

Contra Costa County Employees'
Retirement Association

*Actuarial Valuation and Review
as of December 31, 2008*

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June 26, 2009

*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, 2008. The report summarizes the actuarial data used in the valuation, establishes the funding requirements for the fiscal year beginning July 1, 2010 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 are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

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*

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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, 2008. 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, terminated members, and retired members and beneficiaries as of December 31, 2008, provided by the Association's staff;
- The assets of the Plan as of December 31, 2008, 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.

One of the general goals of an actuarial valuation 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, 2008 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 remaining balance of the Association's unfunded actuarial accrued liability (UAAL) through December 31, 2007 is being amortized over a decreasing 14-year period as of December 31, 2008. Any change in the UAAL that arises at each valuation after December 31, 2007 is amortized over its own separate declining 18-year period.

We recommend that the rates calculated in this report be adopted by the Board for the fiscal year that extends from July 1, 2010 through June 30, 2011.

SIGNIFICANT ISSUES IN VALUATION YEAR

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

*Ref: Pg. 60
Ref: Pg. 54*

- The ratio of the valuation value of assets to actuarial accrued liabilities decreased from 89.9% to 88.5%. The Association's UAAL has increased from \$565 million to \$690 million. This increase is primarily due to an investment return on actuarial value that fell short of the 7.80% assumed rate. A reconciliation of the Association's UAAL is provided in Section 3, Exhibit I.

Ref: Pg. 32

- The aggregate employer rate calculated in this valuation (before considering the employer subvention of member rates and member subvention of employer rates) has increased from 24.71% of payroll to 25.99% of payroll. This increase is primarily due to the investment loss mentioned above. A complete reconciliation of the Association's aggregate employer rate is provided in Section 2, Subsection D, see Chart 15.

Ref: Pg. 33

- 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 10.66% of payroll to 10.62% of payroll. This decrease is due to the changes in the member population for the December 31, 2008 valuation. A complete reconciliation of the Association's aggregate member rate is provided in Section 2, Subsection D, see Chart 16.

Ref: Pg. 55

- The results of this valuation reflect a change in the methodology used for amortizing the Association's UAAL that was adopted by the Association starting with this valuation. The remaining balance of the UAAL as of December 31, 2007 continues to be amortized over a declining period that has 14 years remaining as of December 31, 2008. Any change in the UAAL that arises at each valuation after December 31, 2007 is amortized over its own separate declining 18-year period. This change decreased the aggregate employer contribution rate by 0.29% of payroll compared to the rate under a continuation of the previous policy, where the entire UAAL would have been amortized over a single declining period with 14 years remaining.

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

- The Summary of Key Valuation Results (page v) 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 vi) 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).

Ref: Pg. 5

- As detailed on page 5 of this valuation report, the total unrecognized investment loss as of December 31, 2008 is about \$1.55 billion. This investment loss 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 gains that may occur after December 31, 2008. 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, this will result in investment losses on the actuarial value of assets in the next few years.

The deferred losses of \$1.55 billion represent about 41% of the market value of assets. Unless offset by future investment gains or other favorable experience, the recognition of the \$1.55 billion market losses is expected to have a significant impact on the Association's future funded ratio and contribution rate requirements. This potential impact may be illustrated as follows:

- If the deferred losses were recognized immediately in the valuation value of assets, the funded percentage would decrease from 88.5% to 62.6%.
 - If the deferred losses were recognized immediately in the valuation value of assets, the aggregate employer rate would increase from 26% to about 43% of payroll.
- The valuation reflects one change in plan provisions: The Housing Authority adopted "Enhanced" General Tier 1 benefits effective October 1, 2008.
 - The actuarial valuation report as of December 31, 2008 is based on financial information as of that date. Changes in the value of assets subsequent to that date, to the extent that they exist, are not reflected. Declines in asset values will increase the actuarial cost of the plan, while increases will decrease the actuarial cost of the plan.

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

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, 2008		December 31, 2007	
Employer Contribution Rates (County and District combined)⁽¹⁾:				
	Total Rate	Estimated Annual Amount	Total Rate	Estimated Annual Amount
General Tier 1 Non-enhanced	30.64%	\$213,578	28.76%	\$1,677,654
General Tier 1 Enhanced	26.30%	21,451,202	24.50%	18,818,703
General Tier 3 Enhanced	20.95%	96,829,564	19.89%	86,783,615
Safety Tier A Non-enhanced	37.41%	847,293	34.38%	731,240
Safety Tier A Enhanced	40.46%	61,867,120	38.51%	57,230,588
Safety Tier C Enhanced	36.72%	1,975,131	34.76%	694,926
All Employers combined	25.99%	\$183,183,888	24.71%	\$165,936,726
Average Member Contribution Rates⁽¹⁾:				
	Total Rate	Estimated Annual Amount	Total Rate	Estimated Annual Amount
General Tier 1 Non-enhanced	11.31%	\$78,837	10.88%	\$634,662
General Tier 1 Enhanced	9.43%	7,691,741	9.32%	7,159,614
General Tier 3 Enhanced	9.39%	43,395,500	9.41%	41,048,389
Safety Tier A Non-enhanced	12.92%	292,623	12.76%	271,397
Safety Tier A Enhanced	14.90%	22,781,240	14.95%	22,218,343
Safety Tier C Enhanced	11.85%	637,399	11.89%	237,706
All Categories Combined	10.62%	\$74,877,340	10.66%	\$71,570,111
Refundability Factors				
	Non-enhanced	Enhanced	Non-enhanced	Enhanced
General Tier 1	.9948	.9964	.9951	.9972
General Tier 3	N/A	.9935	N/A	.9929
Safety Tier A	1.0000	.9978	1.0000	.9971
Safety Tier C	N/A	.9833	N/A	.9800
Funded Status:				
Actuarial accrued liability	\$5,972,471,074		\$5,581,048,225	
Valuation value of assets	\$5,282,505,159		\$5,016,136,535	
Funded percentage	88.5%		89.9%	
Unfunded Actuarial Accrued Liability (UAAL)	\$689,965,915		\$564,911,690	
Key Assumptions:				
Interest rate	7.80%		7.80%	
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, 2008		December 31, 2007	
Employer Contribution Rates (County and District combined)⁽¹⁾:		Estimated		Estimated
	Total Rate	Annual Amount	Total Rate	Annual Amount
General Tier 1 Non-enhanced	34.35%	\$239,439	32.38%	\$1,888,819
General Tier 1 Enhanced	29.24%	23,849,263	27.41%	21,054,162
General Tier 3 Enhanced	24.09%	111,340,946	23.03%	100,480,952
Safety Tier A Non-enhanced	37.41%	847,293	34.38%	731,240
Safety Tier A Enhanced	42.87%	65,539,429	40.96%	60,873,463
Safety Tier C Enhanced	40.85%	2,197,280	38.89%	777,493
All Employers combined	28.94%	\$204,013,650	27.67%	\$185,806,129
Average Member Contribution Rates⁽¹⁾:		Estimated		Estimated
	Total Rate	Annual Amount	Total Rate	Annual Amount
General Tier 1 Non-enhanced	7.59%	\$52,907	7.25%	\$422,913
General Tier 1 Enhanced	6.48%	5,285,523	6.41%	4,924,155
General Tier 3 Enhanced	6.23%	28,791,689	6.25%	27,263,808
Safety Tier A Non-enhanced	12.92%	292,623	12.76%	271,397
Safety Tier A Enhanced	12.50%	19,111,778	12.49%	18,562,348
Safety Tier C Enhanced	7.65%	411,486	7.68%	153,539
All Categories Combined	7.65%	\$53,946,006	7.68%	\$51,598,160

⁽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, 2008, for most Safety Tier A employers, Safety members contribute up to an extra 9% of compensation (depending 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, 2008	December 31, 2007	Percentage Change
Active Members:			
Number of members	9,385	9,421	-0.4%
Average age	45.9	45.6	N/A
Average service	10.5	10.2	N/A
Projected total compensation	\$704,947,668	\$671,617,932	5.0%
Average projected compensation	\$75,114	\$71,289	5.4%
Retired Member and Beneficiaries:			
Number of members:			
Service retired	4,980	4,873	2.2%
Disability retired	922	923	-0.1%
Beneficiaries	1,110	1,115	-0.4%
Total	7,012	6,911	1.5%
Average age	69.2	69.0	N/A
Average Monthly Benefit	\$3,075	\$2,943	4.5%
Vested Terminated Members:			
Number of terminated vested members ⁽¹⁾	2,153	2,008	7.2%
Average age	45.6	45.4	N/A
Summary of Financial Data:			
Market value of assets	\$3,749,698,812	\$5,199,116,582	-27.9%
Return on market value of assets	-28.35%	6.03%	N/A
Actuarial value of assets	\$5,295,960,900	\$5,029,275,788	5.3%
Return on actuarial value of assets	4.73%	11.63%	N/A
Valuation value of assets	\$5,282,505,159	\$5,016,136,535	5.3%
Return on valuation value of assets	4.72%	11.64%	N/A

⁽¹⁾ Includes 718 nonvested terminated members as of December 31, 2008 and 661 as of December 31, 2007.

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 nine valuations can be seen in this chart.

CHART 1
Member Population: 2000 – 2008

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
2007	9,421	2,008	6,911	0.95
2008	9,385	2,153	7,012	0.98

⁽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 9,385 active members with an average age of 45.9, average years of service of 10.5 years and average compensation of \$75,114. The 9,421 active members in the prior valuation had an average age of 45.6, average service of 10.2 years and average compensation of \$71,289.

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

Inactive Members

In this year's valuation, there were 2,153 members with a vested right to a deferred or immediate vested benefit or entitled to a return of their employee contributions versus 2,008 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, 2008

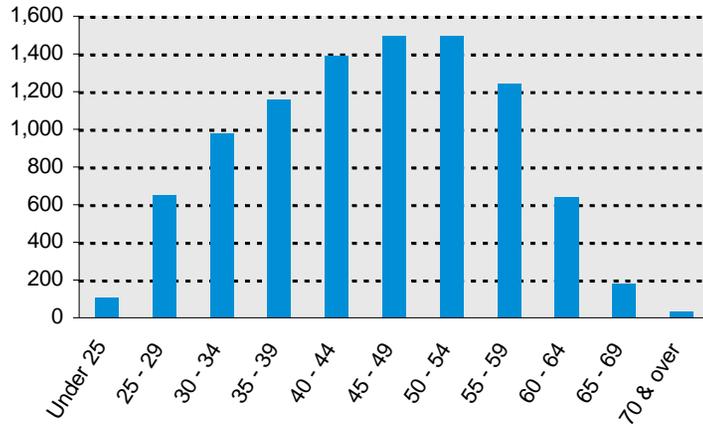
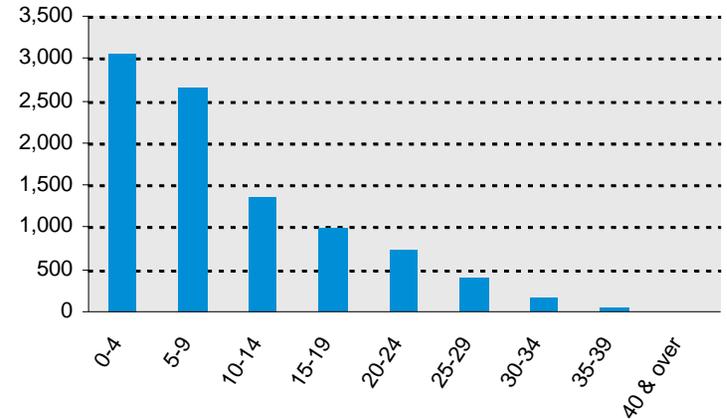


CHART 3
Distribution of Active Members by Years of Service as of December 31, 2008



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

Retired Members and Beneficiaries

As of December 31, 2008, 5,902 retired members and 1,110 beneficiaries were receiving total monthly benefits of \$21,558,540. For comparison, in the previous valuation, there were 5,796 retired members and 1,115 beneficiaries receiving monthly benefits of \$20,342,219.

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

■ Beneficiary
■ Disability
■ Service

CHART 4
Distribution of Retired Members and Beneficiaries by Type and by Monthly Amount as of December 31, 2008

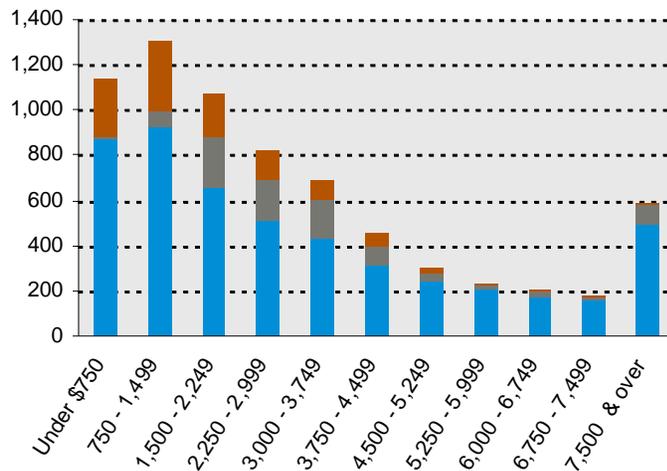
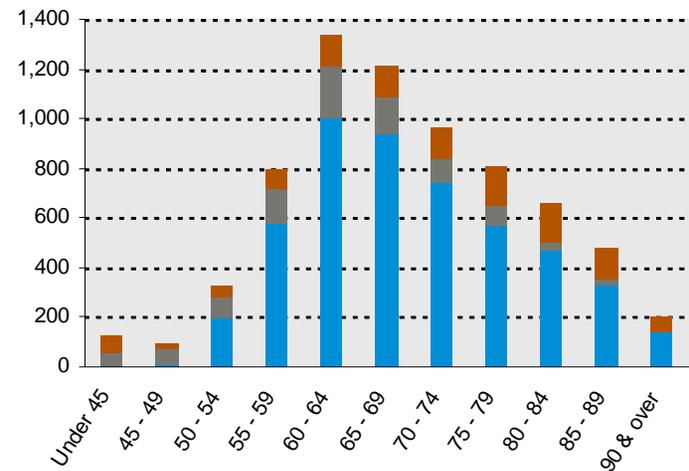


CHART 5
Distribution of Retired Members and Beneficiaries by Type and by Age as of December 31, 2008



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.

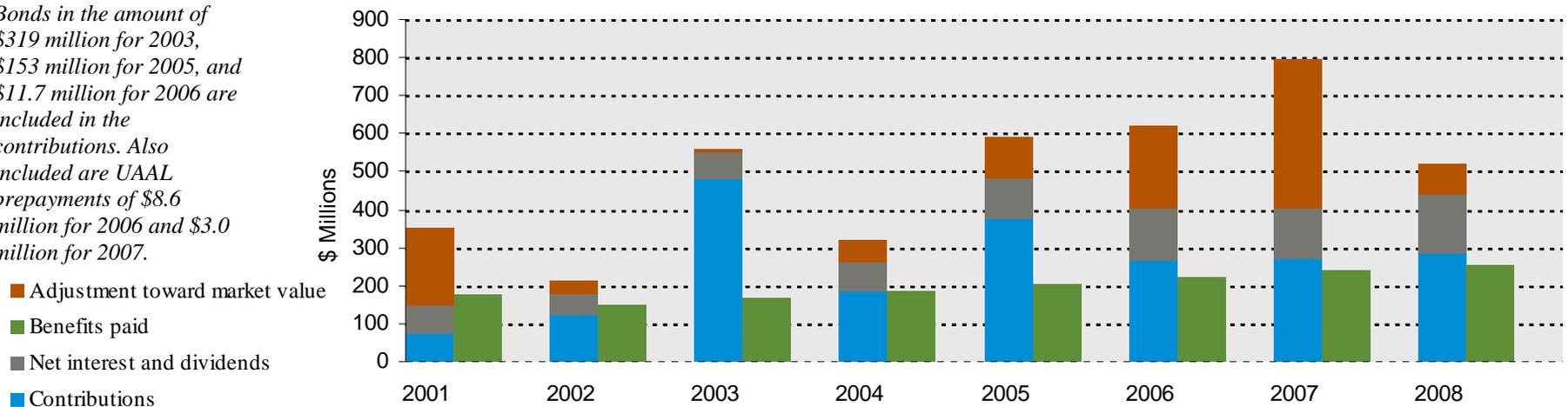
Retirement plan assets change as a result of the net impact of these income and expense components. The adjustment toward market value shown in the chart is the “non-cash” earnings on investment implicitly included in the Actuarial Value of Assets. Additional financial information, including a summary 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 eight 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 are UAAL prepayments of \$8.6 million for 2006 and \$3.0 million for 2007.

CHART 6
Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended December 31, 2001 - 2008



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, 2008

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

Six Month Period		Total Actual	Expected Market	Investment	Deferred	Deferred
From	To	Market Return (net)	Return (net)	Gain (Loss)	Factor	Return
7/2004	12/2004	\$325,616,709	\$135,588,114	\$190,028,594	0.1	\$19,002,859
1/2005	6/2005	95,562,086	148,852,732	(53,290,646)	0.2	(10,658,129)
7/2005	12/2005	228,037,754	156,484,262	71,553,492	0.3	21,466,048
1/2006	6/2006	166,440,802	167,088,121	(647,319)	0.4	(258,928)
7/2006	12/2006	436,850,889	174,623,395	262,227,494	0.5	131,113,747
1/2007	6/2007	260,000,409	192,710,429	67,289,979	0.6	40,373,988
7/2007	12/2007	35,143,730	203,536,876	(168,393,146)	0.7	(117,875,202)
1/2008	6/2008	(348,105,153)	205,702,885	(553,808,038)	0.8	(443,046,431)
7/2008	12/2008	(1,128,210,678)	189,989,366	(1,318,200,044)	0.9	<u>(1,186,380,040)</u>
1. Total Deferred Return ⁽¹⁾						\$ (1,546,262,088)
2. Market Value of Assets						3,749,698,812
3. Actuarial Value of Assets (Item 2 – Item 1)						5,295,960,900
4. Actuarial Value as Percentage of Market Value (Item 3 / Item 2)						141.2%
5. Non-valuation Reserves and Designations:						
a. Post Retirement Death Benefit						13,455,741
b. Statutory Contingency						0
c. Additional One Percent Contingency						0
d. Unrestricted Designation						0
e. Total						<u>\$13,455,741</u>
6. Valuation Value of Assets (Item 3 – Item 5e)						<u>\$5,282,505,159</u>

⁽¹⁾ *Deferred Return Recognized in each of the next 5 years:*

(a) Amount Recognized during 2009	\$ (319,650,786)
(b) Amount Recognized during 2010	(335,150,866)
(c) Amount Recognized during 2011	(368,399,499)
(d) Amount Recognized during 2012	(391,240,931)
(e) Amount Recognized during 2013	<u>(131,820,004)</u>
(f) Subtotal	\$ (1,546,262,088)

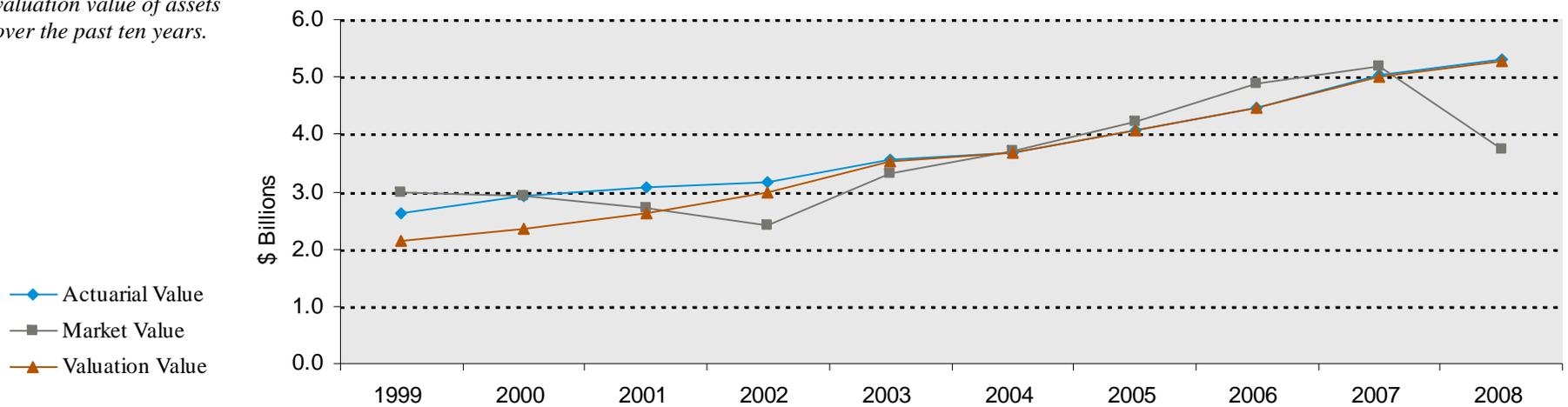
SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association

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 ten years.

CHART 8
Relative Values of Market Value, Actuarial Value and Valuation Value of Assets for Years Ended December 31, 1999 – 2008



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 loss is \$173.4 million, \$155.0 million loss from investments and \$18.4 million loss from all other sources. The net experience variation from individual sources other than investments was 0.3% 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, 2008

1. Net gain/(loss) from investments*	\$(154,986,214)
2. Net gain/(loss) from other experience**	<u>(18,458,059)</u>
3. Net experience gain/(loss): (1) + (2)	<u>\$(173,444,273)</u>

* Details in Chart 10

** See Section 3, Exhibit I. Does not include the effect of plan or assumption changes, if any.

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 2008 was 7.80%. The rate of return on Actuarial Value for the 2008 Plan Year was 4.73%.

Since the actual return for the year was less than the assumed return, the Plan experienced an actuarial loss on the Actuarial and Valuation Value of Assets during the year ended December 31, 2008.

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

CHART 10

Investment Experience for Year Ended December 31, 2008 – Valuation Value and Actuarial Value of Assets

	Valuation Value	Actuarial Value
1. Actual return	\$237,402,129	\$238,397,117
2. Average value of assets	5,030,619,783	5,043,419,786
3. Actual rate of return: (1) ÷ (2)	4.72%	4.73%
4. Assumed rate of return	7.80%	7.80%
5. Expected return: (2) x (4)	392,388,343	393,386,743
6. Actuarial gain/(loss): (1) – (5)	<u>\$(154,986,214)</u>	<u>\$(154,989,626)</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 eight years.

Based upon recommendations previously adopted by the Board, we have maintained the assumed rate of return of 7.80%.

CHART 11

Investment Return – Market Value, Actuarial Value, and Valuation Value: 2001 – 2008

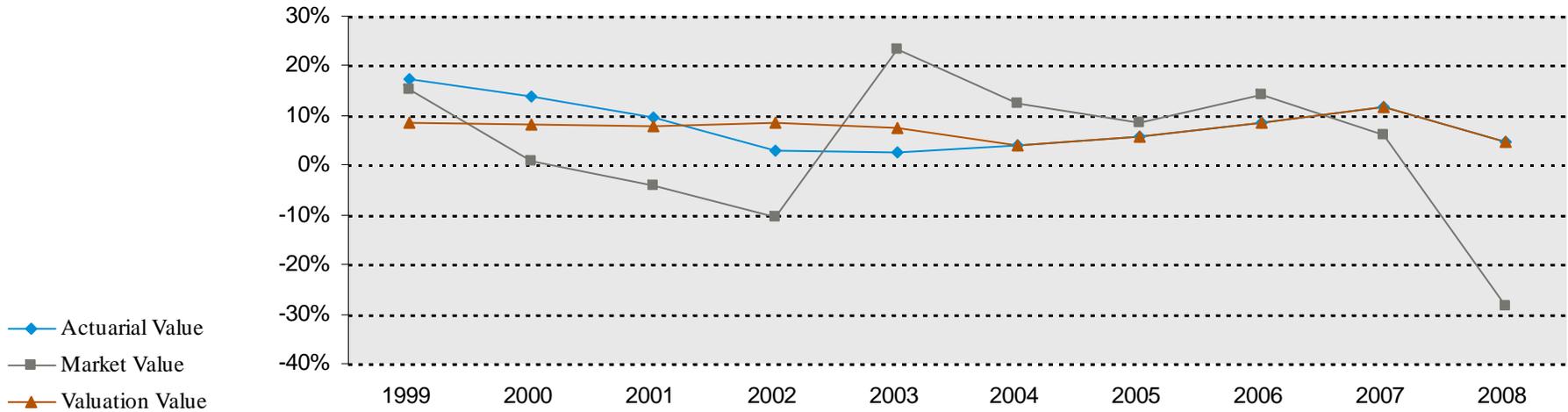
Year Ended December 31	Market Value Investment Return		Actuarial Value Investment Return		Valuation Value Investment Return	
	Amount	Percent of Assets	Amount	Percent of Assets	Amount	Percent of Assets
2001	\$(121,804,662)	(4.23%)	\$278,746,528	9.73%	\$186,188,249	7.92%
2002	(274,820,794)	(10.28%)	93,144,770	3.05%	227,080,187	8.53%
2003	599,528,120	23.44%	83,420,012	2.52%	244,215,190	7.41%
2004	406,427,237	12.27%	136,674,234	3.85%	135,741,405	3.84%
2005	331,400,271	8.71%	216,618,073	5.74%	215,737,484	5.74%
2006	603,899,378	14.23%	353,776,306	8.63%	352,838,472	8.64%
2007	294,694,885	6.03%	522,206,583	11.63%	521,211,436	11.64%
2008	(1,477,705,765)	(28.35%)	238,397,117	4.73%	237,402,129	4.72%
Total	\$361,618,670		\$1,922,983,623		\$2,120,414,552	
<i>Five-Year Average Return</i>		0.74%		7.00%		7.00%

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 - 2008



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 remaining balance of the December 31, 2007 UAAL is being amortized over a 14-year declining period as of December 31, 2008. Any change in the UAAL that arises at each valuation after December 31, 2007 is amortized over its own separate declining 18-year period.

The recommended employer contributions are provided on Charts 13 and 14. County contribution rates also include Superior Court.

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 up to 9% of compensation (depending 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. The outstanding balance of this UAAL as of December 31, 2008 was \$23,928,958 for Basic benefits and \$4,451,836 for COL benefits.

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. The outstanding balance of these adjustments as of December 31, 2008 is as follows:

	General	Safety
Basic	\$23,048,801	\$61,142,850
COL	\$18,497,065	\$56,696,707

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

- Adjustments are also made to the Contra Costa County Fire Protection District (CCCFPD) and Moraga-Orinda Fire District (Moraga) UAAL contribution rates to account for POBs and any other special contributions made in 2005, 2006 and 2007. The outstanding balance of these adjustments as of December 31, 2008 is as follows:

	CCCFPD		Moraga	
	General	Safety	General	Safety
Basic	\$4,514,188	\$71,478,437	\$438,537	\$15,798,651
COL	\$3,144,083	\$54,512,658	\$254,522	\$11,088,447

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, 2009 through June 30, 2010

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

	Non-enhanced				Enhanced			
	Districts				County			
	Normal Cost	+	UAAL	= Total	Normal Cost	+	UAAL	= Total
General Tier 1 (Aggregate)								
Basic	11.96%		7.28%	= 19.24%	12.33%		3.40%	= 15.73%
50% Subvention	3.62%		0.00%	= 3.62%	2.91%		0.00%	= 2.91%
Basic + 50% Subvention	15.58%		7.28%	= 22.86%	15.24%		3.40%	= 18.64%
COL	3.70%		5.82%	= 9.52%	3.78%		2.39%	= 6.17%
Total	19.28%		13.10%	= 32.38%	19.02%		5.79%	= 24.81%
General Tier 1 (Under \$350)								
Basic	8.19%		4.99%	= 13.18%	8.36%		2.31%	= 10.67%
50% Subvention	2.48%		0.00%	= 2.48%	1.97%		0.00%	= 1.97%
Basic + 50% Subvention	10.67%		4.99%	= 15.66%	10.33%		2.31%	= 12.64%
COL	2.53%		3.98%	= 6.51%	2.57%		1.62%	= 4.19%
Total	13.20%		8.97%	= 22.17%	12.90%		3.93%	= 16.83%
General Tier 1 (Over \$350)								
Basic	12.28%		7.48%	= 19.76%	12.54%		3.46%	= 16.00%
50% Subvention	3.72%		0.00%	= 3.72%	2.96%		0.00%	= 2.96%
Basic + 50% Subvention	16.00%		7.48%	= 23.48%	15.50%		3.46%	= 18.96%
COL	3.80%		5.97%	= 9.77%	3.85%		2.43%	= 6.28%
Total	19.80%		13.45%	= 33.25%	19.35%		5.89%	= 25.24%

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

CHART 13 (continued)
Components of Current Employer Contribution Rates
Employer Rates Under Current Assumptions for July 1, 2009 through June 30, 2010

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

	Enhanced				Enhanced			
	Districts without POB				Districts with POB (CCCFPD)			
	Normal Cost	+	UAAL	= Total	Normal Cost	+	UAAL	= Total
General Tier 1 (Aggregate)								
Basic	12.33%		7.65%	19.98%	12.33%		-1.66%	10.67%
50% Subvention	2.91%		0.00%	2.91%	2.91%		0.00%	2.91%
Basic + 50% Subvention	15.24%		7.65%	22.89%	15.24%		-1.66%	13.58%
COL	3.78%		6.08%	9.86%	3.78%		-0.40%	3.38%
Total	19.02%		13.73%	32.75%	19.02%		-2.06%	16.96%
General Tier 1 (Under \$350)								
Basic	8.37%		5.19%	13.56%	8.37%		-1.13%	7.24%
50% Subvention	1.98%		0.00%	1.98%	1.98%		0.00%	1.98%
Basic + 50% Subvention	10.35%		5.19%	15.54%	10.35%		-1.13%	9.22%
COL	2.56%		4.12%	6.68%	2.56%		-0.27%	2.29%
Total	12.91%		9.31%	22.22%	12.91%		-1.40%	11.51%
General Tier 1 (Over \$350)								
Basic	12.56%		7.78%	20.34%	12.56%		-1.69%	10.87%
50% Subvention	2.96%		0.00%	2.96%	2.96%		0.00%	2.96%
Basic + 50% Subvention	15.52%		7.78%	23.30%	15.52%		-1.69%	13.83%
COL	3.85%		6.18%	10.03%	3.85%		-0.41%	3.44%
Total	19.37%		13.96%	33.33%	19.37%		-2.10%	17.27%

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, 2009 through June 30, 2010

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

	Enhanced			Total
	Districts with POB (Moraga)			
	Normal Cost	+	UAAL	=
General Tier 1 (Aggregate)				
Basic	12.33%		-1.02%	11.31%
50% Subvention	2.91%		0.00%	2.91%
Basic + 50% Subvention	15.24%		-1.02%	14.22%
COL	3.78%		1.05%	4.83%
Total	19.02%		0.03%	19.05%
General Tier 1 (Under \$350)				
Basic	8.37%		-0.69%	7.68%
50% Subvention	1.98%		0.00%	1.98%
Basic + 50% Subvention	10.35%		-0.69%	9.66%
COL	2.56%		0.71%	3.27%
Total	12.91%		0.02%	12.93%
General Tier 1 (Over \$350)				
Basic	12.56%		-1.04%	11.52%
50% Subvention	2.96%		0.00%	2.96%
Basic + 50% Subvention	15.52%		-1.04%	14.48%
COL	3.85%		1.07%	4.92%
Total	19.37%		0.03%	19.40%

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, 2009 through June 30, 2010

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

	Non-enhanced				Enhanced			
	Districts				County			
	Normal Cost	+	UAAL	= Total	Normal Cost	+	UAAL	= Total
Safety Tier A								
Basic	13.91%		7.02%	20.93%	21.46%		7.09%	28.55%
0%/50% Subvention	0.00%		0.00%	0.00%	4.25%		0.00%	4.25%
Basic + 0%/50% Subvention	13.91%		7.02%	20.93%	25.71%		7.09%	32.80%
COL	4.30%		9.15%	13.45%	6.58%		5.68%	12.26%
Total	18.21%		16.17%	34.38%	32.29%		12.77%	45.06%

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, 2009 through June 30, 2010

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

	Enhanced				Enhanced			
	Districts without POB				Districts with POB (CCCFPD)			
	Normal Cost	+	UAAL	= Total	Normal Cost	+	UAAL	= Total
Safety Tier A								
Basic	21.46%		15.36%	36.82%	21.46%		-3.00%	18.46%
0% Subvention	0.00%		0.00%	0.00%	0.00%		0.00%	0.00%
Basic + 0% Subvention	21.46%		15.36%	36.82%	21.46%		-3.00%	18.46%
COL	6.58%		13.34%	19.92%	6.58%		-0.66%	5.92%
Total	28.04%		28.70%	56.74%	28.04%		-3.66%	24.38%
	Enhanced							
	Districts with POB (Moraga)							
	Normal Cost	+	UAAL	= Total				
Safety Tier A								
Basic	21.46%		-3.28%	18.18%				
0% Subvention	0.00%		0.00%	0.00%				
Basic + 0% Subvention	21.46%		-3.28%	18.18%				
COL	6.58%		0.26%	6.84%				
Total	28.04%		-3.02%	25.02%				

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, 2009 through June 30, 2010

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

	Enhanced County				Enhanced Districts without POB			
	Normal Cost	+	UAAL	= Total	Normal Cost	+	UAAL	= Total
General Tier 3 (Aggregate)								
Basic	10.86%		3.44%	= 14.30%	10.86%		8.11%	= 18.97%
50% Subvention	3.14%		0.00%	= 3.14%	3.14%		0.00%	= 3.14%
Basic + 50% Subvention	14.00%		3.44%	= 17.44%	14.00%		8.11%	= 22.11%
COL	3.14%		2.40%	= 5.54%	3.14%		6.17%	= 9.31%
Total	17.14%		5.84%	= 22.98%	17.14%		14.28%	= 31.42%
General Tier 3 (Under \$350)								
Basic	7.40%		2.35%	= 9.75%	7.40%		5.53%	= 12.93%
50% Subvention	2.14%		0.00%	= 2.14%	2.14%		0.00%	= 2.14%
Basic + 50% Subvention	9.54%		2.35%	= 11.89%	9.54%		5.53%	= 15.07%
COL	2.14%		1.63%	= 3.77%	2.14%		4.21%	= 6.35%
Total	11.68%		3.98%	= 15.66%	11.68%		9.74%	= 21.42%
General Tier 3 (Over \$350)								
Basic	11.10%		3.52%	= 14.62%	11.10%		8.30%	= 19.40%
50% Subvention	3.21%		0.00%	= 3.21%	3.21%		0.00%	= 3.21%
Basic + 50% Subvention	14.31%		3.52%	= 17.83%	14.31%		8.30%	= 22.61%
COL	3.21%		2.45%	= 5.66%	3.21%		6.31%	= 9.52%
Total	17.52%		5.97%	= 23.49%	17.52%		14.61%	= 32.13%

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

CHART 13 (continued)
Components of Current Employer Contribution Rates
Employer Rates Under Current Assumptions for July 1, 2009 through June 30, 2010

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

	Enhanced			
	County			
	Normal Cost	+	UAAL	= Total
Safety Tier C				
Basic	18.45%		7.09%	25.54%
50% Subvention	4.13%		0.00%	4.13%
Basic + 50% Subvention	22.58%		7.09%	29.67%
COL	3.54%		5.68%	9.22%
Total	26.12%		12.77%	38.89%

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

CHART 13 (continued)
Components of Recommended Employer Contribution Rates
Employer Rates Under Recommended Assumptions for July 1, 2009 through June 30, 2010

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

	Normal Cost	+	UAAL	=	Total
Basic	13.42%		4.10%		17.52%
50% Subvention*	2.96%		0.00%		2.96%
Basic + 50% Subvention*	16.38%		4.10%		20.48%
COL	3.98%		3.21%		7.19%
Total	20.36%		7.31%		27.67%

Payroll	Tier 1		Tier 3	Safety Tier A		Safety Tier C	Total
	<u>Non-Enhanced</u>	<u>Enhanced</u>	<u>Enhanced</u>	<u>Non-Enhanced</u>	<u>Enhanced</u>	<u>Enhanced</u>	
County	-	\$42,445,656	\$433,408,322	-	\$85,714,700	\$1,999,212	\$563,567,890
Districts without POB	\$5,833,289	29,665,797	2,812,602	\$2,126,935	21,220,598	-	61,659,221
Districts with POB (CCCFPD)	-	4,263,675	-	-	34,231,408	-	38,495,083
Districts with POB (Moraga)	-	444,766	-	-	7,450,972	-	7,895,738
Total	\$5,833,289	\$76,819,894	\$436,220,924	\$2,126,935	\$148,617,678	\$1,999,212	\$671,617,932

* 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, 2010 through June 30, 2011

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

	Non-enhanced				Enhanced			
	Districts				County			
	Normal Cost	+	UAAL	= Total	Normal Cost	+	UAAL	= Total
General Tier 1 (Aggregate)								
Basic	12.63%		7.85%	= 20.48%	12.46%		4.17%	= 16.63%
50% Subvention	3.71%		0.00%	= 3.71%	2.94%		0.00%	= 2.94%
Basic + 50% Subvention	16.34%		7.85%	= 24.19%	15.40%		4.17%	= 19.57%
COL	4.12%		6.04%	= 10.16%	3.81%		2.77%	= 6.58%
Total	20.46%		13.89%	= 34.35%	19.21%		6.94%	= 26.15%
General Tier 1 (Under \$350)								
Basic	8.63%		5.36%	= 13.99%	8.45%		2.83%	= 11.28%
50% Subvention	2.53%		0.00%	= 2.53%	1.99%		0.00%	= 1.99%
Basic + 50% Subvention	11.16%		5.36%	= 16.52%	10.44%		2.83%	= 13.27%
COL	2.82%		4.13%	= 6.95%	2.59%		1.88%	= 4.47%
Total	13.98%		9.49%	= 23.47%	13.03%		4.71%	= 17.74%
General Tier 1 (Over \$350)								
Basic	12.94%		8.04%	= 20.98%	12.67%		4.24%	= 16.91%
50% Subvention	3.80%		0.00%	= 3.80%	2.99%		0.00%	= 2.99%
Basic + 50% Subvention	16.74%		8.04%	= 24.78%	15.66%		4.24%	= 19.90%
COL	4.23%		6.19%	= 10.42%	3.88%		2.82%	= 6.70%
Total	20.97%		14.23%	= 35.20%	19.54%		7.06%	= 26.60%

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, 2010 through June 30, 2011

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

	Enhanced				Enhanced			
	Districts without POB				Districts with POB (CCCFPD)			
	Normal Cost	+	UAAL	= Total	Normal Cost	+	UAAL	= Total
General Tier 1 (Aggregate)								
Basic	12.46%		8.31%	20.77%	12.46%		-1.74%	10.72%
50% Subvention	2.94%		0.00%	2.94%	2.94%		0.00%	2.94%
Basic + 50% Subvention	15.40%		8.31%	23.71%	15.40%		-1.74%	13.66%
COL	3.81%		6.36%	10.17%	3.81%		-0.63%	3.18%
Total	19.21%		14.67%	33.88%	19.21%		-2.37%	16.84%
General Tier 1 (Under \$350)								
Basic	8.46%		5.63%	14.09%	8.46%		-1.18%	7.28%
50% Subvention	1.99%		0.00%	1.99%	1.99%		0.00%	1.99%
Basic + 50% Subvention	10.45%		5.63%	16.08%	10.45%		-1.18%	9.27%
COL	2.59%		4.32%	6.91%	2.59%		-0.43%	2.16%
Total	13.04%		9.95%	22.99%	13.04%		-1.61%	11.43%
General Tier 1 (Over \$350)								
Basic	12.69%		8.45%	21.14%	12.69%		-1.77%	10.92%
50% Subvention	2.99%		0.00%	2.99%	2.99%		0.00%	2.99%
Basic + 50% Subvention	15.68%		8.45%	24.13%	15.68%		-1.77%	13.91%
COL	3.88%		6.47%	10.35%	3.88%		-0.64%	3.24%
Total	19.56%		14.92%	34.48%	19.56%		-2.41%	17.15%

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, 2010 through June 30, 2011

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

	Enhanced			Total
	Districts with POB (Moraga)			
	Normal Cost	+	UAAL	=
General Tier 1 (Aggregate)				
Basic	12.46%		0.92%	13.38%
50% Subvention	2.94%		0.00%	2.94%
Basic + 50% Subvention	15.40%		0.92%	16.32%
COL	3.81%		2.08%	5.89%
Total	19.21%		3.00%	22.21%
General Tier 1 (Under \$350)				
Basic	8.46%		0.63%	9.09%
50% Subvention	1.99%		0.00%	1.99%
Basic + 50% Subvention	10.45%		0.63%	11.08%
COL	2.59%		1.41%	4.00%
Total	13.04%		2.04%	15.08%
General Tier 1 (Over \$350)				
Basic	12.69%		0.94%	13.63%
50% Subvention	2.99%		0.00%	2.99%
Basic + 50% Subvention	15.68%		0.94%	16.62%
COL	3.88%		2.12%	6.00%
Total	19.56%		3.06%	22.62%

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, 2010 through June 30, 2011

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

	Non-enhanced				Enhanced			
	Districts				County			
	Normal Cost	+	UAAL	= Total	Normal Cost	+	UAAL	= Total
Safety Tier A								
Basic	13.84%		8.94%	22.78%	21.43%		8.43%	29.86%
0%/50% Subvention	0.00%		0.00%	0.00%	4.24%		0.00%	4.24%
Basic + 0%/50% Subvention	13.84%		8.94%	22.78%	25.67%		8.43%	34.10%
COL	4.51%		10.12%	14.63%	6.55%		6.39%	12.94%
Total	18.35%		19.06%	37.41%	32.22%		14.82%	47.04%

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, 2010 through June 30, 2011

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

	Enhanced County				Enhanced Districts without POB			
	Normal Cost	+	UAAL	= Total	Normal Cost	+	UAAL	= Total
General Tier 3 (Aggregate)								
Basic	10.79%		4.21%	15.00%	10.79%		8.75%	19.54%
50% Subvention	3.14%		0.00%	3.14%	3.14%		0.00%	3.14%
Basic + 50% Subvention	13.93%		4.21%	18.14%	13.93%		8.75%	22.68%
COL	3.12%		2.78%	5.90%	3.12%		6.44%	9.56%
Total	17.05%		6.99%	24.04%	17.05%		15.19%	32.24%
General Tier 3 (Under \$350)								
Basic	7.35%		2.87%	10.22%	7.35%		5.96%	13.31%
50% Subvention	2.14%		0.00%	2.14%	2.14%		0.00%	2.14%
Basic + 50% Subvention	9.49%		2.87%	12.36%	9.49%		5.96%	15.45%
COL	2.12%		1.89%	4.01%	2.12%		4.39%	6.51%
Total	11.61%		4.76%	16.37%	11.61%		10.35%	21.96%
General Tier 3 (Over \$350)								
Basic	11.02%		4.30%	15.32%	11.02%		8.94%	19.96%
50% Subvention	3.21%		0.00%	3.21%	3.21%		0.00%	3.21%
Basic + 50% Subvention	14.23%		4.30%	18.53%	14.23%		8.94%	23.17%
COL	3.18%		2.84%	6.02%	3.18%		6.58%	9.76%
Total	17.41%		7.14%	24.55%	17.41%		15.52%	32.93%

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, 2010 through June 30, 2011

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

	Enhanced			
	County			
	Normal Cost	+	UAAL	= Total
Safety Tier C				
Basic	18.39%		8.43%	26.82%
50% Subvention	4.13%		0.00%	4.13%
Basic + 50% Subvention	22.52%		8.43%	30.95%
COL	3.51%		6.39%	9.90%
Total	26.03%		14.82%	40.85%

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, 2010 through June 30, 2011

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

	Normal Cost	+	UAAL	=	Total
Basic	13.36%		5.01%		18.37%
50% Subvention*	2.95%		0.00%		2.95%
Basic + 50% Subvention*	16.31%		5.01%		21.32%
COL	3.96%		3.66%		7.62%
Total	20.27%		8.67%		28.94%

Payroll	Tier 1		Tier 3	Safety Tier A		Safety Tier C	Total
	<u>Non-Enhanced</u>	<u>Enhanced</u>	<u>Enhanced</u>	<u>Non-Enhanced</u>	<u>Enhanced</u>	<u>Enhanced</u>	
County	-	\$39,072,635	\$459,206,003	-	\$86,611,074	\$5,378,897	\$590,268,609
Districts without POB	\$697,059	37,831,830	2,939,894	\$2,264,882	23,745,559	-	67,479,224
Districts with POB (CCCFPD)	-	4,118,058	-	-	34,759,347	-	38,877,405
Districts with POB (Moraga)	-	544,185	-	-	7,778,245	-	8,322,430
Total	\$697,059	\$81,566,708	\$462,145,897	\$2,264,882	\$152,894,225	\$5,378,897	\$704,947,668

* 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, 2008 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, 2007 to December 31, 2008 Valuation

	Contribution Rate*	Estimated Annual Dollar Cost**
Recommended Average Employer Contribution Rate in December 31, 2007 Valuation	24.71%	\$165,936,726
Effect of investment (gain)/loss ⁽¹⁾	1.67%	11,772,626
Effect of difference in actual versus expected contributions due to delay in implementation of contribution rates calculated in 12/31/2007 valuation	(0.44%)	(3,101,770)
Effect of actual versus expected salary increase including total payroll growth ⁽²⁾	(0.10%)	(704,948)
Effect of change in amortization methodology ⁽³⁾	(0.29%)	(2,044,348)
Effect of plan change ⁽⁴⁾	0.04%	281,979
Effect of net other changes ⁽⁵⁾	<u>0.40%</u>	<u>11,043,623</u>
Total change	<u>1.28%</u>	<u>\$17,247,162</u>
Recommended Average Employer Contribution Rate in December 31, 2008 Valuation	25.99%	\$183,183,888

* 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 4.72% was less than the 7.80% assumed in the valuation.

(2) This item represents the net impact of lower than expected individual salary increases and total payroll growth. Higher individual salary increases increase cost while higher total payroll growth decreases the UAAL contribution rate, since the remaining UAAL is amortized over a larger payroll.

(3) The 2008 change in UAAL is amortized over an 18-year period while the remaining balance of any previous UAAL continues to be amortized over a schedule with 14 years remaining as of December 31, 2008.

(4) The Housing Authority adopted enhanced benefits.

(5) Other differences in actual versus expected experience including (but not limited to) mortality, disability, withdrawal, retirement and terminal pay 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, 2008 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, 2007 to December 31, 2008 Valuation**

	Contribution Rate*	Estimated Annual Dollar Cost**
Recommended Average Member Contribution Rate in December 31, 2007 Valuation	10.66%	\$71,570,111
Effect of other experience (gains)/losses ⁽¹⁾	<u>(0.04%)</u>	<u>3,307,229</u>
Total change	<u>(0.04%)</u>	<u>\$3,307,229</u>
Recommended Average Member Contribution Rate in December 31, 2008 Valuation	10.62%	\$74,877,340

* 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⁾ 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 requirements. High ratios indicate a well-funded plan with assets sufficient to cover the Plan's liabilities. 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

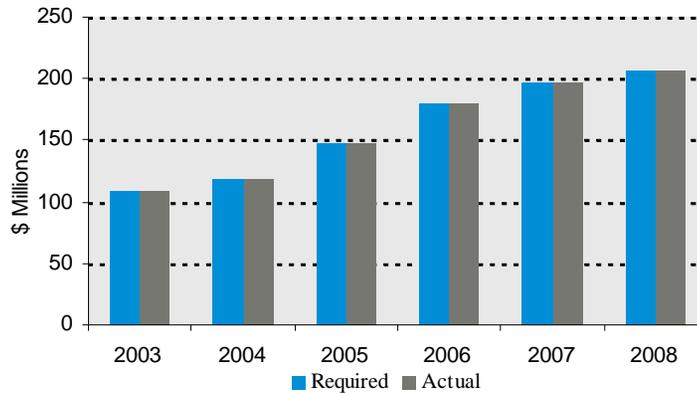
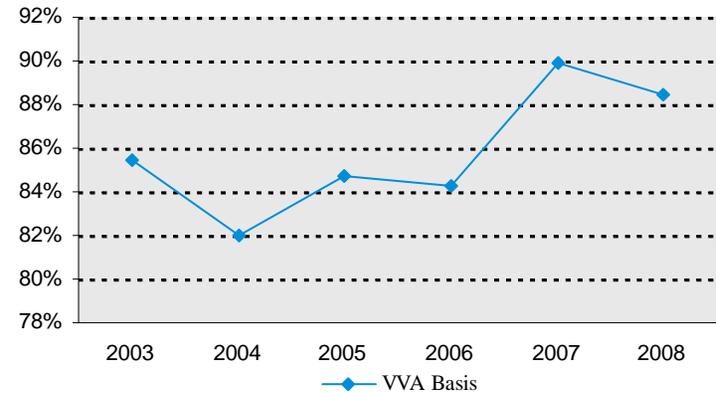


CHART 18
Funded Ratio



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
	2008	2007	
Active members in valuation			
Number	995	1,040	-4.3%
Average age	50.0	49.9	N/A
Average service	17.6	17.6	N/A
Projected total compensation ⁽¹⁾	\$82,263,766	\$82,653,183	-0.5%
Projected average compensation	\$82,677	\$79,474	4.0%
Account balances	\$76,109,619	\$75,259,255	1.1%
Total active vested members	854	898	-4.9%
Vested terminated members⁽²⁾	317	305	3.9%
Retired members			
Number in pay status	2,658	2,698	-1.5%
Average age	73.7	73.3	N/A
Average monthly benefit ⁽³⁾	\$3,059	\$2,908	5.2%
Disabled members			
Number in pay status	343	357	-3.9%
Average age	67.2	66.7	N/A
Average monthly benefit ⁽³⁾	\$2,315	\$2,241	3.3%
Beneficiaries			
Number in pay status	723	726	-0.4%
Average age	75.0	74.7	N/A
Average monthly benefit ⁽³⁾	\$1,724	\$1,645	4.8%

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

⁽²⁾ Includes nonvested terminated members.

⁽³⁾ Includes adjustment to reflect COLA that is paid for a partial year starting with the April 1 following the valuation date.

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
	2008	2007	
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⁾	306	332	-7.8%
Retired members			
Number in pay status	441	435	1.4%
Average age	70.2	69.5	N/A
Average monthly benefit ⁽⁴⁾	\$840	\$800	5.0%
Disabled members			
Number in pay status	61	61	0.0%
Average age	65.6	64.6	N/A
Average monthly benefit ⁽⁴⁾	\$1,872	\$1,796	4.2%
Beneficiaries			
Number in pay status	78	77	1.3%
Average age	59.9	58.9	N/A
Average monthly benefit ⁽⁴⁾	\$871	\$846	3.0%

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

⁽²⁾ Includes nonvested terminated members.

⁽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.

⁽⁴⁾ Includes adjustment to reflect COLA that is paid for a partial year starting with the April 1 following the valuation date.

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
	2008	2007	
Active members in valuation			
Number	6,786	6,766	0.3%
Average age	46.4	46.1	N/A
Average service	9.2	8.8	N/A
Projected total compensation ⁽¹⁾	\$462,145,897	\$436,220,924	5.9%
Projected average compensation	\$68,103	\$64,472	5.6%
Account balances	\$253,989,338	\$215,184,080	18.0%
Total active vested members	4,405	4,373	0.7%
Vested terminated members⁽²⁾	1,215	1,074	13.1%
Retired members			
Number in pay status	983	872	12.7%
Average age	64.2	63.5	N/A
Average monthly benefit ⁽³⁾	\$2,030	\$1,884	7.7%
Disabled members			
Number in pay status	62	59	5.1%
Average age	60.0	58.9	N/A
Average monthly benefit ⁽³⁾	\$2,111	\$1,992	6.0%
Beneficiaries			
Number in pay status	52	50	4.0%
Average age	52.0	50.5	N/A
Average monthly benefit ⁽³⁾	\$1,260	\$1,247	1.0%

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

⁽²⁾ Includes nonvested terminated members.

⁽³⁾ Includes adjustment to reflect COLA that is paid for a partial year starting with the April 1 following the valuation date.

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
	2008	2007	
Active members in valuation			
Number	1,604	1,615	-0.7%
Average age	40.9	40.6	N/A
Average service	11.7	11.4	N/A
Projected total compensation ⁽¹⁾	\$160,538,005	\$152,743,825	5.1%
Projected average compensation	\$100,086	\$94,578	5.8%
Account balances ⁽²⁾	\$224,167,912	\$155,840,378	43.8%
Total active vested members	1,221	1,219	0.2%
Vested terminated members⁽³⁾	315	297	6.1%
Retired members			
Number in pay status	898	868	3.5%
Average age	65.4	65.2	N/A
Average monthly benefit ⁽⁴⁾	\$6,418	\$6,236	2.9%
Disabled members			
Number in pay status	456	446	2.2%
Average age	59.9	59.5	N/A
Average monthly benefit ⁽⁴⁾	\$4,690	\$4,554	3.0%
Beneficiaries			
Number in pay status	257	262	-1.9%
Average age	67.0	67.3	N/A
Average monthly benefit ⁽⁴⁾	\$2,886	\$2,720	6.1%

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

⁽²⁾ Starting in 2008, includes employer contributions subvented by the member.

⁽³⁾ Includes nonvested terminated members.

⁽⁴⁾ Includes adjustment to reflect COLA that is paid for a partial year starting with the April 1 following the valuation date.

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, 2008
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 \$42,014	1 \$42,014	--	--	--	--	--	--	--	--
25 - 29	--	--	--	--	--	--	--	--	--	--
30 - 34	--	--	--	--	--	--	--	--	--	--
35 - 39	2 81,690	1 48,715	1 \$114,666	--	--	--	--	--	--	--
40 - 44	2 60,703	--	1 78,646	1 \$42,760	--	--	--	--	--	--
45 - 49	1 57,924	1 57,924	--	--	--	--	--	--	--	--
50 - 54	1 54,245	--	1 54,245	--	--	--	--	--	--	--
55 - 59	3 52,005	1 27,167	--	--	--	--	1 \$62,692	1 \$66,155	--	--
60 - 64	2 51,038	1 41,282	--	--	1 \$60,795	--	--	--	--	--
65 & over	--	--	--	--	--	--	--	--	--	--
Total	12 \$58,088	5 \$43,420	3 \$82,519	1 \$42,760	1 \$60,795	--	1 \$62,692	1 \$66,155	--	--

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, 2008

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	--	--	--	--	--	--	--	--	--
	\$60,515	\$60,515	--	--	--	--	--	--	--	--	--
25 - 29	33	27	6	--	--	--	--	--	--	--	--
	57,739	55,721	\$66,820	--	--	--	--	--	--	--	--
30 - 34	48	18	28	2	--	--	--	--	--	--	--
	68,564	58,739	74,452	\$74,550	--	--	--	--	--	--	--
35 - 39	67	21	32	13	1	--	--	--	--	--	--
	76,000	62,777	84,434	73,834	\$111,914	--	--	--	--	--	--
40 - 44	110	21	50	18	17	4	--	--	--	--	--
	83,550	81,599	84,401	82,696	82,774	\$90,309	--	--	--	--	--
45 - 49	136	27	41	25	22	15	6	--	--	--	--
	80,888	61,073	83,026	83,890	92,625	97,376	\$58,670	--	--	--	--
50 - 54	237	21	50	26	30	31	36	41	2	--	--
	86,625	78,193	89,645	83,639	94,294	94,483	89,779	\$75,656	\$69,731	--	--
55 - 59	248	16	42	25	22	17	38	64	24	--	--
	86,279	84,254	87,114	80,152	94,527	93,567	96,772	81,250	76,623	--	--
60 - 64	84	4	12	10	8	9	11	14	14	2	--
	88,531	58,696	84,991	86,355	70,687	98,807	85,479	114,849	84,964	\$62,971	--
65 & over	15	1	1	4	1	1	1	3	3	--	--
	94,707	41,904	77,584	90,173	70,447	137,259	70,473	76,965	143,784	--	--
Total	983	161	262	123	101	77	92	122	43	2	--
	\$82,977	\$67,155	\$84,161	\$82,093	\$90,111	\$95,689	\$89,915	\$83,120	\$83,704	\$62,971	--

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, 2008
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	35-39	40 & over
Under 25	65	65	--	--	--	--	--	--	--	--
	\$40,425	\$40,425	--	--	--	--	--	--	--	--
25 - 29	469	412	57	--	--	--	--	--	--	--
	52,931	52,514	\$55,941	--	--	--	--	--	--	--
30 - 34	687	448	208	31	--	--	--	--	--	--
	62,111	60,906	64,288	\$64,921	--	--	--	--	--	--
35 - 39	768	364	270	118	14	2	--	--	--	--
	66,450	60,305	71,113	75,782	\$57,544	\$67,048	--	--	--	--
40 - 44	960	324	317	186	102	30	1	--	--	--
	68,836	59,732	70,730	73,814	81,285	74,270	\$59,744	--	--	--
45 - 49	1080	283	295	201	159	94	48	--	--	--
	71,016	61,910	67,407	73,921	81,793	87,762	66,237	--	--	--
50 - 54	1101	261	299	172	160	129	71	8	1	--
	72,133	59,243	67,621	70,736	78,936	93,747	84,543	\$97,294	\$66,361	--
55 - 59	928	198	231	174	146	105	59	13	2	--
	71,479	63,211	66,081	71,260	77,493	81,436	80,082	106,820	87,120	--
60 - 64	543	77	148	111	79	75	40	8	5	--
	72,921	58,776	65,064	73,830	72,350	82,051	92,836	134,664	117,109	--
65 - 69	154	28	60	19	26	13	3	3	1	1
	69,384	61,610	68,145	79,019	76,209	61,598	54,551	89,500	67,621	\$88,098
70 & over	31	2	7	4	14	3	1	--	--	--
	70,259	75,107	60,796	62,986	79,459	52,428	80,599	--	--	--
Total	6,786	2,462	1,892	1,016	700	451	223	32	9	1
	\$68,103	\$58,795	\$67,492	\$72,890	\$78,364	\$85,073	\$80,378	\$109,776	\$99,308	\$88,098

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, 2008
By Age and Years of Service**

iv. Safety Tier A Non-Enhanced

Age	Total	Years of Service						
		0-4	5-9	10-14	15-19	20-24	25-29	30 & over
Under 25	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
25 - 29	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
30 - 34	2	--	2	--	--	--	--	--
	\$102,342	--	\$102,342	--	--	--	--	--
35 - 39	2	--	2	--	--	--	--	--
	102,342	--	102,342	--	--	--	--	--
40 - 44	5	--	--	--	3	2	--	--
	107,198	--	--	--	\$107,135	\$107,292	--	--
45 - 49	4	--	--	--	1	1	2	--
	113,237	--	--	--	116,043	103,906	\$116,499	--
50 - 54	3	--	--	1	--	1	1	--
	107,022	--	--	\$102,681	--	102,342	116,043	--
55 - 59	4	--	1	--	--	1	2	--
	136,377	--	170,300	--	--	113,031	131,089	--
60 - 64	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
65 & over	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
Total	20	--	5	1	4	5	5	--
	\$113,244	--	\$115,934	\$102,681	\$109,362	\$106,773	\$122,244	--

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, 2008

By Age and Years of Service

v. Safety Tier A 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	23	23	--	--	--	--	--	--	--	--
	\$75,554	\$75,554	--	--	--	--	--	--	--	--
25 - 29	129	105	24	--	--	--	--	--	--	--
	84,558	81,724	\$96,957	--	--	--	--	--	--	--
30 - 34	230	82	141	7	--	--	--	--	--	--
	90,668	89,013	91,511	\$93,090	--	--	--	--	--	--
35 - 39	307	66	155	70	15	1	--	--	--	--
		90,295	95,954	99,711	\$114,223	\$179,748	--	--	--	--
40 - 44	309	35	82	77	73	40	2	--	--	--
	105,690	85,707	100,319	98,734	118,509	123,688	\$115,551	--	--	--
45 - 49	268	14	42	30	59	105	18	--	--	--
	113,503	114,077	96,920	98,116	115,947	120,653	127,676	--	--	--
50 - 54	150	14	19	18	17	35	40	7	--	--
	114,621	81,105	85,508	106,447	118,452	125,572	132,367	\$116,239	--	--
55 - 59	62	5	11	8	8	13	11	4	2	--
	109,666	84,922	112,729	96,685	118,737	116,583	105,923	126,981	\$111,321	--
60 - 64	17	--	5	3	2	2	5	--	--	--
	100,819	--	94,260	94,061	89,970	81,139	123,643	--	--	--
65 & over	12	1	3	7	--	1	--	--	--	--
	75,515	61602	72,333	78,946	--	74,957	--	--	--	--
Total	1,507	345	482	220	174	197	76	11	2	--
	\$101,456	\$86,365	\$95,337	\$98,644	\$116,948	\$121,542	\$126,412	\$120,145	\$111,321	--

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, 2008
By Age and Years of Service**

vi. Safety Tier C 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	15 \$69,460	15 \$69,460	--	--	--	--	--	--	--	--
25 - 29	24 67,881	24 67,881	--	--	--	--	--	--	--	--
30 - 34	17 72,987	17 72,987	--	--	--	--	--	--	--	--
35 - 39	12 63,805	12 63,805	--	--	--	--	--	--	--	--
40 - 44	5 72,279	5 72,279	--	--	--	--	--	--	--	--
45 - 49	1 86,867	1 86,867	--	--	--	--	--	--	--	--
50 - 54	3 84,389	3 84,389	--	--	--	--	--	--	--	--
55 - 59	--	--	--	--	--	--	--	--	--	--
60 - 64	--	--	--	--	--	--	--	--	--	--
65 & over	--	--	--	--	--	--	--	--	--	--
Total	77 \$69,856	77 \$69,856	--	--	--	--	--	--	--	--

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, 2008

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	2	--	--	2	--	--	--	--	--	--
	\$360	--	--	\$360	--	--	--	--	--	--
25 - 29	2	--	--	2	--	--	--	--	--	--
	744	--	--	744	--	--	--	--	--	--
30 - 34	5	--	--	3	1	--	1	--	--	--
	636	--	--	512	\$845	--	\$799	--	--	--
35 - 39	4	1	--	2	1	--	--	--	--	--
	1155	\$2,022	--	874	851	--	--	--	--	--
40 - 44	9	1	2	3	3	--	--	--	--	--
	908	1374	\$881	658	1021	--	--	--	--	--
45 - 49	21	6	4	6	3	2	--	--	--	--
	1,327	1,457	1,396	1,463	1,062	\$785	--	--	--	--
50 - 54	75	42	13	8	6	3	2	--	1	--
	1,924	2,053	1,938	1,886	1,701	1,375	1,563	--	\$313	--
55 - 59	277	155	80	14	15	4	5	1	3	--
	2,909	3,606	2,041	2,411	2,156	1,979	1,387	\$313	744	--
60 - 64	553	224	192	83	18	16	10	9	1	--
	3,539	4,781	3,303	1,819	2,121	2,333	1,284	1,271	1528	--
65 - 69	545	95	200	128	74	25	17	4	2	--
	3,314	4,510	4,158	2,566	1,715	1,661	2,286	1,740	1613	--
70 - 74	535	15	112	181	110	90	18	4	3	2
	3,037	4,191	4,337	3,528	2,343	1,448	2,087	1,404	1,198	\$1,515
75 - 80	555	3	21	109	186	135	70	21	3	7
	2,468	6,326	2,568	3,446	2,895	1,783	1,235	1,828	1,605	1,742
80 - 84	525	4	2	15	136	175	120	65	6	2
	2,270	4,826	2,175	3,577	2,775	2,464	1,584	1,559	1,382	3,056
85 - 89	426	--	6	4	22	108	166	97	19	4
	2,111	--	1,728	2,602	2,121	2,387	2,135	1,957	1,292	1286
90 & over	190	--	--	--	3	6	69	63	41	8
	1,717	--	--	--	1,202	1,274	1,687	2,051	1,490	1,027
Total	3,724	546	632	560	578	564	478	264	79	23
	\$2,731	\$4,135	\$3,506	\$2,897	\$2,490	\$2,057	\$1,773	\$1,830	\$1,388	\$1,509

Note: Total retired benefit \$10,170,848, average age 73.4 and average years retired 16.6.

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

ii. General Tier 2 as of December 31, 2008

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	1	1	--	--	--	--	--	--	--	--
	\$112	\$112	--	--	--	--	--	--	--	--
25 - 29	2	--	1	1	--	--	--	--	--	--
	695	--	\$933	\$456	--	--	--	--	--	--
30 - 34	4	--	--	2	2	--	--	--	--	--
	786	--	--	611	\$962	--	--	--	--	--
35 - 39	10	--	2	5	3	--	--	--	--	--
	840	--	650	955	773	--	--	--	--	--
40 - 44	4	1	--	1	2	--	--	--	--	--
	1,101	541	--	1,799	1,032	--	--	--	--	--
45 - 49	2	--	--	2	--	--	--	--	--	--
	2,116	--	--	2116	--	--	--	--	--	--
50 - 54	22	13	2	5	2	--	--	--	--	--
	929	746	1,092	1217	1,233	--	--	--	--	--
55 - 59	45	19	19	6	1	--	--	--	--	--
	862	830	670	1,387	1,971	--	--	--	--	--
60 - 64	105	25	31	40	6	3	--	--	--	--
	916	946	794	880	1,477	\$1,278	--	--	--	--
65 - 69	110	19	34	46	11	--	--	--	--	--
	899	760	930	937	879	--	--	--	--	--
70 - 74	125	4	40	59	17	5	--	--	--	--
	1021	1064	1,014	1,048	925	1,062	--	--	--	--
75 - 80	91	--	11	43	29	5	3	--	--	--
	1074	--	951	1,037	1,288	662	\$669	--	--	--
80 - 84	47	--	4	19	20	3	1	--	--	--
	855	--	802	934	797	942	462	--	--	--
85 - 89	10	--	--	3	7	--	--	--	--	--
	1056	--	--	463	1,311	--	--	--	--	--
90 & over	2	--	--	--	1	1	--	--	--	--
	163	--	--	--	87	238	--	--	--	--
Total	580	82	144	232	101	17	4	--	--	--
	\$952	\$835	\$886	\$995	\$1,065	\$913	\$617	--	--	--

Note: Total retired benefit \$552,365, average age 68.3 and average years retired 11.0.

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

EXHIBIT C (continued)

Average Monthly Benefit and Membership Distribution of Retired Members and Beneficiaries

iii. General Tier 3 as of December 31, 2008

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	2	1	--	--	--	--	--	--
	\$1,255	\$1,190	\$1,590	\$649	--	--	--	--	--	--
25 - 29	3	3	--	--	--	--	--	--	--	--
	522	522	--	--	--	--	--	--	--	--
30 - 34	2	2	--	--	--	--	--	--	--	--
	982	982	--	--	--	--	--	--	--	--
35 - 39	4	1	3	--	--	--	--	--	--	--
	840	459	966	--	--	--	--	--	--	--
40 - 44	8	6	2	--	--	--	--	--	--	--
	1,696	1,942	956	--	--	--	--	--	--	--
45 - 49	5	2	3	--	--	--	--	--	--	--
	2,080	2,319	1,921	--	--	--	--	--	--	--
50 - 54	77	64	13	--	--	--	--	--	--	--
	1,614	1,539	1,982	--	--	--	--	--	--	--
55 - 59	208	168	40	--	--	--	--	--	--	--
	1,914	2,092	1,166	--	--	--	--	--	--	--
60 - 64	305	231	74	--	--	--	--	--	--	--
	2,416	2,718	1,470	--	--	--	--	--	--	--
65 - 69	313	216	93	1	2	1	--	--	--	--
	2,081	2,310	1,579	1,658	\$1,479	\$1,035	--	--	--	--
70 - 74	138	60	78	--	--	--	--	--	--	--
	1,430	1,558	1,332	--	--	--	--	--	--	--
75 - 80	23	10	13	--	--	--	--	--	--	--
	1,438	1,538	1,361	--	--	--	--	--	--	--
80 - 84	7	4	3	--	--	--	--	--	--	--
	2,096	2,774	1,192	--	--	--	--	--	--	--
85 - 89	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
90 & over	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
Total	1,097	768	324	2	2	1	--	--	--	--
	\$1,998	\$2,237	\$1,441	\$1,154	\$1,479	\$1,035	--	--	--	--

Note: Total retired benefit \$2,191,484, average age 63.4 and average years retired 4.0.

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

EXHIBIT C (continued)

Average Monthly Benefit and Membership Distribution of Retired Members and Beneficiaries

iv. Safety as of December 31, 2008

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	4	--	--	--	--	--	--	--	--
	\$1,068	\$1,068	--	--	--	--	--	--	--	--
25 - 29	2	--	--	--	2	--	--	--	--	--
	1020	--	--	--	\$1,020	--	--	--	--	--
30 - 34	6	5	--	--	1	--	--	--	--	--
	3,490	4,038	--	--	751	--	--	--	--	--
35 - 39	21	12	8	--	1	--	--	--	--	--
	3,420	4,011	\$2,867	--	751	--	--	--	--	--
40 - 44	26	10	10	4	2	--	--	--	--	--
	3,670	4,433	3,628	\$3,276	853	--	--	--	--	--
45 - 49	69	27	23	14	5	--	--	--	--	--
	3,366	3,384	3,328	3,448	3,212	--	--	--	--	--
50 - 54	158	114	22	10	9	3	--	--	--	--
	6,046	7,147	3,516	2,755	2,903	\$3,164	--	--	--	--
55 - 59	269	138	77	28	14	10	--	1	1	--
	6,312	7,709	6,261	2,737	3,168	2,692	--	\$3,004	\$1,139	--
60 - 64	378	82	182	52	26	17	13	5	1	--
	5,831	7,001	6,977	3,523	3,200	2,423	\$2,711	2,941	2,809	--
65 - 69	241	14	71	79	49	15	5	6	1	1
	5,691	3,677	6,569	6,976	4,561	2,581	2,849	3,538	2,117	\$2,702
70 - 74	167	3	12	35	65	31	15	4	2	--
	5,057	1,597	3,952	4,808	6,571	4,193	3,230	3,083	3,054	--
75 - 80	138	--	1	14	26	40	32	21	3	1
	4,352	--	8,133	4,619	5,408	4,788	3,781	3,133	2,414	1,563
80 - 84	79	--	--	--	2	10	31	25	4	7
	4,111	--	--	--	3,030	5,296	4,678	3,621	2,508	2,879
85 - 89	41	--	--	--	--	2	5	18	13	3
	4,378	--	--	--	--	3157	6,054	5,216	3,349	1,828
90 & over	12	--	--	--	--	--	--	3	5	4
	3,240	--	--	--	--	--	--	4,916	2,957	2,338
Total	1,611	409	406	236	202	128	101	83	30	16
	\$5,366	\$6,644	\$6,126	\$4,800	\$4,813	\$3,884	\$3,903	\$3,810	\$2,926	\$2,453

Note: Total retired benefit \$8,643,843, average age 64.1 and average years retired 12.8.

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

EXHIBIT D

Reconciliation of Member Data – December 31, 2007 to December 31, 2008

	Active Participants	Vested Former Participants⁽¹⁾	Pensioners	Disableds	Beneficiaries	Total
Number as of December 31, 2007	9,421	2,008	4,873	923	1,115	18,340
New participants	624	54	0	0	55	733
Terminations – with vested rights ⁽¹⁾	-289	289	0	0	0	0
Contributions Refunds	-176	-126	0	0	0	-302
Retirements	-195	-44	239	0	0	0
New disabilities	-15	-1	-4	20	0	0
Return to work	27	-25	-2	0	0	0
Died with or without beneficiary	-12	-2	-133	-21	-60	-228
Data adjustments	<u>0</u>	<u>0</u>	<u>7</u>	<u>0</u>	<u>0</u>	<u>7</u>
Number as of December 31, 2008	9,385	2,153	4,980	922	1,110	18,550

⁽¹⁾ Includes 718 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, 2008	Year Ended December 31, 2007
Contribution income:		
Employer contributions	\$206,518,693	\$196,929,570
Employee contributions	<u>76,452,406</u>	<u>75,590,807</u>
Net contribution income	\$282,971,099	\$272,520,377
Investment income:		
Interest, dividends and other income	\$186,863,002	\$162,829,132
Adjustment toward market value ⁽¹⁾	84,077,140	391,640,836
Less investment and administrative fees	<u>(32,543,025)</u>	<u>(32,263,385)</u>
Net investment income	<u>238,397,117</u>	<u>522,206,583</u>
Total income available for benefits	\$521,368,216	\$794,726,960
Less benefit payments:		
Benefits paid	\$(250,444,562)	\$(235,656,024)
Refunds of contributions	(3,730,320)	(3,113,234)
Adjustments/transfers	<u>(508,222)</u>	<u>(339,053)</u>
Net benefit payments	\$(254,683,104)	\$(239,108,311)
Change in reserve for future benefits	\$266,685,112	\$555,618,649

⁽¹⁾ Equals the "non-cash" earnings on investments implicitly included in the Actuarial Value of Assets.

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

EXHIBIT F

Summary Statement of Assets

	Year Ended December 31, 2008	Year Ended December 31, 2007
Cash equivalents	\$449,131,950	\$641,310,134
Accounts receivable:		
Investment trades	\$361,930,772	\$418,536,394
Investment income	19,313,653	16,697,511
Employee and employer contributions	7,619,110	8,195,756
Additional contributions ⁽¹⁾	<u>24,940,611</u>	<u>26,366,059</u>
Total accounts receivable	413,804,146	469,795,720
Investments:		
Stocks	\$1,584,443,392	\$2,622,477,662
Bonds	1,569,704,942	1,997,853,713
Real estate	372,959,638	449,530,954
Alternative investments	<u>218,175,131</u>	<u>189,479,124</u>
Total investments at market value	<u>3,745,283,103</u>	<u>5,259,341,453</u>
Total assets	\$4,608,219,199	\$6,370,447,307
Less accounts payable:		
Investment trades	\$(481,267,131)	\$(649,189,678)
Security lending	(280,747,586)	(420,834,135)
Employer contributions unearned	(87,327,991)	(88,171,861)
Other	<u>(9,177,679)</u>	<u>(13,135,051)</u>
Total accounts payable	\$(858,520,387)	\$(1,171,330,725)
Net assets at market value	<u>\$3,749,698,812</u>	<u>\$5,199,116,582</u>
Net assets at actuarial value	<u>\$5,295,960,900</u>	<u>\$5,029,275,788</u>
Net assets at valuation value	<u>\$5,282,505,159</u>	<u>\$5,016,136,535</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 the Plan's funding is given by an Actuarial Balance Sheet. In this approach, we first determine the amount and timing of all future payments that are projected/anticipated to be made by the Plan for current participants. We then discount these payments at the valuation interest rate to the date of the valuation, thereby determining their present value. We refer to this present value as the "liability" of the Plan.

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

	Basic	COLA	Total
Assets			
1. Total valuation value of assets	\$3,467,284,363	\$1,815,220,796	\$5,282,505,159
2. Present value of future contributions by members	369,938,065	207,935,513	577,873,578
3. Present value of future employer contributions for:			
(a) entry age normal cost	722,878,504	212,987,462	935,865,966
(b) unfunded actuarial accrued liability	400,272,284	289,693,631	689,965,915
4. Total actuarial assets	\$4,960,373,216	\$2,525,837,402	\$7,486,210,618
Liabilities			
5. Present value of retirement allowances payable to present retired members	\$1,901,777,971	\$1,337,814,795	\$3,239,592,766
6. Present value of retirement allowances to be granted in the future	3,058,595,245	1,188,022,607	4,246,617,852
7. Total present value of benefits	\$4,960,373,216	\$2,525,837,402	\$7,486,210,618

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

EXHIBIT H

Summary of Total Allocated Reserves

Reserves	December 31, 2008	December 31, 2007
Member Deposits ⁽¹⁾	\$450,683,276	\$402,308,679
Member Cost of Living ⁽¹⁾	183,722,077	150,321,127
Employer Advance ⁽¹⁾	1,420,881,191	1,255,462,859
Employer Cost of Living ⁽¹⁾	941,378,185	853,911,376
Retired Members ⁽¹⁾	1,624,797,602	1,580,626,451
Retired Cost of Living ⁽¹⁾	686,649,902	652,971,328
Smoothed Market Value Valuation ⁽¹⁾	198,874,477	184,150,047
Dollar Power Cost of Living Supplement Pre-Funding ⁽¹⁾	20,191,143	22,895,560
Post Retirement Death Benefit ⁽²⁾	13,455,741	13,139,253
Statutory Contingency (one percent) ⁽²⁾	0	0
Additional One Percent Contingency Designation ⁽²⁾	0	0
Contra Tracking Account ⁽¹⁾	(244,672,694)	(86,510,892)
Total Allocated Reserves	\$5,295,960,900	\$5,029,275,788
Market Stabilization Account	(1,546,262,088)	169,840,794
Net Market Value	\$3,749,698,812	\$5,199,116,582

⁽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, 2008
1. Unfunded actuarial accrued liability at beginning of year	\$564,911,690
2. Gross Normal cost at middle of year	192,929,247
3. Actual employer and member contributions	(282,971,099)
4. Interest (whole year on (1) plus half year on (2) - (3))	<u>40,551,480</u>
5. Expected unfunded actuarial accrued liability at end of year	<u>\$515,421,318</u>
6. Actuarial (gain)/loss due to all changes:	
a. Investment return	\$154,986,214
b. Salary increases	5,838,027
c. Plan changes	1,100,324
d. Change in assumptions	0
e. Other experience (gain)/loss ⁽¹⁾	<u>12,620,032</u>
f. Total changes	<u>\$174,544,597</u>
7. Unfunded actuarial accrued liability at end of year	<u>\$689,965,915</u>

⁽¹⁾ *Other differences in actual versus expected experience including (but not limited to) mortality, disability, withdrawal, retirement and terminal pay experience.*

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

EXHIBIT J

Table of Amortization Bases

	Date Established	Initial Amount	Outstanding Balance	Years Remaining	Annual Payment**
General Non-enhanced	December 31, 2007	\$3,465,547	\$374,378	14	\$32,943
	December 31, 2008	113,943	<u>113,943</u>	18	<u>8,289</u>
Subtotal			\$488,321		\$41,232
General Enhanced	December 31, 2007	\$341,888,341	\$340,867,571	14	\$29,994,095
	December 31, 2008	85,749,497	<u>85,749,497</u>	18	<u>6,237,893</u>
Subtotal			\$426,617,068		\$36,231,988
Safety Non-enhanced	December 31, 2007	\$59,712	\$59,001	14	\$5,192
	December 31, 2008	918,762	<u>918,762</u>	18	<u>66,836</u>
Subtotal			\$977,763		\$72,028
Safety Enhanced	December 31, 2007	\$221,364,412	\$218,728,747	14	\$19,246,686
	December 31, 2008	44,998,116	<u>44,998,116</u>	18	<u>3,273,412</u>
Subtotal			\$263,726,863		\$22,520,098
Special Adjustments*	December 31, 2007	-\$1,866,322	<u>-\$1,844,100</u>	14	<u>-\$162,269</u>
Subtotal			-\$1,844,100		-\$162,269
Grand Total			\$689,965,915		\$58,703,077

* Includes remaining balance of UAAL attributable to Districts who did not issue Pension Obligation Bonds (POBs) when POBs were issued by the County. Also includes remaining balance of POBs and any other special contributions made by the Contra Costa County Fire Protection District and Moraga-Orinda Fire District.

** As of beginning of year.

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

EXHIBIT K

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 \$195,000 for 2009. 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 L

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.

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
2003	\$108,728,047	\$108,728,047 ⁽¹⁾	100.0%
2004	118,245,418	118,245,418	100.0%
2005	147,165,108	147,165,108 ⁽²⁾	100.0%
2006	179,755,315	179,755,315 ⁽³⁾	100.0%
2007	196,929,570	196,929,570	100.0%
2008	206,518,693	206,518,693	100.0%

⁽¹⁾ Excludes pension obligation bond proceeds of \$319,094,719.

⁽²⁾ Excludes pension obligation bond proceeds of \$153,134,911.

⁽³⁾ 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 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)
12/31/2003	\$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%
12/31/2007	5,016,136,535	5,581,048,225	564,911,690	89.88%	671,617,932	84.11%
12/31/2008	5,282,505,159	5,972,471,074	689,965,915	88.45%	704,947,668	97.87%

⁽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, 2008
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	Remaining balance of December 31, 2007 UAAL is amortized over a fixed (decreasing or closed) period with 14 years remaining as of December 31, 2008. Any changes in UAAL after December 31, 2007 will be separately amortized over a fixed 18-year period effective with that valuation.
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% per year except for Tier 3 disability benefits and Tier 2 benefits that are valued as a 3.75% increase per year. Safety Tier C benefits are assumed to increase at 2% per year.
Plan membership:	
Retired members and beneficiaries receiving benefits	7,012
Terminated members entitled to, but not yet receiving benefits ⁽²⁾	2,153
Active members	<u>9,385</u>
Total	18,550

⁽¹⁾ Includes inflation at 3.75%, plus "across the board" salary increases of 0.50%, plus merit and promotional increases. See Exhibit IV for these increases.

⁽²⁾ Includes 718 nonvested terminated members.

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.

Beneficiaries:

Beneficiaries are assumed to have the same mortality as a General Member of the opposite sex who has taken a service (non-disability) retirement.

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:

Age	Rate (%)			
	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 benefits, 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. There is no explicit assumption for children's benefits.

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 2: 3.25%
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. Safety Tier C benefits are subject to a 2.00% 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:	There have been no changes in actuarial assumptions since the previous valuation.

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)
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Maximum Benefit: 100% of FAS1

<i>Safety Tier C (Enhanced)(§31664.1)</i>	50	(3.00%xFAS3xYrs)
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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 remaining balance of the December 31, 2007 Unfunded Actuarial Accrued Liability (UAAL) is being amortized as a level percent of payroll over a declining 14-year period as of December 31, 2008. Any change in the UAAL that arises at each valuation after December 31, 2007 is amortized over its own separate declining 18-year period.

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 Housing Authority adopted "Enhanced" General Tier 1 benefits (\$31676.16) effective October 1, 2008.

Plan Provisions Not Valued:

Additional \$5,000 lump sum post-retirement death benefit payable to a member's beneficiary. This benefit is paid from a reserve that is not included in the Valuation Value of Assets and is subject at all times to the availability of funds.

NOTE: The summary of major plan provisions is designed to outline principal 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, 2008 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%	1.86%	2.79%	5.45%	8.17%
16	3.65%	5.47%	1.89%	2.84%	5.54%	8.31%
17	3.71%	5.56%	1.92%	2.88%	5.63%	8.44%
18	3.76%	5.64%	1.95%	2.92%	5.71%	8.56%
19	3.82%	5.73%	1.98%	2.97%	5.80%	8.70%
20	3.88%	5.82%	2.01%	3.02%	5.89%	8.84%
21	3.95%	5.92%	2.05%	3.07%	6.00%	8.99%
22	4.01%	6.01%	2.07%	3.11%	6.08%	9.12%
23	4.07%	6.10%	2.11%	3.16%	6.18%	9.26%
24	4.13%	6.20%	2.14%	3.21%	6.27%	9.41%
25	4.20%	6.30%	2.18%	3.27%	6.38%	9.57%
26	4.27%	6.40%	2.21%	3.32%	6.48%	9.72%
27	4.33%	6.50%	2.25%	3.37%	6.58%	9.87%
28	4.40%	6.60%	2.28%	3.42%	6.68%	10.02%
29	4.47%	6.70%	2.31%	3.47%	6.78%	10.17%
30	4.54%	6.81%	2.35%	3.53%	6.89%	10.34%
31	4.61%	6.92%	2.39%	3.59%	7.00%	10.51%
32	4.69%	7.03%	2.43%	3.64%	7.12%	10.67%
33	4.76%	7.14%	2.47%	3.70%	7.23%	10.84%
34	4.83%	7.25%	2.51%	3.76%	7.34%	11.01%
35	4.91%	7.37%	2.55%	3.82%	7.46%	11.19%
36	4.99%	7.49%	2.59%	3.88%	7.58%	11.37%
37	5.07%	7.61%	2.63%	3.94%	7.70%	11.55%

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, 2008 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%	2.67%	4.01%	7.83%	11.75%
39	5.25%	7.87%	2.72%	4.08%	7.97%	11.95%
40	5.33%	8.00%	2.77%	4.15%	8.10%	12.15%
41	5.43%	8.14%	2.81%	4.22%	8.24%	12.36%
42	5.53%	8.29%	2.87%	4.30%	8.40%	12.59%
43	5.63%	8.44%	2.91%	4.37%	8.54%	12.81%
44	5.74%	8.61%	2.97%	4.46%	8.71%	13.07%
45	5.84%	8.76%	3.03%	4.54%	8.87%	13.30%
46	5.95%	8.92%	3.08%	4.62%	9.03%	13.54%
47	6.04%	9.06%	3.13%	4.70%	9.17%	13.76%
48	6.13%	9.20%	3.18%	4.77%	9.31%	13.97%
49	6.22%	9.33%	3.23%	4.84%	9.45%	14.17%
50	6.29%	9.44%	3.26%	4.89%	9.55%	14.33%
51	6.30%	9.45%	3.27%	4.90%	9.57%	14.35%
52	6.29%	9.43%	3.26%	4.89%	9.55%	14.32%
53	6.23%	9.34%	3.23%	4.84%	9.46%	14.18%
54	6.05%	9.08%	3.14%	4.71%	9.19%	13.79%
55	6.05%	9.08%	3.14%	4.71%	9.19%	13.79%
56	6.05%	9.08%	3.14%	4.71%	9.19%	13.79%
57	6.05%	9.08%	3.14%	4.71%	9.19%	13.79%
58	6.05%	9.08%	3.14%	4.71%	9.19%	13.79%
59	6.05%	9.08%	3.14%	4.71%	9.19%	13.79%
60	6.05%	9.08%	3.14%	4.71%	9.19%	13.79%
Interest:	7.80%					
Salary Increase:	See Exhibit IV.					
COLA Loading:	51.83%					
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, 2008 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%	1.86%	2.79%	4.97%	7.46%
16	3.17%	4.75%	1.89%	2.83%	5.06%	7.58%
17	3.21%	4.82%	1.91%	2.87%	5.12%	7.69%
18	3.27%	4.90%	1.95%	2.92%	5.22%	7.82%
19	3.32%	4.98%	1.98%	2.97%	5.30%	7.95%
20	3.37%	5.06%	2.01%	3.02%	5.38%	8.08%
21	3.43%	5.14%	2.05%	3.07%	5.48%	8.21%
22	3.48%	5.22%	2.07%	3.11%	5.55%	8.33%
23	3.53%	5.30%	2.11%	3.16%	5.64%	8.46%
24	3.59%	5.39%	2.14%	3.21%	5.73%	8.60%
25	3.65%	5.47%	2.17%	3.26%	5.82%	8.73%
26	3.71%	5.56%	2.21%	3.32%	5.92%	8.88%
27	3.77%	5.65%	2.25%	3.37%	6.02%	9.02%
28	3.83%	5.74%	2.28%	3.42%	6.11%	9.16%
29	3.89%	5.83%	2.32%	3.48%	6.21%	9.31%
30	3.95%	5.92%	2.35%	3.53%	6.30%	9.45%
31	4.01%	6.01%	2.39%	3.58%	6.40%	9.59%
32	4.07%	6.11%	2.43%	3.64%	6.50%	9.75%
33	4.13%	6.20%	2.47%	3.70%	6.60%	9.90%
34	4.20%	6.30%	2.51%	3.76%	6.71%	10.06%
35	4.27%	6.40%	2.55%	3.82%	6.82%	10.22%
36	4.33%	6.50%	2.59%	3.88%	6.92%	10.38%
37	4.40%	6.60%	2.63%	3.94%	7.03%	10.54%
38	4.47%	6.71%	2.67%	4.00%	7.14%	10.71%
39	4.54%	6.81%	2.71%	4.06%	7.25%	10.87%
40	4.61%	6.92%	2.75%	4.13%	7.36%	11.05%

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, 2008 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%	2.80%	4.20%	7.49%	11.24%
42	4.77%	7.15%	2.84%	4.26%	7.61%	11.41%
43	4.85%	7.27%	2.89%	4.34%	7.74%	11.61%
44	4.93%	7.39%	2.94%	4.41%	7.87%	11.80%
45	5.01%	7.52%	2.99%	4.48%	8.00%	12.00%
46	5.10%	7.65%	3.04%	4.56%	8.14%	12.21%
47	5.19%	7.79%	3.10%	4.65%	8.29%	12.44%
48	5.29%	7.93%	3.15%	4.73%	8.44%	12.66%
49	5.39%	8.09%	3.21%	4.82%	8.60%	12.91%
50	5.49%	8.23%	3.27%	4.91%	8.76%	13.14%
51	5.59%	8.38%	3.33%	5.00%	8.92%	13.38%
52	5.67%	8.51%	3.39%	5.08%	9.06%	13.59%
53	5.77%	8.65%	3.44%	5.16%	9.21%	13.81%
54	5.84%	8.76%	3.48%	5.22%	9.32%	13.98%
55	5.91%	8.87%	3.53%	5.29%	9.44%	14.16%
56	5.92%	8.88%	3.53%	5.30%	9.45%	14.18%
57	5.91%	8.86%	3.52%	5.28%	9.43%	14.14%
58	5.85%	8.78%	3.49%	5.24%	9.34%	14.02%
59	5.69%	8.53%	3.39%	5.09%	9.08%	13.62%
60	5.69%	8.53%	3.39%	5.09%	9.08%	13.62%

Interest: 7.80%
 Salary Increase: See Exhibit IV.
 COLA Loading: 59.64%
 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, 2008 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%	1.51%	2.27%	4.62%	6.94%
16	3.17%	4.75%	1.54%	2.31%	4.71%	7.06%
17	3.21%	4.82%	1.56%	2.34%	4.77%	7.16%
18	3.27%	4.90%	1.59%	2.38%	4.86%	7.28%
19	3.32%	4.98%	1.61%	2.42%	4.93%	7.40%
20	3.37%	5.06%	1.64%	2.46%	5.01%	7.52%
21	3.43%	5.14%	1.67%	2.50%	5.10%	7.64%
22	3.48%	5.22%	1.69%	2.53%	5.17%	7.75%
23	3.53%	5.30%	1.71%	2.57%	5.24%	7.87%
24	3.59%	5.39%	1.75%	2.62%	5.34%	8.01%
25	3.65%	5.47%	1.77%	2.66%	5.42%	8.13%
26	3.71%	5.56%	1.80%	2.70%	5.51%	8.26%
27	3.77%	5.65%	1.83%	2.74%	5.60%	8.39%
28	3.83%	5.74%	1.86%	2.79%	5.69%	8.53%
29	3.89%	5.83%	1.89%	2.83%	5.78%	8.66%
30	3.95%	5.92%	1.91%	2.87%	5.86%	8.79%
31	4.01%	6.01%	1.95%	2.92%	5.96%	8.93%
32	4.07%	6.11%	1.98%	2.97%	6.05%	9.08%
33	4.13%	6.20%	2.01%	3.01%	6.14%	9.21%
34	4.20%	6.30%	2.04%	3.06%	6.24%	9.36%
35	4.27%	6.40%	2.07%	3.11%	6.34%	9.51%
36	4.33%	6.50%	2.11%	3.16%	6.44%	9.66%
37	4.40%	6.60%	2.13%	3.20%	6.53%	9.80%
38	4.47%	6.71%	2.17%	3.26%	6.64%	9.97%
39	4.54%	6.81%	2.21%	3.31%	6.75%	10.12%

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, 2008 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%	2.24%	3.36%	6.85%	10.28%
41	4.69%	7.04%	2.28%	3.42%	6.97%	10.46%
42	4.77%	7.15%	2.31%	3.47%	7.08%	10.62%
43	4.85%	7.27%	2.35%	3.53%	7.20%	10.80%
44	4.93%	7.39%	2.39%	3.59%	7.32%	10.98%
45	5.01%	7.52%	2.43%	3.65%	7.44%	11.17%
46	5.10%	7.65%	2.47%	3.71%	7.57%	11.36%
47	5.19%	7.79%	2.52%	3.78%	7.71%	11.57%
48	5.29%	7.93%	2.57%	3.85%	7.86%	11.78%
49	5.39%	8.09%	2.62%	3.93%	8.01%	12.02%
50	5.49%	8.23%	2.67%	4.00%	8.16%	12.23%
51	5.59%	8.38%	2.71%	4.07%	8.30%	12.45%
52	5.67%	8.51%	2.75%	4.13%	8.42%	12.64%
53	5.77%	8.65%	2.80%	4.20%	8.57%	12.85%
54	5.84%	8.76%	2.83%	4.25%	8.67%	13.01%
55	5.91%	8.87%	2.87%	4.31%	8.78%	13.18%
56	5.92%	8.88%	2.87%	4.31%	8.79%	13.19%
57	5.91%	8.86%	2.87%	4.30%	8.78%	13.16%
58	5.85%	8.78%	2.84%	4.26%	8.69%	13.04%
59	5.69%	8.53%	2.76%	4.14%	8.45%	12.67%
60	5.69%	8.53%	2.76%	4.14%	8.45%	12.67%

Interest: 7.80%
 Salary Increase: See Exhibit IV.
 COLA Loading: 48.55%
 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, 2008 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
15	7.85%	4.07%	11.92%
16	7.85%	4.07%	11.92%
17	7.85%	4.07%	11.92%
18	7.85%	4.07%	11.92%
19	7.85%	4.07%	11.92%
20	7.85%	4.07%	11.92%
21	7.85%	4.07%	11.92%
22	7.97%	4.13%	12.10%
23	8.09%	4.19%	12.28%
24	8.22%	4.26%	12.48%
25	8.35%	4.33%	12.68%
26	8.48%	4.40%	12.88%
27	8.61%	4.46%	13.07%
28	8.74%	4.53%	13.27%
29	8.87%	4.60%	13.47%
30	9.02%	4.68%	13.70%
31	9.15%	4.74%	13.89%
32	9.30%	4.82%	14.12%
33	9.45%	4.90%	14.35%
34	9.59%	4.97%	14.56%
35	9.75%	5.05%	14.80%
36	9.91%	5.14%	15.05%
37	10.08%	5.22%	15.30%
38	10.25%	5.31%	15.56%
39	10.43%	5.41%	15.84%
40	10.62%	5.50%	16.12%
41	10.82%	5.61%	16.43%
42	11.05%	5.73%	16.78%
43	11.31%	5.86%	17.17%
44	11.60%	6.01%	17.61%

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, 2008 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
45	11.77%	6.10%	17.87%
46	11.80%	6.12%	17.92%
47	11.73%	6.08%	17.81%
48	11.56%	5.99%	17.55%
49	11.51%	5.97%	17.48%
50	11.51%	5.97%	17.48%
51	11.51%	5.97%	17.48%
52	11.51%	5.97%	17.48%
53	11.51%	5.97%	17.48%
54	11.51%	5.97%	17.48%
55	11.51%	5.97%	17.48%
56	11.51%	5.97%	17.48%
57	11.51%	5.97%	17.48%
58	11.51%	5.97%	17.48%
59	11.51%	5.97%	17.48%
60	11.51%	5.97%	17.48%

Interest: 7.80%
 Salary Increase: See Exhibit IV.
 COLA Loading: 51.83%
 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, 2008 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
15	7.85%	5.92%	13.77%
16	7.85%	5.92%	13.77%
17	7.85%	5.92%	13.77%
18	7.85%	5.92%	13.77%
19	7.85%	5.92%	13.77%
20	7.85%	5.92%	13.77%
21	7.85%	5.92%	13.77%
22	7.97%	6.01%	13.98%
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%	6.69%	15.56%
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%	8.01%	18.63%
41	10.82%	8.17%	18.99%
42	11.05%	8.34%	19.39%
43	11.31%	8.54%	19.85%
44	11.60%	8.75%	20.35%

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, 2008 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%	8.72%	20.28%
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%
 Salary Increase: See Exhibit IV.
 COLA Loading: 75.47%
 Mortality: RP-2000 Combined Healthy Mortality Table (85% Male and 15% Female, with ages set back two years)
 These rates exclude up to an extra 9% of compensation (depending 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, 2008 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
15	7.48%	3.06%	10.54%
16	7.48%	3.06%	10.54%
17	7.48%	3.06%	10.54%
18	7.48%	3.06%	10.54%
19	7.48%	3.06%	10.54%
20	7.48%	3.06%	10.54%
21	7.48%	3.06%	10.54%
22	7.60%	3.11%	10.71%
23	7.72%	3.16%	10.88%
24	7.83%	3.20%	11.03%
25	7.96%	3.25%	11.21%
26	8.08%	3.30%	11.38%
27	8.20%	3.35%	11.55%
28	8.33%	3.41%	11.74%
29	8.46%	3.46%	11.92%
30	8.59%	3.51%	12.10%
31	8.73%	3.57%	12.30%
32	8.86%	3.62%	12.48%
33	9.00%	3.68%	12.68%
34	9.15%	3.74%	12.89%
35	9.29%	3.80%	13.09%
36	9.44%	3.86%	13.30%
37	9.60%	3.93%	13.53%
38	9.76%	3.99%	13.75%
39	9.94%	4.06%	14.00%
40	10.13%	4.14%	14.27%
41	10.31%	4.22%	14.53%
42	10.53%	4.31%	14.84%
43	10.71%	4.38%	15.09%

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, 2008 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
44	10.82%	4.42%	15.24%
45	10.84%	4.43%	15.27%
46	10.77%	4.40%	15.17%
47	10.56%	4.32%	14.88%
48	11.01%	4.50%	15.51%
49	11.51%	4.71%	16.22%
50	11.51%	4.71%	16.22%
51	11.51%	4.71%	16.22%
52	11.51%	4.71%	16.22%
53	11.51%	4.71%	16.22%
54	11.51%	4.71%	16.22%
55	11.51%	4.71%	16.22%
56	11.51%	4.71%	16.22%
57	11.51%	4.71%	16.22%
58	11.51%	4.71%	16.22%
59	11.51%	4.71%	16.22%
60	11.51%	4.71%	16.22%

Interest: 7.80%
 Salary Increase: See Exhibit IV.
 COLA Loading: 40.89%
 Mortality: RP-2000 Combined Healthy Mortality Table (85% Male and 15% Female, with ages set back two years)

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