



**CITY OF SAN RAFAEL
RETIREE HEALTHCARE PLAN**

BARTHEL ASSOCIATES, LLC

June 30, 2015 GASB 45 Actuarial Valuation

Doug Pryor, Vice President
Adam Zimmerer, Actuarial Analyst
Tak Frazita, Associate Actuary

Bartel Associates, LLC

March 15, 2016

CONTENTS

Topic	Page
Benefit Summary	1
Implied Subsidy	5
Data Summary	7
Actuarial Assumptions Highlights	9
Actuarial Methods	11
Assets	13
Results	17
Actuarial Certification	39
Exhibits	
Premiums	E – 1
Participant Statistics	E – 3
Actuarial Assumptions	E – 21
Definitions	E – 27

BENEFIT SUMMARY

	Elected Officials, Unrepresented Mid Management & Management	All other Bargaining Units¹
■ Eligibility ²	■ Retire directly from City: <ul style="list-style-type: none"> • Age 50 (age 55 if hired \geq 7/1/11 for Miscellaneous) with 10 years service (including reciprocity) or • 30 years service (Miscellaneous), 20 years service (Safety); or • Age 70 • Disability retirement 	
■ Benefit	■ Hired < 1/1/09 Full premium/cap ■ Hired \geq 1/1/09 PEMHCA Min	■ Hired < 1/1/10 Up to cap ■ Hired \geq 1/1/10 PEMHCA Min ³
■ Surviving Spouse Benefit	■ Benefit continues to surviving spouse	

¹ Annual active conversion of 50 hours of sick leave to HRA (excluded from valuation)

² Age 52 and 5 or age 70 for Miscellaneous PEPRAs members, age 50 and 5 or age 70 for Safety PEPRAs members

³ City match 2% Firefighters salary to HRA (excluded from valuation)



March 15, 2016



BENEFIT SUMMARY

■ Medicare Part B	■ Hired < 4/1/07 Full reimbursement ■ Hired \geq 4/1/07 None	■ None		
■ Other OPEB	■ No Dental, Vision, or Life Benefits			
■ Contributions	<u>Fiscal Year</u>	<u>Pay-Go</u>	<u>Trust</u>	<u>Total</u>
	2014/15	\$ 2,100,000	\$ 150,000	\$ 2,250,000
	2013/14	2,100,000	500,000	2,600,000
	2012/13	2,073,000	500,000	2,573,000
	2011/12	2,124,000	-	2,124,000
	2010/11	1,808,000	(1,000,000)	808,000
	2009/10	1,755,000	(1,000,000)	755,000
	2008/09	1,686,000	(1,000,000)	686,000



March 15, 2016



BENEFIT SUMMARY

Bargaining Unit	Monthly Cap	Min Date⁴
SEIU Child Care Unit	\$543	1/1/10
Unrepresented Mid-Management Employees	Retired < 12/1/01: \$442 Retired ≥ 12/1/01: Full prem Hired ≥ 4/1/07: \$600	1/1/09
San Rafael Fire Chief Officer's Association	\$557	1/1/10
San Rafael Firefighters' Association, I.A.F.F., Local 1775	\$557	1/1/10
San Rafael Police Association	\$386	1/1/10
San Rafael Police Mid-Management Association	\$566	1/1/10
SEIU 1021	\$752	1/1/10
Public Employees Bargaining Unit (PEU) Local 1	\$659	1/1/10
Unrepresented Management Employees and Council City Clerk and Elected Part-Time City Attorney	Hired < 4/1/07: Full prem. Hired ≥ 4/1/07: \$600	1/1/09
Western Council of Engineers (WCE)	\$752	1/1/10

⁴ Employees hired on or after date receive only PEMHCA minimum (\$122 in 2015, \$125 in 2016).



March 15, 2016



BENEFIT SUMMARY

This page intentionally blank

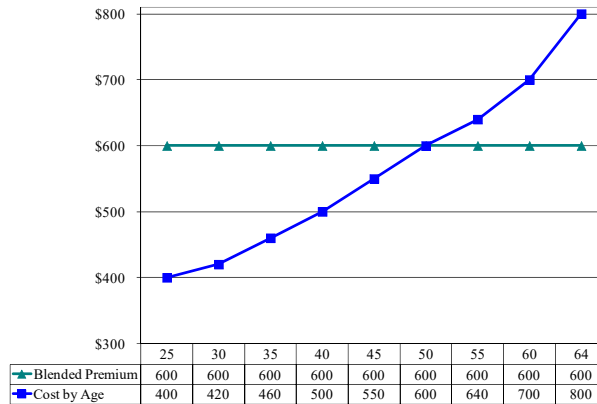


March 15, 2016

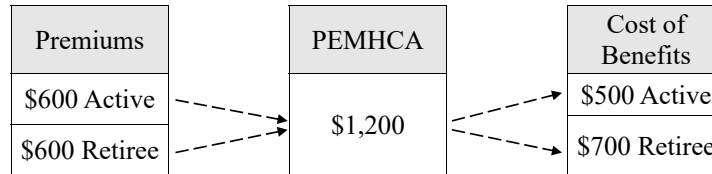


IMPLIED SUBSIDY

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



- Sample active age 40, retire age 60:



March 15, 2016



IMPLIED SUBSIDY

- GASB 45 defers to actuarial standards of practice.
- Prior Actuarial Standards of Practice No. 6⁵ (ASOP 6) allowed community rated plans to value liability using premiums, resulting in no implied subsidy.
- In May 2014, Actuarial Standards Board released revised ASOP 6:
 - Requires implied subsidy valued for community rated plans such as PEMHCA.
 - Timing: effective with all valuations on or after March 31, 2015
- June 30, 2015 valuation includes the implied subsidy.

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



March 15, 2016



DATA SUMMARY

Actives

	6/30/07	6/30/09 ⁶	6/30/11 ⁷	6/30/13 ⁸	6/30/15
■ Count					
• Cap	408	377	326	294	261
• PEMHCA Min	<u>n/a</u>	<u>4</u>	<u>35</u>	<u>76</u>	<u>115</u>
• Total	408	381	361	370	376
■ Average					
• Age	44.7	44.3	44.6	44.0	44.4
• City Service	11.6	10.7	10.9	11.1	11.2
• Pay	\$72,800	\$77,900	\$77,000	\$77,900	\$ 80,700
■ Total Pay (000's)	29,719	29,689	27,784	28,808	30,346

⁶ Data as of April 2010.

⁷ Data as of December 2011.

⁸ Data as of October 2013.



March 15, 2016



DATA SUMMARY

Retirees

	6/30/07	6/30/09 ⁹	6/30/11 ¹⁰	6/30/13 ¹¹	6/30/15
■ Count	247	291	308	328	323
■ Average					
• Age	66.6	65.9	66.7	67.4	68.7
• Retirement Age	56.6	53.9	54.7	55.2	55.3
• Monthly Benefit	\$ 480	\$ 537	\$ 573	\$ 554	\$ 629

⁹ Data as of April 2010.

¹⁰ Data as of December 2011.

¹¹ Data as of October 2013.



March 15, 2016



ACTUARIAL ASSUMPTIONS HIGHLIGHTS

Assumption	June 30, 2013 Valuation	June 30, 2015 Valuation
■ Valuation Date	<ul style="list-style-type: none"> • June 30, 2013 • 2014/15 & 2015/16 	<ul style="list-style-type: none"> • June 30, 2015 • 2016/17 & 2017/18
■ Funding Policy	<ul style="list-style-type: none"> • Pay-go with no CERBT account reimbursement • Total payment not < ARC 	<ul style="list-style-type: none"> • Same
■ General Inflation	<ul style="list-style-type: none"> • 3.25% 	<ul style="list-style-type: none"> • 2.75%
■ Discount Rate	<ul style="list-style-type: none"> • 7.50% (CERBT MFAD 0.11%) 	<ul style="list-style-type: none"> • 7.25%
■ Payroll Increases	<ul style="list-style-type: none"> • Aggregate increases – 3.25% • Merit Increases – Same as 6/30/2011 MCERA assumptions 	<ul style="list-style-type: none"> • Aggregate increases – 3.00% • Merit Increases – Same as 6/30/2014 MCERA assumptions



March 15, 2016



ACTUARIAL ASSUMPTIONS HIGHLIGHTS

Assumption	June 30, 2013 Valuation		June 30, 2015 Valuation	
		<u>Non-Medicare</u>	<u>Medicare</u>	
	<u>Year</u>	<u>All Plans</u>		<u>Year</u>
				<u>All Plans</u>
■ Healthcare Trend	2013	Actual 2013 premiums		2013
	2014	Actual 2014 premiums		2014
	2015	8.0%	8.3%	2015
	2016	7.5%	7.8%	2016
	2017	7.0%	7.2%	2017
	2018	6.5%	6.7%	2018
	2019	6.0%	6.1%	2019
	2020	5.5%	5.6%	2020
	2021+	5.0%	5.0%	2021+
■ Cap Increases	• None			• Same
■ PPACA High Cost Plan Excise Tax	• n/a			• 2.0% cash subsidy load



March 15, 2016



ACTUARIAL METHODS

Method	June 30, 2013 Valuation	June 30, 2015 Valuation
■ Cost Method	■ Entry Age Normal	■ Same
■ Amortization Method	■ Level percentage of payroll	■ Same
■ Actuarial Value of Assets	■ Investment gains and losses spread over 5-year rolling period ■ Not less than 80% nor more than 120% of market value	■ Investment gains and losses spread over 5-year rolling period ■ Not less than 80% nor more than 120% of market value
■ Amortization Period	■ 21-year fixed (closed) period for 6/30/14 UAAL	■ 19-year fixed (closed) period for 6/30/16 UAAL



ACTUARIAL METHODS

This page intentionally blank



ASSETS

Market Value of Plan Assets¹²
(000's Omitted)

	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
■ MVA (beginning of year)	\$ 9,568	\$ 9,585	\$ 10,889	\$ 11,178	\$ 12,666	\$ 15,492
• Contribution	-	-	-	500	500	150
• Benefit Payments	(1,000)	(1,000)	-	-	-	-
• Expenses	n/a	n/a	n/a	0	(19)	(16)
• Investment Return	1,017	2,303	289	988	2,346	(19)
■ MVA (end of year)	9,585	10,889	11,178	12,666	15,492	15,608
■ Approximate Return	10.6%	24.0%	2.7%	8.8%	18.4%	-0.2%

¹² 401(h) account transferred to CERBT 6/26/13.

Amounts revised from previous valuation based on updated information provided by City.



March 15, 2016

13



ASSETS

Actuarial Value of Plan Assets¹³
(000's Omitted)

	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
■ AVA (eoy)	\$ 12,773	\$ 11,008	\$ 10,861	\$ 11,130	\$ 12,505	\$ 14,253
• Contribution	-	-	-	500	500	150
• Benefit Payments	(1,000)	(1,000)	-	-	-	-
• Credited Return	(765)	853	269	875	1,248	1,096
■ AVA (eoy)	11,008	10,861	11,130	12,505	14,253	15,499
■ Approximate Return	(6.0%)	7.7%	2.5%	7.9%	10.0%	7.7%

¹³ MCERA asset smoothing through 6/30/12. Rolling 5 year smoothing starting in 2012/13.



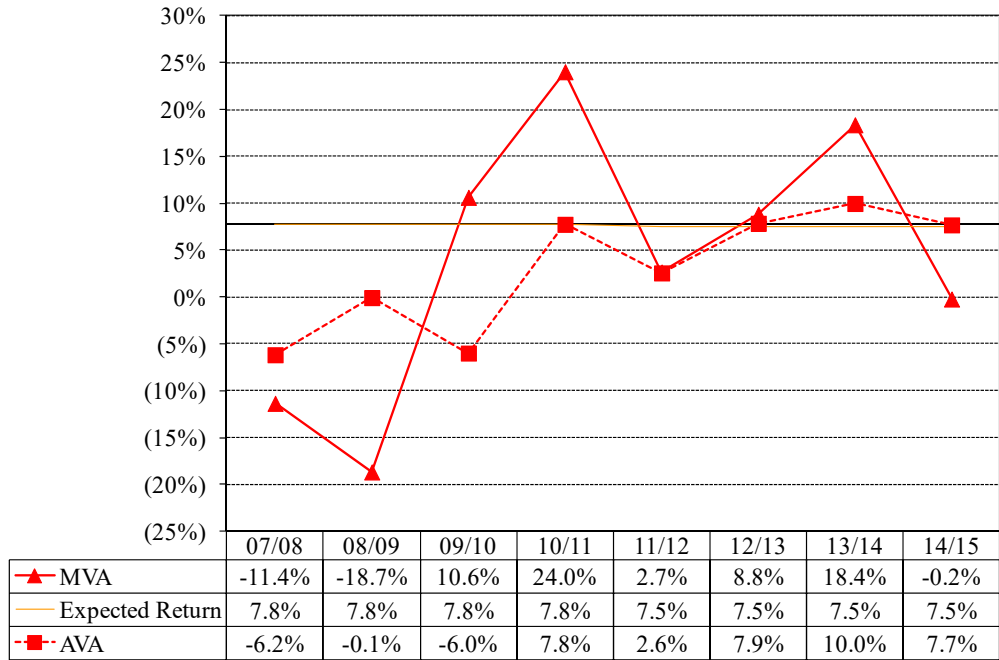
March 15, 2016

14



ASSETS

Historical Returns



ASSETS

This page intentionally blank



RESULTS

Actuarial Obligations (000's Omitted)

	6/30/07	6/30/09	6/30/11	6/30/13	6/30/15
■ Present Value of Benefits					
• Actives	\$ 41,880	\$ 37,131	\$ 14,105	\$ 12,988	\$ 19,720
• Retirees	<u>27,714</u>	<u>35,196</u>	<u>25,802</u>	<u>24,462</u>	<u>34,358</u>
• Total	69,594	72,327	39,907	37,450	54,078
■ Actuarial Accrued Liability					
• Actives	25,053	21,066	9,354	9,087	13,868
• Retirees	<u>27,714</u>	<u>35,196</u>	<u>25,802</u>	<u>24,462</u>	<u>34,358</u>
• Total	52,767	56,262	35,156	33,549	48,226
■ Assets	<u>14,563</u>	<u>12,773</u>	<u>9,861</u>	<u>12,505</u>	<u>15,499</u>
■ Unfunded Liability	38,204	43,489	25,295	21,044	32,727
■ Normal Cost	2,022	1,805	706	580	846
■ Pay-Go Cost	1,686	2,045	2,282	2,256	3,101



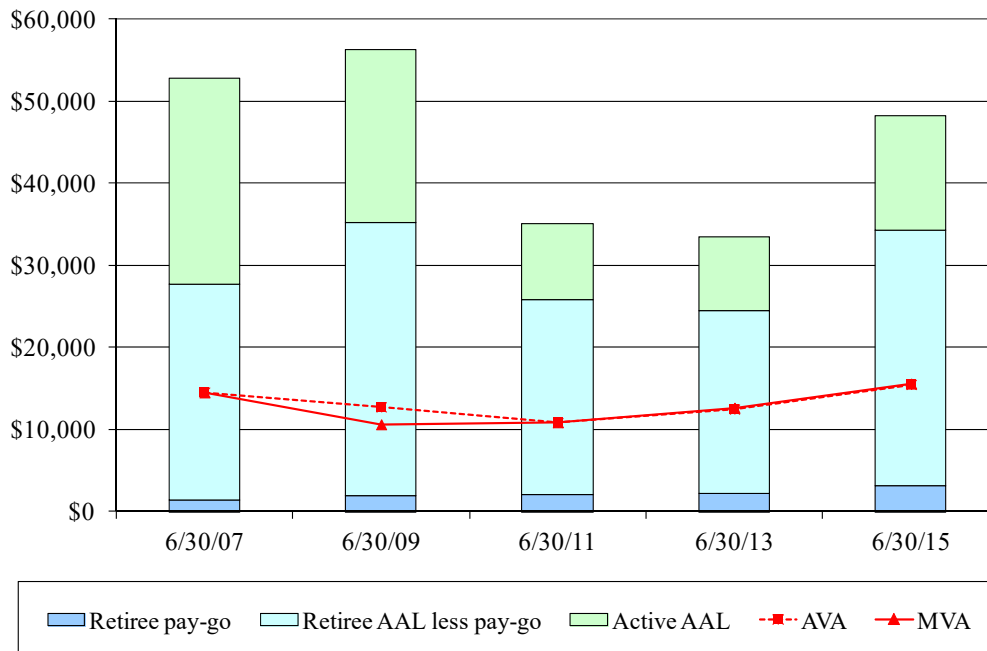
March 15, 2016

17



RESULTS

Historical Funded Status (000's Omitted)



March 15, 2016

18



RESULTS

Actuarial Accrued Liability Gain/Loss
(000's Omitted)

	AAL (Gain)/Loss
■ Actual @ 6/30/13	\$ 33,549
■ Expected @ 6/30/15	35,179
■ Changes	
• Premiums < Expected	(884)
• Updated Actuarial Assumptions	(365)
• Excise Tax	665
• Discount Rate	891
• Implied Subsidy	13,405
• Demographic/Other	<u>(664)</u>
• Total	12,157
■ Actual @ 6/30/15	48,226



RESULTS

This page intentionally blank



RESULTS

Annual Required Contribution (ARC)¹⁴
(000's Omitted)

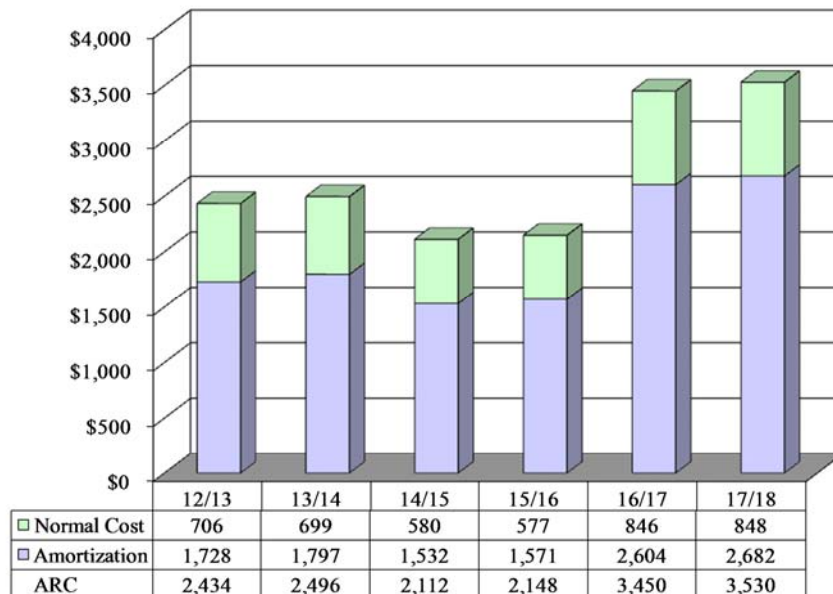
	6/30/2013 Val		6/30/2015 Val	
	2014/15	2015/16	2016/17	2017/18
■ Annual Required Contribution - \$				
• Normal Cost	\$ 580	\$ 577	\$ 846	\$ 848
• UAAL Amortization	<u>1,532</u>	<u>1,571</u>	<u>2,604</u>	<u>2,682</u>
• Total ARC	2,112	2,148	3,450	3,530
■ Projected Payroll	29,744	30,711	31,256	32,194
■ Annual Required Contribution - %				
• Normal Cost	1.9%	1.9%	2.7%	2.6%
• UAAL Amortization	<u>5.2%</u>	<u>5.1%</u>	<u>8.3%</u>	<u>8.3%</u>
• Total ARC	7.1%	7.0%	11.0%	11.0%

¹⁴ Actuarially Determined Contribution (ADC) for 2017/18.



RESULTS

Annual Required Contribution (ARC)¹⁵
(000's Omitted)



¹⁵ Actuarially Determined Contribution (ADC) for 2017/18.



RESULTS

Amortization Bases
(000's Omitted)

	6/30/2013 Val		6/30/2015 Val	
	6/30/14	6/30/15	6/30/16	6/30/17
■ Outstanding Balance				
• Initial UAAL	\$ 45,116	\$ 45,143	\$ 45,064	\$ 44,762
• (Gain)/Loss				
➤ 2009 val	(4,307)	(4,310)	(4,302)	(4,273)
➤ 2011 val	(26,749)	(26,765)	(26,718)	(26,539)
➤ 2013 val	(2,862)	(2,864)	(2,859)	(2,840)
➤ 2015 val	-	-	12,608	12,523
• NOO (projected)	<u>9,400</u>	<u>9,262</u>	<u>9,068</u>	<u>9,007</u>
• Total	20,598	20,467	32,862	32,640



March 15, 2016

23



RESULTS

Amortization Payments
(000's Omitted)

	6/30/2013 Val		6/30/2015 Val	
	2014/15	2015/16	2016/17	2017/18
■ Payment				
• Initial UAAL	\$ 3,356	\$ 3,465	\$ 3,569	\$ 3,676
• (Gain)/Loss				
➤ 2009 val	(320)	(331)	(341)	(351)
➤ 2011 val	(1,990)	(2,054)	(2,116)	(2,180)
➤ 2013 val	(213)	(220)	(226)	(233)
➤ 2015 val	-	-	999	1,029
• NOO (projected)	<u>699</u>	<u>711</u>	<u>719</u>	<u>740</u>
• Total	1,532	1,571	2,604	2,682
• Average years	21.0	20.0	19.0	18.0



March 15, 2016

24



RESULTS

Actuarial Obligations – June 30, 2015
(000's Omitted)

	Cash Subsidy	Implied Subsidy	Total
■ Present Value of Benefits			
• Actives	\$ 13,497	\$ 6,223	\$ 19,720
• Retirees	<u>25,337</u>	<u>9,021</u>	<u>34,358</u>
• Total	38,834	15,244	54,078
■ Actuarial Accrued Liability (AAL)			
• Actives	9,484	4,384	13,868
• Retirees	<u>25,337</u>	<u>9,021</u>	<u>34,358</u>
• Total	34,821	13,405	48,226
■ Actuarial Value of Assets¹⁶	<u>15,499</u>	-	<u>15,499</u>
■ Unfunded AAL	19,322	13,405	32,727
■ 2016/17 Normal Cost	612	234	846
■ 2016/17 Pay-As-You-Go Cost	2,319	782	3,101

¹⁶ AVA allocated to cash subsidy.



March 15, 2016

25



RESULTS

Annual Required Contribution (ARC) – Fiscal Year 2016/17
(000's Omitted)

	Cash Subsidy	Implied Subsidy	Total
■ ARC - \$			
• Normal Cost	\$ 612	\$ 234	\$ 846
• UAAL Amortization	<u>1,504</u>	<u>1,100</u>	<u>2,604</u>
• Total	2,116	1,334	3,450
■ Projected Payroll	31,256	31,256	31,256
■ ARC - %			
• Normal Cost	2.0%	0.7%	2.7%
• UAAL Amortization	<u>4.8%</u>	<u>3.5%</u>	<u>8.3%</u>
• Total	6.8%	4.3%	11.0%



March 15, 2016

26



RESULTS

Estimated 2016/17 Implied Subsidy Transfer for Medical Coverage
For Illustrative Purposes Only
(000's Omitted)

Before Implied Subsidy	Actives	Retirees	Total
■ Total Premium ¹⁷	\$ 5,000	\$ 3,000	\$ 8,000
■ Member Contribution ¹⁸	-	(681)	(681)
■ Employer Contribution	5,000	2,319	7,319

After Implied Subsidy	Actives	Retirees	Total
■ Total Premium	5,000	3,000	8,000
■ Member Contribution	-	(681)	(681)
■ Implied Subsidy Transfer	(782)	782	-
■ Employer Contribution	4,218	3,101	7,319

¹⁷ Estimated premium based on the 6/30/15 participant data, 2016 premiums and estimated 2017 premiums

¹⁸ Assumes no member contribution for actives



March 15, 2016



RESULTS

Benefit Payments Projection
(000's Omitted)

FYE June 30,	Benefit Payments		
	Cash	Implied Subsidy	Total
2017	\$ 2,319	\$ 782	\$ 3,101
2018	2,418	771	3,189
2019	2,534	806	3,340
2020	2,655	906	3,561
2021	2,754	948	3,702
2022	2,811	921	3,732
2023	2,881	950	3,832
2024	2,967	991	3,958
2025	3,014	1,056	4,070
2026	3,063	1,100	4,163



March 15, 2016



RESULTS

Net OPEB Obligation (NOO)
(000's Omitted)

	Actual 2014/15	Estimated		
		2015/16	2016/17	2017/18
■ NOO at Beginning of Year	\$ 9,296	\$ 9,164	\$ 9,068	\$ 9,007
■ Annual OPEB Cost				
• Annual Required Contribution ¹⁹	2,112	2,148	3,450	3,530
• Interest on NOO	705	687	657	n/a
• Adjustment for NOO	<u>(699)</u>	<u>(704)</u>	<u>(719)</u>	<u>n/a</u>
• Annual OPEB Cost	2,118	2,131	3,389	n/a
■ Contributions				
• Cash Benefit Payments	2,100	2,229	2,319	2,418
• Implied Subsidy Benefit Payments ²⁰	-	-	782	771
• Trust Pre-Funding	<u>150</u>	<u>-</u>	<u>349</u>	<u>341</u>
• Total Contribution	2,250	2,229	3,450	3,530
■ NOO at End of Year	9,164	9,067	9,007	n/a

¹⁹ Actuarially Determined Contribution (ADC) for 2017/18.

²⁰ Cash payments estimated after 2014/15. Implied subsidy payments listed here should be used in CAFR.



March 15, 2016

29



RESULTS

NOO Projection
(000's Omitted)

Fiscal Year	Beginning of Year Net OPEB Obligation	Contribution ²¹			Annual OPEB Cost (AOC)	Payroll	Contribution as % of Payroll
		Benefit Pmts	Pre-Fund	Total Contrib			
2016/17	\$ 9,068	\$ 3,101	\$ 349	\$ 3,450	\$ 3,389	\$ 31,256	11.0%
2017/18	9,007	3,189	341	3,530	n/a	32,194	11.0%
2018/19	n/a	3,340	271	3,611	n/a	33,160	10.9%
2019/20	n/a	3,561	132	3,692	n/a	34,155	10.8%
2020/21	n/a	3,702	73	3,775	n/a	35,179	10.7%
2021/22	n/a	3,732	126	3,858	n/a	36,235	10.6%
2022/23	n/a	3,832	114	3,946	n/a	37,322	10.6%
2023/24	n/a	3,958	78	4,036	n/a	38,441	10.5%
2024/25	n/a	4,070	59	4,129	n/a	39,595	10.4%
2025/26	n/a	4,163	62	4,225	n/a	40,782	10.4%

²¹ Based on benefits paid to retirees.



March 15, 2016

30



RESULTS

Actuarial Obligations – June 30, 2015
(000's Omitted)

	Miscellaneous	Safety	Total
■ PVPB			
• Actives	\$ 13,517	\$ 6,203	\$ 19,720
• Retirees	<u>18,371</u>	<u>15,987</u>	<u>34,358</u>
• Total	31,888	22,190	54,078
■ AAL			
• Actives	9,807	4,061	13,868
• Retirees	<u>18,371</u>	<u>15,987</u>	<u>34,358</u>
• Total	28,178	20,048	48,226
■ Assets²²	<u>9,056</u>	<u>6,443</u>	<u>15,499</u>
■ Unfunded Liability	19,122	13,605	32,727
■ Normal Cost (16/17)	572	273	846
■ Pay Go Costs (16/17)	1,725	1,376	3,101

²² For illustrative purposes, assets allocated on AAL.



March 15, 2016

31



RESULTS

Annual Required Contribution (ARC) – Fiscal Year 2016/17
(000's Omitted)

	Miscellaneous	Safety	Total
■ ARC- \$			
• Normal Cost	\$ 572	\$ 273	\$ 846
• UAL Amortization ²³	<u>1,531</u>	<u>1,073</u>	<u>2,604</u>
• Total ARC	2,104	1,345	3,450
■ Projected Payroll	16,918	14,339	31,256
■ ARC - %			
• Normal Cost	3.4%	1.9%	2.7%
• UAL Amortization	<u>9.0%</u>	<u>7.5%</u>	<u>8.3%</u>
• Total ARC	12.4%	9.4%	11.0%

²³ For illustrative purposes, amortization amount allocated on AAL.



March 15, 2016

32



RESULTS

Parking Fund/SRSD Results

Participant Counts²⁴

	Parking Fund	SRSD	Other	Total
■ Counts				
• Actives	15	15	346	376
• Retirees	-	<u>2</u>	<u>321</u>	<u>323</u>
• Total	15	17	667	699

²⁴ Counts assigned to groups based upon City research of personnel and financial records for each participant.



RESULTS

Parking Fund/SRSD Results

Participant Statistics

	Parking Fund	SRSD	Other	Total
■ Actives				
• Averages				
➤ Age	52.2	51.0	43.8	44.4
➤ Pay	\$58,100	\$84,800	\$81,500	\$80,700
• Service				
➤ Allocated average	9.1	12.8	11.2	11.2
➤ Average in group	9.6	12.3	11.2	11.2
• Total Pay (000's)	\$744	\$817	\$28,785	\$30,346
■ Retirees				
• Average Age	n/a	67.2	68.8	68.7



RESULTS

Parking Fund/SRSD Results

**Actuarial Obligations – June 30, 2015
(000's Omitted)**

	Parking Fund	SRSD
■ PVPB		
• Actives	\$ 723	\$ 1,452
• Retirees	<u>-</u>	<u>395</u>
• Total	723	1,847
■ AAL		
• Actives	455	1,081
• Retirees	<u>-</u>	<u>395</u>
• Total	455	1,476
■ Assets²⁵	<u>146</u>	<u>474</u>
■ Unfunded Liability	309	1,002
■ Pay Go Costs (16/17)	9	39

²⁵ For illustrative purposes, assets allocated on AAL.



RESULTS

Parking Fund/SRSD Results

**Annual Required Contribution (ARC) – Fiscal Year 2016/17
(000's Omitted)**

	Parking Fund	SRSD
■ ARC- \$		
• Normal Cost	\$ 42	\$ 57
• UAL Amortization ²⁶	<u>28</u>	<u>84</u>
• Total ARC	70	142
■ Projected Payroll	878	1,341
■ ARC - %		
• Normal Cost	4.8%	4.3%
• UAL Amortization	<u>3.2%</u>	<u>6.3%</u>
• Total ARC	7.9%	10.6%

²⁶ For illustrative purposes, amortization amount allocated on AAL.



RESULTS

Discount Rate Sensitivity
(000's Omitted)

	6.25%	7.25%	8.25%
■ PVPB on 6/30/15	\$ 61,585	54,078	47,996
■ Funded Status @ 6/30/15			
● AAL	53,871	48,226	43,503
● Assets	<u>15,499</u>	<u>15,499</u>	<u>15,499</u>
● Unfunded AAL	38,372	32,727	28,004
■ 2016/17 ARC			
● Normal Cost	\$ 1,035	\$ 846	\$ 697
● UAAL Amort.	<u>2,812</u>	<u>2,604</u>	<u>2,412</u>
● Total ARC	3,848	3,450	3,108
● ARC as % of Pay	12.3%	11.0%	9.9%



March 15, 2016

37



RESULTS

This page intentionally blank



March 15, 2016

38



ACTUARIAL CERTIFICATION

This report presents the City of San Rafael Retiree Healthcare Plan ("Plan") June 30, 2015 actuarial valuation. The purpose of this valuation is to:

- Determine the Governmental Accounting Standards Board Statement Nos. 43 and 45 June 30, 2013 Benefit Obligations,
- Determine the 2016/17 Annual Required Contributions under GASB 45,
- Determine the Plan's June 30, 2013 Funded Status, and
- Calculate the 2016/17 and 2017/18 Actuarially Determined Contributions.

The report provides information intended for reporting under GASB 43 and 45, but may not be appropriate for other purposes. Information provided in this report may be useful to the City for the Plan's financial management. Future valuations may differ significantly if the Plan's experience differs from our assumptions or if there are changes in Plan design, actuarial methods or actuarial assumptions. The project scope did not include an analysis of this potential variation.

The valuation is based on Plan provisions, participant data, and 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 principals and practices. Additionally, in our opinion, actuarial methods and assumptions



March 15, 2016

39



ACTUARIAL CERTIFICATION

comply with GASB 43 and 45. As members of the American Academy of Actuaries meeting the Academy Qualification Standards, we certify the actuarial results and opinions herein.

Respectfully submitted,

A handwritten signature in blue ink that reads 'Doug Pryor'.

Doug Pryor, ASA, EA, MAAA
Vice President
Bartel Associates, LLC
March 15, 2016



March 15, 2016

40



PREMIUMS

2015 PEMHCA Monthly Premiums
Bay Area

Medical Plan	Non-Medicare Eligible			Medicare Eligible		
	Single	2-Party	Family	Single	2-Party	Family
Anthem Select	\$ 662.41	\$ 1,324.82	\$ 1,722.27	\$ 445.38	\$ 890.76	\$ 1,336.14
Anthem Traditional	827.57	1,655.14	2,151.68	445.38	890.76	1,336.14
Blue Shield Access+	928.87	1,857.74	2,415.06	352.63	705.26	1,057.89
Blue Shield NetValue	870.60	1,741.20	2,263.56	352.63	705.26	1,057.89
Kaiser	714.45	1,428.90	1,857.57	295.51	591.02	886.53
UnitedHealthcare	850.67	1,701.34	2,211.74	267.41	534.82	802.23
PERS Choice	700.84	1,401.68	1,822.18	339.47	678.94	1,018.41
PERS Select	690.43	1,380.86	1,795.12	339.47	678.94	1,018.41
PERSCare	775.08	1,550.16	2,015.21	368.76	737.52	1,106.28
PORAC	675.00	1,292.00	1,642.00	402.00	802.00	1,281.00



March 15, 2016

E-1



PREMIUMS

2016 PEMHCA Monthly Premiums
Bay Area

Medical Plan	Non-Medicare Eligible			Medicare Eligible		
	Single	2-Party	Family	Single	2-Party	Family
Anthem Select	\$ 721.79	\$ 1,443.58	\$ 1,876.65	n/a	n/a	n/a
Anthem Traditional	855.42	1,710.84	2,224.09	n/a	n/a	n/a
Blue Shield Access+	1,016.18	2,032.36	2,642.07	n/a	n/a	n/a
Blue Shield NetValue	1,033.86	2,067.72	2,688.04	n/a	n/a	n/a
Health Net SmartCare	808.44	1,616.88	2,101.94	n/a	n/a	n/a
Kaiser	746.47	1,492.94	1,940.82	\$ 297.23	\$ 594.46	\$ 891.69
UnitedHealthcare	955.44	1,910.88	2,484.14	320.98	641.96	962.94
PERS Choice	798.36	1,596.72	2,075.74	366.38	732.76	1,099.14
PERS Select	730.07	1,460.14	1,898.18	366.38	732.76	1,099.14
PERSCare	889.27	1,778.54	2,312.10	408.04	816.08	1,224.12
PORAC	699.00	1,399.00	1,789.00	442.00	881.00	1,408.00



March 15, 2016

E-2



PARTICIPANT STATISTICS

Participant Statistics
June 30, 2015

	Miscellaneous	Police	Fire	Total
■ Actives				
• Count	248	64	64	376
• Average Age	46.8	40.5	38.9	44.4
• Average Service	11.3	12.2	9.5	11.2
• Average Pay	\$ 66,200	\$ 105,800	\$ 111,800	\$ 80,700
• Payroll (\$000s)	16,425	6,769	7,152	30,346
■ Retirees				
➤ Count < 65	55	23	44	122
➤ Count ≥ 65	109	39	53	201
➤ Total	164	62	97	323
• Average Age	69.9	67.1	67.8	68.7
• Average Ret. Age ²⁷	58.2	50.8	53.7	55.4

²⁷ Excludes 32 surviving spouses



March 15, 2016

E-3



PARTICIPANT STATISTICS

Participant Statistics
June 30, 2013

	Miscellaneous	Police	Fire	Total
■ Actives				
• Count	244	62	64	370
• Average Age	46.5	39.9	38.6	44.0
• Average Service	11.5	11.4	9.4	11.1
• Average Pay	\$ 64,192	\$ 103,374	\$ 105,255	\$ 77,860
• Payroll (\$000s)	15,663	6,409	6,736	28,808
■ Retirees				
➤ Count < 65	60	34	49	143
➤ Count ≥ 65	<u>99</u>	<u>32</u>	<u>54</u>	<u>185</u>
➤ Total	159	66	103	328
• Average Age	68.7	65.0	66.8	67.4
• Average Ret. Age ²⁸	57.9	50.8	53.7	55.2

²⁸ Excludes 35 surviving spouses



March 15, 2016

E-4



PARTICIPANT STATISTICS

Medical Plan Participation²⁹

Medical Plan	Actives	Retirees		
		< 65	≥ 65	Total
Anthem Traditional	1%	0%	0%	0%
Blue Shield Access+	13%	20%	19%	19%
Blue Shield NetValue	4%	2%	0%	1%
Kaiser	72%	54%	45%	48%
PERS Choice	3%	2%	11%	8%
PERS Select	1%	1%	0%	1%
PERS Care	1%	5%	24%	16%
PORAC	5%	16%	1%	7%
Total	100%	100%	100%	100%

²⁹ Excludes waived participants.



March 15, 2016

E-5



PARTICIPANT STATISTICS

Active Medical Coverage

Medical Plan	Single	2-Party	Family	Waived	Total
Anthem Traditional	-	1	2	-	3
Blue Shield Access+	16	5	17	-	38
Blue Shield NetValue	5	3	4	-	12
Kaiser	94	39	78	-	211
PERS Choice	3	2	4	-	9
PERS Select	-	1	1	-	2
PERSCare	1	1	2	-	4
PORAC	4	2	7	-	13
Waived	-	-	-	84	84
Total	123	54	115	84	376



March 15, 2016

E-6



PARTICIPANT STATISTICS

Retiree Medical Coverage – Under Age 65

Medical Plan	Single	2-Party	Family	Total
Blue Shield Access+	16	4	4	24
Blue Shield NetValue	1	1	1	3
Kaiser	32	33	1	66
PERS Choice	3	-	-	3
PERS Select	1	-	-	1
PERSCare	1	4	1	6
PORAC	5	9	5	19
Total	59	51	12	122



March 15, 2016

E-7



PARTICIPANT STATISTICS

Retiree Medical Coverage – Over Age 65

Medical Plan	Single	2-Party	Family	Total
Blue Shield Access+	18	20	-	38
Kaiser	44	44	3	91
PERS Choice	11	11	-	22
PERS Select	1	-	-	1
PERSCare	32	15	-	47
PORAC	-	1	1	2
Total	106	91	4	201



March 15, 2016

E-8



PARTICIPANT STATISTICS

Actives by Age and City Service
Miscellaneous

Age	City Service							Total
	< 1	1-4	5-9	10-14	15-19	20-24	≥ 25	
< 25	4	6	-	-	-	-	-	10
25-29	6	9	5	-	-	-	-	20
30-34	7	7	4	2	1	-	-	21
35-39	4	7	10	2	3	-	-	26
40-44	2	4	9	10	2	1	-	28
45-49	2	1	8	6	5	6	3	31
50-54	4	7	4	5	7	3	11	41
55-59	1	1	11	6	11	2	7	39
60-64	-	1	3	7	6	2	3	22
≥ 65	-	-	2	3	2	1	2	10
Total	30	43	56	41	37	15	26	248



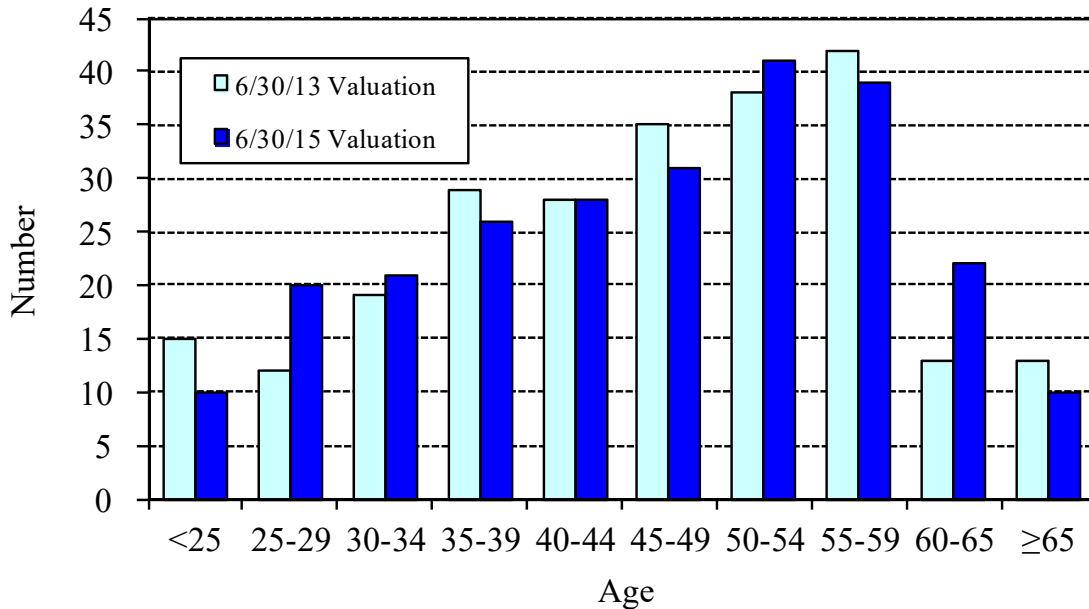
March 15, 2016

E-9



PARTICIPANT STATISTICS

Active Age Distribution
Miscellaneous



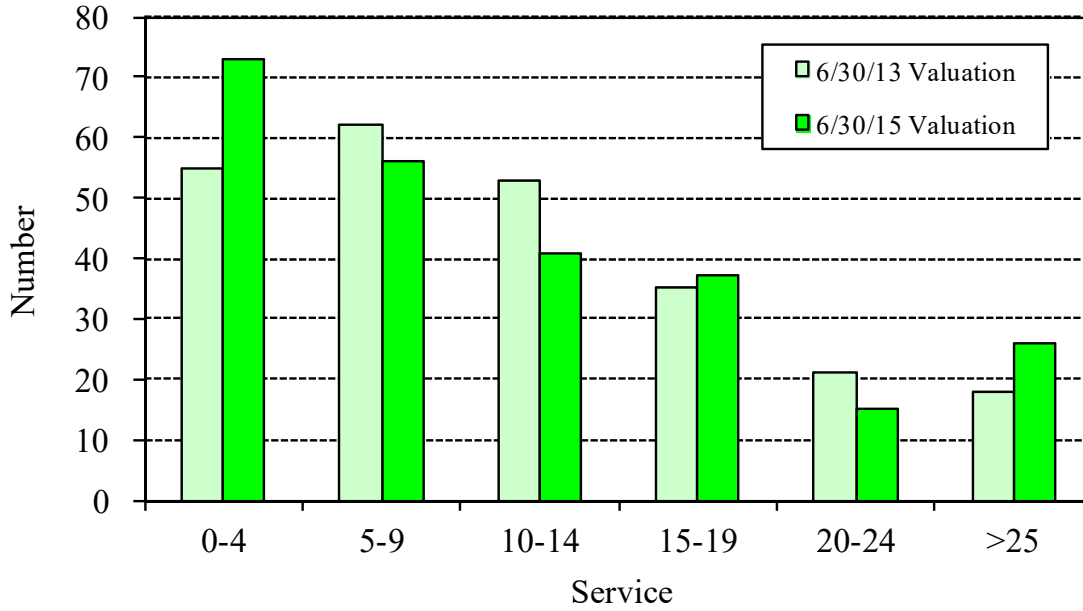
March 15, 2016

E-10



PARTICIPANT STATISTICS

Active Service Distribution
Miscellaneous



PARTICIPANT STATISTICS

This page intentionally blank



PARTICIPANT STATISTICS

Actives by Age and City Service
Safety

Age	City Service							Total
	< 1	1-4	5-9	10-14	15-19	20-24	≥ 25	
< 25	-	1	-	-	-	-	-	1
25-29	3	15	1	-	-	-	-	19
30-34	2	10	11	3	-	-	-	26
35-39	-	5	8	7	1	-	-	21
40-44	-	1	5	11	7	-	-	24
45-49	-	-	3	6	5	4	1	19
50-54	-	1	1	1	3	-	5	11
55-59	-	-	1	-	2	-	3	6
60-64	-	-	1	-	-	-	-	1
≥ 65	-	-	-	-	-	-	-	-
Total	5	33	31	28	18	4	9	128



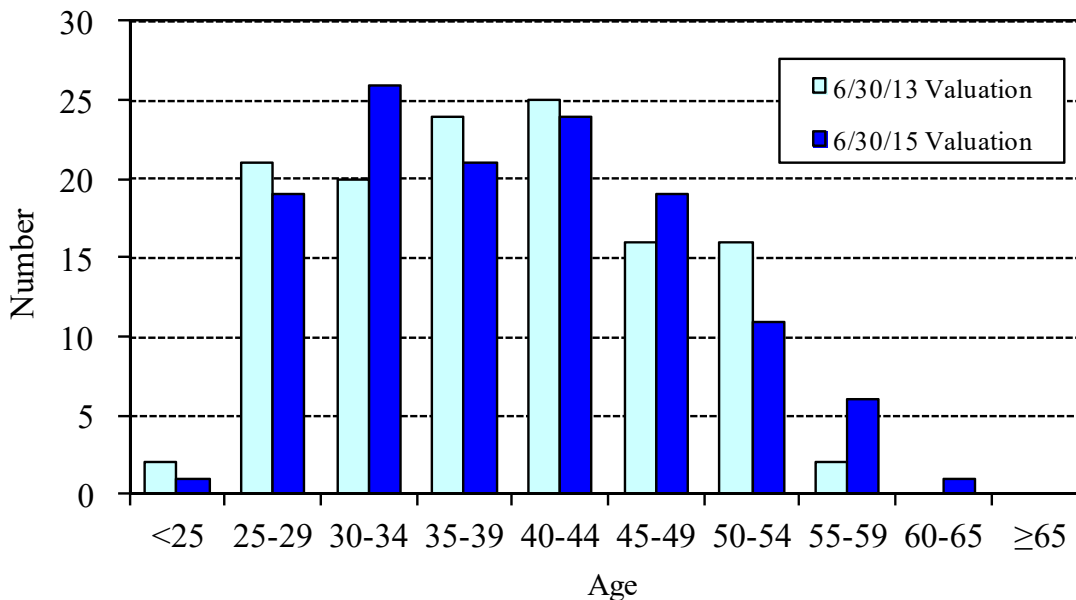
March 15, 2016

E-13



PARTICIPANT STATISTICS

Active Age Distribution
Safety



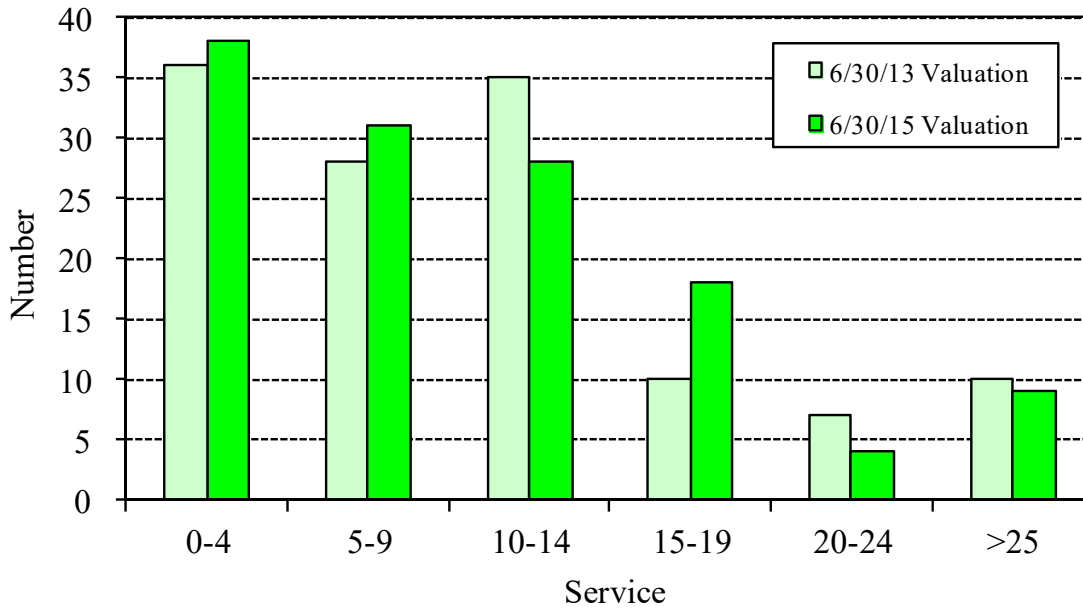
March 15, 2016

E-14



PARTICIPANT STATISTICS

Active Service Distribution
Safety



PARTICIPANT STATISTICS

This page intentionally blank



PARTICIPANT STATISTICS

Retiree Healthcare Coverage by Age Group
Miscellaneous

Age	Single	2-Party	Family	Total
Under 50	1	-	-	1
50-54	4	2	-	6
55-59	7	6	-	13
60-64	19	13	3	35
65-69	18	17	1	36
70-74	20	10	-	30
75-79	11	7	-	18
80-84	4	5	-	9
Over 85	14	2	-	16
Total	98	62	4	164
Average Age	70.8	68.8	63.7	69.9



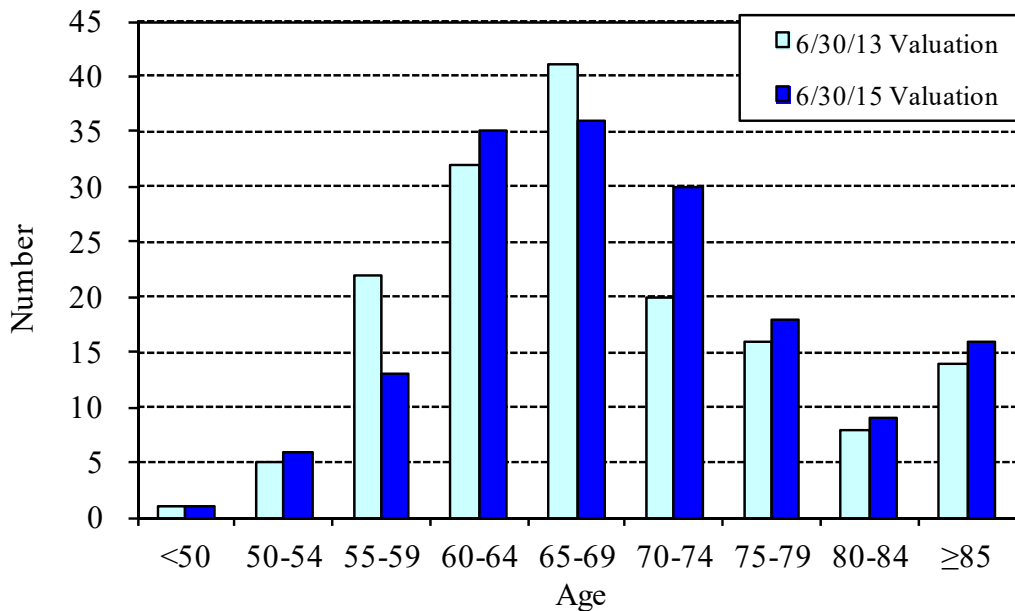
March 15, 2016

E-17



PARTICIPANT STATISTICS

Retiree Age Distribution
Miscellaneous



March 15, 2016

E-18



PARTICIPANT STATISTICS

Retiree Healthcare Coverage by Age Group
Safety

Age	Single	2-Party	Family	Total
Under 50	4	-	-	4
50-54	-	5	2	7
55-59	9	10	4	23
60-64	15	15	3	33
65-69	16	21	3	40
70-74	6	12	-	18
75-79	9	7	-	16
80-84	4	8	-	12
Over 85	4	2	-	6
Total	67	80	12	159
Average Age	67.9	68.3	60.6	67.5



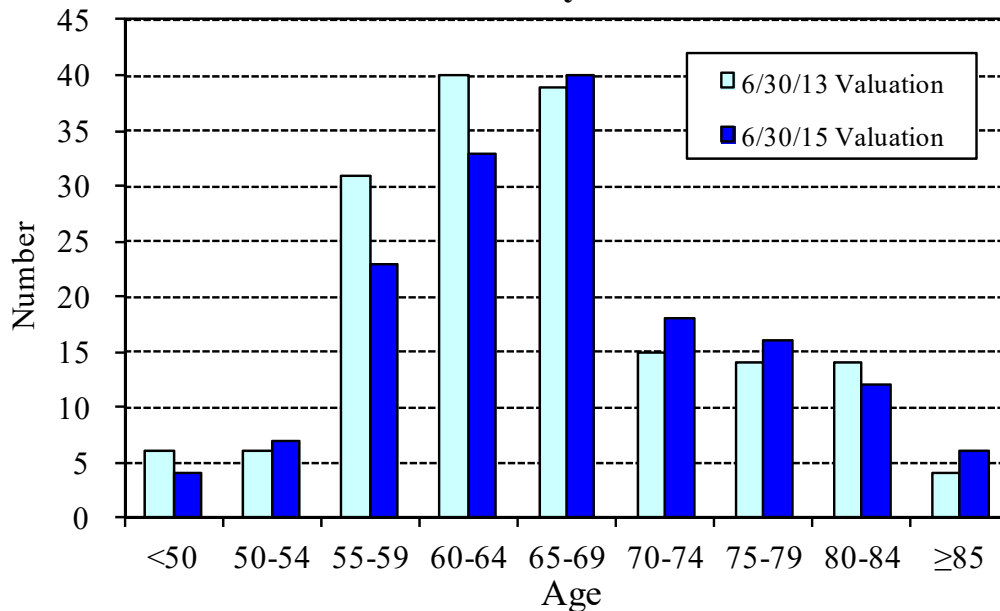
March 15, 2016

E-19



PARTICIPANT STATISTICS

Retiree Age Distribution
Safety



March 15, 2016

E-20



ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2013 Valuation	June 30, 2015 Valuation
<ul style="list-style-type: none"> ■ Mortality, Withdrawal, Disability 	<ul style="list-style-type: none"> • 6/30/11 MCERA valuation assumptions • Scale AA for post-retirement mortality 	<ul style="list-style-type: none"> • 6/30/14 MCERA valuation assumptions • Scale MP-2014 with 15-year convergence in 2022 for post-retirement mortality



March 15, 2016

E-21



ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2013 Valuation	June 30, 2015 Valuation																																										
<ul style="list-style-type: none"> ■ Service Retirement 	<ul style="list-style-type: none"> • 6/30/11 MCERA valuation assumptions <table border="0"> <tr> <td></td> <td align="center"><u>Misc</u></td> <td align="center"><u>Safety</u></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Benefit</td> <td align="center">2.7%<u>@55</u></td> <td align="center">3%<u>@55</u></td> <td></td> <td>Tier 1³⁰</td> <td align="center">2.7%<u>@55</u> 3%<u>@55</u></td> </tr> <tr> <td>ERA</td> <td align="center">59.8</td> <td align="center">53.5</td> <td></td> <td>ERA</td> <td align="center">60.5 55.6</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Tier 2³¹</td> <td align="center">2%<u>@55</u> 3%<u>@55</u></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>ERA</td> <td align="center">60.1 55.5</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Tier 3³²</td> <td align="center">2%<u>@62</u> 2.7%<u>@57</u></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>ERA</td> <td align="center">59.9 55.0</td> </tr> </table>		<u>Misc</u>	<u>Safety</u>				Benefit	2.7% <u>@55</u>	3% <u>@55</u>		Tier 1 ³⁰	2.7% <u>@55</u> 3% <u>@55</u>	ERA	59.8	53.5		ERA	60.5 55.6					Tier 2 ³¹	2% <u>@55</u> 3% <u>@55</u>					ERA	60.1 55.5					Tier 3 ³²	2% <u>@62</u> 2.7% <u>@57</u>					ERA	59.9 55.0	<ul style="list-style-type: none"> • 6/30/14 MCERA valuation assumptions
	<u>Misc</u>	<u>Safety</u>																																										
Benefit	2.7% <u>@55</u>	3% <u>@55</u>		Tier 1 ³⁰	2.7% <u>@55</u> 3% <u>@55</u>																																							
ERA	59.8	53.5		ERA	60.5 55.6																																							
				Tier 2 ³¹	2% <u>@55</u> 3% <u>@55</u>																																							
				ERA	60.1 55.5																																							
				Tier 3 ³²	2% <u>@62</u> 2.7% <u>@57</u>																																							
				ERA	59.9 55.0																																							
<ul style="list-style-type: none"> ■ Part Time Employment 	<ul style="list-style-type: none"> • 25% PARS employees become full time eligible 	<ul style="list-style-type: none"> • Same 																																										

³⁰ Final Average Pay based on 1 year (FAP 1); 3% COLA

³¹ Hired ≥ 7/1/11 based on FAP 3 and 2% COLA

³² PEPRA hired ≥ 1/1/13



March 15, 2016

E-22



ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2013 Valuation	June 30, 2015 Valuation
<ul style="list-style-type: none"> ■ PEMHCA Minimum Increases 	<ul style="list-style-type: none"> • 4.5% after 2014 	<ul style="list-style-type: none"> • 4.0% after 2016
<ul style="list-style-type: none"> ■ Participation at Retirement 	<ul style="list-style-type: none"> • Actives: <ul style="list-style-type: none"> ➢ Capped benefit: <ul style="list-style-type: none"> ○ Currently covered: 100% ○ Currently waived: 80% ➢ PEMHCA minimum: 60% • Retirees: same as current election 	<ul style="list-style-type: none"> • Same
<ul style="list-style-type: none"> ■ Medical Plan at Retirement 	<ul style="list-style-type: none"> • Currently covered: same as current elections • Currently waived: weighted premium based on current retiree elections 	<ul style="list-style-type: none"> • Same • Employees enrolled in Anthem & Blue Shield Medicare plans assumed to move to UnitedHealthcare beginning 2016



March 15, 2016

E-23



ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2013 Valuation	June 30, 2015 Valuation
<ul style="list-style-type: none"> ■ Marital Status 	<ul style="list-style-type: none"> • Covered actives and retirees – based on current coverage election • Waived actives – 80% married 	<ul style="list-style-type: none"> • Same
<ul style="list-style-type: none"> ■ Spouse Age 	<ul style="list-style-type: none"> • Males 3 years older than females 	<ul style="list-style-type: none"> • Same
<ul style="list-style-type: none"> ■ Dependents at Retirement 	<ul style="list-style-type: none"> • Pre-65: <ul style="list-style-type: none"> ➢ Actives: 20% ➢ Retirees: same as current coverage • Post-65: 0% 	<ul style="list-style-type: none"> • Same



March 15, 2016

E-24



ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2013 Valuation	June 30, 2015 Valuation
<ul style="list-style-type: none"> ■ Medicare Eligible Rate 	<ul style="list-style-type: none"> • Actives and Retirees under 65: <ul style="list-style-type: none"> ➢ Hired < 4/1/86: 80% Misc, 90% Safety ➢ Hired > 4/1/86: 100% • Retirees over 65: current Medicare eligible status 	<ul style="list-style-type: none"> • Same
<ul style="list-style-type: none"> ■ Medicare Participation 	<ul style="list-style-type: none"> • All eligible elect City reimbursement of Part B 	<ul style="list-style-type: none"> • Same



March 15, 2016

E-25



ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2013 Valuation				June 30, 2015 Valuation					
<ul style="list-style-type: none"> ■ HMO Medical Claims Costs 2016 PEMHCA Implied Subsidy Estimate 	<ul style="list-style-type: none"> • Monthly claims costs estimated from Bartel Associates PEMHCA client database and PEMHCA premiums 									
	Bay Area Region – Non-Medicare Eligible									
		<u>Anthem Trad.</u>		<u>BS Access+</u>		<u>BS NetValue</u>		<u>Kaiser</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	\$251	\$494	\$298	\$587	\$328	\$645	\$246	\$483	
	35	329	604	391	718	430	789	322	591	
	45	524	634	623	753	685	828	513	620	
	55	875	885	1,040	1,052	1,143	1,156	856	866	
	60	1,118	1,045	1,328	1,242	1,460	1,366	1,093	1,023	
	65	1,412	1,272	1,678	1,510	1,844	1,661	1,381	1,244	
	70	1,674	1,470	1,988	1,746	2,186	1,920	1,637	1,438	
	75	2,000	1,729	2,376	2,054	2,612	2,258	1,956	1,691	
	80	2,322	1,992	2,758	2,366	3,032	2,602	2,271	1,948	
	Bay Area Region - Medicare Eligible									
	<u>Anthem Trad.</u>		<u>BS Access+</u>		<u>BS NetValue</u>		<u>Kaiser</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>		
65	n/a	n/a	n/a	n/a	n/a	n/a	\$285	\$265		
70	n/a	n/a	n/a	n/a	n/a	n/a	268	256		
75	n/a	n/a	n/a	n/a	n/a	n/a	336	301		
80	n/a	n/a	n/a	n/a	n/a	n/a	360	319		



March 15, 2016

E-26



ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2013 Valuation	June 30, 2015 Valuation							
■ PPO Medical Claims Costs 2016 PEMHCA Implied Subsidy Estimate	• Monthly claims costs estimated from Bartel Associates PEMHCA client database and PEMHCA premiums								
	Bay Area Region – Non-Medicare Eligible								
		<u>PERS Choice</u>		<u>PERS Select</u>		<u>PERSCare</u>		<u>PORAC</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	\$244	\$401	\$216	\$354	\$284	\$466	\$237	\$389
	35	363	557	320	492	421	647	351	540
	45	576	631	508	557	668	732	558	611
	55	851	823	752	727	988	955	826	799
	60	1,023	946	903	835	1,187	1,097	990	917
	65	1,270	1,142	1,121	1,008	1,474	1,325	1,231	1,107
	70	1,506	1,320	1,329	1,165	1,747	1,532	1,459	1,279
	75	1,799	1,553	1,588	1,371	2,087	1,802	1,743	1,505
	80	2,088	1,789	1,844	1,579	2,423	2,076	2,024	1,734
	Bay Area Region - Medicare Eligible								
	<u>PERS Choice</u>		<u>PERS Select</u>		<u>PERSCare</u>		<u>PORAC</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>	
65	\$346	\$362	\$346	\$362	\$385	\$403	\$435	\$456	
70	329	351	329	351	367	391	414	441	
75	372	387	372	387	414	431	467	486	
80	384	399	384	399	428	444	483	501	



March 15, 2016

E-27



DEFINITIONS

■ GASB 45 Accrual Accounting	<ul style="list-style-type: none"> • Project future employer-provided benefit cash flow for current active employees and current retirees • Discount projected cash flow to valuation date using discount rate and actuarial assumptions to determine present value of benefits (PVB) • Discount rate is expected long-term return on plan assets • Allocate PVB to past, current, and future periods • Normal Cost is portion of PVB allocated to current fiscal year • Actuarial cost method used for valuation is Entry Age Normal Cost method which determines Normal Cost as a level percent of payroll • Actuarial Accrued Liability (AAL) is portion of PVB allocated to prior service with the employer • Unfunded AAL (UAAL) is AAL less Plan Assets • Assets must be in segregated and restricted trust to be considered Plan Assets for GASB 45
■ PayGo Cost	<ul style="list-style-type: none"> • Cash subsidy is employer pay-as-you-go benefit payments for retirees • Implied subsidy is difference between actual cost of retiree benefits and retiree premiums subsidized by active employee premiums



March 15, 2016

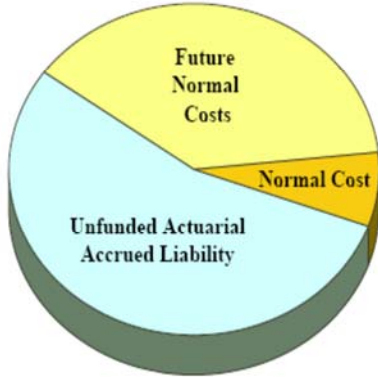
E-28



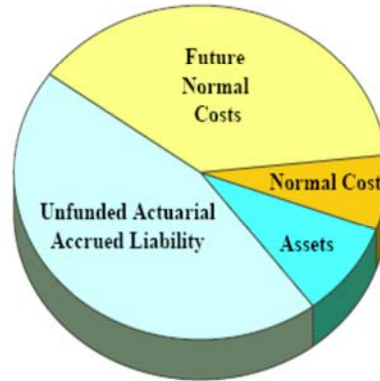
DEFINITIONS

Present Value of Benefits

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



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



March 15, 2016

E-29



DEFINITIONS

<p>■ Annual Required Contribution (ARC)</p>	<ul style="list-style-type: none"> ● GASB 45 contribution is Normal Cost plus amortization of: <ul style="list-style-type: none"> ➢ Initial UAAL and AAL for plan, assumption, and method changes ➢ Experience gains and losses (difference between actual experience and that expected from assumptions) ➢ Contribution gains and losses (difference between ARC and actual contributions)
<p>■ Net OPEB Obligation (NOO)</p>	<ul style="list-style-type: none"> ● NOO is accumulated amounts expensed but not funded ● Net OPEB Asset if amounts funded exceed those expensed
<p>■ Annual OPEB Cost (AOC)</p>	<ul style="list-style-type: none"> ● Expense for current period including: <ul style="list-style-type: none"> ➢ ARC ➢ Interest on NOO ➢ Adjustment of NOO ● Adjustment of NOO prevents double counting of expense since ARCs include amortization of prior contribution gains and losses previously expensed



March 15, 2016

E-30

