

Contra Costa County Employees'
Retirement Association

*Actuarial Valuation and Review
as of December 31, 2010*

Copyright © 2011
THE SEGAL GROUP, INC.,
THE PARENT OF THE SEGAL COMPANY
ALL RIGHTS RESERVED



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

August 3, 2011

*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, 2010. The report summarizes the actuarial data used in the valuation, establishes the funding requirements for the fiscal year beginning July 1, 2012 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.

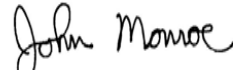
We look forward to reviewing this report at your next meeting and to answering any questions.

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/hy

SECTION 1

VALUATION SUMMARY

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

SECTION 2

VALUATION RESULTS

A. Member Data	1
B. Financial Information.....	4
C. Actuarial Experience.....	9
D. Recommended Contribution .	14
E. Information Required by GASB.....	54

SECTION 3

SUPPLEMENTARY INFORMATION

EXHIBIT A Table of Plan Coverage	55
EXHIBIT B Members in Active Service and Projected Compensation as of December 31, 2010	60
EXHIBIT C Average Monthly Benefit and Membership Distribution of Retired Members and Beneficiaries	66
EXHIBIT D Reconciliation of Member Data – December 31, 2009 to December 31, 2010	70
EXHIBIT E Summary Statement of Income and Expenses on an Actuarial Value Basis.....	71
EXHIBIT F Summary Statement of Assets	72
EXHIBIT G Actuarial Balance Sheet.....	73
EXHIBIT H Summary of Total Allocated Reserves	74
EXHIBIT I Development of Unfunded Actuarial Accrued Liability	75
EXHIBIT J Table of Amortization Bases	76
EXHIBIT K Section 415 Limitations.....	82
EXHIBIT L Definitions of Pension Terms	83

SECTION 4

REPORTING INFORMATION

EXHIBIT I Supplementary Information Required by GASB – Schedule of Employer Contributions.....	85
EXHIBIT II Supplementary Information Required by GASB – Schedule of Funding Progress	86
EXHIBIT III Supplementary Information Required by GASB	87
EXHIBIT IV Actuarial Assumptions and Actuarial Cost Method	88
EXHIBIT V Summary of Plan Provisions.....	99
Appendix A Member Contribution Rates for Members with Membership Dates before January 1, 2011	108
Appendix B Member Contribution Rates for Members with Membership Dates on or after January 1, 2011	120

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, 2010. 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, 2010, provided by the Association's staff;
- The assets of the Plan as of December 31, 2010, 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, 2010 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 12 years remaining as December 31, 2010. 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, 2012 through June 30, 2013.

SIGNIFICANT ISSUES IN VALUATION YEAR

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

Ref: Pg. 86
Ref: Pg. 75

- The ratio of the valuation value of assets to actuarial accrued liabilities decreased from 83.8% to 80.3%. The Association's UAAL has increased from \$1.025 billion to \$1.312 billion. This increase is primarily due to an investment return on actuarial value (i.e. after smoothing) that fell short of the 7.75% assumed rate. A reconciliation of the Association's UAAL is provided in Section 3, Exhibit I.

Ref: Pg. 52

- The aggregate employer rate calculated in this valuation (before considering any employer subvention of member rates or member subvention of employer rates) has increased from 30.49% of payroll to 34.49% 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 16.

Ref: Pg. 53

- The aggregate member rate calculated in this valuation (before considering any employer subvention of these rates or member subvention of employer rates) has increased from 10.99% of payroll to 11.00% of payroll. A complete reconciliation of the Association's aggregate member rate is provided in Section 2, Subsection D, see Chart 17.

Ref: Pg. 107

- The valuation reflects one change in plan provisions. In March 2010, the Board adopted a change to their policy that determines which pay items are considered compensation for retirement purposes. This amended policy applies to members with membership dates on or after January 1, 2011. Under this amended policy, certain terminal pay elements are no longer included in the determination of compensation for retirement purposes. In this valuation, there are no active members in this category yet; however, we have determined employer and member rates for these members as shown in Charts 14 and 15 and Appendix B. Any average employer or member rates shown in this report are solely based on the rates for members included in the valuation and thus do not reflect this new set of rates.

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

Ref: Pg. 95

- The results of this valuation reflect a change in that the terminal pay assumptions are now based on cost groups. The proposed terminal pay assumptions by cost group are based on a combination of the current assumptions by tier and actual terminal pay experience for retirements during the period from January 1, 2008 through December 31, 2010. Note that there are also different sets of terminal pay assumptions that depend on membership date. These changes are documented in Section 4, Exhibit IV of this report. This change in actuarial assumptions increased the Plan's UAAL by \$16 million and the average employer contribution rate by 0.28% of payroll.
- The Summary of Key Valuation Results (page v) and the employer and member rate reconciliations (Charts 16 and 17) 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 14 and 15) also include the 50% subvention line (except for Safety Districts).

Ref: Pg. 5

- As detailed on page 5 of this valuation report, the total unrecognized investment loss as of December 31, 2010 is about \$329 million as compared to \$828 million in the previous valuation. 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, 2010. 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, then the deferred losses would be recognized over the next few years as shown in the footnote in Chart 7.

The deferred losses of \$329 million represent about 7% of the market value of assets. Unless offset by future investment gains or other favorable experience, the recognition of the \$329 million market losses is expected to have a material 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 80.3% to 75.3%.
 - If the deferred losses were recognized immediately in the valuation value of assets, the aggregate employer rate would increase from 34.5% to about 38.1% of payroll.
- The actuarial valuation report as of December 31, 2010 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, 2010		December 31, 2009	
Average Employer Contribution Rates⁽¹⁾:		Estimated		Estimated
General	Total Rate	Annual Amount	Total Rate	Annual Amount
Cost Group #1 – County and Small Districts (Tier 1)	29.16%	\$11,044,880	26.06%	\$11,373,297
Cost Group #2 – County and Small Districts (Tier 3)	26.50%	122,147,769	23.77%	108,611,824
Cost Group #3 – Central Contra Costa Sanitary District	53.91%	13,183,861	40.30%	10,155,197
Cost Group #4 – Contra Costa Housing Authority	33.96%	1,811,604	34.94%	1,869,128
Cost Group #5 – Contra Costa County Fire Protection District	25.71%	1,031,007	20.44%	863,281
Cost Group #6 – Small Districts (Tier 1 Non-Enhanced)	27.37%	198,484	23.85%	174,874
Safety				
Cost Group #7 – County (Tier A)	58.87%	46,776,045	52.42%	43,414,118
Cost Group #8 – Contra Costa and East Fire Protection Districts	52.78%	19,605,462	43.98%	17,282,119
Cost Group #9 – County (Tier C)	52.03%	4,073,737	45.88%	2,876,437
Cost Group #10 – Moraga-Orinda Fire District	44.70%	3,529,061	37.72%	3,032,815
Cost Group #11 – San Ramon Valley Fire District	63.55%	12,394,971	56.24%	10,958,768
Cost Group #12 – Rodeo-Hercules Fire Protection District	58.04%	1,310,499	46.02%	1,125,464
All Employers combined	34.49%	\$237,107,380	30.49%	\$211,737,322
Average Member Contribution Rates⁽¹⁾:		Estimated		Estimated
General	Total Rate	Annual Amount	Total Rate	Annual Amount
Cost Group #1 – County and Small Districts (Tier 1)	9.43%	\$3,572,201	9.12%	\$3,979,581
Cost Group #2 – County and Small Districts (Tier 3)	9.76%	44,988,288	9.75%	44,552,575
Cost Group #3 – Central Contra Costa Sanitary District	10.04%	2,455,314	9.87%	2,487,141
Cost Group #4 – Contra Costa Housing Authority	10.63%	567,060	10.44%	558,491
Cost Group #5 – Contra Costa County Fire Protection District	9.72%	389,785	9.70%	409,678
Cost Group #6 – Small Districts (Tier 1 Non-Enhanced)	11.55%	83,759	11.07%	81,168
Safety				
Cost Group #7 – County (Tier A)	15.81%	12,562,074	15.76%	13,052,394
Cost Group #8 – Contra Costa and East Fire Protection Districts	15.14%	5,624,198	15.00%	5,893,891
Cost Group #9 – County (Tier C)	12.23%	957,559	12.34%	773,654
Cost Group #10 – Moraga-Orinda Fire District	15.49%	1,222,934	15.58%	1,252,684
Cost Group #11 – San Ramon Valley Fire District	14.84%	2,894,435	14.93%	2,909,218
Cost Group #12 – Rodeo-Hercules Fire Protection District	14.24%	321,529	14.00%	342,384
All Categories Combined	11.00%	\$75,639,136	10.99%	\$76,292,859

⁽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 18 and 19 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, 2010	December 31, 2009
Refundability Factors		
General		
Cost Group #1 – County and Small Districts (Tier 1)	0.9552	0.9548
Cost Group #2 – County and Small Districts (Tier 3)	0.9520	0.9521
Cost Group #3 – Central Contra Costa Sanitary District	0.9558	0.9558
Cost Group #4 – Contra Costa Housing Authority	0.9532	0.9537
Cost Group #5 – Contra Costa County Fire Protection District	0.9561	0.9553
Cost Group #6 – Small Districts (Tier 1 Non-Enhanced)	0.9544	0.9568
Safety		
Cost Group #7 – County (Tier A)	0.9703	0.9701
Cost Group #8 – Contra Costa and East Fire Protection Districts	0.9706	0.9705
Cost Group #9 – County (Tier C)	0.9715	0.9712
Cost Group #10 – Moraga-Orinda Fire District	0.9722	0.9716
Cost Group #11 – San Ramon Valley Fire District	0.9717	0.9720
Cost Group #12 – Rodeo-Hercules Fire Protection District	0.9735	0.9738
Funded Status:		
Actuarial accrued liability	\$6,654,036,801	\$6,314,787,187
Valuation value of assets	\$5,341,821,711	\$5,290,114,102
Funded percentage	80.3%	83.8%
Unfunded Actuarial Accrued Liability (UAAL)	\$1,312,215,090	\$1,024,673,085
Key Assumptions:		
Interest rate	7.75%	7.75%
Inflation rate	3.50%	3.50%
Across the board salary increase	0.75%	0.75%

Note: Pages 18 and 19 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, 2010		December 31, 2009	
Average Employer Contribution Rates⁽¹⁾:		Estimated		Estimated
General	Total Rate	Annual Amount	Total Rate	Annual Amount
Cost Group #1 – County and Small Districts (Tier 1)	31.97%	\$12,109,344	28.80%	\$12,568,917
Cost Group #2 – County and Small Districts (Tier 3)	29.60%	136,437,081	26.87%	122,777,258
Cost Group #3 – Central Contra Costa Sanitary District	56.90%	13,915,075	43.26%	10,901,088
Cost Group #4 – Contra Costa Housing Authority	37.12%	1,980,175	38.07%	2,036,568
Cost Group #5 – Contra Costa County Fire Protection District	28.61%	1,147,301	23.35%	986,185
Cost Group #6 – Small Districts (Tier 1 Non-Enhanced)	31.05%	225,171	27.39%	200,831
Safety				
Cost Group #7 – County (Tier A)	63.23%	50,240,349	56.77%	47,016,777
Cost Group #8 – Contra Costa and East Fire Protection Districts	52.78%	19,605,462	43.98%	17,282,119
Cost Group #9 – County (Tier C)	56.27%	4,405,712	50.15%	3,144,144
Cost Group #10 – Moraga-Orinda Fire District	44.70%	3,529,061	37.72%	3,032,815
Cost Group #11 – San Ramon Valley Fire District	63.55%	12,394,971	56.24%	10,958,768
Cost Group #12 – Rodeo-Hercules Fire Protection District	58.04%	1,310,499	46.02%	1,125,464
All Employers combined	37.43%	\$257,300,201	33.41%	\$232,030,934
Average Member Contribution Rates⁽¹⁾:		Estimated		Estimated
General	Total Rate	Annual Amount	Total Rate	Annual Amount
Cost Group #1 – County and Small Districts (Tier 1)	6.49%	\$2,458,492	6.26%	\$2,729,417
Cost Group #2 – County and Small Districts (Tier 3)	6.51%	30,007,557	6.50%	29,678,870
Cost Group #3 – Central Contra Costa Sanitary District	6.91%	1,689,862	6.77%	1,705,972
Cost Group #4 – Contra Costa Housing Authority	7.32%	390,487	7.16%	383,027
Cost Group #5 – Contra Costa County Fire Protection District	6.69%	268,278	6.66%	281,073
Cost Group #6 – Small Districts (Tier 1 Non-Enhanced)	7.70%	55,839	7.37%	54,002
Safety				
Cost Group #7 – County (Tier A)	11.32%	8,994,476	11.28%	9,342,069
Cost Group #8 – Contra Costa and East Fire Protection Districts	15.14%	5,624,198	15.00%	5,893,891
Cost Group #9 – County (Tier C)	7.87%	616,189	7.94%	497,797
Cost Group #10 – Moraga-Orinda Fire District	15.49%	1,222,934	15.58%	1,252,684
Cost Group #11 – San Ramon Valley Fire District	14.84%	2,894,435	14.93%	2,909,218
Cost Group #12 – Rodeo-Hercules Fire Protection District	14.24%	321,529	14.00%	342,384
All Categories Combined	7.93%	\$54,544,276	7.93%	\$55,070,404

⁽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 18 and 19 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, 2010	December 31, 2009	Percentage Change
Active Members:			
Number of members	8,811	8,938	-1.4%
Average age	46.6	46.4	N/A
Average service	11.1	11.0	N/A
Projected total compensation	\$687,443,206	\$694,443,999	-1.0%
Average projected compensation	\$78,021	\$77,696	0.4%
Retired Member and Beneficiaries:			
Number of members:			
Service retired	5,469	5,219	4.8%
Disability retired	921	941	-2.1%
Beneficiaries	1,169	1,132	3.3%
Total	7,559	7,292	3.7%
Average age	69.3	69.2	N/A
Average Monthly Benefit	\$3,248	\$3,111	4.4%
Vested Terminated Members:			
Number of terminated vested members ⁽¹⁾	2,231	2,209	1.0%
Average age	46.1	45.6	N/A
Summary of Financial Data:			
Market value of assets	\$5,027,157,199	\$4,476,729,530	12.3%
Return on market value of assets	13.35%	19.68%	N/A
Actuarial value of assets	\$5,355,971,152	\$5,304,261,661	1.0%
Return on actuarial value of assets	1.82%	0.34%	N/A
Valuation value of assets	\$5,341,821,711	\$5,290,114,102	1.0%
Return on valuation value of assets	1.80%	0.32%	N/A

⁽¹⁾ Includes 806 nonvested terminated members as of December 31, 2010 and 777 as of December 31, 2009.

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: 2001 – 2010

Year Ended December 31	Active Members	Vested Terminated Members⁽¹⁾	Retired Members and Beneficiaries	Ratio of Non-Actives to Actives
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
2010	8,811	2,231	7,559	1.11

⁽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 8,811 active members with an average age of 46.6, average years of service of 11.1 years and average compensation of \$78,021. The 8,938 active members in the prior valuation had an average age of 46.4, average service of 11.0 years and average compensation of \$77,696.

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

Inactive Members

In this year's valuation, there were 2,231 members with a vested right to a deferred or immediate vested benefit or entitled to a return of their employee contributions versus 2,209 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, 2010

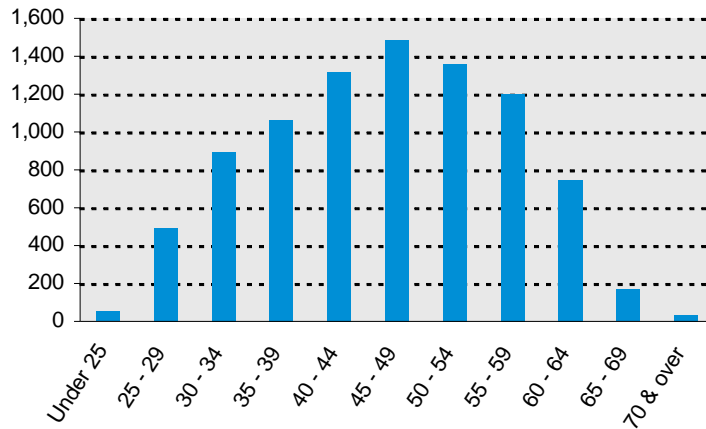
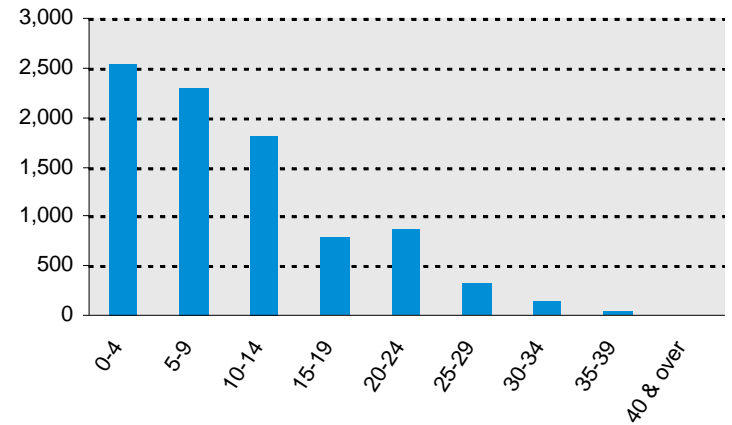


CHART 3
Distribution of Active Members by Years of Service as of December 31, 2010



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

Retired Members and Beneficiaries

As of December 31, 2010, 6,390 retired members and 1,169 beneficiaries were receiving total monthly benefits of \$24,553,122. For comparison, in the previous valuation, there were 6,160 retired members and 1,132 beneficiaries receiving monthly benefits of \$22,682,409.

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, 2010

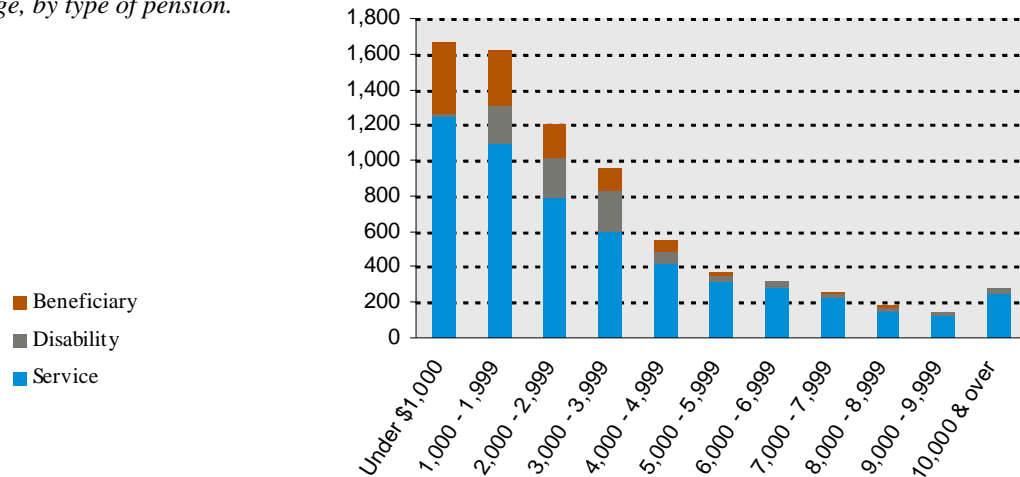
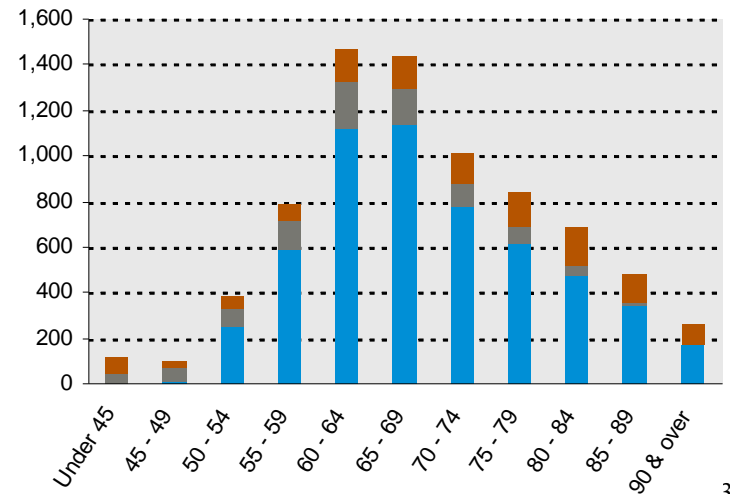


CHART 5
Distribution of Retired Members and Beneficiaries by Type and by Age as of December 31, 2010



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.

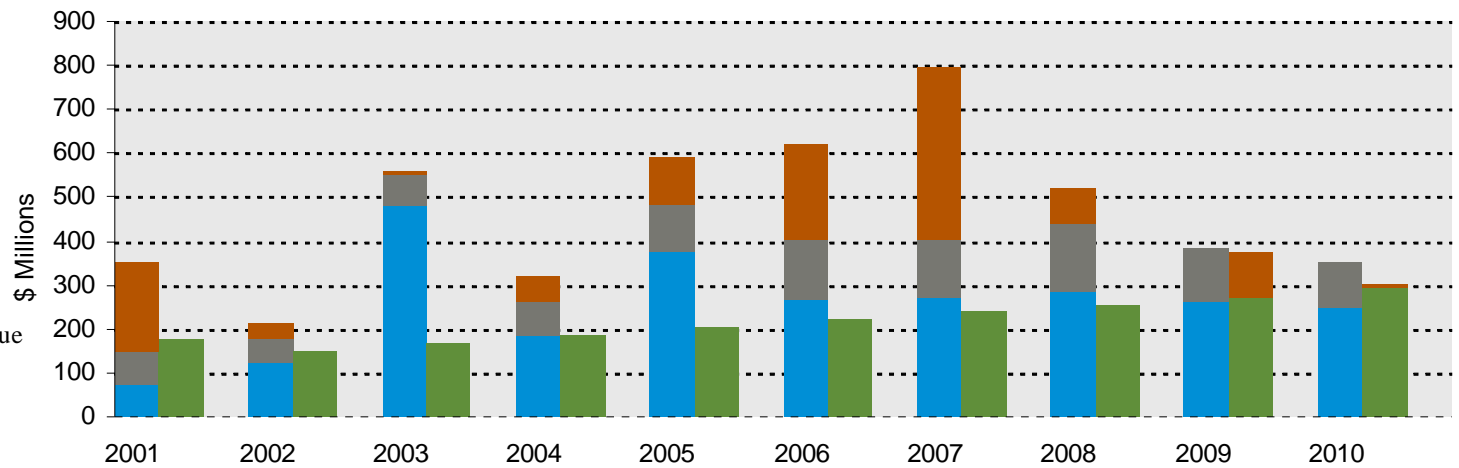
Retirement plan assets change as a result of the net impact of these income and expense components. The adjustment toward market value shown in the chart is the “non-cash” earnings on investment implicitly included in the Actuarial Value of Assets. Additional financial information, including a summary 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 ten 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 - 2010



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, 2010

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

Six Month Period		Total Actual Market	Expected Market	Investment	Deferred	Deferred
From	To	Return (net)	Return (net)	Gain (Loss)	Factor	Return
7/2006	12/2006	\$436,850,889	\$174,623,395	\$262,227,494	0.1	\$26,222,749
1/2007	6/2007	260,000,409	192,710,429	67,289,979	0.2	13,457,996
7/2007	12/2007	35,143,730	203,536,876	(168,393,146)	0.3	(50,517,944)
1/2008	6/2008	(348,105,153)	205,702,885	(553,808,038)	0.4	(221,523,215)
7/2008	12/2008	(1,128,210,678)	189,989,366	(1,318,200,044)	0.5	(659,100,022)
1/2009	6/2009	106,872,212	146,385,892	(39,513,680)	0.6	(23,708,208)
7/2009	12/2009	628,870,712	150,326,140	478,544,572	0.7	334,981,201
1/2010	6/2010	(94,057,382)	174,278,387	(268,335,769)	0.8	(214,668,615)
7/2010	12/2010	687,503,854	169,679,293	517,824,561	0.9	<u>466,042,105</u>
1. Total Deferred Return ⁽¹⁾						\$(328,813,953)
2. Market Value of Assets						5,027,157,199
3. Actuarial Value of Assets (Item 2 – Item 1)						5,355,971,152
4. Actuarial Value as Percentage of Market Value (Item 3 / Item 2)						106.5%
5. Non-valuation Reserves and Designations:						
a. Post Retirement Death Benefit						\$14,149,441
b. Statutory Contingency						0
c. Additional One Percent Contingency						0
d. Unrestricted Designation						<u>0</u>
e. Total						\$14,149,441
6. Valuation Value of Assets (Item 3 – Item 5e)						<u>\$5,341,821,711</u>

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

(a) Amount Recognized during 2011	\$(230,695,564)
(b) Amount Recognized during 2012	(253,536,994)
(c) Amount Recognized during 2013	5,883,933
(d) Amount Recognized during 2014	97,752,215
(e) Amount Recognized during 2015	<u>51,782,457</u>
(f) Subtotal	\$(328,813,953)

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

CHART 8

Allocation of Valuation Value of Assets as of December 31, 2010

The calculation of the valuation value of assets from December 31, 2009 to December 31, 2010 by cost groups is provided below.

	General					
	Cost Group #1 County and Small Districts (Tier 1)	Cost Group #2 County and Small Districts (Tier 3)	Cost Group #3 Central Contra Costa Sanitary District	Cost Group #4 Contra Costa Housing Authority	Cost Group #5 Contra Costa County Fire Protection District	Cost Group #6 Small Districts (Tier 1 Non-Enhanced)
1 Allocated Valuation Value of Assets As of Beginning of Plan Year	\$1,192,755,694	\$1,708,941,772	\$176,346,030	\$34,153,134	\$37,054,908	\$3,833,263
2 Contributions:						
a. Total Member Contributions	2,927,315	31,902,422	999,312	404,439	338,833	54,294
b. Employer Contributions - Excludes POB and other Special Contributions	10,798,388	104,974,992	9,396,829	1,800,660	654,117	226,248
c. Employer Contributions - Special (POB, Termination, etc.)	618,097	14,604	0	0	0	0
d. Total Contributions	14,343,800	136,892,018	10,396,141	2,205,099	992,950	280,542
3 Total Payments Excluding Post- Retirement Death	116,487,261	43,004,754	11,458,739	2,304,394	1,973,092	151,092
4 Total Transfers Into or Out of Valuation Assets	0	0	0	0	0	0
5 Subtotal (Item 1 + 2d - 3 + 4)	1,090,612,233	1,802,829,036	175,283,432	34,053,839	36,074,766	3,962,713
6 Weighted Average Fund Balance	1,141,683,964	1,755,885,404	175,814,731	34,103,487	36,564,837	3,897,988
7 Earnings Allocated in Proportion to Item 6	20,550,555	31,606,312	3,164,703	613,870	658,175	70,165
8 Allocated Valuation Value of Assets As of End of Plan Year (Item 5 + 7)	\$1,111,162,788	\$1,834,435,348	\$178,448,135	\$34,667,709	\$36,732,941	\$4,032,878

Note: Results may not add due to rounding.

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

CHART 8 (continued)

Allocation of Valuation Value of Assets as of December 31, 2010

	Safety					Total
	Cost Groups #7 & 9 County (Tier A & Tier C)	Cost Group #8 Contra Costa & East Fire Protection Districts	Cost Group #10 Moraga-Orinda Fire District	Cost Group #11 San Ramon Valley Fire District	Cost Group #12 Rodeo-Hercules Fire Protection District	
1 Allocated Valuation Value of Assets As of Beginning of Plan Year	\$1,099,257,376	\$695,345,826	\$124,795,586	\$198,035,496	\$19,595,018	\$5,290,114,103
2 Contributions:						
a. Total Member Contributions	14,196,301	8,405,587	1,996,355	2,917,495	188,130	64,330,484
b. Employer Contributions - Excludes POB and other Special Contributions	35,733,561	6,402,399	1,363,545	10,909,720	897,796	183,158,255
c. Employer Contributions – Special (POB, Termination, etc.)	159,974	0	0	0	0	792,675
d. Total Contributions	50,089,836	14,807,986	3,359,900	13,827,215	1,085,926	248,281,413
3 Total Payments Excluding Post- Retirement Death	62,211,664	38,065,510	7,253,477	7,752,647	746,205	291,408,835
4 Total Transfers Into or Out of Valuation Assets	0	0	0	0	0	0
5 Subtotal (Item 1 + 2d – 3 + 4)	1,087,135,548	672,088,302	120,902,009	204,110,064	19,934,739	5,246,986,681
6 Weighted Average Fund Balance	1,093,196,462	683,717,064	122,848,798	201,072,780	19,764,879	5,268,550,394
7 Earnings Allocated in Proportion to Item 6	19,677,769	12,307,053	2,211,305	3,619,353	355,772	94,835,030
8 Allocated Valuation Value of Assets As of End of Plan Year (Item 5 + 7)	\$1,106,813,317	\$684,395,355	\$123,113,314	\$207,729,417	\$20,290,511	\$5,341,821,711

Note: Results may not add due to rounding.

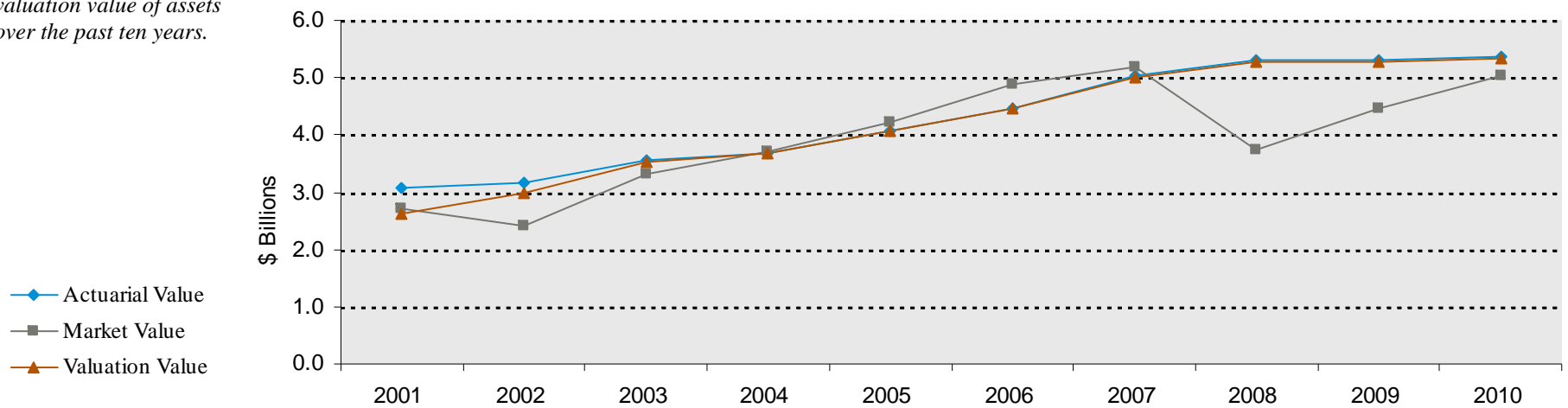
SECTION 2: Valuation Results for the Contra Costa County Employees' Retirement Association

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 9
Relative Values of Market Value, Actuarial Value and Valuation Value of Assets for Years Ended December 31, 2001 – 2010



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 \$245.7 million, \$313.5 million loss from investments and \$67.8 million gain from all other sources. The net experience variation from individual sources other than investments was 1.0% 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 10
Actuarial Experience for Year Ended December 31, 2010

1. Net gain/(loss) from investments*	\$(313,477,625)
2. Net gain/(loss) from salary increase experience	83,072,934
3. Net gain/(loss) from other experience**	<u>(15,293,083)</u>
4. Net experience gain/(loss): (1) + (2) + (3)	<u>\$(245,697,774)</u>

* Details in Chart 11

** 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 2010 was 7.75%. The actual rate of return on Actuarial Value for the 2010 Plan Year was 1.82%.

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, 2010.

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

CHART 11
Investment Experience for Year Ended December 31, 2010 – Valuation Value and Actuarial Value of Assets

	Valuation Value	Actuarial Value
1. Actual return	\$94,835,030	\$95,918,913
2. Average value of assets	5,268,550,392	5,282,156,950
3. Actual rate of return: (1) ÷ (2)	1.80%	1.82%
4. Assumed rate of return	7.75%	7.75%
5. Expected return: (2) x (4)	408,312,655	409,367,164
6. Actuarial gain/(loss): (1) – (5)	<u>\$(313,477,625)</u>	<u>\$(313,448,251)</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 ten years.

Based upon recommendations previously adopted by the Board, we have maintained the assumed rate of return of 7.75%.

CHART 12

Investment Return – Market Value, Actuarial Value, and Valuation Value: 2001 – 2010

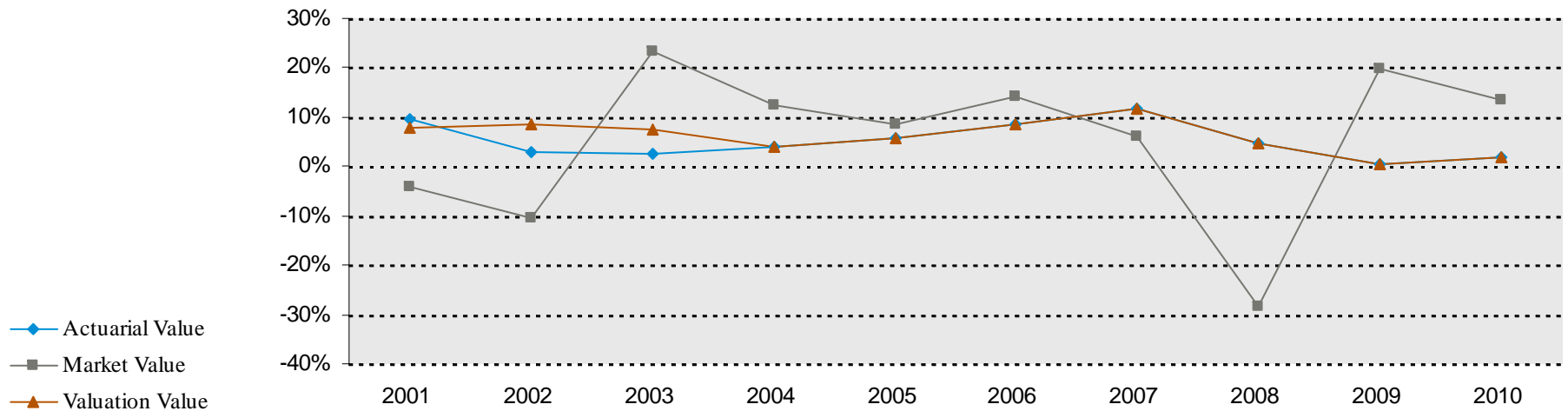
Year Ended December 31	Market Value Investment Return		Actuarial Value Investment Return		Valuation Value Investment Return	
	Amount	Percent of Assets	Amount	Percent of Assets	Amount	Percent of Assets
2001	\$(121,804,662)	(4.23%)	\$278,746,528	9.73%	\$186,188,249	7.92%
2002	(274,820,794)	(10.28%)	93,144,770	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%
2010	594,637,090	13.35%	95,918,913	1.82%	94,835,030	1.80%
Total	\$1,693,212,651		\$2,037,129,469		\$2,232,270,698	
<i>Five-Year Average Return</i>		3.34%	<i>Actuarial Value Average Return</i>		5.06%	5.06%
<i>Ten-Year Average Return</i>		4.48%	<i>Valuation Value Average Return</i>		4.99%	5.61%

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 13
Market, Actuarial and Valuation Value Rates of Return for Years Ended December 31, 2001 - 2010



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 12-year declining period as of December 31, 2010. Any change in the UAAL that arises at each valuation after December 31, 2007 is amortized over its own separate declining 18-year period.

Employer Contribution Rates

The current employer contribution rates are shown in Charts 14-A for members with membership dates before January 1, 2011 and 14-B for members with membership dates on or after January 1, 2011. The recommended employer contributions are provided on Charts 15-A for members with membership dates before January 1, 2011 and 15-B for members with membership dates on or after January 1, 2011. County contribution rates also include the Superior Court.

The demographics of members with membership dates on or after January 1, 2011 are assumed to be the same as for the members included in the December 31, 2009 and 2010 valuations, respectively.

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

The amortization cost for the UAAL for members with membership dates before January 1, 2011 has been expressed as a percentage of total future payroll, including members with membership dates on or after January 1, 2011. This has been done in order to continue the open group level percent of payroll amortization methodology for the UAAL associated with members with membership dates before January 1, 2011. It is also consistent with the methodology applied when Safety Tier C was implemented.

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 14 and 15 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%

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

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 14 and 15. The age specific contribution rates are provided in Appendix A for members with membership dates before January 1, 2011 and Appendix B for members with membership dates on or after January 1, 2011.

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.

Cost Sharing Adjustments

Starting with the December 31, 2009 Actuarial Valuation, 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 review of experience back to December 31, 2002. This 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 cost groups are detailed on pages 18 and 19. 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.

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

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, 2010 is as follows:

	<u>County General</u>	<u>Moraga General</u>	<u>CCCFPD Safety</u>
Basic	\$239,247,742	\$421,323	\$68,672,752
COL	\$191,711,619	\$244,531	\$52,372,916

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	POB Issuance
(1)	County General	Tier 1 Enhanced	Yes
	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	Yes
	East Contra Costa Fire Protection District	Tier 1 Enhanced	
	Moraga-Orinda Fire District	Tier 1 Enhanced	Yes
	Rodeo-Hercules Fire Protection District	Tier 1 Enhanced	
	San Ramon Valley Fire District	Tier 1 Enhanced	
(2)	County General	Tier 3 Enhanced	Yes
	In-Home Supportive Services Authority	Tier 3 Enhanced	
	Contra Costa Mosquito and Vector Control District	Tier 3 Enhanced	
	Superior Court	Tier 3 Enhanced	Yes
(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	Yes
(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	POB Issuance
(7)	County Safety	Tier A Enhanced	Yes
(8)	Contra Costa County Fire Protection District East Contra Costa Fire Protection District	Tier A Enhanced Tier A Enhanced	Yes
(9)	County Safety	Tier C Enhanced (Deputy Sheriff members hired on or after January 1, 2007)	Yes
(10)	Moraga-Orinda Fire District	Tier A Enhanced	Yes
(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 14-A
Components of Current Employer Contribution Rates for Members with Membership Dates before January 1, 2011
Employer Rates Under Current 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-A (continued)
Components of Current Employer Contribution Rates for Members with Membership Dates before January 1, 2011
Employer Rates Under Current 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-A (continued)
Components of Current Employer Contribution Rates for Members with Membership Dates before January 1, 2011
Employer Rates Under Current 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-A (continued)
Components of Current Employer Contribution Rates for Members with Membership Dates before January 1, 2011
Employer Rates Under Current 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-A (continued)
Components of Current Employer Contribution Rates for Members with Membership Dates before January 1, 2011
Employer Rates Under Current 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-A (continued)
Components of Current Employer Contribution Rates for Members with Membership Dates before January 1, 2011
Employer Rates Under Current 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

CHART 14-B

**Components of Current Employer Contribution Rates for Members with Membership Dates on or after January 1, 2011
Employer Rates Under Current 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 County				Enhanced Cost Group #1 Districts without POB			
	Normal Cost	+	UAAL	= Total	Normal Cost	+	UAAL	= Total
General Tier 1 (Aggregate)								
Basic	10.46%		6.70%	= 17.16%	10.46%		11.55%	= 22.01%
50% Subvention	2.74%		0.00%	= 2.74%	2.74%		0.00%	= 2.74%
Basic + 50% Subvention	13.20%		6.70%	= 19.90%	13.20%		11.55%	= 24.75%
COL	3.11%		2.64%	= 5.75%	3.11%		6.53%	= 9.64%
Total	16.31%		9.34%	= 25.65%	16.31%		18.08%	= 34.39%
General Tier 1 (Under \$350)								
Basic	7.09%		4.54%	= 11.63%	7.09%		7.83%	= 14.92%
50% Subvention	1.86%		0.00%	= 1.86%	1.86%		0.00%	= 1.86%
Basic + 50% Subvention	8.95%		4.54%	= 13.49%	8.95%		7.83%	= 16.78%
COL	2.10%		1.79%	= 3.89%	2.10%		4.44%	= 6.54%
Total	11.05%		6.33%	= 17.38%	11.05%		12.27%	= 23.32%
General Tier 1 (Over \$350)								
Basic	10.63%		6.81%	= 17.44%	10.63%		11.75%	= 22.38%
50% Subvention	2.79%		0.00%	= 2.79%	2.79%		0.00%	= 2.79%
Basic + 50% Subvention	13.42%		6.81%	= 20.23%	13.42%		11.75%	= 25.17%
COL	3.16%		2.68%	= 5.84%	3.16%		6.65%	= 9.81%
Total	16.58%		9.49%	= 26.07%	16.58%		18.40%	= 34.98%

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

CHART 14-B (continued)
Components of Current Employer Contribution Rates for Members with Membership Dates on or after January 1, 2011
Employer Rates Under Current 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	10.46%		4.84%	15.30%
50% Subvention	2.74%		0.00%	2.74%
Basic + 50% Subvention	13.20%		4.84%	18.04%
COL	3.11%		2.63%	5.74%
Total	16.31%		7.47%	23.78%
General Tier 1 (Under \$350)				
Basic	7.09%		3.29%	10.38%
50% Subvention	1.86%		0.00%	1.86%
Basic + 50% Subvention	8.95%		3.29%	12.24%
COL	2.10%		1.78%	3.88%
Total	11.05%		5.07%	16.12%
General Tier 1 (Over \$350)				
Basic	10.63%		4.93%	15.56%
50% Subvention	2.79%		0.00%	2.79%
Basic + 50% Subvention	13.42%		4.93%	18.35%
COL	3.16%		2.68%	5.84%
Total	16.58%		7.61%	24.19%

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

CHART 14-B (continued)
Components of Current Employer Contribution Rates for Members with Membership Dates on or after January 1, 2011
Employer Rates Under Current 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	10.19%		6.70%	= 16.89%	10.19%		11.55%	= 21.74%
50% Subvention	3.10%		0.00%	= 3.10%	3.10%		0.00%	= 3.10%
Basic + 50% Subvention	13.29%		6.70%	= 19.99%	13.29%		11.55%	= 24.84%
COL	2.98%		2.64%	= 5.62%	2.98%		6.53%	= 9.51%
Total	16.27%		9.34%	= 25.61%	16.27%		18.08%	= 34.35%
General Tier 3 (Under \$350)								
Basic	6.93%		4.56%	= 11.49%	6.93%		7.86%	= 14.79%
50% Subvention	2.11%		0.00%	= 2.11%	2.11%		0.00%	= 2.11%
Basic + 50% Subvention	9.04%		4.56%	= 13.60%	9.04%		7.86%	= 16.90%
COL	2.03%		1.79%	= 3.82%	2.03%		4.44%	= 6.47%
Total	11.07%		6.35%	= 17.42%	11.07%		12.30%	= 23.37%
General Tier 3 (Over \$350)								
Basic	10.40%		6.84%	= 17.24%	10.40%		11.79%	= 22.19%
50% Subvention	3.16%		0.00%	= 3.16%	3.16%		0.00%	= 3.16%
Basic + 50% Subvention	13.56%		6.84%	= 20.40%	13.56%		11.79%	= 25.35%
COL	3.04%		2.69%	= 5.73%	3.04%		6.66%	= 9.70%
Total	16.60%		9.53%	= 26.13%	16.60%		18.45%	= 35.05%

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

CHART 14-B (continued)
Components of Current Employer Contribution Rates for Members with Membership Dates on or after January 1, 2011
Employer Rates Under Current 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	11.03%		16.39%		27.42%	11.72%		9.74%		21.46%
50% Subvention	2.96%		0.00%		2.96%	3.13%		0.00%		3.13%
Basic + 50% Subvention	13.99%		16.39%		30.38%	14.85%		9.74%		24.59%
COL	3.30%		7.92%		11.22%	3.35%		8.38%		11.73%
Total	17.29%		24.31%		41.60%	18.20%		18.12%		36.32%
General Tier 1 (Under \$350)										
Basic	7.46%		11.09%		18.55%	8.00%		6.65%		14.65%
50% Subvention	2.00%		0.00%		2.00%	2.13%		0.00%		2.13%
Basic + 50% Subvention	9.46%		11.09%		20.55%	10.13%		6.65%		16.78%
COL	2.24%		5.36%		7.60%	2.29%		5.72%		8.01%
Total	11.70%		16.45%		28.15%	12.42%		12.37%		24.79%
General Tier 1 (Over \$350)										
Basic	11.19%		16.63%		27.82%	12.00%		9.97%		21.97%
50% Subvention	3.00%		0.00%		3.00%	3.20%		0.00%		3.20%
Basic + 50% Subvention	14.19%		16.63%		30.82%	15.20%		9.97%		25.17%
COL	3.36%		8.04%		11.40%	3.43%		8.58%		12.01%
Total	17.55%		24.67%		42.22%	18.63%		18.55%		37.18%

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

CHART 14-B (continued)
Components of Current Employer Contribution Rates for Members with Membership Dates on or after January 1, 2011
Employer Rates Under Current 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	10.61%		3.19%		13.80%	10.31%		7.60%		17.91%
50% Subvention	2.91%		0.00%		2.91%	3.54%		0.00%		3.54%
Basic + 50% Subvention	13.52%		3.19%		16.71%	13.85%		7.60%		21.45%
COL	3.08%		1.96%		5.04%	3.31%		0.93%		4.24%
Total	16.60%		5.15%		21.75%	17.16%		8.53%		25.69%
General Tier 1 (Under \$350)										
Basic	7.21%		2.17%		9.38%	7.03%		5.19%		12.22%
50% Subvention	1.98%		0.00%		1.98%	2.42%		0.00%		2.42%
Basic + 50% Subvention	9.19%		2.17%		11.36%	9.45%		5.19%		14.64%
COL	2.09%		1.33%		3.42%	2.26%		0.63%		2.89%
Total	11.28%		3.50%		14.78%	11.71%		5.82%		17.53%
General Tier 1 (Over \$350)										
Basic	10.81%		3.25%		14.06%	10.55%		7.78%		18.33%
50% Subvention	2.97%		0.00%		2.97%	3.62%		0.00%		3.62%
Basic + 50% Subvention	13.78%		3.25%		17.03%	14.17%		7.78%		21.95%
COL	3.14%		2.00%		5.14%	3.39%		0.95%		4.34%
Total	16.92%		5.25%		22.17%	17.56%		8.73%		26.29%

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

CHART 14-B (continued)
Components of Current Employer Contribution Rates for Members with Membership Dates on or after January 1, 2011
Employer Rates Under Current 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	19.29%		13.29%		32.58%					
50% Subvention	4.35%		0.00%		4.35%					
Basic + 50% Subvention	23.64%		13.29%		36.93%					
COL	6.18%		10.38%		16.56%					
Total	29.82%		23.67%		53.49%					
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	18.76%		3.31%		22.07%	18.76%		22.30%		41.06%
0% Subvention	0.00%		0.00%		0.00%	0.00%		0.00%		0.00%
Basic + 0% Subvention	18.76%		3.31%		22.07%	18.76%		22.30%		41.06%
COL	6.17%		9.63%		15.80%	6.17%		24.12%		30.29%
Total	24.93%		12.94%		37.87%	24.93%		46.42%		71.35%

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

CHART 14-B (continued)
Components of Current Employer Contribution Rates for Members with Membership Dates on or after January 1, 2011
Employer Rates Under Current 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	17.78%		13.29%		31.07%							
50% Subvention	4.27%		0.00%		4.27%							
Basic + 50% Subvention	22.05%		13.29%		35.34%							
COL	3.47%		10.38%		13.85%							
Total	25.52%		23.67%		49.19%							
	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	18.68%		1.86%		20.54%	18.00%		18.26%		36.26%		
0% Subvention	0.00%		0.00%		0.00%	0.00%		0.00%		0.00%		
Basic + 0% Subvention	18.68%		1.86%		20.54%	18.00%		18.26%		36.26%		
COL	6.06%		7.92%		13.98%	5.91%		10.98%		16.89%		
Total	24.74%		9.78%		34.52%	23.91%		29.24%		53.15%		

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

CHART 14-B (continued)
Components of Current Employer Contribution Rates for Members with Membership Dates on or after January 1, 2011
Employer Rates Under Current 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	13.58%		15.77%	29.35%
0% Subvention	0.00%		0.00%	0.00%
Basic + 0% Subvention	13.58%		15.77%	29.35%
COL	4.69%		9.39%	14.08%
Total	18.27%		25.16%	43.43%

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

CHART 15-A
Components of Recommended Employer Contribution Rates for Members with Membership Dates before January 1, 2011
Employer Rates Under Recommended Assumptions for July 1, 2012 through June 30, 2013

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	11.76%		8.73%		20.49%	11.76%		13.81%		25.57%
50% Subvention	2.81%		0.00%		2.81%	2.81%		0.00%		2.81%
Basic + 50% Subvention	14.57%		8.73%		23.30%	14.57%		13.81%		28.38%
COL	3.26%		3.37%		6.63%	3.26%		7.44%		10.70%
Total	17.83%		12.10%		29.93%	17.83%		21.25%		39.08%
General Tier 1 (Under \$350)										
Basic	7.97%		5.91%		13.88%	7.97%		9.37%		17.34%
50% Subvention	1.90%		0.00%		1.90%	1.90%		0.00%		1.90%
Basic + 50% Subvention	9.87%		5.91%		15.78%	9.87%		9.37%		19.24%
COL	2.21%		2.28%		4.49%	2.21%		5.04%		7.25%
Total	12.08%		8.19%		20.27%	12.08%		14.41%		26.49%
General Tier 1 (Over \$350)										
Basic	11.95%		8.87%		20.82%	11.95%		14.05%		26.00%
50% Subvention	2.86%		0.00%		2.86%	2.86%		0.00%		2.86%
Basic + 50% Subvention	14.81%		8.87%		23.68%	14.81%		14.05%		28.86%
COL	3.31%		3.42%		6.73%	3.31%		7.56%		10.87%
Total	18.12%		12.29%		30.41%	18.12%		21.61%		39.73%
					Payroll = \$28,697,279					Payroll = \$8,581,647

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

CHART 15-A (continued)

**Components of Recommended Employer Contribution Rates for Members with Membership Dates before January 1, 2011
Employer Rates Under Recommended Assumptions for July 1, 2012 through June 30, 2013**

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	11.76%		6.58%	18.34%
50% Subvention	2.81%		0.00%	2.81%
Basic + 50% Subvention	14.57%		6.58%	21.15%
COL	3.26%		3.24%	6.50%
Total	17.83%		9.82%	27.65%
General Tier 1 (Under \$350)				
Basic	7.97%		4.46%	12.43%
50% Subvention	1.90%		0.00%	1.90%
Basic + 50% Subvention	9.87%		4.46%	14.33%
COL	2.21%		2.19%	4.40%
Total	12.08%		6.65%	18.73%
General Tier 1 (Over \$350)				
Basic	11.95%		6.69%	18.64%
50% Subvention	2.86%		0.00%	2.86%
Basic + 50% Subvention	14.81%		6.69%	21.50%
COL	3.31%		3.29%	6.60%
Total	18.12%		9.98%	28.10%

Payroll = \$602,314

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

CHART 15-A (continued)

**Components of Recommended Employer Contribution Rates for Members with Membership Dates before January 1, 2011
Employer Rates Under Recommended Assumptions for July 1, 2012 through June 30, 2013**

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

	Enhanced Cost Group #2 County				Enhanced Cost Group #2 Districts without POB			
	Normal Cost	+	UAAL	= Total	Normal Cost	+	UAAL	= Total
General Tier 3 (Aggregate)								
Basic	11.16%		8.73%	= 19.89%	11.16%		13.81%	= 24.97%
50% Subvention	3.10%		0.00%	= 3.10%	3.10%		0.00%	= 3.10%
Basic + 50% Subvention	14.26%		8.73%	= 22.99%	14.26%		13.81%	= 28.07%
COL	3.18%		3.37%	= 6.55%	3.18%		7.44%	= 10.62%
Total	17.44%		12.10%	= 29.54%	17.44%		21.25%	= 38.69%
General Tier 3 (Under \$350)								
Basic	7.59%		5.94%	= 13.53%	7.59%		9.39%	= 16.98%
50% Subvention	2.10%		0.00%	= 2.10%	2.10%		0.00%	= 2.10%
Basic + 50% Subvention	9.69%		5.94%	= 15.63%	9.69%		9.39%	= 19.08%
COL	2.17%		2.29%	= 4.46%	2.17%		5.07%	= 7.24%
Total	11.86%		8.23%	= 20.09%	11.86%		14.46%	= 26.32%
General Tier 3 (Over \$350)								
Basic	11.38%		8.91%	= 20.29%	11.38%		14.09%	= 25.47%
50% Subvention	3.16%		0.00%	= 3.16%	3.16%		0.00%	= 3.16%
Basic + 50% Subvention	14.54%		8.91%	= 23.45%	14.54%		14.09%	= 28.63%
COL	3.25%		3.43%	= 6.68%	3.25%		7.60%	= 10.85%
Total	17.79%		12.34%	= 30.13%	17.79%		21.69%	= 39.48%
				Payroll = \$457,953,654				Payroll = \$2,991,917

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

CHART 15-A (continued)

**Components of Recommended Employer Contribution Rates for Members with Membership Dates before January 1, 2011
Employer Rates Under Recommended Assumptions for July 1, 2012 through June 30, 2013**

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	14.39%		23.96%		38.35%	12.27%		10.35%		22.62%
50% Subvention	2.99%		0.00%		2.99%	3.16%		0.00%		3.16%
Basic + 50% Subvention	17.38%		23.96%		41.34%	15.43%		10.35%		25.78%
COL	4.25%		11.31%		15.56%	3.17%		8.17%		11.34%
Total	21.63%		35.27%		56.90%	18.60%		18.52%		37.12%
General Tier 1 (Under \$350)										
Basic	9.73%		16.21%		25.94%	8.37%		7.06%		15.43%
50% Subvention	2.02%		0.00%		2.02%	2.16%		0.00%		2.16%
Basic + 50% Subvention	11.75%		16.21%		27.96%	10.53%		7.06%		17.59%
COL	2.88%		7.64%		10.52%	2.16%		5.57%		7.73%
Total	14.63%		23.85%		38.48%	12.69%		12.63%		25.32%
General Tier 1 (Over \$350)										
Basic	14.60%		24.31%		38.91%	12.56%		10.59%		23.15%
50% Subvention	3.03%		0.00%		3.03%	3.23%		0.00%		3.23%
Basic + 50% Subvention	17.63%		24.31%		41.94%	15.79%		10.59%		26.38%
COL	4.31%		11.47%		15.78%	3.24%		8.36%		11.60%
Total	21.94%		35.78%		57.72%	19.03%		18.95%		37.98%
					Payroll = \$24,455,315					Payroll = \$5,334,523

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

CHART 15-A (continued)
Components of Recommended Employer Contribution Rates for Members with Membership Dates before January 1, 2011
Employer Rates Under Recommended Assumptions for July 1, 2012 through June 30, 2013

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	11.75%		6.85%		18.60%	12.60%		7.26%		19.86%
50% Subvention	2.90%		0.00%		2.90%	3.68%		0.00%		3.68%
Basic + 50% Subvention	14.65%		6.85%		21.50%	16.28%		7.26%		23.54%
COL	3.19%		3.92%		7.11%	3.76%		3.75%		7.51%
Total	17.84%		10.77%		28.61%	20.04%		11.01%		31.05%
General Tier 1 (Under \$350)										
Basic	7.97%		4.65%		12.62%	8.60%		4.95%		13.55%
50% Subvention	1.97%		0.00%		1.97%	2.51%		0.00%		2.51%
Basic + 50% Subvention	9.94%		4.65%		14.59%	11.11%		4.95%		16.06%
COL	2.17%		2.66%		4.83%	2.57%		2.56%		5.13%
Total	12.11%		7.31%		19.42%	13.68%		7.51%		21.19%
General Tier 1 (Over \$350)										
Basic	11.96%		6.97%		18.93%	12.90%		7.43%		20.33%
50% Subvention	2.95%		0.00%		2.95%	3.77%		0.00%		3.77%
Basic + 50% Subvention	14.91%		6.97%		21.88%	16.67%		7.43%		24.10%
COL	3.25%		4.00%		7.25%	3.85%		3.84%		7.69%
Total	18.16%		10.97%		29.13%	20.52%		11.27%		31.79%
					Payroll = \$4,010,138					Payroll = \$725,188

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

CHART 15-A (continued)

**Components of Recommended Employer Contribution Rates for Members with Membership Dates before January 1, 2011
Employer Rates Under Recommended Assumptions for July 1, 2012 through June 30, 2013**

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	21.92%		17.30%		39.22%
50% Subvention	4.36%		0.00%		4.36%
Basic + 50% Subvention	26.28%		17.30%		43.58%
COL	6.75%		12.90%		19.65%
Total	33.03%		30.20%		63.23%

Payroll = \$79,456,506

	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	21.20%		8.28%		29.48%	21.20%		29.22%		50.42%
0% Subvention	0.00%		0.00%		0.00%	0.00%		0.00%		0.00%
Basic + 0% Subvention	21.20%		8.28%		29.48%	21.20%		29.22%		50.42%
COL	6.64%		13.44%		20.08%	6.64%		29.40%		36.04%
Total	27.84%		21.72%		49.56%	27.84%		58.62%		86.46%

Payroll = \$33,909,602

Payroll = \$3,238,334

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

CHART 15-A (continued)
Components of Recommended Employer Contribution Rates for Members with Membership Dates before January 1, 2011
Employer Rates Under Recommended Assumptions for July 1, 2012 through June 30, 2013

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	18.30%		17.30%		35.60%					
50% Subvention	4.24%		0.00%		4.24%					
Basic + 50% Subvention	22.54%		17.30%		39.84%					
COL	3.53%		12.90%		16.43%					
Total	26.07%		30.20%		56.27%					
Payroll = \$7,829,592										
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	21.62%		5.64%		27.26%	21.61%		21.97%		43.58%
0% Subvention	0.00%		0.00%		0.00%	0.00%		0.00%		0.00%
Basic + 0% Subvention	21.62%		5.64%		27.26%	21.61%		21.97%		43.58%
COL	6.83%		10.61%		17.44%	6.97%		13.00%		19.97%
Total	28.45%		16.25%		44.70%	28.58%		34.97%		63.55%
Payroll = \$7,894,991					Payroll = \$19,504,281					

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

CHART 15-A (continued)

**Components of Recommended Employer Contribution Rates for Members with Membership Dates before January 1, 2011
Employer Rates Under Recommended Assumptions for July 1, 2012 through June 30, 2013**

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	16.99%		22.58%	39.57%
0% Subvention	0.00%		0.00%	0.00%
Basic + 0% Subvention	16.99%		22.58%	39.57%
COL	5.40%		13.07%	18.47%
Total	22.39%		35.65%	58.04%

Payroll = \$2,257,925

Grand Total (Includes Both Enhanced and Non-enhanced – County and District)				
	Normal Cost	+	UAAL	= Total
Basic	13.63%		10.90%	24.53%
50% Subvention*	2.94%		0.00%	2.94%
Basic + 50% Subvention*	16.57%		10.90%	27.47%
COL	3.98%		5.98%	9.96%
Total	20.55%		16.88%	37.43%

Payroll = \$687,443,206

* 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 15-B

**Components of Recommended Employer Contribution Rates for Members with Membership Dates on or after January 1, 2011
Employer Rates Under Recommended Assumptions for July 1, 2012 through June 30, 2013**

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	10.36%		8.73%		19.09%	10.36%		13.81%		24.17%
50% Subvention	2.81%		0.00%		2.81%	2.81%		0.00%		2.81%
Basic + 50% Subvention	13.17%		8.73%		21.90%	13.17%		13.81%		26.98%
COL	3.06%		3.37%		6.43%	3.06%		7.44%		10.50%
Total	16.23%		12.10%		28.33%	16.23%		21.25%		37.48%
General Tier 1 (Under \$350)										
Basic	7.02%		5.91%		12.93%	7.02%		9.37%		16.39%
50% Subvention	1.91%		0.00%		1.91%	1.91%		0.00%		1.91%
Basic + 50% Subvention	8.93%		5.91%		14.84%	8.93%		9.37%		18.30%
COL	2.06%		2.28%		4.34%	2.06%		5.04%		7.10%
Total	10.99%		8.19%		19.18%	10.99%		14.41%		25.40%
General Tier 1 (Over \$350)										
Basic	10.53%		8.87%		19.40%	10.53%		14.05%		24.58%
50% Subvention	2.86%		0.00%		2.86%	2.86%		0.00%		2.86%
Basic + 50% Subvention	13.39%		8.87%		22.26%	13.39%		14.05%		27.44%
COL	3.10%		3.42%		6.52%	3.10%		7.56%		10.66%
Total	16.49%		12.29%		28.78%	16.49%		21.61%		38.10%

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

CHART 15-B (continued)

**Components of Recommended Employer Contribution Rates for Members with Membership Dates on or after January 1, 2011
Employer Rates Under Recommended Assumptions for July 1, 2012 through June 30, 2013**

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	10.36%		6.58%	16.94%
50% Subvention	2.81%		0.00%	2.81%
Basic + 50% Subvention	13.17%		6.58%	19.75%
COL	3.06%		3.24%	6.30%
Total	16.23%		9.82%	26.05%
General Tier 1 (Under \$350)				
Basic	7.02%		4.46%	11.48%
50% Subvention	1.91%		0.00%	1.91%
Basic + 50% Subvention	8.93%		4.46%	13.39%
COL	2.06%		2.19%	4.25%
Total	10.99%		6.65%	17.64%
General Tier 1 (Over \$350)				
Basic	10.53%		6.69%	17.22%
50% Subvention	2.86%		0.00%	2.86%
Basic + 50% Subvention	13.39%		6.69%	20.08%
COL	3.10%		3.29%	6.39%
Total	16.49%		9.98%	26.47%

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

CHART 15-B (continued)

**Components of Recommended Employer Contribution Rates for Members with Membership Dates on or after January 1, 2011
Employer Rates Under Recommended Assumptions for July 1, 2012 through June 30, 2013**

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

	Enhanced Cost Group #2 County				Enhanced Cost Group #2 Districts without POB			
	Normal Cost	+	UAAL	= Total	Normal Cost	+	UAAL	= Total
General Tier 3 (Aggregate)								
Basic	10.12%		8.73%	= 18.85%	10.12%		13.81%	= 23.93%
50% Subvention	3.10%		0.00%	= 3.10%	3.10%		0.00%	= 3.10%
Basic + 50% Subvention	13.22%		8.73%	= 21.95%	13.22%		13.81%	= 27.03%
COL	2.98%		3.37%	= 6.35%	2.98%		7.44%	= 10.42%
Total	16.20%		12.10%	= 28.30%	16.20%		21.25%	= 37.45%
General Tier 3 (Under \$350)								
Basic	6.88%		5.94%	= 12.82%	6.88%		9.39%	= 16.27%
50% Subvention	2.11%		0.00%	= 2.11%	2.11%		0.00%	= 2.11%
Basic + 50% Subvention	8.99%		5.94%	= 14.93%	8.99%		9.39%	= 18.38%
COL	2.03%		2.29%	= 4.32%	2.03%		5.07%	= 7.10%
Total	11.02%		8.23%	= 19.25%	11.02%		14.46%	= 25.48%
General Tier 3 (Over \$350)								
Basic	10.32%		8.91%	= 19.23%	10.32%		14.09%	= 24.41%
50% Subvention	3.16%		0.00%	= 3.16%	3.16%		0.00%	= 3.16%
Basic + 50% Subvention	13.48%		8.91%	= 22.39%	13.48%		14.09%	= 27.57%
COL	3.05%		3.43%	= 6.48%	3.05%		7.60%	= 10.65%
Total	16.53%		12.34%	= 28.87%	16.53%		21.69%	= 38.22%

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

CHART 15-B (continued)

**Components of Recommended Employer Contribution Rates for Members with Membership Dates on or after January 1, 2011
Employer Rates Under Recommended Assumptions for July 1, 2012 through June 30, 2013**

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	11.77%		23.96%		35.73%	11.35%		10.35%		21.70%
50% Subvention	2.99%		0.00%		2.99%	3.16%		0.00%		3.16%
Basic + 50% Subvention	14.76%		23.96%		38.72%	14.51%		10.35%		24.86%
COL	3.58%		11.31%		14.89%	3.19%		8.17%		11.36%
Total	18.34%		35.27%		53.61%	17.70%		18.52%		36.22%
General Tier 1 (Under \$350)										
Basic	7.96%		16.21%		24.17%	7.75%		7.06%		14.81%
50% Subvention	2.02%		0.00%		2.02%	2.15%		0.00%		2.15%
Basic + 50% Subvention	9.98%		16.21%		26.19%	9.90%		7.06%		16.96%
COL	2.42%		7.64%		10.06%	2.17%		5.57%		7.74%
Total	12.40%		23.85%		36.25%	12.07%		12.63%		24.70%
General Tier 1 (Over \$350)										
Basic	11.94%		24.31%		36.25%	11.62%		10.59%		22.21%
50% Subvention	3.03%		0.00%		3.03%	3.23%		0.00%		3.23%
Basic + 50% Subvention	14.97%		24.31%		39.28%	14.85%		10.59%		25.44%
COL	3.63%		11.47%		15.10%	3.26%		8.36%		11.62%
Total	18.60%		35.78%		54.38%	18.11%		18.95%		37.06%

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

CHART 15-B (continued)

**Components of Recommended Employer Contribution Rates for Members with Membership Dates on or after January 1, 2011
Employer Rates Under Recommended Assumptions for July 1, 2012 through June 30, 2013**

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	10.34%		6.85%		17.19%	11.00%		7.26%		18.26%
50% Subvention	2.90%		0.00%		2.90%	3.68%		0.00%		3.68%
Basic + 50% Subvention	13.24%		6.85%		20.09%	14.68%		7.26%		21.94%
COL	2.99%		3.92%		6.91%	3.45%		3.75%		7.20%
Total	16.23%		10.77%		27.00%	18.13%		11.01%		29.14%
General Tier 1 (Under \$350)										
Basic	7.02%		4.65%		11.67%	7.51%		4.95%		12.46%
50% Subvention	1.97%		0.00%		1.97%	2.51%		0.00%		2.51%
Basic + 50% Subvention	8.99%		4.65%		13.64%	10.02%		4.95%		14.97%
COL	2.02%		2.66%		4.68%	2.35%		2.56%		4.91%
Total	11.01%		7.31%		18.32%	12.37%		7.51%		19.88%
General Tier 1 (Over \$350)										
Basic	10.53%		6.97%		17.50%	11.26%		7.43%		18.69%
50% Subvention	2.95%		0.00%		2.95%	3.77%		0.00%		3.77%
Basic + 50% Subvention	13.48%		6.97%		20.45%	15.03%		7.43%		22.46%
COL	3.04%		4.00%		7.04%	3.53%		3.84%		7.37%
Total	16.52%		10.97%		27.49%	18.56%		11.27%		29.83%

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

CHART 15-B (continued)

**Components of Recommended Employer Contribution Rates for Members with Membership Dates on or after January 1, 2011
Employer Rates Under Recommended Assumptions for July 1, 2012 through June 30, 2013**

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

Enhanced					Enhanced					
Cost Group #9					Cost Group #11					
County					San Ramon Valley Fire District					
	Normal Cost	+	UAAL	=	Total	Normal Cost	+	UAAL	=	Total
Safety Tier C										
Basic	17.47%		17.30%		34.77%	18.63%		21.97%		40.60%
50% Subvention	4.24%		0.00%		4.24%	0.00%		0.00%		0.00%
Basic + 50% Subvention	21.71%		17.30%		39.01%	18.63%		21.97%		40.60%
COL	3.42%		12.90%		16.32%	6.21%		13.00%		19.21%
Total	25.13%		30.20%		55.33%	24.84%		34.97%		59.81%

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

CHART 15-B (continued)

**Components of Recommended Employer Contribution Rates for Members with Membership Dates on or after January 1, 2011
Employer Rates Under Recommended Assumptions for July 1, 2012 through June 30, 2013**

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	15.22%		22.58%	37.80%
0% Subvention	0.00%		0.00%	0.00%
Basic + 0% Subvention	15.22%		22.58%	37.80%
COL	5.03%		13.07%	18.10%
Total	20.25%		35.65%	55.90%

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

The employer contribution rates as of December 31, 2010 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 16

Reconciliation of Recommended Average Employer Contribution from December 31, 2009 to December 31, 2010 Valuation

	Contribution Rate*	Estimated Annual Dollar Cost**
Recommended Average Employer Contribution Rate in December 31, 2009 Valuation	30.49%	\$211,737,322
Effect of investment (gain)/loss ⁽¹⁾	3.44%	23,648,046
Effect of difference in actual versus expected contributions due to delay in implementation of contribution rates calculated in 12/31/2009 valuation	0.43%	2,956,006
Effect of actual versus expected salary increase including total payroll growth ⁽²⁾	(0.23%)	(1,581,119)
Effect of net other experience (gains)/losses ⁽³⁾	0.08%	(1,577,716)
Effect of changes in actuarial assumptions and methods ⁽⁴⁾	<u>0.28%</u>	<u>1,924,841</u>
Total change	<u>4.00%</u>	<u>\$25,370,058</u>
Recommended Average Employer Contribution Rate in December 31, 2010 Valuation	34.49%	\$237,107,380

* 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 1.80% was less than the 7.75% assumed in the valuation.

(2) This item represents the net impact of lower than expected individual salary increases and total payroll growth. Lower individual salary increases decrease cost while lower total payroll growth increases the UAAL contribution rate, since the remaining UAAL is amortized over a lower 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. Terminal pay assumptions are now based on cost groups.

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

The member contribution rates as of December 31, 2010 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 17
Reconciliation of Recommended Average Member Contribution from December 31, 2009 to December 31, 2010 Valuation**

	Contribution Rate*	Estimated Annual Dollar Cost**
Recommended Average Member Contribution Rate in December 31, 2009 Valuation	10.99%	\$76,292,859
Effect of changes in actuarial assumptions and methods ⁽¹⁾	0.01%	68,744
Effect of other experience (gains)/losses ⁽²⁾	<u>0.00%</u>	<u>(722,467)</u>
Total change	<u>0.01%</u>	<u>\$(653,723)</u>
Recommended Average Member Contribution Rate in December 31, 2010 Valuation	11.00%	\$75,639,136

* 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) The Board approved changes in actuarial assumptions. Terminal pay assumptions are now based on cost groups.

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

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

E. INFORMATION REQUIRED BY GASB

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

Critical information to GASB is the historical comparison of the GASB required contributions to the actual contributions. This comparison demonstrates whether a plan is being funded on an actuarially sound basis and in accordance with the GASB funding requirements. Chart 18 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 18
Required Versus Actual Contributions

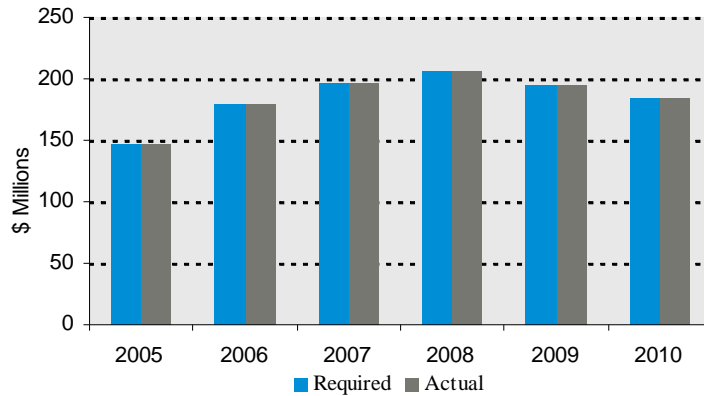
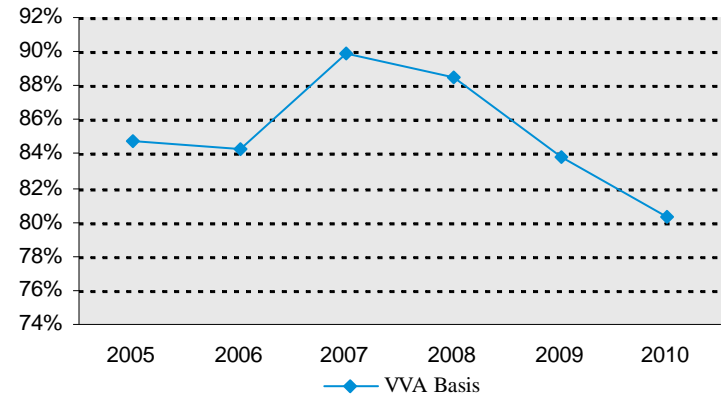


CHART 19
Funded Ratio



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
	2010	2009	
Active members in valuation			
Number	832	925	-10.1%
Average age	50.1	50.2	N/A
Average service	16.7	17.3	N/A
Projected total compensation ⁽¹⁾	\$72,406,404	\$79,141,013	-8.5%
Projected average compensation	\$87,027	\$85,558	1.7%
Account balances	\$66,710,409	\$73,610,874	-9.4%
Total active vested members	703	785	-10.4%
Vested terminated members⁽²⁾	303	301	0.7%
Retired members			
Number in pay status	2,690	2,672	0.7%
Average age	73.5	73.6	N/A
Average monthly benefit	\$3,322	\$3,128	6.2%
Disabled members			
Number in pay status ⁽³⁾	324	333	-2.7%
Average age	68.4	67.7	N/A
Average monthly benefit	\$2,385	\$2,320	2.8%
Beneficiaries			
Number in pay status	705	697	1.1%
Average age	75.8	75.4	N/A
Average monthly benefit	\$1,762	\$1,731	1.8%

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

⁽²⁾ Includes nonvested terminated members.

⁽³⁾ For 2010, includes 237 members receiving a service-connected disability and 87 members receiving an ordinary disability.

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
	2010	2009	
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⁾	288	295	-2.4%
Retired members			
Number in pay status	431	438	-1.6%
Average age	71.4	70.6	N/A
Average monthly benefit	\$772	\$744	3.8%
Disabled members			
Number in pay status ⁽⁴⁾	53	59	-10.2%
Average age	67.4	66.7	N/A
Average monthly benefit	\$1,902	\$1,869	1.8%
Beneficiaries			
Number in pay status	92	83	10.8%
Average age	61.4	61.5	N/A
Average monthly benefit	\$827	\$847	-2.4%

⁽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⁾ For 2010, includes 26 members receiving a service-connected disability and 27 members receiving an ordinary disability.

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
	2010	2009	
Active members in valuation			
Number	6,493	6,481	0.2%
Average age	47.4	47.1	N/A
Average service	10.2	9.9	N/A
Projected total compensation ⁽¹⁾	\$460,945,571	\$456,949,492	0.9%
Projected average compensation	\$70,991	\$70,506	0.7%
Account balances	\$315,234,892	\$281,677,172	11.9%
Total active vested members	4,546	4,433	2.5%
Vested terminated members⁽²⁾	1,329	1,297	2.5%
Retired members			
Number in pay status	1,349	1,170	15.3%
Average age	65.0	64.6	N/A
Average monthly benefit	\$2,218	\$2,141	3.6%
Disabled members			
Number in pay status ⁽³⁾	70	73	-4.1%
Average age	59.9	60.1	N/A
Average monthly benefit	\$2,102	\$2,035	3.3%
Beneficiaries			
Number in pay status	79	71	11.3%
Average age	56.0	56.2	N/A
Average monthly benefit	\$1,299	\$1,343	-3.3%

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

⁽²⁾ Includes nonvested terminated members.

⁽³⁾ For 2010, includes 22 members receiving a service-connected disability and 48 members receiving an ordinary disability.

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

EXHIBIT A (continued)

Table of Plan Coverage

iv. Safety Tier A

Category	Year Ended December 31		Change From Prior Year
	2010	2009	
Active members in valuation			
Number	1,388	1,452	-4.4%
Average age	42.1	41.7	N/A
Average service	12.9	12.5	N/A
Projected total compensation ⁽¹⁾	\$146,261,639	\$152,084,014	-3.8%
Projected average compensation	\$105,376	\$104,741	0.6%
Account balances	\$262,347,874	\$242,680,553	8.1%
Total active vested members	1,144	1,181	-3.1%
Vested terminated members⁽²⁾	300	305	-1.6%
Retired members			
Number in pay status	999	939	6.4%
Average age	65.4	65.5	N/A
Average monthly benefit	\$6,653	\$6,407	3.8%
Disabled members			
Number in pay status ⁽³⁾	474	476	-0.4%
Average age	60.7	60.2	N/A
Average monthly benefit	\$4,903	\$4,769	2.8%
Beneficiaries			
Number in pay status	293	281	4.3%
Average age	67.3	66.8	N/A
Average monthly benefit	\$3,003	\$2,859	5.0%

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

⁽²⁾ Includes nonvested terminated members.

⁽³⁾ For 2010, includes 453 members receiving a service-connected disability and 21 members receiving an ordinary disability.

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

EXHIBIT A (continued)
Table of Plan Coverage
v. Safety Tier C

Category	Year Ended December 31		Change From Prior Year
	2010	2009	
Active members in valuation			
Number	98	80	22.5%
Average age	32.3	32.4	N/A
Average service	2.4	2.0	N/A
Projected total compensation ⁽¹⁾	\$7,829,592	\$6,269,479	24.9%
Projected average compensation	\$79,894	\$78,368	1.9%
Account balances	\$1,681,896	\$1,004,480	67.4%
Total active vested members	3	3	0.0%
Vested terminated members⁽²⁾	11	11	0.0%
Retired members			
Number in pay status	0	0	0.0%
Average age	N/A	N/A	N/A
Average monthly benefit	N/A	N/A	N/A
Disabled members			
Number in pay status	0	0	0.0%
Average age	N/A	N/A	N/A
Average monthly benefit	N/A	N/A	N/A
Beneficiaries			
Number in pay status	0	0	0.0%
Average age	N/A	N/A	N/A
Average monthly benefit	N/A	N/A	N/A

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

⁽²⁾ Includes nonvested terminated members.

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, 2010
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	--	--	--	--	--	--	--	--	--	--
25 - 29	1 \$8,853	1 \$8,853	--	--	--	--	--	--	--	--
30 - 34	--	--	--	--	--	--	--	--	--	--
35 - 39	--	--	--	--	--	--	--	--	--	--
40 - 44	3 77,402	--	2 \$92,414	1 \$47,379	--	--	--	--	--	--
45 - 49	2 57,811	2 57,811	--	--	--	--	--	--	--	--
50 - 54	1 78,995	1 78,995	--	--	--	--	--	--	--	--
55 - 59	1 78,916	--	--	--	--	--	--	1 \$78,916	--	--
60 - 64	4 52,649	1 36,943	1 30,244	--	--	1 \$66,198	--	1 77,212	--	--
65 & over	--	--	--	--	--	--	--	--	--	--
Total	12 \$60,432	5 \$48,082	3 \$71,690	1 \$47,379	--	1 \$66,198	--	2 \$78,065	--	--

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, 2010
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	2	1	1	--	--	--	--	--	--	--
	\$70,406	\$68,528	\$72,283	--	--	--	--	--	--	--
25 - 29	33	26	7	--	--	--	--	--	--	--
	65,450	64,345	69,554	--	--	--	--	--	--	--
30 - 34	40	15	22	3	--	--	--	--	--	--
	76,300	70,655	81,522	\$66,225	--	--	--	--	--	--
35 - 39	56	18	22	14	2	--	--	--	--	--
	77,397	72,404	77,485	84,022	\$75,006	--	--	--	--	--
40 - 44	90	20	31	24	10	5	--	--	--	--
	88,160	82,966	96,946	85,643	75,671	\$91,525	--	--	--	--
45 - 49	132	27	33	35	15	18	2	2	--	--
	85,572	78,760	79,081	89,623	85,641	101,616	\$97,227	\$57,176	--	--
50 - 54	181	18	28	40	28	28	11	25	3	--
	88,246	77,096	91,949	86,202	82,138	99,284	102,396	85,035	\$76,687	--
55 - 59	176	12	30	28	18	20	12	32	23	1
	95,148	76,444	108,464	96,889	99,367	101,720	117,632	86,998	76,507	\$83,658
60 - 64	93	7	19	17	8	6	5	20	10	1
	91,496	85,209	84,623	75,151	88,496	72,949	131,138	105,851	103,684	72,024
65 & over	17	2	3	5	1	4	--	1	--	1
	90,403	33,433	70,339	93,579	101,727	128,968	--	118,272	--	55,211
Total	820	146	196	166	82	81	30	80	36	3
	\$87,416	\$74,375	\$88,366	\$87,191	\$86,457	\$99,440	\$112,936	\$90,743	\$84,071	\$70,298

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, 2010
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	33	33	--	--	--	--	--	--	--	--
	\$37,371	\$37,371	--	--	--	--	--	--	--	--
25 - 29	324	276	48	--	--	--	--	--	--	--
	53,004	52,013	\$58,703	--	--	--	--	--	--	--
30 - 34	650	404	207	39	--	--	--	--	--	--
	63,700	61,945	67,702	\$60,634	--	--	--	--	--	--
35 - 39	721	306	241	165	9	--	--	--	--	--
	70,553	65,474	75,041	73,382	\$71,183	--	--	--	--	--
40 - 44	900	274	265	254	62	42	3	--	--	--
	71,764	62,183	75,113	76,586	79,241	\$73,783	\$59,979	--	--	--
45 - 49	1,054	217	271	261	132	131	39	3	--	--
	74,156	62,801	69,286	73,816	91,410	86,185	74,102	\$81,169	--	--
50 - 54	1,035	222	234	230	113	152	69	15	--	--
	73,651	60,796	69,787	74,540	79,835	88,560	82,620	71,622	--	--
55 - 59	965	165	221	209	131	145	70	21	3	--
	74,726	61,716	69,321	74,141	83,163	83,436	82,495	99,847	\$82,744	--
60 - 64	632	92	150	148	89	91	48	12	2	--
	73,327	59,973	70,575	70,861	77,045	80,364	88,736	93,966	97,179	--
65 - 69	149	18	52	38	17	15	7	2	--	--
	73,656	75,658	60,907	82,298	71,113	71,240	75,993	254,449	--	--
70 & over	30	1	9	7	3	8	2	--	--	--
	62,028	183,547	60,862	56,522	71,624	50,397	57,919	--	--	--
Total	6,493	2,008	1,698	1,351	556	584	238	53	5	--
	\$70,991	\$60,786	\$70,406	\$73,902	\$82,403	\$83,447	\$81,733	\$95,304	\$88,518	--

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, 2010
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	1	1	--	--	--	--	--	--
	\$64,454	\$64,454	--	--	--	--	--	--
30 - 34	1	--	1	--	--	--	--	--
	109,772	--	\$109,772	--	--	--	--	--
35 - 39	2	--	--	2	--	--	--	--
	109,772	--	--	\$109,772	--	--	--	--
40 - 44	5	--	--	1	--	4	--	--
	116,549	--	--	116,799	--	\$116,487	--	--
45 - 49	2	--	--	--	--	1	1	--
	120,810	--	--	--	--	110,725	\$130,894	--
50 - 54	6	1	--	--	2	--	2	1
	113,472	80,664	--	--	\$117,878	--	116,299	\$131,814
55 - 59	3	--	1	--	--	1	1	--
	119,654	--	104,793	--	--	128,141	126,027	--
60 - 64	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
65 & over	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
Total	20	2	2	3	2	6	4	1
	\$112,896	\$72,559	\$107,283	\$112,114	\$117,878	\$117,469	\$122,380	\$131,814

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, 2010
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	4	4	--	--	--	--	--	--	--	--
	\$81,115	\$81,115	--	--	--	--	--	--	--	--
25 - 29	103	93	10	--	--	--	--	--	--	--
	91,841	90,570	\$103,659	--	--	--	--	--	--	--
30 - 34	182	72	92	18	--	--	--	--	--	--
	97,215	95,270	98,155	\$100,185	--	--	--	--	--	--
35 - 39	268	43	125	94	6	--	--	--	--	--
	97,870	94,496	98,475	97,981	\$107,702	--	--	--	--	--
40 - 44	312	27	78	95	75	37	--	--	--	--
	106,099	92,654	102,748	100,929	110,951	\$126,413	--	--	--	--
45 - 49	289	17	47	50	43	100	32	--	--	--
	115,609	121,654	104,692	102,106	116,228	121,798	\$129,362	--	--	--
50 - 54	137	9	20	18	19	46	20	5	--	--
	116,285	93,304	93,171	101,350	\$123,426	128,290	122,896	\$139,843	--	--
55 - 59	51	7	15	7	5	7	5	4	1	--
	113,501	96,652	111,607	104,247	96,058	114,354	150,117	119,997	\$196,810	--
60 - 64	15	1	7	1	--	2	2	2	--	--
	97,679	118,941	94,619	81,246	--	88,881	102,178	110,274	--	--
65 & over	7	1	1	3	1	--	1	--	--	--
	85,516	82,755	79,265	87,091	80,274	--	95,048	--	--	--
Total	1,368	274	395	286	149	192	60	11	1	--
	\$105,266	\$94,737	\$100,229	\$100,013	\$113,228	\$123,629	\$127,458	\$127,250	\$196,810	--

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, 2010
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	12	12	--	--	--	--	--	--	--	--	--
	\$68,128	\$68,128	--	--	--	--	--	--	--	--	--
25 - 29	34	34	--	--	--	--	--	--	--	--	--
	79,006	79,006	--	--	--	--	--	--	--	--	--
30 - 34	24	24	--	--	--	--	--	--	--	--	--
	84,616	84,616	--	--	--	--	--	--	--	--	--
35 - 39	15	15	--	--	--	--	--	--	--	--	--
	80,289	80,289	--	--	--	--	--	--	--	--	--
40 - 44	8	8	--	--	--	--	--	--	--	--	--
	79,687	79,687	--	--	--	--	--	--	--	--	--
45 - 49	2	2	--	--	--	--	--	--	--	--	--
	84,927	84,927	--	--	--	--	--	--	--	--	--
50 - 54	1	1	--	--	--	--	--	--	--	--	--
	93,841	93,841	--	--	--	--	--	--	--	--	--
55 - 59	2	2	--	--	--	--	--	--	--	--	--
	94,755	94,755	--	--	--	--	--	--	--	--	--
60 - 64	--	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--	--
65 & over	--	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--	--
Total	98	98	--	--	--	--	--	--	--	--	--
	\$79,894	\$79,894	--	--	--	--	--	--	--	--	--

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, 2010

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	--	--	--	--	--
	\$366	--	--	--	\$366	--	--	--	--	--
25 - 29	3	--	1	1	1	--	--	--	--	--
	693	--	\$564	\$1,149	366	--	--	--	--	--
30 - 34	6	1	1	--	3	--	1	--	--	--
	820	\$1,607	564	--	641	--	\$829	--	--	--
35 - 39	2	--	1	--	1	--	--	--	--	--
	1,280	--	2,058	--	502	--	--	--	--	--
40 - 44	6	--	1	--	5	--	--	--	--	--
	1,023	--	1,379	--	951	--	--	--	--	--
45 - 49	17	3	4	5	5	--	--	--	--	--
	1,087	1,369	795	1,195	1,044	--	--	--	--	--
50 - 54	70	40	11	4	9	3	2	--	1	--
	2,093	2,351	1,900	2,671	1,506	\$1,791	814	--	\$325	--
55 - 59	254	163	57	11	8	6	5	1	3	--
	3,274	3,999	1,926	2,532	2,784	1,664	1,257	\$1,804	567	--
60 - 64	569	196	219	98	24	10	13	5	4	--
	3,652	4,995	3,661	1,895	2,303	2,335	1,621	1,617	911	--
65 - 69	589	86	239	137	70	27	17	10	2	1
	3,621	4,322	4,631	3,060	1,724	1,970	2,295	1,870	1,477	\$699
70 - 74	517	10	103	191	108	71	21	8	3	2
	3,182	2,317	4,497	3,876	2,258	1,556	1,778	2,339	1,343	1,843
75 - 80	516	1	15	116	170	113	77	15	8	1
	2,784	5,173	3,791	3,820	3,319	2,019	1,275	1,747	1,686	983
80 - 84	515	1	2	24	119	163	113	69	18	6
	2,441	4,130	1,424	2,673	3,466	2,765	1,529	1,575	1,683	1,816
85 - 89	415	--	3	6	21	98	146	114	22	5
	2,242	--	5,588	4,014	2,589	2,742	2,113	1,952	1,287	1,464
90 & over	238	--	1	1	2	15	72	92	46	9
	1,928	--	1,065	1,226	1,737	2,137	1,918	2,085	1,719	1,319
Total	3,719	501	658	594	548	506	467	314	107	24
	\$2,945	\$4,261	\$3,933	\$3,238	\$2,744	\$2,336	\$1,764	\$1,900	\$1,531	\$1,477

Note: Total retired benefit \$10,951,466, average age 73.5 and average years retired 16.8.

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, 2010

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	2	--	--	--	2	--	--	--	--	--
	\$1,234	--	--	--	\$1,234	--	--	--	--	--
25 - 29	2	--	--	2	--	--	--	--	--	--
	693	--	--	\$693	--	--	--	--	--	--
30 - 34	2	--	--	1	1	--	--	--	--	--
	480	--	--	563	396	--	--	--	--	--
35 - 39	7	--	2	4	1	--	--	--	--	--
	709	--	\$648	535	1,522	--	--	--	--	--
40 - 44	8	1	--	3	3	1	--	--	--	--
	1,039	\$539	--	1,689	524	\$1,138	--	--	--	--
45 - 49	3	--	--	1	2	--	--	--	--	--
	1,961	--	--	2,826	1,528	--	--	--	--	--
50 - 54	19	12	2	3	2	--	--	--	--	--
	916	572	1,210	2,424	424	--	--	--	--	--
55 - 59	35	15	11	5	3	1	--	--	--	--
	741	682	251	1,191	1,676	1,965	--	--	--	--
60 - 64	97	22	31	36	6	2	--	--	--	--
	807	805	576	864	1,569	1,092	--	--	--	--
65 - 69	110	17	26	39	22	5	1	--	--	--
	807	478	1,132	728	761	1,027	\$943	--	--	--
70 - 74	97	4	20	50	21	2	--	--	--	--
	1,017	725	685	1,211	863	1,672	--	--	--	--
75 - 80	115	--	14	50	35	10	6	--	--	--
	988	--	712	1,191	725	1,491	646	--	--	--
80 - 84	59	--	3	18	32	5	1	--	--	--
	820	--	372	886	812	973	473	--	--	--
85 - 89	15	--	--	3	9	3	--	--	--	--
	844	--	--	901	562	1,636	--	--	--	--
90 & over	5	--	--	--	4	1	--	--	--	--
	416	--	--	--	461	238	--	--	--	--
Total	576	71	109	215	143	30	8	--	--	--
	\$885	\$653	\$721	\$1,039	\$821	\$1,290	\$662	--	--	--

Note: Total retired benefit \$509,765, average age 69.4 and average years retired 12.4.

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

iii. General Tier 3 as of December 31, 2010

Age	Total	Years of Retirement								
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	4	3	1	--	--	--	--	--	--	--
	\$1,172	\$1,027	\$1,609	--	--	--	--	--	--	--
25 - 29	2	--	1	1	--	--	--	--	--	--
	1,139	--	1,628	\$651	--	--	--	--	--	--
30 - 34	4	2	2	--	--	--	--	--	--	--
	1,151	1,747	555	--	--	--	--	--	--	--
35 - 39	2	--	2	--	--	--	--	--	--	--
	1,106	--	1,106	--	--	--	--	--	--	--
40 - 44	8	2	5	1	--	--	--	--	--	--
	775	1,110	622	875	--	--	--	--	--	--
45 - 49	14	8	5	1	--	--	--	--	--	--
	2,103	2,336	1,829	1,619	--	--	--	--	--	--
50 - 54	94	86	8	--	--	--	--	--	--	--
	1,588	1,550	1,993	--	--	--	--	--	--	--
55 - 59	229	166	60	3	--	--	--	--	--	--
	2,102	2,368	1,374	1,981	--	--	--	--	--	--
60 - 64	412	284	115	13	--	--	--	--	--	--
	2,562	2,882	1,930	1,176	--	--	--	--	--	--
65 - 69	430	227	177	24	2	--	--	--	--	--
	2,317	2,572	2,170	1,050	\$1,698	--	--	--	--	--
70 - 74	221	85	104	30	--	2	--	--	--	--
	1,771	1,932	1,773	1,351	--	\$1,156	--	--	--	--
75 - 80	65	16	36	13	--	--	--	--	--	--
	1,431	1,905	1,181	1,540	--	--	--	--	--	--
80 - 84	10	5	1	4	--	--	--	--	--	--
	1,758	1,654	5,442	968	--	--	--	--	--	--
85 - 89	3	2	1	--	--	--	--	--	--	--
	2,533	2,675	2,247	--	--	--	--	--	--	--
90 & over	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
Total	1,498	886	518	90	2	2	--	--	--	--
	\$2,164	\$2,443	\$1,849	\$1,267	\$1,698	\$1,156	--	--	--	--

Note: Total retired benefit \$3,241,970, average age 64.3 and average years retired 4.7.

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

iv. Safety Tier A as of December 31, 2010

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	--	--	--	--	--	--	--
	\$1,087	--	\$1,087	--	--	--	--	--	--	--
25 - 29	1	--	--	--	1	--	--	--	--	--
	1,037	--	--	--	\$1,037	--	--	--	--	--
30 - 34	7	6	--	--	1	--	--	--	--	--
	2,850	\$3,152	--	--	1,037	--	--	--	--	--
35 - 39	16	7	8	--	1	--	--	--	--	--
	3,846	4,426	3,723	--	768	--	--	--	--	--
40 - 44	26	10	12	1	3	--	--	--	--	--
	2,884	3,492	2,867	\$3,408	756	--	--	--	--	--
45 - 49	68	27	19	16	6	--	--	--	--	--
	4,196	5,594	3,240	3,539	2,684	--	--	--	--	--
50 - 54	197	142	21	17	11	5	1	--	--	--
	6,026	7,067	3,372	3,461	3,099	\$3,404	\$2,933	--	--	--
55 - 59	271	110	118	23	14	4	2	--	--	--
	6,665	7,736	6,955	3,061	3,406	2,964	2,318	--	--	--
60 - 64	385	75	180	59	35	16	10	8	1	1
	6,134	7,569	7,542	3,895	3,140	2,758	2,566	\$3,125	\$775	\$1,181
65 - 69	312	22	80	116	48	20	13	8	4	1
	5,607	3,509	6,654	7,086	3,550	3,592	2,697	3,169	3,141	2,803
70 - 74	171	7	9	42	62	30	12	5	3	1
	5,430	3,147	4,284	6,076	6,690	4,435	2,780	3,771	3,111	3,424
75 - 80	140	--	2	13	33	39	31	13	9	--
	4,739	--	1,874	5,267	6,161	5,350	3,341	3,675	3,098	--
80 - 84	102	--	--	--	8	17	32	28	10	7
	4,288	--	--	--	3,706	5,262	4,751	3,887	3,707	2,911
85 - 89	50	--	--	--	--	2	6	22	13	7
	4,057	--	--	--	--	3,267	5,315	4,486	3,746	2,429
90 & over	16	--	--	--	--	--	--	2	10	4
	4,120	--	--	--	--	--	--	5,057	4,142	3,595
Total	1,766	406	453	287	223	133	107	86	50	21
	\$5,578	\$6,791	\$6,521	\$5,452	\$4,623	\$4,380	\$3,637	\$3,891	\$3,555	\$2,818

Note: Total retired benefit \$9,849,921, average age 64.5 and average years retired 13.2.

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

EXHIBIT D

Reconciliation of Member Data – December 31, 2009 to December 31, 2010

	Active Participants	Vested Former Participants⁽¹⁾	Pensioners	Disableds	Beneficiaries	Total
Number as of December 31, 2009	8,938	2,209	5,219	941	1,132	18,439
New participants	439	56	0	0	81	576
Terminations – with vested rights ⁽¹⁾	-164	164	0	0	0	0
Contributions Refunds	-87	-99	0	0	0	-186
Retirements	-327	-59	386	0	0	0
New disabilities	-12	0	-2	14	0	0
Return to work	32	-32	0	0	0	0
Died with or without beneficiary	-8	-8	-136	-34	-42	-228
Data adjustments	<u>0</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>-2</u>	<u>0</u>
Number as of December 31, 2010	8,811	2,231	5,469	921	1,169	18,601

⁽¹⁾ Includes 806 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, 2010	Year Ended December 31, 2009
Contribution income:		
Employer contributions	\$183,950,930	\$195,613,673
Employee contributions	<u>64,330,484</u>	<u>66,536,161</u>
Net contribution income	\$248,281,414	\$262,149,834
Investment income:		
Interest, dividends and other income	\$140,638,423	\$155,083,209
Adjustment toward market value ⁽¹⁾	(9,668,021)	(102,780,421)
Less investment and administrative fees	<u>(35,051,489)</u>	<u>(34,075,855)</u>
Net investment income	<u>95,918,913</u>	<u>18,226,933</u>
Total income available for benefits	\$344,200,327	\$280,376,767
Less benefit payments:		
Benefits paid	\$(288,969,175)	\$(266,866,460)
Refunds of contributions	(2,647,011)	(4,628,272)
Adjustments/transfers	<u>(874,649)</u>	<u>(581,275)</u>
Net benefit payments	\$(292,490,835)	\$(272,076,007)
Change in reserve for future benefits	\$51,709,492	\$8,300,760

⁽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, 2010	Year Ended December 31, 2009
Cash equivalents	\$481,921,090	\$663,857,178
Other Assets	1,927,508	2,066,481
Accounts receivable:		
Investment trades	\$477,211,226	\$192,270,043
Investment income	13,355,196	14,094,596
Employee and employer contributions	6,930,127	7,079,763
Additional contributions ⁽¹⁾	<u>23,124,759</u>	<u>24,132,440</u>
Total accounts receivable	520,621,308	237,576,842
Investments:		
Stocks	\$2,467,400,407	\$2,169,486,036
Bonds	1,517,912,283	1,412,260,613
Real estate	566,632,791	492,043,654
Alternative investments	<u>299,279,903</u>	<u>249,373,445</u>
Total investments at market value	<u>4,851,225,384</u>	<u>4,323,163,748</u>
Total assets	\$5,855,695,290	\$5,226,664,249
Less accounts payable:		
Investment trades	\$(467,870,346)	\$(192,198,940)
Security lending	(269,790,009)	(461,576,590)
Employer contributions unearned	(77,584,103)	(81,695,415)
Other	<u>(13,293,633)</u>	<u>(14,463,774)</u>
Total accounts payable	\$(828,538,091)	\$(749,934,719)
Net assets at market value	<u>\$5,027,157,199</u>	<u>\$4,476,729,530</u>
Net assets at actuarial value	<u>\$5,355,971,152</u>	<u>\$5,304,261,661</u>
Net assets at valuation value	<u>\$5,341,821,711</u>	<u>\$5,290,114,102</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	<u>Basic</u>	<u>COLA</u>	<u>Total</u>
1. Total valuation value of assets	\$3,467,588,293	\$1,874,233,418	\$5,341,821,711
2. Present value of future contributions by members	351,704,218	200,106,091	551,810,309
3. Present value of future employer contributions for:			
(a) entry age normal cost	670,382,044	190,356,216	860,738,260
(b) unfunded actuarial accrued liability	859,143,412	453,071,678	1,312,215,090
4. Total actuarial assets	<u>\$5,348,817,967</u>	<u>\$2,717,767,403</u>	<u>\$8,066,585,370</u>
Liabilities			
5. Present value of benefits for retirees and beneficiaries	\$2,271,877,723	\$1,539,873,396	\$3,811,751,119
6. Present value of benefits for vested terminated members ⁽¹⁾	125,925,397	48,231,597	174,156,994
7. Present value of benefits for active members	2,951,014,847	1,129,662,410	4,080,677,257
8. Total present value of benefits	<u>\$5,348,817,967</u>	<u>\$2,717,767,403</u>	<u>\$8,066,585,370</u>

⁽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, 2010	December 31, 2009
Member Deposits ⁽¹⁾	\$553,112,184	\$503,689,973
Member Cost of Living ⁽¹⁾	250,438,850	215,726,662
Employer Advance ⁽¹⁾	1,777,531,388	1,616,871,233
Employer Cost of Living ⁽¹⁾	1,144,168,438	1,046,752,850
Retired Members ⁽¹⁾	1,634,130,448	1,615,284,114
Retired Cost of Living ⁽¹⁾	739,890,913	708,063,460
Smoothed Market Value Valuation ⁽¹⁾	231,982,586	214,894,000
Dollar Power Cost of Living Supplement Pre-Funding ⁽¹⁾	14,605,106	18,778,932
Post Retirement Death Benefit ⁽²⁾	14,149,441	14,147,559
Statutory Contingency (one percent) ⁽²⁾	0	0
Additional One Percent Contingency Designation ⁽²⁾	0	0
Contra Tracking Account ⁽¹⁾	(1,004,038,202)	(649,947,122)
Total Allocated Reserves	\$5,355,971,152	\$5,304,261,661
Market Stabilization Account	(328,813,953)	(827,532,131)
Net Market Value	\$5,027,157,199	\$4,476,729,530

⁽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, 2010
1. Unfunded actuarial accrued liability at beginning of year	\$1,024,673,085
2. Gross Normal cost at middle of year	197,172,488
3. Actual employer and member contributions	(248,281,414)
4. Interest (whole year on (1) plus half year on (2) - (3))	<u>77,431,693</u>
5. Expected unfunded actuarial accrued liability at end of year ⁽¹⁾	<u>\$1,050,995,852</u>
6. Actuarial (gain)/loss due to all changes:	
a. Investment return	\$313,477,625
b. Salary increases	(83,072,934)
c. Other experience (gain)/loss ⁽²⁾	15,293,083
d. Changes in actuarial assumptions and methods ⁽³⁾	<u>15,521,464</u>
e. Total changes	<u>\$261,219,238</u>
7. Unfunded actuarial accrued liability at end of year	<u>\$1,312,215,090</u>

⁽¹⁾ Includes contribution loss of \$39,207,839 during the year from actual contributions less than expected.

⁽²⁾ Other differences in actual versus expected experience including (but not limited to) mortality, disability, withdrawal, retirement and terminal pay experience.

⁽³⁾ The Board approved changes in actuarial assumptions. Terminal pay assumptions are now based on cost groups.

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⁽¹⁾
General						
Cost Groups #1 and #2	December 31, 2007	Restart of Amortization	\$789,616,678	\$749,589,986	12	\$74,421,979
County and Small Districts	December 31, 2008	Actuarial (Gain)/Loss	80,496,792	80,143,082	16	6,342,860
(Tiers 1 and 3)	December 31, 2009	Actuarial (Gain)/Loss	165,997,327	165,896,556	17	12,544,408
	December 31, 2009	Assumption Change ⁽²⁾	39,793,000	39,768,843	17	3,007,155
	December 31, 2009	Depooling Implementation	-75,134,625	-75,089,014	17	-5,677,919
	December 31, 2010	Actuarial (Gain)/Loss	153,957,206	153,957,206	18	11,160,228
	December 31, 2010	Assumption Change ⁽³⁾	0	<u>0</u>	18	<u>0</u>
Subtotal				\$1,114,266,659		\$101,798,710
Cost Group #3						
	December 31, 2007	Restart of Amortization	\$36,185,000	\$34,350,735	12	\$3,410,464
Central Contra Costa	December 31, 2008	Actuarial (Gain)/Loss	3,709,835	3,693,534	16	292,322
Sanitary District	December 31, 2009	Actuarial (Gain)/Loss	10,118,261	10,112,118	17	764,636
	December 31, 2009	Assumption Change ⁽²⁾	2,003,000	2,001,784	17	151,367
	December 31, 2009	Depooling Implementation	20,037,235	20,025,071	17	1,514,213
	December 31, 2010	Actuarial (Gain)/Loss	18,178,489	18,178,489	18	1,317,743
	December 31, 2010	Assumption Change ⁽³⁾	11,479,648	<u>11,479,648</u>	18	<u>832,150</u>
Subtotal				\$99,841,380		\$8,282,895

Note: Results may not add due to rounding.

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

	Date Established	Source	Initial Amount	Outstanding Balance	Years Remaining	Annual Payment⁽¹⁾
General						
Cost Group #4	December 31, 2007	Restart of Amortization	\$7,770,000	\$7,376,129	12	\$732,328
Contra Costa Housing Authority	December 31, 2008	Actuarial (Gain)/Loss	1,573,513	1,566,599	16	123,987
	December 31, 2009	Actuarial (Gain)/Loss	1,277,079	1,276,304	17	96,509
	December 31, 2009	Assumption Change ⁽²⁾	425,000	424,742	17	32,117
	December 31, 2009	Depooling Implementation	-189,275	-189,160	17	-14,304
	December 31, 2010	Actuarial (Gain)/Loss	619,697	619,697	18	44,921
	December 31, 2010	Assumption Change ⁽³⁾	-920,656	<u>-920,656</u>	18	<u>-66,738</u>
Subtotal				\$10,153,654		\$948,822
Cost Group #5						
	December 31, 2007	Restart of Amortization	-\$1,011,000	-\$959,751	12	-\$95,288
Contra Costa County Fire Protection District	December 31, 2008	Actuarial (Gain)/Loss	45,963	45,761	16	3,622
	December 31, 2009	Actuarial (Gain)/Loss	1,614,180	1,613,200	17	121,983
	December 31, 2009	Assumption Change ⁽²⁾	336,000	335,796	17	25,392
	December 31, 2009	Depooling Implementation	2,142,538	2,141,237	17	161,911
	December 31, 2010	Actuarial (Gain)/Loss	2,722,306	2,722,306	18	197,338
	December 31, 2010	Assumption Change ⁽³⁾	0	<u>0</u>	18	<u>0</u>
Subtotal				\$5,898,549		\$414,958

Note: Results may not add due to rounding.

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

	Date Established	Source	Initial Amount	Outstanding Balance	Years Remaining	Annual Payment⁽¹⁾
General						
Cost Group #6	December 31, 2007	Restart of Amortization	\$1,028,000	\$975,889	12	\$96,890
Small Districts	December 31, 2008	Actuarial (Gain)/Loss	61,240	60,971	16	4,825
(Tier 1 Non-enhanced)	December 31, 2009	Actuarial (Gain)/Loss	385,148	384,914	17	29,106
	December 31, 2009	Assumption Change ⁽²⁾	126,000	125,924	17	9,522
	December 31, 2009	Depooling Implementation	-1,028,581	-1,027,957	17	-77,730
	December 31, 2010	Actuarial (Gain)/Loss	194,488	194,488	18	14,098
	December 31, 2010	Assumption Change ⁽³⁾	0	<u>0</u>	18	<u>0</u>
Subtotal				\$714,229		\$76,711
Safety						
Cost Group #7 and #9	December 31, 2007	Restart of Amortization	\$129,233,744	\$122,682,718	12	\$12,180,380
County Tiers A and C	December 31, 2008	Actuarial (Gain)/Loss	25,934,594	25,820,635	16	2,043,554
	December 31, 2009	Actuarial (Gain)/Loss	55,813,557	55,779,674	17	4,217,827
	December 31, 2009	Assumption Change ⁽²⁾	11,213,000	11,206,193	17	847,366
	December 31, 2009	Depooling Implementation	24,145,656	24,130,998	17	1,824,686
	December 31, 2010	Actuarial (Gain)/Loss	57,993,092	57,993,092	18	4,203,870
	December 31, 2010	Assumption Change ⁽³⁾	0	<u>0</u>	18	<u>0</u>
Subtotal				\$297,613,311		\$25,317,682

Note: Results may not add due to rounding.

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

	Date Established	Source	Initial Amount	Outstanding Balance	Years Remaining	Annual Payment⁽¹⁾
Safety						
Cost Group #8	December 31, 2007	Restart of Amortization	\$124,138,710	\$117,845,958	12	\$11,700,169
Contra Costa and East Fire	December 31, 2008	Actuarial (Gain)/Loss	6,780,436	6,750,643	16	534,274
Protection Districts	December 31, 2009	Actuarial (Gain)/Loss	27,018,706	27,002,304	17	2,041,802
	December 31, 2009	Assumption Change ⁽²⁾	4,945,000	4,941,998	17	373,693
	December 31, 2009	Depooling Implementation	47,818,666	47,789,637	17	3,613,654
	December 31, 2010	Actuarial (Gain)/Loss	38,165,445	38,165,445	18	2,766,581
	December 31, 2010	Assumption Change ⁽³⁾	-1,599,051	<u>-1,599,051</u>	18	<u>-115,914</u>
Subtotal				\$240,896,933		\$20,914,259
Cost Group #10						
	December 31, 2007	Restart of Amortization	-\$2,591,000	-\$2,459,659	12	-\$244,204
Moraga-Orinda Fire District	December 31, 2008	Actuarial (Gain)/Loss	2,002,150	1,993,353	16	157,762
	December 31, 2009	Actuarial (Gain)/Loss	5,671,684	5,668,241	17	428,609
	December 31, 2009	Assumption Change ⁽²⁾	1,012,000	1,011,386	17	76,477
	December 31, 2009	Depooling Implementation	4,873,631	4,870,672	17	368,300
	December 31, 2010	Actuarial (Gain)/Loss	5,334,964	5,334,964	18	386,727
	December 31, 2010	Assumption Change ⁽³⁾	806,018	<u>806,018</u>	18	<u>58,428</u>
Subtotal				\$17,224,975		\$1,232,099

Note: Results may not add due to rounding.

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

	Date Established	Source	Initial Amount	Outstanding Balance	Years Remaining	Annual Payment⁽¹⁾
Safety						
Cost Group #11	December 31, 2007	Restart of Amortization	\$58,766,000	\$55,787,075	12	\$5,538,741
San Ramon Valley	December 31, 2008	Actuarial (Gain)/Loss	10,216,694	10,171,801	16	805,039
Fire District	December 31, 2009	Actuarial (Gain)/Loss	9,262,105	9,256,482	17	699,937
	December 31, 2009	Assumption Change ⁽²⁾	2,453,000	2,451,511	17	185,373
	December 31, 2009	Depooling Implementation	-20,174,500	-20,162,253	17	-1,524,586
	December 31, 2010	Actuarial (Gain)/Loss	6,585,812	6,585,812	18	477,400
	December 31, 2010	Assumption Change ⁽³⁾	5,093,420	<u>5,093,420</u>	18	<u>369,218</u>
Subtotal				\$69,183,849		\$6,551,121
Cost Group #12						
	December 31, 2007	Restart of Amortization	\$3,960,000	\$3,759,262	12	\$373,233
Rodeo-Hercules Fire	December 31, 2008	Actuarial (Gain)/Loss	957,150	952,944	16	75,420
Protection District	December 31, 2009	Actuarial (Gain)/Loss	2,872,360	2,870,616	17	217,064
	December 31, 2009	Assumption Change ⁽²⁾	1,154,000	1,153,299	17	87,208
	December 31, 2009	Depooling Implementation	-1,809,374	-1,808,276	17	-136,734
	December 31, 2010	Actuarial (Gain)/Loss	1,502,503	1,502,503	18	108,915
	December 31, 2010	Assumption Change ⁽³⁾	662,085	<u>662,085</u>	18	<u>47,994</u>
Subtotal				\$9,092,435		\$773,100

Note: Results may not add due to rounding.

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

	Date Established	Source	Initial Amount	Outstanding Balance	Years Remaining	Annual Payment⁽¹⁾
Both General and Safety						
Special Adjustments⁽⁴⁾	December 31, 2007	Pension Obligation Bonds	-\$582,184,442	<u>-\$552,670,884</u>	12	<u>-\$54,871,145</u>
Subtotal				-\$552,670,884		-\$54,871,145
Grand Total				\$1,312,215,090		\$111,439,213

(1) *As of beginning of year.*

(2) *Changes in actuarial assumptions and methods from actuarial experience study.*

(3) *The Board approved changes in actuarial assumptions. Terminal pay assumptions are now based on cost groups.*

(4) *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.*

Note: Results may not add due to rounding.

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 2011. 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
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%
2010	183,950,930	183,950,930	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)
12/31/2005	\$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%
12/31/2010	5,341,821,711	6,654,036,801	1,312,215,090	80.28%	687,443,206	190.88%

⁽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, 2010
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 12 years remaining as of December 31, 2010. 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	7,559
Terminated members entitled to, but not yet receiving benefits ⁽²⁾	2,231
Active members	<u>8,811</u>
Total	18,601

⁽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. The average total assumed salary increase for active members in the December 31, 2010 valuation is 6.0%.

⁽²⁾ Includes 806 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.

The mortality tables shown above were determined to contain sufficient provision appropriate to reasonably reflect future mortality improvement, based on a review of mortality experience as of the measurement date.

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.

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

Terminal Pay Assumptions:

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

	Membership Date before January 1, 2011	Membership Date on or after January 1, 2011
Cost Group 1:	12.00%	3.00%
Cost Group 2:	3.50% for Tier 2 7.50% for Tier 3	1.00%
Cost Group 3:	24.00%	8.00%
Cost Group 4:	6.00%	0.75%
Cost Group 5:	12.00%	3.00%
Cost Group 6:	12.00%	3.00%
Cost Group 7:	11.25%	1.50%
Cost Group 8:	10.50%	1.25%
Cost Group 9:	3.75%	0.50%
Cost Group 10:	14.00%	1.75%
Cost Group 11:	15.00%	3.50%
Cost Group 12:	16.00%	8.00%

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

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

Service From Unused Sick Leave Conversion:

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

Service Retirements:

General: 1.25%
Safety: 2.25%

Disability Retirements:

General: 0.25%
Safety: 1.25%

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

Net Investment Return:

7.75%, 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.

<u>Years of Service</u>	<u>General</u>	<u>Safety</u>
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: The terminal pay assumptions have been changed since the previous valuation and are now based on cost groups. Previously, the terminal pay assumptions (as a percentage of final average pay) were as follows:

Terminal Pay Assumptions:

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

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.

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

Final Compensation for Benefit Determination:

General Tier 1, Tier 3 (non-disability), and Safety Tier A Highest consecutive twelve months of compensation earnable. (FAS1)

General Tier 2, Tier 3 (disability), and Safety Tier C Highest consecutive thirty-six months of compensation earnable. (FAS3)

Note: For members with membership dates on or after January 1, 2011, certain terminal pay elements are no longer included in the determination of compensation for retirement purposes.

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.

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

Benefit Formula:

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

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

Maximum Benefit: 100% of FAS1

General Tier 2 (§31752)

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

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

Benefit Formula:

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

Maximum Benefit: 100% of FAS1

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

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

Maximum Benefit: 100% of FAS1

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

Maximum Benefit: 100% of FAS1

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

Maximum Benefit: 100% of FAS3

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

Ordinary Disability:

General Tier 1

Eligibility

Five years of service (§31720).

Benefit Formula

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

General Tier 2 and General Tier 3

Eligibility

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

Benefit Formula

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

Offset

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

Safety

Eligibility

Five years of service (§31720).

Benefit Formula

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

Line-of-Duty Disability:

General Tier 1 and Safety

Eligibility

No age or service requirements (§31720).

Benefit Formula

50% of the Final Compensation (§31727.4).

General Tier 2 and General Tier 3

Eligibility

No age or service requirements (§31720).

Benefit Formula

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

Offset

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

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

Pre-Retirement Death:

General Tier 1 and Tier 3, and Safety

Eligibility - A None.
Benefit - A Refund of employee contributions with interest plus one month's compensation for each year of service to a maximum of six month's compensation (§31781); 50% of Final Compensation payable to spouse if Line of Duty death (§31787).

OR

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

Death in line of duty 50% of Final compensation.

General Tier 2

Eligibility - A None.
Benefit - A Refund of employee contributions with interest plus \$2,000 lump sum benefit offset by any Social Security payment. (§31781.01); If a Line of Duty death, then 60% of Service or Disability Retirement Benefit (minimum benefit is 24% of Final Compensation) plus, for each minor child, 10% of the allowance otherwise paid to the member. Minimum family benefit is 60% of the member's allowance. Maximum family benefit is 100% of member's allowance.

OR

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

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

Death After Retirement:

General Tier 1 and Tier 3, and Safety

Service or

Ordinary Disability Retirement

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

Line-of-Duty Disability

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

General Tier 2

Service or

Disability Retirement

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

Withdrawal Benefits:

Less than Five Years of Service

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

Five or More Years of Service

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

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

Post-Retirement

Cost-of-Living Benefits:

General Tier 1 and Tier 3, and Safety

Tier A

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

General Tier 2

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

Safety Tier C

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

County Contributions:

Determined by the Entry Age Normal Cost method. The 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 12 years remaining as of December 31, 2010. 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 Appendices A and B 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

Member Contributions (continued):

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 members under the enhanced benefit formula will be exempt from paying member contributions after 30 years of service.

Plan Amendments:

In 1997, the Board adopted a policy that determined which pay items are considered compensation for retirement purposes. Under that policy, various types of terminal pay were included in the determination of compensation for retirement purposes. This policy still applies to members with membership dates before January 1, 2011.

In March 2010, the Board adopted a change to this policy for members with membership dates on or after January 1, 2011. Under this amended policy, certain terminal pay elements are no longer included in the determination of compensation for retirement purposes.

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 for Members with Membership Dates before January 1, 2011

**General Tier 1 (Non-enhanced) Members' Contribution Rates for Members Not Receiving Benefits under
2% at 55 Formula (Expressed as a Percentage of Monthly Payroll)
For Members with Membership Dates before January 1, 2011**

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%	1.81%	2.71%	5.44%	8.15%
16	3.69%	5.53%	1.84%	2.76%	5.53%	8.29%
17	3.74%	5.61%	1.87%	2.80%	5.61%	8.41%
18	3.80%	5.70%	1.89%	2.84%	5.69%	8.54%
19	3.86%	5.79%	1.93%	2.89%	5.79%	8.68%
20	3.92%	5.88%	1.95%	2.93%	5.87%	8.81%
21	3.98%	5.97%	1.99%	2.98%	5.97%	8.95%
22	4.04%	6.06%	2.01%	3.02%	6.05%	9.08%
23	4.10%	6.15%	2.05%	3.07%	6.15%	9.22%
24	4.16%	6.24%	2.07%	3.11%	6.23%	9.35%
25	4.23%	6.34%	2.11%	3.16%	6.34%	9.50%
26	4.29%	6.43%	2.13%	3.20%	6.42%	9.63%
27	4.35%	6.53%	2.17%	3.25%	6.52%	9.78%
28	4.42%	6.63%	2.20%	3.30%	6.62%	9.93%
29	4.49%	6.73%	2.23%	3.35%	6.72%	10.08%
30	4.55%	6.83%	2.27%	3.40%	6.82%	10.23%
31	4.63%	6.94%	2.31%	3.46%	6.94%	10.40%
32	4.70%	7.05%	2.34%	3.51%	7.04%	10.56%
33	4.77%	7.15%	2.37%	3.56%	7.14%	10.71%
34	4.84%	7.26%	2.41%	3.62%	7.25%	10.88%
35	4.91%	7.37%	2.45%	3.67%	7.36%	11.04%
36	4.99%	7.49%	2.49%	3.73%	7.48%	11.22%
37	5.07%	7.60%	2.53%	3.79%	7.60%	11.39%

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

**General Tier 1 (Non-enhanced) Members' Contribution Rates for Members Not Receiving Benefits under
2% at 55 Formula (Expressed as a Percentage of Monthly Payroll)
For Members with Membership Dates before January 1, 2011**

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%	2.57%	3.85%	7.72%	11.57%
39	5.23%	7.84%	2.61%	3.91%	7.84%	11.75%
40	5.31%	7.97%	2.65%	3.97%	7.96%	11.94%
41	5.40%	8.10%	2.69%	4.04%	8.09%	12.14%
42	5.49%	8.23%	2.73%	4.10%	8.22%	12.33%
43	5.58%	8.37%	2.78%	4.17%	8.36%	12.54%
44	5.67%	8.51%	2.83%	4.24%	8.50%	12.75%
45	5.78%	8.67%	2.88%	4.32%	8.66%	12.99%
46	5.90%	8.85%	2.94%	4.41%	8.84%	13.26%
47	6.01%	9.01%	2.99%	4.49%	9.00%	13.50%
48	6.10%	9.15%	3.04%	4.56%	9.14%	13.71%
49	6.21%	9.32%	3.10%	4.65%	9.31%	13.97%
50	6.31%	9.47%	3.15%	4.72%	9.46%	14.19%
51	6.35%	9.53%	3.17%	4.75%	9.52%	14.28%
52	6.35%	9.52%	3.16%	4.74%	9.51%	14.26%
53	6.33%	9.49%	3.15%	4.73%	9.48%	14.22%
54	6.11%	9.16%	3.05%	4.57%	9.16%	13.73%
55	6.11%	9.16%	3.05%	4.57%	9.16%	13.73%
56	6.11%	9.16%	3.05%	4.57%	9.16%	13.73%
57	6.11%	9.16%	3.05%	4.57%	9.16%	13.73%
58	6.11%	9.16%	3.05%	4.57%	9.16%	13.73%
59	6.11%	9.16%	3.05%	4.57%	9.16%	13.73%
60	6.11%	9.16%	3.05%	4.57%	9.16%	13.73%

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

**General Tier 1 (Enhanced) Members' Contribution Rates for Members Receiving Benefits under 2% at 55 Formula
(Expressed as a Percentage of Monthly Payroll)
For Members with Membership Dates before January 1, 2011**

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%	1.91%	2.86%	5.07%	7.60%
16	3.21%	4.81%	1.93%	2.90%	5.14%	7.71%
17	3.26%	4.89%	1.97%	2.95%	5.23%	7.84%
18	3.31%	4.96%	1.99%	2.99%	5.30%	7.95%
19	3.36%	5.04%	2.03%	3.04%	5.39%	8.08%
20	3.41%	5.12%	2.06%	3.09%	5.47%	8.21%
21	3.47%	5.20%	2.09%	3.14%	5.56%	8.34%
22	3.52%	5.28%	2.13%	3.19%	5.65%	8.47%
23	3.57%	5.36%	2.16%	3.24%	5.73%	8.60%
24	3.63%	5.44%	2.19%	3.28%	5.82%	8.72%
25	3.69%	5.53%	2.23%	3.34%	5.92%	8.87%
26	3.74%	5.61%	2.26%	3.39%	6.00%	9.00%
27	3.80%	5.70%	2.29%	3.44%	6.09%	9.14%
28	3.85%	5.78%	2.33%	3.49%	6.18%	9.27%
29	3.91%	5.87%	2.36%	3.54%	6.27%	9.41%
30	3.97%	5.96%	2.40%	3.60%	6.37%	9.56%
31	4.03%	6.05%	2.43%	3.65%	6.46%	9.70%
32	4.09%	6.14%	2.47%	3.71%	6.56%	9.85%
33	4.16%	6.24%	2.51%	3.77%	6.67%	10.01%
34	4.22%	6.33%	2.55%	3.82%	6.77%	10.15%
35	4.29%	6.43%	2.59%	3.88%	6.88%	10.31%
36	4.35%	6.53%	2.63%	3.94%	6.98%	10.47%
37	4.42%	6.63%	2.67%	4.00%	7.09%	10.63%
38	4.49%	6.73%	2.71%	4.06%	7.20%	10.79%
39	4.55%	6.83%	2.75%	4.12%	7.30%	10.95%
40	4.62%	6.93%	2.79%	4.18%	7.41%	11.11%

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
(Expressed as a Percentage of Monthly Payroll)
For Members with Membership Dates before January 1, 2011**

Calculated Under Recommended Assumptions

Entry Age	Basic		COLA		Total	
	First \$350	Over \$350	First \$350	Over \$350	First \$350	Over \$350
41	4.69%	7.04%	2.83%	4.25%	7.52%	11.29%
42	4.77%	7.15%	2.88%	4.32%	7.65%	11.47%
43	4.84%	7.26%	2.92%	4.38%	7.76%	11.64%
44	4.92%	7.38%	2.97%	4.46%	7.89%	11.84%
45	4.99%	7.49%	3.01%	4.52%	8.00%	12.01%
46	5.08%	7.62%	3.07%	4.60%	8.15%	12.22%
47	5.16%	7.74%	3.11%	4.67%	8.27%	12.41%
48	5.25%	7.87%	3.17%	4.75%	8.42%	12.62%
49	5.34%	8.01%	3.23%	4.84%	8.57%	12.85%
50	5.43%	8.15%	3.28%	4.92%	8.71%	13.07%
51	5.55%	8.32%	3.35%	5.02%	8.90%	13.34%
52	5.65%	8.48%	3.41%	5.12%	9.06%	13.60%
53	5.74%	8.61%	3.47%	5.20%	9.21%	13.81%
54	5.85%	8.77%	3.53%	5.29%	9.38%	14.06%
55	5.94%	8.91%	3.59%	5.38%	9.53%	14.29%
56	5.97%	8.96%	3.61%	5.41%	9.58%	14.37%
57	5.97%	8.96%	3.61%	5.41%	9.58%	14.37%
58	5.95%	8.93%	3.59%	5.39%	9.54%	14.32%
59	5.75%	8.62%	3.47%	5.20%	9.22%	13.82%
60	5.75%	8.62%	3.47%	5.20%	9.22%	13.82%

Interest: 7.75%
 Salary Increase: See Exhibit IV.
 COLA Loading: 60.37%
 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
(Expressed as a Percentage of Monthly Payroll)
For Members with Membership Dates before January 1, 2011**

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%	1.58%	2.37%	4.74%	7.11%
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%	2.48%	4.96%	7.44%
19	3.36%	5.04%	1.68%	2.52%	5.04%	7.56%
20	3.41%	5.12%	1.71%	2.56%	5.12%	7.68%
21	3.47%	5.20%	1.73%	2.60%	5.20%	7.80%
22	3.52%	5.28%	1.76%	2.64%	5.28%	7.92%
23	3.57%	5.36%	1.79%	2.68%	5.36%	8.04%
24	3.63%	5.44%	1.81%	2.72%	5.44%	8.16%
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%	1.90%	2.85%	5.70%	8.55%
28	3.85%	5.78%	1.93%	2.89%	5.78%	8.67%
29	3.91%	5.87%	1.95%	2.93%	5.86%	8.80%
30	3.97%	5.96%	1.99%	2.98%	5.96%	8.94%
31	4.03%	6.05%	2.01%	3.02%	6.04%	9.07%
32	4.09%	6.14%	2.05%	3.07%	6.14%	9.21%
33	4.16%	6.24%	2.08%	3.12%	6.24%	9.36%
34	4.22%	6.33%	2.11%	3.16%	6.33%	9.49%
35	4.29%	6.43%	2.14%	3.21%	6.43%	9.64%
36	4.35%	6.53%	2.17%	3.26%	6.52%	9.79%
37	4.42%	6.63%	2.21%	3.31%	6.63%	9.94%
38	4.49%	6.73%	2.24%	3.36%	6.73%	10.09%
39	4.55%	6.83%	2.27%	3.41%	6.82%	10.24%

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

**General Tier 3 (Enhanced) Members' Contribution Rates for Members Receiving Benefits under 2% at 55 Formula
(Expressed as a Percentage of Monthly Payroll)
For Members with Membership Dates before January 1, 2011**

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%	2.31%	3.46%	6.93%	10.39%
41	4.69%	7.04%	2.35%	3.52%	7.04%	10.56%
42	4.77%	7.15%	2.38%	3.57%	7.15%	10.72%
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%	3.74%	7.48%	11.23%
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%	2.62%	3.93%	7.87%	11.80%
49	5.34%	8.01%	2.67%	4.00%	8.01%	12.01%
50	5.43%	8.15%	2.71%	4.07%	8.14%	12.22%
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%	2.87%	4.30%	8.61%	12.91%
54	5.85%	8.77%	2.92%	4.38%	8.77%	13.15%
55	5.94%	8.91%	2.97%	4.45%	8.91%	13.36%
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%	4.46%	8.92%	13.39%
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:	49.93%					
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
(Expressed as a Percentage of Monthly Payroll)
For Members with Membership Dates before January 1, 2011**

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
15	7.99%	4.81%	12.80%
16	7.99%	4.81%	12.80%
17	7.99%	4.81%	12.80%
18	7.99%	4.81%	12.80%
19	7.99%	4.81%	12.80%
20	7.99%	4.81%	12.80%
21	7.99%	4.81%	12.80%
22	8.11%	4.88%	12.99%
23	8.24%	4.96%	13.20%
24	8.36%	5.03%	13.39%
25	8.49%	5.11%	13.60%
26	8.62%	5.19%	13.81%
27	8.74%	5.26%	14.00%
28	8.88%	5.34%	14.22%
29	9.01%	5.42%	14.43%
30	9.15%	5.51%	14.66%
31	9.29%	5.59%	14.88%
32	9.43%	5.67%	15.10%
33	9.58%	5.76%	15.34%
34	9.73%	5.85%	15.58%
35	9.88%	5.94%	15.82%
36	10.04%	6.04%	16.08%
37	10.20%	6.14%	16.34%
38	10.38%	6.25%	16.63%
39	10.55%	6.35%	16.90%
40	10.75%	6.47%	17.22%
41	10.93%	6.58%	17.51%
42	11.17%	6.72%	17.89%

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
(Expressed as a Percentage of Monthly Payroll)
For Members with Membership Dates before January 1, 2011**

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
43	11.40%	6.86%	18.26%
44	11.68%	7.03%	18.71%
45	11.88%	7.15%	19.03%
46	11.91%	7.17%	19.08%
47	11.86%	7.14%	19.00%
48	11.77%	7.08%	18.85%
49	11.65%	7.01%	18.66%
50	11.65%	7.01%	18.66%
51	11.65%	7.01%	18.66%
52	11.65%	7.01%	18.66%
53	11.65%	7.01%	18.66%
54	11.65%	7.01%	18.66%
55	11.65%	7.01%	18.66%
56	11.65%	7.01%	18.66%
57	11.65%	7.01%	18.66%
58	11.65%	7.01%	18.66%
59	11.65%	7.01%	18.66%
60	11.65%	7.01%	18.66%

Interest: 7.75%
 Salary Increase: See Exhibit IV.
 COLA Loading: 60.17%
 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
(Expressed as a Percentage of Monthly Payroll)
For Members with Membership Dates before January 1, 2011**

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
15	7.99%	6.07%	14.06%
16	7.99%	6.07%	14.06%
17	7.99%	6.07%	14.06%
18	7.99%	6.07%	14.06%
19	7.99%	6.07%	14.06%
20	7.99%	6.07%	14.06%
21	7.99%	6.07%	14.06%
22	8.11%	6.17%	14.28%
23	8.24%	6.26%	14.50%
24	8.36%	6.36%	14.72%
25	8.49%	6.45%	14.94%
26	8.62%	6.55%	15.17%
27	8.74%	6.64%	15.38%
28	8.88%	6.75%	15.63%
29	9.01%	6.85%	15.86%
30	9.15%	6.96%	16.11%
31	9.29%	7.06%	16.35%
32	9.43%	7.17%	16.60%
33	9.58%	7.28%	16.86%
34	9.73%	7.40%	17.13%
35	9.88%	7.51%	17.39%
36	10.04%	7.63%	17.67%
37	10.20%	7.75%	17.95%
38	10.38%	7.89%	18.27%
39	10.55%	8.02%	18.57%
40	10.75%	8.17%	18.92%
41	10.93%	8.31%	19.24%
42	11.17%	8.49%	19.66%

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
(Expressed as a Percentage of Monthly Payroll)
For Members with Membership Dates before January 1, 2011**

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
43	11.40%	8.67%	20.07%
44	11.68%	8.88%	20.56%
45	11.88%	9.03%	20.91%
46	11.91%	9.05%	20.96%
47	11.86%	9.02%	20.88%
48	11.77%	8.95%	20.72%
49	11.65%	8.86%	20.51%
50	11.65%	8.86%	20.51%
51	11.65%	8.86%	20.51%
52	11.65%	8.86%	20.51%
53	11.65%	8.86%	20.51%
54	11.65%	8.86%	20.51%
55	11.65%	8.86%	20.51%
56	11.65%	8.86%	20.51%
57	11.65%	8.86%	20.51%
58	11.65%	8.86%	20.51%
59	11.65%	8.86%	20.51%
60	11.65%	8.86%	20.51%

Interest: 7.75%
 Salary Increase: See Exhibit IV.
 COLA Loading: 76.02%
 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
(Expressed as a Percentage of Monthly Payroll)
For Members with Membership Dates before January 1, 2011**

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
15	7.62%	3.05%	10.67%
16	7.62%	3.05%	10.67%
17	7.62%	3.05%	10.67%
18	7.62%	3.05%	10.67%
19	7.62%	3.05%	10.67%
20	7.62%	3.05%	10.67%
21	7.62%	3.05%	10.67%
22	7.73%	3.10%	10.83%
23	7.85%	3.15%	11.00%
24	7.97%	3.19%	11.16%
25	8.09%	3.24%	11.33%
26	8.21%	3.29%	11.50%
27	8.34%	3.34%	11.68%
28	8.46%	3.39%	11.85%
29	8.59%	3.44%	12.03%
30	8.72%	3.49%	12.21%
31	8.85%	3.55%	12.40%
32	8.99%	3.60%	12.59%
33	9.13%	3.66%	12.79%
34	9.27%	3.72%	12.99%
35	9.42%	3.78%	13.20%
36	9.57%	3.84%	13.41%
37	9.73%	3.90%	13.63%
38	9.89%	3.96%	13.85%
39	10.05%	4.03%	14.08%
40	10.24%	4.10%	14.34%
41	10.44%	4.18%	14.62%
42	10.64%	4.26%	14.90%

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
(Expressed as a Percentage of Monthly Payroll)
For Members with Membership Dates before January 1, 2011**

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
43	10.82%	4.34%	15.16%
44	10.96%	4.39%	15.35%
45	10.98%	4.40%	15.38%
46	10.93%	4.38%	15.31%
47	10.69%	4.28%	14.97%
48	11.07%	4.44%	15.51%
49	11.65%	4.67%	16.32%
50	11.65%	4.67%	16.32%
51	11.65%	4.67%	16.32%
52	11.65%	4.67%	16.32%
53	11.65%	4.67%	16.32%
54	11.65%	4.67%	16.32%
55	11.65%	4.67%	16.32%
56	11.65%	4.67%	16.32%
57	11.65%	4.67%	16.32%
58	11.65%	4.67%	16.32%
59	11.65%	4.67%	16.32%
60	11.65%	4.67%	16.32%

Interest: 7.75%
 Salary Increase: See Exhibit IV.
 COLA Loading: 40.08%
 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

Appendix B

Member Contribution Rates for Members with Membership Dates on or after January 1, 2011

**General Tier 1 (Non-enhanced) Members' Contribution Rates for Members Not Receiving Benefits under
2% at 55 Formula (Expressed as a Percentage of Monthly Payroll)
For Members with Membership Dates on or after January 1, 2011**

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%	1.66%	2.49%	5.29%	7.93%
16	3.69%	5.53%	1.69%	2.53%	5.38%	8.06%
17	3.74%	5.61%	1.71%	2.57%	5.45%	8.18%
18	3.80%	5.70%	1.74%	2.61%	5.54%	8.31%
19	3.86%	5.79%	1.77%	2.65%	5.63%	8.44%
20	3.92%	5.88%	1.80%	2.70%	5.72%	8.58%
21	3.98%	5.97%	1.83%	2.74%	5.81%	8.71%
22	4.04%	6.06%	1.85%	2.78%	5.89%	8.84%
23	4.10%	6.15%	1.88%	2.82%	5.98%	8.97%
24	4.16%	6.24%	1.91%	2.86%	6.07%	9.10%
25	4.23%	6.34%	1.94%	2.91%	6.17%	9.25%
26	4.29%	6.43%	1.97%	2.95%	6.26%	9.38%
27	4.35%	6.53%	1.99%	2.99%	6.34%	9.52%
28	4.42%	6.63%	2.03%	3.04%	6.45%	9.67%
29	4.49%	6.73%	2.06%	3.09%	6.55%	9.82%
30	4.55%	6.83%	2.09%	3.13%	6.64%	9.96%
31	4.63%	6.94%	2.12%	3.18%	6.75%	10.12%
32	4.70%	7.05%	2.15%	3.23%	6.85%	10.28%
33	4.77%	7.15%	2.19%	3.28%	6.96%	10.43%
34	4.84%	7.26%	2.22%	3.33%	7.06%	10.59%
35	4.91%	7.37%	2.25%	3.38%	7.16%	10.75%
36	4.99%	7.49%	2.29%	3.43%	7.28%	10.92%
37	5.07%	7.60%	2.32%	3.48%	7.39%	11.08%

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 (Expressed as a Percentage of Monthly Payroll)
For Members with Membership Dates on or after January 1, 2011**

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%	2.36%	3.54%	7.51%	11.26%
39	5.23%	7.84%	2.39%	3.59%	7.62%	11.43%
40	5.31%	7.97%	2.43%	3.65%	7.74%	11.62%
41	5.40%	8.10%	2.47%	3.71%	7.87%	11.81%
42	5.49%	8.23%	2.51%	3.77%	8.00%	12.00%
43	5.58%	8.37%	2.56%	3.84%	8.14%	12.21%
44	5.67%	8.51%	2.60%	3.90%	8.27%	12.41%
45	5.78%	8.67%	2.65%	3.97%	8.43%	12.64%
46	5.90%	8.85%	2.71%	4.06%	8.61%	12.91%
47	6.01%	9.01%	2.75%	4.13%	8.76%	13.14%
48	6.10%	9.15%	2.79%	4.19%	8.89%	13.34%
49	6.21%	9.32%	2.85%	4.27%	9.06%	13.59%
50	6.31%	9.47%	2.89%	4.34%	9.20%	13.81%
51	6.35%	9.53%	2.91%	4.37%	9.26%	13.90%
52	6.35%	9.52%	2.91%	4.36%	9.26%	13.88%
53	6.33%	9.49%	2.90%	4.35%	9.23%	13.84%
54	6.11%	9.16%	2.80%	4.20%	8.91%	13.36%
55	6.11%	9.16%	2.80%	4.20%	8.91%	13.36%
56	6.11%	9.16%	2.80%	4.20%	8.91%	13.36%
57	6.11%	9.16%	2.80%	4.20%	8.91%	13.36%
58	6.11%	9.16%	2.80%	4.20%	8.91%	13.36%
59	6.11%	9.16%	2.80%	4.20%	8.91%	13.36%
60	6.11%	9.16%	2.80%	4.20%	8.91%	13.36%

Interest: 7.75%
 Salary Increase: See Exhibit IV.
 COLA Loading: 45.84%
 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

**General Tier 1 (Enhanced) Members' Contribution Rates for Members Receiving Benefits under 2% at 55 Formula
(Expressed as a Percentage of Monthly Payroll)
For Members with Membership Dates on or after January 1, 2011**

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%	1.73%	2.59%	4.89%	7.33%
16	3.21%	4.81%	1.75%	2.62%	4.96%	7.43%
17	3.26%	4.89%	1.78%	2.67%	5.04%	7.56%
18	3.31%	4.96%	1.81%	2.71%	5.12%	7.67%
19	3.36%	5.04%	1.83%	2.75%	5.19%	7.79%
20	3.41%	5.12%	1.86%	2.79%	5.27%	7.91%
21	3.47%	5.20%	1.89%	2.84%	5.36%	8.04%
22	3.52%	5.28%	1.92%	2.88%	5.44%	8.16%
23	3.57%	5.36%	1.95%	2.92%	5.52%	8.28%
24	3.63%	5.44%	1.98%	2.97%	5.61%	8.41%
25	3.69%	5.53%	2.01%	3.02%	5.70%	8.55%
26	3.74%	5.61%	2.04%	3.06%	5.78%	8.67%
27	3.80%	5.70%	2.07%	3.11%	5.87%	8.81%
28	3.85%	5.78%	2.10%	3.15%	5.95%	8.93%
29	3.91%	5.87%	2.13%	3.20%	6.04%	9.07%
30	3.97%	5.96%	2.17%	3.25%	6.14%	9.21%
31	4.03%	6.05%	2.20%	3.30%	6.23%	9.35%
32	4.09%	6.14%	2.23%	3.35%	6.32%	9.49%
33	4.16%	6.24%	2.27%	3.40%	6.43%	9.64%
34	4.22%	6.33%	2.30%	3.45%	6.52%	9.78%
35	4.29%	6.43%	2.34%	3.51%	6.63%	9.94%
36	4.35%	6.53%	2.37%	3.56%	6.72%	10.09%
37	4.42%	6.63%	2.41%	3.62%	6.83%	10.25%
38	4.49%	6.73%	2.45%	3.67%	6.94%	10.40%
39	4.55%	6.83%	2.49%	3.73%	7.04%	10.56%
40	4.62%	6.93%	2.52%	3.78%	7.14%	10.71%

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
(Expressed as a Percentage of Monthly Payroll)
For Members with Membership Dates on or after January 1, 2011**

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%	2.56%	3.84%	7.25%	10.88%
42	4.77%	7.15%	2.60%	3.90%	7.37%	11.05%
43	4.84%	7.26%	2.64%	3.96%	7.48%	11.22%
44	4.92%	7.38%	2.69%	4.03%	7.61%	11.41%
45	4.99%	7.49%	2.73%	4.09%	7.72%	11.58%
46	5.08%	7.62%	2.77%	4.16%	7.85%	11.78%
47	5.16%	7.74%	2.81%	4.22%	7.97%	11.96%
48	5.25%	7.87%	2.86%	4.29%	8.11%	12.16%
49	5.34%	8.01%	2.91%	4.37%	8.25%	12.38%
50	5.43%	8.15%	2.97%	4.45%	8.40%	12.60%
51	5.55%	8.32%	3.03%	4.54%	8.58%	12.86%
52	5.65%	8.48%	3.08%	4.62%	8.73%	13.10%
53	5.74%	8.61%	3.13%	4.70%	8.87%	13.31%
54	5.85%	8.77%	3.19%	4.78%	9.04%	13.55%
55	5.94%	8.91%	3.24%	4.86%	9.18%	13.77%
56	5.97%	8.96%	3.26%	4.89%	9.23%	13.85%
57	5.97%	8.96%	3.26%	4.89%	9.23%	13.85%
58	5.95%	8.93%	3.25%	4.87%	9.20%	13.80%
59	5.75%	8.62%	3.13%	4.70%	8.88%	13.32%
60	5.75%	8.62%	3.13%	4.70%	8.88%	13.32%

Interest: 7.75%
 Salary Increase: See Exhibit IV.
 COLA Loading: 54.54%
 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
(Expressed as a Percentage of Monthly Payroll)
For Members with Membership Dates on or after January 1, 2011**

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%	1.48%	2.22%	4.64%	6.96%
16	3.21%	4.81%	1.51%	2.26%	4.72%	7.07%
17	3.26%	4.89%	1.53%	2.29%	4.79%	7.18%
18	3.31%	4.96%	1.55%	2.33%	4.86%	7.29%
19	3.36%	5.04%	1.57%	2.36%	4.93%	7.40%
20	3.41%	5.12%	1.60%	2.40%	5.01%	7.52%
21	3.47%	5.20%	1.63%	2.44%	5.10%	7.64%
22	3.52%	5.28%	1.65%	2.48%	5.17%	7.76%
23	3.57%	5.36%	1.67%	2.51%	5.24%	7.87%
24	3.63%	5.44%	1.70%	2.55%	5.33%	7.99%
25	3.69%	5.53%	1.73%	2.59%	5.42%	8.12%
26	3.74%	5.61%	1.75%	2.63%	5.49%	8.24%
27	3.80%	5.70%	1.78%	2.67%	5.58%	8.37%
28	3.85%	5.78%	1.81%	2.71%	5.66%	8.49%
29	3.91%	5.87%	1.83%	2.75%	5.74%	8.62%
30	3.97%	5.96%	1.87%	2.80%	5.84%	8.76%
31	4.03%	6.05%	1.89%	2.84%	5.92%	8.89%
32	4.09%	6.14%	1.92%	2.88%	6.01%	9.02%
33	4.16%	6.24%	1.95%	2.93%	6.11%	9.17%
34	4.22%	6.33%	1.98%	2.97%	6.20%	9.30%
35	4.29%	6.43%	2.01%	3.02%	6.30%	9.45%
36	4.35%	6.53%	2.04%	3.06%	6.39%	9.59%
37	4.42%	6.63%	2.07%	3.11%	6.49%	9.74%
38	4.49%	6.73%	2.11%	3.16%	6.60%	9.89%
39	4.55%	6.83%	2.13%	3.20%	6.68%	10.03%

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
(Expressed as a Percentage of Monthly Payroll)
For Members with Membership Dates on or after January 1, 2011**

Calculated Under Recommended Assumptions

<u>Entry Age</u>	<u>Basic</u>		<u>COLA</u>		<u>Total</u>	
	<u>First \$350</u>	<u>Over \$350</u>	<u>First \$350</u>	<u>Over \$350</u>	<u>First \$350</u>	<u>Over \$350</u>
40	4.62%	6.93%	2.17%	3.25%	6.79%	10.18%
41	4.69%	7.04%	2.20%	3.30%	6.89%	10.34%
42	4.77%	7.15%	2.23%	3.35%	7.00%	10.50%
43	4.84%	7.26%	2.27%	3.41%	7.11%	10.67%
44	4.92%	7.38%	2.31%	3.46%	7.23%	10.84%
45	4.99%	7.49%	2.34%	3.51%	7.33%	11.00%
46	5.08%	7.62%	2.38%	3.57%	7.46%	11.19%
47	5.16%	7.74%	2.42%	3.63%	7.58%	11.37%
48	5.25%	7.87%	2.46%	3.69%	7.71%	11.56%
49	5.34%	8.01%	2.51%	3.76%	7.85%	11.77%
50	5.43%	8.15%	2.55%	3.82%	7.98%	11.97%
51	5.55%	8.32%	2.60%	3.90%	8.15%	12.22%
52	5.65%	8.48%	2.65%	3.98%	8.30%	12.46%
53	5.74%	8.61%	2.69%	4.04%	8.43%	12.65%
54	5.85%	8.77%	2.74%	4.11%	8.59%	12.88%
55	5.94%	8.91%	2.79%	4.18%	8.73%	13.09%
56	5.97%	8.96%	2.80%	4.20%	8.77%	13.16%
57	5.97%	8.96%	2.80%	4.20%	8.77%	13.16%
58	5.95%	8.93%	2.79%	4.19%	8.74%	13.12%
59	5.75%	8.62%	2.69%	4.04%	8.44%	12.66%
60	5.75%	8.62%	2.69%	4.04%	8.44%	12.66%
Interest:	7.75%					
Salary Increase:	See Exhibit IV.					
COLA Loading:	46.91%					
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
(Expressed as a Percentage of Monthly Payroll)
For Members with Membership Dates on or after January 1, 2011**

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
15	7.99%	4.48%	12.47%
16	7.99%	4.48%	12.47%
17	7.99%	4.48%	12.47%
18	7.99%	4.48%	12.47%
19	7.99%	4.48%	12.47%
20	7.99%	4.48%	12.47%
21	7.99%	4.48%	12.47%
22	8.11%	4.54%	12.65%
23	8.24%	4.62%	12.86%
24	8.36%	4.68%	13.04%
25	8.49%	4.76%	13.25%
26	8.62%	4.83%	13.45%
27	8.74%	4.90%	13.64%
28	8.88%	4.97%	13.85%
29	9.01%	5.05%	14.06%
30	9.15%	5.13%	14.28%
31	9.29%	5.20%	14.49%
32	9.43%	5.28%	14.71%
33	9.58%	5.37%	14.95%
34	9.73%	5.45%	15.18%
35	9.88%	5.53%	15.41%
36	10.04%	5.62%	15.66%
37	10.20%	5.71%	15.91%
38	10.38%	5.81%	16.19%
39	10.55%	5.91%	16.46%
40	10.75%	6.02%	16.77%
41	10.93%	6.12%	17.05%
42	11.17%	6.26%	17.43%
43	11.40%	6.39%	17.79%

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
(Expressed as a Percentage of Monthly Payroll)
For Members with Membership Dates on or after January 1, 2011**

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
44	11.68%	6.54%	18.22%
45	11.88%	6.66%	18.54%
46	11.91%	6.67%	18.58%
47	11.86%	6.64%	18.50%
48	11.77%	6.59%	18.36%
49	11.65%	6.53%	18.18%
50	11.65%	6.53%	18.18%
51	11.65%	6.53%	18.18%
52	11.65%	6.53%	18.18%
53	11.65%	6.53%	18.18%
54	11.65%	6.53%	18.18%
55	11.65%	6.53%	18.18%
56	11.65%	6.53%	18.18%
57	11.65%	6.53%	18.18%
58	11.65%	6.53%	18.18%
59	11.65%	6.53%	18.18%
60	11.65%	6.53%	18.18%

Interest: 7.75%
 Salary Increase: See Exhibit IV.
 COLA Loading: 56.02%
 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
(Expressed as a Percentage of Monthly Payroll)
For Members with Membership Dates on or after January 1, 2011**

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
15	7.99%	5.53%	13.52%
16	7.99%	5.53%	13.52%
17	7.99%	5.53%	13.52%
18	7.99%	5.53%	13.52%
19	7.99%	5.53%	13.52%
20	7.99%	5.53%	13.52%
21	7.99%	5.53%	13.52%
22	8.11%	5.61%	13.72%
23	8.24%	5.70%	13.94%
24	8.36%	5.79%	14.15%
25	8.49%	5.88%	14.37%
26	8.62%	5.97%	14.59%
27	8.74%	6.05%	14.79%
28	8.88%	6.15%	15.03%
29	9.01%	6.24%	15.25%
30	9.15%	6.33%	15.48%
31	9.29%	6.43%	15.72%
32	9.43%	6.53%	15.96%
33	9.58%	6.63%	16.21%
34	9.73%	6.74%	16.47%
35	9.88%	6.84%	16.72%
36	10.04%	6.95%	16.99%
37	10.20%	7.06%	17.26%
38	10.38%	7.19%	17.57%
39	10.55%	7.30%	17.85%
40	10.75%	7.44%	18.19%
41	10.93%	7.57%	18.50%
42	11.17%	7.73%	18.90%
43	11.40%	7.89%	19.29%

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
(Expressed as a Percentage of Monthly Payroll)
For Members with Membership Dates on or after January 1, 2011**

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
44	11.68%	8.09%	19.77%
45	11.88%	8.22%	20.10%
46	11.91%	8.25%	20.16%
47	11.86%	8.21%	20.07%
48	11.77%	8.15%	19.92%
49	11.65%	8.07%	19.72%
50	11.65%	8.07%	19.72%
51	11.65%	8.07%	19.72%
52	11.65%	8.07%	19.72%
53	11.65%	8.07%	19.72%
54	11.65%	8.07%	19.72%
55	11.65%	8.07%	19.72%
56	11.65%	8.07%	19.72%
57	11.65%	8.07%	19.72%
58	11.65%	8.07%	19.72%
59	11.65%	8.07%	19.72%
60	11.65%	8.07%	19.72%

Interest: 7.75%
 Salary Increase: See Exhibit IV.
 COLA Loading: 69.23%
 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
(Expressed as a Percentage of Monthly Payroll)
For Members with Membership Dates on or after January 1, 2011**

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
15	7.62%	2.96%	10.58%
16	7.62%	2.96%	10.58%
17	7.62%	2.96%	10.58%
18	7.62%	2.96%	10.58%
19	7.62%	2.96%	10.58%
20	7.62%	2.96%	10.58%
21	7.62%	2.96%	10.58%
22	7.73%	3.00%	10.73%
23	7.85%	3.05%	10.90%
24	7.97%	3.09%	11.06%
25	8.09%	3.14%	11.23%
26	8.21%	3.19%	11.40%
27	8.34%	3.24%	11.58%
28	8.46%	3.28%	11.74%
29	8.59%	3.33%	11.92%
30	8.72%	3.39%	12.11%
31	8.85%	3.44%	12.29%
32	8.99%	3.49%	12.48%
33	9.13%	3.54%	12.67%
34	9.27%	3.60%	12.87%
35	9.42%	3.66%	13.08%
36	9.57%	3.72%	13.29%
37	9.73%	3.78%	13.51%
38	9.89%	3.84%	13.73%
39	10.05%	3.90%	13.95%
40	10.24%	3.98%	14.22%
41	10.44%	4.05%	14.49%
42	10.64%	4.13%	14.77%

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
(Expressed as a Percentage of Monthly Payroll)
For Members with Membership Dates on or after January 1, 2011**

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
43	10.82%	4.20%	15.02%
44	10.96%	4.25%	15.21%
45	10.98%	4.26%	15.24%
46	10.93%	4.24%	15.17%
47	10.69%	4.15%	14.84%
48	11.07%	4.30%	15.37%
49	11.65%	4.52%	16.17%
50	11.65%	4.52%	16.17%
51	11.65%	4.52%	16.17%
52	11.65%	4.52%	16.17%
53	11.65%	4.52%	16.17%
54	11.65%	4.52%	16.17%
55	11.65%	4.52%	16.17%
56	11.65%	4.52%	16.17%
57	11.65%	4.52%	16.17%
58	11.65%	4.52%	16.17%
59	11.65%	4.52%	16.17%
60	11.65%	4.52%	16.17%

Interest: 7.75%
 Salary Increase: See Exhibit IV.
 COLA Loading: 38.82%
 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)

5121651v3/05337.002