

**SUBMITTAL TO THE BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

311



FROM: Executive Office

SUBMITTAL DATE:
April 30, 2013



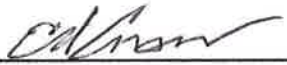
SUBJECT: Pension Advisory Review Committee 2013 Annual Pension Report

RECOMMENDED MOTION: That the Board of Supervisors:

1. Receive and file the attached FY 2012/13 Annual Report;
2. Adopt the recommendation to use the money in the Liability Management Fund to reduce the County's CalPERS' liability by transferring the funds to CalPERS; and,
3. Adopt the recommendation to pre-pay a portion up to two-thirds of the County's FY 2013/14 pension cost if, in the judgment of the County Executive Officer or his designee, if market conditions prove to be favorable.

BACKGROUND: Board Policy B-25 (Pension Management Policy) requires the Pension Advisory Review Committee (PARC) to file an annual report on the County's pension plan status. The attached report fulfills that requirement.

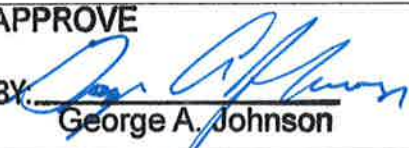
(Continued)

 Don Kent County Treasurer/Tax Collector	 Barbara A. Olivier Assistant County Executive Officer Human Resources Director	 Ed Corser County Finance Director
---	--	---

FINANCIAL DATA	Current F.Y. Total Cost:	\$ N/A	In Current Year Budget:
	Current F.Y. Net County Cost:	\$ N/A	Budget Adjustment:
	Annual Net County Cost:	\$ N/A	For Fiscal Year: 2012-2013

SOURCE OF FUNDS:	Positions To Be Deleted Per A-30 <input type="checkbox"/>
	Requires 4/5 Vote <input type="checkbox"/>

C.E.O. RECOMMENDATION: APPROVE

BY: 
 County Executive Office Signature George A. Johnson

Policy
 Policy
 Consent
 Consent

Dep't Recomm.:
 Per Exec. Ofc.:

2013 MAY 20 10:53 AM
 COUNTY OF RIVERSIDE
 RECEIVED BY THE CLERK

REPORT SUMMARY

Funded Status:

The June 30, 2013 projected actuarial funded status for the Miscellaneous Plan, including Pension Obligation Bonds (POB), is expected to be 87 percent funded on an Actuarial Value basis and 75 percent on a Market Value basis. The Safety Plan, including POB, is expected to be 85 percent funded on an Actuarial Value basis and 74 percent on a Market Value basis. PARC Advisor, Bartel Associates, projects a combined Miscellaneous and Safety projected June 30, 2013 Unfunded Accrued Actuarial Liability (UAAL) of \$1.011 billion on an Actuarial Value Basis and POB of \$347 million; while the Actuarial Value of assets net of POB total \$6.084 billion.

Employer Rate Outlook:

Pension costs continue to trend upward. Employer Contribution rates for the Miscellaneous plan will increase from 13.5 percent of payroll in FY 12/13 to 15.0 percent in FY 13/14. Safety Employer Contribution rates will increase from 22.5 percent in FY 12/13 to 23.4 percent in FY 13/14. The combined increase is projected to be equivalent to \$22 million based on current payroll. Employer Contribution rates are dependent on CalPERS' investment return performance; lower than expected returns in the future will significantly increase the County's pension costs.

Effective March 14, 2012, CalPERS lowered its discount rate assumptions from 7.75 percent to 7.50 percent. Bartel estimated that this change would increase the County's employer contribution rate for Miscellaneous by 1.9 percent and for Safety by 3.2 percent over a two year period, beginning in FY 13/14. The Committee elected not to phase in the assumption change for FY 13/14, as employer rates for 2014/15 through 2032/33 will be lower without a phase in than they would be with a phase in. The Miscellaneous plan without the phase in will increase by 0.581 percent in FY 13/14, and the Safety plan without the phase in will increase by 0.766 percent in FY 13/14. This will result in an estimated increase in employer contributions of \$7.1 million in FY 13/14.

In the upcoming months, CalPERS is expected to make several changes that will increase contribution rates beginning July 1, 2015.

Pension Reform:

Pension reform has been a topic of debate at the local and state level. At the County, the Board of Supervisors took the initiative on pension reform. Due to the recent passage of Assembly Bill (AB) 340, which created the Public Employee's Pension Reform Act (PEPRA), a third tier was added to the County's pension plan. The attached report has additional detail outlining the changes; however, listed below is a table of the changes.

	Plan	EPMC	Earliest Retirement Age	PEPRA Compensation Limits	Final Compensation	Effective Date
County Plan Tier I						
Misc	3% at 60	Yes	50	N/A	12 months	N/A
Safety	3% at 50	Yes	50	N/A	12 months	N/A
County Plan Tier II						
Misc	2% at 60	No	50	N/A	36 months	8/23/2012
Safety	2% at 50	No	50	N/A	36 months	8/23/2012
County Plan Tier III (PEPRA)						
Misc	2% at 62	No	52	\$ 113,700	36 months	01/01/13
Safety	2.7% at 57	No	50	\$ 136,440	36 months	01/01/13

In May 2012, CalPERS performed an actuarial valuation on the County's 2% @ 60 Miscellaneous and 2% @ 50 Safety Tier II pension benefits. CalPERS calculated that starting July 1, 2014 the new Miscellaneous Tier II would decrease the employer contribution rate gradually with an ultimate decrease of 4.4 percent, and the employee contribution rate by 1 percent; and the new Safety Tier II would decrease the employer contribution rate gradually with an ultimate decrease of 5.6 percent, with no impact on the employee contribution rate. At current payroll, the full impact of the Tier II rate decrease would result in an annual savings of approximately \$70 million. However, the employer contribution rate decrease will occur gradually, in proportion to employees hired in the second and third tiers compared to the first tier. The CalPERS' calculations are consistent with Bartel's FY 2013/14 savings projections.

Also, Employer Paid Member Contributions (EPMC) will be eliminated in 2014 for all represented and unrepresented employees, mostly in a phased approach. It is anticipated that the County will realize approximately \$80 million annual savings once all EPMC payments are eliminated.

Liability Management Fund:

The purpose of the fund is to reduce pension costs and accelerate the repayment of pension liabilities. By Board policy, each year PARC recommends whether the funds should be used to pay down the CalPERS' unfunded liability or to buy down the POB. At the end of last fiscal year a payment of \$1 million was made to PERS from this fund. As of the writing of this report, the fund has a balance of \$2.3 million.

Annual Prepayment:

CalPERS offers early payment discounts of 3.75 percent in lieu of periodic payments that coincide with payroll disbursements. PARC first recommended seizing this opportunity in 2004 and expects to continue to do so if market conditions prove to be favorable in funding the pre-payment. The amount we pay is based on up to two-thirds of the County's annual liability. During FY 12/13 the County prepaid \$83 million of its PERS liability. In FY 13/14, we expect to prepay CalPERS \$90 million. We will be calculating the final amount as part of our TRANS financing. If market conditions remain consistent up to the time of the TRANS financing, and the County is able to issue at approximately 0.4 percent with the prepayment savings from CalPERS of approximately 3.75 percent, that will produce a net savings of 3.35 percent, or approximately \$3 million.

Other Post-Employment Benefits (OPEB):

The County invests its OPEB assets with the California Public Employers' Retirement Benefit Trust program (CERBT). Effective January 1, 2011, CalPERS introduced three new investment allocation strategies for CERBT. PARC reviewed the details of the strategies and adopted Strategy 1, an asset allocation strategy most similar to the investment allocation strategy followed by CERBT prior to January 1, 2011, with an expected rate of return of 7.61 percent. It is anticipated CERBT will lower its investment strategy expected return in the near future to 7.36 percent.

2013

Pension Advisory Review Committee



2013 Annual Pension Report

ANNUAL PARC REPORT

The County's Pension Advisory Review Committee (PARC) was established in 2003 to guide policy decisions about retirement benefits. PARC is a Brown Act Committee and consists of those members appointed by the Board of Supervisors, including the Treasurer/Tax Collector, County Finance Director, and the Human Resources Director.

A key responsibility of PARC is to report to the Board and the public about important developments affecting County retirement benefit plans and provide information about projected costs and funding status. This report includes information from the most recent actuarial report prepared for the County by John Bartel of Bartel Associates, LLC. (Attachment 2). It also includes the latest CalPERS' Valuation Reports for Miscellaneous and Safety (Attachments 3 and 4).

1. Funding Status: The June 30, 2013 projected actuarial funded status for:

- a. The Miscellaneous Plan, including Pension Obligation Bonds (POB), is expected to be 87 percent.
- b. The Safety Plan, including POB, is expected to be 85 percent.

The July 2008 State and Local Government Pension Plans report published by the United States Government Accountability Office states, "Many experts consider a funded ratio based on the actuarial asset value of 80 percent or better to be sound for government pensions." Bartel suggests that in order to increase the funding status, an option is to place additional funds into the pension plan, which would reduce the unfunded liability.

2. Employer Rate Outlook: Pension costs continue to trend upward. Employer Contribution rates for the Miscellaneous plan will increase from 13.5 percent of payroll in FY 12/13 to 15.0 percent in FY 13/14. Safety Employer Contribution rates will increase from 22.5 percent in FY 12/13 to 23.4 percent in FY 13/14. The combined increase is projected to be equivalent to \$22 million based on current payroll. Employer Contribution rates are dependent on CalPERS' investment return performance; lower than expected returns in the future will significantly increase the County's pension costs.

Effective March 14, 2012, CalPERS lowered its discount rate assumptions from 7.75 percent to 7.50 percent. Bartel estimated that this change would increase the County's employer contribution rate for Miscellaneous by 1.9 percent and for Safety by 3.2 percent over a two year period, beginning in FY 13/14. The Committee elected not to phase in the assumption change for FY 13/14, as employer rates for 2014/15 through 2032/33 will be lower without a phase in than they would be with a phase in. The Miscellaneous plan without the phase in will increase by 0.581 percent in FY 13/14, and the Safety plan without the phase in will increase by 0.766 percent in FY 13/14. This will result in an estimated increase in employer contributions of \$7.1 million in FY 13/14.

In the upcoming months, CalPERS is expected to make several changes that will increase contribution rates beginning July 1, 2015.

3. Pension Reform: For some time, pension reform has been a topic of debate at local and national levels. Riverside County took the lead in initiating pension reform with its bargaining units. As a result of bargaining, employees of the County took on the responsibility of paying their Employee Paid Member Contribution (EPMC) and a new Tier, effective August 23, 2012, was added in both the Miscellaneous and Safety units of the County. At the same time, Governor Brown initiated proposals that resulted in changes to the pension benefits. The recent passage of Assembly Bill (AB) 340 created the Public Employees’ Pension Reform Act (PEPRA) that implemented new lower benefit formulas, final compensation periods, and new contribution requirements for new employees hired on or after January 1, 2013 who meet the definition of a new member under PEPRA. The lower benefit formula for Tier III is 2% at 62 for Miscellaneous and 2.7% at 57 for Safety. Employee contribution rates for Tier III vary based on PEPRA rules. Listed below is a table with the new options and the important changes.

	Plan	EPMC	Earliest Retirement Age	PEPRA Compensation Limits	Final Compensation	Effective Date
County Plan Tier I						
Misc	3% at 60	Yes	50	N/A	12 months	N/A
Safety	3% at 50	Yes	50	N/A	12 months	N/A
County Plan Tier I with Tier II						
Misc	2% at 60	No	50	N/A	36 months	8/23/12
Safety	2% at 50	No	50	N/A	36 months	8/23/12
County Plan Tier I , Tier II and Tier III (PEPRA)						
Misc	2% at 62	No	52	\$ 113,700	36 months	01/01/13
Safety	2.7% at 57	No	50	\$ 136,440	36 months	01/01/13

At the end of this report is a chart (Attachment 1) showing the pension costs if no action was taken and the changes in rates as a result of the action taken by the Board of Supervisors.

4. At the County, the Board of Supervisors took the initiative on pension reform. With the Board’s direction, collective bargaining negotiations have been completed, with all employee unions to implement a Tier II (lower benefit) for new employees. Tier II was implemented on August 23, 2012: Miscellaneous members’ retirement formula is 2% at 60, and Safety is 2% at 50.

In May 2012 CalPERS performed an actuarial valuation on the County’s 2% @ 60 Miscellaneous and 2% @ 50 Safety Tier II pension benefits. CalPERS, calculated that starting July 1, 2014 the new Miscellaneous Tier II would decrease the employer contribution rate gradually with an ultimate decrease of 4.4 percent, and the employee contribution rate by 1 percent; and the new Safety Tier II would decrease the employer contribution rate gradually with an ultimate decrease of 5.6 percent, with no impact on the employee contribution rate. At current payroll, the full impact of the Tier II rate decrease would result in an annual savings of approximately \$70 million. However, the employer contribution rate decrease will occur gradually, in proportion to employees hired in the second and third tiers compared to the first tier. The CalPERS’ calculations are consistent with Bartel’s FY 2013/14 savings projections.

Also, Employer Paid Member Contributions (EPMC) will be eliminated in 2014 for all represented and unrepresented employees, mostly in a phased approach. It is anticipated that the County will realize approximately \$80 million annual savings once all EPMC payments are eliminated.

5. **Pension Obligation Bond (POB):** The remaining POB debt is \$347 million and the bonds have a remaining 22-year life maturity. Bartel's analysis shows that as of February 11, 2013, the County is basically breaking even (the County has a \$5 million net savings) as a result of the sale of the bonds in February 2005. This is a \$23 million improvement compared to last year's report. The POB has a relatively low break-even rate (4.91 percent) and CalPERS' expected return is 7.50 percent (recently changed from 7.75 percent). So long as CalPERS comes close to their return target, we can expect that the bonds over the remaining life will produce savings.
6. **Liability Management Fund:** The purpose of the fund is to reduce pension costs and accelerate the repayment of pension liabilities. By Board policy, each year PARC recommends whether the funds should be used to pay down the CalPERS' unfunded liability or to buy down the POB. At the end of last fiscal year a payment of \$1 million was made to PERS from this fund. As of the writing of this report, the fund has a balance of \$2.3 million.
7. **Annual Prepayment:** CalPERS offers early payment discounts of 3.75 percent in lieu of periodic payments that coincide with payroll disbursements. PARC first recommended seizing this opportunity in 2004 and expects to continue to do so if market conditions prove to be favorable in funding the pre-payment. The amount we pay is based on up to two-thirds of the County's annual liability. During FY 12/13 the County prepaid \$83 million of its PERS liability. In FY 13/14, we expect to prepay CalPERS \$90 million. We will be calculating the final amount as part of our TRANS financing. The County is able to issue TRANS at approximately 0.4 percent in interest costs and the prepayment savings from CalPERS are at approximately 3.75 percent which is approximately \$3 million.
8. **Other Post-Employment Benefits (OPEB):** The County invests its OPEB assets with the California Public Employers' Retirement Benefit Trust program (CERBT). Effective January 1, 2011, CalPERS introduced three new investment allocation strategies for CERBT. PARC reviewed the details of the strategies and adopted Strategy 1, an asset allocation strategy most similar to the investment allocation strategy followed by CERBT prior to January 1, 2011, with an expected rate of return of 7.61 percent. It is anticipated CERBT will lower its investment strategy expected return in the near future to 7.36 percent.

Recommendations:

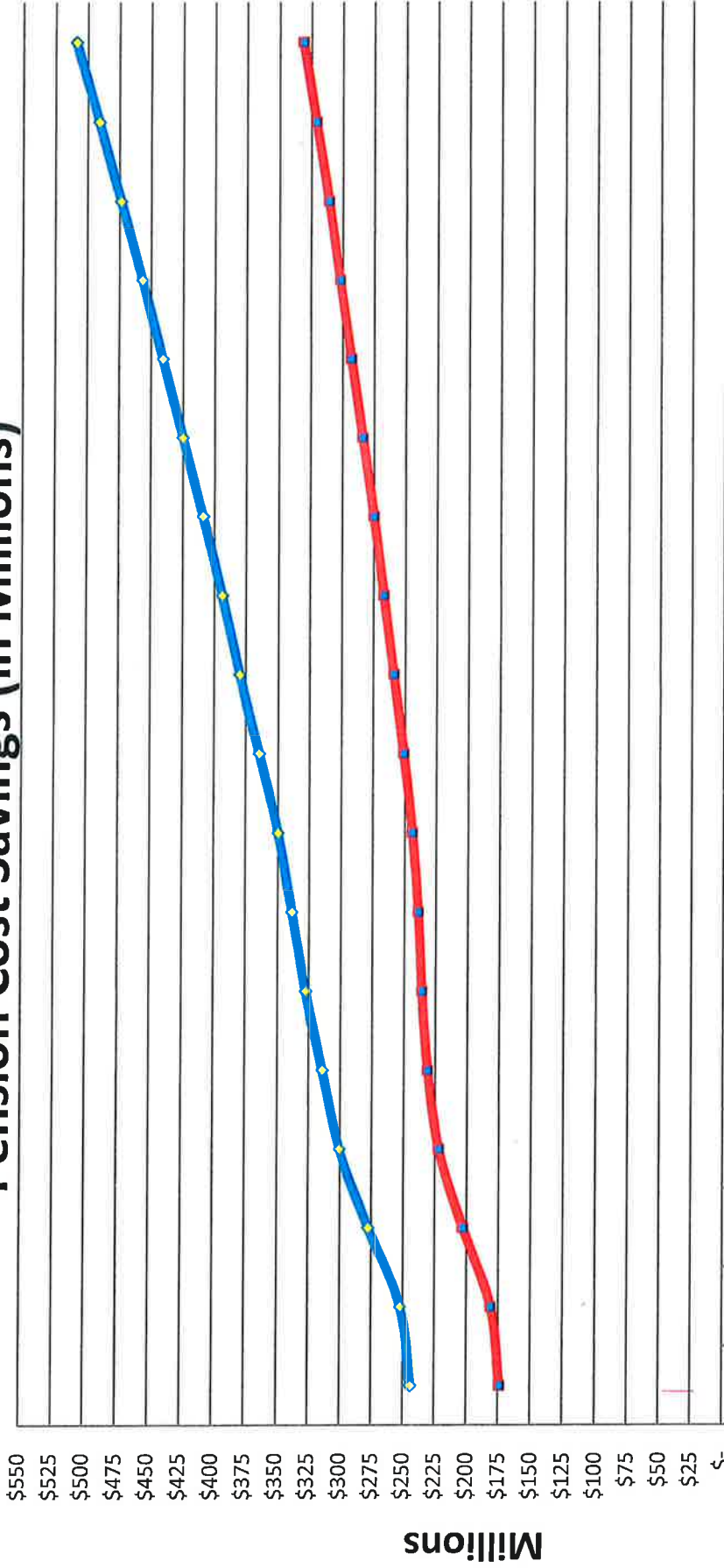
1. Receive and file the 2013 PARC Annual Pension Report.
2. Adopt the recommendation to use the money in the Liability Management Fund to reduce the County's CalPERS liability by transferring the funds to CalPERS. Adopt the recommendation to pre-pay a portion up to two-thirds of the County's FY 2013/14 pension cost if, in the judgment of the County Executive Officer or his designee, market conditions prove to be favorable.

Appendices:

-
1. *Pension Savings Chart*
 2. *Bartel Associates CalPERS Actuarial Issues – 6/30/11 Valuation- February 25, 2013*
 3. *CalPERS 06/30/11 Miscellaneous Actuarial Valuation Reports*
 4. *CalPERS 06/30/11 Safety Actuarial Valuation Reports*

Attachment 1

Pension Cost Savings (in Millions)



	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29
Pension Savings	\$71	\$72	\$75	\$79	\$84	\$92	\$100	\$106	\$114	\$121	\$127	\$134	\$141	\$148	\$155	\$163	\$170	\$178
With EPMC, Tier I	\$245	\$253	\$278	\$301	\$315	\$328	\$339	\$350	\$365	\$380	\$394	\$409	\$425	\$441	\$457	\$474	\$491	\$509
W/O EPMC, Tier II	\$174	\$181	\$203	\$222	\$231	\$236	\$239	\$244	\$251	\$259	\$267	\$275	\$284	\$293	\$302	\$311	\$321	\$331

◆ With EPMC, Tier I
 ■ W/O EPMC, Tier II



**COUNTY OF RIVERSIDE
MISCELLANEOUS AND SAFETY PLANS**

**CalPERS Actuarial Issues – 6/30/11 Valuation
Preliminary Results**

Presented by **John E. Bartel, President**
Prepared by Bianca Lin, Assistant Vice President & Actuary
Tina Haugbro, Actuarial Analyst
Bartel Associates, LLC

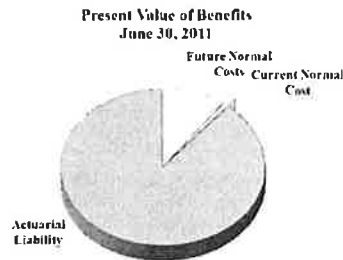
March 27, 2013

Agenda

<u>Topic</u>	<u>Page</u>
Definitions	1
Miscellaneous Plan:	
Demographic Information	3
Plan Funded Status	9
Plan Assets & Actuarial Obligations	13
Contribution Rates & Projections	19
Safety Plan:	
Demographic Information	31
Plan Funded Status	37
Plan Assets & Actuarial Obligations	41
Contribution Rates & Projections	47
Contribution Policy	59
POB	60
GASB 68	70
Actuarial Investment Return	71
PEPRA Summary	73



Definitions



- **PVB - Present Value of all Projected Benefits:**
 - Discounted value (at valuation date - 6/30/11), of all future expected benefit payments based on various (actuarial) assumptions
- **Actuarial Liability:**
 - Discounted value (at valuation date) of benefits earned through valuation date [value of past service benefit]
 - Portion of PVB “earned” at measurement
- **Current Normal Cost:**
 - Portion of PVB allocated to (or “earned” during) current year
 - Value of employee and employer current service benefit

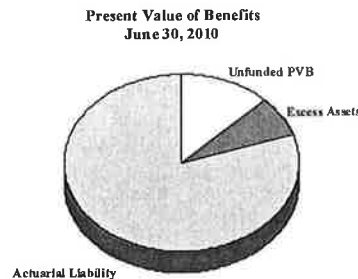


March 27, 2013

1



Definitions



- **Target-** Have money in the bank to cover Actuarial Liability (past service)
- **Unfunded Liability** - Money short of target at valuation date
- **Excess Assets / Surplus:**
 - Money over and above target at that point in time.
 - Doesn't mean you're done contributing.
- **Super Funded:**
 - Assets cover whole pie (PVB)
 - If everything goes exactly like PERS calculated, you'll never have to put another (employer or employee) dime in.



March 27, 2013

2



Summary of Demographic Information – Miscellaneous

	1994	2003	2010	2011
Actives				
■ Counts	8,585	12,671	15,446	15,243
■ Average				
• Age	43	43	43	43
• County Service	8	8	9	9
• PERSable Wages	\$34,000	\$42,800	\$55,400	\$53,300
■ Total PERSable Wages (millions)	318.8	596.6	941.0	887.7
Receiving Payments				
■ Counts				
• Service		3,665	6,336	6,923
• Disability		553	585	590
• Beneficiaries		597	789	805
• Total	3,155	4,815	7,710	8,318
■ Average Annual County Provided Benefit ¹				
• Service		\$12,200	\$20,600	\$22,100
• Disability		6,500	8,100	8,500
• Service Retirements in last 5 years		16,800	25,900	27,700

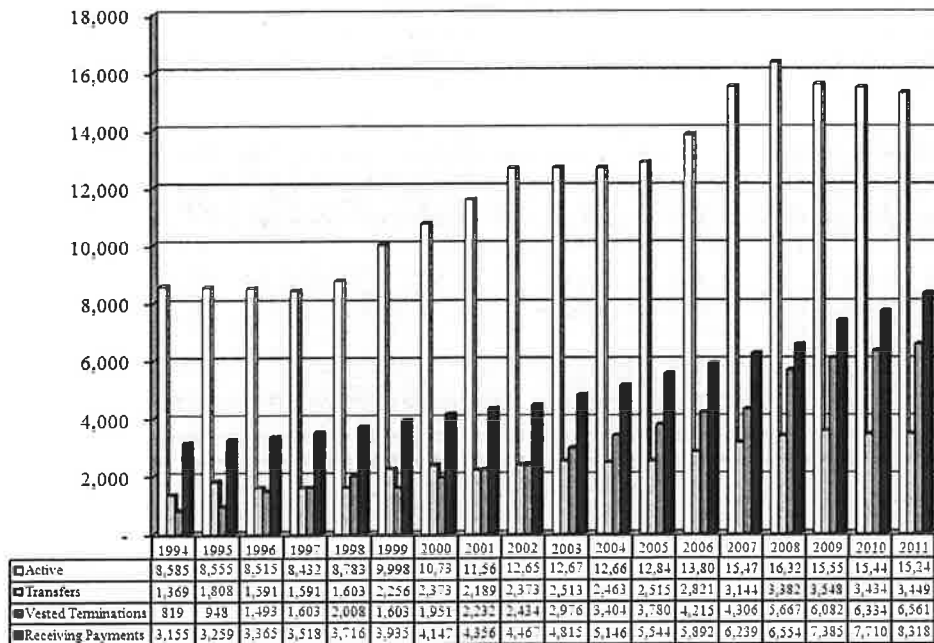
¹ Average County provided pensions are based on County service & County benefit formula, and are not representative of benefits for long service employees.



March 27, 2013



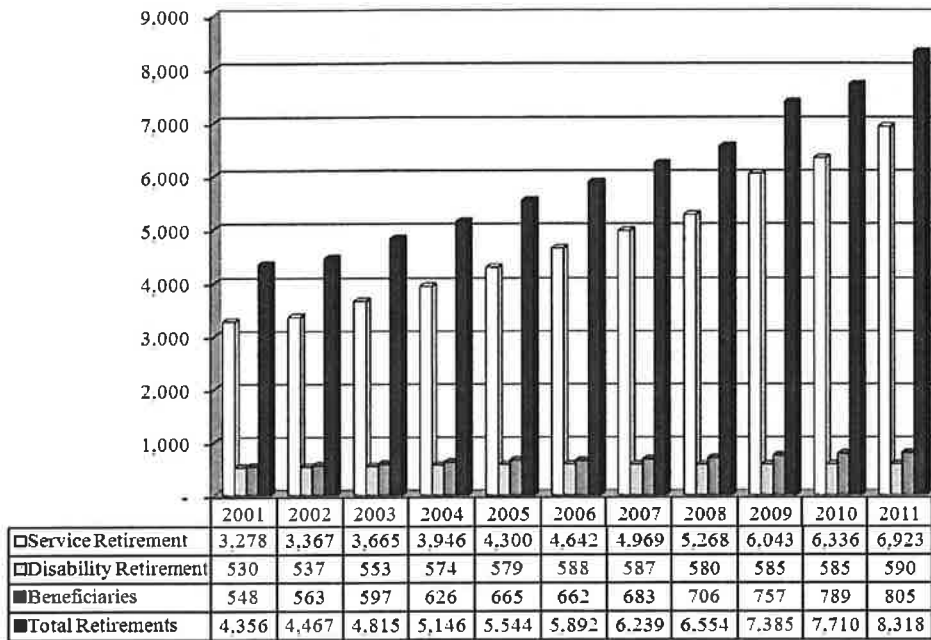
Members Included in Valuation Miscellaneous



March 27, 2013



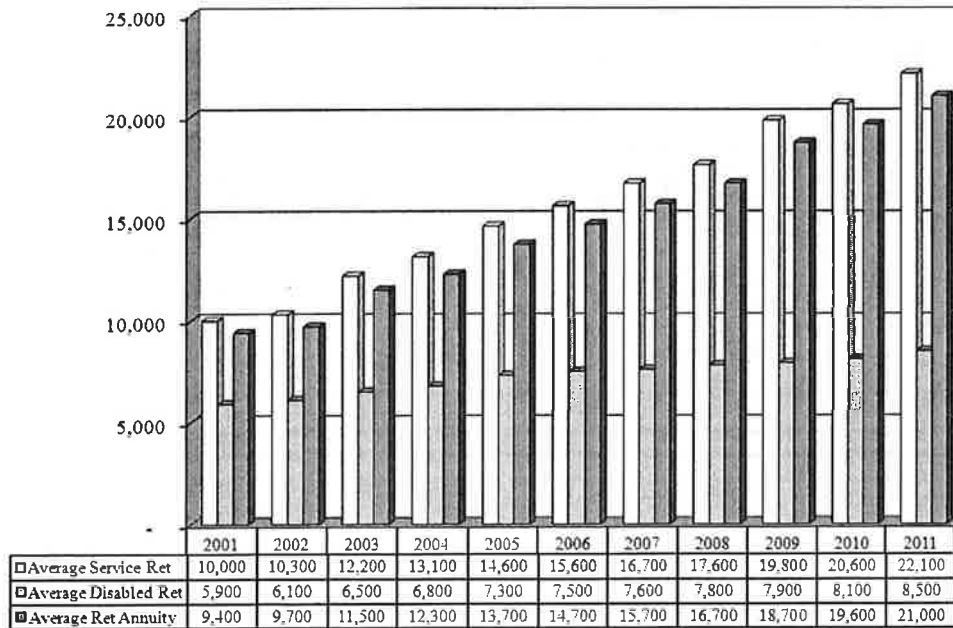
Members Receiving Payments Miscellaneous



March 27, 2013



Average Annuity Miscellaneous



March 27, 2013



Average Annuity Miscellaneous

Service Retirement Retirees' Benefit

Years Retired	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Under 5	\$12,349	\$12,462	\$16,831	\$18,135	\$20,680	\$21,383	\$23,154	\$22,930	\$25,452	\$25,933	\$27,660
5-9	11,755	12,175	12,835	13,079	12,996	13,688	13,474	18,143	19,709	22,185	23,731
10-14	9,780	10,414	11,106	11,844	12,261	12,351	12,996	13,308	13,906	14,618	15,147
15-19	8,238	8,486	9,030	9,158	10,059	10,348	10,992	11,832	12,558	12,874	13,274
20-24	4,605	5,780	6,361	7,358	8,098	9,061	9,181	9,818	10,223	10,636	11,402
25-29	3,096	3,176	3,321	3,605	5,336	5,590	6,915	7,442	8,311	8,428	8,992
Over 30	4,564	3,703	4,247	3,610	5,881	5,387	5,242	5,414	5,424	5,372	5,606
All Years	9,982	10,312	12,223	13,099	14,560	15,586	16,664	17,631	19,751	20,628	22,062



March 27, 2013



Average Annuity Miscellaneous

Service Retirement Retirees' Benefit

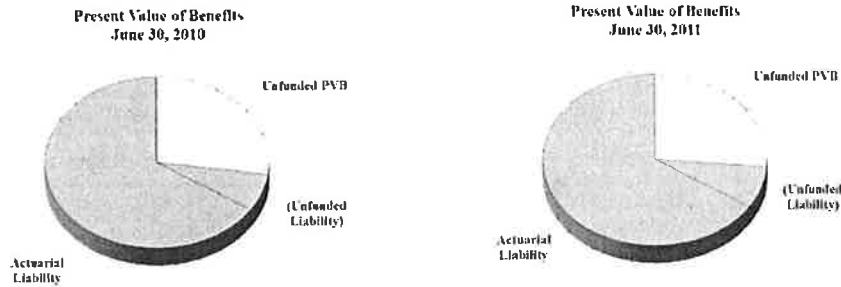
Attained Age	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
50-54	\$ 8,352	\$ 8,270	\$11,218	\$10,905	\$13,909	\$15,136	\$15,599	\$15,620	\$19,486	\$19,522	\$21,685
55-59	11,771	11,299	14,832	16,591	17,653	18,881	19,904	20,836	23,886	24,313	26,563
60-64	11,791	12,027	16,809	17,708	19,425	20,574	21,735	22,549	24,770	26,059	27,138
65-69	11,024	11,945	13,184	14,094	15,593	16,628	18,226	19,717	21,406	22,613	23,414
70-74	10,884	10,889	11,224	11,483	12,482	12,874	13,991	14,974	16,200	16,835	18,978
75-79	8,957	9,537	10,418	10,954	11,645	12,257	12,310	12,820	12,882	13,835	14,161
80-84	7,196	7,640	8,304	9,316	10,352	10,510	10,758	11,762	12,590	12,912	14,074
85 & over	5,201	5,645	5,811	6,016	7,409	8,220	8,929	9,524	9,991	10,394	10,533
All Ages	9,982	10,312	12,223	13,099	14,560	15,586	16,664	17,631	19,751	20,628	22,062



March 27, 2013



Plan Funded Status Miscellaneous



<u>June 30, 2010</u>		<u>June 30, 2011</u>	
\$ 4,097,200,000	Actuarial Liability	\$ 4,461,600,000	
<u>3,652,900,000</u>	Actuarial Asset Value	<u>3,923,500,000</u>	
(444,300,000)	(Unfunded Liability)	(538,100,000)	
<hr/>		<hr/>	
<u>June 30, 2010</u>		<u>June 30, 2011</u>	
\$ 4,097,200,000	Actuarial Liability	\$ 4,461,600,000	
<u>2,882,400,000</u>	Market Asset Value	<u>3,525,600,000</u>	
(1,214,800,000)	(Unfunded Liability)	(936,000,000)	



March 27, 2013

9



Plan Funded Status Miscellaneous

- What happened between 6/30/10 and 6/30/11?
 - Market Value Asset Gain/(Loss) ≈ 455.0 million
 - Unfunded Liability (Increase)/Decrease ≈ (93.8) million
- Reasons for Unfunded Liability increase
 - Actuarial Asset gain/(loss): ≈ (28.4) million
 - \$398 million remaining unrecognized asset losses
 - Assumption Change ≈ (82.5) million
 - Golden Handshake ≈ (28.3) million
 - Actuarial gain/(loss): ≈ 52.0 million
 - Average Salary \$55,400 → \$53,300
 - Number of Actives 15,446 → 15,243
 - Number of Inactives 9,768 → 10,010
 - Number of Retirees 7,710 → 8,318
 - Other gain/(loss): ≈ (6.6) million
 - Contributions
 - Other (expected)

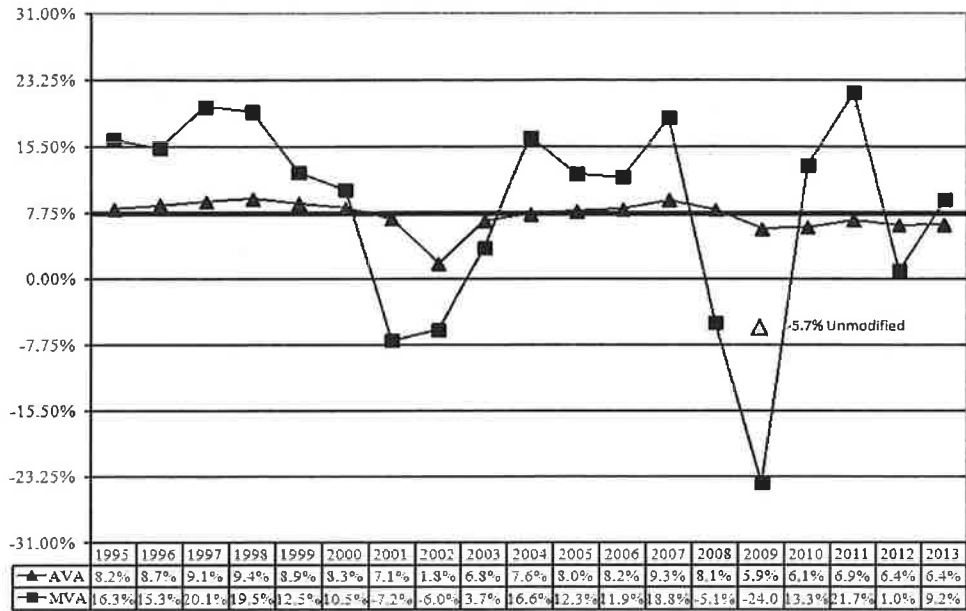


March 27, 2013

10



Actuarial Investment Return Miscellaneous



Above assumes contributions, payments, etc. received evenly throughout year.
2013 estimate based on 12/13 return of 4.1% through October 31, 2012



March 27, 2013



Actuarial Investment Return Miscellaneous

	Market	Actuarial
■ June 30, 2008		
● Return	(5.1%)	8.1%
● Gain/(Loss)	(12.9%)	0.3%
■ June 30, 2009		
● Return	(24.0)%	5.9%
● Gain/(Loss)	(31.8)%	(1.9)%
■ June 30, 2010		
● Return	13.3%	6.1%
● Gain/(Loss)	5.5%	(1.7)%
■ June 30, 2011		
● Return	21.7%	6.9%
● Gain/(Loss)	13.9%	(0.9)%
■ June 30, 2012		
● Return	1.0%	6.4%
● Gain/(Loss)	(6.5)%	(1.1)%

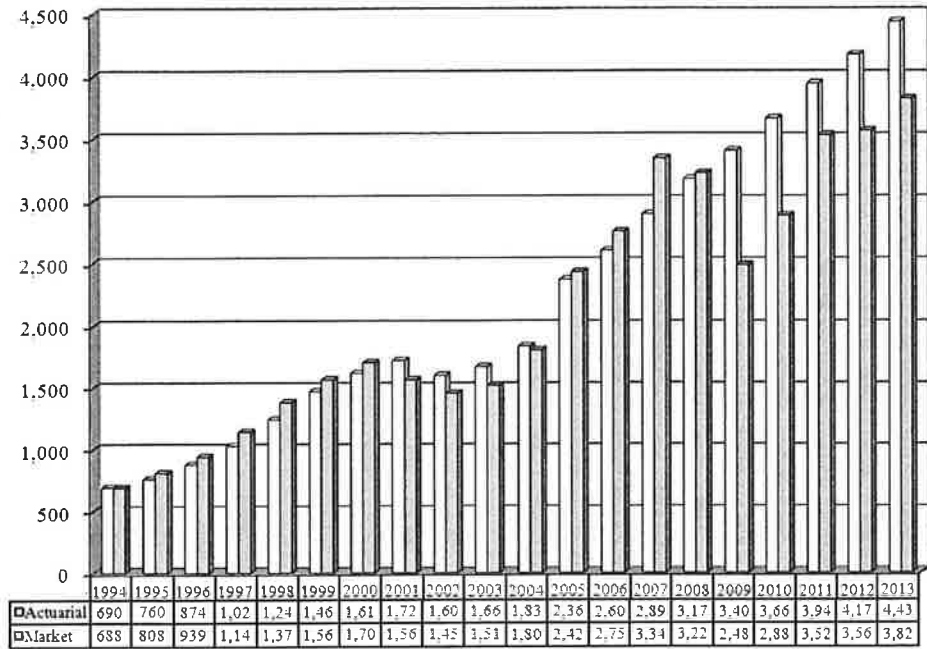
■ Accumulated Market Value Gains/(Losses) through June 30, 2012 ≈ (31.8)%
[(12.9)% + (31.8)% + 5.5% + 13.9% + (6.5)%]



March 27, 2013



Asset Values (Millions) Miscellaneous



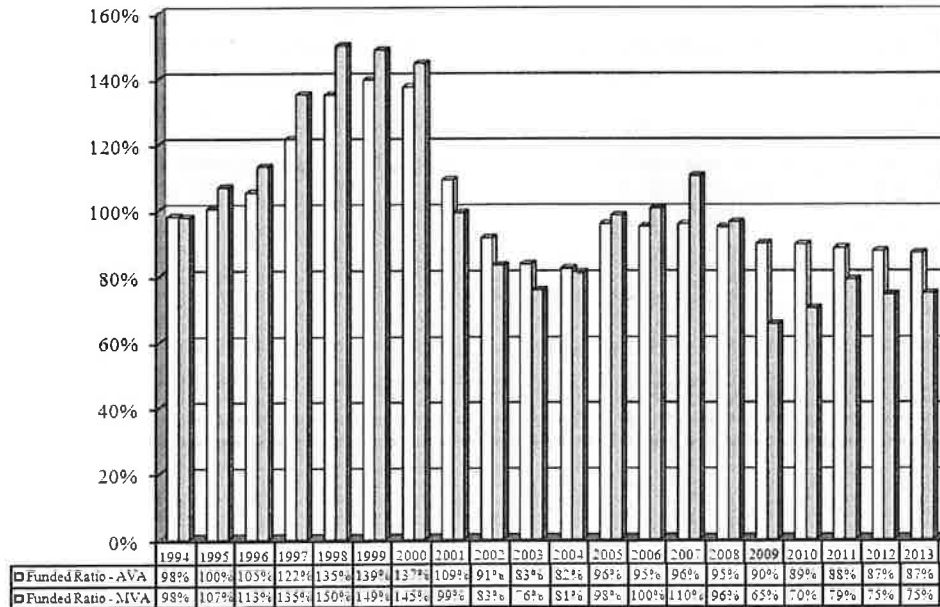
6/30/12 & 6/30/13 asset values estimated.



March 27, 2013



Funded Status Miscellaneous



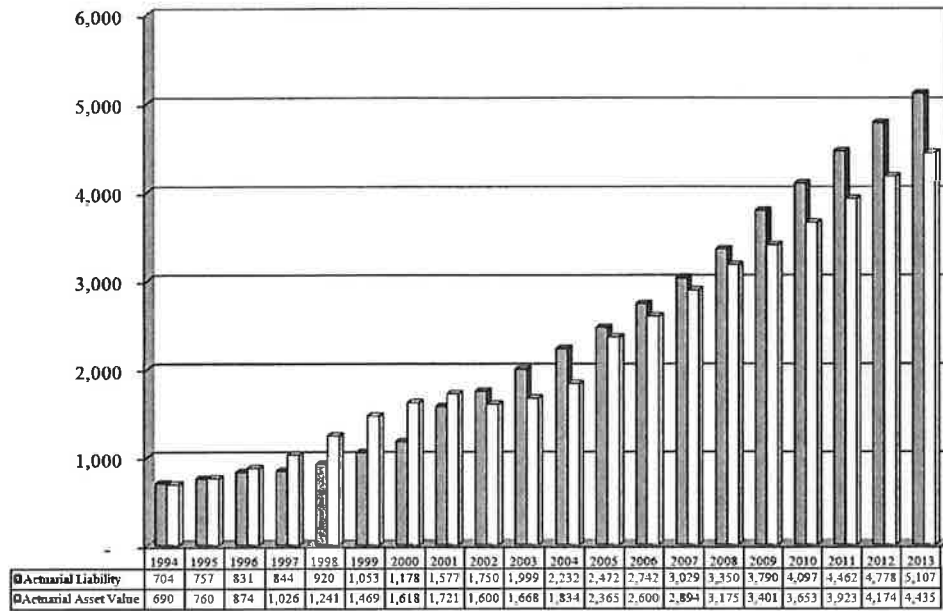
6/30/12 & 6/30/13 funded status estimated



March 27, 2013



Funded Status (Millions) Miscellaneous



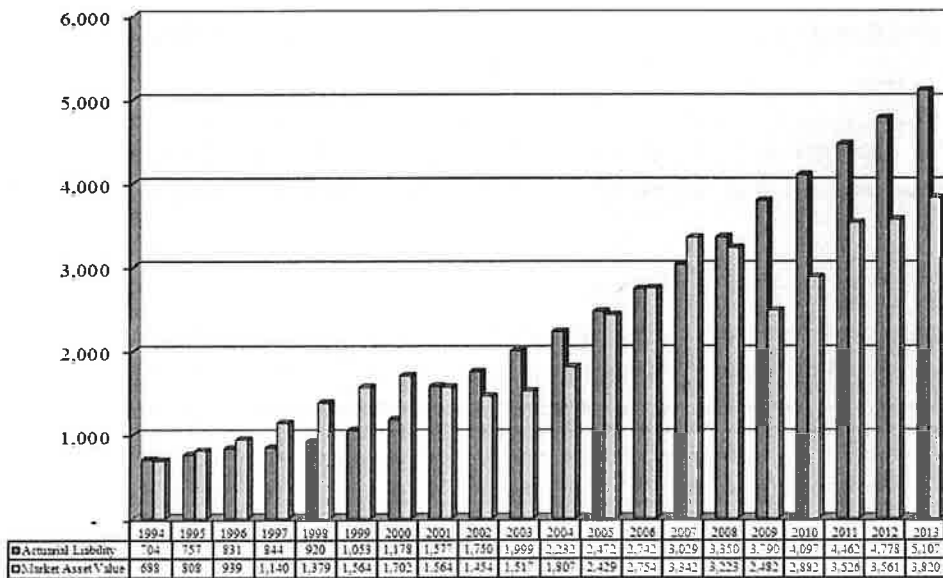
6/30/12 & 6/30/13 funded status estimated



March 27, 2013



Funded Status (Millions) Miscellaneous



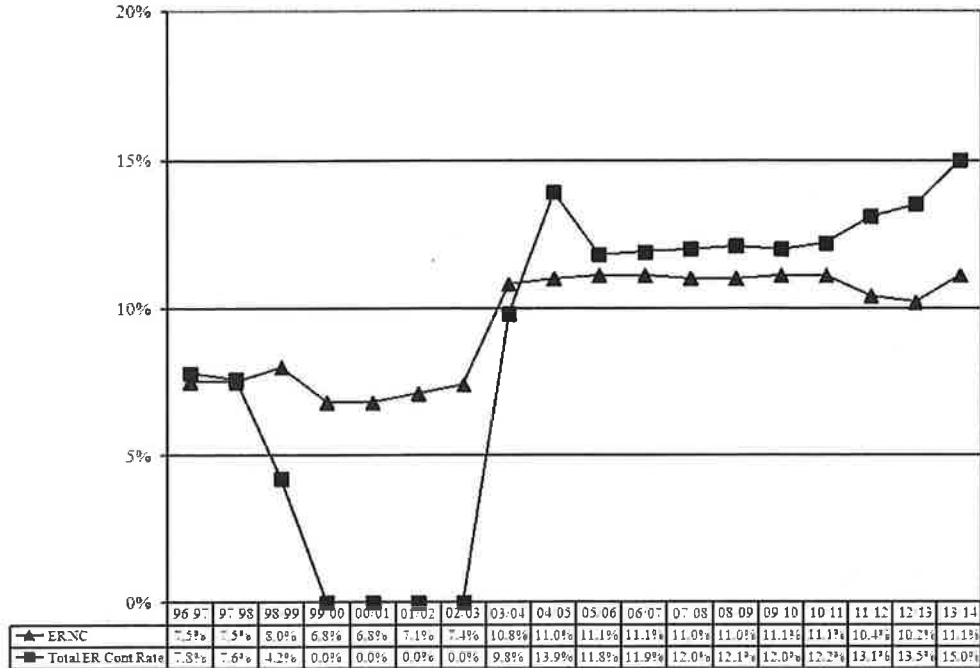
6/30/12 & 6/30/13 funded status estimated



March 27, 2013



Contribution Rates Miscellaneous



March 27, 2013



Contribution Rates Miscellaneous

	<u>6/30/10</u> <u>2012/2013</u>	<u>6/30/11</u> <u>2013/2014</u>
■ Total Normal Cost	18.2%	19.1%
■ Employee Normal Cost	8.0%	8.0%
■ Employer Normal Cost	10.2%	11.1%
■ Amortization Bases:	<u>3.3%</u>	<u>3.9%</u>
■ Total Employer Contribution Rate	13.5%	15.0%
■ Amortization Period	Multiple ≈ 26 years	Multiple ≈ 30 years
■ What Happened from 6/30/10 to 6/30/11:		
● 2012/13 Rate	13.5%	
● (Gains)/Losses	0.6	
● Golden Handshake	0.3	
● Assumption Change	<u>0.6</u>	
● 2013/14 Rate	15.0%	



March 27, 2013



**Contribution Projections
Miscellaneous**

- Market Value Investment Return:
 - June 30, 2011 21.7%
 - June 30, 2012 1.0%²
 - June 30, 2013 - 2016
 - Poor Investment Return: ≈ 0.2% - 3.4%
 - Expected Investment Ret: ≈ 7.50%
 - Good Investment Return: ≈ 11.6% - 15.1%
- No Other: Gains/Losses, Method/Assumption Changes, Benefit Improvements
- Excludes Employer Paid Member Contributions (EPMC)
- Includes Tier 2 (2%@60 FAE3) effective October 1, 2011
- Impact of assumption changes (excluding Normal Cost impact)

	2 Years Phase In	Without Phase In
Initial 2013/14 Rate Impact	0.290%	0.870%
Rate Impact 2014/15+	0.915%	0.870%

- Contribution projections assume 2 years phase in.
- New hire assumptions:
 - Assumes 50% of 2013 new hires will be Tier 2 (2%@60) and 50% will be New Members with PEPRAs benefits.
 - Assumes Tier 2 Members will decrease from 50% to 0% of new hires over 20 years.

² Based on CalPERS press release.



March 27, 2013



**Contribution Projections
Miscellaneous**

Payroll Growth Assumptions

	2013/14	2014/15	2015/16	2016/17
County #1	3.00%	3.00%	3.00%	3.00%
County #2	4.81%	6.41%	6.56%	3.00%
CalPERS	3.00%	3.00%	3.00%	3.00%
	2017/18	2018/19	2019/20	
County #1	3.00%	3.00%	3.00%	
County #2	3.00%	3.00%	3.00%	
CalPERS	3.00%	3.00%	3.00%	

Projected PERSable Wages ('000)

	2012/13	2013/14	2014/15	2015/16	2016/17
County #1	\$806,975	\$831,184	\$856,120	\$881,803	\$908,258
County #2	806,975	845,791	900,006	959,046	987,818
CalPERS	861,936	887,691	914,321	941,751	970,003
		2017/18	2018/19	2019/20	
County #1		\$935,505	\$963,570	\$992,478	
County #2		1,017,452	1,047,976	1,079,415	
CalPERS		999,104	1,029,077	1,059,949	

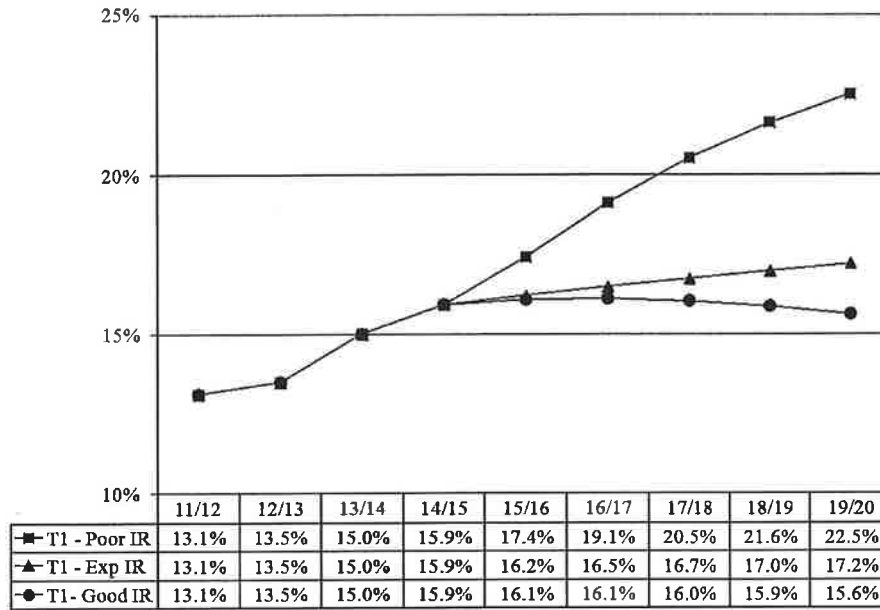


March 27, 2013



Contribution Projections Miscellaneous

Investment Return Various
Tier 1 Only
Includes POB Proceeds But Not Debt Service

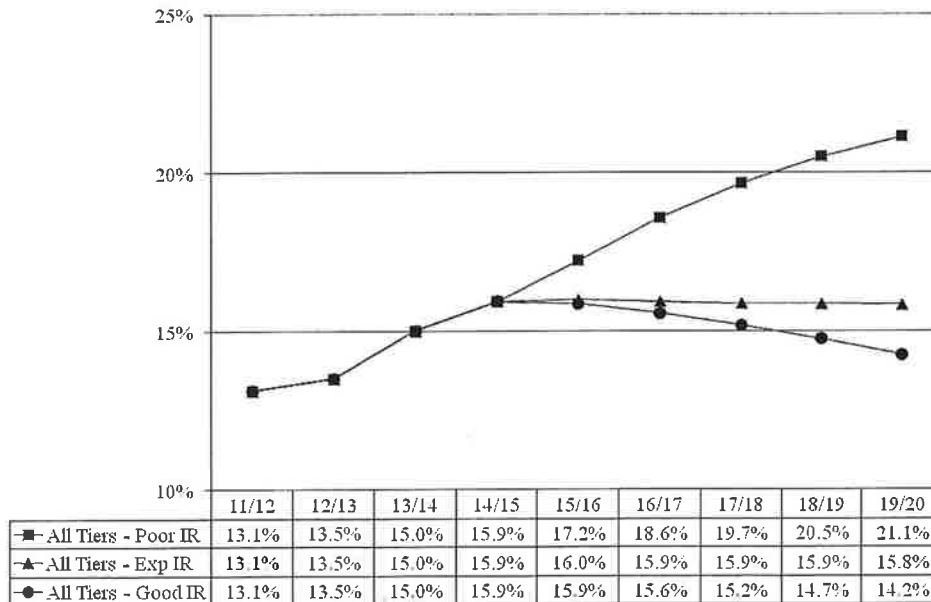


March 27, 2013



Contribution Projections Miscellaneous

Investment Return Various
All Tiers
Includes POB Proceeds But Not Debt Service

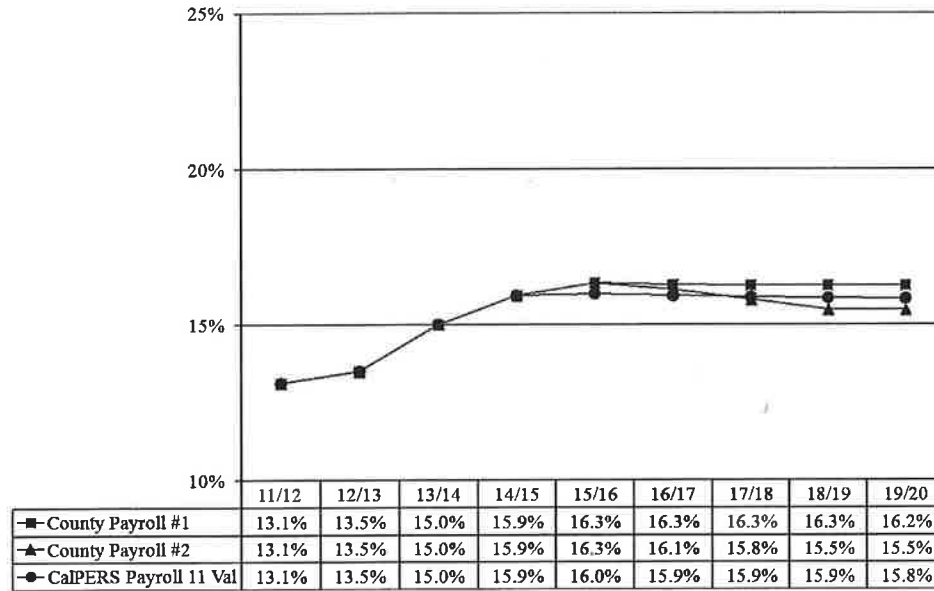


March 27, 2013



Contribution Projections Miscellaneous

Expected Investment Return (7.50%)
Tier 1 + Tier 2 + PEPRA
Includes POB Proceeds But Not Debt Service

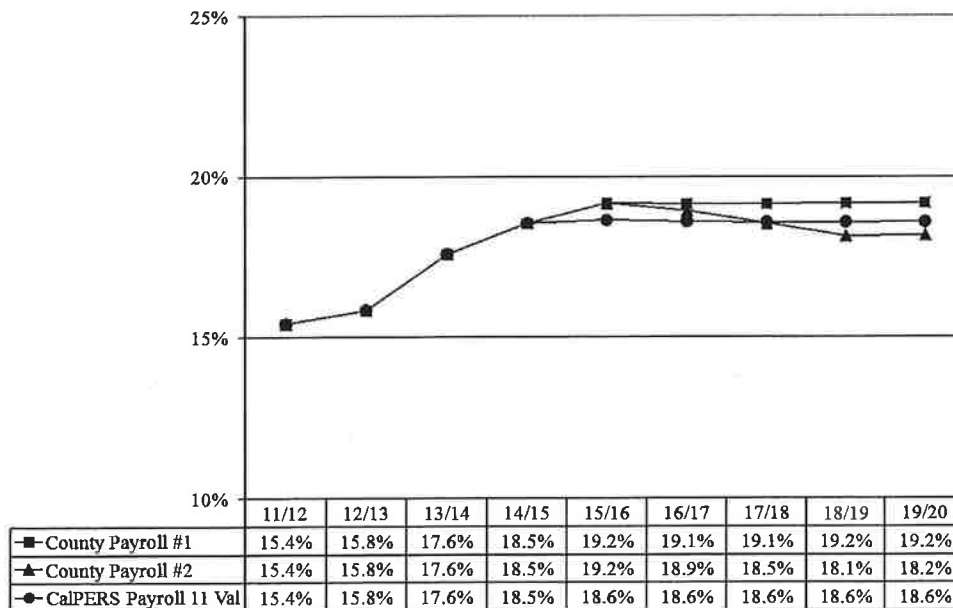


March 27, 2013



Contribution Projections Miscellaneous

Expected Investment Return (7.50%)
Tier 1 + Tier 2 + PEPRA
Includes POB Proceeds And Debt Service

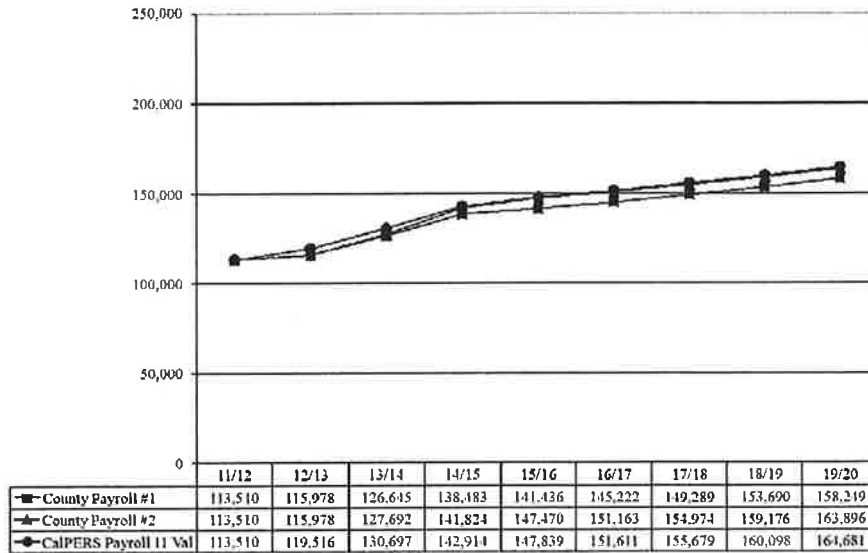


March 27, 2013



Contribution Projections Miscellaneous

Expected Investment Return (7.50%)
Tier 1 + Tier 2 + PEPRA
Includes POB Proceeds But Not Debt Service



*11/12 is based on 6/5/12 projection
Prepayment percentage is assumed the same as in the 11/12 (52.2%)

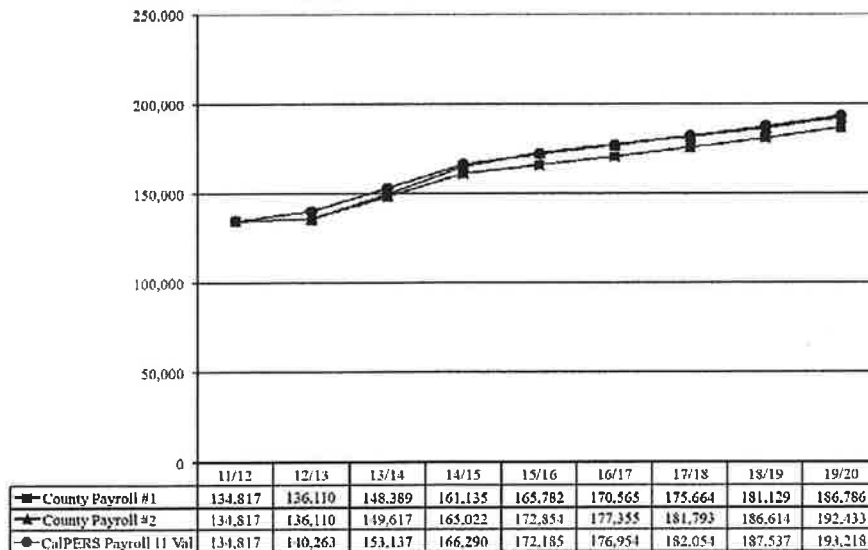


March 27, 2013



Contribution Projections Miscellaneous

Expected Investment Return (7.50%)
Tier 1 + Tier 2 + PEPRA
Includes POB Proceeds And Debt Service



*11/12 is based on 6/5/12 projection
Prepayment percentage is assumed the same as in the 11/12 (52.2%)



March 27, 2013



Contribution Projections Miscellaneous

- Market Value Investment Return:
 - June 30, 2011 21.7%
 - June 30, 2012 1.0%³
 - June 30, 2013 - 2016 Poor Investment Return: ≈ 0.2% - 3.4%
 - Expected Investment Ret: ≈ 7.50%/7.25%
 - Good Investment Return: ≈ 11.6% - 15.1%
- #1 – No County pension change. Tier 1 only, County pays EPMC⁴
- #2 – Include all County pension change. Tier 1 & Tier 2, County does not pay EPMC.
- #3 - #2 plus PEPRRA
- #4 - #3 plus estimated impact on the following changes
 - Mortality improvement
 - Asset smoothing change from 15 years to 5 years
 - Discount rate change from 7.5% to 7.25%
 - First impact on FY14/15
- #1 - #4 based on County payroll #2

³ Based on CalPERS press release.

⁴ Average County paid EPMC 5.4%. Average PERSable EPMC 1.6%.

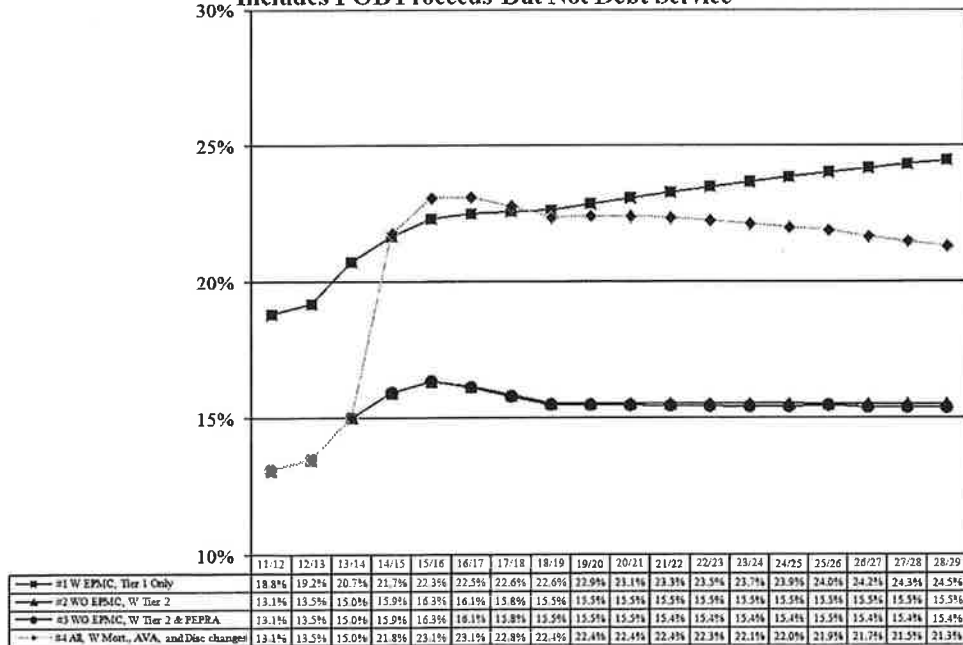


March 27, 2013



Contribution Projections Miscellaneous

**Expected Investment Return (7.50%/7.25%)
Includes POB Proceeds But Not Debt Service**



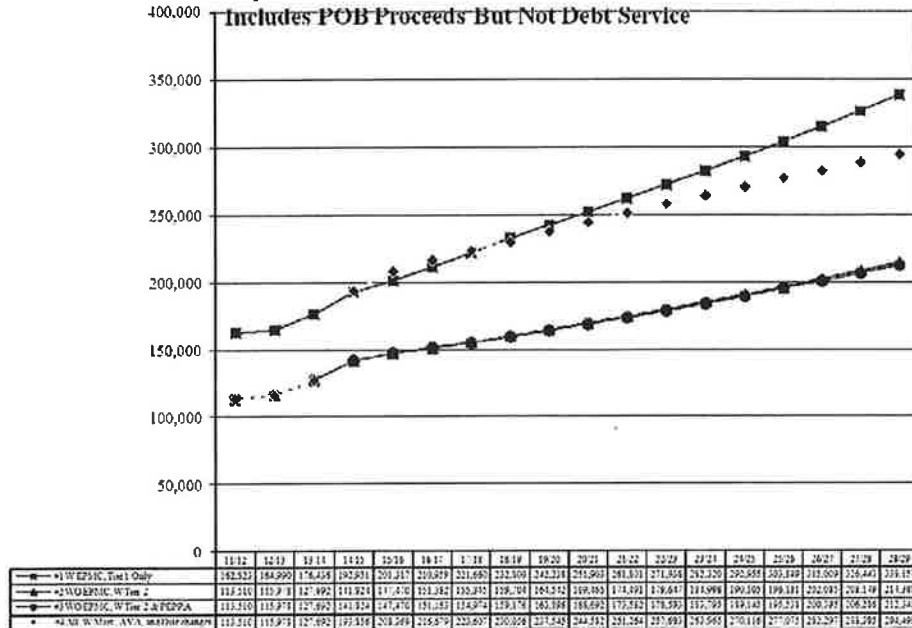
March 27, 2013



Contribution Projections Miscellaneous

Expected Investment Return (7.50%/7.25%)

Includes POB Proceeds But Not Debt Service



March 27, 2013



Contribution Projections Miscellaneous

Employer Contribution Rate if Market Value of Assets were used

	<u>Actuarial</u> <u>2013/14</u> AVA	<u>Market</u> <u>2013/14</u> MVA
■ Plan Assets		
■ ER Normal cost	11.1%	11.1%
■ Amortization bases:	<u>3.9%</u>	<u>7.1%</u>
■ Total Contribution Rate	15.0%	18.2%
■ Amortization period	≈ 30 years	30 years



March 27, 2013



Summary of Demographic Information – Safety

	1994	2003	2010	2011
Actives				
■ Counts	1839	2708	3490	3455
■ Average				
• Age	38	39	38	39
• County Service	10	9	9	9
• PERSable Wages	\$44,200	\$54,500	\$76,000	\$79,100
■ Total PERSable Wages (millions)	88.8	162.4	291.9	298.5
Receiving Payments				
■ Counts				
• Service		540	1302	1401
• Disability		442	522	547
• Beneficiaries		108	158	164
• Total	520	1090	1982	2112
■ Average Annual County Provided Benefit ⁵				
• Service		\$28,100	\$39,000	\$39,400
• Disability		19,200	23,800	24,200
• Service Retirements in last 5 years		29,800	42,900	43,400

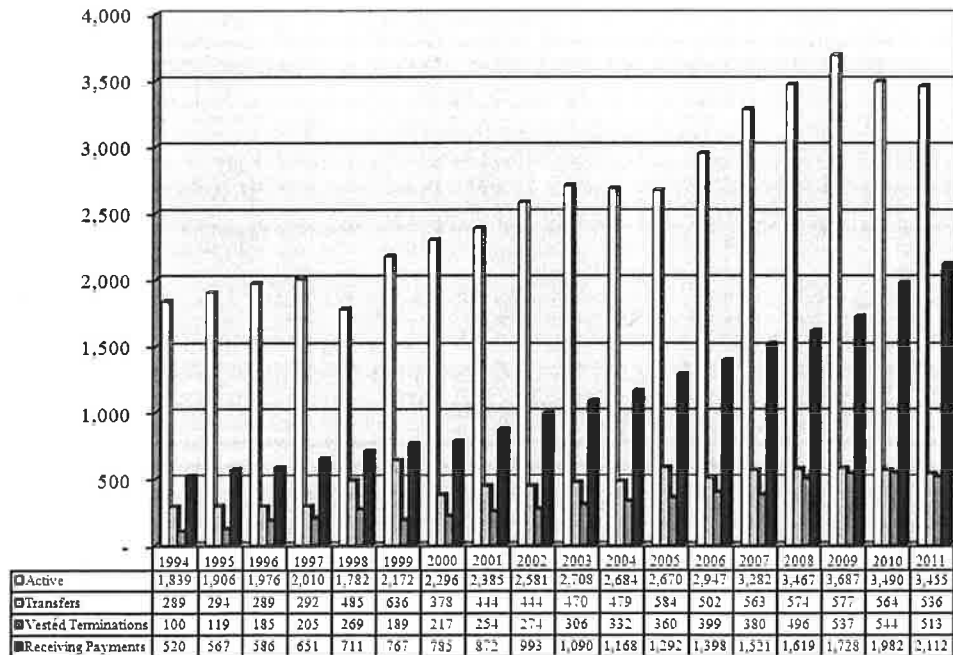
⁵ Average County provided pensions are based on County service & County benefit formula, and are not representative of benefits for long service employees.



March 27, 2013



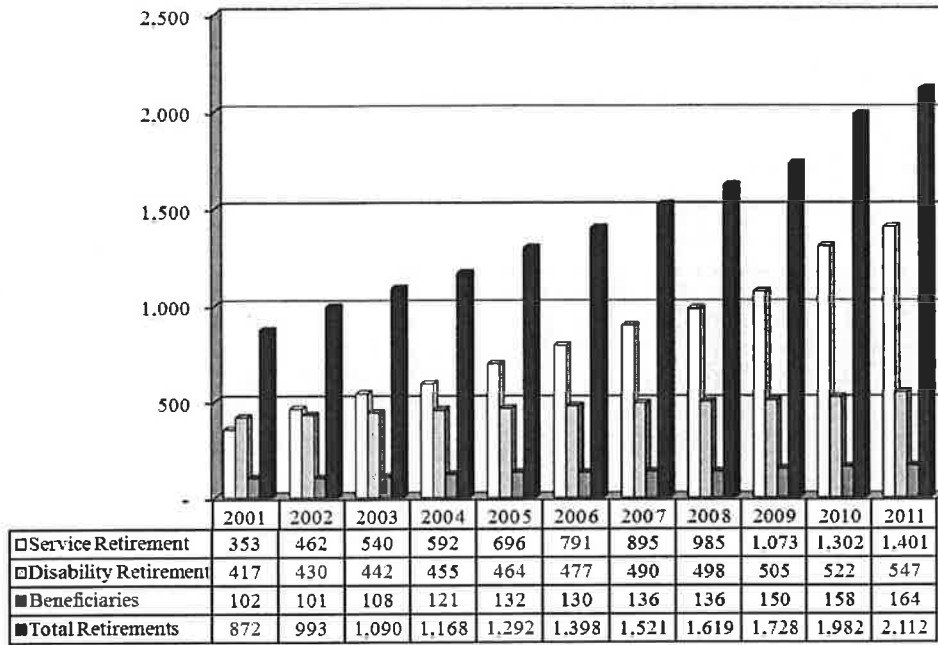
Members Included in Valuation Safety



March 27, 2013



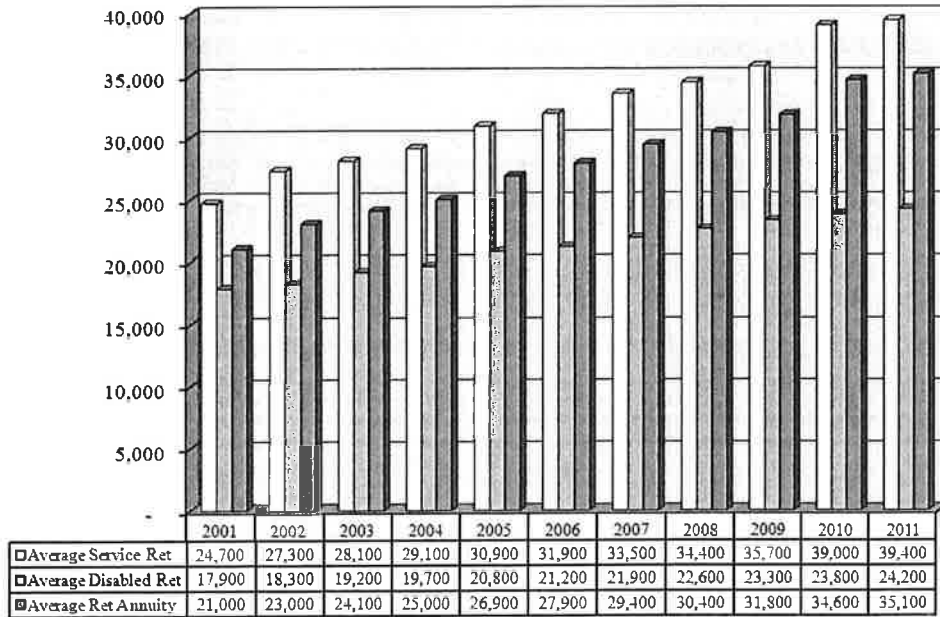
Members Receiving Payments Safety



March 27, 2013



Average Annuity Safety



March 27, 2013



Average Annuity Safety

Service Retirement Retirees' Benefit

Years Retired	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Under 5	\$ 25,410	\$ 28,618	\$ 29,840	\$ 31,179	\$ 33,743	\$ 34,479	\$ 35,472	\$ 36,745	\$ 38,145	\$ 42,927	\$ 43,393
5-9	26,844	28,779	27,501	27,368	27,163	28,123	33,159	32,663	34,196	36,699	37,848
10-14	26,808	26,587	29,249	29,933	30,681	30,133	29,406	32,464	32,436	30,916	31,020
15-19	21,763	27,324	27,928	29,250	26,964	29,224	30,587	31,357	32,982	34,805	34,981
20-24	13,781	14,519	12,651	11,994	19,537	20,399	25,112	29,849	34,166	33,624	32,642
25-29	10,288	11,069	13,487	15,318	19,288	20,385	20,993	21,005	19,198	20,761	28,500
Over 30	15,207	15,511	10,162	16,455	30,776	31,920	28,299	27,267	29,573	28,211	27,756
All Years	24,718	27,306	28,111	29,141	30,929	31,915	33,481	34,389	35,729	38,956	39,395



March 27, 2013

35



Average Annuity Safety

Service Retirement Retirees' Benefit

Attained Age	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
50-54	\$ 20,025	\$ 25,957	\$ 28,252	\$ 26,541	\$ 32,567	\$ 33,130	\$ 35,650	\$ 35,300	\$ 37,007	\$ 44,173	\$ 42,235
55-59	30,032	31,824	31,929	34,435	34,387	35,298	36,108	36,764	36,697	40,669	41,700
60-64	29,058	30,745	29,848	31,148	32,237	33,440	34,861	36,194	37,904	39,455	40,275
65-69	24,112	24,239	26,224	25,829	28,826	28,986	29,985	32,552	34,509	35,161	37,497
70-74	21,428	23,823	24,635	25,451	24,448	24,980	28,068	27,947	30,079	31,361	32,759
75-79	15,609	16,445	20,918	21,740	23,092	23,810	26,745	28,006	29,780	28,419	27,586
80-84	8,264	13,491	10,934	14,589	19,692	21,258	19,489	25,344	27,089	26,978	27,831
85 & over	6,621	5,589	6,758	8,475	13,285	13,803	19,099	15,185	18,624	28,647	32,476
All Ages	24,718	27,306	28,111	29,141	30,929	31,915	33,481	34,389	35,729	38,956	39,395

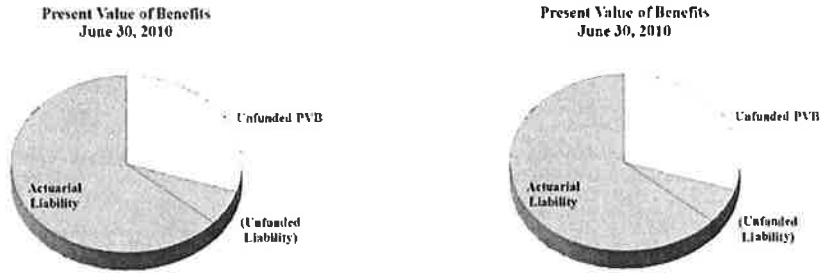


March 27, 2013

36



Plan Funded Status Safety



<u>June 30, 2010</u>			<u>June 30, 2011</u>	
\$	1,809,500,000	Actuarial Liability	\$	2,032,000,000
	<u>1,624,700,000</u>	Actuarial Asset Value		<u>1,745,900,000</u>
	(184,800,000)	(Unfunded Liability)		(286,100,000)
<u>June 30, 2010</u>			<u>June 30, 2011</u>	
\$	1,809,500,000	Actuarial Liability	\$	2,032,000,000
	<u>1,279,800,000</u>	Market Asset Value		<u>1,565,800,000</u>
	(529,700,000)	(Unfunded Liability)		(466,200,000)



March 27, 2013

37



Plan Funded Status Safety

- What happened between 6/30/10 and 6/30/11?
 - Market Value Asset Gain/(Loss) ≈ 202. million
 - Unfunded Liability increase ≈ (101.3) million
- Reasons for Unfunded Liability increase
 - Actuarial Asset gain/(loss): ≈ (12.9) million
 - \$180 million remaining unrecognized asset losses
 - Assumption change ≈ (36.6) million
 - Actuarial gain/(loss): ≈ (43.7) million
 - Average Salary \$76,000 → \$79,100
 - Number of Actives 3,490 → 3,455
 - Number of Inactives 1,108 → 1,049
 - Number of Retirees 1,982 → 2,112
 - Other gain/(loss): ≈ (8.1) million
 - Contributions
 - Other (expected)

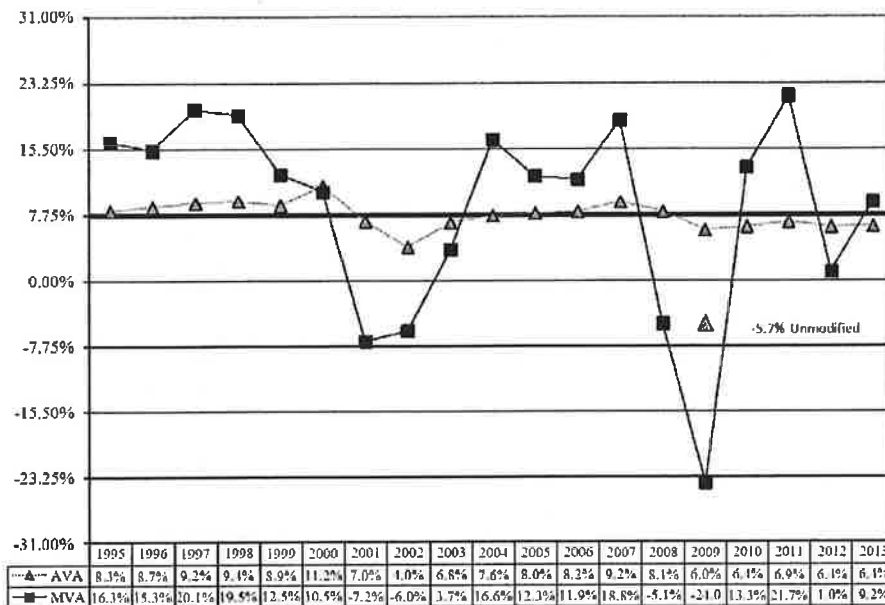


March 27, 2013

38



Actuarial Investment Return Safety



Above assumes contributions, payments, etc. received evenly throughout year.
2013 estimate based on 12/13 return of 4.1% through October 31, 2012



March 27, 2013



Actuarial Investment Return Safety

	Market	Actuarial
■ June 30, 2008		
● Return	(5.1%)	8.1%
● Gain/(Loss)	(12.9%)	0.3%
■ June 30, 2009		
● Return	(24.0)%	6.0%
● Gain/(Loss)	(31.8)%	(1.8)%
■ June 30, 2010		
● Return	13.3%	6.4%
● Gain/(Loss)	5.5%	(1.4)%
■ June 30, 2011		
● Return	21.7%	6.9%
● Gain/(Loss)	13.9%	(0.9)%
■ June 30, 2012		
● Return	1.0%	6.4%
● Gain/(Loss)	(6.5)%	(1.1)%

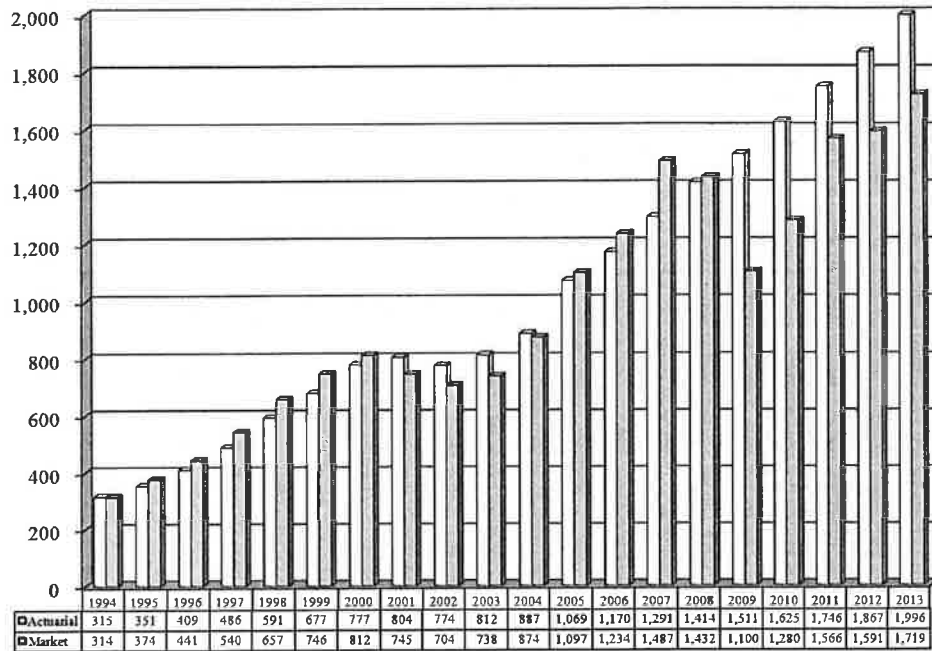
■ Accumulated Market Value Gains/(Losses) through June 30, 2012 ≈ (31.8)%
[(12.9)% + (31.8)% + 5.5% + 13.9% + (6.5)%]



March 27, 2013



Asset Values (Millions) Safety



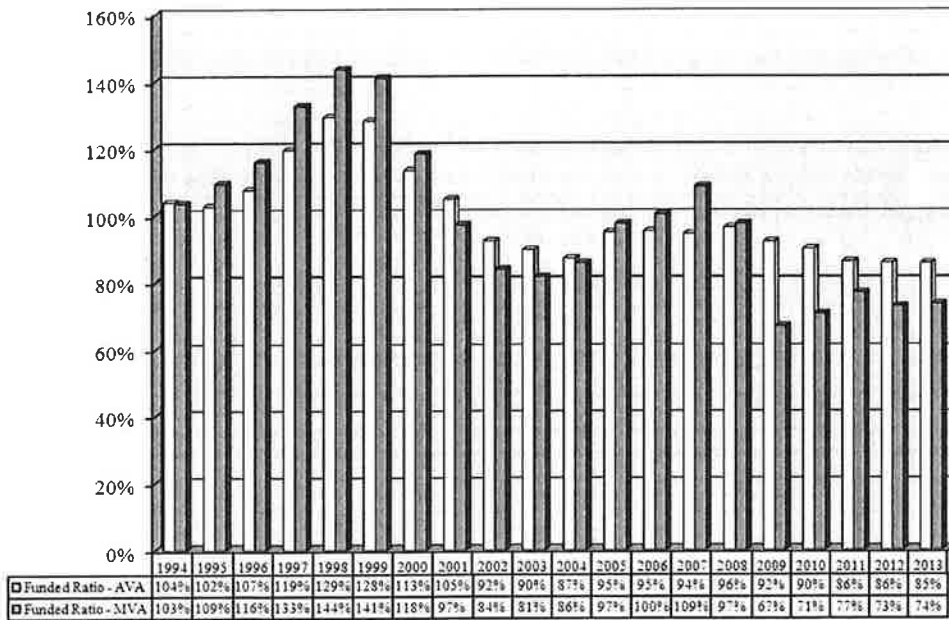
6/30/12 & 6/30/13 asset values estimated.



March 27, 2013



Funded Status Safety



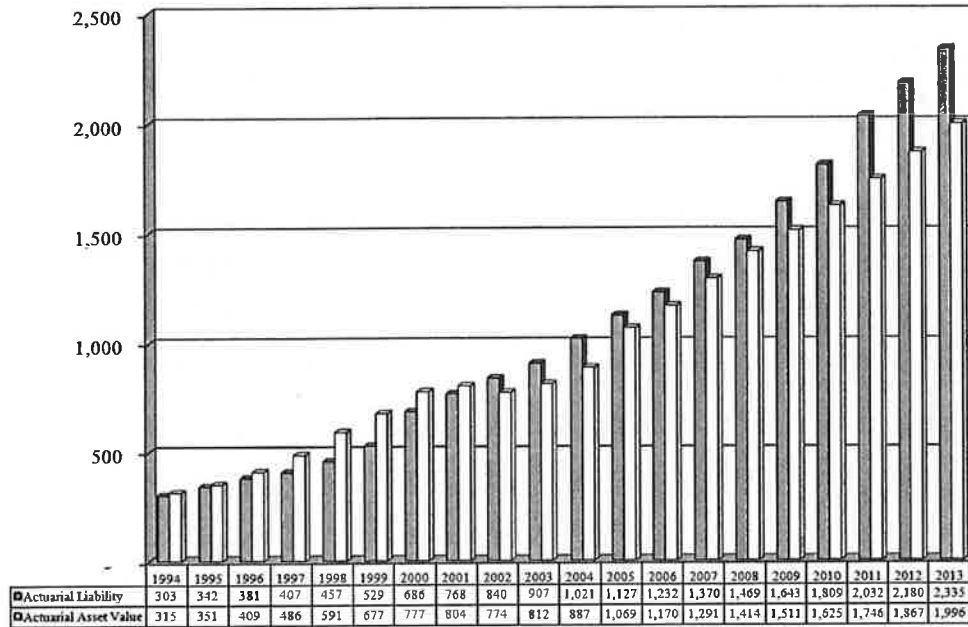
6/30/12 & 6/30/13 funded status estimated



March 27, 2013



Funded Status (Millions) Safety



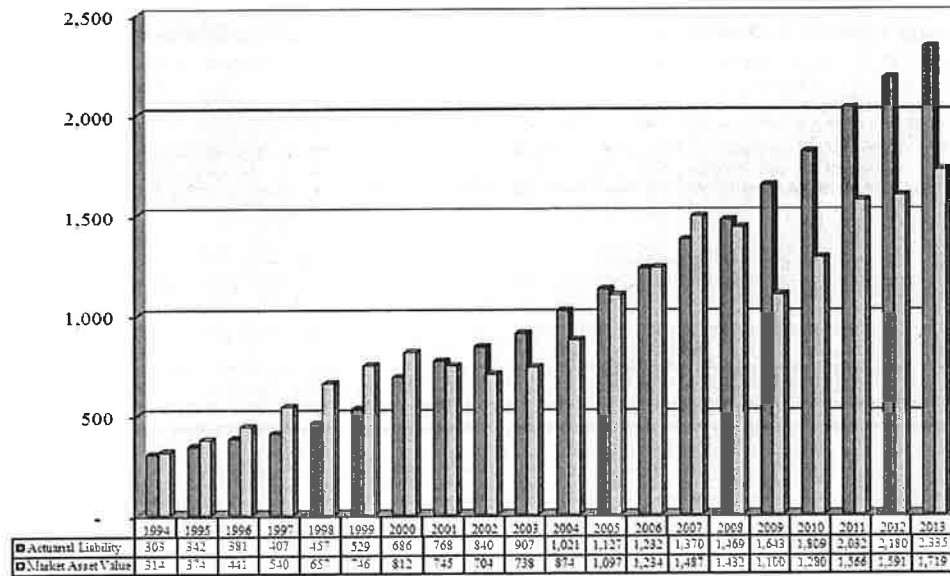
6/30/12 & 6/30/13 funded status estimated



March 27, 2013



Funded Status (Millions) Safety



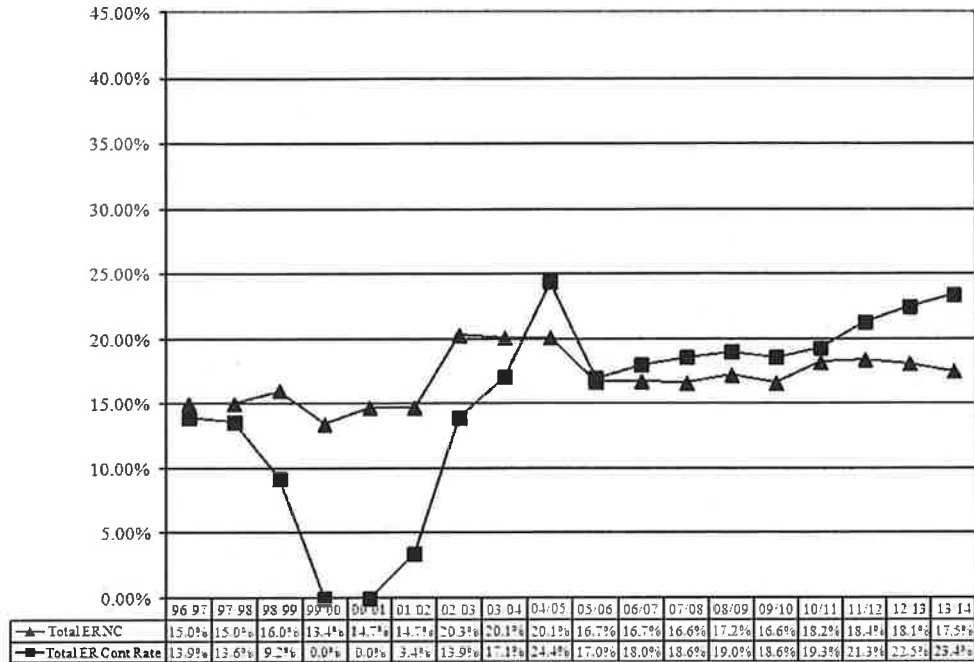
6/30/12 & 6/30/13 funded status estimated



March 27, 2013



Contribution Rates Safety



March 27, 2013



Contribution Rates Safety

	<u>6/30/10</u> <u>2012/2013</u>	<u>6/30/11</u> <u>2013/2014</u>
■ Total Normal Cost	27.1%	26.5%
■ Employee Normal Cost	9.0%	9.0%
■ Employer Normal Cost	18.1%	17.5%
■ Amortization Bases:	4.4%	5.9%
■ Total Employer Contribution Rate	22.5%	23.4%
■ Amortization Period	Multiple ≈ 27 years	Multiple ≈ 33 years
■ What Happened from 6/30/10 to 6/30/11:		
● 2012/13 Rate	22.5%	
● (Gains)/Losses	0.0	
● Assumption Change	<u>0.9</u>	
● 2013/14 Rate	23.4%	



March 27, 2013



Contribution Projections Safety

- Market Value Investment Return:
 - June 30, 2011 21.7%
 - June 30, 2012 1.0%⁶
 - June 30, 2013 - 2016 Poor Investment Return: ≈ 0.2% - 3.4%
 - Expected Investment Ret: ≈ 7.50%
 - Good Investment Return: ≈ 11.6% - 15.1%
- No Other: Gains/Losses, Method/Assumption Changes, Benefit Improvements
- Excludes Employer Paid Member Contributions (EPMC)
- Includes Tier 2 (2%@50) effective October 1, 2011
- Impact of assumption changes (excluding Normal Cost impact)

	2 Years Phase In	Without Phase In
Initial 2013/14 Rate Impact	0.383%	1.149%
Rate Impact 2014/15+	1.211%	1.149%

- Contribution projections assume 2 years phase in.
- New hire assumptions:
 - Assumes 50% of 2013 new hires will be Tier 2 Members (2%@50) with current benefits and 50% will be New Members with PEPRA benefits.
 - Assumes Tier 2 Members will decrease from 50% to 0% of new hires over 10 years.

⁶ Based on CalPERS press release.



March 27, 2013



Contribution Projections Safety

Payroll Growth Assumptions

	2013/14	2014/15	2015/16	2016/17
County #1	3.00%	3.00%	3.00%	3.00%
County #2	8.13%	5.16%	5.33%	3.00%
CalPERS	3.00%	3.00%	3.00%	3.00%
	2017/18	2018/19	2019/20	
County #1	3.00%	3.00%	3.00%	
County #2	3.00%	3.00%	3.00%	
CalPERS	3.00%	3.00%	3.00%	

Projected PERSable Wages ('000)

	2012/13	2013/14	2014/15	2015/16	2016/17
County #1	\$ 261,467	\$269,311	\$277,390	\$285,712	\$294,284
County #2	261,467	282,724	297,313	313,160	322,555
CalPERS	289,806	298,500	307,455	316,678	326,179
		2017/18	2018/19	2019/20	
County #1		\$303,112	\$312,205	\$321,572	
County #2		332,231	342,198	352,464	
CalPERS		335,964	346,043	356,424	

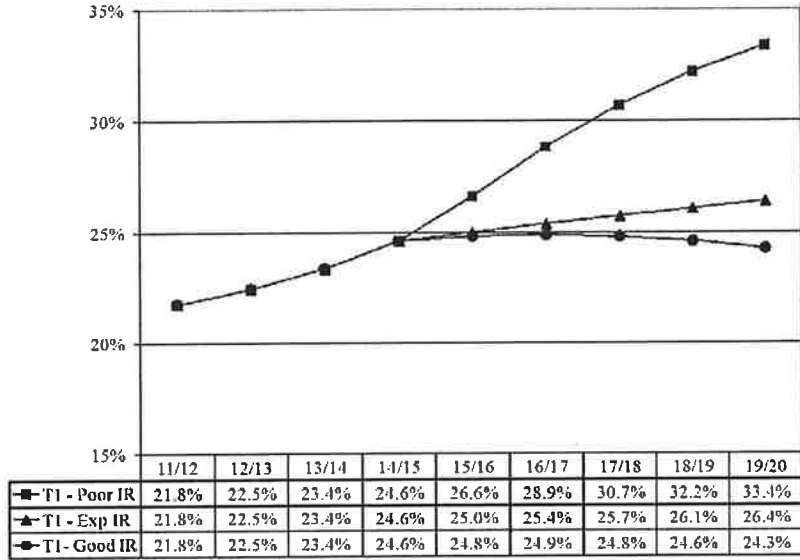


March 27, 2013



Contribution Projections Safety

Investment Return Varies
Tier 1 Only
Includes POB Proceeds But Not Debt Service

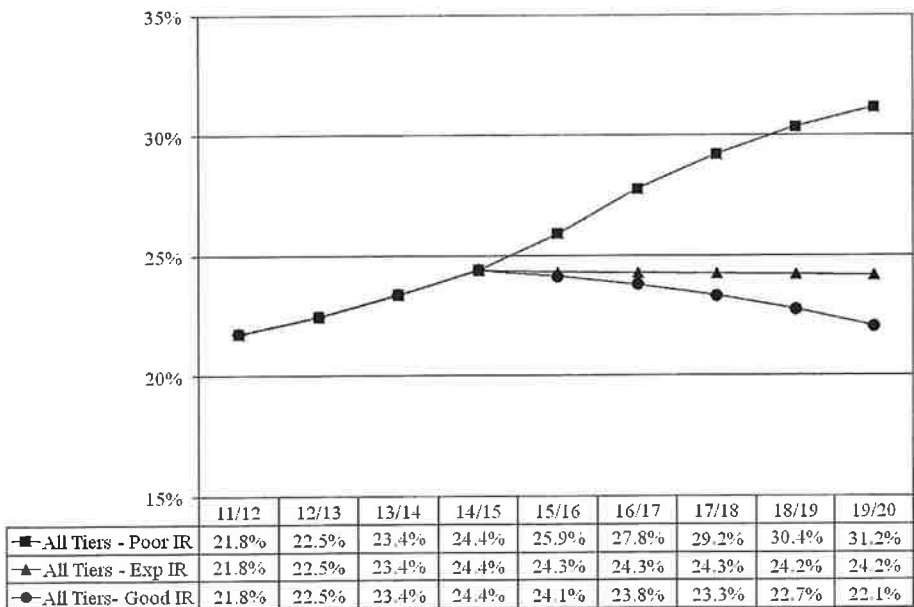


March 27, 2013



Contribution Projections Safety

Investment Return Varies
All Tiers
Includes POB Proceeds But Not Debt Service

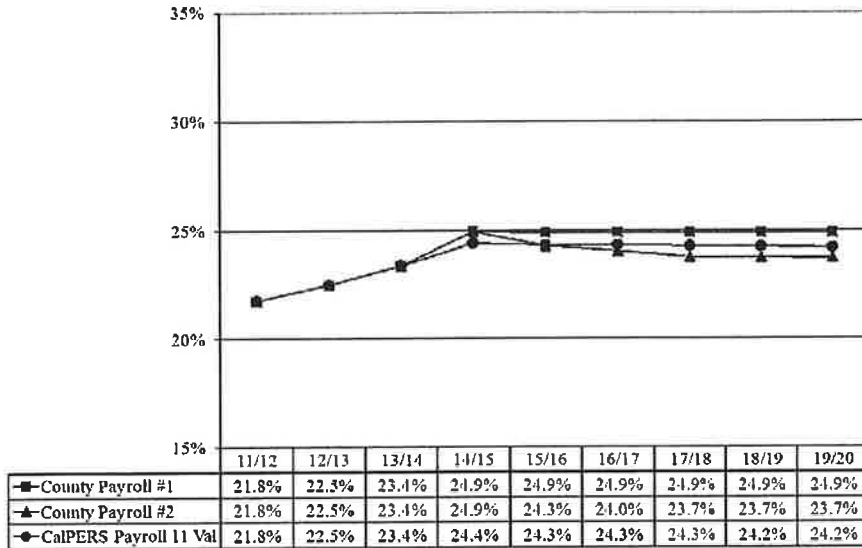


March 27, 2013



Contribution Projections Safety

Expected Investment Return (7.50%)
T1 + T2 + PEPRA
Includes POB Proceeds But Not Debt Service

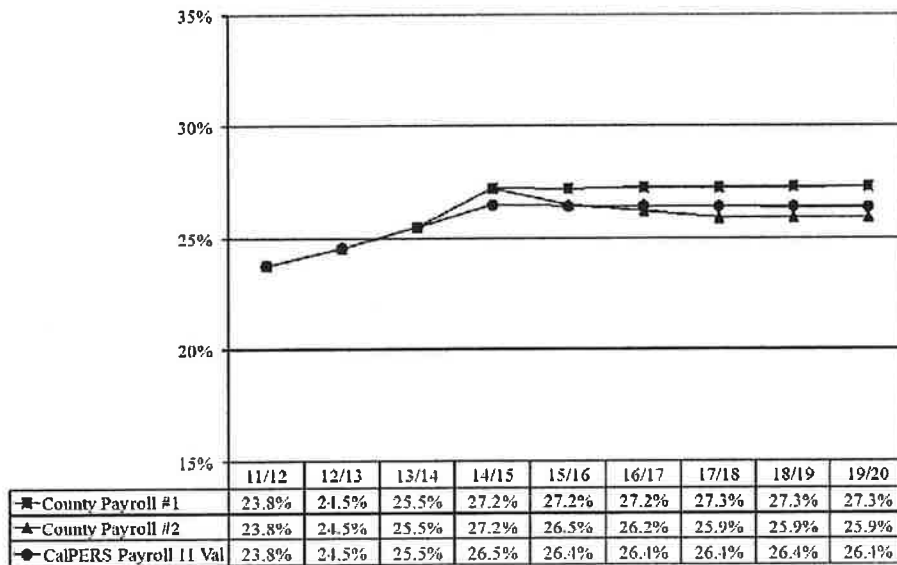


March 27, 2013



Contribution Projections Safety

Expected Investment Return (7.50%)
T1 + T2 + PEPRA
Includes POB Proceeds And Debt Service

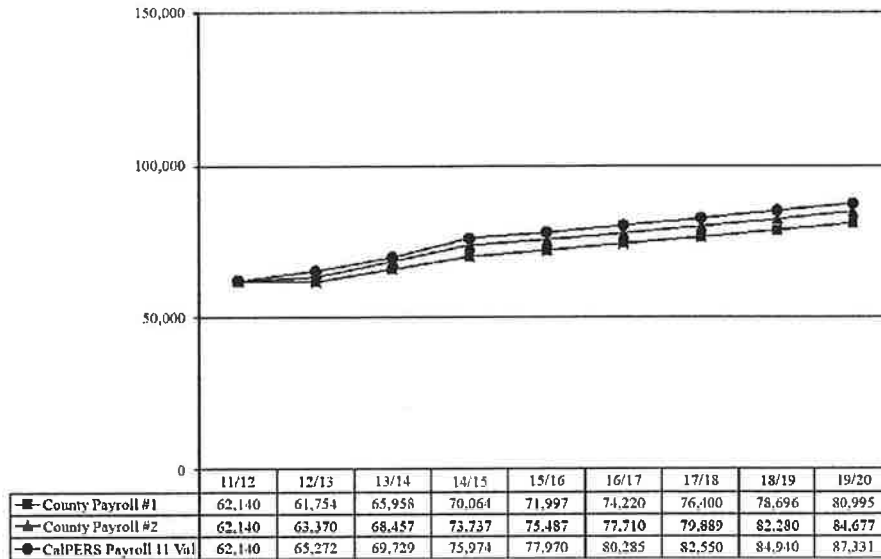


March 27, 2013



Contribution Projections Safety

Expected Investment Return (7.50%)
Tier 1 + Tier 2 + PEPRA
Includes POB Proceeds But Not Debt Service



*11/12 is based on 6/5/12 projection
Prepayment percentage is assumed the same as in the 11/12 (46.3%)

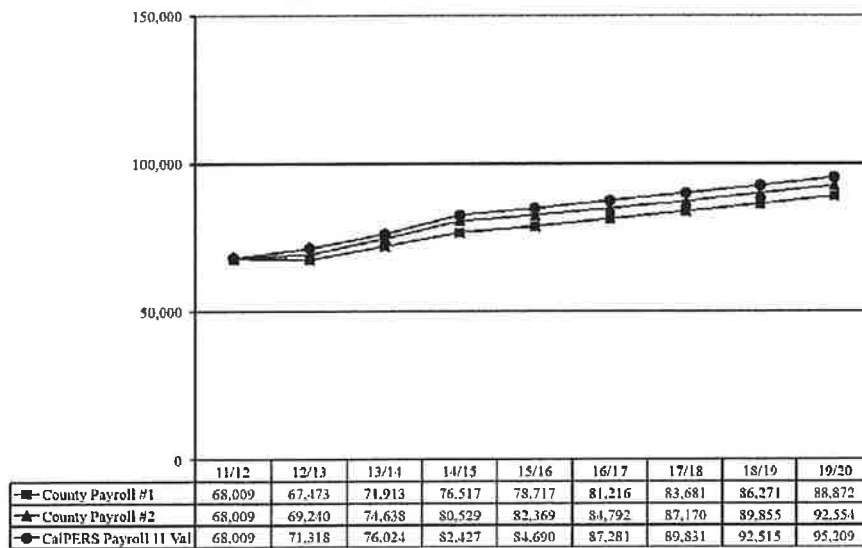


March 27, 2013



Contribution Projections Safety

Expected Investment Return (7.50%)
Tier 1 + Tier 2 + PEPRA
Includes POB Proceeds And Debt Service



*11/12 is based on 6/5/12 projection
■ Prepayment percentage is assumed the same as in the 11/12 (46.3%)



March 27, 2013



Contribution Projections Safety

- Market Value Investment Return:
 - June 30, 2011 21.7%
 - June 30, 2012 1.0%⁷
 - June 30, 2013 - 2016
 - Poor Investment Return: ≈ 0.2% - 3.4%
 - Expected Investment Ret: ≈ 7.50%/7.25%
 - Good Investment Return: ≈ 11.6% - 15.1%
- #1 – No County pension change. Tier 1 only, County pays EPMC⁸
- #2 – Include all County pension change. Tier 1 & Tier 2, County does not pay EPMC.
- #3 - #2 plus PEPPRA
- #4 - #3 plus estimated impact on the following changes
 - Mortality improvement
 - Asset smoothing change from 15 years to 5 years
 - Discount rate change from 7.5% to 7.25%
 - First impact on FY14/15
- #1 - #4 based on County payroll #2

⁷ Based on CalPERS press release.

⁸ Average County paid EPMC 7.6%. Average PERSable EPMC 1.6%.

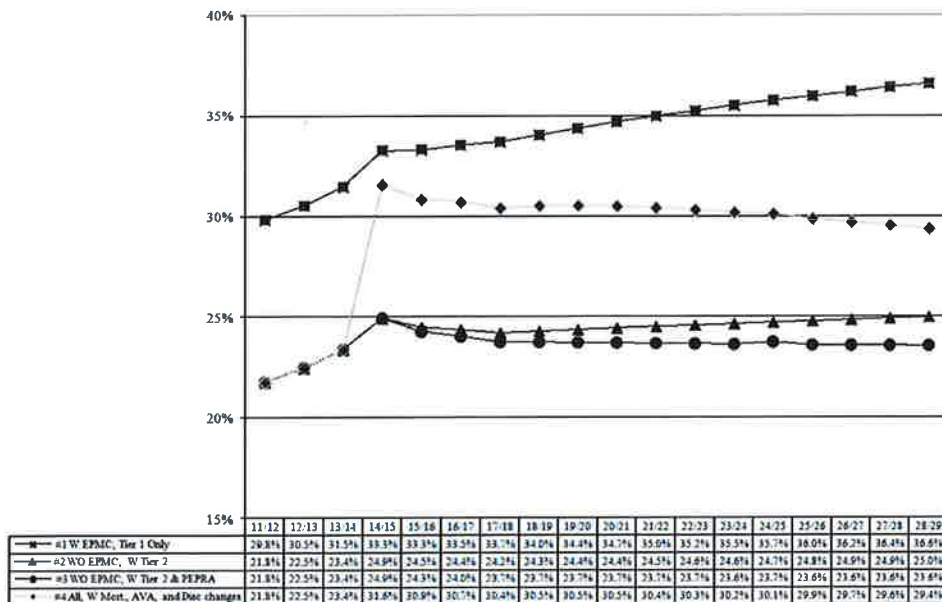


March 27, 2013



Contribution Projections Safety

**Expected Investment Return (7.50%/7.25%)
Includes POB Proceeds But Not Debt Service**

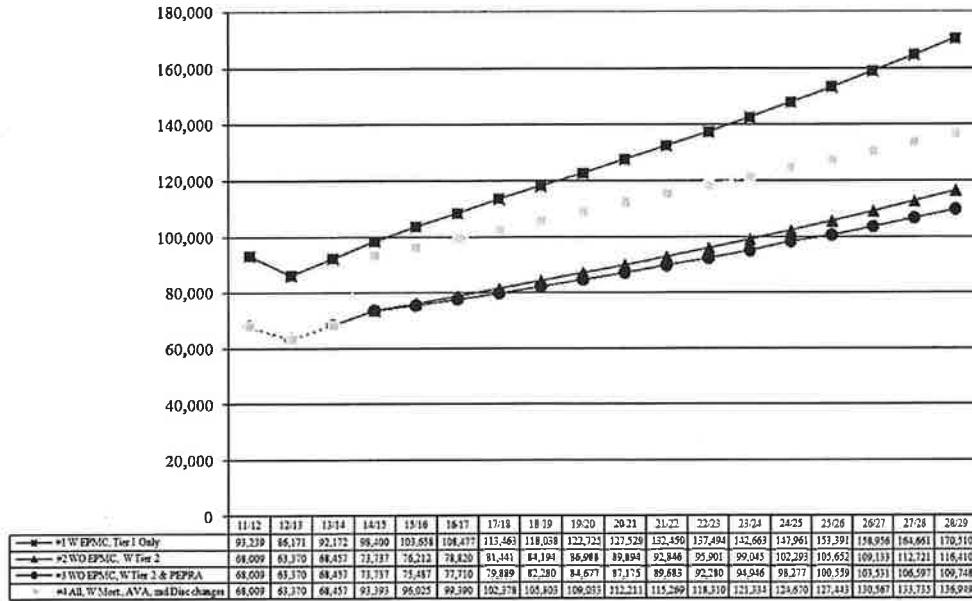


March 27, 2013



Contribution Projections Safety

Expected Investment Return (7.50%/7.25%)
Includes POB Proceeds But Not Debt Service



March 27, 2013



Contribution Projections Safety

Employer Contribution Rate if Market Value of Assets were used

	<u>Actuarial</u> 2013/14 AVA	<u>Market</u> 2013/14 MVA
■ Plan Assets		
■ ER Normal cost	17.5%	17.5%
■ Amortization bases:	<u>5.9%</u>	<u>9.9%</u>
■ Total Contribution Rate	23.4%	27.4%
■ Amortization period	≈ 33 years	33 years



March 27, 2013



Contribution Policy

- Consider policy implications of not increasing CalPERS contributions:
 - UAL not being paid off
 - Generational shift of Unfunded Liability
- Similar to minimum payment on credit card balance
- Consider one of the following:
 - **Adjust contribution to get rate close to rate prior to asset smoothing modification**
 - Requires changing amortization period each year
 - Asking CalPERS to use "Fresh Start"
 - Higher rates 2013/14 and beyond
 - **Use one time money to buy down the UAL**
 - Requires discussing with CalPERS before sending money



March 27, 2013

59



POB (Millions) Bond Proceeds Balance

	<u>Safety</u>	<u>Misc.</u>	<u>Total</u>
■ POB @ 2/16/05	\$ 85.7	\$ 311.2	\$ 396.9
■ Earnings to 6/30/05 ⁹	3.8	13.8	17.6
■ Amortization Payment through 6/30/05 ¹⁰	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
■ Balance @ 6/30/05	89.5	325.0	414.5
■ Earnings to 2/15/06 ⁹	6.5	23.7	30.3
■ Amortization Payment through 2/15/06 ¹⁰	<u>(3.4)</u>	<u>(12.2)</u>	<u>(15.6)</u>
■ Balance @ 2/15/06	92.7	336.5	429.2
■ Earnings 2/16 - 6/30/06 ⁹	\$ 4.0	\$ 14.5	\$ 18.5
■ Amortization payment through 6/30/06 ¹⁰	<u>(2.0)</u>	<u>(7.3)</u>	<u>(9.3)</u>
■ Balance @ 6/30/06	94.7	343.7	438.4

⁹ Estimated based on CalPERS market value returns: 12.2% for 04/05, 11.9% for 05/06, 18.8% for 06/07, -5.1% for 07/08, -24.0% for 2008/09, 13.3% for 2009/10, 20.7% for 2010/11, 1.0% for 2011/12 and an estimated 9.2% for 2012/13.

¹⁰ Based on a rolling 30-year amortization except CalPERS 6/30/04 reports show no reduction in 04/05 contribution



March 27, 2013

60



POB (Millions)
Bond Proceeds Balance

	<u>Safety</u>	<u>Misc.</u>	<u>Total</u>
■ Balance @ 6/30/06	94.7	343.7	438.4
■ Earnings 7/1/06 - 2/15/07 ⁹	10.8	39.1	49.9
■ Amortization payment through 2/15/07 ¹⁰	<u>(3.6)</u>	<u>(12.9)</u>	<u>(16.5)</u>
■ Balance @ 2/15/07	101.9	369.9	471.8
■ Earnings 2/16 - 6/30/07 ⁹	6.8	24.7	31.5
■ Amortization payment through 6/30/07 ¹⁰	<u>(2.3)</u>	<u>(8.3)</u>	<u>(10.6)</u>
■ Balance @ 6/30/07	106.4	386.3	492.7
■ Earnings 7/1/07- 2/15/08 ^{9, 11}	(3.4)	(12.4)	(15.9)
■ Amortization payment through 2/15/08 ¹⁰	<u>(4.0)</u>	<u>(14.5)</u>	<u>(18.5)</u>
■ Balance @ 2/15/08	99.0	359.4	458.4
■ Earnings 2/16 - 6/30/08 ⁹	(1.9)	(7.0)	(8.9)
■ Amortization payment through 6/30/08 ¹⁰	<u>(2.2)</u>	<u>(8.1)</u>	<u>(10.3)</u>
■ Balance @ 6/30/08	94.8	344.3	439.1

¹¹ February 4, 2008 discussion outline showed \$37.1 estimated earnings. Adjusted because CalPERS does not credit earnings except at fiscal year end (June 30).



March 27, 2013



POB (Millions)
Bond Proceeds Balance

	<u>Safety</u>	<u>Misc.</u>	<u>Total</u>
■ Balance @ 6/30/08	94.8	344.3	439.1
■ Earnings 7/1/08- 2/15/09 ⁹	(14.9)	(54.3)	(69.2)
■ Amortization payment through 2/15/09 ¹⁰	<u>(3.6)</u>	<u>(12.9)</u>	<u>(16.5)</u>
■ Balance @ 2/15/09	76.3	277.1	353.4
■ Earnings 2/16 - 6/30/09 ⁹	(7.5)	(27.1)	(34.6)
■ Amortization payment through 6/30/09 ¹⁰	<u>(1.7)</u>	<u>(6.2)</u>	<u>(7.9)</u>
■ Balance @ 6/30/09	67.1	243.8	310.9
■ Earnings 7/1/09- 2/15/10 ⁹	5.5	19.8	25.2
■ Amortization payment through 2/15/10 ¹⁰	<u>(2.5)</u>	<u>(9.1)</u>	<u>(11.7)</u>
■ Balance @ 2/15/10	70.1	254.4	324.5
■ Earnings 2/16 - 6/30/10 ⁹	3.4	12.2	15.6
■ Amortization payment through 6/30/09 ¹⁰	<u>(1.6)</u>	<u>(5.7)</u>	<u>(7.3)</u>
■ Balance @ 6/30/10	71.9	260.9	332.7
■ Earnings 7/1/10- 2/15/11 ⁹	9.4	34.1	43.5
■ Amortization payment through 2/15/11 ¹⁰	<u>(2.7)</u>	<u>(9.8)</u>	<u>(12.5)</u>
■ Balance @ 2/15/11	78.5	285.1	363.7



March 27, 2013



POB (Millions)
Bond Proceeds Balance

	<u>Safety</u>	<u>Misc.</u>	<u>Total</u>
■ Earnings 2/16 - 6/30/11 ⁹	6.0	21.8	27.8
■ Amortization payment through 6/30/10 ¹⁰	<u>(2.9)</u>	<u>(10.7)</u>	<u>(13.7)</u>
■ Balance @ 6/30/11	81.6	296.2	377.8
■ Earnings 7/1/11- 2/15/12 ⁹	0.5	1.8	2.4
■ Amortization payment through 2/15/12 ¹⁰	<u>(3.1)</u>	<u>(11.1)</u>	<u>(14.2)</u>
■ Balance @ 2/15/12	79.0	287.0	366.0
■ Earnings 2/16 - 6/30/12 ⁹	.3	1.1	1.4
■ Amortization payment through 6/30/12 ¹⁰	<u>(3.0)</u>	<u>(10.8)</u>	<u>(13.7)</u>
■ Balance @ 6/30/12	76.4	277.3	353.6
■ Earnings 7/1/12- 2/15/13 ⁹	4.3	15.7	20.1
■ Amortization payment through 2/15/13 ¹⁰	<u>(2.9)</u>	<u>(10.4)</u>	<u>(13.3)</u>
■ Balance @ 2/15/13	77.8	282.6	360.5



March 27, 2013

63



POB (Millions)
Bond Proceeds Balance
Payments

	<u>Principal</u>	<u>Interest</u>	<u>Total</u>	<u>Balance</u>
■ 2/17/05	n/a	n/a	n/a	\$400.0
■ 8/15/05	n/a	9.4	9.4	400.0
■ 2/15/06	3.2	9.5	12.7	396.8
■ 8/15/06	n/a	9.5	9.5	396.8
■ 2/15/07	4.0	9.5	13.4	392.9
■ 8/15/07	n/a	9.4	9.4	392.9
■ 2/15/08	4.9	9.4	14.3	388.0
■ 8/15/08	n/a	9.3	9.3	388.0
■ 2/15/09	5.9	9.3	15.2	382.1
■ 8/15/09	n/a	9.2	9.2	382.1
■ 2/15/10	7.0	9.2	16.2	375.1
■ 8/15/10	n/a	9.1	9.1	375.1
■ 2/15/11	8.2	9.1	17.2	366.9



March 27, 2013

64



POB (Millions)
Bond Proceeds Balance

	Payments			Balance
	Principal	Interest	Total	
■ 8/15/11	n/a	8.9	8.9	366.9
■ 2/15/12	9.4	8.9	18.3	357.5
■ 8/15/12	n/a	8.7	8.7	357.5
■ 2/15/13	10.8	8.7	19.5	346.8



March 27, 2013



POB (Millions)
Estimated Savings

■ Net Estimated Gains through February 15, 2013:	
A. CalPERS Estimated Balance	\$ 360.5
B. Bond Proceeds Balance	346.8
C. Cash Flow Savings/(Deficit) [Payments that would have been paid to CalPERS less POB debt service]	(8.7)
D. Net [(A) – (B) + (C)]	5.0
■ Net Estimated Gains through February 15, 2013:	
E. CalPERS Investment Earnings	\$155.1
F. POB Interest Payments	147.0
G. Cost of Issuance	3.1
H. Net [(E) – (F) – (G)]	5.0
■ Above estimates based on market rate of return. Savings (losses) based on actuarial rate of return would be higher (lower).	



March 27, 2013



POB (Millions)

Safety

	<u>6/30/05</u>	<u>6/30/06</u>	<u>6/30/07</u>	<u>6/30/08</u>	<u>6/30/09</u>	<u>6/30/10</u>	<u>6/30/11</u> ¹²	<u>Proj.</u> <u>6/30/12</u> ¹³	<u>Proj.</u> <u>6/30/13</u> ¹⁴
(1) AAL	\$ 1,127	\$ 1,232	\$ 1,370	\$ 1,469	\$ 1,643	\$ 1,810	\$ 2,032	\$ 2,180	\$ 2,335
(2) AVA	<u>1,069</u>	<u>1,170</u>	<u>1,291</u>	<u>1,414</u>	<u>1,511</u>	<u>1,625</u>	<u>1,748</u>	<u>1,867</u>	<u>1,996</u>
(3) UAAL [(1) - (2)]	58	62	79	55	132	185	284	313	339
(4) Funding Ratio [(2)/(1)]	94.9%	95.0%	94.2%	96.3%	92.0%	89.9%	86.0%	85.6%	85.5%
(5) POB Balance	\$ 86	\$ 86	\$ 85	\$ 84	\$ 83	\$ 81	\$ 79	\$ 77	\$ 75
(6) Net AVA [(2) - (5)]	983	1,084	1,206	1,330	1,428	1,544	1,669	1,790	1,921
(7) Net Funding Ratio [(6)/(1)]	87.2%	88.0%	88.0%	90.5%	86.9%	85.3%	82.1%	82.1%	82.3%

¹² 6/30/11 CalPERS published rate 21.7%.

¹³ 6/30/12 CalPERS published rate 1.0%.

¹⁴ Projected 6/30/13 AVA based on modified asset smoothing method and estimated 2012/13 CalPERS investment return 9.2%, which is based on CalPERS 10/31/12 published rate of return of 4.1%, and 7.50% from 11/1/12 through 6/30/13.



March 27, 2013



POB (Millions)

Miscellaneous

	<u>6/30/05</u>	<u>6/30/06</u>	<u>6/30/07</u>	<u>6/30/08</u>	<u>6/30/09</u>	<u>6/30/10</u>	<u>6/30/11</u> ¹⁵	<u>Proj.</u> <u>6/30/12</u> ¹⁶	<u>Proj.</u> <u>6/30/13</u> ¹⁷
(1) AAL	\$ 2,472	\$ 2,742	\$ 3,029	\$ 3,350	\$ 3,790	\$ 4,097	\$ 4,462	\$ 4,778	\$ 5,107
(2) AVA	<u>2,365</u>	<u>2,600</u>	<u>2,894</u>	<u>3,175</u>	<u>3,401</u>	<u>3,662</u>	<u>3,923</u>	<u>4,174</u>	<u>4,435</u>
(3) UAAL [(1) - (2)]	107	142	135	175	389	435	539	604	672
(4) Funding Ratio [(2)/(1)]	95.7%	94.8%	95.5%	94.8%	89.7%	89.4%	87.9%	87.4%	86.8%
(5) POB Balance	\$ 314	\$ 311	\$ 308	\$ 304	\$ 300	\$ 294	\$ 288	\$ 280	\$ 272
(6) Net AVA [(2) - (5)]	2,051	2,289	2,586	2,871	3,101	3,368	3,635	3,894	4,163
(7) Net Funding Ratio [(6)/(1)]	83.0%	83.5%	85.4%	85.7%	81.8%	82.2%	81.5%	81.5%	81.5%

¹⁵ 6/30/11 CalPERS published rate 21.7%.

¹⁶ 6/30/12 CalPERS published rate 1.0%.

¹⁷ Projected 6/30/13 AVA based on modified asset smoothing method and estimated 2012/13 CalPERS investment return 9.5%, which is based on CalPERS 10/31/12 published rate of return of 4.3%, and 7.50% from 11/1/12 through 6/30/13.



March 27, 2013



POB (Millions)

		Total								
		<u>6/30/05</u>	<u>6/30/06</u>	<u>6/30/07</u>	<u>6/30/08</u>	<u>6/30/09</u>	<u>6/30/10</u>	<u>6/30/11¹⁸</u>	<u>Proj. 6/30/12¹⁹</u>	<u>Proj. 6/30/13²⁰</u>
(1)	AAL	\$ 3,599	\$ 3,974	\$ 4,399	\$ 4,819	\$ 5,433	\$ 5,907	\$ 6,494	\$ 6,958	\$ 7,442
(2)	AVA	<u>3,434</u>	<u>3,770</u>	<u>4,185</u>	<u>4,589</u>	<u>4,912</u>	<u>5,287</u>	<u>5,671</u>	<u>6,041</u>	<u>6,431</u>
(3)	UAAL [(1) - (2)]	165	204	214	230	521	620	823	917	1011
(4)	Funding Ratio [(2)/(1)]	95.4%	94.9%	95.1%	95.2%	90.4%	89.5%	87.3%	86.8%	86.4%
(5)	POB Balance	\$ 400	\$ 397	\$ 393	\$ 388	\$ 383	\$ 375	\$ 367	\$ 358	\$ 347
(6)	Net AVA [(2) - (5)]	3,034	3,373	3,792	4,201	4,529	4,912	5,304	5,683	6,084
(7)	Net Funding Ratio [(6)/(1)]	84.3%	84.9%	86.2%	87.2%	83.4%	83.2%	81.7%	81.7%	81.8%

¹⁸ 6/30/11 CalPERS published rate 21.7%.

¹⁹ 6/30/12 CalPERS published rate 1.0%.

²⁰ Projected 6/30/13 AVA based on modified asset smoothing method and estimated 2012/13 CalPERS investment return 9.2%, which is based on CalPERS 10/31/12 published rate of return of 4.1%, and 7.50% from 11/1/12 through 6/30/13.



March 27, 2013

69



GASB 68

■ Pension Accounting:

- GASB 68, Accounting for Employers, approved June 25, 2012
- Replaces GASB 27
- Effective 2014/15

■ Major Issues:

- Unfunded liability on balance sheet
 - Expense calculation disconnected from contribution calculation
 - Discount rate is
 - Expected return on plan assets when assets sufficient to pay benefits
 - Municipal bond rate when assets not sufficient to pay benefits
- Likely cause CalPERS to modify assets smoothing and/or amortization policy*

■ Other Issues:

- Immediate recognition of AAL for plan changes
- Deferred recognition for gains & losses and assumption changes over active and inactive members' average future working lifetime
- Deferred recognition of investment gains & losses over 5 years
- Disclosure of asset allocation and expected real rates of return by asset class
- Entry age normal cost method



March 27, 2013

70



Actuarial Investment Return
Development of 7.5% Discount Rate

■ History:

	6/30/09	6/30/10	6/30/11
● Real rate of return			
□ 50% Confidence Level	5.04%	4.78%	4.78%
□ Margin for adverse deviation	(0.29)	(0.03)	(0.03)
● Price Inflation	<u>3.00</u>	<u>3.00</u>	<u>2.75</u>
● Total	7.75%	7.75%	7.50%

■ Details of New Assumption:

	Project Period (Years)		New
	1-10	11-19	
● Real rate of return			
□ 50% Confidence Level	4.23%	5.39%	4.78%
● Price Inflation	<u>2.75</u>	<u>2.75</u>	<u>2.75</u>
● Total	6.98%	8.14%	7.53%



March 27, 2013



Actuarial Investment Return

- Lowered assumed price inflation rate from 3% to 2.75%
- Current expected net real rate of return remains at 4.75%
- Margin for adverse deviation remains low
 - difference between expected net long-term rate of return and discount rate
 - margin of conservatism
- CalPERS Chief Actuary recommended 0.28% margin
 - Bartel Associates typically recommends 0.25% to 0.50% margin

	6/30/11			
● Real rate of return	4.75%	4.75%	4.50%	4.50%
● Price Inflation	<u>3.00</u>	<u>2.75</u>	<u>3.00</u>	<u>2.75</u>
● Total	7.75%	7.50%	7.50%	7.25%
● 2013/14 ER Rate - Misc	13.8%	15.6% ²¹	17.4%	19.2%
● 2013/14 ER Rate - Safety	22.5%	24.1% ²²	25.7%	27.3%

²¹ Shown full impact of discount rate change, without phase in.

²² Shown full impact of discount rate change, without phase in.



March 27, 2013



PEPRA Summary

- **New Members** – Generally, employees hired after 1/1/13 who did not previously participate in a reciprocal retirement system
- **Pension Formulas for New Members**
 - Miscellaneous – 2.5% @ 67; earliest svc. ret. age 52
 - Safety – 2% @ 57, 2.5% @ 57, and 2.7% @ 57; earliest svc. ret. age 50
- **Plan Compensation Limit for New Members**
 - \$113,700 (100% of 2013 Social Security Wage Base)
 - \$136,440 (120% for members not in Social Security)
 - Increasing annually with CPI
 - Employer can provide a defined contribution plan for pay above the limit
- **Final Compensation for New Members**
 - Highest average plan compensation over 36 consecutive months
 - Plan compensation is the normal monthly rate of pay or base pay
- **Cost Sharing**
 - Target of 50% of total normal cost
 - New members must pay greatest of 50% of total normal cost, amount paid by similar current members, or bargained amount if higher
 - Employers cannot pay any part of new member required employee contributions
 - Employer may impose current employees paying 50% of total normal cost (with certain limits) if not agreed through collective bargaining by 1/1/18



March 27, 2013

73



PEPRA Summary

- **Benefit Enhancements**
 - Benefit enhancements after 1/1/13 apply only to future service
 - No limits on COLAs
- **Safety Industrial Disability**
 - Increase in benefit for those under 50 with long service
 - Trial period ending 1/1/18
- **Supplemental Defined Benefit Pension Plans**
 - Employer cannot adopt a supplemental defined benefit pension plan after 1/1/13
 - New employees cannot participate in existing plan
- **Pension Holidays**
 - Total employer and employee contributions cannot be less than the normal cost
- **Air Time Service Purchase**
 - Eliminated for all members 1/1/13
- **OPEB**
 - An employer cannot provide better vesting schedule to unrepresented employees as is provided to represented employees
 - Law is unclear whether applies:
 - Only to vesting schedule or also to the amount of benefit provided
 - To new members, existing members, and/or current retirees



March 27, 2013

74



PEPRA Cost Sharing

- Target of 50% of total normal cost for everyone
- *New members* must pay greater of 50% of total normal cost or bargained amount if higher
- Employer cannot pay any part of *new member* required employee contributions
- Employer may impose current employees pay 50% of total normal cost (limited to certain amounts) if not agreed through collective bargaining by 1/1/18
- Miscellaneous Plan:

	<u>Tier 1</u>	<u>Tier 2</u>	
	<u>Current Members</u>		<u>New Members</u>
● Total Normal Cost			
● Employer Normal Cost	11.1%	6.8%	6.5%
● Member Normal Cost	<u>8.0%</u>	<u>7.0%</u>	<u>6.5%</u>
● Total Normal Cost	19.1%	13.8%	13.0%
● 50% Target	9.55%	6.9%	6.5%



March 27, 2013

75



PEPRA Cost Sharing

- Safety Plan

	<u>Tier 1</u>	<u>Tier 2</u>	
	<u>Current Members</u>		<u>New Members</u>
● Total Normal Cost			
● Employer Normal Cost	17.5%	13.2%	10.75%
● Member Normal Cost	<u>9.0%</u>	<u>9.0%</u>	<u>10.75%</u>
● Total Normal Cost	26.5%	22.2%	21.50%
● 50% Target	13.25%	11.1%	10.75%



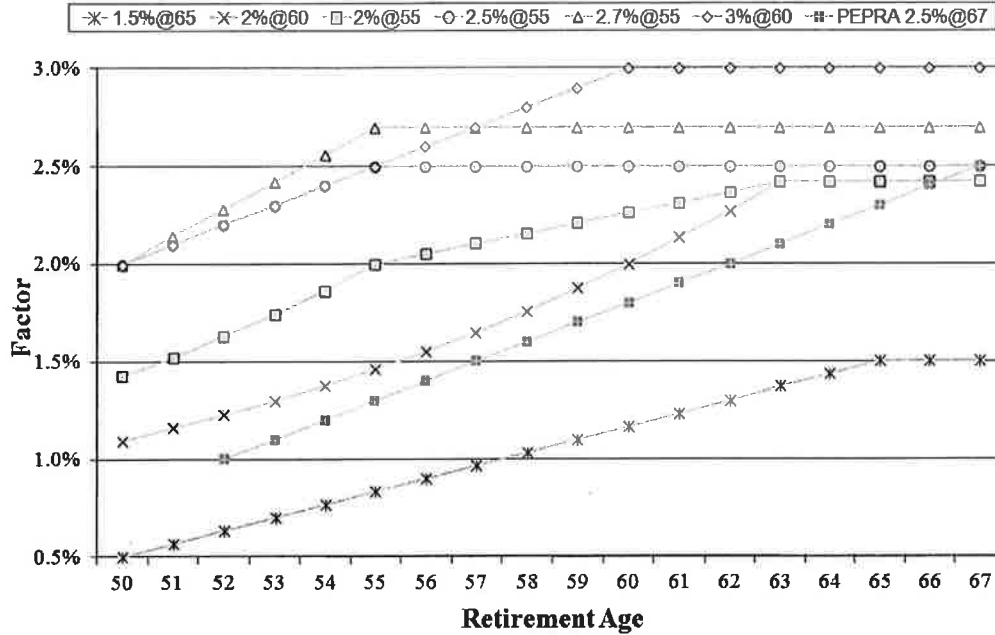
March 27, 2013

76



California Public Employees' Pension Reform Act of 2013 Miscellaneous Benefit Factors

Benefit Factor Comparison



March 27, 2013



California Public Employees' Pension Reform Act of 2013 Miscellaneous Benefit Factors

<u>Age</u>	<u>1.5%@65</u>	<u>2%@60</u>	<u>2%@55</u>	<u>2.5%@55</u>	<u>2.7%@55</u>	<u>3%@60</u>	<u>PEPRA 2.5%@67</u>
50	0.500%	1.092%	1.426%	2.000%	2.000%	2.000%	n/a
51	0.567%	1.156%	1.522%	2.100%	2.140%	2.100%	n/a
52	0.633%	1.224%	1.628%	2.200%	2.280%	2.200%	1.000%
53	0.700%	1.296%	1.742%	2.300%	2.420%	2.300%	1.100%
54	0.767%	1.376%	1.866%	2.400%	2.560%	2.400%	1.200%
55	0.833%	1.460%	2.000%	2.500%	2.700%	2.500%	1.300%
56	0.900%	1.552%	2.052%	2.500%	2.700%	2.600%	1.400%
57	0.967%	1.650%	2.104%	2.500%	2.700%	2.700%	1.500%
58	1.033%	1.758%	2.156%	2.500%	2.700%	2.800%	1.600%
59	1.100%	1.874%	2.210%	2.500%	2.700%	2.900%	1.700%
60	1.167%	2.000%	2.262%	2.500%	2.700%	3.000%	1.800%
61	1.233%	2.134%	2.314%	2.500%	2.700%	3.000%	1.900%
62	1.300%	2.272%	2.366%	2.500%	2.700%	3.000%	2.000%
63	1.367%	2.418%	2.418%	2.500%	2.700%	3.000%	2.100%
64	1.433%	2.418%	2.418%	2.500%	2.700%	3.000%	2.200%
65	1.500%	2.418%	2.418%	2.500%	2.700%	3.000%	2.300%
66	1.500%	2.418%	2.418%	2.500%	2.700%	3.000%	2.400%
67	1.500%	2.418%	2.418%	2.500%	2.700%	3.000%	2.500%
	Member Contribution Rate						
	2%	7%	7%	8%	8%	8%	≈6%

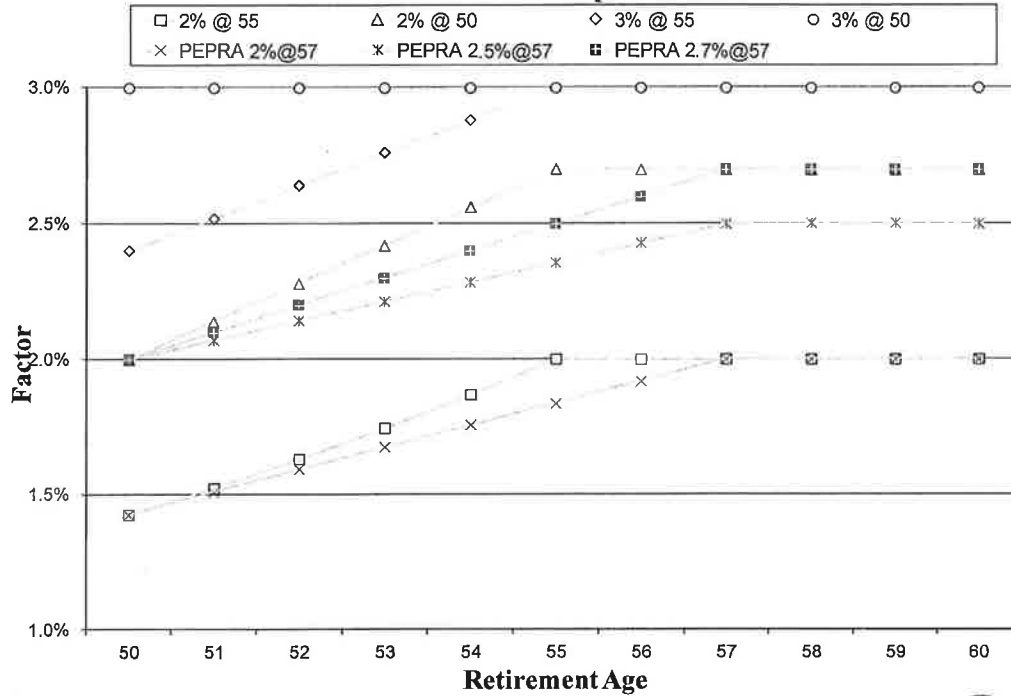


March 27, 2013



California Public Employees' Pension Reform Act of 2013 Safety Benefit Factors

Benefit Factor Comparison



March 27, 2013

79



California Public Employees' Pension Reform Act of 2013 Safety Benefit Factors

<u>Age</u>	<u>2% @ 55</u>	<u>2% @ 50</u>	<u>3% @ 55</u>	<u>3% @ 50</u>	<u>PEPRA</u> <u>2% @ 57</u>	<u>PEPRA</u> <u>2.5% @ 57</u>	<u>PEPRA</u> <u>2.7% @ 57</u>
50	1.426%	2.00%	2.40%	3.00%	1.43%	2.00%	2.00%
51	1.522%	2.14%	2.52%	3.00%	1.51%	2.07%	2.10%
52	1.628%	2.28%	2.64%	3.00%	1.59%	2.14%	2.20%
53	1.742%	2.42%	2.76%	3.00%	1.67%	2.21%	2.30%
54	1.866%	2.56%	2.88%	3.00%	1.75%	2.29%	2.40%
55	2.00%	2.70%	3.00%	3.00%	1.84%	2.36%	2.50%
56	2.00%	2.70%	3.00%	3.00%	1.92%	2.43%	2.60%
57	2.00%	2.70%	3.00%	3.00%	2.00%	2.50%	2.70%
58	2.00%	2.70%	3.00%	3.00%	2.00%	2.50%	2.70%
59	2.00%	2.70%	3.00%	3.00%	2.00%	2.50%	2.70%
60	2.00%	2.70%	3.00%	3.00%	2.00%	2.50%	2.70%

Member Contribution Rate

7%	9%	9%	9%	≈8.4%	≈10.0%	≈10.5%
----	----	----	----	-------	--------	--------



March 27, 2013

80



CalPERS Smoothing Method

	<u>CalPERS</u>
6/30/2011:	
Market Value	100.0%
Actuarial Value	112.5%
6/30/2012:	
Market Value	101.0%
Actuarial Value:	
1. Project @ 7.5%	120.9%
2. Adjust: [(MV-AV) x (1/15)]	119.6%
3. Limited by corridor	119.6%
Actuarial Rate of Return	6.3%
Ratio of Actuarial Value to Market Value	118.4%



March 27, 2013

