

Contra Costa County Employees'
Retirement Association

*Actuarial Valuation and Review
as of December 31, 2006*

Copyright © 2007
THE SEGAL GROUP, INC.,
THE PARENT OF THE SEGAL COMPANY
ALL RIGHTS RESERVED



The Segal Company
120 Montgomery Street, Suite 500, San Francisco, CA 94104
T 415.263.8200 F 415.263.8290 www.segalco.com

July 27, 2007

*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, 2006. The report summarizes the actuarial data used in the valuation, establishes the funding requirements for the fiscal year beginning July 1, 2008 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
Senior Vice President and Actuary*

*John Monroe, EA, ASA, MAAA
Vice President and Associate Actuary*

JZM/hy

SECTION 1

VALUATION SUMMARY

Purpose and Scope.....	i
Significant Issues in Valuation Year.....	ii
Summary of Key Valuation Results.....	iv
Summary of Contribution Rates with Employer Subvention	v
Summary of Key Valuation Demographic and Financial Data.....	vi

SECTION 2

VALUATION RESULTS

A. Member Data	1
B. Financial Information.....	4
C. Actuarial Experience.....	7
D. Recommended Contribution .	12
E. Information Required by GASB.....	32

SECTION 3

SUPPLEMENTARY INFORMATION

EXHIBIT A Table of Plan Coverage	33
EXHIBIT B Members in Active Service and Projected Compensation as of December 31, 2006.....	37
EXHIBIT C Average Monthly Benefit and Membership Distribution of Retired Members and Beneficiaries.....	42
EXHIBIT D Reconciliation of Member Data.....	46
EXHIBIT E Summary Statement of Income and Expenses on an Actuarial Value Basis.....	47
EXHIBIT F Summary Statement of Assets	48
EXHIBIT G Actuarial Balance Sheet	49
EXHIBIT H Summary of Total Allocated Reserves as of December 31, 2006..	50
EXHIBIT I Development of Unfunded Actuarial Accrued Liability	51
EXHIBIT J Section 415 Limitations.....	52
EXHIBIT K Definitions of Pension Terms	53

SECTION 4

REPORTING INFORMATION

EXHIBIT I Supplementary Information Required by GASB – Schedule of Employer Contributions.....	55
EXHIBIT II Supplementary Information Required by GASB – Schedule of Funding Progress	56
EXHIBIT III Supplementary Information Required by GASB	57
EXHIBIT IV Actuarial Assumptions and Actuarial Cost Method	58
EXHIBIT V Summary of Plan Provisions.....	75
Appendix A Member Contribution Rates.....	83

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

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, 2006. 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, 2006, provided by the Association's staff;
- The assets of the Plan as of December 31, 2006, 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, 2006 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

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 16 years left in the amortization period as of December 31, 2006.

We recommend that the rates calculated in this report be adopted by the Board for the fiscal year that extends from July 1, 2008 through June 30, 2009.

SIGNIFICANT ISSUES IN VALUATION YEAR

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

- The results of this valuation reflect changes in economic and non-economic actuarial assumptions as recommended by Segal and adopted by the Association for the December 31, 2006 valuation. These changes were documented in our Review of Economic Assumptions and our Actuarial Experience Study and are also outlined in Section 4, Exhibit IV of this report.
- The ratio of the valuation value of assets to actuarial accrued liabilities decreased from 84.8% to 84.3%. The Association's UAAL has increased from \$730 million to \$833 million. This increase is mainly due to changes in economic and non-economic assumptions, offset by lower than expected salary increases and an investment return on actuarial value that exceeded the 7.90% assumed in the previous valuation. A reconciliation of the Association's UAAL is provided in Section 3, Exhibit I.
- The aggregate employer rate calculated in this valuation (before considering the employer subvention of member rates and member subvention of employer rates) has decreased from 28.63% of payroll to 28.18% of payroll. The primary reasons for this change are the same as the reasons noted above for the change in UAAL, offset by a decrease in the normal cost rate resulting from the assumption changes. A complete reconciliation of the Association's aggregate employer rate is provided in Section 2, Subsection D (see Chart 15).
- The aggregate member rate calculated in this valuation (before considering the employer subvention of these rates or member subvention of employer rates) has decreased from 11.42% of payroll to 10.68% of payroll. This is primarily due to the change in economic and non-economic assumptions. A complete reconciliation of the Association's aggregate member rate is provided in Section 2, Subsection D (see Chart 16).

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

- 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, 2006 is about \$397 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, 2006. This means that if the Association earns the assumed rate of investment return of 7.80% 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 includes contribution rates for the new Safety Tier C. All County Sheriff's Department Safety members hired on or after January 1, 2007 will be placed into this Tier. This Tier provides benefits under the 3% at 50 formula, however, a 36-month period is used for purposes of determining final average salary and a 2% post-retirement COLA is provided.
- The City of Pittsburg contributed \$11.7 million in proceeds from Pension Obligation Bonds during 2006. These contributions were required under their termination agreement with CCCERA. The Contra Costa County Fire Protection District contributed an extra \$8.6 million towards their UAAL during 2006. Their December 31, 2006 UAAL rates have been adjusted accordingly.

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, 2006		December 31, 2005	
Employer Contribution Rates (County and District combined) ⁽¹⁾:				
		Estimated		Estimated
	Total Rate	Annual Amount	Total Rate	Annual Amount
General Tier 1 Non-enhanced	30.91%	\$1,860,427	30.79%	\$1,802,537
General Tier 1 Enhanced	27.00%	21,510,474	27.60%	22,721,842
General Tier 3 Enhanced	22.86%	95,888,815	23.06%	90,344,445
Safety Tier A Non-enhanced	41.90%	836,113	36.79%	698,430
Safety Tier A Enhanced	43.71%	64,159,358	44.03%	64,126,320
Safety Tier C Enhanced	39.29%	N/A	N/A	N/A
All Employers combined	28.18%	\$184,255,187	28.63%	\$179,693,574
Average Member Contribution Rates ⁽¹⁾:				
		Estimated		Estimated
	Total Rate	Annual Amount	Total Rate	Annual Amount
General Tier 1 Non-enhanced	10.90%	\$656,055	11.24%	\$658,022
General Tier 1 Enhanced	9.26%	7,377,821	10.01%	8,240,059
General Tier 3 Enhanced	9.45%	39,640,170	9.97%	39,066,692
Safety Tier A Non-enhanced	12.78%	255,024	14.12%	268,058
Safety Tier A Enhanced	14.95%	21,945,408	16.10%	23,446,910
Safety Tier C Enhanced	11.41%	N/A	N/A	N/A
All Categories Combined	10.68%	\$69,874,478	11.42%	\$71,679,741
Refundability Factors				
	Non-enhanced	Enhanced	Non-enhanced	Enhanced
General Tier 1	.9952	.9973	.9949	.9983
General Tier 3	N/A	.9938	N/A	.9960
Safety Tier A	1.0000	.9975	.9999	.9985
Safety Tier C	N/A	.9978	N/A	.9987
Funded Status:				
Actuarial accrued liability	\$5,293,977,010		\$4,792,428,024	
Valuation value of assets	\$4,460,871,033		\$4,062,057,143	
Funded percentage	84.3%		84.8%	
Unfunded Actuarial Accrued Liability (UAAL)	\$833,105,977		\$730,370,881	
Key Assumptions:				
Interest rate	7.80%		7.90%	
Inflation rate	3.75%		3.75%	

⁽¹⁾ 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

	December 31, 2006		December 31, 2005	
Employer Contribution Rates (County and District combined)⁽¹⁾:	Estimated		Estimated	
	Total Rate	Annual Amount	Total Rate	Annual Amount
General Tier 1 Non-enhanced	34.54%	\$2,078,309	34.59%	\$2,025,000
General Tier 1 Enhanced	29.88%	23,805,088	30.74%	25,306,636
General Tier 3 Enhanced	26.01%	109,102,205	26.39%	103,392,799
Safety Tier A Non-enhanced	41.90%	836,113	36.79%	698,430
Safety Tier A Enhanced	46.20%	67,822,516	46.77%	68,115,581
Safety Tier C Enhanced	43.33%	N/A	N/A	N/A
All Employers combined	31.14%	\$203,644,231	31.79%	\$199,538,446
Average Member Contribution Rates⁽¹⁾:	Estimated		Estimated	
	Total Rate	Annual Amount	Total Rate	Annual Amount
General Tier 1 Non-enhanced	7.26%	\$436,969	7.42%	\$434,388
General Tier 1 Enhanced	6.38%	5,083,207	6.86%	5,647,033
General Tier 3 Enhanced	6.28%	26,342,885	6.63%	25,979,154
Safety Tier A Non-enhanced	12.78%	255,024	14.12%	268,058
Safety Tier A Enhanced	12.45%	18,275,607	13.36%	19,456,566
Safety Tier C Enhanced	7.37%	N/A	N/A	N/A
All Categories Combined	7.71%	\$50,393,692	8.25%	\$51,785,199

⁽¹⁾ 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, 2006, for most Safety Tier A employers, Safety members contribute an extra 3% or 9% of compensation (depends on their MOU) 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

	December 31, 2006	December 31, 2005	Percentage Change
Active Members:			
Number of members	9,210	9,205	0.1%
Average age	45.7	45.5	N/A
Average service	10.4	10.4	N/A
Projected total compensation	\$653,953,163	\$627,546,408	4.2%
Average projected compensation	\$71,005	\$68,175	4.2%
Retired Member and Beneficiaries:			
Number of members:			
Service retired	4,615	4,416	4.5%
Disability retired	913	919	-0.7%
Beneficiaries	1,118	1,102	1.5%
Total	6,646	6,437	3.2%
Average age	69.0	68.8	N/A
Average Monthly Benefit	\$2,815	\$2,693	4.5%
Vested Terminated Members:			
Number of terminated vested members ⁽¹⁾	1,919	1,731	10.9%
Average age	45.4	45.4	N/A
Summary of Financial Data:			
Market value of assets	\$4,871,009,631	\$4,221,722,252	15.4%
Return on market value of assets	14.23%	8.71%	N/A
Actuarial value of assets	\$4,473,657,139	\$4,074,492,832	9.8%
Return on actuarial value of assets	8.63%	5.74%	N/A
Valuation value of assets	\$4,460,871,033	\$4,062,057,143	9.8%
Return on valuation value of assets	8.64%	5.74%	N/A

⁽¹⁾ Includes nonvested terminated members.

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 seven valuations can be seen in this chart.

CHART 1
Member Population: 2000 – 2006

Year Ended December 31	Active Members	Vested Terminated Members⁽¹⁾	Retired Members and Beneficiaries	Ratio of Non-Actives to Actives
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
2006	9,210	1,919	6,646	0.93

⁽¹⁾Includes nonvested terminated members.

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 9,210 active members with an average age of 45.7, average years of service of 10.4 years and average compensation of \$71,005. The 9,205 active members in the prior valuation had an average age of 45.5, average service of 10.4 years and average compensation of \$68,175.

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

Inactive Members

In this year's valuation, there were 1,919 members with a vested right to a deferred or immediate vested benefit or entitled to a return of their employee contributions versus 1,731 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, 2006

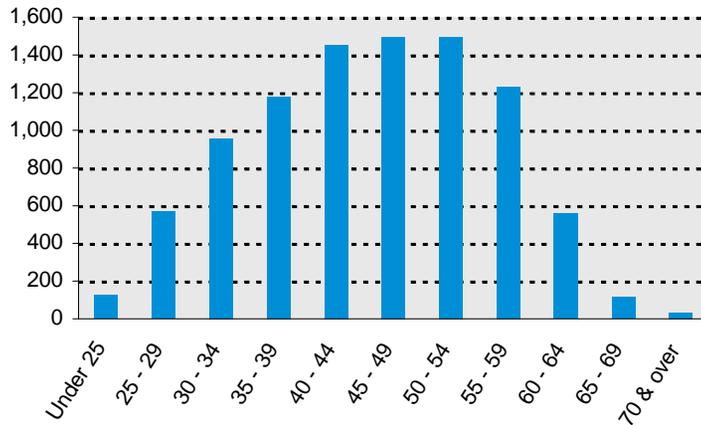
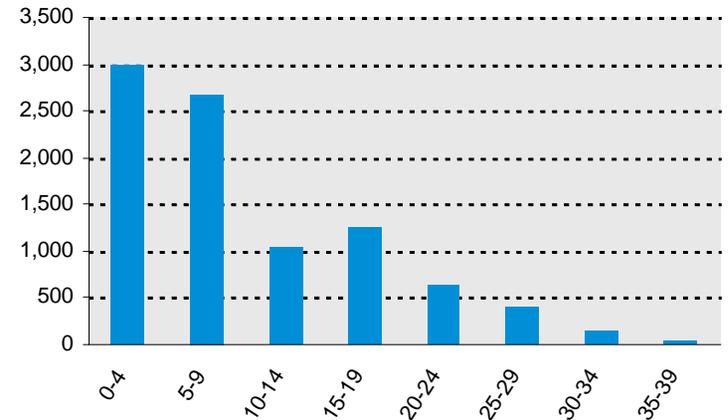


CHART 3
Distribution of Active Members by Years of Service as of December 31, 2006



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

Retired Members and Beneficiaries

As of December 31, 2006, 5,528 retired members and 1,118 beneficiaries were receiving total monthly benefits of \$18,708,820. For comparison, in the previous valuation, there were 5,335 retired members and 1,102 beneficiaries receiving monthly benefits of \$17,332,818.

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, 2006

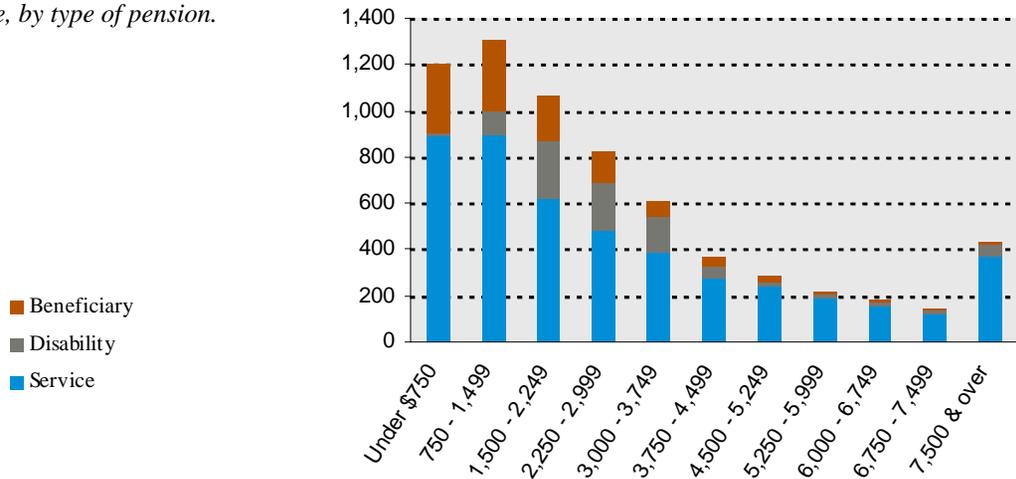
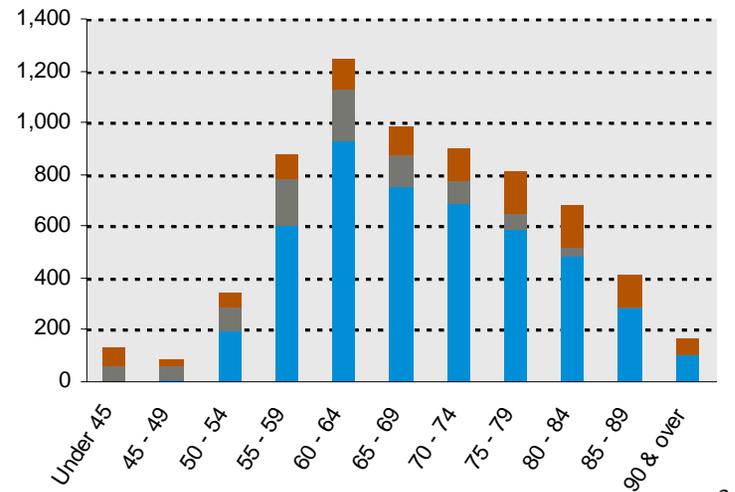


CHART 5
Distribution of Retired Members and Beneficiaries by Type and by Age as of December 31, 2006



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.

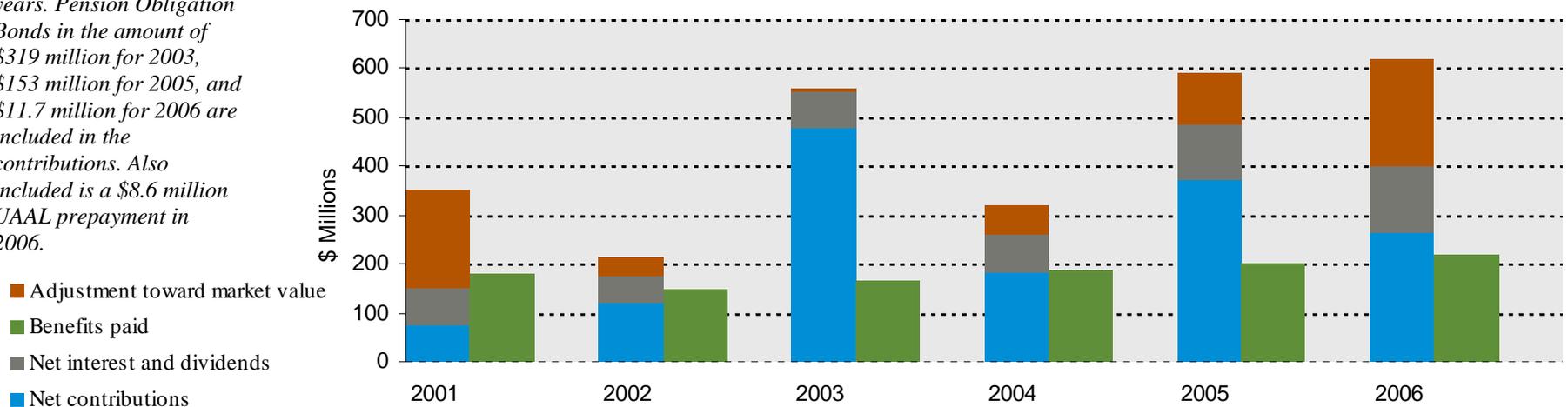
Retirement plan assets change as a result of the net impact of these income and expense components. The adjustment toward market value shown in the chart is the “non-cash” earnings on investment implicitly included in the Actuarial Value of Assets. Additional financial information, including a summary 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 six years. Pension Obligation Bonds in the amount of \$319 million for 2003, \$153 million for 2005, and \$11.7 million for 2006 are included in the contributions. Also included is a \$8.6 million UAAL prepayment in 2006.

CHART 6
Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended December 31, 2001 - 2006



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

CHART 7

Determination of Actuarial and Valuation Value of Assets for Year Ended December 31, 2006

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					
7/2002	12/2002	\$(161,138,970)	\$107,923,673	\$(269,062,644)	0.1	\$(26,906,264)
1/2003	6/2003	232,701,151	105,496,508	127,204,643	0.2	25,440,929
7/2003	12/2003	366,693,598	123,112,205	243,581,393	0.3	73,074,418
1/2004	6/2004	81,082,517	138,259,604	(57,177,087)	0.4	(22,870,835)
7/2004	12/2004	325,616,709	135,588,114	190,028,594	0.5	95,014,297
1/2005	6/2005	95,562,086	148,852,732	(53,290,646)	0.6	(31,974,387)
7/2005	12/2005	228,037,754	156,484,262	71,553,492	0.7	50,087,444
1/2006	6/2006	166,440,802	167,088,121	(647,319)	0.8	(517,855)
7/2006	12/2006	436,850,889	174,623,395	262,227,494	0.9	<u>236,004,745</u>
1. Total Deferred Return						\$397,352,492
2. Market Value of Assets						4,871,009,631
3. Actuarial Value of Assets (Item 2 – Item 1)						4,473,657,139
4. Non-valuation Reserves and Designations:						
a. Post Retirement Death Benefit						12,786,106
b. Statutory Contingency						0
c. Additional One Percent Contingency						0
d. Unrestricted Designation						<u>0</u>
e. Total						\$12,786,106
5. Valuation Value of Assets (Item 3 – Item 4e)						<u>\$4,460,871,033</u>

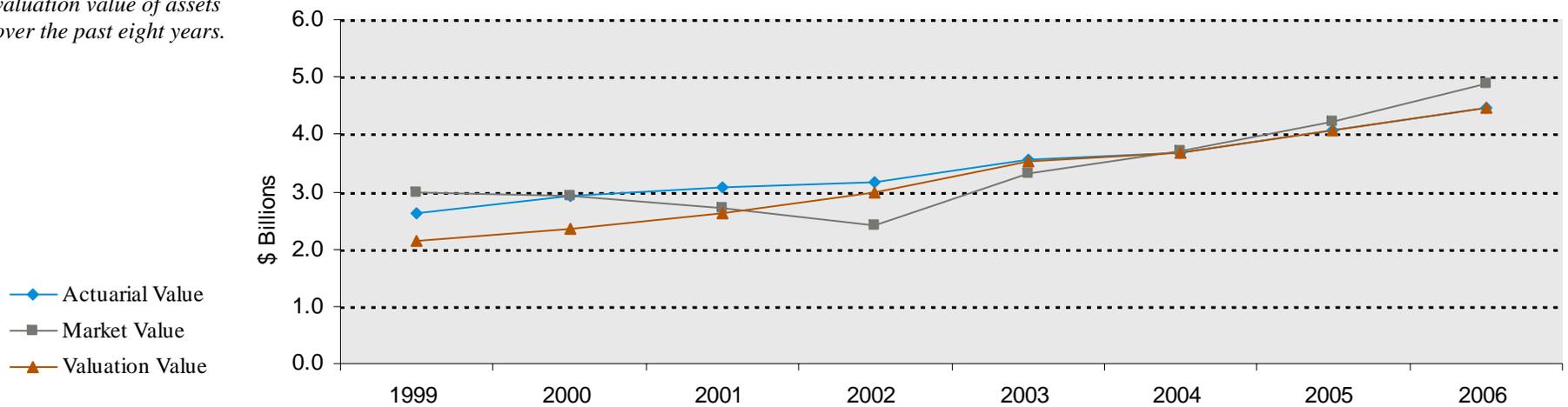
SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association

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 eight years.

CHART 8
Relative Values of Market Value, Actuarial Value and Valuation Value of Assets for Years Ended December 31, 1999 – 2006



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

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 gain is \$92.5 million, \$30.1 million gain from investments and \$62.4 million gain from all other sources. The net experience variation from individual sources other than investments was 1.2% 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.

CHART 9
Actuarial Experience for Year Ended December 31, 2006

1. Net gain/(loss) from investments*	\$30,119,929
2. Net gain/(loss) from other experience**	<u>62,355,630</u>
3. Net experience gain/(loss): (1) + (2)	<u>\$92,475,559</u>

* 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

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 2006 was 7.90%. The rate of return on Actuarial Value for the 2006 Plan Year was 8.63%.

Since the actual return for the year was more than the assumed return, the Plan experienced an actuarial gain on the Actuarial and Valuation Value of Assets during the year ended December 31, 2006.

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

CHART 10

Investment Experience for Year Ended December 31, 2006 – Valuation Value and Actuarial Value of Assets

	Valuation Value	Actuarial Value
1. Actual return	\$352,838,472	\$353,776,306
2. Average value of assets	4,085,044,852	4,097,186,833
3. Actual rate of return: (1) ÷ (2)	8.64%	8.63%
4. Assumed rate of return	7.90%	7.90%
5. Expected return: (2) x (4)	322,718,543	323,677,760
6. Actuarial gain/(loss): (1) – (5)	<u>\$30,119,929</u>	<u>\$30,098,546</u>

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 six years.

Based upon recommendations adopted by the Board, we have decreased the assumed rate of return from 7.90% to 7.80%.

CHART 11

Investment Return – Actuarial Value, Valuation Value and Market Value: 2001 – 2006

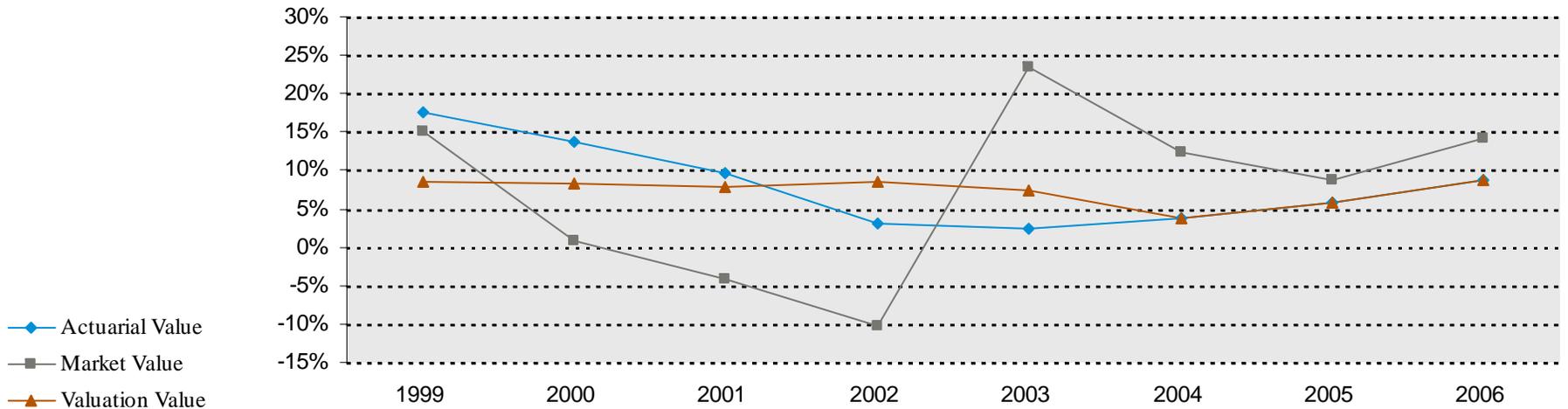
Year Ended December 31	Actuarial Value Investment Return		Valuation Value Investment Return		Market Value Investment Return	
	Amount	Percent of Assets	Amount	Percent of Assets	Amount	Percent of Assets
2001	\$278,746,528	9.73%	\$186,188,249	7.92%	\$(121,804,662)	(4.23%)
2002	93,144,770	3.05%	227,080,187	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%
2006	353,776,306	8.63%	352,837,472	8.64%	603,899,378	14.23%
Total	\$1,162,379,923		\$1,361,799,987		\$1,544,629,550	
<i>Five-Year Average Return</i>		4.97%			6.78%	10.04%

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

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.

CHART 12
Market, Actuarial and Valuation Value Rates of Return for Years Ended December 31, 1999 - 2006



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

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

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 16-year declining period effective December 31, 2006.

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

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

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
- 1/100 of one year Final Average Salary per year of service at age 50 for Safety Tier A Non-enhanced members
- 1/120 of one year Final Average Salary per year of service at age 60 for General Tier 1 and Tier 3 Enhanced members
- 1/100 of one year Final Average Salary per year of service at age 50 for Safety Tier A Enhanced
- 1/100 of three year Final Average Salary per year of service at age 50 for Safety Tier C Enhanced members

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 Tier A employers, Safety members also subvent a portion of the employer rate, currently either 3% or 9% of compensation (depends on their MOU). 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

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 Tier A members share their combined member COLA normal costs in proportion to their basic member contribution rates.
- General Tier 1 and Safety Tier A 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.

Other Adjustments

Other adjustments made in the determination of rates are as follows:

- CCCERA assets are first applied to fund the liability associated with deferred vested and retired members.
- The remainder of the assets are allocated to Non-enhanced and Enhanced General and Safety. The allocation is based on an estimate of the assets each of these cost groups would have using the prior year UAAL contribution rates.
- There is an adjustment made to the District UAAL rates to reflect that they did not issue Pension Obligation Bonds (POBs) during years when the County did.
- Adjustments are also made to the Contra Costa County Fire Protection District (CCCFFPD) and Moraga-Orinda Fire District (Moraga) UAAL contribution rates to account for POBs and any other special contributions made in 2005 and 2006.

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, 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)

	Non - Enhanced				Enhanced			
	Districts				County			
	Normal Cost	+	UAAL	= Total	Normal Cost	+	UAAL	= Total
General Tier 1 (Aggregate)								
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%
General Tier 1 (Under \$350)								
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%
General Tier 1 (Over \$350)								
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 13 (continued)
Components of Current Employer Contribution Rates
Employer Rates Under Current 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)

	Enhanced									
	Districts without POB			Districts with POB						
	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 13 (continued)
Components of Current Employer Contribution Rates
Employer Rates Under Current 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)

	Non-Enhanced				Enhanced			
	Districts				County			
	Normal Cost	+	UAAL	= Total	Normal Cost	+	UAAL	= Total
Safety Tier A								
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 13 (continued)
Components of Current Employer Contribution Rates
Employer Rates Under Current 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)

	Enhanced									
	Districts without POB				Districts with POB					
	Normal Cost	+	UAAL	=	Total	Normal Cost	+	UAAL	=	Total
Safety Tier A										
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 13 (continued)
Components of Current Employer Contribution Rates
Employer Rates Under Current 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)

	Non-Enhanced				Enhanced					
	Districts				County					
	Normal Cost	+	UAAL	=	Total	Normal Cost	+	UAAL	=	Total
General Tier 3 (Aggregate)										
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%
General Tier 3 (Under \$350)										
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%
General Tier 3 (Over \$350)										
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 13 (continued)
Components of Current Employer Contribution Rates
Employer Rates Under Current 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)

	Enhanced									
	Districts without POB				Districts with POB					
	Normal Cost	+	UAAL	=	Total	Normal Cost	+	UAAL	=	Total
General Tier 3 (Aggregate)										
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%					
General Tier 3 (Under \$350)										
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%					
General Tier 3 (Over \$350)										
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 13 (continued)
Components of Current Employer Contribution Rates
Employer Rates Under Current 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%
Total	22.52%		9.27%		31.79%

Payroll	Tier 1		Tier 2	Tier 3		Safety		Total
	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	-	4,261,549	-	-	-	-	40,469,201	44,730,750
Total	\$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

CHART 14
Components of Recommended Employer Contribution Rates
Employer Rates Under Recommended Assumptions for July 1, 2008 through June 30, 2009

7.80% Interest, 4.25% Wage Inflation, Plus Merit Salary Increase Assumptions
 (16 Year Amortization Period as of December 31, 2006)

	Non-enhanced				Enhanced			
	Districts				County			
	Normal Cost	+	UAAL	= Total	Normal Cost	+	UAAL	= Total
General Tier 1 (Aggregate)								
Basic	12.06%		8.73%	= 20.79%	12.39%		5.23%	= 17.62%
50% Subvention	3.62%		0.00%	= 3.62%	2.88%		0.00%	= 2.88%
Basic + 50% Subvention	15.68%		8.73%	= 24.41%	15.27%		5.23%	= 20.50%
COL	3.71%		6.41%	= 10.12%	3.78%		3.24%	= 7.02%
Total	19.39%		15.14%	= 34.53%	19.05%		8.47%	= 27.52%
General Tier 1 (Under \$350)								
Basic	8.25%		5.97%	= 14.22%	8.41%		3.55%	= 11.96%
50% Subvention	2.48%		0.00%	= 2.48%	1.95%		0.00%	= 1.95%
Basic + 50% Subvention	10.73%		5.97%	= 16.70%	10.36%		3.55%	= 13.91%
COL	2.54%		4.39%	= 6.93%	2.57%		2.20%	= 4.77%
Total	13.27%		10.36%	= 23.63%	12.93%		5.75%	= 18.68%
General Tier 1 (Over \$350)								
Basic	12.38%		8.96%	= 21.34%	12.61%		5.32%	= 17.93%
50% Subvention	3.72%		0.00%	= 3.72%	2.93%		0.00%	= 2.93%
Basic + 50% Subvention	16.10%		8.96%	= 25.06%	15.54%		5.32%	= 20.86%
COL	3.80%		6.58%	= 10.38%	3.85%		3.30%	= 7.15%
Total	19.90%		15.54%	= 35.44%	19.39%		8.62%	= 28.01%

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, 2008 through June 30, 2009

7.80% Interest, 4.25% Wage Inflation, Plus Merit Salary Increase Assumptions
 (16 Year Amortization Period as of December 31, 2006)

	Enhanced				Enhanced					
	Districts without POB				Districts with POB (CCCFPD)					
	Normal Cost	+	UAAL	=	Total	Normal Cost	+	UAAL	=	Total
General Tier 1 (Aggregate)										
Basic	12.39%		9.34%		21.73%	12.39%		0.29%		12.68%
50% Subvention	2.88%		0.00%		2.88%	2.88%		0.00%		2.88%
Basic + 50% Subvention	15.27%		9.34%		24.61%	15.27%		0.29%		15.56%
COL	3.78%		6.82%		10.60%	3.78%		0.69%		4.47%
Total	19.05%		16.16%		35.21%	19.05%		0.98%		20.03%
General Tier 1 (Under \$350)										
Basic	8.42%		6.33%		14.75%	8.42%		0.20%		8.62%
50% Subvention	1.95%		0.00%		1.95%	1.95%		0.00%		1.95%
Basic + 50% Subvention	10.37%		6.33%		16.70%	10.37%		0.20%		10.57%
COL	2.57%		4.63%		7.20%	2.57%		0.47%		3.04%
Total	12.94%		10.96%		23.90%	12.94%		0.67%		13.61%
General Tier 1 (Over \$350)										
Basic	12.63%		9.50%		22.13%	12.63%		0.30%		12.93%
50% Subvention	2.93%		0.00%		2.93%	2.93%		0.00%		2.93%
Basic + 50% Subvention	15.56%		9.50%		25.06%	15.56%		0.30%		15.86%
COL	3.85%		6.94%		10.79%	3.85%		0.70%		4.55%
Total	19.41%		16.44%		35.85%	19.41%		1.00%		20.41%

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, 2008 through June 30, 2009

7.80% Interest, 4.25% Wage Inflation, Plus Merit Salary Increase Assumptions
 (16 Year Amortization Period as of December 31, 2006)

	Enhanced			
	Districts with POB (Moraga)			
	Normal Cost	+	UAAL	= Total
General Tier 1 (Aggregate)				
Basic	12.39%		1.24%	13.63%
50% Subvention	2.88%		0.00%	2.88%
Basic + 50% Subvention	15.27%		1.24%	16.51%
COL	3.78%		2.12%	5.90%
Total	19.05%		3.36%	22.41%
General Tier 1 (Under \$350)				
Basic	8.42%		0.84%	9.26%
50% Subvention	1.95%		0.00%	1.95%
Basic + 50% Subvention	10.37%		0.84%	11.21%
COL	2.57%		1.44%	4.01%
Total	12.94%		2.28%	15.22%
General Tier 1 (Over \$350)				
Basic	12.63%		1.26%	13.89%
50% Subvention	2.93%		0.00%	2.93%
Basic + 50% Subvention	15.56%		1.26%	16.82%
COL	3.85%		2.16%	6.01%
Total	19.41%		3.42%	22.83%

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, 2008 through June 30, 2009

7.80% Interest, 4.25% Wage Inflation, Plus Merit Salary Increase Assumptions
 (16 Year Amortization Period as of December 31, 2006)

	Non-enhanced				Enhanced			
	Districts				County			
	Normal Cost	+	UAAL	= Total	Normal Cost	+	UAAL	= Total
Safety Tier A								
Basic	14.11%		11.91%	26.02%	21.54%		10.39%	31.93%
0%/50% Subvention	0.00%		0.00%	0.00%	4.25%		0.00%	4.25%
Basic + 0%/50% Subvention	14.11%		11.91%	26.02%	25.79%		10.39%	36.18%
COL	4.34%		11.54%	15.88%	6.57%		7.28%	13.85%
Total	18.45%		23.45%	41.90%	32.36%		17.67%	50.03%

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, 2008 through June 30, 2009

7.80% Interest, 4.25% Wage Inflation, Plus Merit Salary Increase Assumptions
 (16 Year Amortization Period as of December 31, 2006)

	Enhanced				Enhanced			
	Districts without POB				Districts with POB (CCCFPD)			
	Normal Cost	+	UAAL	= Total	Normal Cost	+	UAAL	= Total
Safety Tier A								
Basic	21.54%		18.63%	40.17%	21.54%		0.52%	22.06%
0% Subvention	0.00%		0.00%	0.00%	0.00%		0.00%	0.00%
Basic + 0% Subvention	21.54%		18.63%	40.17%	21.54%		0.52%	22.06%
COL	6.57%		14.91%	21.48%	6.57%		1.49%	8.06%
Total	28.11%		33.54%	61.65%	28.11%		2.01%	30.12%

	Enhanced			
	Districts with POB (Moraga)			
	Normal Cost	+	UAAL	= Total
Safety Tier A				
Basic	21.54%		-0.55%	20.99%
0% Subvention	0.00%		0.00%	0.00%
Basic + 0% Subvention	21.54%		-0.55%	20.99%
COL	6.57%		1.45%	8.02%
Total	28.11%		0.90%	29.01%

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, 2008 through June 30, 2009

7.80% Interest, 4.25% Wage Inflation, Plus Merit Salary Increase Assumptions

(16 Year Amortization Period as of December 31, 2006)

	Enhanced County				Enhanced Districts without POB			
	Normal Cost	+	UAAL	= Total	Normal Cost	+	UAAL	= Total
General Tier 3 (Aggregate)								
Basic	11.11%		5.27%	16.38%	11.11%		9.81%	20.92%
50% Subvention	3.15%		0.00%	3.15%	3.15%		0.00%	3.15%
Basic + 50% Subvention	14.26%		5.27%	19.53%	14.26%		9.81%	24.07%
COL	3.17%		3.25%	6.42%	3.17%		6.91%	10.08%
Total	17.43%		8.52%	25.95%	17.43%		16.72%	34.15%
General Tier 3 (Under \$350)								
Basic	7.57%		3.59%	11.16%	7.57%		6.68%	14.25%
50% Subvention	2.15%		0.00%	2.15%	2.15%		0.00%	2.15%
Basic + 50% Subvention	9.72%		3.59%	13.31%	9.72%		6.68%	16.40%
COL	2.16%		2.22%	4.38%	2.16%		4.70%	6.86%
Total	11.88%		5.81%	17.69%	11.88%		11.38%	23.26%
General Tier 3 (Over \$350)								
Basic	11.36%		5.39%	16.75%	11.36%		10.02%	21.38%
50% Subvention	3.22%		0.00%	3.22%	3.22%		0.00%	3.22%
Basic + 50% Subvention	14.58%		5.39%	19.97%	14.58%		10.02%	24.60%
COL	3.24%		3.32%	6.56%	3.24%		7.05%	10.29%
Total	17.82%		8.71%	26.53%	17.82%		17.07%	34.89%

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, 2008 through June 30, 2009

7.80% Interest, 4.25% Wage Inflation, Plus Merit Salary Increase Assumptions
(16 Year Amortization Period as of December 31, 2006)

	Enhanced			
	County			
	Normal Cost	+	UAAL	= Total
Safety Tier C				
Basic	18.19%		10.39%	28.58%
50% Subvention	4.04%		0.00%	4.04%
Basic + 50% Subvention	22.23%		10.39%	32.62%
COL	3.43%		7.28%	10.71%
Total	25.66%		17.67%	43.33%

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, 2008 through June 30, 2009

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

	Normal Cost	+	UAAL	=	Total
Basic	13.63%		6.28%		19.91%
50% Subvention*	2.96%		0.00%		2.96%
Basic + 50% Subvention*	16.59%		6.28%		22.87%
COL	4.02%		4.25%		8.27%
Total	20.61%		10.53%		31.14%

Payroll	Tier 1		Tier 3		Safety Tier A		Safety Tier C	Total
	Non-Enhanced	Enhanced	Non-Enhanced	Enhanced	Non-Enhanced	Enhanced	Enhanced	
County	-	\$46,267,917	-	\$416,435,621	-	\$86,191,956	-	\$548,895,494
Districts without POB	\$6,018,851	28,788,128	-	3,037,073	\$1,995,496	20,694,737	-	60,534,285
Districts with POB (CCCFPD)	-	4,161,642	-	-	-	32,958,206	-	37,119,848
Districts with POB (Moraga)	-	456,408	-	-	-	6,947,128	-	7,403,536
Total	\$6,018,851	\$79,674,095	-	\$419,472,694	\$1,995,496	\$146,792,027	-	\$653,953,163

* 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, 2006 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 Average Employer Contribution from December 31, 2005 to December 31, 2006 Valuation

	Contribution Rate*	Estimated Annual Dollar Cost**
Recommended Average Employer Contribution Rate in December 31, 2005 Valuation	28.63%	\$179,693,574
Effect of investment (gain)/loss ⁽¹⁾	(0.38%)	(2,485,022)
Effect of delay in implementing contribution rates from 12/31/2005 valuation ⁽²⁾	(0.14%)	(915,535)
Effect of actual versus expected salary increase including total payroll growth ⁽³⁾	(0.45%)	(2,942,789)
Effects of change in actuarial assumptions ⁽⁴⁾	0.85%	5,558,602
Effect of net other changes ⁽⁵⁾	<u>(0.33%)</u>	<u>5,346,357</u>
Total change	<u>(0.45%)</u>	<u>\$4,561,613</u>
Recommended Average Employer Contribution Rate in December 31, 2006 Valuation	28.18%	\$184,255,187

* 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 8.64% was greater than the 7.90% assumed in the valuation.

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

(3) This item represents the net impact of lower than expected individual salary increases and total payroll growth. Lower individual salary increases decrease cost while lower total payroll growth increases the UAAL contribution rate, since the remaining UAAL is amortized over a smaller payroll.

(4) This item represents the impact of assumption changes adopted by the Board as recommended in the Review of Economic Assumptions and Actuarial Experience Study.

(5) 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, 2006 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 Average Member Contribution from December 31, 2005 to December 31, 2006 Valuation**

	Contribution Rate*	Estimated Annual Dollar Cost**
Recommended Average Member Contribution Rate in December 31, 2005 Valuation	11.42%	\$71,679,741
Effect of change in actuarial assumptions ⁽¹⁾	(0.71%)	\$(4,643,067)
Effect of other experience (gains)/losses ⁽²⁾	<u>(0.03%)</u>	<u>2,837,804</u>
Total change	<u>(0.74%)</u>	<u>\$(1,805,263)</u>
Recommended Average Member Contribution Rate in December 31, 2006 Valuation	10.68%	\$69,874,478

* 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⁾ This item represents the impact of assumption changes adopted by the Board as recommended in the Review of Economic Assumptions and Actuarial Experience Study.

⁽²⁾ 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

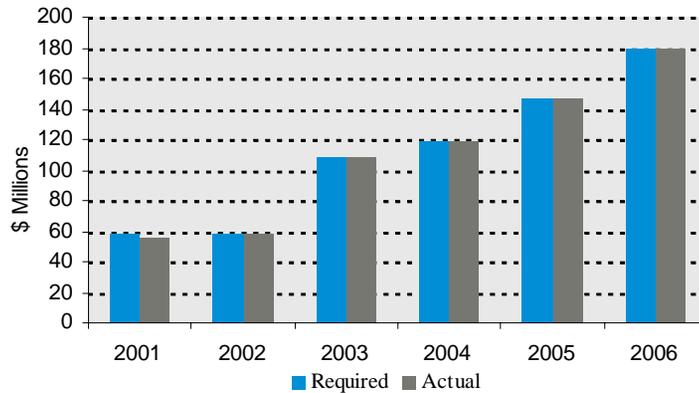
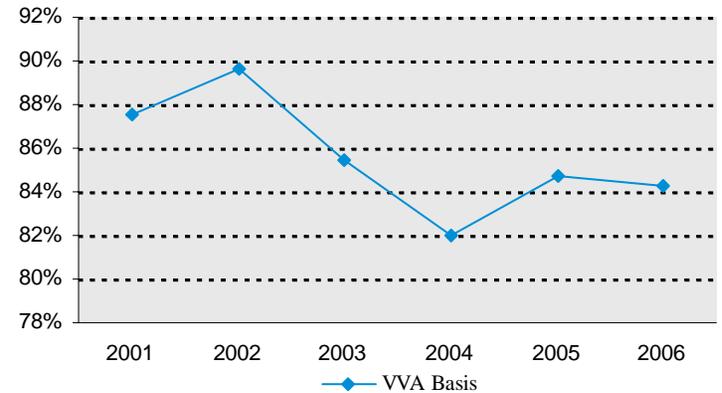


CHART 18
Funded Ratio



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

EXHIBIT A

Table of Plan Coverage

i. General Tier 1

Category	Year Ended December 31		Change From Prior Year
	2006	2005	
Active members in valuation			
Number	1,108	1,169	-5.2%
Average age	49.5	49.3	N/A
Average service	17.5	17.6	N/A
Projected total compensation ⁽¹⁾	\$85,692,946	\$88,172,559	-2.8%
Projected average compensation	\$77,340	\$75,426	2.5%
Account balances	\$73,614,848	\$73,755,766	-0.2%
Total active vested members	936	981	-4.6%
Vested terminated members⁽²⁾	318	324	-1.9%
Retired members			
Number in pay status	2,714	2,699	0.6%
Average age	73.3	73.0	N/A
Average monthly benefit	\$2,780	\$2,645	5.1%
Disabled members			
Number in pay status	364	377	-3.4%
Average age	65.9	65.6	N/A
Average monthly benefit	\$2,202	\$2,129	3.4%
Beneficiaries			
Number in pay status	734	739	-0.7%
Average age	74.4	73.8	N/A
Average monthly benefit	\$1,569	\$1,529	2.6%

⁽¹⁾ Calculated by increasing actual calendar year salaries by the assumed salary scale.

⁽²⁾ 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

Category	Year Ended December 31		Change From Prior Year
	2006	2005	
Active members in valuation			
Number ⁽³⁾	0	0	N/A
Average age	N/A	N/A	N/A
Average service	N/A	N/A	N/A
Projected total compensation ⁽¹⁾	N/A	N/A	N/A
Projected average compensation	N/A	N/A	N/A
Account balances	N/A	N/A	N/A
Total active vested members	N/A	N/A	N/A
Vested terminated members⁽²⁾	361	373	-3.2%
Retired members			
Number in pay status	418	411	1.7%
Average age	69.0	68.5	N/A
Average monthly benefit	\$752	\$733	2.6%
Disabled members			
Number in pay status	66	67	-1.5%
Average age	64.0	63.2	N/A
Average monthly benefit	\$1,764	\$1,747	1.0%
Beneficiaries			
Number in pay status	77	74	4.1%
Average age	57.9	56.1	N/A
Average monthly benefit	\$795	\$813	-2.2%

⁽¹⁾ Calculated by increasing actual calendar year salaries by the assumed salary scale.

⁽²⁾ Includes only members who have terminated employment covered by CCCERA

⁽³⁾ 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

Category	Year Ended December 31		Change From Prior Year
	2006	2005	
Active members in valuation			
Number	6,494	6,425	1.1%
Average age	46.2	45.9	N/A
Average service	8.9	8.6	N/A
Projected total compensation ⁽¹⁾	\$419,472,694	\$391,842,444	7.1%
Projected average compensation	\$64,594	\$60,987	5.9%
Account balances	\$182,539,348	\$151,326,266	20.6%
Total active vested members	4,231	3,965	6.7%
Vested terminated members⁽²⁾			
	988	796	
Retired members			
Number in pay status	680	547	24.3%
Average age	63.3	63.1	N/A
Average monthly benefit	\$1,708	\$1,590	7.4%
Disabled members			
Number in pay status	56	53	5.7%
Average age	58.4	57.6	N/A
Average monthly benefit	\$2,024	\$2,006	0.9%
Beneficiaries			
Number in pay status	41	35	17.1%
Average age	49.6	48.5	N/A
Average monthly benefit	\$935	\$973	-3.9%

⁽¹⁾ Calculated by increasing actual calendar year salaries by the assumed salary scale.

⁽²⁾ 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

Category	Year Ended December 31		Change From Prior Year
	2006	2005	
Active members in valuation			
Number	1,608	1,611	-0.2%
Average age	40.9	44.1	N/A
Average service	11.8	11.9	N/A
Projected total compensation ⁽¹⁾	\$148,787,523	\$147,531,405	0.9%
Projected average compensation	\$92,530	\$91,578	1.0%
Account balances	\$143,709,516	\$129,503,269	11.0%
Total active vested members	1,202	1,177	2.1%
Vested terminated members⁽²⁾			
	252	238	5.9%
Retired members			
Number in pay status	803	759	5.8%
Average age	64.8	64.6	N/A
Average monthly benefit	\$6,062	\$5,768	5.1%
Disabled members			
Number in pay status	427	422	1.2%
Average age	59.0	58.0	N/A
Average monthly benefit	\$4,316	\$4,161	3.7%
Beneficiaries			
Number in pay status	266	254	4.7%
Average age	66.8	66.4	N/A
Average monthly benefit	\$2,616	\$2,516	4.0%

⁽¹⁾ Calculated by increasing actual calendar year salaries by the assumed salary scale.

⁽²⁾ 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, 2006
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	1	1	--	--	--	--	--	--	--	--
	\$38,753	\$38,753	--	--	--	--	--	--	--	--
25 - 29	10	8	2	--	--	--	--	--	--	--
	48,701	46,859	\$56,073	--	--	--	--	--	--	--
30 - 34	8	6	2	--	--	--	--	--	--	--
	39,901	37,511	47,073	--	--	--	--	--	--	--
35 - 39	15	9	4	1	1	--	--	--	--	--
	56,492	50,515	58,184	\$70,338	\$89,678	--	--	--	--	--
40 - 44	13	6	3	1	2	1	--	--	--	--
	53,125	47,527	51,205	69,642	64,284	\$53,642	--	--	--	--
45 - 49	22	9	5	3	3	2	--	--	--	--
	55,880	54,186	60,871	55,247	47,249	64,914	--	--	--	--
50 - 54	21	10	3	2	3	2	--	1	--	--
	60,292	60,256	58,102	61,563	61,510	61,999	--	\$57,614	--	--
55 - 59	12	3	4	1	1	--	3	--	--	--
	61,241	43,117	75,040	53,713	57,511	--	\$64,716	--	--	--
60 - 64	7	3	--	2	1	1	--	--	--	--
	49,658	39,231	--	60,804	57,891	50,417	--	--	--	--
65 & over	1	--	1	--	--	--	--	--	--	--
	57,888	--	57,888	--	--	--	--	--	--	--
Total	110	55	24	10	11	6	3	1	--	--
	\$54,717	\$49,377	\$59,556	\$60,417	\$59,993	\$59,647	\$64,716	\$57,614	--	--

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, 2006
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	5	5	--	--	--	--	--	--	--	--	--
	\$39,189	\$39,189	--	--	--	--	--	--	--	--	--
25 - 29	24	22	2	--	--	--	--	--	--	--	--
	62,601	62,135	\$67,721	--	--	--	--	--	--	--	--
30 - 34	47	24	22	1	--	--	--	--	--	--	--
	67,260	58,782	76,267	\$72,579	--	--	--	--	--	--	--
35 - 39	63	15	36	8	3	1	--	--	--	--	--
	74,643	70,024	77,680	60,742	\$90,317	\$98,763	--	--	--	--	--
40 - 44	116	31	49	16	18	2	--	--	--	--	--
	77,322	64,683	84,121	72,152	84,292	85,285	--	--	--	--	--
45 - 49	163	25	45	25	25	10	31	2	--	--	--
	77,330	65,730	84,009	76,435	82,944	80,916	\$72,813	\$65,125	--	--	--
50 - 54	259	21	46	21	39	16	68	46	2	--	--
	83,317	77,356	89,052	90,150	89,639	88,235	83,143	70,633	\$77,289	--	--
55 - 59	235	15	38	14	17	20	57	55	19	--	--
	83,547	70,771	78,787	111,642	85,904	87,021	86,911	81,903	71,348	--	--
60 - 64	79	5	13	10	6	7	10	17	11	--	--
	86,114	63,638	90,704	84,545	113,184	75,468	71,537	84,154	100,618	--	--
65 & over	7	--	2	--	3	--	--	2	--	--	--
	74,624	--	83,648	--	74,804	--	--	65,330	--	--	--
Total	998	163	253	95	111	56	166	122	32	--	--
	\$79,834	\$65,501	\$82,802	\$83,425	\$87,582	\$84,982	\$81,808	\$77,421	\$81,781	--	--

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, 2006
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	90	88	2	--	--	--	--	--	--
	\$38,608	\$38,340	\$50,376	--	--	--	--	--	--
25 - 29	399	324	74	1	--	--	--	--	--
	48,152	46,729	54,469	\$41,726	--	--	--	--	--
30 - 34	632	411	209	12	--	--	--	--	--
	57,871	54,630	63,834	65,007	--	--	--	--	--
35 - 39	775	325	330	83	35	2	--	--	--
	63,336	56,440	68,341	69,974	\$64,059	\$69,987	--	--	--
40 - 44	992	317	326	163	148	35	3	--	--
	66,367	56,622	65,642	75,324	77,696	71,451	\$69,897	--	--
45 - 49	1,033	302	289	131	198	78	35	--	--
	66,082	56,330	64,935	68,592	75,816	80,544	63,010	--	--
50 - 54	1,077	249	310	153	196	113	51	4	1
	69,876	59,440	65,374	70,348	79,018	81,676	84,395	\$72,815	\$114,004
55 - 59	912	200	245	141	167	105	43	10	1
	68,382	58,253	64,775	68,825	72,177	80,440	82,547	101,399	76,003
60 - 64	449	83	136	62	90	47	20	4	7
	68,069	56,921	62,344	69,766	71,384	69,503	103,786	117,778	113,760
65 & over	135	20	47	17	29	14	7	--	1
	65,512	60,155	60,482	77,418	67,872	59,214	76,750	--	147,665
Total	6,494	2,319	1,968	763	863	394	159	18	10
	\$64,594	\$54,614	\$64,862	\$70,776	\$74,955	\$77,905	\$81,017	\$98,687	\$113,399

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, 2006
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	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
30 - 34	3	1	2	--	--	--	--	--
	\$93,011	\$95,088	\$91,972	--	--	--	--	--
35 - 39	3	--	1	--	2	--	--	--
	95,109	--	89,859	--	\$97,734	--	--	--
40 - 44	3	--	--	--	3	--	--	--
	94,037	--	--	--	94,037	--	--	--
45 - 49	6	--	--	2	--	3	1	--
	97,958	--	--	\$97,734	--	\$96,042	\$104,154	--
50 - 54	2	--	--	--	--	--	2	--
	98,117	--	--	--	--	--	98,117	--
55 - 59	3	--	1	--	--	2	--	--
	121,682	--	141,608	--	--	111,720	--	--
60 - 64	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
65 & over	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
Total	20	1	4	2	5	5	3	--
	\$99,775	\$95,088	\$103,853	\$97,734	\$95,516	\$102,313	\$100,129	--

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, 2006
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	26	26	--	--	--	--	--	--	--
	\$59,937	\$59,937	--	--	--	--	--	--	--
25 - 29	133	113	20	--	--	--	--	--	--
	76,678	75,257	\$84,708	--	--	--	--	--	--
30 - 34	272	139	128	5	--	--	--	--	--
	81,294	78,651	83,684	\$93,573	--	--	--	--	--
35 - 39	328	90	145	65	28	--	--	--	--
	88,953	84,389	88,410	89,099	\$106,096	--	--	--	--
40 - 44	332	47	74	58	121	32	--	--	--
	97,048	78,739	90,884	94,401	106,122	\$108,683	--	--	--
45 - 49	266	22	37	25	71	87	24	--	--
	104,749	80,750	94,211	91,664	106,349	113,172	\$121,355	--	--
50 - 54	132	12	13	9	20	32	40	6	--
	108,591	95,731	83,340	82,079	105,873	113,233	116,722	\$158,875	--
55 - 59	68	8	4	9	11	12	15	8	1
	99,124	86,420	90,696	83,174	97,434	104,813	106,163	110,298	\$133,341
60 - 64	25	2	9	3	3	1	3	3	1
	86,288	65,850	82,230	75,654	85,503	102,620	93,735	99,072	120,911
65 & over	6	--	2	2	1	1	--	--	--
	72,044	--	74,740	76,642	57,376	72,127	--	--	--
Total	1,588	459	432	176	255	165	82	17	2
	\$92,438	\$78,516	\$87,436	\$90,305	\$105,354	\$111,393	\$115,305	\$125,462	\$127,126

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, 2006

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	--	--	--	--	--	--
	\$520	--	\$1,065	\$339	--	--	--	--	--	--
25 - 29	4	--	--	2	2	--	--	--	--	--
	531	--	--	492	\$569	--	--	--	--	--
30 - 34	4	1	--	1	1	1	--	--	--	--
	980	\$1,906	--	465	797	\$753	--	--	--	--
35 - 39	5	--	--	4	1	--	--	--	--	--
	881	--	--	901	802	--	--	--	--	--
40 - 44	12	3	2	5	2	--	--	--	--	--
	1,014	1,004	1,415	1,042	562	--	--	--	--	--
45 - 49	21	8	4	4	2	3	--	--	--	--
	1,941	2,589	2,408	1,030	2,359	529	--	--	--	--
50 - 54	89	51	11	12	4	6	2	3	--	--
	1,637	1,682	1,713	2,208	1,188	1,152	\$955	\$339	--	--
55 - 59	350	197	100	20	13	9	6	5	--	--
	2,615	3,340	1,725	1,965	1,502	1,307	1,656	827	--	--
60 - 64	558	253	167	82	24	18	10	4	--	--
	3,388	4,596	2,927	1,700	1,680	2,117	1,606	1,189	--	--
65 - 69	500	86	206	100	70	21	11	3	2	1
	3,089	4,498	3,857	2,091	1,396	1,563	1,443	1,220	\$945	\$2,094
70 - 74	552	14	123	189	120	81	12	9	4	--
	2,627	2,930	3,785	3,062	1,883	1,161	2,079	1,631	1,257	--
75 - 80	608	2	25	132	191	140	88	23	4	3
	2,248	3,118	2,202	3,194	2,598	1,554	1,340	1,899	1,092	1,516
80 - 84	568	1	8	24	128	205	156	41	4	1
	2,047	11,730	2,997	2,642	2,450	2,133	1,604	1,301	1,674	2,444
85 - 89	383	1	2	5	24	113	149	77	8	4
	1,881	986	2,186	2,101	2,239	1,978	1,902	1,684	1,171	1,209
90 & over	154	--	--	1	2	10	46	58	32	5
	1,554	--	--	47	1,411	1,785	1,663	1,771	1,066	1,069
Total	3,812	617	649	584	584	607	480	223	54	14
	\$2,492	\$3,856	\$3,139	\$2,575	\$2,164	\$1,783	\$1,660	\$1,604	\$1,138	\$1,376

Note: Total retired benefit \$9,497,004, average age 72.8 and average years retired 15.9.

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, 2006

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	--	--	--	--	--	--	--
	\$429	\$104	\$537	--	--	--	--	--	--	--
25 - 29	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
30 - 34	9	1	5	1	2	--	--	--	--	--
	680	1,056	504	\$1,418	\$563	--	--	--	--	--
35 - 39	9	--	4	1	4	--	--	--	--	--
	887	--	1,278	727	535	--	--	--	--	--
40 - 44	2	--	0	1	1	--	--	--	--	--
	1,424	--	0	1,299	1,550	--	--	--	--	--
45 - 49	6	2	2	2	--	--	--	--	--	--
	1,183	1,128	2,027	395	--	--	--	--	--	--
50 - 54	24	17	1	5	1	--	--	--	--	--
	721	462	1,609	1,200	1,831	--	--	--	--	--
55 - 59	69	26	33	6	3	1	--	--	--	--
	874	807	793	1,330	1,322	\$1,247	--	--	--	--
60 - 64	104	19	53	27	3	2	--	--	--	--
	783	768	818	632	1,552	896	--	--	--	--
65 - 69	94	16	41	31	6	--	--	--	--	--
	1,008	791	1,116	920	1,310	--	--	--	--	--
70 - 74	126	3	65	43	11	4	--	--	--	--
	947	1,044	1,085	822	494	1,232	--	--	--	--
75 - 80	75	4	14	42	10	4	1	--	--	--
	882	607	815	985	860	434	\$592	--	--	--
80 - 84	32	--	4	14	13	1	--	--	--	--
	762	--	755	536	1,048	249	--	--	--	--
85 - 89	7	--	--	3	4	--	--	--	--	--
	364	--	--	470	285	--	--	--	--	--
90 & over	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
Total	561	89	225	176	58	12	1	--	--	--
	\$877	\$731	\$956	\$849	\$895	\$829	\$592	--	--	--

Note: Total retired benefit \$492,012, average age 66.7 and average years retired 9.6.

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, 2006

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	3	1	--	--	--	--	--	--	--
	\$1,157	\$1,039	\$1,508	--	--	--	--	--	--	--
25 - 29	3	3	--	--	--	--	--	--	--	--
	517	517	--	--	--	--	--	--	--	--
30 - 34	1	--	1	--	--	--	--	--	--	--
	664	--	664	--	--	--	--	--	--	--
35 - 39	5	2	3	--	--	--	--	--	--	--
	798	554	960	--	--	--	--	--	--	--
40 - 44	4	3	1	--	--	--	--	--	--	--
	955	958	945	--	--	--	--	--	--	--
45 - 49	4	4	--	--	--	--	--	--	--	--
	1,935	1,935	--	--	--	--	--	--	--	--
50 - 54	70	64	6	--	--	--	--	--	--	--
	1,226	1,166	1,868	--	--	--	--	--	--	--
55 - 59	161	134	27	--	--	--	--	--	--	--
	1,843	2,020	967	--	--	--	--	--	--	--
60 - 64	255	210	45	--	--	--	--	--	--	--
	1,888	2,042	1,173	--	--	--	--	--	--	--
65 - 69	185	125	60	--	--	--	--	--	--	--
	1,724	1,934	1,288	--	--	--	--	--	--	--
70 - 74	71	44	27	--	--	--	--	--	--	--
	1,208	1,180	1,253	--	--	--	--	--	--	--
75 - 80	11	5	6	--	--	--	--	--	--	--
	1,305	1,438	1,195	--	--	--	--	--	--	--
80 - 84	3	3	--	--	--	--	--	--	--	--
	2,521	2,521	--	--	--	--	--	--	--	--
85 - 89	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
90 & over	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
Total	777	600	177	--	--	--	--	--	--	--
	\$1,690	\$1,831	\$1,211	--	--	--	--	--	--	--

Note: Total retired benefit \$1,313,115, average age 62.3 and average years retired 3.2.

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, 2006**

Age	Years of Retirement									
	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	5	4	--	1	--	--	--	--	--	--
	\$1,565	\$1,007	--	\$3,798	--	--	--	--	--	--
25 - 29	3	--	--	3	--	--	--	--	--	--
	641	--	--	641	--	--	--	--	--	--
30 - 34	6	5	--	--	1	--	--	--	--	--
	2,765	3,176	--	--	\$708	--	--	--	--	--
35 - 39	17	9	5	1	1	--	1	--	--	--
	2,640	3,050	\$2,821	674	708	--	\$1,937	--	--	--
40 - 44	33	11	14	6	2	--	--	--	--	--
	2,945	3,130	3,313	2,457	804	--	--	--	--	--
45 - 49	57	22	19	11	4	1	--	--	--	--
	3,331	3,401	3,475	3,101	3,063	\$2,664	--	--	--	--
50 - 54	163	119	20	15	6	3	--	--	--	--
	5,733	6,776	3,195	2,631	3,024	2,190	--	--	--	--
55 - 59	299	185	52	29	17	7	8	--	1	--
	5,787	7,417	3,649	2,824	2,843	2,084	2,806	--	\$1,073	--
60 - 64	325	100	133	42	17	21	9	1	2	--
	5,281	6,479	5,986	3,271	3,034	2,342	2,796	\$4,057	2,477	--
65 - 69	206	9	51	78	34	17	8	7	2	--
	5,111	3,811	6,604	5,789	3,953	2,672	2,980	2,990	2,828	--
70 - 74	150	3	7	46	48	28	13	2	2	1
	4,661	2,187	4,969	5,621	5,259	3,414	2,990	2,849	2,096	\$2,391
75 - 80	122	--	--	12	18	44	28	17	1	2
	3,995	--	--	4,986	4,428	4,271	3,838	2,610	2,458	2,829
80 - 84	75	--	--	--	2	11	34	15	8	5
	3,977	--	--	--	2,975	4,871	4,551	3,643	2,491	1,887
85 - 89	27	--	--	--	--	--	4	18	3	2
	3,858	--	--	--	--	--	5,382	3,892	2,905	1,933
90 & over	8	--	--	--	--	--	--	2	6	--
	3,183	--	--	--	--	--	--	4,872	2,619	--
Total	1,496	467	301	244	150	132	105	62	25	10
	\$4,951	\$6,475	\$5,143	\$4,442	\$4,039	\$3,451	\$3,771	\$3,379	\$2,508	\$2,135

Note: Total retired benefit \$7,406,689, average age 63.3 and average years retired 12.3.

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

EXHIBIT D

Reconciliation of Member Data – December 31, 2005 to December 31, 2006

	Active Participants	Vested Former Participants⁽¹⁾	Pensioners	Disableds	Beneficiaries	Total
Number as of December 31, 2005	9,205	1,731	4,416	919	1,102	17,373
New participants	736	71	0	0	0	807
Terminations – with vested rights ⁽¹⁾	-336	336	0	0	0	0
Contributions Refunds	-141	-157	0	0	0	-298
Retirements	-252	-34	286	0	0	0
New disabilities	-9	-1	-3	13	0	0
Return to work	20	-20	0	0	0	0
Died with or without beneficiary	-13	-7	-91	-19	19	-111
Data adjustments	<u>0</u>	<u>0</u>	<u>7</u>	<u>0</u>	<u>-3</u>	<u>4</u>
Number as of December 31, 2006	9,210	1,919	4,615	913	1,118	17,775

⁽¹⁾ Includes nonvested terminated members.

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, 2006	Year Ended December 31, 2005
Contribution income:		
Employer contributions ⁽¹⁾	\$191,448,711	\$300,300,019
Employee contributions	<u>73,468,648</u>	<u>73,474,816</u>
Net contribution income	\$264,917,359	\$373,774,835
Investment income:		
Interest, dividends and other income	\$162,206,699	\$135,954,824
Adjustment toward market value ⁽²⁾	218,390,227	104,367,760
Less investment and administrative fees	<u>(26,820,620)</u>	<u>(23,704,511)</u>
Net investment income	<u>353,776,306</u>	<u>216,618,073</u>
Total income available for benefits	\$618,693,665	\$590,392,908
Less benefit payments:		
Benefits paid	\$(216,057,476)	\$(196,106,294)
Refunds of contributions	(3,231,903)	(2,074,426)
Adjustments/transfers ⁽³⁾	<u>(239,979)</u>	<u>(3,888,030)</u>
Net benefit payments	\$(219,529,358)	\$(202,068,750)
Change in reserve for future benefits	\$399,164,307	\$388,324,158

⁽¹⁾ Includes proceeds from Pension Obligation Bonds of \$11,693,396 issued during 2006 and \$153,134,911 issued during 2005.

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

⁽³⁾ 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, 2006	Year Ended December 31, 2005
Cash equivalents	\$685,912,065	\$695,669,563
Accounts receivable:		
Investment trades	\$305,392,264	\$276,625,254
Investment income	11,590,110	11,231,129
Employee and employer contributions	8,671,611	6,772,172
Additional contributions ⁽¹⁾	<u>26,538,917</u>	<u>27,373,810</u>
Total accounts receivable	352,192,902	322,002,365
Investments:		
Stocks	\$2,492,243,648	\$2,134,119,297
Bonds	1,813,655,433	1,589,582,763
Real estate	447,863,712	368,705,924
Alternative investments	<u>164,124,889</u>	<u>118,406,793</u>
Total investments at market value	<u>4,917,887,682</u>	<u>4,210,814,777</u>
Total assets	\$5,955,992,649	\$5,228,486,705
Less accounts payable:		
Investment trades	\$(642,186,387)	\$(541,938,783)
Security lending	(356,759,508)	(364,436,020)
Employer contributions unearned	(76,343,369)	(76,972,624)
Other	<u>(9,693,754)</u>	<u>(23,417,026)</u>
Total accounts payable	\$(1,084,983,018)	\$(1,006,764,453)
Net assets at market value	<u>\$4,871,009,631</u>	<u>\$4,221,722,252</u>
Net assets at actuarial value	<u>\$4,473,657,139</u>	<u>\$4,074,492,832</u>
Net assets at valuation value	<u>\$4,460,871,033</u>	<u>\$4,062,057,143</u>

⁽¹⁾ 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.

Assets	Basic	COLA	Total
1. Total valuation value of assets	\$2,948,437,537	\$1,512,433,496	\$4,460,871,033
2. Present value of future contributions by members	347,600,595	198,521,475	546,122,070
3. Present value of future employer contributions for:			
(a) entry age normal cost	691,801,740	203,380,665	895,182,405
(b) unfunded actuarial accrued liability	497,032,618	336,073,359	833,105,977
4. Total actuarial assets	\$4,484,872,490	\$2,250,408,995	\$6,735,281,485
Liabilities			
5. Present value of retirement allowances payable to present retired members	\$1,678,460,525	\$1,142,173,802	\$2,820,634,327
6. Present value of retirement allowances to be granted in the future	2,806,411,965	1,108,235,193	3,914,647,158
7. Total present value of benefits	\$4,484,872,490	\$2,250,408,995	\$6,735,281,485

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

EXHIBIT H

Summary of Total Allocated Reserves as of December 31, 2006

Reserves	
Member Deposits ⁽¹⁾	\$371,508,163
Member Cost of Living ⁽¹⁾	123,249,338
Employer Advance ⁽¹⁾	1,166,763,516
Employer Cost of Living ⁽¹⁾	801,248,106
Retired Members ⁽¹⁾	1,457,052,539
Retired Cost of Living ⁽¹⁾	587,945,318
Smoothed Market Value Valuation ⁽¹⁾	170,187,940
Dollar Power Cost of Living Supplement Pre-Funding ⁽¹⁾	25,787,120
Post Retirement Death Benefit ⁽²⁾	12,786,106
Statutory Contingency (one percent) ⁽²⁾	0
Additional One Percent Contingency Designation ⁽²⁾	0
Contra Tracking Account ⁽¹⁾	<u>(242,871,033)</u>
Total Allocated Reserves	\$4,473,657,139
Market Stabilization Account	<u>397,352,492</u>
Net market value	<u>\$4,871,009,631</u>

⁽¹⁾ *Included in valuation value of assets.*

⁽²⁾ *Not included in valuation value of assets.*

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

EXHIBIT I

Development of Unfunded Actuarial Accrued Liability

	Year Ended December 31, 2006
1. Unfunded actuarial accrued liability at beginning of year	\$730,370,881
2. Gross Normal cost at middle of year	195,030,747
3. Actual employer and member contributions	(264,917,359)
4. Interest (whole year on (1) plus half year on (2) + (3))	<u>54,938,778</u>
5. Expected unfunded actuarial accrued liability at end of year	\$715,423,047
6. Actuarial (gain)/loss due to all changes:	
a. Investment return	(\$30,119,929)
b. Salary increases	(46,756,878)
c. Plan changes	0
d. Change in assumptions	210,158,489
e. Other experience (gain)/loss	<u>(15,598,752)</u>
f. Total (gain)/loss	<u>117,682,930</u>
7. Unfunded actuarial accrued liability at end of year	<u>\$833,105,977</u>

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

EXHIBIT J

Section 415 Limitations

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 \$180,000 for 2007. 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

EXHIBIT K

Definitions of Pension Terms

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

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

Plan Year Ended December 31	Annual Required Contributions	Actual Contributions	Percentage Contributed
2001	\$58,642,407	\$55,182,505	94.1% ⁽¹⁾
2002	58,319,678	57,474,043	98.6% ⁽¹⁾
2003	108,728,047	108,728,047 ⁽²⁾	100.0%
2004	118,245,418	118,245,418	100.0%
2005	147,165,108	147,165,108 ⁽³⁾	100.0%
2006	179,755,315	179,755,315 ⁽⁴⁾	100.0%

⁽¹⁾ *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".*

⁽²⁾ *Excludes pension obligation bond proceeds of \$319,094,719.*

⁽³⁾ *Excludes pension obligation bond proceeds of \$153,134,911.*

⁽⁴⁾ *Excludes pension obligation bond proceeds of \$11,693,396.*

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

EXHIBIT II

Supplementary Information Required by GASB – Schedule of Funding Progress

Actuarial Valuation Date	Valuation Value of Assets⁽¹⁾ (a)	Actuarial Accrued Liability (AAL)⁽²⁾ (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a) / (c)]
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%
12/31/2006	4,460,871,033	5,293,977,010	833,105,977	84.26%	653,953,163	127.40%

⁽¹⁾ Excludes assets for non-valuation reserves.

⁽²⁾ 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

Valuation date	December 31, 2006
Actuarial cost method	Entry Age Normal Actuarial Cost Method
Amortization method	Level percent of payroll for total unfunded liability (4.25% payroll growth assumed)
Remaining amortization period	16 years (declining) for all UAAL
Asset valuation method	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
Actuarial assumptions:	
Investment rate of return	7.80%
Inflation rate	3.75%
Projected salary increases ⁽¹⁾	General: 5.00% to 11.75%; Safety: 5.00% to 12.25%
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.
Plan membership:	
Retired members and beneficiaries receiving benefits	6,646
Terminated members entitled to, but not yet receiving benefits	1,919
Active members	<u>9,210</u>
Total	17,775

⁽¹⁾ 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

EXHIBIT IV

Actuarial Assumptions and Actuarial Cost Method

Post – Retirement Mortality Rates:

Healthy:

For General Members: RP-2000 Combined Healthy Mortality Table set back two years.

For Safety Members: RP-2000 Combined Healthy Mortality Table set back two years.

Disabled:

For General members: RP-2000 Combined Healthy Mortality Table set forward six years.

For Safety members: RP-2000 Combined Healthy Mortality Table.

Member Contribution Rates:

For General members: RP-2000 Combined Healthy Mortality Table set back two years weighted 30% male and 70% female.

For Safety members: RP-2000 Combined Healthy Mortality Table set back two years weighted 85% male and 15% female.

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

Termination Rates Before Retirement:

Age	Rate (%) Mortality			
	General		Safety	
	Male	Female	Male	Female
25	0.04	0.02	0.04	0.02
30	0.04	0.02	0.04	0.02
35	0.06	0.04	0.06	0.04
40	0.10	0.06	0.10	0.06
45	0.13	0.09	0.13	0.09
50	0.19	0.14	0.19	0.14
55	0.29	0.22	0.29	0.22
60	0.53	0.39	0.53	0.39
65	1.00	0.76	1.00	0.76

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

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

Termination Rates Before Retirement (continued):

Age	Rate (%)		
	Disability		
	General Tier 1⁽¹⁾	General Tier 3⁽²⁾	Safety⁽³⁾
20	0.03	0.00	0.06
25	0.08	0.02	0.22
30	0.22	0.04	0.39
35	0.36	0.06	0.63
40	0.46	0.09	0.90
45	0.56	0.16	1.30
50	0.69	0.26	2.40
55	0.84	0.36	3.30
60	0.96	0.46	0.00

- (1) 75% of General Tier 1 disabilities are assumed to be duty disabilities. The other 25% are assumed to be ordinary disabilities.
- (2) 20% of General Tier 3 disabilities are assumed to be duty disabilities. The other 80% are assumed to be ordinary disabilities.
- (3) 100% of Safety disabilities are assumed to be duty disabilities.

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

Termination Rates Before Retirement (continued):

Rate (%)		
Withdrawal (Less than Five Years of Service)		
Years of Service	General	Safety
0	14.00	11.00
1	9.00	7.00
2	8.00	5.00
3	6.00	4.00
4	5.00	3.00

Withdrawal (Five or More Years of Service) *		
Age	General	Safety
20	5.00	3.00
25	5.00	3.00
30	5.00	3.00
35	4.92	2.20
40	4.23	1.61
45	3.54	1.05
50	1.68	0.00
55	0.37	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 first assumed to retire.

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

Retirement Rates (Enhanced):

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

Rate (%)				
Age	General Tier 1	General Tier 3	Safety Tier A	Safety Tier C
45	0.00	0.00	2.00	1.00
46	0.00	0.00	2.00	1.00
47	0.00	0.00	2.00	1.00
48	0.00	0.00	2.00	1.00
49	0.00	0.00	10.00	5.00
50	3.00	3.00	25.00	15.00
51	3.00	3.00	20.00	12.00
52	5.00	3.00	20.00	12.00
53	8.00	3.00	20.00	12.00
54	15.00	5.00	25.00	15.00
55	20.00	10.00	30.00	20.00
56	20.00	10.00	30.00	20.00
57	25.00	10.00	40.00	25.00
58	25.00	10.00	40.00	25.00
59	25.00	10.00	40.00	30.00
60	25.00	15.00	100.00	100.00
61	30.00	20.00	100.00	100.00
62	30.00	25.00	100.00	100.00
63	30.00	25.00	100.00	100.00
64	30.00	30.00	100.00	100.00
65	35.00	35.00	100.00	100.00
66	35.00	35.00	100.00	100.00
67	35.00	35.00	100.00	100.00
68	35.00	35.00	100.00	100.00
69	35.00	35.00	100.00	100.00
70	100.00	100.00	100.00	100.00

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

Retirement Rates (Non-enhanced):

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

Age	Rate (%)	
	General Tier 1	Safety Tier A
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

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 40% and 60% of future General and Safety deferred vested members, respectively, will continue to work for a reciprocal employer. For reciprocals, we assume 6.25% compensation increases per annum.

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.

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.

Offsets by Other Plans of the Employer for Disability Benefits:

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

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 3: 7.00%
Safety Tier A: 11.00%
Safety Tier C: 3.75%

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.

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

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: 1.25%
Safety: 2.25%

Disability Retirements:

General: 0.25%
Safety: 1.25%

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

Net Investment Return:

7.80%, net of administration and investment expenses.

Employee Contribution Crediting Rate:

7.80%, 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

Salary Increases:

Annual Rate of Compensation Increase

Inflation: 3.75% per year, plus “across the board” salary increases of 0.50% per year, plus the following merit and promotional increases.

Years of Service	General	Safety
Less than 1	7.50%	8.00%
1	6.50%	6.50%
2	5.00%	5.50%
3	4.00%	4.50%
4	3.00%	2.25%
5	2.00%	0.75%
6	1.75%	0.75%
7	1.50%	0.75%
8	1.25%	0.75%
9	1.00%	0.75%
10	0.75%	0.75%
11	0.75%	0.75%
12	0.75%	0.75%
13	0.75%	0.75%
14	0.75%	0.75%
15	0.75%	0.75%
16	0.75%	0.75%
17	0.75%	0.75%
18	0.75%	0.75%
19	0.75%	0.75%
20 & over	0.75%	0.75%

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

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.
Changes in Actuarial Assumptions:	Based on the Experience Study and Review of Economic Actuarial Assumptions, the following assumptions were changed. Previously, these assumptions were as follows:
Post – Retirement Mortality Rates:	
<i>Healthy:</i>	For General Members: 1994 Group Annuity Mortality Table set forward one year. For Safety Members: 1994 Group Annuity Mortality Table set forward two years.
<i>Disabled:</i>	For General members: 1981 Disability Mortality Table (General) set back three years. For Safety members: 1994 Group Annuity Mortality Table set forward two years.
<i>Member Contribution Rates:</i>	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

Changes in Actuarial Assumptions (Previous Assumptions Continued):

Termination Rates Before Retirement:

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

Changes in Actuarial Assumptions (Previous Assumptions Continued):

Termination Rates Before Retirement (continued):

Age	Rate (%)		
	Disability		
	General Tier 1 ⁽¹⁾	General Tier 2 and 3 ⁽²⁾	Safety ⁽³⁾
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

(1) 70% of General Tier 1 disabilities are assumed to be duty disabilities. The other 30% are assumed to be ordinary disabilities.

(2) 25% of General Tier 2 and 3 disabilities are assumed to be duty disabilities. The other 75% are assumed to be ordinary disabilities.

(3) 100% of Safety disabilities are assumed to be duty disabilities.

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

Changes in Actuarial Assumptions (Previous Assumptions Continued):

Termination Rates Before Retirement (continued):

Rate (%)		
Withdrawal (Less than Five 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 (Five or More 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 first assumed to retire.

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

Changes in Actuarial Assumptions (Previous Assumptions Continued):

Retirement Rates (Enhanced):

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

Age	Rate (%)		
	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

Changes in Actuarial Assumptions (Previous Assumptions Continued):

**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.

**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.

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.

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

Changes in Actuarial Assumptions (Previous Assumptions Continued):

**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.

Net Investment Return:

7.90%, net of administration and investment expenses.

**Employee Contribution
Crediting Rate:**

7.90%, compounded semi-annually.

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

Changes in Actuarial Assumptions (Previous Assumptions Continued):

Salary Increases:

Annual Rate of Compensation Increase		
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%

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

EXHIBIT V

Summary of Plan Provisions

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.

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. All County Sheriff's Department Safety members hired on or after January 1, 2007 will be placed in Safety Tier C Enhanced.

**Final Compensation for
Benefit Determination:**

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

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

Social Security Primary Insurance Amount:

General Tier 2 Estimated Social Security award at age 62 assuming level future earnings. (PIA)

Service:

General Tier 1 and 3 and Safety Years of service. (Yrs)

General Tier 2 Years of service up to a maximum of 30 years. (Yrs30)

Service Retirement Eligibility:

General Age 50 with 10 years of service, or age 70 regardless of service, or after 30 years of service, regardless of age.

Safety 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

Benefit Formula:

<i>Safety Tier A (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

For members previously covered under the non-enhanced §31676.11 formula, they are entitled to at least the benefits they could have received under §31676.11.

Maximum Benefit: 100% of FAS1

<i>Safety Tier A (Enhanced)(§31664.1)</i>	50	(3.00%xFAS1xYrs)
---	----	------------------

Maximum Benefit: 100% of FAS1

<i>Safety Tier C (Enhanced) (§31664.1)</i>	50	(3.00%xFAS3xYrs)
--	----	------------------

Maximum Benefit: 100% of FAS3

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

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).

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

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

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.

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).

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

Post-Retirement

Cost-of-Living Benefits:

General Tier 1 and Tier 3, and Safety

Tier A

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."

Safety Tier C

Future changes based on Consumer Price Index to a maximum of 2% per year, excess "banked."

County Contributions:

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 16-year period as of December 31, 2006.

Member Contributions:

Please refer to Appendix A for the specific rates.

General Tier 1 and Tier 3 (Non-enhanced)

Basic

Provide for one-half of the \$31676.11 benefit payable at age 55.

Cost-of-Living

Provide for one-half of future Cost-of-Living costs.

Safety Tier A (Non-enhanced)

Basic

Provide for one-half of the \$31664 benefit payable at age 50.

Cost-of-Living

Provide for one-half of future Cost-of-Living costs.

General Tier 1 and Tier 3 (Enhanced)

Basic

Provide for an average annuity at age 60 equal to 1/120 of FAS1.

Cost-of-Living

Provide for one-half of future Cost-of-Living costs.

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

Safety Tier A (Enhanced)

Basic

Provide for an average annuity at age 50 equal to 1/100 of FAS1.

Cost-of-Living

Provide for one-half of future Cost-of-Living costs.

Safety Tier C (Enhanced)

Basic

Provide for an average annuity at age 50 equal to 1/100 of FAS3.

Cost-of-Living

Provide for one-half of future Cost-of-Living costs.

Other Information:

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 on or before March 7, 1973 and all safety under the enhanced benefit formula will be exempt from paying member contributions after 30 years of service.

Plan Amendments:

The following plan change is recognized in this valuation:

All County Sheriff's Department Safety members hired on or after January 1, 2007 will be placed in Safety Tier C Enhanced.

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, 2006 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	3.59%	5.38%	1.78%	2.67%	5.37%	8.05%
16	3.65%	5.47%	1.81%	2.72%	5.46%	8.19%
17	3.71%	5.56%	1.84%	2.76%	5.55%	8.32%
18	3.76%	5.64%	1.87%	2.80%	5.63%	8.44%
19	3.82%	5.73%	1.90%	2.85%	5.72%	8.58%
20	3.88%	5.82%	1.93%	2.89%	5.81%	8.71%
21	3.95%	5.92%	1.96%	2.94%	5.91%	8.86%
22	4.01%	6.01%	1.99%	2.98%	6.00%	8.99%
23	4.07%	6.10%	2.02%	3.03%	6.09%	9.13%
24	4.13%	6.20%	2.05%	3.08%	6.18%	9.28%
25	4.20%	6.30%	2.09%	3.13%	6.29%	9.43%
26	4.27%	6.40%	2.12%	3.18%	6.39%	9.58%
27	4.33%	6.50%	2.15%	3.23%	6.48%	9.73%
28	4.40%	6.60%	2.19%	3.28%	6.59%	9.88%
29	4.47%	6.70%	2.22%	3.33%	6.69%	10.03%
30	4.54%	6.81%	2.25%	3.38%	6.79%	10.19%
31	4.61%	6.92%	2.29%	3.44%	6.90%	10.36%
32	4.69%	7.03%	2.33%	3.49%	7.02%	10.52%
33	4.76%	7.14%	2.37%	3.55%	7.13%	10.69%
34	4.83%	7.25%	2.40%	3.60%	7.23%	10.85%
35	4.91%	7.37%	2.44%	3.66%	7.35%	11.03%
36	4.99%	7.49%	2.48%	3.72%	7.47%	11.21%
37	5.07%	7.61%	2.52%	3.78%	7.59%	11.39%

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, 2006 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	5.16%	7.74%	2.56%	3.84%	7.72%	11.58%
39	5.25%	7.87%	2.61%	3.91%	7.86%	11.78%
40	5.33%	8.00%	2.65%	3.97%	7.98%	11.97%
41	5.43%	8.14%	2.69%	4.04%	8.12%	12.18%
42	5.53%	8.29%	2.75%	4.12%	8.28%	12.41%
43	5.63%	8.44%	2.79%	4.19%	8.42%	12.63%
44	5.74%	8.61%	2.85%	4.28%	8.59%	12.89%
45	5.84%	8.76%	2.90%	4.35%	8.74%	13.11%
46	5.95%	8.92%	2.95%	4.43%	8.90%	13.35%
47	6.04%	9.06%	3.00%	4.50%	9.04%	13.56%
48	6.13%	9.20%	3.05%	4.57%	9.18%	13.77%
49	6.22%	9.33%	3.09%	4.63%	9.31%	13.96%
50	6.29%	9.44%	3.13%	4.69%	9.42%	14.13%
51	6.30%	9.45%	3.13%	4.69%	9.43%	14.14%
52	6.29%	9.43%	3.12%	4.68%	9.41%	14.11%
53	6.23%	9.34%	3.09%	4.64%	9.32%	13.98%
54	6.05%	9.08%	3.01%	4.51%	9.06%	13.59%
55	6.05%	9.08%	3.01%	4.51%	9.06%	13.59%
56	6.05%	9.08%	3.01%	4.51%	9.06%	13.59%
57	6.05%	9.08%	3.01%	4.51%	9.06%	13.59%
58	6.05%	9.08%	3.01%	4.51%	9.06%	13.59%
59	6.05%	9.08%	3.01%	4.51%	9.06%	13.59%
60	6.05%	9.08%	3.01%	4.51%	9.06%	13.59%
Interest:	7.80%					
Salary Increase:	See Exhibit IV.					
COLA Loading:	49.66%					
Mortality:	RP-2000 Combined Healthy Mortality Table (30% Male and 70% Female, with ages set back two years)					

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, 2006 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	3.11%	4.67%	1.88%	2.82%	4.99%	7.49%
16	3.17%	4.75%	1.91%	2.87%	5.08%	7.62%
17	3.21%	4.82%	1.94%	2.91%	5.15%	7.73%
18	3.27%	4.90%	1.97%	2.96%	5.24%	7.86%
19	3.32%	4.98%	2.01%	3.01%	5.33%	7.99%
20	3.37%	5.06%	2.04%	3.06%	5.41%	8.12%
21	3.43%	5.14%	2.07%	3.11%	5.50%	8.25%
22	3.48%	5.22%	2.10%	3.15%	5.58%	8.37%
23	3.53%	5.30%	2.13%	3.20%	5.66%	8.50%
24	3.59%	5.39%	2.17%	3.26%	5.76%	8.65%
25	3.65%	5.47%	2.20%	3.30%	5.85%	8.77%
26	3.71%	5.56%	2.24%	3.36%	5.95%	8.92%
27	3.77%	5.65%	2.27%	3.41%	6.04%	9.06%
28	3.83%	5.74%	2.31%	3.47%	6.14%	9.21%
29	3.89%	5.83%	2.35%	3.52%	6.24%	9.35%
30	3.95%	5.92%	2.39%	3.58%	6.34%	9.50%
31	4.01%	6.01%	2.42%	3.63%	6.43%	9.64%
32	4.07%	6.11%	2.46%	3.69%	6.53%	9.80%
33	4.13%	6.20%	2.50%	3.75%	6.63%	9.95%
34	4.20%	6.30%	2.54%	3.81%	6.74%	10.11%
35	4.27%	6.40%	2.58%	3.87%	6.85%	10.27%
36	4.33%	6.50%	2.62%	3.93%	6.95%	10.43%
37	4.40%	6.60%	2.66%	3.99%	7.06%	10.59%
38	4.47%	6.71%	2.70%	4.05%	7.17%	10.76%
39	4.54%	6.81%	2.74%	4.11%	7.28%	10.92%
40	4.61%	6.92%	2.79%	4.18%	7.40%	11.10%

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, 2006 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
41	4.69%	7.04%	2.83%	4.25%	7.52%	11.29%
42	4.77%	7.15%	2.88%	4.32%	7.65%	11.47%
43	4.85%	7.27%	2.93%	4.39%	7.78%	11.66%
44	4.93%	7.39%	2.98%	4.47%	7.91%	11.86%
45	5.01%	7.52%	3.03%	4.54%	8.04%	12.06%
46	5.10%	7.65%	3.08%	4.62%	8.18%	12.27%
47	5.19%	7.79%	3.14%	4.71%	8.33%	12.50%
48	5.29%	7.93%	3.19%	4.79%	8.48%	12.72%
49	5.39%	8.09%	3.26%	4.89%	8.65%	12.98%
50	5.49%	8.23%	3.31%	4.97%	8.80%	13.20%
51	5.59%	8.38%	3.37%	5.06%	8.96%	13.44%
52	5.67%	8.51%	3.43%	5.14%	9.10%	13.65%
53	5.77%	8.65%	3.49%	5.23%	9.26%	13.88%
54	5.84%	8.76%	3.53%	5.29%	9.37%	14.05%
55	5.91%	8.87%	3.57%	5.36%	9.48%	14.23%
56	5.92%	8.88%	3.58%	5.37%	9.50%	14.25%
57	5.91%	8.86%	3.57%	5.35%	9.48%	14.21%
58	5.85%	8.78%	3.53%	5.30%	9.38%	14.08%
59	5.69%	8.53%	3.43%	5.15%	9.12%	13.68%
60	5.69%	8.53%	3.43%	5.15%	9.12%	13.68%

Interest: 7.80%
 Salary Increase: See Exhibit IV.
 COLA Loading: 60.42%
 Mortality: RP-2000 Combined Healthy Mortality Table (30% Male and 70% Female, with ages set back two years)

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, 2006 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	3.11%	4.67%	1.53%	2.29%	4.64%	6.96%
16	3.17%	4.75%	1.55%	2.33%	4.72%	7.08%
17	3.21%	4.82%	1.58%	2.37%	4.79%	7.19%
18	3.27%	4.90%	1.61%	2.41%	4.88%	7.31%
19	3.32%	4.98%	1.63%	2.45%	4.95%	7.43%
20	3.37%	5.06%	1.66%	2.49%	5.03%	7.55%
21	3.43%	5.14%	1.68%	2.52%	5.11%	7.66%
22	3.48%	5.22%	1.71%	2.56%	5.19%	7.78%
23	3.53%	5.30%	1.73%	2.60%	5.26%	7.90%
24	3.59%	5.39%	1.77%	2.65%	5.36%	8.04%
25	3.65%	5.47%	1.79%	2.69%	5.44%	8.16%
26	3.71%	5.56%	1.82%	2.73%	5.53%	8.29%
27	3.77%	5.65%	1.85%	2.78%	5.62%	8.43%
28	3.83%	5.74%	1.88%	2.82%	5.71%	8.56%
29	3.89%	5.83%	1.91%	2.86%	5.80%	8.69%
30	3.95%	5.92%	1.94%	2.91%	5.89%	8.83%
31	4.01%	6.01%	1.97%	2.95%	5.98%	8.96%
32	4.07%	6.11%	2.00%	3.00%	6.07%	9.11%
33	4.13%	6.20%	2.03%	3.05%	6.16%	9.25%
34	4.20%	6.30%	2.06%	3.09%	6.26%	9.39%
35	4.27%	6.40%	2.09%	3.14%	6.36%	9.54%
36	4.33%	6.50%	2.13%	3.19%	6.46%	9.69%
37	4.40%	6.60%	2.16%	3.24%	6.56%	9.84%
38	4.47%	6.71%	2.20%	3.30%	6.67%	10.01%
39	4.54%	6.81%	2.23%	3.35%	6.77%	10.16%

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, 2006 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%	2.27%	3.40%	6.88%	10.32%
41	4.69%	7.04%	2.31%	3.46%	7.00%	10.50%
42	4.77%	7.15%	2.34%	3.51%	7.11%	10.66%
43	4.85%	7.27%	2.38%	3.57%	7.23%	10.84%
44	4.93%	7.39%	2.42%	3.63%	7.35%	11.02%
45	5.01%	7.52%	2.46%	3.69%	7.47%	11.21%
46	5.10%	7.65%	2.51%	3.76%	7.61%	11.41%
47	5.19%	7.79%	2.55%	3.83%	7.74%	11.62%
48	5.29%	7.93%	2.60%	3.90%	7.89%	11.83%
49	5.39%	8.09%	2.65%	3.97%	8.04%	12.06%
50	5.49%	8.23%	2.69%	4.04%	8.18%	12.27%
51	5.59%	8.38%	2.75%	4.12%	8.34%	12.50%
52	5.67%	8.51%	2.79%	4.18%	8.46%	12.69%
53	5.77%	8.65%	2.83%	4.25%	8.60%	12.90%
54	5.84%	8.76%	2.87%	4.30%	8.71%	13.06%
55	5.91%	8.87%	2.91%	4.36%	8.82%	13.23%
56	5.92%	8.88%	2.91%	4.36%	8.83%	13.24%
57	5.91%	8.86%	2.90%	4.35%	8.81%	13.21%
58	5.85%	8.78%	2.87%	4.31%	8.72%	13.09%
59	5.69%	8.53%	2.79%	4.19%	8.48%	12.72%
60	5.69%	8.53%	2.79%	4.19%	8.48%	12.72%

Interest: 7.80%
 Salary Increase: See Exhibit IV.
 COLA Loading: 49.12%
 Mortality: RP-2000 Combined Healthy Mortality Table (30% Male and 70% Female, with ages set back two years)

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

Safety Tier A (Non-enhanced) Members' Contribution Rates for Members Not Receiving Benefits under 3% at 50 Formula from the December 31, 2006 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
15	7.85%	3.90%	11.75%
16	7.85%	3.90%	11.75%
17	7.85%	3.90%	11.75%
18	7.85%	3.90%	11.75%
19	7.85%	3.90%	11.75%
20	7.85%	3.90%	11.75%
21	7.85%	3.90%	11.75%
22	7.97%	3.96%	11.93%
23	8.09%	4.02%	12.11%
24	8.22%	4.08%	12.30%
25	8.35%	4.15%	12.50%
26	8.48%	4.21%	12.69%
27	8.61%	4.28%	12.89%
28	8.74%	4.34%	13.08%
29	8.87%	4.40%	13.27%
30	9.02%	4.48%	13.50%
31	9.15%	4.54%	13.69%
32	9.30%	4.62%	13.92%
33	9.45%	4.69%	14.14%
34	9.59%	4.76%	14.35%
35	9.75%	4.84%	14.59%
36	9.91%	4.92%	14.83%
37	10.08%	5.01%	15.09%
38	10.25%	5.09%	15.34%
39	10.43%	5.18%	15.61%
40	10.62%	5.27%	15.89%
41	10.82%	5.37%	16.19%
42	11.05%	5.49%	16.54%
43	11.31%	5.62%	16.93%
44	11.60%	5.76%	17.36%

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

Safety Tier A (Non-enhanced) Members' Contribution Rates for Members Not Receiving Benefits under 3% at 50 Formula from the December 31, 2006 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
45	11.77%	5.84%	17.61%
46	11.80%	5.86%	17.66%
47	11.73%	5.83%	17.56%
48	11.56%	5.74%	17.30%
49	11.51%	5.72%	17.23%
50	11.51%	5.72%	17.23%
51	11.51%	5.72%	17.23%
52	11.51%	5.72%	17.23%
53	11.51%	5.72%	17.23%
54	11.51%	5.72%	17.23%
55	11.51%	5.72%	17.23%
56	11.51%	5.72%	17.23%
57	11.51%	5.72%	17.23%
58	11.51%	5.72%	17.23%
59	11.51%	5.72%	17.23%
60	11.51%	5.72%	17.23%

Interest: 7.80%
 Salary Increase: See Exhibit IV.
 COLA Loading: 49.66%
 Mortality: RP-2000 Combined Healthy Mortality Table (85% Male and 15% Female, with ages set back two years)

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

Safety Tier A (Enhanced) Members' Contribution Rates for Members Receiving Benefits under 3% at 50 Formula from the December 31, 2006 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
15	7.85%	5.93%	13.78%
16	7.85%	5.93%	13.78%
17	7.85%	5.93%	13.78%
18	7.85%	5.93%	13.78%
19	7.85%	5.93%	13.78%
20	7.85%	5.93%	13.78%
21	7.85%	5.93%	13.78%
22	7.97%	6.02%	13.99%
23	8.09%	6.11%	14.20%
24	8.22%	6.20%	14.42%
25	8.35%	6.30%	14.65%
26	8.48%	6.40%	14.88%
27	8.61%	6.50%	15.11%
28	8.74%	6.60%	15.34%
29	8.87%	6.70%	15.57%
30	9.02%	6.81%	15.83%
31	9.15%	6.91%	16.06%
32	9.30%	7.02%	16.32%
33	9.45%	7.13%	16.58%
34	9.59%	7.24%	16.83%
35	9.75%	7.36%	17.11%
36	9.91%	7.48%	17.39%
37	10.08%	7.61%	17.69%
38	10.25%	7.74%	17.99%
39	10.43%	7.87%	18.30%
40	10.62%	8.02%	18.64%
41	10.82%	8.17%	18.99%
42	11.05%	8.34%	19.39%
43	11.31%	8.54%	19.85%
44	11.60%	8.76%	20.36%

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

Safety Tier A (Enhanced) Members' Contribution Rates for Members Receiving Benefits under 3% at 50 Formula from the December 31, 2006 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
45	11.77%	8.88%	20.65%
46	11.80%	8.91%	20.71%
47	11.73%	8.85%	20.58%
48	11.56%	8.73%	20.29%
49	11.51%	8.69%	20.20%
50	11.51%	8.69%	20.20%
51	11.51%	8.69%	20.20%
52	11.51%	8.69%	20.20%
53	11.51%	8.69%	20.20%
54	11.51%	8.69%	20.20%
55	11.51%	8.69%	20.20%
56	11.51%	8.69%	20.20%
57	11.51%	8.69%	20.20%
58	11.51%	8.69%	20.20%
59	11.51%	8.69%	20.20%
60	11.51%	8.69%	20.20%

Interest: 7.80%
 See Exhibit IV: See Exhibit IV.
 COLA Loading: 75.48%
 Mortality: RP-2000 Combined Healthy Mortality Table (85% Male and 15% Female, with ages set back two years)
 These rates exclude an extra 3% or 9% of compensation (depends on their MOU) that most Safety Tier A (Enhanced) members contribute that reduces the employer's contribution rate.

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

Safety Tier C (Enhanced) Members' Contribution Rates for Members Receiving Benefits under 3% at 50 Formula from the December 31, 2006 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
15	7.48%	3.07%	10.55%
16	7.48%	3.07%	10.55%
17	7.48%	3.07%	10.55%
18	7.48%	3.07%	10.55%
19	7.48%	3.07%	10.55%
20	7.48%	3.07%	10.55%
21	7.48%	3.07%	10.55%
22	7.60%	3.12%	10.72%
23	7.72%	3.17%	10.89%
24	7.83%	3.21%	11.04%
25	7.96%	3.26%	11.22%
26	8.08%	3.31%	11.39%
27	8.20%	3.36%	11.56%
28	8.33%	3.42%	11.75%
29	8.46%	3.47%	11.93%
30	8.59%	3.52%	12.11%
31	8.73%	3.58%	12.31%
32	8.86%	3.63%	12.49%
33	9.00%	3.69%	12.69%
34	9.15%	3.75%	12.90%
35	9.29%	3.81%	13.10%
36	9.44%	3.87%	13.31%
37	9.60%	3.94%	13.54%
38	9.76%	4.00%	13.76%
39	9.94%	4.08%	14.02%
40	10.13%	4.15%	14.28%
41	10.31%	4.23%	14.54%
42	10.53%	4.32%	14.85%
43	10.71%	4.39%	15.10%

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

Safety Tier C (Enhanced) Members' Contribution Rates for Members Receiving Benefits under 3% at 50 Formula from the December 31, 2006 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
44	10.82%	4.44%	15.26%
45	10.84%	4.44%	15.28%
46	10.77%	4.42%	15.19%
47	10.56%	4.33%	14.89%
48	11.01%	4.51%	15.52%
49	11.51%	4.72%	16.23%
50	11.51%	4.72%	16.23%
51	11.51%	4.72%	16.23%
52	11.51%	4.72%	16.23%
53	11.51%	4.72%	16.23%
54	11.51%	4.72%	16.23%
55	11.51%	4.72%	16.23%
56	11.51%	4.72%	16.23%
57	11.51%	4.72%	16.23%
58	11.51%	4.72%	16.23%
59	11.51%	4.72%	16.23%
60	11.51%	4.72%	16.23%

Interest: 7.80%
 See Exhibit IV: See Exhibit IV.
 COLA Loading: 41.00%
 Mortality: RP-2000 Combined Healthy Mortality Table (85% Male and 15% Female, with ages set back two years)

4021178v2/05337.001