



THE TOWN OF
CORTE MADERA

TOWN OF CORTE MADERA
RETIREE HEALTHCARE PLAN

BARTEL
ASSOCIATES, LLC

June 30, 2019 Actuarial Valuation
Plan Funding for 2020/21 and 2021/22
Final Results

Marilyn Oliver, Vice President & Actuary
Michelle Shen, Actuarial Analyst
Katherine Moore, Associate Actuary
Bartel Associates, LLC

January 24, 2020

CONTENTS

Topic	Page
Benefit Summary	1
Data Summary	4
Actuarial Assumptions Highlights	7
Actuarial Methods	11
Assets	13
Results	15
Actuarial Certification	28
Exhibits	
Premiums	E-1
Data Summary	E-3
Actuarial Assumptions	E-16
Amortization Bases	E-27
Definitions	E-29

BENEFIT SUMMARY

<p>■ Eligibility</p>	<p>■ Retire directly from Town under CalPERS (service or disability)</p>															
<p>■ Retiree Medical Benefit</p>	<p>■ Town contribution based on hire date:</p> <ul style="list-style-type: none"> • Hire Date < Tier 2 Effective Date: Tier 1 • Hire Date ≥ Tier 2 Effective Date: Tier 2 <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;">Bargaining Units</th> <th style="width: 20%;">Tier 2 Effective Date</th> </tr> </thead> <tbody> <tr> <td>Firefighters Association</td> <td>1/1/2013</td> </tr> <tr> <td>Fire Battalion Chiefs</td> <td>1/1/2013</td> </tr> <tr> <td>Department Heads / Town Manager</td> <td>8/1/2011</td> </tr> <tr> <td>SEIU</td> <td>7/1/2011</td> </tr> <tr> <td>Mid-Management group</td> <td>8/1/2011</td> </tr> <tr> <td>Council members</td> <td>n/a</td> </tr> </tbody> </table>		Bargaining Units	Tier 2 Effective Date	Firefighters Association	1/1/2013	Fire Battalion Chiefs	1/1/2013	Department Heads / Town Manager	8/1/2011	SEIU	7/1/2011	Mid-Management group	8/1/2011	Council members	n/a
Bargaining Units	Tier 2 Effective Date															
Firefighters Association	1/1/2013															
Fire Battalion Chiefs	1/1/2013															
Department Heads / Town Manager	8/1/2011															
SEIU	7/1/2011															
Mid-Management group	8/1/2011															
Council members	n/a															



BENEFIT SUMMARY

<p>■ Retiree Medical Benefit – Tier 1</p>	<p>■ Town contribution is capped at the Kaiser Region 1 (formerly Kaiser Bay Area) rates as follows:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Coverage</th> <th style="width: 15%;">Single</th> <th style="width: 15%;">Dual</th> <th style="width: 45%;">Family</th> </tr> </thead> <tbody> <tr> <td>Contribution</td> <td>Single</td> <td>Dual</td> <td>Dual¹</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Cap based on elected coverage (single/dual/family) • Contribution drops to Medicare eligible rates at age 65 if Medicare eligible <p>■ Council members - Town contributes PEMHCA minimum²</p>				Coverage	Single	Dual	Family	Contribution	Single	Dual	Dual ¹
Coverage	Single	Dual	Family									
Contribution	Single	Dual	Dual ¹									
<p>■ Retiree Medical Benefit – Tier 2</p>	<p>■ Town contributes to Retirement Health Saving Account (RHSA) in addition to PEMHCA minimum</p> <p>■ RHSA contribution not included in the OPEB costs</p>											
<p>■ Surviving Spouse Benefit</p>	<p>■ Surviving spouse coverage based on retirement plan election</p> <p>■ Same benefit continues to surviving spouse</p>											

¹ Retirees retired before Tier 2 effective dates have Kaiser Family cap.

² 2 retired grandfathered Council members receive the PEMHCA minimum plus an additional reimbursement up to the single Kaiser Region 1 rate. 1 survivor of grandfathered Council member receives only the PEMHCA minimum.



BENEFIT SUMMARY

■ Other	■ No dental, vision, or life insurance benefits			
■ Changes since 6/30/2017	■ Fire department employees transferred to Central Marin Fire Authority. Fire department retirees retained in Town plan.			
■ Pay As You Go (\$000s)	<u>Fiscal Year</u>	<u>Cash from Town</u>	<u>Implied Subsidy</u>	<u>Total</u>
	2018/19	\$470	\$90	\$560
	2017/18	508	67	575
	2016/17	445	74	519
	2015/16	378	64	442
	2014/15	346	65	411
	2013/14	357	n/a	357
	2012/13	347	n/a	347
	2011/12	334	n/a	334
	2010/11	318	n/a	318
	2009/10	278	n/a	278
	2008/09	255	n/a	255



January 24, 2020



DATA SUMMARY

Active Participant Statistics

	6/30/08	6/30/10	6/30/11	6/30/13	6/30/15	6/30/17	6/30/19 ³
■ Actives							
• Count	57	51	48	50	47	49	32
• Average Age	46.9	46.9	47.4	48.5	47.6	46.0	45.6
• Average Town Svc.	8.9	10.3	10.9	12.1	11.7	8.7	6.2
• Average PERS Svc.	11.4	12.1	13.1	14.6	14.4	11.4	10.0
• Average Pay	\$79,849	\$83,596	\$82,010	\$87,344	\$99,420	\$101,355	\$87,020
• Total Payroll (000s)	4,551	4,263	3,936	4,367	4,673	4,966	2,785

³ Fire employees transferred to Central Marin Fire Authority



January 24, 2020



DATA SUMMARY

Retired Participant Statistics

	6/30/08	6/30/10	6/30/11	6/30/13	6/30/15	6/30/17	6/30/19
■ Retirees							
➤ Count < 65	15	19	17	15	18	20	19
➤ Count ≥ 65	<u>26</u>	<u>25</u>	<u>29</u>	<u>31</u>	<u>35</u>	<u>41</u>	<u>41</u>
• Total Count	41	44	46	46	53	61	60
• Average Age	69.1	68.9	68.9	70.2	71.4	70.8	71.3
• Retirement Age							
➤ Disabled Retirees	48.4	48.0	48.0	48.0	48.0	48.3	47.0
➤ Service Retirees	60.7	60.4	60.3	60.3	61.1	60.1	59.9



DATA SUMMARY

Data Reconciliation
6/30/2017 to 6/30/2019

	Active	Retiree			Total
		Service Retiree	Disability	Surviving Spouse	
■ 6/30/17	49	44	10	7	61
• New Hires	12	-	-	-	-
• Terminated	(8)	-	-	-	-
• Fire Department	(18)	-	-	-	-
• Retired	(3)	3	-	-	3
• Death with survivor	-	(1)	(1)	2	-
• Death without survivor	-	(3)	-	(1)	(4)
• Adjustment/Other	-	-	-	-	-
■ 6/30/19	32	43	9	8	60



ACTUARIAL ASSUMPTIONS HIGHLIGHTS

Assumption	June 30, 2017 Valuation	June 30, 2019 Valuation
■ Valuation Date	■ June 30, 2017 ■ 2018/19 & 2019/20	■ June 30, 2019 ■ 2020/21 & 2021/22
■ Discount Rate	■ 6.75% - Funding discount rate	■ Same
■ Funding Policy	■ Annually contribute \$500,000 to CalPERS diversified trust (CERBT) in excess of pay-as-you-go but total including pay-go no more than ADC	■ Beginning 2018/19, annually contribute \$250,000 to CalPERS diversified trust (CERBT) in excess of pay-as-you-go but total including pay-go no more than ADC
■ Inflation	■ 2.75%	■ Same
■ Pay Increases	■ Aggregate Increases: 3.00% ■ Merit Increases: CalPERS 1997-2011 Experience Study	■ Aggregate Increases: 3.00% ■ Merit Increases: CalPERS 1997-2015 Experience Study



January 24, 2020

7



ACTUARIAL ASSUMPTIONS HIGHLIGHTS

Assumption	June 30, 2017 Valuation			June 30, 2019 Valuation		
	Year	Increase from Prior Year Non-Medicare	Medicare	Year	Increase from Prior Year Non-Medicare	Medicare
■ Medical Trend	2017-18	Actual Premiums		2019-20	Actual Premiums	
	2019	7.50%	6.50%	2021 ⁴	7.25%	6.30%
	2020	7.50%	6.50%	2022	7.00%	6.10%
	2021	7.25%	6.30%	2023	6.75%	5.90%
	2022	7.00%	6.10%	2024	6.50%	5.70%
	2023	6.75%	5.90%	2025	6.25%	5.50%
	2024	6.50%	5.70%	2026	6.00%	5.30%
	2025	6.25%	5.50%	2027	5.80%	5.15%
	2026	6.00%	5.30%	2028	5.60%	5.00%
	2027	5.80%	5.15%	2029	5.40%	4.85%
	2028	5.60%	5.00%	2030	5.20%	4.70%
	2029	5.40%	4.85%	2031-35	5.05%	4.60%
	2030	5.20%	4.70%	2036-45	4.90%	4.50%
	2031-35	5.05%	4.60%	2046-55	4.75%	4.45%
	2036-45	4.90%	4.50%	2056-65	4.60%	4.40%
	2046-55	4.75%	4.45%	2066-75	4.30%	4.20%
	2056-65	4.60%	4.40%	2076+	4.00%	4.00%
	2066-75	4.30%	4.20%			
	2076+	4.00%	4.00%			

⁴ Trend shown is increased for PERSCare to reflect delayed CY 2020 premium increases.



January 24, 2020

8



ACTUARIAL ASSUMPTIONS HIGHLIGHTS

Assumption	June 30, 2017 Valuation		June 30, 2019 Valuation	
<ul style="list-style-type: none"> ■ PEMHCA Minimum Increases 	<u>Year</u> 2017 2018 2019+	<u>PEMHCA Min</u> \$ 128/month 133/month 4.25% increase/year	<u>Year</u> 2019 2020 2021+	<u>PEMHCA Min</u> \$ 136/month 139/month 4.25% increase/year
<ul style="list-style-type: none"> ■ Mortality, Termination, Disability 	<ul style="list-style-type: none"> ■ CalPERS 1997-2011 Experience Study ■ Mortality projected fully generational with Scale MP-2017 		<ul style="list-style-type: none"> ■ CalPERS 1997-2015 Experience Study ■ Mortality projected fully generational with Scale MP-2018 	



ACTUARIAL ASSUMPTIONS HIGHLIGHTS

Assumption	June 30, 2017 Valuation			June 30, 2019 Valuation																																											
<ul style="list-style-type: none"> ■ Service Retirement 	<ul style="list-style-type: none"> ■ CalPERS 1997-2011 Experience Study <table style="margin-left: 40px; border-collapse: collapse;"> <tr> <td></td> <td colspan="2" style="text-align: center;"><u>Classic member</u></td> </tr> <tr> <td></td> <td style="text-align: center;"><u>Misc.</u></td> <td style="text-align: center;"><u>Fire</u></td> </tr> <tr> <td>Benefit</td> <td style="text-align: center;">2.5%@55</td> <td style="text-align: center;">3%@50</td> </tr> <tr> <td>ERA</td> <td style="text-align: center;">61.0</td> <td style="text-align: center;">55.7</td> </tr> <tr> <td></td> <td colspan="2" style="text-align: center;"><u>PEPRA member</u></td> </tr> <tr> <td>Benefit</td> <td style="text-align: center;">2%@62</td> <td style="text-align: center;">2.7%@57</td> </tr> <tr> <td>ERA</td> <td style="text-align: center;">63.7</td> <td style="text-align: center;">57.3</td> </tr> </table>				<u>Classic member</u>			<u>Misc.</u>	<u>Fire</u>	Benefit	2.5%@55	3%@50	ERA	61.0	55.7		<u>PEPRA member</u>		Benefit	2%@62	2.7%@57	ERA	63.7	57.3	<ul style="list-style-type: none"> ■ CalPERS 1997-2015 Experience Study <table style="margin-left: 40px; border-collapse: collapse;"> <tr> <td></td> <td colspan="2" style="text-align: center;"><u>Classic member</u></td> </tr> <tr> <td></td> <td style="text-align: center;"><u>Misc.</u></td> <td></td> </tr> <tr> <td>Benefit</td> <td colspan="2" style="text-align: center;">2.5%@55</td> </tr> <tr> <td>ERA</td> <td colspan="2" style="text-align: center;">59.6</td> </tr> <tr> <td></td> <td colspan="2" style="text-align: center;"><u>PEPRA member</u></td> </tr> <tr> <td>Benefit</td> <td colspan="2" style="text-align: center;">2%@62</td> </tr> <tr> <td>ERA</td> <td colspan="2" style="text-align: center;">63.5</td> </tr> </table>			<u>Classic member</u>			<u>Misc.</u>		Benefit	2.5%@55		ERA	59.6			<u>PEPRA member</u>		Benefit	2%@62		ERA	63.5	
	<u>Classic member</u>																																														
	<u>Misc.</u>	<u>Fire</u>																																													
Benefit	2.5%@55	3%@50																																													
ERA	61.0	55.7																																													
	<u>PEPRA member</u>																																														
Benefit	2%@62	2.7%@57																																													
ERA	63.7	57.3																																													
	<u>Classic member</u>																																														
	<u>Misc.</u>																																														
Benefit	2.5%@55																																														
ERA	59.6																																														
	<u>PEPRA member</u>																																														
Benefit	2%@62																																														
ERA	63.5																																														
<ul style="list-style-type: none"> ■ Administrative Fees 	<ul style="list-style-type: none"> ■ PEMHCA: 0.31% of retiree premiums included in Normal Cost ■ CERBT: Not included 			<ul style="list-style-type: none"> ■ PEMHCA: 0.27% of retiree premiums included in Normal Cost ■ CERBT: 0.05% of Market Value of Assets included in Normal Cost 																																											



ACTUARIAL METHODS

	June 30, 2017 Valuation	June 30, 2019 Valuation
■ Cost Method	■ Entry Age Normal	■ Same
■ Amortization Method	■ Level percent of payroll	■ Same
■ Actuarial Value of Assets	■ Market Value	■ Same
■ Amortization Period	<ul style="list-style-type: none"> ■ 6/30/16 UAAL amortized over 16 years (14 years remaining at 6/30/18) ■ Assumption changes: 20 years ■ Experience and contribution gains & losses: 15 years 	<ul style="list-style-type: none"> ■ 6/30/16 UAAL amortized over 16 years (12 years remaining at 6/30/20) ■ Assumption changes: 20 years ■ Experience and contribution gains & losses: 15 years ■ Gain from Fire Department joining Central Marin Fire Authority amortized over 12 years from 6/30/20



ACTUARIAL METHODS

	June 30, 2017 Valuation	June 30, 2019 Valuation
■ "Implied Subsidy"	<ul style="list-style-type: none"> ■ Employer cost for allowing retirees to participate at active rates ■ Implied subsidy included 	■ Same



ASSETS

Market Value of Plan Assets

Market Value of Assets	2015/16	2016/17	2017/18	2018/19
■ Market Value at Beginning of Year	\$582,983	\$1,117,832	\$1,776,950	\$2,418,106
• Contributions	500,000	500,000	500,000	250,000
• Benefit Payments ⁵	-	-	-	-
• Administrative Expenses	(410)	(708)	(1,056)	(1,262)
• Net Investment Earnings ⁶	35,260	159,826	142,211	177,597
■ Market Value at End of Year	1,117,832	1,776,950	2,418,106	2,844,441
■ Approximate Return	4.2%	11.6%	7.0%	7.0%

⁵ Benefit payments made outside CERBT.

⁶ CERBT Strategy #1.

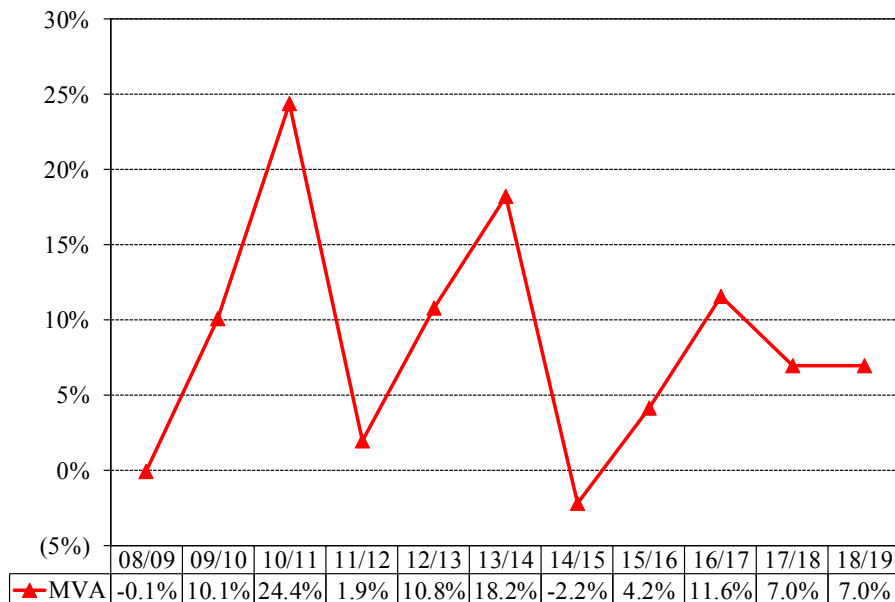


January 24, 2020



ASSETS

Historical Returns: Market Value (MVA)



January 24, 2020



RESULTS

Funded Status
June 30, 2019
 (Amounts in 000's)

	Total
■ Present Value of Benefits	
• Actives	\$ 2,150
• Retirees	<u>7,333</u>
• Total	9,483
■ Actuarial Accrued Liability (AAL)	
• Actives	1,357
• Retirees	<u>7,333</u>
• Total	8,690
■ Actuarial Value of Assets	<u>2,844</u>
■ Unfunded AAL	5,846
■ Funded Ratio	32.7%
■ 2020/21 Normal Cost	108
■ 2020/21 Pay-As-You-Go Cost	583



January 24, 2020

15



RESULTS

Actuarially Determined Contributions (ADC)
 (End of Year Payment, Amounts in 000's)

	2020/21	2021/22
■ ADC - \$		
• Normal Cost	\$ 108	\$ 110
• UAAL Amortization	<u>597</u>	<u>615</u>
• Total	705	725
■ Projected Payroll	2,955	3,043
■ ADC - %		
• Normal Cost	3.7%	3.6%
• UAAL Amortization	<u>20.2%</u>	<u>20.2%</u>
• Total	23.9%	23.8%
■ Estimated Trust Contribution	122	124
■ Pay-As-You-Go Cost	583	601
■ Estimated Contribution as % of ADC	100.0%	100.0%



January 24, 2020

16



RESULTS

Funded Status

(Amounts in 000's)

■ Valuation Date	6/30/2011	6/30/2013	6/30/2015	6/30/2017	6/30/2019
■ Discount Rate	4.25%	4.00%	S&U ⁷	6.75%	6.75%
■ Present Value of Benefits					
• Actives	\$ 11,188	\$ 15,256	\$ 8,164	\$ 5,973	\$ 2,150
• Retirees	<u>6,366</u>	<u>7,108</u>	<u>5,236</u>	<u>7,744</u>	<u>7,333</u>
• Total	17,554	22,364	13,400	13,717	9,483
■ Actuarial Accrued Liability					
• Actives	5,463	7,754	5,051	3,555	1,357
• Retirees	<u>6,366</u>	<u>7,108</u>	<u>5,236</u>	<u>7,744</u>	<u>7,333</u>
• Total	11,829	14,862	10,287	11,299	8,690
■ Actuarial Value of Assets	<u>39</u>	<u>66</u>	<u>583</u>	<u>1,777</u>	<u>2,844</u>
■ Unfunded AAL	11,790	14,796	9,704	9,522	5,846
■ Funded Ratio	0.3%	0.4%	5.7%	15.7%	32.7%
■ Pay-As-You-Go Cost ⁸	370	533	474	625	583

⁷ Select & ultimate discount rate grading from 6.23% to 7.00% for 2032/33 and beyond.

⁸ Projected benefit payments for FY's 2012/13, 2014/15, 2016/17, 2018/19, and 2020/21.



January 24, 2020

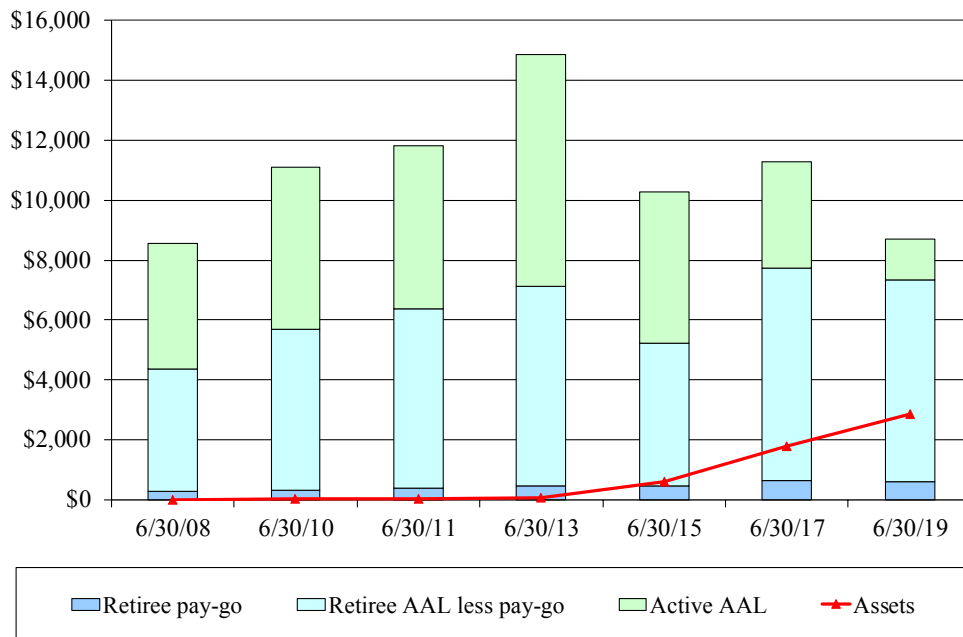
17



RESULTS

Funded Status

(Amounts in 000's)



January 24, 2020

18



RESULTS

Actuarially Determined Contributions (ADC)

(End of year contribution, Amounts in 000's)

	6/30/2017 Valuation		6/30/2019 Valuation	
	2018/19	2019/20 ⁹	2020/21	2021/22
■ Discount Rate	6.75%	6.75%	6.75%	6.75%
■ ADC - \$				
• Normal Cost	\$ 290	\$ 136	\$ 108	\$ 110
• UAAL Amortization	<u>883</u>	<u>709</u>	<u>597</u>	<u>615</u>
• Total	1,173	845	705	725
■ Projected Payroll	5,191	3,120	2,955	3,043
■ ADC - %				
• Normal Cost	5.6%	4.4%	3.7%	3.6%
• UAAL Amortization	<u>17.0%</u>	<u>22.7%</u>	<u>20.2%</u>	<u>20.2%</u>
• Total	22.6%	27.1%	23.9%	23.8%

⁹ Revised to reflect Fire Department move to Central Marin Fire Authority



January 24, 2020

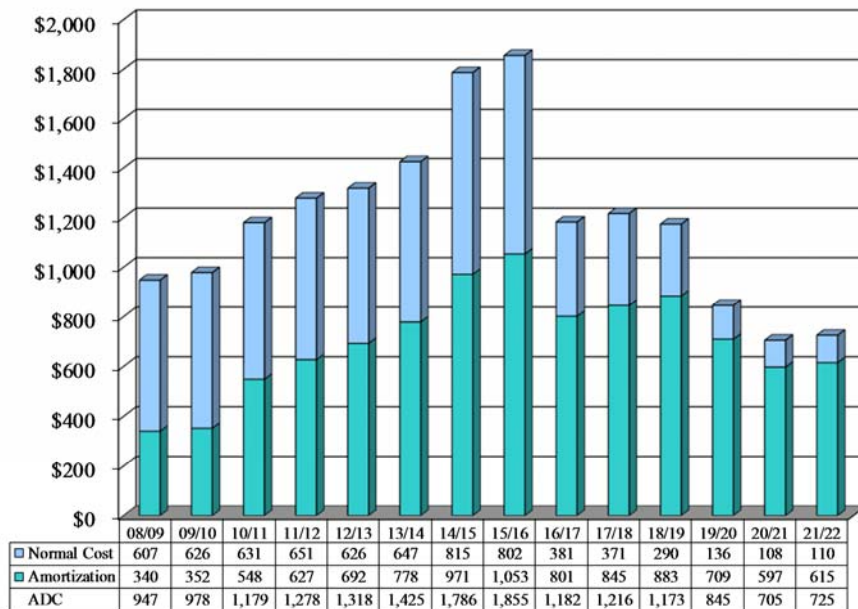
19



RESULTS

Actuarially Determined Contributions (ADC)

(Amounts in 000's)



January 24, 2020

20



RESULTS

Estimated Actuarial Gain/Loss Analysis

(Amounts in 000's)

	UAAL
■ Actual @ 6/30/17	\$ 9,522
■ Expected @ 6/30/19	8,975
■ Source of Change	
• Demographic and other	(268)
• Fire Department move to Central Marin Fire Authority	(2,364)
• Premiums lower than expected	(773)
• Return on assets	(8)
• Contributions less than ADC	290
• CalPERS 1997-2015 assumptions	17
• Projected mortality improvement MP-2018	<u>(23)</u>
■ Total Changes	(3,129)
■ Actual @ 6/30/19	5,846



RESULTS

Benefit Payments Projection

(Amounts in 000's)

FYE June 30,	Benefit Payments		
	Cash	Implied Subsidy	Total
2020	\$ 476	\$ 104	\$ 580
2021	481	102	583
2022	492	109	601
2023	512	121	633
2024	535	136	671
2025	531	125	656
2026	542	121	663
2027	556	111	667
2028	585	131	716
2029	589	124	713
2030	582	110	692



RESULTS

Funded Status by Groups
June 30, 2019 (Amounts in 000's)

	Misc.	Fire ¹⁰	Council	Total
■ Present Value of Benefits				
• Actives	\$ 2,047	\$ -	\$ 103	\$ 2,150
• Retirees	<u>3,414</u>	<u>3,751</u>	<u>168</u>	<u>7,333</u>
• Total	5,461	3,751	271	9,483
■ Actuarial Accrued Liability (AAL)				
• Actives	1,320	-	37	1,357
• Retirees	<u>3,414</u>	<u>3,751</u>	<u>168</u>	<u>7,333</u>
• Total	4,734	3,751	205	8,690
■ Actuarial Value of Assets¹¹	<u>1,550</u>	<u>1,228</u>	<u>67</u>	<u>2,844</u>
■ Unfunded AAL	3,184	2,523	138	5,846
■ 2020/21 Normal Cost	96	1	10	108
■ 2020/21 Pay-As-You-Go Cost	297	270	16	583

¹⁰ Safety only, normal cost is for administrative expenses only as Fire employees moved to Central Marin Fire Authority

¹¹ Allocated between employee groups in proportion to AAL. Actuarial Value = Market Value.



January 24, 2020

23



RESULTS

Actuarially Determined Contributions (ADC) by Groups
Fiscal Year 2020/21
(End of Year Payment, Amounts in 000's)

	Misc.	Fire ¹²	Council	Total
■ ADC - \$				
• Normal Cost	\$ 96	\$ 1	\$ 10	\$ 108
• UAAL Amortization ¹³	<u>329</u>	<u>253</u>	<u>14</u>	<u>597</u>
• Total	425	253	24	705
■ Projected Payroll	2,939	-	15	2,955
■ ADC - %				
• Normal Cost	3.3%	n/a	67.1%	3.7%
• UAAL Amortization	<u>11.2%</u>	<u>n/a</u>	<u>95.2%</u>	<u>20.2%</u>
• Total	14.5%	n/a	161.6%	23.9%

¹² Safety only

¹³ Allocated between employee groups in proportion to AAL.



January 24, 2020

24



RESULTS

Funded Status by Benefits

June 30, 2019

(Amounts in 000's)

	Cash	Implied Subsidy	Total
■ Present Value of Benefits			
• Actives	\$ 1,610	\$ 540	\$ 2,150
• Retirees	<u>6,239</u>	<u>1,093</u>	<u>7,333</u>
• Total	7,849	1,633	9,483
■ Actuarial Accrued Liability (AAL)			
• Actives	1,091	266	1,357
• Retirees	<u>6,239</u>	<u>1,093</u>	<u>7,333</u>
• Total	7,330	1,359	8,690
■ Actuarial Value of Assets¹⁴	<u>2,399</u>	<u>445</u>	<u>2,844</u>
■ Unfunded AAL	4,931	914	5,846
■ 2020/21 Normal Cost	73	35	108
■ 2020/21 Pay-As-You-Go Cost	481	102	583

¹⁴ Allocated between cash and implied subsidy benefits in proportion to AAL. Actuarial Value = Market Value.



January 24, 2020

25



RESULTS

Actuarially Determined Contributions (ADC) by Benefits

Fiscal Year 2020/21

(End of Year Payment, Amounts in 000's)

	Cash	Implied Subsidy	Total
■ ADC - \$			
• Normal Cost	\$ 73	\$ 35	\$ 108
• UAAL Amortization ¹⁵	<u>504</u>	<u>93</u>	<u>597</u>
• Total	577	128	705
■ Projected Payroll	2,955	2,955	2,955
■ ADC - %			
• Normal Cost	2.5%	1.2%	3.7%
• UAAL Amortization	<u>17.0%</u>	<u>3.1%</u>	<u>20.2%</u>
• Total	19.5%	4.3%	23.9%

¹⁵ Allocated between cash and implied subsidy benefits in proportion to AAL.



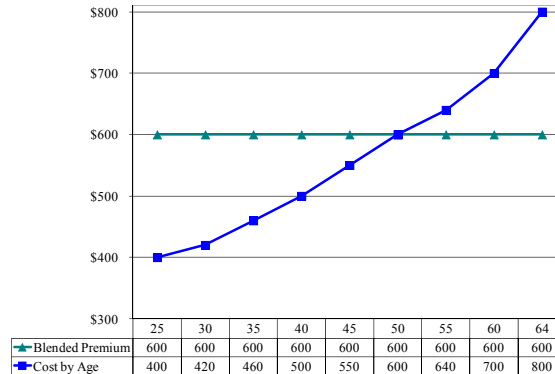
January 24, 2020

26

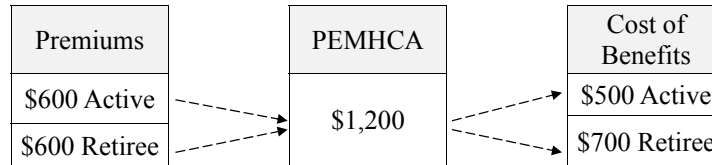


RESULTS

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



- Sample active age 40, retire age 60:



January 24, 2020

27



ACTUARIAL CERTIFICATION

This report presents the Town of Corte Madera Retiree Healthcare Plan (“Plan”) June 30, 2019 actuarial valuation. The purpose of this valuation is to:

- Determine the June 30, 2019 Benefit Obligations,
- Determine the Plan’s June 30, 2019 Funded Status, and
- Calculate the 2020/21 and 2021/22 Actuarially Determined Contributions.

The report provides information intended for plan funding, but may not be appropriate for other purposes. Information provided in this report may be useful to the Town 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 Town 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,

Marilyn Oliver

Marilyn Oliver, FSA, MAAA, EA, FCA
Vice President
Bartel Associates, LLC
January 24, 2020

Katherine Moore

Katherine Moore, ASA, MAAA
Associate Actuary
Bartel Associates, LLC
January 24, 2020



January 24, 2020

28



PREMIUMS

2019 PEMHCA Monthly Premiums

Bay Area

Medical Plan	Non-Medicare Eligible			Medicare Eligible		
	Single	2-Party	Family	Single	2-Party	Family
Anthem HMO Select	\$831.44	\$1,662.88	\$2,161.74	n/a	n/a	n/a
Anthem HMO Traditional	1,111.13	2,222.26	2,888.94	\$357.44	\$ 714.88	\$1,072.32
Blue Shield Access+	970.90	1,941.80	2,524.34	n/a	n/a	n/a
Health Net SmartCare	901.55	1,803.10	2,344.03	n/a	n/a	n/a
Kaiser	768.25	1,536.50	1,997.45	323.74	647.48	971.22
UnitedHealthcare	n/a	n/a	n/a	299.37	598.74	898.11
Western Health Advantage	767.01	1,534.02	1,994.23	n/a	n/a	n/a
PERS Choice	866.27	1,732.54	2,252.30	360.41	720.82	1,081.23
PERS Select	543.19	1,086.38	1,412.29	360.41	720.82	1,081.23
PERSCare	1,131.68	2,263.36	2,942.37	394.83	789.66	1,184.49
PORAC	774.00	1,623.00	2,076.00	513.00	1,022.00	1,635.00



January 24, 2020

E-1



PREMIUMS

2020 PEMHCA Monthly Premiums

Region 1

Medical Plan	Non-Medicare Eligible			Medicare Eligible		
	Single	2-Party	Family	Single	2-Party	Family
Anthem HMO Select	\$868.98	\$1,737.96	\$2,259.35	\$388.15	\$776.30	\$1,164.45
Anthem HMO 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
Anthem EPO Del Norte	861.18	1,722.36	2,239.07	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



January 24, 2020

E-2



DATA SUMMARY

Active Participant Statistics
June 30, 2019

	Miscellaneous	Council	Total
■ Actives			
• Count	28	4	32
• Average Age	44.9	50.7	45.6
• Average Town Service	6.5	4.4	6.2
• Average PERS Service	10.8	4.4	10.0
• Average Pay	\$ 98,937	\$ 3,600	\$ 87,020
• Total Payroll (000s)	2,770	14	2,785



January 24, 2020

E-3



DATA SUMMARY

Active Participant Statistics
June 30, 2017

	Miscellaneous	Fire ¹⁶	Council	Total
■ Actives				
• Count	27	17	5	49
• Average Age	47.8	39.4	59.0	46.0
• Average Town Service	8.7	9.3	6.8	8.7
• Average PERS Service	12.8	10.6	6.8	11.4
• Average Pay	\$ 106,670	\$ 121,665	\$ 3,600	\$ 101,355
• Total Payroll (000s)	2,880	2,068	18	4,966

¹⁶ Safety only



January 24, 2020

E-4



DATA SUMMARY

Retired Participant Statistics
June 30, 2019

	Miscellaneous	Fire	Council	Total
■ Retirees				
➤ Count < 65	8	9	2	19
➤ Count ≥ 65	<u>27</u>	<u>8</u>	<u>6</u>	<u>41</u>
● Total Count	35	17	8	60
● Average Age	73.6	66.1	72.4	71.3
● Retirement Age ¹⁷				
➤ Disabled Retirees ¹⁸	49.9	43.4	n/a	47.0
➤ Service Retirees ¹⁹	62.1	54.7	60.1	59.9

¹⁷ Excludes 8 surviving spouses.

¹⁸ Includes 5 Miscellaneous and 4 Fire disabled retirees.

¹⁹ Includes 25 Miscellaneous, 11 Fire and 7 Council service retirees.



January 24, 2020

E-5



DATA SUMMARY

Retired Participant Statistics
June 30, 2017

	Miscellaneous	Fire	Council	Total
■ Retirees				
➤ Count < 65	8	10	2	20
➤ Count ≥ 65	<u>27</u>	<u>7</u>	<u>7</u>	<u>41</u>
● Total Count	35	17	9	61
● Average Age	74.0	64.1	71.1	70.8
● Retirement Age ²⁰				
➤ Disabled Retirees ²¹	49.9	46.7	n/a	48.3
➤ Service Retirees ²²	62.6	54.7	59.8	60.1

²⁰ Excludes 7 surviving spouses.

²¹ Includes 5 Miscellaneous and 5 Fire disabled retirees.

²² Includes 25 Miscellaneous, 11 Fire and 8 Council service retirees.



January 24, 2020

E-6



DATA SUMMARY

Medical Plan Participation
Non-Waived Participants

Medical Plan	Actives	Retirees	
		< 65	≥ 65
Anthem HMO Select	-	6%	-
Anthem HMO Traditional	-	6%	5%
Health Net SmartCare	4%	-	-
Kaiser	89%	63%	53%
UnitedHealthcare	-	-	10%
Western Health Advantage	-	6%	-
PERS Choice	7%	-	16%
PERS Select	-	19%	3%
PERSCare	-	-	13%
Total	100%	100%	100%



January 24, 2020

E-7



DATA SUMMARY

Active Medical Coverage

Medical Plan	Single	2-Party	Family	Waived	Total
Health Net SmartCare	-	-	1	-	1
Kaiser	7	4	13	-	24
PERS Choice	1	-	1	-	2
Waived	-	-	-	5	5
Total	8	4	15	5	32



January 24, 2020

E-8



DATA SUMMARY

Retiree Medical Coverage
Under Age 65

Medical Plan	Single	2-Party	Family	Waived	Total
Anthem HMO Select	-	-	1	-	1
Anthem HMO Traditional	1	-	-	-	1
Kaiser	1	4	5	-	10
UnitedHealthcare	-	-	-	-	-
Western Health Advantage	-	1	-	-	1
PERS Choice	-	-	-	-	-
PERS Select	1	2	-	-	3
PERSCare	-	-	-	-	-
Waived	-	-	-	3	3
Total	3	7	6	3	19



January 24, 2020

E-9



DATA SUMMARY

Retiree Medical Coverage
Over Age 65

Medical Plan	Single	2-Party	Family	Waived	Total
Anthem HMO Select	-	-	-	-	-
Anthem HMO Traditional	-	1	1	-	2
Kaiser	13	7	-	-	20
UnitedHealthcare	3	1	-	-	4
Western Health Advantage	-	-	-	-	-
PERS Choice	4	1	1	-	6
PERS Select	-	-	1	-	1
PERSCare	4	1	-	-	5
Waived	-	-	-	3	3
Total	24	11	3	3	41



January 24, 2020

E-10



DATA SUMMARY

Actives by Age and Town Service
Miscellaneous

Age	Town Service							Total
	< 1	1-4	5-9	10-14	15-19	20-24	≥ 25	
< 25	-	-	-	-	-	-	-	-
25-29	1	1	-	-	-	-	-	2
30-34	1	2	-	-	-	-	-	3
35-39	-	2	-	-	-	-	-	2
40-44	1	2	1	-	2	-	-	6
45-49	1	3	1	1	-	-	-	6
50-54	-	2	-	-	2	-	1	5
55-59	-	2	-	-	-	1	-	3
60-64	-	1	-	-	-	-	-	1
≥ 65	-	-	-	-	-	-	-	-
Total	4	15	2	1	4	1	1	28



January 24, 2020

E-11



DATA SUMMARY

Actives by Age and Town Service
Council

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



January 24, 2020

E-12



DATA SUMMARY

Actives by Age and Town Service
Total

Age	Town Service							Total
	< 1	1-4	5-9	10-14	15-19	20-24	≥ 25	
< 25	-	-	-	-	-	-	-	-
25-29	1	2	-	-	-	-	-	3
30-34	1	2	-	-	-	-	-	3
35-39	-	2	-	-	-	-	-	2
40-44	1	2	1	-	2	-	-	6
45-49	1	3	1	1	-	-	-	6
50-54	-	3	-	-	2	-	1	6
55-59	-	2	-	-	-	1	-	3
60-64	-	2	-	1	-	-	-	3
≥ 65	-	-	-	-	-	-	-	-
Total	4	18	2	2	4	1	1	32



January 24, 2020

E-13



DATA SUMMARY

Retiree Medical Coverage by Age Group
Miscellaneous²³

Age	Single	2-Party	Family	Waived	Total
Under 50	-	-	-	-	-
50-54	-	1	-	-	1
55-59	1	1	1	-	3
60-64	2	2	-	2	6
65-69	5	1	-	1	7
70-74	6	4	-	-	10
75-79	5	-	-	1	6
80-84	1	2	-	-	3
Over 85	5	1	-	1	7
Total	25	12	1	5	43
Average Age	75.6	70.5	59.2	72.2	73.4

²³ Includes 8 Council members.



January 24, 2020

E-14



DATA SUMMARY

Retiree Medical Coverage by Age Group

Fire

Age	Single	2-Party	Family	Waived	Total
Under 50	-	-	-	-	-
50-54	-	-	3	-	3
55-59	-	2	2	-	4
60-64	-	1	-	1	2
65-69	-	1	3	-	4
70-74	-	1	-	-	1
75-79	-	-	-	-	-
80-84	1	1	-	-	2
Over 85	1	-	-	-	1
Total	2	6	8	1	17
Average Age	86.5	66.8	60.6	65.0	66.1



January 24, 2020

E-15



ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2017 Valuation	June 30, 2019 Valuation
■ Valuation Date	■ June 30, 2017 ■ 2018/19 & 2019/20	■ June 30, 2019 ■ 2020/21 & 2021/22
■ Discount Rate	■ 6.75% - Funding discount rate	■ Same
■ Funding Policy	■ Annually contribute \$500,000 to CalPERS diversified trust (CERBT) in excess of pay-as-you-go but total including pay-go no more than ADC	■ Beginning 2018/19, annually contribute \$250,000 to CalPERS diversified trust (CERBT) in excess of pay-as-you-go but total including pay-go no more than ADC
■ Inflation	■ 2.75%	■ Same
■ Pay Increases	■ Aggregate Increases: 3.00% ■ Merit Increases: CalPERS 1997-2011 Experience Study	■ Aggregate Increases: 3.00% ■ Merit Increases: CalPERS 1997-2015 Experience Study



January 24, 2020

E-16



ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2017 Valuation			June 30, 2019 Valuation		
■ Medical Trend		Increase from Prior Year			Increase from Prior Year	
	<u>Year</u>	<u>Non-Medicare</u>	<u>Medicare</u>	<u>Year</u>	<u>Non-Medicare</u>	<u>Medicare</u>
	2017-18	Actual Premiums		2019-20	Actual Premiums	
	2019	7.50%	6.50%	2021 ²⁴	7.25%	6.30%
	2020	7.50%	6.50%	2022	7.00%	6.10%
	2021	7.25%	6.30%	2023	6.75%	5.90%
	2022	7.00%	6.10%	2024	6.50%	5.70%
	2023	6.75%	5.90%	2025	6.25%	5.50%
	2024	6.50%	5.70%	2026	6.00%	5.30%
	2025	6.25%	5.50%	2027	5.80%	5.15%
	2026	6.00%	5.30%	2028	5.60%	5.00%
	2027	5.80%	5.15%	2029	5.40%	4.85%
	2028	5.60%	5.00%	2030	5.20%	4.70%
	2029	5.40%	4.85%	2031-35	5.05%	4.60%
	2030	5.20%	4.70%	2036-45	4.90%	4.50%
	2031-35	5.05%	4.60%	2046-55	4.75%	4.45%
	2036-45	4.90%	4.50%	2056-65	4.60%	4.40%
	2046-55	4.75%	4.45%	2066-75	4.30%	4.20%
	2056-65	4.60%	4.40%	2076+	4.00%	4.00%
	2066-75	4.30%	4.20%			
2076+	4.00%	4.00%				

²⁴ Trend shown is increased for PERSCare to reflect delayed CY 2020 premium increases.



ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2017 Valuation		June 30, 2019 Valuation	
■ Cap Increase	■ Cap increases follow Kaiser HMO medical trend		■ Same	
■ PEMHCA Minimum Increases	<u>Year</u>	<u>PEMHCA Min</u>	<u>Year</u>	<u>PEMHCA Min</u>
	2017	\$ 128/month	2019	\$ 136/month
	2018	133/month	2020	139/month
	2019+	4.25% increase/year	2021+	4.25% increase/year
■ Mortality, Termination, Disability	■ CalPERS 1997-2011 Experience Study		■ CalPERS 1997-2015 Experience Study	
	■ Mortality projected fully generational with Scale MP-2017		■ Mortality projected fully generational with Scale MP-2018	



ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2017 Valuation	June 30, 2019 Valuation
■ Service Retirement	■ CalPERS 1997-2011 Experience Study <u>Classic member</u> <u>Misc.</u> <u>Fire</u> Benefit 2.5%@55 3%@50 ERA 61.0 55.7 <u>PEPRA member</u> Benefit 2%@62 2.7%@57 ERA 63.7 57.3	■ CalPERS 1997-2015 Experience Study <u>Classic member</u> <u>Misc.</u> Benefit 2.5%@55 ERA 59.6 <u>PEPRA member</u> Benefit 2%@62 ERA 63.5
■ Participation at Retirement	■ Tier 1 Actives: 100% ■ Tier 2 Actives: 70%	■ Same
■ Waived retiree re-election	■ Currently under age 65: 20% at age 65 ■ Currently over age 65: 0%	■ Same



ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2017 Valuation	June 30, 2019 Valuation
■ ACA Excise (Cadillac) Tax	■ 2% cash subsidy load	■ Same
■ Medical Plan at Retirement	■ Currently covered: Same as current election ■ Currently waived: Kaiser Bay Area/Region 1 ■ Post-Medicare: Retirees elect UnitedHealthcare if pre-Medicare plan not offered at Medicare eligibility	■ 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"> ■ Actives and retirees currently under age 65: 100% eligible for Medicare at age 65 ■ Retirees currently over age 65: based on actual coverage²⁵ ■ All Medicare eligible will elect Part B coverage 	<ul style="list-style-type: none"> ■ Same
<ul style="list-style-type: none"> ■ Administrative Fees 	<ul style="list-style-type: none"> ■ PEMHCA: 0.31% of retiree premiums included in Normal Cost ■ CERBT: Not included 	<ul style="list-style-type: none"> ■ PEMHCA: 0.27% of retiree premiums included in Normal Cost ■ CERBT: 0.05% of Market Value of Assets included in Normal Cost

²⁵ 1 retiree did not elect Medicare coverage.



ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2017 Valuation	June 30, 2019 Valuation
<ul style="list-style-type: none"> ■ Spouse Age 	<ul style="list-style-type: none"> ■ Actives: Males 3 years older than females ■ Retirees: Males 3 years older than females if spouse birth date is unavailable 	<ul style="list-style-type: none"> ■ Same
<ul style="list-style-type: none"> ■ Assumed Spouse Coverage at Retirement for Current Employees 	<ul style="list-style-type: none"> ■ Employees Currently Covered: same as current election ■ Employees Currently Waiving Coverage (CalPERS marital assumption): <ul style="list-style-type: none"> • Misc: 85% • Safety: 90% 	<ul style="list-style-type: none"> ■ Employees Currently Covered: same as current election ■ Employees Currently Waiving Coverage: <ul style="list-style-type: none"> • Misc: 70% • Safety: n/a



ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2017 Valuation	June 30, 2019 Valuation
<ul style="list-style-type: none"> ■ Surviving Spouse 	<ul style="list-style-type: none"> ■ 100% participation for actives ■ Based on current data for retirees ■ Marital status based on current coverage, 85% for active Miscellaneous waivers, and 90% for active Safety waivers 	<ul style="list-style-type: none"> ■ 100% participation for actives ■ Based on current data for retirees ■ Marital status based on current coverage, 70% for active Miscellaneous waivers
<ul style="list-style-type: none"> ■ Family Coverage at Retirement 	<ul style="list-style-type: none"> ■ Actives: n/a ■ Retirees: current coverage to age 65 	<ul style="list-style-type: none"> ■ Same



ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2019										
<ul style="list-style-type: none"> ■ 2020 Medical Claims Costs PEMHCA Implied Subsidy Estimate 	<ul style="list-style-type: none"> ■ Sample estimated monthly claims cost: <li align="center">Region 1 										
	<u>Anthem Select</u>		<u>Anthem Traditional</u>		<u>Kaiser</u>		<u>Health Net SmartCare</u>		<u>United Healthcare</u>		
	<u>Age</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>	<u>M</u>	<u>F</u>
	25	\$322	\$564	\$429	\$751	\$281	\$492	\$360	\$631	\$337	\$591
	35	410	696	547	928	358	607	460	780	430	730
	45	586	854	781	1,139	512	745	656	957	614	896
	55	973	1,132	1,296	1,511	849	988	1,089	1,269	1,020	1,188
	60	1,227	1,287	1,635	1,716	1,071	1,122	1,374	1,442	1,286	1,350
	64	1,367	1,374	1,822	1,832	1,194	1,198	1,531	1,540	1,433	1,441
	65	351	349	351	349	308	309	n/a	n/a	303	300
70	374	369	374	369	328	327	n/a	n/a	322	318	
75	393	388	393	388	345	344	n/a	n/a	339	334	
80	413	408	413	408	362	361	n/a	n/a	356	351	



ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2019									
■ 2020 Medical Claims Costs PEMHCA Implied Subsidy Estimate (continued)	■ Sample estimated monthly claims cost: Region 1									
	<u>Western Health</u>									
		<u>Advantage</u>		<u>PERS Choice</u>		<u>PERS Select</u>		<u>PERSCare</u>		
	<u>Age</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	\$264	\$462	\$252	\$471	\$175	\$341	\$326	\$596	
	35	336	570	332	592	235	432	425	746	
	45	481	699	495	738	359	545	625	925	
	55	798	928	861	1,001	642	747	1,072	1,245	
	60	1,006	1,054	1,105	1,149	831	862	1,369	1,424	
	64	1,121	1,126	1,241	1,234	937	929	1,533	1,526	
	65	n/a	n/a	282	344	282	344	293	358	
	70	n/a	n/a	307	376	307	376	319	391	
75	n/a	n/a	322	394	322	394	334	410		
80	n/a	n/a	337	413	337	413	351	430		



ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2019
■ Basis For Assumptions	<ul style="list-style-type: none"> • CalPERS December 2017 experience study based on 1997 to 2015 demographic experience • Mortality improvement based on Society of Actuaries table • Inflation based on the Plan’s long-term time horizon • Capital market assumptions based on 2017 Bartel Associates stochastic analysis, taking into account capital market assumptions of investment advisory firms • Short-term medical trend developed in consultation with Axene Health Partners’ healthcare actuaries • Long-term medical trend developed using Society of Actuaries’ Getzen Model of Long-Run Medical Cost Trends • Medical claims costs were developed by Axene Health Partners based on demographic data for the CalPERS health plans provided by CalPERS and Axene’s proprietary AHP Cost Model



AMORTIZATION BASES

Amortization Bases

(Amounts in 000's)

	6/30/2017 Valuation		6/30/2019 Valuation	
	6/30/2018	6/30/2019	6/30/2020	6/30/2021
■ Outstanding Balance				
• 6/30/16 Fresh Start UAAL	\$ 9,307	\$ 9,049	\$ 8,747	\$ 8,398
• 6/30/17 Experience (Gains)/Losses	(141)	(89)	(86)	(83)
• 6/30/17 Assumption (Gains)/Losses	131	130	129	128
• 6/30/19 Experience (Gains)/Losses	-	-	(646)	(630)
• 6/30/19 Assumption (Gains)/Losses	-	-	(12)	(12)
• 6/30/19 Fire Experience (Gains)/Losses ²⁶	-	(2,024)	(2,660)	(2,553)
• Total	9,298	7,066	5,475	5,248

■ Experience (gains)/losses include contribution losses.

²⁶ Reflects Fire Department move to Central Marin Fire Authority



AMORTIZATION BASES

Amortization Payments

(Amounts in 000's)

	6/30/2017 Valuation		6/30/2019 Valuation	
	2018/19	2019/20	2020/21	2021/22
■ Amortization Payment				
• 6/30/16 Fresh Start UAAL	\$ 886	\$ 913	\$ 940	\$ 968
• 6/30/17 Experience (Gains)/Losses	(13)	(9)	(9)	(9)
• 6/30/17 Assumption (Gains)/Losses	10	10	10	11
• 6/30/19 Experience (Gains)/Losses	-	-	(58)	(60)
• 6/30/19 Assumption (Gains)/Losses	-	-	(1)	(1)
• 6/30/19 Fire Experience (Gains)/Losses	-	(205)	(286)	(294)
• Total	883	709	597	615
■ Average Amortization Years	14.0	13.1	11.8	10.8

■ See page 11 for amortization periods.



DEFINITIONS

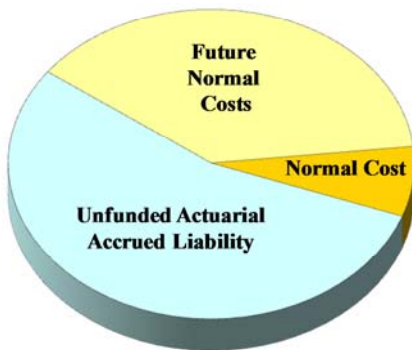
<p>■ OPEB Actuarial Valuation</p>	<ul style="list-style-type: none"> ■ Project future employer-provided benefit cash flows for current active employees and current retirees ■ Discount projected cash flow to valuation date using discount rate (assumed return on assets used to pay benefits) and other actuarial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



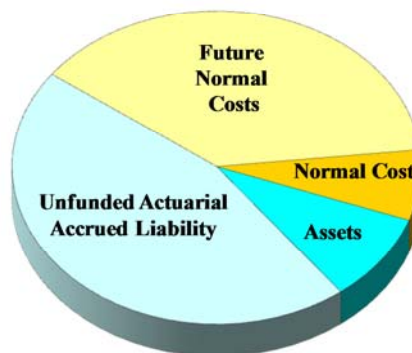
DEFINITIONS

Present Value of Benefits

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



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



DEFINITIONS

■ Terminology Used in Report

- AAL - Actuarial Accrued Liability
- ADC - Actuarially Determined Contribution
- AVA - Actuarial Value of Assets
- EAN - Entry Age Normal Cost Method
- GASBS 75 - Governmental Accounting Standards Board Statement No. 75
- NC - Normal cost
- OPEB - Other (than pensions) Post Employment Benefits
- PVB - Present Value of Projected Benefits
- UAAL - Unfunded Actuarial Accrued Liability



January 24, 2020

E-31

