categories Combined	8.25%	\$51,785,199	8.24%	\$50,990,904

<sup>(1)</sup> Based on projected payroll as of each valuation date shown. These rates include a 50% employer subvention of members' basic contributions for all employers except Safety Districts. The rates do not include any member subvention of employer contributions. As of December 31, 2005, for most Safety employers, Safety members contribute an extra 9% of compensation that reduces the employer's contribution rate.

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

**Summary of Key Valuation Demographic and Financial Data**

	<b>December 31, 2005</b>	<b>December 31, 2004</b>	<b>Percentage Change</b>
<b>Active Members:</b>			
Number of members	9,205	9,358	-1.6%
Average age	45.5	45.5	N/A
Average service	9.9	10.0	N/A
Projected total compensation	\$627,546,408	\$619,132,218	1.4%
Average projected compensation	\$68,175	\$66,161	3.0%
<b>Retired Member and Beneficiaries:</b>			
Number of members:			
Service retired	4,416	4,144	6.6%
Disability retired	919	905	1.5%
Beneficiaries	1,102	1,069	3.1%
Total	6,437	6,118	5.2%
Average age	68.8	68.9	N/A
Average Monthly Benefit	\$2,693	\$2,500	7.7%
<b>Vested Terminated Members:</b>			
Number of terminated vested members <sup>(1)</sup>	1,731	1,517	14.1%
Average age	45.4	45.6	N/A
<b>Summary of Financial Data:</b>			
Market value of assets	\$4,221,722,252	\$3,718,615,896	13.5%
Return on market value of assets	8.71%	12.27%	N/A
Actuarial value of assets	\$4,074,492,832	\$3,686,168,674	10.5%
Return on actuarial value of assets	5.74%	3.85%	N/A
Valuation value of assets	\$4,062,057,143	\$3,673,858,074	10.6%
Return on valuation value of assets	5.74%	3.84%	N/A

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

**SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association**

**A. MEMBER DATA**

The Actuarial Valuation and Review considers the number and demographics of covered members, including active members, vested terminated members, retired members and beneficiaries.

This section presents a summary of significant statistical data on these member groups.

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

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

**CHART 1**  
**Member Population: 2000 – 2005**

<b>Year Ended December 31</b>	<b>Active Members</b>	<b>Vested Terminated Members<sup>(1)</sup></b>	<b>Retired Members and Beneficiaries</b>	<b>Ratio of Non-Actives to Actives</b>
2000	8,884	877	5,245	0.69
2001	9,229	955	5,487	0.70
2002	9,611	1,067	5,619	0.70
2003	9,476	1,248	5,936	0.76
2004	9,358	1,517	6,118	0.82
2005	9,205	1,731	6,437	0.89

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

**SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association**

**Active Members**

Plan costs are affected by the age, years of service and compensation of active members. In this year's valuation, there are 9,205 active members with an average age of 45.5, average years of service of 9.9 years and average compensation of \$68,175. The 9,358 active members in the prior valuation had an average age of 45.5, average service of 10.0 years and average compensation of \$66,161.

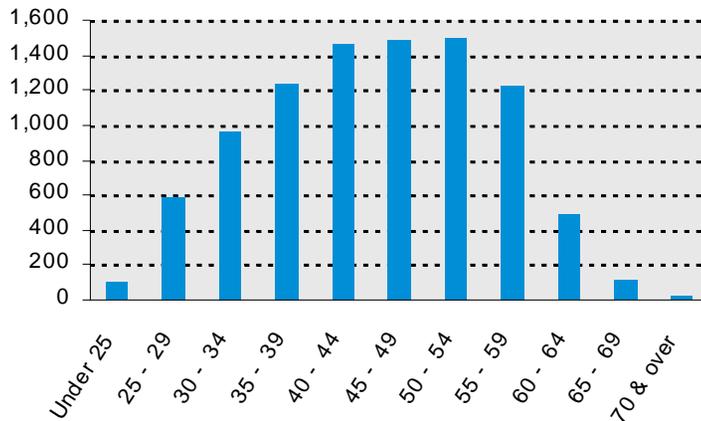
Among the active members, there were none with unknown age or service information.

**Inactive Members**

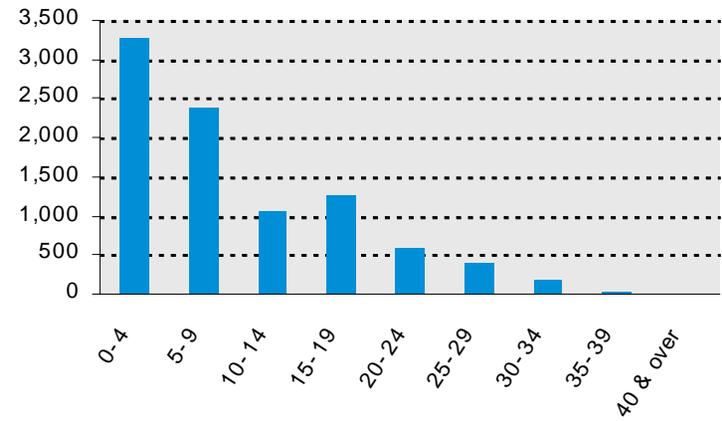
In this year's valuation, there were 1,731 members with a vested right to a deferred or immediate vested benefit or entitled to a return of their employee contributions versus 1,517 in the prior valuation.

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

**CHART 2**  
**Distribution of Active Members by Age as of December 31, 2005**



**CHART 3**  
**Distribution of Active Members by Years of Service as of December 31, 2005**



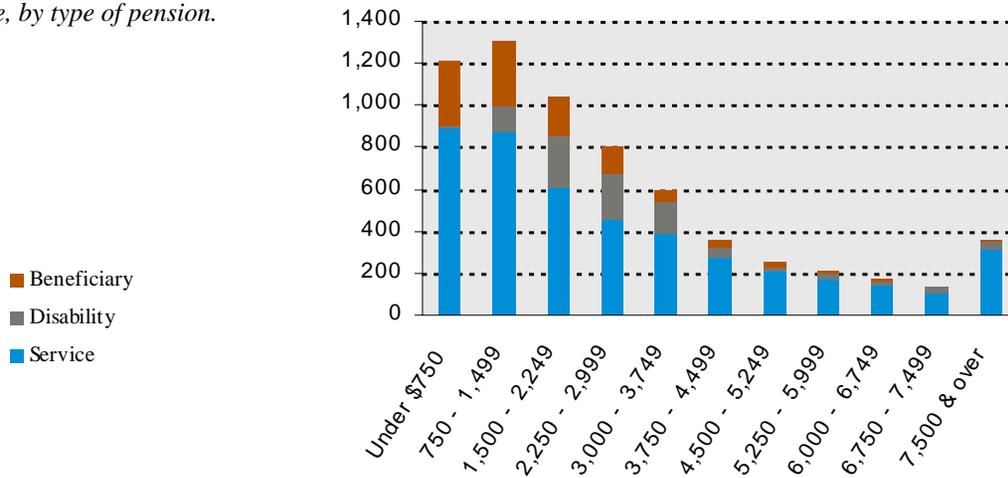
**SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association**

**Retired Members and Beneficiaries**

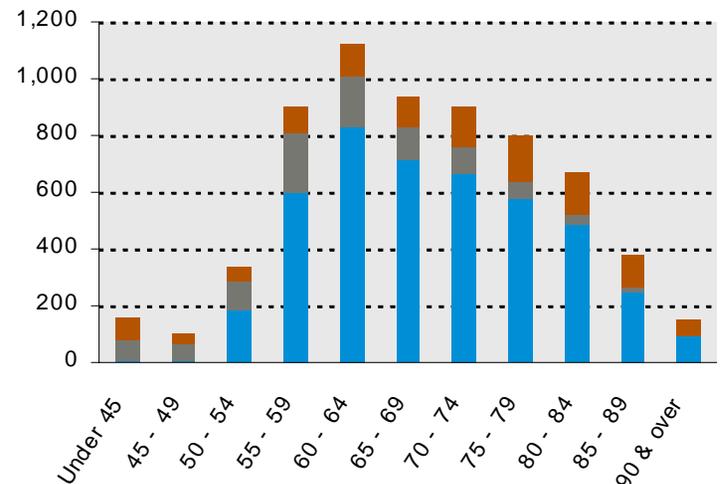
As of December 31, 2005, 5,335 retired members and 1,102 beneficiaries were receiving total monthly benefits of \$17,332,818. For comparison, in the previous valuation, there were 5,049 retired members and 1,069 beneficiaries receiving monthly benefits of \$15,291,126.

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

**CHART 4**  
**Distribution of Retired Members and Beneficiaries by Type and by Monthly Amount as of December 31, 2005**



**CHART 5**  
**Distribution of Retired Members and Beneficiaries by Type and by Age as of December 31, 2005**



**SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association**

**B. FINANCIAL INFORMATION**

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

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

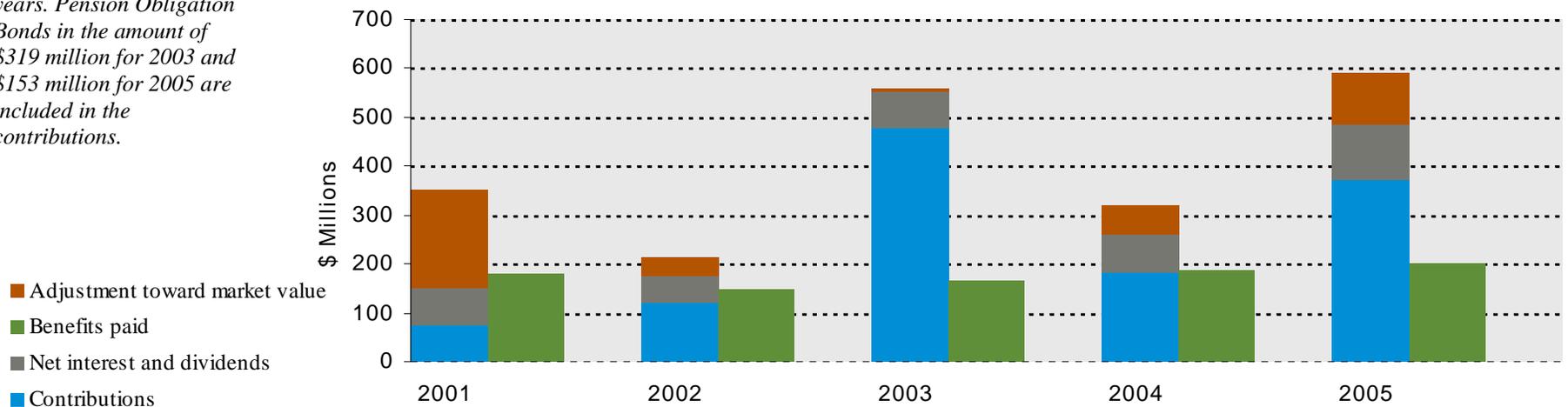
It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board of Retirement has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuation is not recognized in a single year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

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

*The chart depicts the components of changes in the actuarial value of assets over the last five years. Pension Obligation Bonds in the amount of \$319 million for 2003 and \$153 million for 2005 are included in the contributions.*

**CHART 6**

**Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended December 31**



**SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association**

**CHART 7**

**Determination of Actuarial Value of Assets for Year Ended December 31, 2005**

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

Six Month Period		Total Actual Market Return (net)	Expected Market Return (net)	Investment Gain (Loss)	Deferred Factor	Deferred Return
From	To					
7/2001	12/2001	\$(68,835,640)	\$118,433,855	\$(187,269,495)	0.1	\$(18,726,950)
1/2002	6/2002	(118,079,827)	114,304,079	(232,383,906)	0.2	(46,476,781)
7/2002	12/2002	(161,138,970)	107,923,673	(269,062,644)	0.3	(80,718,793)
1/2003	6/2003	232,701,151	105,496,508	127,204,643	0.4	50,881,857
7/2003	12/2003	366,693,598	123,112,205	243,581,393	0.5	121,790,697
1/2004	6/2004	81,082,517	138,259,604	(57,177,087)	0.6	(34,306,252)
7/2004	12/2004	325,616,709	135,588,114	190,028,594	0.7	133,020,016
1/2005	6/2005	95,562,086	148,852,732	(53,290,646)	0.8	(42,632,517)
7/2005	12/2005	228,037,754	156,484,262	71,553,492	0.9	<u>64,398,143</u>
1. Total deferred return						\$ 147,229,420
2. Market Value of Assets						4,221,722,252
3. Actuarial Value of Assets (Item 2 – Item 1)						4,074,492,832
4. Non-valuation reserves and designations:						
a. Post Retirement Death Benefit						12,435,689
b. Statutory Contingency						0
c. Additional One Percent Contingency						0
d. Unrestricted Designation						<u>0</u>
e. Total						\$ 12,435,689
5. Valuation Value of Assets (Item 3 – Item 4e)						<u>\$4,062,057,143</u>

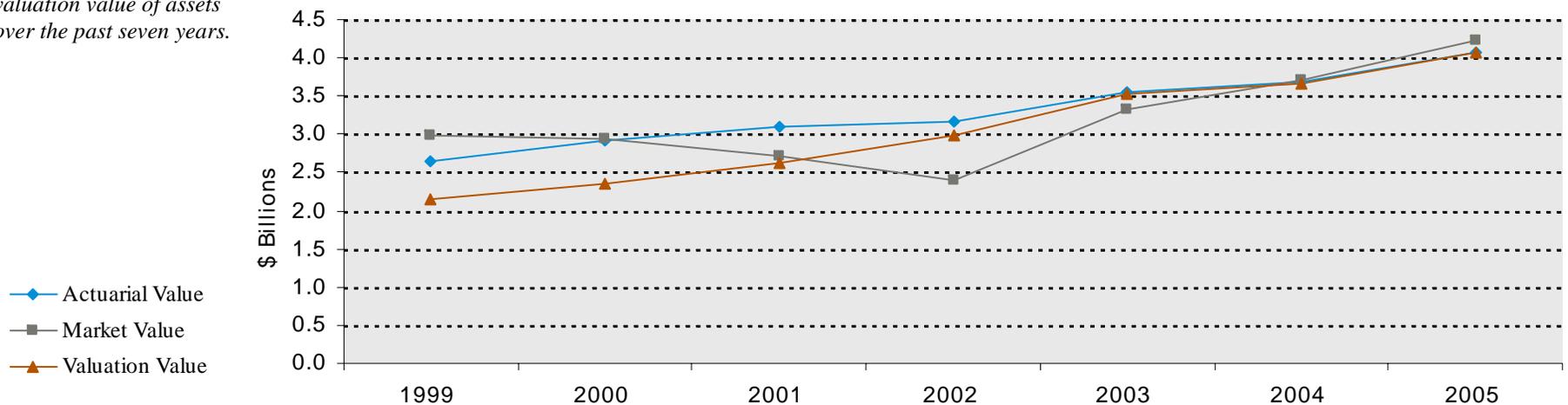
**SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association**

The market value, actuarial value and valuation value of assets are representations of the Plan's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets, but with less volatility. The valuation value of assets is the actuarial value, excluding any non-valuation reserves.

The valuation value of assets is significant because the Plan's liabilities are compared to this measure of its assets to determine what portion, if any, remains unfunded. Amortization of the unfunded liability is an important element in determining the contribution requirement.

*This chart shows the change in the relative values of market value, actuarial value and valuation value of assets over the past seven years.*

**CHART 8**  
**Relative Values of Market Value, Actuarial Value and Valuation Value of Assets for Years Ended December 31, 1999 – 2005**



**SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association**

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**C. ACTUARIAL EXPERIENCE**

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

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term

development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

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

The total loss is \$46.0 million, \$81.3 million loss from investments and \$35.3 million gain from all other sources. The net experience variation from individual sources other than investments was 0.7% of the actuarial accrued liability. A discussion of the major components of the actuarial experience is on the following pages.

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

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**CHART 9**

**Actuarial Experience for Year Ended December 31, 2005**

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1. Net gain/(loss) from investments*	\$(81,309,536)
2. Net gain/(loss) from other experience**	<u>35,316,596</u>
3. Net experience gain/(loss): (1) + (2)	\$(45,992,940)

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\* Details in Chart 10

\*\* Does not include the effect of plan or assumption changes.

**SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association**

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**Investment Rate of Return**

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the Plan's investment policy. For valuation purposes, the assumed rate of return on the actuarial value of assets during 2005 was 7.90%. The rate of return on Actuarial Value for the 2005 Plan Year was 5.74%.

Since the actual return for the year was less than the assumed return, the Plan experienced an actuarial loss on the Actuarial Value of Assets during the year ended December 31, 2005. Non-valuation reserves from prior years were not available to make up the loss in developing the Valuation Value of Assets.

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

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**CHART 10**

**Investment Experience for Year Ended December 31, 2005 – Valuation Value and Actuarial Value of Assets**

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	<b>Valuation Value</b>	<b>Actuarial Value</b>
1. Return	\$ 215,737,484	\$ 216,618,073
2. Average value of assets	3,760,088,867	3,772,021,717
3. Rate of return: (1) ÷ (2)	5.74%	5.74%
4. Assumed rate of return	7.90%	7.90%
5. Expected return: (2) x (4)	297,047,020	297,989,716
6. Gain/(loss): (1) – (5)	<u>\$(81,309,536)</u>	<u>\$(81,371,643)</u>

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**SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association**

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

Based upon this experience, future expectations and discussions with the Board, we have maintained the assumed rate of return of 7.90%.

**CHART 11**

**Investment Return – Actuarial Value, Valuation Value and Market Value: 2001 – 2005**

Year Ended December 31	Actuarial Value Investment Return		Valuation Value Investment Return		Market Value Investment Return	
	Amount	Percent of Assets	Amount	Percent of Assets	Amount	Percent of Assets
2001	\$278,746,528	9.73%	\$186,188,249	7.92%	\$(121,804,662)	(4.23%)
2002	93,144,770	3.05%	227,080,187	8.53%	(274,820,794)	(10.28%)
2003	83,420,012	2.52%	244,215,190	7.41%	599,528,120	23.44%
2004	136,674,234	3.85%	135,741,405	3.84%	406,427,237	12.27%
2005	216,618,073	5.74%	215,737,484	5.74%	331,400,271	8.71%
Total	\$808,603,617		\$1,008,962,515		\$940,730,172	
<i>Five-Year Average Return</i>		4.88%		6.47%		6.18%

*Note: Each year's yield is weighted by the average asset value in that year.*

**SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association**

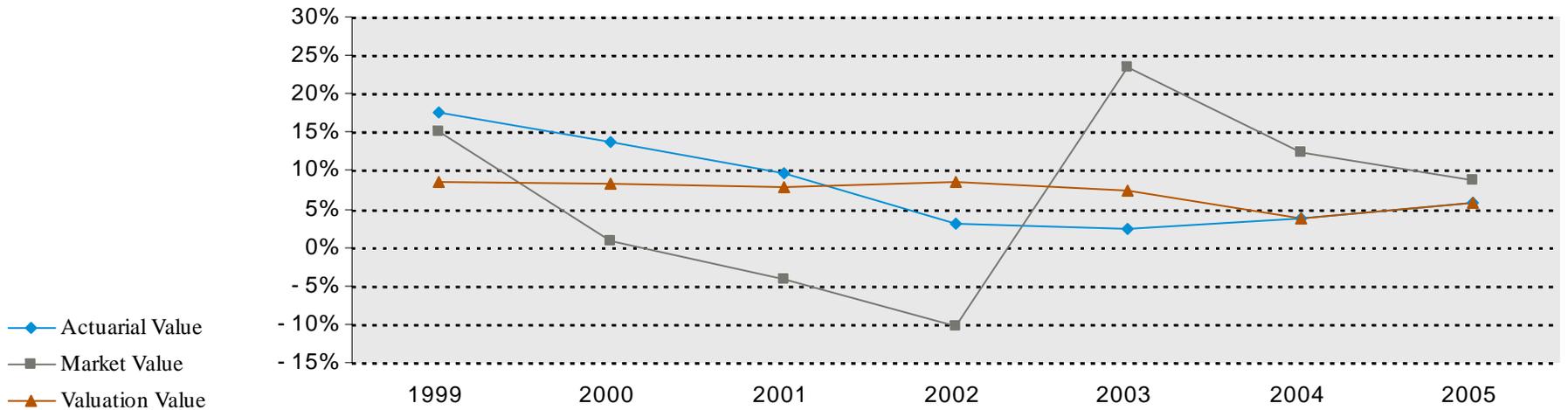
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Subsection B described the actuarial asset valuation method that gradually takes into account fluctuations in the market value rate of return. The effect of this is to stabilize the actuarial rate of return, which contributes to leveling pension plan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

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**CHART 12**  
**Market, Actuarial and Valuation Value Rates of Return for Years Ended December 31, 1999 - 2005**

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## SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association

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### **Other Experience**

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

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

Please see Exhibit I in Section 3 for a detailed reconciliation of changes in the Unfunded Actuarial Accrued Liability.

**SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association**

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**D. RECOMMENDED CONTRIBUTION**

Employer contributions consist of two components:

*Normal Cost*

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

*Contribution to the Unfunded*

*Actuarial Accrued Liability (UAAL)*

That annual contribution rate that, if paid annually over the UAAL amortization period, would accumulate to the amount necessary to fully fund the UAAL. Accumulation includes annual crediting of interest at the assumed investment earning rate. The contribution (or rate credit in the case of a negative UAAL ) is calculated to remain as a level percentage of future active member payroll (including payroll for new members as they enter the Association) assuming a constant number of active members. In order to remain as a level percentage of payroll, amortization payments (credits) are scheduled to increase at the combined annual inflation and "across the board" salary increase rate of 4.25% along with expected payroll. The current UAAL is being recognized over a 17-year declining period effective January 1, 2006.

The recommended employer contributions are provided on Charts 13 and 14.

## SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association

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### *Member Contributions*

Articles 6 and 6.8 of the 1937 Act define the methodology to be used in the calculation of member basic contribution rates for General and Safety members, respectively. The basic contribution rate is determined as that percentage of compensation which if paid annually from a member's first year of membership through the prescribed retirement age would accumulate to the amount necessary to fund a prescribed annuity. The annuity is equal to 1/120 of one year Final Average Salary per year of service at age 55 for General Tier 1 and Tier 3 Non-enhanced members; 40% of the Tier 1 Non-enhanced member's contribution rate (using three-year Final Average Salary) for General Tier 2 members; and Safety Non-enhanced members pay for an annuity at age 50 equal to 1/100 of one year Final Average Salary per year of service. The annuity is equal to 1/120 of one year Final Average Salary per year of service at age 60 for General Tier 1 and Tier 3 Enhanced members; and Safety Enhanced members pay for an annuity at age 50 equal to 1/100 of one year Final Average salary per year of service. Member contributions are accumulated at an annual interest rate adopted annually by the Board. The County is now paying 50% of the members' basic contributions on a nonrefundable basis. For illustration purposes only, the rates shown in Charts 13 and 14 include the 50% employer subvention of members' basic contributions for all employers (except for Safety Districts). Districts pay varying portions, up to 100%, of the members' basic contributions on a nonrefundable basis. Members also pay 50% of the cost-of-living benefit. For most Safety employers, Safety members also subvent a portion of the employer rate, currently 9% of compensation. This is not reflected in Charts 13 and 14. The age specific contribution rates are provided in Appendix A.

Please note that the terminal pay assumptions are only used in establishing cost-of-living member contributions. They are not used in establishing the basic member contributions.

## SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association

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### Cost Sharing Adjustments

CCCERA's member and employer contribution rate structure contains certain cost sharing arrangements consistent with its classification as a "cost sharing multiple employer plan." The rate adjustments that achieve this cost sharing have their roots in historical actuarial valuations. Here is a summary of the adjustments:

- Non-enhanced General Tier 1 and Non-enhanced Safety members share their combined member COLA normal costs in proportion to their basic member contribution rates.
- General Tier 1 and Safety employers share COLA normal cost in the same way that member COLA contributions are shared (i.e., by allocating COLA normal costs in proportion to basic normal costs). These costs are shared equally among member classifications with comparable benefit levels (i.e., enhanced versus non-enhanced).
- UAAL costs are shared equally among member classifications with comparable benefit levels (i.e., enhanced versus non-enhanced).
- The UAAL created when the non-enhanced Tier 3 was adopted by the County is borne only by the County, and not by the Districts.

**SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association**

**CHART 13**  
**Components of Current Employer Contribution Rates**  
**Employer Rates Under Current Assumptions for July 1, 2006 through June 30, 2007**

7.90% Interest, 4.25% Wage Inflation and 2.41% Average Merit Salary Increase Assumptions  
 (18 Year Amortization Period as of December 31, 2004)

	<b>County</b>				<b>Districts</b>			
	Normal Cost	+	UAAL	= Total	Normal Cost	+	UAAL	= Total
<b>Non - Enhanced</b>								
General Tier 1 (Aggregate)								
Basic					11.99%		8.29%	20.28%
50% Subvention					3.79%		0.00%	3.79%
Basic + 50% Subvention					15.78%		8.29%	24.07%
COL					3.57%		4.92%	8.49%
Total					19.35%		13.21%	32.56%
General Tier 1 (Under \$350)								
Basic					8.21%		5.67%	13.88%
50% Subvention					2.59%		0.00%	2.59%
Basic + 50% Subvention					10.80%		5.67%	16.47%
COL					2.45%		3.37%	5.82%
Total					13.25%		9.04%	22.29%
General Tier 1 (Over \$350)								
Basic					12.31%		8.51%	20.82%
50% Subvention					3.89%		0.00%	3.89%
Basic + 50% Subvention					16.20%		8.51%	24.71%
COL					3.67%		5.05%	8.72%
Total					19.87%		13.56%	33.43%

**SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association**

**CHART 13 (continued)**  
**Components of Current Employer Contribution Rates**  
**Employer Rates Under Current Assumptions for July 1, 2006 through June 30, 2007**

7.90% Interest, 4.25% Wage Inflation and 2.41% Average Merit Salary Increase Assumptions  
 (18 Year Amortization Period as of December 31, 2004)

	Non-Enhanced							
	County				Districts			
	Normal Cost	+	UAAL	= Total	Normal Cost	+	UAAL	= Total
General Tier 2								
Basic					8.52%		8.29%	16.81%
50% Subvention					1.49%		0.00%	1.49%
Basic + 50% Subvention					10.01%		8.29%	18.30%
COL					3.15%		4.92%	8.07%
Total					13.16%		13.21%	26.37%
Safety								
Basic					16.03%		7.98%	24.01%
0% Subvention					0.00%		0.00%	0.00%
Basic + 0% Subvention					16.03%		7.98%	24.01%
COL					4.77%		7.50%	12.27%
Total					20.80%		15.48%	36.28%

**SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association**

**CHART 13 (continued)**  
**Components of Current Employer Contribution Rates**  
**Employer Rates Under Current Assumptions for July 1, 2006 through June 30, 2007**

7.90% Interest, 4.25% Wage Inflation and 2.41% Average Merit Salary Increase Assumptions  
 (18 Year Amortization Period as of December 31, 2004)

	<b>Non-Enhanced</b>									
	<b>County</b>				<b>Districts</b>					
	Normal Cost	+	UAAL	=	Total	Normal Cost	+	UAAL	=	Total
<b>General Tier 3 (Aggregate)</b>										
Basic					9.90%			8.80%		18.70%
50% Subvention					3.77%			0.00%		3.77%
Basic + 50% Subvention					13.67%			8.80%		22.47%
COL					3.04%			5.02%		8.06%
Total					16.71%			13.82%		30.53%
<b>General Tier 3 (Under \$350)</b>										
Basic					6.73%			5.98%		12.71%
50% Subvention					2.56%			0.00%		2.56%
Basic + 50% Subvention					9.29%			5.98%		15.27%
COL					2.07%			3.41%		5.48%
Total					11.36%			9.39%		20.75%
<b>General Tier 3 (Over \$350)</b>										
Basic					10.10%			8.97%		19.07%
50% Subvention					3.84%			0.00%		3.84%
Basic + 50% Subvention					13.94%			8.97%		22.91%
COL					3.10%			5.12%		8.22%
Total					17.04%			14.09%		31.13%

**SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association**

**CHART 13 (continued)**  
**Components of Current Employer Contribution Rates**  
**Employer Rates Under Current Assumptions for July 1, 2006 through June 30, 2007**

7.90% Interest, 4.25% Wage Inflation and 2.41% Average Merit Salary Increase Assumptions  
 (18 Year Amortization Period as of December 31, 2004)

	Enhanced							
	County				Districts			
	Normal Cost	+	UAAL	= Total	Normal Cost	+	UAAL	= Total
General Tier 1 (Aggregate)								
Basic	13.86%		4.58%	= 18.44%	13.86%		8.77%	= 22.63%
50% Subvention	3.11%		0.00%	= 3.11%	3.11%		0.00%	= 3.11%
Basic + 50% Subvention	16.97%		4.58%	= 21.55%	16.97%		8.77%	= 25.74%
COL	4.01%		1.89%	= 5.90%	4.01%		5.09%	= 9.10%
Total	20.98%		6.47%	= 27.45%	20.98%		13.86%	= 34.84%
General Tier 1 (Under \$350)								
Basic	9.42%		3.11%	= 12.53%	9.42%		5.96%	= 15.38%
50% Subvention	2.11%		0.00%	= 2.11%	2.11%		0.00%	= 2.11%
Basic + 50% Subvention	11.53%		3.11%	= 14.64%	11.53%		5.96%	= 17.49%
COL	2.72%		1.28%	= 4.00%	2.72%		3.46%	= 6.18%
Total	14.25%		4.39%	= 18.64%	14.25%		9.42%	= 23.67%
General Tier 1 (Over \$350)								
Basic	14.13%		4.67%	= 18.80%	14.13%		8.94%	= 23.07%
50% Subvention	3.17%		0.00%	= 3.17%	3.17%		0.00%	= 3.17%
Basic + 50% Subvention	17.30%		4.67%	= 21.97%	17.30%		8.94%	= 26.24%
COL	4.08%		1.92%	= 6.00%	4.08%		5.19%	= 9.27%
Total	21.38%		6.59%	= 27.97%	21.38%		14.13%	= 35.51%

**SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association**

**CHART 13 (continued)**

**Components of Current Employer Contribution Rates**

**Employer Rates Under Current Assumptions for July 1, 2006 through June 30, 2007**

7.90% Interest, 4.25% Wage Inflation and 2.41% Average Merit Salary Increase Assumptions  
(18 Year Amortization Period as of December 31, 2004)

	<b>Enhanced</b>									
	<b>County</b>					<b>Districts</b>				
	Normal Cost	+	UAAL	=	Total	Normal Cost	+	UAAL	=	Total
Safety										
Basic	23.81%		8.77%		32.58%	23.81%		16.77%		40.58%
50%/0% Subvention	4.64%		0.00%		4.64%	0.00%		0.00%		0.00%
Basic + 50%/0% Subvention	28.45%		8.77%		37.22%	23.81%		16.77%		40.58%
COL	6.89%		4.35%		11.24%	6.89%		11.77%		18.66%
Total	35.34%		13.12%		48.46%	30.70%		28.54%		59.24%

**SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association**

**CHART 13 (continued)**  
**Components of Current Employer Contribution Rates**  
**Employer Rates Under Current Assumptions for July 1, 2006 through June 30, 2007**

7.90% Interest, 4.25% Wage Inflation and 2.41% Average Merit Salary Increase Assumptions  
 (18 Year Amortization Period as of December 31, 2004)

	Enhanced							
	County				Districts			
	Normal Cost	+	UAAL	= Total	Normal Cost	+	UAAL	= Total
General Tier 3 (Aggregate)								
Basic	12.19%		4.63%	= 16.82%	12.19%		9.28%	= 21.47%
50% Subvention	3.33%		0.00%	= 3.33%	3.33%		0.00%	= 3.33%
Basic + 50% Subvention	15.52%		4.63%	= 20.15%	15.52%		9.28%	= 24.80%
COL	3.33%		1.90%	= 5.23%	3.33%		5.19%	= 8.52%
Total	18.85%		6.53%	= 25.38%	18.85%		14.47%	= 33.32%
General Tier 3 (Under \$350)								
Basic	8.33%		3.16%	= 11.49%	8.33%		6.35%	= 14.68%
50% Subvention	2.27%		0.00%	= 2.27%	2.27%		0.00%	= 2.27%
Basic + 50% Subvention	10.60%		3.16%	= 13.76%	10.60%		6.35%	= 16.95%
COL	2.27%		1.30%	= 3.57%	2.27%		3.56%	= 5.83%
Total	12.87%		4.46%	= 17.33%	12.87%		9.91%	= 22.78%
General Tier 3 (Over \$350)								
Basic	12.49%		4.74%	= 17.23%	12.49%		9.53%	= 22.02%
50% Subvention	3.41%		0.00%	= 3.41%	3.41%		0.00%	= 3.41%
Basic + 50% Subvention	15.90%		4.74%	= 20.64%	15.90%		9.53%	= 25.43%
COL	3.41%		1.95%	= 5.36%	3.41%		5.33%	= 8.74%
Total	19.31%		6.69%	= 26.00%	19.31%		14.86%	= 34.17%

**SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association**

**CHART 13 (continued)**  
**Components of Current Employer Contribution Rates**  
**Employer Rates Under Recommended Assumptions for July 1, 2006 through June 30, 2007**

**Grand Total (Includes Both Enhanced and Non-enhanced – County and District)**

	Normal Cost	+	UAAL	=	Total
Basic	15.12%		6.58%		21.70%
50% Subvention*	3.16%		0.00%		3.16%
Basic + 50% Subvention*	18.28%		6.58%		24.86%
COL	4.26%		3.37%		7.63%
Total	22.54%		9.95%		32.49%

Payroll	Tier 1		Tier 2	Tier 3		Safety		Total
	Non-Enhanced	Enhanced		Non-Enhanced	Enhanced	Non-Enhanced	Enhanced	
County	-	\$58,868,518	-	-	\$373,282,711	-	\$86,971,852	\$519,123,081
Districts	\$6,710,095	31,211,998	\$1,041,441	\$288,921	696,589	\$4,855,230	55,204,863	100,009,137
Total	\$6,710,095	\$90,080,516	\$1,041,441	\$288,921	\$373,979,300	\$4,855,230	\$142,176,715	\$619,132,218

\* These rates include the 50% employer subvention of members' basic contributions (except for Safety District rates).

**SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association**

**CHART 14**  
**Components of Recommended Employer Contribution Rates**  
**Employer Rates Under Recommended Assumptions for July 1, 2007 through June 30, 2008**

7.90% Interest, 4.25% Wage Inflation and 2.41% Average Merit Salary Increase Assumptions  
 (17 Year Amortization Period as of December 31, 2005)

	<b>Non-enhanced</b>				<b>Enhanced</b>			
	<b>Districts</b>				<b>County</b>			
	Normal Cost	+	UAAL	= Total	Normal Cost	+	UAAL	= Total
<b>General Tier 1 (Aggregate)</b>								
Basic	12.47%		8.70%	= 21.17%	13.81%		4.97%	= 18.78%
50% Subvention	3.80%		0.00%	= 3.80%	3.14%		0.00%	= 3.14%
Basic + 50% Subvention	16.27%		8.70%	= 24.97%	16.95%		4.97%	= 21.92%
COL	3.69%		5.93%	= 9.62%	4.00%		2.48%	= 6.48%
Total	19.96%		14.63%	= 34.59%	20.95%		7.45%	= 28.40%
<b>General Tier 1 (Under \$350)</b>								
Basic	8.55%		5.97%	= 14.52%	9.39%		3.37%	= 12.76%
50% Subvention	2.60%		0.00%	= 2.60%	2.13%		0.00%	= 2.13%
Basic + 50% Subvention	11.15%		5.97%	= 17.12%	11.52%		3.37%	= 14.89%
COL	2.53%		4.06%	= 6.59%	2.71%		1.68%	= 4.39%
Total	13.68%		10.03%	= 23.71%	14.23%		5.05%	= 19.28%
<b>General Tier 1 (Over \$350)</b>								
Basic	12.82%		8.95%	= 21.77%	14.08%		5.06%	= 19.14%
50% Subvention	3.91%		0.00%	= 3.91%	3.20%		0.00%	= 3.20%
Basic + 50% Subvention	16.73%		8.95%	= 25.68%	17.28%		5.06%	= 22.34%
COL	3.79%		6.09%	= 9.88%	4.07%		2.52%	= 6.59%
Total	20.52%		15.04%	= 35.56%	21.35%		7.58%	= 28.93%

**SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association**

**CHART 14 (continued)**  
**Components of Recommended Employer Contribution Rates**  
**Employer Rates Under Recommended Assumptions for July 1, 2007 through June 30, 2008**

7.90% Interest, 4.25% Wage Inflation and 2.41% Average Merit Salary Increase Assumptions  
 (17 Year Amortization Period as of December 31, 2005)

	<b>Enhanced</b>				<b>Enhanced</b>			
	<b>Districts without POB</b>				<b>Districts with POB</b>			
	Normal Cost	+	UAAL	= Total	Normal Cost	+	UAAL	= Total
General Tier 1 (Aggregate)								
Basic	13.81%		9.25%	23.06%	13.81%		0.96%	14.77%
50% Subvention	3.14%		0.00%	3.14%	3.14%		0.00%	3.14%
Basic + 50% Subvention	16.95%		9.25%	26.20%	16.95%		0.96%	17.91%
COL	4.00%		6.22%	10.22%	4.00%		1.41%	5.41%
Total	20.95%		15.47%	36.42%	20.95%		2.37%	23.32%
General Tier 1 (Under \$350)								
Basic	9.39%		6.28%	15.67%	9.39%		0.65%	10.04%
50% Subvention	2.13%		0.00%	2.13%	2.13%		0.00%	2.13%
Basic + 50% Subvention	11.52%		6.28%	17.80%	11.52%		0.65%	12.17%
COL	2.71%		4.22%	6.93%	2.71%		0.96%	3.67%
Total	14.23%		10.50%	24.73%	14.23%		1.61%	15.84%
General Tier 1 (Over \$350)								
Basic	14.08%		9.42%	23.50%	14.08%		0.98%	15.06%
50% Subvention	3.20%		0.00%	3.20%	3.20%		0.00%	3.20%
Basic + 50% Subvention	17.28%		9.42%	26.70%	17.28%		0.98%	18.26%
COL	4.07%		6.33%	10.40%	4.07%		1.44%	5.51%
Total	21.35%		15.75%	37.10%	21.35%		2.42%	23.77%

**SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association**

**CHART 14 (continued)**  
**Components of Recommended Employer Contribution**  
**Employer Rates Under Recommended Assumptions for July 1, 2007 through June 30, 2008**

7.90% Interest, 4.25% Wage Inflation and 2.41% Average Merit Salary Increase Assumptions  
 (17 Year Amortization Period as of December 31, 2005)

	<b>Non-enhanced</b>				<b>Enhanced</b>			
	<b>Districts</b>				<b>County</b>			
	Normal Cost	+	UAAL	= Total	Normal Cost	+	UAAL	= Total
Safety								
Basic	15.26%		8.61%	23.87%	23.86%		9.42%	33.28%
0%/50% Subvention	0.00%		0.00%	0.00%	4.65%		0.00%	4.65%
Basic + 0%/50% Subvention	15.26%		8.61%	23.87%	28.51%		9.42%	37.93%
COL	4.52%		8.40%	12.92%	6.91%		5.43%	12.34%
Total	19.78%		17.01%	36.79%	35.42%		14.85%	50.27%

**SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association**

**CHART 14 (continued)**

**Components of Recommended Employer Contribution**

**Employer Rates Under Recommended Assumptions for July 1, 2007 through June 30, 2008**

7.90% Interest, 4.25% Wage Inflation and 2.41% Average Merit Salary Increase Assumptions  
(17 Year Amortization Period as of December 31, 2005)

	<b>Enhanced</b>				<b>Enhanced</b>			
	<b>Districts without POB</b>				<b>Districts with POB</b>			
	Normal Cost	+	UAAL	= Total	Normal Cost	+	UAAL	= Total
Safety								
Basic	23.86%		17.50%	41.36%	23.86%		0.61%	24.47%
0% Subvention	0.00%		0.00%	0.00%	0.00%		0.00%	0.00%
Basic + 0% Subvention	23.86%		17.50%	41.36%	23.86%		0.61%	24.47%
COL	6.91%		12.93%	19.84%	6.91%		1.07%	7.98%
Total	30.77%		30.43%	61.20%	30.77%		1.68%	32.45%

**SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association**

**CHART 14 (continued)**  
**Components of Recommended Employer Contribution**  
**Employer Rates Under Recommended Assumptions for July 1, 2007 through June 30, 2008**

7.90% Interest, 4.25% Wage Inflation and 2.41% Average Merit Salary Increase Assumptions  
 (17 Year Amortization Period as of December 31, 2005)

	<b>Non-Enhanced</b>				<b>Enhanced</b>			
	<b>Districts</b>				<b>County</b>			
	Normal Cost	+	UAAL	= Total	Normal Cost	+	UAAL	= Total
<b>General Tier 3 (Aggregate)</b>								
Basic					12.18%		5.02%	17.20%
50% Subvention					3.33%		0.00%	3.33%
Basic + 50% Subvention					15.51%		5.02%	20.53%
COL					3.32%		2.49%	5.81%
Total					18.83%		7.51%	26.34%
<b>General Tier 3 (Under \$350)</b>								
Basic					8.31%		3.43%	11.74%
50% Subvention					2.28%		0.00%	2.28%
Basic + 50% Subvention					10.59%		3.43%	14.02%
COL					2.26%		1.70%	3.96%
Total					12.85%		5.13%	17.98%
<b>General Tier 3 (Over \$350)</b>								
Basic					12.47%		5.14%	17.61%
50% Subvention					3.41%		0.00%	3.41%
Basic + 50% Subvention					15.88%		5.14%	21.02%
COL					3.39%		2.55%	5.94%
Total					19.27%		7.69%	26.96%

**SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association**

**CHART 14 (continued)**  
**Components of Recommended Employer Contribution Rates**  
**Employer Rates Under Recommended Assumptions for July 1, 2007 through June 30, 2008**

7.90% Interest, 4.25% Wage Inflation and 2.41% Average Merit Salary Increase Assumptions  
 (17 Year Amortization Period as of December 31, 2005)

	<b>Enhanced</b>				<b>Enhanced</b>					
	<b>Districts without POB</b>				<b>Districts with POB</b>					
	Normal Cost	+	UAAL	=	Total	Normal Cost	+	UAAL	=	Total
<b>General Tier 3 (Aggregate)</b>										
Basic	12.18%		9.75%		21.93%					
50% Subvention	3.33%		0.00%		3.33%					
Basic + 50% Subvention	15.51%		9.75%		25.26%					
COL	3.32%		6.31%		9.63%					
Total	18.83%		16.06%		34.89%					
<b>General Tier 3 (Under \$350)</b>										
Basic	8.31%		6.67%		14.98%					
50% Subvention	2.28%		0.00%		2.28%					
Basic + 50% Subvention	10.59%		6.67%		17.26%					
COL	2.26%		4.33%		6.59%					
Total	12.85%		11.00%		23.85%					
<b>General Tier 3 (Over \$350)</b>										
Basic	12.47%		10.01%		22.48%					
50% Subvention	3.41%		0.00%		3.41%					
Basic + 50% Subvention	15.88%		10.01%		25.89%					
COL	3.39%		6.49%		9.88%					
Total	19.27%		16.50%		35.77%					

**SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association**

**CHART 14 (continued)**  
**Components of Current Employer Contribution Rates**  
**Employer Rates Under Recommended Assumptions for July 1, 2007 through June 30, 2008**

**Grand Total (Includes Both Enhanced and Non-enhanced – County and District)**

	Normal Cost	+	UAAL	=	Total
Basic	15.12%		5.93%		21.05%
50% Subvention*	3.16%		0.00%		3.16%
Basic + 50% Subvention*	18.28%		5.93%		24.21%
COL	4.24%		3.34%		7.58%
<b>Total</b>	<b>22.52%</b>		<b>9.27%</b>		<b>31.79%</b>

Payroll	Tier 1		Tier 2		Tier 3		Safety		Total
	Non-Enhanced	Enhanced	Non-Enhanced	Enhanced	Non-Enhanced	Enhanced	Non-Enhanced	Enhanced	
County	-	\$51,314,397	-	-	\$389,719,663	-	\$85,790,555		\$526,824,615
Districts without POB	\$5,854,292	26,742,321	-	-	2,122,781	\$1,898,425	19,373,224		55,991,043
Districts with POB	-	<u>4,261,549</u>	-	-	-	-	<u>40,469,201</u>		<u>44,730,750</u>
<b>Total</b>	\$5,854,292	\$82,318,267	-	-	\$391,842,444	\$1,898,425	\$145,632,980		\$627,546,408

\* These rates include the 50% employer subvention of members' basic contributions (except for Safety District rates).

## SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association

The employer contribution rates as of December 31, 2005 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

### Reconciliation of Recommended Employer Contribution Rate

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

#### CHART 15

#### Reconciliation of Recommended Employer Contribution from December 31, 2004 to December 31, 2005 Valuation

	Contribution Rate*	Estimated Annual Dollar Cost**
<b>Recommended Employer Contribution Rate in December 31, 2004 Valuation</b>	29.33%	\$ 181,592,734
Effect of investment (gain)/loss <sup>(1)</sup>	1.03%	6,463,728
Effect of delay in implementing contribution rates from 12/31/2004 valuation <sup>(2)</sup>	0.43%	2,698,450
Effect of actual versus expected salary increase including total payroll growth <sup>(3)</sup>	0.05%	313,773
Effect of pension obligation bond proceeds deposited by districts <sup>(4)</sup>	(1.94%)	(12,174,400)
Effect of change in benefits <sup>(5)</sup>	0.09%	564,792
Effects of change in actuarial assumptions <sup>(6)</sup>	0.00%	0
Effect of net other changes <sup>(7)</sup>	<u>(0.36%)</u>	<u>234,497</u>
<b>Total change</b>	<u>(0.70%)</u>	<u>\$(1,899,160)</u>
<b>Recommended Employer Contribution Rate in December 31, 2005 Valuation</b>	28.63%	\$179,693,574

\* These rates do not include any employer subvention of member contributions, or member subvention of employer contributions.

\*\* Based on projected payroll for each valuation date shown.

(1) Return on valuation of assets of 5.74% was less than the 7.90% assumed in the valuation.

(2) This accounts for the UAAL increase that results from any time lag between the valuation and the implementation of resulting contribution rates.

(3) Total payroll growth for determining the UAAL contribution rate was assumed to be 4.25% per year. Actual payroll growth was less so the remaining UAAL is amortized over a smaller payroll. This item also includes the impact of lower than expected individual salary increases.

(4) This item represents the impact of the pension obligation bond proceeds (POBs) deposited by two districts during 2005.

(5) Contra Costa Mosquito Abatement District and East Contra Costa County Fire Protection District adopted enhanced benefits.

(6) Combined effect on reducing inflation by 0.25% and increasing the "across the board" salary increase assumption by 0.25%.

(7) Other differences in actual versus expected experience. Estimated annual dollar cost also reflects change in payroll from prior valuation.

**SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association**

The member contribution rates as of December 31, 2005 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

**Reconciliation of Recommended Member Contribution Rate**

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

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

**CHART 16  
Reconciliation of Recommended Member Contribution from December 31, 2004 to December 31, 2005 Valuation**

	Contribution Rate*	Estimated Annual Dollar Cost**
<b>Recommended Member Contribution Rate in December 31, 2004 Valuation</b>	11.40%	\$70,602,498
Effect of change in actuarial assumptions <sup>(1)</sup>	0.00%	\$0
Effect of change in benefits <sup>(2)</sup>	0.01%	62,755
Effect of other experience (gains)/losses <sup>(3)</sup>	<u>0.01%</u>	<u>1,014,488</u>
<b>Total change</b>	<u>0.02%</u>	<u>\$1,077,243</u>
<b>Recommended Member Contribution Rate in December 31, 2005 Valuation</b>	11.42%	\$71,679,741

\* These rates do not include any employer subvention of member contributions, or member subvention of employer contributions.

\*\* Based on projected payroll for each valuation date shown.

(1) Combined effect on reducing inflation by 0.25% and increasing the "across the board" salary increase assumption by 0.25%.

(2) Contra Costa Mosquito Abatement District and East Contra Costa County Fire Protection District adopted enhanced benefits.

(3) Other differences in actual versus expected experience. Estimated annual dollar cost also reflects change in payroll from prior valuation.

**SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association**

**E. INFORMATION REQUIRED BY GASB**

Government Accounting Standards Board (GASB) reporting information provides standardized information for comparative purposes of governmental pension plans. This information allows a reader of the financial statements to compare the funding status of one governmental plan to another on relatively equal terms.

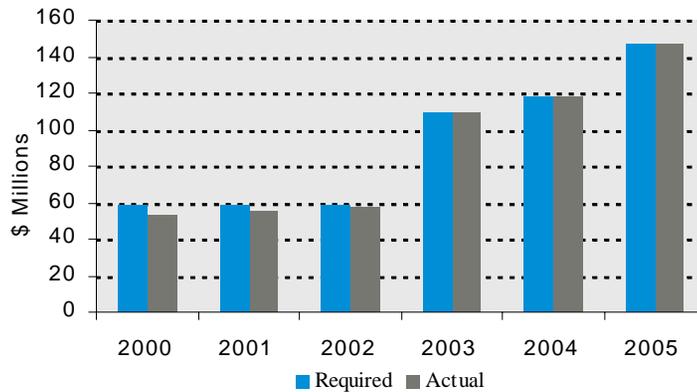
Critical information to GASB is the historical comparison of the GASB required contributions to the actual contributions. This comparison demonstrates whether a plan is being funded on an actuarially sound basis and in accordance with the GASB funding requirements. Chart 17 below presents a graphical representation of this information for the Plan

The other critical piece of information regarding the Plan's financial status is the funded ratio. This ratio compares the valuation value of assets of the plan to the liabilities of the plan as calculated under GASB. High ratios indicate a well-funded plan with assets sufficient to pay most benefits. Lower ratios may indicate recent changes to benefit structures, funding of the plan below actuarial requirements, poor asset performance, or a variety of other changes.

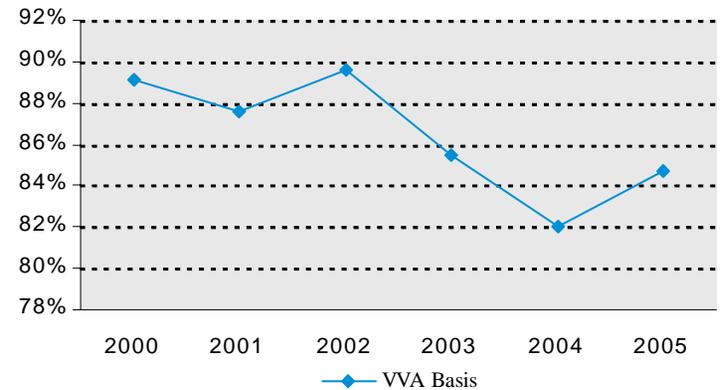
The details regarding the calculations of these values and other GASB numbers may be found in Section 4, Exhibits I, II, and III.

*These graphs show key GASB factors.*

**CHART 17**  
**Required Versus Actual Contributions**



**CHART 18**  
**Funded Ratio**



**SECTION 3: Supplemental Information for the Contra Costa County Employees' Retirement Association**

**EXHIBIT A**

**Table of Plan Coverage**

**i. General Tier 1**

<b>Category</b>	<b>Year Ended December 31</b>		<b>Change From Prior Year</b>
	<b>2005</b>	<b>2004</b>	
<b>Active members in valuation</b>			
Number	1,169	1,335	-12.4%
Average age	49.3	49.4	N/A
Average service	17.6	16.0	N/A
Projected total compensation <sup>(1)</sup>	\$88,172,559	\$96,790,611	-8.9%
Projected average compensation	\$75,426	\$72,502	4.0%
Account balances	\$73,755,766	\$79,881,598	-7.7%
Total active vested members	981	1,113	-11.9%
<b>Vested terminated members<sup>(2)</sup></b>			
	324	321	0.9%
<b>Retired members</b>			
Number in pay status	2,699	2,677	0.8%
Average age	73.0	73.2	N/A
Average monthly benefit	\$2,645	\$2,447	8.1%
<b>Disabled members</b>			
Number in pay status	377	388	-2.8%
Average age	65.6	65.3	N/A
Average monthly benefit	\$2,129	\$2,010	5.9%
<b>Beneficiaries</b>			
Number in pay status	739	733	0.8%
Average age	73.8	73.6	N/A
Average monthly benefit	\$1,529	\$1,409	8.5%

<sup>(1)</sup> Calculated by increasing actual calendar year 2005 salaries by the assumed salary scale.

<sup>(2)</sup> Includes only members who have terminated employment covered by CCCERA.

**SECTION 3: Supplemental Information for the Contra Costa County Employees' Retirement Association**

**EXHIBIT A (continued)**

**Table of Plan Coverage**

**ii. General Tier 2**

<b>Category</b>	<b>Year Ended December 31</b>		<b>Change From Prior Year</b>
	<b>2005</b>	<b>2004</b>	
<b>Active members in valuation</b>			
Number	0 <sup>3</sup>	18	N/A
Average age	N/A	43.4	N/A
Average service	N/A	5.7	N/A
Projected total compensation <sup>(1)</sup>	N/A	\$1,041,441	N/A
Projected average compensation	N/A	\$57,858	N/A
Account balances	N/A	\$126,361	N/A
Total active vested members	N/A	7	N/A
<b>Vested terminated members<sup>(2)</sup></b>	373	443	-15.8%
<b>Retired members</b>			
Number in pay status	411	404	1.7%
Average age	68.5	67.8	N/A
Average monthly benefit	\$733	\$707	3.7%
<b>Disabled members</b>			
Number in pay status	67	67	0.0%
Average age	63.2	62.4	N/A
Average monthly benefit	\$1,747	\$1,680	4.0%
<b>Beneficiaries</b>			
Number in pay status	74	69	7.2%
Average age	56.1	54.2	N/A
Average monthly benefit	\$813	\$802	1.4%

<sup>(1)</sup> Calculated by increasing actual calendar year 2005 salaries by the assumed salary scale.

<sup>(2)</sup> Includes only members who have terminated employment covered by CCCERA

<sup>(3)</sup> As of the December 31, 2005 valuation, there are no longer any Tier 2 Active Members since they have all transferred to Tier 3.

**SECTION 3: Supplemental Information for the Contra Costa County Employees' Retirement Association**

**EXHIBIT A (continued)**

**Table of Plan Coverage**

**iii. General Tier 3**

<b>Category</b>	<b>Year Ended December 31</b>		<b>Change From Prior Year</b>
	<b>2005</b>	<b>2004</b>	
<b>Active members in valuation</b>			
Number	6,425	6,322	1.6%
Average age	45.9	45.9	N/A
Average service	8.6	8.5	N/A
Projected total compensation <sup>(1)</sup>	\$391,842,444	\$374,268,220	4.7%
Projected average compensation	\$60,987	\$59,201	3.0%
Account balances	\$151,326,266	\$122,145,917	23.9%
Total active vested members	3,965	3,772	5.1%
<b>Vested terminated members<sup>(2)</sup></b>	796	532	49.6%
<b>Retired members</b>			
Number in pay status	547	367	49.0%
Average age	63.1	62.2	N/A
Average monthly benefit	\$1,590	\$1,368	16.2%
<b>Disabled members</b>			
Number in pay status	53	49	8.2%
Average age	57.6	57.0	N/A
Average monthly benefit	\$2,006	\$1,902	5.5%
<b>Beneficiaries</b>			
Number in pay status	35	26	34.6%
Average age	48.5	49.9	N/A
Average monthly benefit	\$973	\$1,001	-2.8%

<sup>(1)</sup> Calculated by increasing actual calendar year 2005 salaries by the assumed salary scale.

<sup>(2)</sup> Includes only members who have terminated employment covered by CCCERA.

**SECTION 3: Supplemental Information for the Contra Costa County Employees' Retirement Association**

**EXHIBIT A (continued)**

**Table of Plan Coverage**

**iv. Safety**

<b>Category</b>	<b>Year Ended December 31</b>		<b>Change From Prior Year</b>
	<b>2005</b>	<b>2004</b>	
<b>Active members in valuation</b>			
Number	1,611	1,683	-4.3%
Average age	44.1	40.9	N/A
Average service	11.9	11.2	N/A
Projected total compensation <sup>(1)</sup>	\$147,531,405	\$147,031,946	0.3%
Projected average compensation	\$91,578	\$87,363	4.8%
Account balances	\$129,503,269	\$119,424,071	8.4%
Total active vested members	1,177	1,194	-1.4%
<b>Vested terminated members<sup>(2)</sup></b>	238	221	7.7%
<b>Retired members</b>			
Number in pay status	759	696	9.1%
Average age	64.6	64.7	N/A
Average monthly benefit	\$5,768	\$5,336	8.1%
<b>Disabled members</b>			
Number in pay status	422	401	5.2%
Average age	58.0	57.6	N/A
Average monthly benefit	\$4,161	\$3,885	7.1%
<b>Beneficiaries</b>			
Number in pay status	254	241	5.4%
Average age	66.4	66.2	N/A
Average monthly benefit	\$2,516	\$2,407	4.5%

<sup>(1)</sup> Calculated by increasing actual calendar year 2005 salaries by the assumed salary scale.

<sup>(2)</sup> Includes only members who have terminated employment covered by CCCERA

**SECTION 3: Supplemental Information for the Contra Costa County Employees' Retirement Association**

**EXHIBIT B**

**Members in Active Service and Projected Compensation as of December 31, 2005  
By Age and Years of Service**

**i. General Tier 1 Non-Enhanced**

Age	Years of Service									
	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	2	2	--	--	--	--	--	--	--	--
	\$29,940	\$29,940	--	--	--	--	--	--	--	--
25 - 29	13	11	2	--	--	--	--	--	--	--
	40,987	38,273	\$55,911	--	--	--	--	--	--	--
30 - 34	9	6	2	1	--	--	--	--	--	--
	41,957	34,971	47,643	\$72,500	--	--	--	--	--	--
35 - 39	15	7	5	--	2	1	--	--	--	--
	58,183	61,137	47,648	--	\$75,913	\$54,716	--	--	--	--
40 - 44	17	9	2	3	2	1	--	--	--	--
	47,774	39,995	45,719	57,661	58,501	70,788	--	--	--	--
45 - 49	21	8	6	2	3	2	--	--	--	--
	54,655	51,648	58,845	51,555	50,996	62,698	--	--	--	--
50 - 54	18	7	1	3	2	1	4	--	--	--
	58,687	50,744	67,176	70,702	64,513	58,675	\$58,545	--	--	--
55 - 59	16	8	3	3	1	--	1	--	--	--
	49,358	41,488	57,331	57,587	53,826	--	59,245	--	--	--
60 - 64	3	1	--	--	2	--	--	--	--	--
	50,941	44,365	--	--	54,229	--	--	--	--	--
65 & over	1	--	1	--	--	--	--	--	--	--
	52,398	--	52,398	--	--	--	--	--	--	--
Total	115	59	22	12	12	5	5	--	--	--
	\$50,907	\$44,462	\$53,701	\$61,122	\$59,427	\$61,915	\$58,685	--	--	--

**SECTION 3: Supplemental Information for the Contra Costa County Employees' Retirement Association**

**EXHIBIT B (continued)**

**Members in Active Service and Projected Compensation as of December 31, 2005  
By Age and Years of Service**

**ii. General Tier 1 Enhanced**

Age	Total	Years of Service									
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over	
Under 25	6	6	--	--	--	--	--	--	--	--	--
	\$35,955	\$35,955	--	--	--	--	--	--	--	--	--
25 - 29	24	22	2	--	--	--	--	--	--	--	--
	56,844	56,238	\$63,512	--	--	--	--	--	--	--	--
30 - 34	48	28	19	1	--	--	--	--	--	--	--
	70,242	67,332	74,388	\$72,957	--	--	--	--	--	--	--
35 - 39	77	34	29	10	4	--	--	--	--	--	--
	71,948	68,362	77,931	62,852	\$81,785	--	--	--	--	--	--
40 - 44	104	30	42	12	17	1	2	--	--	--	--
	75,147	67,248	79,594	73,427	81,190	\$85,603	\$53,974	--	--	--	--
45 - 49	189	36	42	30	26	13	38	4	--	--	--
	76,513	71,047	76,239	78,169	84,835	87,756	71,542	\$72,738	--	--	--
50 - 54	282	27	38	23	36	21	76	56	5	--	--
	79,596	83,560	81,444	84,536	90,430	86,535	76,450	69,618	\$73,871	--	--
55 - 59	243	24	30	14	15	14	60	67	18	1	--
	82,996	69,922	77,739	98,177	80,152	95,648	86,106	84,060	76,990	\$57,786	--
60 - 64	75	4	14	6	12	5	11	15	8	--	--
	87,287	116,752	78,973	85,638	99,912	101,184	66,218	83,719	96,378	--	--
65 & over	6	1	--	--	2	--	1	1	1	--	--
	64,943	75,650	--	--	73,821	--	78,920	46,077	41,371	--	--
Total	1,054	212	216	96	112	54	188	143	32	1	--
	\$78,101	\$69,409	\$78,139	\$80,837	\$86,763	\$90,531	\$77,715	\$77,786	\$80,237	\$57,786	--

**SECTION 3: Supplemental Information for the Contra Costa County Employees' Retirement Association**

**EXHIBIT B (continued)**

**Members in Active Service and Projected Compensation as of December 31, 2005  
By Age and Years of Service**

**iii. General Tier 3 Enhanced**

Age	Years of Service								
	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35 & over
Under 25	83	83	--	--	--	--	--	--	--
	\$28,114	\$28,114	--	--	--	--	--	--	--
25 - 29	400	339	61	--	--	--	--	--	--
	43,499	41,736	\$53,294	--	--	--	--	--	--
30 - 34	640	419	206	14	1	--	--	--	--
	55,777	50,638	65,218	\$70,842	\$53,326	--	--	--	--
35 - 39	805	384	301	72	46	2	--	--	--
	58,737	52,103	64,542	66,739	63,921	\$51,800	--	--	--
40 - 44	1,016	357	304	154	158	40	3	--	--
	62,803	50,889	64,074	75,415	74,740	64,105	\$58,272	--	--
45 - 49	1,025	320	277	144	178	91	15	--	--
	63,828	50,526	64,234	65,039	79,059	78,038	61,532	--	--
50 - 54	1,062	290	268	168	202	99	32	3	--
	64,700	51,198	61,864	69,760	74,906	74,363	88,829	\$76,446	--
55 - 59	877	199	220	130	171	110	36	10	1
	65,846	52,086	61,310	66,452	72,114	75,389	92,101	121,506	\$99,444
60 - 64	388	88	100	63	79	35	17	3	3
	65,536	51,425	64,206	67,640	68,049	69,077	109,877	100,643	85,767
65 - 69	129	21	43	16	33	9	6	1	--
	62,105	63,896	53,211	73,186	66,778	55,277	71,794	78,704	--
Total	6,425	2,500	1,780	761	868	386	109	17	4
	\$60,987	\$49,249	\$63,011	\$69,077	\$73,637	\$73,417	\$87,657	\$107,355	\$89,186

**SECTION 3: Supplemental Information for the Contra Costa County Employees' Retirement Association**

**EXHIBIT B (continued)**

**Members in Active Service and Projected Compensation as of December 31, 2005  
By Age and Years of Service**

**iv. Safety Non-Enhanced**

Age	Years of Service							
	Total	0-4	5-9	10-14	15-19	20-24	25-29	30 & over
Under 25	--	--	--	--	--	--	--	--
25 - 29	1	1	--	--	--	--	--	--
	\$81,502	\$81,502	--	--	--	--	--	--
30 - 34	2	--	2	--	--	--	--	--
	86,682	--	\$86,682	--	--	--	--	--
35 - 39	5	--	1	--	4	--	--	--
	90,515	--	82,483	--	\$92,523	--	--	--
40 - 44	2	--	--	--	1	1	--	--
	94,556	--	--	--	87,978	\$101,134	--	--
45 - 49	6	--	--	2	--	2	2	--
	93,430	--	--	\$94,131	--	85,341	\$100,818	--
50 - 54	3	1	--	--	--	1	1	--
	108,027	136,650	--	--	--	100,277	87,152	--
55 - 59	1	--	--	--	--	1	--	--
	117,213	--	--	--	--	117,213	--	--
60 - 64	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
65 & over	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
<b>Total</b>	<b>20</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>5</b>	<b>5</b>	<b>3</b>	<b>--</b>
	\$94,921	\$109,076	\$85,282	\$94,131	\$91,614	\$97,861	\$96,263	--

**SECTION 3: Supplemental Information for the Contra Costa County Employees' Retirement Association**

**EXHIBIT B (continued)**

**Members in Active Service and Projected Compensation as of December 31, 2005  
By Age and Years of Service**

**v. Safety Enhanced**

Age	Years of Service								
	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-35	35 & over
Under 25	13	13	--	--	--	--	--	--	--
	\$70,936	\$70,936	--	--	--	--	--	--	--
25 - 29	148	128	20	--	--	--	--	--	--
	73,496	70,881	\$90,231	--	--	--	--	--	--
30 - 34	269	145	116	8	--	--	--	--	--
	79,816	75,504	84,362	\$92,078	--	--	--	--	--
35 - 39	337	96	114	89	38	--	--	--	--
	89,055	78,874	88,227	92,392	\$109,447	--	--	--	--
40 - 44	323	62	58	54	116	33	--	--	--
	96,111	77,162	86,932	97,604	105,089	\$113,839	--	--	--
45 - 49	251	24	24	29	86	61	27	--	--
	104,071	73,502	94,781	95,869	106,617	108,632	\$129,899	--	--
50 - 54	136	16	11	11	13	28	49	8	--
	107,192	87,536	93,849	87,905	111,003	108,708	115,012	\$131,982	--
55 - 59	85	12	3	5	15	15	18	16	1
	98,172	79,730	68,034	77,360	95,691	110,419	105,860	105,050	\$119,027
60 - 64	24	3	10	4	--	3	2	2	--
	79,373	86,927	76,031	63,276	--	86,910	89,337	95,681	--
65 & over	5	--	4	--	--	1	--	--	--
	71,544	--	71,998	--	--	69,729	--	--	--
Total	1,591	499	360	200	268	141	96	26	1
	\$91,536	\$75,513	\$86,806	\$93,086	\$105,958	\$109,318	\$116,948	\$112,616	\$119,027

**SECTION 3: Supplemental Information for the Contra Costa County Employees' Retirement Association**

**EXHIBIT C**

**Average Monthly Benefit and Membership Distribution of Retired Members and Beneficiaries**

**i. General Tier 1 as of December 31, 2005**

Age	Total	Years of Retirement								
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	6	2	1	3	--	--	--	--	--	--
	\$1,814	\$4,426	\$1,039	\$331	--	--	--	--	--	--
25 - 29	6	--	--	6	--	--	--	--	--	--
	797	--	--	797	--	--	--	--	--	--
30 - 34	3	1	--	2	--	--	--	--	--	--
	1,381	1,869	--	1,137	--	--	--	--	--	--
35 - 39	6	1	--	5	--	--	--	--	--	--
	925	1,252	--	860	--	--	--	--	--	--
40 - 44	12	3	5	4	--	--	--	--	--	--
	895	736	1,082	780	--	--	--	--	--	--
45 - 49	31	11	5	8	3	3	--	1	--	--
	1,573	1,826	2,135	1,418	\$1,607	\$513	--	\$287	--	--
50 - 54	95	59	10	8	6	7	1	3	--	1
	1,758	1,864	2,129	2,299	963	822	\$1,591	500	--	\$2,779
55 - 59	375	217	102	22	11	12	5	4	--	2
	2,640	3,328	1,650	2,231	1,700	1,231	1,426	804	--	3,254
60 - 64	517	235	146	71	30	17	12	2	1	3
	3,185	4,379	2,698	1,624	1,659	1,803	1,475	1,302	\$617	2,435
65 - 69	509	107	191	104	68	26	7	3	2	1
	2,908	4,216	3,516	2,018	1,306	1,457	1,839	1,185	1,626	1,197
70 - 74	570	17	124	187	127	81	18	11	4	1
	2,453	3,484	3,464	2,922	1,749	1,124	1,551	1,480	1,219	867
75 - 80	610	2	27	136	198	140	81	21	4	1
	2,151	1,303	2,537	2,970	2,449	1,399	1,388	1,692	1,821	1,131
80 - 84	583	3	8	28	128	206	165	36	8	1
	1,948	5,076	3,321	2,392	2,440	1,909	1,637	1,112	1,268	996
85 - 89	349	1	--	3	21	123	134	58	6	3
	1,796	967	--	980	2,092	1,915	1,823	1,531	1,084	1,256
90 & over	143	--	--	--	2	13	44	55	23	6
	1,604	--	--	--	1,370	1,955	1,648	1,790	1,103	817
Total	3,815	659	619	587	594	628	467	194	48	19
	\$2,378	\$3,679	\$2,903	\$2,453	\$2,077	\$1,643	\$1,641	\$1,496	\$1,209	\$1,550

Note: Total retired benefit \$9,071,134, average age 72.4 and average years retired 15.7.

**SECTION 3: Supplemental Information for the Contra Costa County Employees' Retirement Association**

**EXHIBIT C (continued)**

**Average Monthly Benefit and Membership Distribution of Retired Members and Beneficiaries**

**ii. General Tier 2 as of December 31, 2005**

Age	Total	Years of Retirement								
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	4	1	3	--	--	--	--	--	--	--
	\$420	\$102	\$526	--	--	--	--	--	--	--
25 - 29	2	--	1	1	--	--	--	--	--	--
	438	--	515	\$362	--	--	--	--	--	--
30 - 34	7	1	4	1	1	--	--	--	--	--
	734	1,036	489	1,390	\$756	--	--	--	--	--
35 - 39	8	--	3	3	2	--	--	--	--	--
	961	--	1,623	479	691	--	--	--	--	--
40 - 44	3	--	1	2	--	--	--	--	--	--
	1,791	--	2,582	1,396	--	--	--	--	--	--
45 - 49	6	2	2	2	--	--	--	--	--	--
	901	1,106	1,211	387	--	--	--	--	--	--
50 - 54	19	11	3	3	1	1	--	--	--	--
	754	300	1,139	1,531	1,795	\$1,222	--	--	--	--
55 - 59	83	35	40	6	2	--	--	--	--	--
	841	746	806	1,578	998	--	--	--	--	--
60 - 64	101	31	41	24	4	1	--	--	--	--
	782	903	693	708	1,181	862	--	--	--	--
65 - 69	100	21	57	19	3	--	--	--	--	--
	1,017	730	1,182	810	1,198	--	--	--	--	--
70 - 74	122	14	52	39	10	7	--	--	--	--
	888	747	1,151	695	738	515	--	--	--	--
75 - 80	71	4	22	37	6	2	--	--	--	--
	842	848	872	819	1,042	333	--	--	--	--
80 - 84	21	--	3	14	3	1	--	--	--	--
	836	--	820	593	1,479	2,363	--	--	--	--
85 - 89	5	--	--	4	1	--	--	--	--	--
	380	--	--	420	217	--	--	--	--	--
90 & over	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
Total	552	120	232	155	33	12	--	--	--	--
	\$867	\$749	\$978	\$778	\$986	\$726	--	--	--	--

Note: Total retired benefit \$478,592, average age 66.2 and average years retired 9.0.

**SECTION 3: Supplemental Information for the Contra Costa County Employees' Retirement Association**

**EXHIBIT C (continued)**

**Average Monthly Benefit and Membership Distribution of Retired Members and Beneficiaries**

**iii. General Tier 3 as of December 31, 2005**

Age	Total	Years of Retirement								
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	6	4	2	--	--	--	--	--	--	--
	\$1,225	\$1,347	\$981	--	--	--	--	--	--	--
25 - 29	3	3	--	--	--	--	--	--	--	--
	507	507	--	--	--	--	--	--	--	--
30 - 34	2	2	--	--	--	--	--	--	--	--
	1,005	1,005	--	--	--	--	--	--	--	--
35 - 39	6	5	1	--	--	--	--	--	--	--
	607	565	815	--	--	--	--	--	--	--
40 - 44	4	4	--	--	--	--	--	--	--	--
	1,765	1,765	--	--	--	--	--	--	--	--
45 - 49	6	6	--	--	--	--	--	--	--	--
	1,804	1,804	--	--	--	--	--	--	--	--
50 - 54	61	58	3	--	--	--	--	--	--	--
	1,253	1,224	1,808	--	--	--	--	--	--	--
55 - 59	133	119	14	--	--	--	--	--	--	--
	1,622	1,698	975	--	--	--	--	--	--	--
60 - 64	208	179	29	--	--	--	--	--	--	--
	1,859	1,981	1,103	--	--	--	--	--	--	--
65 - 69	145	116	29	--	--	--	--	--	--	--
	1,558	1,636	1,245	--	--	--	--	--	--	--
70 - 74	52	37	15	--	--	--	--	--	--	--
	1,133	1,053	1,328	--	--	--	--	--	--	--
75 - 80	7	3	4	--	--	--	--	--	--	--
	1,679	2,743	881	--	--	--	--	--	--	--
80 - 84	2	2	--	--	--	--	--	--	--	--
	1,236	1,236	--	--	--	--	--	--	--	--
85 - 89	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
90 & over	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
Total	635	538	97	--	--	--	--	--	--	--
	\$1,591	\$1,667	\$1,170	--	--	--	--	--	--	--

Note: Total retired benefit \$1,010,262, average age 61.8 and average years retired 3.0.

**SECTION 3: Supplemental Information for the Contra Costa County Employees' Retirement Association**

**EXHIBIT C (continued)**

**Average Monthly Benefit and Membership Distribution of Retired Members and Beneficiaries**

**iv. Safety as of December 31, 2005**

Age	Total	Years of Retirement								
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	7	5	--	2	--	--	--	--	--	--
	\$1,677	\$1,466	--	\$2,206	--	--	--	--	--	--
25 - 29	2	--	--	2	--	--	--	--	--	--
	625	--	--	625	--	--	--	--	--	--
30 - 34	9	7	--	2	--	--	--	--	--	--
	2,951	3,390	--	1,415	--	--	--	--	--	--
35 - 39	17	12	1	4	--	--	--	--	--	--
	2,254	2,604	\$3,095	994	--	--	--	--	--	--
40 - 44	41	18	17	6	--	--	--	--	--	--
	3,022	3,036	3,219	2,425	--	--	--	--	--	--
45 - 49	54	19	17	11	5	2	--	--	--	--
	3,076	2,927	3,327	2,800	\$3,029	\$3,984	--	--	--	--
50 - 54	160	114	22	15	5	4	--	--	--	--
	5,363	6,341	2,932	2,838	2,679	3,678	--	--	--	--
55 - 59	308	182	54	35	16	9	9	--	3	--
	5,384	6,997	3,496	2,778	2,395	2,285	\$2,769	--	\$4,977	--
60 - 64	293	86	117	48	18	12	8	3	1	--
	5,237	5,963	6,464	3,167	2,976	2,355	2,795	\$2,243	2,472	--
65 - 69	184	10	48	69	31	14	7	4	1	--
	4,870	3,747	5,592	5,898	3,810	2,272	2,670	2,893	3,020	--
70 - 74	154	2	13	40	44	34	13	7	--	1
	4,314	1,703	4,982	5,580	4,801	2,927	3,241	2,542	--	\$2,322
75 - 80	109	--	--	9	19	32	32	11	4	2
	3,955	--	--	3,747	4,840	4,545	3,634	2,649	2,833	1,621
80 - 84	67	--	--	--	2	8	29	22	3	3
	3,896	--	--	--	2,889	4,466	4,470	3,537	2,502	1,525
85 - 89	25	--	--	--	--	--	5	14	4	2
	3,580	--	--	--	--	--	5,089	3,552	2,646	1,877
90 & over	5	--	--	--	--	--	--	--	4	1
	2,405	--	--	--	--	--	--	--	2,801	820
Total	1,435	455	289	243	140	115	103	61	20	9
	\$4,720	\$5,984	\$5,042	\$4,171	\$3,911	\$3,339	\$3,684	\$3,160	\$3,053	\$1,635

Note: Total retired benefit \$6,772,831, average age 63.0 and average years retired 12.1.

**SECTION 3: Supplemental Information for the Contra Costa County Employees' Retirement Association**

**EXHIBIT D**

**Reconciliation of Member Data – December 31, 2004 to December 31, 2005**

	<b>Active Participants</b>	<b>Vested Former Participants<sup>(1)</sup></b>	<b>Pensioners</b>	<b>Disableds</b>	<b>Beneficiaries</b>	<b>Total</b>
Number as of December 31, 2004	9,358	1,517	4,144	905	1,069	16,993
New participants	702	89	0	0	0	791
Terminations – with vested rights <sup>(1)</sup>	-336	336	0	0	0	0
Contributions Refunds	-140	-125	0	0	0	-265
Retirements	-366	-49	415	0	0	0
New disabilities	-28	-3	-5	36	0	0
Return to work	25	-25	0	0	0	0
Died with or without beneficiary	-10	-10	-147	-22	34	-155
Data adjustments	<u>0</u>	<u>1</u>	<u>9</u>	<u>0</u>	<u>-1</u>	<u>9</u>
Number as of December 31, 2005	9,205	1,731	4,416	919	1,102	17,373

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

**SECTION 3: Supplemental Information for the Contra Costa County Employees' Retirement Association**

**EXHIBIT E**

**Summary Statement of Income and Expenses on an Actuarial Value Basis**

	Year Ended December 31, 2005	Year Ended December 31, 2004
<b>Contribution income:</b>		
Employer contributions <sup>(1)</sup>	\$300,300,019	\$118,245,418
Employee contributions	<u>73,474,816</u>	<u>65,297,397</u>
Net contribution income	\$373,774,835	\$183,542,815
<b>Investment income:</b>		
Interest, dividends and other income	\$135,954,824	\$100,900,771
Adjustment toward market value <sup>(2)</sup>	104,367,760	59,905,354
Less investment and administrative fees	<u>(23,704,511)</u>	<u>(24,131,891)</u>
Net investment income	<u>216,618,073</u>	<u>136,674,234</u>
<b>Total income available for benefits</b>	<b>\$590,392,908</b>	<b>\$320,217,049</b>
<b>Less benefit payments:</b>		
Benefits paid	\$(196,106,294)	\$(178,979,297)
Refunds of contributions	(2,074,426)	(909,468)
Adjustments/transfers <sup>(3)</sup>	<u>(3,888,030)</u>	<u>(4,960,338)</u>
Net benefit payments	\$(202,068,750)	\$(184,849,103)
<b>Change in reserve for future benefits</b>	<b>\$388,324,158</b>	<b>\$135,367,946</b>

<sup>(1)</sup> Includes proceeds of \$153,134,911 from Pension Obligation Bonds issued during 2005.

<sup>(2)</sup> Equals the "non-cash" earnings on investments implicitly included in the Actuarial Value of Assets.

<sup>(3)</sup> Includes transfers for withdrawn employers.

**SECTION 3: Supplemental Information for the Contra Costa County Employees' Retirement Association**

**EXHIBIT F**

**Summary Statement of Assets**

	Year Ended December 31, 2005	Year Ended December 31, 2004
<b>Cash equivalents</b>	\$695,669,563	\$657,799,613
<b>Accounts receivable:</b>		
Investment trades	\$276,625,254	\$285,421,487
Investment income	11,231,129	12,588,142
Employee and employer contributions	6,772,172	5,244,608
Additional contributions <sup>(1)</sup>	<u>27,373,810</u>	<u>33,725,926</u>
Total accounts receivable	322,002,365	336,980,163
<b>Investments:</b>		
Stocks	\$2,134,119,297	\$1,746,928,390
Bonds	1,589,582,763	1,311,420,447
Real estate	368,705,924	366,127,999
Alternative investments	<u>118,406,793</u>	<u>86,629,806</u>
Total investments at market value	<u>4,210,814,777</u>	<u>3,511,106,642</u>
<b>Total assets</b>	<b>\$5,228,486,705</b>	<b>\$4,505,886,418</b>
<b>Less accounts payable:</b>		
Investment trades	\$(541,938,783)	\$(368,779,935)
Security lending	(364,436,020)	(332,937,664)
Employer contributions unearned	(76,972,624)	(64,949,247)
Other	<u>(23,417,026)</u>	<u>(20,603,676)</u>
Total accounts payable	\$(1,006,764,453)	\$(787,270,522)
<b>Net assets at market value</b>	<u><b>\$4,221,722,252</b></u>	<u><b>\$3,718,615,896</b></u>
<b>Net assets at actuarial value</b>	<u><b>\$4,074,492,832</b></u>	<u><b>\$3,686,168,674</b></u>
<b>Net assets at valuation value</b>	<u><b>\$4,062,057,143</b></u>	<u><b>\$3,673,858,074</b></u>

<sup>(1)</sup> Equals the sum of additional contribution receivables for the final Paulson Settlement.

**SECTION 3: Supplemental Information for the Contra Costa County Employees' Retirement Association**

**EXHIBIT G**

**Actuarial Balance Sheet**

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

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

	Basic	COLA	Total
<b>Assets</b>			
1. Total valuation value of assets	\$2,696,757,514	\$1,365,299,629	\$4,062,057,143
2. Present value of future contributions by members	381,626,404	215,912,493	597,538,897
3. Present value of future employer contributions for:			
(a) entry age normal cost	785,038,999	220,480,820	1,005,519,819
(b) unfunded actuarial accrued liability	467,522,735	262,848,146	730,370,881
4. Total actuarial assets	\$4,330,945,652	\$2,064,541,088	\$6,395,486,740
<b>Liabilities</b>			
5. Present value of retirement allowances payable to present retired members	\$1,485,613,426	\$982,987,545	\$2,468,600,971
6. Present value of retirement allowances to be granted in the future	2,845,332,226	1,081,553,543	3,926,885,769
7. Total present value of benefits	\$4,330,945,652	\$2,064,541,088	\$6,395,486,740

**SECTION 3: Supplemental Information for the Contra Costa County Employees' Retirement Association**

**EXHIBIT H**

**Summary of Total Allocated Reserves as of December 31, 2005**

<b>Reserves</b>	
Member Deposits <sup>(1)</sup>	\$347,341,888
Member Cost of Living <sup>(1)</sup>	96,991,433
Employer Advance <sup>(1)</sup>	1,120,750,868
Employer Cost of Living <sup>(1)</sup>	760,781,775
Retired Members <sup>(1)</sup>	1,293,622,706
Retired Cost of Living <sup>(1)</sup>	513,347,475
New Dollar Power Cost of Living Supplement and Pre-Fund <sup>(1)</sup>	28,987,886
Smoothed Market Value Valuation <sup>(1)</sup>	157,348,121
Post Retirement Death Benefit <sup>(2)</sup>	12,435,689
Statutory Contingency (one percent) <sup>(2)</sup>	0
Additional One Percent Contingency Designation <sup>(2)</sup>	0
Contra Tracking Account <sup>(1)</sup>	<u>(257,115,009)</u>
 Total Allocated Reserves	 \$4,074,492,832
Market Stabilization Account	<u>147,229,420</u>
Net market value	<u>\$4,221,722,252</u>

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

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

**SECTION 3: Supplemental Information for the Contra Costa County Employees' Retirement Association**

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**EXHIBIT I**

**Development of Unfunded Actuarial Accrued Liability**

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	<b>Year Ended December 31, 2005</b>
1. Unfunded actuarial accrued liability at beginning of year	\$807,384,825
2. Gross Normal cost at middle of year	191,626,895
3. Actual employer and member contributions	(373,774,835)
4. Interest (whole year on (1) plus half year on (2) + (3) )	<u>56,588,558</u>
5. Expected unfunded actuarial accrued liability at end of year	\$681,825,443
6. Actuarial (gain)/loss due to all changes:	
a. Investment return	\$81,309,536
b. Salary increases	(12,310,517)
c. Plan changes	2,552,498
d. Change in assumptions	0
e. Other experience (gain)/loss	<u>(23,006,079)</u>
f. Total (gain)/loss	<u>48,545,438</u>
7. Unfunded actuarial accrued liability at end of year	<u>\$730,370,881</u>

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### **SECTION 3: Supplemental Information for the Contra Costa County Employees' Retirement Association**

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#### **EXHIBIT J**

#### **Section 415 Limitations**

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

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

In particular, Section 415(b) of the IRC limits the maximum annual benefit payable at the Normal Retirement Age to a dollar limit of \$160,000 indexed for inflation. That limit is \$175,000 for 2006. Normal Retirement Age for these purposes is age 62. These are the limits in simplified terms. They must generally be adjusted based on each participant's circumstances, for such things as age at retirement, form of benefits chosen and after tax contributions. Limits are also affected by the "grandfather" election under Section 415(b)(10).

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

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

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

**SECTION 3: Supplemental Information for the Contra Costa County Employees' Retirement Association**

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**EXHIBIT K**

**Definitions of Pension Terms**

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

**Assumptions or Actuarial**

**Assumptions:**

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

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

**Normal Cost:**

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

**Actuarial Accrued Liability**

**For Actives:**

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

**Actuarial Accrued Liability**

**For Pensioners:**

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

**Unfunded Actuarial Accrued**

**Liability:**

The extent to which the actuarial accrued liability of the Plan exceeds the assets of the Plan. There are many approaches to paying off the unfunded actuarial accrued liability, from meeting interest accrual only to amortizing it over a specific period of time.

**SECTION 3: Supplemental Information for the Contra Costa County Employees' Retirement Association**

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**Amortization of the Unfunded**

**Actuarial Accrued Liability:** Payments made over a period of years equal in value to the Plan's unfunded actuarial accrued liability.

**Investment Return:**

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

**SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association**

**EXHIBIT I**

**Supplementary Information Required by GASB – Schedule of Employer Contributions**

<b>Plan Year Ended December 31</b>	<b>Annual Required Contributions</b>	<b>Actual Contributions</b>	<b>Percentage Contributed</b>
2000	\$58,035,756	\$ 52,986,645	91.3%*
2001	58,642,407	55,182,505	94.1%*
2002	58,319,678	57,474,043	98.6%*
2003	108,728,047	108,728,047**	100.0%
2004	118,245,418	118,245,418	100.0%
2005	147,165,108	147,165,108***	100.0%

\* *The contribution percentage is less than 100% due to actions taken by the Board of Retirement to phase-in, over three years, increased contribution requirements associated with the significant actuarial assumption changes and the expansion of earnable compensation required by the "Ventura Decision".*

\*\* *Excludes pension obligation bond proceeds of \$319,094,719.*

\*\*\* *Excludes pension obligation bond proceeds of \$153,134,911.*

**SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association**

**EXHIBIT II**

**Supplementary Information Required by GASB – Schedule of Funding Progress**

<b>Actuarial Valuation Date</b>	<b>Valuation Value of Assets* (a)</b>	<b>Actuarial Accrued Liability (AAL)** (b)</b>	<b>Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)</b>	<b>Funded Ratio (a) / (b)</b>	<b>Covered Payroll (c)</b>	<b>UAAL as a Percentage of Covered Payroll [(b) - (a) / (c)]</b>
12/31/2000	\$2,355,179,000	\$2,643,526,000	\$288,347,000	89.09%	\$488,384,000	59.04%
12/31/2001	2,613,220,000	2,983,551,000	370,331,000	87.59%	523,621,000	70.73%
12/31/2002	3,296,736,000	3,677,624,000	380,888,000	89.64%	580,415,000	65.62%
12/31/2003	3,538,722,000	4,141,390,000	602,668,000	85.45%	600,274,000	100.40%
12/31/2004	3,673,858,074	4,481,242,899	807,384,825	81.98%	619,132,218	130.41%
12/31/2005	4,062,057,143	4,792,428,024	730,370,881	84.76%	627,546,408	116.39%

*\*Excludes assets for non-valuation reserves.*

*\*\*Excludes liabilities for non-valuation reserves.*

**SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association**

**EXHIBIT III**

**Supplementary Information Required by GASB**

<b>Valuation date</b>	December 31, 2005
<b>Actuarial cost method</b>	Entry Age Normal Actuarial Cost Method
<b>Amortization method</b>	Level percent of payroll for total unfunded liability (4.25% payroll growth assumed)
<b>Remaining amortization period</b>	17 years (declining) for all UAAL
<b>Asset valuation method</b>	Market value of assets less unrecognized returns in each of the last nine semi-annual accounting periods. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized semi-annually over a five-year period. The Actuarial Value of Assets is reduced by the value of the non-valuation reserves and designations
<b>Actuarial assumptions:</b>	
Investment rate of return	7.90%
Inflation Rate	3.75%
Projected salary increases*	General: 5.45% to 16.05%; Safety: 4.85% to 13.45%
Cost of living adjustments	3.0% per year except for Tier 3 disability benefits and Tier 2 benefits that are valued as a 3.75% increase per year.
<b>Plan membership:</b>	
Retired members and beneficiaries receiving benefits	6,437
Terminated members entitled to, but not yet receiving benefits	1,731
Active members	<u>9,205</u>
Total	17,373

\* Includes inflation at 3.75%, plus "Across the Board" salary increases of 0.50%, plus merit and longevity increases. See Exhibit IV for these increases.

**SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association**

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**EXHIBIT IV**

**Actuarial Assumptions and Actuarial Cost Method**

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**Post – Retirement Mortality Rates:**

*Healthy:*

For General Members: 1994 Group Annuity Mortality Table set forward one year.

For Safety Members: 1994 Group Annuity Mortality Table set forward two years.

*Disabled:*

For General members: 1981 Disability Mortality Table (General) set back three years.

For Safety members: 1994 Group Annuity Mortality Table set forward two years.

*Employee Contribution Rates:*

For General members: 1994 Group Annuity Mortality Table set forward one year weighted 30% male and 70% female.

For Safety members: 1994 Group Annuity Mortality Table set forward two years weighted 85% male and 15% female.

**SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association**

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

Age	Rate (%) Mortality			
	General		Safety	
	Male	Female	Male	Female
25	0.07	0.03	0.07	0.03
30	0.08	0.04	0.08	0.04
35	0.09	0.05	0.09	0.06
40	0.12	0.08	0.13	0.08
45	0.17	0.10	0.19	0.11
50	0.29	0.16	0.32	0.17
55	0.49	0.26	0.56	0.29
60	0.90	0.51	1.01	0.58
65	1.62	0.97	1.80	1.08

All pre-retirement deaths are assumed to be non-service connected.

**SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association**

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

Age	Rate (%)		
	Disability		
	General Tier 1 <sup>(1)</sup>	General Tier 2 and 3 <sup>(2)</sup>	Safety <sup>(3)</sup>
20	0.04	0.00	0.06
25	0.11	0.02	0.16
30	0.24	0.04	0.44
35	0.36	0.08	0.84
40	0.52	0.11	1.12
45	0.66	0.17	1.56
50	0.79	0.34	2.22
55	0.94	0.56	2.50
60	1.15	0.80	0.00

- <sup>(1)</sup> 70% of General Tier 1 disabilities are assumed to be duty disabilities. The other 30% are assumed to be ordinary disabilities.
- <sup>(2)</sup> 25% of General Tier 2 and 3 disabilities are assumed to be duty disabilities. The other 75% are assumed to be ordinary disabilities.
- <sup>(3)</sup> 100% of Safety disabilities are assumed to be duty disabilities.

**SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association**

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

Rate (%)		
Withdrawal (< 5 Years of Service)		
Years of Service	General	Safety
0	13.00	9.00
1	7.00	6.00
2	6.00	5.00
3	5.00	4.00
4	4.00	3.00
Withdrawal (5+ Years of Service) *		
Age	General	Safety
20	4.00	3.00
25	4.00	3.00
30	4.00	2.78
35	4.00	2.00
40	3.84	1.46
45	3.21	0.95
50	1.52	0.00
55	0.33	0.00
60	0.00	0.00

\* The member is assumed to receive the greater of the member's contribution balance or a deferred retirement benefit. No withdrawal is assumed after a member is eligible for retirement.

**SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association**

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**Retirement Rates (Enhanced):**

For those members covered under the enhanced benefit formulas the following rates apply:

Rate (%)			
Age	Tier 1	Tier 3	Safety
50	3.00	3.00	30.00
51	3.00	3.00	25.00
52	5.00	5.00	25.00
53	10.00	5.00	25.00
54	15.00	10.00	30.00
55	20.00	10.00	45.00
56	20.00	10.00	45.00
57	25.00	10.00	50.00
58	25.00	10.00	50.00
59	25.00	10.00	50.00
60	25.00	15.00	100.00
61	30.00	15.00	100.00
62	30.00	25.00	100.00
63	30.00	25.00	100.00
64	30.00	30.00	100.00
65	35.00	35.00	100.00
66	35.00	35.00	100.00
67	35.00	35.00	100.00
68	35.00	35.00	100.00
69	35.00	35.00	100.00
70	100.00	100.00	100.00

**SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association**

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**Retirement Rates (Non-enhanced):**

For those members not covered under the enhanced benefit formulas the following rates apply:

<b>Age</b>	<b>Rate (%)</b>	
	<b>Tier 1</b>	<b>Safety</b>
50	3.00	1.00
51	3.00	1.00
52	3.00	1.00
53	3.00	1.00
54	3.00	1.00
55	10.00	2.00
56	10.00	2.00
57	10.00	3.00
58	10.00	4.00
59	10.00	20.00
60	25.00	17.00
61	15.00	17.00
62	40.00	18.00
63	25.00	20.00
64	30.00	100.00
65	40.00	100.00
66	35.00	100.00
67	35.00	100.00
68	35.00	100.00
69	35.00	100.00
70	100.00	100.00

**SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association**

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**Retirement Age and Benefit for  
Deferred Vested Members:**

For deferred vested members, we make the following retirement assumption:

General:           Age 58  
Safety:             Age 55

We assume that 50% of future General and Safety deferred vested members will continue to work for a reciprocal employer. For those that continue to work for a reciprocal employer, we assume 6.25% compensation increases per annum.

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**Future Benefit Accruals:**

1.0 year of service per year for the full-time employees. Continuation of current partial service accrual for part-time employees.

**Unknown Data for Members:**

Same as those exhibited by members with similar known characteristics. If not specified, members are assumed to be male.

**Inclusion of Deferred Vested  
Members:**

All deferred vested members are included in the valuation.

**Percent Married:**

80% of male members and 55% of female members and assumed to be married at pre-retirement death or retirement.

**Age of Spouse:**

Females are 3 years younger than their spouses.

**Tier 3 Members Converting  
Prior Tier 2 Service:**

10% of all eligible Tier 3 members will convert their prior Tier 2 service to Tier 3 service.

**Offsets by Other Plans of the  
Employer for Disability Benefits:**

The Plan requires members who retire because of disability from Tier 2 and Tier 3 to offset the Plan's disability benefits with other Plans of the employer. We have not assumed any offsets in this valuation.

**SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association**

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**Terminal Pay Assumptions:**

The following assumptions for terminal pay as a percentage of final average pay are used:

General Tier 1:	11.50%
General Tier 2:	3.25%
General Tier 3	8.50%
Safety:	11.50%

For determining the cost of the basic benefit (i.e. non-COLA component), the cost of this pay element is currently recognized in the valuation as an employer only cost and does not affect member contribution rates.

**Service From Unused Sick Leave Conversion:**

The following assumptions for service converted from unused sick leave as a percentage of service at retirement are used:

Service Retirements:

General:	1.00%
Safety:	2.00%

Disability Retirements:

General:	0.00%
Safety:	1.00%

Pursuant to Section 31641.01, the cost of this benefit will be charged only to employers and will not affect member contribution rates.

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**Net Investment Return:**

7.90%, net of administration and investment expenses.

**Employee Contribution Crediting Rate:**

7.90%, compounded semi-annually.

**Consumer Price Index:**

Increase of 3.75% per year; retiree COLA increases due to CPI subject to a 3.00% maximum change per year except for Tier 3 disability benefits and Tier 2 benefits which are subject to a 4.00% (valued as 3.75% increase) maximum change per year.

**SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association**

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**Salary Increases:**

Annual Rate of Compensation Increase		
Inflation: 3.75%; plus “across the board” salary increases of 0.50% per year; plus the following merit and longevity increases.		
Age	General	Safety
20	11.80%	9.20%
25	6.40%	7.60%
30	4.70%	5.00%
35	3.50%	3.00%
40	2.80%	2.20%
45	2.10%	1.80%
50	1.80%	1.30%
55	1.50%	1.00%
60	1.40%	0.00%

**Actuarial Value of Assets:** Market value of assets less unrecognized returns in each of the last nine semi-annual accounting periods. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized semi-annually over a five-year period.

**Valuation Value of Assets:** Actuarial Value of Assets reduced by the value of the non-valuation reserves and designations.

**Actuarial Cost Method:** Entry Age Normal Actuarial Cost Method. Entry Age is age minus years of service. Actuarial Accrued Liability is calculated on an individual basis and is based on costs allocated as a level percent of compensation. The Normal Cost is calculated on an aggregate basis by taking the Present Value of Future Normal Costs divided by Present Value of Future Salaries to obtain a normal cost rate for each rate group of employees. This normal cost rate is then multiplied by the total of current salaries for that rate group. The Present Value of Future Normal Costs is determined as if the current benefit accrual rate had always been in effect.

**SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association**

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**Changes in Assumptions:** Based on the March 2006 Review of Economic Actuarial Assumptions, two assumptions were changed. Previously, these assumptions were as follows:

**Consumer Price Index:** Increase of 4.00% per year; retiree COLA increases due to CPI subject to a 3.00% maximum change per year except for Tier 3 disability benefits and Tier 2 benefits which are subject to a 4.00% (valued as 3.75% increase) maximum change per year.

**Salary Increases:**

<u>Annual Rate of Compensation Increase</u>		
Inflation: 4.00%; plus “across-the-board” salary increases of 0.25% per year; plus the following merit and longevity increases.		
<u>Age</u>	<u>General</u>	<u>Safety</u>
20	11.80%	9.20%
25	6.40%	7.60%
30	4.70%	5.00%
35	3.50%	3.00%
40	2.80%	2.20%
45	2.10%	1.80%
50	1.80%	1.30%
55	1.50%	1.00%
60	1.40%	0.00%

**SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association**

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**EXHIBIT V**

**Summary of Plan Provisions**

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

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**Membership Eligibility:**

<i>General Tier 1</i>	All General members hired before July 1, 1980 and electing not to transfer to Tier 2 Plan. Certain General members who are hired after July 1, 1980 and work for specific employers are placed in Tier 1.
<i>General Tier 2</i>	Most General members hired on or after August 1, 1980 and all General members hired before July 1, 1980 electing to transfer to the Tier 2 Plan. Effective October 1, 2002, for the County, Tier 2 was eliminated and all County employees (excluding CNA employees) in Tier 2 were placed in Tier 3. Effective January 1, 2005, all CNA employees in Tier 2 were placed in Tier 3.
<i>General Tier 3</i>	Tier 2 members can elect Tier 3 coverage (for future service) effective on the later of: October 1, 1998 or the day after achieving 5 years of service. All County General members (excluding CNA employees) hired on or after October 1, 2002 will be placed in Tier 3. All CNA employees hired after January 1, 2005 were placed in Tier 3.
<i>Safety</i>	All Safety members.

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**Final Compensation for  
Benefit Determination:**

<i>General Tier 1, Tier 3, and Safety</i>	Highest consecutive twelve months of compensation earnable. (FAS1)
<i>General Tier 2</i>	Highest consecutive thirty-six months of compensation earnable. (FAS3)

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**Social Security Primary Insurance Amount:**

<i>General Tier 2</i>	Estimated Social Security award at age 62 assuming level future earnings. (PIA)
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**SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association**

**Service:**

<i>General Tier 1 and 3</i>	Years of service. (Yrs)
<i>General Tier 2</i>	Years of service up to a maximum of 30 years. (Yrs30)

**Service Retirement Eligibility:**

<i>General</i>	Age 50 with 10 years of service, or age 70 regardless of service, or after 30 years of service, regardless of age.
<i>Safety</i>	Age 50 with 10 years of service, or age 70 regardless of service, or after 20 years of service, regardless of age.

**Benefit Formula:**

*General Tier 1 and Tier 3 (Non-enhanced)(§31676.11)*

Retirement Age	Benefit Formula
50	$(1.24\% \times \text{FAS1} - 1/3 \times 1.24\% \times \$350 \times 12) \times \text{Yrs}$
55	$(1.67\% \times \text{FAS1} - 1/3 \times 1.67\% \times \$350 \times 12) \times \text{Yrs}$
60	$(2.18\% \times \text{FAS1} - 1/3 \times 2.18\% \times \$350 \times 12) \times \text{Yrs}$
62	$(2.35\% \times \text{FAS1} - 1/3 \times 2.35\% \times \$350 \times 12) \times \text{Yrs}$
65	$(2.61\% \times \text{FAS1} - 1/3 \times 2.61\% \times \$350 \times 12) \times \text{Yrs}$

Maximum Benefit: 100% of FAS1

*General Tier 2(§31752)*

50	$(0.83\% \times \text{FAS3} \times \text{Yrs} - 0.57\% \times \text{Yrs} \times 30 \times \text{PIA})$
55	$(1.13\% \times \text{FAS3} \times \text{Yrs} - 0.87\% \times \text{Yrs} \times 30 \times \text{PIA})$
60	$(1.43\% \times \text{FAS3} \times \text{Yrs} - 1.37\% \times \text{Yrs} \times 30 \times \text{PIA})$
62	$(1.55\% \times \text{FAS3} \times \text{Yrs} - 1.67\% \times \text{Yrs} \times 30 \times \text{PIA})$
65	$(1.73\% \times \text{FAS3} \times \text{Yrs} - 1.67\% \times \text{Yrs} \times 30 \times \text{PIA})$

**SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association**

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**Benefit Formula:**

<i>Safety (Non-enhanced)(§31664)</i>	50	(2.00%xFAS1xYrs)
	55	(2.62%xFAS1xYrs)

Maximum Benefit: 100% of FAS1

<i>General Tier 1 and Tier 3 (Enhanced) (§31676.16)</i>	Retirement Age	Benefit Formula
	50	(1.43%xFAS1 – 1/3x1.43%x\$350x12)xYrs
	55	(2.00%xFAS1 – 1/3x2.00%x\$350x12)xYrs
	60	(2.26%xFAS1 – 1/3x2.26%x\$350x12)xYrs
	62	(2.37%xFAS1 – 1/3x2.37%x\$350x12)xYrs
	65	(2.42%xFAS1 – 1/3x2.42%x\$350x12)xYrs

Maximum Benefit: 100% of FAS1

<i>Safety (Enhanced)(§31664.1)</i>	50	(3.00%xFAS1xYrs)
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Maximum Benefit: 100% of FAS1

## SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association

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### Ordinary Disability:

#### General Tier 1

##### *Eligibility*

Five years of service (§31720).

##### *Benefit Formula*

1.5% per year of service. If the benefit does not exceed one-third of Final Compensation, the service is projected to 65, but total benefit cannot be more than one-third of Final Compensation (§31727).

#### General Tier 2 and General Tier 3

##### *Eligibility*

Ten years of service (definition of disability is more strict than Tier 1 Plan) (§31720.1).

##### *Benefit Formula*

40% of Final Compensation plus 10% of Final Compensation used in the benefit determination for each minor child (maximum of three) (§31727.01).

##### *Offset*

Disability benefits are offset by other plans of the employer except Workers Compensation and Social Security.

#### Safety

##### *Eligibility*

Five years of service (§31720).

##### *Benefit Formula*

1.8% per year of service. If the benefit does not exceed one-third of Final Compensation, the service is projected to 55, but total benefit cannot be more than one-third of Final Compensation (§31727.2).

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### Line-of-Duty Disability:

#### General Tier 1 and Safety

##### *Eligibility*

No age or service requirements (§31720).

##### *Benefit Formula*

50% of the Final Compensation (§31727.4).

#### General Tier 2 and General Tier 3

##### *Eligibility*

No age or service requirements (§31720).

##### *Benefit Formula*

40% of Final Compensation plus 10% of Final Compensation for each minor child (maximum of three) (§31727.01).

##### *Offset*

Disability benefits are offset by other plans of the Employer except Workers Compensation and Social Security.

**SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association**

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**Pre-Retirement Death:**

General Tier 1 and Tier 3, and Safety

*Eligibility - A* None.

*Benefit - A* Refund of employee contributions with interest plus one month's compensation for each year of service to a maximum of six month's compensation (§31781); 50% of Final Compensation payable to spouse if Line of Duty death (§31787).

OR

*Eligibility - B* Five years of service.

*Benefit - B* Option 2 (100% continuation) of Service Retirement or Ordinary Disability benefit payable to designated beneficiary.

*Death in line of duty* 50% of Final compensation.

General Tier 2

*Eligibility - A* None.

*Benefit - A* Refund of employee contributions with interest plus \$2,000 lump sum benefit offset by any Social Security payment. (§31781.01); If a Line of Duty death, then 60% of Service or Disability Retirement Benefit (minimum benefit is 24% of Final Compensation) plus, for each minor child, 10% of the allowance otherwise paid to the member. Minimum family benefit is 60% of the member's allowance. Maximum family benefit is 100% of member's allowance.

OR

*Eligibility - B* Ten years of service.

*Benefit - B* Option 2 (100% continuation) of Service Retirement or Ordinary Disability benefit payable to designated beneficiary.

**SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association**

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**Death After Retirement:**

General Tier 1 and Tier 3, and Safety

*Service or*

*Ordinary Disability Retirement*

60% of member's unmodified allowance continued to eligible spouse. An eligible spouse is a surviving spouse who was married to the member one year prior to member's retirement or at least two years prior to the date of death and has attained age 55 on or prior to the date of death (§31760.2). An additional lump sum benefit of \$5,000 is payable to the member's beneficiary (§31789.12).

*Line-of-Duty Disability*

100% of members allowance continued to eligible spouse (§31786). An additional lump sum benefit of \$5,000 is payable to the member's beneficiary (§31789.12).

General Tier 2

*Service or*

*Disability Retirement*

60% of member's unmodified allowance continued to eligible spouse plus 10% of allowance to each minor child. Minimum benefit is 60% of allowance. Maximum benefit is 100% of allowance. \$7,000 lump sum benefit, less any Social Security Lump sum payment payable to member's beneficiary.

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**Withdrawal Benefits:**

*Less than Five Years of Service*

Refund of accumulated employee contributions with interest, or earned benefit at age 70 (§31628).

*Five or More Years of Service*

If contributions left on deposit, entitled to earned benefits commencing at any time after eligible to retire (§31700).

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**Post-Retirement**

**Cost-of-Living Benefits:**

*General Tier 1 and Tier 3, and Safety*

Future changes based on Consumer Price Index to a maximum of 3% per year, excess "banked." Tier 3 disability benefits have a maximum of 4% per year, excess "banked."

*General Tier 2*

Future changes based on Consumer Price Index to a maximum of 4% per year, excess "banked."

**SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association**

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<b>County Contributions:</b>	Determined by the Entry Age Normal Cost method. The total Unfunded Actuarial Accrued Liability is being funded as a level percent of payroll over a 17-year period as of December 31, 2005.
<b>Member Contributions:</b>	Please refer to Appendix A for the specific rates.
General Tier 1 and Tier 3 (Non-enhanced)	
<i>Basic</i>	Provide for one-half of the \$31676.11 benefit payable at age 55.
<i>Cost-of-Living</i>	Provide for one-half of future Cost-of-Living costs.
General Tier 2	
<i>Basic</i>	40% of the full \$31676.11 employee contribution rate at all ages.
<i>Cost-of-Living</i>	Provide for one-half of future Cost-of-Living costs.
Safety (Non-enhanced)	
<i>Basic</i>	Provide for one-half of the \$31664 benefit payable at age 50.
<i>Cost-of-Living</i>	Provide for one-half of future Cost-of-Living costs.
General Tier 1 and Tier 3 (Enhanced)	
<i>Basic</i>	Provide for an average annuity at age 60 equal to 1/120 of FAS1.
<i>Cost-of-Living</i>	Provide for one-half of future Cost-of-Living costs.
Safety (Enhanced)	
<i>Basic</i>	Provide for an average annuity at age 50 equal to 1/100 of FAS1.
<i>Cost-of-Living</i>	Provide for one-half of future Cost-of-Living costs.
<b>Other Information:</b>	Transfers from the Tier 1 Plan to the Tier 2 Plan were made on an individual voluntary irrevocable basis. Credit is given under the Tier 2 Plan for future service only. The Cost-of-Living maximum is 4% only for the credit under the Tier 2 Plan. Transferred Tier 2 Plan members keep the five-year requirement for nonservice-connected disability. Those who were members before April 1, 1973 and all safety under the enhanced benefit formula will be exempt from paying member contributions after 30 years of service.

#### SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association

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**Plan Amendments:**

The following plan changes are recognized in this valuation:

Contra Costa Mosquito Abatement District members in Tier 2 will be transferred to Tier 3. Contra Costa Mosquito Abatement District members in Tiers 1 and 3 will receive "Enhanced" benefits under §31676.16. These changes became effective on February 1, 2006.

East Contra Costa Fire Protection District adopted "Enhanced" General Tier 1 benefits (§31676.16) for their General members and "Enhanced" Safety benefits (§31664.1) for their Safety members. These changes became effective on July 1, 2005.

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

**SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association**

**Appendix A**

**Member Contribution Rates**

**General Tier 1 (Non-enhanced) Members' Contribution Rates for Members Not Receiving Benefits under 2% at 55 Formula from the December 31, 2005 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)**

**Calculated Under Recommended Assumptions**

Entry Age	Basic		COLA		Total	
	First \$350	Over \$350	First \$350	Over \$350	First \$350	Over \$350
15	5.40%	8.10%	2.55%	3.82%	7.95%	11.92%
16	5.35%	8.02%	2.52%	3.78%	7.87%	11.80%
17	5.29%	7.93%	2.49%	3.74%	7.78%	11.67%
18	5.23%	7.85%	2.47%	3.70%	7.70%	11.55%
19	5.19%	7.78%	2.45%	3.67%	7.64%	11.45%
20	5.15%	7.72%	2.43%	3.64%	7.58%	11.36%
21	5.11%	7.67%	2.41%	3.61%	7.52%	11.28%
22	5.09%	7.63%	2.40%	3.60%	7.49%	11.23%
23	5.07%	7.60%	2.39%	3.58%	7.46%	11.18%
24	5.05%	7.58%	2.38%	3.57%	7.43%	11.15%
25	5.04%	7.56%	2.37%	3.56%	7.41%	11.12%
26	5.03%	7.55%	2.37%	3.56%	7.40%	11.11%
27	5.03%	7.54%	2.37%	3.55%	7.40%	11.09%
28	5.03%	7.55%	2.37%	3.56%	7.40%	11.11%
29	5.03%	7.55%	2.37%	3.56%	7.40%	11.11%
30	5.04%	7.56%	2.37%	3.56%	7.41%	11.12%
31	5.05%	7.57%	2.38%	3.57%	7.43%	11.14%
32	5.06%	7.59%	2.39%	3.58%	7.45%	11.17%
33	5.07%	7.61%	2.39%	3.59%	7.46%	11.20%
34	5.09%	7.64%	2.40%	3.60%	7.49%	11.24%
35	5.11%	7.67%	2.41%	3.61%	7.52%	11.28%
36	5.14%	7.71%	2.42%	3.63%	7.56%	11.34%
37	5.17%	7.75%	2.43%	3.65%	7.60%	11.40%

**SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association**

**General Tier 1 (Non-enhanced) Members' Contribution Rates for Members Not Receiving Benefits under 2% at 55 Formula from the December 31, 2005 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)**

**Calculated Under Recommended Assumptions**

Entry Age	Basic		COLA		Total	
	First \$350	Over \$350	First \$350	Over \$350	First \$350	Over \$350
38	5.19%	7.79%	2.45%	3.67%	7.64%	11.46%
39	5.23%	7.84%	2.46%	3.69%	7.69%	11.53%
40	5.26%	7.89%	2.48%	3.72%	7.74%	11.61%
41	5.29%	7.94%	2.49%	3.74%	7.78%	11.68%
42	5.33%	7.99%	2.51%	3.76%	7.84%	11.75%
43	5.37%	8.05%	2.53%	3.79%	7.90%	11.84%
44	5.41%	8.11%	2.55%	3.82%	7.96%	11.93%
45	5.45%	8.18%	2.57%	3.85%	8.02%	12.03%
46	5.50%	8.25%	2.59%	3.89%	8.09%	12.14%
47	5.55%	8.32%	2.61%	3.92%	8.16%	12.24%
48	5.58%	8.37%	2.63%	3.94%	8.21%	12.31%
49	5.63%	8.44%	2.65%	3.98%	8.28%	12.42%
50	5.67%	8.51%	2.67%	4.01%	8.34%	12.52%
51	5.74%	8.61%	2.71%	4.06%	8.45%	12.67%
52	5.77%	8.65%	2.72%	4.08%	8.49%	12.73%
53	5.82%	8.73%	2.74%	4.11%	8.56%	12.84%
54	5.85%	8.77%	2.75%	4.13%	8.60%	12.90%
55	5.85%	8.77%	2.75%	4.13%	8.60%	12.90%
56	5.85%	8.77%	2.75%	4.13%	8.60%	12.90%
57	5.85%	8.77%	2.75%	4.13%	8.60%	12.90%
58	5.85%	8.77%	2.75%	4.13%	8.60%	12.90%
59	5.85%	8.77%	2.75%	4.13%	8.60%	12.90%
60	5.85%	8.77%	2.75%	4.13%	8.60%	12.90%
Interest:	7.90%					
Salary Increase:	See Exhibit IV.					
COLA Loading:	47.12%					
Mortality:	GAM 1994 (30% Male and 70% Female, with ages set forward one year)					

**SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association**

**General Tier 1 (Enhanced) Members' Contribution Rates for Members Receiving Benefits under 2% at 55 Formula from the December 31, 2005 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)**

**Calculated Under Recommended Assumptions**

Entry Age	Basic		COLA		Total	
	First \$350	Over \$350	First \$350	Over \$350	First \$350	Over \$350
15	4.62%	6.93%	2.72%	4.08%	7.34%	11.01%
16	4.57%	6.86%	2.69%	4.03%	7.26%	10.89%
17	4.53%	6.80%	2.67%	4.00%	7.20%	10.80%
18	4.50%	6.75%	2.65%	3.97%	7.15%	10.72%
19	4.46%	6.69%	2.62%	3.93%	7.08%	10.62%
20	4.43%	6.65%	2.61%	3.91%	7.04%	10.56%
21	4.41%	6.61%	2.59%	3.89%	7.00%	10.50%
22	4.39%	6.59%	2.59%	3.88%	6.98%	10.47%
23	4.38%	6.57%	2.57%	3.86%	6.95%	10.43%
24	4.37%	6.56%	2.57%	3.86%	6.94%	10.42%
25	4.37%	6.55%	2.57%	3.85%	6.94%	10.40%
26	4.37%	6.55%	2.57%	3.85%	6.94%	10.40%
27	4.37%	6.55%	2.57%	3.85%	6.94%	10.40%
28	4.37%	6.55%	2.57%	3.85%	6.94%	10.40%
29	4.37%	6.56%	2.57%	3.86%	6.94%	10.42%
30	4.39%	6.58%	2.58%	3.87%	6.97%	10.45%
31	4.40%	6.60%	2.59%	3.88%	6.99%	10.48%
32	4.41%	6.62%	2.59%	3.89%	7.00%	10.51%
33	4.43%	6.64%	2.60%	3.90%	7.03%	10.54%
34	4.45%	6.67%	2.61%	3.92%	7.06%	10.59%
35	4.47%	6.71%	2.63%	3.95%	7.10%	10.66%
36	4.49%	6.74%	2.64%	3.96%	7.13%	10.70%
37	4.52%	6.78%	2.66%	3.99%	7.18%	10.77%
38	4.55%	6.82%	2.67%	4.01%	7.22%	10.83%
39	4.58%	6.87%	2.69%	4.04%	7.27%	10.91%
40	4.61%	6.92%	2.71%	4.07%	7.32%	10.99%
41	4.65%	6.97%	2.73%	4.10%	7.38%	11.07%

**SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association**

**General Tier 1 (Enhanced) Members' Contribution Rates for Members Receiving Benefits under 2% at 55 Formula from the December 31, 2005 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)**

**Calculated Under Recommended Assumptions**

Entry Age	Basic		COLA		Total	
	First \$350	Over \$350	First \$350	Over \$350	First \$350	Over \$350
42	4.68%	7.02%	2.75%	4.13%	7.43%	11.15%
43	4.72%	7.08%	2.77%	4.16%	7.49%	11.24%
44	4.75%	7.13%	2.79%	4.19%	7.54%	11.32%
45	4.80%	7.20%	2.82%	4.23%	7.62%	11.43%
46	4.84%	7.26%	2.85%	4.27%	7.69%	11.53%
47	4.88%	7.32%	2.87%	4.30%	7.75%	11.62%
48	4.93%	7.39%	2.90%	4.35%	7.83%	11.74%
49	4.97%	7.45%	2.92%	4.38%	7.89%	11.83%
50	5.02%	7.53%	2.95%	4.43%	7.97%	11.96%
51	5.07%	7.60%	2.98%	4.47%	8.05%	12.07%
52	5.11%	7.67%	3.01%	4.51%	8.12%	12.18%
53	5.17%	7.75%	3.04%	4.56%	8.21%	12.31%
54	5.23%	7.84%	3.07%	4.61%	8.30%	12.45%
55	5.27%	7.91%	3.10%	4.65%	8.37%	12.56%
56	5.31%	7.96%	3.12%	4.68%	8.43%	12.64%
57	5.40%	8.10%	3.17%	4.76%	8.57%	12.86%
58	5.43%	8.15%	3.19%	4.79%	8.62%	12.94%
59	5.45%	8.18%	3.21%	4.81%	8.66%	12.99%
60	5.45%	8.18%	3.21%	4.81%	8.66%	12.99%

Interest: 7.90%  
 Salary Increase: See Exhibit IV.  
 COLA Loading: 58.81%  
 Mortality: GAM 1994 (30% Male and 70% Female, with ages set forward one year)

**SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association**

**General Tier 3 (Enhanced) Members' Contribution Rates for Members Receiving Benefits under 2% at 55 Formula from the December 31, 2005 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)**

**Calculated Under Recommended Assumptions**

Entry Age	Basic		COLA		Total	
	First \$350	Over \$350	First \$350	Over \$350	First \$350	Over \$350
15	4.62%	6.93%	2.27%	3.40%	6.89%	10.33%
16	4.57%	6.86%	2.24%	3.36%	6.81%	10.22%
17	4.53%	6.80%	2.23%	3.34%	6.76%	10.14%
18	4.50%	6.75%	2.21%	3.31%	6.71%	10.06%
19	4.46%	6.69%	2.19%	3.28%	6.65%	9.97%
20	4.43%	6.65%	2.17%	3.26%	6.60%	9.91%
21	4.41%	6.61%	2.16%	3.24%	6.57%	9.85%
22	4.39%	6.59%	2.15%	3.23%	6.54%	9.82%
23	4.38%	6.57%	2.15%	3.22%	6.53%	9.79%
24	4.37%	6.56%	2.15%	3.22%	6.52%	9.78%
25	4.37%	6.55%	2.14%	3.21%	6.51%	9.76%
26	4.37%	6.55%	2.14%	3.21%	6.51%	9.76%
27	4.37%	6.55%	2.14%	3.21%	6.51%	9.76%
28	4.37%	6.55%	2.14%	3.21%	6.51%	9.76%
29	4.37%	6.56%	2.15%	3.22%	6.52%	9.78%
30	4.39%	6.58%	2.15%	3.23%	6.54%	9.81%
31	4.40%	6.60%	2.16%	3.24%	6.56%	9.84%
32	4.41%	6.62%	2.17%	3.25%	6.58%	9.87%
33	4.43%	6.64%	2.17%	3.26%	6.60%	9.90%
34	4.45%	6.67%	2.18%	3.27%	6.63%	9.94%
35	4.47%	6.71%	2.19%	3.29%	6.66%	10.00%
36	4.49%	6.74%	2.21%	3.31%	6.70%	10.05%
37	4.52%	6.78%	2.22%	3.33%	6.74%	10.11%
38	4.55%	6.82%	2.23%	3.35%	6.78%	10.17%
39	4.58%	6.87%	2.25%	3.37%	6.83%	10.24%

**SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association**

**General Tier 3 (Enhanced) Members' Contribution Rates for Members Receiving Benefits under 2% at 55 Formula from the December 31, 2005 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)**

**Calculated Under Recommended Assumptions**

Entry Age	Basic		COLA		Total	
	First \$350	Over \$350	First \$350	Over \$350	First \$350	Over \$350
40	4.61%	6.92%	2.26%	3.39%	6.87%	10.31%
41	4.65%	6.97%	2.28%	3.42%	6.93%	10.39%
42	4.68%	7.02%	2.29%	3.44%	6.97%	10.46%
43	4.72%	7.08%	2.31%	3.47%	7.03%	10.55%
44	4.75%	7.13%	2.33%	3.50%	7.08%	10.63%
45	4.80%	7.20%	2.35%	3.53%	7.15%	10.73%
46	4.84%	7.26%	2.37%	3.56%	7.21%	10.82%
47	4.88%	7.32%	2.39%	3.59%	7.27%	10.91%
48	4.93%	7.39%	2.41%	3.62%	7.34%	11.01%
49	4.97%	7.45%	2.43%	3.65%	7.40%	11.10%
50	5.02%	7.53%	2.46%	3.69%	7.48%	11.22%
51	5.07%	7.60%	2.49%	3.73%	7.56%	11.33%
52	5.11%	7.67%	2.51%	3.76%	7.62%	11.43%
53	5.17%	7.75%	2.53%	3.80%	7.70%	11.55%
54	5.23%	7.84%	2.57%	3.85%	7.80%	11.69%
55	5.27%	7.91%	2.59%	3.88%	7.86%	11.79%
56	5.31%	7.96%	2.60%	3.90%	7.91%	11.86%
57	5.40%	8.10%	2.65%	3.97%	8.05%	12.07%
58	5.43%	8.15%	2.67%	4.00%	8.10%	12.15%
59	5.45%	8.18%	2.67%	4.01%	8.12%	12.19%
60	5.45%	8.18%	2.67%	4.01%	8.12%	12.19%

Interest: 7.90%  
 Salary Increase: See Exhibit IV.  
 COLA Loading: 49.05%  
 Mortality: GAM 1994 (30% Male and 70% Female, with ages set forward one year)

**SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association**

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**Safety (Non-enhanced) Members' Contribution Rates for Members Not Receiving Benefits under 3% at 50 Formula from the December 31, 2005 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)**

**Calculated Under Recommended Assumptions**

<b>Entry Age</b>	<b>Basic</b>	<b>COLA</b>	<b>Total</b>
15	9.76%	4.60%	14.36%
16	9.76%	4.60%	14.36%
17	9.76%	4.60%	14.36%
18	9.76%	4.60%	14.36%
19	9.76%	4.60%	14.36%
20	9.76%	4.60%	14.36%
21	9.68%	4.56%	14.24%
22	9.61%	4.53%	14.14%
23	9.54%	4.50%	14.04%
24	9.49%	4.47%	13.96%
25	9.45%	4.45%	13.90%
26	9.42%	4.44%	13.86%
27	9.39%	4.42%	13.81%
28	9.39%	4.42%	13.81%
29	9.39%	4.42%	13.81%
30	9.40%	4.43%	13.83%
31	9.43%	4.44%	13.87%
32	9.46%	4.46%	13.92%
33	9.50%	4.48%	13.98%
34	9.56%	4.50%	14.06%
35	9.61%	4.53%	14.14%
36	9.66%	4.55%	14.21%
37	9.73%	4.58%	14.31%
38	9.80%	4.62%	14.42%
39	9.88%	4.66%	14.54%
40	9.94%	4.68%	14.62%
41	10.02%	4.72%	14.74%
42	10.12%	4.77%	14.89%
43	10.18%	4.80%	14.98%
44	10.27%	4.84%	15.11%

**SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association**

**Safety (Non-enhanced) Members' Contribution Rates for Members Not Receiving Benefits under 3% at 50 Formula from the December 31, 2005 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)**

**Calculated Under Recommended Assumptions**

<b>Entry Age</b>	<b>Basic</b>	<b>COLA</b>	<b>Total</b>
45	10.38%	4.89%	15.27%
46	10.48%	4.94%	15.42%
47	10.58%	4.99%	15.57%
48	10.63%	5.01%	15.64%
49	10.93%	5.15%	16.08%
50	10.93%	5.15%	16.08%
51	10.93%	5.15%	16.08%
52	10.93%	5.15%	16.08%
53	10.93%	5.15%	16.08%
54	10.93%	5.15%	16.08%
55	10.93%	5.15%	16.08%
56	10.93%	5.15%	16.08%
57	10.93%	5.15%	16.08%
58	10.93%	5.15%	16.08%
59	10.93%	5.15%	16.08%
60	10.93%	5.15%	16.08%

Interest: 7.90%  
 Salary Increase: See Exhibit IV.  
 COLA Loading: 47.12%  
 Mortality: GAM 1994 (85% Male and 15% Female, with ages set forward two years)

**SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association**

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**Safety (Enhanced) Members' Contribution Rates for Members Receiving Benefits under 3% at 50 Formula from the December 31, 2005 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)**

**Calculated Under Recommended Assumptions**

<b>Entry Age</b>	<b>Basic</b>	<b>COLA</b>	<b>Total</b>
15	9.76%	7.12%	16.88%
16	9.76%	7.12%	16.88%
17	9.76%	7.12%	16.88%
18	9.76%	7.12%	16.88%
19	9.76%	7.12%	16.88%
20	9.76%	7.12%	16.88%
21	9.68%	7.06%	16.74%
22	9.61%	7.01%	16.62%
23	9.54%	6.96%	16.50%
24	9.49%	6.93%	16.42%
25	9.45%	6.90%	16.35%
26	9.42%	6.87%	16.29%
27	9.39%	6.85%	16.24%
28	9.39%	6.85%	16.24%
29	9.39%	6.85%	16.24%
30	9.40%	6.86%	16.26%
31	9.43%	6.88%	16.31%
32	9.46%	6.90%	16.36%
33	9.50%	6.93%	16.43%
34	9.56%	6.98%	16.54%
35	9.61%	7.01%	16.62%
36	9.66%	7.05%	16.71%
37	9.73%	7.10%	16.83%
38	9.80%	7.15%	16.95%
39	9.88%	7.21%	17.09%
40	9.94%	7.25%	17.19%
41	10.02%	7.31%	17.33%
42	10.12%	7.39%	17.51%
43	10.18%	7.43%	17.61%
44	10.27%	7.50%	17.77%

**SECTION 4: Reporting Information for the Contra Costa County Employees' Retirement Association**

**Safety (Enhanced) Members' Contribution Rates for Members Receiving Benefits under 3% at 50 Formula from the December 31, 2005 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)**

**Calculated Under Recommended Assumptions**

<b>Entry Age</b>	<b>Basic</b>	<b>COLA</b>	<b>Total</b>
45	10.38%	7.58%	17.96%
46	10.48%	7.65%	18.13%
47	10.58%	7.72%	18.30%
48	10.63%	7.76%	18.39%
49	10.93%	7.98%	18.91%
50	10.93%	7.98%	18.91%
51	10.93%	7.98%	18.91%
52	10.93%	7.98%	18.91%
53	10.93%	7.98%	18.91%
54	10.93%	7.98%	18.91%
55	10.93%	7.98%	18.91%
56	10.93%	7.98%	18.91%
57	10.93%	7.98%	18.91%
58	10.93%	7.98%	18.91%
59	10.93%	7.98%	18.91%
60	10.93%	7.98%	18.91%

Interest: 7.90%  
 See Exhibit IV: See Exhibit IV.  
 COLA Loading: 72.98%  
 Mortality: GAM 1994 (85% Male and 15% Female, with ages set forward two years)

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