



BARTEL
ASSOCIATES, LLC

**CITY OF PACIFICA
MISCELLANEOUS & SAFETY PLANS**

**CalPERS Actuarial Issues – 6/30/17 Valuation
Preliminary Results**

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November 13, 2018

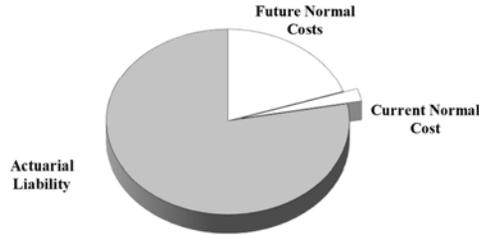
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DEFINITIONS

Present Value of Benefits
June 30, 2017



- **Present Value of all Projected Benefits (PVB):**
 - Discounted value (at valuation date - 6/30/17), of all future expected benefit payments based on various (actuarial) assumptions
- **Current Normal Cost:**
 - Portion of PVB allocated to (or “earned” during) current year
 - Value of employee and employer current service benefit
- **Actuarial Accrued Liability (AAL):**
 - Discounted value (at valuation date) of benefits earned through valuation date (value of past service benefit)
 - Portion of PVB “earned” at measurement



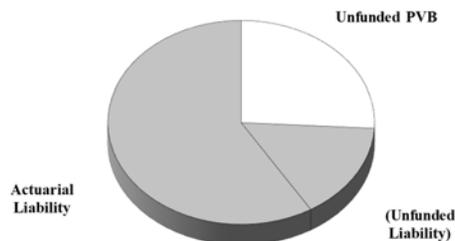
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DEFINITIONS

Present Value of Benefits
June 30, 2017



- **Target-** Have money in the bank to cover Actuarial Liability (past service)
- **Unfunded Liability** - Money short of target at valuation date
 - If all actuarial assumptions were always exactly met, then the plan assets would always equal AAL
 - Any difference is the unfunded (or overfunded) AAL
 - Every year, the actuary calculates the difference between the expected UAAL and Actual UAAL. This is a new layer or amortization base
 - Each new layer gets amortized (paid off) over a period of time as part of the contribution [rate].



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HOW WE GOT HERE

- Investment Losses
- CalPERS Contribution Policy
- Enhanced Benefits
- Demographics



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HOW WE GOT HERE – INVESTMENT RETURN

Annual Return on Market Value of Assets



Above assumes contributions, payments, etc. received evenly throughout year.



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HOW WE GOT HERE – OLD CONTRIBUTION POLICY

- Effective with 2003 valuations:
 - Slow (15 year) recognition of investment losses into funded status
 - Rolling 30 year amortization of all (primarily investment) losses

- Designed to:
 - First smooth rates and
 - Second pay off UAL

- Mitigated contribution volatility



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HOW WE GOT HERE – ENHANCED BENEFITS

- At CalPERS, Enhanced Benefits implemented using all (future & prior) service

- Typically not negotiated with cost sharing

- City of Pacifica

	Tier 1	PEPRA
● Miscellaneous	2.5%@55 FAE1	2%@62 FAE3
● Safety Police	3%@50 FAE1	2.7%@57 FAE3
● Safety Fire	3%@55 FAE1	2.7%@57 FAE3

- Note:
 - FAE1 is highest one year (typically final) average earnings
 - FAE3 is highest three years (typically final three) average earnings

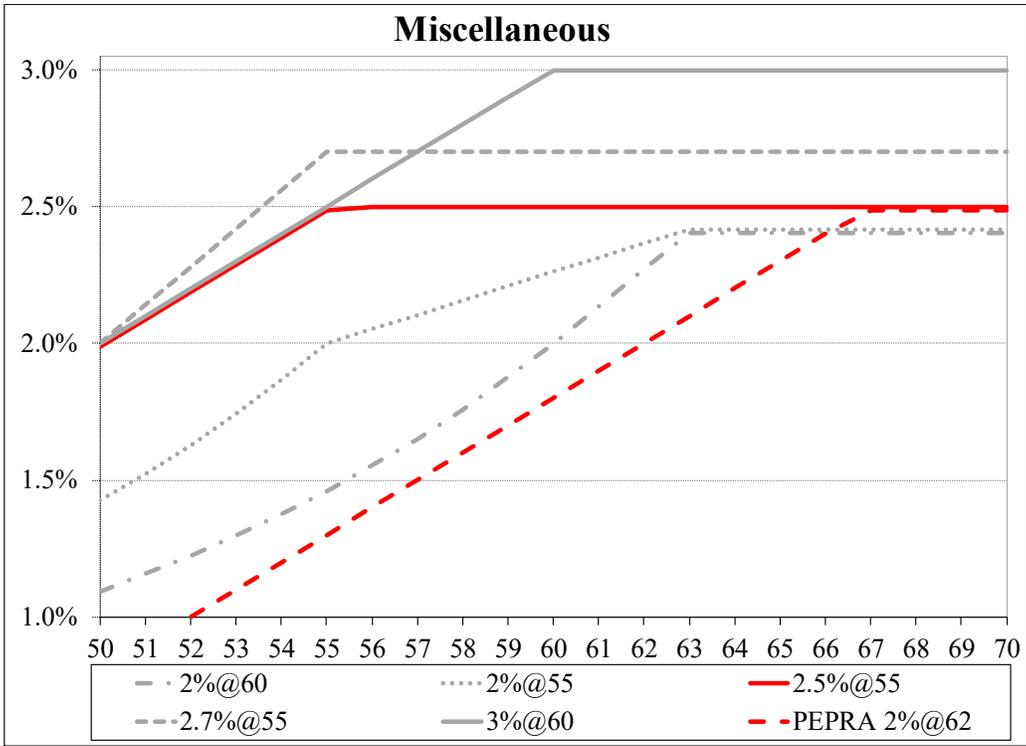


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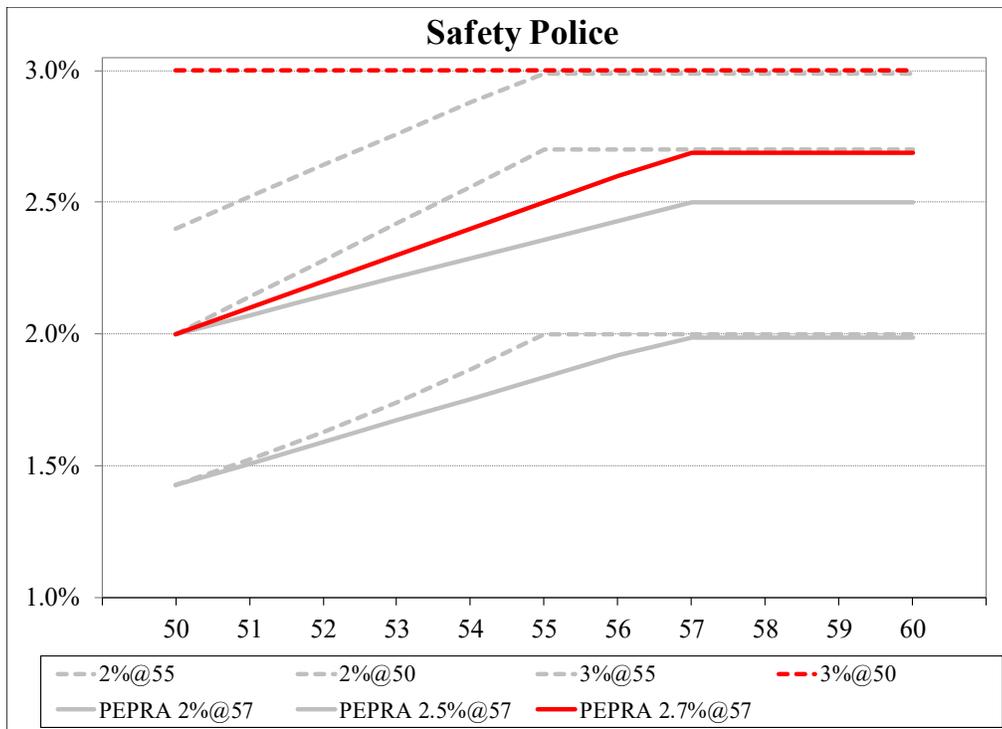
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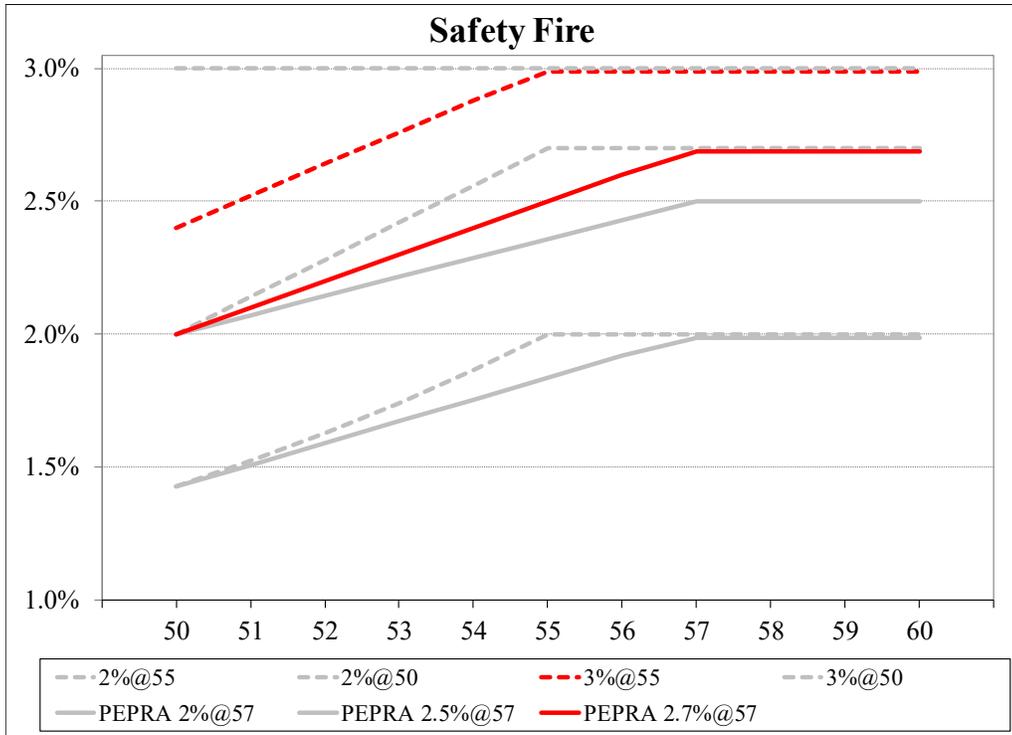
HOW WE GOT HERE – ENHANCED BENEFITS



HOW WE GOT HERE – ENHANCED BENEFITS



HOW WE GOT HERE – ENHANCED BENEFITS



HOW WE GOT HERE – DEMOGRAPHIC

- Around the State
 - Large retiree liability compared to actives
 - State average: 55% for Miscellaneous, 65% for Safety
 - Declining active population and increasing number of retirees
 - Higher percentage of retiree liability increases contribution volatility

- City of Pacifica percentage of liability belonging to retirees:
 - Miscellaneous 56%
 - Safety Police 63%
 - Safety Fire 55%



CALPERS CHANGES

- Contribution policy changes:
 - No asset smoothing
 - No rolling amortization
 - 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)
- CalPERS Board changed their discount rate:

	<u>Rate</u>	<u>Initial</u>	<u>Full</u>
● 6/30/16 valuation	7.375%	18/19	22/23
● 6/30/17 valuation	7.25%	19/20	23/24
● 6/30/18 valuation	7.00%	20/21	24/25
- December 2018: CalPERS Board selected asset allocation similar to current portfolio. No change to the discount rate



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CALPERS CHANGES

- Risk Mitigation Strategy
 - Move to more conservative investments over time to reduce volatility
 - 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 6.0% over 20+ years
 - Risk mitigation suspended until 6/30/18 valuation
- February 2018 CalPERS adopted new amortization policy
 - Applies only to newly established amortization bases
 - Fixed dollar amortization rather than % pay
 - Amortize gains/losses over 20 rather than 30 years
 - 5-year ramp up (not down) for investment gains and losses
 - No ramp up/down for other amortization bases
 - Minimizes total interest paid over time and pays off UAL faster
 - Effective June 30, 2019 valuation for 2021/22 contributions
 - Included in this study

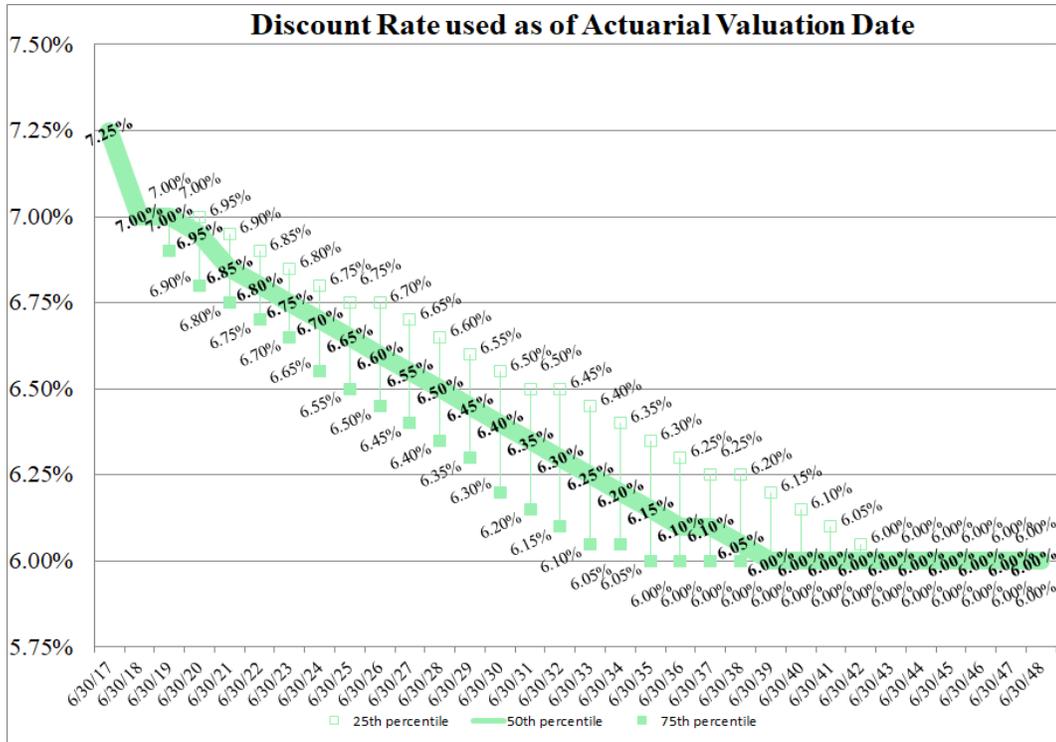


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CALPERS CHANGES



CALPERS CHANGES

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DEMOGRAPHIC INFORMATION - MISCELLANEOUS

	1997	2007	2016	2017
Actives				
■ Counts	140	128	119	122
■ Average				
• Age	42	46	48	48
• City Service	8	10	11	10
• PERSable Wages	\$ 37,100	\$ 63,300	\$ 70,000	\$ 72,500
■ Total PERSable Wages	5,200,000	8,100,000	8,300,000	8,800,000
Inactive Members				
■ Counts				
• Transferred	54	68	73	77
• Separated	36	78	84	87
• Retired				
□ Service		131	151	155
□ Disability		7	7	7
□ Beneficiaries		18	19	18
□ Total	98	156	177	180
■ Average Annual City Provided Benefit for Service Retirees ¹	N/A	\$ 13,800	\$ 24,200	\$ 25,000
■ Active / Retiree Ratio (City)	1.4	0.8	0.7	0.7
■ Active / Retiree Ratio (All CalPERS)	N/A	1.7	1.3	1.3

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

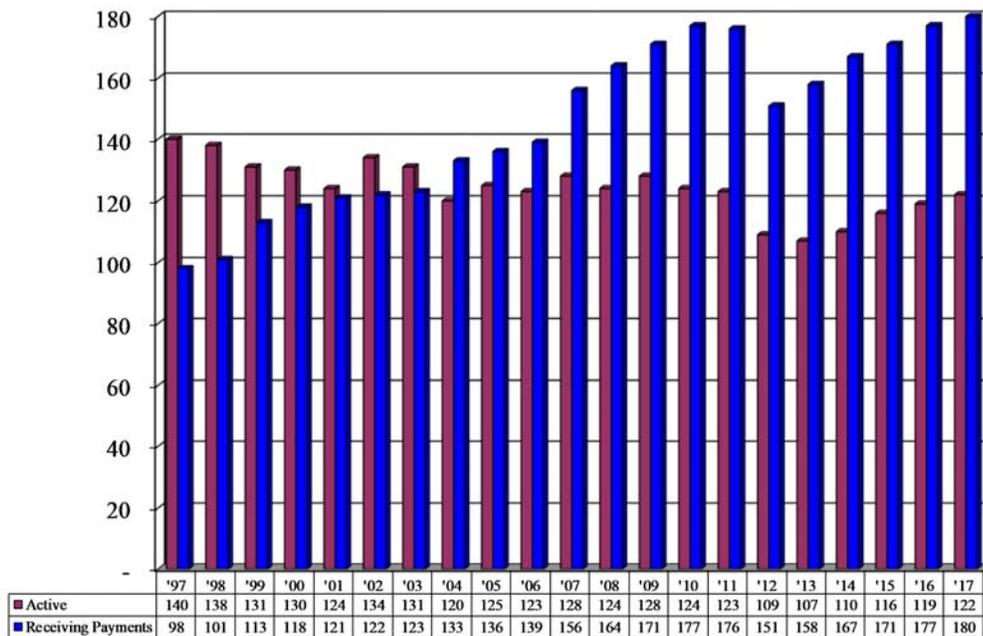


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DEMOGRAPHIC INFORMATION - MISCELLANEOUS



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FUNDED STATUS - MISCELLANEOUS

	<u>June 30, 2016</u>	<u>June 30, 2017</u>
Active AAL	\$30,500,000	\$30,700,000
Retiree AAL	50,000,000	52,600,000
Inactive AAL	<u>9,300,000</u>	<u>10,900,000</u>
Total AAL	89,800,000	94,200,000
Assets	<u>72,400,000</u>	<u>78,200,000</u>
Unfunded Liability	17,400,000	16,000,000
Funded Ratio	80.7%	83.1%

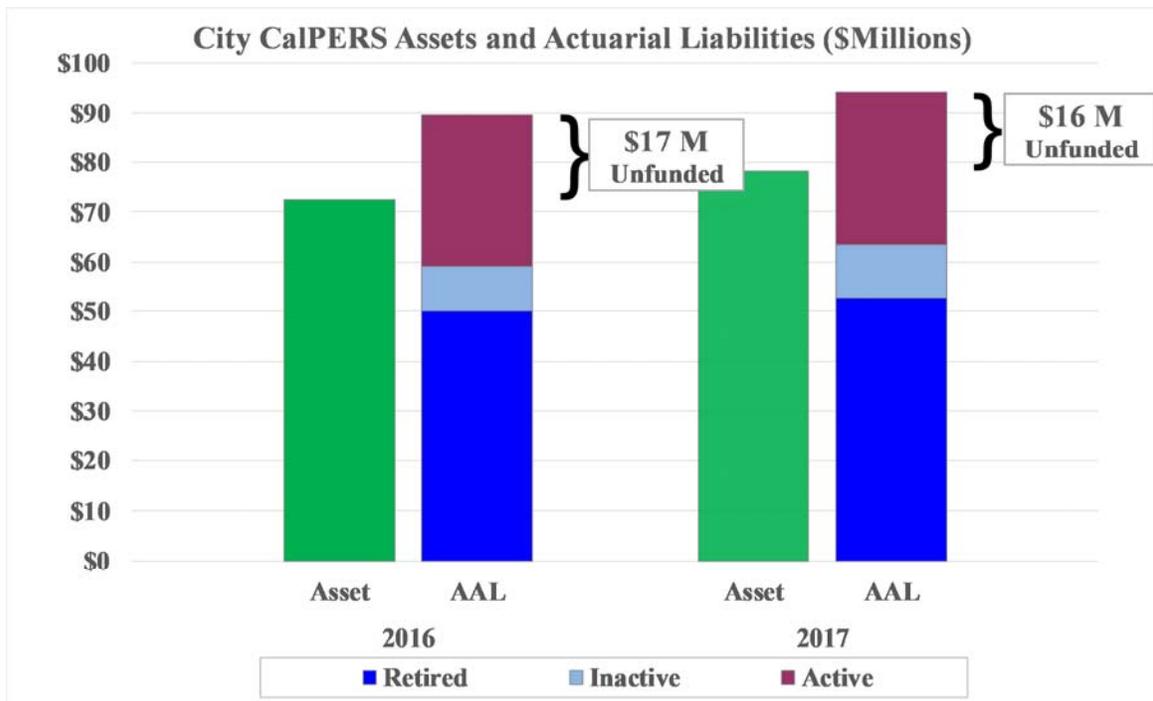


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FUNDED STATUS - MISCELLANEOUS



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FUNDED STATUS - MISCELLANEOUS

Discount Rate Sensitivity

June 30, 2017

	Discount Rate		
	<u>7.25%</u>	<u>7.00%</u>	<u>6.00%</u>
AAL	\$ 94,200,000	\$ 96,700,000	\$ 109,500,000
Assets	78,200,000	78,200,000	78,200,000
Unfunded Liability	16,000,000	18,500,000	31,300,000
Funded Ratio	83.0%	80.9%	71.4%



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FUNDED STATUS - MISCELLANEOUS

Unfunded Accrued Liability Changes

■ Unfunded Accrued Liability on 6/30/16		\$17,400,000
■ Expected Unfunded Accrued Liability on 6/30/17		18,200,000
■ Other Changes		
• Asset Loss (Gain)	(2,600,000)	
• Assumption Change	1,100,000	
• Contribution & Experience Loss (Gain)	<u>(700,000)</u>	
• Total		<u>(2,200,000)</u>
■ Unfunded Accrued Liability on 6/30/17		16,000,000

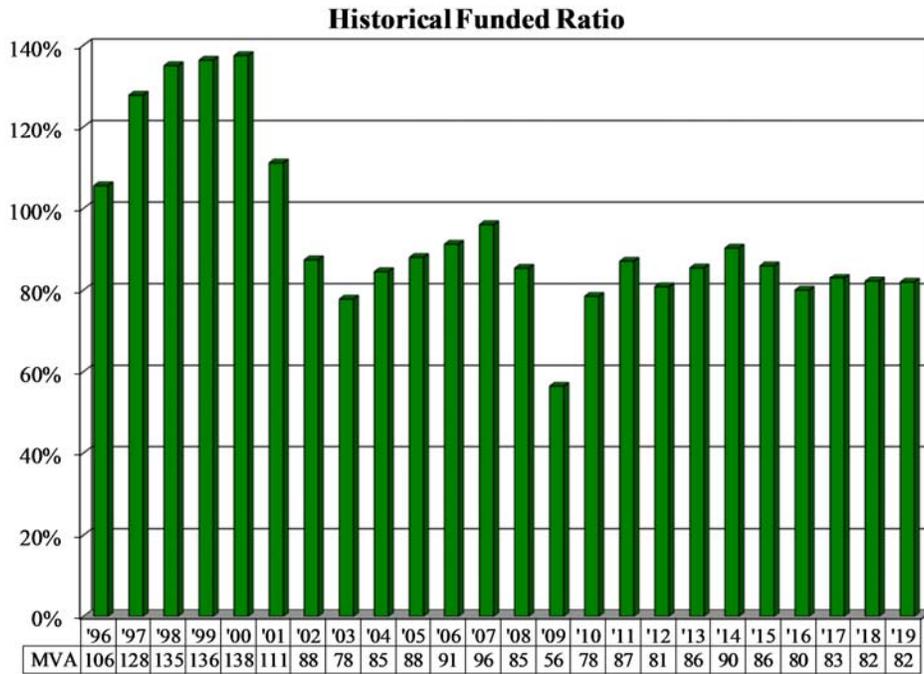


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FUNDED STATUS - MISCELLANEOUS



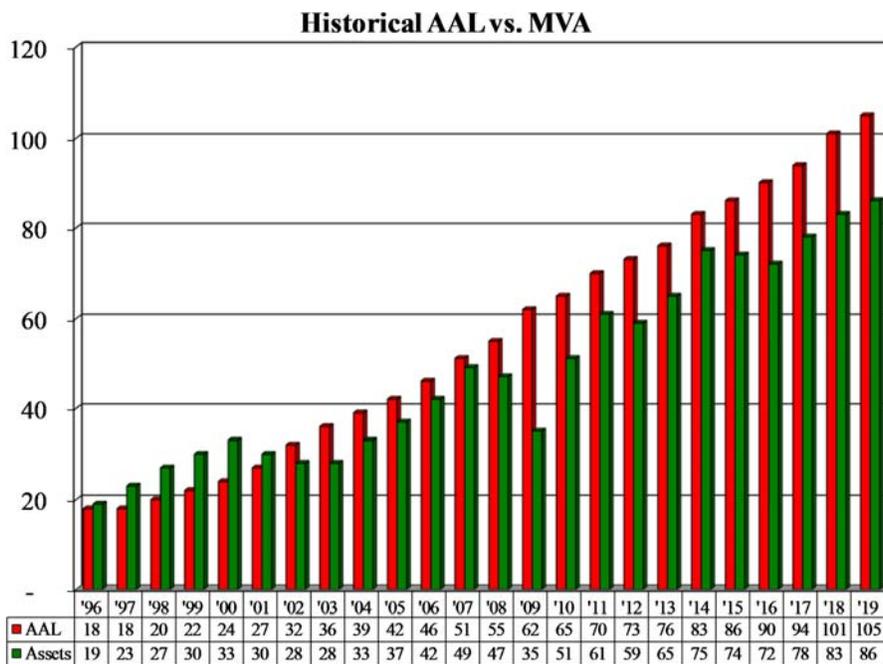
6/30/18 & 6/30/19 funded status estimated



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FUNDED STATUS (MILLIONS) - MISCELLANEOUS



6/30/18 & 6/30/19 funded status estimated



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CONTRIBUTIONS - MISCELLANEOUS

Historical Employer Contribution Rates (Percent of Payroll)



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CONTRIBUTIONS - MISCELLANEOUS

	6/30/16 2018/2019	6/30/17 2019/2020
■ Total Normal Cost	18.1%	18.7%
■ Employee Normal Cost	7.7%	7.7%
■ Employer Normal Cost	10.4%	11.0%
■ Amortization Payments	<u>10.3%</u>	<u>12.2%</u>
■ Total Employer Contribution Rate	20.7%	23.2%
■ 2018/19 Employer Contribution Rate		20.7%
● Payroll > Expected		(0.3%)
● Asset Method Change (5 th Year)		1.1%
● 6/30/14 Assumption Change (4 th Year)		0.9%
● 6/30/16 Discount Rate Change (2 nd Year)		0.3%
● 6/30/17 Discount Rate & Inflation (1 st Year)		1.0%
● Other (Gains)/Losses		<u>(0.5%)</u>
■ 2019/20 Employer Contribution Rate		23.2%



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CONTRIBUTIONS - MISCELLANEOUS

- Market Value Investment Return:
 - June 30, 2018 8.6%²
 - Future returns based on stochastic analysis using 1,000 trials

<u>Single Year Returns at³</u>	<u>25th Percentile</u>	<u>50th Percentile</u>	<u>75th Percentile</u>
Current Investment Mix	0.1%	7.0%	14.8%
Ultimate Investment Mix	0.8%	6.0%	11.4%

 - Assumes investment returns will, generally be 6.5% (as compared to 7.0%) over the next 10 years and higher beyond that.
- Assumption Changes – Discount Rate
 - Decrease to 7.0% by June 30, 2018 valuation
 - Additional Discount Rate decreases due to Risk Mitigation policy.
- No Other: Gains/Losses, Method/Assumption Changes, Benefit Improvements
- Different from CalPERS projection

² Based July 2018 CalPERS press release

³ Nth percentile means N percentage of our trials result in returns lower than the indicated rates.



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CONTRIBUTIONS - MISCELLANEOUS

- New hire assumptions:
 - 62.5% of 2018/19 new hires are PEPRAs members and 37.5% are Classic members
 - Percentage of PEPRAs member future hires to increase from 62.5% to 100% over 15 years
- Employee Cost Sharing for Tier 1 and PEPRAs by Employee Group:
 - Unrepresented Management/Confidential: 2.5%
 - Teamsters Local 350 Directors: 2.5%
 - Teamsters Local 350 Management Employees: 2.5%
 - Teamsters Local 856 Miscellaneous Employees: 2.5%
 - Teamsters Local 856 Wastewater Treatment Plant: 2.5%

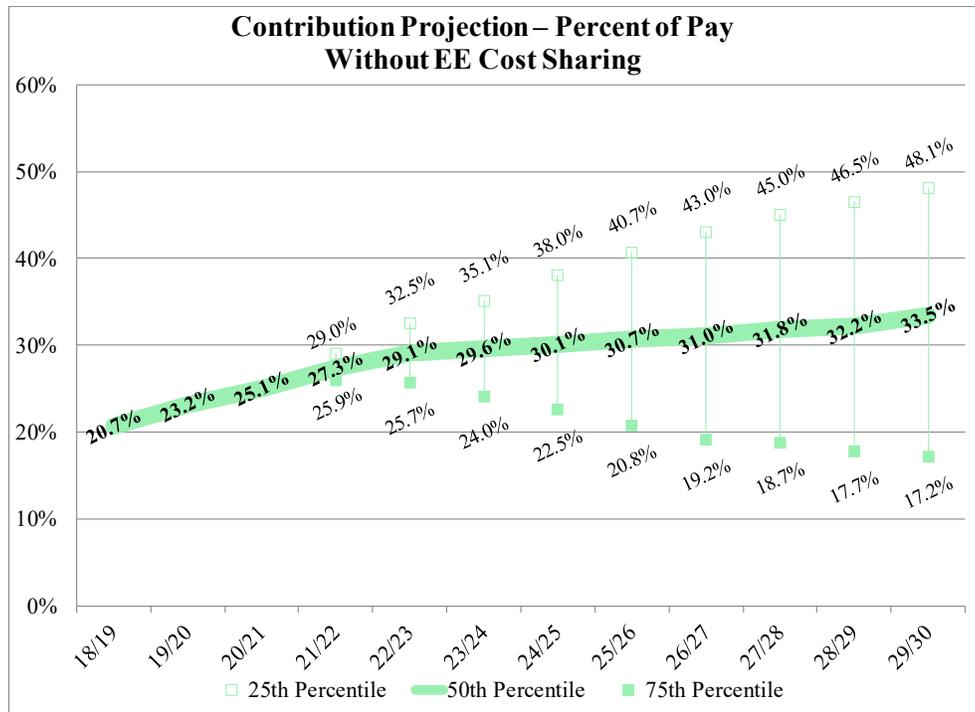


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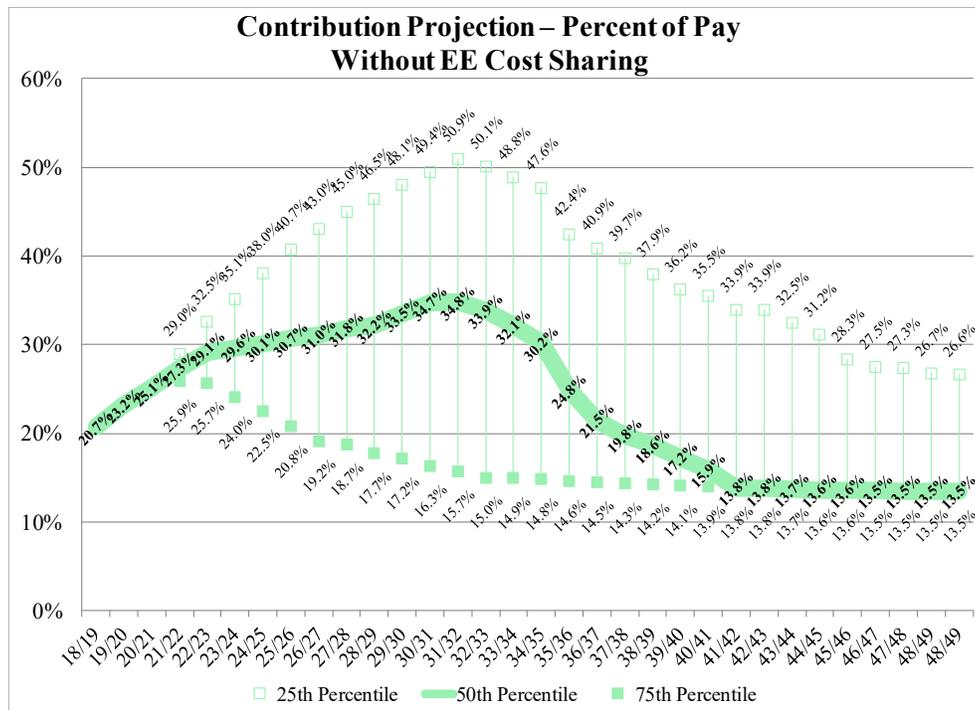
CONTRIBUTIONS - MISCELLANEOUS



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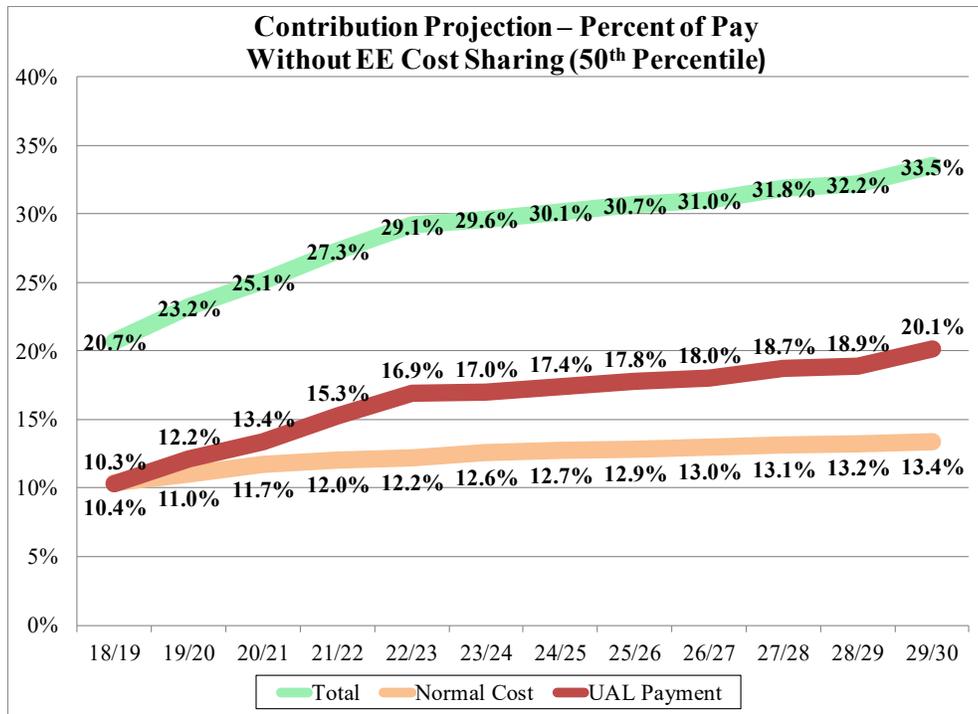
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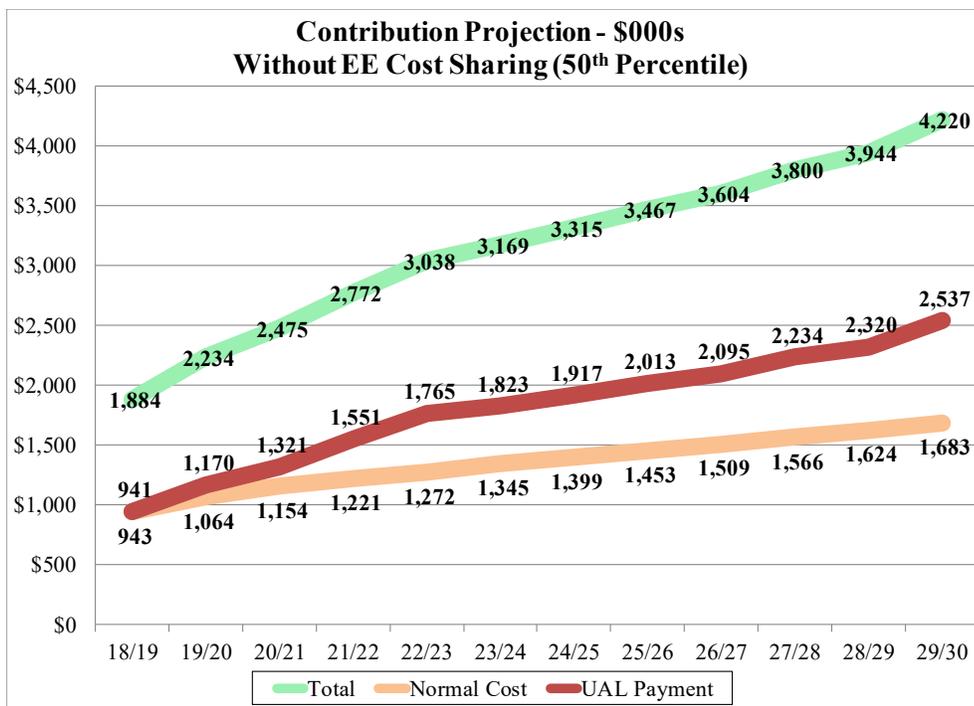
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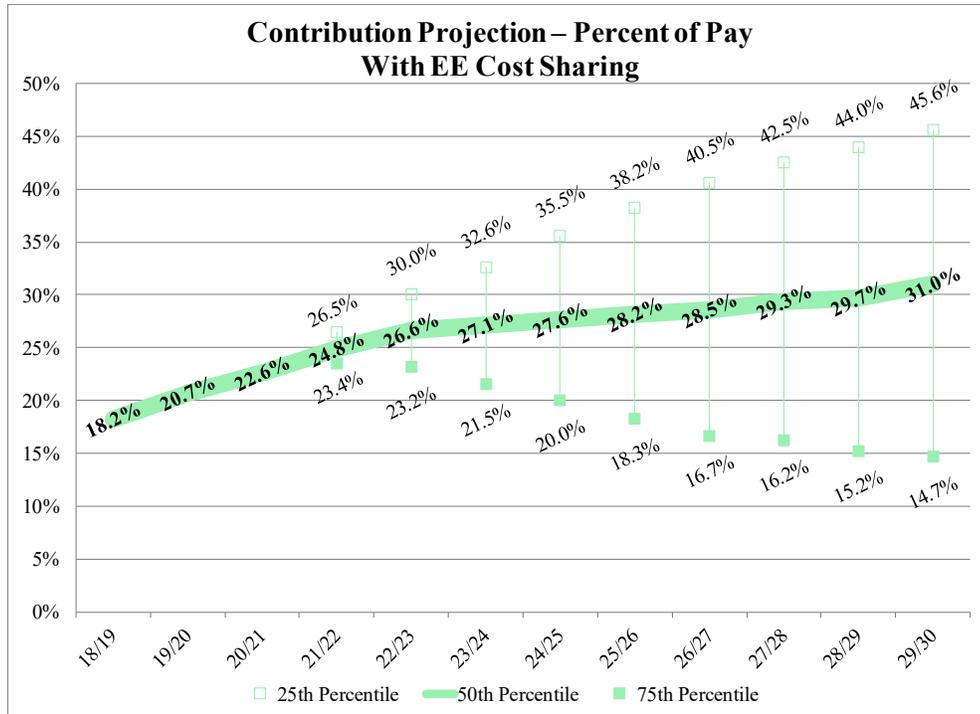
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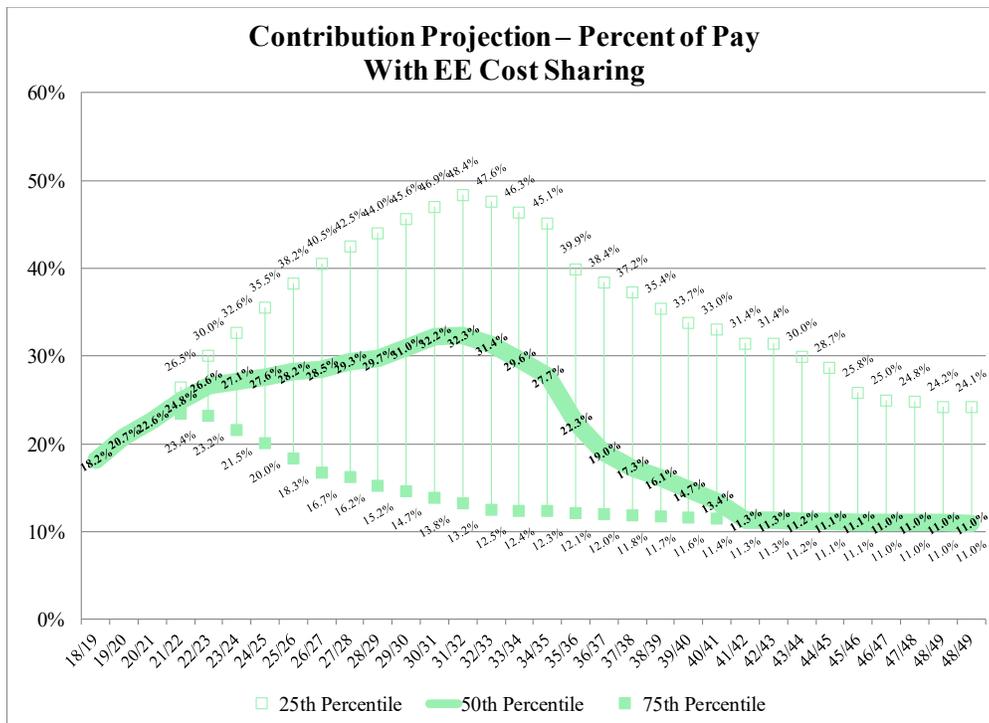
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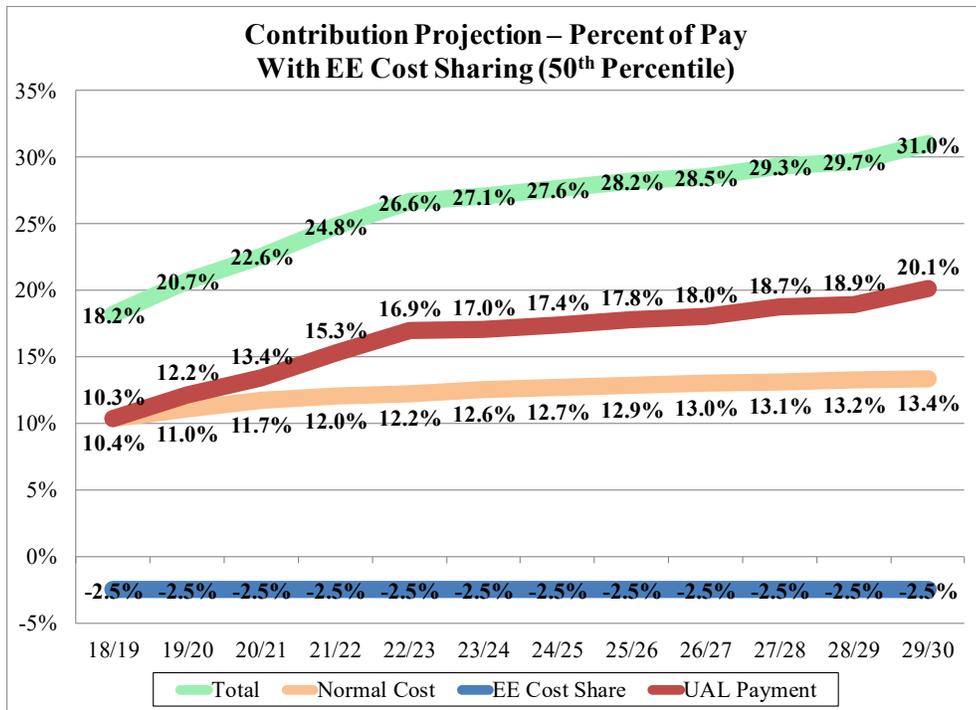
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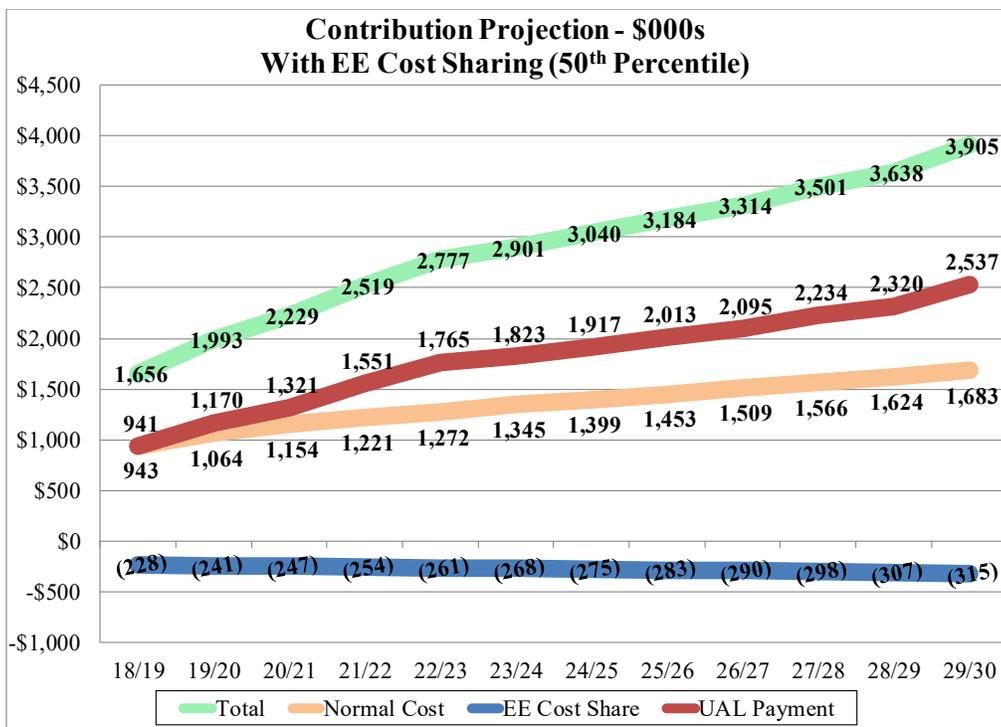


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CONTRIBUTIONS - MISCELLANEOUS

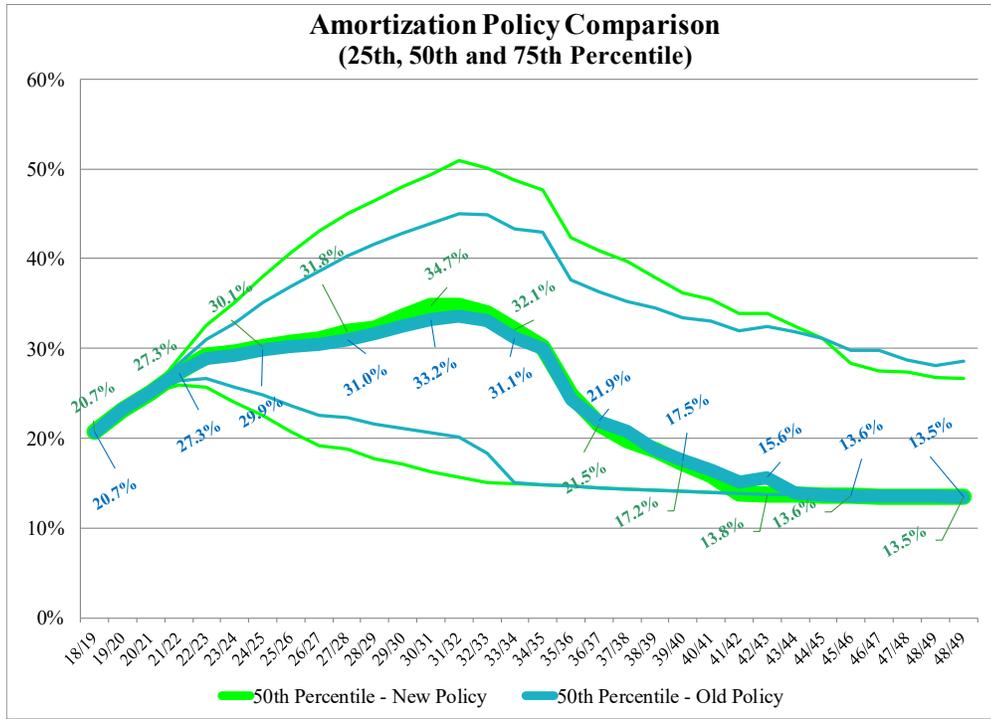


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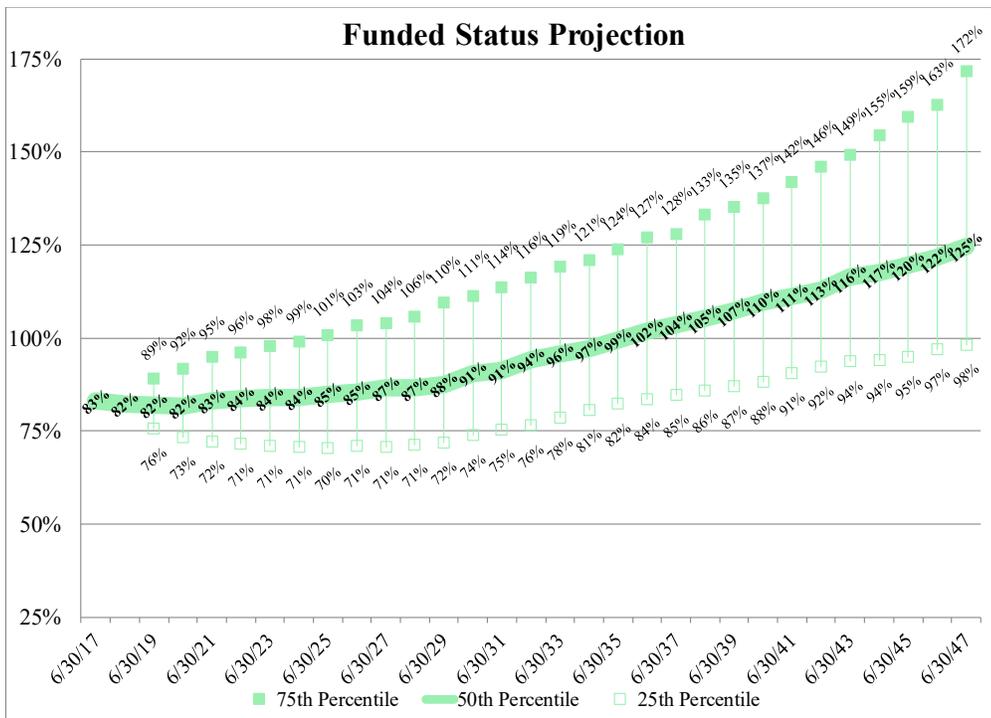
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CONTRIBUTIONS - MISCELLANEOUS



FUNDED STATUS - MISCELLANEOUS



DEMOGRAPHIC INFORMATION – SAFETY POLICE

	2011	2014	2016	2017
Actives				
■ Counts	34	31	31	30
■ Average PERSable Wages	\$ 121,800	\$ 118,300	\$ 121,600	\$ 129,500
■ Total Projected PERSable Wages	4.1	3.7	3.8	3.9
Inactive Members				
■ Counts				
• Transferred	44	43	45	46
• Separated	13	17	16	13
• Retired	79	86	92	95
■ Active / Retiree Ratio (City)	0.4	0.4	0.3	0.3
■ Active / Retiree Ratio (All CalPERS)	1.5	1.3	1.3	1.3

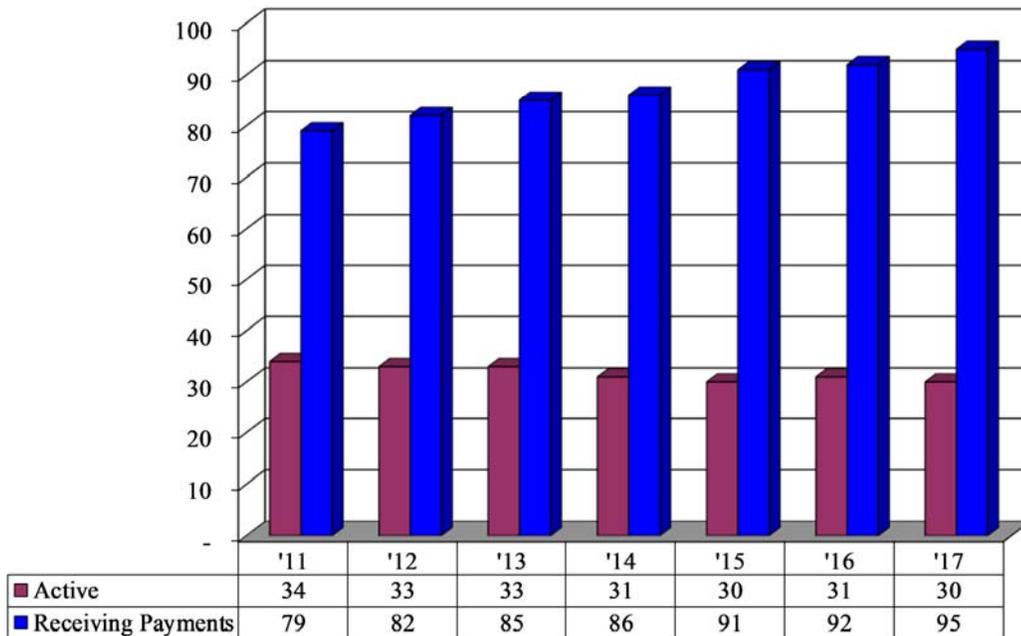


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DEMOGRAPHIC INFORMATION – SAFETY POLICE



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FUNDED STATUS – SAFETY POLICE

	<u>June 30, 2016</u>	<u>June 30, 2017</u>
Active AAL	\$15,300,000	\$17,900,000
Retiree AAL	43,000,000	44,700,000
Inactive AAL	<u>8,900,000</u>	<u>8,900,000</u>
Total AAL	67,200,000	71,500,000
Assets	<u>47,700,000</u>	<u>51,700,000</u>
Unfunded Liability	19,500,000	19,800,000
Funded Ratio	71.0%	72.3%

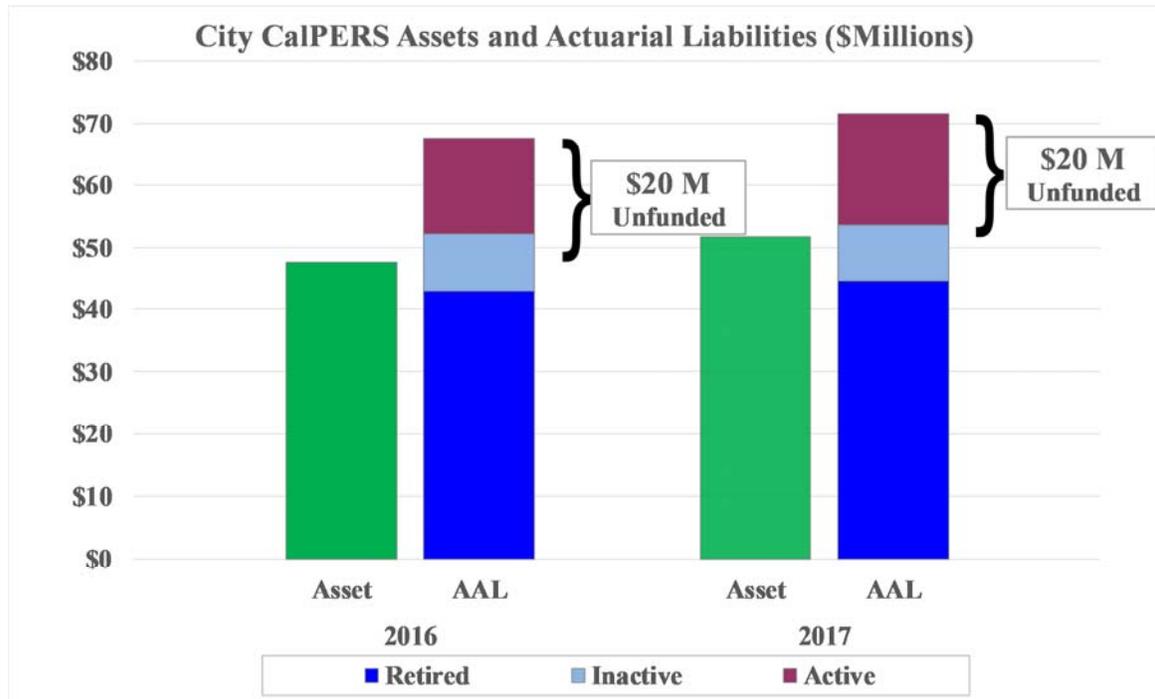


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FUNDED STATUS – SAFETY POLICE



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FUNDED STATUS – SAFETY POLICE

Discount Rate Sensitivity

June 30, 2017

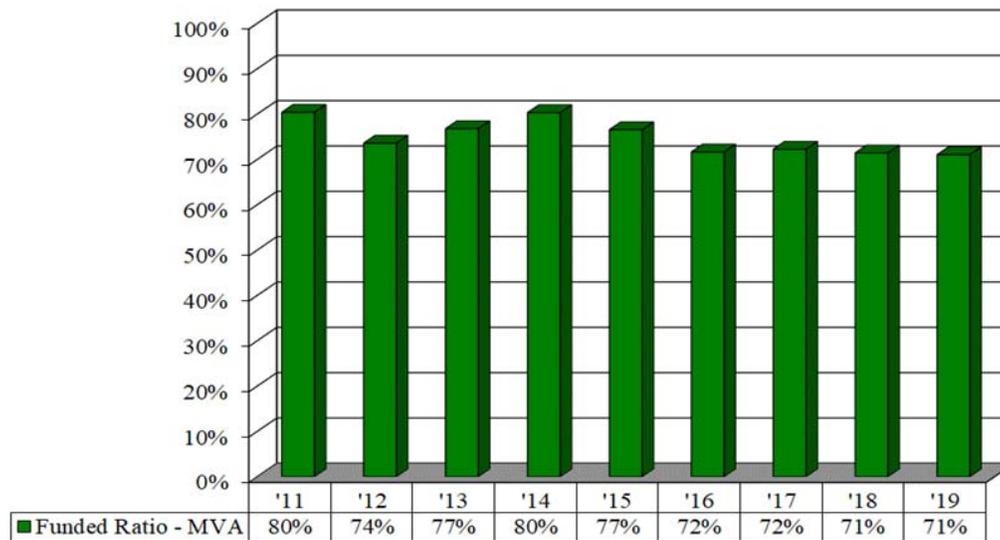
	Discount Rate		
	<u>7.25%</u>	<u>7.00%</u>	<u>6.00%</u>
AAL	\$ 71,500,000	\$ 73,600,000	\$ 83,700,000
Assets	<u>51,700,000</u>	<u>51,700,000</u>	<u>51,700,000</u>
Unfunded Liability	19,800,000	21,900,000	32,000,000
Funded Ratio	72.3%	70.2%	61.8%



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FUNDED STATUS – SAFETY POLICE



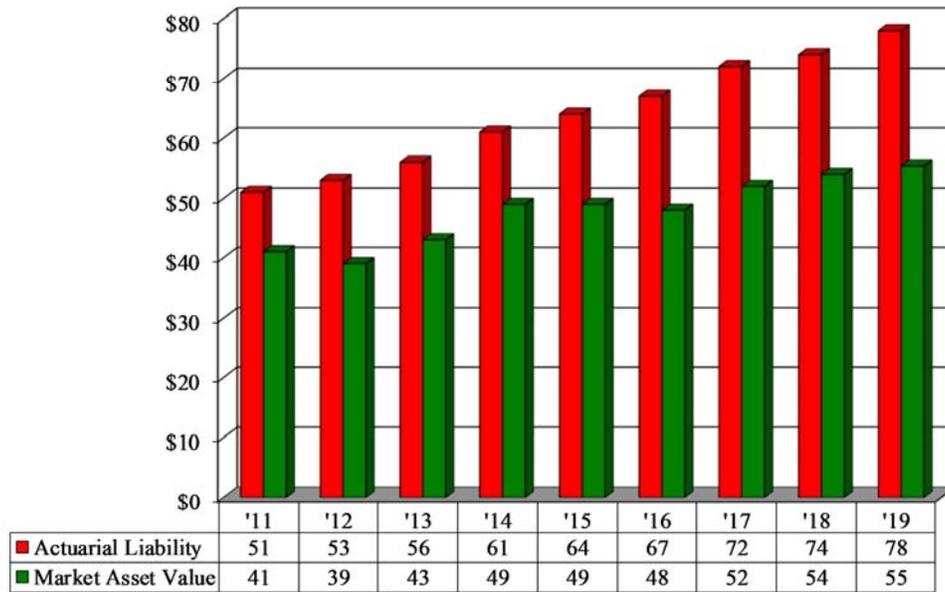
6/30/18 & 6/30/19 funded status estimated



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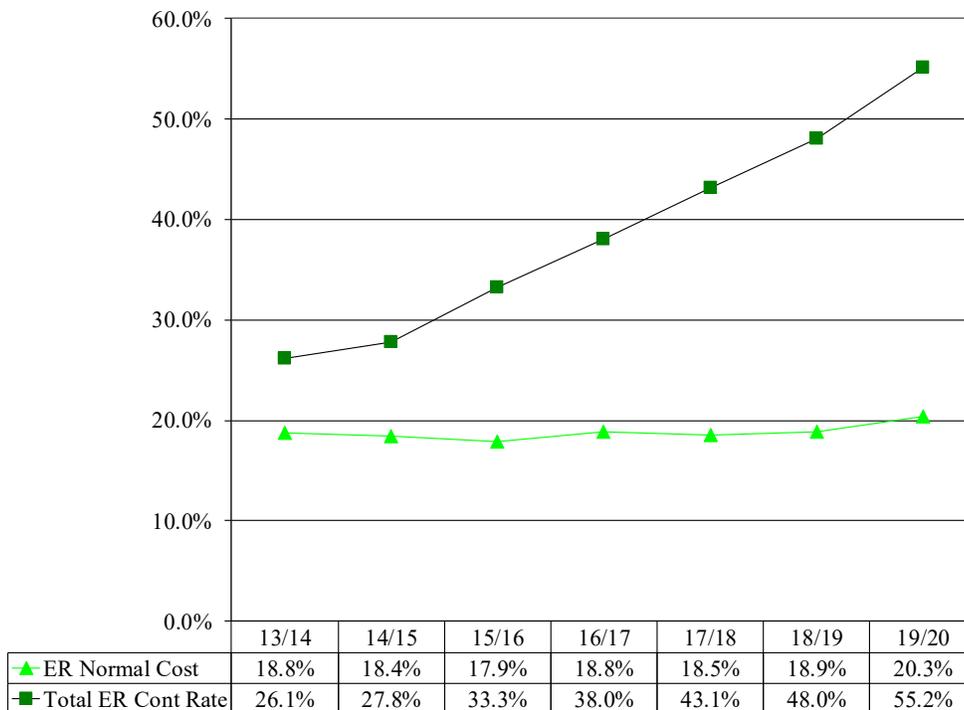
FUNDED STATUS (MILLIONS) – SAFETY POLICE



6/30/18 & 6/30/19 funded status estimated



CONTRIBUTION RATES – SAFETY POLICE



CONTRIBUTION RATES – SAFETY POLICE

	6/30/17 Valuation		
	<u>2019/2020 Contribution Rates</u>		
	<u>Total⁴</u>	<u>Tier 1</u>	<u>PEPRA</u>
		3%<u>@50</u>	2.7%<u>@57</u>
■ Base Total Normal Cost	28.9%	29.7%	25.0%
■ Class 1 Benefits			
● Final Average Comp (1-Year)	<u>1.0%</u>	<u>1.2%</u>	<u>-</u>
■ Total Normal Cost	29.9%	30.9%	25.0%
■ Formula's Expected EE Contr. Rate	<u>9.5%</u>	<u>9.0%</u>	<u>12.0%</u>
■ ER Normal Cost	20.3%	21.9%	13.0%
■ Amortization Bases	34.8%	42.2%	1.0%
■ Amortization of Side Fund	<u>-</u>	<u>-</u>	<u>-</u>
■ Total ER Contribution	55.2%	64.1%	14.0%
■ Employee counts	30	23	7
■ Employee payroll (in 000's)	3,884	3,193	691
■ Total ER Contribution \$ (in 000's)	\$ 2,143		

⁴ Weighting of total contribution based on projected classic and PEPRA payrolls



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CONTRIBUTION RATES – SAFETY POLICE

	<u>6/30/16</u>	<u>6/30/17</u>
	<u>2018/2019</u>	<u>2019/2020</u>
■ Total Normal Cost	28.5%	29.9%
■ Employee Normal Cost	<u>9.6%</u>	<u>9.5%</u>
■ Employer Normal Cost	18.9%	20.3%
■ Amortization Payments	<u>29.1%</u>	<u>34.8%</u>
■ Total Employer Contribution Rate	48.0%	55.2%
■ 2018/19 Employer Contribution Rate		48.0%
● Asset Method Change (5 th Year)		2.7%
● 6/30/14 Assumption Change (4 th Year)		1.8%
● 6/30/16 Discount Rate Change (2 nd Year)		0.6%
● 6/30/17 Discount Rate & Inflation (1 st Year)		2.2%
● Other (Gains)/Losses		<u>(0.1%)</u>
■ 2019/20 Employer Contribution Rate		55.2%



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CONTRIBUTION PROJECTIONS – SAFETY POLICE

- Market Value Investment Return:
 - June 30, 2018 8.6%⁵
 - Future returns based on stochastic analysis using 1,000 trials

<u>Single Year Returns at⁶</u>	<u>25th Percentile</u>	<u>50th Percentile</u>	<u>75th Percentile</u>
Current Investment Mix	0.1%	7.0%	14.8%
Ultimate Investment Mix	0.8%	6.0%	11.4%

 - Assumes investment returns will, generally be 6.5% (as compared to 7.0%) over the next 10 years and higher beyond that.
- Assumption Changes – Discount Rate
 - Decrease to 7.0% by June 30, 2018 valuation
 - Additional Discount Rate decreases due to Risk Mitigation policy.
- No Other: Gains/Losses, Method/Assumption Changes, Benefit Improvements
- Different from CalPERS projection

⁵ Based July 2018 CalPERS press release

⁶ Nth percentile means N percentage of our trials result in returns lower than the indicated rates.



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CONTRIBUTION PROJECTIONS – SAFETY POLICE

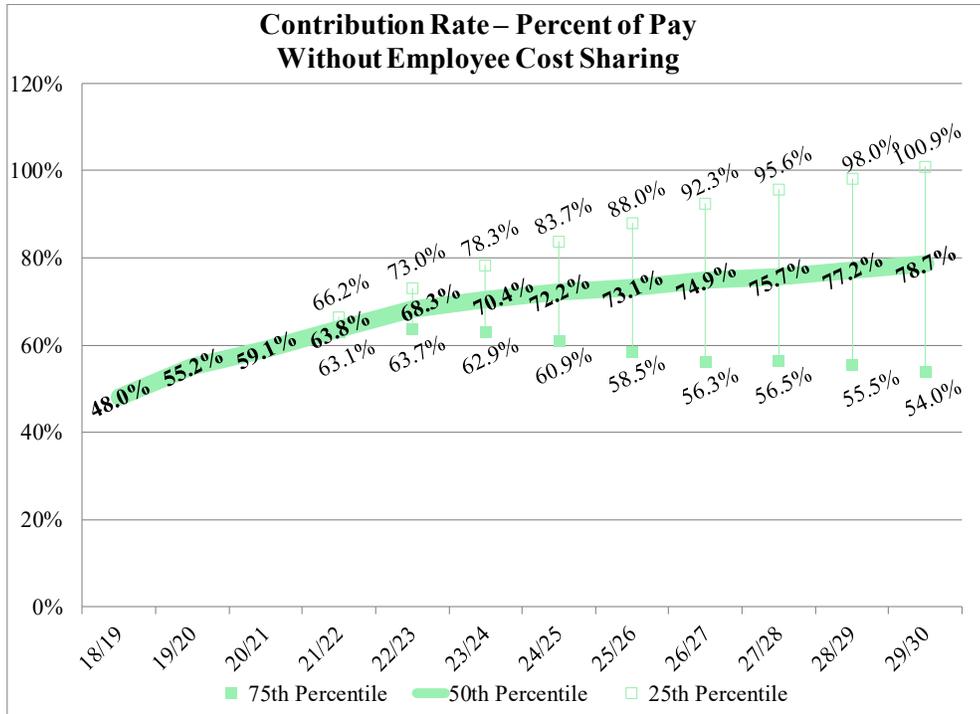
- New hire assumptions:
 - 75.0% of 2018/19 new hires are PEPRA members and 25.0% are Classic members
 - Percentage of PEPRA member future hires to increase from 75.0% to 100% over 5 years
- Employee Cost Sharing
 - Applies to Classic and PEPRA employees
 - Varies by Employee Group:
 - Pacifica Police Management Association: 5.0%
 - Pacifica Police Supervisor Association: 5.0%
 - Pacifica Police Officer Association: 4.0%
 - Combined employee cost sharing: 4.3%, based on 2017 calculation



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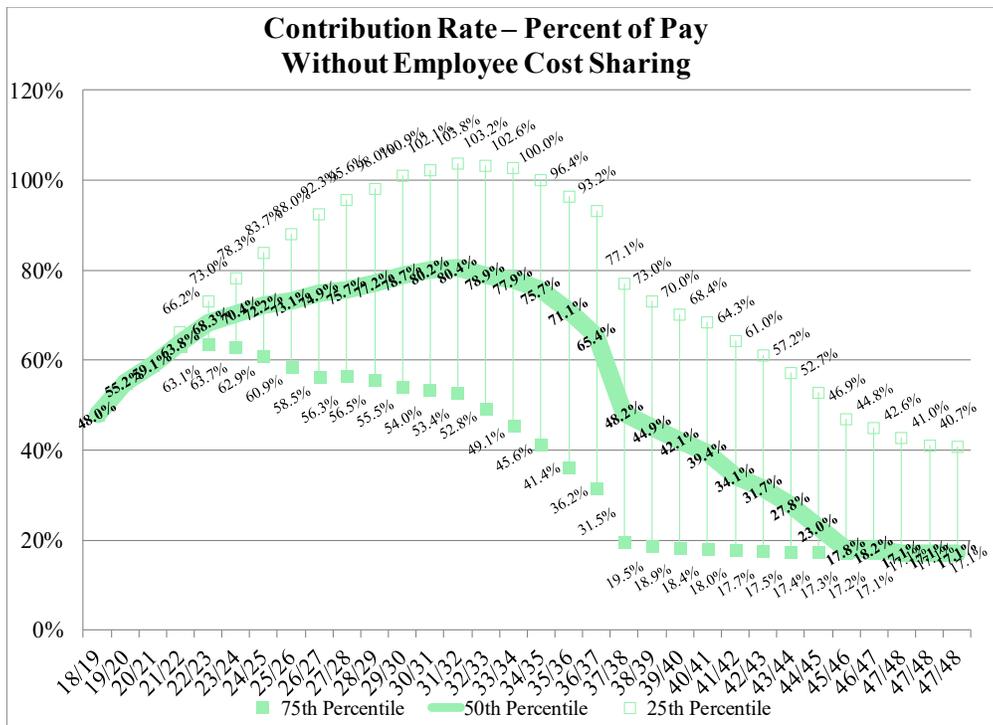
CONTRIBUTION PROJECTIONS – SAFETY POLICE



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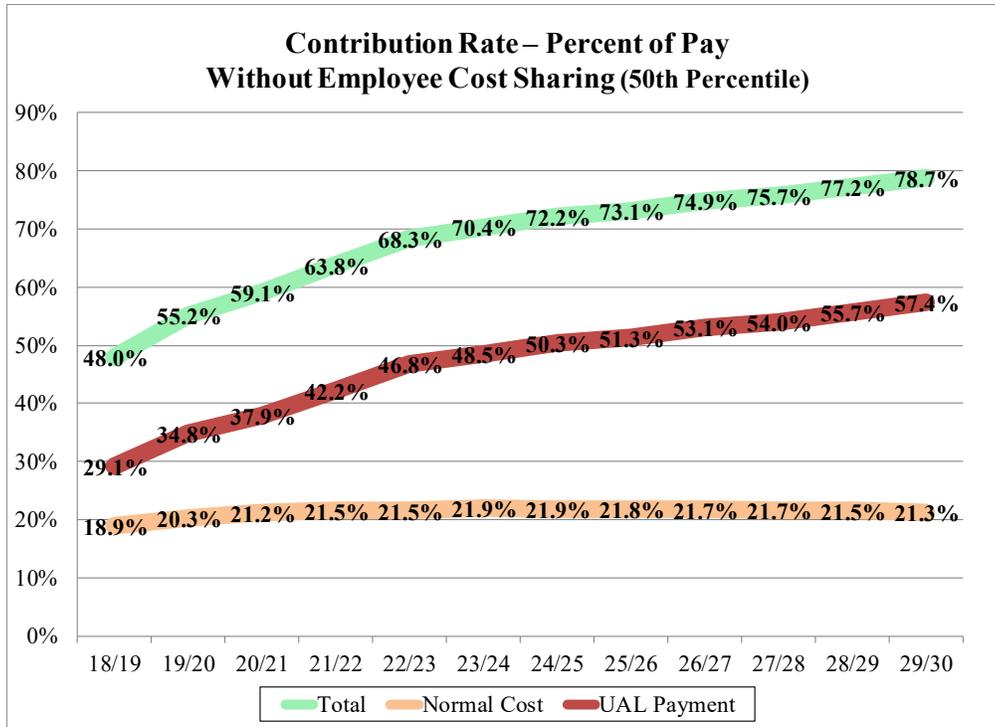
CONTRIBUTION PROJECTIONS – SAFETY POLICE



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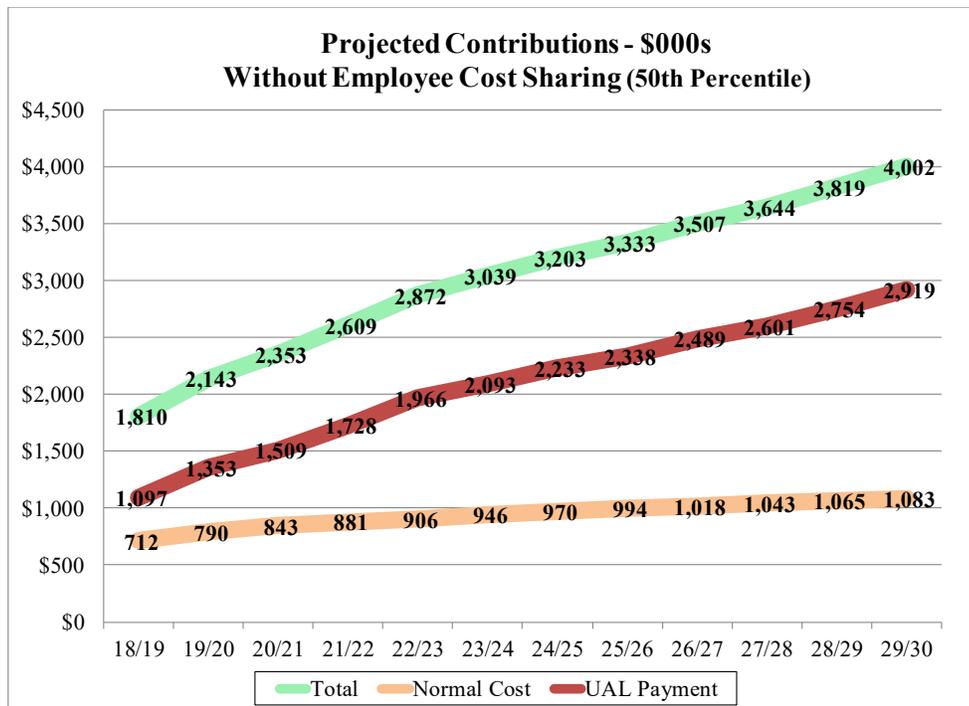
CONTRIBUTION PROJECTIONS – SAFETY POLICE



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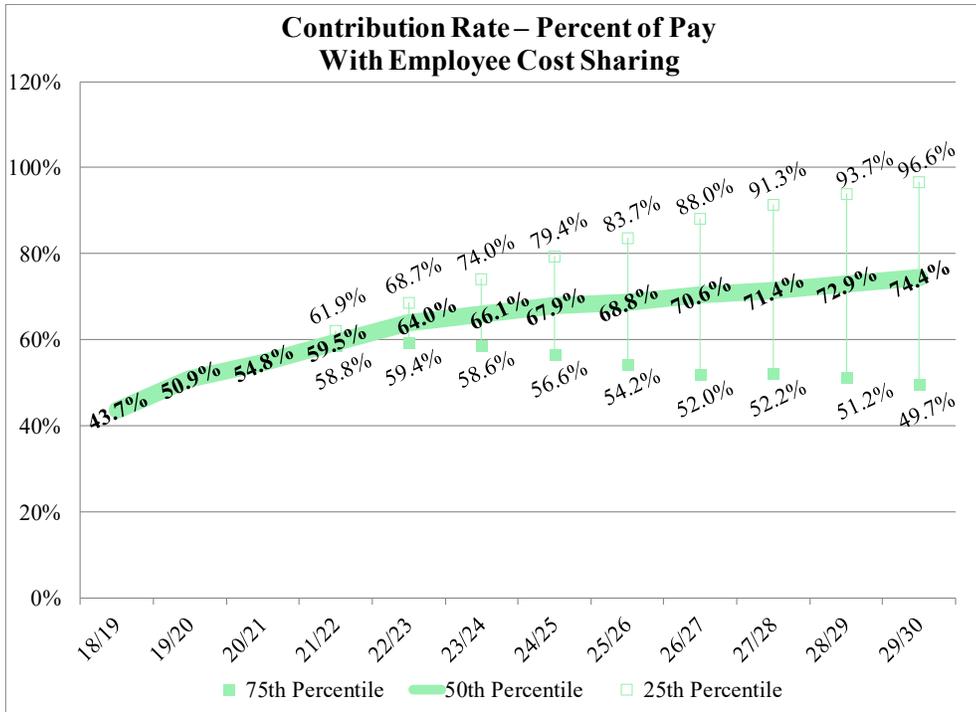
CONTRIBUTION PROJECTIONS – SAFETY POLICE



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CONTRIBUTION PROJECTIONS – SAFETY POLICE

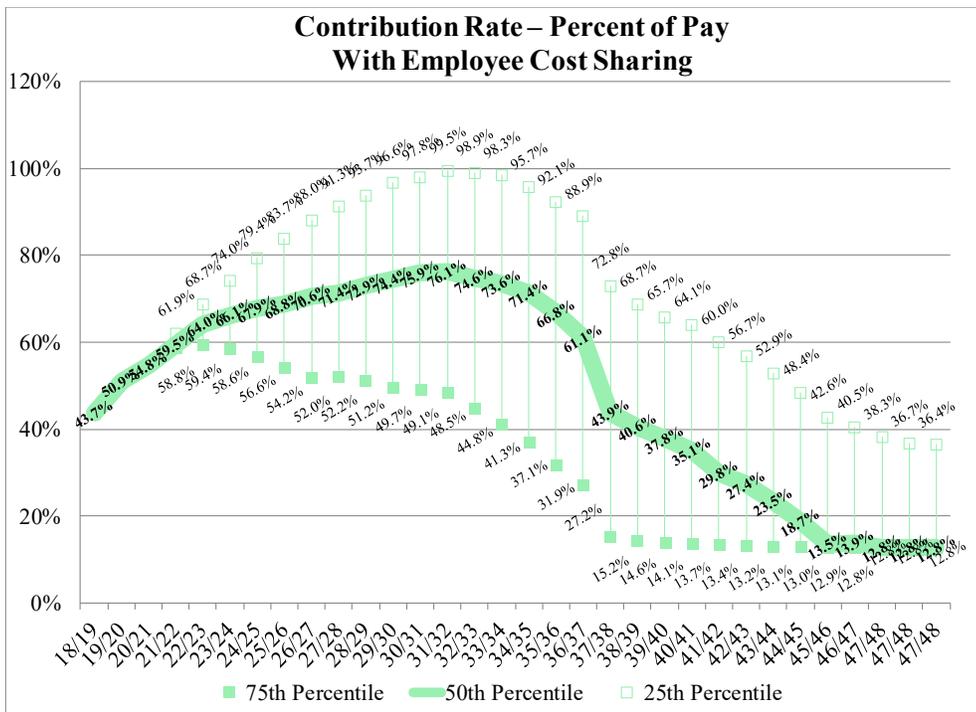


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CONTRIBUTION PROJECTIONS – SAFETY POLICE

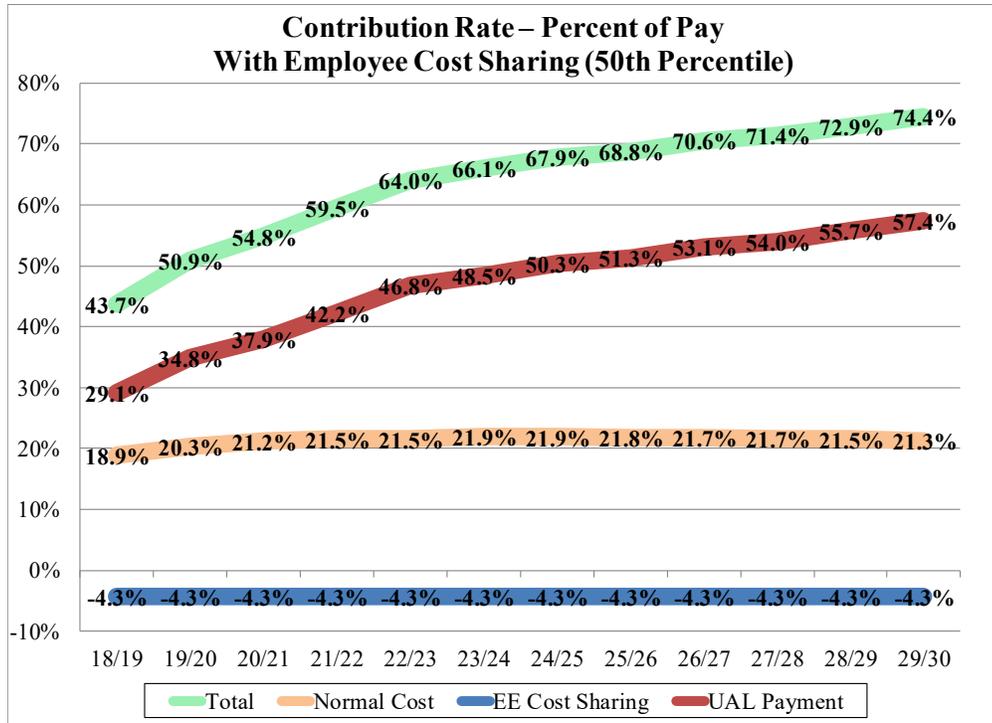


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CONTRIBUTION PROJECTIONS – SAFETY POLICE

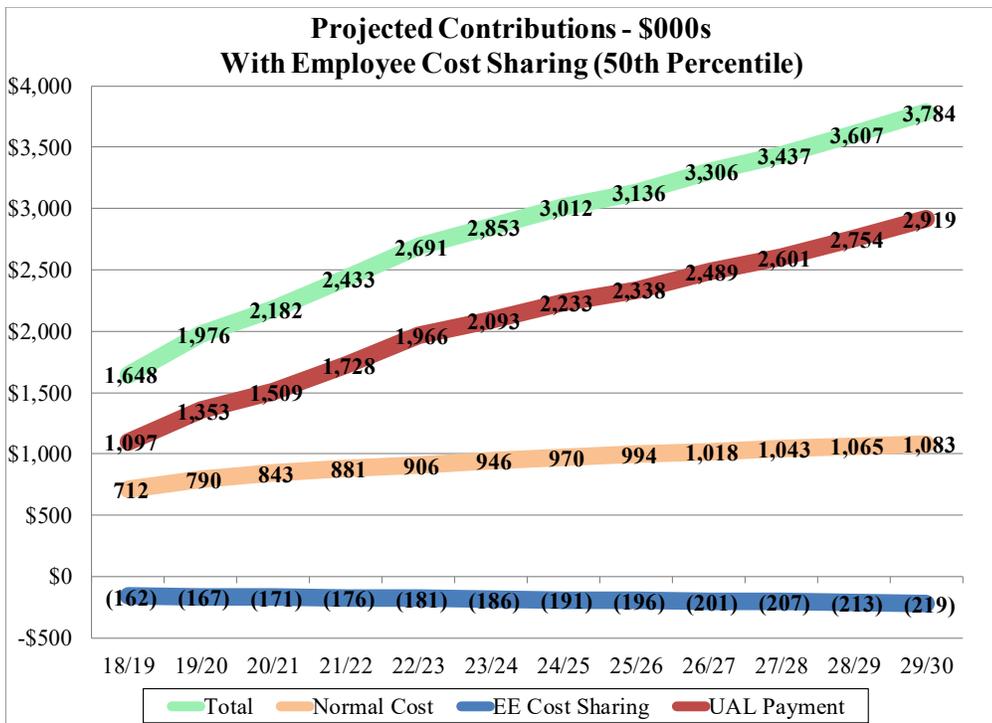


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CONTRIBUTION PROJECTIONS – SAFETY POLICE

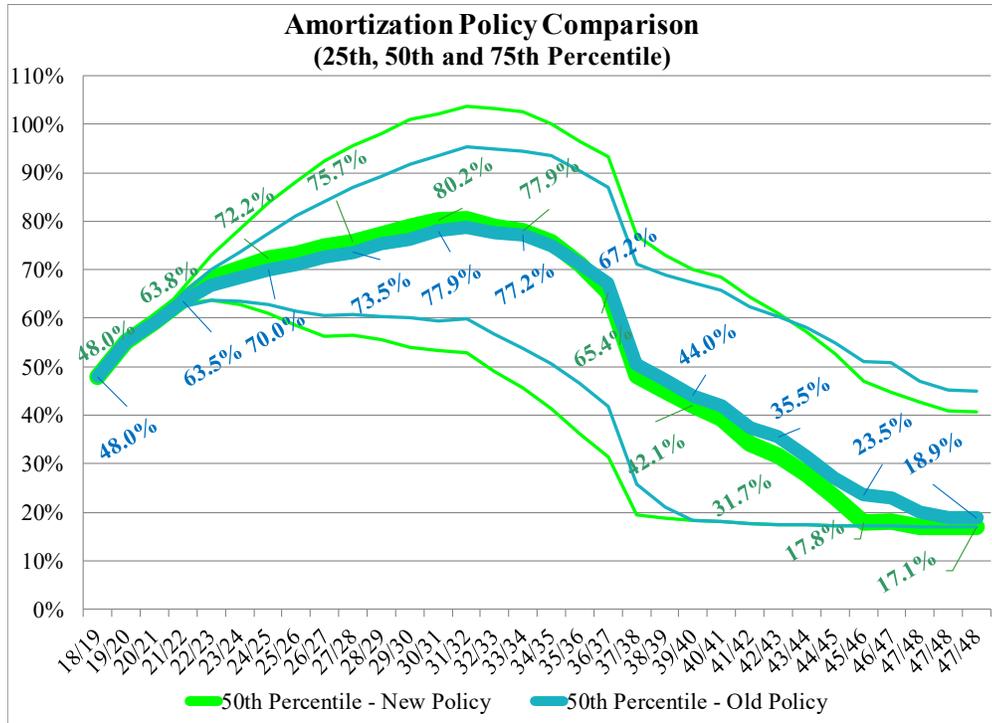


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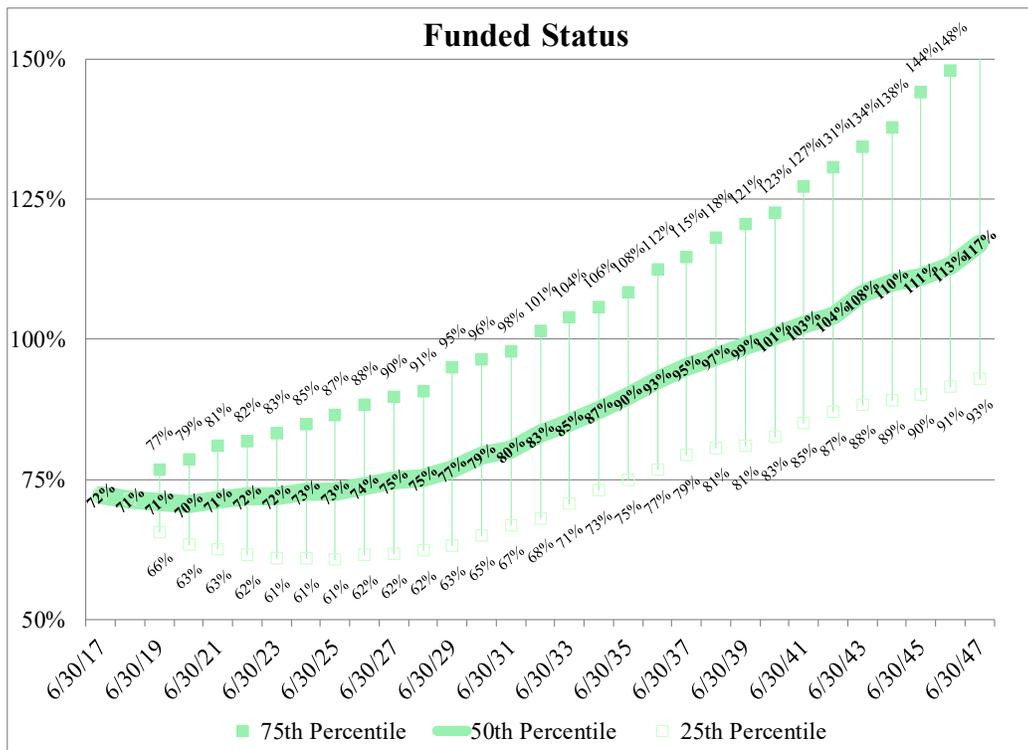
CONTRIBUTION PROJECTIONS – SAFETY POLICE



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CONTRIBUTION PROJECTIONS – SAFETY POLICE



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DEMOGRAPHIC INFORMATION – SAFETY FIRE

	2011	2014	2016	2017
Actives				
■ Counts	26	25	25	23
■ Average PERSable Wages	\$ 116,700	\$ 116,500	\$ 123,700	\$ 123,100
■ Total Projected PERSable Wages	3.0	2.9	3.1	2.8
Inactive Members				
■ Counts				
• Transferred	11	11	9	8
• Separated	2	2	2	3
• Retired	49	51	55	56
■ Active / Retiree Ratio (City)	0.5	0.5	0.5	0.4
■ Active / Retiree Ratio (All CalPERS)	1.5	1.3	1.3	1.3

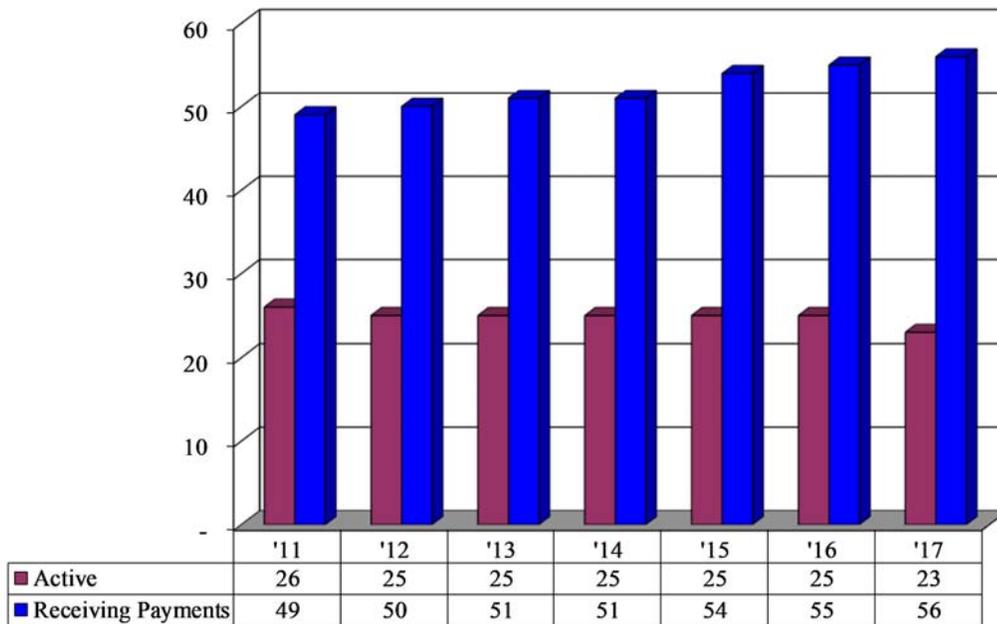


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DEMOGRAPHIC INFORMATION – SAFETY FIRE



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FUNDED STATUS – SAFETY FIRE

	<u>June 30, 2016</u>	<u>June 30, 2017</u>
Active AAL	\$17,000,000	\$16,500,000
Retiree AAL	22,200,000	23,700,000
Inactive AAL	<u>2,200,000</u>	<u>3,200,000</u>
Total AAL	41,400,000	43,400,000
Assets	<u>30,300,000</u>	<u>32,100,000</u>
Unfunded Liability	11,100,000	11,300,000
Funded Ratio	73.2%	74.0%

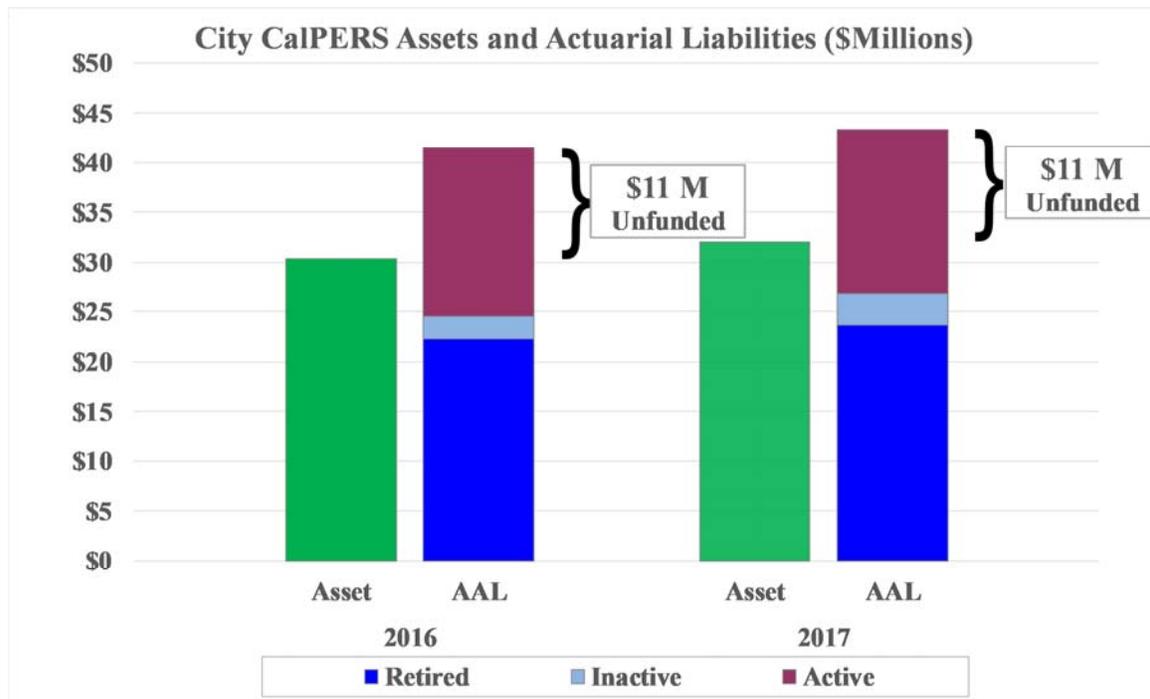


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FUNDED STATUS – SAFETY FIRE



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FUNDED STATUS – SAFETY FIRE

Discount Rate Sensitivity

June 30, 2017

	<u>Discount Rate</u>		
	<u>7.25%</u>	<u>7.00%</u>	<u>6.00%</u>
AAL	\$ 43,400,000	\$ 44,500,000	\$ 50,000,000
Assets	<u>32,100,000</u>	<u>32,100,000</u>	<u>32,100,000</u>
Unfunded Liability	11,300,000	12,400,000	17,900,000
Funded Ratio	74.0%	72.1%	64.2%

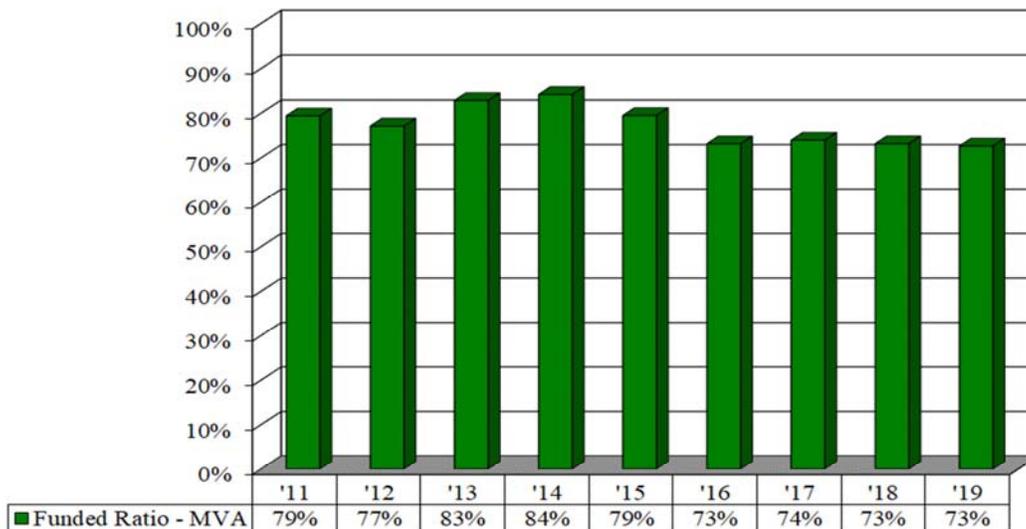


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FUNDED STATUS – SAFETY FIRE



6/30/18 & 6/30/19 funded status estimated

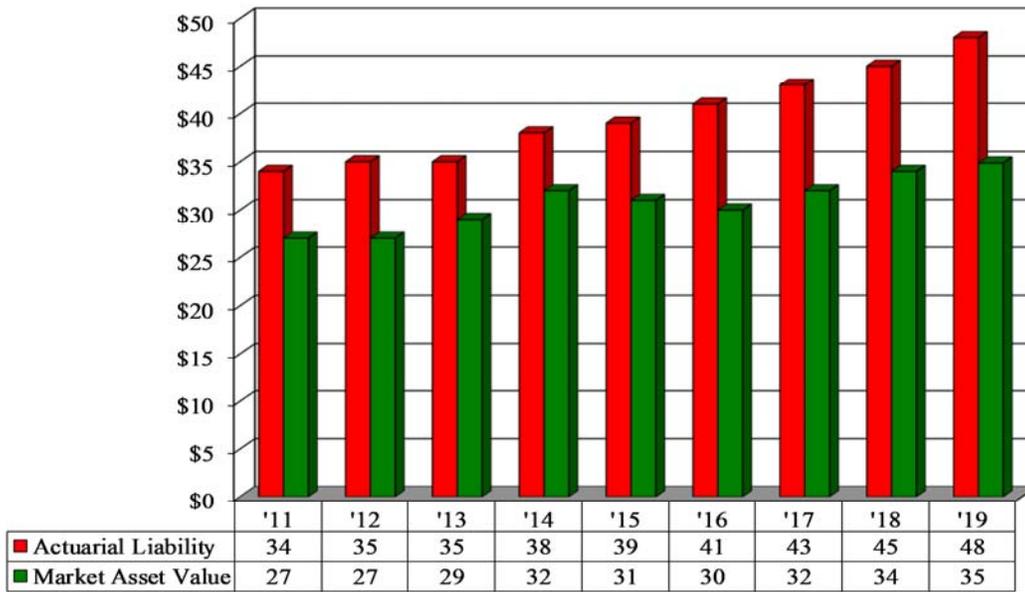


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FUNDED STATUS (MILLIONS) – SAFETY FIRE



6/30/18 & 6/30/19 funded status estimated

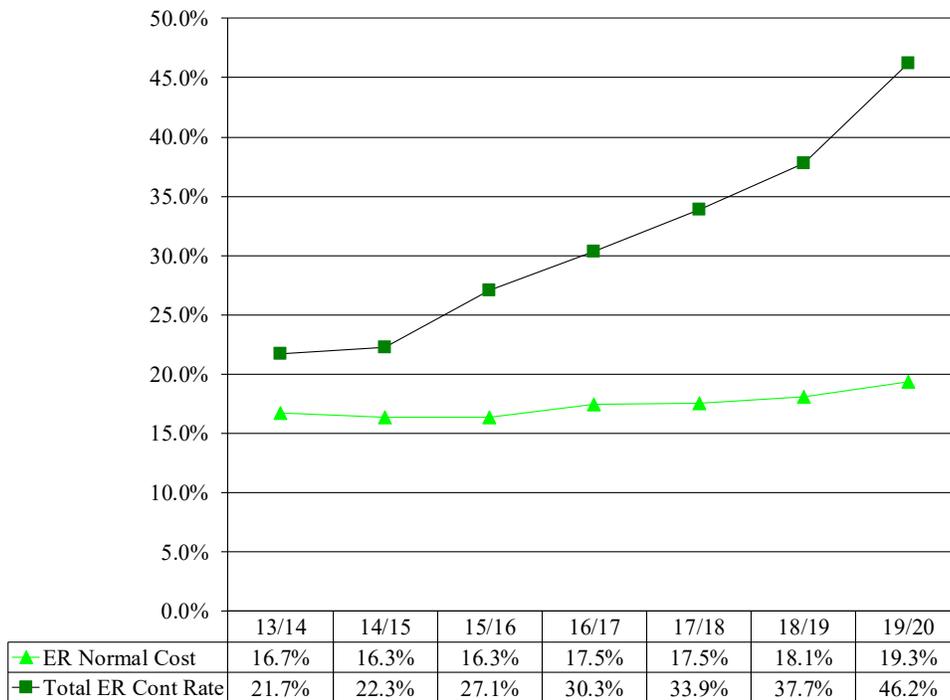


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CONTRIBUTION RATES – SAFETY FIRE



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CONTRIBUTION RATES – SAFETY FIRE

	6/30/17 Valuation		
	<u>2019/2020 Contribution Rates</u>		
	<u>Total</u>⁷	<u>Tier 1</u>	<u>PEPRA</u>
		3%<u>@55</u>	2.7%<u>@57</u>
■ Base Total Normal Cost	27.6%	27.9%	25.0%
■ Class 1 Benefits			
● Final Average Comp (1-Year)	<u>1.0%</u>	<u>1.1%</u>	<u>-</u>
■ Total Normal Cost	28.6%	29.0%	25.0%
■ Formula's Expected EE Contr. Rate	<u>9.3%</u>	<u>9.0%</u>	<u>12.0%</u>
■ ER Normal Cost	19.3%	20.0%	13.0%
■ Amortization Bases	26.9%	30.0%	0.9%
■ Amortization of Side Fund	<u>-</u>	<u>-</u>	<u>-</u>
■ Total ER Contribution	46.2%	50.0%	13.9%
■ Employee counts	23	20	3
■ Employee payroll (in 000's)	2,830	2,535	295
■ Total ER Contribution \$ (in 000's)	\$ 1,308		

⁷ Weighting of total contribution based on projected classic and PEPRA payrolls



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CONTRIBUTION RATES – SAFETY FIRE

	<u>6/30/16</u>	<u>6/30/17</u>
	<u>2018/2019</u>	<u>2019/2020</u>
■ Total Normal Cost	27.4%	28.6%
■ Employee Normal Cost	9.2%	9.3%
■ Employer Normal Cost	18.1%	19.3%
■ Amortization Payments	<u>19.6%</u>	<u>26.9%</u>
■ Total Employer Contribution Rate	37.7%	46.2%
■ 2018/19 Employer Contribution Rate		37.7%
● Payroll < Expected		2.2%
● Asset Method Change (5 th Year)		2.0%
● 6/30/14 Assumption Change (4 th Year)		1.4%
● 6/30/16 Discount Rate Change (2 nd Year)		0.5%
● 6/30/17 Discount Rate & Inflation (1 st Year)		1.9%
● Other (Gains)/Losses		<u>0.5%</u>
■ 2019/20 Employer Contribution Rate		46.2%



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CONTRIBUTION PROJECTIONS – SAFETY FIRE

- Market Value Investment Return:
 - June 30, 2018 8.6%⁸
 - Future returns based on stochastic analysis using 1,000 trials

<u>Single Year Returns at⁹</u>	<u>25th Percentile</u>	<u>50th Percentile</u>	<u>75th Percentile</u>
Current Investment Mix	0.1%	7.0%	14.8%
Ultimate Investment Mix	0.8%	6.0%	11.4%

 - Assumes investment returns will, generally be 6.5% (as compared to 7.0%) over the next 10 years and higher beyond that.
- Assumption Changes – Discount Rate
 - Decrease to 7.0% by June 30, 2018 valuation
 - Additional Discount Rate decreases due to Risk Mitigation policy.
- No Other: Gains/Losses, Method/Assumption Changes, Benefit Improvements
- Different from CalPERS projection

⁸ Based July 2018 CalPERS press release

⁹ Nth percentile means N percentage of our trials result in returns lower than the indicated rates.



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CONTRIBUTION PROJECTIONS – SAFETY FIRE

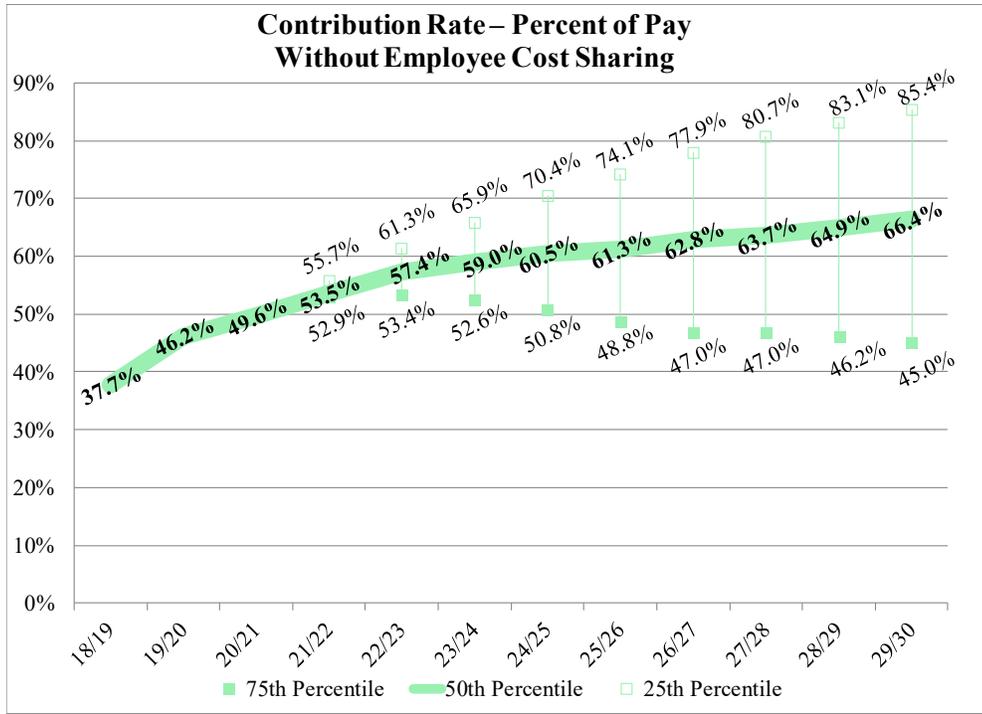
- New hire assumptions:
 - 75.0% of 2018/19 new hires are PEPRAs and 25.0% are Classic members
 - Percentage of PEPRAs member future hires to increase from 75.0% to 100% over 5 years
- Employee Cost Sharing
 - Applies to Classic and PEPRAs employees
 - Varies by Employee Group:
 - IAFF Local 2400 Firefighters: 3.0%
 - Teamsters Local 856 Fire Battalion Chiefs: 5.0%
 - Combined employee cost sharing: 3.2%, based on 2017 calculation



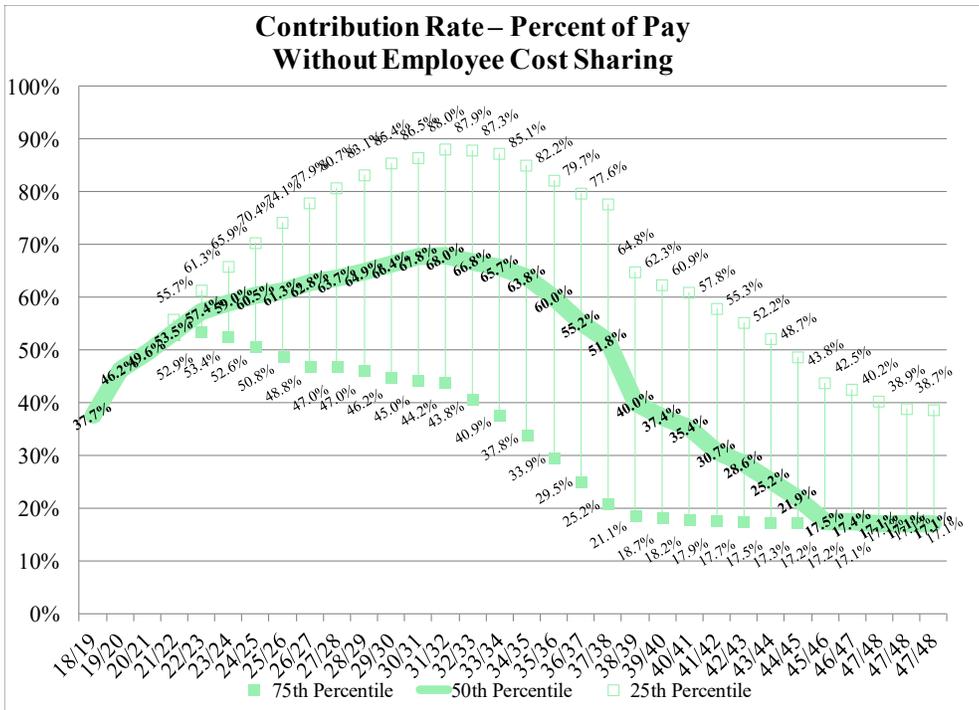
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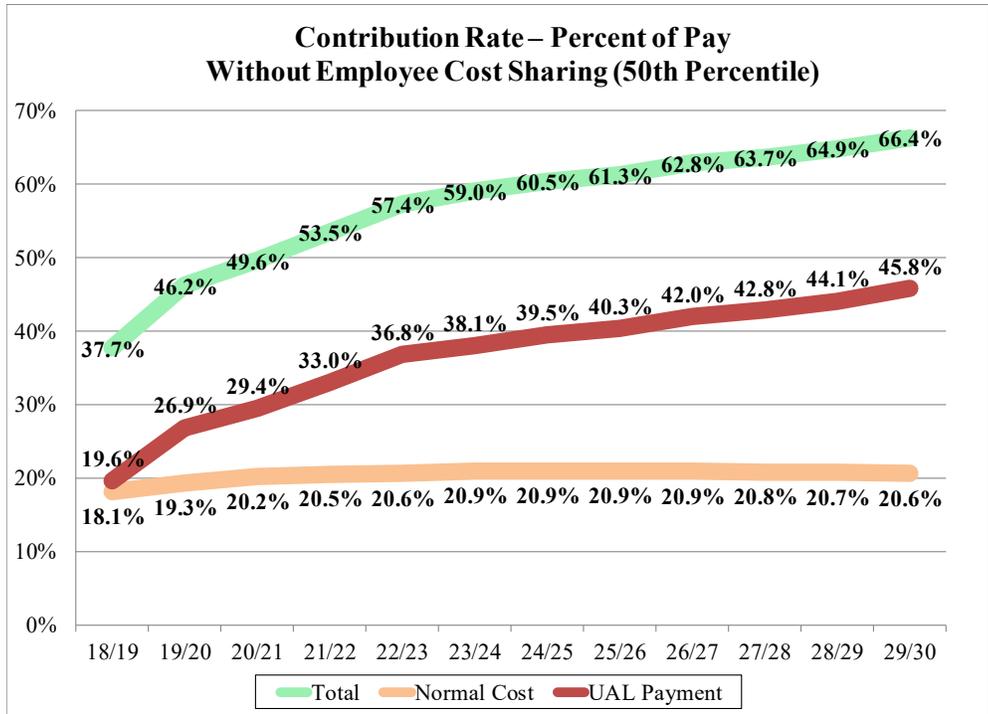
CONTRIBUTION PROJECTIONS – SAFETY FIRE



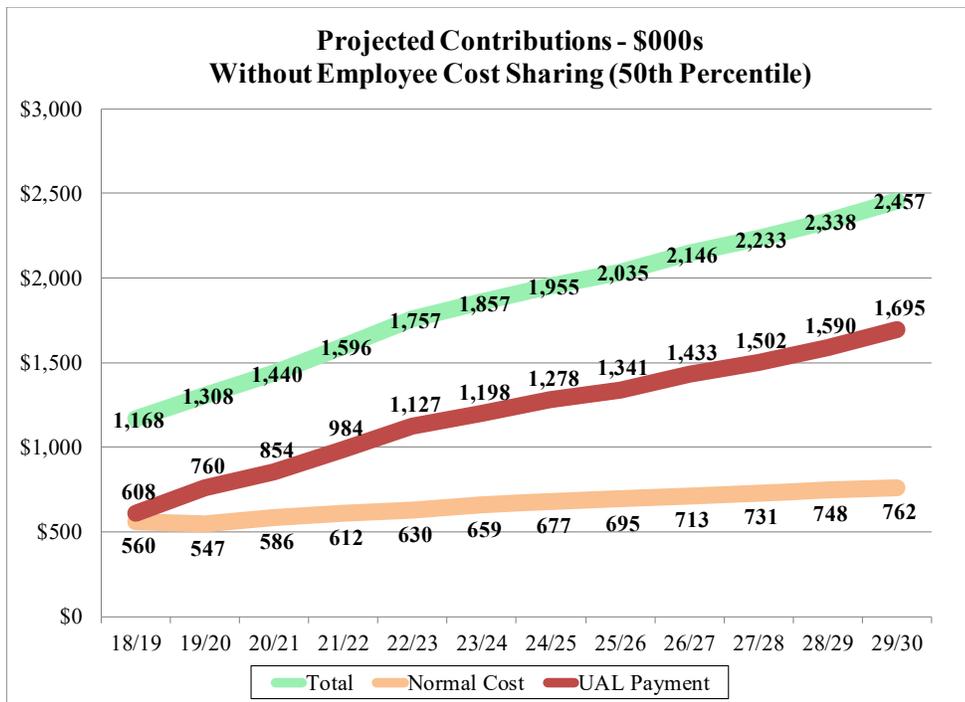
CONTRIBUTION PROJECTIONS – SAFETY FIRE



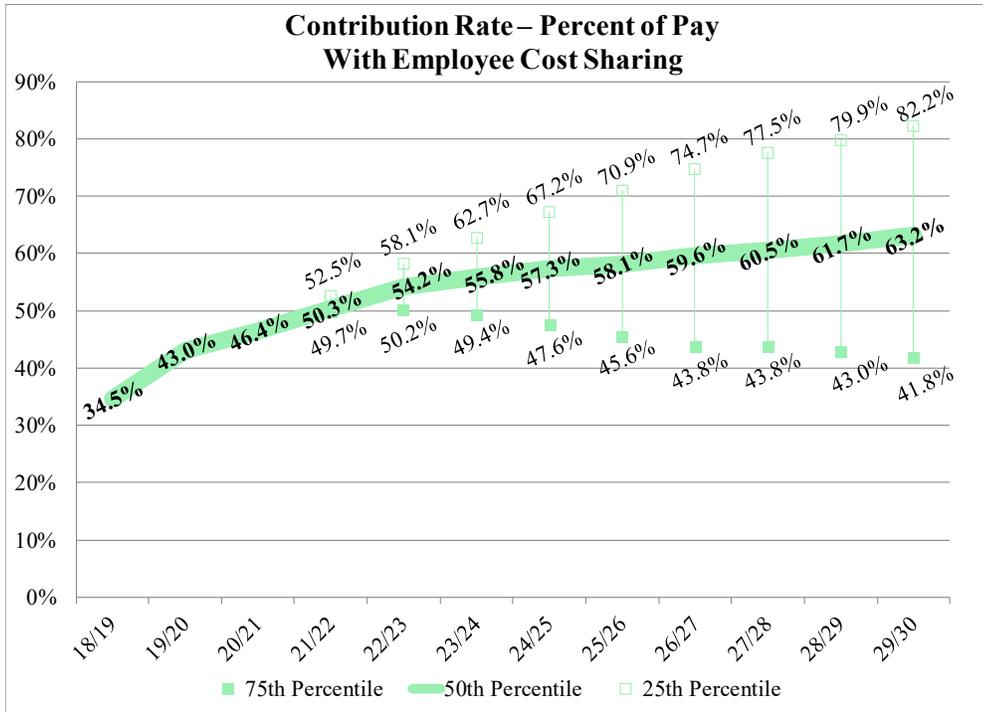
CONTRIBUTION PROJECTIONS – SAFETY FIRE



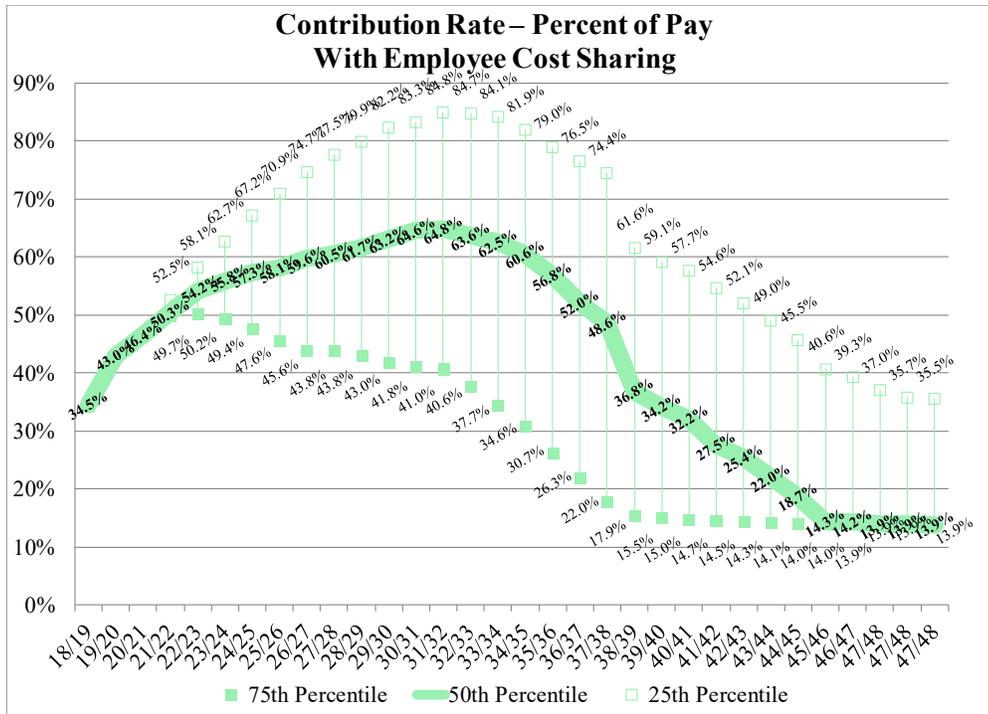
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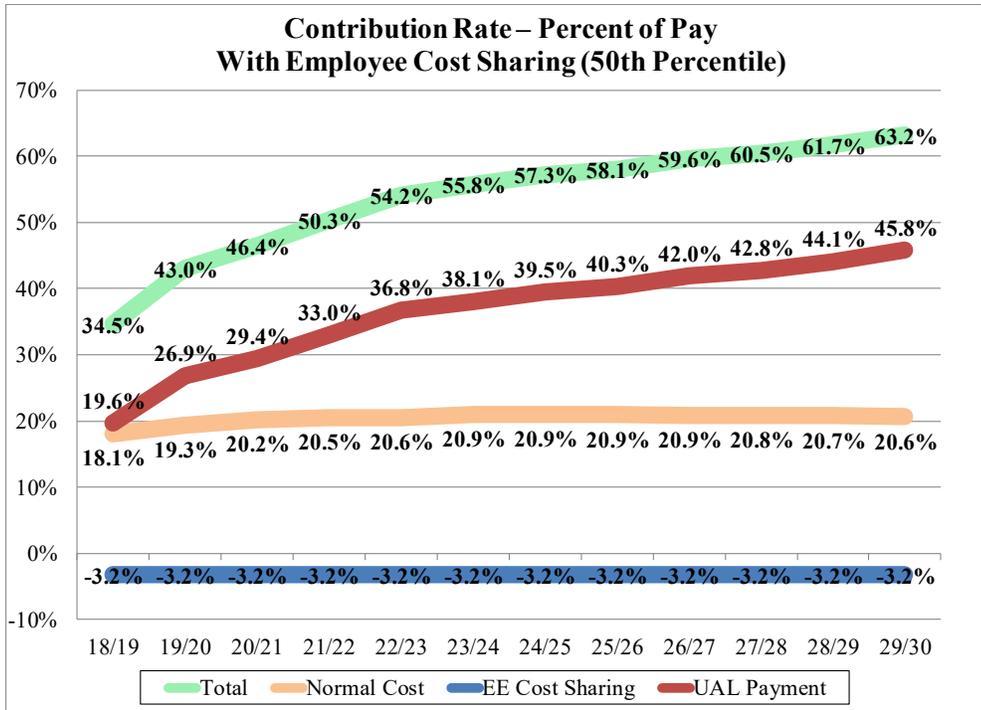
CONTRIBUTION PROJECTIONS – SAFETY FIRE



CONTRIBUTION PROJECTIONS – SAFETY FIRE



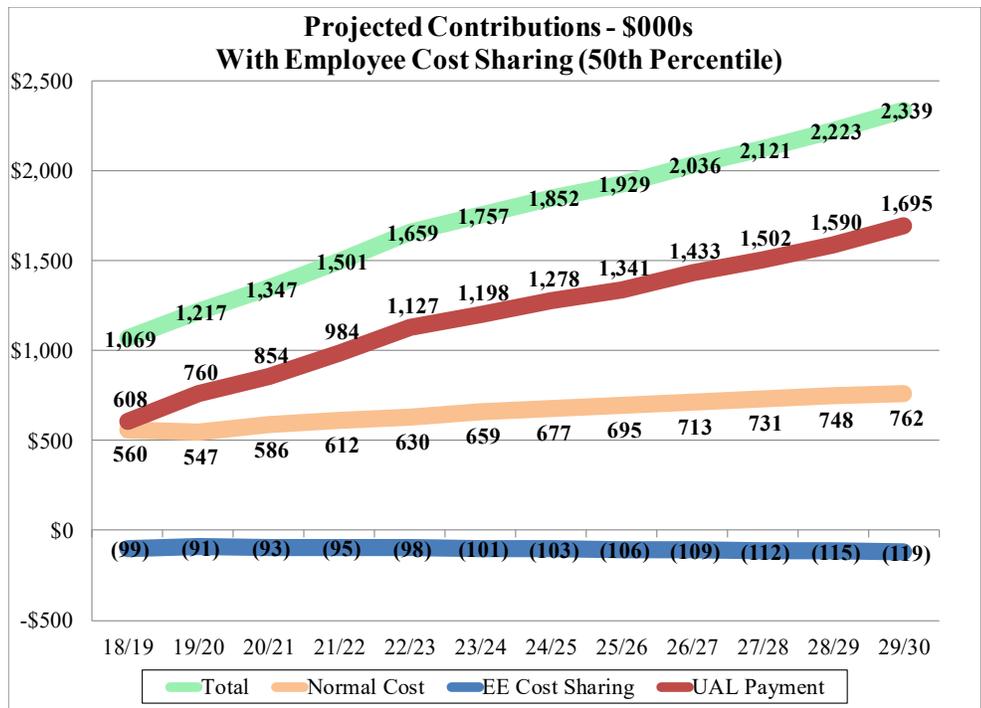
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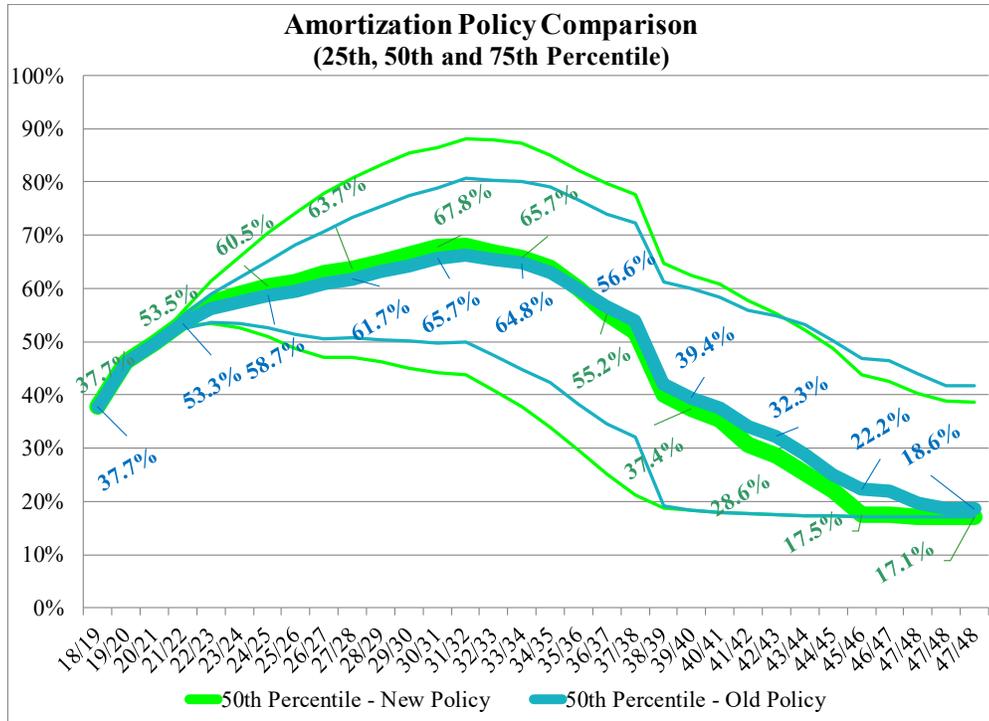
CONTRIBUTION PROJECTIONS – SAFETY FIRE



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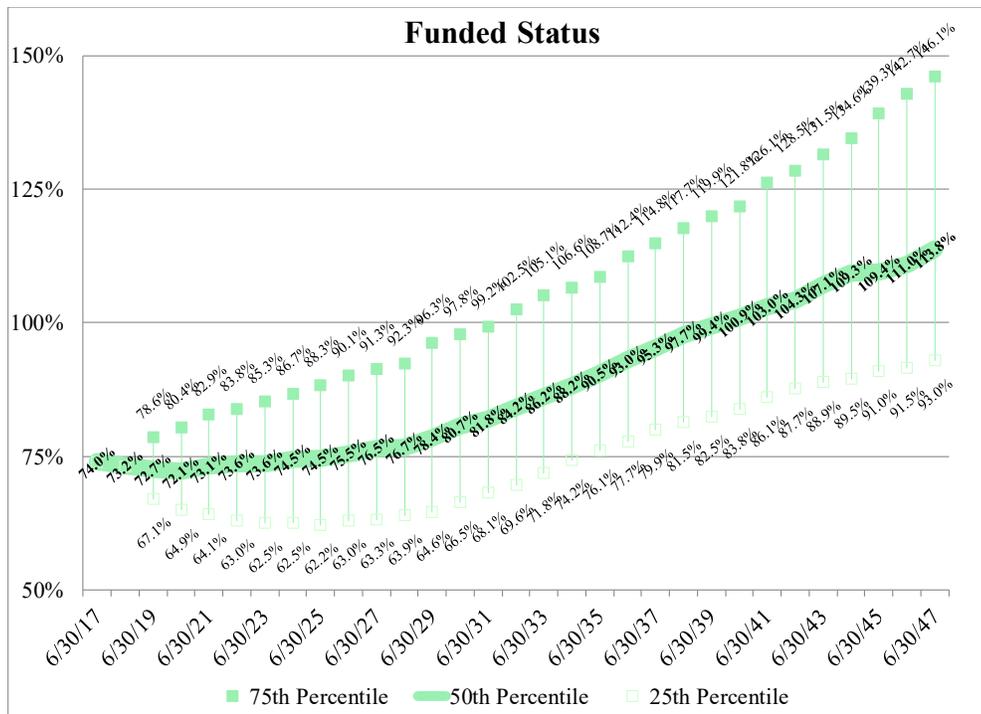
CONTRIBUTION PROJECTIONS – SAFETY FIRE



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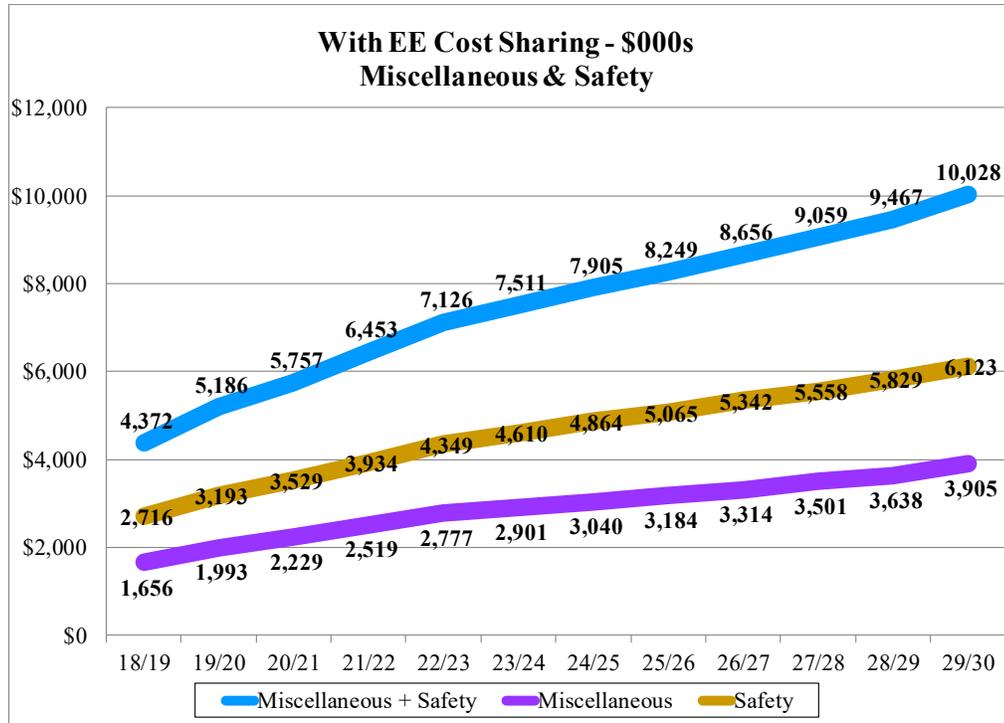
FUNDED STATUS – SAFETY FIRE



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COMBINED MISCELLANEOUS AND SAFETY



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COMBINED MISCELLANEOUS AND SAFETY

Funded Status Summary on June 30, 2017 (Amounts in \$Millions)

	Miscellaneous	Safety Police	Safety Fire	Total
■ AAL	\$ 94	\$ 72	\$ 43	\$ 209
■ Assets	<u>78</u>	<u>52</u>	<u>32</u>	<u>162</u>
■ Unfunded AAL	16	20	11	47
■ Funded Ratio	83.0%	72.3%	74.0%	77.5%



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LEAVING CALPERS

- Participation in CalPERS is governed by State law and CalPERS rules
- The following are considered “withdrawing” from CalPERS:
 - Exclude new hires from CalPERS & giving them a different pension
 - Stop accruing benefits for current employees
- “Withdrawal” from CalPERS:
 - Treated as plan termination
 - Liability increased for conservative investments
 - Liability increased for future demographic fluctuations
 - Liability must be funded immediately by withdrawing agency
 - Otherwise, retiree benefits are cut



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LEAVING CALPERS

CalPERS Termination Estimates on June 30, 2017 (Amounts in Millions)

Discount Rate	Ongoing Plan	Termination Basis	
	7.25%	1.75%	3.00%
Miscellaneous			
AAL	\$ 94	\$ 178	\$ 158
Assets	<u>78</u>	<u>78</u>	<u>78</u>
UAL	16	100	80
Safety Police			
AAL	\$ 72	\$ 141	\$ 126
Assets	<u>52</u>	<u>52</u>	<u>52</u>
UAL	20	89	74
Safety Fire			
AAL	\$ 43	\$ 86	\$ 78
Assets	<u>32</u>	<u>32</u>	<u>32</u>
UAL	11	54	46
Total			
UAL	\$ 47	\$ 243	\$ 200
Funded Ratio	77.5%	40.0%	44.8%



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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 8% of pay for Miscellaneous and 12% for Safety) if not agreed through collective bargaining by 1/1/18
- Miscellaneous Plan:

	<u>Classic Members</u>	<u>New Members</u>
	Tier 1	PEPRA
	<u>2.7%@55 FAE1</u>	<u>2%@62 FAE3</u>
● Employer Normal Cost	11.2%	10.02%
● Member Normal Cost	<u>8.0%</u>	<u>7.25%</u>
● Total Normal Cost	19.2%	17.27%
● 50% Target	9.6%	8.64%



PEPRA COST SHARING

- Safety Police Plan:

	<u>Classic Members</u>	<u>New Members</u>
	Tier 1	PEPRA
	<u>3%@50 FAE1</u>	<u>2.7%@57 FAE3</u>
● Employer Normal Cost	21.9%	13.03%
● Member Normal Cost	<u>9.0%</u>	<u>12.00%</u>
● Total Normal Cost	30.9%	25.03%
● 50% Target	15.5%	12.52%

- Safety Fire Plan:

	<u>Classic Members</u>	<u>New Members</u>
	Tier 1	PEPRA
	<u>3%@55 FAE1</u>	<u>2.7%@57 FAE3</u>
● Employer Normal Cost	20.1%	13.03%
● Member Normal Cost	<u>9.0%</u>	<u>12.00%</u>
● Total Normal Cost	29.1%	25.03%
● 50% Target	14.6%	12.52%



PAYING DOWN THE UNFUNDED LIABILITY & RATE STABILIZATION

- Where do you get the money from?
- How do you use the money?



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WHERE DO YOU GET THE MONEY FROM?

- POB:
 - Usually thought of as interest arbitrage between expected earnings and rate paid on POB
 - No guaranteed savings
 - PEPRA prevents contributions from dropping below normal cost
 - Savings offset when investment return is good
 - GFOA Advisory
- Borrow from General Fund similar to State
- One time payments
 - Council resolution to use a portion of one time money, e.g.
 - 1/3 to one time projects
 - 1/3 to replenish reserves and
 - 1/3 to pay down unfunded liability



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HOW DO YOU USE THE MONEY?

- Internal Service Fund
 - Typically used for rate stabilization
 - Restricted investments:
 - Likely low (0.5%-1.0%) investment returns
 - Short term/high quality, designed for preservation of principal
 - Assets can be used by Council for other purposes
 - Does not reduce Unfunded Liability



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HOW DO YOU USE THE MONEY?

- Make payments directly to CalPERS:
 - Likely best long-term investment return
 - Must be considered an irrevocable decision
 - Extra payments cannot be used as future “credit”
 - PEPRA prevents contributions from dropping below normal cost
 - Option #1: Request shorter amortization period (Fresh Start):
 - Higher short term payments
 - Less interest and lower long term payments
 - Likely cannot revert to old amortization schedule
 - Savings offset when investment return is good (PEPRA)



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HOW DO YOU USE THE MONEY?

- Make payments directly to CalPERS (continued):
 - Option #2: Target specific amortization bases:
 - Extra contribution's impact muted by reduced future contributions
 - CalPERS can't track the "would have been" contribution
 - No guaranteed savings
 - Larger asset pool means larger loss (or gain) opportunity
 - Paying off shorter amortization bases: larger contribution savings over shorter period:
 - e.g. 10 year base reduces contribution 12.3¢ for \$1
 - Less interest savings vs paying off longer amortization bases
 - Paying off longer amortization bases: smaller contribution savings over longer period:
 - e.g. 25 year base reduces contribution 6.5¢ for \$1
 - More interest savings vs paying off shorter amortization bases



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HOW DO YOU USE THE MONEY?

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IRREVOCABLE SUPPLEMENTAL (§115) PENSION TRUST

- Can only be used to:
 - Reimburse City for CalPERS contributions
 - Make payments directly to CalPERS
- Investments significantly less restricted than City investment funds
 - Fiduciary rules govern Trust investments
 - Usually, designed for long term returns
- Assets don't count for GASB accounting
 - Are considered Employer assets
- Over 100 trusts established, mostly since 2015
 - Trust providers: PARS, PFM, Keenan
 - California Employers' Pension Prefunding Trust (CEPPT) is coming



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IRREVOCABLE SUPPLEMENTAL (§115) PENSION TRUST

- More flexibility than paying CalPERS directly
 - City decides if and when and how much money to put into Trust
 - City decides if and when and how much to withdraw to pay CalPERS or reimburse Agency
- Funding strategies typically focus on
 - Reducing the unfunded liability
 - Fund enough to make total CalPERS UAL = 0
 - Make PEPRAs required payments from Trust when overfunded
 - Stabilizing contribution rates
 - Mitigate expected contribution rates to better manage budget
 - Combination
 - Use funds for rate stabilization/budget predictability
 - Target increasing fund balance to pay off UAL sooner



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IRREVOCABLE SUPPLEMENTAL (§115) PENSION TRUST

- Consider:
 - How much can you put into Trust?
 - Initial seed money?
 - Additional amounts in future years?
 - When do you take money out?
 - Target budget rate?
 - Year target budget rate kicks in?
 - Before or after CalPERS rate exceeds budgeted rate?



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IRREVOCABLE SUPPLEMENTAL (§115) PENSION TRUST

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IRREVOCABLE SUPPLEMENTAL (§115) PENSION TRUST

Direct Payment to CalPERS

- Following example illustrates additional contribution of \$1 million to CalPERS on June 30, 2019:
- Miscellaneous
 - Long Base: 2016 Gain/Loss
 - Short Base: 2011 Assumption Change
- Safety Police
 - Long Base: 2017 Non-Asset Gain/Loss and 2016 Asset Gain/Loss
 - Short Base: 2017 Fresh Start and 2014 Assumption Change
- Safety Fire
 - Long Base: 2017 Non-Asset Gain/Loss and 2016 Asset Gain/Loss
 - Short Base: 2017 Fresh Start and 2014 Assumption Change
- Estimated Savings

	Miscellaneous	Safety Police	Safety Fire
Short Base	\$1 million	\$1 million	\$1 million
\$ Savings (000's)	\$599	\$690	\$682
PV Savings @ 3% (000's)	292	332	328
Long Base	\$1 million	\$1 million	\$1 million
\$ Savings (000's)	\$1,549	\$1,557	\$1,554
PV Savings @ 3% (000's)	642	645	644



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IRREVOCABLE SUPPLEMENTAL (§115) PENSION TRUST

Payment to 115 Trust

	Miscellaneous	Safety Police	Safety Fire
Trust Contributions	\$1 million	\$1 million	\$1 million
Trust Earnings	5%	5%	5%
Trust Target			
- Target Rate ¹⁰	28.8%	69.7%	57.2%
- 1st Year	2027/28	2026/27	2024/25
- Last Year	2033/34	2034/35	2034/35
\$ Savings (000's)	\$830	\$826	\$815
PV Savings @ 3% (000's)	289	294	283

¹⁰ Includes employee cost sharing



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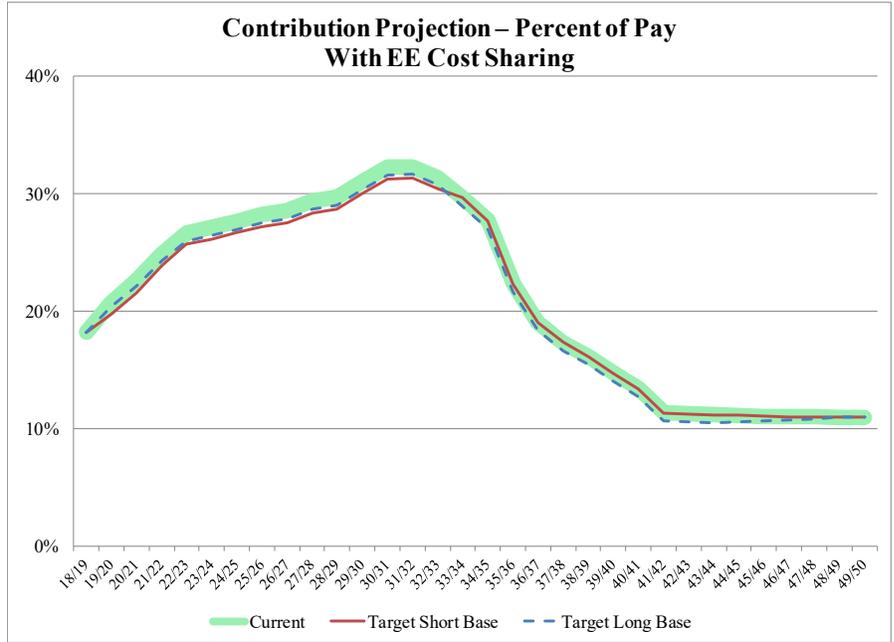
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Direct Payment to CalPERS

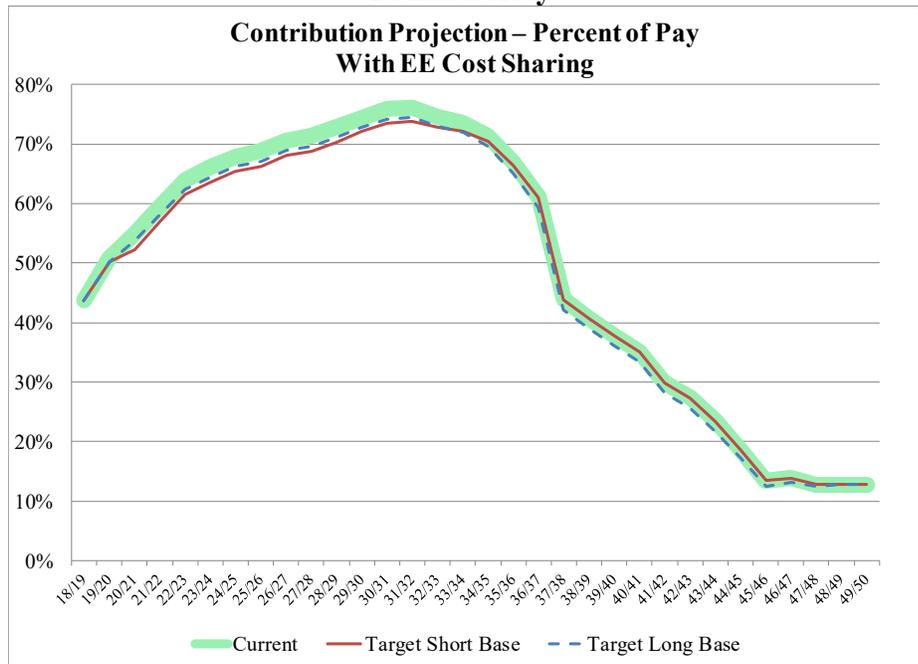
Miscellaneous



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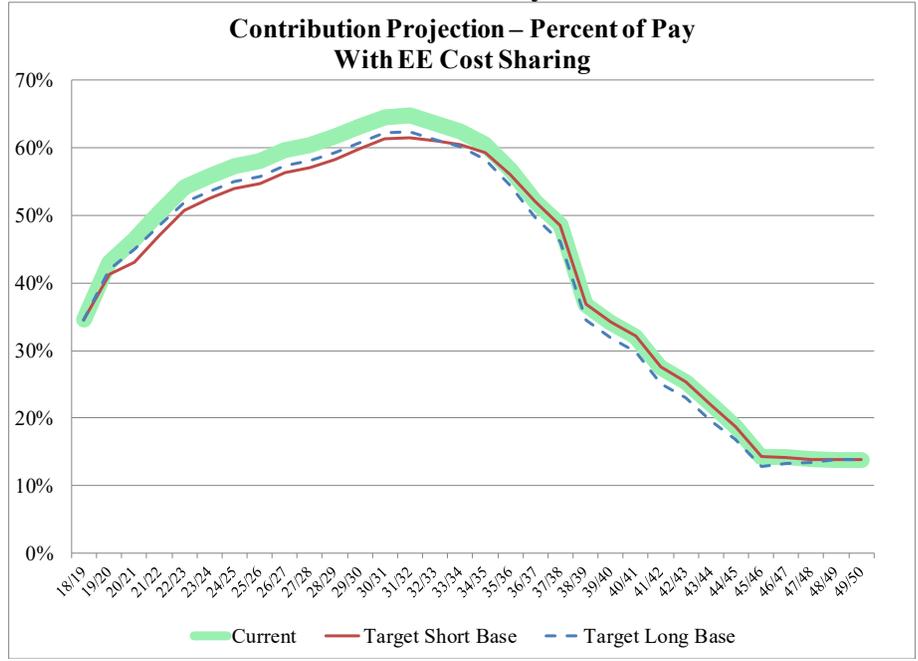
Direct Payment to CalPERS

Police Safety



IRREVOCABLE SUPPLEMENTAL (§115) PENSION TRUST

**Direct Payment to CalPERS
Fire Safety**



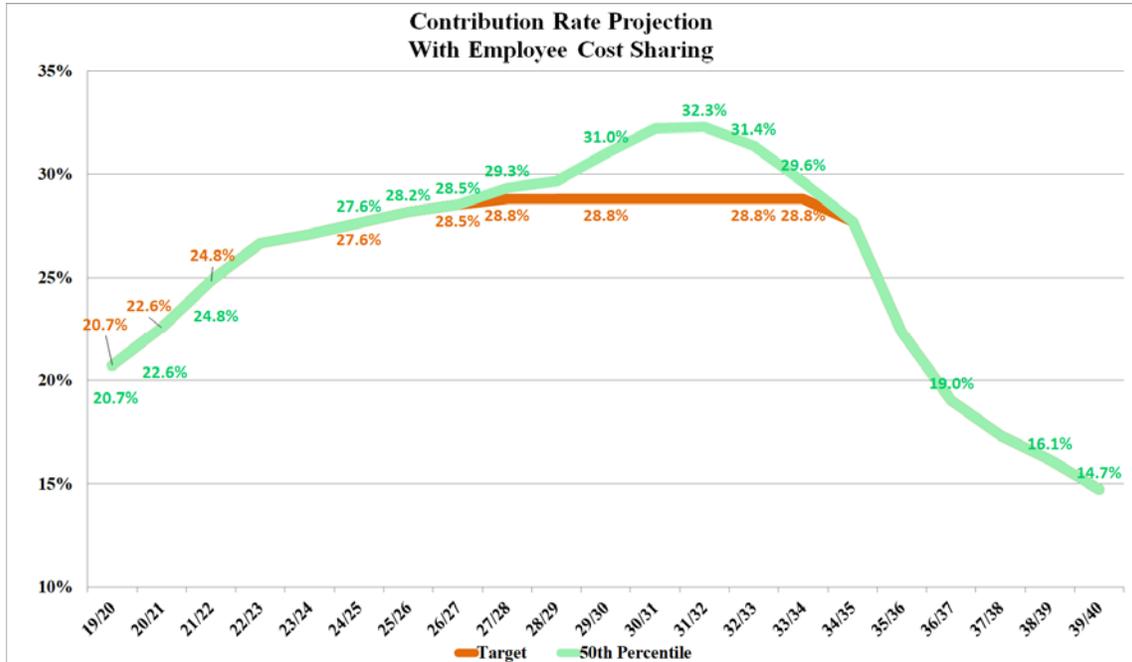
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IRREVOCABLE SUPPLEMENTAL (§115) PENSION TRUST

Miscellaneous



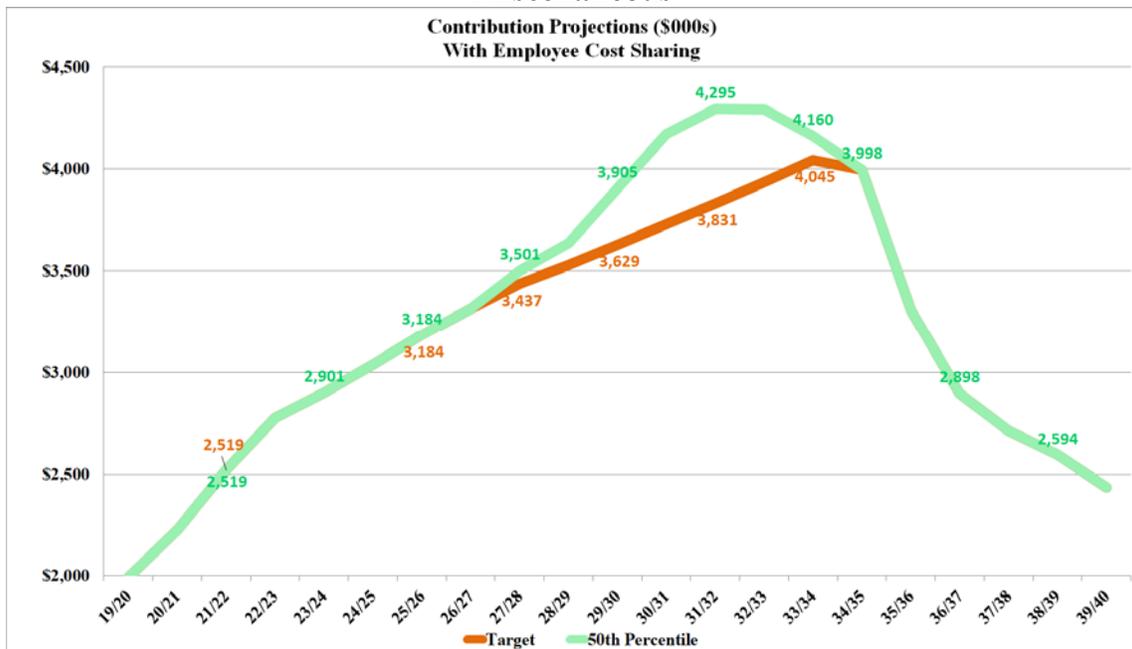
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Miscellaneous

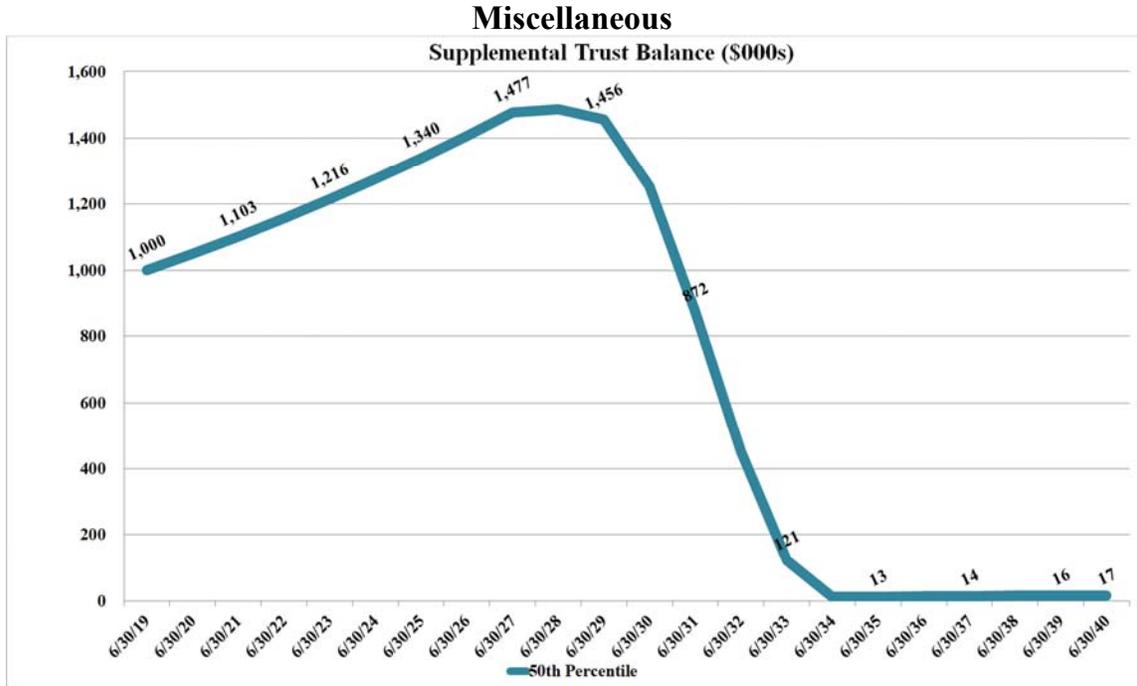


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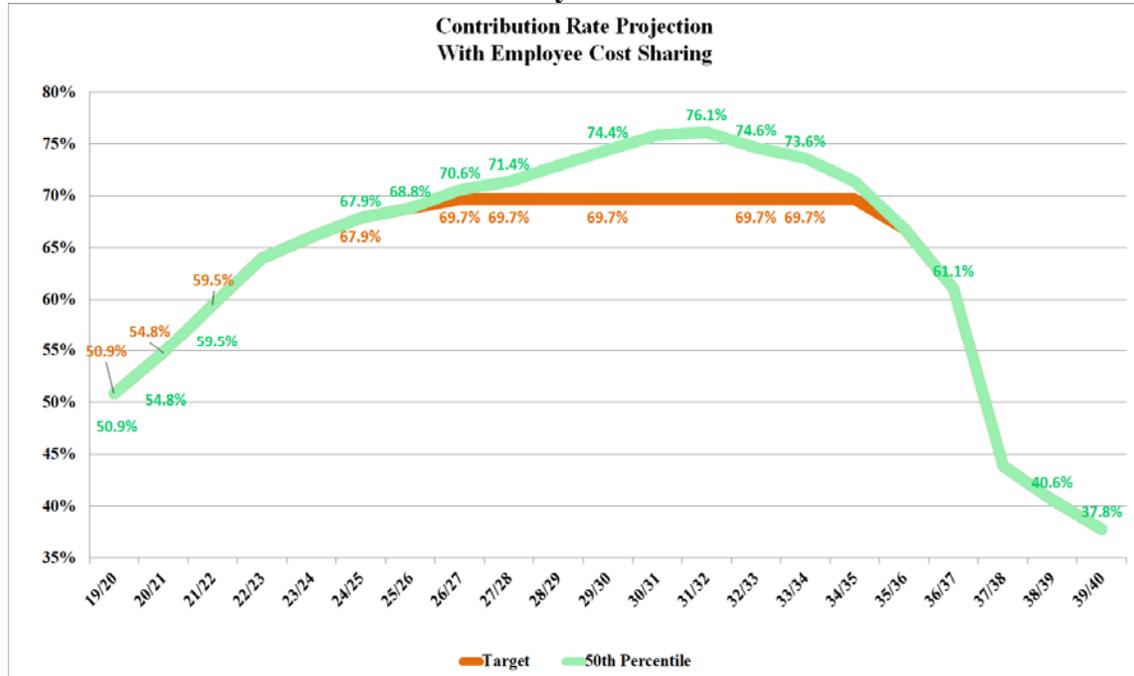
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IRREVOCABLE SUPPLEMENTAL (§115) PENSION TRUST

Safety Police



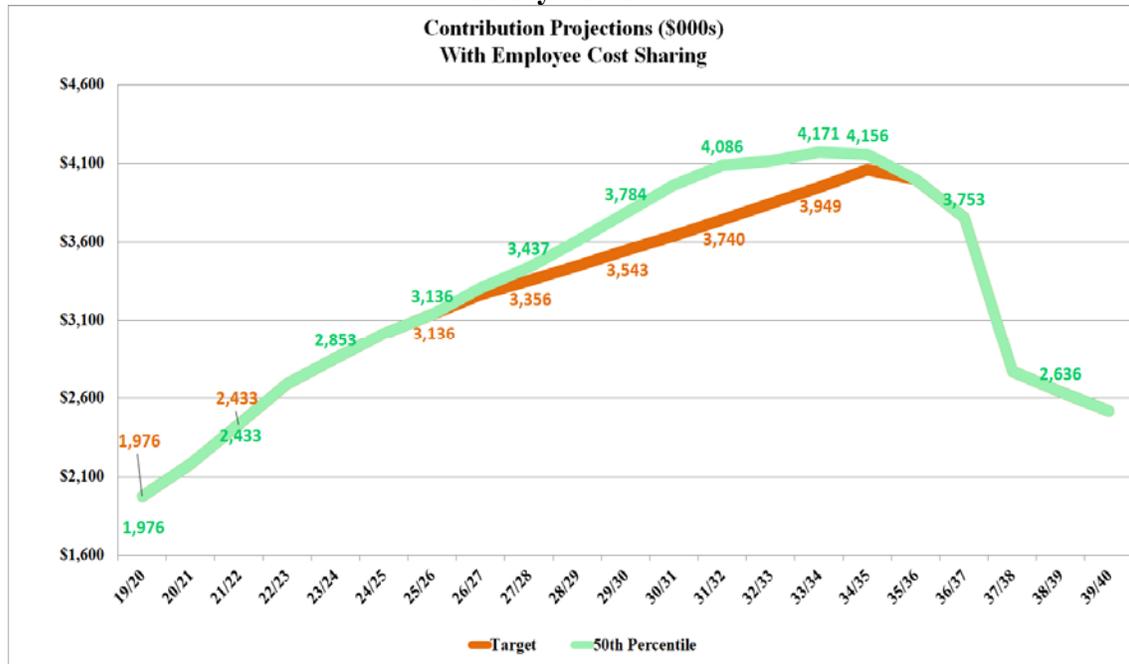
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IRREVOCABLE SUPPLEMENTAL (§115) PENSION TRUST

Safety Police



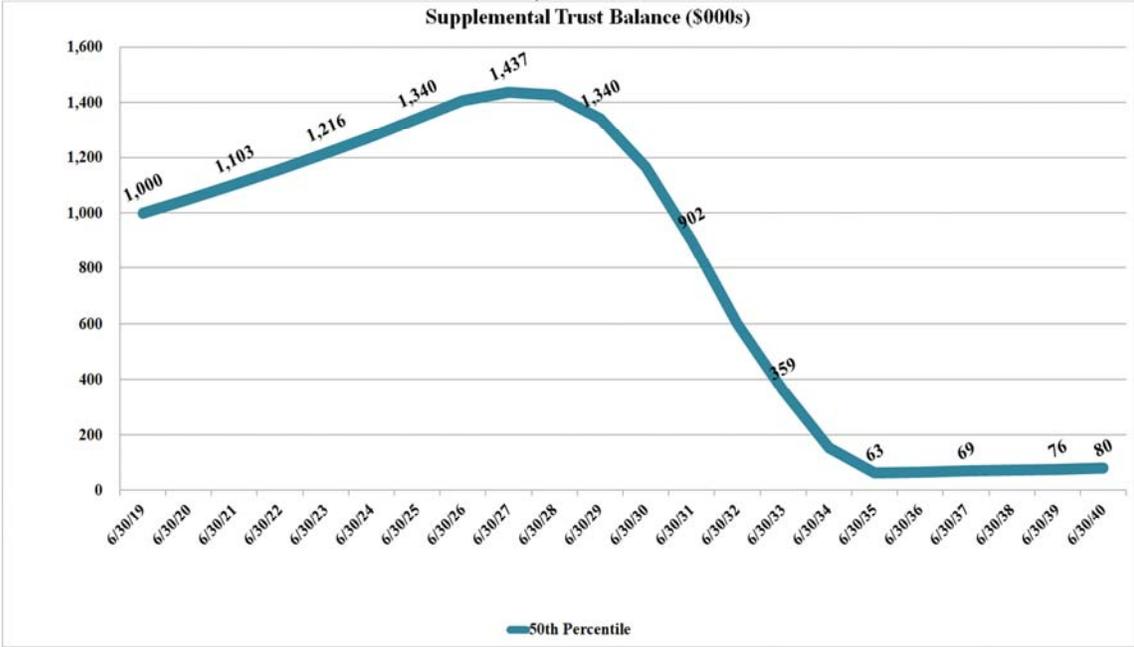
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IRREVOCABLE SUPPLEMENTAL (§115) PENSION TRUST

Safety Police



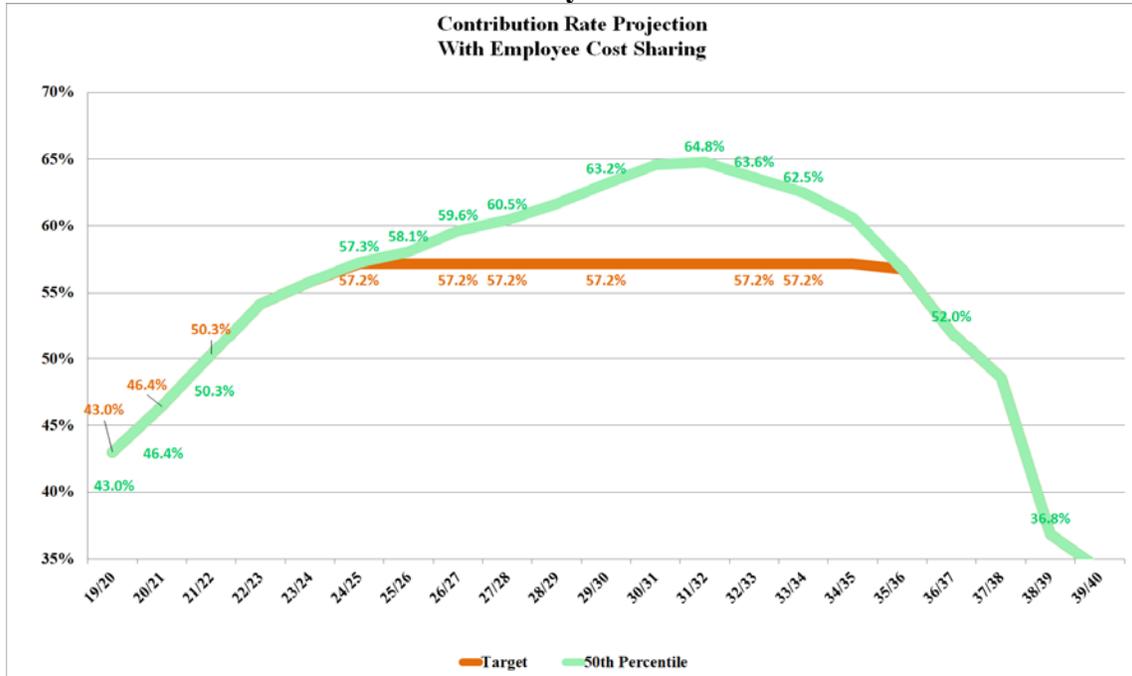
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IRREVOCABLE SUPPLEMENTAL (§115) PENSION TRUST

Safety Fire



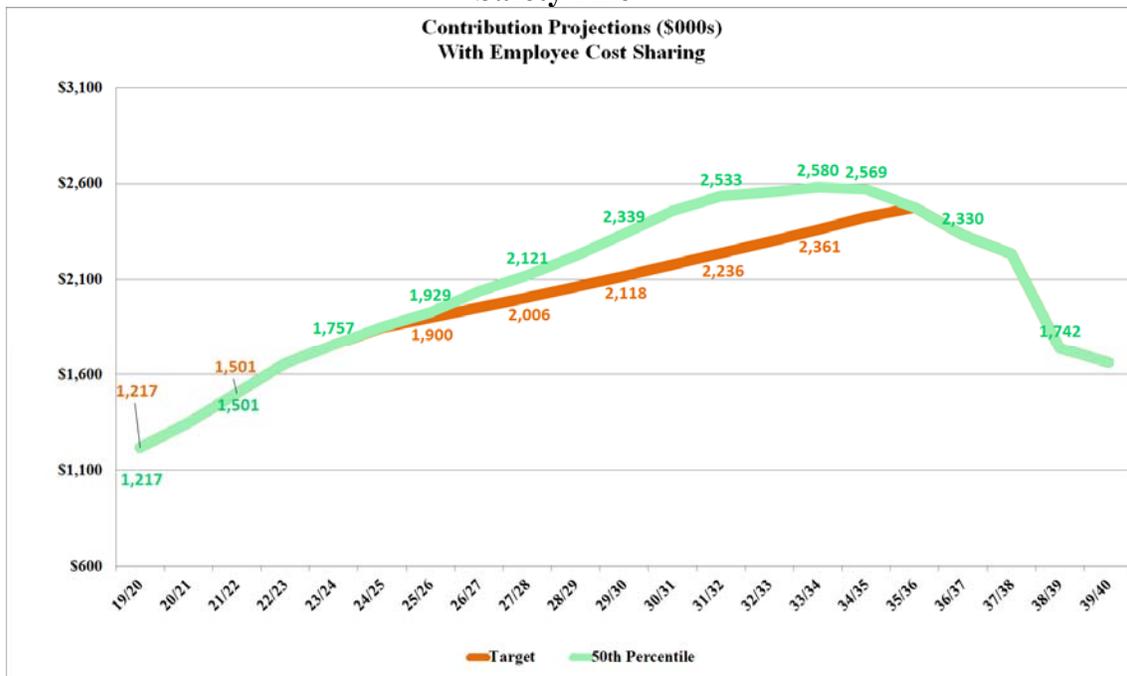
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IRREVOCABLE SUPPLEMENTAL (§115) PENSION TRUST

Safety Fire



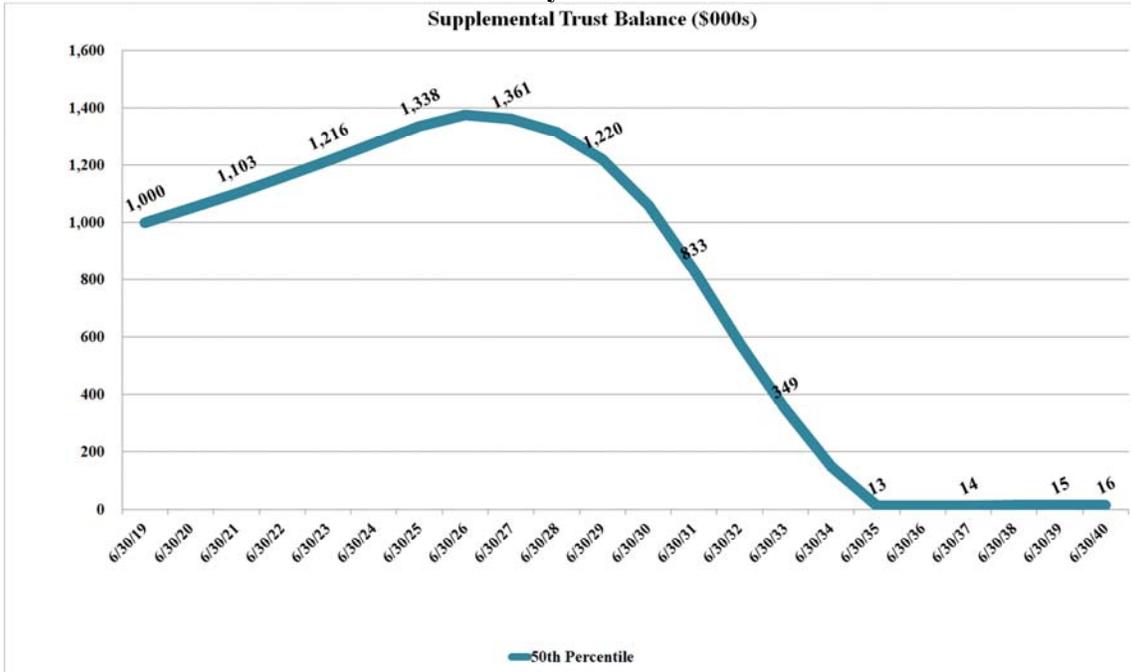
November 13, 2018

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IRREVOCABLE SUPPLEMENTAL (§115) PENSION TRUST

Safety Fire



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