



CITY OF
CHULA VISTA

CITY OF CHULA VISTA

MISCELLANEOUS AND SAFETY PLANS

BARTEL
ASSOCIATES, LLC

**CalPERS Actuarial Issues – 6/30/14 Valuation
Preliminary Results**

Presented by **John E. Bartel, President**
Prepared by Bianca Lin, Assistant Vice President
Matthew Childs, Actuarial Analyst
Bartel Associates, LLC

May 31, 2016

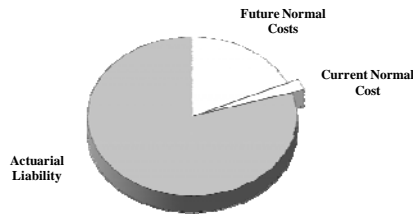
Agenda

<u>Topic</u>	<u>Page</u>
Definitions	1
CalPERS Changes	3
Miscellaneous Plan:	
Demographic Information	5
Plan Funded Status	7
Contribution Rates & Projections	11
Safety Plan:	
Demographic Information	21
Plan Funded Status	23
Contribution Rates & Projections	27
PEPRA Cost Sharing	37
Paying Down the Unfunded Liability	39



DEFINITIONS

Present Value of Benefits
June 30, 2014



- **PVB - Present Value of all Projected Benefits:**
 - Discounted value (at valuation date - 6/30/14), 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



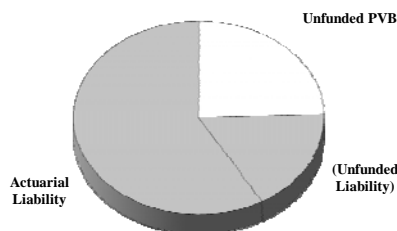
May 31, 2016

1



DEFINITIONS

Present Value of Benefits
June 30, 2014



- **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.



May 31, 2016

2



CALPERS CHANGES

- Contribution policy changes:
 - No asset smoothing
 - 5-year ramp up
 - Included in 6/30/13 valuation (first impact 15/16 rates; full impact 19/20)
- Assumption changes:
 - Anticipate future mortality improvement
 - Other, less significant, changes
 - Included in 6/30/14 valuation (first impact 16/17 rates; full impact 20/21)
- Risk Mitigation Strategy
 - Move to more conservative investments over time
 - Only when investment return is better than expected
 - Lower discount rate in concert
 - Essentially use $\approx 50\%$ of investment gains to pay for cost increases
 - Likely get to 6.5% over ≈ 20 years

CALPERS CHANGES

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SUMMARY OF DEMOGRAPHIC INFORMATION - MISCELLANEOUS

	1994	2004	2013	2014
Actives				
■ Counts	579	821	603	605
■ Average				
• Age	43	43	48	48
• City Service	10	8	13	13
• PERSable Wages	\$42,600	\$58,400	\$69,500	\$72,200
■ Total PERSable Wages (millions)	24.0	52.7	45.8	47.7
Receiving Payments				
■ Counts				
• Service		301	541	567
• Disability		42	65	67
• Beneficiaries		48	74	74
• Total	216	391	680	708
■ Average Annual City Provided Benefit ¹				
• Service		\$17,000	\$29,700	\$29,900
• Disability		7,700	6,300	6,000
• Service Retirements in last 5 years		25,700	27,600	24,300

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

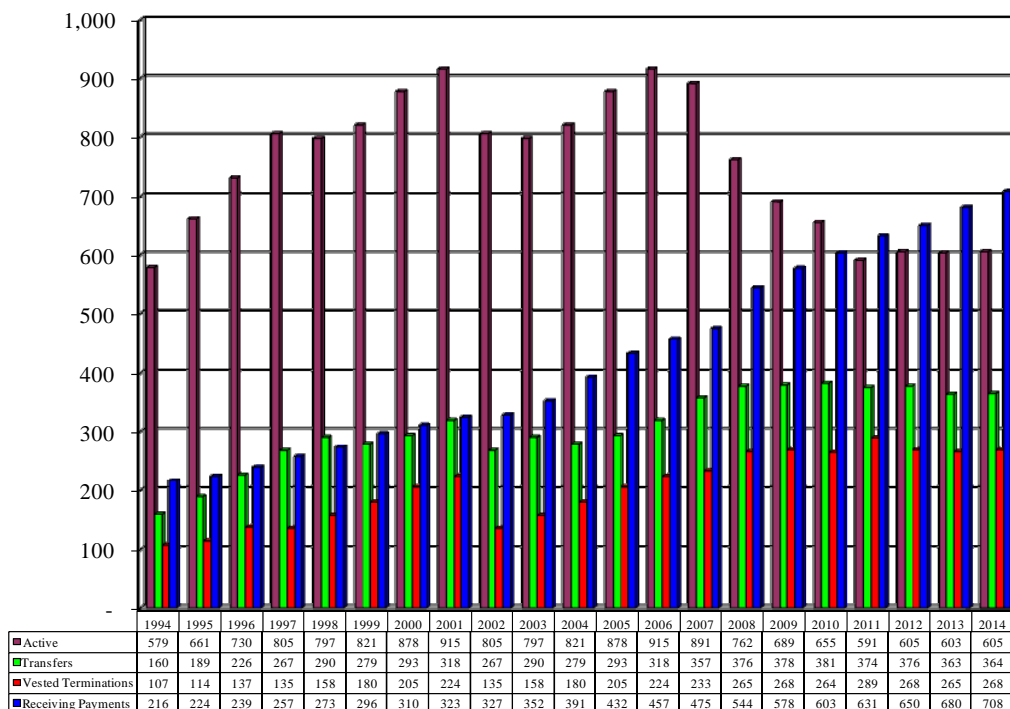


May 31, 2016

5



MEMBERS INCLUDED IN VALUATION - MISCELLANEOUS



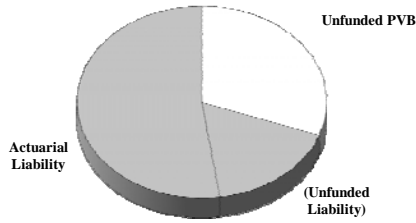
May 31, 2016

6

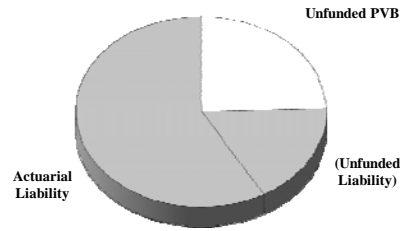


PLAN FUNDED STATUS - MISCELLANEOUS

Present Value of Benefits
June 30, 2013



Present Value of Benefits
June 30, 2014



<u>June 30, 2013</u>		<u>June 30, 2014</u>
\$ 173,100,000	Active AAL	\$ 195,800,000
212,500,000	Retiree AAL	233,100,000
<u>28,900,000</u>	Inactive AAL	<u>30,900,000</u>
414,500,000	Total AAL	459,800,000
<u>278,900,000</u>	Market Value of Assets	<u>324,300,000</u>
(135,600,000)	(Unfunded AAL)	(135,500,000)



May 31, 2016

7



PLAN FUNDED STATUS - MISCELLANEOUS

- What happened between 6/30/13 and 6/30/14?
 - Unfunded Liability (Increase)/Decrease ≈ \$0.1 million
- Reasons for Unfunded Liability increase
 - Asset gain/(loss): ≈ \$27.6 million
 - Assumption Change gain/(loss): ≈ \$(22.7) million
 - Actuarial gain/(loss): ≈ \$(0.9) million
 - Average Salary \$69,500 → \$72,200
 - Number of Actives 603 → 605
 - Number of Inactives 628 → 632
 - Number of Retirees 680 → 708
 - Other gain/(loss): ≈ \$(3.9) million
 - Contributions
 - Other (expected)

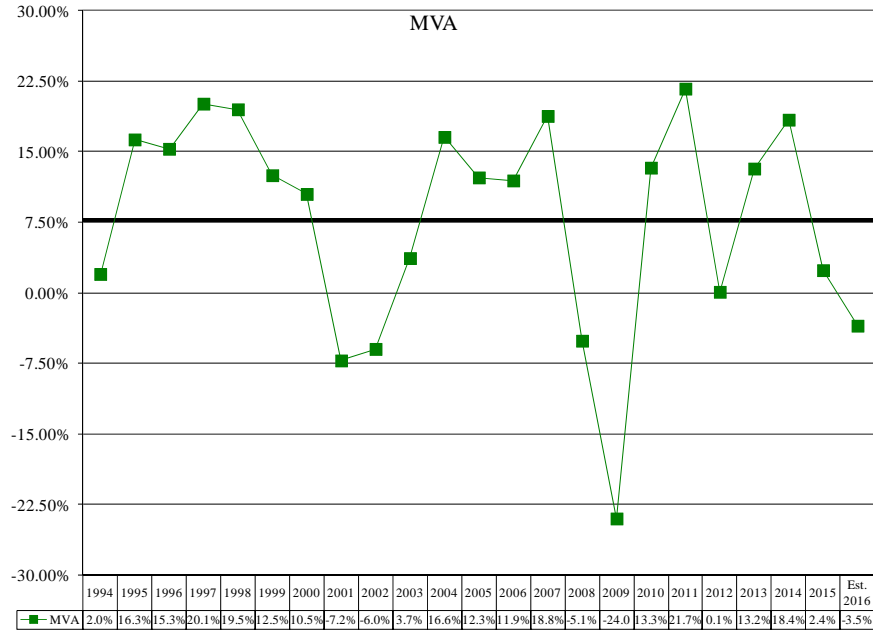


May 31, 2016

8



INVESTMENT RETURN - MISCELLANEOUS



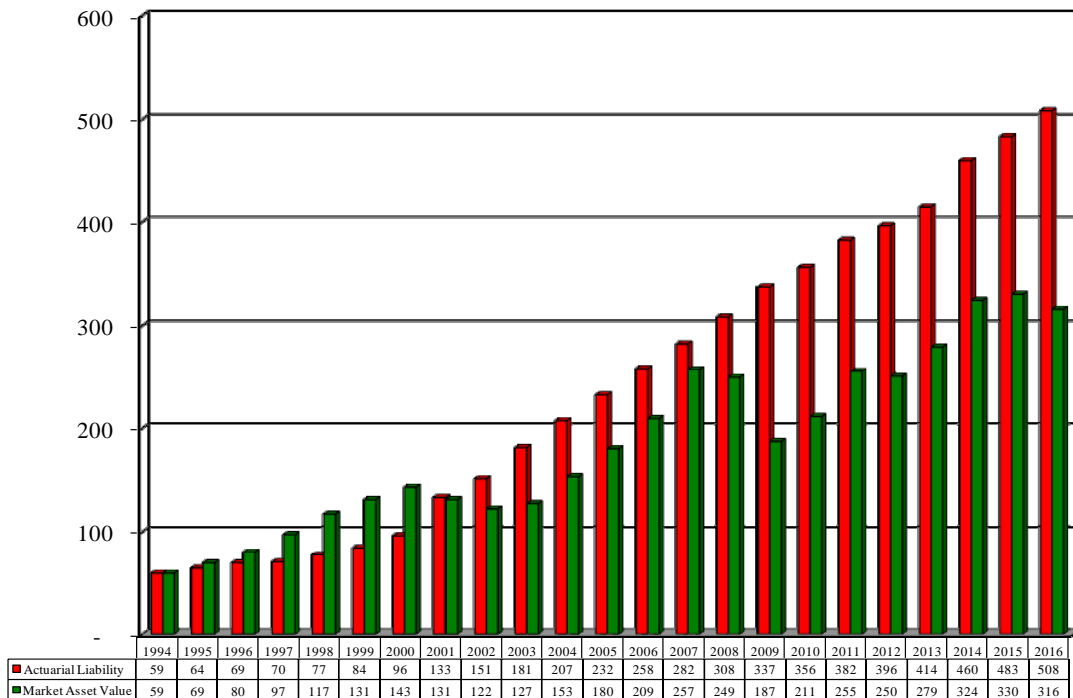
Above assumes contributions, payments, etc. received evenly throughout year.
 Estimated June 30, 2016 based on CalPERS actual return through 2/29/16 and assumed 7.5% annual return for the remaining 4 months.



May 31, 2016



FUNDED STATUS (MILLIONS) - MISCELLANEOUS



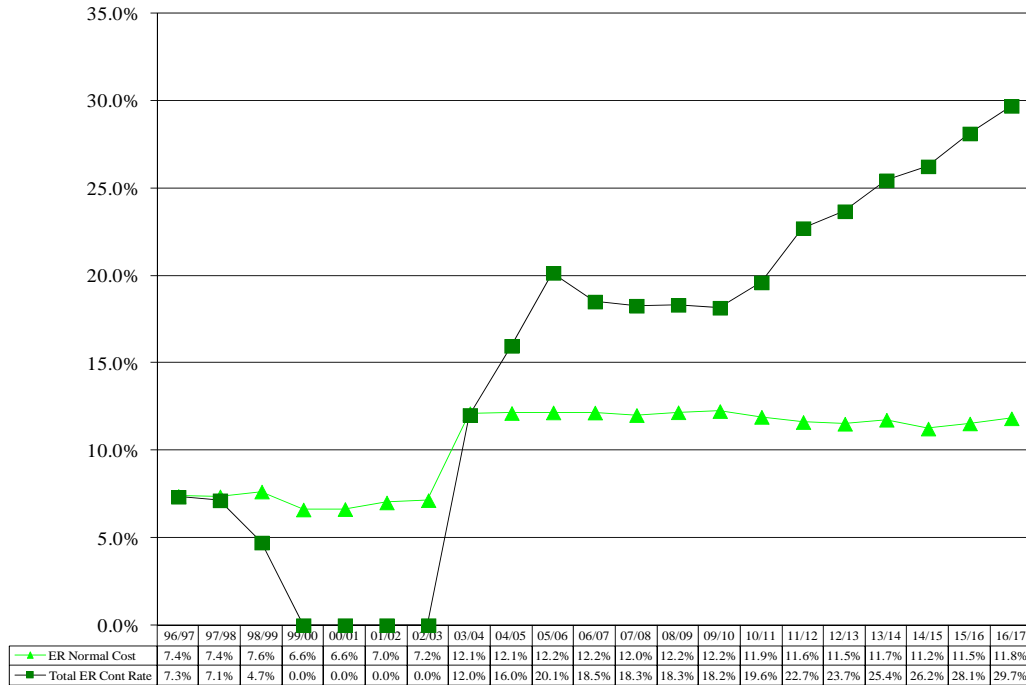
6/30/15 & 6/30/16 funded status estimated



May 31, 2016



CONTRIBUTION RATES - MISCELLANEOUS



May 31, 2016



CONTRIBUTION RATES - MISCELLANEOUS

	<u>6/30/13</u> <u>2015/2016</u>	<u>6/30/14</u> <u>2016/2017</u>
■ Total Normal Cost	19.5%	19.7%
■ Employee Normal Cost	7.9%	7.9%
■ Employer Normal Cost	11.5%	11.8%
■ Amortization Bases	<u>16.6%</u>	<u>17.9%</u>
■ Total Employer Contribution Rate	28.1%	29.7%
■ Amortization Period	Multiple	Multiple
■ What Happened from 6/30/13 to 6/30/14:		
● 2015/16 Rate	28.1%	
● Asset Method Change (2 nd Year)	1.3%	
● Assumption Change (1 st Year)	1.7%	
● Payroll Increased More than Expected	(0.2)%	
● (Gains)/Losses	<u>(1.2)%</u>	
● 2016/17 Rate	29.7%	



May 31, 2016



CONTRIBUTION PROJECTIONS - MISCELLANEOUS

- Market Value Investment Return:
 - June 30, 2015 2.4%²
 - June 30, 2016 (3.5%)³
 - Future returns based on stochastic analysis using 1,000 trials

<u>Single Year Returns at⁴</u>	<u>75th Percentile</u>	<u>50th Percentile</u>	<u>25th Percentile</u>
● 7.5% Investment Mix	0.6%	7.5%	15.3%
● 6.5% Investment Mix	1.3%	6.5%	11.9%
- No Other: Gains/Losses, Method/Assumption Changes, Benefit Improvements
- Excludes Employer Paid Member Contributions (EPMC)
- Tier 2 (2% @60 FAE3) effective April 22, 2011
- Includes Tier 1 EPMC elimination effective 2015/16
- City projected 2016/17 payroll

² Based on CalPERS CAFR.

³ June 30, 2016 return based on CalPERS return of (5.8%) through 2/29/16 and assumed future returns for 4 months.

⁴ Nth percentile means N percentage of our trials result in returns greater than the indicated rates.



May 31, 2016



CONTRIBUTION PROJECTIONS - MISCELLANEOUS

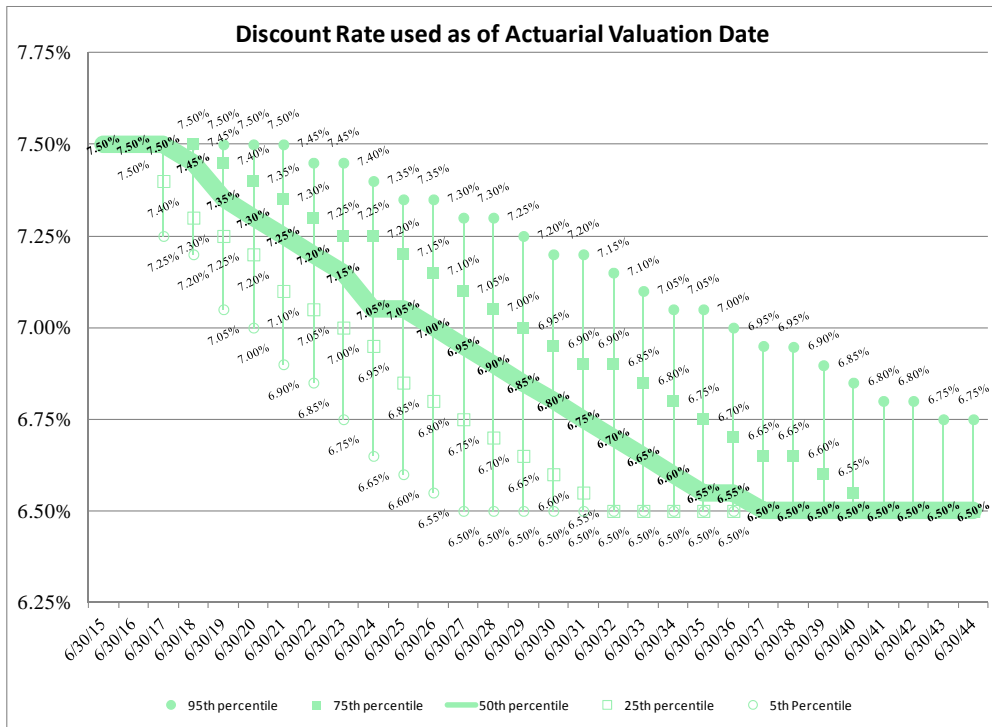
- New hire assumptions:
 - Assumes 40% of 2013 new hires were Classic Tier 2 Members (2% @60) and 60% were New Members with PEPRA benefits.
 - Assumes Classic Members will decrease from 40% to 0% of new hires over 20 years.



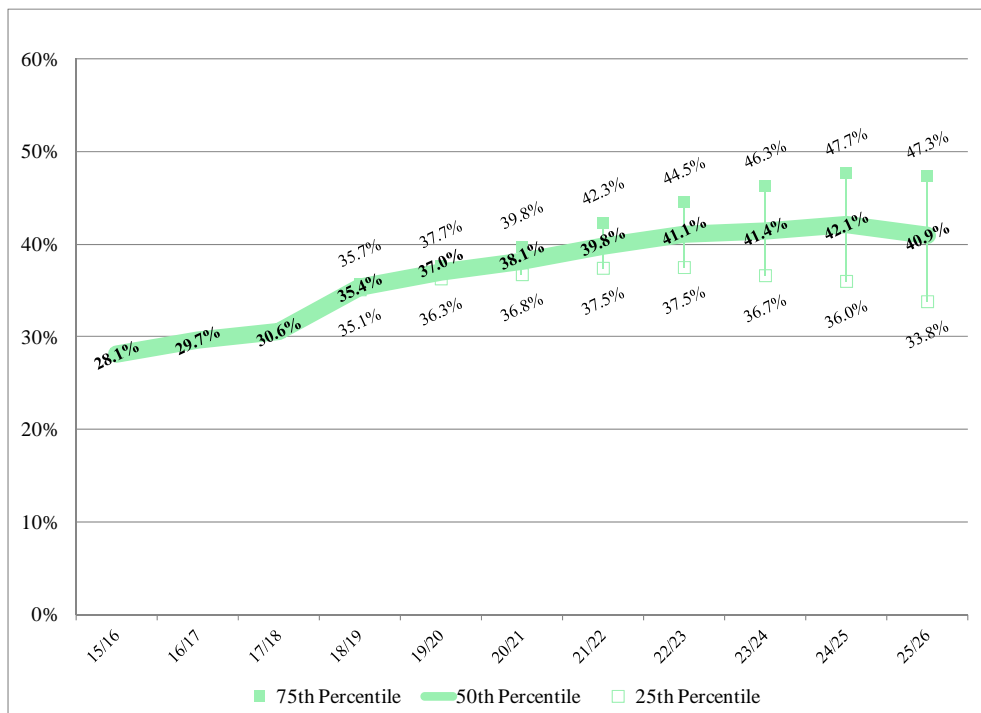
May 31, 2016



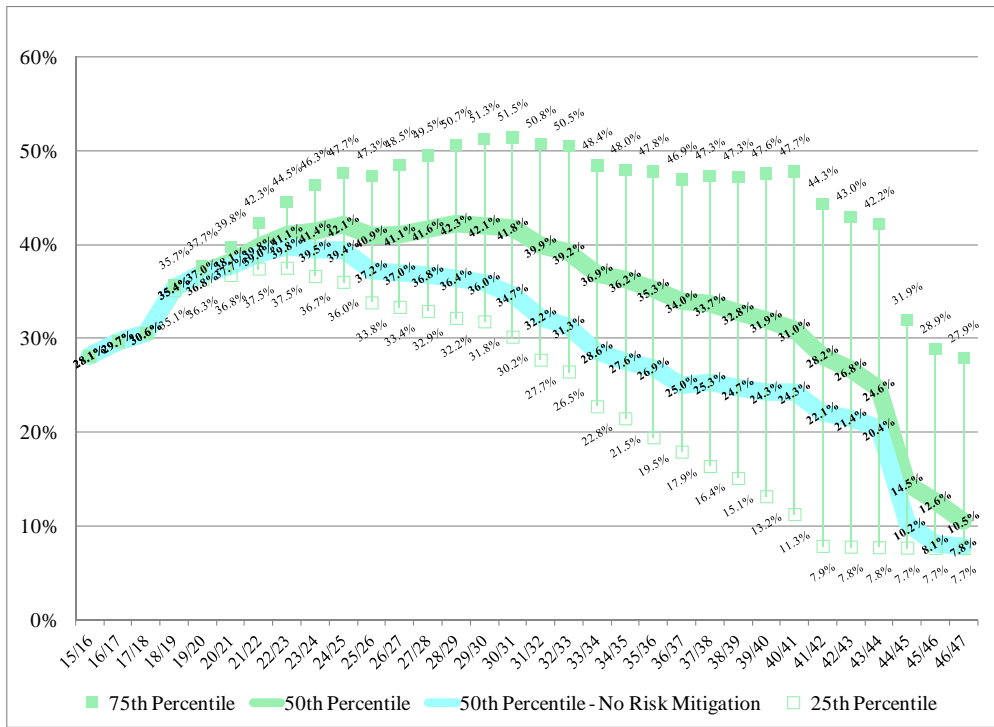
CONTRIBUTION PROJECTIONS - MISCELLANEOUS



CONTRIBUTION PROJECTIONS - MISCELLANEOUS



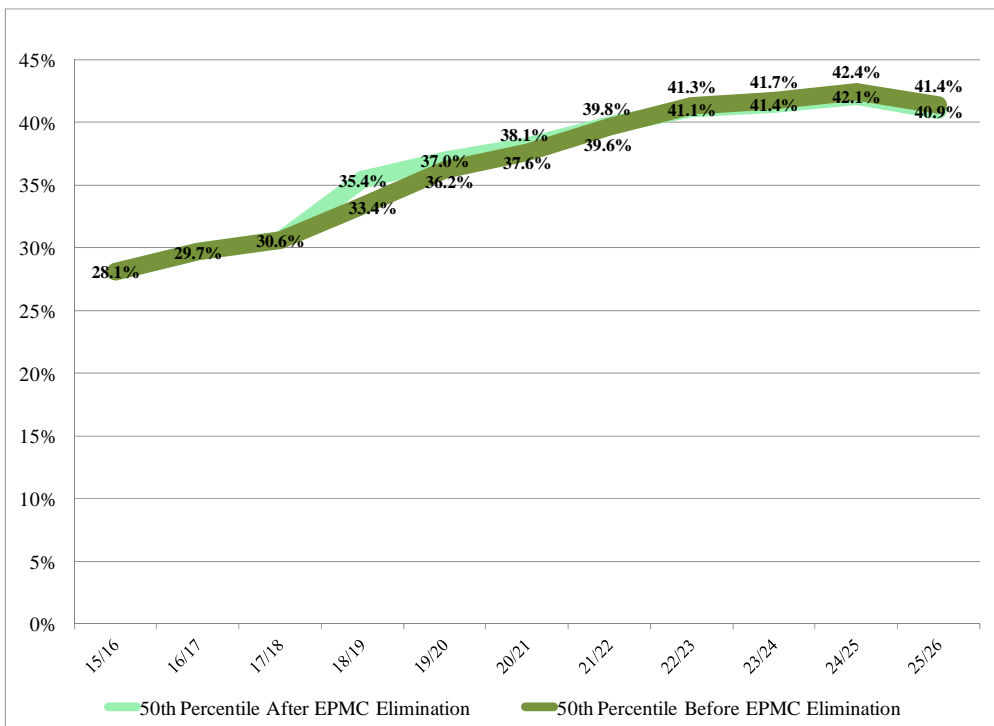
CONTRIBUTION PROJECTIONS - MISCELLANEOUS



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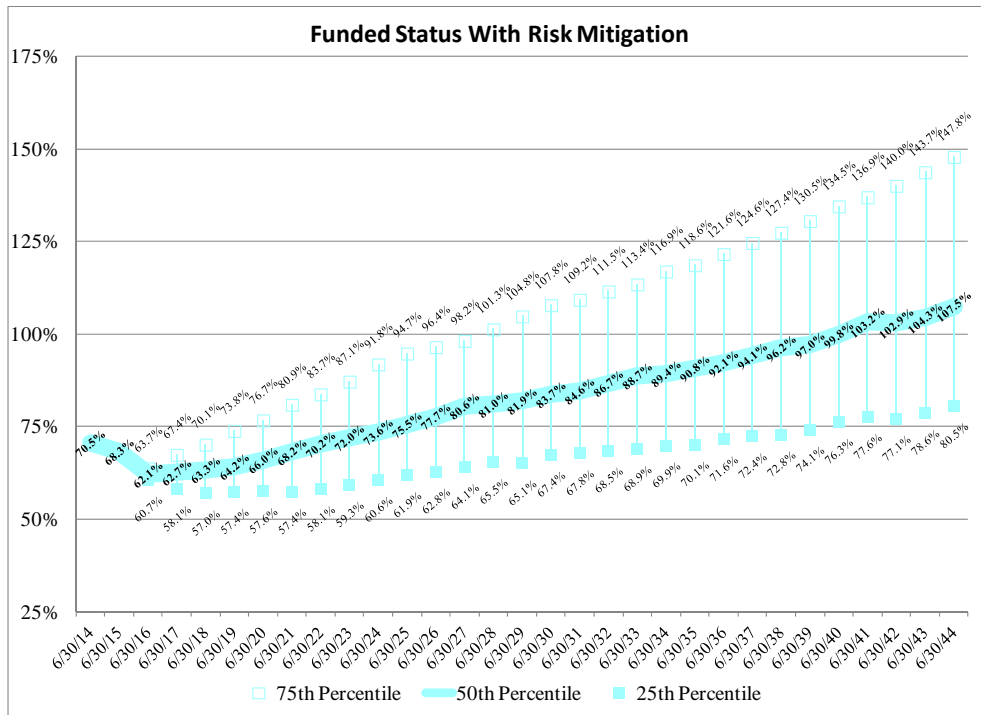
CONTRIBUTION PROJECTIONS - MISCELLANEOUS



May 31, 2016



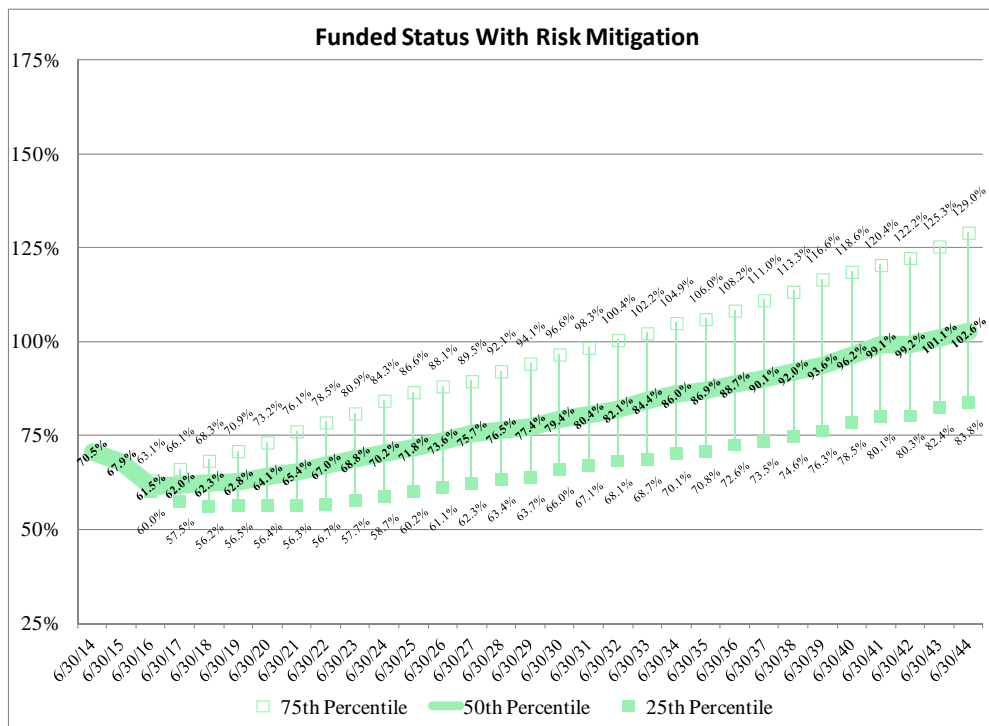
CONTRIBUTION PROJECTIONS - MISCELLANEOUS



May 31, 2016



CONTRIBUTION PROJECTIONS - MISCELLANEOUS



May 31, 2016



SUMMARY OF DEMOGRAPHIC INFORMATION – SAFETY

	1994	2004	2013	2014
Actives				
■ Counts	256	313	332	322
■ Average				
• Age	37	38	42	42
• City Service	11	10	13	13
• PERSable Wages	\$52,300	\$71,600	\$102,200	\$102,800
■ Total PERSable Wages (millions)	14.6	24.7	37.1	36.2
Receiving Payments				
■ Counts				
• Service		98	144	156
• Disability		100	128	135
• Beneficiaries		22	25	28
• Total	134	220	297	319
■ Average Annual City Provided Benefit ⁵				
• Service		\$36,600	\$57,400	\$62,300
• Disability		27,000	42,100	45,600
• Service Retirements in last 5 years		40,600	71,700	74,400

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

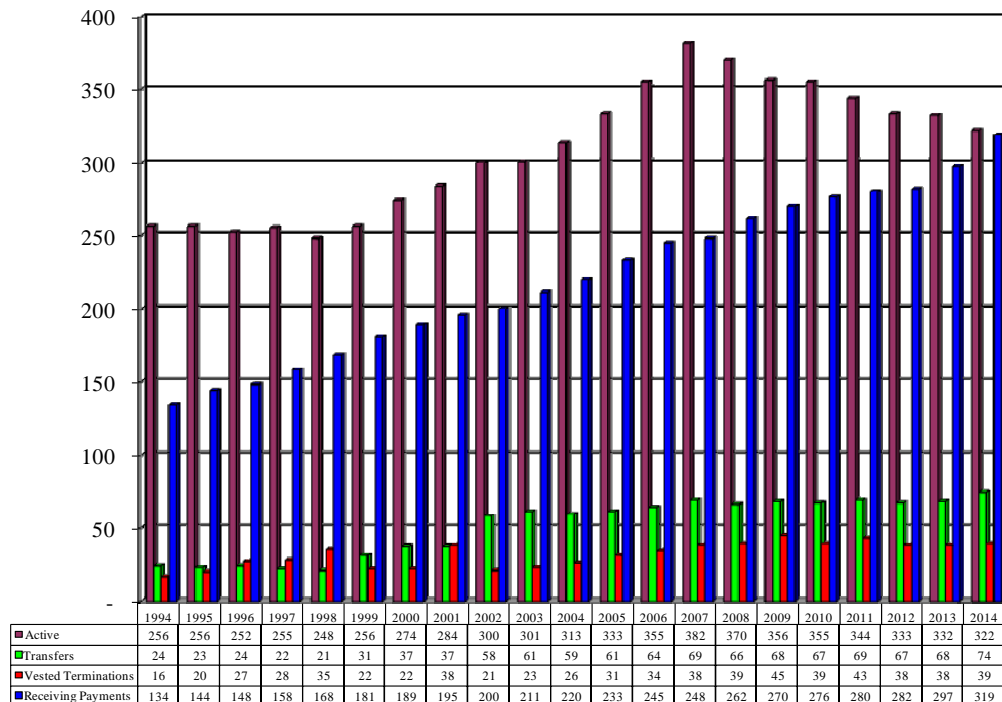


May 31, 2016

21



MEMBERS INCLUDED IN VALUATION – SAFETY



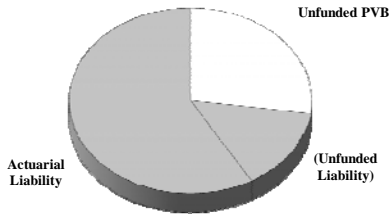
May 31, 2016

22

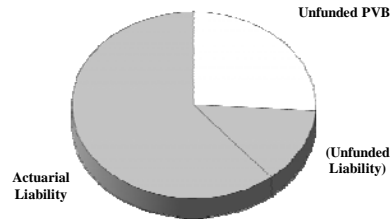


PLAN FUNDED STATUS – SAFETY

**Present Value of Benefits
June 30, 2013**



**Present Value of Benefits
June 30, 2014**



<u>June 30, 2013</u>		<u>June 30, 2014</u>
\$ 157,800,000	Active AAL	\$ 155,700,000
187,200,000	Retiree AAL	229,800,000
<u>17,200,000</u>	Inactive AAL	<u>18,300,000</u>
362,200,000	Total AAL	403,800,000
<u>272,900,000</u>	Market Value of Assets	<u>317,300,000</u>
(89,300,000)	(Unfunded AAL)	(86,500,000)



May 31, 2016

23



PLAN FUNDED STATUS – SAFETY

- What happened between 6/30/13 and 6/30/14?
 - Unfunded Liability (Increase)/Decrease ≈ \$2.8 million
- Reasons for Unfunded Liability increase
 - Asset gain/(loss): ≈ \$27.3 million
 - Assumption Change gain/(loss): ≈ \$(21.6) million
 - Actuarial gain/(loss): ≈ \$(2.1) million
 - Average Salary \$102,200 → \$102,800
 - Number of Actives 332 → 322
 - Number of Inactives 106 → 113
 - Number of Retirees 297 → 319
 - Other gain/(loss): ≈ \$(0.8) million
 - Contributions
 - Other (expected)

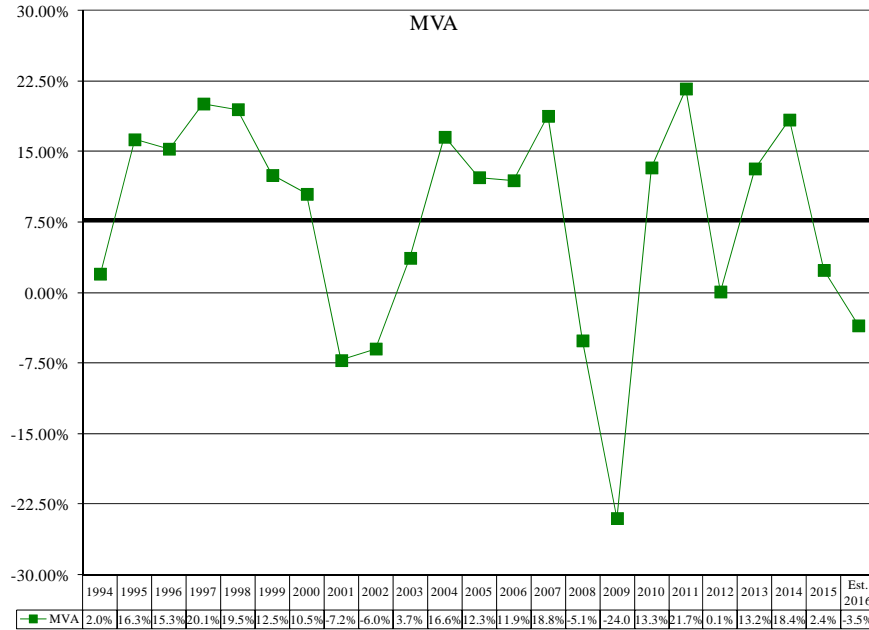


May 31, 2016

24



INVESTMENT RETURN – SAFETY



Above assumes contributions, payments, etc. received evenly throughout year.
 Estimated June 30, 2016 based on CalPERS actual return through 2/29/16 and assumed 7.5% annual return for the remaining 4 months.

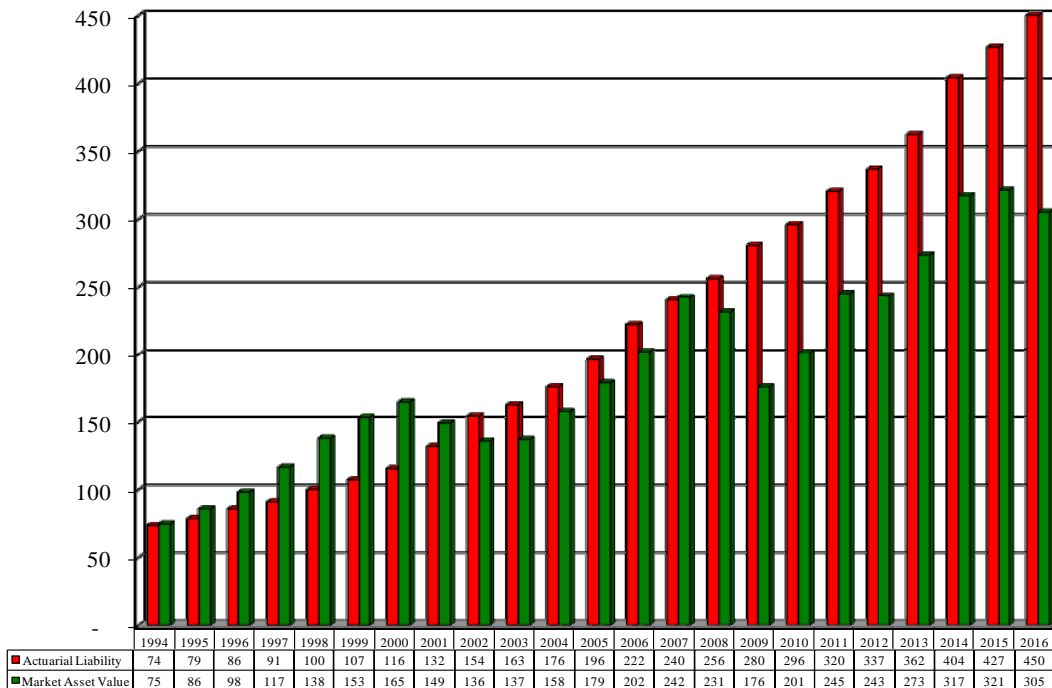


May 31, 2016

25



FUNDED STATUS (MILLIONS) – SAFETY



6/30/15 & 6/30/16 funded status estimated

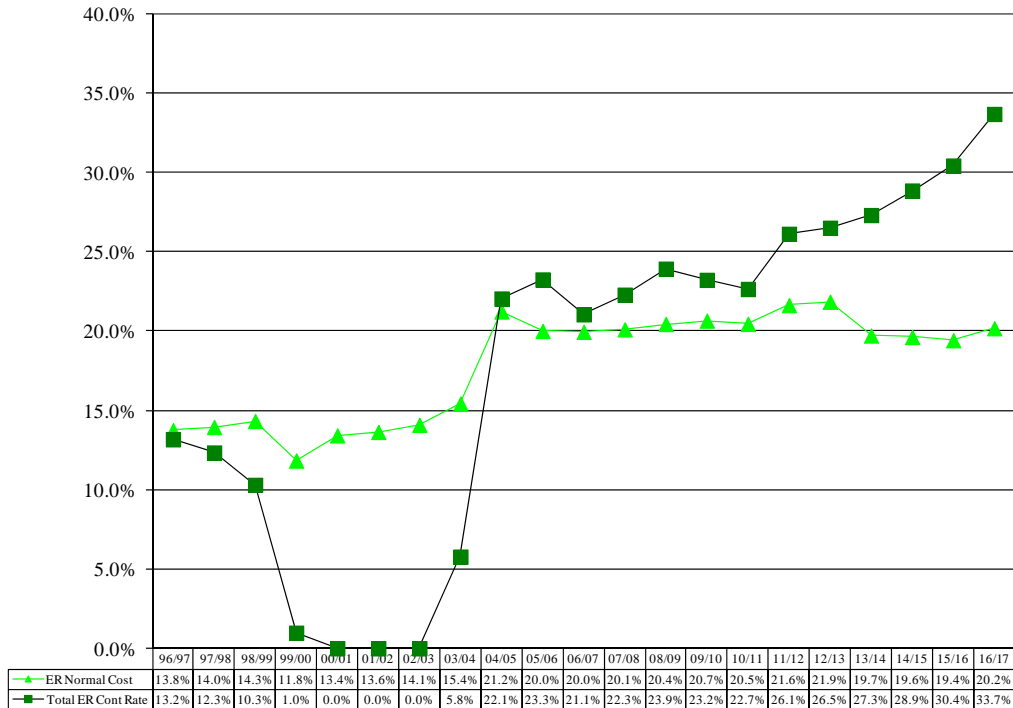


May 31, 2016

26



CONTRIBUTION RATES – SAFETY



May 31, 2016

27



CONTRIBUTION RATES – SAFETY

	<u>6/30/13</u> <u>2015/2016</u>	<u>6/30/14</u> <u>2016/2017</u>
■ Total Normal Cost	28.4%	29.3%
■ Employee Normal Cost	9.0%	9.1%
■ Employer Normal Cost	19.4%	20.2%
■ Amortization Bases	<u>11.0%</u>	<u>13.5%</u>
■ Total Employer Contribution Rate	30.4%	33.7%
■ Amortization Period	Multiple	Multiple
■ What Happened from 6/30/13 to 6/30/14:		
● 2015/16 Rate		30.4%
● Asset Method Change (2 nd year)		1.6%
● Assumption Change (1 st year)		1.9%
● Payroll Increased Less Than Expected		0.6%
● (Gain)/Losses		<u>(0.8)%</u>
● 2016/17 Rate		33.7%



May 31, 2016

28



CONTRIBUTION PROJECTIONS - SAFETY

- Market Value Investment Return:
 - June 30, 2015 2.4%⁶
 - June 30, 2016 (3.5%)⁷
 - Future returns based on stochastic analysis using 1,000 trials

<u>Single Year Returns at⁸</u>	<u>75th Percentile</u>	<u>50th Percentile</u>	<u>25th Percentile</u>
● 7.5% Investment Mix	0.6%	7.5%	15.3%
● 6.5% Investment Mix	1.3%	6.5%	11.9%
- No Other: Gains/Losses, Method/Assumption Changes, Benefit Improvements
- Excludes Employer Paid Member Contributions (EPMC)
- Tier 2 (3% @55 FAE3) effective April 22, 2011
- City projected 2016/17 payroll

⁶ Based on CalPERS CAFR.

⁷ June 30, 2016 return based on CalPERS return of (5.8%) through 2/29/16 and assumed future returns for 4 months.

⁸ Nth percentile means N percentage of our trials result in returns greater than the indicated rates.



May 31, 2016



CONTRIBUTION PROJECTIONS - SAFETY

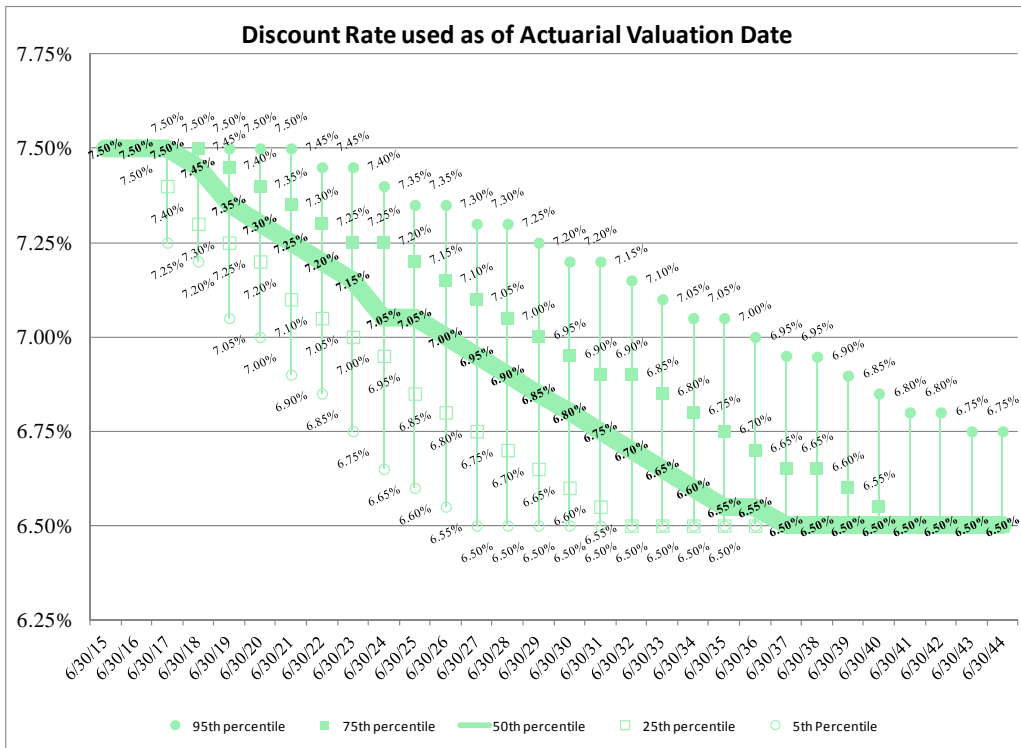
- New hire assumptions:
 - Assumes 30% of 2013 new hires were Classic Tier 2 Members (3% @55) and 70% were New Members with PEPRA benefits.
 - Assumes Classic Members will decrease from 30% to 0% of new hires over 10 years.



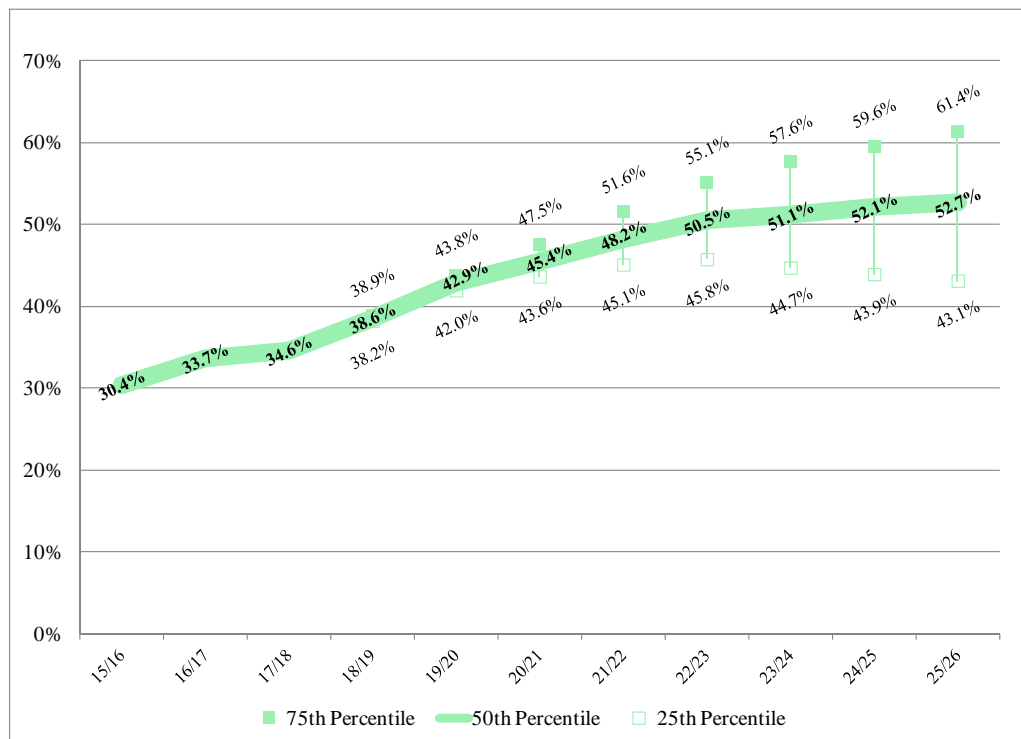
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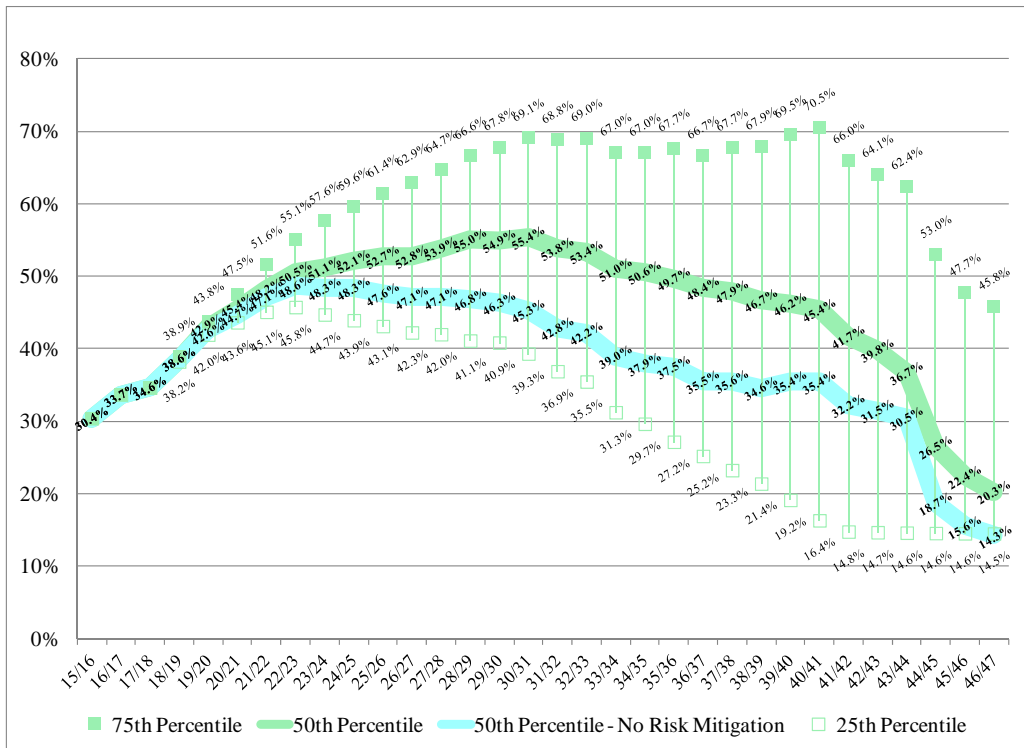
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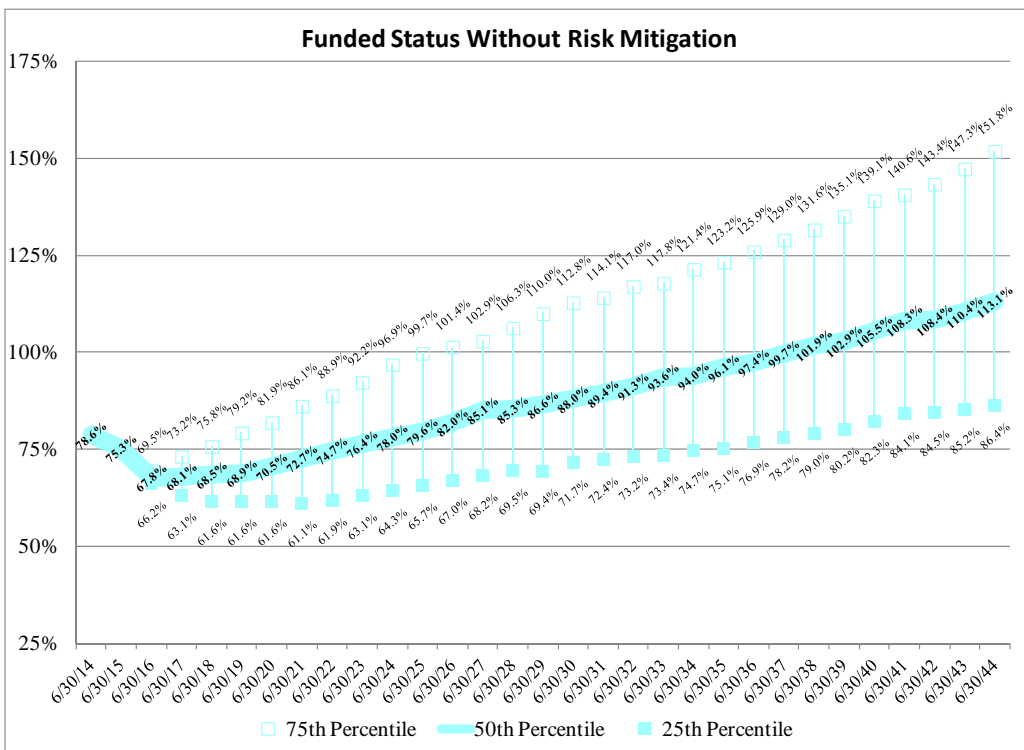
CONTRIBUTION PROJECTIONS - SAFETY



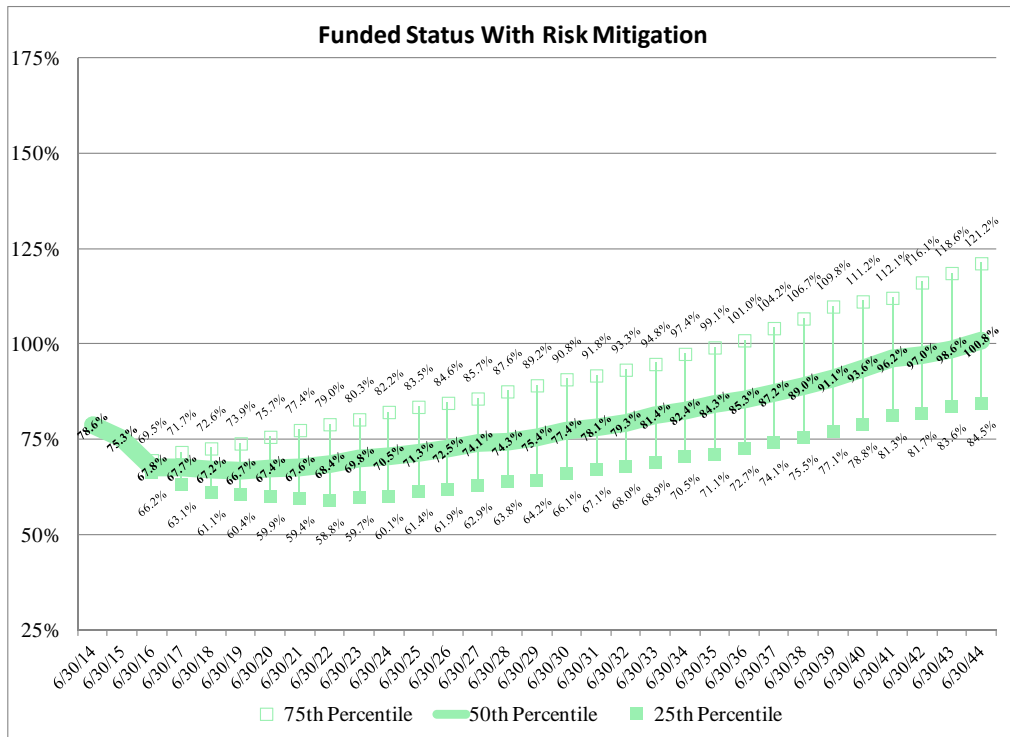
CONTRIBUTION PROJECTIONS - SAFETY



CONTRIBUTION PROJECTIONS - SAFETY



CONTRIBUTION PROJECTIONS - SAFETY



CONTRIBUTION PROJECTIONS - SAFETY

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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>
	Tier 1	Tier 2	Tier 3
	<u>3% @ 60</u>	<u>2% @ 60</u>	<u>2% @ 62</u>
● Employer Normal Cost	12.1%	7.4%	6.07%
● Member Normal Cost	<u>8.0%</u>	<u>7.0%</u>	<u>6.75%</u>
● Total Normal Cost	20.1%	14.4%	12.82%
● 50% Target	10.1%	7.2%	6.41%



May 31, 2016

37



PEPRA COST SHARING

- Safety Plan

	<u>Current Members</u>		<u>New Members</u>
	Tier 1	Tier 2	Tier 3
	<u>3% @ 50</u>	<u>3% @ 55</u>	<u>2.7% @ 57</u>
● Employer Normal Cost	20.5%	17.8%	11.82%
● Member Normal Cost	<u>9.0%</u>	<u>9.0%</u>	<u>12.25%</u>
● Total Normal Cost	29.5%	26.8%	24.07%
● 50% Target	14.8%	13.4%	12.04%



May 31, 2016

38



PAYING DOWN THE UNFUNDED LIABILITY

- Pension Obligation Bond (POB)
 - Interest arbitrage between expected CalPERS earnings and rate paid on POB
 - Not guaranteed
- Borrow from General Fund
 - Pay GF back like a loan
 - Payments come from all funds
- Request shorter amortization period of CalPERS
 - Higher short term payments
 - Less interest and lower long term payments
- One time payments
 - City resolution to use portion of one time money



May 31, 2016

39



PAYING DOWN THE UNFUNDED LIABILITY

- Internal Service Fund
 - Restricted investments
 - Likely low (0.5% - 1.0%) investment returns
 - Short term/high quality
 - Designed for preservation of principal
 - Assets could be used by Council for other purposes
- Irrevocable Supplemental (§115) Pension Trust
 - A few trusts established
 - PARS & PFM
 - Investments significantly less restricted
 - Designed for long term returns
 - Likely much higher (5% - 7%) investment return
 - Assets could not be used by Council for other purposes
 - Can only be used to
 - Reimburse City for CalPERS contributions
 - Make payments directly to CalPERS



May 31, 2016

40

