

**Contra Costa County Employees'
Retirement Association**

*Actuarial Valuation and Review
as of December 31, 2009*

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October 25, 2010

*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, 2009. The report summarizes the actuarial data used in the valuation, establishes the funding requirements for the fiscal year beginning July 1, 2011 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.

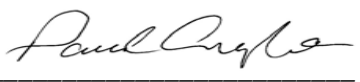
This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board of Retirement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

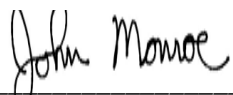
We look forward to reviewing this report at your next meeting and to answering any questions.

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*

CZI/kek

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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, 2009. 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, 2009, provided by the Association's staff;
- The assets of the Plan as of December 31, 2009, 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, 2009 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 period with 13 years remaining as December 31, 2009. 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, 2011 through June 30, 2012.

SIGNIFICANT ISSUES IN VALUATION YEAR

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

- Ref: Pg. 64*
Ref: Pg. 55

➤ The ratio of the valuation value of assets to actuarial accrued liabilities decreased from 88.5% to 83.8%. The Association's UAAL has increased from \$690 million to \$1.025 billion. 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. 33*

➤ 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 25.99% of payroll to 30.49% 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. 34*

➤ The aggregate member rate calculated in this valuation (before considering the employer subvention of these rates or member subvention of employer rates) has increased from 10.62% of payroll to 10.99% of payroll. This increase is primarily due to changes in actuarial assumptions and methods that were approved by the Board. A complete reconciliation of the Association's aggregate member rate is provided in Section 2, Subsection D, see Chart 16.
- Ref: Pg. 66*

➤ The results of this valuation reflect changes in the actuarial assumptions and methods adopted by the Board for this valuation. These changes were documented in our Actuarial Experience Study and Review of Economic Actuarial Assumptions and are outlined in Section 4, Exhibit IV of this report. These changes in actuarial assumptions and methods increased the Plan's UAAL by \$64 million and the average employer contribution rate by 1.11% of payroll.

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

- This valuation also reflects the Board action to depool CCCERA's assets, liabilities and normal cost by employer when determining employer contribution rates. The Board action included a retroactive application of depooling back to December 31, 2002. This retroactive application did not involve recalculation of any employer rates prior to December 31, 2009. However, it did involve reflecting the separate experience of the employers in each individual cost group from December 31, 2002 through December 31, 2009. The new cost groups are described on page 15 of this report. That page also notes any exceptions to this depooling (such as for small districts, etc.). In the aggregate this action had no impact on the average employer contribution rate.
- 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 vii) 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). Please note that any rates as of December 31, 2008 that are shown in this report do not reflect the depooling action taken by the Board.

Ref: Pg. 5

- As detailed on page 5 of this valuation report, the total unrecognized investment loss as of December 31, 2009 is about \$828 million. 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, 2009. This means that if the Association earns the assumed rate of investment return of 7.75% 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 \$828 million represent about 19% of the market value of assets. Unless offset by future investment gains or other favorable experience, the recognition of the \$828 million 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 83.8% to 70.7%.
 - If the deferred losses were recognized immediately in the valuation value of assets, the aggregate employer rate would increase from 30.5% to about 39.5% of payroll.
- The actuarial valuation report as of December 31, 2009 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, 2009		December 31, 2008	
		Estimated		Estimated
Employer Contribution Rates⁽¹⁾:				
General	Total Rate	Annual Amount	Total Rate	Annual Amount
Cost Group #1 – County and Small Districts (Tier 1)	26.06%	\$11,373,297	24.41%	\$11,645,334
Cost Group #2 – County and Small Districts (Tier 3)	23.77%	108,611,824	20.95%	96,871,730
Cost Group #3 – Central Contra Costa Sanitary District	40.30%	10,155,197	30.94%	7,500,076
Cost Group #4 – Contra Costa Housing Authority	34.94%	1,869,128	30.94%	1,727,075
Cost Group #5 – Contra Costa County Fire Protection District	20.44%	863,281	13.90%	614,527
Cost Group #6 – Small Districts (Tier 1 Non-Enhanced)	23.85%	174,874	30.64%	213,579
Safety				
Cost Group #7 – County (Tier A)	52.42%	43,414,118	42.80%	36,978,498
Cost Group #8 – Contra Costa and East Fire Protection Districts	43.98%	17,282,119	28.46%	10,870,812
Cost Group #9 – County (Tier C)	45.88%	2,876,437	36.72%	1,955,762
Cost Group #10 – Moraga-Orinda Fire District	37.72%	3,032,815	26.87%	2,127,185
Cost Group #11 – San Ramon Valley Fire District	56.24%	10,958,768	58.55%	11,832,018
Cost Group #12 – Rodeo-Hercules Fire Protection District	46.02%	1,125,464	37.41%	847,292
All Employers combined	30.49%	\$211,737,322	25.99%	\$183,183,888
Average Member Contribution Rates⁽¹⁾:				
General	Total Rate	Annual Amount	Total Rate	Annual Amount
Cost Group #1 – County and Small Districts (Tier 1)	9.12%	\$3,979,581	9.43%	\$4,498,079
Cost Group #2 – County and Small Districts (Tier 3)	9.75%	44,552,575	9.39%	43,391,686
Cost Group #3 – Central Contra Costa Sanitary District	9.87%	2,487,141	9.43%	2,285,899
Cost Group #4 – Contra Costa Housing Authority	10.44%	558,491	9.43%	526,384
Cost Group #5 – Contra Costa County Fire Protection District	9.70%	409,678	9.43%	416,906
Cost Group #6 – Small Districts (Tier 1 Non-Enhanced)	11.07%	81,168	11.31%	78,837
Safety				
Cost Group #7 – County (Tier A)	15.76%	13,052,394	14.90%	12,873,355
Cost Group #8 – Contra Costa and East Fire Protection Districts	15.00%	5,893,891	14.90%	5,691,800
Cost Group #9 – County (Tier C)	12.34%	773,654	11.85%	631,149
Cost Group #10 – Moraga-Orinda Fire District	15.58%	1,252,684	14.90%	1,179,570
Cost Group #11 – San Ramon Valley Fire District	14.93%	2,909,218	14.90%	3,011,052
Cost Group #12 – Rodeo-Hercules Fire Protection District	14.00%	342,384	12.92%	292,623
All Categories Combined	10.99%	\$76,292,859	10.62%	\$74,877,340

⁽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.

Note: Pages 15 and 16 contain a summary that shows which employers are in each cost group.

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

Summary of Key Valuation Results (continued)

	December 31, 2009	December 31, 2008
Refundability Factors		
General		
Cost Group #1 – County and Small Districts (Tier 1)	0.9548	0.9964
Cost Group #2 – County and Small Districts (Tier 3)	0.9521	0.9935
Cost Group #3 – Central Contra Costa Sanitary District	0.9558	0.9964
Cost Group #4 – Contra Costa Housing Authority	0.9537	0.9964
Cost Group #5 – Contra Costa County Fire Protection District	0.9553	0.9964
Cost Group #6 – Small Districts (Tier 1 Non-Enhanced)	0.9568	0.9948
Safety		
Cost Group #7 – County (Tier A)	0.9701	0.9978
Cost Group #8 – Contra Costa and East Fire Protection Districts	0.9705	0.9978
Cost Group #9 – County (Tier C)	0.9712	0.9833
Cost Group #10 – Moraga-Orinda Fire District	0.9716	0.9978
Cost Group #11 – San Ramon Valley Fire District	0.9720	0.9978
Cost Group #12 – Rodeo-Hercules Fire Protection District	0.9738	1.0000
Funded Status:		
Actuarial accrued liability	\$6,314,787,187	\$5,972,471,074
Valuation value of assets	\$5,290,114,102	\$5,282,505,159
Funded percentage	83.8%	88.5%
Unfunded Actuarial Accrued Liability (UAAL)	\$1,024,673,085	\$689,965,915
Key Assumptions:		
Interest rate	7.75%	7.80%
Inflation rate	3.50%	3.75%
Across the board salary increase	0.75%	0.50%

Note: Pages 15 and 16 contain a summary that shows which employers are in each cost group.

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

Summary of Contribution Rates with Employer Subvention

	December 31, 2009		December 31, 2008	
Employer Contribution Rates (County and District combined)⁽¹⁾:				
General	Total Rate	Estimated Annual Amount	Total Rate	Estimated Annual Amount
Cost Group #1 – County and Small Districts (Tier 1)	28.80%	\$12,568,917	27.35%	\$13,047,705
Cost Group #2 – County and Small Districts (Tier 3)	26.87%	122,777,258	24.09%	111,383,233
Cost Group #3 – Central Contra Costa Sanitary District	43.26%	10,901,088	33.88%	8,212,753
Cost Group #4 – Contra Costa Housing Authority	38.07%	2,036,568	33.88%	1,891,186
Cost Group #5 – Contra Costa County Fire Protection District	23.35%	986,185	16.84%	744,506
Cost Group #6 – Small Districts (Tier 1 Non-Enhanced)	27.39%	200,831	34.35%	239,440
Safety				
Cost Group #7 – County (Tier A)	56.77%	47,016,777	47.04%	40,641,788
Cost Group #8 – Contra Costa and East Fire Protection Districts	43.98%	17,282,119	28.46%	10,870,812
Cost Group #9 – County (Tier C)	50.15%	3,144,144	40.85%	2,175,732
Cost Group #10 – Moraga-Orinda Fire District	37.72%	3,032,815	26.87%	2,127,185
Cost Group #11 – San Ramon Valley Fire District	56.24%	10,958,768	58.55%	11,832,018
Cost Group #12 – Rodeo-Hercules Fire Protection District	46.02%	1,125,464	37.41%	847,292
All Employers combined	33.41%	\$232,030,934	28.94%	\$204,013,650
Average Member Contribution Rates⁽¹⁾:				
General	Total Rate	Estimated Annual Amount	Total Rate	Estimated Annual Amount
Cost Group #1 – County and Small Districts (Tier 1)	6.26%	\$2,729,417	6.48%	\$3,090,939
Cost Group #2 – County and Small Districts (Tier 3)	6.50%	29,678,870	6.23%	28,792,674
Cost Group #3 – Central Contra Costa Sanitary District	6.77%	1,705,972	6.48%	1,570,798
Cost Group #4 – Contra Costa Housing Authority	7.16%	383,027	6.48%	361,714
Cost Group #5 – Contra Costa County Fire Protection District	6.66%	281,073	6.48%	286,484
Cost Group #6 – Small Districts (Tier 1 Non-Enhanced)	7.37%	54,002	7.59%	52,907
Safety				
Cost Group #7 – County (Tier A)	11.28%	9,342,069	12.50%	10,799,795
Cost Group #8 – Contra Costa and East Fire Protection Districts	15.00%	5,893,891	12.50%	4,775,000
Cost Group #9 – County (Tier C)	7.94%	497,797	7.65%	407,450
Cost Group #10 – Moraga-Orinda Fire District	15.58%	1,252,684	12.50%	989,572
Cost Group #11 – San Ramon Valley Fire District	14.93%	2,909,218	12.50%	2,526,050
Cost Group #12 – Rodeo-Hercules Fire Protection District	14.00%	342,384	12.92%	292,623
All Categories Combined	7.93%	\$55,070,404	7.65%	\$53,946,006

⁽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, 2009, 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.

Note: Pages 15 and 16 contain a summary that shows which employers are in each cost group.

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

Summary of Key Valuation Demographic and Financial Data

	December 31, 2009	December 31, 2008	Percentage Change
Active Members:			
Number of members	8,938	9,385	-4.8%
Average age	46.4	45.9	N/A
Average service	11.0	10.5	N/A
Projected total compensation	\$694,443,999	\$704,947,668	-1.5%
Average projected compensation	\$77,696	\$75,114	3.4%
Retired Member and Beneficiaries:			
Number of members:			
Service retired	5,219	4,980	4.8%
Disability retired	941	922	2.1%
Beneficiaries	1,132	1,110	2.0%
Total	7,292	7,012	4.0%
Average age	69.2	69.2	N/A
Average Monthly Benefit	\$3,111	\$3,075	1.2%
Vested Terminated Members:			
Number of terminated vested members ⁽¹⁾	2,209	2,153	2.6%
Average age	45.6	45.6	N/A
Summary of Financial Data:			
Market value of assets	\$4,476,729,530	\$3,749,698,812	19.4%
Return on market value of assets	19.68%	-28.35%	N/A
Actuarial value of assets	\$5,304,261,661	\$5,295,960,900	0.2%
Return on actuarial value of assets	0.34%	4.73%	N/A
Valuation value of assets	\$5,290,114,102	\$5,282,505,159	0.1%
Return on valuation value of assets	0.32%	4.72%	N/A

⁽¹⁾ Includes 777 nonvested terminated members as of December 31, 2009 and 718 as of December 31, 2008.

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 ten valuations can be seen in this chart.

CHART 1
Member Population: 2000 – 2009

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
2009	8,938	2,209	7,292	1.06

⁽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 8,938 active members with an average age of 46.4, average years of service of 11.0 years and average compensation of \$77,696. The 9,385 active members in the prior valuation had an average age of 45.9, average service of 10.5 years and average compensation of \$75,114.

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

Inactive Members

In this year's valuation, there were 2,209 members with a vested right to a deferred or immediate vested benefit or entitled to a return of their employee contributions versus 2,153 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, 2009

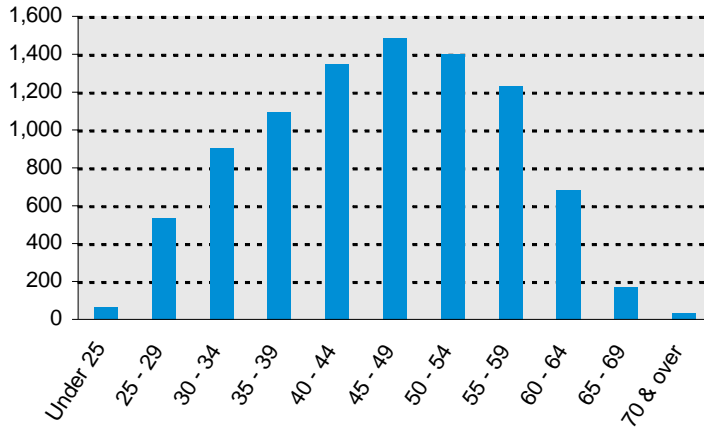
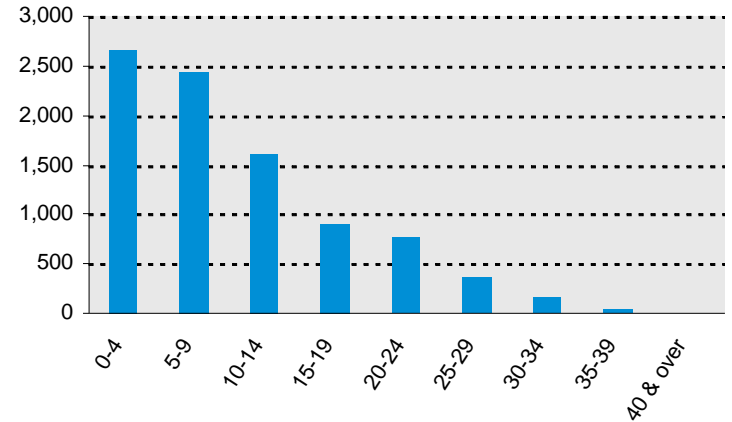


CHART 3
Distribution of Active Members by Years of Service as of December 31, 2009



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

Retired Members and Beneficiaries

As of December 31, 2009, 6,160 retired members and 1,132 beneficiaries were receiving total monthly benefits of \$22,682,409. For comparison, in the previous valuation, there were 5,902 retired members and 1,110 beneficiaries receiving monthly benefits of \$21,558,540.

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

CHART 4
Distribution of Retired Members and Beneficiaries by Type and by Monthly Amount as of December 31, 2009

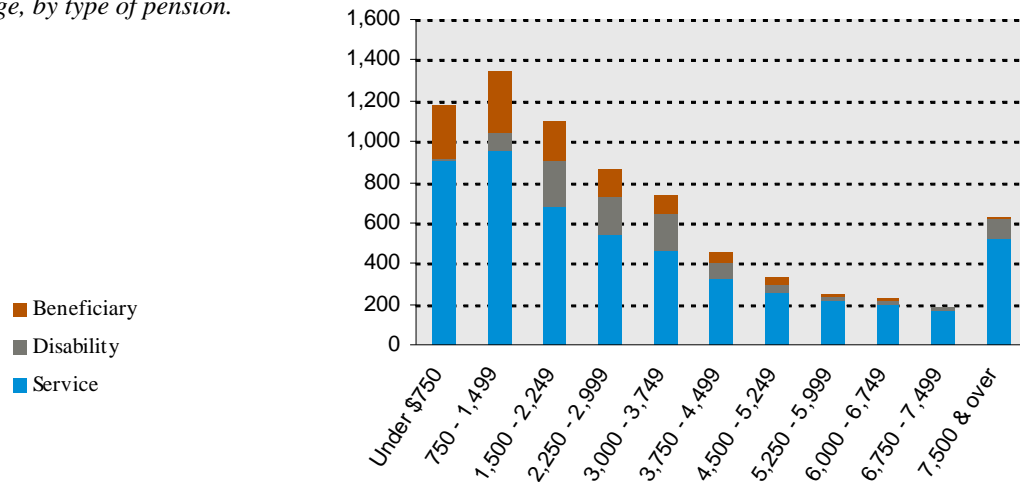
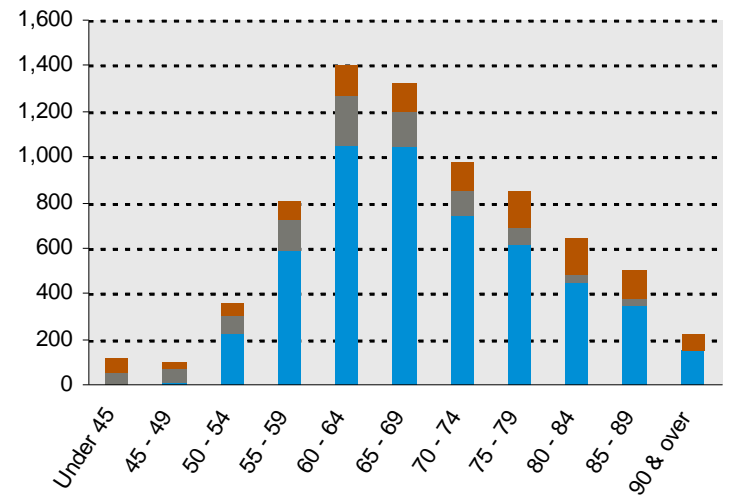


CHART 5
Distribution of Retired Members and Beneficiaries by Type and by Age as of December 31, 2009



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.

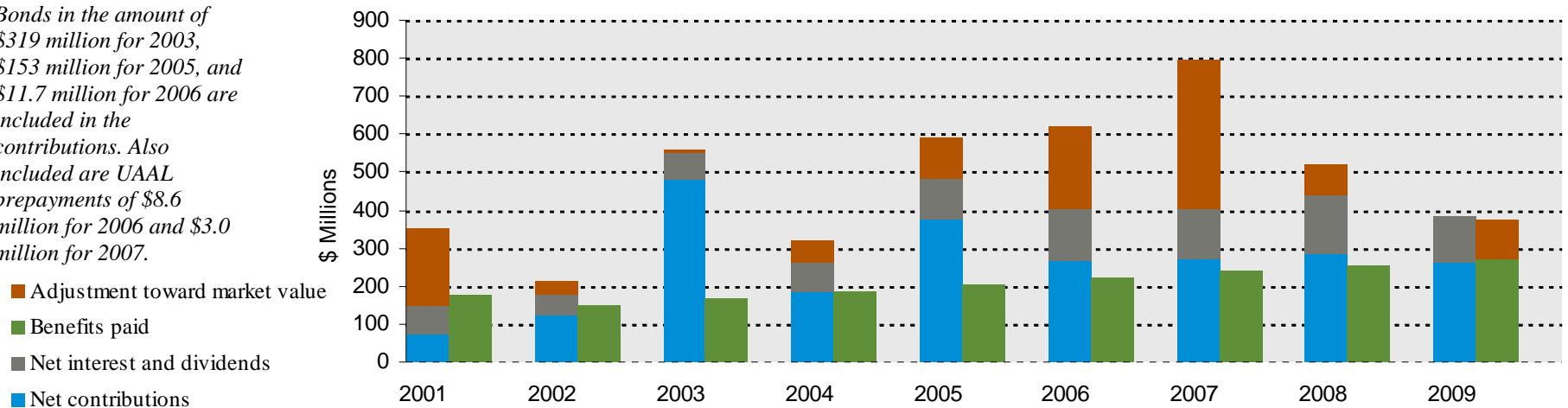
Retirement plan assets change as a result of the net impact of these income and expense components. The adjustment toward market value shown in the chart is the “non-cash” earnings on investment implicitly included in the Actuarial Value of Assets. Additional financial information, including a summary 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 nine 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 - 2009



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, 2009

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
7/2005	12/2005	\$228,037,754	\$156,484,262	\$71,553,492	0.1	\$7,155,349
1/2006	6/2006	166,440,802	167,088,121	(647,319)	0.2	(129,464)
7/2006	12/2006	436,850,889	174,623,395	262,227,494	0.3	78,668,248
1/2007	6/2007	260,000,409	192,710,429	67,289,979	0.4	26,915,992
7/2007	12/2007	35,143,730	203,536,876	(168,393,146)	0.5	(84,196,573)
1/2008	6/2008	(348,105,153)	205,702,885	(553,808,038)	0.6	(332,284,823)
7/2008	12/2008	(1,128,210,678)	189,989,366	(1,318,200,044)	0.7	(922,740,031)
1/2009	6/2009	106,872,212	146,385,892	(39,513,680)	0.8	(31,610,944)
7/2009	12/2009	628,870,712	150,326,140	478,544,572	0.9	<u>430,690,115</u>
1. Total Deferred Return ⁽¹⁾						\$(827,532,131)
2. Market Value of Assets						4,476,729,530
3. Actuarial Value of Assets (Item 2 – Item 1)						5,304,261,661
4. Actuarial Value as Percentage of Market Value (Item 3 / Item 2)						118.5%
5. Non-valuation Reserves and Designations:						
a. Post Retirement Death Benefit						14,147,559
b. Statutory Contingency						0
c. Additional One Percent Contingency						0
d. Unrestricted Designation						<u>0</u>
e. Total						\$14,147,559
6. Valuation Value of Assets (Item 3 – Item 5e)						<u>\$5,290,114,102</u>

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

(a) Amount Recognized during 2010	\$(247,344,689)
(b) Amount Recognized during 2011	(280,593,322)
(c) Amount Recognized during 2012	(303,434,753)
(d) Amount Recognized during 2013	(44,013,825)
(e) Amount Recognized during 2014	<u>47,854,458</u>
(f) Subtotal	\$(827,532,131)

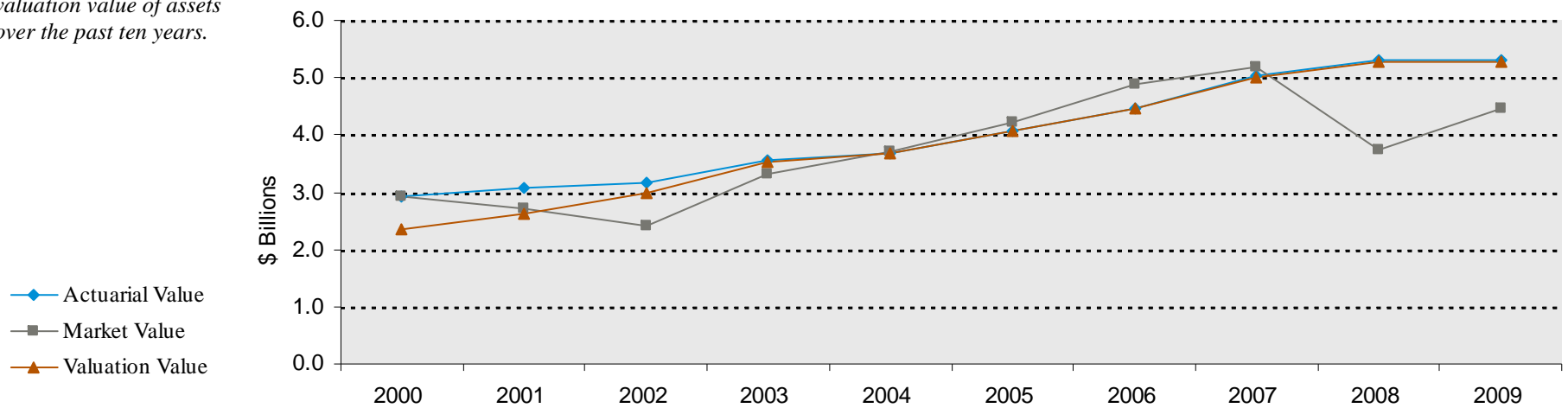
SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association

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, 2000 – 2009



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 \$286.3 million, \$394.6 million loss from investments and \$108.3 million gain from all other sources. The net experience variation from individual sources other than investments was 1.7% of the actuarial accrued liability. A discussion of the major components of the actuarial experience is on the following pages.

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

**CHART 9
Actuarial Experience for Year Ended December 31, 2009**

1. Net gain/(loss) from investments*	\$(394,647,212)
2. Net gain/(loss) from salary increase experience	47,181,358
3. Net gain/(loss) from other experience**	<u>61,149,294</u>
4. Net experience gain/(loss): (1) + (2) + (3)	<u>\$(286,316,560)</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 2009 was 7.80%. The rate of return on Actuarial Value for the 2009 Plan Year was 0.34%.

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, 2009.

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

CHART 10

Investment Experience for Year Ended December 31, 2009 – Valuation Value and Actuarial Value of Assets

	Valuation Value	Actuarial Value
1. Actual return	\$17,021,116	\$18,226,933
2. Average value of assets	5,277,799,073	5,290,997,814
3. Actual rate of return: (1) ÷ (2)	0.32%	0.34%
4. Assumed rate of return	7.80%	7.80%
5. Expected return: (2) x (4)	411,668,328	412,697,829
6. Actuarial gain/(loss): (1) – (5)	<u>\$(394,647,212)</u>	<u>\$(394,470,896)</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 nine years.

Based upon recommendations developed in our December 31, 2009 Review of Economic Actuarial Assumptions for the Actuarial Valuation recently adopted by the Board, we have reduced the assumed rate of return from 7.80% to 7.75%.

CHART 11

Investment Return – Market Value, Actuarial Value, and Valuation Value: 2001 – 2009

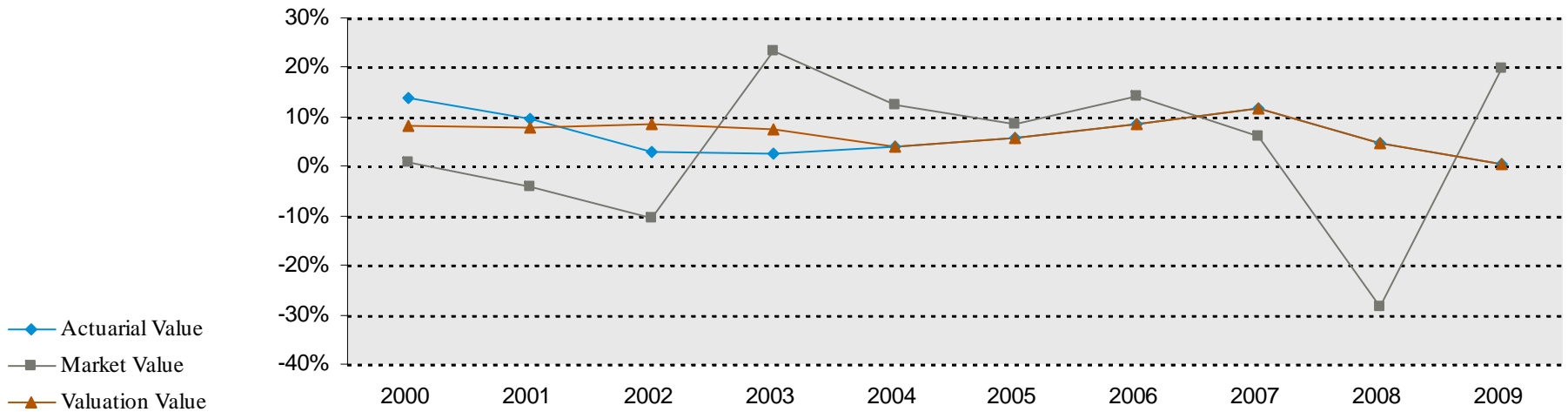
Year Ended December 31	Market Value Investment Return		Actuarial Value Investment Return		Valuation Value Investment Return	
	Amount	Percent of Assets	Amount	Percent of Assets	Amount	Percent of Assets
2001	\$(121,804,662)	(4.23%)	\$278,746,528	9.73%	\$186,188,249	7.92%
2002	(274,820,794)	(10.28%)	93,144,770	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%
2009	736,956,891	19.68%	18,226,933	0.34%	17,021,116	0.32%
Total	\$1,098,575,561		\$1,941,210,556		\$2,137,435,668	
<i>Five-Year Average Return</i>		2.23%		5.93%		5.93%

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, 2000 - 2009



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)

The 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 13-year declining period as of December 31, 2009. 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 the 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.

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. The terminal pay assumptions are only used in establishing cost-of-living member contributions.

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

Cost Sharing Adjustments

The Board took action to depool CCCERA's assets, liabilities and normal cost by employer when determining employer contribution rates. The Board action included a retroactive application of depooling back to December 31, 2002. This retroactive application did not involve recalculation of any employer rates prior to December 31, 2009. However, it did involve reflecting the separate experience of the employers in each individual cost group back from December 31, 2002 through December 31, 2009. The new cost groups are detailed on the next two pages. In addition, the Board action called for a discontinuation of certain cost sharing adjustments for both member and employer contribution rates for General Tier 1 and Safety Tier A. Even under the depooling structure, there are a few remaining cost sharing arrangements. Here is a summary of the cost sharing arrangements:

- Smaller employers (less than 50 active members) will be pooled with the applicable County tier. Safety members from the East Contra Costa Fire Protection District will be pooled with Safety members of the Contra Costa County Fire Protection District.
- Due to a statutory requirement, the Superior Court will continue to be pooled with the County regardless of how many members the Court has.
- UAAL costs are pooled between Cost Group #1 and Cost Group #2 which represent General County and Small Districts for Tiers 1 and 3. UAAL costs are also pooled for Cost Groups #7 and #9 which are Safety County Tiers A and C.

Other Adjustments

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

- Adjustments are made to some UAAL amounts for the County, the Contra Costa County Fire Protection District (CCCFPD) and the Moraga-Orinda Fire District (Moraga) to account for Pension Obligation Bonds (POBs) and any other special contributions that they previously made. These adjustments serve to reduce the UAAL contribution rate for these employers. The outstanding balance of these adjustments as of December 31, 2009 is as follows:

	<u>County General</u>	<u>Moraga General</u>	<u>CCCFPD Safety</u>
Basic	\$244,824,678	\$431,144	\$70,273,535
COL	\$196,180,473	\$250,231	\$53,593,744

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

Summary of Cost Groups and Employers

GENERAL

Cost Group	Employer Name	Benefit Structure
(1)	County General	Tier 1 Enhanced
	Local Agency Formation Commission	Tier 1 Enhanced
	CC Mosquito and Vector Control District	Tier 1 Enhanced
	Bethel Island Municipal District	Tier 1 Enhanced
	First 5 - Children & Families Commission	Tier 1 Enhanced
	Contra Costa County Employees' Retirement Association	Tier 1 Enhanced
	Superior Court	Tier 1 Enhanced
	East Contra Costa Fire Protection District	Tier 1 Enhanced
	Moraga-Orinda Fire District	Tier 1 Enhanced
	Rodeo-Hercules Fire Protection District	Tier 1 Enhanced
	San Ramon Valley Fire District	Tier 1 Enhanced
(2)	County General	Tier 3 Enhanced
	In-Home Supportive Services Authority	Tier 3 Enhanced
	Contra Costa Mosquito and Vector Control District	Tier 3 Enhanced
	Superior Court	Tier 3 Enhanced
(3)	Central Contra Costa Sanitary District	Tier 1 Enhanced
(4)	Contra Costa Housing Authority	Tier 1 Enhanced
(5)	Contra Costa County Fire Protection District	Tier 1 Enhanced
(6)	Rodeo Sanitary District	Tier 1 Non-Enhanced
	Byron Brentwood Cemetery	Tier 1 Non-Enhanced

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

Summary of Cost Groups and Employers (continued)

SAFETY

Cost Group	Employer Name	Benefit Structure
(7)	County Safety	Tier A Enhanced
(8)	Contra Costa County Fire Protection District East Contra Costa Fire Protection District	Tier A Enhanced Tier A Enhanced
(9)	County Safety	Tier C Enhanced (Deputy Sheriff new hires)
(10)	Moraga-Orinda Fire District	Tier A Enhanced
(11)	San Ramon Valley Fire District	Tier A Enhanced
(12)	Rodeo-Hercules Fire Protection District	Tier A Non-Enhanced

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, 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 13 (continued)
Components of Current Employer Contribution Rates
Employer Rates Under Current 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 13 (continued)
Components of Current Employer Contribution Rates
Employer Rates Under Current 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 13 (continued)
Components of Current Employer Contribution Rates
Employer Rates Under Current 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 13 (continued)
Components of Current Employer Contribution Rates
Employer Rates Under Current 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
Safety Tier A								
Basic	21.43%		16.60%	38.03%	21.43%		-2.25%	19.18%
0% Subvention	0.00%		0.00%	0.00%	0.00%		0.00%	0.00%
Basic + 0% Subvention	21.43%		16.60%	38.03%	21.43%		-2.25%	19.18%
COL	6.55%		13.97%	20.52%	6.55%		-0.40%	6.15%
Total	27.98%		30.57%	58.55%	27.98%		-2.65%	25.33%
	Enhanced							
	Districts with POB (Moraga)							
	Normal Cost	+	UAAL	= Total				
Safety Tier A								
Basic	21.43%		-2.02%	19.41%				
0% Subvention	0.00%		0.00%	0.00%				
Basic + 0% Subvention	21.43%		-2.02%	19.41%				
COL	6.55%		0.91%	7.46%				
Total	27.98%		-1.11%	26.87%				

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, 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 13 (continued)
Components of Current Employer Contribution Rates
Employer Rates Under Current 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 13 (continued)
Components of Current Employer Contribution Rates
Employer Rates Under Current 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

CHART 14
Components of Recommended Employer Contribution Rates
Employer Rates Under Recommended Assumptions for July 1, 2011 through June 30, 2012

7.75% Interest, 4.25% Wage Inflation, Plus Merit Salary Increase Assumptions

	Enhanced				Enhanced			
	Cost Group #1				Cost Group #1			
	County				Districts without POB			
	Normal Cost	+	UAAL	= Total	Normal Cost	+	UAAL	= Total
General Tier 1 (Aggregate)								
Basic	11.77%		6.70%	18.47%	11.77%		11.55%	23.32%
50% Subvention	2.74%		0.00%	2.74%	2.74%		0.00%	2.74%
Basic + 50% Subvention	14.51%		6.70%	21.21%	14.51%		11.55%	26.06%
COL	3.37%		2.64%	6.01%	3.37%		6.53%	9.90%
Total	17.88%		9.34%	27.22%	17.88%		18.08%	35.96%
General Tier 1 (Under \$350)								
Basic	7.97%		4.54%	12.51%	7.97%		7.83%	15.80%
50% Subvention	1.86%		0.00%	1.86%	1.86%		0.00%	1.86%
Basic + 50% Subvention	9.83%		4.54%	14.37%	9.83%		7.83%	17.66%
COL	2.28%		1.79%	4.07%	2.28%		4.44%	6.72%
Total	12.11%		6.33%	18.44%	12.11%		12.27%	24.38%
General Tier 1 (Over \$350)								
Basic	11.96%		6.81%	18.77%	11.96%		11.75%	23.71%
50% Subvention	2.79%		0.00%	2.79%	2.79%		0.00%	2.79%
Basic + 50% Subvention	14.75%		6.81%	21.56%	14.75%		11.75%	26.50%
COL	3.42%		2.68%	6.10%	3.42%		6.65%	10.07%
Total	18.17%		9.49%	27.66%	18.17%		18.40%	36.57%
				Payroll = \$34,970,994				Payroll = \$8,042,350

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, 2011 through June 30, 2012

7.75% Interest, 4.25% Wage Inflation, Plus Merit Salary Increase Assumptions

	Enhanced			
	Cost Group #1			
	Districts with POB (Moraga)			
	Normal Cost	+	UAAL	= Total
General Tier 1 (Aggregate)				
Basic	11.77%		4.84%	16.61%
50% Subvention	2.74%		0.00%	2.74%
Basic + 50% Subvention	14.51%		4.84%	19.35%
COL	3.37%		2.63%	6.00%
Total	17.88%		7.47%	25.35%
General Tier 1 (Under \$350)				
Basic	7.97%		3.29%	11.26%
50% Subvention	1.86%		0.00%	1.86%
Basic + 50% Subvention	9.83%		3.29%	13.12%
COL	2.28%		1.78%	4.06%
Total	12.11%		5.07%	17.18%
General Tier 1 (Over \$350)				
Basic	11.96%		4.93%	16.89%
50% Subvention	2.79%		0.00%	2.79%
Basic + 50% Subvention	14.75%		4.93%	19.68%
COL	3.42%		2.68%	6.10%
Total	18.17%		7.61%	25.78%

Payroll = \$622,418

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, 2011 through June 30, 2012

7.75% Interest, 4.25% Wage Inflation, Plus Merit Salary Increase Assumptions

	Enhanced				Enhanced			
	Cost Group #2				Cost Group #2			
	County				Districts without POB			
	Normal Cost	+	UAAL	= Total	Normal Cost	+	UAAL	= Total
General Tier 3 (Aggregate)								
Basic	11.20%		6.70%	17.90%	11.20%		11.55%	22.75%
50% Subvention	3.10%		0.00%	3.10%	3.10%		0.00%	3.10%
Basic + 50% Subvention	14.30%		6.70%	21.00%	14.30%		11.55%	25.85%
COL	3.17%		2.64%	5.81%	3.17%		6.53%	9.70%
Total	17.47%		9.34%	26.81%	17.47%		18.08%	35.55%
General Tier 3 (Under \$350)								
Basic	7.62%		4.56%	12.18%	7.62%		7.86%	15.48%
50% Subvention	2.11%		0.00%	2.11%	2.11%		0.00%	2.11%
Basic + 50% Subvention	9.73%		4.56%	14.29%	9.73%		7.86%	17.59%
COL	2.15%		1.79%	3.94%	2.15%		4.44%	6.59%
Total	11.88%		6.35%	18.23%	11.88%		12.30%	24.18%
General Tier 3 (Over \$350)								
Basic	11.43%		6.84%	18.27%	11.43%		11.79%	23.22%
50% Subvention	3.16%		0.00%	3.16%	3.16%		0.00%	3.16%
Basic + 50% Subvention	14.59%		6.84%	21.43%	14.59%		11.79%	26.38%
COL	3.23%		2.69%	5.92%	3.23%		6.66%	9.89%
Total	17.82%		9.53%	27.35%	17.82%		18.45%	36.27%
				Payroll = \$453,870,555				Payroll = \$3,078,937

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, 2011 through June 30, 2012

7.75% Interest, 4.25% Wage Inflation, Plus Merit Salary Increase Assumptions

	Enhanced				Enhanced					
	Cost Group #3				Cost Group #4					
	Central Contra Costa Sanitary District				Contra Costa Housing Authority					
	Normal Cost	+	UAAL	=	Total	Normal Cost	+	UAAL	=	Total
General Tier 1 (Aggregate)										
Basic	12.42%		16.39%		28.81%	13.19%		9.74%		22.93%
50% Subvention	2.96%		0.00%		2.96%	3.13%		0.00%		3.13%
Basic + 50% Subvention	15.38%		16.39%		31.77%	16.32%		9.74%		26.06%
COL	3.57%		7.92%		11.49%	3.63%		8.38%		12.01%
Total	18.95%		24.31%		43.26%	19.95%		18.12%		38.07%
General Tier 1 (Under \$350)										
Basic	8.40%		11.09%		19.49%	9.00%		6.65%		15.65%
50% Subvention	2.00%		0.00%		2.00%	2.13%		0.00%		2.13%
Basic + 50% Subvention	10.40%		11.09%		21.49%	11.13%		6.65%		17.78%
COL	2.42%		5.36%		7.78%	2.48%		5.72%		8.20%
Total	12.82%		16.45%		29.27%	13.61%		12.37%		25.98%
General Tier 1 (Over \$350)										
Basic	12.60%		16.63%		29.23%	13.50%		9.97%		23.47%
50% Subvention	3.00%		0.00%		3.00%	3.20%		0.00%		3.20%
Basic + 50% Subvention	15.60%		16.63%		32.23%	16.70%		9.97%		26.67%
COL	3.63%		8.04%		11.67%	3.72%		8.58%		12.30%
Total	19.23%		24.67%		43.90%	20.42%		18.55%		38.97%
					Payroll = \$25,199,002					Payroll = \$5,349,534

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, 2011 through June 30, 2012

7.75% Interest, 4.25% Wage Inflation, Plus Merit Salary Increase Assumptions

	Enhanced				Non-enhanced					
	Cost Group #5				Cost Group #6					
	Contra Costa County Fire Protection District				Districts without POB					
	Normal Cost	+	UAAL	=	Total	Normal Cost	+	UAAL	=	Total
General Tier 1 (Aggregate)										
Basic	11.96%		3.19%		15.15%	11.74%		7.60%		19.34%
50% Subvention	2.91%		0.00%		2.91%	3.54%		0.00%		3.54%
Basic + 50% Subvention	14.87%		3.19%		18.06%	15.28%		7.60%		22.88%
COL	3.33%		1.96%		5.29%	3.58%		0.93%		4.51%
Total	18.20%		5.15%		23.35%	18.86%		8.53%		27.39%
General Tier 1 (Under \$350)										
Basic	8.13%		2.17%		10.30%	8.01%		5.19%		13.20%
50% Subvention	1.98%		0.00%		1.98%	2.42%		0.00%		2.42%
Basic + 50% Subvention	10.11%		2.17%		12.28%	10.43%		5.19%		15.62%
COL	2.26%		1.33%		3.59%	2.44%		0.63%		3.07%
Total	12.37%		3.50%		15.87%	12.87%		5.82%		18.69%
General Tier 1 (Over \$350)										
Basic	12.19%		3.25%		15.44%	12.02%		7.78%		19.80%
50% Subvention	2.97%		0.00%		2.97%	3.62%		0.00%		3.62%
Basic + 50% Subvention	15.16%		3.25%		18.41%	15.64%		7.78%		23.42%
COL	3.39%		2.00%		5.39%	3.66%		0.95%		4.61%
Total	18.55%		5.25%		23.80%	19.30%		8.73%		28.03%
					Payroll = \$4,223,488					Payroll = \$733,227

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, 2011 through June 30, 2012

7.75% Interest, 4.25% Wage Inflation, Plus Merit Salary Increase Assumptions

Enhanced										
Cost Group #7										
County										
	Normal Cost	+	UAAL	=	Total					
Safety Tier A										
Basic	21.97%		13.29%		35.26%					
50% Subvention	4.35%		0.00%		4.35%					
Basic + 50% Subvention	26.32%		13.29%		39.61%					
COL	6.78%		10.38%		17.16%					
Total	33.10%		23.67%		56.77%					
Payroll = \$82,819,759										
Enhanced					Enhanced					
Cost Group #8					Cost Group #8					
Contra Costa County Fire Protection District					East Contra Costa Fire Protection District					
	Normal Cost	+	UAAL	=	Total	Normal Cost	+	UAAL	=	Total
Safety Tier A										
Basic	21.36%		3.31%		24.67%	21.36%		22.30%		43.66%
0% Subvention	0.00%		0.00%		0.00%	0.00%		0.00%		0.00%
Basic + 0% Subvention	21.36%		3.31%		24.67%	21.36%		22.30%		43.66%
COL	6.75%		9.63%		16.38%	6.75%		24.12%		30.87%
Total	28.11%		12.94%		41.05%	28.11%		46.42%		74.53%
Payroll = \$35,850,237					Payroll = \$3,442,367					

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, 2011 through June 30, 2012

7.75% Interest, 4.25% Wage Inflation, Plus Merit Salary Increase Assumptions

Enhanced										
Cost Group #9										
County										
	Normal Cost	+	UAAL	=	Total					
Safety Tier C										
Basic	18.64%		13.29%		31.93%					
50% Subvention	4.27%		0.00%		4.27%					
Basic + 50% Subvention	22.91%		13.29%		36.20%					
COL	3.57%		10.38%		13.95%					
Total	26.48%		23.67%		50.15%					
Payroll = \$6,269,479										
Enhanced					Enhanced					
Cost Group #10					Cost Group #11					
Moraga-Orinda Fire District					San Ramon Valley Fire District					
	Normal Cost	+	UAAL	=	Total	Normal Cost	+	UAAL	=	Total
Safety Tier A										
Basic	21.30%		1.86%		23.16%	20.52%		18.26%		38.78%
0% Subvention	0.00%		0.00%		0.00%	0.00%		0.00%		0.00%
Basic + 0% Subvention	21.30%		1.86%		23.16%	20.52%		18.26%		38.78%
COL	6.64%		7.92%		14.56%	6.48%		10.98%		17.46%
Total	27.94%		9.78%		37.72%	27.00%		29.24%		56.24%
Payroll = \$8,040,336					Payroll = \$19,485,718					

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, 2011 through June 30, 2012

7.75% Interest, 4.25% Wage Inflation, Plus Merit Salary Increase Assumptions

	Non-enhanced			
	Cost Group #12			
	Rodeo-Hercules Fire Protection District			
	Normal Cost	+	UAAL	= Total
Safety Tier A				
Basic	15.72%		15.77%	31.49%
0% Subvention	0.00%		0.00%	0.00%
Basic + 0% Subvention	15.72%		15.77%	31.49%
COL	5.14%		9.39%	14.53%
Total	20.86%		25.16%	46.02%

Payroll = \$2,445,598

Grand Total (Includes Both Enhanced and Non-enhanced – County and District)				
	Normal Cost	+	UAAL	= Total
Basic	13.62%		8.18%	21.80%
50% Subvention*	2.92%		0.00%	2.92%
Basic + 50% Subvention*	16.54%		8.18%	24.72%
COL	3.98%		4.71%	8.69%
Total	20.52%		12.89%	33.41%

Payroll = \$694,443,999

* 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, 2009 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, 2008 to December 31, 2009 Valuation

	Contribution Rate*	Estimated Annual Dollar Cost**
Recommended Average Employer Contribution Rate in December 31, 2008 Valuation	25.99%	\$183,183,888
Effect of investment (gain)/loss ⁽¹⁾	4.31%	29,930,536
Effect of difference in actual versus expected contributions due to delay in implementation of contribution rates calculated in 12/31/2008 valuation	(0.07%)	(486,111)
Effect of actual versus expected salary increase including total payroll growth ⁽²⁾	(0.01%)	(69,444)
Effect of net other experience (gains)/losses ⁽³⁾	(0.84)%	(8,529,875)
Effect of changes in actuarial assumptions and methods ⁽⁴⁾	1.11%	7,708,328
Effect of depooling implementation ⁽⁵⁾	<u>0.00%</u>	<u>0</u>
Total change	<u>4.50%</u>	<u>\$28,553,434</u>
Recommended Average Employer Contribution Rate in December 31, 2009 Valuation	30.49%	\$211,737,322

* 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 the valuation value of assets of 0.32% 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) 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.

(4) The Board approved changes in actuarial assumptions and methods.

(5) The Board approved implementation of depooling by employer when determining employer contribution rates.

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

The member contribution rates as of December 31, 2009 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, 2008 to December 31, 2009 Valuation**

	Contribution Rate*	Estimated Annual Dollar Cost**
Recommended Average Member Contribution Rate in December 31, 2008 Valuation	10.62%	\$74,877,340
Effect of changes in actuarial assumptions and methods	0.42%	2,916,665
Effect of depooling implementation	0.00%	0
Effect of other experience (gains)/losses ⁽¹⁾	<u>(0.05%)</u>	<u>(1,501,146)</u>
Total change	<u>0.37%</u>	<u>\$1,415,519</u>
Recommended Average Member Contribution Rate in December 31, 2009 Valuation	10.99%	\$76,292,859

* 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

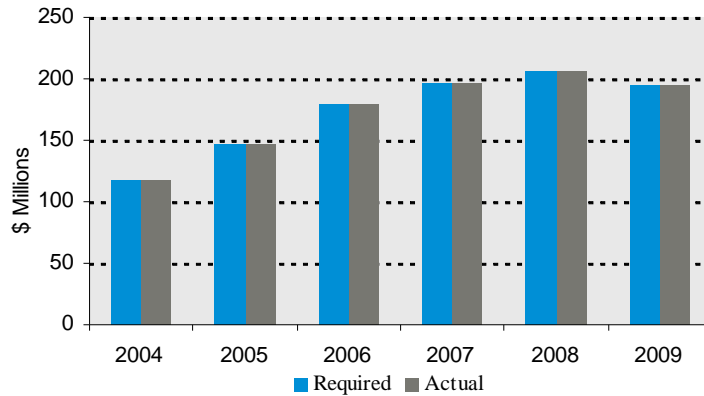
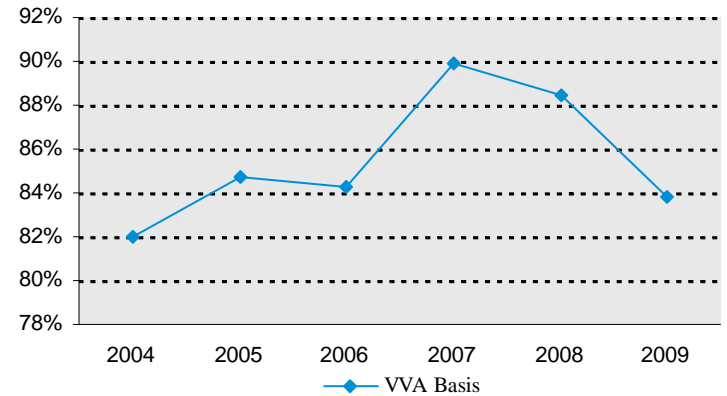


CHART 18
Funded Ratio



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
	2009	2008	
Active members in valuation			
Number	925	995	-7.0%
Average age	50.2	50.0	N/A
Average service	17.3	17.6	N/A
Projected total compensation ⁽¹⁾	\$79,141,013	\$82,263,766	-3.8%
Projected average compensation	\$85,558	\$82,677	3.5%
Account balances	\$73,610,874	\$76,109,619	-3.3%
Total active vested members	785	854	-8.1%
Vested terminated members⁽²⁾	301	317	-5.0%
Retired members			
Number in pay status	2,672	2,658	0.5%
Average age	73.6	73.7	N/A
Average monthly benefit ⁽³⁾	\$3,128	\$3,059	2.3%
Disabled members			
Number in pay status	333	343	-2.9%
Average age	67.7	67.2	N/A
Average monthly benefit ⁽³⁾	\$2,320	\$2,315	0.2%
Beneficiaries			
Number in pay status	697	723	-3.6%
Average age	75.4	75.0	N/A
Average monthly benefit ⁽³⁾	\$1,731	\$1,724	0.4%

⁽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
	2009	2008	
Active members in valuation			
Number ⁽¹⁾	0	0	N/A
Average age	N/A	N/A	N/A
Average service	N/A	N/A	N/A
Projected total compensation ⁽²⁾	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⁽³⁾	295	306	-3.6%
Retired members			
Number in pay status	438	441	-0.7%
Average age	70.6	70.2	N/A
Average monthly benefit ⁽⁴⁾	\$744	\$840	-11.4%
Disabled members			
Number in pay status	59	61	-3.3%
Average age	66.7	65.6	N/A
Average monthly benefit ⁽⁴⁾	\$1,869	\$1,872	-0.2%
Beneficiaries			
Number in pay status	83	78	6.4%
Average age	61.5	59.9	N/A
Average monthly benefit ⁽⁴⁾	\$847	\$871	-2.8%

⁽¹⁾ As of the December 31, 2005 valuation, there are no longer any Tier 2 Active Members since they have all transferred to Tier 3.

⁽²⁾ Calculated by increasing actual calendar year salaries by the assumed salary scale.

⁽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 A (continued)

Table of Plan Coverage

iii. General Tier 3

Category	Year Ended December 31		Change From Prior Year
	2009	2008	
Active members in valuation			
Number	6,481	6,786	-4.5%
Average age	47.1	46.4	N/A
Average service	9.9	9.2	N/A
Projected total compensation ⁽¹⁾	\$456,949,492	\$462,145,897	-1.1%
Projected average compensation	\$70,506	\$68,103	3.5%
Account balances	\$281,677,172	\$253,989,338	10.9%
Total active vested members	4433	4405	0.6%
Vested terminated members⁽²⁾	1,297	1,215	6.7%
Retired members			
Number in pay status	1,170	983	19.0%
Average age	64.6	64.2	N/A
Average monthly benefit ⁽³⁾	\$2,141	\$2,030	5.5%
Disabled members			
Number in pay status	73	62	17.7%
Average age	60.1	60.0	N/A
Average monthly benefit ⁽³⁾	\$2,035	\$2,111	-3.6%
Beneficiaries			
Number in pay status	71	52	36.5%
Average age	56.2	52.0	N/A
Average monthly benefit ⁽³⁾	\$1,343	\$1,260	6.6%

⁽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
	2009	2008	
Active members in valuation			
Number	1,532	1,604	-4.5%
Average age	41.2	40.9	N/A
Average service	12.0	11.7	N/A
Projected total compensation ⁽¹⁾	\$158,353,494	\$160,538,005	-1.4%
Projected average compensation	\$103,364	\$100,086	3.3%
Account balances ⁽²⁾	\$243,685,033	\$224,167,912	8.7%
Total active vested members	1,184	1,221	-3.0%
Vested terminated members⁽³⁾	316	315	0.3%
Retired members			
Number in pay status	939	898	4.6%
Average age	65.5	65.4	N/A
Average monthly benefit ⁽⁴⁾	\$6,407	\$6,418	-0.2%
Disabled members			
Number in pay status	476	456	4.4%
Average age	60.2	59.9	N/A
Average monthly benefit ⁽⁴⁾	\$4,769	\$4,690	1.7%
Beneficiaries			
Number in pay status	281	257	9.3%
Average age	66.8	67.0	N/A
Average monthly benefit ⁽⁴⁾	\$2,859	\$2,886	-0.9%

⁽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, 2009
By Age and Years of Service**

i. General Tier 1 Non-Enhanced

Age	Years of Service									
	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	1	1	--	--	--	--	--	--	--	--
	\$49,855	\$49,855	--	--	--	--	--	--	--	--
25 - 29	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
30 - 34	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
35 - 39	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
40 - 44	4	1	2	1	--	--	--	--	--	--
	76,384	53,289	\$103,521	\$45,204	--	--	--	--	--	--
45 - 49	1	1	--	--	--	--	--	--	--	--
	61,375	61,375	--	--	--	--	--	--	--	--
50 - 54	1	--	1	--	--	--	--	--	--	--
	57,022	--	57,022	--	--	--	--	--	--	--
55 - 59	2	1	--	--	--	--	1	--	--	--
	46,606	27,376	--	--	--	--	\$65,835	--	--	--
60 - 64	3	--	1	--	--	1	--	1	--	--
	55,410	--	32,115	--	--	\$64,092	--	\$70,023	--	--
65 & over	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
Total	12	4	4	1	--	1	1	1	--	--
	\$61,102	\$47,974	\$74,045	\$45,204	--	\$64,092	\$65,835	\$70,023	--	--

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, 2009
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	3	3	--	--	--	--	--	--	--	--	--
	\$69,296	\$69,296	--	--	--	--	--	--	--	--	--
25 - 29	36	32	4	--	--	--	--	--	--	--	--
	59,948	58,453	\$71,912	--	--	--	--	--	--	--	--
30 - 34	39	15	21	3	--	--	--	--	--	--	--
	70,409	65,602	74,531	\$65,586	--	--	--	--	--	--	--
35 - 39	59	18	34	6	1	--	--	--	--	--	--
	80,027	79,201	81,638	68,322	\$110,331	--	--	--	--	--	--
40 - 44	108	20	37	32	12	7	--	--	--	--	--
	85,311	78,796	85,829	87,692	84,640	\$91,451	--	--	--	--	--
45 - 49	133	26	38	25	21	16	7	--	--	--	--
	83,175	70,682	82,051	87,672	91,771	96,882	\$62,493	--	--	--	--
50 - 54	203	19	44	27	24	31	17	37	4	--	--
	87,973	82,361	90,104	87,096	87,876	97,479	92,586	\$78,926	\$88,093	--	--
55 - 59	217	15	34	28	22	19	24	50	25	--	--
	91,856	79,804	95,096	91,045	95,985	108,721	110,561	81,632	81,626	--	--
60 - 64	99	8	18	15	11	4	13	17	12	1	--
	93,041	56,874	92,175	89,046	84,562	96,944	107,288	112,880	88,647	\$65,834	--
65 & over	16	2	4	4	1	2	--	1	1	1	--
	81,009	31,076	61,375	93,553	132,759	103,767	--	118,272	100,499	55,211	--
Total	913	158	234	140	92	79	61	105	42	2	--
	\$85,879	\$70,764	\$85,575	\$87,253	\$90,618	\$99,660	\$99,338	\$86,087	\$84,698	\$60,523	--

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, 2009
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	31	31	--	--	--	--	--	--	--	--
	\$42,909	\$42,909	--	--	--	--	--	--	--	--
25 - 29	360	311	49	--	--	--	--	--	--	--
	53,835	53,567	\$55,535	--	--	--	--	--	--	--
30 - 34	638	404	194	40	--	--	--	--	--	--
	64,616	63,955	65,954	\$64,802	--	--	--	--	--	--
35 - 39	731	331	253	137	10	--	--	--	--	--
	68,554	63,122	74,085	71,305	\$70,787	--	--	--	--	--
40 - 44	917	291	293	219	75	38	1	--	--	--
	70,804	62,880	72,021	76,684	78,548	\$72,529	\$85,916	--	--	--
45 - 49	1,062	240	287	233	154	105	42	1	--	--
	73,735	65,208	69,492	73,165	88,667	86,518	68,194	\$61,245	--	--
50 - 54	1,048	219	254	214	132	141	79	9	--	--
	73,683	61,009	67,898	73,669	79,107	91,902	85,231	79,287	--	--
55 - 59	949	181	215	198	142	127	65	18	3	--
	74,285	65,966	67,787	72,474	81,973	81,740	85,955	98,842	\$81,702	--
60 - 64	571	83	145	133	84	75	37	9	5	--
	73,034	66,851	63,869	72,956	71,869	85,328	86,167	116,564	103,130	--
65 - 69	146	22	57	28	20	13	5	1	--	--
	72,342	64,958	67,326	83,386	81,799	67,321	61,979	139,452	--	--
70 & over	28	1	10	4	7	5	1	--	--	--
	60,234	40,821	66,371	67,276	56,777	53,318	48,881	--	--	--
Total	6,481	2,114	1,757	1,206	624	504	230	38	8	--
	\$70,506	\$61,962	\$68,804	\$73,486	\$80,780	\$84,764	\$81,814	\$98,487	\$95,094	--

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, 2009
By Age and Years of Service**

iv. Safety Tier A Non-Enhanced

Age	Years of Service							
	Total	0-4	5-9	10-14	15-19	20-24	25-29	30 & over
Under 25	--	--	--	--	--	--	--	--
25 - 29	--	--	--	--	--	--	--	--
30 - 34	2	--	2	--	--	--	--	--
35 - 39	\$109,960	--	\$109,960	--	--	--	--	--
40 - 44	1	--	1	--	--	--	--	--
45 - 49	109,960	--	109,960	--	--	--	--	--
50 - 54	6	--	1	--	--	5	--	--
55 - 59	114,231	--	109,960	--	--	\$115,085	--	--
60 - 64	2	--	--	--	--	1	1	--
65 & over	118,466	--	--	--	--	111,577	\$125,355	--
Total	5	--	--	--	2	1	2	--
	119,405	--	--	--	\$117,263	109,960	126,271	--
	4	--	1	--	--	1	2	--
	149,094	--	178,211	--	--	122,323	147,921	--
	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
	20	--	5	--	2	8	5	--
	\$122,280	--	\$123,610	--	\$117,263	\$114,910	\$134,747	--

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, 2009
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	16	16	--	--	--	--	--	--	--	--	--
	\$83,213	\$83,213	--	--	--	--	--	--	--	--	--
25 - 29	113	98	15	--	--	--	--	--	--	--	--
	88,644	87,590	\$95,534	--	--	--	--	--	--	--	--
30 - 34	202	72	115	15	--	--	--	--	--	--	--
	95,238	94,634	95,454	\$96,477	--	--	--	--	--	--	--
35 - 39	289	59	134	84	12	--	--	--	--	--	--
	98,885	92,417	98,892	101,114	\$115,016	--	--	--	--	--	--
40 - 44	313	24	78	94	83	33	1	--	--	--	--
	106,592	88,853	99,270	103,136	113,870	\$128,687	\$95,048	--	--	--	--
45 - 49	281	19	45	34	59	98	26	--	--	--	--
	117,147	127,436	102,324	105,274	118,142	121,907	130,613	--	--	--	--
50 - 54	139	12	19	21	18	32	29	8	--	--	--
	114,418	88,518	95,277	95,769	125,035	122,300	129,287	\$138,361	--	--	--
55 - 59	57	5	16	7	7	8	9	5	--	--	--
	110,603	86,787	109,540	109,280	90,994	119,290	114,231	146,689	--	--	--
60 - 64	15	--	5	4	1	2	2	1	--	--	--
	91,909	--	95,244	69,952	133,236	87,108	108,353	98,456	--	--	--
65 & over	7	1	1	4	1	--	--	--	--	--	--
	86,507	81,132	79,265	90,410	83,512	--	--	--	--	--	--
Total	1,432	306	428	263	181	173	67	14	--	--	--
	\$104,496	\$92,525	\$98,429	\$101,264	\$115,503	\$122,750	\$126,643	\$138,485	--	--	--

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, 2009
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	11	11	--	--	--	--	--	--	--	--	--
	\$71,204	\$71,204	--	--	--	--	--	--	--	--	--
25 - 29	23	23	--	--	--	--	--	--	--	--	--
	76,790	76,790	--	--	--	--	--	--	--	--	--
30 - 34	24	24	--	--	--	--	--	--	--	--	--
	79,822	79,822	--	--	--	--	--	--	--	--	--
35 - 39	13	13	--	--	--	--	--	--	--	--	--
	78,686	78,686	--	--	--	--	--	--	--	--	--
40 - 44	4	4	--	--	--	--	--	--	--	--	--
	83,631	83,631	--	--	--	--	--	--	--	--	--
45 - 49	2	2	--	--	--	--	--	--	--	--	--
	80,688	80,688	--	--	--	--	--	--	--	--	--
50 - 54	1	1	--	--	--	--	--	--	--	--	--
	93,357	93,357	--	--	--	--	--	--	--	--	--
55 - 59	2	2	--	--	--	--	--	--	--	--	--
	96,077	96,077	--	--	--	--	--	--	--	--	--
60 - 64	--	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--	--
65 & over	--	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--	--
Total	80	80	--	--	--	--	--	--	--	--	--
	\$78,368	\$78,368	--	--	--	--	--	--	--	--	--

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, 2009

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	--	--	--	--	--
	\$357	--	--	--	\$357	--	--	--	--	--
25 - 29	3	1	--	1	1	--	--	--	--	--
	676	\$550	--	\$1,121	357	--	--	--	--	--
30 - 34	7	2	--	2	2	--	1	--	--	--
	755	1,059	--	490	693	--	\$805	--	--	--
35 - 39	3	--	1	--	2	--	--	--	--	--
	1,247	--	\$2,008	--	867	--	--	--	--	--
40 - 44	5	--	1	2	2	--	--	--	--	--
	1,113	--	1,345	819	1,292	--	--	--	--	--
45 - 49	19	5	5	6	3	--	--	--	--	--
	1,162	1,397	1,086	1,103	1,015	--	--	--	--	--
50 - 54	74	44	11	6	8	2	2	--	1	--
	1,822	1,891	1,908	2,034	1,662	\$1,606	790	--	\$316	--
55 - 59	261	152	72	13	10	6	3	2	3	--
	3,028	3,791	1,921	2,528	2,245	2,054	1,241	\$1,033	749	--
60 - 64	559	211	197	93	26	14	11	6	1	--
	3,555	4,555	3,806	1,842	2,038	1,985	1,421	1,199	1,539	--
65 - 69	569	96	218	129	75	26	14	9	2	--
	3,458	4,468	4,220	3,007	1,714	1,971	2,363	1,656	1,625	--
70 - 74	520	15	108	184	103	77	20	6	4	3
	3,008	3,154	4,250	3,543	2,315	1,422	1,773	2,254	1,154	\$1,465
75 - 80	548	1	12	122	172	136	75	19	3	8
	2,609	5,047	3,878	3,263	3,290	1,953	1,230	2,028	1,359	1,732
80 - 84	488	3	4	17	120	153	106	73	12	--
	2,266	2,270	5,229	3,808	2,980	2,444	1,506	1,468	1,243	--
85 - 89	444	--	3	4	23	110	161	119	18	6
	2,159	--	2,132	2,765	2,445	2,520	2,139	1,928	1,402	1,439
90 & over	200	--	1	1	1	11	68	59	50	9
	1,800	--	1,039	1,196	49	1,835	1,753	2,155	1,632	1,062
Total	3,702	530	633	580	550	535	461	293	94	26
	\$2,793	\$3,997	\$3,747	\$3,003	\$2,628	\$2,133	\$1,748	\$1,843	\$1,466	\$1,402

Note: Total retired benefit \$10,337,949, average age 73.4 and average years retired 16.7.

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

EXHIBIT C (continued)

Average Monthly Benefit and Membership Distribution of Retired Members and Beneficiaries

ii. General Tier 2 as of December 31, 2009

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	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
25 - 29	2	--	--	2	--	--	--	--	--	--
	\$676	--	--	\$676	--	--	--	--	--	--
30 - 34	3	--	--	2	1	--	--	--	--	--
	525	--	--	594	\$386	--	--	--	--	--
35 - 39	7	--	2	3	2	--	--	--	--	--
	655	--	\$633	484	935	--	--	--	--	--
40 - 44	8	1	--	3	4	--	--	--	--	--
	1,169	\$526	--	1,648	970	--	--	--	--	--
45 - 49	2	--	--	1	1	--	--	--	--	--
	2,058	--	--	2,757	1,360	--	--	--	--	--
50 - 54	19	11	2	5	1	--	--	--	--	--
	923	315	1,181	1,878	2,331	--	--	--	--	--
55 - 59	44	19	17	7	--	1	--	--	--	--
	731	673	554	1,151	--	\$1,917	--	--	--	--
60 - 64	101	23	33	36	5	4	--	--	--	--
	803	720	548	947	1,611	1,074	--	--	--	--
65 - 69	108	18	29	48	12	1	--	--	--	--
	844	518	1,042	847	813	1,258	--	--	--	--
70 - 74	110	2	28	56	20	4	--	--	--	--
	964	1,262	737	1,122	682	1,593	--	--	--	--
75 - 80	110	--	12	51	32	10	5	--	--	--
	946	--	572	1,163	816	798	\$751	--	--	--
80 - 84	52	--	3	15	28	4	1	1	--	--
	849	--	320	971	759	1,162	460	\$2,242	--	--
85 - 89	11	--	--	3	6	2	--	--	--	--
	759	--	--	616	345	2,216	--	--	--	--
90 & over	3	--	--	--	2	1	--	--	--	--
	305	--	--	--	342	232	--	--	--	--
Total	580	74	126	232	114	27	6	1	--	--
	\$873	\$611	\$713	\$1,045	\$802	\$1,153	\$703	\$2,242	--	--

Note: Total retired benefit \$506,411, average age 68.9 and average years retired 11.7.

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

EXHIBIT C (continued)

Average Monthly Benefit and Membership Distribution of Retired Members and Beneficiaries

iii. General Tier 3 as of December 31, 2009

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	2	2	--	--	--	--	--	--	--
	\$1,171	\$762	\$1,579	--	--	--	--	--	--	--
25 - 29	1	--	--	1	--	--	--	--	--	--
	635	--	--	\$635	--	--	--	--	--	--
30 - 34	3	2	1	--	--	--	--	--	--	--
	794	873	635	--	--	--	--	--	--	--
35 - 39	2	--	2	--	--	--	--	--	--	--
	1,079	--	1,079	--	--	--	--	--	--	--
40 - 44	10	5	5	--	--	--	--	--	--	--
	1,157	1,514	801	--	--	--	--	--	--	--
45 - 49	11	7	2	1	1	--	--	--	--	--
	1,944	1,911	2,352	1579	\$1,727	--	--	--	--	--
50 - 54	92	78	12	1	1	--	--	--	--	--
	1,688	1,640	2,045	2,725	66	--	--	--	--	--
55 - 59	222	169	52	1	--	--	--	--	--	--
	2,026	2,293	1,162	1,898	--	--	--	--	--	--
60 - 64	348	250	90	7	--	--	1	--	--	--
	2,517	2,707	2,096	1,231	--	--	\$1,965	--	--	--
65 - 69	387	248	117	17	3	2	--	--	--	--
	2,168	2,443	1,708	1,602	1,518	\$886	--	--	--	--
70 - 74	177	70	88	19	--	--	--	--	--	--
	1,686	1,972	1,509	1,458	--	--	--	--	--	--
75 - 80	46	17	24	5	--	--	--	--	--	--
	1,387	1,659	1,184	1,431	--	--	--	--	--	--
80 - 84	8	3	3	2	--	--	--	--	--	--
	2,111	2,432	2,673	788	--	--	--	--	--	--
85 - 89	3	1	--	--	1	1	--	--	--	--
	2,216	3,944	--	--	929	1,776	--	--	--	--
90 & over	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
Total	1,314	852	398	54	6	3	1	--	--	--
	\$2,092	\$2,347	\$1,651	\$1,465	\$1,213	\$1,183	\$1,965	--	--	--

Note: Total retired benefit \$2,748,784, average age 63.9 and average years retired 4.4.

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, 2009**

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	--	--	--	--	--	--	--
	\$1,060	--	\$1,060	--	--	--	--	--	--	--
25 - 29	1	--	--	--	1	--	--	--	--	--
	1,012	--	--	--	\$1,012	--	--	--	--	--
30 - 34	7	5	--	--	2	--	--	--	--	--
	2,390	\$2,995	--	--	879	--	--	--	--	--
35 - 39	21	9	11	--	1	--	--	--	--	--
	3,514	4,380	3,057	--	746	--	--	--	--	--
40 - 44	25	11	8	3	3	--	--	--	--	--
	3,344	4,087	3,290	\$3,311	801	--	--	--	--	--
45 - 49	69	25	20	15	7	2	--	--	--	--
	3,763	4,587	3,281	3,467	2,990	\$3,214	--	--	--	--
50 - 54	171	128	18	15	7	3	--	--	--	--
	5,721	6,628	2,955	3,072	3,000	3,187	--	--	--	--
55 - 59	277	137	88	25	19	8	--	--	--	--
	6,393	7,802	6,228	2,929	3,099	2,747	--	--	--	--
60 - 64	396	86	180	59	30	19	13	7	2	--
	5,889	7,009	7,257	3,721	3,218	2,521	\$2,758	\$3,015	\$952	--
65 - 69	255	19	66	92	46	16	7	5	3	1
	5,530	3,850	5,858	7,332	4,061	2,601	2,707	3,410	2,840	\$2,721
70 - 74	170	5	10	43	66	24	14	4	4	--
	5,231	2,252	3,732	5,336	6,706	4,123	3,056	3,769	2,957	--
75 - 80	142	1	1	15	36	38	27	18	6	--
	4,410	1,654	12,478	4,210	5,518	4,795	3,354	3,220	3,249	--
80 - 84	97	--	--	1	4	14	32	31	6	9
	4,216	--	--	1,430	3,372	5,718	4,791	3,707	3,301	2,887
85 - 89	44	--	--	--	--	2	5	21	13	3
	4,030	--	--	--	--	3,180	5,329	4,607	3,327	1,447
90 & over	17	--	--	--	--	--	--	2	7	8
	3,370	--	--	--	--	--	--	4,910	3,644	2,744
Total	1,696	426	406	268	222	126	98	88	41	21
	\$5,359	\$6,620	\$6,093	\$5,110	\$4,706	\$3,929	\$3,756	\$3,780	\$3,178	\$2,619

Note: Total retired benefit \$9,089,265, average age 64.2 and average years retired 13.0.

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

EXHIBIT D

Reconciliation of Member Data – December 31, 2008 to December 31, 2009

	Active Participants	Vested Former Participants⁽¹⁾	Pensioners	Disableds	Beneficiaries	Total
Number as of December 31, 2008	9,385	2,153	4,980	922	1,110	18,550
New participants	283	24	0	0	76	383
Terminations – with vested rights ⁽¹⁾	-254	254	0	0	0	0
Contributions Refunds	-142	-115	0	0	0	-257
Retirements	-314	-80	394	0	0	0
New disabilities	-28	-3	-9	40	0	0
Return to work	21	-19	-2	0	0	0
Died with or without beneficiary	-13	-5	-147	-22	-54	-241
Data adjustments	<u>0</u>	<u>0</u>	<u>3</u>	<u>1</u>	<u>0</u>	<u>4</u>
Number as of December 31, 2009	8,938	2,209	5,219	941	1,132	18,439

⁽¹⁾ Includes 777 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, 2009	Year Ended December 31, 2008
Contribution income:		
Employer contributions	\$195,613,673	\$206,518,693
Employee contributions	<u>66,536,161</u>	<u>76,452,406</u>
Net contribution income	\$262,149,834	\$282,971,099
Investment income:		
Interest, dividends and other income	\$155,083,209	\$186,863,002
Adjustment toward market value ⁽¹⁾	(102,780,421)	84,077,140
Less investment and administrative fees	<u>(34,075,855)</u>	<u>(32,543,025)</u>
Net investment income	<u>18,226,933</u>	<u>238,397,117</u>
Total income available for benefits	\$280,376,767	\$521,368,216
Less benefit payments:		
Benefits paid	\$(266,866,460)	\$(250,444,562)
Refunds of contributions	(4,628,272)	(3,730,320)
Adjustments/transfers	<u>(581,275)</u>	<u>(508,222)</u>
Net benefit payments	\$(272,076,007)	\$(254,683,104)
Change in reserve for future benefits	\$8,300,760	\$266,685,112

⁽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, 2009	Year Ended December 31, 2008
Cash equivalents	\$665,923,659	\$449,131,950
Accounts receivable:		
Investment trades	\$192,270,043	\$361,930,772
Investment income	14,094,596	19,313,653
Employee and employer contributions	7,079,763	7,619,110
Additional contributions ⁽¹⁾	<u>24,132,440</u>	<u>24,940,611</u>
Total accounts receivable	237,576,842	413,804,146
Investments:		
Stocks	\$2,169,486,036	\$1,584,443,392
Bonds	1,412,260,613	1,569,704,942
Real estate	492,043,654	372,959,638
Alternative investments	<u>249,373,445</u>	<u>218,175,131</u>
Total investments at market value	<u>4,323,163,748</u>	<u>3,745,283,103</u>
Total assets	\$5,226,664,249	\$4,608,219,199
Less accounts payable:		
Investment trades	\$(192,198,940)	\$(481,267,131)
Security lending	(461,576,590)	(280,747,586)
Employer contributions unearned	(81,695,415)	(87,327,991)
Other	<u>(14,463,774)</u>	<u>(9,177,679)</u>
Total accounts payable	\$(749,934,719)	\$(858,520,387)
Net assets at market value	<u>\$4,476,729,530</u>	<u>\$3,749,698,812</u>
Net assets at actuarial value	<u>\$5,304,261,661</u>	<u>\$5,295,960,900</u>
Net assets at valuation value	<u>\$5,290,114,102</u>	<u>\$5,282,505,159</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.

Assets	Basic	COLA	Total
1. Total valuation value of assets	\$3,455,914,778	\$7,834,199,324	\$5,290,114,102
2. Present value of future contributions by members	358,904,575	204,656,275	563,560,850
3. Present value of future employer contributions for:			
(a) entry age normal cost	684,086,388	194,187,266	878,273,654
(b) unfunded actuarial accrued liability	657,895,047	366,778,038	1,024,673,085
4. Total actuarial assets	\$5,156,800,788	\$2,599,820,903	\$7,756,621,691
Liabilities			
5. Present value of benefits for retirees and beneficiaries	\$2,098,354,144	\$1,425,059,469	\$3,523,413,613
6. Present value of benefits for vested terminated members ⁽¹⁾	118,709,885	45,736,279	164,446,164
7. Present value of benefits for active members	2,939,736,759	1,129,025,155	4,068,761,914
8. Total present value of benefits	\$5,156,800,788	\$2,599,820,903	\$7,756,621,691

⁽¹⁾ *Includes nonvested terminated members.*

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

EXHIBIT H

Summary of Total Allocated Reserves

Reserves	December 31, 2009	December 31, 2008
Member Deposits ⁽¹⁾	\$503,689,973	\$450,683,276
Member Cost of Living ⁽¹⁾	215,726,662	183,722,077
Employer Advance ⁽¹⁾	1,616,871,233	1,420,881,191
Employer Cost of Living ⁽¹⁾	1,046,752,850	941,378,185
Retired Members ⁽¹⁾	1,615,284,114	1,624,797,602
Retired Cost of Living ⁽¹⁾	708,063,460	686,649,902
Smoothed Market Value Valuation ⁽¹⁾	214,894,000	198,874,477
Dollar Power Cost of Living Supplement Pre-Funding ⁽¹⁾	18,778,932	20,191,143
Post Retirement Death Benefit ⁽²⁾	14,147,559	13,455,741
Statutory Contingency (one percent) ⁽²⁾	0	0
Additional One Percent Contingency Designation ⁽²⁾	0	0
Contra Tracking Account ⁽¹⁾	(649,947,122)	(244,672,694)
Total Allocated Reserves	\$5,304,261,661	\$5,295,960,900
Market Stabilization Account	(827,532,131)	(1,546,262,088)
Net Market Value	\$4,476,729,530	\$3,749,698,812

⁽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, 2009
1. Unfunded actuarial accrued liability at beginning of year	\$689,965,915
2. Gross Normal cost at middle of year	195,453,131
3. Actual employer and member contributions	(262,149,834)
4. Interest (whole year on (1) plus half year on (2) - (3))	<u>51,216,170</u>
5. Expected unfunded actuarial accrued liability at end of year ⁽¹⁾	<u>\$674,485,382</u>
6. Actuarial (gain)/loss due to all changes:	
a. Investment return	\$394,647,212
b. Salary increases	(47,181,358)
c. Other experience (gain)/loss ⁽²⁾	(61,149,294)
d. Changes in actuarial assumptions and methods	63,871,143
e. Depooling implementation	<u>0</u>
f. Total changes	<u>\$350,187,703</u>
7. Unfunded actuarial accrued liability at end of year	<u>\$1,024,673,085</u>

⁽¹⁾ Includes contribution gain of \$6,234,494 during the year from actual contributions greater than expected.

⁽²⁾ 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	Source	Initial Amount	Outstanding Balance	Years Remaining	Annual Payment**
General						
Cost Groups #1 and #2	December 31, 2007	Restart of Amortization	\$789,616,678	\$767,063,150	13	\$71,387,989
County and Small Districts	December 31, 2008	Actuarial (Gain)/Loss	80,496,792	80,463,008	17	6,084,278
(Tiers 1 and 3)	December 31, 2009	Actuarial (Gain)/Loss	165,997,327	165,997,327	18	12,033,006
	December 31, 2009	Assumption Change	39,793,000	39,793,000	18	2,884,561
	December 31, 2009	Depooling Implementation	-75,134,625	<u>-75,134,625</u>	18	<u>-5,446,445</u>
Subtotal				\$978,181,860		\$86,943,389
Cost Group #3						
	December 31, 2007	Restart of Amortization	\$36,185,000	\$35,151,461	13	\$3,271,428
Central Contra Costa	December 31, 2008	Actuarial (Gain)/Loss	3,709,835	3,708,278	17	280,405
Sanitary District	December 31, 2009	Actuarial (Gain)/Loss	10,118,261	10,118,261	18	733,464
	December 31, 2009	Assumption Change	2,003,000	2,003,000	18	145,196
	December 31, 2009	Depooling Implementation	20,037,235	<u>20,037,235</u>	18	<u>1,452,482</u>
Subtotal				\$71,018,235		\$5,882,975
Cost Group #4						
	December 31, 2007	Restart of Amortization	\$7,770,000	\$7,548,068	13	\$702,473
Contra Costa Housing	December 31, 2008	Actuarial (Gain)/Loss	1,573,513	1,572,853	17	118,933
Authority	December 31, 2009	Actuarial (Gain)/Loss	1,277,079	1,277,079	18	92,574
	December 31, 2009	Assumption Change	425,000	425,000	18	30,808
	December 31, 2009	Depooling Implementation	-189,275	<u>-189,275</u>	18	<u>-13,720</u>
Subtotal				\$10,633,275		\$931,068

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

	Date Established	Source	Initial Amount	Outstanding Balance	Years Remaining	Annual Payment**
General						
Cost Group #5	December 31, 2007	Restart of Amortization	-\$1,011,000	-\$982,123	13	-\$91,403
Contra Costa County Fire Protection District	December 31, 2008	Actuarial (Gain)/Loss	45,963	45,943	17	3,474
	December 31, 2009	Actuarial (Gain)/Loss	1,614,180	1,614,180	18	117,011
	December 31, 2009	Assumption Change	336,000	336,000	18	24,356
	December 31, 2009	Depooling Implementation	2,142,538	<u>2,142,538</u>	18	<u>155,311</u>
Subtotal				\$3,156,538		\$208,749
Cost Group #6	December 31, 2007	Restart of Amortization	\$1,028,000	\$998,638	13	\$92,940
Small Districts	December 31, 2008	Actuarial (Gain)/Loss	61,240	61,214	17	4,629
(Tier 1 Non-enhanced)	December 31, 2009	Actuarial (Gain)/Loss	385,148	385,148	18	27,919
	December 31, 2009	Assumption Change	126,000	126,000	18	9,134
	December 31, 2009	Depooling Implementation	-1,028,581	<u>-1,028,581</u>	18	<u>-74,561</u>
Subtotal				\$542,419		\$60,060
Safety						
Cost Group #7 and #9	December 31, 2007	Restart of Amortization	\$129,233,744	\$125,542,489	13	\$11,683,817
County Tiers A and C	December 31, 2008	Actuarial (Gain)/Loss	25,934,594	25,923,710	17	1,960,243
	December 31, 2009	Actuarial (Gain)/Loss	55,813,557	55,813,557	18	4,045,877
	December 31, 2009	Assumption Change	11,213,000	11,213,000	18	812,821
	December 31, 2009	Depooling Implementation	24,145,656	<u>24,145,656</u>	18	<u>1,750,298</u>
Subtotal				\$242,638,411		\$20,253,057

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

	Date Established	Source	Initial Amount	Outstanding Balance	Years Remaining	Annual Payment**
Safety						
Cost Group #8	December 31, 2007	Restart of Amortization	\$124,138,710	\$120,592,982	13	\$11,223,183
Contra Costa and East Fire Protection Districts	December 31, 2008	Actuarial (Gain)/Loss	6,780,436	6,777,591	17	512,493
	December 31, 2009	Actuarial (Gain)/Loss	27,018,706	27,018,706	18	1,958,563
	December 31, 2009	Assumption Change	4,945,000	4,945,000	18	358,459
	December 31, 2009	Depooling Implementation	47,818,666	<u>47,818,666</u>	18	<u>3,466,335</u>
Subtotal				\$207,152,945		\$17,519,033
Cost Group #10						
	December 31, 2007	Restart of Amortization	-\$2,591,000	-\$2,516,994	13	-\$234,248
Moraga-Orinda Fire District	December 31, 2008	Actuarial (Gain)/Loss	2,002,150	2,001,310	17	151,331
	December 31, 2009	Actuarial (Gain)/Loss	5,671,684	5,671,884	18	411,136
	December 31, 2009	Assumption Change	1,012,000	1,012,000	18	73,359
	December 31, 2009	Depooling Implementation	4,873,631	<u>4,873,631</u>	18	<u>353,285</u>
Subtotal				\$11,041,631		\$754,863
Cost Group #11						
	December 31, 2007	Restart of Amortization	\$58,766,000	\$57,087,409	13	\$5,312,941
San Ramon Valley Fire District	December 31, 2008	Actuarial (Gain)/Loss	10,216,694	10,212,407	17	772,220
	December 31, 2009	Actuarial (Gain)/Loss	9,262,105	9,262,105	18	671,402
	December 31, 2009	Assumption Change	2,453,000	2,453,000	18	177,816
	December 31, 2009	Depooling Implementation	-20,174,500	<u>-20,174,500</u>	18	<u>-1,462,432</u>
Subtotal				\$58,840,500		\$5,471,946

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

	Date Established	Source	Initial Amount	Outstanding Balance	Years Remaining	Annual Payment**
Safety						
Cost Group #12	December 31, 2007	Restart of Amortization	\$3,960,000	\$3,846,892	13	\$358,017
Rodeo-Hercules Fire	December 31, 2008	Actuarial (Gain)/Loss	957,150	956,748	17	72,345
Protection District	December 31, 2009	Actuarial (Gain)/Loss	2,872,360	2,872,360	18	208,215
	December 31, 2009	Assumption Change	1,154,000	1,154,000	18	83,652
	December 31, 2009	Depooling Implementation	-1,809,374	<u>-1,809,374</u>	18	<u>-131,160</u>
Subtotal				\$7,020,626		\$591,070
Both General and Safety						
Special Adjustments*	December 31, 2007	Pension Obligation Bonds	-\$582,184,442	<u>-\$565,553,805</u>	13	<u>-\$52,634,192</u>
Subtotal				-\$565,553,805		-\$52,634,192
Grand Total				\$1,024,673,085		\$85,982,018

* Includes remaining balance of Pension Obligation Bonds (POBs) and any other special contributions made by the County (including Courts) or Moraga-Orinda Fire District that have been allocated to the County General cost groups or for Contra Costa Fire Protection District that have been allocated to their Safety cost group.

** 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 2010. 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
2004	\$118,245,418	\$118,245,418	100.0%
2005	147,165,108	147,165,108 ⁽¹⁾	100.0%
2006	179,755,315	179,755,315 ⁽²⁾	100.0%
2007	196,929,570	196,929,570	100.0%
2008	206,518,693	206,518,693	100.0%
2009	195,613,673	195,613,673	100.0%

⁽¹⁾ Excludes pension obligation bond proceeds of \$153,134,911.

⁽²⁾ Excludes pension obligation bond proceeds of \$11,693,396.

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

EXHIBIT II

Supplementary Information Required by GASB – Schedule of Funding Progress

Actuarial Valuation Date	Valuation Value of Assets⁽¹⁾ (a)	Actuarial Accrued Liability (AAL)⁽²⁾ (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)] / (c)
12/31/2004	\$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%
12/31/2009	5,290,114,102	6,314,787,187	1,024,673,085	83.77%	694,443,999	147.55%

⁽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, 2009
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 13 years remaining as of December 31, 2009. 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	7.75%
Inflation rate	3.50%
Projected salary increases ⁽¹⁾	General: 5.00% to 13.25%; Safety: 5.00% to 13.75%
Cost of living adjustments	3% per year except for Tier 3 disability benefits and Tier 2 benefits that are valued as a 3.50% increase per year. Safety Tier C benefits are assumed to increase at 2% per year. All increases are contingent upon actual increases in CPI.
Plan membership:	
Retired members and beneficiaries receiving benefits	7,292
Terminated members entitled to, but not yet receiving benefits ⁽²⁾	2,209
Active members	<u>8,938</u>
Total	18,439

⁽¹⁾ Includes inflation at 3.50%, plus "across the board" salary increases of 0.75%, plus merit and promotional increases. See Exhibit IV for these increases.

⁽²⁾ Includes 777 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 three years for males and set back two years for females.

For Safety Members: RP-2000 Combined Healthy Mortality Table set back three years for males and set back two years for females.

Disabled:

For General Members: RP-2000 Combined Healthy Mortality Table set forward four years.

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

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 three years for males and set back two years for females weighted 30% male and 70% female.

For Safety Members: RP-2000 Combined Healthy Mortality Table set back three years for males and set back two years for females 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	0.09	0.06	0.09	0.06
45	0.12	0.09	0.12	0.09
50	0.17	0.14	0.17	0.14
55	0.27	0.22	0.27	0.22
60	0.47	0.39	0.47	0.39
65	0.88	0.76	0.88	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	0.02	0.00	0.02
25	0.04	0.02	0.22
30	0.11	0.04	0.42
35	0.18	0.06	0.65
40	0.26	0.09	0.90
45	0.42	0.13	1.15
50	0.56	0.18	2.60
55	0.69	0.23	4.40
60	0.75	0.28	5.00
65	0.75	0.42	5.00
70	0.75	0.58	5.00

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

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

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

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

Termination Rates Before Retirement (continued):

Rate (%)		
Withdrawal (Less than Five Years of Service)		
Years of Service	General	Safety
0	15.00	11.00
1	9.00	7.00
2	9.00	5.00
3	6.00	4.00
4	5.00	4.00

Withdrawal (Five or More Years of Service) *		
Age	General	Safety
20	5.00	4.00
25	5.00	4.00
30	5.00	4.00
35	5.00	3.14
40	4.73	2.39
45	3.05	1.80
50	2.42	1.24
55	1.68	0.81
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	4.00	4.00	25.00	15.00
51	4.00	3.00	17.00	10.00
52	4.00	3.00	20.00	12.00
53	5.00	3.00	20.00	12.00
54	10.00	5.00	20.00	12.00
55	15.00	10.00	30.00	20.00
56	15.00	10.00	25.00	15.00
57	17.00	10.00	25.00	15.00
58	20.00	10.00	30.00	20.00
59	20.00	10.00	30.00	20.00
60	20.00	15.00	40.00	30.00
61	30.00	17.00	40.00	30.00
62	30.00	25.00	40.00	30.00
63	30.00	25.00	40.00	30.00
64	30.00	27.00	40.00	30.00
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	40.00	100.00	100.00
71	100.00	40.00	100.00	100.00
72	100.00	40.00	100.00	100.00
73	100.00	40.00	100.00	100.00
74	100.00	40.00	100.00	100.00
75	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 5.50% 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:

75% of male members and 50% of female members are 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: 12.00%
General Tier 2: 3.50%
General Tier 3: 7.50%
Safety Tier A: 11.25%
Safety Tier C: 3.75%

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

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

Service From Unused Sick Leave Conversion:

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

Service Retirements:

General:	1.25%
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:

7.75%, net of administration and investment expenses.

Employee Contribution Crediting Rate:

7.75%, compounded semi-annually.

Consumer Price Index:

Increase of 3.50% 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 3.50% 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: 3.50% per year, plus “across the board” salary increases of 0.75% per year, plus the following merit and promotional increases.

Years of Service	General	Safety
Less than 1	9.00%	9.50%
1	6.00%	6.25%
2	4.75%	5.25%
3	3.25%	4.00%
4	2.25%	2.00%
5	1.50%	0.75%
6	1.25%	0.75%
7	1.00%	0.75%
8	0.75%	0.75%
9	0.75%	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 calculated as age on the valuation date minus years of service. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are based on costs allocated as a level percent of compensation, with Normal Cost determined as if the current benefit accrual rate had always been in effect.
Changes in Actuarial Assumptions and Methods:	Based on the Actuarial Experience Study and Review of Economic Actuarial Assumptions, the following assumptions and methods were changed. Previously, these assumptions and methods were as follows:
Post – Retirement Mortality Rates:	
<i>Healthy:</i>	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.
<i>Disabled:</i>	For General Members: RP-2000 Combined Healthy Mortality Table set forward six years. For Safety Members: RP-2000 Combined Healthy Mortality Table.
<i>Beneficiaries:</i>	Beneficiaries are assumed to have the same mortality as a General Member of the opposite sex who has taken a service (non-disability) retirement.
<i>Member Contribution Rates:</i>	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

Changes in Actuarial Assumptions (previous assumptions continued):

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

Changes in Actuarial Assumptions (previous assumptions continued):

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

Changes in Actuarial Assumptions (previous assumptions continued):

Termination Rates Before Retirement (continued):

Rate (%)		
Withdrawal (Less than Five Years of Service)		
Years of Service	General	Safety
0	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

Changes in Actuarial Assumptions (previous assumptions continued):

Retirement Rates (Enhanced):

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

Age	Rate (%)			
	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

Changes in Actuarial Assumptions (previous assumptions continued):

**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.

Percent Married:

80% of male members and 55% of female members are assumed to be married at pre-retirement death or retirement. There is no explicit assumption for children's benefits.

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.

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

Changes in Actuarial Assumptions (previous assumptions continued):

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

Changes in Actuarial Methods:

Actuarial Cost Method:

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

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

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 amortized as a level percent of payroll over a declining period with 13 years remaining as of December 31, 2009. 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:

There have been no changes in plan provisions since the previous actuarial valuation.

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, 2009 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	3.63%	5.44%	1.79%	2.69%	5.42%	8.13%
16	3.69%	5.53%	1.82%	2.73%	5.51%	8.26%
17	3.74%	5.61%	1.85%	2.77%	5.59%	8.38%
18	3.80%	5.70%	1.88%	2.82%	5.68%	8.52%
19	3.86%	5.79%	1.91%	2.86%	5.77%	8.65%
20	3.92%	5.88%	1.94%	2.91%	5.86%	8.79%
21	3.98%	5.97%	1.97%	2.95%	5.95%	8.92%
22	4.04%	6.06%	1.99%	2.99%	6.03%	9.05%
23	4.10%	6.15%	2.03%	3.04%	6.13%	9.19%
24	4.16%	6.24%	2.05%	3.08%	6.21%	9.32%
25	4.23%	6.34%	2.09%	3.13%	6.32%	9.47%
26	4.29%	6.43%	2.12%	3.18%	6.41%	9.61%
27	4.35%	6.53%	2.15%	3.23%	6.50%	9.76%
28	4.42%	6.63%	2.19%	3.28%	6.61%	9.91%
29	4.49%	6.73%	2.22%	3.33%	6.71%	10.06%
30	4.55%	6.83%	2.25%	3.38%	6.80%	10.21%
31	4.63%	6.94%	2.29%	3.43%	6.92%	10.37%
32	4.70%	7.05%	2.32%	3.48%	7.02%	10.53%
33	4.77%	7.15%	2.35%	3.53%	7.12%	10.68%
34	4.84%	7.26%	2.39%	3.59%	7.23%	10.85%
35	4.91%	7.37%	2.43%	3.64%	7.34%	11.01%
36	4.99%	7.49%	2.47%	3.70%	7.46%	11.19%
37	5.07%	7.60%	2.51%	3.76%	7.58%	11.36%

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, 2009 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	5.15%	7.72%	2.55%	3.82%	7.70%	11.54%
39	5.23%	7.84%	2.58%	3.87%	7.81%	11.71%
40	5.31%	7.97%	2.63%	3.94%	7.94%	11.91%
41	5.40%	8.10%	2.67%	4.00%	8.07%	12.10%
42	5.49%	8.23%	2.71%	4.07%	8.20%	12.30%
43	5.58%	8.37%	2.76%	4.14%	8.34%	12.51%
44	5.67%	8.51%	2.81%	4.21%	8.48%	12.72%
45	5.78%	8.67%	2.85%	4.28%	8.63%	12.95%
46	5.90%	8.85%	2.91%	4.37%	8.81%	13.22%
47	6.01%	9.01%	2.97%	4.45%	8.98%	13.46%
48	6.10%	9.15%	3.01%	4.52%	9.11%	13.67%
49	6.21%	9.32%	3.07%	4.61%	9.28%	13.93%
50	6.31%	9.47%	3.12%	4.68%	9.43%	14.15%
51	6.35%	9.53%	3.14%	4.71%	9.49%	14.24%
52	6.35%	9.52%	3.13%	4.70%	9.48%	14.22%
53	6.33%	9.49%	3.13%	4.69%	9.46%	14.18%
54	6.11%	9.16%	3.02%	4.53%	9.13%	13.69%
55	6.11%	9.16%	3.02%	4.53%	9.13%	13.69%
56	6.11%	9.16%	3.02%	4.53%	9.13%	13.69%
57	6.11%	9.16%	3.02%	4.53%	9.13%	13.69%
58	6.11%	9.16%	3.02%	4.53%	9.13%	13.69%
59	6.11%	9.16%	3.02%	4.53%	9.13%	13.69%
60	6.11%	9.16%	3.02%	4.53%	9.13%	13.69%

Interest: 7.75%
 Salary Increase: See Exhibit IV.
 COLA Loading: 49.42%
 Mortality: RP-2000 Combined Healthy Mortality Table (30% Male and 70% Female, with ages set back three years for males and two years for females)

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, 2009 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	3.16%	4.74%	1.87%	2.81%	5.03%	7.55%
16	3.21%	4.81%	1.90%	2.85%	5.11%	7.66%
17	3.26%	4.89%	1.93%	2.90%	5.19%	7.79%
18	3.31%	4.96%	1.96%	2.94%	5.27%	7.90%
19	3.36%	5.04%	1.99%	2.98%	5.35%	8.02%
20	3.41%	5.12%	2.02%	3.03%	5.43%	8.15%
21	3.47%	5.20%	2.05%	3.08%	5.52%	8.28%
22	3.52%	5.28%	2.09%	3.13%	5.61%	8.41%
23	3.57%	5.36%	2.11%	3.17%	5.68%	8.53%
24	3.63%	5.44%	2.15%	3.22%	5.78%	8.66%
25	3.69%	5.53%	2.18%	3.27%	5.87%	8.80%
26	3.74%	5.61%	2.21%	3.32%	5.95%	8.93%
27	3.80%	5.70%	2.25%	3.37%	6.05%	9.07%
28	3.85%	5.78%	2.28%	3.42%	6.13%	9.20%
29	3.91%	5.87%	2.32%	3.48%	6.23%	9.35%
30	3.97%	5.96%	2.35%	3.53%	6.32%	9.49%
31	4.03%	6.05%	2.39%	3.58%	6.42%	9.63%
32	4.09%	6.14%	2.43%	3.64%	6.52%	9.78%
33	4.16%	6.24%	2.46%	3.69%	6.62%	9.93%
34	4.22%	6.33%	2.50%	3.75%	6.72%	10.08%
35	4.29%	6.43%	2.54%	3.81%	6.83%	10.24%
36	4.35%	6.53%	2.58%	3.87%	6.93%	10.40%
37	4.42%	6.63%	2.62%	3.93%	7.04%	10.56%
38	4.49%	6.73%	2.65%	3.98%	7.14%	10.71%
39	4.55%	6.83%	2.69%	4.04%	7.24%	10.87%
40	4.62%	6.93%	2.73%	4.10%	7.35%	11.03%

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, 2009 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%	2.78%	4.17%	7.47%	11.21%
42	4.77%	7.15%	2.82%	4.23%	7.59%	11.38%
43	4.84%	7.26%	2.87%	4.30%	7.71%	11.56%
44	4.92%	7.38%	2.91%	4.37%	7.83%	11.75%
45	4.99%	7.49%	2.95%	4.43%	7.94%	11.92%
46	5.08%	7.62%	3.01%	4.51%	8.09%	12.13%
47	5.16%	7.74%	3.05%	4.58%	8.21%	12.32%
48	5.25%	7.87%	3.11%	4.66%	8.36%	12.53%
49	5.34%	8.01%	3.16%	4.74%	8.50%	12.75%
50	5.43%	8.15%	3.22%	4.83%	8.65%	12.98%
51	5.55%	8.32%	3.29%	4.93%	8.84%	13.25%
52	5.65%	8.48%	3.35%	5.02%	9.00%	13.50%
53	5.74%	8.61%	3.40%	5.10%	9.14%	13.71%
54	5.85%	8.77%	3.46%	5.19%	9.31%	13.96%
55	5.94%	8.91%	3.52%	5.28%	9.46%	14.19%
56	5.97%	8.96%	3.54%	5.31%	9.51%	14.27%
57	5.97%	8.96%	3.54%	5.31%	9.51%	14.27%
58	5.95%	8.93%	3.53%	5.29%	9.48%	14.22%
59	5.75%	8.62%	3.40%	5.10%	9.15%	13.72%
60	5.75%	8.62%	3.40%	5.10%	9.15%	13.72%

Interest: 7.75%
 Salary Increase: See Exhibit IV.
 COLA Loading: 59.21%
 Mortality: RP-2000 Combined Healthy Mortality Table (30% Male and 70% Female, with ages set back three years for males and two years for females)

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, 2009 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	3.16%	4.74%	1.57%	2.36%	4.73%	7.10%
16	3.21%	4.81%	1.60%	2.40%	4.81%	7.21%
17	3.26%	4.89%	1.63%	2.44%	4.89%	7.33%
18	3.31%	4.96%	1.65%	2.47%	4.96%	7.43%
19	3.36%	5.04%	1.67%	2.51%	5.03%	7.55%
20	3.41%	5.12%	1.70%	2.55%	5.11%	7.67%
21	3.47%	5.20%	1.73%	2.59%	5.20%	7.79%
22	3.52%	5.28%	1.75%	2.63%	5.27%	7.91%
23	3.57%	5.36%	1.78%	2.67%	5.35%	8.03%
24	3.63%	5.44%	1.81%	2.71%	5.44%	8.15%
25	3.69%	5.53%	1.84%	2.76%	5.53%	8.29%
26	3.74%	5.61%	1.87%	2.80%	5.61%	8.41%
27	3.80%	5.70%	1.89%	2.84%	5.69%	8.54%
28	3.85%	5.78%	1.92%	2.88%	5.77%	8.66%
29	3.91%	5.87%	1.95%	2.93%	5.86%	8.80%
30	3.97%	5.96%	1.98%	2.97%	5.95%	8.93%
31	4.03%	6.05%	2.01%	3.02%	6.04%	9.07%
32	4.09%	6.14%	2.04%	3.06%	6.13%	9.20%
33	4.16%	6.24%	2.07%	3.11%	6.23%	9.35%
34	4.22%	6.33%	2.10%	3.15%	6.32%	9.48%
35	4.29%	6.43%	2.13%	3.20%	6.42%	9.63%
36	4.35%	6.53%	2.17%	3.25%	6.52%	9.78%
37	4.42%	6.63%	2.20%	3.30%	6.62%	9.93%
38	4.49%	6.73%	2.23%	3.35%	6.72%	10.08%
39	4.55%	6.83%	2.27%	3.40%	6.82%	10.23%

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, 2009 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	4.62%	6.93%	2.30%	3.45%	6.92%	10.38%
41	4.69%	7.04%	2.34%	3.51%	7.03%	10.55%
42	4.77%	7.15%	2.37%	3.56%	7.14%	10.71%
43	4.84%	7.26%	2.41%	3.62%	7.25%	10.88%
44	4.92%	7.38%	2.45%	3.68%	7.37%	11.06%
45	4.99%	7.49%	2.49%	3.73%	7.48%	11.22%
46	5.08%	7.62%	2.53%	3.80%	7.61%	11.42%
47	5.16%	7.74%	2.57%	3.86%	7.73%	11.60%
48	5.25%	7.87%	2.61%	3.92%	7.86%	11.79%
49	5.34%	8.01%	2.66%	3.99%	8.00%	12.00%
50	5.43%	8.15%	2.71%	4.06%	8.14%	12.21%
51	5.55%	8.32%	2.77%	4.15%	8.32%	12.47%
52	5.65%	8.48%	2.82%	4.23%	8.47%	12.71%
53	5.74%	8.61%	2.86%	4.29%	8.60%	12.90%
54	5.85%	8.77%	2.91%	4.37%	8.76%	13.14%
55	5.94%	8.91%	2.96%	4.44%	8.90%	13.35%
56	5.97%	8.96%	2.98%	4.47%	8.95%	13.43%
57	5.97%	8.96%	2.98%	4.47%	8.95%	13.43%
58	5.95%	8.93%	2.97%	4.45%	8.92%	13.38%
59	5.75%	8.62%	2.87%	4.30%	8.62%	12.92%
60	5.75%	8.62%	2.87%	4.30%	8.62%	12.92%

Interest: 7.75%
 Salary Increase: See Exhibit IV.
 COLA Loading: 49.84%
 Mortality: RP-2000 Combined Healthy Mortality Table (30% Male and 70% Female, with ages set back three years for males and two years for females)

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, 2009 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
15	7.99%	4.58%	12.57%
16	7.99%	4.58%	12.57%
17	7.99%	4.58%	12.57%
18	7.99%	4.58%	12.57%
19	7.99%	4.58%	12.57%
20	7.99%	4.58%	12.57%
21	7.99%	4.58%	12.57%
22	8.11%	4.65%	12.76%
23	8.24%	4.72%	12.96%
24	8.36%	4.79%	13.15%
25	8.49%	4.86%	13.35%
26	8.62%	4.94%	13.56%
27	8.74%	5.01%	13.75%
28	8.88%	5.09%	13.97%
29	9.01%	5.16%	14.17%
30	9.15%	5.24%	14.39%
31	9.29%	5.32%	14.61%
32	9.43%	5.40%	14.83%
33	9.58%	5.49%	15.07%
34	9.73%	5.57%	15.30%
35	9.88%	5.66%	15.54%
36	10.04%	5.75%	15.79%
37	10.20%	5.84%	16.04%
38	10.38%	5.95%	16.33%
39	10.55%	6.04%	16.59%
40	10.75%	6.16%	16.91%
41	10.93%	6.26%	17.19%
42	11.17%	6.40%	17.57%
43	11.40%	6.53%	17.93%
44	11.68%	6.69%	18.37%

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, 2009 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
45	11.88%	6.80%	18.68%
46	11.91%	6.82%	18.73%
47	11.86%	6.79%	18.65%
48	11.77%	6.74%	18.51%
49	11.65%	6.67%	18.32%
50	11.65%	6.67%	18.32%
51	11.65%	6.67%	18.32%
52	11.65%	6.67%	18.32%
53	11.65%	6.67%	18.32%
54	11.65%	6.67%	18.32%
55	11.65%	6.67%	18.32%
56	11.65%	6.67%	18.32%
57	11.65%	6.67%	18.32%
58	11.65%	6.67%	18.32%
59	11.65%	6.67%	18.32%
60	11.65%	6.67%	18.32%

Interest: 7.75%
 Salary Increase: See Exhibit IV.
 COLA Loading: 57.28%
 Mortality: RP-2000 Combined Healthy Mortality Table (85% Male and 15% Female, with ages set back three years for males and two years for females)

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, 2009 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
15	7.99%	6.06%	14.05%
16	7.99%	6.06%	14.05%
17	7.99%	6.06%	14.05%
18	7.99%	6.06%	14.05%
19	7.99%	6.06%	14.05%
20	7.99%	6.06%	14.05%
21	7.99%	6.06%	14.05%
22	8.11%	6.15%	14.26%
23	8.24%	6.25%	14.49%
24	8.36%	6.34%	14.70%
25	8.49%	6.44%	14.93%
26	8.62%	6.54%	15.16%
27	8.74%	6.63%	15.37%
28	8.88%	6.74%	15.62%
29	9.01%	6.84%	15.85%
30	9.15%	6.94%	16.09%
31	9.29%	7.05%	16.34%
32	9.43%	7.16%	16.59%
33	9.58%	7.27%	16.85%
34	9.73%	7.38%	17.11%
35	9.88%	7.50%	17.38%
36	10.04%	7.62%	17.66%
37	10.20%	7.74%	17.94%
38	10.38%	7.88%	18.26%
39	10.55%	8.01%	18.56%
40	10.75%	8.16%	18.91%
41	10.93%	8.29%	19.22%
42	11.17%	8.48%	19.65%
43	11.40%	8.65%	20.05%
44	11.68%	8.86%	20.54%

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, 2009 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
45	11.88%	9.02%	20.90%
46	11.91%	9.04%	20.95%
47	11.86%	9.00%	20.86%
48	11.77%	8.93%	20.70%
49	11.65%	8.84%	20.49%
50	11.65%	8.84%	20.49%
51	11.65%	8.84%	20.49%
52	11.65%	8.84%	20.49%
53	11.65%	8.84%	20.49%
54	11.65%	8.84%	20.49%
55	11.65%	8.84%	20.49%
56	11.65%	8.84%	20.49%
57	11.65%	8.84%	20.49%
58	11.65%	8.84%	20.49%
59	11.65%	8.84%	20.49%
60	11.65%	8.84%	20.49%

Interest: 7.75%

Salary Increase: See Exhibit IV.

COLA Loading: 75.89%

Mortality: RP-2000 Combined Healthy Mortality Table (85% Male and 15% Female, with ages set back three years for males and two years for females)

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, 2009 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
15	7.62%	3.07%	10.69%
16	7.62%	3.07%	10.69%
17	7.62%	3.07%	10.69%
18	7.62%	3.07%	10.69%
19	7.62%	3.07%	10.69%
20	7.62%	3.07%	10.69%
21	7.62%	3.07%	10.69%
22	7.73%	3.11%	10.84%
23	7.85%	3.16%	11.01%
24	7.97%	3.21%	11.18%
25	8.09%	3.26%	11.35%
26	8.21%	3.31%	11.52%
27	8.34%	3.36%	11.70%
28	8.46%	3.41%	11.87%
29	8.59%	3.46%	12.05%
30	8.72%	3.51%	12.23%
31	8.85%	3.56%	12.41%
32	8.99%	3.62%	12.61%
33	9.13%	3.68%	12.81%
34	9.27%	3.73%	13.00%
35	9.42%	3.79%	13.21%
36	9.57%	3.85%	13.42%
37	9.73%	3.92%	13.65%
38	9.89%	3.98%	13.87%
39	10.05%	4.05%	14.10%
40	10.24%	4.12%	14.36%
41	10.44%	4.20%	14.64%
42	10.64%	4.28%	14.92%
43	10.82%	4.36%	15.18%

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, 2009 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
44	10.96%	4.41%	15.37%
45	10.98%	4.42%	15.40%
46	10.93%	4.40%	15.33%
47	10.69%	4.30%	14.99%
48	11.07%	4.46%	15.53%
49	11.65%	4.69%	16.34%
50	11.65%	4.69%	16.34%
51	11.65%	4.69%	16.34%
52	11.65%	4.69%	16.34%
53	11.65%	4.69%	16.34%
54	11.65%	4.69%	16.34%
55	11.65%	4.69%	16.34%
56	11.65%	4.69%	16.34%
57	11.65%	4.69%	16.34%
58	11.65%	4.69%	16.34%
59	11.65%	4.69%	16.34%
60	11.65%	4.69%	16.34%

Interest: 7.75%
 Salary Increase: See Exhibit IV.
 COLA Loading: 40.27%
 Mortality: RP-2000 Combined Healthy Mortality Table (85% Male and 15% Female, with ages set back three years for males and two years for females)

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