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August 31, 2010

Ms. Marilyn Leedom  
Chief Executive Officer  
Contra Costa County Employees' Retirement Association  
1355 Willow Way, Suite 221  
Concord, CA 94520

**Re: Contra Costa County Employees' Retirement Association  
Illustration of Impact on Employer Contribution Rates from December 31, 2008  
Actuarial Valuation Due to Depooling – Updated to Reflect New Data**

Dear Marilyn:

This letter provides an illustration of the impact on employer contribution rates resulting from the Board's action to depool CCCERA's assets, Actuarial Accrued Liabilities (AAL) and Normal Cost by employer. Appendix I shows the current cost groups analyzed, the employers included in each cost group and the active counts as of December 31, 2008, while Appendix II shows the employer contribution rates from the December 31, 2008 actuarial valuation both before and after depooling. The rest of this letter contains background information on the action taken by the Board and how the illustrative employer contribution rates after depooling have been determined.

In January 2010 we had previously provided the impact on only the General contribution rates. At that time we did not include the Safety contribution rates due to the prior inclusion of various fire districts data in County payroll. This letter now contains the updated impact on the General contribution rates as well as the impact on Safety contribution rates. All results reflect revised data received from the Retirement Association.

In particular, this revised data is based on the Retirement Association verifying last employer and tier codes for virtually all members who received a benefit payment at any time during the period from January 1, 2003 through December 31, 2008 and active members as of December 31, 2009. We have used each member's last known employer and tier code to allocate liabilities and benefit payments throughout this period.



## **Background**

At its October 14, 2009 meeting, the Board took action to depool CCCERA's assets, AAL and Normal Cost by employer for determining employer contribution rates. However, the smaller employers (those with less than 50 active members) will be pooled with the applicable County tier.

Due to a statutory requirement, the Superior Court will continue to be pooled with the County regardless of how many members the Court has.

The three employers that terminated participation with CCCERA in the last decade and still have nonactive members in CCCERA were pooled with the applicable County tier. These employers are subject to additional contributions depending on their funded status that is measured every three years. Overall, there is little impact on employer contribution rates either way (pooled or not pooled) due to the small size of the assets and liabilities associated with these employers. In the future, consideration could be given to including these employers in their own cost group.

Appendix I shows the resulting twelve cost groups and the employers included in each cost group, along with the active member counts as of December 31, 2008.

The Board action also included a retroactive application of the depooling back to December 31, 2002. This retroactive approach would not involve recalculation of employer rates prior to December 31, 2008. However, it would involve reflecting the separate experience of the employers in each individual cost group back to December 31, 2002.

Note that in these calculations we have used an implementation date of December 31, 2008 to illustrate the effect of this depooling as if it were implemented on that date, on a retroactive basis. In practice, the implementation date will be December 31, 2009, so as to avoid changing the rates that were already adopted based on the already completed December 31, 2008 valuation. The first actual employer rates affected by depooling would be those in the December 31, 2009 valuation.

There were also two specific cost sharing adjustments that will be removed as of the implementation date of December 31, 2009. These adjustments are for General Tier 1 and Safety Tier A as follows:

- Non-enhanced General Tier 1 and Non-enhanced Safety Tier A members shared their combined member COLA normal costs in proportion to their basic member contribution rates.
- General Tier 1 and Safety Tier A employers shared COLA normal cost in the same way that member COLA contributions are shared (i.e., by allocating COLA normal costs in proportion to basic normal costs). These costs were shared equally among member classifications with comparable benefit levels (i.e., enhanced versus non-enhanced).

Note that the first adjustment affects member contribution rates and has not been determined as part of this study. However, this will only impact the fewer than 30 active members that are in either Non-enhanced General Tier 1 or Non-enhanced Safety Tier A.

### **Closed Cost Groups and Pooling of Unfunded Actuarial Accrued Liability (UAAL)**

There are two cost groups that currently have active members, but are generally closed to new members. As listed in Appendix I, these are cost groups number 1 (County General Tier 1 Enhanced) and number 7 (County Safety Tier A Enhanced).

If the UAAL for these two cost groups is not pooled with another cost group that is open to new active members then the UAAL rate for these generally closed cost groups would increase substantially in future years. This is because the UAAL for CCCERA is amortized as a level percent of payroll and the payroll growth for the generally closed cost group would be less than the payroll growth assumption (currently 4.25%).

For County General Tier 1 Enhanced this would ultimately lead to large UAAL rates being borne by the very small district employers in that Tier. This is due to the payroll growth issue mentioned above caused by the closed group nature of the County in Tier 1. However, the small district employers in that tier still continue to add new active members and eventually will represent the bulk of the active members in that tier. Combining this with the large retired member liability in that tier that is mostly from former County employees leads to the impractical result that the small district employers would bear the potential impact of the volatility in rates associated with the large County retiree liability.

In order to avoid associating a large County retiree liability with the small district payroll, we have pooled the UAAL for County General Tier 1 Enhanced and County General Tier 3 Enhanced (cost groups 1 and 2) in the determination of the employer contribution rates (in the after depooling scenario). Normal Cost rates for these cost groups will not be pooled since they will not be affected as much by the issues mentioned above.

Note that the benefit formulas for General Tier 1 Enhanced and General Tier 3 Enhanced differ only because of the disability benefit paid. Therefore, there will be a small amount of cross-subsidization occurring because of this pooling.

For County Safety Tier A Enhanced, there are few new active members entering this tier. Both this cost group and the County Safety Tier C cost group only have the County as an employer. Therefore, in order to produce more stable UAAL rates for the County Safety Tier A Enhanced cost group, we have pooled the UAAL for County Safety Tier A Enhanced and County Safety Tier C Enhanced (cost groups 7 and 9). Normal Cost rates for those cost groups will not be pooled.

There are some substantial differences between the Safety Tier A Enhanced and Safety Tier C Enhanced benefits, such as the period over which final average salaries are determined and the COLA. However, since the County is the only employer in these two cost groups, they will be the only employer affected by this particular pooling.

### **Process Used in Determining Illustrative Employer Contribution Rates (After Depooling)**

There are three key stages in the process used to determine the illustrative employer contribution rates as of December 31, 2008 after depooling. Those stages are as follows:

- Initial allocation of assets by employer at December 31, 2002
- Roll forward of assets for each employer from December 31, 2002 through December 31, 2008
- Calculation of illustrative employer contribution rates at December 31, 2008

Information on each of the stages is described below.

#### **Initial Allocation of Assets by Employer at December 31, 2002**

To determine the initial allocation of assets for each employer as of December 31, 2002 we had to first determine the December 31, 2002 liabilities as of that date for every employer. This allocation was based on the member's last employer and tier code. In addition, this required obtaining data from the Retirement Association that denotes the employer for each retired member as this data did not exist in the original December 31, 2002 data used for that valuation.

We then used our valuation software to determine liabilities for each employer as of December 31, 2002 in a manner consistent with the liabilities determined in the December 31, 2002 actuarial valuation. Once the December 31, 2002 liabilities by employer were determined, we then allocated enough assets to each cost group in such a way as to result in the same UAAL contribution rate that was already determined in the December 31, 2002 valuation for every employer.

#### **Roll forward of assets for each employer from December 31, 2002 through December 31, 2008**

The assets that were allocated to each employer at December 31, 2002 were then "rolled forward" by adding in contributions and allocated investment income and subtracting benefit payments. This was done on an annual basis for the 2003 through 2008 calendar years.

The contribution and benefit payment information was provided by the Retirement Association and accepted by Segal without audit. Benefit payments were allocated based on each member's last employer and tier code.

### **Calculation of employer contribution rates at December 31, 2008**

The assets as of December 31, 2008 for each employer were then combined into the twelve cost groups. Liabilities as of the same date were also separated into the twelve cost groups based on the actual current members in each group.

Employer contribution rates were then calculated for each cost group following substantially the same process used in the annual actuarial valuation. Any change in the December 31, 2008 UAAL due to depooling was amortized over 18 years.

Please note that district contribution rates still reflect the fact that they did not issue pension obligation bonds (POBs) when the County did. The contribution rates for the Moraga-Orinda Fire District or the Contra Costa County Fire Protection District also reflect any POBs or special contributions that were deposited in prior years by those employers.

### **Summary of Results**

Appendix II shows the employer contribution rate from the December 31, 2008 actuarial valuation and the illustrative employer contribution rate determined on the same valuation date after depooling. The rates are shown for each employer in CCCERA.

As noted above, in these calculations we have used an implementation date of December 31, 2008 to illustrate the effect of this depooling as if it were implemented on that date, on a retroactive basis. In practice the implementation date will be December 31, 2009, so as to avoid changing the rates that were already adopted based on the already completed December 31, 2008 valuation.

It is important to note that the results of depooling depend critically on the employer by employer contribution and benefit payment data, and on the employer by employer member data reported to us.

The results shown in Appendix II can be used to estimate the impact that depooling will have once it is implemented in the December 31, 2009 actuarial valuation. However, the actual impact of depooling will not be known until it is implemented in that actuarial valuation.

**Note that this “retroactive” approach did not require or involve recalculation of employer rates prior to December 31, 2008.** Only employer contribution rates on and after the implementation date would be affected, but now those rates would reflect the separate experience of the cost groups back to December 31, 2002.

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These calculations were based on the December 31, 2002 and 2008 actuarial valuations for CCCERA, member data as of December 31, 2002, 2008 and 2009 provided by CCCERA and contribution and benefit payment information from January 1, 2003 through December 31, 2008 that was also provided by CCCERA. The December 31, 2008 actuarial valuation and these calculations were completed under the supervision of John Monroe, ASA, MAAA, Enrolled Actuary.

If there is any additional information you require, please let us know.

Sincerely,

A handwritten signature in cursive script that reads "Paul Angelo".

Paul Angelo

JZM/kek  
Enclosures

## APPENDIX I

### Summary of Cost Groups and Employers

#### GENERAL

<b>Cost Group</b>	<b>Code</b>	<b>Employer Name</b>	<b>Benefit Structure</b>	<b>Number of Active Members as of December 31, 2008</b>
(1)	N/A	County General	Tier 1 Enhanced	430
	0356	Local Agency Formation Commission	Tier 1 Enhanced	2
	3301	CC Mosquito and Vector Control District	Tier 1 Enhanced	5
	3770	Bethel Island Municipal District	Tier 1 Enhanced	3
	4181	First 5 - Children & Families Commission	Tier 1 Enhanced	16
	4980	Contra Costa County Employees' Retirement Association	Tier 1 Enhanced	39
	9500	Superior Court	Tier 1 Enhanced	35
	7060	East Contra Costa Fire Protection District	Tier 1 Enhanced	2
	7274	Moraga-Orinda Fire District	Tier 1 Enhanced	7
	7800	Rodeo-Hercules Fire Protection District	Tier 1 Enhanced	1
	7830	San Ramon Valley Fire District	Tier 1 Enhanced	29
(2)	N/A	County General	Tier 3 Enhanced	6,356
	0508	In-Home Supportive Services Authority	Tier 3 Enhanced	13
	3301	Contra Costa Mosquito and Vector Control District	Tier 3 Enhanced	32
	9500	Superior Court	Tier 3 Enhanced	383
(3)	3406	Central Contra Costa Sanitary District	Tier 1 Enhanced	265
(4)	9990	Contra Costa Housing Authority	Tier 1 Enhanced	94
(5)	7300	Contra Costa County Fire Protection District	Tier 1 Enhanced	59
(6)	3414	Rodeo Sanitary District	Tier 1 Non-Enhanced	8
	3603	Byron Brentwood Cemetery	Tier 1 Non-Enhanced	4

**APPENDIX I**

**Summary of Cost Groups and Employers (continued)**

**SAFETY**

<b>Cost Group</b>	<b>Code</b>	<b>Employer Name</b>	<b>Benefit Structure</b>	<b>Number of Active Members as of December 31, 2008</b>
(7)	N/A	County Safety	Tier A Enhanced	940
(8)	7300	Contra Costa County Fire Protection District	Tier A Enhanced	296
	7060	East Contra Costa Fire Protection District	Tier A Enhanced	50*
(9)	N/A	County Safety	Tier C Enhanced (Deputy Sheriff new hires)	76
(10)	7274	Moraga-Orinda Fire District	Tier A Enhanced	66
(11)	7830	San Ramon Valley Fire District	Tier A Enhanced	154
(12)	7800	Rodeo-Hercules Fire Protection District	Tier A Non-Enhanced	20

\* *It is our understanding that two of these members retired in early 2009 and there are 48 active members at this employer as of December 31, 2009.*

## APPENDIX II

### Summary of Employer Contribution Rates from December 31, 2008 Actuarial Valuation Before and After Depooling

#### GENERAL

Cost Group	Employer Name	Employer Contribution Rate Before Depooling	Employer Contribution Rate After Depooling	Change in Employer Contribution Rate	
(1)	County General (Tier 1 Enhanced)	23.21%	22.08%	-1.13%	
	Local Agency Formation Commission	30.94%	30.33%	-0.61%	
	Contra Costa Mosquito and Vector Control District	30.94%	30.33%	-0.61%	
	Bethel Island Municipal District	30.94%	30.33%	-0.61%	
	First 5 - Children & Families Commission	30.94%	30.33%	-0.61%	
	Contra Costa County Employees' Retirement Association	30.94%	30.33%	-0.61%	
	Superior Court	23.21%	22.08%	-1.13%	
	East Contra Costa Fire Protection District	30.94%	30.33%	-0.61%	
	Moraga-Orinda Fire District	19.27%	18.66%	-0.61%	
	Rodeo-Hercules Fire Protection District	30.94%	30.33%	-0.61%	
	San Ramon Valley Fire District	30.94%	30.33%	-0.61%	
	(2)	County General (Tier 3 Enhanced)	20.90%	20.67%	-0.23%
		In-Home Supportive Services Authority	29.10%	28.92%	-0.18%
Contra Costa Mosquito and Vector Control District		29.10%	28.92%	-0.18%	
Superior Court		20.90%	20.67%	-0.23%	
(3)	Central Contra Costa Sanitary District	30.94%	35.81%	+4.87%	
(4)	Contra Costa Housing Authority	30.94%	32.17%	+1.23%	
(5)	Contra Costa County Fire Protection District	13.90%	16.82%	+2.92%	
(6)	Rodeo Sanitary District	30.64%	22.38%	-8.26%	
	Byron Brentwood Cemetery	30.64%	22.38%	-8.26%	

**APPENDIX II**

**Summary of Employer Contribution Rates from December 31, 2008 Actuarial Valuation  
Before and After Depooling (continued)**

**SAFETY**

<b>Cost Group</b>	<b>Employer Name</b>	<b>Employer Contribution Rate Before Depooling</b>	<b>Employer Contribution Rate After Depooling</b>	<b>Change in Employer Contribution Rate</b>
(7)	County Safety (Tier A Enhanced)	42.80%	44.90%	+2.10%
(8)	Contra Costa County Fire Protection District	25.33%	27.17%	+1.84%
	East Contra Costa Fire Protection District	58.55%	60.54%	+1.99%
(9)	County Safety (Tier C Enhanced)	36.72%	38.61%	+1.89%
(10)	Moraga-Orinda Fire District	26.87%	27.27%	+0.40%
(11)	San Ramon Valley Fire District	58.55%	51.95%	-6.60%
(12)	Rodeo-Hercules Fire Protection District	37.41%	35.54%	-1.87%