

TOWN OF ROSS RETIREE HEALTHCARE PLAN

BARTEL ISSOCIATES, LLC

June 30, 2015 Actuarial Valuation

Bartel Associates, LLC

Joseph R. D'Onofrio, Assistant Vice President Daniel Park, Actuarial Analyst Katherine Moore, Associate Actuary **February 17, 2016**

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BENEFIT SUMMARY

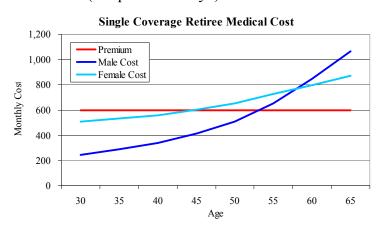
■ Eligibility	 Retire directly from Town under CalPERS (service or disability) Town Council members not eligible 				
■ Retiree Medical Benefit	• Town contribution is the PEMHCA minimum benefit: 2015 \$122 / month 2016 \$125 / month 2017+ Medical CPI increases				
■ Surviving Spouse Benefit	 Retiree 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 				
■ PEMHCA Administration Fee	 0.32% of retiree premium for 2015/16 Paid by Town and included with OPEB costs 				
■ Other OPEB	No Town contribution for dental, vision, life insurance, or Medicare Part B premium				





BENEFIT SUMMARY

- Implied Subsidy
- Retirees pay blended medical premiums rather than expected medical costs by age and gender
- Active premiums subsidize non-Medicare eligible retiree medical costs ("implied subsidy")



- Implied subsidy required by Actuarial Standards of Practice for actuarial valuations after 3/31/15
- Implied subsidy included with valuation results





FUNDING POLICY

■ Funding Policy	 Contribute full ARC less benefit payments with CERBT #1 Benefit payments made from Town assets Additional prefunding for 2014/15 Unfunded Liability amortized over 23 years for 2016/17 							
■ Pay-As-You-Go Cost	Fiscal Year 2014/15 2013/14 2012/13	2014/15 \$13,624 n/a 2013/14 12,751 12,751						
■ Town Contributions	Fiscal <u>Year</u> 2014/15 Est 2013/14 2012/13	Audit PayGo \$13,624 12,751 13,284	CERBT Prefunding \$225,000 26,000 0	Audit <u>Contribution</u> \$238,624 38,751 13,284	ARC \$35,000 39,000 55,000			

¹ Does not include PEMHCA administrative fees. Valuation ARCs include an estimate of PEMHCA administrative fees.





FUNDING POLICY

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PARTICIPANT SUMMARY

Participants - June 30, 2015

Participants	Misc	Police	Fire ²	Total
■ Actives ³	5	8	0	13
Average Age	60.8	45.3	n/a	51.3
 Average Town Service 	8.5	9.1	n/a	8.9
 Average Pay 	\$ 92,800	\$101,300	n/a	\$ 98,000
Total Payroll	464,000	810,100	n/a	1,274,100
■ Retirees				
Service Retirees	4	3	2	9
 Disabled Retirees 	0	3	1	4
 Surviving Spouses 	<u>1</u>	<u>1</u>	<u>1</u>	3
• Total	5	7	4	16
Average Age	68.3	68.4	69.2	68.6
 Average Retirement Age 				
> Service Retirees	64.0	57.3	56.5	60.1
Disabled Retirees	n/a	50.1	55.0	51.3

 $^{^{2}}$ Fire employees who retired prior to the formation of the Fire Joint Powers Authority on 7/1/12.

³ Excludes time employees not eligible for PEMHCA.



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PARTICIPANT SUMMARY

Participants - June 30, 2013

Participants	Misc	Police	Fire ⁴	Total
■ Actives	6	8	0	14
 Average Age 	58.9	43.3	n/a	50.0
 Average Town Service 	10.3	7.0	n/a	8.4
 Average Pay 	\$ 89,700	\$ 95,400	n/a	\$ 93,000
Total Payroll	538,000	763,000	n/a	1,302,000
■ Retirees				
 Service Retirees 	3	3	2	8
 Disabled Retirees 	0	3	1	4
 Surviving Spouses 	<u>2</u>	<u>1</u>	<u>1</u>	<u>4</u>
• Total	5	7	4	16
 Average Age 	68.6	66.4	67.2	67.3
 Average Retirement Age 				
Service Retirees	59.7	57.3	56.5	58.0
Disabled Retirees	n/a	50.1	55.0	51.3

⁴ Fire employees who retired prior to the formation of the Fire Joint Powers Authority on 7/1/12.





PARTICIPANT SUMMARY

Active Participant Reconciliation

	Actives					
Active Participants	Misc	Police	Total			
■ June 30, 2013	6	8	14			
• Terminations	(2)	(0)	(2)			
• Deaths	(0)	(0)	(0)			
New Retirees	(1)	(0)	(1)			
New Full-Time Hires	2	0	0			
■ June 30, 2015	5	8	13			





PARTICIPANT SUMMARY

Retired Participant Reconciliation

	Retirees					
Retired Participants	Service	Disabled	Survivors	Total		
■ June 30, 2013	8	4	4	16		
New Retirees	1	0	0	1		
New Survivors	-	-	0	0		
• Deaths	(0)	(0)	(1)	(1)		
■ June 30, 2015	9	4	3	16		





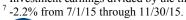
ASSETS

Market Value of Plan Assets (Amounts in 000's)

Market Value of Assets	2013/14	2014/15
■ Market Value at Beginning of Year	\$ 0	\$ 30
CERBT Contributions	26	225
• Town PayGo Contributions ⁵	13	14
• Investment Earnings	4	(6)
Benefit Payments	(13)	(14)
Administrative Expenses	(0)	(0)
■ Market Value at End of Year	30	249
■Estimated Net Annual Return ⁶	15.3%	(4.9%)
■ CERBT #1 Net Annual Return ⁷	18.5%	(0.1%)

⁵ Benefit payments made directly from Town assets.

⁶ Investment earnings divided by the time funds were invested. May not be an accurate measure for large changes in assets.



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ASSETS

Actuarial Value of Plan Assets (Amounts in 000's)

Actuarial Value of Assets	2013/14	2014/15
■ Actuarial Value at Beginning of Year	\$ 0	\$ 28
• Contributions	39	239
 Expected Net Earnings 	2	9
Benefit Payments	(13)	(14)
■ Expected AVA at End of Year	28	262
 Market Value at End of Year 	30	249
MVA - Expected AVA	2	(13)
• 1/5 of (MVA - Expected AVA)	0	(3)
Preliminary AVA	28	259
• Minimum AVA (80% of MVA)	24	199
• Maximum AVA (120% of MVA)	36	299
■ Actuarial Value at End of Year	28	259
- Astronial Value Estimated Not Determine	0.00/	7 10/
■ Actuarial Value Estimated Net Return	8.9%	5.1%
■ AVA / MVA	93%	104%





ASSUMPTIONS HIGHLIGHTS

Assumption	June 3	0, 2013 Val	luation	June 30, 2015 Valuation
■ Valuation Date	June 30,2014/15	2013 and 2015/1	6 ARCs	June 30, 20152016/17 and 2017/18 ARCs
■ Discount Rate	• 7.25% - 1 CERBT		unding with	• Same
■ PEMHCA Minimum	• 4.50% ar	nnually		• Same
■ Participation at Retirement	Actives Ret $<$ 65 Ret \ge 65 Actives Ret $<$ 65 Ret \ge 65	Part < 65 65% 100% n/a	$ \frac{\text{Covered}}{\text{Part} \ge 65} \\ $	• Same





ASSUMPTIONS HIGHLIGHTS

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Assumption	June 30, 2013 Valuation			Ju	ine 30, 2015 V	aluation
■ Medical Trend		Increase from	Prior Year		Increase from	n Prior Year
	Cal	Non-Medicare	<u>Medicare</u>	Cal	Non-Medicare	<u>Medicare</u>
	Year	<u>All Pla</u>	ans	Year	<u>All P</u>	<u>lans</u>
	2013	Premiu	ms	2013	n/	a
	2014	Premiu	ms	2014	n/	a
	2015	8.0%	8.3%	2015	Prem	iums
	2016	7.5% 7.8%		2016	Premiums	
	2017	7.0%	7.2%	2017	7.0%	7.2%
	2018	6.5%	6.7%	2018	6.5%	6.7%
	2019	6.0%	6.1%	2019	6.0%	6.1%
	2020	5.5%	5.6%	2020	5.5%	5.6%
	2021+	5.0%	5.0%	2021+	5.0%	5.0%
■ Mortality, Termination, Disability, Merit Pay	Exper	CalPERS 1997-2007 Experience Study Mortality improvement projection Scale AA			PERS 1997-20 perience Study rtality Improve -2014 modified Itimate mortali rovement rates	ement Scale d to converge ity





Actuarial Obligations (Amounts in 000's)

	6/30/13 Valuation		6/3	ion	
	Actual	Projected	Actual	Projected	Projected
Actuarial Obligations	6/30/13	6/30/15	6/30/15	6/30/16	6/30/17
■ Discount Rate	7.25%	7.25%	7.25%	7.25%	7.25%
■ Present Value of Benefits					
• Actives	\$174	n/a	\$425	n/a	n/a
• Retirees	<u>234</u>	<u>n/a</u>	<u>419</u>	<u>n/a</u>	<u>n/a</u>
• Total	408	\$438	844	\$871	\$892
■ Actuarial Accrued Liability					
• Actives	83	n/a	211	n/a	n/a
• Retirees	<u>234</u>	<u>n/a</u>	<u>419</u>	<u>n/a</u>	<u>n/a</u>
• Total	317	362	630	679	725
■ Actuarial Value of Assets	0	<u>49</u>	<u>259</u>	<u>296</u>	<u>339</u>
■ Unfunded AAL	317	314	371	383	386
■ Funded Percentage	0%	14%	41%	44%	47%
■ Normal Cost	14	15	38	39	40
■ Pay-As-You-Go Cost	14	17	33	41	51





VALUATION RESULTS

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Estimated Actuarial Gains & Losses (Amounts in 000's)

Actuarial Gains & Losses	AAL
■ 6/30/13 Actuarial Accrued Liability	\$317
■ 6/30/15 Expected Actuarial Accrued Liability	362
■ Experience Losses (Gains)	
 Actual versus expected PEMHCA minimum 	(14)
Demographic & other	(2)
■ Assumption Changes	
 CalPERS demographic assumptions 	(0)
 Projected mortality improvement 	16
PEMHCA administration fee	<u>(1)</u>
■ Total Gains & Losses	(1)
■ 6/30/15 Cash Subsidy Actuarial Accrued Liability	360
■ Implied Subsidy	<u>270</u>
■ 6/30/15 Actuarial Accrued Liability	630





Annual Required Contribution (ARC) (Amounts in 000's)

	6/30/13 V	aluation	6/30/15	Valuation
Annual Required Contribution	2014/15	2015/16	2016/17	2017/18 ⁸
■ Discount Rate	7.25%	7.25%	7.25%	7.25%
■ARC - \$				
• Normal Cost	\$14	\$15	\$39	\$40
UAAL Amortization	<u>21</u>	<u>21</u>	<u>26</u>	<u>27</u>
• Total ARC	35	36	65	67
■ Projected Payroll ⁹	1,344	1,388	1,315	1,358
■ARC - %				
• Normal Cost	1.1%	1.1%	3.0%	2.9%
UAAL Amortization	<u>1.5%</u>	<u>1.5%</u>	2.0%	2.0%
• Total ARC%	2.6%	2.6%	4.9%	4.9%
■ UAAL Amortization Years	25	24	23	22

⁸ Accounting information for 2017/18 will be determined under GASB 75.



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VALUATION RESULTS

Benefit Payment Projection (Amounts in 000's)

	(Cash Subsidy	7		
Fiscal	Current	Current	Total	Implied	Total
Year	Actives	Retirees	Cash	Subsidy	Payment
2015/16	\$0	\$15	\$16	\$18	\$33
2016/17	2	16	17	24	41
2017/18	3	16	19	32	51
2018/19	4	17	21	43	63
2019/20	6	17	23	50	73
2020/21	7	18	25	37	61
2021/22	8	19	27	43	69
2022/23	10	19	29	32	61
2023/24	11	20	30	14	45
2024/25	12	20	32	18	51
PVB ¹⁰	214	260	474	369	844

¹⁰ Present Value of Benefits for all years, including those after the 11 years shown. The Present Value of Benefits is the discounted value of future expected Town benefit payments using the valuation discount rate of 7.25%.





⁹ Reported payroll increased 1 year using the aggregate payroll increase assumption of 3.25% per year.

<u>Actuarial Obligations - Implied Subsidy Estimate</u> June 30, 2015 - 7.25% Discount Rate

(Amounts in 000's)

	Cash	Implied	Town
Actuarial Obligations	Subsidy	Subsidy	Cost
■ Present Value of Benefits			
• Actives	\$214	\$210	\$425
• Retirees	<u>260</u>	<u>159</u>	<u>419</u>
• Total	474	369	844
■ Actuarial Accrued Liability			
• Actives	100	111	211
• Retirees	<u>260</u>	<u>159</u>	<u>419</u>
• Total	360	270	630
■ Plan Assets	<u>259</u>	0	<u>259</u>
■ Unfunded Actuarial Accrued Liability	101	270	371
■ Funded Percentage	72%	0%	41%
■ Normal Cost 2016/17	21	18	39
■ Pay-As-You-Go Cost 2016/17	17	24	41





VALUATION RESULTS

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<u>Annual Required Contribution (ARC) - Implied Subsidy Estimate</u> 2016/17 Fiscal Year - 7.25% Discount Rate

(Amounts in 000's)

Annual Required Contribution	Cash Subsidy	Implied Subsidy	Town Cost
■ ARC - \$			
Normal Cost	\$21	\$18	\$39
UAAL Amortization	<u>_6</u>	<u>20</u>	<u>26</u>
• Total ARC	27	37	65
■ Projected Payroll	1,315	1,315	1,315
■ ARC - %			
• Normal Cost	1.6%	1.3%	3.0%
UAAL Amortization	0.5%	1.5%	2.0%
• Total ARC	2.1%	2.8%	4.9%





Contribution Projection

7.25% Discount Rate

(Amounts in 000's)

Fiscal	Actuarial Contribution			Pro	jected Tow	n Contribut	ion
Year End	ARC	Projected Payroll	ARC % Pay	Cash Subsidy	Implied Subsidy	Trust Funding	Total Contrib
2016	\$36	\$1,388	2.6%	\$16	\$0 ¹¹	\$20	\$36
2017	65	1,315	4.9%	17	24	24	65
2018	67	1,358	4.9%	19	32	16	67
2019	69	1,402	4.9%	21	43	5	69
2020	72	1,448	4.9%	23	50	$(1)^{12}$	72
2021	74	1,495	4.9%	25	37	12	74
2022	76	1,544	4.9%	27	43	6	76
2023	78	1,594	4.9%	29	32	17	78
2024	81	1,645	4.9%	30	14	37	81
2025	83	1,699	4.9%	32	18	33	83

¹¹ The Town will implement the requirement to include the implied subsidy with the June 30, 2015 valuation for the 2016/17 fiscal year. The 2015/16 ARC was determined by the June 30, 2013 valuation which did not include the implied subsidy. ¹² This illustration assumes that the Town will request a reimbursement from CERBT when cash subsidy plus implied subsidy benefit payments exceed the ARC.



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VALUATION RESULTS

Funded Status Projection

7.25% Discount Rate

(Amounts in 000's)

Fiscal		Actuar	ial Value o		Fu	ınded Stat	us	
Year End	BOY AVA	Trust Funding	Trust Benefits	Expected Earnings	EOY AVA	BOY AAL	BOY UAAL	BOY Fund%
2016	\$259	\$20	\$0	\$17	\$296	\$630	\$371	41%
2017	296	24	0	19	339	679	383	44%
2018	339	16	0	24	379	725	386	47%
2019	379	5	0	27	411	764	385	50%
2020	411	0	(1)	28	438	796	385	52%
2021	438	12	0	32	482	821	383	53%
2022	482	6	0	35	523	861	379	56%
2023	523	17	0	37	577	897	374	58%
2024	577	37	0	41	655	946	369	61%
2025	655	33	0	46	734	1,017	362	64%





Estimated Net OPEB Obligation (NOO) Projection (Amounts in Dollars)

	Audit	Estimate	Estimate	Estimate
Estimated Net OPEB Obligation	2013/14	2014/15	2015/16	2016/17
■ Discount Rate	7.25%	7.25%	7.25%	7.25%
■ NOO at Beginning of Year	\$215,768	\$217,908	\$15,871	\$15,961
■ Annual OPEB Cost				
 Annual Required Contribution 	39,000	35,000	36,000	65,000
• Interest on NOO	15,617	15,798	1,151	1,157
 NOO Adjustment 	(13,726)	(14,211)	(1,061)	(1,095)
 Annual OPEB Cost 	40,891	36,587	36,090	65,062
■ Contributions ¹³				
 Benefit Payments 	12,751	13,624	16,000	17,000
 Implied Subsidy Payments 	0	0	0	24,000
 Trust Funding 	<u>26,000</u>	225,000	20,000	<u>24,000</u>
 Total Contributions 	38,751	238,624	36,000	65,000
■ NOO at End of Year	217,908	15,871	15,961	16,023
■ NOO Amortization Years	26	25	24	23
■ NOO Amortization Factor	n/a	15.33	14.96	14.57

¹³ Estimated contributions for years after 2013/14. Estimated PEMHCA administration expenses are included with estimated cash benefit payments. Estimated items other than the ARC should be revised when actual contributions are known.



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VALUATION RESULTS



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CERBT OPEB Trust Prefunding Sensitivity 14 (Amounts in 000's)

■ Investment Strategy	CERBT #1	CERBT #2	CERBT #3
■ Discount Rate	7.25%	6.75%	6.25%
■ Present Value of Benefits	\$844	\$904	\$972
■ Funded Status 6/30/15			
 Actuarial Accrued Liability 	630	664	701
 Actuarial Value of Assets 	<u>259</u>	<u>259</u>	<u>259</u>
Unfunded AAL	371	405	442
■ ARC 2016/17			
• Normal Cost	\$ 39	\$ 42	\$ 45
• UAAL Amortization ¹⁵	<u>26</u>	<u>27</u>	<u>29</u>
• Total ARC	65	69	74
• ARC % of Payroll	4.9%	5.3%	5.6%

¹⁴ Bartel Associates is not an investment advisor and cannot recommend specific OPEB trusts. CERBT funds are shown for illustrative purposes only. ¹⁵ 23-year amortization of Unfunded AAL.







VALUATION RESULTS

CERBT Fund Investment Strategy¹⁶

■ CERBT Investment Strategy	CERBT #1	CERBT #2	CERBT #3
■ Public Equity	57%	40%	24%
■ Fixed Income	27%	39%	39%
■ REITs	8%	8%	8%
■ TIPS	5%	10%	26%
■ Commodities	3%	3%	3%
■ Total	100%	100%	100%
■ Standard Deviation	11.74%	9.32%	7.14%
■ Long-Term Expected Net Real Return	4.53%	3.98%	3.37%
■ Long-Term Inflation Assumption	<u>3.00%</u>	<u>3.00%</u>	<u>3.00%</u>
■ Long-Term Expected Net Nominal Return	7.53%	6.98%	6.37%
■ Recommended Discount Rate	7.25%	6.75%	6.25%
■ Margin for Adverse Deviation	0.28%	0.23%	0.12%

¹⁶ Standard Deviation and Long-Term Expected Net Real Return provided by CalPERS. Long-Term Inflation Assumption is Bartel Associates' assumption.



ISSUES

OPEB Accounting Changes

- OPEB Accounting:
 - GASB Statement No. 75 "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions," approved by GASB Board on June 2, 2015
 - Replaces GASB 45
 - Effective for fiscal years beginning after 6/15/17 (2017/18 for Town)
- Major Issues:
 - Net OPEB Liability (UAAL) on balance sheet
 - Expense calculation disconnected from contribution calculation
 - Discount rate is expected trust rate of return when assets sufficient to pay benefits
 - Discount rate is 20-year high-quality municipal bond rate when assets not sufficient
 - Immediate recognition of Total OPEB Liability (AAL) for plan changes
 - Deferred recognition of changes in Total OPEB Liability for gains and losses and assumption changes over average active and inactive average future working lifetime
 - Recognition of investment gains and losses over 5 years
 - Disclosure of asset allocation and expected real rates of return for each asset class
 - Entry age normal cost method
 - Biennial actuarial valuations



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ISSUES



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ISSUES

High Cost Health Coverage Excise Tax 17

- Patient Protection and Affordable Care Act (PPACA) enacted in March 2010 imposed a tax on high cost medical coverage ("Cadillac Tax")
- Excise tax of 40% beginning in 2020 applied to healthcare costs exceeding annual dollar thresholds¹⁸
 - \$10,200 for self-only coverage and \$11,850 for individuals aged 55 to 64
 - \$27,500 for non-self-only coverage and \$30,950 for individuals aged 55 to 64¹⁹
 - 2018 limits subject to increase if benchmark plan's 2018 premiums are more than 55% higher than 2010 premiums²⁰
 - Thresholds will increase for 2019 with CPI + 1%
 - Thresholds will increase for 2020 and later years with CPI
 - Age/gender adjustment if employer's demographics are substantially different from national workforce

¹⁸ Effective starting with taxable year beginning on or after 1/1/18 of entity liable for tax. Healthcare costs are premiums for fully-insured plans.

¹⁹ Higher thresholds for self and non-self coverage apply if majority of employees are engaged in high risk professions, including law enforcement officers and employees in fire protection activities.

²⁰ Benchmark plan is Federal Employees Health Benefits Plan (FEHBP) Blue Cross and Blue Shield Standard Option.



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ISSUES

High Cost Health Coverage Excise Tax

- Plans not currently subject to tax may become subject in future as medical CPI is expected to outpace general CPI
- Paid by insurers for fully insured plans and by employer or TPA for self-insured plans
- GASB 75 and Actuarial Standards of Practice require taxes and assessments expected to be imposed on benefit payments be included in valuations²¹
- Valuation assumes excise tax is added to premium and the additional cost borne by retiree

²¹GASB Statement No. 75, "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions," adopted in June 2015 and revised Actuarial Standard of Practice No. 6, "Measuring Retiree Group Benefits Obligations and Determining Retiree Group Benefits Program Periodic Costs or Actuarially Determined Contributions" adopted in May 2014.



TSWAY ROSS

¹⁷ The Consolidated Appropriations Act of 2016 signed into law on 12/18/15 delayed the effective date of the excise tax from 1/1/18 to 1/1/20 and changed it from a nondeductible tax to a deductible tax. Employers should consult with their healthcare provides, tax advisors, and legal counsel regarding the applicability of PPACA enacted taxes.

NEXT STEPS

■ Current Valuation

- Prefund implied subsidy?
- Additional prefunding?
- Final valuation report
- CERBT forms

■ Next Valuation

- 6/30/17 if no significant changes
- 2017/18 GASB 75 accounting information must use:
 - > Measurement date no earlier than 6/30/17 Prior fiscal year-end
 - ➤ Valuation date no earlier than 12/31/15 30 months prior to fiscal year-end
 - > Timing:
 - Cannot use Town's 6/30/15 valuation for 2017/18
 - Use 6/30/17 valuation for 2017/18 accounting?
 - Can do 6/30/16 valuation rolled-forward to 6/30/17 for GASB 75 accounting.
 - Measurement date should be consistently applied from period to period





ACTUARIAL CERTIFICATION

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This report presents the Town of Ross 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, 2015 Benefit Obligations,
- Determine the Plan's June 30, 2015 Funded Status, and
- Calculate the 2016/17 Annual Required Contribution and the 2017/18 Actuarially Determined Contribution.

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 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. Additionally, in our opinion, actuarial methods and assumptions 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,

Joseph R. D'Onofrio, FSA, EA, MAAA, FCA
Assistant Vice President
Bartel Associates, LLC
February 17, 2016

Katherine Moore, ASA, MAAA
Associate Actuary
Bartel Associates, LLC
February 17, 2016





EXHIBITS

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EXHIBITS

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PREMIUMS

2015 PEMHCA Monthly Premiums Bay Area

	Non-Medicare Eligible			M	edicare Eli	gible
Medical Plan	Single	2-Party	Family	Single	2-Party	Family
Anthem HMO Select	\$662.41	\$1,324.82	\$1,722.27	\$445.38	\$890.76	\$1,336.14
Anthem HMO 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



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PREMIUMS

2016 PEMHCA Monthly Premiums Bay Area

	Non-	Medicare I	Eligible	Medicare Eligible			
Medical Plan	Single	2-Party	Family	Single	2-Party	Family	
Anthem HMO Select	\$721.79	\$1,443.58	\$1,876.65	n/a	n/a	n/a	
Anthem HMO 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	1,798.00	442.00	881.00	1,408.00	





PARTICIPANT STATISTICS

Medical Plan Participation Non-Waived Participants

	Ju	ine 30, 201	13	June 30, 2015			
		Reti	rees		Reti	rees	
Medical Plan	Actives	< 65	≥ 65	Actives	< 65	≥ 65	
Anthem HMO Traditional	0%	0%	0%	18%	0%	0%	
Blue Shield Access +	8%	0%	17%	0%	0%	14%	
Kaiser	84%	100%	50%	73%	100%	57%	
PERS Choice	8%	0%	0%	9%	0%	0%	
PERSCare	0%	0%	33%	0%	0%	29%	
Total	100%	100%	100%	100%	100%	100%	





PARTICIPANT STATISTICS

E-3

Active Medical Coverage

Medical Plan	Single	2-Party	Family	Waived	Total
Anthem HMO Traditional		1	1		2
Kaiser	1	1	6		8
PERS Choice		1			1
Waived				2	2
Total	1	3	7	2	13
Election %	9%	27%	64%		
Waived %				15%	





PARTICIPANT STATISTICS

Retiree Medical Coverage Under Age 65

Medical Plan	Single	2-Party	Family	Waived	Total
Kaiser		2	1		3
Waived				3	3
Total	0	2	1	3	6
E14:0/	00/	(70/	220/		
Election %	0%	67%	33%		
Waived %				50%	





PARTICIPANT STATISTICS

E-5

Retiree Medical Coverage Age 65 & Over

Medical Plan	Single	2-Party	Family	Waived	Total
Blue Shield Access+	1				1
Kaiser	2	2			4
PERSCare	1	1			2
Waived				3	3
Total	4	3	0	3	10
Election %	57%	43%	0%		
Waived %				30%	





PARTICIPANT STATISTICS

Actives by Age and Town Service Miscellaneous

		Town Service								
Age	< 1	1-4	5-9	10-14	15-19	20-24	≥ 25	Total		
< 25								0		
25-29								0		
30-34								0		
35-39								0		
40-44								0		
45-49								0		
50-54								0		
55-59	2		1					3		
60-64						1		1		
≥ 65			1					1		
Total	2	0	2	0	0	1	0	5		







PARTICIPANT STATISTICS

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Actives by Age and Town Service Police

		Town Service							
Age	< 1	1-4	5-9	10-14	15-19	20-24	≥ 25	Total	
< 25								0	
25-29								0	
30-34		1						1	
35-39			1					1	
40-44			1	1				2	
45-49				2				2	
50-54				1				1	
55-59								0	
60-64		1						1	
≥ 65								0	
Total	0	2	2	4	0	0	0	8	





Assumption	June 30, 2013 Valuation	June 30, 2015 Valuation
■ Valuation Date	 June 30, 2013 2014/15 and 2015/16 ARCs ARC calculated as of beginning of the year with interest to end of year 1-year lag period between valuation date and first fiscal year ARC 	 June 30, 2015 2016/17 and 2017/18 ARCs ARC calculated as of beginning of the year with interest to end of year 1-year lag period between valuation date and first fiscal year ARC
■ Funding Policy	 Prefund full ARC less benefit payments with CERBT Benefit payments currently made from Town assets 	• Same
■ Discount Rate	• 7.25% - Full ARC funding with CERBT #1	• Same





ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2013 Valuation	June 30, 2015 Valuation
■ General Inflation	 3% annually Basis for aggregate payroll and discount rate assumptions	• Same
■ Aggregate Payroll Increases	 3.25% annually Inflation plus 0.25% For Normal Cost calculation and UAAL amortization 	• Same
■ Merit Payroll Increases	 CalPERS 1997-2007 Experience Study Added to aggregate payroll increase assumption for Normal Cost calculation 	 CalPERS 1997-2011 Experience Study Added to aggregate payroll increase assumption for Normal Cost calculation
■ PEMHCA Minimum Increases	• 4.50% annually	• Same





Assumption	Jun	e 30, 2013 Valı	uation	Ju	ine 30, 2015 V	aluation	
■ Medical Trend		Increase from	Prior Year		Increase from	n Prior Year	
	Cal	Non-Medicare	Medicare	Cal	Non-Medicare	<u>Medicare</u>	
	Year	All Pla	<u>ans</u>	Year	<u>All Plans</u>		
	2013	Premiu	ms	2013	n/a		
	2014	Premiums 2014 n/a		a			
	2015	8.0%	8.3%	2015	Premi	ums	
	2016	7.5%	.5% 7.8% 2016 Pren		Premi	iums	
	2017	7.0%	7.2%	2017	7.0%	7.2%	
	2018	6.5%	6.7%	2018	6.5%	6.7%	
	2019	6.0%	6.1%	2019	6.0%	6.1%	
	2020	5.5%	5.6%	2020	5.5%	5.6%	
	2021+	5.0%	5.0%	2021+	5.0%	5.0%	
■ CalPERS Service	• Used demo	al CalPERS serv for CalPERS graphic tables v on total CalPE	which are	• Sam	ne		





ACTUARIAL ASSUMPTIONS

_	20	2012 X	. 1 40		T	20. 201	- X7 1	
J	une 30,	2013 V	aluation	1	June 30, 2015 Valuation			
• Saı	mple es	timated	monthly	claim	s costs			
		I	Bay Area -	Non-N	Medicare Eli	gible		
	BS A	ccess+	Ka	iser	PERS	Choice	PER	SCare
Age	<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	\$298	\$587	\$246		\$244	\$401	\$284	\$466
35	391	718	322	591	363	557	421	647
45	623	753	513	620	576	631	669	732
55	1,040	1,052	856	866	851	823	988	955
60	1,328	1,242	1,093	1,023	1,023	946	1,187	1,097
65	1,678	1,510	1,381	1,244	1,270	1,142	1,474	1,325
• Ca	IPERS	1997-20	07		• CalPER	S 1997-	-2011	
Ex	perience	e Study			Experie	ence Stu	ıdv	
	•	-	ment		_		•	t Scale
	-							
P	J 7- 0							- 1-8
							2	022
	• San Age 25 35 45 55 60 65 • Ca Ex	• Sample est BS A	• Sample estimated: BS Access+	● Sample estimated monthly Bay Area BS Access+ Age M F M 25 \$298 \$587 \$246 35 391 718 322 45 623 753 513 55 1,040 1,052 856 60 1,328 1,242 1,093 65 1,678 1,510 1,381 ● CalPERS 1997-2007	Bay Area - Non-M BS Access+ Age M F M F 25 \$298 \$587 \$246 \$483 35 391 718 322 591 45 623 753 513 620 55 1,040 1,052 856 866 60 1,328 1,242 1,093 1,023 65 1,678 1,510 1,381 1,244 • CalPERS 1997-2007 Experience Study • Mortality improvement	■ Sample estimated monthly claims costs Bay Area - Non-Medicare Elimated BS Access+ Kaiser PERS Age M F M 25 \$298 \$587 \$246 \$483 \$244 35 391 718 322 591 363 45 623 753 513 620 576 55 1,040 1,052 856 866 851 60 1,328 1,242 1,093 1,023 1,023 65 1,678 1,510 1,381 1,244 1,270 ● CalPER Experience Study ● CalPER Experience Study ● Mortal MP-20 • Mortality improvement projection Scale AA MP-20 to ultime	Sample estimated monthly claims costs Bay Area - Non-Medicare Eligible BS Access+ Kaiser PERS Choice Age M F M F 25 \$298 \$587 \$246 \$483 \$244 \$401 35 391 718 322 591 363 557 45 623 753 513 620 576 631 55 1,040 1,052 856 866 851 823 60 1,328 1,242 1,093 1,023 1,023 946 65 1,678 1,510 1,381 1,244 1,270 1,142 • CalPERS 1997-2007 Experience Study • Mortality Improvement • Mortality Improvement • Mortality Improvement projection Scale AA MP-2014 modition ultimate modition ultimate moditions. Total PERS 1997-2014	Sample estimated monthly claims costs Bay Area - Non-Medicare Eligible BS Access+ Kaiser PERS Choice PER Age M F M F M 25 \$298 \$587 \$246 \$483 \$244 \$401 \$284 35 391 718 322 591 363 557 421 45 623 753 513 620 576 631 669 55 1,040 1,052 856 866 851 823 988 60 1,328 1,242 1,093 1,023 1,023 946 1,187 65 1,678 1,510 1,381 1,244 1,270 1,142 1,474 • CalPERS 1997-2007 Experience Study • Mortality Improvement • Mortality Improvement





Assumption	June 30, 2013	Valuation	n	June 30, 2015	Valuation	n	
■ Service	• CalPERS 1997-2007			• CalPERS 1997-2011			
Retirement	Experience Study			Experience Stud	ly		
	<u>CalPERS</u>	Misc	<u>ERA</u>	<u>CalPERS</u>	Misc	<u>ERA</u>	
	CalPERS Hire Age	45		CalPERS Hire Age	45		
	Hire $< 1/1/13$	2%@55	61.0	Hire < 1/1/13	2%@55	61.4	
	Hire $\ge 1/1/13$			Hire $\ge 1/1/13$			
	> Classic Member	2%@60	62.0	> Classic Member	2%@60	62.4	
	> New Member	2%@62	62.4	> New Member	2%@62	62.4	
	<u>CalPERS</u>	Police	ERA	<u>CalPERS</u>	Police	ERA	
	CalPERS Hire Age	30		CalPERS Hire Age	30		
	Hire $< 1/1/13$	3%@55	56.8	Hire < 1/1/13	3%@55	57.3	
	Hire $\ge 1/1/13$			Hire $\ge 1/1/13$			
	> Classic Member	3%@55	56.8	> Classic Member	3%@55	57.3	
	➤ New Member	2.7%@57	57.7	➤ New Member	2.7%@57	57.7	





ACTUARIAL ASSUMPTIONS

Assumption	June 3	0, 2013 Val	luation	June 30, 2015 Valuation
■ Participation at Retirement	Actives Ret < 65 Ret ≥ 65 Actives Ret < 65 Ret ≥ 65	Part < 65 65% 100% n/a Currently	Part ≥ 65 65% 100% 100% y Waived Part ≥ 65 65% 20% 0%	• Same
■ Medical Plan at Retirement	 Covered - same as current plan Waived - Kaiser 		urrent plan	 Currently covered - Same as current election Currently waived - Kaiser Participants in Blue Shield and Anthem elect Kaiser when Medicare eligible





Assumption	June 30, 2013 Valuation	June 30, 2015 Valuation
■ Coverage Election at Retirement	 Covered - based on current coverage election Waived - 80% married and elect 2-party coverage 	• Same
■ Medicare Eligibility	 100% eligible for Medicare at age 65 Medicare eligible retirees will elect Part B coverage 	• Same
■ Marital Status at Retirement	 Married if currently elect 2-party or family coverage Waived - 80% married Retirees - based on spouse information if provided 	• Same





ACTUARIAL ASSUMPTIONS

Assumption	June 30, 2013 Valuation		June 30, 20	15 Valuation
■ PEMHCA Administration Fee	• 0.33% for 201 • 0.35% of retir 2014/15 and 1 average throu Year 2009/10 2010/11 2011/12 2012/13 2013/14 5-Year Ave	ree premium for ater years - 5-year	• 0.32% for 202 • 0.32% for 202 years - 5-year 2015/16: Year 2011/12 2012/13 2013/14 2014/15 2015/16 5-Year Ave	
■ Spouse Age	 Actives - males 3 years older than females Retirees - males 3 years older than females if spouse birth date not provided 		• Same	





ACTUARIAL METHODS

Method	June 30, 2015 Valuation
■ Cost Method	Entry Age NormalNormal Cost is a level percentage of payroll
■ Actuarial Value of Assets	 Investment gains and losses spread over a 5-year rolling period Not less than 80% nor more than 120% of market value
■ Amortization Method	• Level percent of payroll
■ Amortization Period for ARC & NOO	 30-year fixed (closed) period for 6/30/09 UAAL for 2009/10 ARC 23-year fixed (closed) period for projected 6/30/15 UAAL for 2016/17 ARC Amortization period decreases by one year each fiscal year When amortization period reaches 15 years, experience gains and losses will be amortized over fixed (closed) 15-year periods and plan and assumption changes will be amortized over fixed (closed) 20-year periods





ACTUARIAL METHODS

Method	June 30, 2015 Valuation
■ Future New Hires	 Valuation Results - Closed group, no new hires for first year ARC Projections and subsequent year ARCs: Simplified open group projection Total active pay increased in accordance with aggregate payroll assumption No additional retirees from new hires over the 10-year projection period
■ Implied Subsidy	• Implied subsidy included for non-Medicare eligible retirees



DEFINITIONS

■ GASB 45 Accrual Accounting

- 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
- 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

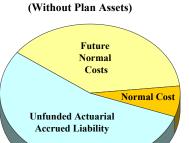


E-19

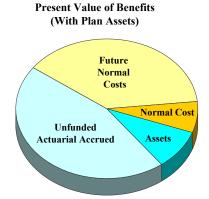


DEFINITIONS

Present Value of Benefits



Present Value of Benefits







DEFINITIONS

■ Annual Required Contribution (ARC)	 GASB 45 contribution is Normal Cost plus amortization of: 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)
■ Net OPEB Obligation (NOO)	 NOO is accumulated amounts expensed but not funded Net OPEB Asset if amounts funded exceed those expensed
■ Annual OPEB Cost (AOC)	 Expense for current period including: 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





DEFINITIONS

■ Terminology Used in Report	 AAL - Actuarial Accrued Liability AOC - Annual OPEB Cost ARC - Annual Required Contribution AVA - Actuarial Value of Assets BOY - Beginning of Fiscal Year
	• EAN - Entry Age Normal Cost Method
	GASB 45 - Governmental Accounting Standards Board Statement
	No. 45
	• GASB 75 - Governmental Accounting Standards Board Statement No. 75
	MVA - Market Value of Assets
	NOO - Net OPEB Obligation
	OPEB - Other (than pensions) Post Employment Benefits
	PVB - Present Value of Projected Benefits
	UAAL - Unfunded Actuarial Accrued Liability



