



**BARTEL**  
ASSOCIATES, LLC

## **City of Rocklin**

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# **CalPERS Actuarial Analysis June 30, 2018 Valuation**

**March 2020**

**CITY OF ROCKLIN**  
**CALPERS ACTUARIAL ANALYSIS – JUNE 30, 2018 VALUATION**

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The City of Rocklin retained Bartel Associates to provide CalPERS-related actuarial consulting services. This Executive Summary analyzes the City’s CalPERS Miscellaneous, Safety Police, and Safety Fire pension plans to assist the City in evaluating the current funding situation. Unless indicated otherwise, amounts referred to below are totals for the 3 plans.

**Background**

We believe there are 2 primary issues the City should evaluate and address with respect to the CalPERS pension plan, the Unfunded Actuarial Accrued Liability (unfunded liability) and future contributions. The unfunded liability provides an estimated value at a single point in time of additional contributions needed to pay off past accrued liabilities. Projected future contributions represent the future cash outlay required to defease the unfunded liability. Therefore, both need to be considered:

- **Unfunded Liability**  
 The City’s June 30, 2018 total Unfunded Actuarial Liability (UAL) is \$54.7 million. This is measured by CalPERS based on a 7% discount rate. CalPERS risk mitigation policy is expected to reduce future portfolio risk and investment returns. After taking into account the Risk Mitigation policy, 6.5% is likely the more appropriate discount rate. If a 6.5% discount rate is used, the UAL is \$69.2 million.
- **Future Contributions**  
 Due primarily to CalPERS actuarial assumption and methods changes over the last 5 years, City total contributions are expected to gradually increase from \$6.1 million in 2019/20 to \$12.1 million in fiscal year 2030/31. For all 3 plans, significantly higher contributions should be expected for many years to come.

Future unfunded liabilities and contributions will vary significantly depending on investment returns. While we have prepared analysis on the impact of variability, this summary focusses on expected contributions. Future investment returns will have a dramatic impact on City costs.

We believe agencies should strongly consider funding amounts above the contributions CalPERS currently requires, with the level of funding being an individual agency budgetary decision.

**Funded Status**

Following is the estimated June 30, 2018 plan funded status based on a 6.5% discount rate.

(in \$ millions)

	<b>Miscellaneous</b>	<b>Police</b>	<b>Fire</b>	<b>Total</b>
■ <b>Actuarial Accrued Liability</b>	\$ 94.9	\$ 66.9	\$ 50.1	\$ 211.9
■ <b>Assets</b>	<u>61.4</u>	<u>46.7</u>	<u>34.6</u>	<u>142.7</u>
■ <b>Unfunded Liability</b>	33.5	20.2	15.5	69.2
■ <b>Funded Ratio</b>	64.7%	69.8%	74.5%	72.6%



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## Contribution Projections

Our projections incorporate the following:

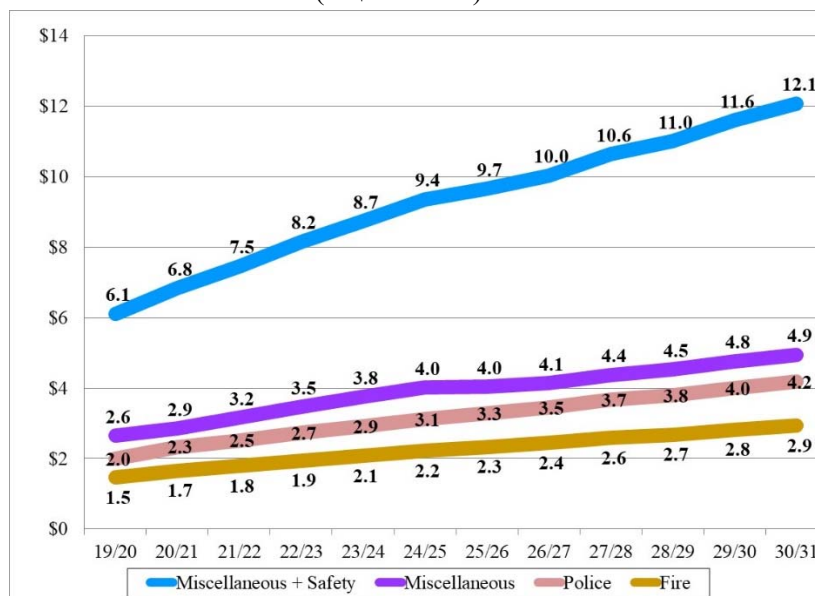
- Discount rate reductions due to risk mitigation. CalPERS risk mitigation policy is expected to reduce future portfolio risk and investment returns. Bartel Associates modeling projects the impact of this policy will be to gradually (over the next approximate 20 years) reduce expected returns, and the discount rate, to 6%.
- Future asset returns:
  - 6.7% investment return reported by CalPERS for 18/19, and
  - For years after 18/19, investment returns based on Bartel Associates capital market assumption model. In general this projects lower (6.5%) investment returns over the next approximate 9 years.
- Projections are based on 1,000 stochastic investment return trial outcomes, with results representing the median outcome.
- The impact of new hires coming in with PEPRA benefits assuming:
  - 7.5% of 2019/20 new hires will be classic members (laterals).
  - 92.5% of 2019/20 new hires will be new members with PEPRA benefits.
  - Classic members will decrease from 7.5% to 0% of new hires over 3 years.
- City employee cost sharing:
  - Miscellaneous Employees (including non-Sworn Police):

	AFSCME	Confidential	Management	City Manager	Police-Classic	Police-PEPRA	Totals
<b>Employee %</b>	1.0%	2.0%	2.0%	1.0%	3.0%	2.5%	1.6%
<b>% of Payroll</b>	53.3%	6.2%	23.5%	1.8%	10.4%	4.8%	100.0%

- Safety Employees: 3% of payroll

Based on the above assumptions and methods, following are projected total City contributions:

(in \$ millions)

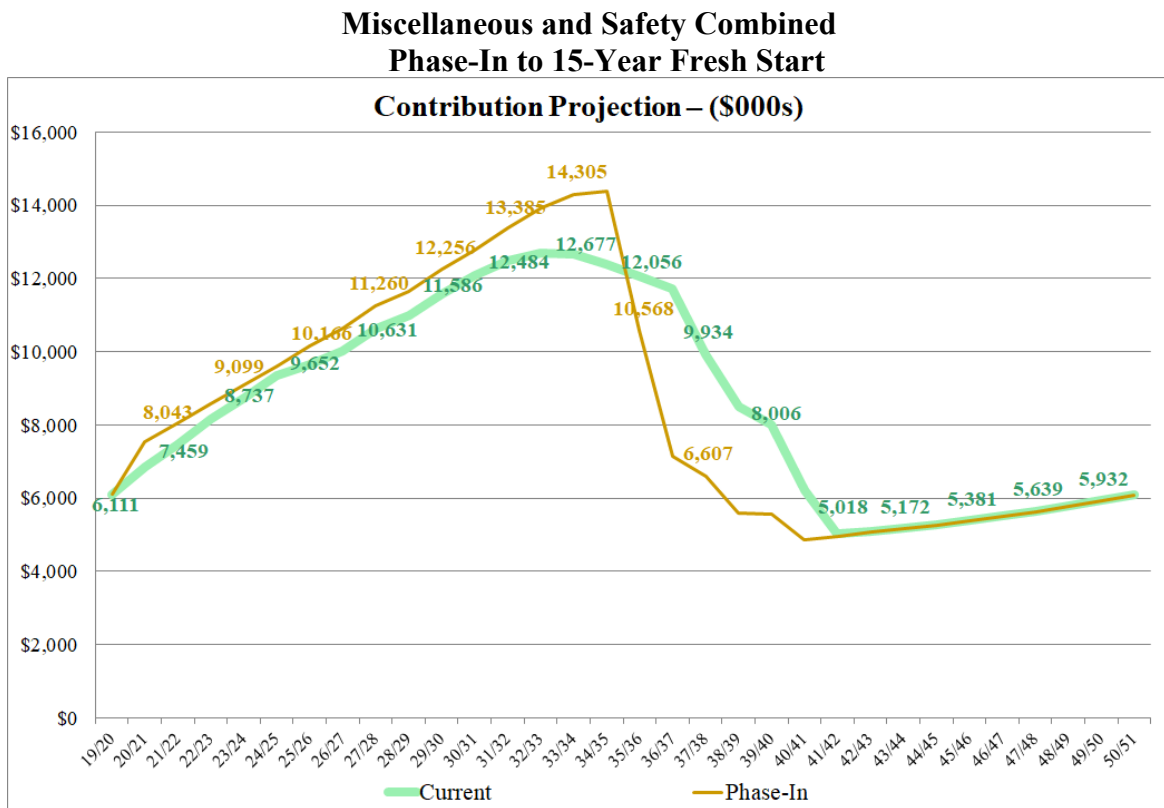


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**Alternative Funding Scenario**

We have modeled the following alternative funding scenarios:

- Scenario 1
  - City contributions phase-in to a 15-year amortization payment on the unfunded liability:
    - 50% of difference between the 15-year amortization payment and current payment in 20/21
    - Percentage increases by 10% annually until getting to 100% in 25/26
  - Since contributions in first 5 years would be below the full payment required to pay off the unfunded liability in 15 years, an additional payment in year 16 would be needed to pay off unfunded liability.
  - Following are the projected required contributions (“Current”) and the alternative contributions (“Phase-in”):



- Estimated savings and present value of savings:

(in \$000's)

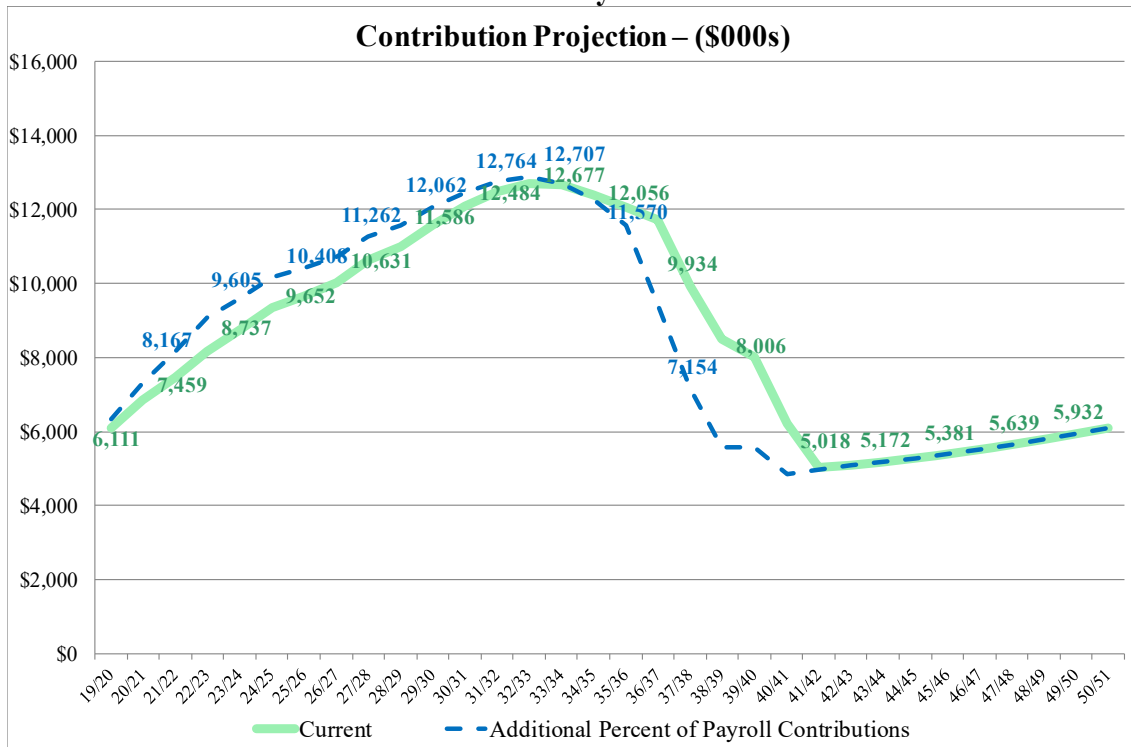
	Miscellaneous	Police	Fire	Total
\$ Savings	\$6,666	\$3,015	\$2,363	\$12,044
PV Savings @ 3%	2,445	1,153	902	4,500

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■ Scenario 2

- City contributes amounts in addition to the CalPERS required contribution:
  - 1% of payroll in 19/20
  - 2% of payroll in 20/21
  - 3% of payroll in 21/22
  - 4% of payroll in 22/23 and future years.
- Future required CalPERS contributions are impacted by the additional amounts
  - Applying contributions credits to longest bases results in higher near term contributions and higher long term savings.
  - Projections assume credits applied to long bases
  - Savings would be lower if credits applied to shorter bases
- Following are the projected required contributions (“Current”) and the alternative contributions (“Phase-in”):

**Miscellaneous and Safety Combined**  
**Additional Percent of Payroll Contributions**



- Estimated savings and present value of savings:

(in \$000's)

	Miscellaneous	Police	Fire	Total
\$ Savings	\$6,731	\$3,265	\$2,194	\$12,190
PV Savings @ 3%	2,521	1,259	837	4,617

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For Scenario 1 and 2, the following table provides the annual contributions amounts and the increase/(decrease) compared to the current projection:

(in \$000's)

Year	Scenario 1 Contributions			Scenario 2		
	Current	Alternative	Increase/ (Decrease)	Current	Alternative	Increase/ (Decrease)
19/20	\$ 6,111	\$ 6,333	\$ 222	\$ 6,111	\$ 6,111	\$ -
20/21	6,842	7,311	469	6,842	7,546	705
21/22	7,459	8,167	708	7,459	8,043	584
22/23	8,151	9,074	923	8,151	8,585	434
23/24	8,737	9,605	868	8,737	9,099	363
24/25	9,355	10,165	809	9,355	9,621	266
25/26	9,652	10,408	756	9,652	10,166	514
26/27	10,033	10,730	697	10,033	10,645	611
27/28	10,631	11,262	631	10,631	11,260	628
28/29	11,005	11,562	558	11,005	11,656	651
29/30	11,586	12,062	476	11,586	12,256	669
30/31	12,074	12,459	385	12,074	12,761	688
31/32	12,484	12,764	281	12,484	13,385	901
32/33	12,711	12,875	164	12,711	13,936	1,225
33/34	12,677	12,707	30	12,677	14,305	1,628
34/35	12,392	12,270	(122)	12,392	14,371	1,979
35/36	12,056	11,570	(485)	12,056	10,568	(1,487)
36/37	11,736	9,430	(2,305)	11,736	7,139	(4,596)
37/38	9,934	7,154	(2,780)	9,934	6,607	(3,327)
38/39	8,514	5,591	(2,923)	8,514	5,591	(2,923)
39/40	8,006	5,577	(2,429)	8,006	5,577	(2,429)
40/41	6,214	4,858	(1,356)	6,214	4,858	(1,356)
41/42	5,018	4,963	(55)	5,018	4,963	(55)
42/43	5,085	5,085	-	5,085	5,085	-
43/44	5,172	5,172	-	5,172	5,172	-