



**CITY OF ESCONDIDO
MISCELLANEOUS AND SAFETY PLANS**

**CalPERS Actuarial Issues – 6/30/18 Valuation
Preliminary Results**

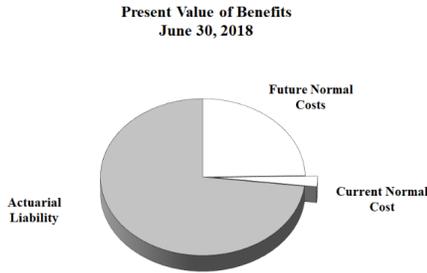
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October 4, 2019

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DEFINITIONS



- **PVB - Present Value of all Projected Benefits:**
 - The value now of amounts due to be paid in the future
 - Discounted value (at valuation date - 6/30/18), of all future expected benefit payments based on various (actuarial) assumptions

- **Current Normal Cost (NC):**
 - Portion of PVB allocated to (or “earned” during) current year
 - Value of employee and employer current service benefit
- **Actuarial Liability (AAL):**
 - Discounted value (at valuation date) of benefits earned through valuation date [value of past service benefit]
 - Portion of PVB “earned” at measurement

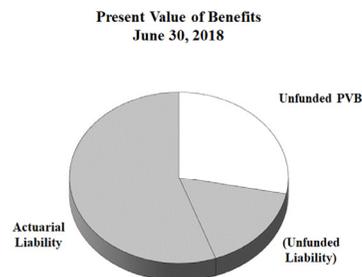
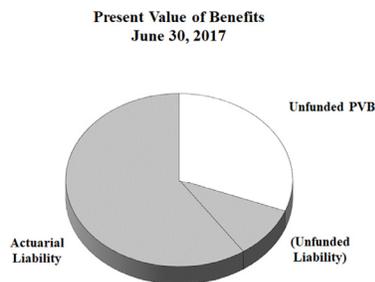


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DEFINITIONS



- **Target-** Have money in the bank to cover Actuarial Liability (past service)
- **Unfunded Liability (UAAL or UAL) - 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

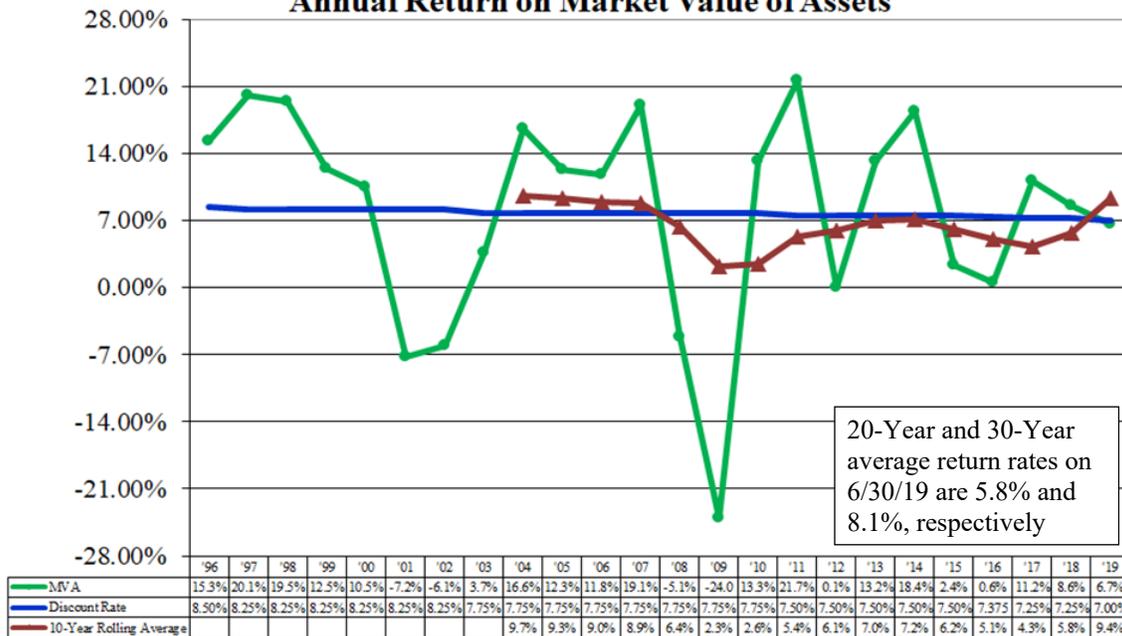


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HOW WE GOT HERE – INVESTMENT RETURN

Annual Return on Market Value of Assets



Returns (after 2001) shown are gross returns, unreduced for administrative expenses. The discount rate is based on expected returns net of administrative expenses.



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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 Escondido

	Tier 1	Tier 2	PEPRA
● Miscellaneous	3%@60 FAE1	2%@60 FAE3	2%@62 FAE3
● Safety	3%@50 FAE1	2%@50 FAE3	2.7%@57 FAE3

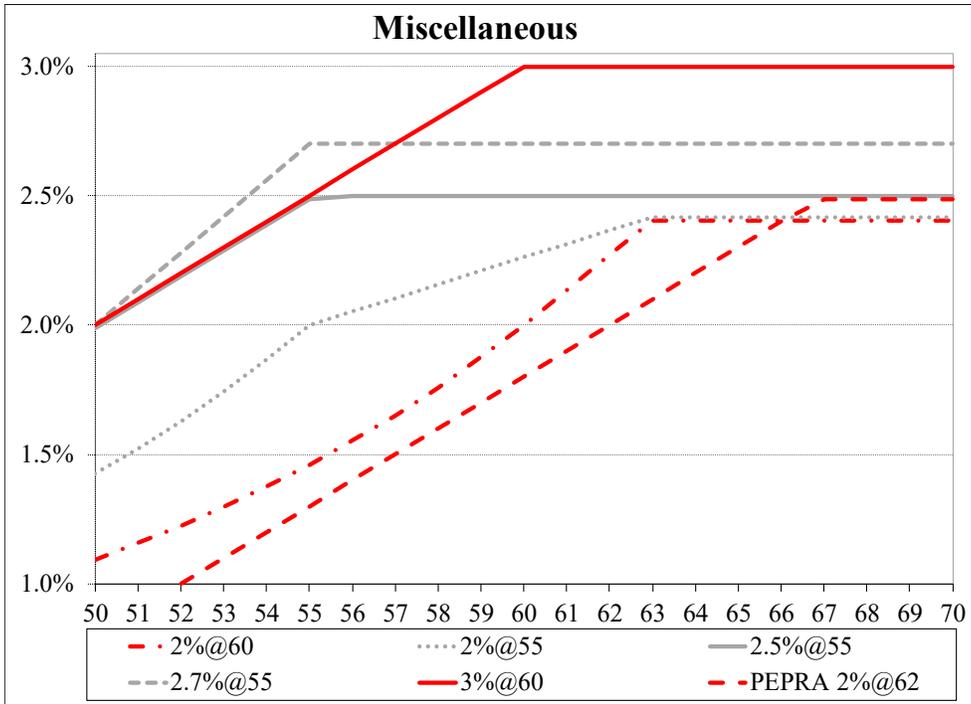
- Note:
 - FAE1 is highest one year (typically final) average earnings
 - FAE3 is highest three years (typically final three) average earnings
- PEPRA tier implemented for new employees hired after 1/1/13
 - Employee pays half of total normal cost
 - 2019 Compensation limit
 - Social Security-covered participants: \$124,180
 - Non-Social Security-covered participants: \$149,016



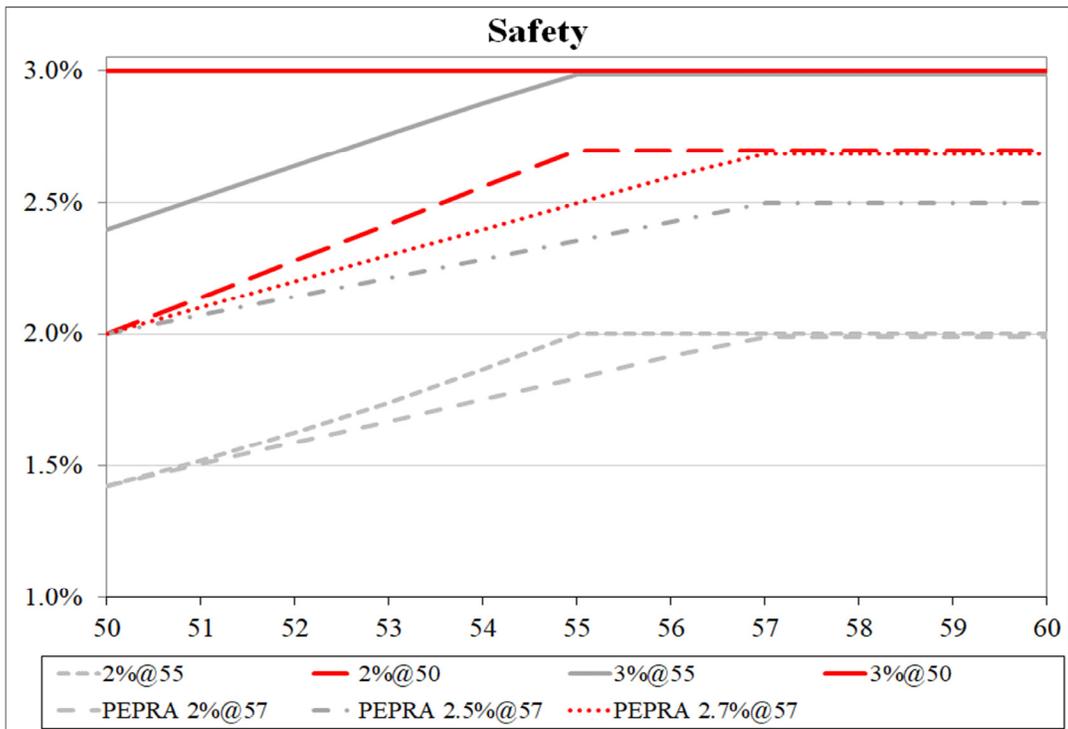
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HOW WE GOT HERE – ENHANCED BENEFITS



HOW WE GOT HERE – ENHANCED BENEFITS



HOW WE GOT HERE – DEMOGRAPHIC

- Around the State
 - Large retiree liability compared to actives
 - State average: 59% for Miscellaneous, 62% for Safety
 - Declining active population and increasing number of retirees
 - Higher percentage of retiree liability increases contribution volatility

- City of Escondido percentage of liability belonging to retirees:
 - Miscellaneous 60%
 - Safety 64%



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CALPERS CHANGES

- Recent contribution policy changes:
 - No asset smoothing
 - No rolling amortization
 - 5-year ramp up
- 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

- CalPERS Board changed the discount rate:

	<u>Rate</u>	<u>Initial Impact</u>	<u>Full Impact</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



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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% discount rate over 20+ years
- Risk mitigation suspended from 6/30/16 to 6/30/18 valuation
- Did not trigger for 6/30/19 valuation

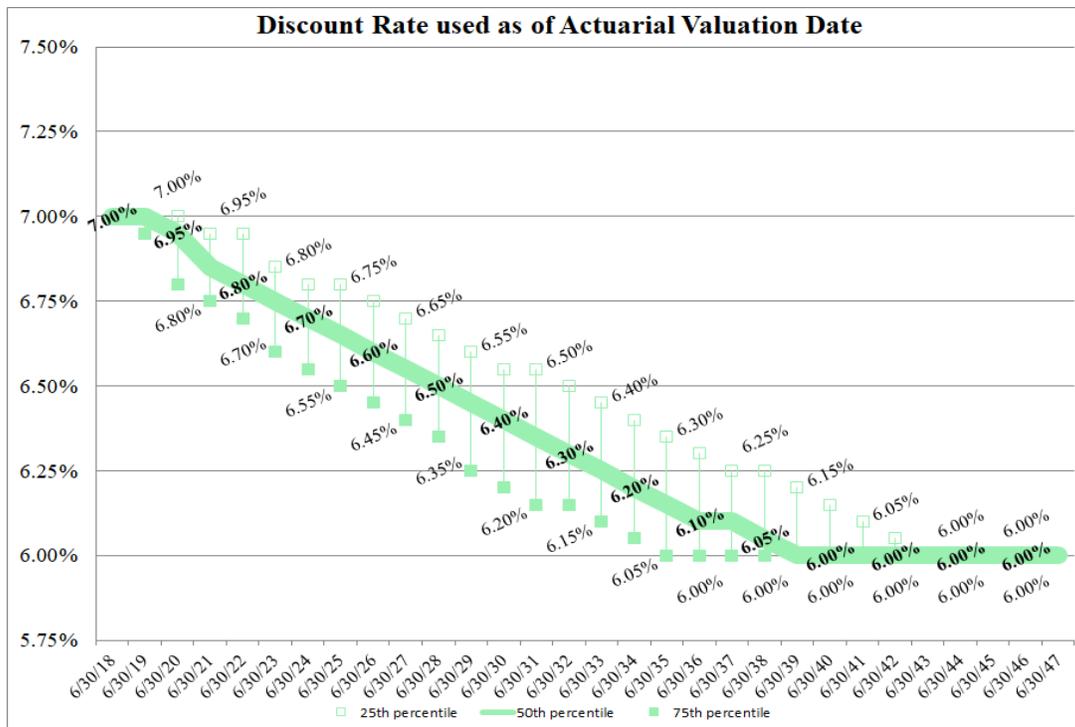


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CALPERS CHANGES



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SUMMARY OF DEMOGRAPHIC INFORMATION - MISCELLANEOUS

	1998	2008	2017	2018
Actives				
■ Counts	539	664	581	548
■ Average				
• Age	44	44	46	45
• City Service	10	11	11	11
• PERSable Wages	\$ 38,300	\$ 56,600	\$ 62,500	\$ 63,100
■ Total PERSable Wages	20,600,000	37,600,000	36,300,000	34,600,000
Inactive Members				
■ Counts				
• Transferred	187	234	287	311
• Separated	117	250	365	378
• Retired				
□ Service	244	427	553	601
□ Disability	20	28	22	22
□ Beneficiaries	28	62	64	66
□ Total	292	517	639	689
■ Average Annual City Provided Benefit for Service Retirees ¹	5,400	15,700	30,300	31,300

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

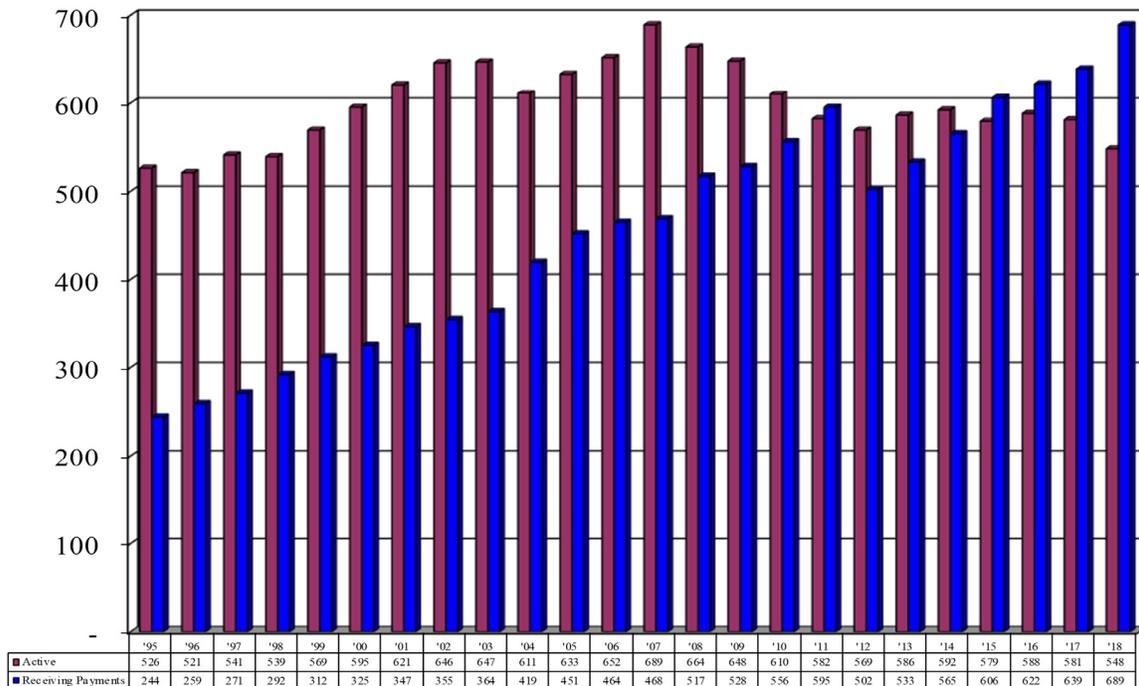


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SUMMARY OF DEMOGRAPHIC INFORMATION - MISCELLANEOUS



Starting in 2012, inactives were no longer counted separately for different coverage groups (e.g. before and after Social Security coverage)



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PLAN FUNDED STATUS - MISCELLANEOUS

	<u>June 30, 2017</u>	<u>June 30, 2018</u>
■ Actuarial Accrued Liability		
● Active	\$ 146,200,000	\$ 140,800,000
● Retiree	231,000,000	263,100,000
● Inactive	<u>27,400,000</u>	<u>31,600,000</u>
● Total	404,600,000	435,500,000
■ Assets	<u>277,200,000</u>	<u>294,900,000</u>
■ Unfunded Liability	127,400,000	140,600,000
■ Funded Ratio	68.5%	67.7%

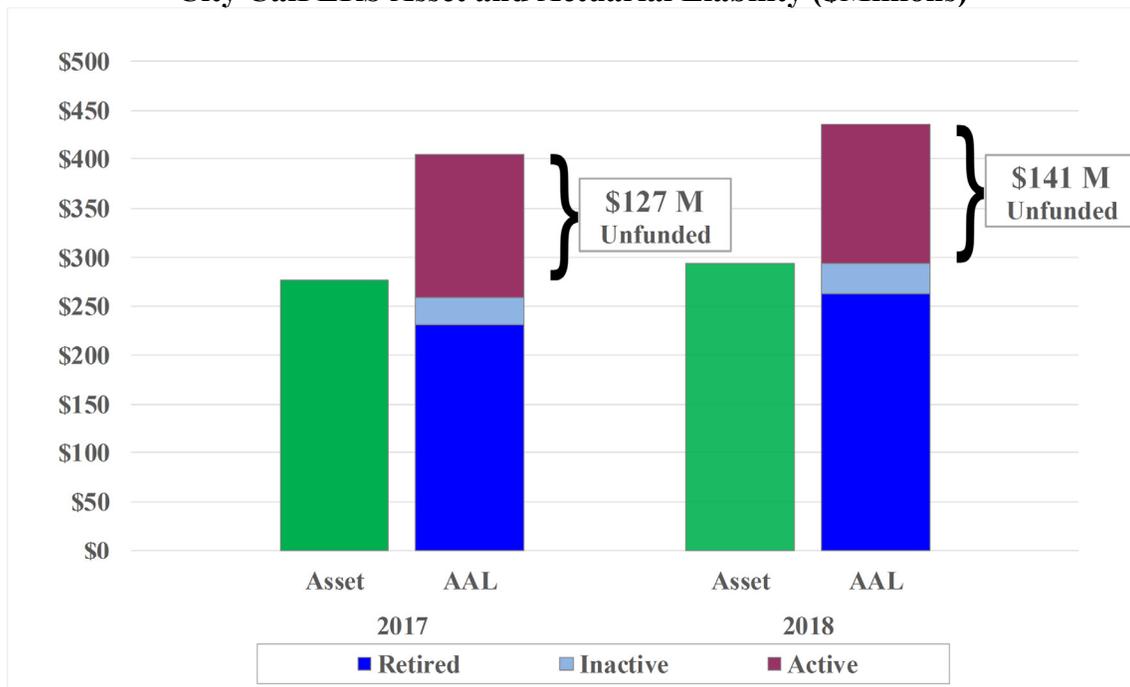


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PLAN FUNDED STATUS - MISCELLANEOUS

City CalPERS Asset and Actuarial Liability (\$Millions)



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PLAN FUNDED STATUS - MISCELLANEOUS

Discount Rate Sensitivity

June 30, 2018

	Discount Rate		
	<u>7.00%</u>	<u>6.50%</u>	<u>6.00%</u>
AAL	\$ 435,500,000	\$ 463,300,000	\$ 491,000,000
Assets	<u>294,900,000</u>	<u>294,900,000</u>	<u>294,900,000</u>
Unfunded Liability	140,600,000	168,400,000	196,100,000
Funded Ratio	67.7%	63.7%	60.1%



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PLAN FUNDED STATUS - MISCELLANEOUS

Unfunded Accrued Liability Changes

■ Unfunded Accrued Liability on 6/30/17	\$ 127,400,000
■ Expected 6/30/18 Unfunded Accrued Liability	128,600,000
■ Other Changes	
• Asset Loss (Gain) (8.6% return for FY 2018)	(3,000,000)
• Assumption Change (DR 7.25% → 7%)	11,300,000
• Method Change (Software system)	3,300,000
• Contribution & Experience Loss (Gain)	400,000
• Total	<u>12,000,000</u>
■ Unfunded Accrued Liability on 6/30/18	140,600,000
■ Projected Unfunded Accrued Liability on 6/30/19	143,100,000

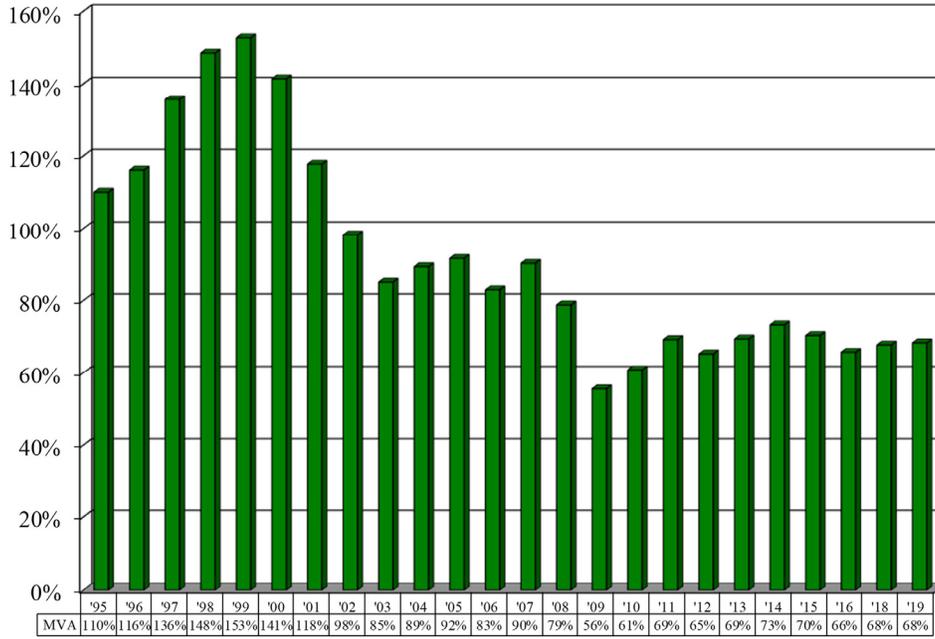


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FUNDED RATIO - MISCELLANEOUS

Historical Funded Ratio



6/30/19 funded status estimated

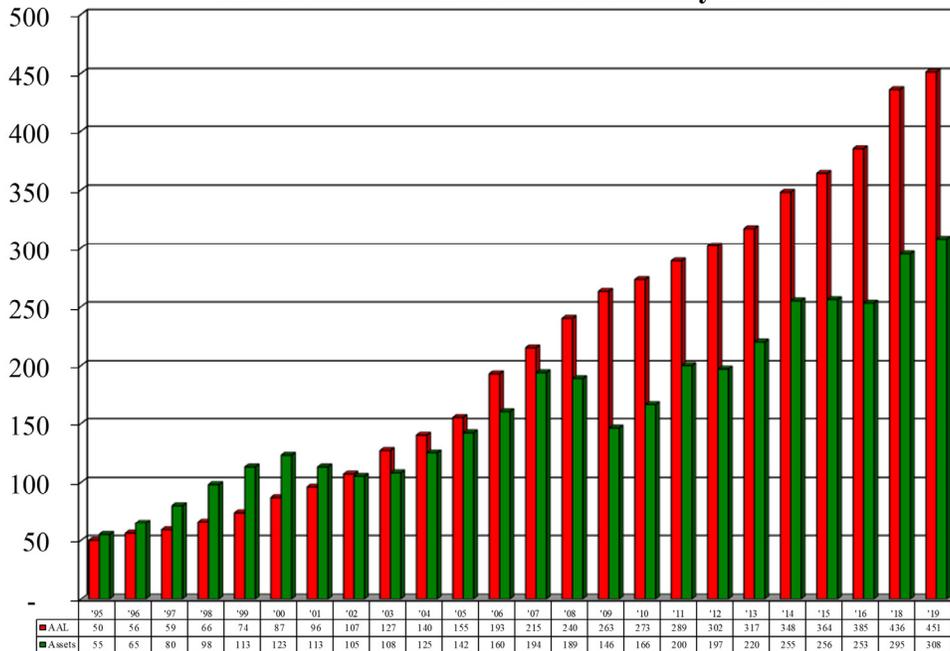


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FUNDED STATUS (MILLIONS) - MISCELLANEOUS

Historical Actuarial Accrued Liability vs. Assets



6/30/19 funded status estimated

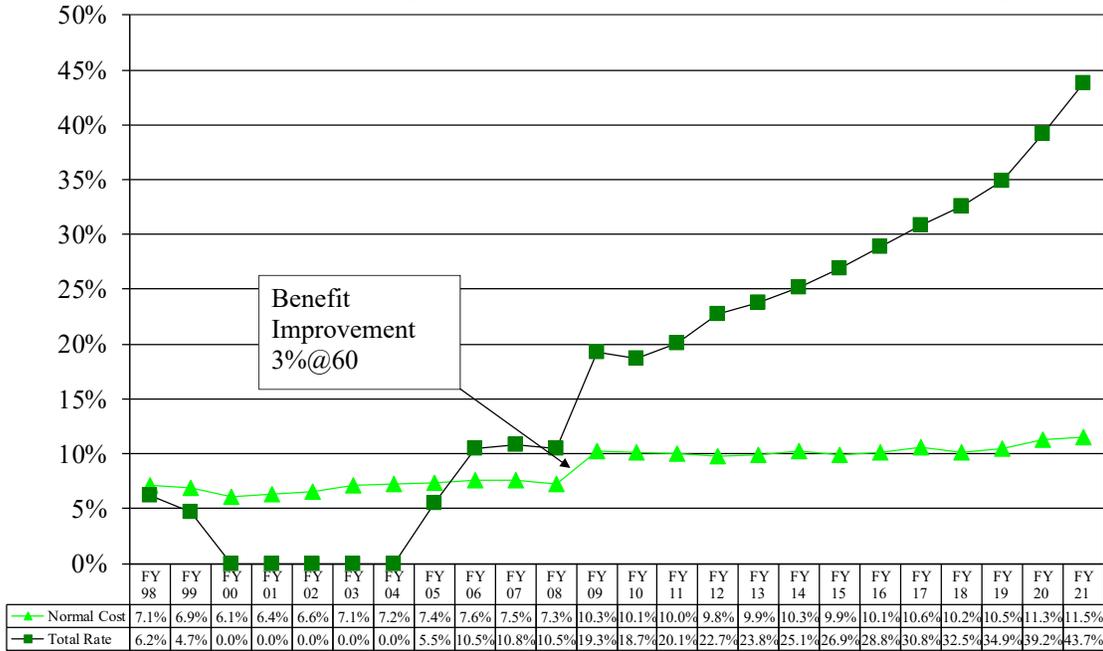


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CONTRIBUTION RATES - MISCELLANEOUS

Historical Employer Contribution Rates (Percent of Payroll)



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CONTRIBUTION RATES - MISCELLANEOUS

	<u>6/30/17</u> <u>2019/2020</u>	<u>6/30/18</u> <u>2020/2021</u>
■ Total Normal Cost	18.9%	19.2%
■ Employee Normal Cost	<u>7.6%</u>	<u>7.7%</u>
■ Employer Normal Cost	11.3%	11.5%
■ Amortization Payments	<u>27.9%</u>	<u>32.2%</u> ²
■ Total Employer Contribution Rate	39.2%	43.7%
■ 2019/20 Employer Contribution Rate		39.2%
● Payroll < Expected		2.2%
● 6/30/14 Assumption Change (5 th Year)		1.1%
● 6/30/16 Discount Rate Change (3 rd Year)		0.3%
● 6/30/17 Discount Rate & Inflation (2 nd Year)		0.4%
● 6/30/18 Discount Rate change (1 st Year)		1.5%
● Other (Gains)/Losses		<u>(1.0%)</u>
■ 2020/21 Employer Contribution Rate		43.7%

² Equivalent to 8.6% of UAL. One year, 7% interest on the UAL is 26.1% of payroll.



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CONTRIBUTION PROJECTIONS - MISCELLANEOUS

- Market Value Investment Return:
 - June 30, 2019 6.7%³
 - Future returns based on stochastic analysis using 1,000 trials

<u>Single Year Returns at⁴</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 9 years and higher beyond that.
- Discount Rate decreases due to Risk Mitigation policy
- No Other: Gains/Losses, Method/Assumption Changes, Benefit Improvements
- Different from CalPERS projection

³ Gross return based on July 2019 CalPERS press release

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



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CONTRIBUTION PROJECTIONS - MISCELLANEOUS

- New hire assumptions:
 - 92.5% of 2019/20 new hires are PEPRAs members and 7.5% are Classic members
 - Percentage of PEPRAs member future hires to increase from 92.5% to 100% over 3 years

- 6/30/18 employee distribution:

Benefit Tier	Count	6/30/18 Payroll
● 3%@60 FAE1	337	\$ 23,984,743
● 2%@60 FAE3	14	1,224,889
● 2%@62 FAE3 (PEPRA)	197	9,366,270

- Teamsters Miscellaneous Classic members cost sharing:
 - 1% of PERSable pay for 18/19
 - 2% of PERSable pay for 19/20
 - 3% of PERSable pay for 20/21 and thereafter
 - Assumes Teamsters Classic payroll is 31% of Miscellaneous Classic payroll

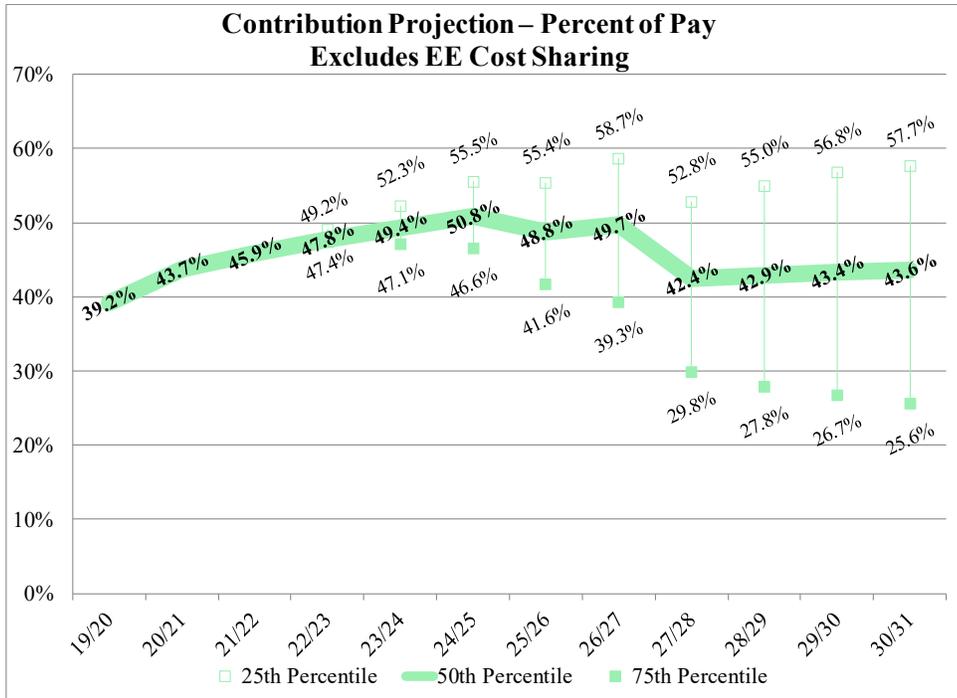


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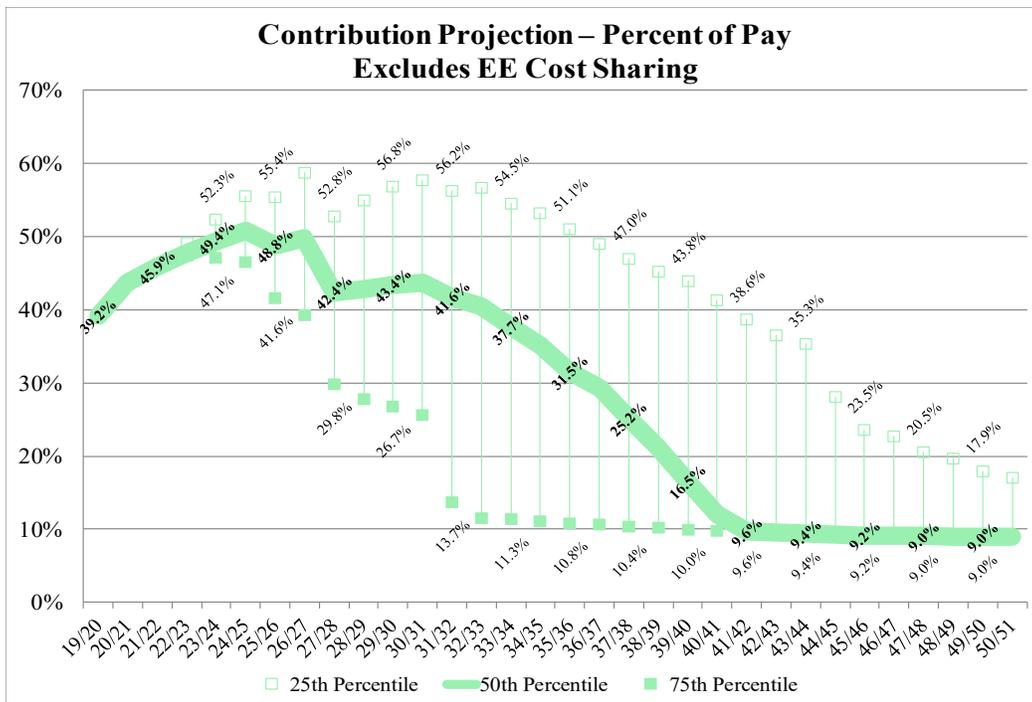
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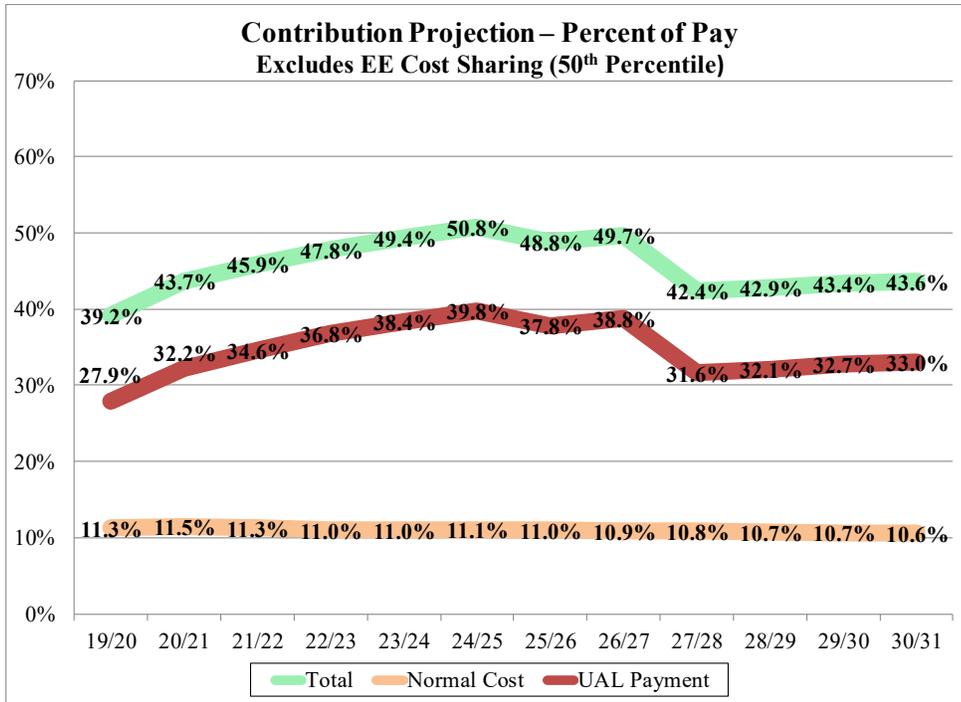
CONTRIBUTION PROJECTIONS - MISCELLANEOUS



CONTRIBUTION PROJECTIONS - MISCELLANEOUS



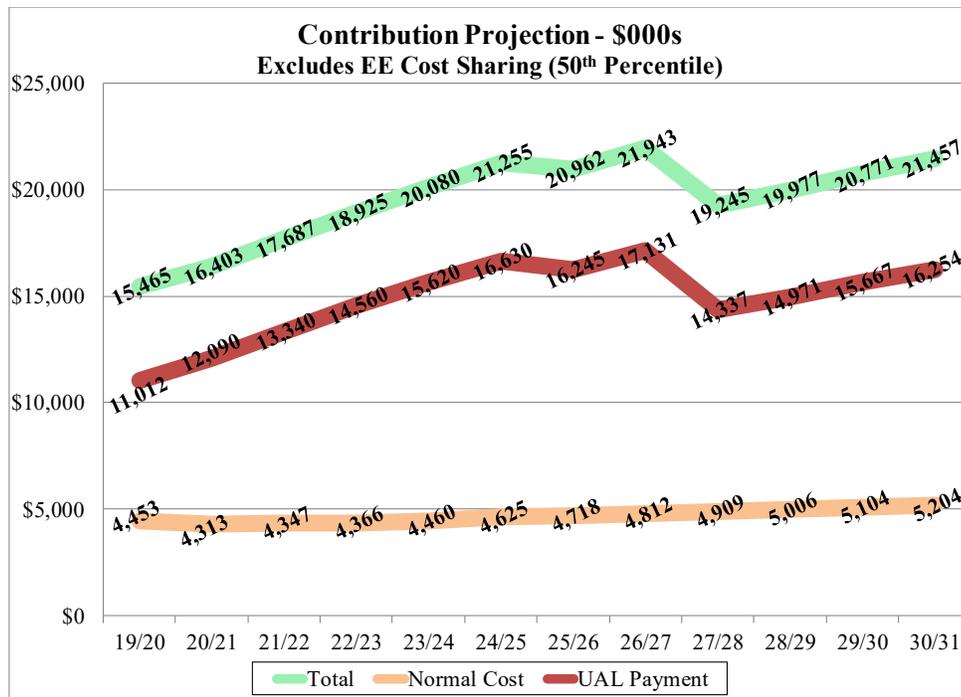
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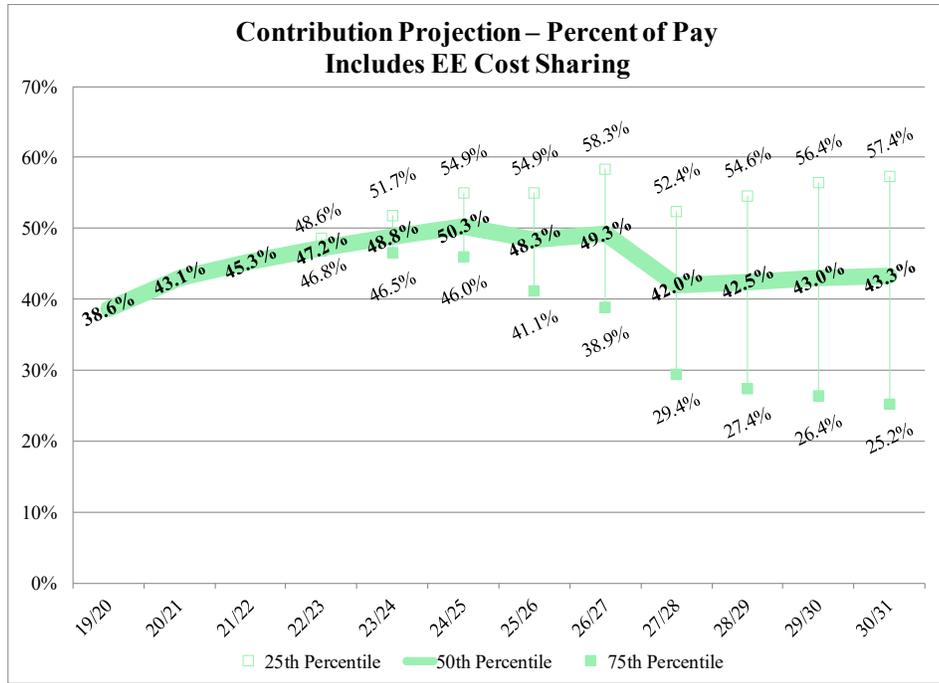
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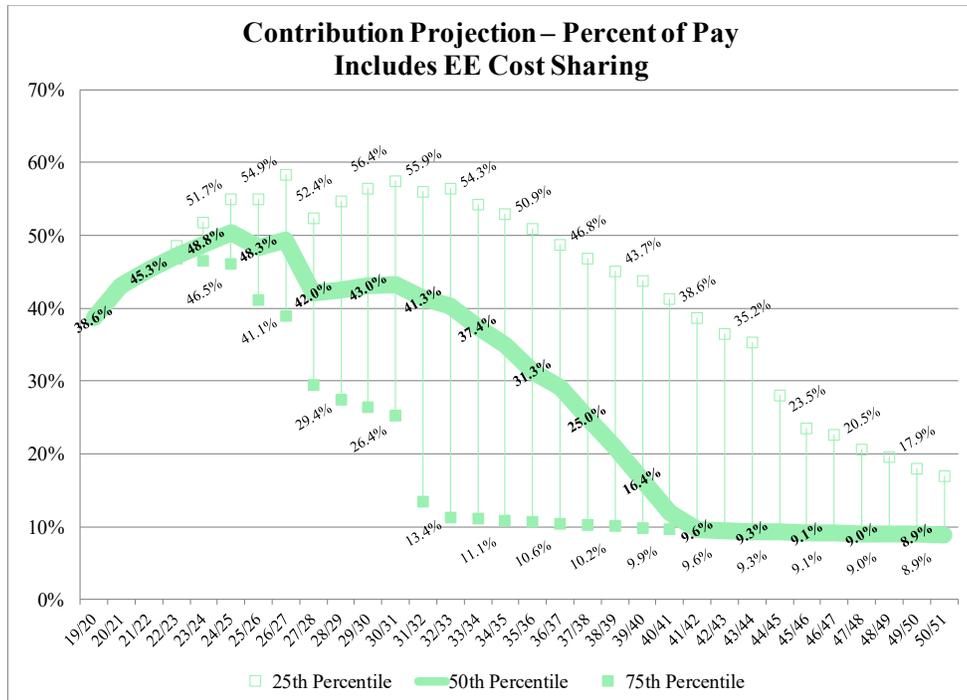
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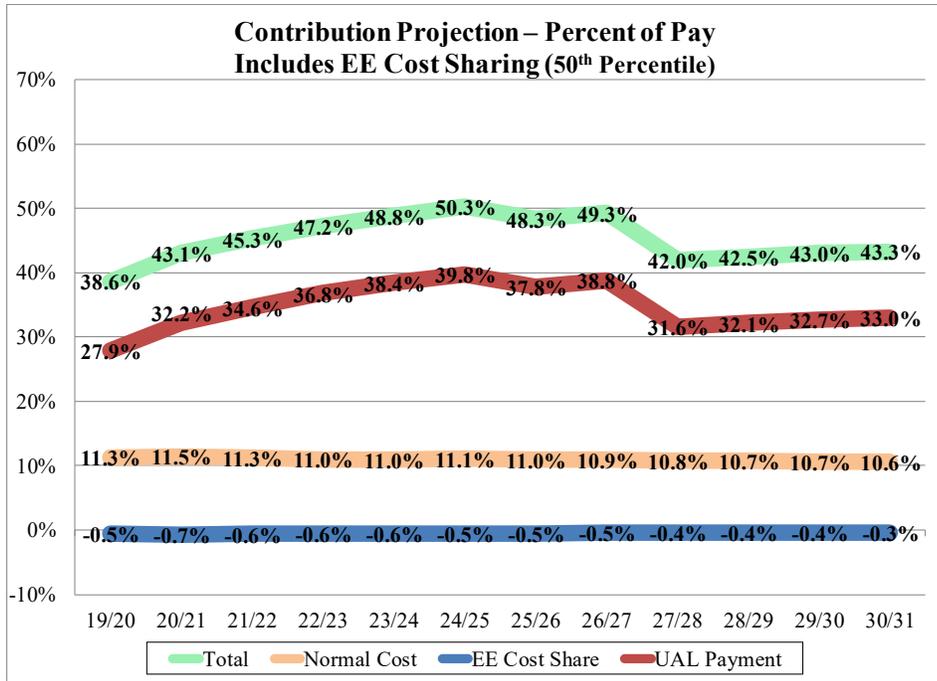
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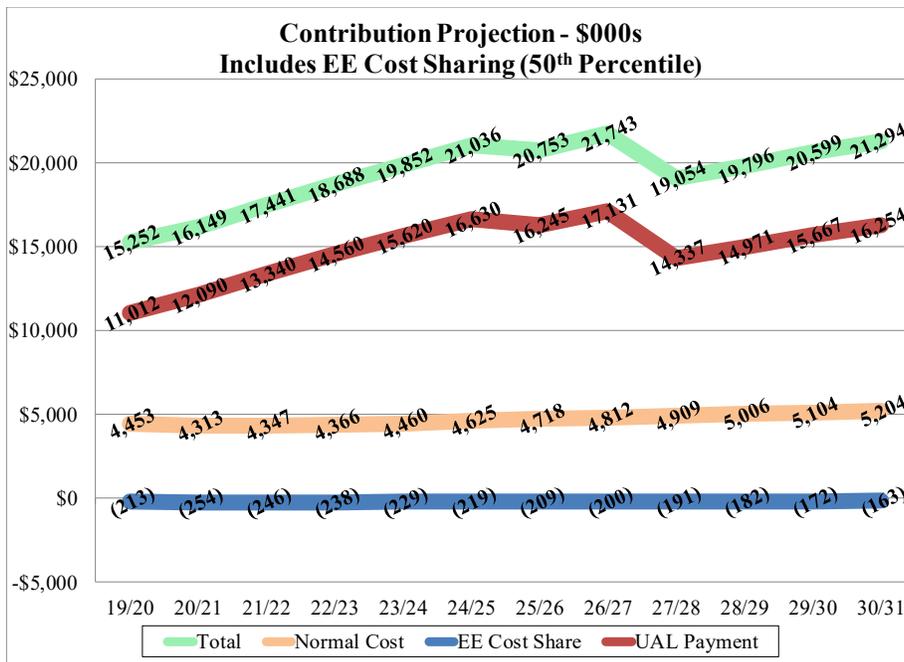
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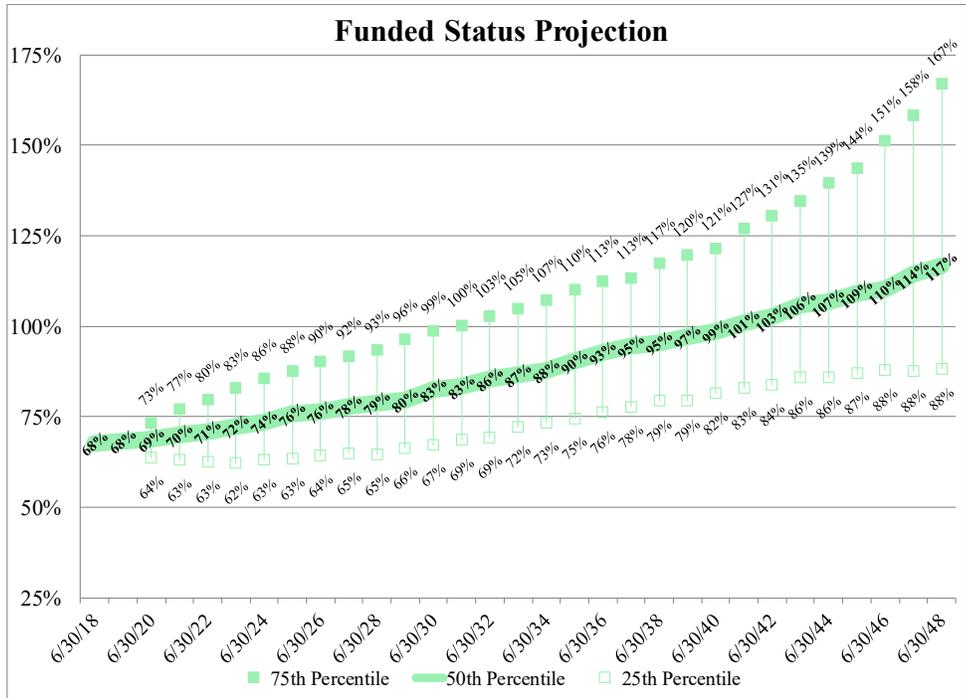
CONTRIBUTION PROJECTIONS - MISCELLANEOUS



CONTRIBUTION PROJECTIONS - MISCELLANEOUS



FUNDED STATUS - MISCELLANEOUS



FUNDED STATUS - MISCELLANEOUS

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SUMMARY OF DEMOGRAPHIC INFORMATION - SAFETY

	1998	2008	2017	2018
Actives				
■ Counts	224	252	250	249
■ Average				
• Age	40	40	40	41
• City Service	12	12	12	12
• PERSable Wages	\$ 53,900	\$ 89,600	\$ 100,700	\$ 103,200
■ Total PERSable Wages	12,100,000	22,600,000	25,200,000	25,700,000
Inactive Members				
■ Counts				
• Transferred	35	69	66	69
• Separated	21	28	48	47
• Retired				
□ Service	50	101	176	184
□ Disability	50	83	108	109
□ Beneficiaries	6	17	21	21
□ Total	106	201	305	314
■ Average Annual City Provided Benefit for Service Retirees ⁵	27,400	53,600	64,300	65,500

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

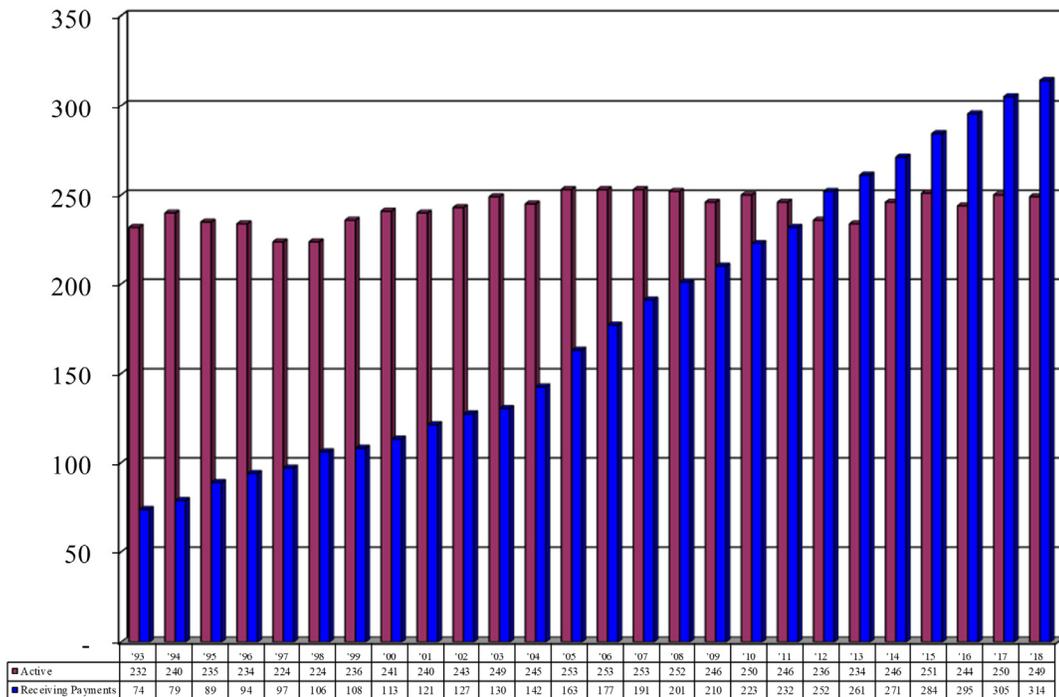


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SUMMARY OF DEMOGRAPHIC INFORMATION - SAFETY



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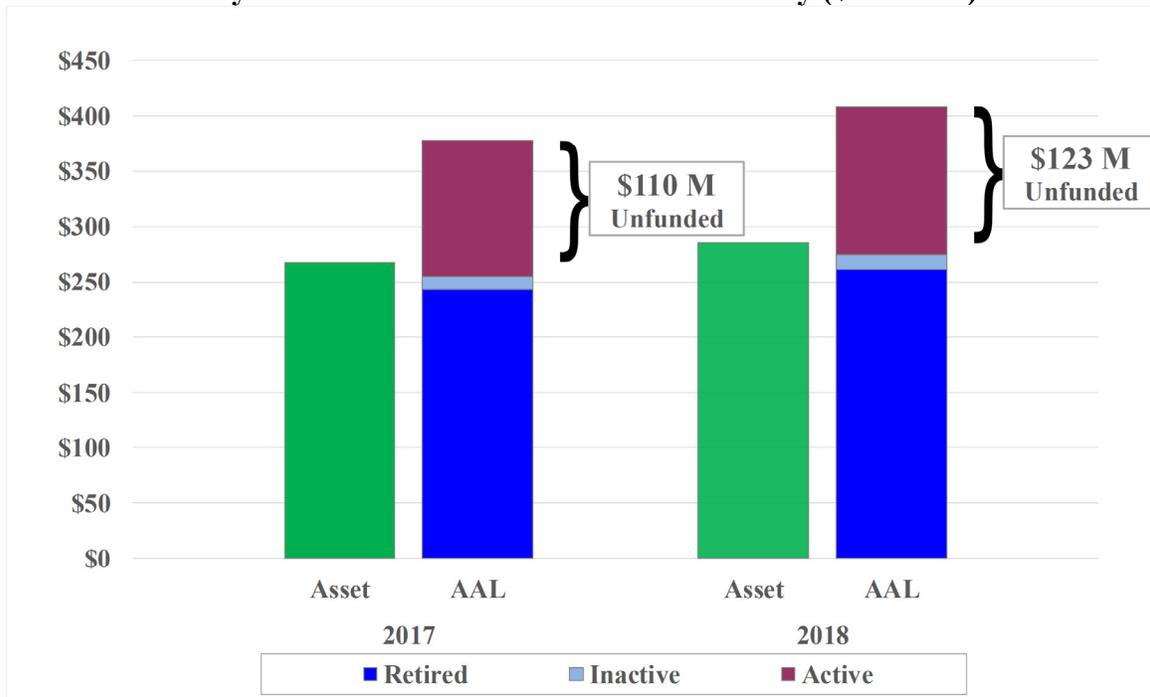
PLAN FUNDED STATUS - SAFETY

	<u>June 30, 2017</u>	<u>June 30, 2018</u>
■ Actuarial Accrued Liability		
● Active	\$ 122,700,000	\$ 133,900,000
● Retiree	242,400,000	261,600,000
● Inactive	<u>12,900,000</u>	<u>12,900,000</u>
● Total	378,000,000	408,400,000
■ Assets	<u>267,700,000</u>	<u>285,300,000</u>
■ Unfunded Liability	110,300,000	123,100,000
■ Funded Ratio	70.8%	69.9%



PLAN FUNDED STATUS - SAFETY

City CalPERS Asset and Actuarial Liability (\$Millions)



PLAN FUNDED STATUS - SAFETY

Discount Rate Sensitivity

June 30, 2018

	Discount Rate		
	<u>7.00%</u>	<u>6.50%</u>	<u>6.00%</u>
AAL	\$ 408,400,000	\$ 437,200,000	\$ 466,000,000
Assets	<u>285,300,000</u>	<u>285,300,000</u>	<u>285,300,000</u>
Unfunded Liability	123,100,000	151,900,000	180,700,000
Funded Ratio	69.9%	65.3%	61.2%



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PLAN FUNDED STATUS - SAFETY

Unfunded Accrued Liability Changes

■ Unfunded Accrued Liability on 6/30/17	\$ 110,300,000
■ Expected 6/30/18 Unfunded Accrued Liability	113,400,000
■ Other Changes	
• Asset Loss (Gain) (8.6% return for FY 2018)	(2,800,000)
• Assumption Change (DR 7.25% → 7%)	11,600,000
• Method Change (Software system)	1,800,000
• Contribution & Experience Loss (Gain)	(900,000)
• Total	<u>9,700,000</u>
■ Unfunded Accrued Liability on 6/30/18	123,100,000
■ Projected Unfunded Accrued Liability on 6/30/19	126,800,000



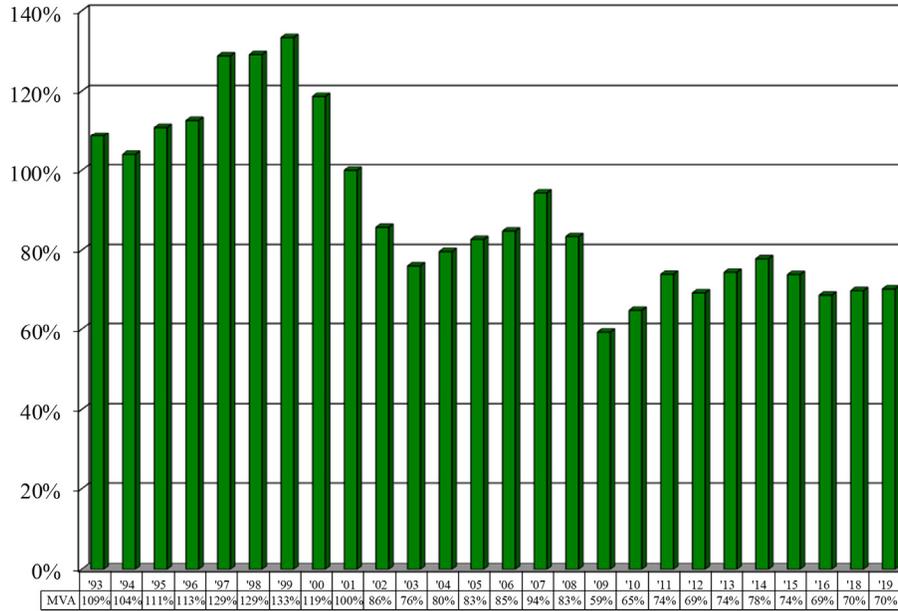
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FUNDED RATIO - SAFETY

Historical Funded Ratio



6/30/19 funded status estimated

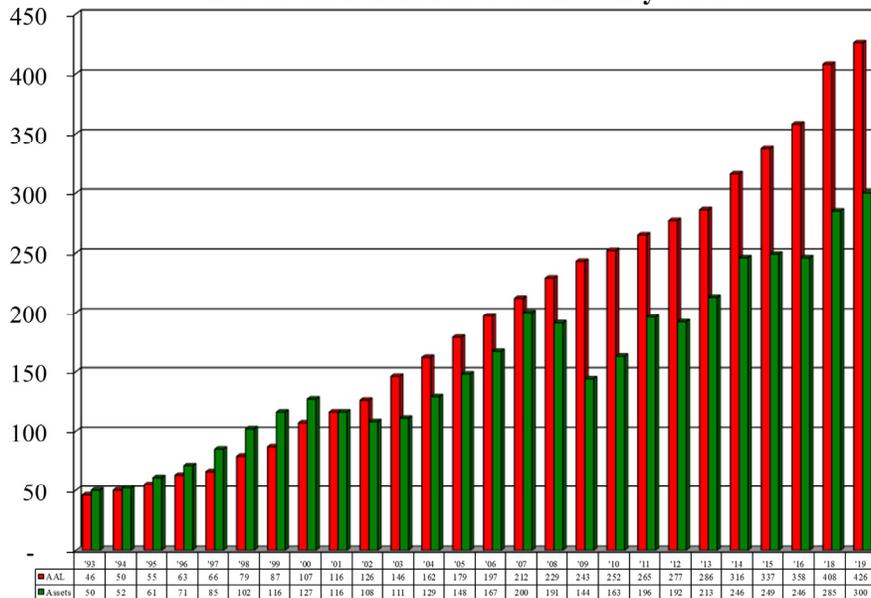


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FUNDED STATUS (MILLIONS) - SAFETY

Historical Actuarial Accrued Liability vs. Assets



6/30/19 funded status estimated

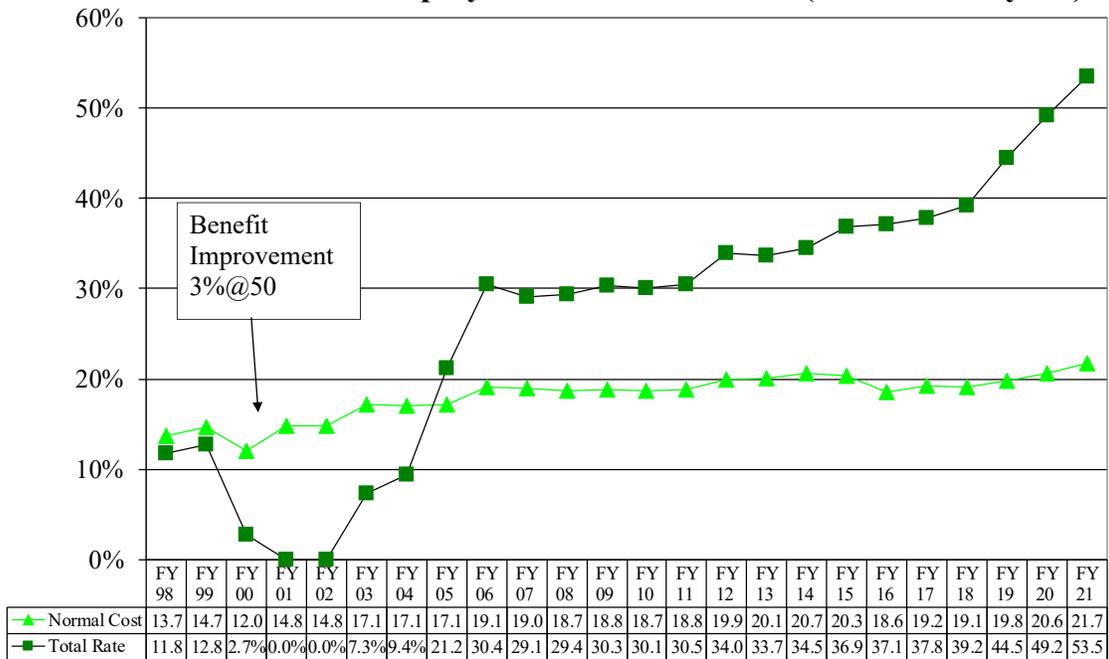


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CONTRIBUTION RATES - SAFETY

Historical Employer Contribution Rates (Percent of Payroll)



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CONTRIBUTION RATES - SAFETY

	6/30/17 2019/2020	6/30/18 2020/2021
■ Total Normal Cost	30.1%	31.3%
■ Employee Normal Cost	<u>9.5%</u>	<u>9.6%</u>
■ Employer Normal Cost	20.6%	21.7%
■ Amortization Payments	<u>28.6%</u>	<u>31.7%</u> ⁶
■ Total Employer Contribution Rate	49.2%	53.5%
■ 2019/20 Employer Contribution Rate		49.2%
● Payroll < Expected		0.3%
● 6/30/14 Assumption Change (5 th Year)		1.2%
● 6/30/16 Discount Rate Change (3 rd Year)		0.5%
● 6/30/17 Discount Rate & Inflation (2 nd Year)		0.6%
● 6/30/18 Discount Rate change (1 st Year)		2.3%
● Other (Gains)/Losses		<u>(0.6%)</u>
■ 2020/21 Employer Contribution Rate		53.5%

⁶ Equivalent to 7.0% of UAL. One year, 7% interest on the UAL is 31.8% of payroll.



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CONTRIBUTION PROJECTIONS - SAFETY

- Market Value Investment Return:
 - June 30, 2019 6.7%⁷
 - Future returns based on stochastic analysis using 1,000 trials

<u>Single Year Returns at⁸</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 9 years and higher beyond that.
- Discount Rate decreases due to Risk Mitigation policy
- No Other: Gains/Losses, Method/Assumption Changes, Benefit Improvements
- Different from CalPERS projection

⁷ Gross return based on July 2019 CalPERS press release.

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



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CONTRIBUTION PROJECTIONS - SAFETY

- New hire assumptions:
 - 92.5% of 2019/20 new hires are PEPRA members and 7.5% are Classic members
 - Percentage of PEPRA member future hires to increase from 92.5% to 100% over 3 years
- 6/30/18 employee distribution:

Benefit Tier	Count	6/30/18 Payroll
● 3%@50 FAE1	178	\$19,876,827
● 2%@50 FAE3	14	1,369,570
● 2.7%@57 FAE3 (PEPRA)	57	4,442,376

- Non-management Classic Safety members cost sharing
 - 1.5% of PERSable payroll for 18/19
 - 2.5% of PERSable payroll for 19/20
 - 3.0% of PERSable payroll for 20/21 and thereafter
 - Assumes non-management Classic Safety payroll are 90% of total Classic Safety payroll

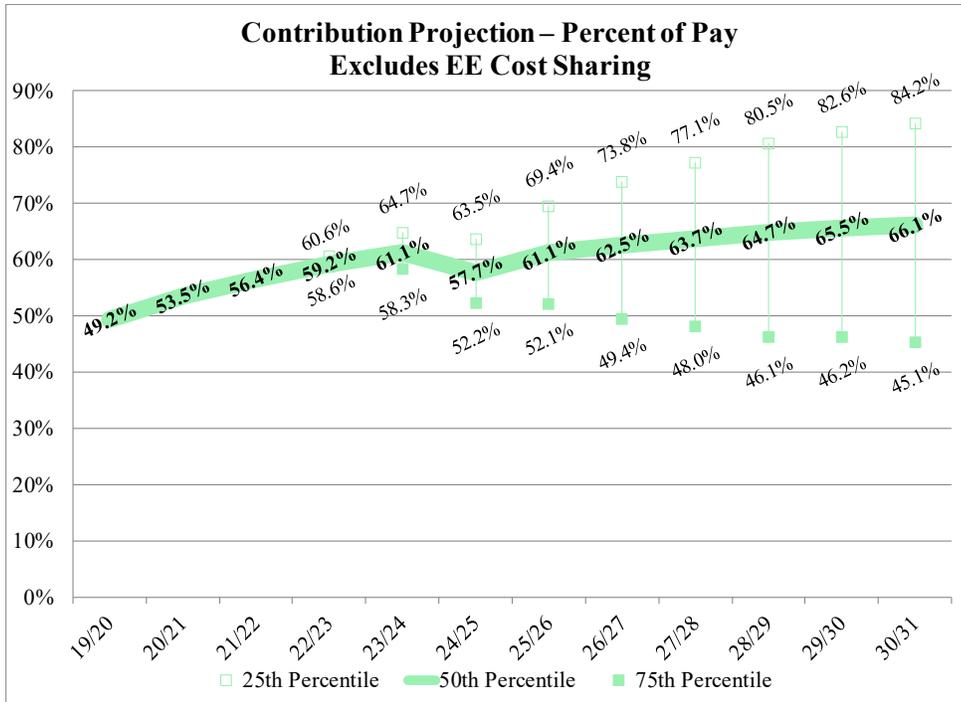


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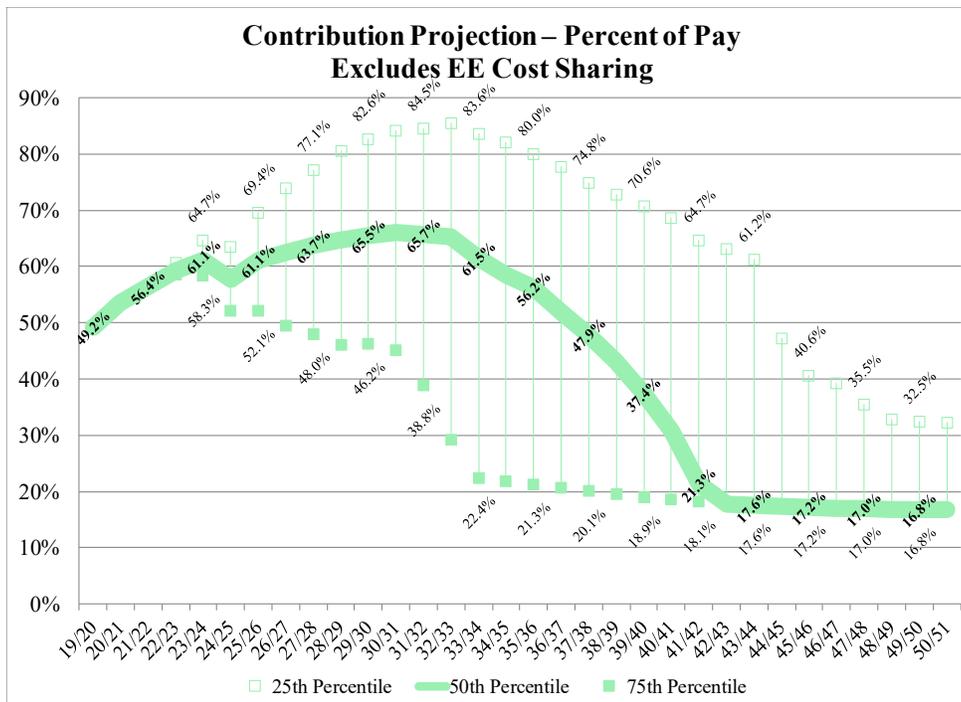
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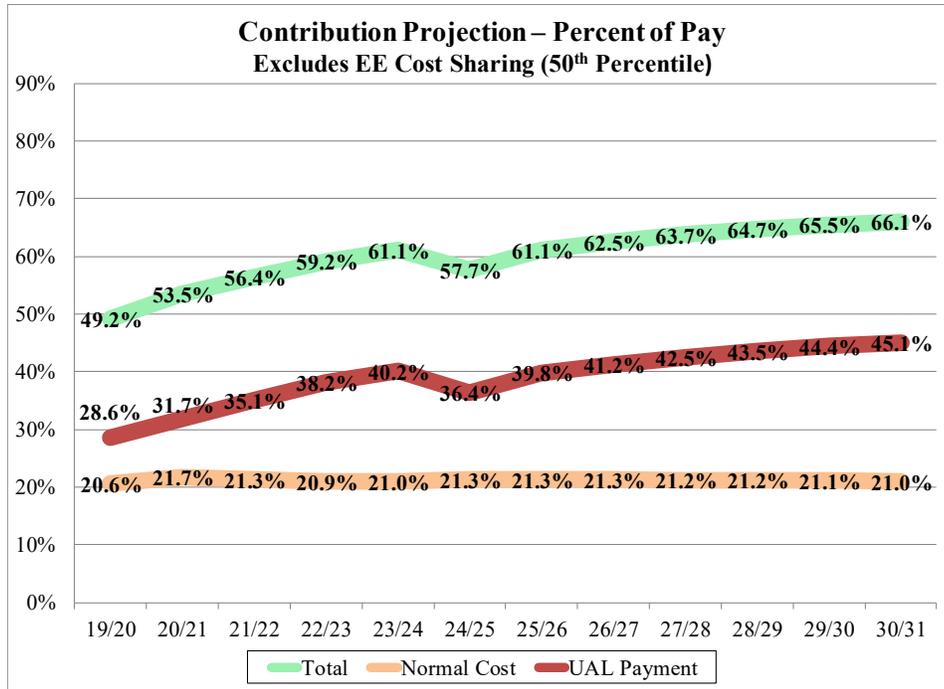
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CONTRIBUTION PROJECTIONS - SAFETY



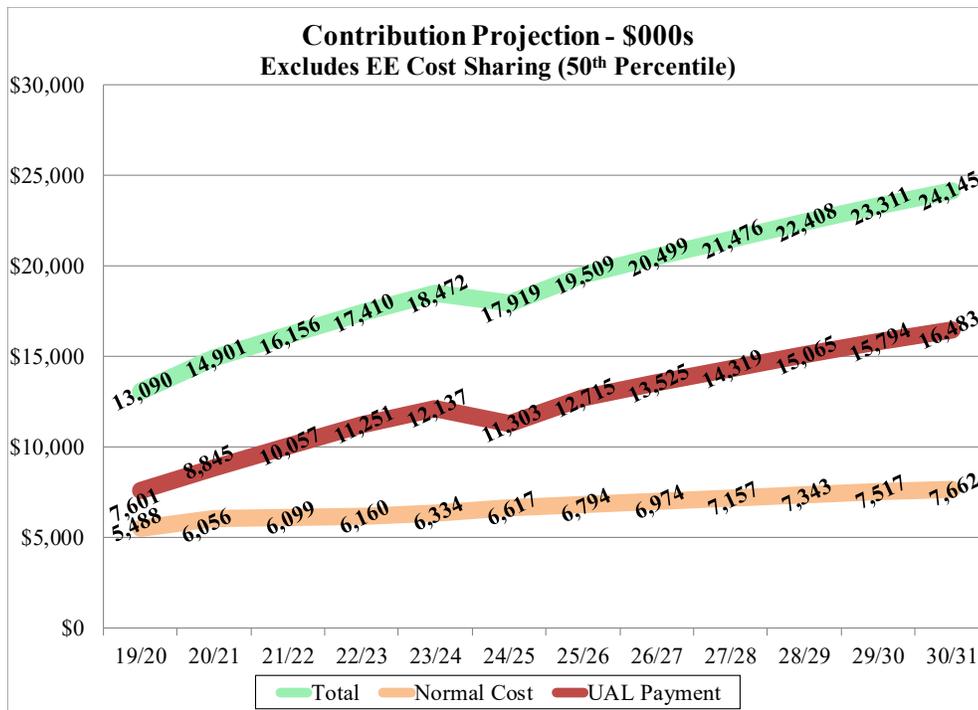
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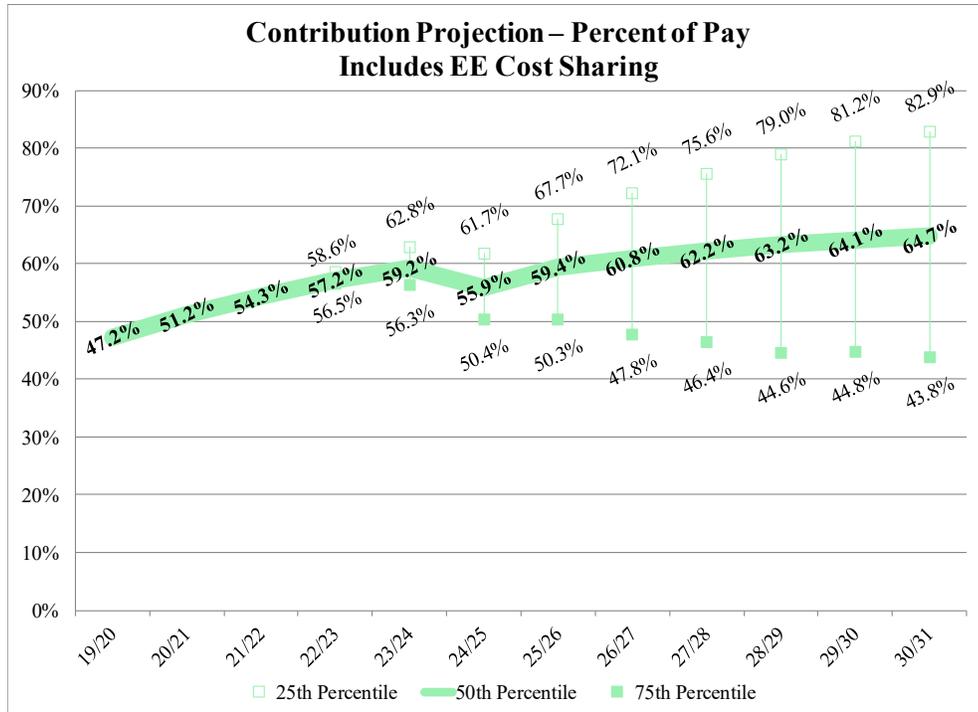
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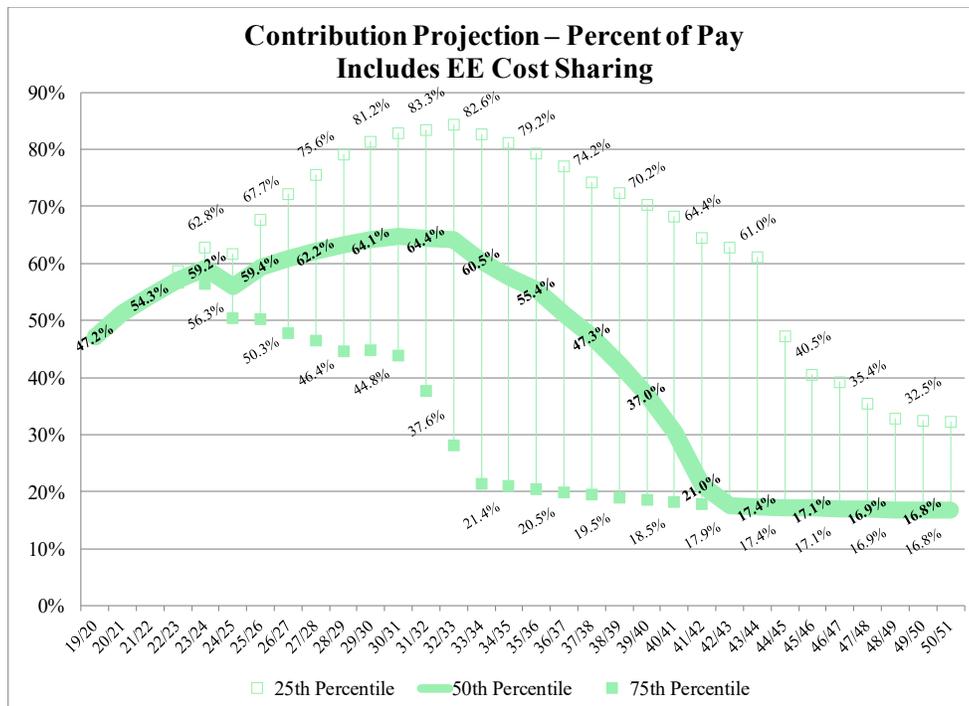
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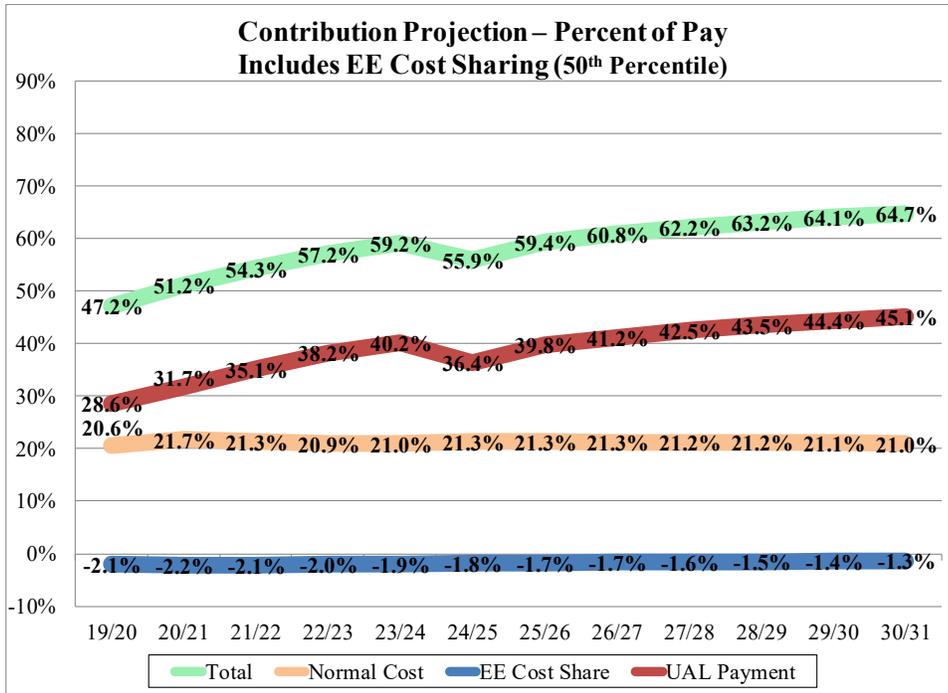
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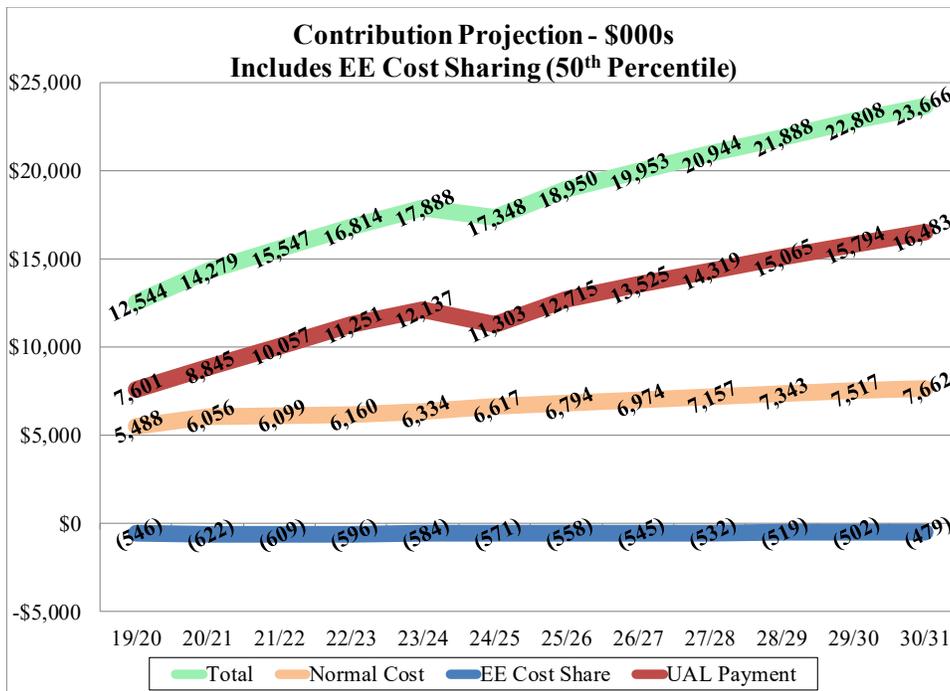
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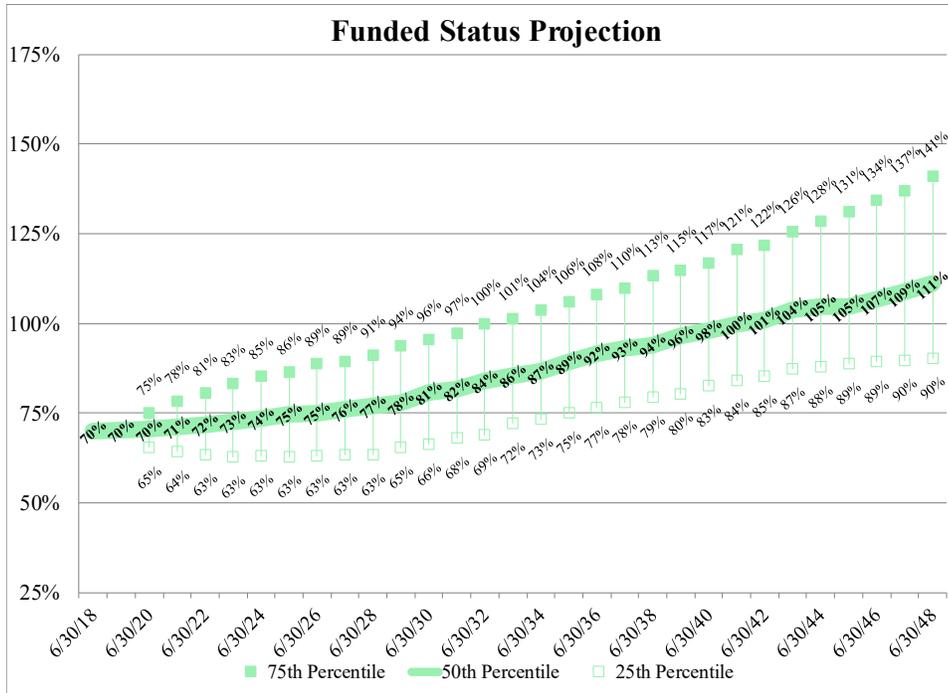
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CONTRIBUTION PROJECTIONS - SAFETY



FUNDED STATUS - SAFETY

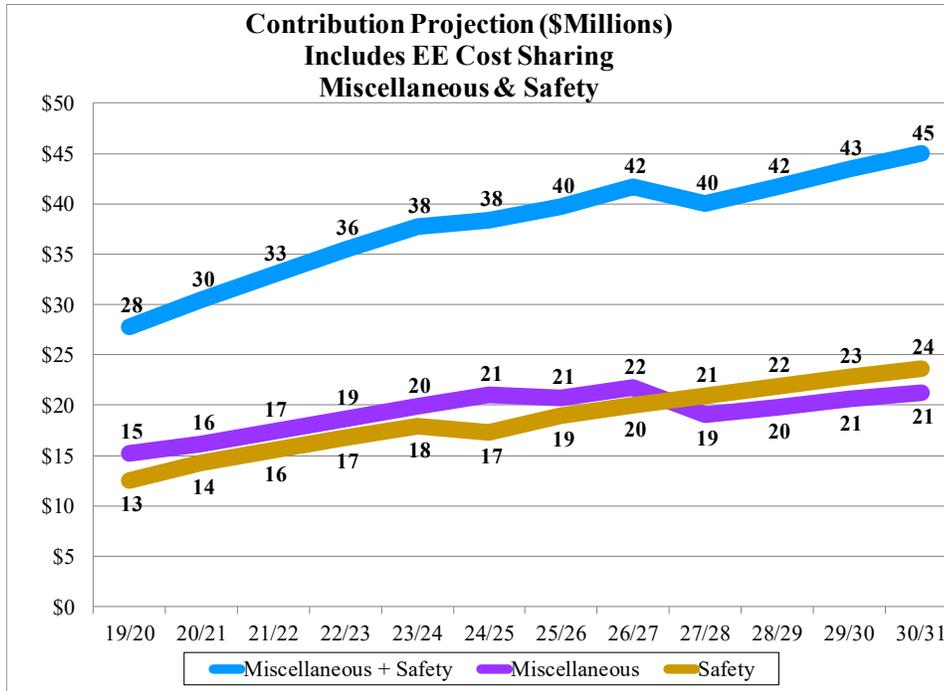


FUNDED STATUS - SAFETY

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COMBINED MISCELLANEOUS AND SAFETY



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COMBINED MISCELLANEOUS AND SAFETY

Funded Status Summary on June 30, 2018 (Amounts in \$Millions)

	Miscellaneous	Safety	Total
■ AAL	\$ 436	\$ 408	\$ 844
■ Assets	<u>295</u>	<u>285</u>	<u>580</u>
■ Unfunded AAL	141	123	264
■ Funded Ratio	67.7%	69.9%	68.7%



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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, 2018 (Amounts in Millions)

Discount Rate	Ongoing Plan	Termination Basis	
	7.00%	2.5%	3.25%
Miscellaneous			
Actuarial Accrued Liability	\$ 436	\$ 719	\$ 660
Assets	<u>295</u>	<u>295</u>	<u>295</u>
Unfunded AAL (UAAL)	141	424	365
Safety			
Actuarial Accrued Liability	\$ 408	\$ 714	\$ 648
Assets	<u>285</u>	<u>285</u>	<u>285</u>
Unfunded AAL (UAAL)	123	429	363
Total			
Unfunded AAL (UAAL)	264	853	728
Funded Ratio	68.7%	40.5%	44.3%



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PEPRA COST SHARING

- Target of 50% of total normal cost paid by all employees
- *PEPRA members* must pay greater of 50% of total normal cost or bargained amount if higher
- Employer cannot pay any part of *PEPRA 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 2020/21:

	<u>Classic Members</u>		<u>New Members</u>
	Tier 1	Tier 2	PEPRA
	<u>3%<i>@</i>60 FAE1</u>	<u>2%<i>@</i>60 FAE3</u>	<u>2%<i>@</i>62 FAE3</u>
● Employer Normal Cost	13.3%	10.4%	7.27%
● Member Normal Cost	<u>8.0%</u>	<u>7.0%</u>	<u>7.00%</u>
● Total Normal Cost	21.3%	17.4%	14.27%
● 50% Target	10.7%	8.7%	7.14%



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PEPRA COST SHARING

- Safety Plan 2020/21:

	<u>Classic Members</u>		<u>New Members</u>
	Tier 1	Tier 2	PEPRA
	<u>3%<i>@</i>50 FAE1</u>	<u>3%<i>@</i>55 FAE3</u>	<u>2.7%<i>@</i>57 FAE3</u>
● Employer Normal Cost	23.4%	21.5%	13.93%
● Member Normal Cost	<u>9.0%</u>	<u>9.0%</u>	<u>13.00%</u>
● Total Normal Cost	32.4%	30.5%	26.93%
● 50% Target	16.2%	15.3%	13.47%

- PEPRA Member Contributions:

Group	2019/20		2020/21			
	Total NC (Basis)	Member Rate	Total Normal Cost	Change	Member Rate	Method
Miscellaneous	13.79%	7.00%	14.27%	0.478%	7.00%	Agency Basis
Safety	24.30%	12.25%	26.22%	1.92%	13.00%	Pool Basis



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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
 - Governing body 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 governing body 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 11.9¢ 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 6.2¢ 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) effective July 2019
 - Strategy 1: Expected Return 5% (48 stocks / 52% bonds)
 - Strategy 2: Expected Return 4% (22% stocks / 78% bonds)



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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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COMPARISON OF OPTIONS

- | ■ Supplemental Trust | ■ CalPERS |
|--|--|
| ● Flexible | ● Locked In |
| ● Likely lower long-term return | ● Likely higher long-term return |
| ● Investment strategy choice | ● No investment choice |
| ● Does not reduce net pension liability for GASB reporting | ● Reduces net pension liability for GASB reporting |
| ● More visible | ● More restricted |



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IRREVOCABLE SUPPLEMENTAL (§115) PENSION TRUST

Direct Payment to CalPERS

- Following example illustrates additional contribution to CalPERS on June 30, 2019:
- Miscellaneous
 - Long Base: 2016 Gain/Loss (28 year amortization)
 - Short Base: 2003 Assumption Change (5 years amortization)
- Safety
 - Long Base: 2016 Gain/Loss (28 years amortization)
 - Short Base: 2003 Benefit Change (5 years amortization)
- Estimated Savings

	Miscellaneous	Safety
Short Base	\$3.8 million	\$3.6 million
\$ Savings (000's)	\$696	\$514
PV Savings @ 3% (000's)	373	278
Long Base	\$3.8 million	\$3.6 million
\$ Savings (000's)	\$5,212	\$4,888
PV Savings @ 3% (000's)	2,205	2,068



IRREVOCABLE SUPPLEMENTAL (§115) PENSION TRUST

Payment to 115 Trust

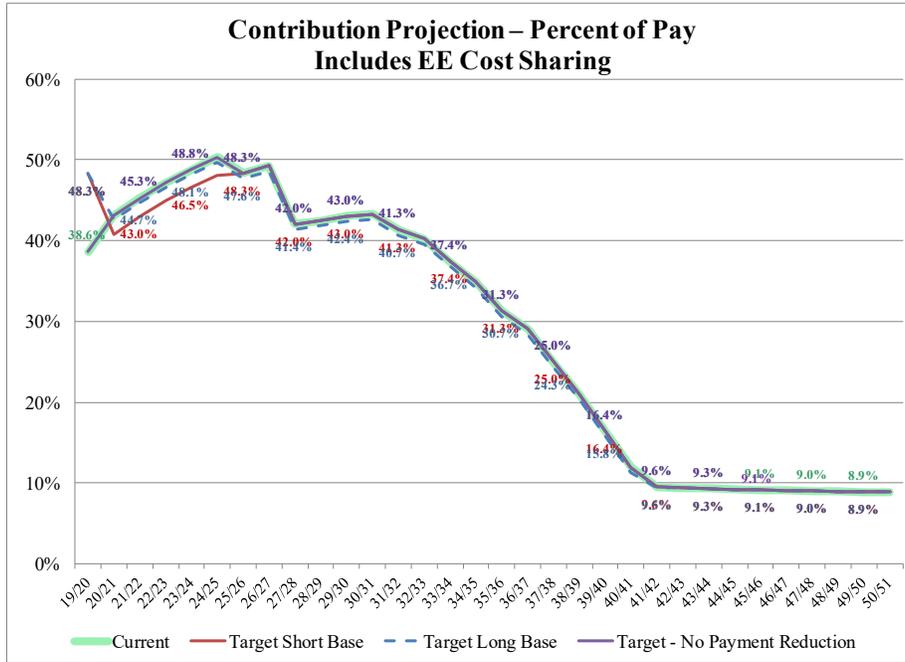
- City's PARS 115 Trust
 - Balance at 7/31/19: \$7,039,989
 - Projected to 6/30/20: \$7.4 million
 - Allocation based on UAL
 - Miscellaneous: 52%
 - Safety 48%

	Miscellaneous	Safety
Initial Balance @6/30/20	\$3.8 million	\$3.6 million
Trust Earnings	5%	5%
Trust Target		
- Target contribution rate	46.3%	61.1%
- 1st year Trust used	2023/24	2027/28
- Last year Trust used	2026/27	2032/33
\$ Savings (000's)	\$1,177	\$2,496
PV Savings @ 3% (000's)	510	916



IRREVOCABLE SUPPLEMENTAL (§115) PENSION TRUST

Direct Payment to CalPERS Miscellaneous

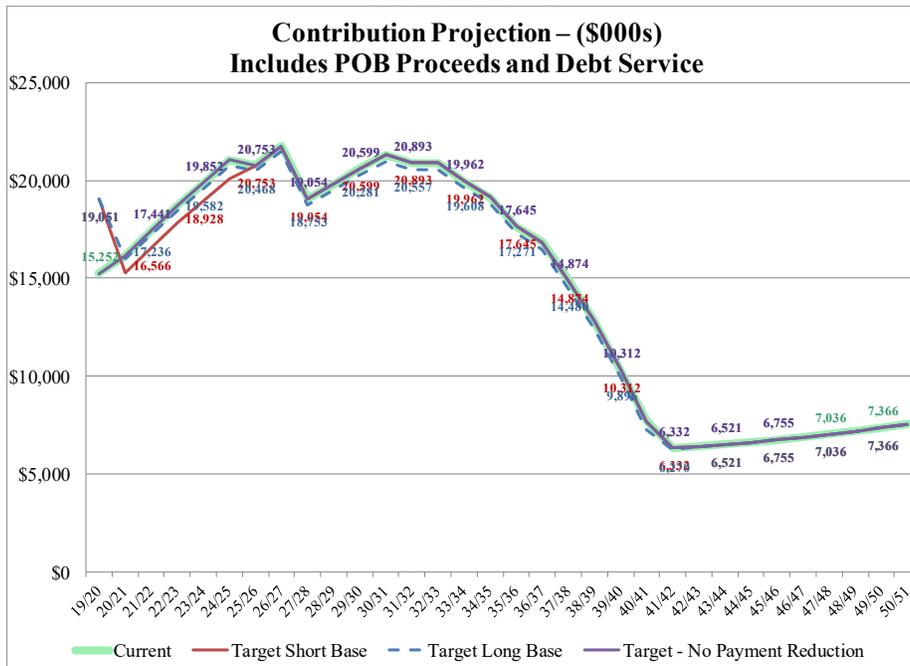


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Direct Payment to CalPERS Miscellaneous

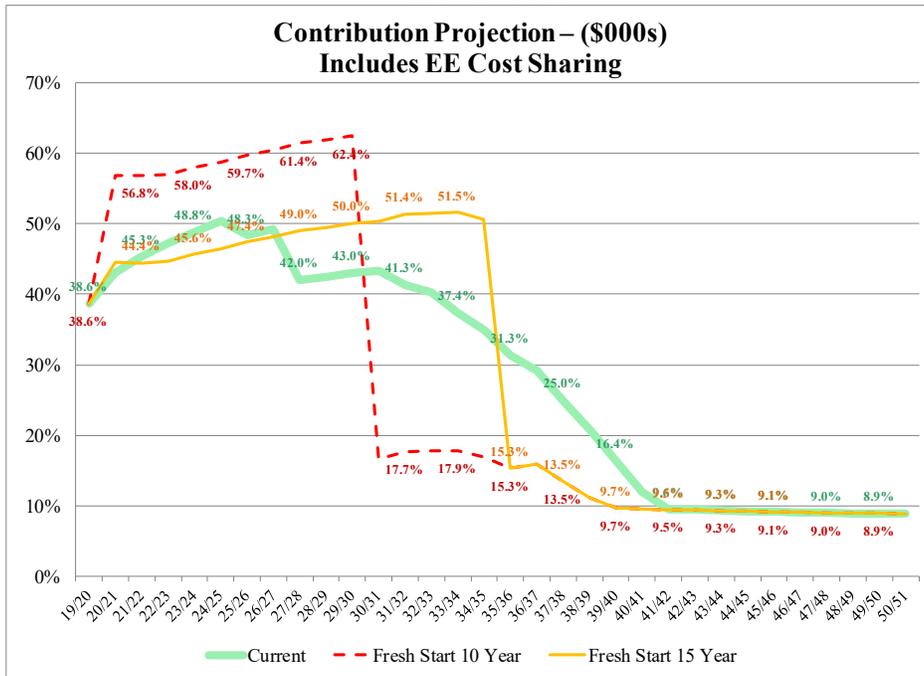


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**Direct Payment to CalPERS
Miscellaneous**

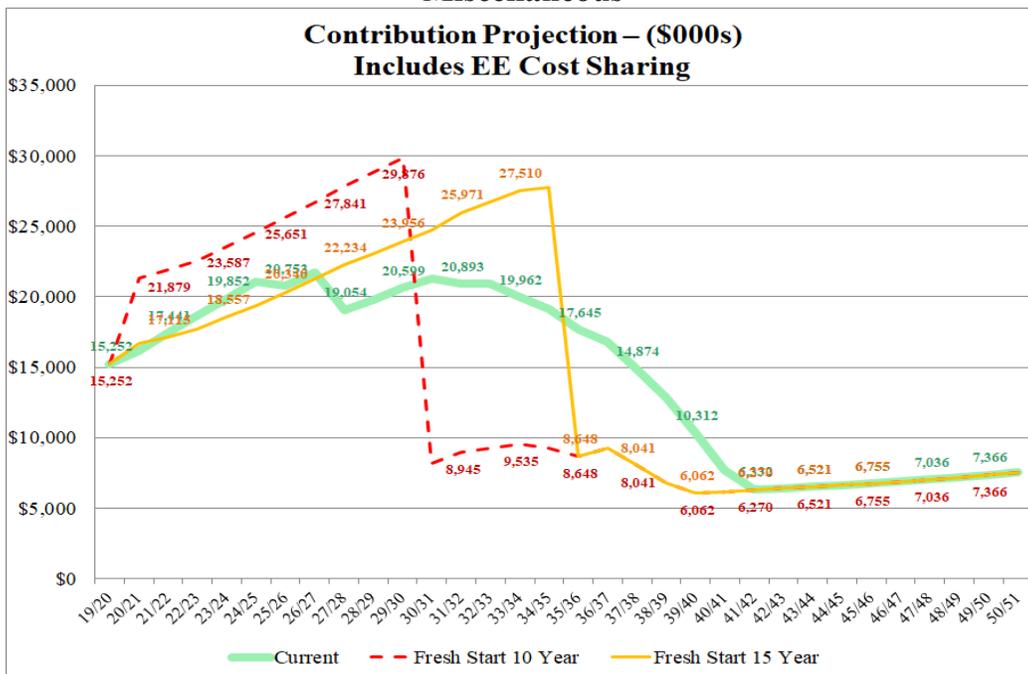


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**Direct Payment to CalPERS
Miscellaneous**

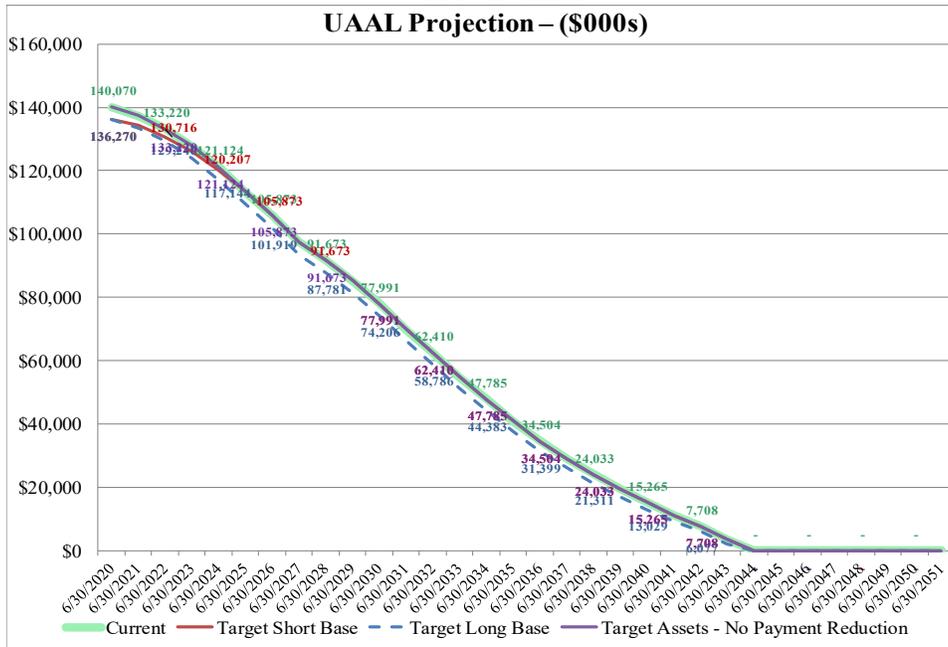


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Direct Payment to CalPERS Miscellaneous

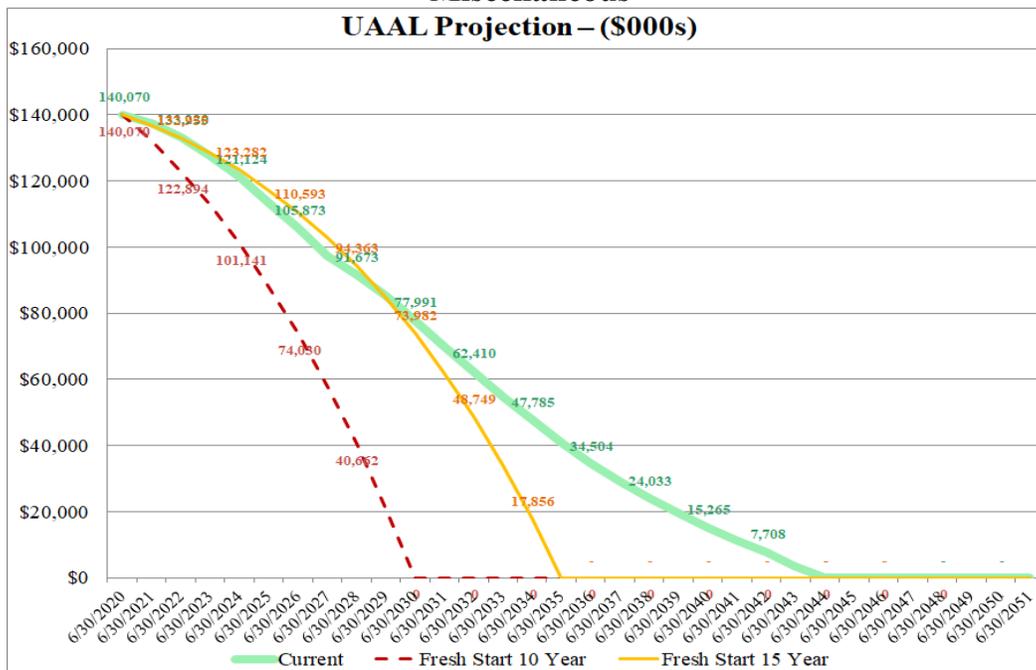


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IRREVOCABLE SUPPLEMENTAL (§115) PENSION TRUST

Direct Payment to CalPERS Miscellaneous

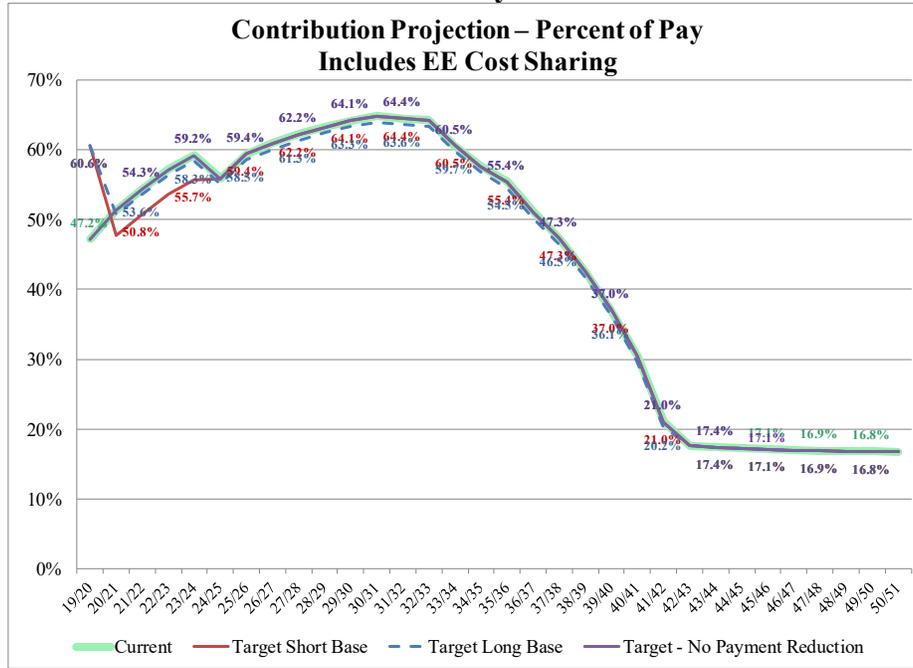


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Direct Payment to CalPERS Safety

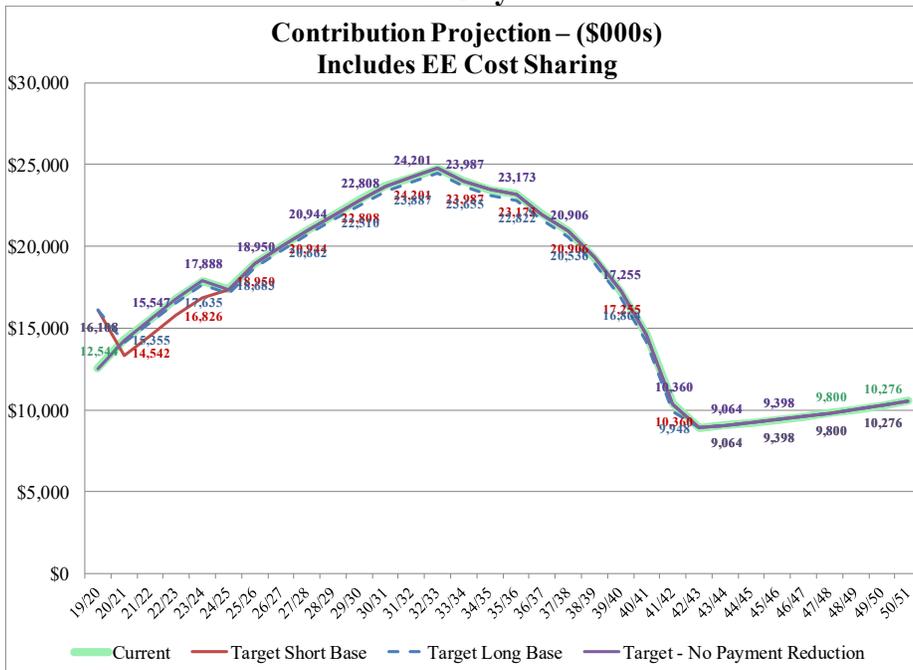


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Direct Payment to CalPERS Safety

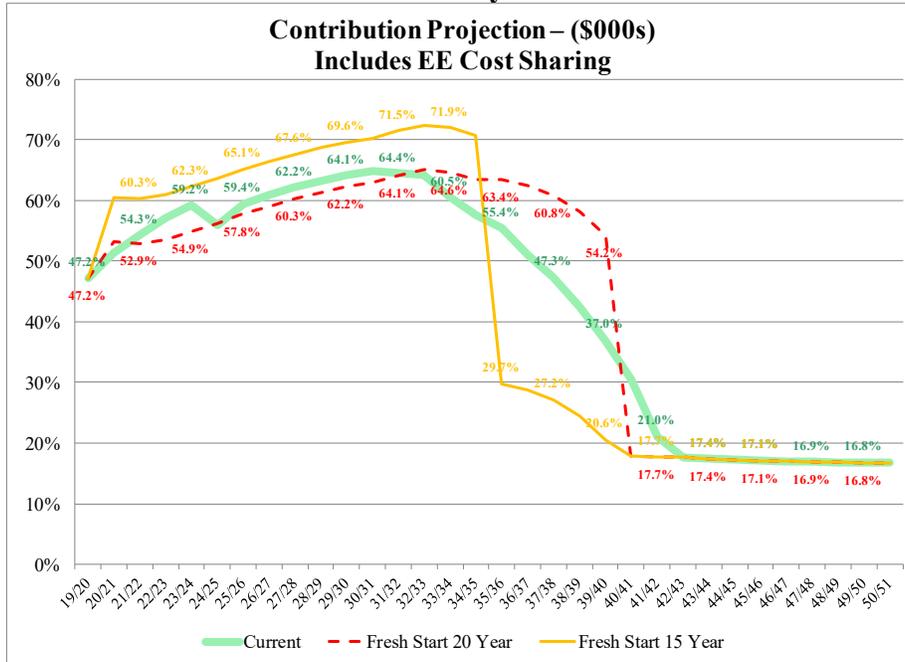


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Direct Payment to CalPERS Safety

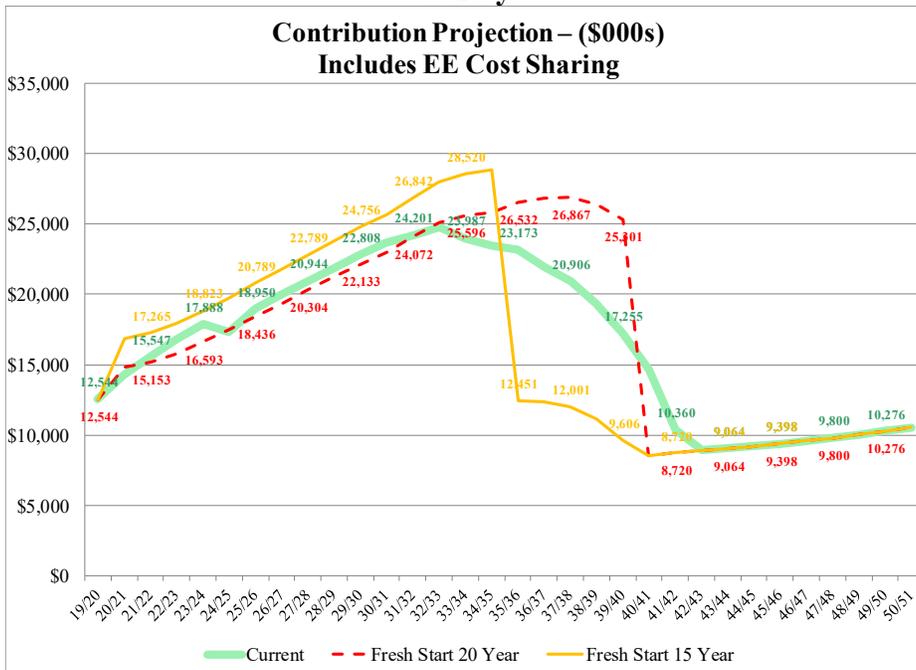


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Direct Payment to CalPERS Safety

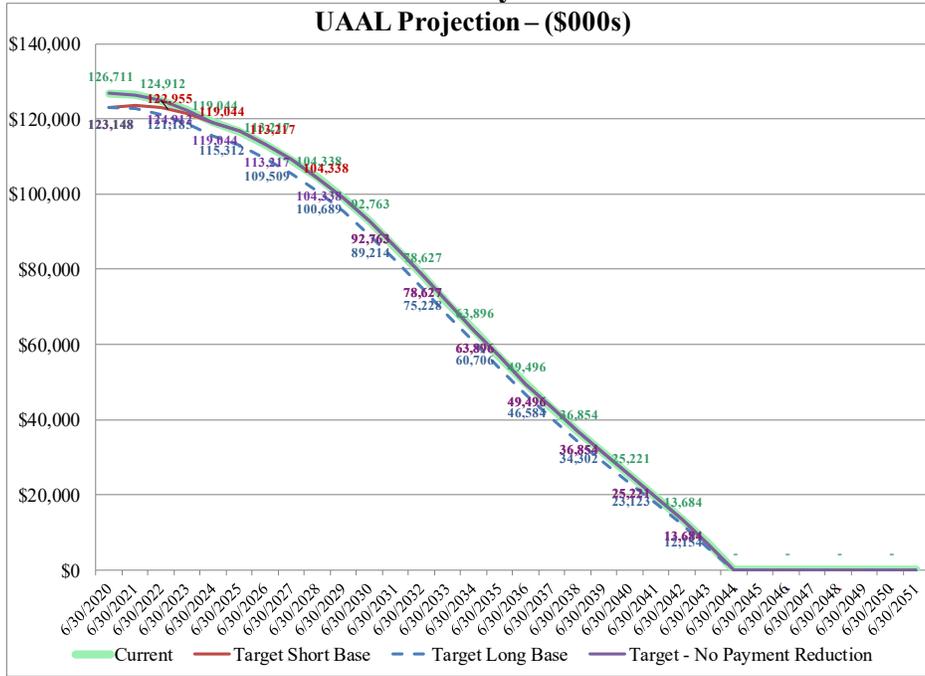


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**Direct Payment to CalPERS
Safety**

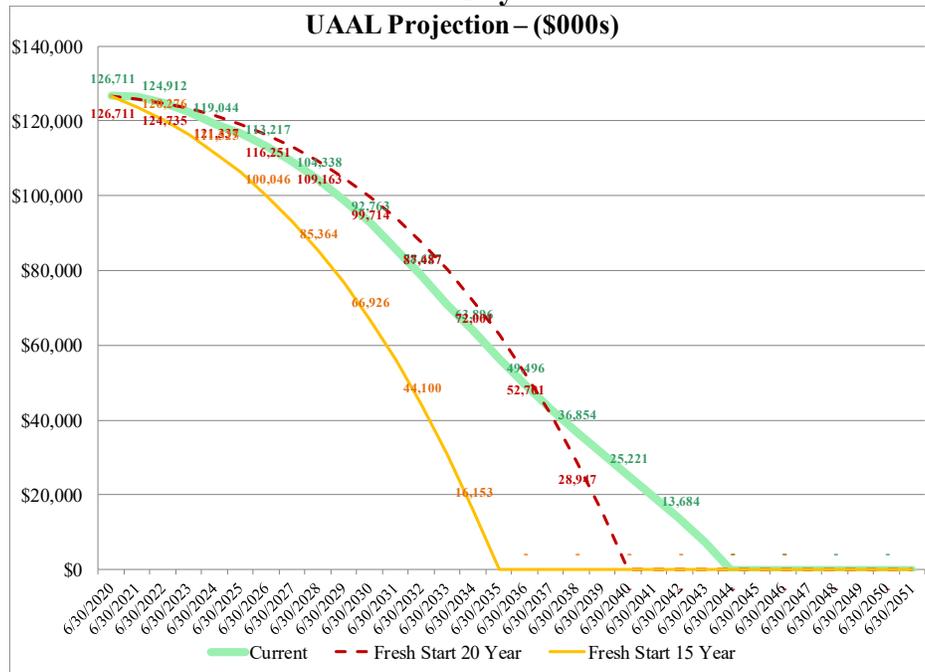


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**Direct Payment to CalPERS
Safety**

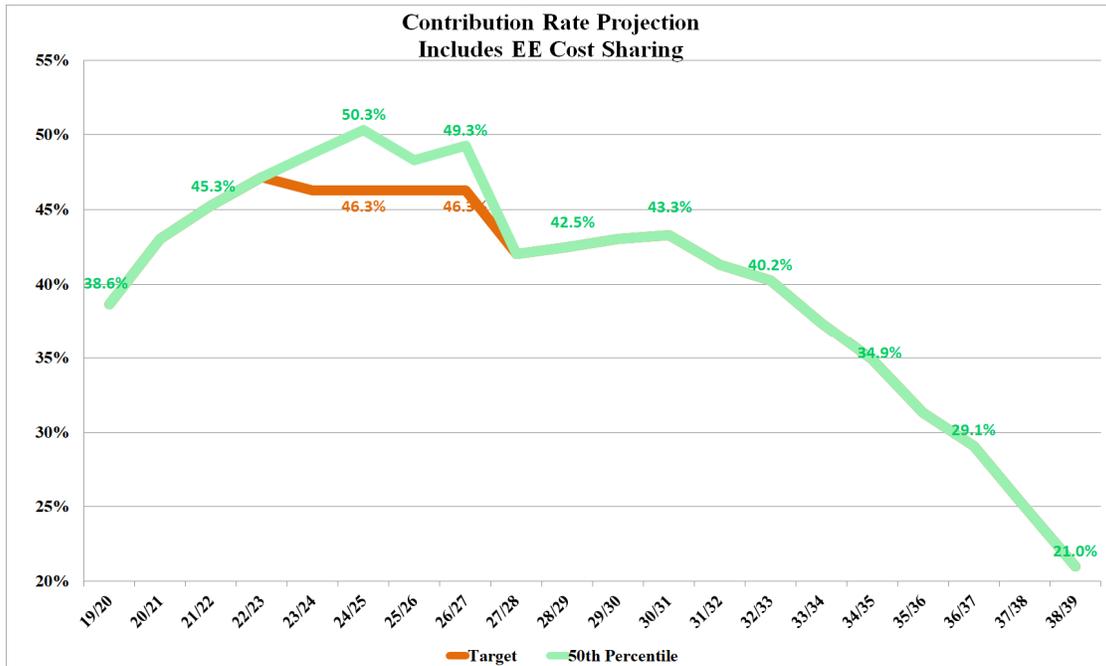


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IRREVOCABLE SUPPLEMENTAL (§115) PENSION TRUST

Payment to 115 Trust Miscellaneous



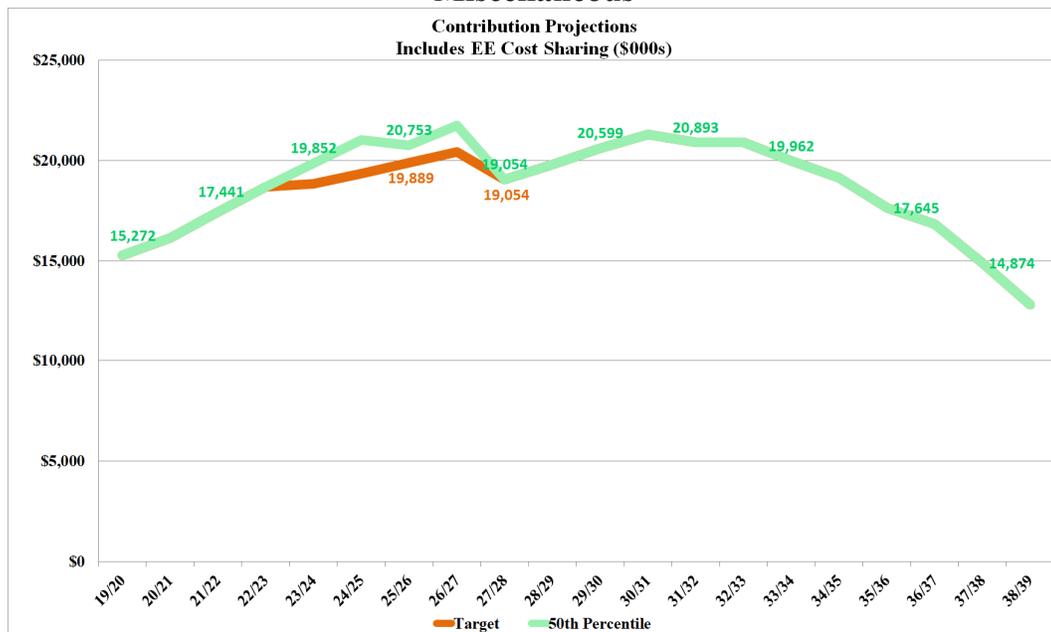
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IRREVOCABLE SUPPLEMENTAL (§115) PENSION TRUST

Payment to 115 Trust Miscellaneous



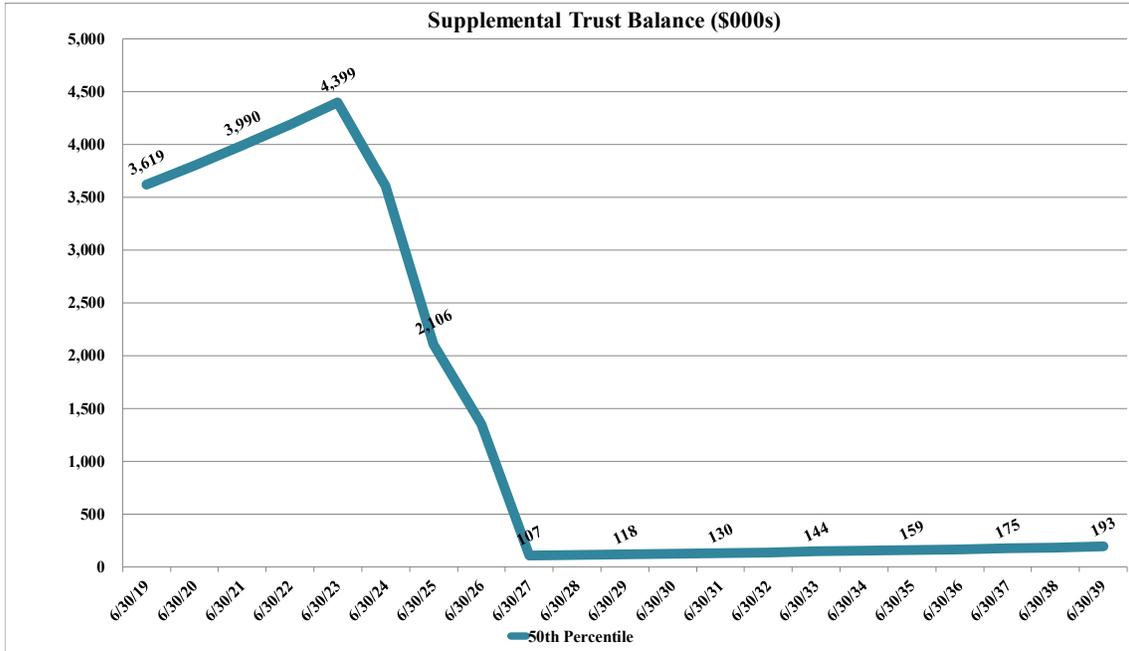
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IRREVOCABLE SUPPLEMENTAL (§115) PENSION TRUST

**Payment to 115 Trust
Miscellaneous**



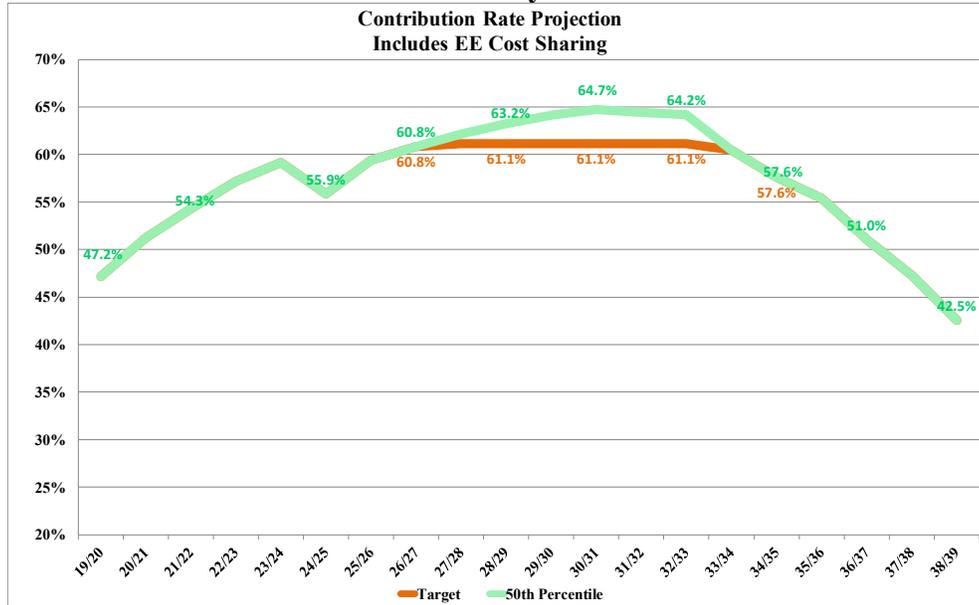
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Payment to 115 Trust Safety

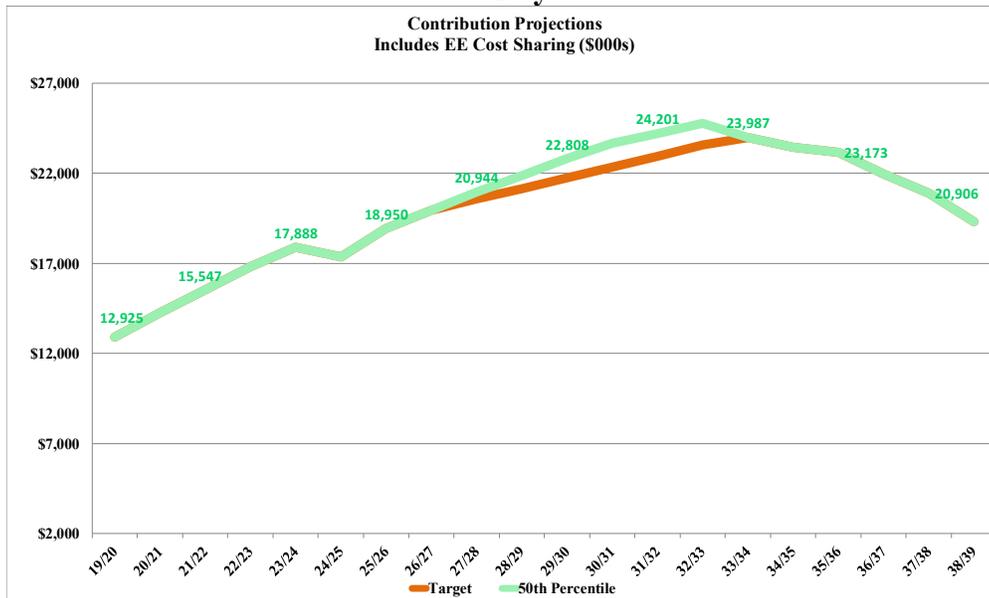


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Payment to 115 Trust Safety

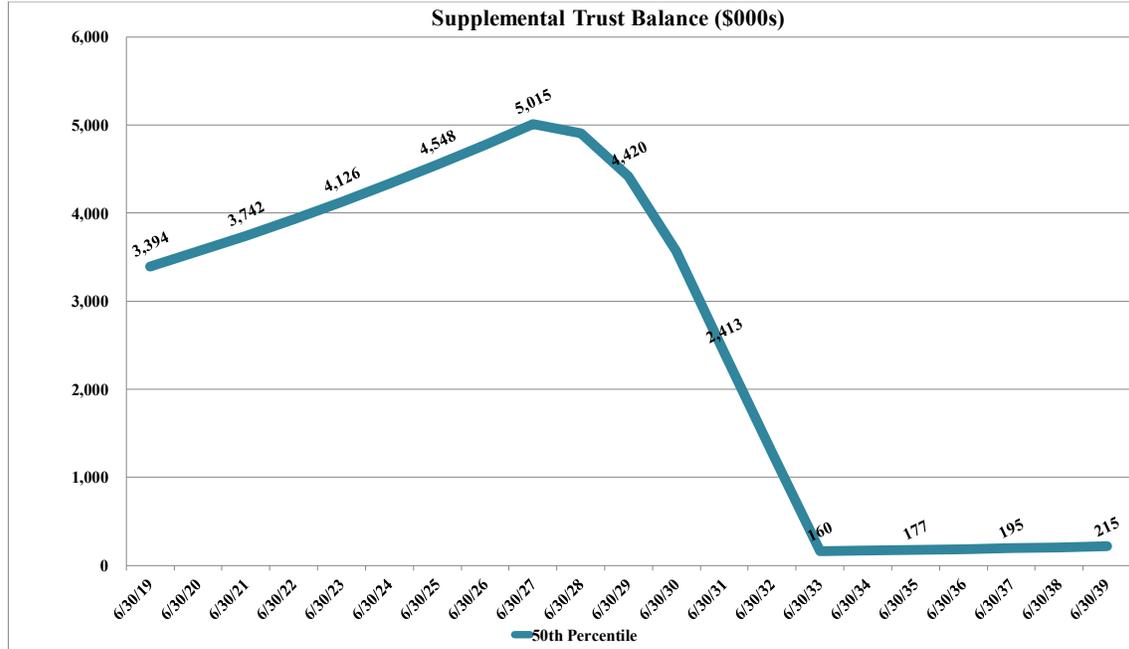


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IRREVOCABLE SUPPLEMENTAL (§115) PENSION TRUST

Payment to 115 Trust Safety



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ACTUARIAL CERTIFICATION

This report presents analysis of the City of Escondido CalPERS pension plans. The purpose of this report is to provide the City:

- Historical perspective on the plan investment returns, assets, funded status and contributions.
- Projections of likely future contributions and the impact of investment volatility

The calculations and projections in this report are based on information contained in the City's June 30, 2018 and earlier CalPERS actuarial valuation reports. We reviewed this information for reasonableness, but do not make any representation on the accuracy of the CalPERS reports.

Future investment returns and volatility are based on Bartel Associates Capital Market model which results in long term returns summarized on pages 23 and 45.

Future results may differ from our projections due to differences in actual experience as well as changes in plan provisions, CalPERS actuarial assumptions or methodology. Other than variations in investment return, this study does not analyze these.

To the best of our knowledge, this report is complete and accurate and has been conducted using generally accepted actuarial principles and practices. As members of the American Academy of Actuaries meeting the Academy Qualification Standards, we certify the actuarial results and opinions herein.

Respectfully submitted,

DRAFT

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