



**CITY OF CONCORD  
RETIREE HEALTHCARE PLAN**

**June 30, 2020 Actuarial Valuation  
Plan Funding for 2021/22 and 2022/23**

**Bartel Associates, LLC**  
Doug Pryor, Vice President  
Catherine Wandro, Assistant Vice President  
Tina Liu, Associates Actuary

August 5, 2021

**Contents**

<u>Topic</u>	<u>Page</u>
Benefit Summary	1
Implied Subsidy	5
Data Summary	7
Actuarial Assumptions Highlights	11
Assets	17
Results	21
Bartel Associates OPEB Database	33
Actuarial Certification	36
Exhibits	
Premiums	E – 1
Participant Statistics	E – 3
Actuarial Assumptions	E – 11
Actuarial Methods	E – 20
Definitions	E – 21



**BENEFIT SUMMARY**

<p>■ Eligibility</p>	<p>■ Retire directly from the City under CalPERS (service or disability)</p> <p>■ Elected Officials newly elected after 11/1/14: Age 65 with 30 years of City service as an elected official</p>
<p>■ Medical Benefit</p>	<p>■ Teamsters and Unrepresented:</p> <ul style="list-style-type: none"> <li>● Hired &lt; 6/28/16 &amp; 5 years City service – Full premium up to cap</li> <li>● Hired ≥ 6/28/16 or &lt; 5 years City service – PEMHCA Minimum</li> </ul> <p>■ OPEIU:</p> <ul style="list-style-type: none"> <li>● Hired &lt; 7/12/16 &amp; 5 years City service – Full premium up to cap</li> <li>● Hired ≥ 7/12/16 or &lt; 5 years City service – PEMHCA Minimum</li> </ul> <p>■ Police &amp; Police Managers:</p> <ul style="list-style-type: none"> <li>● Hired &lt; 8/2/16 &amp; vested – Full premium up to the applicable 2-party or family cap</li> <li>● Hired ≥ 8/2/16 or not vested – PEMHCA Minimum</li> <li>● Vesting Schedule (based on City Service):             <ul style="list-style-type: none"> <li>➢ 0-9 YOS – PEMHCA Minimum</li> <li>➢ 10-14 YOS – 2-party cap</li> <li>➢ 15+ YOS – Family cap</li> </ul> </li> <li>● Disability Retirement – not subject to vesting schedule</li> </ul>

**BENEFIT SUMMARY**

<p>■ Medical Benefit (continued)</p>	<p>■ Elected Officials:</p> <ul style="list-style-type: none"> <li>● Elected &lt; 11/1/14 &amp; 5 years CalPERS svc – Full premium to cap</li> <li>● Elected ≥ 11/1/14 but &lt; 6/28/16, age 65 with 30 years consecutive City service – Full premium to cap</li> <li>● Elected ≥ 6/28/16, age 65 &amp; 30 years consecutive City service – PEMHCA Minimum</li> <li>● If age and service requirements are not met, no City-paid benefit and not allowed to participate in City medical plans</li> </ul>																								
<p>■ Monthly Caps</p>	<table border="1"> <thead> <tr> <th align="center">Plan Type</th> <th align="center">Single</th> <th align="center">2-Party</th> <th align="center">Family</th> </tr> </thead> <tbody> <tr> <td>Pre-Medicare</td> <td align="right">\$671.82</td> <td align="right">\$1,343.65</td> <td align="right">\$1,746.74</td> </tr> <tr> <td>Medicare</td> <td align="right">287.52</td> <td align="right">575.04</td> <td align="right">862.56</td> </tr> <tr> <td>Combination - 1 in Medicare</td> <td align="center">n/a</td> <td align="right">937.30</td> <td align="right">1,321.01</td> </tr> <tr> <td>Combination - 2 in Medicare, Retiree Basic</td> <td align="center">n/a</td> <td align="center">n/a</td> <td align="right">1,235.10</td> </tr> <tr> <td>Combination - 2 in Medicare, 1 Dep. Basic</td> <td align="center">n/a</td> <td align="center">n/a</td> <td align="right">974.16</td> </tr> </tbody> </table>	Plan Type	Single	2-Party	Family	Pre-Medicare	\$671.82	\$1,343.65	\$1,746.74	Medicare	287.52	575.04	862.56	Combination - 1 in Medicare	n/a	937.30	1,321.01	Combination - 2 in Medicare, Retiree Basic	n/a	n/a	1,235.10	Combination - 2 in Medicare, 1 Dep. Basic	n/a	n/a	974.16
Plan Type	Single	2-Party	Family																						
Pre-Medicare	\$671.82	\$1,343.65	\$1,746.74																						
Medicare	287.52	575.04	862.56																						
Combination - 1 in Medicare	n/a	937.30	1,321.01																						
Combination - 2 in Medicare, Retiree Basic	n/a	n/a	1,235.10																						
Combination - 2 in Medicare, 1 Dep. Basic	n/a	n/a	974.16																						
<p>■ PEMHCA Minimum</p>	<p>■ 2020     \$139/month</p> <p>■ 2021     \$143/month</p> <p>■ 2022     \$149/month</p>																								

## BENEFIT SUMMARY

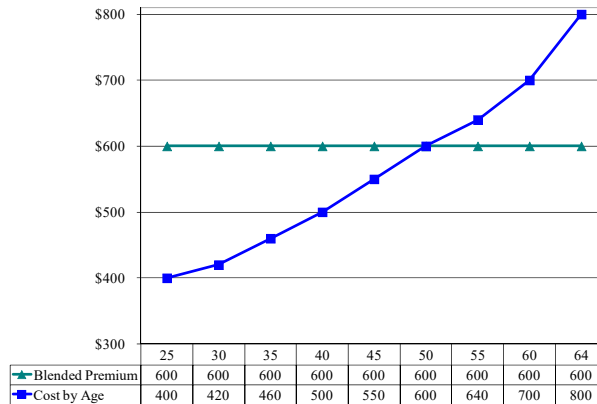
<ul style="list-style-type: none"> <li>■ Medical Benefit</li> <li>CCRS Retirees</li> </ul>	<ul style="list-style-type: none"> <li>■ CCRS Retirees – City pays the PEMHCA minimum contribution under the unequal method</li> <li>■ As of 2018, PEMHCA unequal method = PEMHCA Minimum</li> </ul>
<ul style="list-style-type: none"> <li>■ Surviving Spouse Benefit</li> </ul>	<ul style="list-style-type: none"> <li>■ Retiree medical benefit continues to surviving spouse if retiree elects CalPERS or CCRS survivor annuity</li> </ul>
<ul style="list-style-type: none"> <li>■ Dental, Vision, Life Insurance</li> </ul>	<ul style="list-style-type: none"> <li>■ None</li> </ul>

## BENEFIT SUMMARY

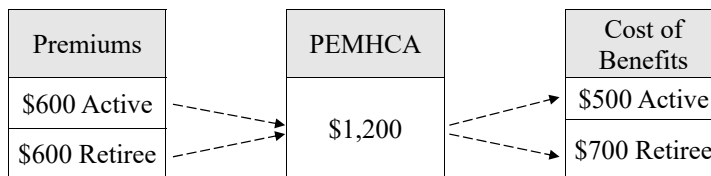
<ul style="list-style-type: none"> <li>■ Cash Pay-As-You-Go Costs</li> </ul>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;"><u>Fiscal Year</u></th> <th style="text-align: left; border-bottom: 1px solid black;"><u>Cash Pay Go</u></th> </tr> </thead> <tbody> <tr><td>■ 2019/20</td><td>\$4,120,938</td></tr> <tr><td>■ 2018/19</td><td>4,062,448</td></tr> <tr><td>■ 2017/18</td><td>4,024,102</td></tr> <tr><td>■ 2016/17</td><td>4,188,062</td></tr> <tr><td>■ 2015/16</td><td>3,795,087</td></tr> <tr><td>■ 2014/15</td><td>3,670,019</td></tr> <tr><td>■ 2013/14</td><td>3,494,778</td></tr> <tr><td>■ 2012/13</td><td>3,254,171</td></tr> <tr><td>■ 2011/12</td><td>3,196,020</td></tr> </tbody> </table>	<u>Fiscal Year</u>	<u>Cash Pay Go</u>	■ 2019/20	\$4,120,938	■ 2018/19	4,062,448	■ 2017/18	4,024,102	■ 2016/17	4,188,062	■ 2015/16	3,795,087	■ 2014/15	3,670,019	■ 2013/14	3,494,778	■ 2012/13	3,254,171	■ 2011/12	3,196,020
<u>Fiscal Year</u>	<u>Cash Pay Go</u>																				
■ 2019/20	\$4,120,938																				
■ 2018/19	4,062,448																				
■ 2017/18	4,024,102																				
■ 2016/17	4,188,062																				
■ 2015/16	3,795,087																				
■ 2014/15	3,670,019																				
■ 2013/14	3,494,778																				
■ 2012/13	3,254,171																				
■ 2011/12	3,196,020																				

## IMPLIED SUBSIDY

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



- Sample active employee age 40, retiree age 60:



## IMPLIED SUBSIDY

- GASB 45 defers to actuarial standards of practice.
- Actuarial Standards of Practice No. 6<sup>1</sup> (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
- June 30, 2015 and later valuations include the implied subsidy.

<sup>1</sup> Measuring Retiree Group Benefits Obligations and Determining Retiree Group Benefits Plan Costs or Contributions.

## DATA SUMMARY

### Miscellaneous Participants

	6/30/13	6/30/15	6/30/16	6/30/18	6/30/20
■ Actives					
● Counts <sup>2</sup>	251	224	229	246	220
● Average:					
> Age	47.3	47.8	48.1	46.9	45.8
> City Service	10.6	11.3	10.1	9.9	9.5
> Salary	\$59,900	\$72,000	\$70,000	\$78,300	\$88,900
● Total Salary (000's)	\$15,036	\$16,118	\$16,018	\$19,252	\$19,551
■ CalPERS Retirees					
● Counts <sup>3</sup>	266	280	298	302	330
● Average:					
> Age	66.3	67.5	68.0	69.4	70.1
> Retirement Age					
○ Service	57.8	57.6	57.7	57.7	58.1
○ Disability	53.7	53.7	53.7	54.3	55.6
■ CCRS Retirees in PEMHCA					
● Count	19	16	16	16	12
● Average:					
> Age	79.2	82.4	82.5	84.5	84.0
> Retirement Age	55.0	58.9	58.0	58.0	58.1

<sup>2</sup> Includes 62 and 83 Miscellaneous actives eligible for PEMHCA minimum only at retirement for 6/30/18 and 6/30/20, respectively.

<sup>3</sup> Includes 36 and 40 waived Miscellaneous retirees for 6/30/18 and 6/30/20, respectively.

## DATA SUMMARY

### Safety Participants

	6/30/13	6/30/15	6/30/16	6/30/18	6/30/20
■ Actives					
● Counts <sup>4</sup>	145	148	153	147	141
● Average:					
> Age	41.2	40.9	40.0	39.5	38.6
> City Service	13.7	13.2	11.6	11.3	10.8
> Salary	\$111,300	\$116,300	\$93,200	\$105,100	\$134,900
● Total Salary (000's)	\$16,143	\$17,210	\$14,256	\$15,446	\$19,022
■ CalPERS Retirees					
● Counts <sup>5</sup>	96	107	119	134	154
● Average:					
> Age	58.0	58.9	58.8	59.8	60.5
> Retirement Age					
○ Service	52.4	52.1	52.0	52.0	52.2
○ Disability	43.8	43.6	43.7	45.1	45.7
■ CCRS Retirees in PEMHCA					
● Count	12	15	14	14	14
● Average:					
> Age	74.8	76.4	76.7	78.7	79.6
> Retirement Age	52.2	53.8	53.3	53.3	52.7

<sup>4</sup> Includes 16 and 35 Safety actives eligible for PEMHCA minimum only at retirement for 6/30/18 and 6/30/20, respectively.

<sup>5</sup> Includes 7 and 12 waived Safety retirees for 6/30/18 and 6/30/20, respectively.

## DATA SUMMARY

### Total Participants

	6/30/13	6/30/15	6/30/16	6/30/18	6/30/20
■ Actives					
● Counts <sup>6</sup>	396	372	382	393	361
● Average:					
> Age	45.0	45.1	44.9	44.1	43.0
> City Service	11.7	12.0	10.7	10.4	10.0
> Salary	\$78,700	\$89,600	\$79,300	\$88,300	\$106,900
● Total Salary (000's)	\$31,179	\$33,328	\$30,275	\$34,698	\$38,573
■ CalPERS Retirees					
● Counts <sup>7</sup>	362	387	417	436	484
● Average:					
> Age	64.1	65.2	65.4	66.4	67.0
> Retirement Age					
○ Service	56.8	56.5	56.5	56.4	56.8
○ Disability	44.9	44.7	45.0	46.0	46.5
■ CCRS Retirees in PEMHCA					
● Count	31	31	30	30	26
● Average:					
> Age	77.5	79.5	79.8	81.8	81.6
> Retirement Age	53.9	56.4	55.9	55.9	55.4

<sup>6</sup> Includes 78 and 118 actives eligible for PEMHCA minimum only at retirement for 6/30/18 and 6/30/20, respectively.

<sup>7</sup> Includes 43 and 52 waived retirees for 6/30/18 and 6/30/20, respectively.

## DATA SUMMARY

### Participant Reconciliation

	Actives	Retirees		Total
		PERS	CCRS	
■ June 30, 2018	393	436	30	859
● Withdrawal/Death	(40)	(10)	(5)	(55)
● New Retirees	(55)	55	-	-
● New Hires	63	-	-	63
● Data Changes	—	<u>3</u>	<u>1</u>	<u>4</u>
■ June 30, 2020	361	484	26	871

## ACTUARIAL ASSUMPTIONS HIGHLIGHTS

### Discount Rate

- CERBT Investment Options (target investment allocations effective October 2018):

	Strategy 1	Strategy 2	Strategy 3
Global Equity	59%	40%	22%
Fixed Income	25%	43%	49%
TIPS	5%	5%	16%
Commodities	3%	4%	5%
REITs	<u>8%</u>	<u>8%</u>	<u>8%</u>
Total	100%	100%	100%

- City moving to Strategy 2

## ACTUARIAL ASSUMPTIONS HIGHLIGHTS

### Discount Rate

- Future expected returns
  - Stochastic simulations of geometric average returns over 20 years
  - 5,000 trials
  - 2.75% inflation assumption
  - Projections based on 5 independent Investment Advisors 2017 10-year Capital Market Assumptions and where available, investment advisors anticipated long-term trends
  - Confidence levels:

	Strategy 1	Strategy 2	Strategy 3
50% Confidence Level	6.75%	<b>6.25%</b>	5.50%
55% Confidence Level	6.50%	6.00%	5.25%
60% Confidence Level	6.00%	5.75%	5.25%

- Recommended discount rate assumption for Strategy 2 = 6.25%

**ACTUARIAL ASSUMPTION HIGHLIGHTS**

<b>Assumption</b>	<b>6/30/18 Valuation</b>	<b>6/30/20 Valuation</b>
■ Valuation Date	■ June 30, 2018 ■ 2019/20 & 2020/21 fiscal years	■ June 30, 2020 ■ 2021/22 & 2022/23 fiscal years
■ Funding Policy	■ Full ADC pre-funding	■ Same
■ General Inflation	■ 2.75% ■ For economic assumptions	■ Same
■ Discount Rate	■ 6.75% – Pre-funded with CalPERS CERBT Asset Strategy #1	■ 6.25% – Pre-funded with CalPERS CERBT Asset Strategy #2 ■ Sensitivity included for CERBT Strategy #1
■ Payroll Increases	■ Aggregate Increases – 3.00% ■ Merit Increases – CalPERS 1997-2015 Experience Study	■ Same
■ Cap Increase	■ 0%	■ Same

**ACTUARIAL ASSUMPTION HIGHLIGHTS**

■ Medical Trend	<u>Increase from Prior Year</u>			<u>Increase from Prior Year</u>			
	<u>Year</u>	<u>Pre-Medicare</u>	<u>Post-Medicare</u>	<u>Calendar Year</u>	<u>Pre-Medicare</u>	<u>Post-Medicare Kaiser</u>	<u>Post-Medicare Other</u>
	2018	Actual 2018 Premiums/Claims		2018		n/a	
	2019	Actual 2019 Premiums/Claims		2019		n/a	
	2020	Actual 2020 Premiums/Claims		2020	Actual 2020 Premiums		
	2021	7.25%	6.30%	2021	Actual 2021 Premiums		
	2022	7.00%	6.10%	2022	7.00%	5.00%	6.10%
	2023	6.75%	5.90%	2023	6.75%	4.85%	5.90%
	2024	6.50%	5.70%	2024	6.50%	4.70%	5.70%
	2025	6.25%	5.50%	2025	6.25%	4.60%	5.50%
	2026	6.00%	5.30%	2026	6.00%	4.50%	5.30%
	2027	5.80%	5.15%	2027	5.80%	4.45%	5.15%
	2028	5.60%	5.00%	2028	5.60%	4.40%	5.00%
	2029	5.40%	4.85%	2029	5.40%	4.35%	4.85%
	2030	5.20%	4.70%	2030	5.20%	4.30%	4.70%
	2031-35	5.05%	4.60%	2031-35	5.05%	4.25%	4.60%
	2036-45	4.90%	4.50%	2036-45	4.90%	4.20%	4.50%
	2046-55	4.75%	4.45%	2046-55	4.75%	4.15%	4.45%
	2056-65	4.60%	4.40%	2056-65	4.60%	4.10%	4.40%
	2066-75	4.30%	4.20%	2066-75	4.30%	4.05%	4.20%
	2076+	4.00%	4.00%	2076+	4.00%	4.00%	4.00%



**ACTUARIAL ASSUMPTION HIGHLIGHTS**

<b>Assumption</b>	<b>6/30/18 Valuation</b>	<b>6/30/20 Valuation</b>																								
<ul style="list-style-type: none"> <li>■ PEMHCA Minimum Increase</li> </ul>	<p align="center">PEMHCA</p> <table border="0"> <tr> <td><u>Year</u></td> <td><u>Minimum</u></td> </tr> <tr> <td>2018</td> <td>\$133.00</td> </tr> <tr> <td>2019</td> <td>136.00</td> </tr> <tr> <td>2020</td> <td>139.00</td> </tr> <tr> <td>2021+</td> <td>Increases</td> </tr> <tr> <td></td> <td>4.25%/yr.</td> </tr> </table>	<u>Year</u>	<u>Minimum</u>	2018	\$133.00	2019	136.00	2020	139.00	2021+	Increases		4.25%/yr.	<p align="center">PEMHCA</p> <table border="0"> <tr> <td><u>Year</u></td> <td><u>Minimum</u></td> </tr> <tr> <td>2020</td> <td>\$139.00</td> </tr> <tr> <td>2021</td> <td>143.00</td> </tr> <tr> <td>2022</td> <td>149.00</td> </tr> <tr> <td>2023+</td> <td>Increases</td> </tr> <tr> <td></td> <td>4.25%/yr.</td> </tr> </table>	<u>Year</u>	<u>Minimum</u>	2020	\$139.00	2021	143.00	2022	149.00	2023+	Increases		4.25%/yr.
<u>Year</u>	<u>Minimum</u>																									
2018	\$133.00																									
2019	136.00																									
2020	139.00																									
2021+	Increases																									
	4.25%/yr.																									
<u>Year</u>	<u>Minimum</u>																									
2020	\$139.00																									
2021	143.00																									
2022	149.00																									
2023+	Increases																									
	4.25%/yr.																									
<ul style="list-style-type: none"> <li>■ Administrative Expenses</li> </ul>	<ul style="list-style-type: none"> <li>■ PEMHCA: 0.27% of estimated retiree premiums</li> <li>■ CERBT: 0.05% of assets</li> <li>■ Included in ADC</li> </ul>	<ul style="list-style-type: none"> <li>■ PEMHCA: 0.25% of estimated retiree premiums</li> <li>■ CERBT: 0.05% of assets</li> <li>■ Included in ADC</li> </ul>																								
<ul style="list-style-type: none"> <li>■ Mortality, Withdrawal, Disability, Retirement</li> </ul>	<ul style="list-style-type: none"> <li>■ CalPERS 1997-2015 Experience Study</li> <li>■ Fully generational mortality improvement Scale MP-2018</li> </ul>	<ul style="list-style-type: none"> <li>■ CalPERS 1997-2015 Experience Study</li> <li>■ Fully generational mortality improvement Scale MP-2020</li> </ul>																								

**ACTUARIAL ASSUMPTION HIGHLIGHTS**

<b>Assumption</b>	<b>6/30/18 Valuation</b>	<b>6/30/20 Valuation</b>
<ul style="list-style-type: none"> <li>■ Affordable Care Act (ACA) Excise Tax</li> </ul>	<ul style="list-style-type: none"> <li>■ 2.0% liability load on cash subsidy to estimate impact</li> </ul>	<ul style="list-style-type: none"> <li>■ Repealed</li> <li>■ No liability load</li> </ul>
<ul style="list-style-type: none"> <li>■ Age-Based Claims Costs</li> </ul>	<ul style="list-style-type: none"> <li>■ Age-based claims costs included for all PEMHCA medical plans</li> </ul>	<ul style="list-style-type: none"> <li>■ Due to age-risk adjusted federal subsidies to Medicare Advantage plans, no age-based claims costs were included for these plans (Anthem Medicare Preferred, Kaiser Senior Advantage, UnitedHealthcare Group Medicare Advantage Plan)</li> </ul>

**ASSETS**

**Market Value of Plan Assets (MVA)<sup>8</sup>**

(Amounts in \$000's)

	<b>2018/19</b>	<b>2019/20</b>	<b>Projected 2020/21<sup>9</sup></b>
■ <b>Market Value (Beginning of Year)</b>	\$28,581	\$30,562	\$31,829
● Contributions	4,333	4,250	4,250
● Benefit Payments/Disbursements	(4,200)	(4,165)	(4,223)
● Net Investment Return	1,863	1,198	9,307
● Administrative Expenses	<u>(15)</u>	<u>(16)</u>	<u>(19)</u>
■ <b>Market Value (End of Year)</b>	30,562	31,829	41,144
■ <b>Approximate Annual Return</b>	6.3%	3.7%	27.8%

<sup>8</sup> CERBT quarterly statements used for funding purposes. GASBS 75 disclosures are based on audited assets.

<sup>9</sup> Projected using unaudited 6/30/21 CERBT balance, actual 2020/21 contributions, and estimated end of year reimbursement request of \$4,223,000.

**ASSETS**

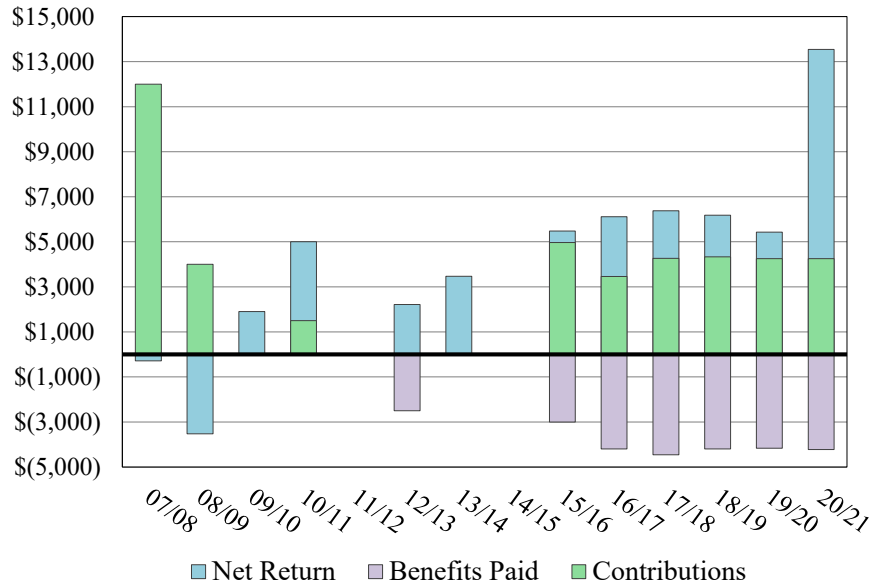
**Actuarial Value of Plan Assets (AVA)**

(Amounts in \$000's)

	<b>2018/19</b>	<b>2019/20</b>	<b>Projected 2020/21</b>
■ <b>Actuarial Value (Beginning of Year)</b>	\$ 28,409	\$ 30,535	\$ 32,591
● Employer Contribution	4,333	4,250	4,250
● Benefit Payment/Disbursements	(4,200)	(4,165)	(4,223)
● Expected Investment Return	1,986	2,162	2,312
■ <b>Expected AVA (End of Year)</b>	30,528	32,782	34,930
■ <b>MVA (End of Year)</b>	<b>30,562</b>	<b>31,829</b>	<b>41,144</b>
■ <b>1/5 of (MVA - Expected AVA)</b>	7	(191)	1,243
■ <b>Preliminary AVA</b>	30,535	32,591	36,173
● Minimum AVA (80% of MVA)	24,450	25,463	32,915
● Maximum AVA (120% of MVA)	36,675	38,194	49,373
■ <b>AVA (End of Year)</b>	<b>30,535</b>	<b>32,591</b>	<b>36,173</b>
■ <b>Approximate AVA return</b>	6.8%	6.2%	10.4%

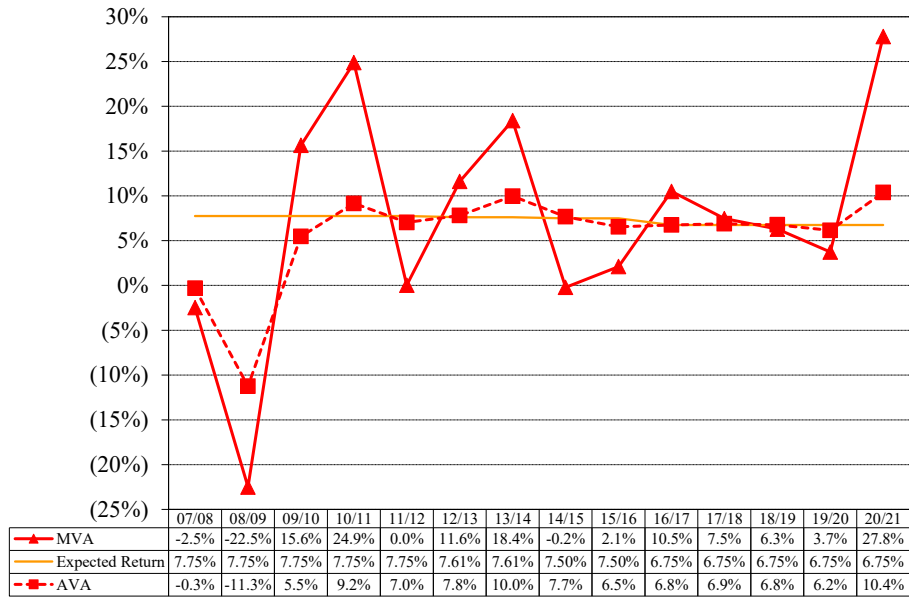
## ASSETS

### Historical Asset Changes (Amounts in \$000's)



## ASSETS

### Annualized Asset Returns



## RESULTS

### Actuarial Obligations

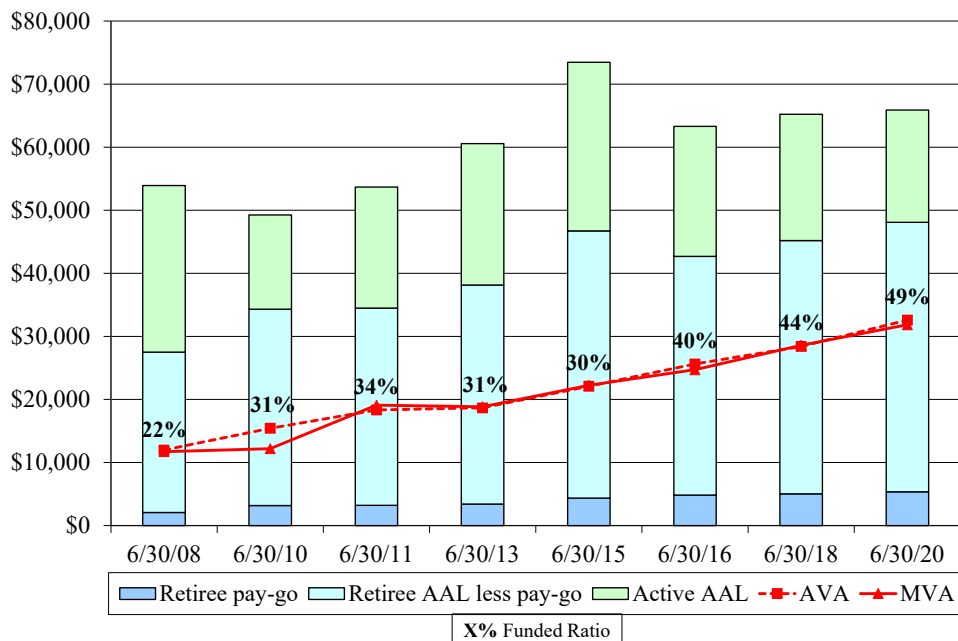
(Amounts in \$000's)

	6/30/18 Valuation	6/30/20 Valuation	
		6/30/20	Projected 6/30/21
<b>■ Present Value of Benefits</b> <ul style="list-style-type: none"> <li>● Actives</li> <li>● Retirees</li> <li>● Total</li> </ul>	\$ 32,031 <u>45,194</u> 77,225	\$ 29,083 <u>48,093</u> 77,176	
<b>■ Actuarial Accrued Liability</b> <ul style="list-style-type: none"> <li>● Actives</li> <li>● Retirees</li> <li>● Total</li> </ul>	20,020 <u>45,194</u> 65,214	17,794 <u>48,093</u> 65,887	\$ 65,968
<b>■ Actuarial Value of Assets</b>	<u>28,409</u>	<u>32,591</u>	<u>36,173</u>
<b>■ Unfunded AAL</b>	36,805	33,296	29,795
<b>■ Funded Ratio</b>	43.6%	49.5%	54.8%
<b>■ Normal Cost</b>	1,644	n/a	1,446
<b>■ Pay-As-You-Go Cost</b>	5,024	5,246	5,336

## RESULTS

### Historical Actuarial Accrued Liability

(Amounts in \$000's)



**RESULTS**

**Actuarial (Gain)/Loss Analysis**

(Amounts in \$000's)

	<b>AAL</b>
■ <b>6/30/2018 Actual</b>	\$ 65,214
■ <b>6/30/2020 Expected</b>	66,916
<ul style="list-style-type: none"> <li>● Experience (Gains)/Losses:                             <ul style="list-style-type: none"> <li>➢ Premiums/Claims different than expected</li> <li>➢ Demographic/other</li> </ul> </li> <li>● Assumption Changes:                             <ul style="list-style-type: none"> <li>➢ Kaiser Medicare Medical Trend</li> <li>➢ Mortality Improvement Scale MP-2020</li> <li>➢ ACA Excise Tax Removed</li> <li>➢ No Implied Subsidy for Medicare Advantage Plans</li> <li>➢ Discount Rate 6.25%</li> </ul> </li> </ul>	(993) 488 (5) (244) (974) (2,093) <u>2,792</u>
■ <b>Total (Gains)/Losses</b>	(1,029)
■ <b>6/30/2020 Actual</b>	65,887

**RESULTS**

**Unfunded Actuarial Accrued Liability Amortization Balances**

(Amounts in 000's)

	<b>Original Bases</b>			<b>Remaining Bases 6/30/2021</b>		<b>2021/22 Amortization Payment</b>
	<b>Date</b>	<b>Years</b>	<b>Amount</b>	<b>Years</b>	<b>Balance</b>	
■ 6/30/16 Fresh Start	6/30/16	23	\$37,683	18	\$36,983	\$ 2,806
■ 6/30/18 Val (G)/L	6/30/19	20	(2,023)	18	(1,995)	(151)
■ 6/30/20 Val (G)/L	6/30/21	18	(5,193)	18	<u>(5,193)</u>	<u>(394)</u>
■ Unfunded AAL					29,795	2,261

## RESULTS

### Actuarially Determined Contribution (ADC)

(Amounts in \$000's)

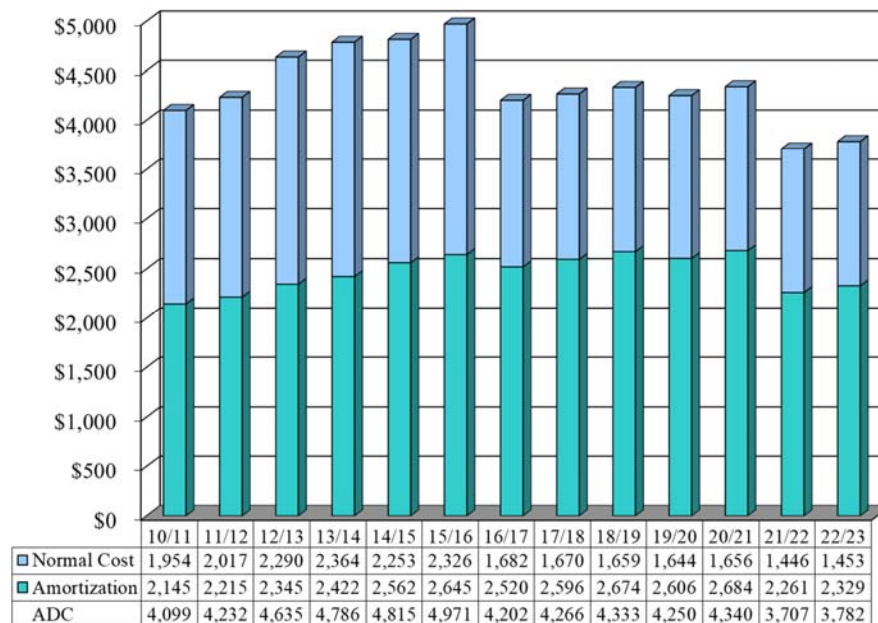
	6/30/18 Valuation		6/30/20 Valuation	
	2019/20	2020/21	2021/22	2022/23
■ <b>ADC - \$</b>				
● Normal Cost <sup>10</sup>	\$ 1,644	\$ 1,656	\$ 1,446	\$ 1,453
● UAAL Amortization	<u>2,606</u>	<u>2,684</u>	<u>2,261</u>	<u>2,329</u>
● Total	4,250	4,340	3,707	3,782
■ <b>Projected Payroll</b>	36,811	37,915	40,922	42,150
■ <b>ADC - %</b>				
● Normal Cost	4.5%	4.4%	3.5%	3.4%
● UAAL Amortization	<u>7.1%</u>	<u>7.1%</u>	<u>5.5%</u>	<u>5.5%</u>
● Total	11.5%	11.4%	9.1%	9.0%

<sup>10</sup> Normal Cost includes expected administrative expenses: \$28,000 for 2019/20, \$30,000 for 2020/21, \$34,000 for 2021/22, and \$35,000 for 2022/23

## RESULTS

### Historical Annual Required Contributions (ARC/ADC)

(Amounts in \$000's)



**RESULTS**

**Actuarial Obligations by Misc/Safety**

**June 30, 2020**  
(Amounts in \$000's)

	<b>Misc</b>	<b>Safety</b>	<b>Total</b>
■ <b>Present Value of Benefits</b>			
● Actives	\$ 13,291	\$ 15,792	\$ 29,083
● Retirees	<u>23,414</u>	<u>24,679</u>	<u>48,093</u>
● Total	36,705	40,471	77,176
■ <b>Actuarial Accrued Liability</b>			
● Actives	8,136	9,658	17,794
● Retirees	<u>23,414</u>	<u>24,679</u>	<u>48,093</u>
● Total	31,550	34,337	65,887
■ <b>Actuarial Value of Assets<sup>11</sup></b>	<u>15,606</u>	<u>16,985</u>	<u>32,591</u>
■ <b>Unfunded AAL</b>	15,944	17,352	33,296
■ <b>2021/22 Normal Cost</b>	720	726	1,446
■ <b>2021/22 Pay-As-You-Go Cost</b>	2,977	2,359	5,336

<sup>11</sup> Allocated in proportion to the AAL

**RESULTS**

**Actuarially Determined Contribution (ADC) by Misc/Safety**

**2021/22 Fiscal Year**  
(Amounts in \$000's)

	<b>Misc</b>	<b>Safety</b>	<b>Total</b>
■ <b>ADC - \$</b>			
● Normal Cost	\$ 720	\$ 726	\$ 1,446
● UAAL Amortization	<u>1,068</u>	<u>1,193</u>	<u>2,261</u>
● Total	1,788	1,919	3,707
■ <b>Projected Payroll</b>	20,742	20,180	40,922
■ <b>ADC - %</b>			
● Normal Cost	3.5%	3.6%	3.5%
● UAAL Amortization	<u>5.1%</u>	<u>5.9%</u>	<u>5.5%</u>
● Total	8.6%	9.5%	9.1%

**RESULTS**

**Actuarial Obligations by Cash/Implied Subsidy**

(Amounts in \$000's)

	<b>Cash Subsidy</b>	<b>Implied Subsidy</b>	<b>Total</b>
■ <b>Present Value of Benefits</b>			
● Actives	\$ 18,517	\$ 10,566	\$ 29,083
● Retirees	<u>39,337</u>	<u>8,756</u>	<u>48,093</u>
● Total	57,854	19,322	77,176
■ <b>Actuarial Accrued Liability</b>			
● Actives	11,526	6,268	17,794
● Retirees	<u>39,337</u>	<u>8,756</u>	<u>48,093</u>
● Total	50,863	15,024	65,887
■ <b>Actuarial Value of Assets<sup>12</sup></b>	<u>25,159</u>	<u>7,432</u>	<u>32,591</u>
■ <b>Unfunded AAL</b>	25,704	7,592	33,296
■ <b>2021/22 Normal Cost</b>	947	499	1,446
■ <b>2021/22 Pay-As-You-Go Cost</b>	4,389	947	5,336

<sup>12</sup> Allocated in proportion to the AAL

**RESULTS**

**Actuarially Determined Contribution (ADC) by Cash/Implied Subsidy**

**2021/22 Fiscal Year**

(Amounts in \$000's)

	<b>Cash Subsidy</b>	<b>Implied Subsidy</b>	<b>Total</b>
■ <b>ADC - \$</b>			
● Normal Cost	\$ 947	\$ 499	\$ 1,446
● UAAL Amortization	<u>1,728</u>	<u>533</u>	<u>2,261</u>
● Total	2,675	1,032	3,707
■ <b>Projected Payroll</b>	40,922	40,922	40,922
■ <b>ADC - %</b>			
● Normal Cost	2.3%	1.2%	3.5%
● UAAL Amortization	<u>4.2%</u>	<u>1.3%</u>	<u>5.5%</u>
● Total	6.5%	2.5%	9.1%



**RESULTS**

**10-Year Benefit Payment and ADC Projection**

(Amounts in \$000's)

Fiscal Year	Benefit Payments			ADC	Payroll	ADC % of Payroll
	Cash Subsidy	Implied Subsidy	Total			
2021/22	\$4,389	\$947	\$5,336	\$ 3,707	\$ 40,922	9.1%
2022/23	4,365	1,010	5,375	3,782	42,150	9.0%
2023/24	4,342	1,074	5,416	3,857	43,414	8.9%
2024/25	4,334	1,159	5,493	3,933	44,717	8.8%
2025/26	4,322	1,233	5,555	4,011	46,058	8.7%
2026/27	4,308	1,323	5,631	4,084	47,440	8.6%
2027/28	4,276	1,396	5,672	4,158	48,863	8.5%
2028/29	4,172	1,337	5,509	4,236	50,329	8.4%
2029/30	4,110	1,353	5,463	4,315	51,839	8.3%
2030/31	4,028	1,379	5,407	4,398	53,394	8.2%

**RESULTS**

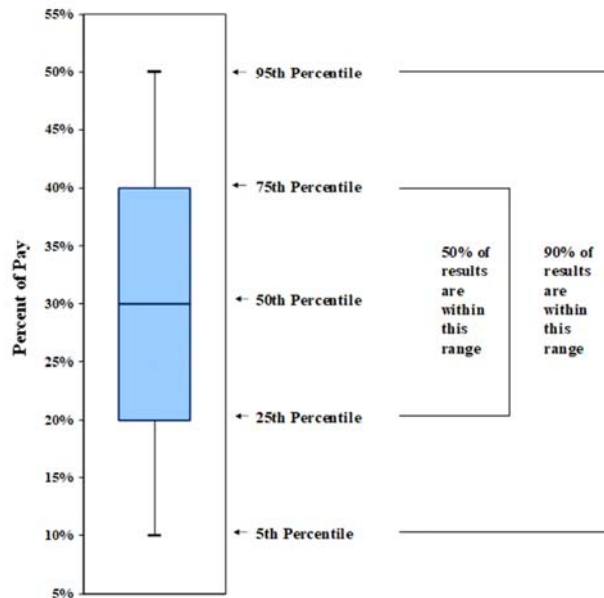
**Discount Rate Sensitivity**

(Amounts in \$000's)

	Valuation CERBT 2 6.25%	Sensitivity CERBT 1 6.75%
■ PVPB at 6/30/20	\$77,176	\$ 72,991
■ AAL at 6/30/20		
• Actives	17,794	16,820
• Retirees	<u>48,093</u>	<u>46,275</u>
• Total	65,887	63,095
■ Actuarial Value of Assets	<u>32,591</u>	<u>32,591</u>
■ Unfunded AAL	33,296	30,504
■ 2021/22 ADC		
• Normal Cost	\$ 1,446	\$ 1,323
• UAAL Amortization	<u>2,261</u>	<u>2,134</u>
• Total	3,707	3,457
• ADC as % of payroll	9.1%	8.4%

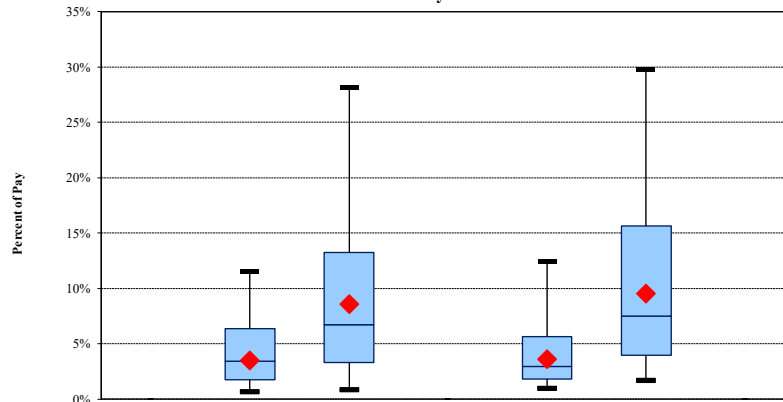
# BARTEL ASSOCIATES OPEB DATABASE

**Bartel Associates OPEB Database  
Sample Percentile Graph**



# BARTEL ASSOCIATES OPEB DATABASE

**Bartel Associates OPEB Database  
Normal Cost & Actuarially Determined Contribution**

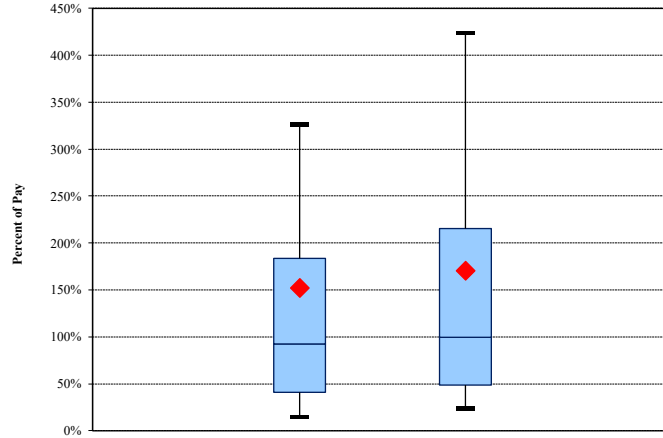


	Miscellaneous		Safety	
	NC	ADC	NC	ADC
95th Percentile	11.6%	28.2%	12.4%	29.8%
75th Percentile	6.4%	13.3%	5.6%	15.6%
50th Percentile	3.4%	6.7%	3.0%	7.5%
25th Percentile	1.8%	3.3%	1.8%	4.0%
5th Percentile	0.7%	0.8%	0.9%	1.7%
<b>Percent of Pay (♦)</b>	<b>3.5%</b>	<b>8.6%</b>	<b>3.6%</b>	<b>9.5%</b>
<b>Percentile</b>	<b>50%</b>	<b>63%</b>	<b>57%</b>	<b>63%</b>

Discount Rate = 6.25%, Average Amortization Period = 18.0 Years

# BARTEL ASSOCIATES OPEB DATABASE

**Bartel Associates OPEB Database  
Actuarial Accrued Liability**



	<u>Miscellaneous</u>	<u>Safety</u>
95th Percentile	326%	424%
75th Percentile	183%	215%
50th Percentile	92%	100%
25th Percentile	41%	48%
5th Percentile	14%	23%
<b>Percent of Pay (♦)</b>	<b>152%</b>	<b>170%</b>
<b>Percentile</b>	<b>70%</b>	<b>67%</b>

Discount Rate = 6.25%

## ACTUARIAL CERTIFICATION

This report presents the City of Concord Retiree Healthcare Plan (“Plan”) June 30, 2020 actuarial valuation. The purpose of this valuation is to:

- Determine the Plan’s June 30, 2020 Funded Status and
- Calculate the 2021/22 and 2022/23 Actuarially Determined Contributions.

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 asset information 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 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,



Doug Pryor, ASA, EA, MAAA  
Vice President  
Bartel Associates, LLC  
August 5, 2021



Catherine A. Wandro, ASA, FCA, MAAA  
Assistant Vice President  
Bartel Associates, LLC  
August 5, 2021

**EXHIBITS - PREMIUMS**

**2020 PEMHCA Monthly Medical Premiums**  
**Region 1**

Medical Plan	Non-Medicare Eligible			Medicare Eligible		
	Single	2-Party	Family	Single	2-Party	Family
Anthem Select	\$ 868.98	\$ 1,737.96	\$ 2,259.35	\$ 388.15	\$ 776.30	\$1,164.45
Anthem Traditional	1,184.84	2,369.68	3,080.58	388.15	776.30	1,164.45
Blue Shield Access+	1,127.77	2,255.54	2,932.20	n/a	n/a	n/a
Blue Shield Trio	833.00	1,666.00	2,165.80	n/a	n/a	n/a
Health Net SmartCare	1,000.52	2,001.04	2,601.35	n/a	n/a	n/a
Kaiser	768.49	1,536.98	1,998.07	339.43	678.86	1,018.29
UnitedHealthcare	899.94	1,799.88	2,339.84	327.03	654.06	981.09
Western Health Advantage	731.96	1,463.92	1,903.10	n/a	n/a	n/a
PERS Choice	861.18	1,722.36	2,239.07	351.39	702.78	1,054.17
PERS Select	520.29	1,040.58	1,352.75	351.39	702.78	1,054.17
PERSCare	1,133.14	2,266.28	2,946.16	384.78	769.56	1,154.34
PORAC	774.00	1,699.00	2,199.00	513.00	1,022.00	1,635.00

**EXHIBITS - PREMIUMS**

**2021 PEMHCA Monthly Medical Premiums**  
**Region 1**

Medical Plan	Non-Medicare Eligible			Medicare Eligible		
	Single	2-Party	Family	Single	2-Party	Family
Anthem Select	\$ 925.60	\$ 1,851.20	\$ 2,406.56	\$ 383.37	\$ 766.74	\$ 1,150.11
Anthem Traditional	1,307.86	2,615.72	3,400.44	383.37	766.74	1,150.11
Blue Shield Access+	1,170.08	2,340.16	3,042.21	n/a	n/a	n/a
Blue Shield Trio	880.50	1,761.00	2,289.30	n/a	n/a	n/a
Health Net SmartCare	1,120.21	2,240.42	2,912.55	n/a	n/a	n/a
Kaiser	813.64	1,627.28	2,115.46	324.48	648.96	973.44
UnitedHealthcare	941.17	1,882.34	2,447.04	311.56	623.12	934.68
Western Health Advantage	757.02	1,514.04	1,968.25	n/a	n/a	n/a
PERS Choice	935.84	1,871.68	2,433.18	349.97	699.94	1,049.91
PERS Select	566.67	1,133.34	1,473.34	349.97	699.94	1,049.91
PERSCare	1,294.69	2,589.38	3,366.19	381.25	762.50	1,143.75
PORAC	799.00	1,725.00	2,199.00	513.00	1,022.00	1,635.00

**EXHIBITS - PARTICIPANT STATISTICS**

**Medical Plan Participation**

Medical Plan	Actives	Retirees		
		Pre-65	Post-65	Total
Anthem Select	4%	6%	1%	3%
Anthem Traditional	1%	3%	1%	2%
Blue Shield	0%	0%	0%	0%
Kaiser	77%	50%	52%	51%
Health Net SmartCare	5%	9%	0%	3%
UnitedHealthcare	0%	0%	17%	11%
Western Health Advantage	0%	0%	0%	0%
PERS Choice	3%	15%	20%	18%
PERS Select	3%	3%	0%	1%
PERSCare	0%	7%	8%	8%
PORAC	7%	7%	1%	3%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**EXHIBITS - PARTICIPANT STATISTICS**

**Current Active Medical Plan Coverage**

Plan	Single	2-Party	Family	Total
Anthem Select	3	1	7	11
Anthem Traditional	1	-	3	4
Blue Shield	-	-	-	-
Kaiser	66	49	112	227
Health Net SmartCare	5	2	7	14
UnitedHealthcare	-	-	1	1
Western Health Advantage	-	-	1	1
PERS Choice	-	3	6	9
PERS Select	4	1	4	9
PERSCare	-	-	-	-
PORAC	7	-	12	19
Waived	-	-	-	66
<b>Total</b>	<b>86</b>	<b>56</b>	<b>153</b>	<b>361</b>

**EXHIBITS - PARTICIPANT STATISTICS**

**Retiree Medical Plan Coverage - Pre 65**

<b>Plan</b>	<b>Single</b>	<b>2-Party</b>	<b>Family</b>	<b>Total</b>
Anthem Select	2	6	3	11
Anthem Traditional	1	2	3	6
Blue Shield	-	-	-	-
Kaiser	17	39	29	85
Health Net SmartCare	4	4	7	15
UnitedHealthcare	-	-	-	-
Western Health Advantage	-	-	-	-
PERS Choice	4	14	7	25
PERS Select	1	2	3	6
PERSCare	5	2	5	12
PORAC	-	5	7	12
Waived	-	-	-	23
<b>Total</b>	<b>34</b>	<b>74</b>	<b>64</b>	<b>195</b>

**EXHIBITS - PARTICIPANT STATISTICS**

**Retiree Medical Plan Coverage - Post 65**

<b>Plan</b>	<b>Single</b>	<b>2-Party</b>	<b>Family</b>	<b>Total</b>
Anthem Select	1	2	-	3
Anthem Traditional	-	3	-	3
Blue Shield	-	-	-	-
Kaiser	61	84	2	147
Health Net SmartCare	-	-	-	-
UnitedHealthcare	22	25	1	48
Western Health Advantage	-	-	-	-
PERS Choice	23	32	3	58
PERS Select	-	-	-	-
PERSCare	12	11	-	23
PORAC	1	3	-	4
Waived	-	-	-	29
<b>Total</b>	<b>120</b>	<b>160</b>	<b>6</b>	<b>315</b>

**EXHIBITS - PARTICIPANT STATISTICS**

**Actives by Age and Service – Miscellaneous**

Age	City Service							Total
	< 1	1-4	5-9	10-14	15-19	20-24	≥ 25	
< 25	3	3	-	-	-	-	-	6
25-29	6	9	1	-	-	-	-	16
30-34	5	11	7	-	-	-	-	23
35-39	2	17	6	1	1	-	-	27
40-44	2	17	2	4	7	2	-	34
45-49	1	4	5	5	9	-	2	26
50-54	-	8	4	5	7	8	3	35
55-59	1	6	4	5	6	2	5	29
60-64	-	3	4	5	5	3	-	20
≥ 65	-	-	2	-	1	-	1	4
<b>Total</b>	<b>20</b>	<b>78</b>	<b>35</b>	<b>25</b>	<b>36</b>	<b>15</b>	<b>11</b>	<b>220</b>

**EXHIBITS - PARTICIPANT STATISTICS**

**Actives by Age and Service – Safety**

Age	City Service							Total
	< 1	1-4	5-9	10-14	15-19	20-24	≥ 25	
< 25	-	3	-	-	-	-	-	3
25-29	3	12	4	-	-	-	-	19
30-34	1	11	19	-	-	-	-	31
35-39	2	6	10	10	2	-	-	30
40-44	-	4	1	3	8	4	-	20
45-49	-	-	-	1	7	13	1	22
50-54	1	-	1	-	4	2	6	14
55-59	-	-	-	-	1	1	-	2
60-64	-	-	-	-	-	-	-	-
≥ 65	-	-	-	-	-	-	-	-
<b>Total</b>	<b>7</b>	<b>36</b>	<b>35</b>	<b>14</b>	<b>22</b>	<b>20</b>	<b>7</b>	<b>141</b>

**EXHIBITS - PARTICIPANT STATISTICS**

**Retirees Medical Plan Coverage by Age – Miscellaneous**

Age	Medical Coverage				
	Single	2-Party	Family	Waived	Total
Under 50	-	-	-	-	-
50-54	-	1	-	2	3
55-59	7	13	7	4	31
60-64	10	31	7	9	57
65-69	19	41	2	8	70
70-74	37	41	1	12	91
75-79	18	28	1	3	50
80-84	11	12	-	1	24
85 & Over	11	4	-	1	16
<b>Total</b>	113	171	18	40	342
<b>Average Age</b>	73.4	70.2	62.8	67.9	70.6

**EXHIBITS - PARTICIPANT STATISTICS**

**Retirees Medical Plan Coverage by Age – Safety**

Age	Medical Coverage				
	Single	2-Party	Family	Waived	Total
Under 50	3	-	10	2	15
50-54	3	5	19	4	31
55-59	4	14	18	1	37
60-64	7	10	3	1	21
65-69	6	17	1	2	26
70-74	6	8	1	1	16
75-79	4	6	-	1	11
80-84	6	3	-	-	9
85 & Over	2	-	-	-	2
<b>Total</b>	41	63	52	12	168
<b>Average Age</b>	68.0	65.7	53.7	58.9	62.1



**EXHIBITS - ACTUARIAL ASSUMPTIONS**

<b>Assumption</b>	<b>6/30/18 Valuation</b>	<b>6/30/20 Valuation</b>
■ Valuation Date	<ul style="list-style-type: none"> <li>■ June 30, 2018</li> <li>■ 2019/20 &amp; 2020/21 fiscal years</li> </ul>	<ul style="list-style-type: none"> <li>■ June 30, 2020</li> <li>■ 2021/22 &amp; 2022/23 fiscal years</li> </ul>
■ Funding Policy	■ Full ADC pre-funding	■ Same
■ General Inflation	<ul style="list-style-type: none"> <li>■ 2.75%</li> <li>■ Used for economic assumptions</li> </ul>	■ Same
■ Discount Rate	■ 6.75% – Pre-funded with CalPERS CERBT Asset Strategy #1	<ul style="list-style-type: none"> <li>■ 6.25% – Pre-funded with CalPERS CERBT Asset Strategy #2</li> <li>■ Sensitivity included for CERBT Strategy #1</li> </ul>
■ Payroll Increases	<ul style="list-style-type: none"> <li>■ Aggregate Increases – 3.00%</li> <li>■ Merit Increases – CalPERS 1997-2015 Experience Study</li> </ul>	■ Same

**EXHIBITS - ACTUARIAL ASSUMPTIONS**

<b>Assumption</b>	<b>6/30/18 Valuation</b>		<b>6/30/20 Valuation</b>			
■ Medical Trend	<u>Increase from Prior Year</u>		<u>Increase from Prior Year</u>			
	<u>Year</u>	Pre-Medicare	Post-Medicare	Calendar Year	Pre-Medicare	Post-Medicare Kaiser Other
	2018	Actual 2018 Premiums/Claims	Actual 2018 Premiums/Claims	2018	n/a	
	2019	Actual 2019 Premiums/Claims	Actual 2019 Premiums/Claims	2019	n/a	
	2020	Actual 2020 Premiums/Claims	Actual 2020 Premiums/Claims	2020	Actual 2020 Premiums	
	2021	7.25%	6.30%	2021	Actual 2021 Premiums	
	2022	7.00%	6.10%	2022	7.00%	5.00% 6.10%
	2023	6.75%	5.90%	2023	6.75%	4.85% 5.90%
	2024	6.50%	5.70%	2024	6.50%	4.70% 5.70%
	2025	6.25%	5.50%	2025	6.25%	4.60% 5.50%
	2026	6.00%	5.30%	2026	6.00%	4.50% 5.30%
	2027	5.80%	5.15%	2027	5.80%	4.45% 5.15%
	2028	5.60%	5.00%	2028	5.60%	4.40% 5.00%
	2029	5.40%	4.85%	2029	5.40%	4.35% 4.85%
	2030	5.20%	4.70%	2030	5.20%	4.30% 4.70%
	2031-35	5.05%	4.60%	2031-35	5.05%	4.25% 4.60%
	2036-45	4.90%	4.50%	2036-45	4.90%	4.20% 4.50%
	2046-55	4.75%	4.45%	2046-55	4.75%	4.15% 4.45%
	2056-65	4.60%	4.40%	2056-65	4.60%	4.10% 4.40%
	2066-75	4.30%	4.20%	2066-75	4.30%	4.05% 4.20%
2076+	4.00%	4.00%	2076+	4.00%	4.00% 4.00%	

**EXHIBITS - ACTUARIAL ASSUMPTIONS**

<b>Assumption</b>	<b>6/30/18 Valuation</b>	<b>6/30/20 Valuation</b>																				
■ Cap Increase	■ 0%	■ Same																				
■ PEMHCA Minimum for CCRS Retirees per AB 2544	<p align="center">PEMHCA</p> <table border="0"> <tr> <td><u>Year</u></td> <td><u>Minimum</u></td> </tr> <tr> <td>2018</td> <td>\$133.00</td> </tr> <tr> <td>2019</td> <td>136.00</td> </tr> <tr> <td>2020</td> <td>139.00</td> </tr> <tr> <td>2021+</td> <td>Increases 4.25%/yr.</td> </tr> </table>	<u>Year</u>	<u>Minimum</u>	2018	\$133.00	2019	136.00	2020	139.00	2021+	Increases 4.25%/yr.	<p align="center">PEMHCA</p> <table border="0"> <tr> <td><u>Year</u></td> <td><u>Minimum</u></td> </tr> <tr> <td>2020</td> <td>\$139.00</td> </tr> <tr> <td>2021</td> <td>143.00</td> </tr> <tr> <td>2022</td> <td>149.00</td> </tr> <tr> <td>2023+</td> <td>Increases 4.25%/yr.</td> </tr> </table>	<u>Year</u>	<u>Minimum</u>	2020	\$139.00	2021	143.00	2022	149.00	2023+	Increases 4.25%/yr.
<u>Year</u>	<u>Minimum</u>																					
2018	\$133.00																					
2019	136.00																					
2020	139.00																					
2021+	Increases 4.25%/yr.																					
<u>Year</u>	<u>Minimum</u>																					
2020	\$139.00																					
2021	143.00																					
2022	149.00																					
2023+	Increases 4.25%/yr.																					
■ Administrative Expenses	<ul style="list-style-type: none"> <li>■ PEMHCA: 0.27% of estimated retiree premiums</li> <li>■ CERBT: 0.05% of assets</li> <li>■ Included in ADC</li> </ul>	<ul style="list-style-type: none"> <li>■ PEMHCA: 0.25% of estimated retiree premiums</li> <li>■ CERBT: 0.05% of assets</li> <li>■ Included in ADC</li> </ul>																				

**EXHIBITS - ACTUARIAL ASSUMPTIONS**

<b>Assumption</b>	<b>6/30/18 Valuation</b>	<b>6/30/20 Valuation</b>
■ Mortality, Withdrawal, Disability	<ul style="list-style-type: none"> <li>■ CalPERS 1997-2015 Experience Study</li> <li>■ Fully generational mortality improvement Scale MP-2018</li> </ul>	<ul style="list-style-type: none"> <li>■ CalPERS 1997-2015 Experience Study</li> <li>■ Fully generational mortality improvement Scale MP-2020</li> </ul>
■ Affordable Care Act (ACA) Excise Tax	■ 2.0% liability load on cash subsidy to estimate impact	<ul style="list-style-type: none"> <li>■ N/A</li> <li>■ Repealed in 2019</li> </ul>
■ Active Employee Participation at Retirement	<ul style="list-style-type: none"> <li>■ Currently covered – 100%</li> <li>■ Currently waived – 80%</li> <li>■ PEMHCA Minimum Only – 60%</li> </ul>	■ Same
■ Waived retiree re-election	<ul style="list-style-type: none"> <li>■ Currently &lt; 65: 20% re-elect coverage at age 65</li> <li>■ Currently ≥ 65: 0%</li> </ul>	■ Same

**EXHIBITS - ACTUARIAL ASSUMPTIONS**

<b>Assumption</b>	<b>6/30/18 Valuation</b>	<b>6/30/20 Valuation</b>																																														
<ul style="list-style-type: none"> <li>■ Medical Plan at Retirement</li> </ul>	<ul style="list-style-type: none"> <li>■ Currently covered – Same as current election</li> <li>■ Currently waived – Kaiser</li> </ul>	<ul style="list-style-type: none"> <li>■ Same</li> </ul>																																														
<ul style="list-style-type: none"> <li>■ Retirement</li> </ul>	<ul style="list-style-type: none"> <li>■ CalPERS 1997-2015 Experience Study                             <ul style="list-style-type: none"> <li>● DOH&lt;1/1/13:</li> </ul> <table border="1" style="margin-left: 40px; border-collapse: collapse;"> <thead> <tr> <th rowspan="2"></th> <th colspan="2">Misc</th> <th rowspan="2">Police</th> </tr> <tr> <th>DOH &lt;11/29/10</th> <th>DOH ≥11/29/10</th> </tr> </thead> <tbody> <tr> <td>Level</td> <td>2.5%@55</td> <td>2.0%@55</td> <td>3%@50</td> </tr> <tr> <td>ERA</td> <td>60</td> <td>61</td> <td>54</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>● DOH≥1/1/13 (PEPRA):</li> </ul> <table border="1" style="margin-left: 40px; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Misc</th> <th>Police</th> </tr> </thead> <tbody> <tr> <td>Level</td> <td>2%@62</td> <td>2.7%@57</td> </tr> <tr> <td>ERA</td> <td>62</td> <td>56</td> </tr> </tbody> </table> </li></ul>		Misc		Police	DOH <11/29/10	DOH ≥11/29/10	Level	2.5%@55	2.0%@55	3%@50	ERA	60	61	54		Misc	Police	Level	2%@62	2.7%@57	ERA	62	56	<ul style="list-style-type: none"> <li>■ CalPERS 1997-2015 Experience Study                             <ul style="list-style-type: none"> <li>● DOH&lt;1/1/13:</li> </ul> <table border="1" style="margin-left: 40px; border-collapse: collapse;"> <thead> <tr> <th rowspan="2"></th> <th colspan="2">Misc</th> <th rowspan="2">Police</th> </tr> <tr> <th>DOH &lt;11/29/10</th> <th>DOH ≥11/29/10</th> </tr> </thead> <tbody> <tr> <td>Level</td> <td>2.5%@55</td> <td>2.0%@55</td> <td>3%@50</td> </tr> <tr> <td>ERA</td> <td>61</td> <td>62</td> <td>54</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>● DOH≥1/1/13 (PEPRA):</li> </ul> <table border="1" style="margin-left: 40px; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Misc</th> <th>Police</th> </tr> </thead> <tbody> <tr> <td>Level</td> <td>2%@62</td> <td>2.7%@57</td> </tr> <tr> <td>ERA</td> <td>62</td> <td>56</td> </tr> </tbody> </table> </li></ul>		Misc		Police	DOH <11/29/10	DOH ≥11/29/10	Level	2.5%@55	2.0%@55	3%@50	ERA	61	62	54		Misc	Police	Level	2%@62	2.7%@57	ERA	62	56
	Misc		Police																																													
	DOH <11/29/10	DOH ≥11/29/10																																														
Level	2.5%@55	2.0%@55	3%@50																																													
ERA	60	61	54																																													
	Misc	Police																																														
Level	2%@62	2.7%@57																																														
ERA	62	56																																														
	Misc		Police																																													
	DOH <11/29/10	DOH ≥11/29/10																																														
Level	2.5%@55	2.0%@55	3%@50																																													
ERA	61	62	54																																													
	Misc	Police																																														
Level	2%@62	2.7%@57																																														
ERA	62	56																																														

**EXHIBITS - ACTUARIAL ASSUMPTIONS**

<b>Assumption</b>	<b>6/30/18 Valuation</b>	<b>6/30/20 Valuation</b>
<ul style="list-style-type: none"> <li>■ Medicare Eligible Rate</li> </ul>	<ul style="list-style-type: none"> <li>■ 100%</li> <li>■ Everyone eligible for Medicare will elect Part B coverage</li> </ul>	<ul style="list-style-type: none"> <li>■ Same</li> </ul>
<ul style="list-style-type: none"> <li>■ Spouse Coverage at Retirement</li> </ul>	<ul style="list-style-type: none"> <li>■ Currently covered – Current spouse coverage</li> <li>■ Currently waived – 80% covered</li> </ul>	<ul style="list-style-type: none"> <li>■ Same</li> </ul>
<ul style="list-style-type: none"> <li>■ Spouse Age</li> </ul>	<ul style="list-style-type: none"> <li>■ Actives – Males 3 years older than females</li> <li>■ Retirees – Males 3 years older than females if birth date not available</li> </ul>	<ul style="list-style-type: none"> <li>■ Same</li> </ul>
<ul style="list-style-type: none"> <li>■ Dependents at Retirement</li> </ul>	<ul style="list-style-type: none"> <li>■ Pre-65 Family Coverage:                             <ul style="list-style-type: none"> <li>● Misc – 20%</li> <li>● Safety – 40%</li> </ul> </li> <li>■ No Family Coverage for 65+</li> </ul>	<ul style="list-style-type: none"> <li>■ Same</li> </ul>

**EXHIBITS - ACTUARIAL ASSUMPTIONS**

<b>Assumption</b>	<b>6/30/18 Valuation</b>	<b>6/30/20 Valuation</b>
<ul style="list-style-type: none"> <li>■ Age-Based Claims Costs</li> </ul>	<ul style="list-style-type: none"> <li>■ Age-based claims costs included for all PEMHCA medical plans</li> </ul>	<ul style="list-style-type: none"> <li>■ Due to age-risk adjusted federal subsidies to Medicare Advantage plans, no age-based claims costs were included for these plans (Anthem Medicare Preferred, Kaiser Senior Advantage, UnitedHealthcare Group Medicare Advantage Plan)</li> </ul>

**EXHIBITS - ACTUARIAL ASSUMPTIONS**

<b>Assumption</b>	<b>June 30, 2020 Valuation</b>																																																																														
<ul style="list-style-type: none"> <li>■ HMO Medical Claims Costs 2021</li> </ul> PEMHCA Implied Subsidy Estimate	<ul style="list-style-type: none"> <li>■ Age-based claims are based on factors developed by Axene Health Partners' healthcare actuaries, demographic data from CalPERS, and PEMHCA premiums. Sample monthly claims costs:</li> </ul> <table border="1" data-bbox="490 1409 1399 1675"> <thead> <tr> <th colspan="9">Region 1 – Non-Medicare Eligible</th> </tr> <tr> <th rowspan="2">Age</th> <th colspan="2">Anthem Select</th> <th colspan="2">Anthem Trad.</th> <th colspan="2">HN Smartcare</th> <th colspan="2">Kaiser</th> </tr> <tr> <th>M</th> <th>F</th> <th>M</th> <th>F</th> <th>M</th> <th>F</th> <th>M</th> <th>F</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>\$340</td> <td>\$596</td> <td>\$443</td> <td>\$777</td> <td>\$380</td> <td>\$665</td> <td>\$298</td> <td>\$522</td> </tr> <tr> <td>35</td> <td>434</td> <td>735</td> <td>566</td> <td>960</td> <td>484</td> <td>821</td> <td>380</td> <td>645</td> </tr> <tr> <td>45</td> <td>620</td> <td>902</td> <td>808</td> <td>1,178</td> <td>691</td> <td>1,008</td> <td>543</td> <td>791</td> </tr> <tr> <td>55</td> <td>1,028</td> <td>1,197</td> <td>1,341</td> <td>1,563</td> <td>1,147</td> <td>1,337</td> <td>902</td> <td>1,049</td> </tr> <tr> <td>60</td> <td>1,297</td> <td>1,360</td> <td>1,692</td> <td>1,776</td> <td>1,447</td> <td>1,519</td> <td>1,138</td> <td>1,192</td> </tr> </tbody> </table>								Region 1 – Non-Medicare Eligible									Age	Anthem Select		Anthem Trad.		HN Smartcare		Kaiser		M	F	M	F	M	F	M	F	25	\$340	\$596	\$443	\$777	\$380	\$665	\$298	\$522	35	434	735	566	960	484	821	380	645	45	620	902	808	1,178	691	1,008	543	791	55	1,028	1,197	1,341	1,563	1,147	1,337	902	1,049	60	1,297	1,360	1,692	1,776	1,447	1,519	1,138	1,192
Region 1 – Non-Medicare Eligible																																																																															
Age	Anthem Select		Anthem Trad.		HN Smartcare		Kaiser																																																																								
	M	F	M	F	M	F	M	F																																																																							
25	\$340	\$596	\$443	\$777	\$380	\$665	\$298	\$522																																																																							
35	434	735	566	960	484	821	380	645																																																																							
45	620	902	808	1,178	691	1,008	543	791																																																																							
55	1,028	1,197	1,341	1,563	1,147	1,337	902	1,049																																																																							
60	1,297	1,360	1,692	1,776	1,447	1,519	1,138	1,192																																																																							

**EXHIBITS - ACTUARIAL ASSUMPTIONS**

Assumption	June 30, 2020 Valuation								
<p>■ PPO Medical Claims Costs 2021</p> <p>PEMHCA Implied Subsidy Estimate</p>	<p>■ Age-based claims are based on factors developed by Axene Health Partners' healthcare actuaries, demographic data from CalPERS, and PEMHCA premiums. Sample monthly claims costs:</p>								
	Region 1 – Non-Medicare Eligible								
	<u>Age</u>	<u>PERS Choice</u>		<u>PERS Select</u>		<u>PERSCare</u>		<u>PORAC</u>	
	<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>	
25	\$268	\$500	\$196	\$381	\$349	\$639	\$312	\$565	
35	353	628	262	483	455	798	405	705	
45	525	784	401	608	670	991	590	872	
55	914	1,063	717	834	1,148	1,333	1,002	1,171	
60	1,173	1,220	928	963	1,466	1,525	1,275	1,337	
Region 1 – Medicare Eligible									
<u>Age</u>	<u>PERS Choice</u>		<u>PERS Select</u>		<u>PERSCare</u>		<u>PORAC</u>		
	<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>	
65	\$273	\$333	\$273	\$333	\$290	\$354	\$398	\$481	
70	305	374	305	374	324	397	445	540	
75	329	404	329	404	349	428	478	583	
80	341	422	341	422	361	447	496	609	

**EXHIBITS - ACTUARIAL METHODS**

Method	June 30, 2018 Valuation	June 30, 2020 Valuation
■ Cost Method	■ Entry Age Normal	
■ Actuarial Value of Assets	<p>■ Investment gains and losses spread over a 5-year rolling period</p> <p>■ Corridor: 80% &amp; 120% of market value</p>	
■ Amortization Method	■ Level Percent of Payroll	■ Same
■ Amortization Periods	■ 20-year fixed (closed) amortization	■ 18-year fixed (closed) amortization
■ Implied Subsidy	■ Employer cost for allowing retirees to participate at active rates	
■ Future New Entrants	<p>■ Valuation Results: Closed Group, no new hires</p> <p>■ Projections: Simplified open group projection:</p> <ul style="list-style-type: none"> <li>● Actives: Total pay increased in accordance with aggregate payroll assumptions</li> <li>● Retirees: No additional retirees from new hires over 10-year projection period</li> </ul>	

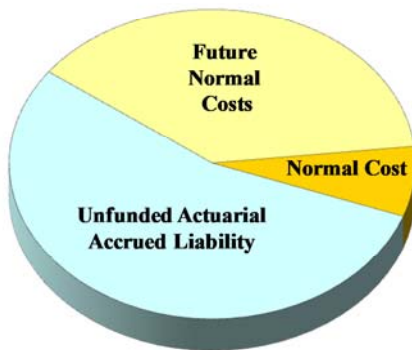
## EXHIBITS - DEFINITIONS

<ul style="list-style-type: none"> <li>■ OPEB Actuarial Valuation</li> </ul>	<ul style="list-style-type: none"> <li>■ Project future employer-provided benefit cash flows for current active employees and current retirees</li> <li>■ 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)</li> <li>■ Allocate PVB to past, current, and future periods using the actuarial cost method</li> <li>■ 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)</li> <li>■ Normal Cost (NC) is amount allocated to current fiscal year for active employees</li> <li>■ Actuarial Accrued Liability (AAL) is amount allocated to prior service with employer</li> <li>■ Unfunded AAL (UAAL) is AAL less plan assets pre-funded in a segregated and restricted trust</li> </ul>
<ul style="list-style-type: none"> <li>■ PayGo Cost</li> </ul>	<ul style="list-style-type: none"> <li>■ Cash subsidy is the pay-as-you-go employer benefit payments for retirees</li> <li>■ Implied subsidy is the difference between the actual cost of retiree benefits and retiree premiums subsidized by active employee premiums</li> </ul>

## EXHIBITS - DEFINITIONS

### Present Value of Benefits

**Present Value of Benefits  
(Without Plan Assets)**



**Present Value of Benefits  
(With Plan Assets)**

