



BARTEL
ASSOCIATES, LLC

**CITY OF ROCKLIN
RETIREE HEALTHCARE PLAN**

**June 30, 2017 OPEB Actuarial Valuation
Plan Funding for 2018/19 and 2019/20**

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Bartel Associates, LLC

June 14, 2018

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BENEFIT SUMMARY

■ Eligibility	■ Full-time employees retiring directly from City under CalPERS (age 50 ¹ and 5 years, or disability)									
■ Medical ²	■ City monthly cap: <table border="1" style="margin-left: 20px;"> <thead> <tr> <th></th> <th>Miscellaneous</th> <th>Safety³</th> </tr> </thead> <tbody> <tr> <td>2017</td> <td style="text-align: right;">\$1,093</td> <td style="text-align: right;">\$1,093</td> </tr> <tr> <td>2018</td> <td style="text-align: right;">1,093</td> <td style="text-align: right;">1,200</td> </tr> </tbody> </table>		Miscellaneous	Safety ³	2017	\$1,093	\$1,093	2018	1,093	1,200
	Miscellaneous	Safety ³								
2017	\$1,093	\$1,093								
2018	1,093	1,200								
■ Surviving Spouse	■ Surviving spouse coverage based on retirement plan election ■ Same benefit continues to surviving spouse									
■ Other	■ No City paid dental, vision, life, Medicare Part B ■ Previous medical benefits can be found in the back of the report									

¹ Miscellaneous PEPRA retirees age 52 and 5 years

² Unrepresented/Hourly receive PEMHCA minimum (\$128/month in 2017; \$133/month 2018), 1 Fire retiree receives higher existing benefit of \$1,766/month, and 2 Police retiree receive the higher existing benefit of \$1,377/month.

³ Different caps, including a vesting schedule, applied prior to 7/1/2018, for Safety hired after 5/1/2003. \$1,200 cap effective 7/1/18 for all Safety.



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BENEFIT SUMMARY

■ Pay As ⁴ You Go (\$000s)	<u>Fiscal Year</u>	<u>Cash Payments</u>
	2016/17	\$ 1,281
	2015/16	1,222
	2014/15	1,121
	2013/14	1,014
	2012/13	918
	2011/12	806
	2010/11	697
	2009/10	578
	2008/09	483
	2007/08	454
	2006/07	384
	2005/06	350

⁴ Reported in CAFR



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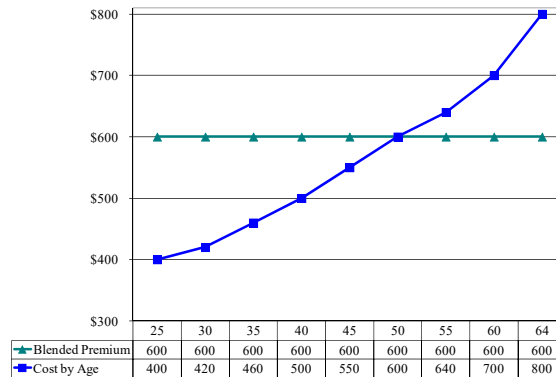
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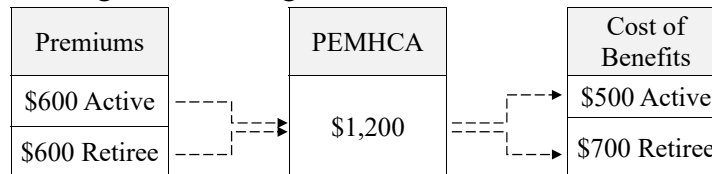
IMPLIED SUBSIDY

Implied Subsidy

- For PEMHCA, employer cost for allowing retirees to participate at active rates.
 - General trend:



- Sample active age 40, retire age 60:



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IMPLIED SUBSIDY

Implied Subsidy

- GASBS 75 defers to actuarial standards of practice.
- Previous Actuarial Standards of Practice No. 6⁵ (ASOP 6) allowed community rated plans to value liability using premiums, resulting in no implied subsidy.
- In May 2014, Actuarial Standards Board released revised ASOP 6:
 - Requires implied subsidy valued for community rated plans such as PEMHCA.
 - Timing: effective with all valuations on or after March 31, 2015 with earlier implementation encouraged
- Valuations on and after 6/30/15 include the implied subsidy.

⁵ Measuring Retiree Group Benefits Obligations and Determining Retiree Group Benefits Plan Costs or Contributions.



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PARTICIPANT STATISTICS

Actives

	6/30/10	6/30/12	6/30/13	6/30/15	6/30/16	6/30/17
■ Count						
• Miscellaneous	154	136	139	144	138	143
• Unrepresented/Hourly	39	27	23	8	5	4
• Safety	<u>86</u>	<u>87</u>	<u>86</u>	<u>89</u>	<u>89</u>	<u>86</u>
• Total	279	250	248	241	232	233
■ Average						
• Age	43.4	44.7	44.1	44.5	44.5	45.0
• City Service	9.5	10.9	10.6	10.5	10.4	10.2
• CalPERS Service	11.6	13.3	13.0	12.9	12.9	13.0
• Pay	\$67,600	\$67,800	\$69,300	\$85,300	\$87,000	\$91,700
■ Total Payroll (000's)	18,853	16,956	17,174	20,553	20,186	21,373



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PARTICIPANT STATISTICS

Retirees

	6/30/10	6/30/12	6/30/13	6/30/15	6/30/16	6/30/17
■ Count ⁶						
• Miscellaneous	44	56	67	77	84	87
• Safety	<u>24</u>	<u>27</u>	<u>31</u>	<u>34</u>	<u>37</u>	<u>38</u>
• Total	68	83	98	111	121	125
■ Average						
• Age	61.4	62.0	62.1	63.2	63.5	64.0
• Service Retirement Age						
➤ Miscellaneous	57.5	57.4	57.4	57.7	57.8	57.7
➤ Safety	53.0	52.3	52.7	53.0	53.0	52.8
• Monthly Benefit	\$827	\$877	\$887	\$860	\$874	\$859

⁶ Waived retirees excluded (5, 6, 7, 10, 13 and 16 at June 30, 2010, 2012, 2013, 2015, 2016 and 2017, respectively)



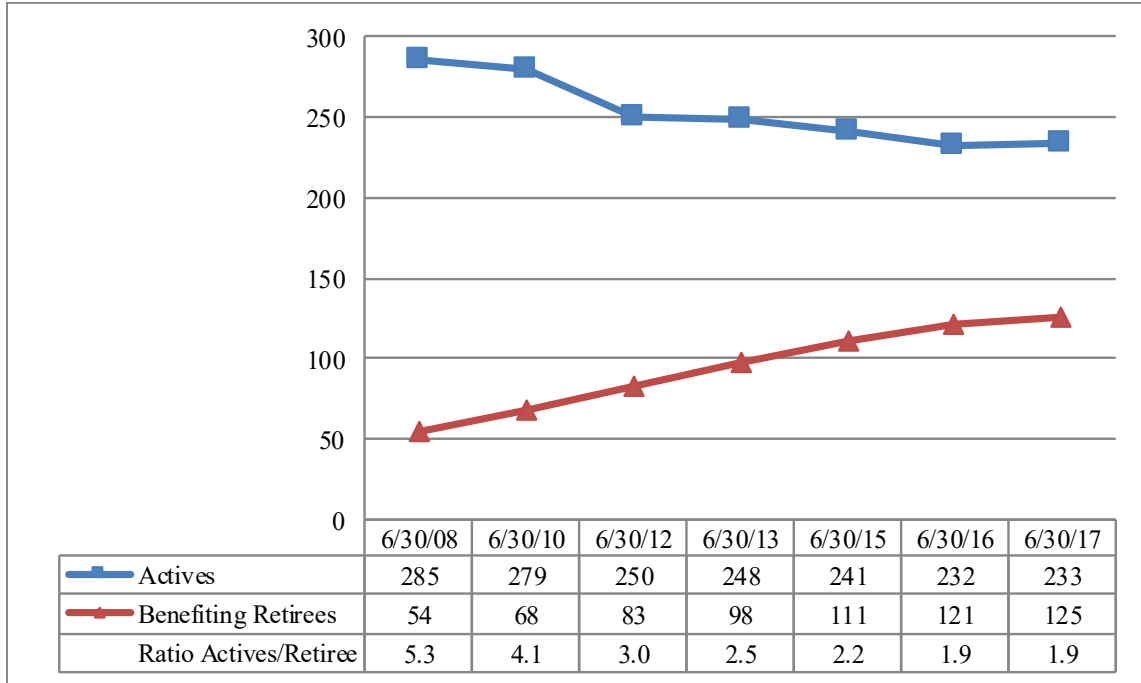
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PARTICIPANT STATISTICS

Historical Participant Counts



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PARTICIPANT STATISTICS

Participant Reconciliation

	Actives	Retirees ⁷	Total
■ June 30, 2016	232	121	353
• Withdrawal/Death	(16)	(3)	(19)
• New Retirees	(7)	7	-
• New Retirees - Waived	(2)	-	(2)
• New Hires	26	-	26
• Data Corrections	-	-	-
■ June 30, 2017	233	125	358

⁷ Waived retirees excluded (13 and 16 at June 30, 2016 and 2017, respectively)



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ACTUARIAL ASSUMPTION HIGHLIGHTS

	June 30, 2016 Valuation	June 30, 2017 Valuation																				
■ Valuation Date	■ June 30, 2016 ■ 2017/18 & 2018/19 Funding	■ June 30, 2017 ■ 2018/19 & 2019/20 Funding																				
■ Funding Plan ⁸	■ Pre-funded phase-in: <table border="0" style="margin-left: 20px;"> <tr> <td><u>FYE</u></td> <td><u>ADC %</u></td> </tr> <tr> <td>2017</td> <td>70%</td> </tr> <tr> <td>2018</td> <td>80%</td> </tr> <tr> <td>2019</td> <td>90%</td> </tr> <tr> <td>2020+</td> <td>100%</td> </tr> </table>	<u>FYE</u>	<u>ADC %</u>	2017	70%	2018	80%	2019	90%	2020+	100%	■ Pre-funded phase-in: <table border="0" style="margin-left: 20px;"> <tr> <td><u>FYE</u></td> <td><u>ADC %</u></td> </tr> <tr> <td>2017</td> <td>70%</td> </tr> <tr> <td>2018</td> <td>80%</td> </tr> <tr> <td>2019</td> <td>90%</td> </tr> <tr> <td>2020+</td> <td>100%</td> </tr> </table>	<u>FYE</u>	<u>ADC %</u>	2017	70%	2018	80%	2019	90%	2020+	100%
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■ Valuation Discount Rate	■ 7.00% ■ Pre-funded through CERBT Strategy 1 starting 13/14	■ 6.75% ■ Pre-funded through CERBT Strategy 1 starting 13/14																				
■ General Inflation	■ 3.00%	■ 2.75%																				

⁸ City contributes pay-go plus applicable percentage of difference between full ADC (at Full ADC Discount Rate) and pay-go. In 2013/14 City contributed additional \$1 million. In addition to the percentages contributed through the funding plan, the City sets aside General Fund surplus per the Retiree's Health Reserve Key Management Practice.



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ACTUARIAL ASSUMPTION HIGHLIGHTS

	June 30, 2016 Valuation	June 30, 2017 Valuation																				
■ Payroll Increases	■ Aggregate Increases: 3.25% ■ Merit Increases: CalPERS 1997-2011 Experience Study	■ Aggregate Increases: 3.00% ■ Merit Increases: CalPERS 1997-2015 Experience Study																				
■ Mortality, Termination, Disability	■ CalPERS 1997-2011 Experience Study ■ Fully generational with Scale MP14 modified to converge to ultimate improvement rates in 2022 for pre and post-retirement mortality	■ CalPERS 1997-2015 Experience Study ■ Post-retirement mortality projected fully generational with Scale MP-2017																				
■ City Cap Increases	■ None	■ Same																				
■ PEMHCA Minimum Increases	<table border="0" style="margin-left: 20px;"> <tr> <td><u>Year</u></td> <td><u>PEMHCA Min</u></td> </tr> <tr> <td>2015</td> <td>\$ 122</td> </tr> <tr> <td>2016</td> <td>125</td> </tr> <tr> <td>2017</td> <td>128</td> </tr> <tr> <td>2018</td> <td>4.5% increase/year</td> </tr> </table>	<u>Year</u>	<u>PEMHCA Min</u>	2015	\$ 122	2016	125	2017	128	2018	4.5% increase/year	<table border="0" style="margin-left: 20px;"> <tr> <td><u>Year</u></td> <td><u>PEMHCA Min</u></td> </tr> <tr> <td>2017</td> <td>\$ 128</td> </tr> <tr> <td>2018</td> <td>133</td> </tr> <tr> <td>2019</td> <td>136</td> </tr> <tr> <td>2020</td> <td>4.25% increase/year</td> </tr> </table>	<u>Year</u>	<u>PEMHCA Min</u>	2017	\$ 128	2018	133	2019	136	2020	4.25% increase/year
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2019	136																					
2020	4.25% increase/year																					



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ACTUARIAL ASSUMPTION HIGHLIGHTS

■ Healthcare Trend	June 30, 2016 Valuation		June 30, 2017 Valuation			
	Year	Increase from Prior Year		Year	Increase from Prior Year	
		<u>Non-Medicare</u> All Plans	<u>Medicare</u> All Plans		<u>Non-Medicare</u> All Plans	<u>Medicare</u> All Plans
2015	Actual Premiums		2017	Actual Premiums/Claims		
2016	Actual Premiums		2018	Actual Premiums/Claims		
2017	Actual Premiums		2019	7.50%	6.50%	
2018	6.5%	6.7%	2020	7.50%	6.50%	
2019	6.0%	6.1%	2021	7.25%	6.30%	
2020	5.5%	5.6%	2022	7.00%	6.10%	
2021+	5.0%	5.0%	2023	6.75%	5.90%	
			2024	6.50%	5.70%	
			2025	6.25%	5.50%	
			2026	6.00%	5.30%	
			2027	5.80%	5.15%	
			2028	5.60%	5.00%	
			2029	5.40%	4.85%	
			2030	5.20%	4.70%	
			2031-2035	5.05%	4.60%	
			2036-2045	4.90%	4.50%	
			2046-2055	4.75%	4.45%	
			2056-2065	4.60%	4.40%	
			2066-2075	4.30%	4.20%	
			2076+	4.00%	4.00%	



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ACTUARIAL ASSUMPTION HIGHLIGHTS

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ASSETS

Market Value of Plan Assets

(Amounts in 000's)

	2013/14	2014/15	2015/16	2016/17
■ Market Value (Beginning of Year)	\$ -	\$ 1,772	\$ 4,045	\$ 8,342
• Contributions	1,744	2,277 ⁹	4,266 ¹⁰	3,155
• Benefit Payments	-	-	-	-
• Expenses	(0)	(2)	(3)	(6)
• Investment Earnings	28	(2)	34	839
■ Market Value (End of Year)	1,772	4,045	8,342	12,330 ¹¹
■ Approximate Return	22.5%	(0.2%)	0.8%	10.0%

⁹ Includes contribution accrual of \$777,000.

¹⁰ Includes contribution accrual of \$1,766,400.

¹¹ Based on CERBT Schedule of Changes in Fiduciary Net Position by Employer for the fiscal year ending 6/30/17. Beginning balance and changes during 2016/17 for GASBS 75 reporting will differ.



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ASSETS

Actuarial Value of Plan Assets

(Amounts in 000's)

	2013/14	2014/15	2015/16	2016/17
■ Actuarial Value (Beginning of Year)	\$ -	\$ 1,757	\$ 4,138	\$ 8,632
• Contributions	1,744	2,277	4,266	3,155
• Benefit Payments	-	-	-	-
• Credited Return	13	104	228	593
■ Actuarial Value (End of Year)	1,757	4,138	8,632	12,380
■ Approximate Return	10.3%	5.9%	5.5%	6.9%



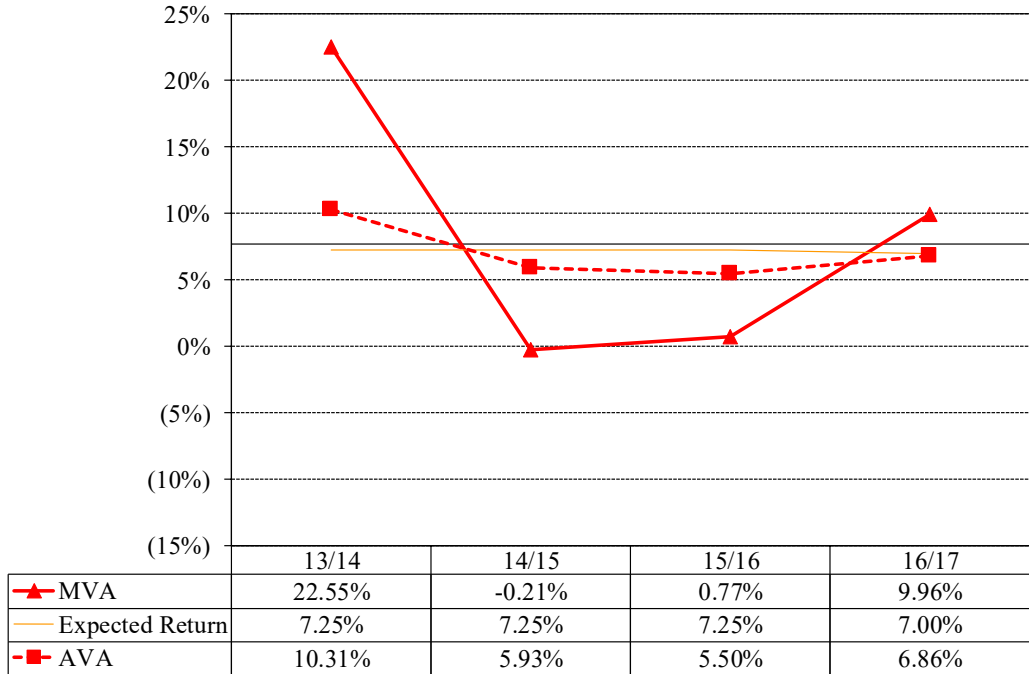
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ASSETS

Historical Asset Returns



ASSETS

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RESULTS

Actuarial Obligations

(Amounts in 000's)

	6/30/16	6/30/17
■ Discount Rate	7.00%	6.75%
■ Present Value of Benefits		
• Actives	\$ 25,557	\$ 21,503
• Retirees	<u>18,582</u>	<u>19,591</u>
• Total	44,139	41,094
■ Actuarial Accrued Liability (AAL)		
• Actives	13,624	12,121
• Retirees	<u>18,582</u>	<u>19,591</u>
• Total	32,206	31,712
■ Actuarial Value of Assets	<u>8,632</u>	<u>12,380</u>
■ Unfunded AAL (UAAL)	23,574	19,332
■ 2018/19 Service Cost¹²	1,498	1,255
■ 2018/19 Pay-As-You-Go Cost	1,603	1,666

¹² Included estimated expenses of \$12k for 18/19.



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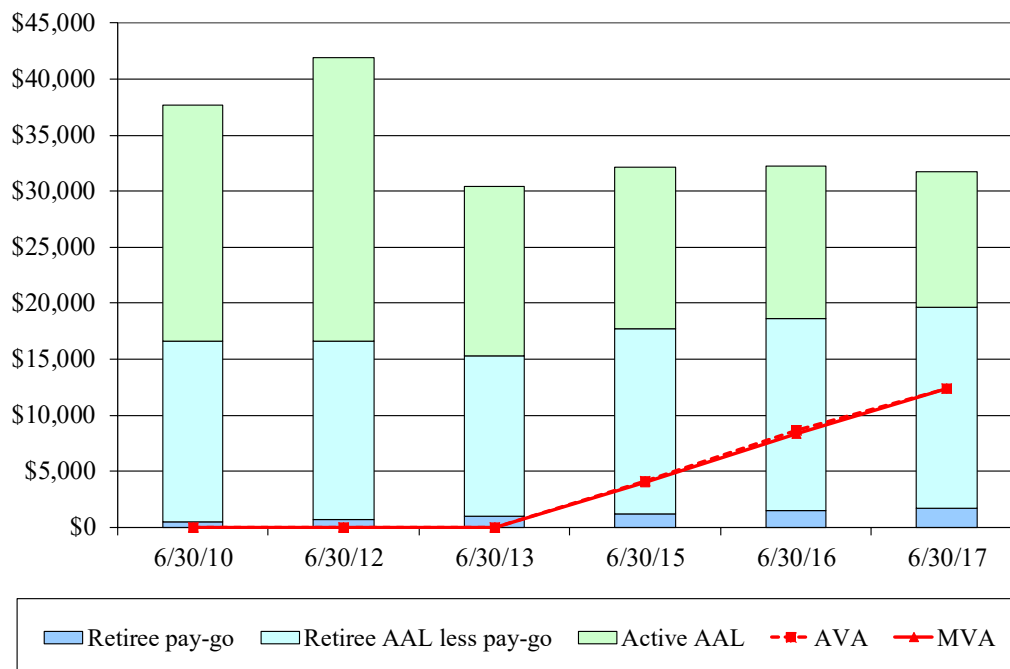
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RESULTS

Historical Funded Status

(Amounts in 000's)



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RESULTS

Actuarial (Gain)/Loss Analysis

(Amounts in 000's)

		AAL
■ 6/30/16 Actual		\$ 32,206
■ 6/30/17 Expected		34,316
■ Experience (Gains)/Losses	● Premiums less than expected	(869)
	● Demographic & other	<u>(1,174)</u>
	● Total	(2,043)
■ Assumption Changes	● Healthcare trend	1,025
	● Mortality Scale MP17 improvement	(490)
	● CalPERS 1997-2015 Experience Study	13
	● Discount rate from 7.00% to 6.75%	<u>1,006</u>
	● Total	1,554
■ Plan Changes	● Safety remove vesting schedule and cap at \$1,093	(2,755)
	● Safety cap Increase from \$1,093 to \$1,200	<u>640</u>
	● Total	(2,115)
■ Total (Gain)/Loss		(2,604)
■ 6/30/17 Actual		31,712



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RESULTS

Schedule of Funding Progress¹³

(Amounts in 000's)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Entry Age Actuarial Accrued Liability (b)	Unfunded Actuarial Accrued Liability (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as Percentage of Covered Payroll ((b-a)/c)
6/30/2008	\$ -	\$ 31,939	\$ 31,939	-	\$ 21,077	151.5%
6/30/2010	-	41,873	41,873	-	18,853	222.1%
6/30/2012 (pay-go)	-	44,572	44,572	-	16,956	262.9%
6/30/2012 (phase-in)	-	31,396	31,396	-	16,956	185.2%
6/30/2013	-	30,473	30,473	-	17,174	177.4%
6/30/2015	4,138	32,145	28,007	12.9%	20,553	136.3%
6/30/2016	8,632	32,206	23,574	26.8%	20,186	116.8%
6/30/2017	12,380	31,712	19,332	39.0%	21,373	90.5%

¹³ Select and ultimate discount rates were used for valuation dates before 6/30/2016.



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RESULTS

Actuarially Determined Contribution (ADC)

(Amounts in 000's)

	6/30/16 Valuation		6/30/17 Valuation	
	2017/18	2018/19 ¹⁴	2018/19	2019/20
■ ADC - \$				
• Service Cost ¹⁵	\$ 1,498	\$ 1,547	\$ 1,255	\$ 1,294
• UAAL Amortization	<u>2,123</u>	<u>2,231</u>	<u>1,771</u>	<u>1,833</u>
• Total	3,621	3,778	3,026	3,127
■ Payroll	20,842	21,519	22,014	22,675
■ ADC - % of Total City Payroll				
• Service Cost	7.2%	7.2%	5.7%	5.7%
• UAAL Amortization	<u>10.2%</u>	<u>10.4%</u>	<u>8.0%</u>	<u>8.0%</u>
• Total	17.4%	17.6%	13.7%	13.7%

¹⁴ Provided for comparison purposes only

¹⁵ Included estimated expenses of \$12k for 18/19 and \$15k for 19/20.



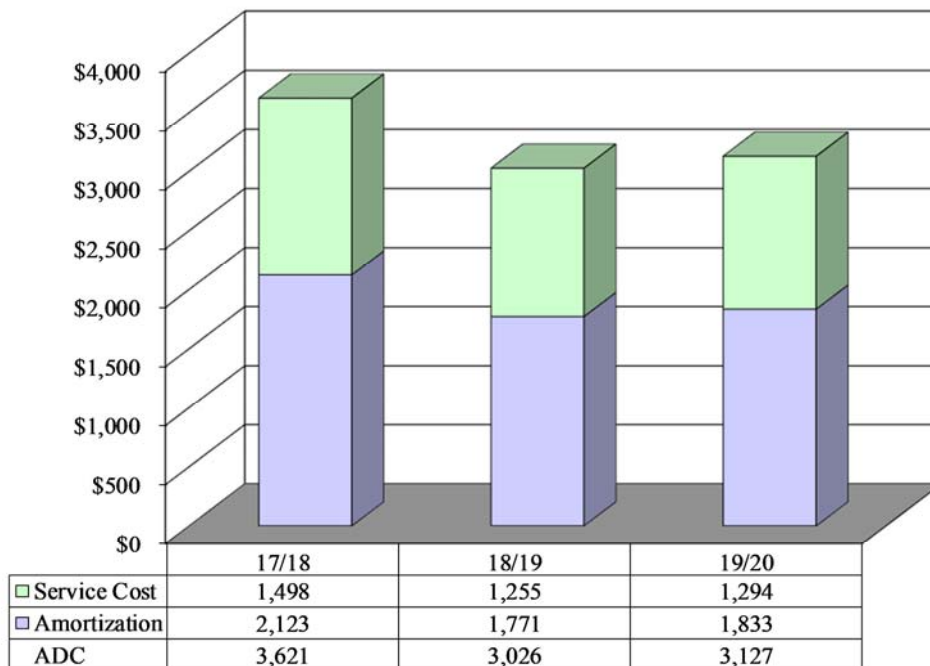
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RESULTS

Actuarially Determined Contributions

(Amounts in 000's)



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RESULTS

Amortization Bases

(Amounts in 000's)

	6/30/16 Valuation		6/30/17 Valuation	
	6/30/17	6/30/18	6/30/18	6/30/19
■ Outstanding Balance	\$ 23,464	\$ 23,385	\$ 18,597	\$ 18,172



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RESULTS

Amortization Payments

(Amounts in 000's)

	6/30/16 Valuation		6/30/17 Valuation	
	2017/18	2018/19	2018/19	2019/20
■ Amortization Payment	\$ 2,123	\$ 2,231	\$ 1,771	\$ 1,833
■ Amortization Years	15	14	14	13



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RESULTS

10-Year Contribution Projection

(Amounts in 000's)

Fiscal Year Ending	Contributions						
	(a) ADC	Benefit Payments			(e) Phase-in %	(f) Pre-Funding [(a) - (d)]*(e)	(g) Total Contribution (d) + (f)
		(b) Cash	(c) Implied Subsidy	(d) Total (b) + (c)			
2018/19	\$ 3,026	\$ 1,389	\$ 277	\$ 1,666	90%	\$ 1,224	\$ 2,890
2019/20	3,127	1,500	343	1,843	100%	1,284	3,127
2020/21	3,216	1,602	361	1,963	100%	1,253	3,216
2021/22	3,308	1,682	372	2,054	100%	1,254	3,308
2022/23	3,401	1,782	406	2,188	100%	1,213	3,401
2023/24	3,495	1,914	434	2,348	100%	1,147	3,495
2024/25	3,590	2,062	454	2,516	100%	1,074	3,590
2025/26	3,686	2,221	464	2,685	100%	1,001	3,686
2026/27	3,781	2,311	494	2,805	100%	976	3,781
2027/28	3,876	2,409	481	2,890	100%	986	3,876



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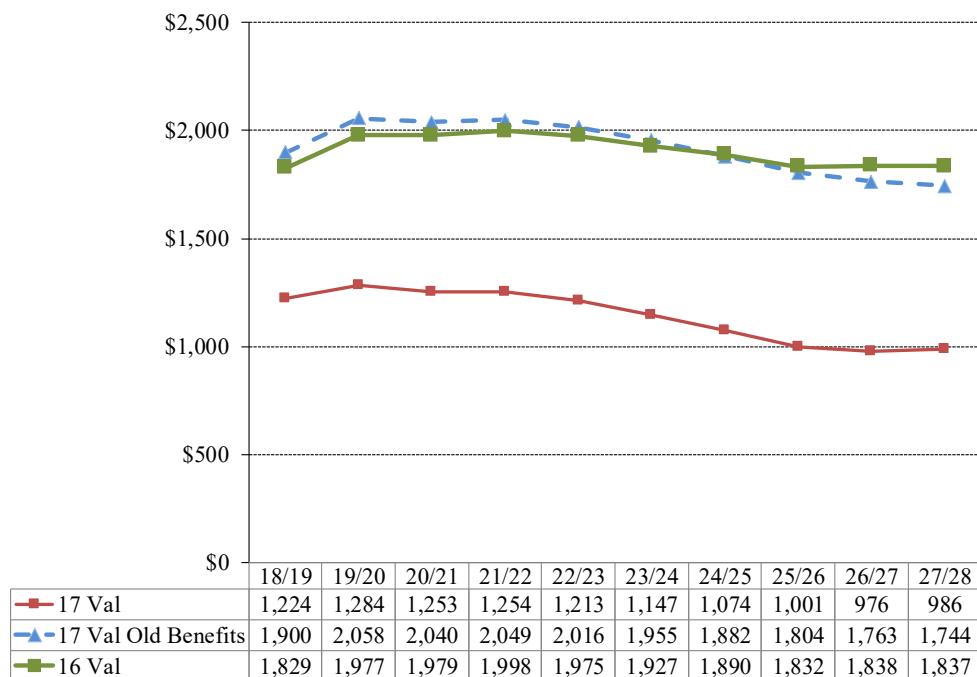
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RESULTS

Projected Trust Contribution Comparison

(Amounts in 000's)



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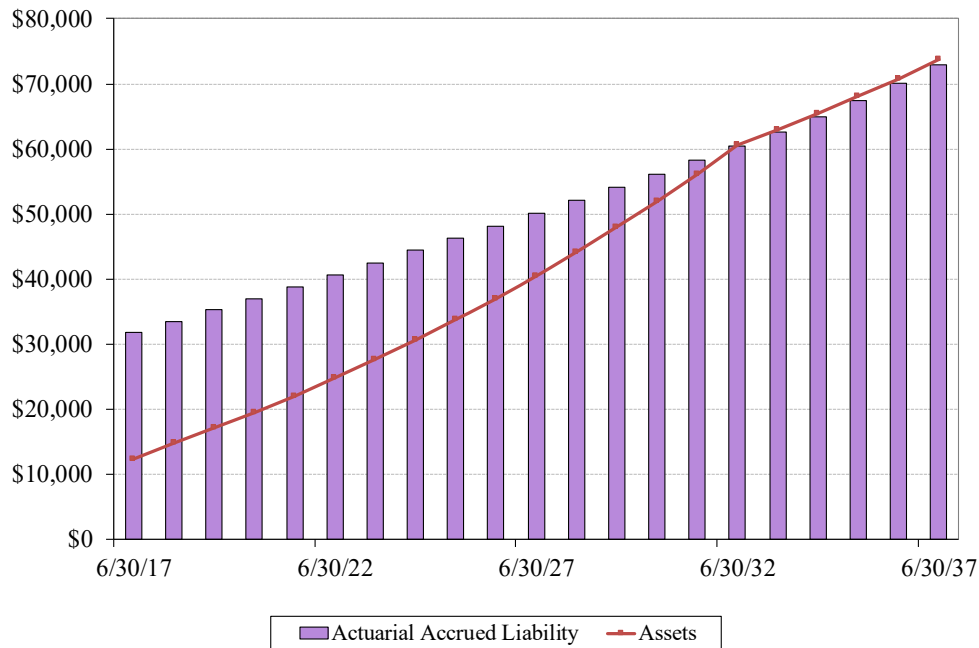
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Projected Funded Status

(Amounts in 000's)



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RESULTS

Actuarial Obligations by Cash and Implied Subsidy

June 30, 2017

(Amounts in 000's)

	Cash Subsidy	Implied Subsidy	Total
■ Present Value of Benefits			
• Actives	\$ 16,615	\$ 4,888	\$ 21,503
• Retirees	<u>16,806</u>	<u>2,785</u>	<u>19,591</u>
• Total	33,421	7,673	41,094
■ Actuarial Accrued Liability (AAL)			
• Actives	9,323	2,798	12,121
• Retirees	<u>16,806</u>	<u>2,785</u>	<u>19,591</u>
• Total	26,129	5,583	31,712
■ Actuarial Assets¹⁶	<u>10,200</u>	<u>2,180</u>	<u>12,380</u>
■ Unfunded AAL (UAAL)	15,929	3,403	19,332
■ 2018/19 Service Cost¹⁷	1,001	254	1,255
■ 2018/19 Pay-As-You-Go Cost	1,389	277	1,666

¹⁶ Assets allocated on AAL.

¹⁷ Included estimated expenses of \$12k for 18/19.



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RESULTS

Actuarially Determined Contribution (ADC)

2018/19 Fiscal Year

(Amounts in 000's)

	Cash Subsidy	Implied Subsidy	Total
■ ADC - \$			
• Service Cost ¹⁸	\$ 1,001	\$ 254	\$ 1,255
• UAAL Amortization	<u>1,456</u>	<u>314</u>	<u>1,771</u>
• Total	2,457	569	3,026
■ Projected Payroll	22,014	22,014	22,014
■ ADC - %			
• Service Cost	4.5%	1.2%	5.7%
• UAAL Amortization	<u>6.6%</u>	<u>1.4%</u>	<u>8.0%</u>
• Total	11.1%	2.6%	13.7%

¹⁸ Included estimated expenses of \$12k for 18/19.



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RESULTS

Estimated 2018/19 Implied Subsidy Transfer for Medical Coverage

For Illustrative Purposes Only

(Amounts in 000's)

Before Implied Subsidy

	Actives	Retirees	Total
■ Total Premium	3,185	1,582	4,767
■ Member Contribution¹⁹	-	<u>(304)</u>	<u>(304)</u>
■ Employer Contribution	3,185	1,278	4,463

After Implied Subsidy

	Actives	Retirees	Total
■ Total Premium	3,185	1,582	4,767
■ Member Contribution	-	(304)	(304)
■ Implied Subsidy Transfer	<u>(259)</u>	<u>259</u>	-
■ Employer Contribution	2,926	1,537	4,463

¹⁹ Assumes no member contribution for actives.



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GASB STATEMENT NO. 75

- This OPEB accounting changes approved by GASB 6/2/15:
 - Effective for 2018 fiscal year
- Fundamental changes
 - Delinks contributions and accounting
 - Unfunded liability recognition drives expense
- Major issues:
 - Unfunded liability on balance sheet
 - Lower discount rate if projected assets do not cover projected benefit payments
 - Immediate recognition in OPEB expense of:
 - Service & interest cost
 - Benefit changes
 - Deferred recognition in OPEB expense of:
 - Gains/losses & assumption changes, over future working lifetime (average of active and inactive employees) closed period
 - Asset gains/losses over 5 years
- GASBS 75 information provided under separate report



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ACTUARIAL CERTIFICATION

This report presents City of Rocklin's Retiree Healthcare Plan ("Plan") June 30, 2017 actuarial valuation. The purpose of this valuation is to:

- Determine the Plan's June 30, 2017 Benefit Obligations,
- Determine the Plan's June 30, 2017 Funded Status, and
- Calculate the 2018/19 and 2019/20 Actuarially Determined Contributions (ADC).

The report provides information intended for funding the City's Plan, but may not be appropriate for other purposes. Information provided in this report may be useful to the City for the Plan's financial management. Future valuations may differ significantly if the Plan's experience differs from our assumptions or if there are changes in Plan design, actuarial methods or actuarial assumptions. The project scope did not include an analysis of this potential variation.

The valuation is based on Plan provisions, participant data, and assets provided by the City as summarized in this report, which we relied on and did not audit. We reviewed the participant data for reasonableness.

To the best of our knowledge, this report is complete and accurate and has been conducted using generally accepted actuarial principals 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,

Doug Pryor, ASA, MAAA, EA
Vice President
Bartel Associates, LLC
June 14, 2018

Tina Liu, MAAA, EA
Associate Actuary
Bartel Associates, LLC
June 14, 2018



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PREMIUMS

2016 PEMHCA Monthly Medical Premiums
Sacramento

Plan	Non-Medicare			Medicare		
	EE	EE+1	Family	EE	EE+1	Family
Anthem Select	\$902.07	\$1,804.14	\$2,345.38	n/a	n/a	n/a
Anthem Traditional	1,112.54	2,225.08	2,892.60	n/a	n/a	n/a
Blue Shield Access+	885.33	1,770.66	2,301.86	n/a	n/a	n/a
Blue Shield NetValue	900.73	1,801.46	2,341.90	n/a	n/a	n/a
Health Net SmartCare	747.55	1,495.10	1,943.63	n/a	n/a	n/a
Kaiser	695.11	1,390.22	1,807.29	\$ 297.23	\$594.46	\$891.69
UnitedHealthCare	686.36	1,372.72	1,784.54	320.98	641.96	962.94
PERS Choice	727.58	1,455.16	1,891.71	366.38	732.76	1,099.14
PERS Select	665.35	1,330.70	1,729.91	366.38	732.76	1,099.14
PERSCare	810.40	1,620.80	2,107.04	408.04	816.08	1,224.12
PORAC	699.00	1,399.00	1,789.00	442.00	881.00	1,408.00



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PREMIUMS

2017 PEMHCA Monthly Medical Premiums
Sacramento

Plan	Non-Medicare			Medicare		
	EE	EE+1	Family	EE	EE+1	Family
Anthem Select	\$ 907.08	\$1,814.16	\$2,358.41	n/a	n/a	n/a
Anthem Tradional	1,286.41	2,572.82	3,344.67	n/a	n/a	n/a
Blue Shield Access+	859.42	1,718.84	2,234.49	n/a	n/a	n/a
Health Net SmartCare	672.66	1,345.32	1,748.92	n/a	n/a	n/a
Kaiser	690.56	1,381.12	1,795.46	\$300.48	\$600.96	\$ 901.44
UnitedHealthCare	756.78	1,513.56	1,967.63	324.21	648.42	972.63
PERS Choice	723.47	1,446.94	1,881.02	353.63	707.26	1,060.89
PERS Select	641.47	1,282.94	1,667.82	353.63	707.26	1,060.89
PERSCare	812.40	1,624.80	2,112.24	389.76	779.52	1,169.28
PORAC	699.00	1,467.00	1,876.00	464.00	924.00	1,477.00



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PREMIUMS

2018 PEMHCA Monthly Medical Premiums
Sacramento

Plan	Non-Medicare			Medicare		
	EE	EE+1	Family	EE	EE+1	Family
Anthem Select	\$942.29	\$1,884.58	\$2,449.95	n/a	n/a	n/a
Anthem Tradional	1,054.62	2,109.24	2,742.01	\$370.34	\$740.68	\$1,111.02
Blue Shield Access+	806.71	1,613.42	2,097.45	n/a	n/a	n/a
Health Net SmartCare	980.82	1,961.64	2,550.13	n/a	n/a	n/a
Kaiser	703.96	1,407.92	1,830.30	316.34	632.68	949.02
UnitedHealthCare	831.42	1,662.84	2,161.69	330.76	661.52	992.28
Western Health Advantage	744.79	1,489.58	1,936.45	n/a	n/a	n/a
PERS Choice	735.38	1,470.76	1,911.99	345.97	691.94	1,037.91
PERS Select	684.90	1,369.80	1,780.74	345.97	691.94	1,037.91
PERSCare	797.61	1,595.22	2,073.79	382.30	764.60	1,146.90
PORAC	734.00	1,540.00	1,970.00	487.00	970.00	1,551.00



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PREMIUMS

PEMHCA Monthly Premium Increases²⁰
Sacramento

Medical Plan	Non-Medicare		Medicare	
	2017	2018	2017	2018
Anthem Select	0.6%	3.9%	n/a	n/a
Anthem Traditional	15.6%	(18.0%)	n/a	n/a
Blue Shield Access+	(2.9%)	(0.6%)	n/a	n/a
Health Net Smartcare	(10.0%)	45.8%	n/a	n/a
Kaiser	(0.7%)	1.9%	1.1%	5.3%
United HealthCare	10.3%	9.9%	1.0%	2.0%
Western Health Advantage	n/a	n/a	n/a	n/a
PERS Choice	(0.6%)	1.6%	(3.5%)	(2.2%)
PERS Select	(3.6%)	6.8%	(3.5%)	(2.2%)
PERSCare	0.2%	(1.8%)	(4.5%)	(1.9%)
PORAC	4.3%	5.0%	5.0%	5.0%

²⁰ The increases are for Single premiums only.



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DATA SUMMARY

Active Participant Statistics
June 30, 2017

	Miscellaneous	Safety	Unrepresented Hourly	Total
■ Count	143	86	4	233
■ Average:				
• Age	46.9	41.8	44.4	45.0
• Service	9.5	11.5	2.7	10.2
• CalPERS Service	11.7	15.1	12.9	13.0
• Pay	\$ 82,200	\$ 111,900	n/a	\$ 91,700
■ Total Payroll (000s)	11,752	9,621	n/a	21,373



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DATA SUMMARY

Active Participant Statistics
June 30, 2016

	Miscellaneous	Safety	Unrepresented Hourly	Total
■ Count	138	89	5	232
■ Average:				
• Age	46.8	41.6	33.8	44.5
• Service	10.0	11.3	3.6	10.4
• CalPERS Service	12.2	14.5	5.2	12.9
• Pay	\$ 74,700 ²¹	\$ 106,800	n/a	\$ 87,000
■ Total Payroll (000s)	10,685	9,501	n/a	20,186

²¹ Includes Unrepresented Hourly Pay



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DATA SUMMARY

Retired Participant Statistics
June 30, 2017

	Misc.	Safety	Total
■ Currently receiving benefit			
➤ Count < 65	43	31	74
➤ Count > 65	<u>44</u>	<u>7</u>	<u>51</u>
• Total Count	87	38	125
• Average age	66.5	58.4	64.0
• Average Retirement Age			
➤ Disabled Retirees	55.2	41.7	44.7
➤ Service Retirees	57.7	52.8	56.6
■ Waived			
➤ Count < 65	9	1	10
➤ Count > 65	<u>5</u>	<u>1</u>	<u>6</u>
• Total Count	14	2	16
• Average age	63.0	64.5	63.2
• Average retirement age	56.7	43.6	55.1



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DATA SUMMARY

Retired Participant Statistics
June 30, 2016

	Misc.	Safety	Total
■ Currently receiving benefit			
➤ Count < 65	44	30	74
➤ Count > 65	<u>40</u>	<u>7</u>	<u>47</u>
• Total Count	84	37	121
• Average age	66.0	58.0	63.5
• Average Retirement Age			
➤ Disabled Retirees	55.2	41.7	44.7
➤ Service Retirees	57.8	53.0	56.7
■ Waived			
➤ Count < 65	8	-	8
➤ Count > 65	<u>4</u>	<u>1</u>	<u>5</u>
• Total Count	12	1	13
• Average age	61.7	77.3	62.9
• Average retirement age	56.6	37.0	55.0



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DATA SUMMARY

Active Medical Plan Coverage

Plan	EE	EE+1	Family	Waived	Total
Anthem Select	3	-	-	-	3
Anthem Traditional	2	-	-	-	2
Blue Shield Access+	13	2	3	-	18
Kaiser	42	27	45	-	114
United HealthCare	6	5	7	-	18
Western Health Advantage	-	1	-	-	1
PERS Choice	1	3	1	-	5
PERS Select	1	1	3	-	5
PERSCare	3	-	-	-	3
PORAC	5	3	18	-	26
Waived	-	-	-	38	38
Total	76	42	77	38	233



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DATA SUMMARY

Retiree Medical Plan Coverage
Under Age 65

Plan	EE	EE+1	Family	Waived	Total
Blue Shield Access+	3	4	-	-	7
Kaiser	12	20	9	-	41
United HealthCare	2	3	5	-	10
PERS Choice	2	7	2	-	11
PERSCare	3	-	-	-	3
PORAC	-	1	1	-	2
Waived	-	-	-	10	10
Total	22	35	17	10	84



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DATA SUMMARY

Retiree Medical Plan Coverage
Over Age 65

Plan	EE	EE+1	Family	Waived	Total
Blue Shield Access+	1	-	-	-	1
Kaiser	4	10	2	-	16
United HealthCare	1	7	-	-	8
PERS Choice	1	9	2	-	12
PERS Select	1	1	-	-	2
PERSCare	7	5	-	-	12
Waived	-	-	-	6	6
Total	15	32	4	6	57



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DATA SUMMARY

Actives by Age and Service
Total

Age	City Service							Total
	< 1	1-4	5-9	10-14	15-19	20-24	≥ 25	
< 25	3	2	-	-	-	-	-	5
25-29	1	15	1	-	-	-	-	17
30-34	5	8	8	1	-	-	-	22
35-39	4	12	6	7	2	-	-	31
40-44	5	4	3	12	10	-	-	34
45-49	1	9	6	15	11	3	3	48
50-54	4	4	1	8	12	5	1	35
55-59	-	6	1	7	4	2	8	28
60-64	2	-	-	4	3	2	-	11
≥ 65	-	1	-	-	1	-	-	2
Total	25	61	26	54	43	12	12	233



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DATA SUMMARY

Actives by Age and Service
Miscellaneous

Age	City Service							Total
	< 1	1-4	5-9	10-14	15-19	20-24	≥ 25	
< 25	3	1	-	-	-	-	-	4
25-29	1	9	1	-	-	-	-	11
30-34	2	5	4	1	-	-	-	12
35-39	4	9	1	2	-	-	-	16
40-44	3	2	1	4	2	-	-	12
45-49	1	9	3	8	5	1	1	28
50-54	4	4	1	5	8	2	1	25
55-59	-	6	1	7	4	1	8	27
60-64	2	-	-	4	3	1	-	10
≥ 65	-	1	-	-	1	-	-	2
Total	20	46	12	31	23	5	10	147



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DATA SUMMARY

Actives by Age and Service
Safety

Age	City Service							Total
	< 1	1-4	5-9	10-14	15-19	20-24	≥ 25	
< 25	-	1	-	-	-	-	-	1
25-29	-	6	-	-	-	-	-	6
30-34	3	3	4	-	-	-	-	10
35-39	-	3	5	5	2	-	-	15
40-44	2	2	2	8	8	-	-	22
45-49	-	-	3	7	6	2	2	20
50-54	-	-	-	3	4	3	-	10
55-59	-	-	-	-	-	1	-	1
60-64	-	-	-	-	-	1	-	1
≥ 65	-	-	-	-	-	-	-	-
Total	5	15	14	23	20	7	2	86

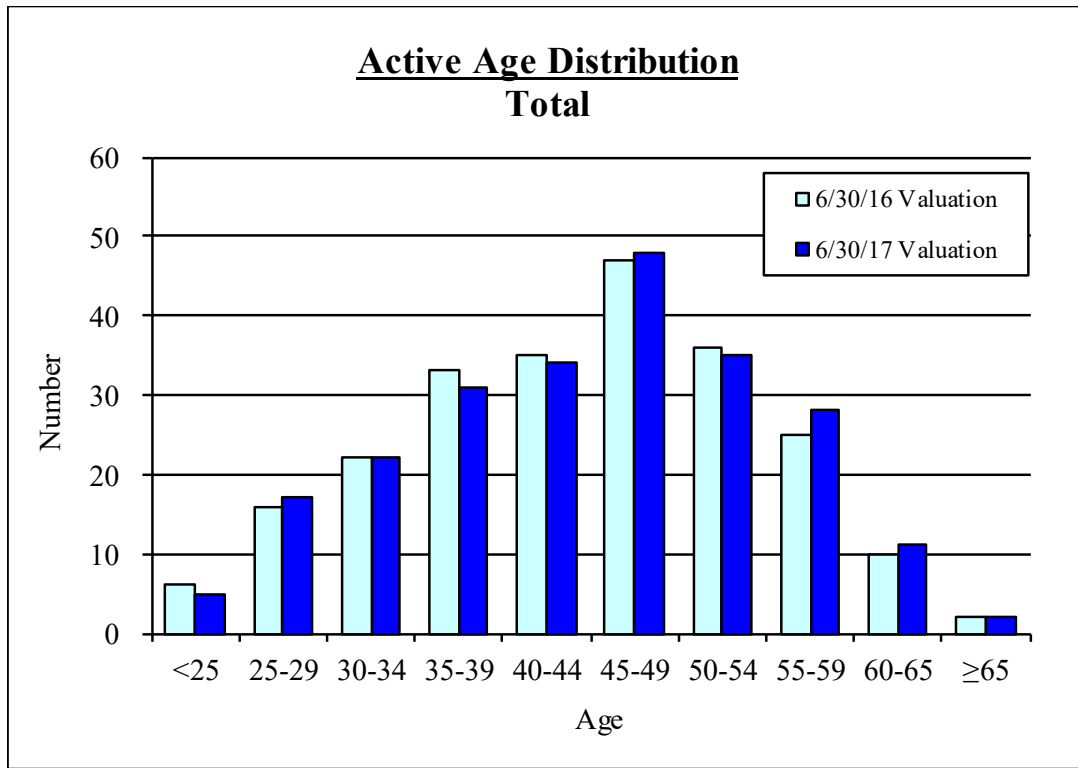


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DATA SUMMARY

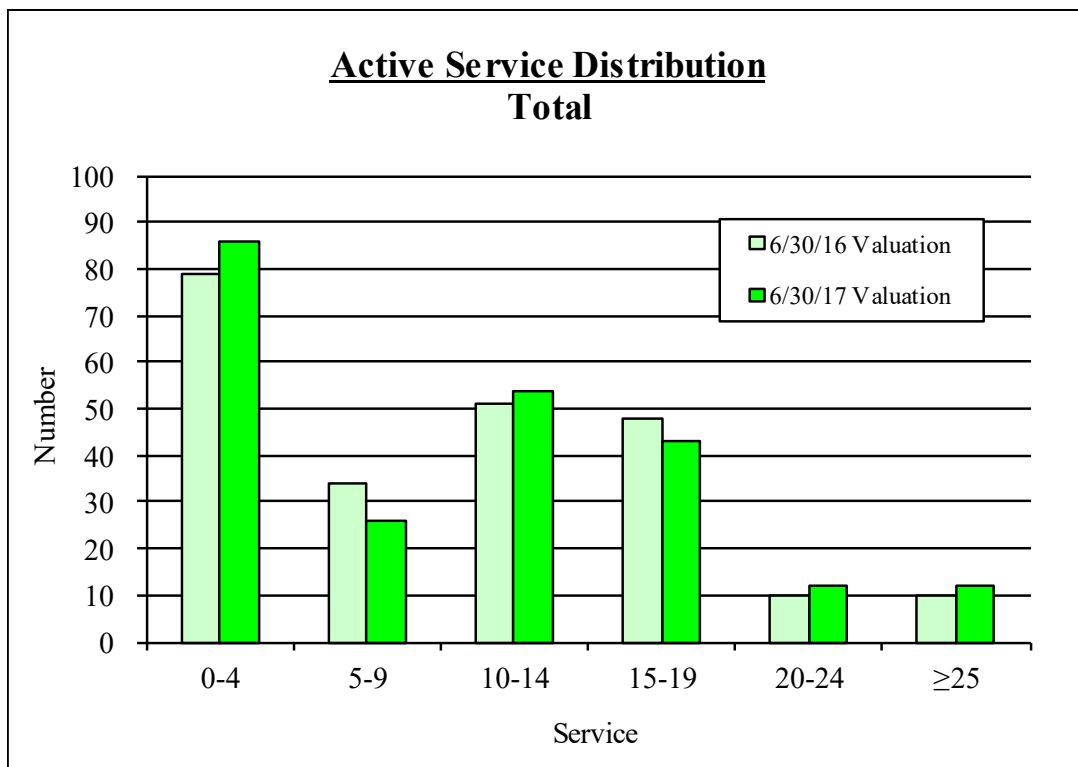


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DATA SUMMARY

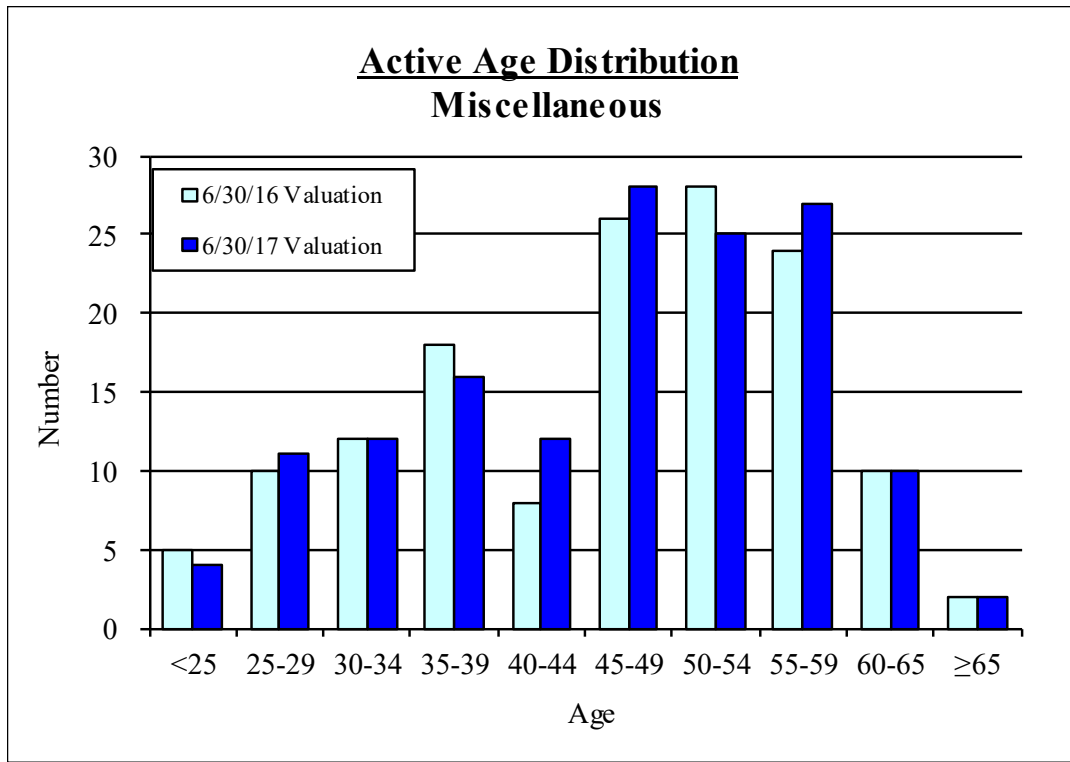


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DATA SUMMARY

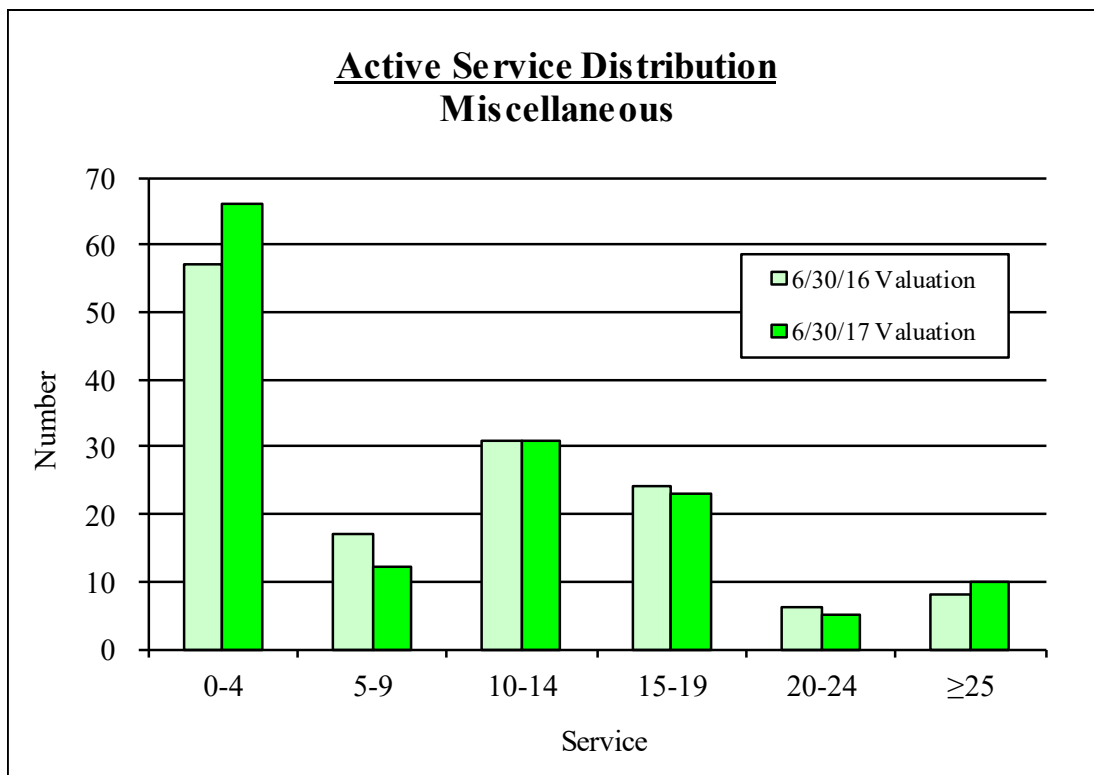


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DATA SUMMARY



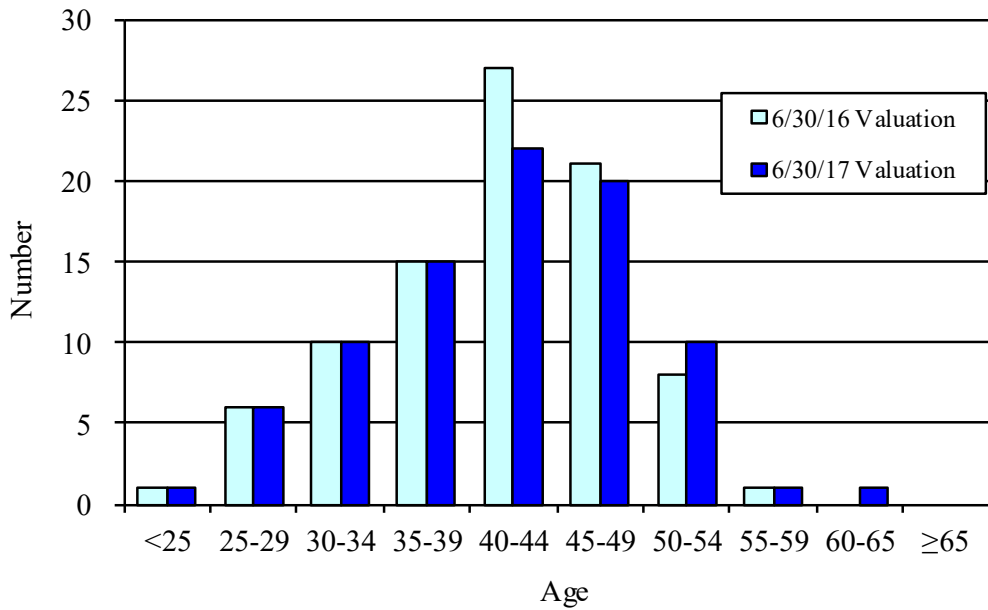
June 14, 2018

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DATA SUMMARY

**Active Age Distribution
Safety**



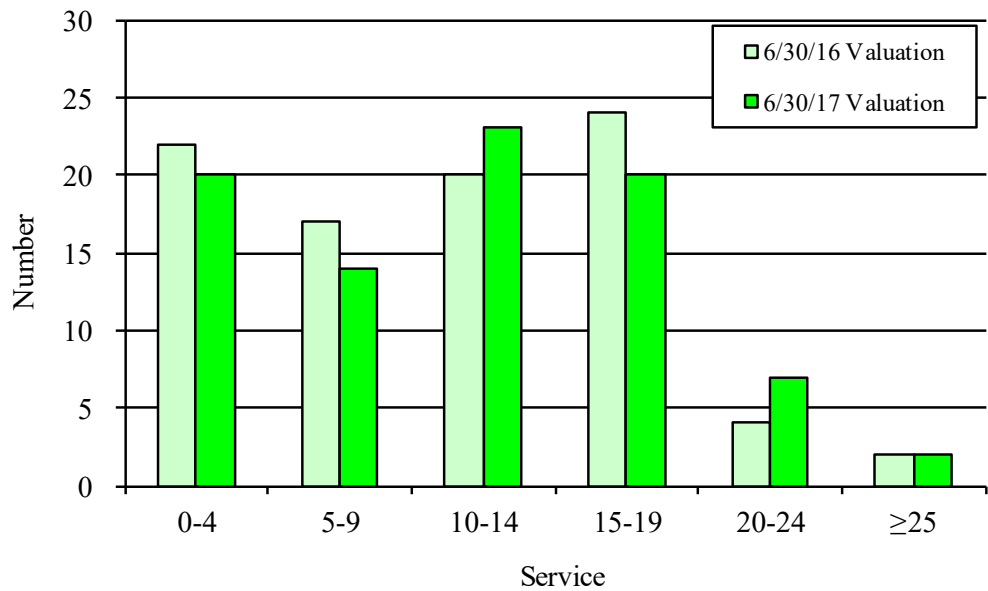
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DATA SUMMARY

**Active Service Distribution
Safety**



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DATA SUMMARY

Retiree Medical Coverage by Age Group

Total

Age	EE	EE+1	Family	Waived	Total
Under 50	1	2	2	-	5
50-54	1	7	1	2	11
55-59	7	11	9	1	28
60-64	13	15	5	7	40
65-69	5	16	2	4	27
70-74	3	9	2	1	15
75-79	1	5	-	1	7
80-84	4	1	-	-	5
85 & Over	2	1	-	-	3
Total < 65	22	35	17	10	84
Total ≥ 65	15	32	4	6	57
Total	37	67	21	16	141
Average Age	66.4	64.3	58.8	63.2	63.9



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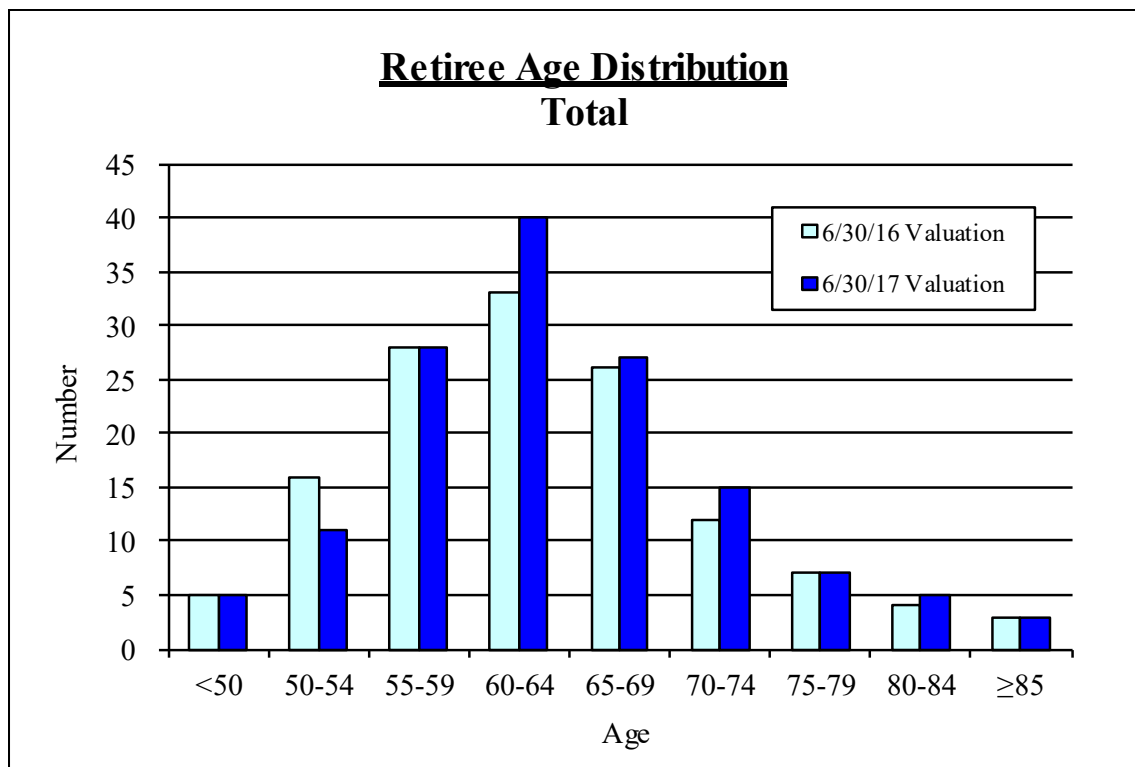
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DATA SUMMARY

Retiree Age Distribution

Total



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DATA SUMMARY

Retiree Medical Coverage by Age Group
Miscellaneous

Age	EE	EE+1	Family	Waived	Total
Under 50	-	-	-	-	-
50-54	-	3	-	1	4
55-59	4	6	6	1	17
60-64	11	12	1	7	31
65-69	5	13	1	4	23
70-74	3	7	1	1	12
75-79	1	5	-	-	6
80-84	4	1	-	-	5
85 & Over	2	1	-	-	3
Total < 65	15	21	7	9	52
Total ≥ 65	15	27	2	5	49
Total	30	48	9	14	101
Average Age	68.6	66.5	59.7	63.0	66.0



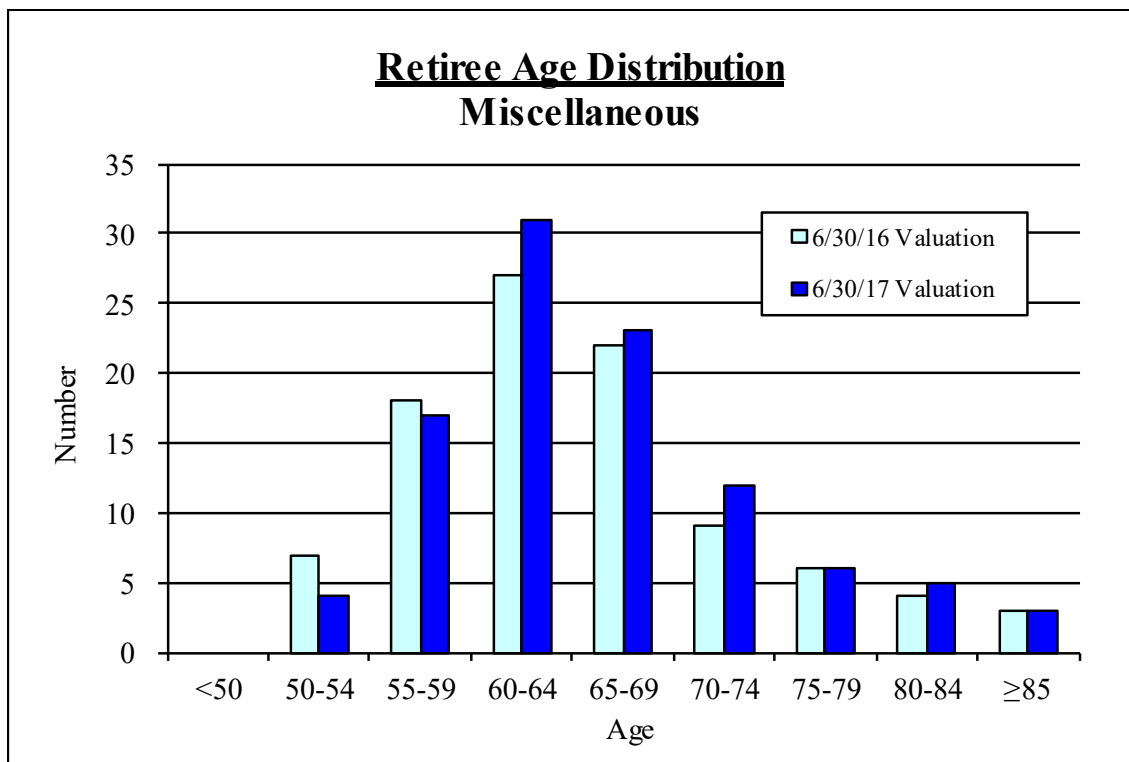
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DATA SUMMARY

Retiree Age Distribution
Miscellaneous



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DATA SUMMARY

Retiree Medical Coverage by Age Group
Safety

Age	EE	EE+1	Family	Waived	Total
Under 50	1	2	2	-	5
50-54	1	4	1	1	7
55-59	3	5	3	-	11
60-64	2	3	4	-	9
65-69	-	3	1	-	4
70-74	-	2	1	-	3
75-79	-	-	-	1	1
80-84	-	-	-	-	-
85 & Over	-	-	-	-	-
Total < 65	7	14	10	1	32
Total ≥ 65	0	5	2	1	8
Total	7	19	12	2	40
Average Age	57.2	59.0	58.1	64.5	58.7



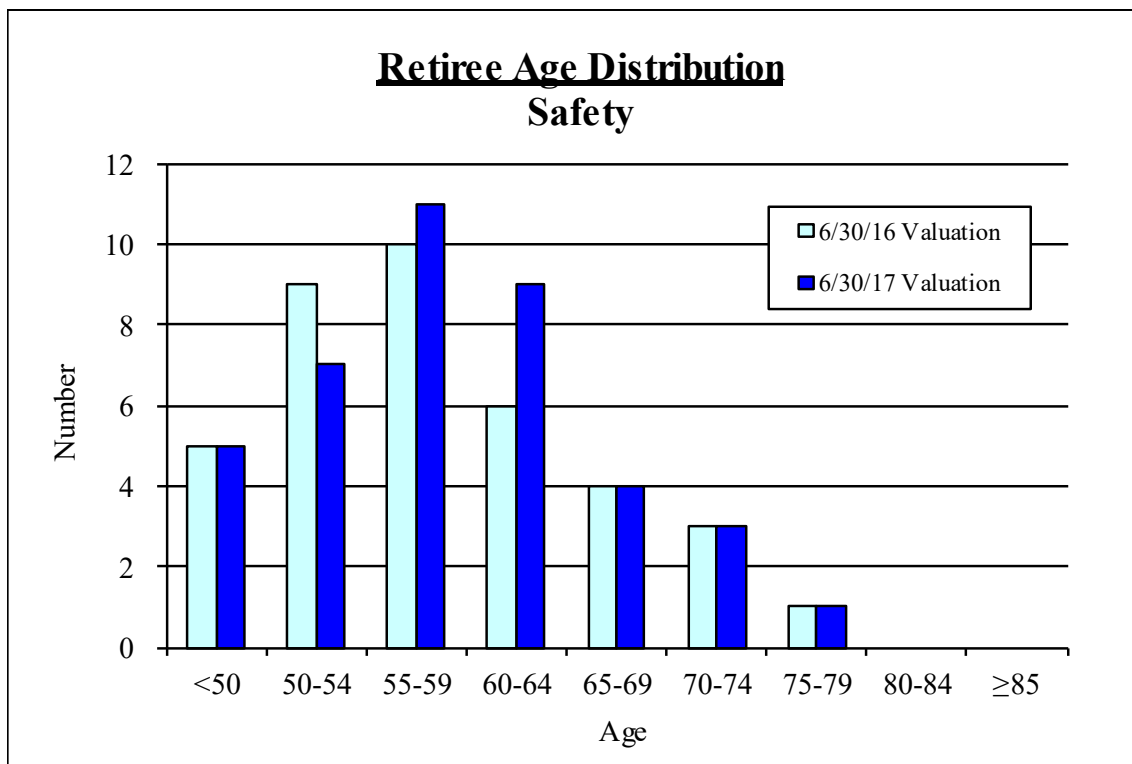
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DATA SUMMARY

Retiree Age Distribution
Safety



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DATA SUMMARY

Medical Plan Participation

Plan	Active	Retiree		
		Pre-65	Post-65	Total
Anthem Select	2%	0%	0%	0%
Anthem Traditional	1%	0%	0%	0%
Blue Shield Access+	9%	10%	2%	6%
Kaiser	59%	55%	31%	46%
United HealthCare	9%	13%	16%	14%
PERS Choice	3%	15%	24%	18%
PERS Select	3%	0%	4%	2%
PERSCare	1%	4%	24%	12%
PORAC	13%	3%	0%	2%
Total	100%	100%	100%	100%



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DATA SUMMARY

Participant Counts by Tier

	6/30/08	6/30/10	6/30/12	6/30/13	6/30/15	6/30/16	6/30/17
■ Actives							
• Tier 1	160	146	129	116	166	154	156
• Tier 2	125	94	94	109	67	73	73
• Unrepresented/ Hourly	—	<u>39</u>	<u>27</u>	<u>23</u>	<u>8</u>	<u>5</u>	<u>4</u>
• Total	285	279	250	248	241	232	233
■ Retirees ²²							
• Tier 1	54	66	80	92	106	108	134
• Tier 2	-	2	3	6	4	11	5
• Unrepresented/ Hourly	—	—	—	—	<u>1</u>	<u>2</u>	<u>2</u>
• Total	54	68	83	98	111	121	141

²² Waived retirees excluded



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ACTUARIAL METHODS

	June 30, 2016 Valuation	June 30, 2017 Valuation
■ Cost Method	■ Entry Age Normal	■ Same
■ Amortization	■ Level percentage of payroll	■ Same
■ Actuarial Value of Assets	<ul style="list-style-type: none"> ■ Valuation assets projected to June 30, 2017 (using actual June 30, 2016 assets) ■ Asset gains/losses recognized over 5 years ■ Shorter period but same method as CalPERS Pension ■ Corridor: 80% & 120% of market value 	<ul style="list-style-type: none"> ■ Valuation assets projected to June 30, 2018 (using actual June 30, 2017 assets) ■ Asset gains/losses recognized over 5 years ■ Shorter period but same method as CalPERS Pension ■ Corridor: 80% & 120% of market value
■ Future New Entrants	■ Closed group – no new participants	■ Same



ACTUARIAL METHODS

■ Unfunded Liability Amortization	<ul style="list-style-type: none"> ■ Initial UAAL – 19-year fixed (closed) period (15 years remaining at 6/30/18) ■ Maximum 30-year combined period 	<ul style="list-style-type: none"> ■ Initial UAAL – 19-year fixed (closed) period (14 years remaining at 6/30/19) ■ Maximum 30-year combined period
■ ACA Excise Tax	■ Estimated by 2% load on cash subsidy	■ Same



ACTUARIAL ASSUMPTIONS

	June 30, 2016 Valuation	June 30, 2017 Valuation
■ Service Retirement	■ CalPERS 1997-2011 Experience Study ²³	■ CalPERS 1997-2015 Experience Study
	Misc. Safety	Misc. Safety
	Benefit 2%@55 3%@50	Benefit 2%@55 3%@50
	ERA 61.0 54.0 (Fire) 54.7 (Police)	ERA 61.2 54.7 (Fire) 54.2 (Police)
	PEPRA Misc. Safety	PEPRA Misc. Safety
	Benefit 2%@62 2.7%@57	Benefit 2%@62 2.7%@57
	ERA 62.5 56.4 (Fire) 54.0 (Police)	ERA 63.1 56.7 (Fire) 55.5 (Police)

²³ 2%@60 for miscellaneous hired after 6/30/12.



ACTUARIAL ASSUMPTIONS

	June 30, 2016 Valuation	June 30, 2017 Valuation
■ Medical Plan at Retirement	■ Actives:	■ Same
	<u>Medical Plan</u> <u>Pre-65</u> <u>Post-65</u>	
	Blue Shield 10% 0%	
	BS Net Value 0% 0%	
	Kaiser 55% 30%	
	UnitedHealth 15% 20%	
	PERS Choice 20% 25%	
	PERSCare 0% 25%	
	■ Retirees < 65:	
	● Pre-65: Same as current election	
● Post 65: Post 65 assumptions for actives		
■ Retirees ≥ 65: Same as current election		



ACTUARIAL ASSUMPTIONS

	June 30, 2016 Valuation	June 30, 2017 Valuation
<ul style="list-style-type: none"> ■ Participation at Retirement 	<ul style="list-style-type: none"> ■ Actives and Retirees currently covered: 100% ■ Actives currently waived: 80% ■ Retirees currently waived: 10% elect at 65 ■ Unrepresented & Hourly: 60% 	<ul style="list-style-type: none"> ■ Same
<ul style="list-style-type: none"> ■ Marital Status at Retirement 	<ul style="list-style-type: none"> ■ Currently Covered: same as current election ■ Currently Waived: 80% married 	<ul style="list-style-type: none"> ■ Same
<ul style="list-style-type: none"> ■ Medicare Eligible Rate 	<ul style="list-style-type: none"> ■ 100% ■ Everyone eligible for Medicare will elect Part B coverage 	<ul style="list-style-type: none"> ■ Same



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ACTUARIAL ASSUMPTIONS

	June 30, 2016 Valuation	June 30, 2017 Valuation
<ul style="list-style-type: none"> ■ Spouse Age 	<ul style="list-style-type: none"> ■ Actives: Males 3 years older than females ■ Retirees: Males 3 years older than females if spouse birth date not provided 	<ul style="list-style-type: none"> ■ Same
<ul style="list-style-type: none"> ■ Dependents at Retirement 	<ul style="list-style-type: none"> ■ Actives: <ul style="list-style-type: none"> • Misc: 20% • Safety: 30% ■ Retirees: same as current coverage until age 65 	<ul style="list-style-type: none"> ■ Same
<ul style="list-style-type: none"> ■ Surviving Spouse Participation 	<ul style="list-style-type: none"> ■ 100% 	<ul style="list-style-type: none"> ■ Same



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PREVIOUS VALUATION BENEFIT

■ Medical ²⁴	All Miscellaneous & Safety Hired < 5/1/2003	Safety²⁵ Hired ≥ 5/1/2003																																		
	<p>■ City cap:</p> <table border="1" style="margin-left: 20px; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Single</th> <th>2-Party</th> <th>Family</th> </tr> </thead> <tbody> <tr> <td>2016</td> <td>\$1,093</td> <td>\$1,093</td> <td>\$1,093</td> </tr> <tr> <td>2017</td> <td>1,093</td> <td>1,093</td> <td>1,093</td> </tr> </tbody> </table>		Single	2-Party	Family	2016	\$1,093	\$1,093	\$1,093	2017	1,093	1,093	1,093	<p>■ Cap greater of City cap and State 100/90 premium:</p> <table border="1" style="margin-left: 20px; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Single</th> <th>2-Party</th> <th>Family</th> </tr> </thead> <tbody> <tr> <td>2016</td> <td>\$705</td> <td>\$1,343</td> <td>\$1,727</td> </tr> <tr> <td>2017</td> <td>707</td> <td>1,349</td> <td>1,727</td> </tr> </tbody> </table> <p>■ Vesting schedule applied²⁶:</p> <table border="1" style="margin-left: 20px; border-collapse: collapse;"> <thead> <tr> <th>CalPERS Service</th> <th>Vested Percent</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">< 10</td> <td style="text-align: center;">0%</td> </tr> <tr> <td style="text-align: center;">10</td> <td style="text-align: center;">50%</td> </tr> <tr> <td style="text-align: center;">↓</td> <td style="text-align: center;">↓</td> </tr> <tr> <td style="text-align: center;">≥ 20</td> <td style="text-align: center;">100%</td> </tr> </tbody> </table> <p>• Minimum 5 years City service</p>		Single	2-Party	Family	2016	\$705	\$1,343	\$1,727	2017	707	1,349	1,727	CalPERS Service	Vested Percent	< 10	0%	10	50%	↓	↓	≥ 20	100%
	Single	2-Party	Family																																	
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10	50%																																			
↓	↓																																			
≥ 20	100%																																			

²⁴ Unrepresented/Hourly receive PEMHCA minimum (\$125/month in 2016; \$128/month 2017)

²⁵ Includes police administration

²⁶ 100% vested at disability retirement or 20 years City service



June 14, 2018

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DEFINITIONS

<p>■ GASBS 75 Accrual Accounting</p>	<ul style="list-style-type: none"> ■ Project future employer-provided benefit cash flows for current active employees and current retirees ■ Discount projected cash flow to valuation date using discount rate (assumed return on assets used to pay benefits) and other actuarial assumptions to determine present value of projected future benefits (PVB) ■ Allocate PVB to past, current, and future periods using the actuarial cost method ■ Actuarial cost method used for this valuation is the Entry Age Normal Cost method which determines Normal Cost as a level percentage of payroll (same method used by CalPERS) ■ Normal Cost is amount allocated to current fiscal year ■ Actuarial Accrued Liability (AAL) is amount allocated to prior service with employer ■ Unfunded AAL (UAAL) is AAL less plan assets pre-funded in a segregated and restricted trust
<p>■ PayGo Cost</p>	<ul style="list-style-type: none"> ■ Cash subsidy is employer pay-as-you-go benefit payments for retirees ■ Implied subsidy is difference between actual cost of retiree benefits and retiree premiums subsidized by active employee premiums



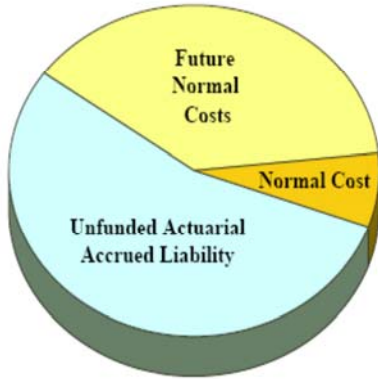
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Present Value of Benefits

Present Value of Benefits
(Without Plan Assets)



Present Value of Benefits
(With Plan Assets)

