



**CITY OF THOUSAND OAKS
RETIREE HEALTHCARE PLAN**

June 30, 2019 Actuarial Valuation
Final Results

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February 25, 2020

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BENEFIT SUMMARY

<p>■ Eligibility</p>	<ul style="list-style-type: none"> • Retire directly from City under CalPERS (service or disability) • Designated Part-Time employees eligible¹ • City Council members eligible if in CalPERS
<p>■ Retiree Healthcare Benefit</p>	<ul style="list-style-type: none"> • Employees <ul style="list-style-type: none"> ➢ City maximum payment is \$435 per month but not less than PEMHCA minimum amount² • City Council members, City Manager, and City Attorney <ul style="list-style-type: none"> ➢ City pays full premium if elected or hired before 1/1/12 ➢ City pays PEMHCA minimum amount if elected or hired on or after 1/1/12 • No City contribution for retirees not participating in PEMHCA

¹ Designated Part-Time (DPT) employees fill permanent part-time positions with 20 to 30 scheduled hours per week.

² City maximum payment has been \$435 per month since 2006.



BENEFIT SUMMARY

<p>■ PEMHCA Minimum Amount</p>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;"><u>Year</u></th> <th style="text-align: center;"><u>PEMHCA Minimum³</u></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">2019</td> <td style="text-align: center;">\$136 / month</td> </tr> <tr> <td style="text-align: center;">2020</td> <td style="text-align: center;">\$139 / month</td> </tr> <tr> <td style="text-align: center;">2021</td> <td style="text-align: center;">\$143 / month (Estimated)</td> </tr> <tr> <td style="text-align: center;">2022+</td> <td style="text-align: center;">Medical CPI increases</td> </tr> </tbody> </table>	<u>Year</u>	<u>PEMHCA Minimum³</u>	2019	\$136 / month	2020	\$139 / month	2021	\$143 / month (Estimated)	2022+	Medical CPI increases
<u>Year</u>	<u>PEMHCA Minimum³</u>										
2019	\$136 / month										
2020	\$139 / month										
2021	\$143 / month (Estimated)										
2022+	Medical CPI increases										
<p>■ Surviving Spouse Benefit</p>	<ul style="list-style-type: none"> • Retiree benefit paid to surviving spouse of retiree who elected CalPERS joint & survivor payment option • Retiree benefit paid to spouse of active employee who died while eligible to retire receiving CalPERS survivor benefit 										

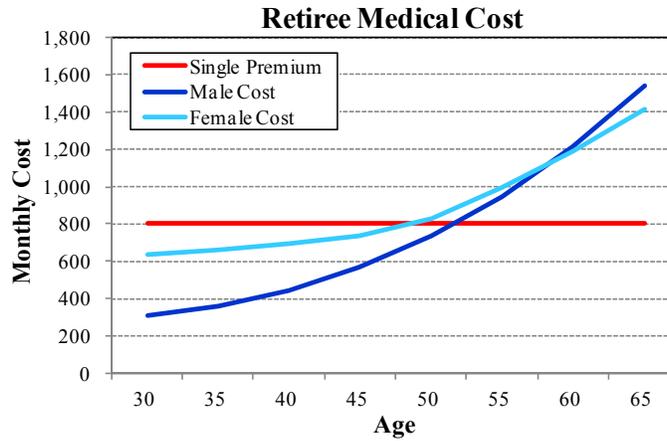
³The PEMHCA minimum amount is increased annually to reflect the medical care component of CPI-U for the second year preceding the calendar year for which the PEMHCA minimum amount is effective, rounded to the nearest dollar. The expected PEMHCA minimum amount for 2021 is \$143 per month. CalPERS had not issued a Circular Letter regarding the 2021 PEMHCA minimum amount at the time this valuation was completed.



BENEFIT SUMMARY

■ Implicit Subsidy

- Retirees pay blended medical premiums rather than expected medical costs by age and gender
- Active premiums subsidize non-Medicare eligible retiree medical costs (“implicit subsidy”)



- Implicit subsidy required by Actuarial Standards of Practice for actuarial valuations for PEMHCA plans with measurement dates after 3/31/15

BENEFIT SUMMARY



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FUNDING POLICY

<p>■ Funding Policy</p>	<ul style="list-style-type: none"> • Contribute at least full ADC⁴ with OPEB trust (CERBT Investment Strategy #1) • Cash subsidy benefit payments are paid by the City and reimbursed by the OPEB trust • PEMHCA administrative fees are paid by the City and not reimbursed by the OPEB trust • Implicit subsidy benefit payments are currently paid by the City through active premiums and not reimbursed by the OPEB trust • Unfunded Liability amortized over 16 years for the 2020/21 ADC 																																																	
<p>■ Pay-As-You-Go Cost⁵</p>	<table border="1"> <thead> <tr> <th><u>Fiscal Year</u></th> <th><u>Cash Subsidy</u></th> <th><u>Implicit Subsidy</u></th> <th><u>PEMHCA Fees</u></th> <th><u>Total PayGo</u></th> <th><u>Trust Paid</u></th> <th><u>City Paid</u></th> </tr> </thead> <tbody> <tr> <td>2018/19</td> <td>\$1,395,303</td> <td>\$285,312</td> <td>\$4,637</td> <td>\$1,685,252</td> <td>\$1,395,303</td> <td>\$289,949</td> </tr> <tr> <td>2017/18</td> <td>1,381,000</td> <td>269,000</td> <td>6,000</td> <td>1,656,000</td> <td>1,381,000</td> <td>275,000</td> </tr> <tr> <td>2016/17</td> <td>1,342,000</td> <td>285,000</td> <td>n/a</td> <td>1,627,000</td> <td>1,342,000</td> <td>285,000</td> </tr> <tr> <td>2015/16</td> <td>1,288,000</td> <td>275,000</td> <td>n/a</td> <td>1,563,000</td> <td>1,288,000</td> <td>275,000</td> </tr> <tr> <td>2014/15</td> <td>1,212,000</td> <td>n/a</td> <td>n/a</td> <td>1,212,000</td> <td>1,212,000</td> <td>n/a</td> </tr> <tr> <td>2013/14</td> <td>1,180,000</td> <td>n/a</td> <td>n/a</td> <td>1,180,000</td> <td>1,180,000</td> <td>n/a</td> </tr> </tbody> </table>	<u>Fiscal Year</u>	<u>Cash Subsidy</u>	<u>Implicit Subsidy</u>	<u>PEMHCA Fees</u>	<u>Total PayGo</u>	<u>Trust Paid</u>	<u>City Paid</u>	2018/19	\$1,395,303	\$285,312	\$4,637	\$1,685,252	\$1,395,303	\$289,949	2017/18	1,381,000	269,000	6,000	1,656,000	1,381,000	275,000	2016/17	1,342,000	285,000	n/a	1,627,000	1,342,000	285,000	2015/16	1,288,000	275,000	n/a	1,563,000	1,288,000	275,000	2014/15	1,212,000	n/a	n/a	1,212,000	1,212,000	n/a	2013/14	1,180,000	n/a	n/a	1,180,000	1,180,000	n/a
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⁴ Actuarially Determined Contribution (ADC) is GASBS 75's terminology for the recommended funding contribution.

⁵ Implicit subsidy is not applicable prior to the 6/30/15 valuation that determined the 2015/16 and 2016/17 ADCs. PEMHCA administrative fees were not available for years prior to 2017/18.

FUNDING POLICY

<p>■ City Contributions⁶</p>	<table border="1"> <thead> <tr> <th><u>Fiscal Year</u></th> <th><u>City PayGo</u></th> <th><u>Trust Prefund</u></th> <th><u>Total Contrib</u></th> <th><u>ADC</u></th> <th><u>Discount Rate</u></th> </tr> </thead> <tbody> <tr> <td>2018/19</td> <td>\$289,949</td> <td>\$2,001,461</td> <td>\$2,291,410</td> <td>\$1,501,000</td> <td>6.75%</td> </tr> <tr> <td>2017/18</td> <td>275,000</td> <td>2,125,000</td> <td>2,400,000</td> <td>1,455,000</td> <td>6.75%</td> </tr> <tr> <td>2016/17</td> <td>285,000</td> <td>2,062,000</td> <td>2,347,000</td> <td>1,618,000</td> <td>7.25%</td> </tr> <tr> <td>2015/16</td> <td>275,000</td> <td>1,913,000</td> <td>2,188,000</td> <td>1,568,000</td> <td>7.25%</td> </tr> <tr> <td>2014/15</td> <td>n/a</td> <td>1,791,000</td> <td>1,791,000</td> <td>1,275,000</td> <td>7.00%</td> </tr> <tr> <td>2013/14</td> <td>n/a</td> <td>1,320,000</td> <td>1,320,000</td> <td>1,249,000</td> <td>7.00%</td> </tr> </tbody> </table>	<u>Fiscal Year</u>	<u>City PayGo</u>	<u>Trust Prefund</u>	<u>Total Contrib</u>	<u>ADC</u>	<u>Discount Rate</u>	2018/19	\$289,949	\$2,001,461	\$2,291,410	\$1,501,000	6.75%	2017/18	275,000	2,125,000	2,400,000	1,455,000	6.75%	2016/17	285,000	2,062,000	2,347,000	1,618,000	7.25%	2015/16	275,000	1,913,000	2,188,000	1,568,000	7.25%	2014/15	n/a	1,791,000	1,791,000	1,275,000	7.00%	2013/14	n/a	1,320,000	1,320,000	1,249,000	7.00%
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⁶ The 6/30/13 actuarial valuation prepared by the prior actuary determined the ADCs for 2013/14 and 2014/15.

PARTICIPANT SUMMARY

Participants

Participants	6/30/13		6/30/15		6/30/17		6/30/19	
■ Actives								
• Participating	n/a	n/a	276	76%	272	77%	283	78%
• Waived Coverage	<u>n/a</u>	<u>n/a</u>	<u>87</u>	<u>24%</u>	<u>81</u>	<u>23%</u>	<u>80</u>	<u>22%</u>
• Total Actives	371	n/a	363	100%	353	100%	363	100%
• Average Age	n/a		49.8		49.2		48.2	
• Average City Service	n/a		13.9		13.1		12.1	
• Total Payroll (000's) ⁷	n/a		27,668		29,555		29,479	
■ Retirees								
• Participating	234	n/a	254	81%	274	81%	284	80%
• Waived Coverage	<u>n/a</u>	<u>n/a</u>	<u>59</u>	<u>19%</u>	<u>64</u>	<u>19%</u>	<u>70</u>	<u>20%</u>
• Total Retirees	n/a	n/a	313	100%	338	100%	354	100%
• Average Age	n/a		70.4		70.4		71.1	
• Ave Service Retire Age	n/a		60.7		60.7		60.7	
• Ave Disabled Retire Age	n/a		46.2		45.9		46.1	

⁷City provided \$29,478,799 total 2018/19 PERSable payroll with active census data for 6/30/19 OPEB valuation.

PARTICIPANT SUMMARY

Participant Reconciliation

Participants	Actives	Retirees			
		Service	Disabled	Survivors	Total
■ June 30, 2017					
• Terminations ⁸	(23)	-	-	-	-
• New Retirees & Survivors	(35)	35	0	0	35
• Retiree Deaths with Survivor	-	(6)	(1)	7	-
• Retiree Deaths without Survivor ⁹	-	(14)	(2)	(3)	(19)
• New Participants	68	-	-	-	-
■ June 30, 2019					
	363	297	16	41	354

⁸ Active employees reported for the 6/30/17 valuation and not reported for the 6/30/19 valuation were assumed to be terminations and deaths before retirement.

⁹ Retirees reported for the 6/30/17 valuation and not reported for the 6/30/19 valuation were assumed to be deaths without covered survivors.

ASSETS

Cash Market Value of Plan Assets¹⁰

(Amounts in 000's)

CERBT OPEB Trust	2015/16	2016/17	2017/18	2018/19
■ Market Value at Beginning of Year	\$12,064	\$13,136	\$15,243	\$17,213
• City Trust Contributions	2,214	2,062	2,125	2,001
• Investment Earnings	146	1,395	1,224	1,092
• Benefit Payments	(1,278)	(1,338)	(1,367)	(1,382)
• Investment Expenses	(4)	(5)	(6)	(6)
• CERBT Administrative Expenses	<u>(6)</u>	<u>(7)</u>	<u>(8)</u>	<u>(9)</u>
■ Market Value at End of Year	13,136	15,243	17,213	18,910
• Accrued City Trust Contributions	0	0	0	0
• Accrued Benefit Payments	<u>(329)</u>	<u>(333)</u>	<u>(348)</u>	<u>(362)</u>
■ Accrued Market Value at End of Year	12,807	14,910	16,864	18,548
■ Estimated Net Annual Return	1.1%	10.4%	7.9%	6.2%
■ CERBT #1 Net Annual Return¹¹	1.0%	10.6%	8.0%	6.2%

¹⁰ Numbers may not add due to rounding.

¹¹ From CalPERS Investment Committee's "CalPERS Trust Level Monthly Update - Performance & Risk" for 6/30 year-ends.

ASSETS

Accrued Market Value of Plan Assets

(Amounts in 000's)

Accrued Market Value of Assets	2015/16	2016/17	2017/18	2018/19
■ Market Value at Beginning of Year	\$12,047	\$12,807	\$14,910	\$16,864
• City Contributions				
➢ Trust Prefunding Contributions	1,913	2,062	2,125	2,001
➢ City Cash Subsidy Benefit Payments	0	0	0	0
➢ City Implicit Subsidy Benefit Payments	275	285	269	285
➢ PEMHCA Administrative Fees	<u>n/a</u>	<u>n/a</u>	<u>6</u>	<u>5</u>
➢ Total Contributions	2,188	2,347	2,400	2,291
• Investment Earnings	146	1,395	1,224	1,092
• Benefit Payments				
➢ Cash Subsidy Benefit Payments	(1,288)	(1,342)	(1,381)	(1,395)
➢ Implicit Subsidy Benefit Payments	<u>(275)</u>	<u>(285)</u>	<u>(269)</u>	<u>(285)</u>
➢ Total Benefit Payments	(1,563)	(1,627)	(1,650)	(1,681)
• Investment Expenses	(4)	(5)	(6)	(6)
• CERBT Administrative Expenses	(6)	(7)	(8)	(9)
• PEMHCA Administrative Fees	n/a	n/a	(6)	(5)
■ Market Value at End of Year	12,807	14,910	16,864	18,548

ASSETS

Actuarial Value of Plan Assets

(Amounts in 000's)

Actuarial Value of Assets	2015/16	2016/17	2017/18	2018/19
■ Actuarial Value at Beginning of Year	\$11,974	\$13,352	\$15,034	\$16,823
• City Contributions	2,188	2,347	2,400	2,291
• Expected Net Earnings	889	994	1,042	1,166
• Benefit Payments	(1,563)	(1,627)	(1,650)	(1,681)
• Administrative Expenses	n/a	n/a	(14)	(13)
■ Expected AVA at End of Year	13,488	15,066	16,813	18,586
■ Accrued Market Value at End of Year	12,807	14,910	16,864	18,548
■ MVA - Expected AVA	(681)	(156)	51	(38)
■ 1/5 of (MVA - Expected AVA)	(136)	(31)	10	(7)
■ Preliminary AVA	13,352	15,034	16,823	18,579
■ Minimum AVA (80% of MVA)	10,246	11,928	13,491	14,838
■ Maximum AVA (120% of MVA)	15,369	17,892	20,237	22,257
■ Actuarial Value at End Year	13,352	15,034	16,823	18,579
■ Actuarial Value Estimated Net Return	6.1%	7.0%	6.8%	6.7%
■ AVA/MVA	104%	101%	100%	100%

ASSETS



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VALUATION RESULTS

Actuarial Obligations

Actuarial Obligations (Amounts in 000's)	6/30/17 Valuation		6/30/19 Valuation		
	Actual 6/30/17	Projected 6/30/19	Actual 6/30/19	Projected 6/30/20	Projected 6/30/21
■ Discount Rate	6.75%	6.75%	6.75%	6.75%	6.75%
■ Present Value of Benefits					
• Actives	\$13,608	\$ n/a	\$13,343	n/a	n/a
• Retirees	<u>15,906</u>	<u>n/a</u>	<u>15,954</u>	<u>n/a</u>	<u>n/a</u>
• Total	29,514	30,176	29,297	\$29,609	\$29,805
■ Actuarial Accrued Liability					
• Actives	8,920	n/a	8,649	n/a	n/a
• Retirees	<u>15,906</u>	<u>n/a</u>	<u>15,954</u>	<u>n/a</u>	<u>n/a</u>
• Total	24,826	26,290	24,603	25,274	25,874
■ Actuarial Value of Assets	<u>15,034</u>	<u>16,645</u>	<u>18,579</u>	<u>19,333</u>	<u>20,037</u>
■ Unfunded AAL	9,792	9,645	6,024	5,941	5,837
■ Funded Percentage	60.6%	63.3%	75.5%	76.5%	77.4%
■ Annual Cost for Following Year					
• Normal Cost	695	737	677	697	718
• PEMHCA Administrative Fees	7	8	6	6	7
• CERBT Administrative Expenses	<u>8</u>	<u>9</u>	<u>9</u>	<u>10</u>	<u>10</u>
• Annual Cost	710	754	692	713	735

VALUATION RESULTS

Actuarial Obligations

June 30, 2019

Actuarial Obligations (Amounts in 000's)	Cash Subsidy	Implicit Subsidy	Total Subsidy
■ Discount Rate	6.75%	6.75%	6.75%
■ Present Value of Benefits			
• Actives	\$ 9,114	\$4,229	\$13,343
• Retirees	<u>14,897</u>	<u>1,057</u>	<u>15,954</u>
• Total	24,011	5,286	29,297
■ Actuarial Accrued Liability			
• Actives	6,050	2,599	8,649
• Retirees	<u>14,897</u>	<u>1,057</u>	<u>15,954</u>
• Total	20,947	3,656	24,603
■ Actuarial Value of Assets¹²	<u>15,818</u>	<u>2,761</u>	<u>18,579</u>
■ Unfunded AAL	5,129	895	6,024
■ Annual Cost 2020/21			
• Normal Cost	483	214	697
• PEMHCA Administrative Fee	6	0	6
• CERBT Administrative Expenses	<u>9</u>	<u>1</u>	<u>10</u>
• Annual Cost	498	215	713

¹² Actuarial Value of Assets allocated to cash subsidy and implicit subsidy in proportion to Actuarial Accrued Liability.

VALUATION RESULTS

Estimated Gains & Losses

(Amounts in 000's)

Actuarial Gains & Losses	AAL	(AVA)	UAAL	Fund%
■ 6/30/17 Actual Amounts	\$24,826	\$(15,034)	\$9,792	60.6%
■ 6/30/19 Expected Amounts	26,290	(16,645)	9,645	63.3%
■ Experience Losses (Gains)				
• Actual versus expected premiums ¹³	(235)	-	(235)	
• Demographic & other	(1,162)	-	(1,162)	
• Asset loss (gain)	-	(1,934)	(1,934)	
■ Assumption Changes				
• Mortality assumption	193	-	193	
• Mortality improvement	(114)	-	(114)	
• Participation at retirement	(157)	-	(157)	
• Remove ACA high cost plan excise tax	<u>(212)</u>	<u>-</u>	<u>(212)</u>	
■ Total Changes	(1,687)	(1,934)	(3,621)	12.2%
■ 6/30/19 Actual Amounts	24,603	(18,579)	6,024	75.5%

¹³ Includes the impact of actual versus expected premiums and changes in claims aging factors.

VALUATION RESULTS

Estimated Gains & Losses

(Amounts in 000's)

Actuarial Accrued Liability Actuarial Gains & Losses	Cash Subsidy	Implicit Subsidy	Total Subsidy
■ 6/30/17 Actual Amounts	\$21,332	\$3,494	\$24,826
■ 6/30/19 Expected Amounts	22,590	3,700	26,290
■ Experience Losses (Gains)			
• Actual versus expected premiums	(395)	160	(235)
• Demographic & other	(951)	(211)	(1,162)
■ Assumption Changes			
• Mortality assumption	184	9	193
• Mortality improvement	(109)	(5)	(114)
• Participation at retirement	(160)	3	(157)
• Remove ACA high cost plan excise tax	<u>(212)</u>	<u>-</u>	<u>(212)</u>
■ Total Changes	(1,643)	(44)	(1,687)
■ 6/30/19 Actual Amounts	20,947	3,656	24,603

VALUATION RESULTS

Actuarially Determined Contributions (ADC)

(Amounts in 000's)

Actuarially Determined Contribution	<u>6/30/17 Valuation</u>			<u>6/30/19 Valuation¹⁴</u>	
	2017/18	2018/19	2019/20	2020/21	2021/22
■ Discount Rate	6.75%	6.75%	6.75%	6.75%	6.75%
■ ADC - \$					
• Annual Cost	\$ 710	\$ 732	\$754	\$ 713	\$ 735
• UAAL Amortization	<u>745</u>	<u>769</u>	<u>794</u>	<u>511</u>	<u>527</u>
• Total ADC	1,455	1,501	1,548	1,224	1,262
■ Projected Payroll¹⁵	30,442	31,355	32,296	35,001	36,051
■ ADC - %					
• Annual Cost	2.3%	2.3%	2.3%	2.0%	2.0%
• UAAL Amortization	<u>2.5%</u>	<u>2.5%</u>	<u>2.5%</u>	<u>1.5%</u>	<u>1.5%</u>
• Total ADC%	4.8%	4.8%	4.8%	3.5%	3.5%
■ UAAL Amortization Years	19	18	17	16	15

¹⁴ A 1-year lag period was introduced for the 6/30/19 valuation.

¹⁵ For 2020/21, the City's 2019/20 budgeted payroll of \$33,981,636 increased for one year using the aggregate pay increase assumption of 3% per year.

VALUATION RESULTS

Actuarially Determined Contribution (ADC)

2020/21 Fiscal Year

(Amounts in 000's)

Actuarially Determined Contribution	Cash Subsidy	Implicit Subsidy	Total Subsidy
■ Discount Rate	6.75%	6.75%	6.75%
■ ADC - \$			
• Annual Cost	\$498	\$215	\$ 713
• UAAL Amortization	<u>435</u>	<u>76</u>	<u>511</u>
• Total ADC	933	291	1,224
■ Projected Payroll	35,001	35,001	35,001
■ ADC - %			
• Annual Cost	1.4%	0.6%	2.0%
• UAAL Amortization	<u>1.3%</u>	<u>0.2%</u>	<u>1.5%</u>
• Total ADC %	2.7%	0.8%	3.5%

VALUATION RESULTS

Benefit Payment Projection

(Amounts in 000's)

Fiscal Year End	Cash Subsidy			Implicit Subsidy	Total Benefit Payments
	Current Actives	Current Retirees	Total Cash		
2020	\$ 43	\$1,308	\$1,351	\$261	\$1,612
2021	121	1,309	1,430	315	1,745
2022	197	1,342	1,539	337	1,876
2023	271	1,370	1,641	388	2,029
2024	344	1,380	1,724	415	2,139
2025	415	1,377	1,792	442	2,234
2026	479	1,351	1,830	477	2,307
2027	538	1,309	1,847	463	2,310
2028	594	1,275	1,869	469	2,338
2029	636	1,240	1,876	472	2,348
PVB ¹⁶	9,114	14,897	24,011	5,286	29,297

¹⁶ Present Value of Benefits for all years, including those after the 10 years shown. The Present Value of Benefits is the discounted value of future expected City benefit payments using the valuation discount rate.

VALUATION RESULTS



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ACTUARIAL CERTIFICATION

This report presents City of Thousand Oaks Retiree Healthcare Plan (“Plan”) June 30, 2019 actuarial valuation. The purpose of this valuation is to calculate the June 30, 2019 funded status and 2020/21 and 2021/22 Actuarially Determined Contributions and provide the basis for the City’s GASBS 75 accounting information report for the fiscal years ending on June 30, 2020 and June 30, 2021. The report may not be appropriate for other purposes.

Future valuations may differ significantly if the Plan’s experience differs from the assumptions or if there are changes in Plan design, actuarial methods, or actuarial assumptions. The scope of the valuation 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 but 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 completed using generally accepted actuarial principles and practices. As members of the American Academy of Actuaries meeting the Academy’s Qualification Standards, we certify the actuarial results and opinions herein.

Respectfully submitted,



Joseph R. D’Onofrio, FSA, EA, FCA, MAAA
Assistant Vice President
Bartel Associates, LLC
February 25, 2020



Tak Frazita, FSA, EA, FCA, MAAA
Associate Actuary
Bartel Associates, LLC
February 25, 2020

EXHIBITS

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Premiums	E-1
Participant Statistics	E-5
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PREMIUMS

2018 PEMHCA Monthly Premiums
Los Angeles

Medical Plan	Non-Medicare Eligible			Medicare Eligible		
	Single B	2-Party B/B	Family B/B/B	Single M	2-Party M/M	Family M/M/M
Anthem HMO Select	\$660.17	\$1,320.34	\$1,716.44	n/a	n/a	n/a
Anthem HMO Traditional	784.72	1,569.44	2,040.27	\$370.34	\$740.68	\$1,111.02
Blue Shield Access+	613.29	1,226.58	1,594.55	n/a	n/a	n/a
Health Net Salud y Más	404.32	808.64	1,051.23	n/a	n/a	n/a
Health Net SmartCare	577.15	1,154.30	1,500.59	n/a	n/a	n/a
Kaiser Permanente	642.70	1,285.40	1,671.02	316.34	632.68	949.02
UnitedHealthcare	602.78	1,205.56	1,567.23	330.76	661.52	992.28
PERS Choice	620.39	1,240.78	1,613.01	345.97	691.94	1,037.91
PERS Select	573.21	1,146.42	1,490.35	345.97	691.94	1,037.91
PERSCare	673.73	1,347.46	1,751.70	382.30	764.60	1,146.90

PREMIUMS

2019 PEMHCA Monthly Premiums
Los Angeles

Medical Plan	Non-Medicare Eligible			Medicare Eligible		
	Single B	2-Party B/B	Family B/B/B	Single M	2-Party M/M	Family M/M/M
Anthem HMO Select	\$627.07	\$1,254.14	\$1,630.38	n/a	n/a	n/a
Anthem HMO Traditional	878.48	1,756.96	2,284.05	\$357.44	\$714.88	\$1,072.32
Blue Shield Access+	669.75	1,339.50	1,741.35	n/a	n/a	n/a
Health Net Salud y Más	356.50	713.00	926.90	n/a	n/a	n/a
Health Net SmartCare	584.27	1,168.54	1,519.10	n/a	n/a	n/a
Kaiser Permanente	618.64	1,237.28	1,608.46	323.74	647.48	971.22
UnitedHealthcare	669.61	1,339.22	1,740.99	299.37	598.74	898.11
PERS Choice	654.50	1,309.00	1,701.70	360.41	720.82	1,081.23
PERS Select	420.77	841.54	1,094.00	360.41	720.82	1,081.23
PERSCare	843.78	1,687.56	2,193.83	394.83	789.66	1,184.49

PREMIUMS

2020 PEMHCA Monthly Premiums
Region 2

Medical Plan	Non-Medicare Eligible			Medicare Eligible		
	Single B	2-Party B/B	Family B/B/B	Single M	2-Party M/M	Family M/M/M
Anthem HMO Select	\$619.93	\$1,239.86	\$1,611.82	\$388.15	\$776.30	\$1,164.45
Anthem HMO Traditional	902.63	1,805.26	2,346.84	388.15	776.30	1,164.45
Blue Shield Access+	813.17	1,626.34	2,114.24	n/a	n/a	n/a
Blue Shield Trio	624.93	1,249.86	1,624.82	n/a	n/a	n/a
Health Net Salud y Más	392.31	784.62	1,020.01	n/a	n/a	n/a
Health Net SmartCare	648.42	1,296.84	1,685.89	n/a	n/a	n/a
Kaiser Permanente	664.39	1,328.78	1,727.41	339.43	678.86	1,018.29
UnitedHealthcare	668.31	1,336.62	1,737.61	327.03	654.06	981.09
PERS Choice	710.29	1,420.58	1,846.75	351.39	702.78	1,054.17
PERS Select	435.74	871.48	1,132.92	351.39	702.78	1,054.17
PERSCare	931.12	1,862.24	2,420.91	384.78	769.56	1,154.34

PREMIUMS

PEMHCA Monthly Premium Increases
Los Angeles/Region 2 - 2018 to 2020

Medical Plan	Actual Increases		Assumed Increases	
	Non-Medicare	Medicare	Non-Medicare	Medicare
Anthem HMO Select	(6.1%)	n/a	15.6%	n/a
Anthem HMO Traditional	15.0%	4.8%	15.6%	13.4%
Blue Shield Access+	32.6%	n/a	15.6%	n/a
Blue Shield Trio	n/a	n/a	n/a	n/a
Health Net Salud y Más	(3.0%)	n/a	15.6%	n/a
Health Net SmartCare	12.3%	n/a	15.6%	n/a
Kaiser Permanente	3.4%	7.3%	15.6%	13.4%
UnitedHealthcare	10.9%	(1.1%)	15.6%	13.4%
PERS Choice	14.5%	1.6%	15.6%	13.4%
PERS Select	(24.0%)	1.6%	15.6%	13.4%
PERSCare	38.2%	0.6%	15.6%	13.4%

PARTICIPANT STATISTICS

Medical Plan Participation
Non-Waived Participants

Medical Plan	June 30, 2017			June 30, 2019		
	Actives	Retirees		Actives	Retirees	
		< 65	≥ 65		< 65	≥ 65
Anthem HMO Select	9%	4%	0%	8%	3%	0%
Anthem HMO Traditional	0%	0%	0%	0%	0%	1%
Blue Shield Access+	6%	14%	1%	8%	10%	1%
Health Net Salud y Mas	0%	0%	0%	0%	0%	0%
Health Net SmartCare	0%	0%	0%	0%	0%	0%
Kaiser Permanente	29%	19%	12%	30%	20%	13%
UnitedHealthcare	11%	14%	8%	4%	13%	10%
PERS Choice	28%	35%	39%	24%	41%	38%
PERS Select	8%	8%	1%	19%	8%	2%
PERSCare	9%	6%	39%	7%	5%	35%
Total	100%	100%	100%	100%	100%	100%

PARTICIPANT STATISTICS

Active Medical Coverage
June 30, 2019

Medical Plan	Single	2-Party	Family	Waived	Total
Anthem HMO Select	5	7	11		23
Anthem HMO Traditional	1				1
Blue Shield Access+	9	10	4		23
Health Net Salud y Mas	1				1
Health Net SmartCare					0
Kaiser Permanente	36	26	24		86
UnitedHealthcare	4	3	3		10
PERS Choice	28	25	14		67
PERS Select	18	8	27		53
PERSCare	14	1	4		19
Waived				80	80
Total	116	80	87	80	363
Election %	41%	28%	31%		100%
Waived %				22%	

PARTICIPANT STATISTICS

Retiree Medical Coverage
June 30, 2019 - Under Age 65

Medical Plan	Single	2-Party	Family	Waived	Total
Anthem HMO Select	1	1			2
Anthem HMO Traditional					0
Blue Shield Access+	4	1	1		6
Health Net Salud y Mas					0
Health Net SmartCare					0
Kaiser Permanente	7	4	1		12
UnitedHealthcare	5	3			8
PERS Choice	16	6	3		25
PERS Select	2	3			5
PERSCare	2		1		3
Waived				23	23
Total	37	18	6	23	84
Election %	61%	29%	10%		100%
Waived %				27%	

PARTICIPANT STATISTICS

Retiree Medical Coverage
June 30, 2019 - Age 65 & Over

Medical Plan	Single	2-Party	Family	Waived	Total
Anthem HMO Select					0
Anthem HMO Traditional	1				1
Blue Shield Access+	2				2
Health Net Salud y Mas					0
Health Net SmartCare					0
Kaiser Permanente	15	15			30
UnitedHealthcare	9	13			22
PERS Choice	45	39			84
PERS Select	5				5
PERSCare	68	10	1		79
Waived				47	47
Total	145	77	1	47	270
Election %	65%	35%	0%		100%
Waived %				17%	

PARTICIPANT STATISTICS

New Retiree Participation

6/30/19 Valuation

Active Coverage	New Retiree Coverage						Participation %	
	Single	2-Party	Family	Covered	Waived	Total	Actual	Assump
Single	12	0	0	12	0	12		
2-Party	2	11	0	13	0	13		
Family	<u>1</u>	<u>0</u>	<u>4</u>	<u>5</u>	<u>0</u>	<u>5</u>		<u>Old</u>
Covered	15	11	4	30	0	30	100%	80%
Waived	<u>1</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>4</u>	<u>5</u>	20%	80%
Total	16	11	4	31	4	35		

6/30/17 and 6/30/19 Valuations

Active Coverage	New Retiree Coverage						Participation %	
	Single	2-Party	Family	Covered	Waived	Total	Actual	Assump
Single	26	0	0	26	1	27		
2-Party	3	22	0	25	2	27		
Family	<u>3</u>	<u>1</u>	<u>5</u>	<u>9</u>	<u>1</u>	<u>10</u>		<u>New</u>
Covered	32	23	5	60	4	64	94%	95%
Waived	<u>1</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>8</u>	<u>9</u>	11%	20%
Total	33	23	5	61	12	73		

PARTICIPANT STATISTICS

Retiree Actives by Age and City Service

June 30, 2019

Age	City Service							Total
	< 1	1-4	5-9	10-14	15-19	20-24	≥ 25	
< 25	2	3						5
25-29	4	15	2					21
30-34	6	21	3	3				33
35-39	8	15	5	9	4			41
40-44	4	9	4	11	8			36
45-49	3	13	4	9	6	6		41
50-54	2	8	6	10	21	7	7	61
55-59	3	6	5	14	19	9	19	75
60-64		4	4	4	8	7	10	37
≥ 65			1	6	3	1	2	13
Total	32	94	34	66	69	30	38	363

PARTICIPANT STATISTICS

Retiree Healthcare Coverage by Age Group
June 30, 2019

Age	Single	2-Party	Family	Waived	Total
Under 50	1			1	2
50-54	4		1	1	6
55-59	8	2	1	7	18
60-64	24	16	4	14	58
65-69	40	26		15	81
70-74	47	25	1	10	83
75-79	30	15		7	52
80-84	13	7		5	25
85 & Over	15	4		10	29
Total	182	95	7	70	354
Average Age	71.6	71.2	61.4	70.8	71.1
Election %	64%	34%	2%		
Waived %				20%	

ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2017 Valuation	June 30, 2019 Valuation
■ Valuation Date	<ul style="list-style-type: none"> • June 30, 2017 • 2017/18, 2018/19, and 2019/20 ADCs • ADC calculated as of beginning of the year with interest to end of year 	<ul style="list-style-type: none"> • June 30, 2019 • 2020/21 and 2021/22 ADCs • ADC calculated as of beginning of the year with interest to end of year • 1-year lag period
■ Funding Policy	<ul style="list-style-type: none"> • Contribute full ADC with CERBT #1 as percentage of payroll • Cash subsidy benefit payments reimbursed from OPEB trust 	<ul style="list-style-type: none"> • Same
■ General Inflation	<ul style="list-style-type: none"> • 2.75% • Basis for aggregate payroll and discount rate assumptions 	<ul style="list-style-type: none"> • Same

ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2017 Valuation	June 30, 2019 Valuation																																																
<ul style="list-style-type: none"> Aggregate Payroll Increases 	<ul style="list-style-type: none"> 3.00% annually Inflation plus 0.25% For Normal Cost calculation and UAAL amortization 	<ul style="list-style-type: none"> Same 																																																
<ul style="list-style-type: none"> Target Asset Allocation and Real Returns 	<ul style="list-style-type: none"> 2017 capital market assumptions 2017 CERBT #1 target asset allocation <table border="1"> <thead> <tr> <th><u>CERBT #1</u></th> <th><u>Mix</u></th> <th><u>10 Yr</u></th> <th><u>>10 Yr</u></th> </tr> </thead> <tbody> <tr> <td>Global Equity</td> <td>57%</td> <td>4.53%</td> <td>5.11%</td> </tr> <tr> <td>Fixed Income</td> <td>27%</td> <td>0.87%</td> <td>2.07%</td> </tr> <tr> <td>TIPS</td> <td>5%</td> <td>0.70%</td> <td>1.89%</td> </tr> <tr> <td>REITs</td> <td>8%</td> <td>3.76%</td> <td>3.76%</td> </tr> <tr> <td>Commodities</td> <td>3%</td> <td>0.84%</td> <td>0.84%</td> </tr> </tbody> </table>	<u>CERBT #1</u>	<u>Mix</u>	<u>10 Yr</u>	<u>>10 Yr</u>	Global Equity	57%	4.53%	5.11%	Fixed Income	27%	0.87%	2.07%	TIPS	5%	0.70%	1.89%	REITs	8%	3.76%	3.76%	Commodities	3%	0.84%	0.84%	<ul style="list-style-type: none"> 2017 capital market assumptions 2019 CERBT #1 target asset allocation <table border="1"> <thead> <tr> <th><u>CERBT #1</u></th> <th><u>Mix</u></th> <th><u>10 Yr</u></th> <th><u>>10 Yr</u></th> </tr> </thead> <tbody> <tr> <td>Global Equity</td> <td>59%</td> <td>4.82%</td> <td>5.9%</td> </tr> <tr> <td>Fixed Income</td> <td>25%</td> <td>1.47%</td> <td>2.5%</td> </tr> <tr> <td>TIPS</td> <td>5%</td> <td>1.29%</td> <td>5%</td> </tr> <tr> <td>REITs</td> <td>8%</td> <td>3.76%</td> <td>8%</td> </tr> <tr> <td>Commodities</td> <td>3%</td> <td>0.84%</td> <td>3%</td> </tr> </tbody> </table>	<u>CERBT #1</u>	<u>Mix</u>	<u>10 Yr</u>	<u>>10 Yr</u>	Global Equity	59%	4.82%	5.9%	Fixed Income	25%	1.47%	2.5%	TIPS	5%	1.29%	5%	REITs	8%	3.76%	8%	Commodities	3%	0.84%	3%
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ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2017 Valuation	June 30, 2019 Valuation																								
<ul style="list-style-type: none"> Discount Rate 	<ul style="list-style-type: none"> 6.75% 2017 capital market assumptions 2.75% assumed inflation 4 bp investment expenses with no administrative expenses 50% confidence level <table border="1"> <tbody> <tr> <td>Expected Real Return</td> <td>4.08%</td> </tr> <tr> <td>Assumed Inflation</td> <td>2.75%</td> </tr> <tr> <td>Assumed Expenses</td> <td>(0.04%)</td> </tr> <tr> <td>Expected Nominal Return</td> <td>6.79%</td> </tr> <tr> <td>Rounding Margin</td> <td>(0.04%)</td> </tr> <tr> <td>Discount Rate</td> <td>6.75%</td> </tr> </tbody> </table>	Expected Real Return	4.08%	Assumed Inflation	2.75%	Assumed Expenses	(0.04%)	Expected Nominal Return	6.79%	Rounding Margin	(0.04%)	Discount Rate	6.75%	<ul style="list-style-type: none"> 6.75% 2017 capital market assumptions 2.75% assumed inflation 5 bp investment expenses with no administrative expenses 50% confidence level <table border="1"> <tbody> <tr> <td>Expected Real Return</td> <td>4.14%</td> </tr> <tr> <td>Assumed Inflation</td> <td>2.75%</td> </tr> <tr> <td>Assumed Expenses</td> <td>(0.05%)</td> </tr> <tr> <td>Expected Nominal Return</td> <td>6.84%</td> </tr> <tr> <td>Rounding Margin</td> <td>(0.09%)</td> </tr> <tr> <td>Discount Rate</td> <td>6.75%</td> </tr> </tbody> </table>	Expected Real Return	4.14%	Assumed Inflation	2.75%	Assumed Expenses	(0.05%)	Expected Nominal Return	6.84%	Rounding Margin	(0.09%)	Discount Rate	6.75%
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Discount Rate	6.75%																									

ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2017 Valuation	June 30, 2019 Valuation
<ul style="list-style-type: none"> ■ Merit Payroll Increases 	<ul style="list-style-type: none"> • CalPERS 1997-2015 Experience Study • Added to aggregate payroll increase assumption for Normal Cost calculation 	<ul style="list-style-type: none"> • Same
<ul style="list-style-type: none"> ■ Administrative Expenses 	<ul style="list-style-type: none"> • CERBT - 0.06% of assets added to Normal Cost • PEMHCA - 0.33% of retiree premium added to Normal Cost (2017/18 PEMHCA administrative fee) 	<ul style="list-style-type: none"> • CERBT - 0.05% of assets added to Normal Cost • PEMHCA - 0.27% of retiree premium added to Normal Cost (2019/20 PEMHCA administrative fee)
<ul style="list-style-type: none"> ■ CalPERS Service 	<ul style="list-style-type: none"> • Total CalPERS service used for CalPERS demographic assumptions 	<ul style="list-style-type: none"> • Same
<ul style="list-style-type: none"> ■ PPACA Excise Tax 	<ul style="list-style-type: none"> • 1% cash subsidy load 	<ul style="list-style-type: none"> • Repealed 12/20/19

ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2017 Valuation	June 30, 2019 Valuation
<ul style="list-style-type: none"> ■ Cash Subsidy Cap Increases 	<ul style="list-style-type: none"> • No increases 	<ul style="list-style-type: none"> • Same
<ul style="list-style-type: none"> ■ Medical Trend 	<ul style="list-style-type: none"> • n/a 	<ul style="list-style-type: none"> • Short-term healthcare trend was developed in consultation with Axene Health Partners' healthcare actuaries • Long-term healthcare trend developed using Society of Actuaries' Getzen Model of Long-Run Medical Cost Trends

ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2017 Valuation			June 30, 2019 Valuation		
	Calendar Year	Increase from Prior Year		Calendar Year	Increase from Prior Year	
■ Medical Trend		Non-Medicare	Medicare		Non-Medicare	Medicare
		Premiums			n/a	
	2017			2017	n/a	
	2018	Premiums		2018	n/a	
	2019	7.50%	6.50%	2019	Premiums	
	2020	7.50%	6.50%	2020	Premiums	
	2021	7.25%	6.30%	2021	7.25%	6.30%
	2022	7.00%	6.10%	2022	7.00%	6.10%
	2023	6.75%	5.90%	2023	6.75%	5.90%
	2024	6.50%	5.70%	2024	6.50%	5.70%
	2025	6.25%	5.50%	2025	6.25%	5.50%
	2026	6.00%	5.30%	2026	6.00%	5.30%
	2027	5.80%	5.15%	2027	5.80%	5.15%
	2028	5.60%	5.00%	2028	5.60%	5.00%
	2029	5.40%	4.85%	2029	5.40%	4.85%
	2030	5.20%	4.70%	2030	5.20%	4.70%
	2031-2035	5.05%	4.60%	2031-2035	5.05%	4.60%
2036-2045	4.90%	4.50%	2036-2045	4.90%	4.50%	
2046-2055	4.75%	4.45%	2046-2055	4.75%	4.45%	
2056-2065	4.60%	4.40%	2056-2065	4.60%	4.40%	
2066-2075	4.30%	4.20%	2066-2075	4.30%	4.20%	
2076+	4.00%	4.00%	2076+	4.00%	4.00%	

ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2017 Valuation				June 30, 2019 Valuation				
	Region 2 - Non-Medicare Eligible								
■ Medical Claims Costs 2020 Calendar Year	Anthem Select		Anthem Trad		BS Access+		HN Salud y Mas		
	Age	M	F	M	F	M	F	M	F
	25	\$243	\$424	\$338	\$593	\$303	\$531	\$180	\$314
	35	309	523	432	732	386	655	228	387
	45	441	642	616	898	552	804	326	474
	55	733	851	1,023	1,192	916	1,066	542	628
	60	925	968	1,291	1,354	1,155	1,212	684	714
	65	1,047	1,048	1,462	1,466	1,309	1,312	775	773
■ Medical Claims Costs 2020 Calendar Year	Region 2 - Non-Medicare Eligible								
	Kaiser		UHC		PERS Choice		PERS Select		
	Age	M	F	M	F	M	F	M	F
	25	\$236	\$413	\$252	\$441	\$214	\$401	\$151	\$296
	35	301	510	321	544	282	505	203	375
	45	430	625	459	668	422	631	312	473
	55	713	829	762	885	737	857	559	650
	60	900	942	961	1,006	947	984	725	751
65	1,019	1,020	1,089	1,089	1,084	1,075	833	823	

ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2017 Valuation	June 30, 2019 Valuation	
■ Medical Claims Costs 2020 Calendar Year	Region 2 - Non-Medicare Eligible		
	<u>PERSCare</u>		
	<u>Age</u>	<u>M</u>	<u>F</u>
	25	\$282	\$519
	35	369	648
	45	543	805
	55	934	1,084
	60	1,193	1,240
	65	1,361	1,350
■ PEMHCA Minimum Increases	<ul style="list-style-type: none"> • 4.25% annually • General inflation plus 1.50% • Not greater than medical trend 	<ul style="list-style-type: none"> • Same 	
■ Termination, Disability	<ul style="list-style-type: none"> • CalPERS 1997-2015 Experience Study 	<ul style="list-style-type: none"> • Same 	

ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2017 Valuation	June 30, 2019 Valuation						
■ Mortality	<ul style="list-style-type: none"> • CalPERS 1997-2011 Experience Study • CalPERS 1997-2015 base mortality rates not available at time of valuation • Mortality Improvement Scale 2017 	<ul style="list-style-type: none"> • CalPERS 1997-2015 Experience Study • Mortality Improvement Scale 2019 						
■ Service Retirement	<ul style="list-style-type: none"> • CalPERS 1997-2015 Experience Study <table border="0"> <tr> <td align="center"><u>CalPERS Member</u></td> <td align="center"><u>Misc</u></td> </tr> <tr> <td align="center">Classic Members</td> <td align="center">2%@55</td> </tr> <tr> <td align="center">PEPRA Members</td> <td align="center">2%@62</td> </tr> </table> <ul style="list-style-type: none"> • Same for Designated Part-Time employees 	<u>CalPERS Member</u>	<u>Misc</u>	Classic Members	2%@55	PEPRA Members	2%@62	<ul style="list-style-type: none"> • Same
<u>CalPERS Member</u>	<u>Misc</u>							
Classic Members	2%@55							
PEPRA Members	2%@62							

ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2017 Valuation	June 30, 2019 Valuation
<p>■ Participation at Retirement</p>	<ul style="list-style-type: none"> • Active employees & surviving spouses: <ul style="list-style-type: none"> ➢ Covered - 80% ➢ Waived - 80% • Active Council Members, City Manager, and City Attorney <ul style="list-style-type: none"> ➢ Eligible for full premium <ul style="list-style-type: none"> - Covered - 100% - Waived - n/a ➢ Eligible for PEMHCA minimum <ul style="list-style-type: none"> - Covered - 80% - Waived - 80% • Retirees & surviving spouses: <ul style="list-style-type: none"> ➢ Covered - 100% ➢ Waived < 65 - 20% at 65 ➢ Waived ≥ 65 - 0% 	<ul style="list-style-type: none"> • Active employees & surviving spouses: <ul style="list-style-type: none"> ➢ Covered - 95% ➢ Waived - 20% • Active Council Members, City Manager, and City Attorney <ul style="list-style-type: none"> ➢ Eligible for full premium <ul style="list-style-type: none"> - Covered - 100% - Waived - n/a ➢ Eligible for PEMHCA minimum <ul style="list-style-type: none"> - Covered - 60% - Waived - 20% • Retirees & surviving spouses: <ul style="list-style-type: none"> ➢ Covered - 100% ➢ Waived < 65 - 0% at 65 ➢ Waived ≥ 65 - 0%

ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2017 Valuation	June 30, 2019 Valuation
<p>■ Medical Plan at Retirement</p>	<ul style="list-style-type: none"> • Covered - current plan election • Waived - PERS Choice if assumed to participate • Participants in Anthem HMO Select and Blue Shield Access+ elect United Healthcare when Medicare eligible 	<ul style="list-style-type: none"> • Covered - current plan election • Waived - PERS Choice if assumed to participate • UnitedHealthcare when eligible for Medicare if Medicare eligible plan not available for current plan election
<p>■ Retiree & Spouse Coverage Election at Retirement</p>	<ul style="list-style-type: none"> • Covered - based on current coverage election • Waived <ul style="list-style-type: none"> ➢ Single coverage if assumed not married ➢ 2-party coverage if assumed married 	<ul style="list-style-type: none"> • Same

ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2017 Valuation	June 30, 2019 Valuation
<ul style="list-style-type: none"> ■ Medicare Eligibility 	<ul style="list-style-type: none"> • 100% eligible for Medicare at age 65 • Medicare eligible retirees will elect Part B coverage 	<ul style="list-style-type: none"> • Same
<ul style="list-style-type: none"> ■ Marital Status at Retirement 	<ul style="list-style-type: none"> • Actives: <ul style="list-style-type: none"> ➢ Married if currently elect 2-party or family coverage ➢ Waived - 80% married • Retirees - based on spouse information if provided 	<ul style="list-style-type: none"> • Same
<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

ACTUARIAL METHODS

Method	June 30, 2017 Valuation	June 30, 2019 Valuation
<ul style="list-style-type: none"> ■ Cost Method 	<ul style="list-style-type: none"> • Entry Age Normal • Normal Cost is a level percentage of payroll 	<ul style="list-style-type: none"> • Same
<ul style="list-style-type: none"> ■ Actuarial Value of Assets 	<ul style="list-style-type: none"> • Investment gains and losses spread over a 5-year rolling period • Not less than 80% nor more than 120% of market value 	<ul style="list-style-type: none"> • Same
<ul style="list-style-type: none"> ■ Amortization Method 	<ul style="list-style-type: none"> • Level percent of payroll 	<ul style="list-style-type: none"> • Same
<ul style="list-style-type: none"> ■ Amortization Period 	<ul style="list-style-type: none"> • 30-year fixed (closed) period for 2006/07 ARC • 19-year fixed (closed) period for 6/30/17 UAAL for 2017/18 ADC 	<ul style="list-style-type: none"> • 30-year fixed (closed) period for 2006/07 ARC • 16-year fixed (closed) period for projected 6/30/20 UAAL for 2020/21 ADC

ACTUARIAL METHODS

Method	June 30, 2017 Valuation	June 30, 2019 Valuation
<ul style="list-style-type: none"> ■ Implicit Subsidy 	<ul style="list-style-type: none"> • Implicit subsidy estimate include for non-Medicare eligible retirees 	<ul style="list-style-type: none"> • Same

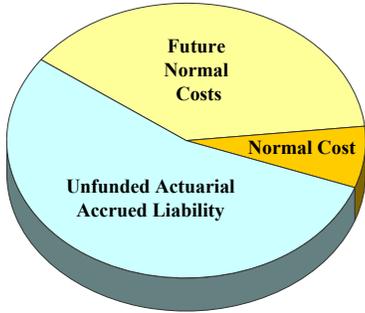
DEFINITIONS

<ul style="list-style-type: none"> ■ Actuarial Obligations 	<ul style="list-style-type: none"> • The Present Value of Benefits (PVB) is calculated as follows: <ul style="list-style-type: none"> ➢ Project future employer-provided retiree benefits for current retirees and current active employees (future retirees) ➢ Discount projected benefits to valuation date using the discount rate ➢ Discount rate is the expected long-term net rate of return on assets for benefits projected to be paid from the OPEB trust and the expected long-term net rate of return on City investments for benefits projected to be paid from City assets ➢ Allocate the PVB to past, current, and future working periods using the Entry Age Normal Cost Method • Normal Cost (NC) is portion of the PVB allocated to one fiscal year • Actuarial Accrued Liability (AAL) is the portion of the PVB allocated to prior City service, that is, the accumulation of prior years' NCs • Unfunded AAL (UAAL) is AAL less the Actuarial Value of Assets • Actuarial Value of Assets (AVA) smooths market value of assets (MVA) volatility by spreading investment gains and losses over 5 years
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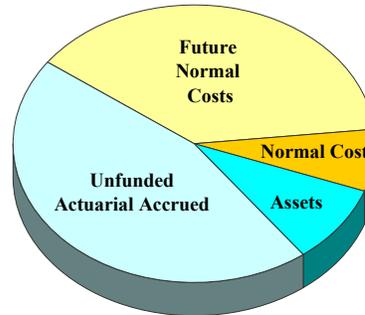
DEFINITIONS

Present Value of Benefits

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



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



DEFINITIONS

<p>■ PayGo Cost</p>	<ul style="list-style-type: none"> ● Cash Subsidy is the City’s pay-as-you-go cash payments for its portion of retiree premiums ● Implicit Subsidy is the difference between the expected cost of retiree healthcare benefits, by age and gender, and retiree premiums, that is, it is the portion of retiree healthcare costs subsidized by active employee premiums
<p>■ Terminology Used in Report</p>	<ul style="list-style-type: none"> ● AAL - Actuarial Accrued Liability ● ADC - Actuarially Determined Contribution ● AVA - Actuarial Value of Assets ● GASBS 75 - Governmental Accounting Standards Board Statement No. 75 ● MVA - Market Value of Assets ● NC - Normal Cost ● OPEB - Other (than pensions) Postemployment Benefits ● PVB - Present Value of Benefits ● UAAL - Unfunded Actuarial Accrued Liability