



CITY OF
CHULA VISTA

**CITY OF CHULA VISTA
MISCELLANEOUS AND SAFETY PLANS**

BARTEL
ASSOCIATES, LLC

**CalPERS Actuarial Issues – 6/30/13 Valuation
Preliminary Results**

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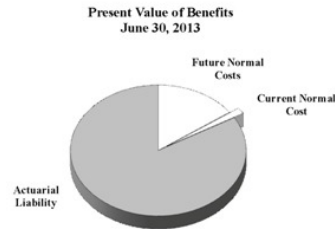
December 17, 2014

Agenda

<u>Topic</u>	<u>Page</u>
Definitions	1
CalPERS Changes	3
Miscellaneous Plan:	
Demographic Information	5
Plan Funded Status	11
Plan Maturity	13
Contribution Rates & Projections	17
Safety Plan:	
Demographic Information	23
Plan Funded Status	29
Plan Maturity	31
Contribution Rates & Projections	35
GASB 68	41
PEPRA Cost Sharing	43



DEFINITIONS



- **PVB - Present Value of all Projected Benefits:**
 - Discounted value (at valuation date - 6/30/13), 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

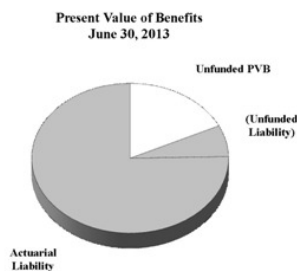


December 17, 2014

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.



December 17, 2014

2



CALPERS CHANGES

- Contribution policy changes:
 - No asset smoothing
 - 5-year ramp up
 - Future Gains/losses: 25 year amortization period
 - With 5 year ramp up means paid over 30 years
 - Method & Assumption changes: 15 year amortization period
 - With 5 year ramp up means paid over 20 years
 - No cap on rate increases each year
- Assumption changes:
 - No changes to economic assumptions
 - Anticipate future mortality improvement
 - Earlier retirements for Miscellaneous 3%@60 & Safety
 - Higher salary increases for Safety near retirement



December 17, 2014

3



CALPERS CHANGES

- Timing:
 - Contribution policy changes:
 - Included in 6/30/13 valuation (first impact 2015/16 rates)
 - Full impact in 2019/20 rates.
 - Assumption changes:
 - Included in 6/30/14 valuation (first impact 2016/17 rates)
 - Full impact in 2020/21 rates.



December 17, 2014

4



SUMMARY OF DEMOGRAPHIC INFORMATION - MISCELLANEOUS

	1994	2003	2012	2013
Actives				
■ Counts	579	797	605	603
■ Average				
• Age	43	44	47	48
• City Service	10	8	12	13
• PERSable Wages	\$42,600	\$56,000	\$68,400	\$69,500
■ Total PERSable Wages (millions)	24.0	49.1	45.2	45.8
Receiving Payments				
■ Counts				
• Service		269	525	541
• Disability		41	58	65
• Beneficiaries		<u>42</u>	<u>67</u>	<u>74</u>
• Total	216	352	650	680
■ Average Annual City Provided Benefit ¹				
• Service		\$13,400	\$29,100	\$29,700
• Disability		7,300	6,700	6,300
• Service Retirements in last 5 years		20,200	34,900	27,600

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

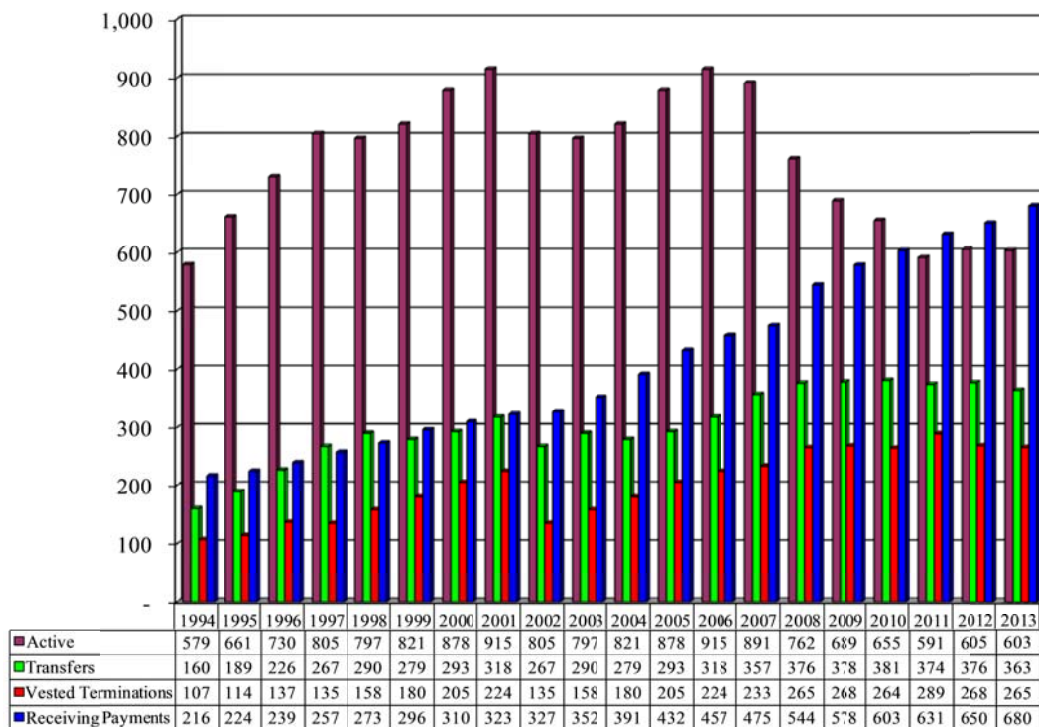


December 17, 2014

5



MEMBERS INCLUDED IN VALUATION - MISCELLANEOUS



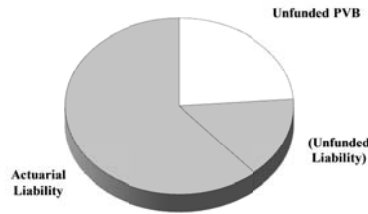
December 17, 2014

6

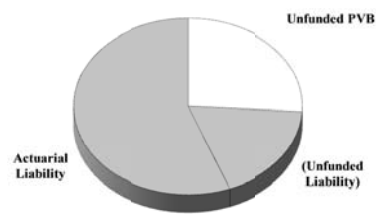


PLAN FUNDED STATUS - MISCELLANEOUS

Present Value of Benefits
June 30, 2012



Present Value of Benefits
June 30, 2013



<u>June 30, 2012</u>		<u>June 30, 2013</u>	
\$ 396,000,000	Actuarial Liability	\$ 414,500,000	
299,700,000	Actuarial Asset Value	316,500,000	
(96,300,000)	(Unfunded Liability)	(98,000,000)	
<u>June 30, 2012</u>		<u>June 30, 2013</u>	
\$ 396,000,000	Actuarial Liability	\$ 414,500,000	
250,000,000	Market Asset Value	278,900,000	
(146,000,000)	(Unfunded Liability)	(135,600,000)	



December 17, 2014

7



PLAN FUNDED STATUS - MISCELLANEOUS

- What happened between 6/30/12 and 6/30/13?
 - Market Value Asset Gain/(Loss) ≈ 15.1 million
 - Unfunded Liability (Increase)/Decrease ≈ (39.3) million
- Reasons for Unfunded Liability increase
 - Actuarial Asset gain/(loss):
 - Change from actuarial value to market value ≈ (37.5) million
 - Investment return ≈ (2.7) million
 - Actuarial gain/(loss): ≈ 1.7 million
 - Average Salary \$68,400 → \$69,500
 - Number of Actives 605 → 603
 - Number of Inactives 644 → 628
 - Number of Retirees 650 → 680
 - Other gain/(loss): ≈ (0.7) million
 - Contributions
 - Other (expected)

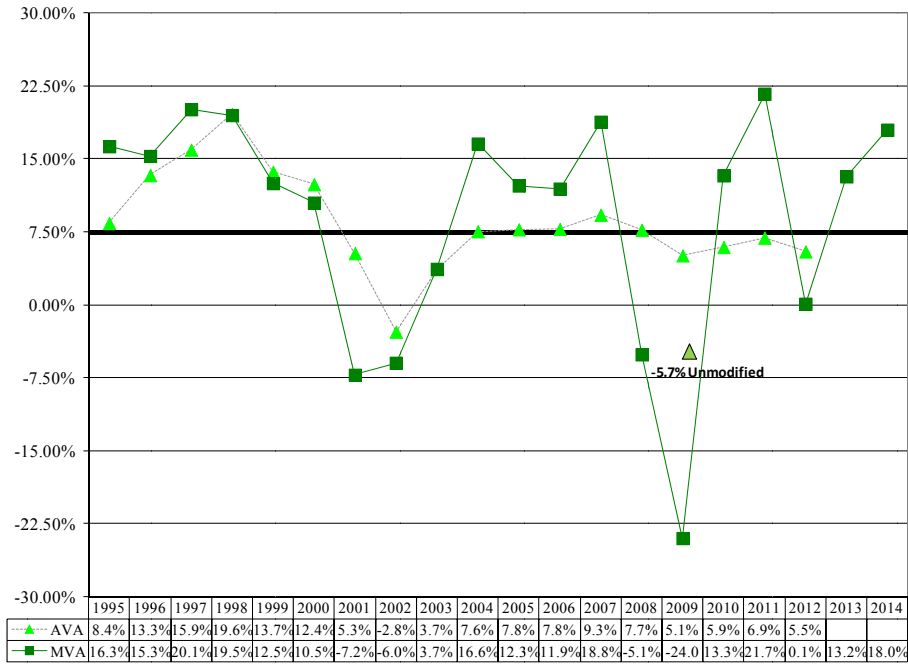


December 17, 2014

8



INVESTMENT RETURN - MISCELLANEOUS



Above assumes contributions, payments, etc. received evenly throughout year.
June 30, 2014 return of 18.0% used in CalPERS report.

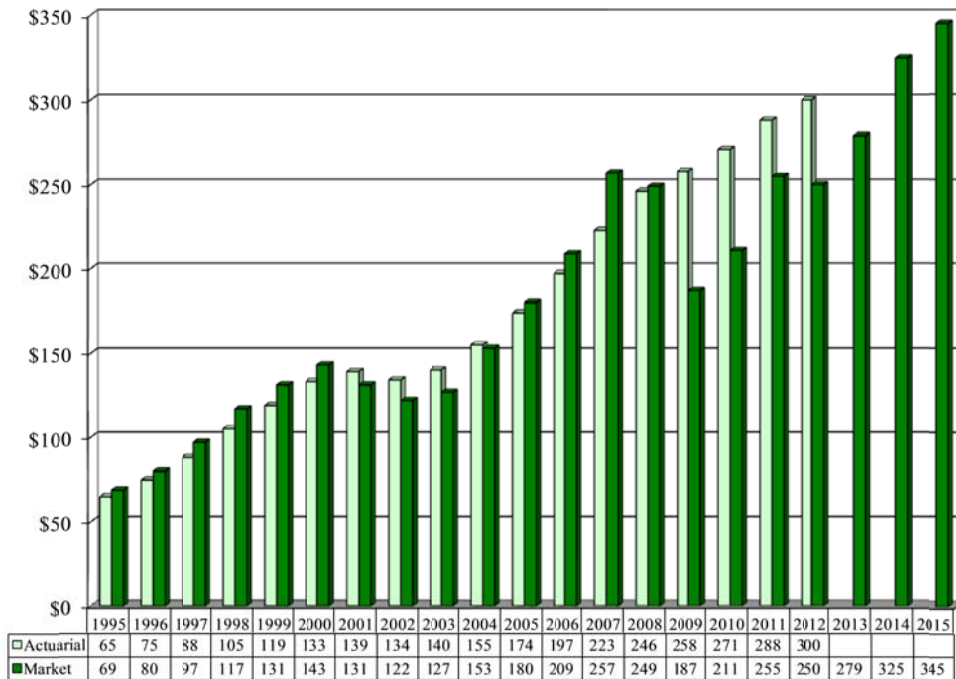


December 17, 2014

9



ASSET VALUES (MILLIONS) - MISCELLANEOUS



6/30/14 & 6/30/15 asset values estimated.

AVA is being set equal to MVA and a separate AVA is not available starting 6/30/13.

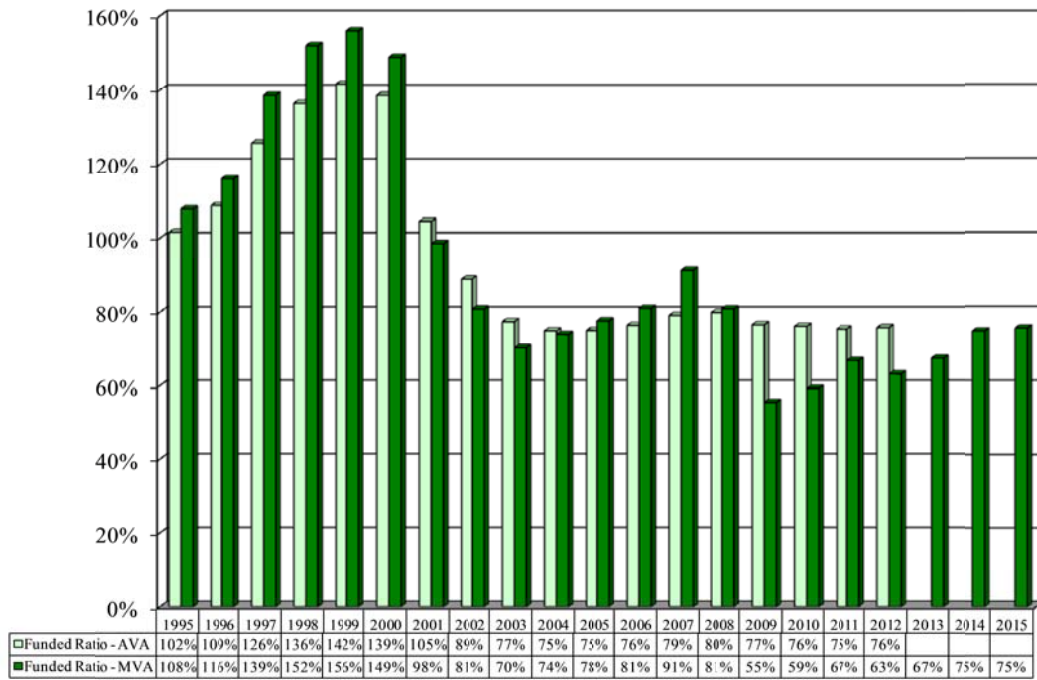


December 17, 2014

10



FUNDED RATIO - MISCELLANEOUS



6/30/14 & 6/30/15 funded status estimated.

AVA is being set equal to MVA and a separate AVA is not available starting 6/30/13.

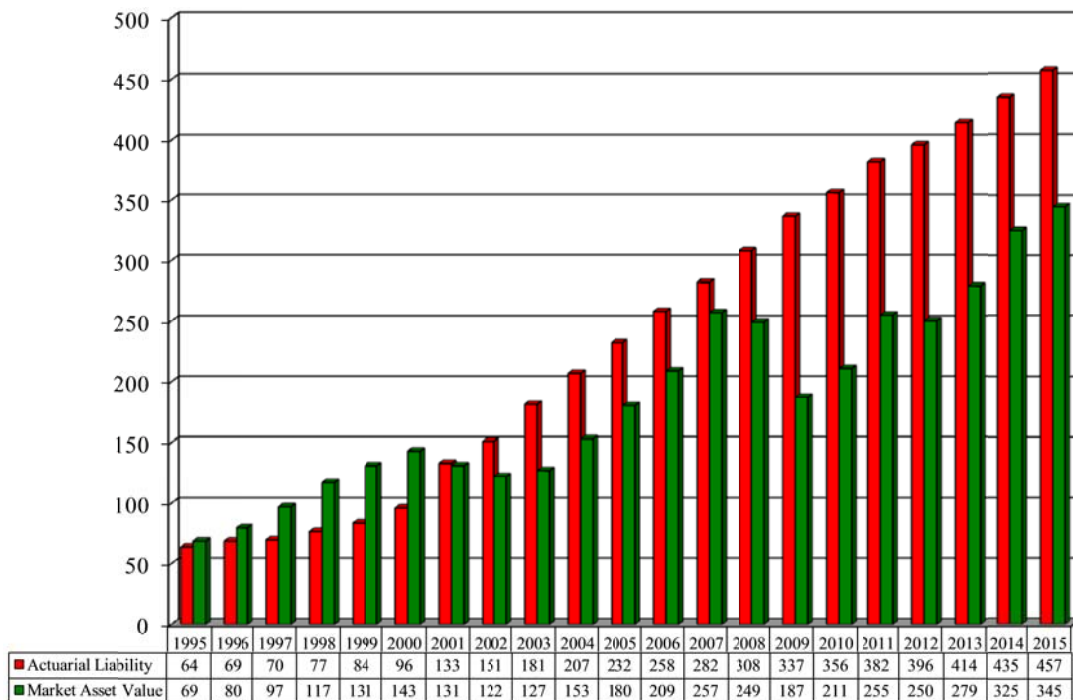


December 17, 2014

11



FUNDED STATUS (MILLIONS) - MISCELLANEOUS



6/30/14 & 6/30/15 funded status estimated



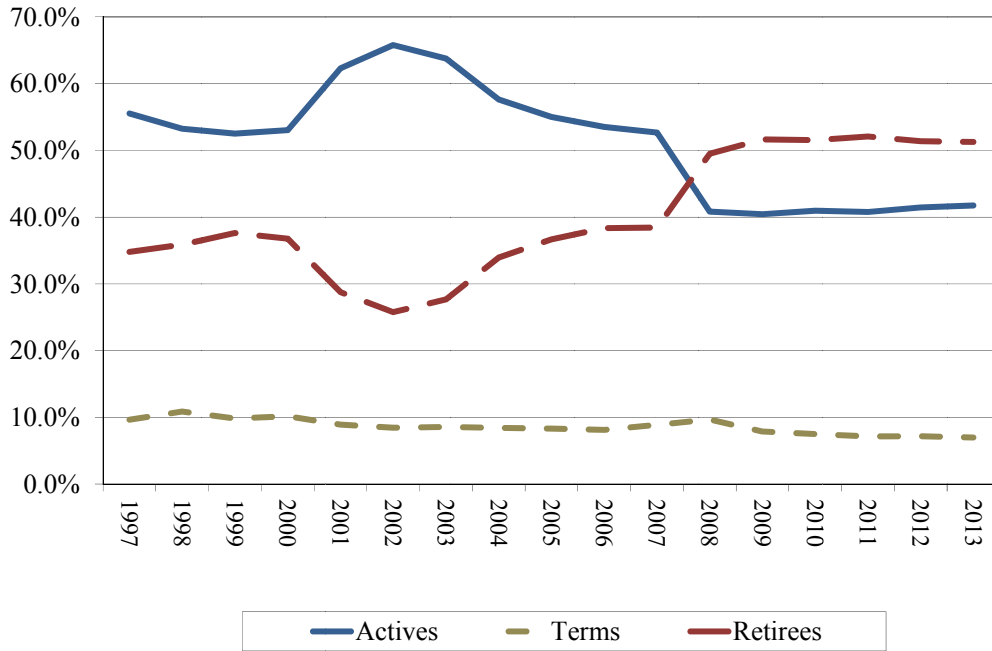
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12



PLAN MATURITY - MISCELLANEOUS

% of Total AAL Line Graph with Actives, VTs and Retirees



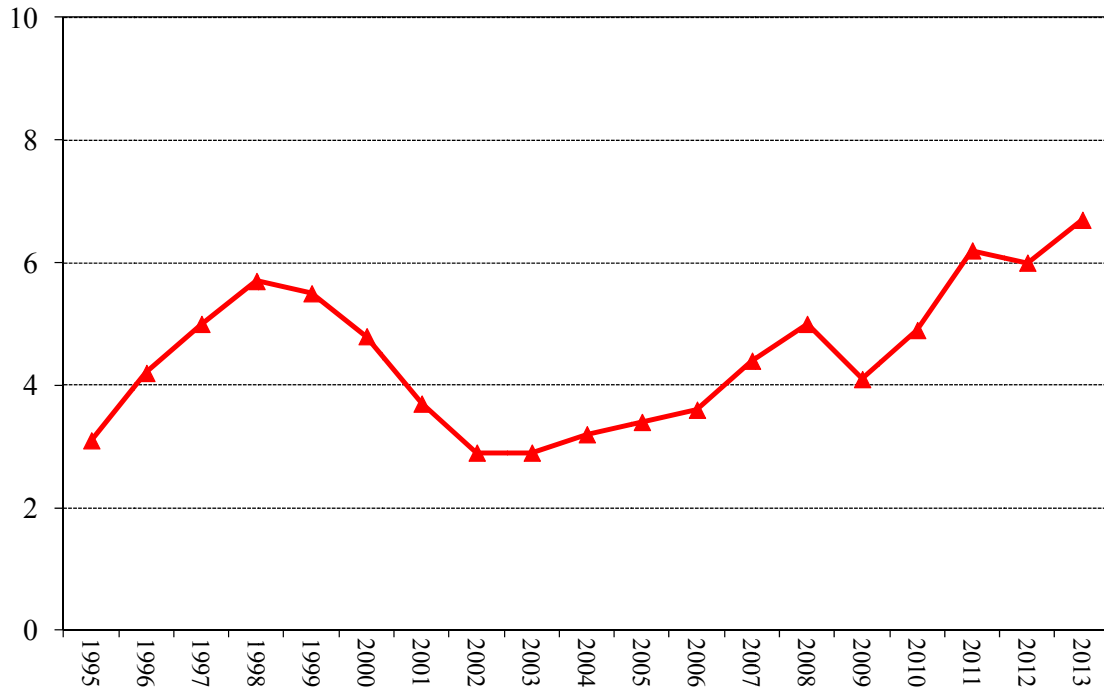
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13



PLAN MATURITY - MISCELLANEOUS

Asset Volatility Index: Ratio of MVA to Payroll



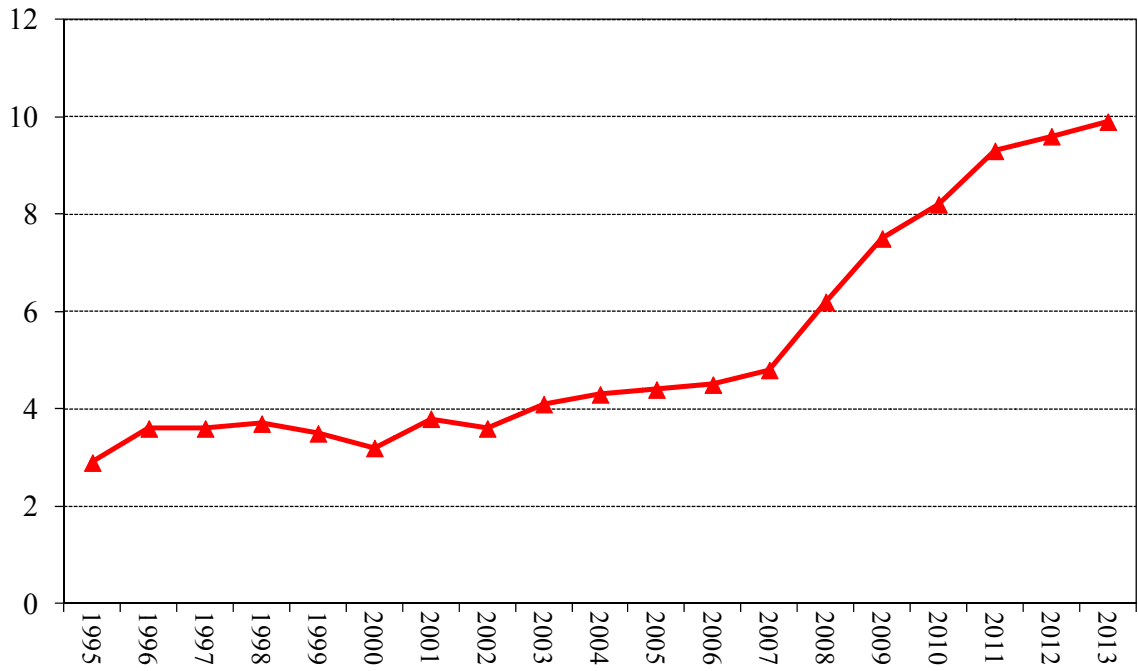
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14



PLAN MATURITY - MISCELLANEOUS

Liability Volatility Index: Ratio of AAL to Payroll



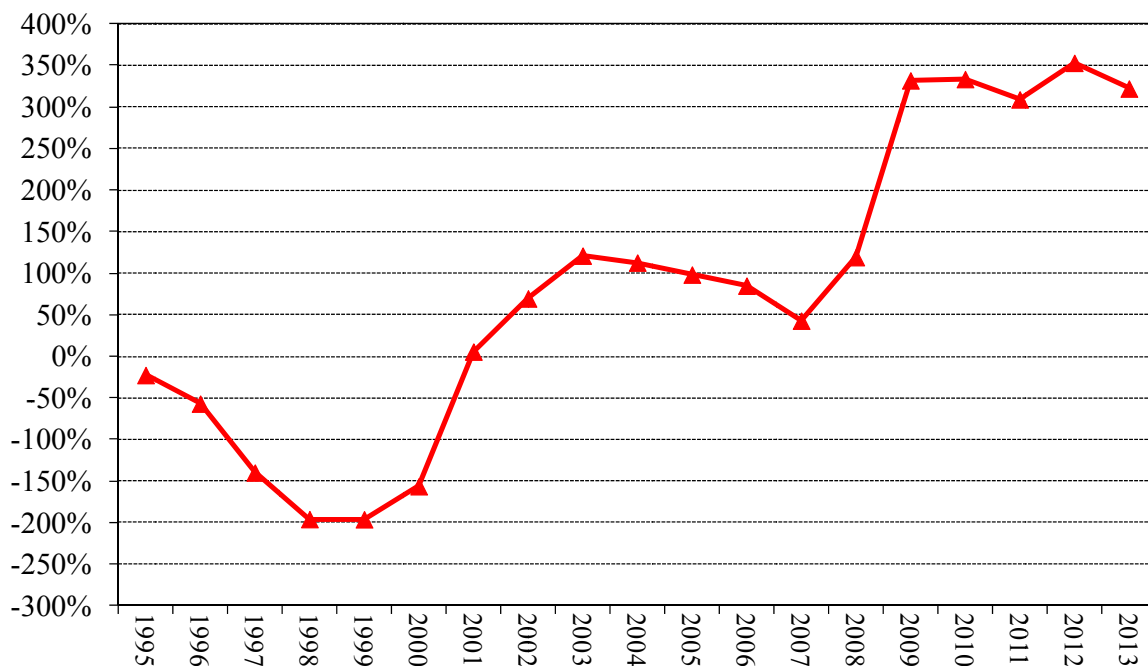
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15



PLAN MATURITY - MISCELLANEOUS

Unfunded Actuarial Accrued Liability as % of Payroll

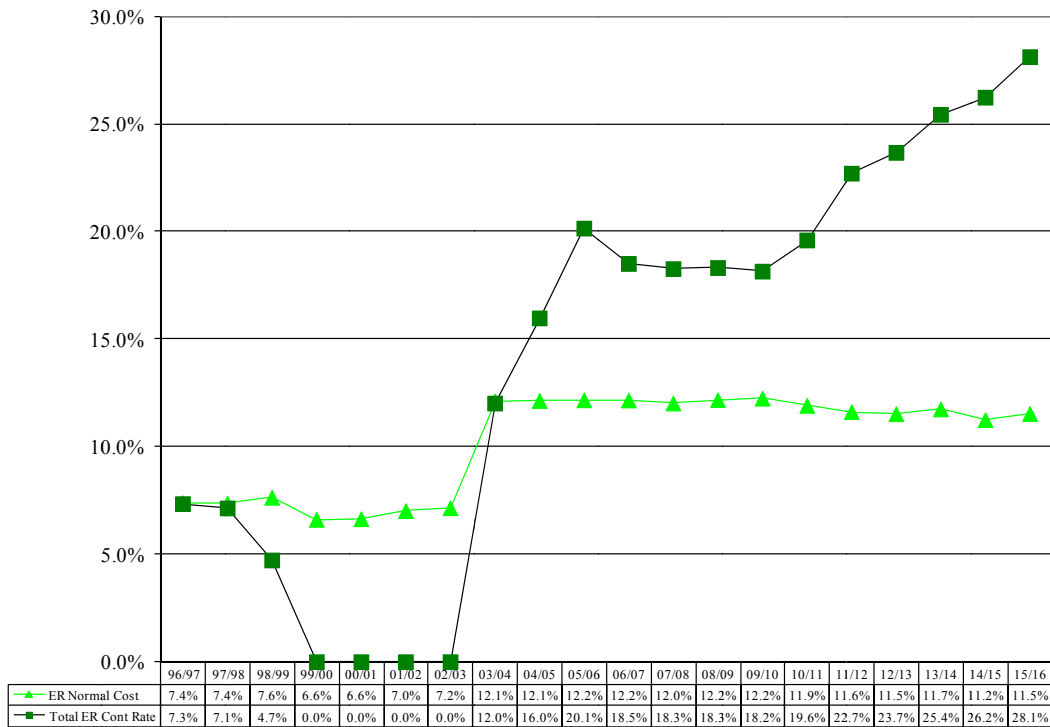


December 17, 2014

16



CONTRIBUTION RATES - MISCELLANEOUS



December 17, 2014

17



CONTRIBUTION RATES - MISCELLANEOUS

	<u>6/30/12</u> <u>2014/2015</u>	<u>6/30/13</u> <u>2015/2016</u>
■ Total Normal Cost	19.2%	19.5%
■ Employee Normal Cost	7.9%	7.9%
■ Employer Normal Cost	11.2%	11.5%
■ Amortization Bases:	<u>15.0%</u>	<u>16.6%</u>
■ Total Employer Contribution Rate	26.2%	28.1%
■ What Happened from 6/30/12 to 6/30/13:		
● 2014/15 Rate	26.2%	
● Asset Method Change	1.3%	
● (Gain)/Losses	<u>0.5%</u>	
● 2015/16 Rate	28.1%	



December 17, 2014

18



CONTRIBUTION PROJECTIONS - MISCELLANEOUS

- Market Value Investment Return:
 - June 30, 2012 0.1%²
 - June 30, 2013 13.2%³
 - June 30, 2014 18.0%⁴

- June 30, 2015 - 2019

<u>Poor</u>	<u>Expected</u>	<u>Good</u>
0.2% - 4.3%	7.5%	10.6% - 15.1%
- No Other: Gains/Losses, Method/Assumption Changes, Benefit Improvements
- Excludes Employer Paid Member Contributions (EPMC)
- Includes CalPERS Board adopted assumption changes, first impact 2016/17
- Includes Tier 2 2.0%@60 effective April 22, 2011
- New hire assumptions:
 - Assumes 50% of 2013 new hires will be Classic Tier 2 Members (2.0%@60) and 50% will be New Members with PEPRAs benefits.
 - Assumes Classic Members will decrease from 50% to 0% of new hires over 20 years.

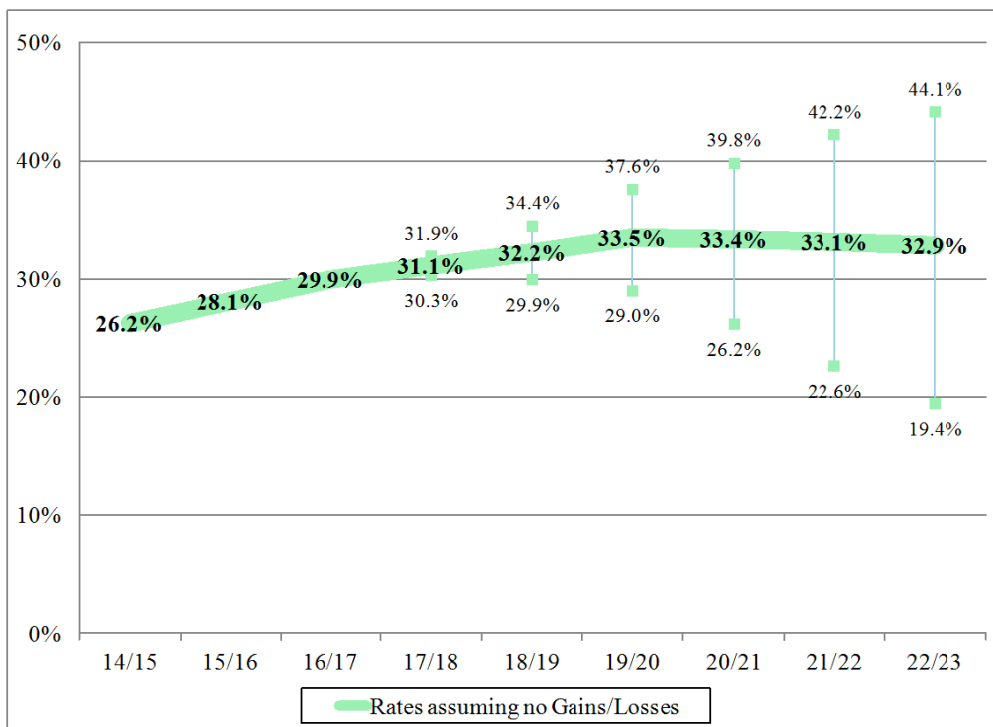
² Based on CalPERS CAFR.
³ Based on CalPERS CAFR.
⁴ Based on CalPERS 6/30/13 report.



December 17, 2014



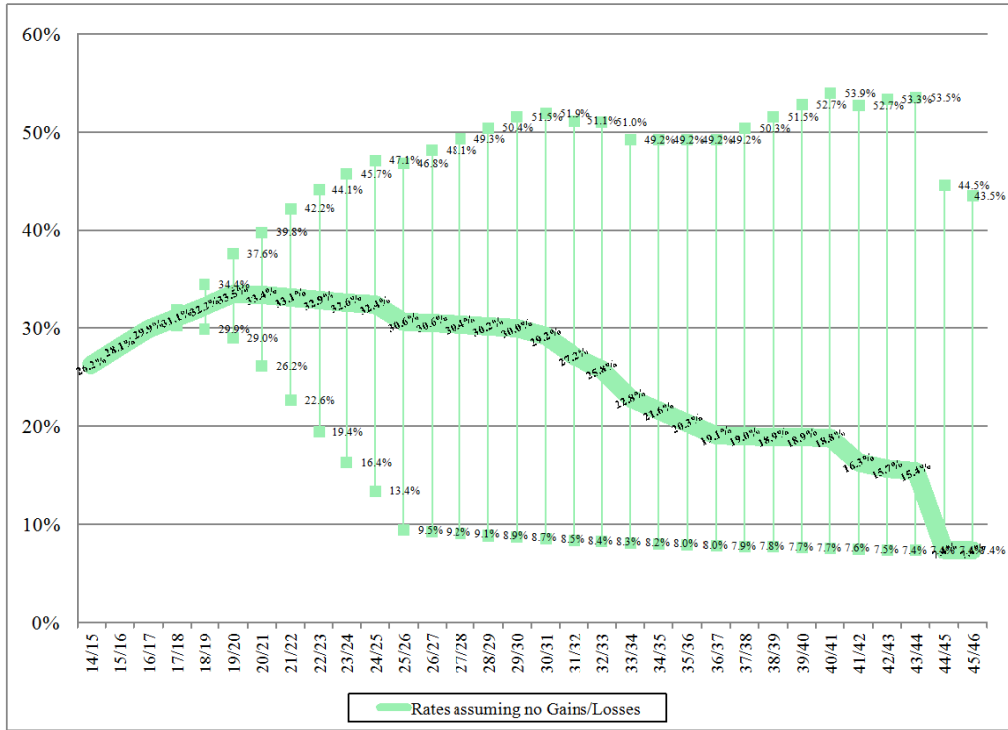
CONTRIBUTION PROJECTIONS - MISCELLANEOUS



December 17, 2014



CONTRIBUTION PROJECTIONS - MISCELLANEOUS



CONTRIBUTION PROJECTIONS - MISCELLANEOUS

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SUMMARY OF DEMOGRAPHIC INFORMATION - SAFETY

	1994	2003	2012	2013
Actives				
■ Counts	256	301	333	332
■ Average				
• Age	37	38	42	42
• City Service	11	10	13	13
• PERSable Wages	\$52,300	\$68,700	\$99,200	\$102,200
■ Total PERSable Wages (millions)	14.6	22.8	36.1	37.1
Receiving Payments				
■ Counts				
• Service		91	136	144
• Disability		97	119	128
• Beneficiaries		23	27	25
• Total	134	211	282	297
■ Average Annual City Provided Benefit ⁵				
• Service		\$33,800	\$57,200	\$57,400
• Disability		26,300	39,900	42,100
• Service Retirements in last 5 years		38,300	69,900	71,700

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

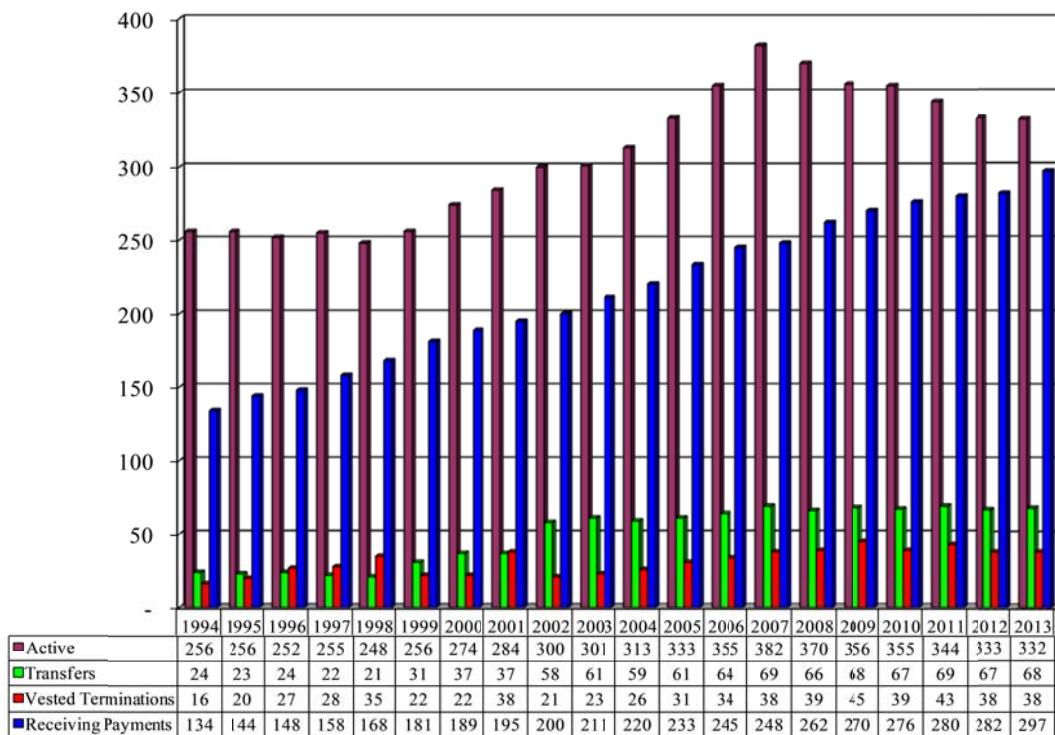


December 17, 2014

23



MEMBERS INCLUDED IN VALUATION - SAFETY



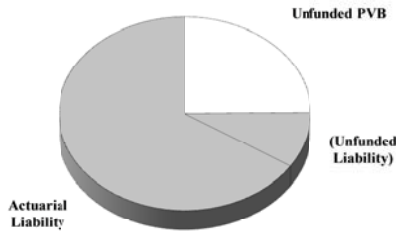
December 17, 2014

24

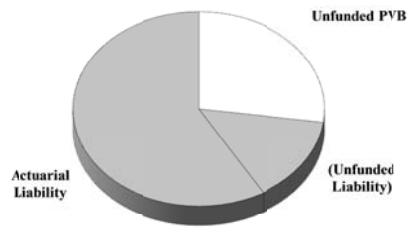


PLAN FUNDED STATUS - SAFETY

Present Value of Benefits
June 30, 2012



Present Value of Benefits
June 30, 2013



<u>June 30, 2012</u>		<u>June 30, 2013</u>
\$ 337,400,000	Actuarial Liability	\$ 362,200,000
289,300,000	Actuarial Asset Value	307,900,000
(48,100,000)	(Unfunded Liability)	(54,300,000)
<u>June 30, 2012</u>		<u>June 30, 2013</u>
\$ 337,400,000	Actuarial Liability	\$ 362,200,000
242,500,000	Market Asset Value	272,900,000
(94,900,000)	(Unfunded Liability)	(89,300,000)



December 17, 2014

25



PLAN FUNDED STATUS - SAFETY

- What happened between 6/30/12 and 6/30/13?
 - Market Value Asset Gain/(Loss) ≈ 14.7 million
 - Unfunded Liability (Increase)/Decrease ≈ (41.2) million

- Reasons for Unfunded Liability increase
 - Actuarial Asset gain/(loss):
 - Change from actuarial value to market value ≈ (35.0) million
 - Investment return ≈ (2.5) million
 - Actuarial gain/(loss): ≈ (3.9) million
 - Average Salary \$99,200 → \$102,200
 - Number of Actives 333 → 332
 - Number of Inactives 105 → 106
 - Number of Retirees 282 → 297
 - Other gain/(loss): ≈ 0.2 million
 - Contributions
 - Other (expected)

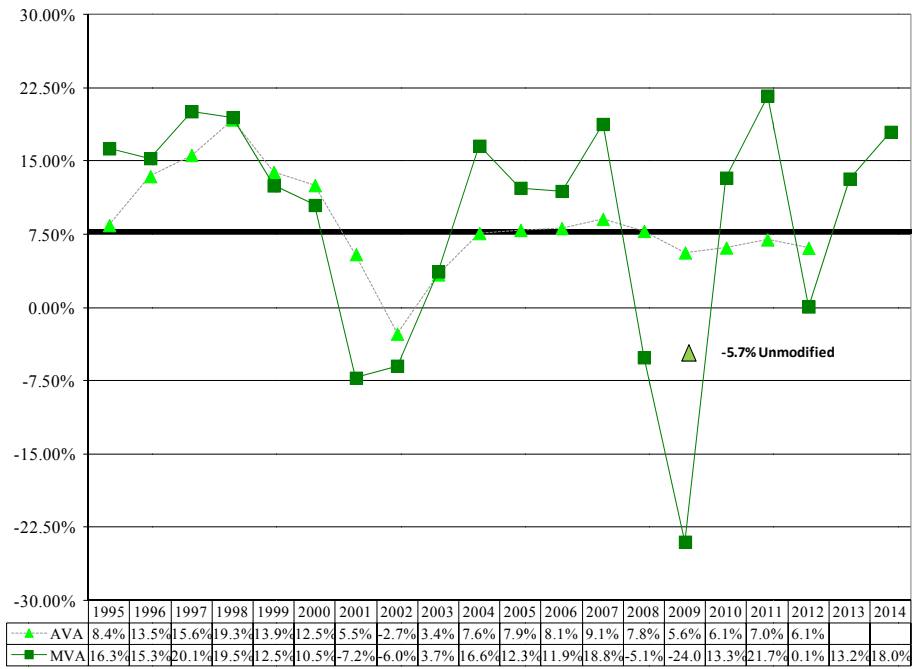


December 17, 2014

26



INVESTMENT RETURN - SAFETY



Above assumes contributions, payments, etc. received evenly throughout year.
June 30, 2014 return of 18.0% used in CalPERS report.

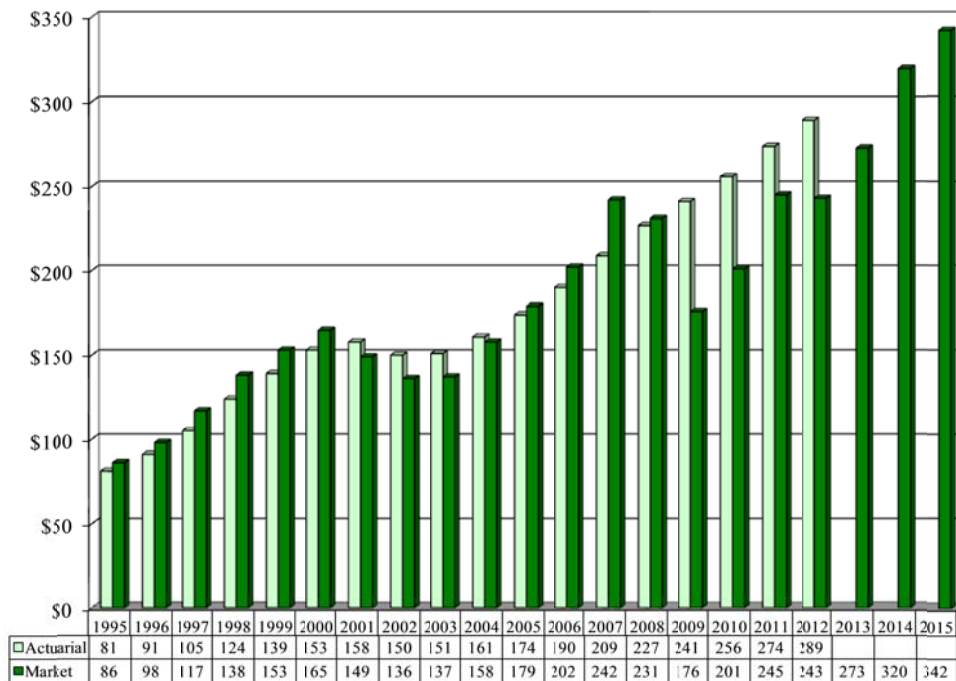


December 17, 2014

27



ASSET VALUES (MILLIONS) - SAFETY



6/30/14 & 6/30/15 asset values estimated.

AVA is being set equal to MVA and a separate AVA will not be used in future years.

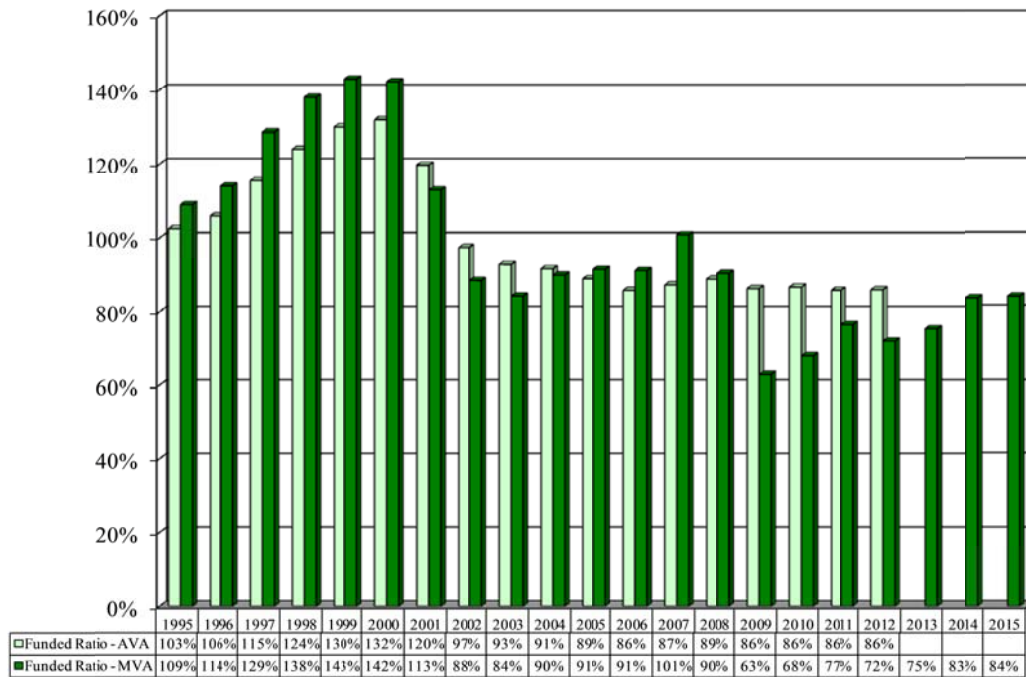


December 17, 2014

28



FUNDED RATIO - SAFETY



6/30/14 & 6/30/15 funded status estimated.

AVA is being set equal to MVA and a separate AVA will not be used in future years.

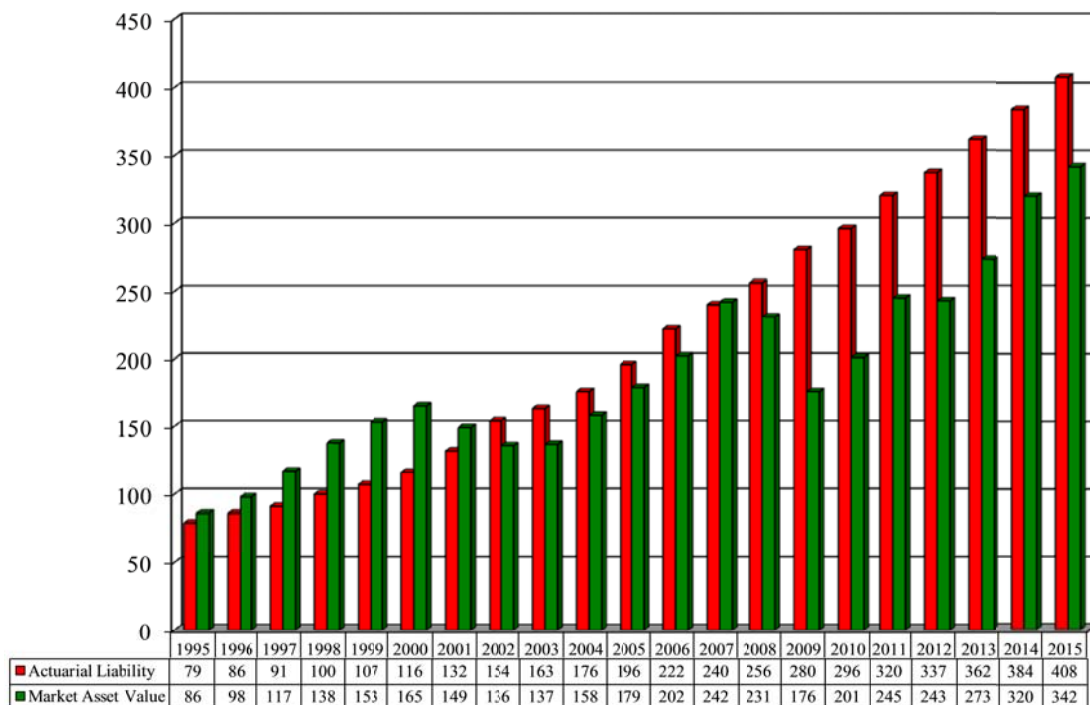


December 17, 2014

29



FUNDED STATUS (MILLIONS) - SAFETY



6/30/14 & 6/30/15 funded status estimated



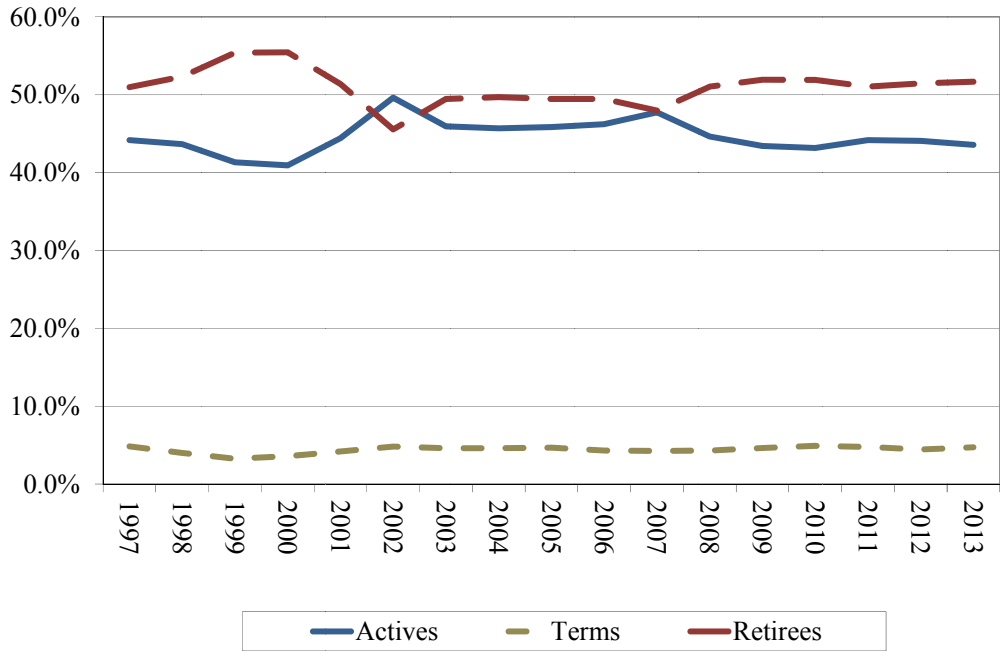
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30



PLAN MATURITY - SAFETY

% of Total AAL Line Graph with Actives, VTs and Retirees



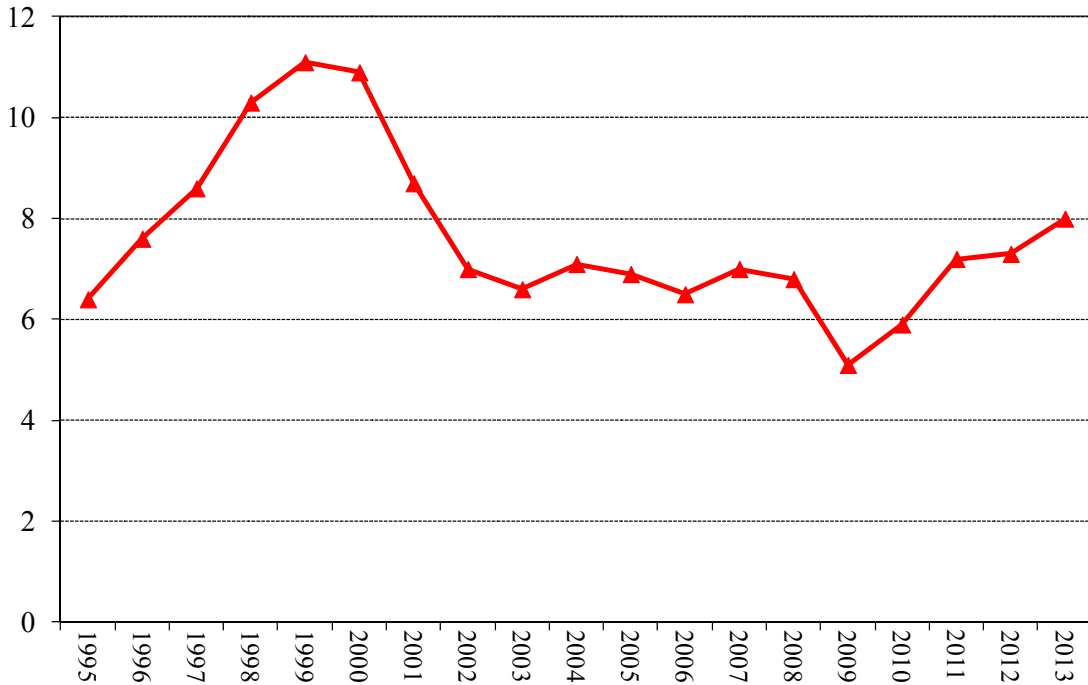
December 17, 2014

31



PLAN MATURITY - SAFETY

Asset Volatility Index: Ratio of MVA to Payroll



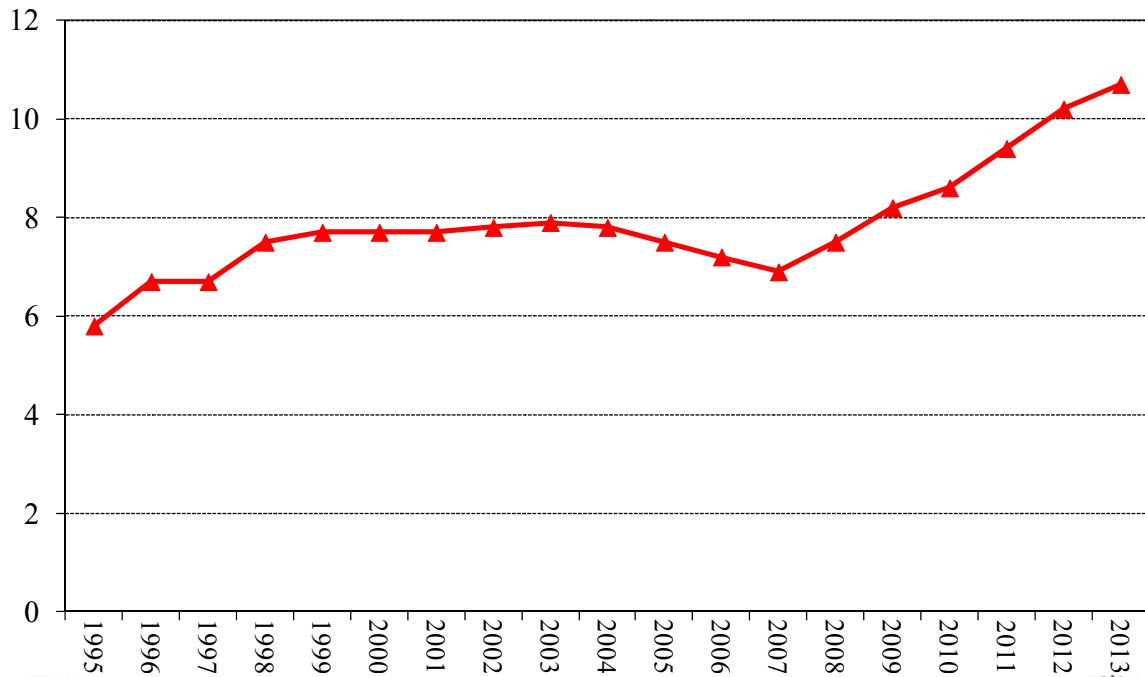
December 17, 2014

32



PLAN MATURITY - SAFETY

Liability Volatility Index: Ratio of AAL to Payroll



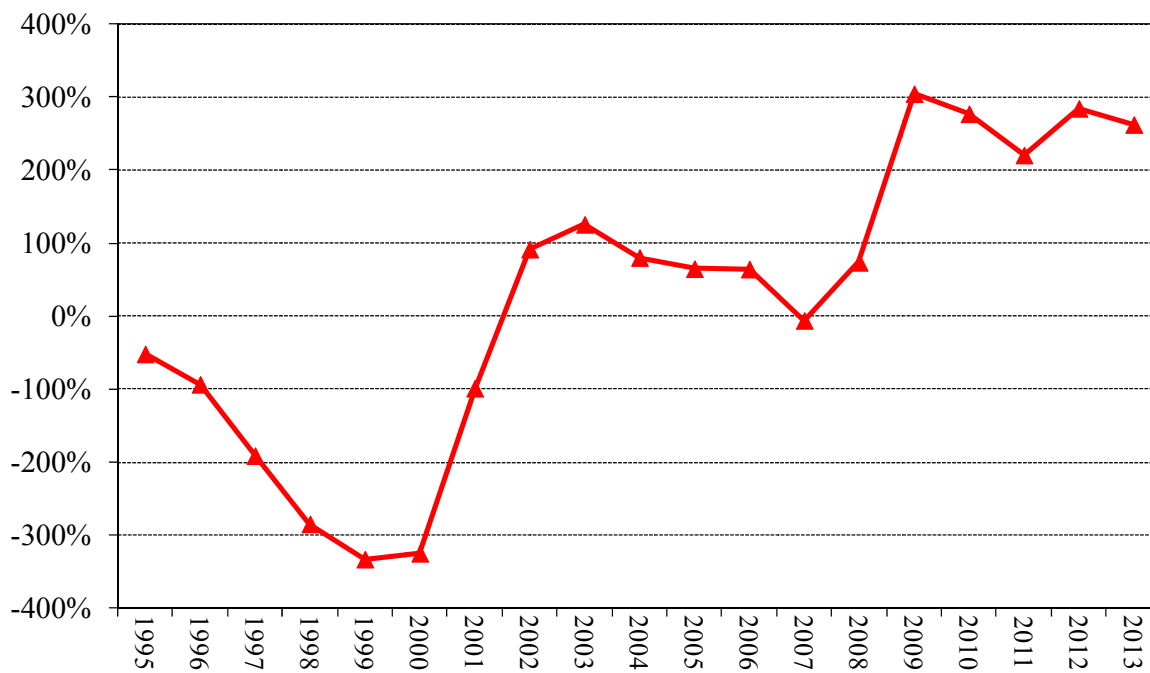
December 17, 2014

33



PLAN MATURITY - SAFETY

Unfunded Actuarial Accrued Liability as % of Payroll



December 17, 2014

34



CONTRIBUTION RATES - SAFETY



December 17, 2014

35



CONTRIBUTION RATES - SAFETY

	<u>6/30/12</u> <u>2014/2015</u>	<u>6/30/13</u> <u>2015/2016</u>
■ Total Normal Cost	28.6%	28.4%
■ Employee Normal Cost	9.0%	9.0%
■ Employer Normal Cost	19.6%	19.4%
■ Amortization Bases	<u>9.2%</u>	<u>11.0%</u>
■ Total Employer Contribution Rate	28.9%	30.4%
■ What Happened from 6/30/12 to 6/30/13:		
● 2014/15 Rate	28.9%	
● Asset Method Change	1.6%	
● (Gain)/Losses	<u>(0.1)%</u>	
● 2015/16 Rate	30.4%	



December 17, 2014

36



CONTRIBUTION PROJECTIONS - SAFETY

- Market Value Investment Return:
 - June 30, 2012 0.1%⁶
 - June 30, 2013 13.2%⁷
 - June 30, 2014 18.0%⁸

- June 30, 2015 - 2019

<u>Poor</u>	<u>Expected</u>	<u>Good</u>
0.2% - 4.3%	7.5%	10.6% - 15.1%
- No Other: Gains/Losses, Method/Assumption Changes, Benefit Improvements
- Excludes Employer Paid Member Contributions (EPMC)
- Includes CalPERS Board adopted assumption changes, first impact 2016/17
- Includes Tier 2, 3%@55 effective April 22, 2011
- New hire assumptions:
 - Assumes 50% of 2013 new hires will be Classic Tier 2 Members (3%@55) and 50% will be New Members with PEPRAs benefits.
 - Assumes Classic Members will decrease from 50% to 0% of new hires over 10 years

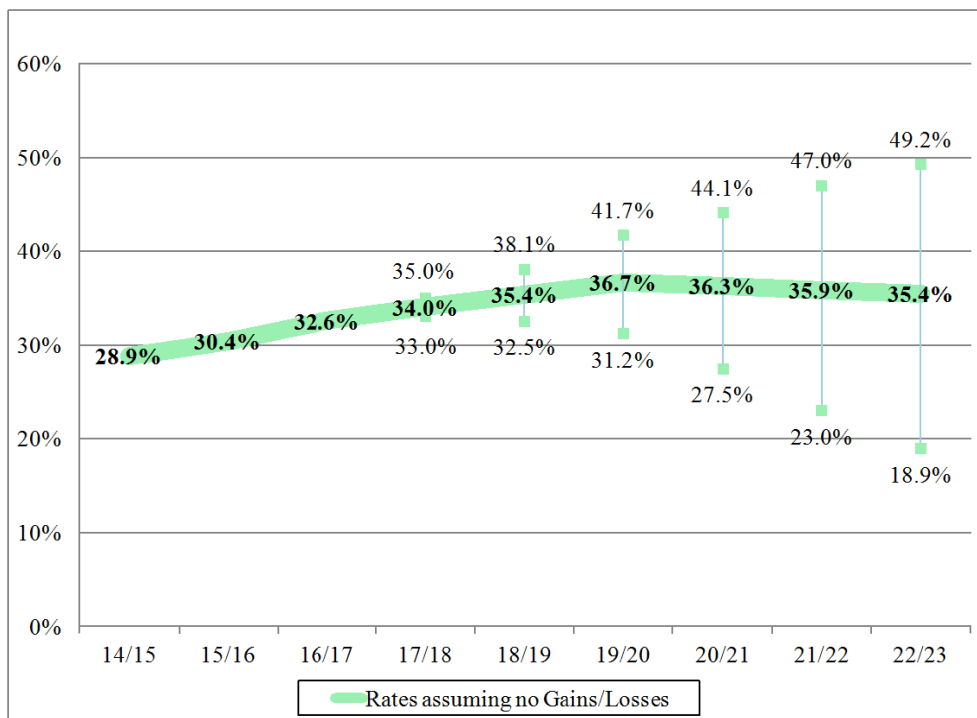
⁶ Based on CalPERS CAFR.
⁷ Based on CalPERS CAFR.
⁸ Based on CalPERS 6/30/13 report.



December 17, 2014



CONTRIBUTION PROJECTIONS - SAFETY



December 17, 2014



CONTRIBUTION PROJECTIONS - SAFETY



CONTRIBUTION PROJECTIONS - SAFETY

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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 caused CalPERS to modify assets smoothing and/or amortization policy to avoid using discount rate lower than expected return (7.5%).*

■ **Estimated June 30, 2014 Unfunded Actuarial Liability (in Millions)**

Plan	Total Pension Liability (AAL)	Fiduciary Net Position (MVA)	Net Pension Liability (UAL)
Safety	\$384	\$320	\$ 64
Miscellaneous	435	325	110
Estimated Total Net Pension Liability			\$174



December 17, 2014

41



GASB 68

■ **CalPERS:**

- Actuaries have approval from CalPERS Board to make necessary system changes & have begun work.
- Intend to provide June 30, 2015 GASB 68 information in spring 2015.
- Expect to provide only upon request.
- Will charge small fee, set in early 2015.



December 17, 2014

42



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>Current Members</u>		<u>New Members</u>
	<u>Tier 1</u>	<u>Tier 2</u>	<u>Tier 3</u>
	<u>3% @ 60</u>	<u>2% @ 60</u>	<u>2.5% @ 67</u>
	<u>FAE1</u>	<u>FAE3</u>	<u>FAE3</u>
● Employer Normal Cost	11.2%	7.2%	6.55%
● Member Normal Cost	<u>8.0%</u>	<u>7.0%</u>	<u>6.75%</u>
● Total Normal Cost	19.2%	14.2%	13.3%
● 50% Target	9.6%	7.1%	6.65%



PEPRA COST SHARING

- Safety Plan:

	<u>Current Members</u>		<u>New Members</u>
	<u>Tier 1</u>	<u>Tier 2</u>	<u>Tier 3</u>
	<u>3% @ 50</u>	<u>3% @ 55</u>	<u>2.7% @ 67</u>
	<u>FAE1</u>	<u>FAE3</u>	<u>FAE3</u>
● Employer Normal Cost	19.6%	17.1%	12.05%
● Member Normal Cost	<u>9.0%</u>	<u>9.0%</u>	<u>12.25%</u>
● Total Normal Cost	28.6%	26.1%	24.3%
● 50% Target	14.3%	13.05%	12.15%



CalPERS Background

Pension Terminology

Defined Benefit Plan

- Guaranteed annual pension based on retirement age, years of service and salary, for example
 - Public Sector – CalPERS
 - Private Sector – Generally only very large employers

Defined Contribution Plan

- Employer contribution is a fixed dollar amount; benefit based on contributions and investment earnings
 - Public Sector – 457 Plan
 - Private Sector – 401(k) Plan

Pension Terminology (cont.)

Vested Rights: As determined by CA Supreme Court

- Employee must be eligible to continue earning benefit formula in place when hired.
- Cannot be reduced or eliminated unless traded for something of equal or greater value.
- Individual right, can not be negotiated away.

Pension Terminology (cont.)

CalPERS Retirement formulas

- Options used to vary based on
 - Type of employer [State, School, Local Public Agency]
 - Occupation [Miscellaneous (office and others), Safety]
 - Contract between Agency and CalPERS
- New Law (PEPRA) now mandates formulas
- Benefit is:
 - $\text{Service} \times \text{Final Average Compensation} \times \text{Benefit Factor}$

Pension Terminology (cont.)

CalPERS Retirement formulas - City has 4 different groups

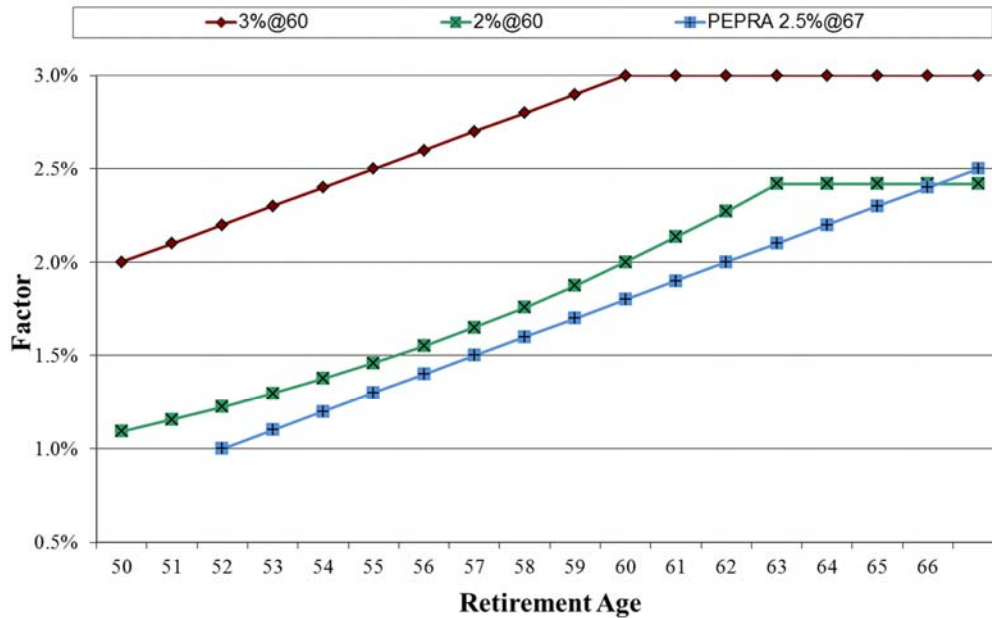
- Miscellaneous :
 - Tier 1 3.0% @ 60
 - Tier 2 2.0% @ 60
 - Tier 3 2.5% @ 67
- Safety:
 - Tier 1 3.0% @ 50
 - Tier 2 3.0% @ 55
 - Tier 3 2.7% @ 57

Pension Terminology (cont.)

Member Contributions

- Miscellaneous
 - Tier 1 8%
 - Tier 2 7%
 - Tier 3 Employee pays 6.75%
- Safety:
 - Tier 1 9%
 - Tier 2 9%
 - Tier 3 Employee pays 12.25%

Miscellaneous Benefit Factor Comparison



Note: Miscellaneous has no benefit cap



December 17, 2013

53



Benefit Factors Miscellaneous

<u>Age</u>	<u>3%@60</u>	<u>2%@60</u>	<u>PEPRA 2.5%@67</u>
50	2.000%	1.092%	n/a
51	2.100%	1.156%	n/a
52	2.200%	1.224%	1.000%
53	2.300%	1.296%	1.100%
54	2.400%	1.376%	1.200%
55	2.500%	1.460%	1.300%
56	2.600%	1.552%	1.400%
57	2.700%	1.650%	1.500%
58	2.800%	1.758%	1.600%
59	2.900%	1.874%	1.700%
60	3.000%	2.000%	1.800%
61	3.000%	2.134%	1.900%
62	3.000%	2.272%	2.000%
63	3.000%	2.418%	2.100%
64	3.000%	2.418%	2.200%
65	3.000%	2.418%	2.300%
66	3.000%	2.418%	2.400%
67	3.000%	2.418%	2.500%

Member Contribution Rate

7%

8%

≈6%



December 17, 2013

54



Pension Terminology (cont.)

CalPERS Retirement formulas

- City has 3 Miscellaneous formulas

[Retire at age 60 with \$70,000 pay and 30 years City service]:

Tier 1	3.0% @ 60	$3.0\% \times \$70,000 \times 30$	= \$63,000
Tier 2	2.0% @ 60	$2.0\% \times \$66,000 \times 30$	= \$39,600
Tier 3	2.5% @ 67	$1.8\% \times \$66,000 \times 30$	= \$35,640