Bartel Associates March 9, 2021 PowerPoint Presentation



BARTEL ISSOCIATES, LLC

TOWN OF LOS GATOS MISCELLANEOUS AND SAFETY PLANS

CalPERS Actuarial Issues – 6/30/19 Valuation Preliminary Results - Draft

Bartel Associates, LLC

Bianca Lin, Assistant Vice President Joseph R. D'Onofrio, Assistant Vice President Tina Liu, Associate Actuary Matt Childs, Actuarial Analyst

March 8, 2021

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DEFINITIONS

Present Value of Benefits June 30, 2019 Future Normal Costs Current Normal Cost

- Present Value of Benefits (PVB):
 - Discounted value at valuation date (6/30/19) of all future expected benefit payments using various actuarial assumptions
- Normal Cost (NC):
 - Portion of PVB allocated to (or "earned" during) year following valuation date
- Actuarial Accrued Liability (AAL):
 - Discounted value at valuation date of benefits "earned" through valuation date (value of past normal costs)



March 8, 2021

1



DEFINITIONS

Present Value of Benefits June 30, 2019 Unfunded PVB Assets (Unfunded Liability) Actuarial Liability

- Funding Target Have plan assets equal to Actuarial Accrued Liability
- Unfunded Liability (UAAL or UAL) Assets short of target at valuation date
 - Difference between AAL and plan assets is the unfunded (or overfunded) AAL
 - The change in this difference creates a new UAAL layer or amortization base at each valuation date
 - Each new UAAL layer gets amortized (paid off) over a period of time as part of the employer contribution





PLAN FUNDED STATUS - MISCELLANEOUS

	<u>June 30, 2018</u>	June 30, 2019
■ Actuarial Accrued Liability		
Active	\$22,300,000	\$26,200,000
Retiree	70,700,000	72,300,000
Inactive	14,100,000	13,600,000
Total	107,100,000	112,100,000
■ Assets	73,300,000	76,100,000
■ Unfunded Liability	33,800,000	36,000,000
■ Funded Ratio	68.4%	67.9%
 Average Funded Ratio for CalPERS Public Agency Miscellaneous Plans¹ 	71.8%	72.2%

Individual agency and average funded ratios depends on benefit levels, demographics, effective dates, funding policy, ADPs, etc.

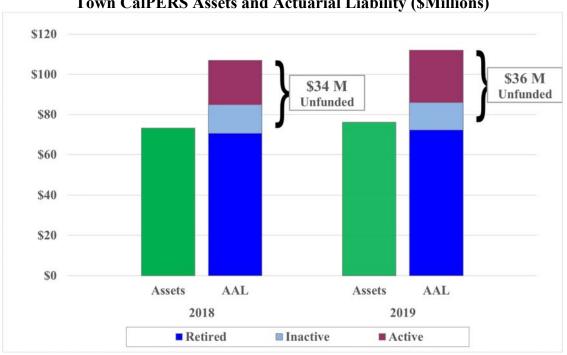


March 8, 2021

3

PLAN FUNDED STATUS - MISCELLANEOUS

Town CalPERS Assets and Actuarial Liability (\$Millions)



4





PLAN FUNDED STATUS - SAFETY

	June 30, 2018	June 30, 2019
■ Actuarial Accrued Liability		
Active	\$21,300,000	\$23,700,000
• Retiree	67,200,000	69,800,000
Inactive	3,000,000	3,000,000
Total	91,500,000	96,500,000
■ Assets	65,900,000	69,500,000
■ Unfunded Liability	25,600,000	27,000,000
■ Funded Ratio	72.1%	72.0%
Average Funded Ratio for CalPERS Public Agency Safety Plans ²	68.3%	68.6%

² Individual agency and average funded ratios depends on benefit levels, demographics, effective dates, funding policy, ADPs, etc.

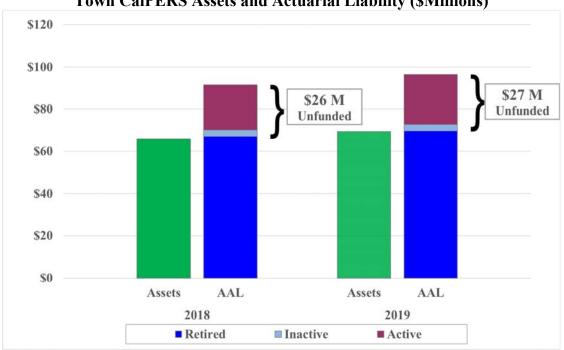


March 8, 2021

5

PLAN FUNDED STATUS - SAFETY

Town CalPERS Assets and Actuarial Liability (\$Millions)



6





DISCOUNT RATE SENSITIVITY

Miscellaneous June 30, 2019

	Discount Rate		
	<u>7.00%</u>	<u>6.50%</u> ³	<u>6.00%</u>
AAL	\$112,100,000	\$119,300,000	\$126,500,000
Assets	76,100,000	76,100,000	76,100,000
Unfunded Liability	36,000,000	43,200,000	50,400,000
Funded Ratio	67.9%	63.8%	60.2%

Estimated by Bartel Associates. (Straight line interpolation of the 7% and 6% discount rate AAL provided in the 6/30/19 valuation report.)



March 8, 2021

7



DISCOUNT RATE SENSITIVITY

Safety June 30, 2019

	Discount Rate		
	<u>7.00%</u>	<u>6.50%</u> ⁴	<u>6.00%</u>
AAL	\$96,500,000	\$103,100,000	\$109,700,000
Assets	69,500,000	69,500,000	69,500,000
Unfunded Liability	27,000,000	33,600,000	40,200,000
Funded Ratio	72.0%	67.4%	63.4%

Estimated by Bartel Associates. (Straight line interpolation of the 7% and 6% discount rate AAL provided in the 6/30/19 valuation report.)





CONTRIBUTION PROJECTIONS - MISCELLANEOUS

■ Capital Market Assumptions for investments in CalPERS PERF:

			Geometric		Geometric
		PERF	Real		Nominal
		Policy	Average	Standard	Average
	Asset Class	Target	Return	Deviation	Return
lacktriangle	Public Equity	50%	4.82%	17.84%	7.44%
lacktriangle	Fixed Income	28%	1.47%	4.24%	4.01%
•	Real Assets	13%	4.81%	12.55%	7.43%
lacktriangle	Private Equity	8%	6.19%	25.50%	8.84%
lacktriangle	Liquidity	<u>1%</u>	0.06%	0.97%	2.56%
		100%			

- Based on study of investment consultant and investment bank 2017 short and long-term capital market assumptions adjusted for long-term trends in investment returns.
- Inflation 2.5%



March 8, 2021





 $4.7\%^{5}$

CONTRIBUTION PROJECTIONS - MISCELLANEOUS

- Market Value Investment Return:
 - June 30, 2020
 - Future returns based on stochastic analysis using 1,000 trials⁶
 - Single Year Returns at 7

 Current Investment Mix

 25th Percentile 50th Percentile 75th Percentile 75th Percentile 7.0%

 14.8%

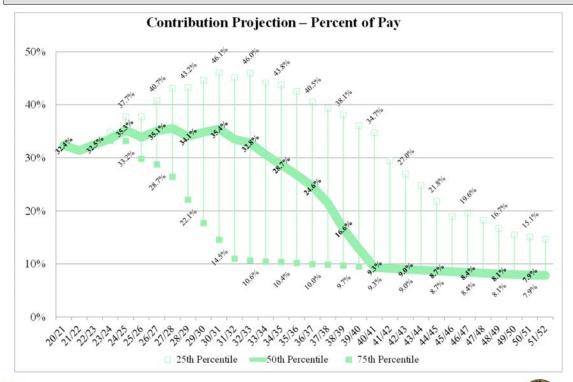
Ultimate Investment Mix 0.8% 6.0% 11.4%

- Assumes investment returns will, generally be 6.5% (as compared to 7.0%) over the next 8 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. Our projections include:
 - Actual 2019/20 investment return
 - Lower expected return for next 8 years
 - Impact of risk mitigation
 - Possibly different PEPRA new hire assumptions
- ⁵ Net of investment expenses and gross of administrative expenses. 15 bp assumed for administrative expenses.
- ⁶ Future returns are assumed net of investment and administrative expenses
- ⁷ Nth percentile means N percentage of our trials result in returns lower than the indicated rates.





CONTRIBUTION PROJECTIONS - MISCELLANEOUS

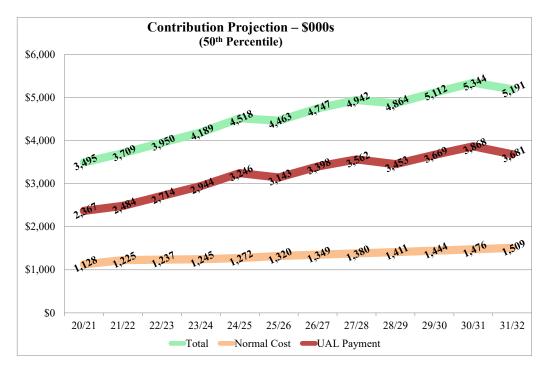


(B4) March 8, 2021



CONTRIBUTION PROJECTIONS - MISCELLANEOUS

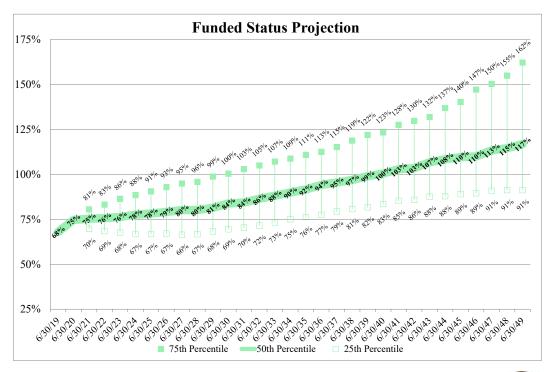
11







FUNDED STATUS - MISCELLANEOUS



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March 8, 2021

13



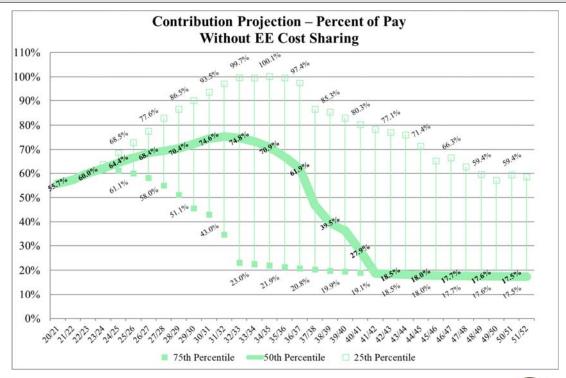
FUNDED STATUS - MISCELLANEOUS

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CONTRIBUTION PROJECTIONS – SAFETY



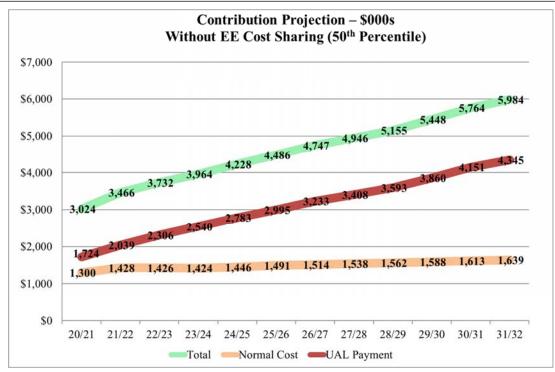


March 8, 2021

15



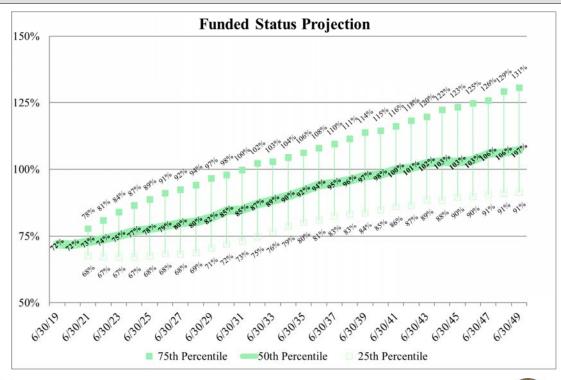
CONTRIBUTION PROJECTIONS – SAFETY







FUNDED STATUS - SAFETY



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March 8, 2021

17



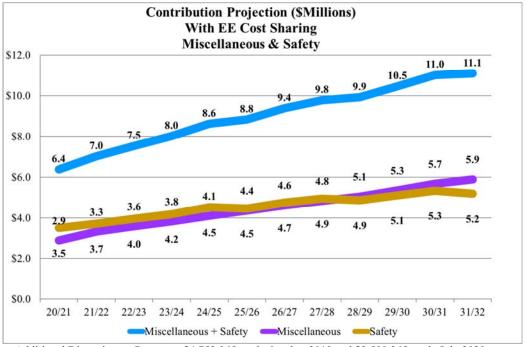
FUNDED STATUS - SAFETY

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COMBINED MISCELLANEOUS AND SAFETY



Reflects Additional Discretionary Payments \$4,753,965 made October 2019 and \$3,580,365 made July 2020.



March 8, 2021





COMBINED MISCELLANEOUS AND SAFETY

Funded Status Summary on June 30, 2019 (Amounts in \$Millions)

	Miscellaneous	Safety	Total
■ AAL	\$ 112	\$ 97	\$ 209
■ Assets	<u>76</u>	<u>70</u>	<u>146</u>
■ Unfunded AAL	36	27	63
■ Funded Ratio	67.9%	72.0%	69.9%





PREFUNDING OPTION

Additional CalPERS Contributions Prefunding Option

■ Direct Payment to CalPERS

- Pay down a portion of the Unfunded Liability
 - > Target specific bases (short or long)
- Fresh start amortization (more stable contribution)
 - > Directly through CalPERS
 - > Indirectly through budgeted contributions
- Funds invested per CalPERS' investment policy
- Contribution is lower but volatility remains
- Employer required to pay Normal Cost when 100% funded
- Sources of funds
 - > General fund
 - > Prior dedicated internal reserve
 - > Pension Obligation Bond



March 8, 2021

21



PREFUNDING OPTION

Direct Payment to CalPERS Savings

Following illustrates the interest savings on Additional Discretionary Payments (ADPs) of \$4,753,965 made on October 18, 2019 (June 30, 2016 loss base) and \$3,580,365 made July 7, 2020 (June 30, 2015 loss base):

	Estimated	2021/22
Target Bases	Savings	Contribution Impact
October 18, 2019 ADP	\$4.8 1	nillion
\$ Savings (000's)	\$6,299	\$(268)
PV Savings @ 3% (000's)	2,583	
July 7, 2020 ADP	\$3.6 million	
\$ Savings (000's)	\$4,382	\$(253)
PV Savings @ 3% (000's)	1,919	

22





PREFUNDING OPTION

Direct Payment to CalPERS Prefunding Option

- Following illustrates additional \$1 million contribution to CalPERS on June 30, 2021:
- Miscellaneous Plan
 - Shortest Base: 2003 Assumption Change (4 years, \$1.1 million on 6/30/21) Less interest savings, largest short-term contribution impact
 - Longest Base: 2013 Gain/Loss (24 years, \$10.9 million on 6/30/21) Greater interest savings, smallest short-term contribution impact

Tanget Dases	Estimated	2021/22
Target Bases	Savings	Contribution Impact
Shortest Bases	\$1 million	
\$ Savings (000's)	\$144	\$(275)
PV Savings @ 3% (000's)	78	
Longest Bases	\$1 m	illion
\$ Savings (000's)	\$1,042	\$(70)
PV Savings @ 3% (000's)	464	



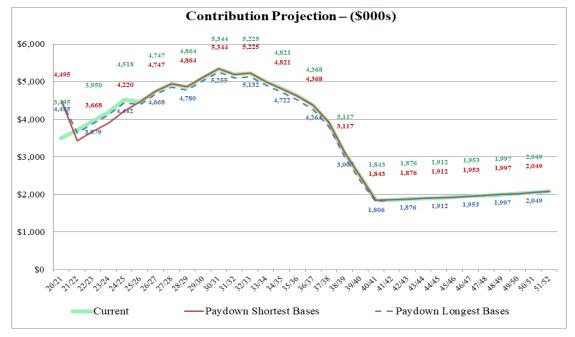
March 8, 2021

23



PREFUNDING OPTION

Direct Payment to CalPERS Miscellaneous



24

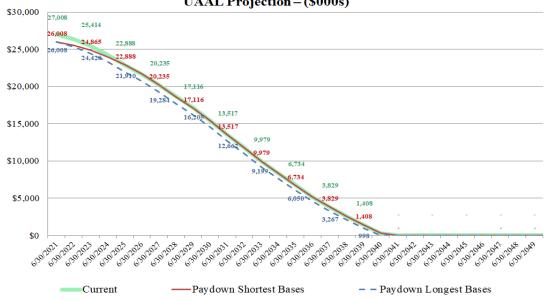




PREFUNDING OPTION

Direct Payment to CalPERS Miscellaneous

UAAL Projection - (\$000s)







PREFUNDING OPTION

25

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26