





January 29, 2018

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Ms. Heidi Bigall
Director of Administrative Services
Town of Tiburon
1505 Tiburon Blvd.
Tiburon, CA 94920

Re: Town of Tiburon GASB 75 Report for Fiscal Year Ended June 30, 2018

Dear Ms. Bigall,

Town of Tiburon ("The Town") has retained Nicolay Consulting Group to complete this valuation of The Town's postemployment medical program (the "Plan") as of June 30, 2017 measurement date compliant under Governmental Accounting Standards Board (GASB) Statement 75.

The purpose of this valuation is to determine the value of the expected postretirement benefits for current and future retirees and the Total OPEB Liability and Actuarially Determined Contribution for the fiscal year ending June 30, 2018. The amounts reported herein are not necessarily appropriate for use for a different fiscal year without adjustment.

Based on the foregoing, the cost results and actuarial exhibits presented in this report were determined on a consistent and objective basis in accordance with applicable Actuarial Standards of Practice and generally accepted actuarial procedures. We believe they fully and fairly disclose the actuarial position of the Plan based on the plan provisions, employee and plan cost data submitted.

The actuarial calculations were completed under the supervision of Gary Cline, ASA, MAAA, FCA, Enrolled Actuary. A member of the American Academy of Actuaries whom meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of our knowledge, the information supplied in the actuarial valuation is complete and accurate. In our opinion, assumptions as approved by the plan sponsor are reasonably related to the experience of and expectations for the Plan.

We would be pleased to answer any questions on the material contained in this report or to provide explanation or further detail as may be appropriate.

Respectfully submitted,

NICOLAY CONSULTING GROUP

Gary E. Cline, ASA, MAAA, FCA, EA Vice President & Chief Operating Officer

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#### A) Highlights

### **Summary of Key Valuation Results**

	2017
Disclosure elements as of measurement date ending June 30:	
Present Value of Future Benefits:	
Active	\$2,532,993
Retiree	<u>\$1,792,367</u>
Total	\$4,325,360
Actuarial Accrued Liability or Total OPEB Liability (TOL)	
Active	\$1,722,291
Retiree	<u>1,792,367</u>
Total	\$3,514,658
Plan Fiduciary Net Position	<u>1,386,481</u>
Net OPEB Liability	\$2,128,177
Plan Fiduciary Net Position as a percentage of the TOL	39%
Aggregate OPEB Expense (Exhibit 3)	\$50,323
Covered Payroll	\$3,853,068
Schedule of contributions for fiscal year ending 30:	
Actuarially determined contributions	\$318,222
Actual contributions <sup>(1)</sup>	<u>\$1,409,411</u>
Contribution deficiency (excess)	(\$1,091,189)
Pay-As-You-Go Premiums	\$119,394
Demographic data for fiscal year ending June 30 <sup>(2)</sup> :	
Number of active members	37
Number of retired members and beneficiaries	<u>21</u>
Total	58
Key assumptions as of June 30:	
Discount rate	6.66%
Initial Trend Rate	
Pre-65	7.8%
Post-65	5.0%
Ultimate Rate	5.0%
Year Ultimate Rate is Reached	2031
Trend for CalPERS Minimum	4.00%

<sup>(1)</sup> Includes payments to trust and amounts paid directly by the plan sponsor



<sup>(2)</sup> Census data as of June 30, 2017 is used in the measurement of the TOL as of June 30, 2017. See Section III for additional details.

# **Section I Management Summary**

#### B) Gap Analysis

The Actuarial Accrued Liability (AAL) has decreased (\$2,066,934) from 5,581,592 as of June 30, 2016 to \$3,514,658 as of June 30, 2017. A breakdown of the sources of this change in liability is shown below:

Liability Experience	Amount	Percentage
Expected Benefits Earned, Benefit Payments and Interest	\$269	5%
Actual Demographic and Other Experience	<u>(\$56)</u>	<u>(1%)</u>
Total Liability Experience	\$213	4%

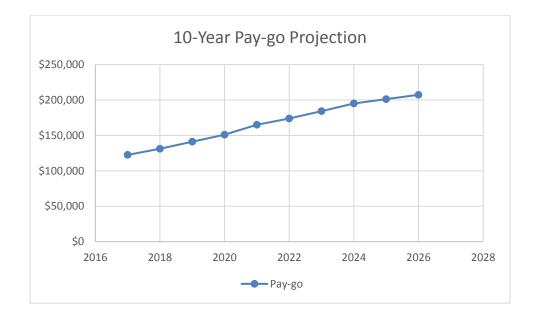
Changes in Assumptions	Amount	Percentage
Change in Discount Rate from 2.85% to 6.66%	<u>(\$2,280)</u>	(41%)
Total Liability Assumption Changes	(\$2,280)	(41%)

<sup>\*</sup>Amounts are in thousands.



# C) 10-Year Projection of Employer Benefit Payments

Fiscal Year Beginning 7/1	Premiums	Implicit Subsidy	Total
2017	\$122,490	\$55,782	\$178,272
2018	\$131,238	\$42,257	\$173,495
2019	\$141,005	\$60,267	\$201,272
2020	\$151,120	\$73,983	\$225,103
2021	\$164,998	\$76,989	\$241,987
2022	\$173,749	\$82,723	\$256,472
2023	\$184,287	\$78,475	\$262,762
2024	\$195,021	\$54,777	\$249,798
2025	\$201,068	\$57,131	\$258,199
2026	\$207,343	\$65,985	\$273,328



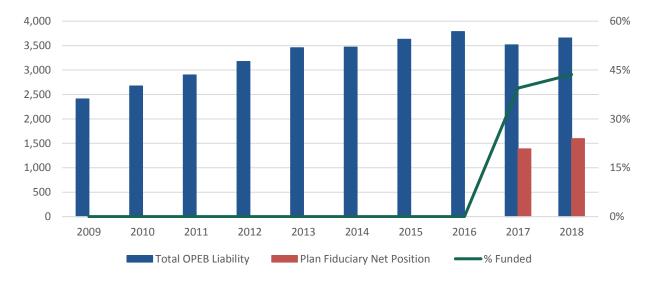


# **Section I Management Summary**

#### D) Funding Progress

Below is an illustration of the funded status of the Plan for the past 9 years, and a projection of the next year looking forward:

Funded Status
(9-year historical, 1-year projection)



# A) Schedule of Changes in Net OPEB Liability (Exhibit 1)

	2017
Total OPER Liability	
Service cost Interest Change of benefit terms Differences between expected and actual experience Changes of assumptions Benefit payments, including refunds of employee contributions Net change in Total OPEB Liability	\$224,595 163,787 0 (56,071) (2,279,851) (119,394) (2,066,934)
Total OPEB Liability – beginning	5,581,592
Total OPEB Liability – ending (a)	<u>\$3,514,658</u>
Plan Fiduciary Net Position	
Contributions – employer Contributions – employee Net investment income Benefit payments, including refunds of employee contributions Administrative expense Other Net change in Plan Fiduciary Net Position	\$1,409,411 0 98,547 (119,394) (2,083) 0 \$1,386,481
Plan Fiduciary Net Position – beginning Plan Fiduciary Net Position – ending (b)	<u> </u>
Net OPEB Liability – ending (a) – (b)	\$2,128,177
Plan Fiduciary Net Position as a percentage of the Total OPEB Liability  Covered employee payroll <sup>(1)</sup> Plan Net OPEB Liability as percentage of covered employee payroll <sup>(1)</sup>	39% \$3,853,068 55%

<sup>&</sup>lt;sup>1</sup> Covered payroll not available



#### B) Derivation of Significant Actuarial Assumptions

**Long-term Expected Rate of Return** – As of June 30, 2017, the long-term expected rates of return for each major investment class in the Plan's portfolio are as follows:

Investment Class	Target Allocation	Long-Term Expected Real Rate of Return <sup>1</sup>
Equity	58.00%	5.66%
Fixed Income	35.00%	1.41%
REITs	2.00%	5.06%
Cash	5.00%	-0.26%

<sup>&</sup>lt;sup>1</sup>JP Morgan Long Term Capital Market assumptions and expected inflation of 2.25%.

**Discount rate** – The discount rate used to measure the total OPEB liability as of June 30, 2016 was 2.85%. This single discount rate was based on the Bond Buyer-20 Bond GO index.

The discount rate used to measure the total OPEB liability as of June 30, 2017 was 6.66%. This single discount rate was based on a blend of the long-term expected real rate of return of assets under the PARS Balanced Index Plus investment strategy of 6.85% and the Bond Buyer 20-Bond GO index of 3.58%.



#### **Section II GASB 75 Exhibits**

#### C) Sensitivity Analysis (Exhibit 2)

Sensitivity of the Total OPEB Liability to changes in the discount rate – The following presents The Town's Total OPEB Liability would be if it were calculated using a discount rate that is 1% point lower (5.66%) or 1% point higher (7.66%) than the current rate:

Sensitivity of the Total OPEB Liability to changes in the Trend rate – The following presents The Town's Total OPEB Liability would be if it were calculated using a trend table that is 1% point lower or 1% point higher than the current rate:

Total OPEB Liability as of 06/30/2017 measurement date: \$3,514,658

#### **Sensitivity Analysis:**

		Discount Rate				Trend	
	TOL	\$ Change	%Change		TOL	\$ Change	% Change
+1%	\$3,145,753	(\$368,905)	(10%)	+1%	\$3,830,363	\$315,705	9%
Base	\$3,514,658	0	0	Base	\$3,514,658	0	0
-1%	\$3,957,811	\$443,153	13%	-1%	\$3,253,054	(\$261,604)	(7%)



# D) Schedule of OPEB Expense for Fiscal Year Ended June 30, 2018 (Exhibit 3)

## **Components of OPEB Expense**

Service Cost	\$224,595
Interest on the Total OPEB Liability (Exhibit 4)	163,787
Changes on Benefit Terms	0
Recognized Differences between Expected and Actual Experience	(7,202)
Recognized Changes of Assumptions	(292,826)
Employee Contributions	0
Projected Earnings on OPEB Plan Investments (Exhibit 5)	(25,506)
Recognized Differences Between Projected and Actual Earnings on	
Plan Investments	(14,608)
Administrative Expense	2,083
Other Changes in Fiduciary Net Position	0
Aggregate OPEB Expense	\$ <u>50,323</u>



# E) Interest on the Total OPEB Liability (Exhibit 4)

	Amount for Period a	Portion of Period b	Interest Rate c	Interest on the Total OPEB Liability a*b*c
Beginning Total OPEB Liability	5,581,592	100%	2.85%	\$159,075
Service Cost	224,595	100%	2.85%	6,401
Benefit payments, including refunds of employee contribution	(119,394)	50%	2.85%	(1,689)
Total Interest on the total OPEB liability	· · · · ·			\$163,787



# **Section II GASB 75 Exhibits**

# F) Earnings on Plan Fiduciary Net Position (Exhibit 5)

	Amount for Period a	Portion of Period b	Projected Rate of Return c	Projected Earnings a*b*c
Beginning Plan Fiduciary Net Position	\$0	100%	4.00%	\$0
Employer Contributions	1,290,017	50%	4.00%	27,911
Employee Contributions	0	50%	4.00%	0
Benefits payments, (including refunds of employee contributions)	(119,394)	50%	4.00%	(2,364)
Administrative Expense and Other	(2,083)	50%	4.00%	<u>(41)</u>
Total Projected Earnings Actual Net Investment Income				<u>\$25,506</u> 98,547
Net Difference Between Projected and Actual Earnings On Investments				<u>(\$73,041)</u>



#### G) Schedule of Contributions<sup>1</sup> (Exhibit 6)

	Plan Year 2016 - 2017
Actuarially Determined Contribution <sup>2</sup>	\$318,222
Covered-employee payroll <sup>3</sup> Contributions as a percentage of covered-employee payroll <sup>3</sup>	\$3,853,068 8%
Contributions to the Trust Pay-go Payments by Employer Unreimbursed by the Trust Active Implicit Rate Subsidy Transferred to OPEB Total OPEB Contributions <sup>1</sup>	\$1,290,017 119,394 <u>0</u> \$1,409,411

<sup>&</sup>lt;sup>1</sup> ADC and Contributions are for the measurement period July 1, 2016 to June 30, 2017.



<sup>&</sup>lt;sup>2</sup> Employers setting a discount rate based on the assumption that assets will be sufficient to cover all future benefit payments under the plan are assumed to annually make contributions equal to the actuarially determined contribution. Annual contributions made that are substantially less than the ADC would require additional support for use of a discount rate equal to the long-term expected return on trust assets.

<sup>&</sup>lt;sup>3</sup> Covered-Employee Payroll represented above is based on cover-employee payroll provided by the employer. GASB 75 defines covered-employee payroll as the total payroll of employees that are provided OPEBs through the OPEB plan. Accordingly, if OPEB covered-employee payroll shown above is different than total earnings for covered-employees, the employer should display in the disclosure footnotes the payroll based on total earnings for the covered group and recalculate the required payroll-related ratios.

# H) Deferred Inflows/Outflows of Resources (Exhibit 7)

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience in the measurement of the TOL	\$0	\$48,869
Changes in assumptions	0	1,987,025
Net difference between projected and actual earnings of OPEB plan investments	0	58,433
Contribution to OPEB plan after measurement date <sup>1</sup>	0	0
Total	\$0	\$2,094,327

<sup>&</sup>lt;sup>1</sup> To be determined at fiscal year end.

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Fiscal Year Ended June 30	Deferred Outflows/(Inflows) of Resources
2019	(\$314,636)
2020	(314,636)
2021	(314,636)
2022	(314,637)
2023	(300,028)
Thereafter	<u>(535,754)</u> (\$2,094,327)



## **Section II GASB 75 Exhibits**

# I) Schedule of Deferred Inflows/Outflows of Resources (Exhibit 8)

Fiscal Year	Initial	Deferred Outflows of Resources as of	Deferred Inflows of Resources as of	Initial	Years	Deferred Outflows/(Inflows) Recognized in Fiscal
Established	Amount	06/30/18	06/30/18	Years	Left	2018
Changes in As	sumption					
2017	(\$2,279,851)	<u>0</u> 0	(\$1,987,025)	7.8	6.8	(\$292,826)
Total	(\$2,279,851)	0	(\$1,987,025)			(\$292,826)
Difference Bety	ween Expected	l and Actual Plan	Experience			
2011	<u>(\$56,071)</u>	<u>0</u> 0	<u>(48,869)</u>	7.8	6.8	<u>(\$7,202)</u>
Total	(\$56,071)	0	(48,869)			(\$7,202)
Net Difference Between Projected and Actual Earnings On Investments						
2017	<u>(\$73,041)</u>	0	<u>(\$58,433)</u>	5.0	4.0	<u>(\$14,608)</u>
Total	(\$73,041)	0	(\$58,433)			(\$14,608)
Balance as of	06/30/2018:	\$0	(\$2,094,327)			(\$314,636)



# J) Journal Entry to Record the NOL for fiscal year ended June 30, 2018 (Exhibit 9)

	DR	CR
Net Position	\$4,172,181	\$0
DO-Experience	0	0
DO-Investment	0	0
DO-Contributions	0	0
DO-Assumptions	0	0
OPEB Expense	50,323	0
DI-Experience	0	48,869
DI-Investment	0	58,433
DI-Assumptions	0	1,987,025
NOL	0	2,128,177
	\$4,222,504	\$4,222,504



#### A) Summary of Demographic Information

The participant data used in the valuation was provided by The Town as of July 1, 2017. It is assumed that this data is representative of the population as of July 1, 2017. While the participant data was checked for reasonableness, the data was not audited, and the valuation results presented in this report are dependent upon the accuracy of the participant data provided. The table below presents a summary of the basic participant information for the active and retired participants covered under the terms of the Plan.

	Total
Actives Total Counts Average Age Average Service	37 <u>45</u> 12
Retirees Counts Under age 65 Age 65 and over Total Counts Average Age	8 <u>13</u> 21 68
Total Participants  Covered Dependents of Retirees	58
Counts Spouses / Domestic Partners Children Total	5 <u>0</u> 5
Grand Total	63



## B) Distribution of Participants by Age and Service

**Distribution of Service Groups by Age Groups** 

Age Group	Retired <sup>*</sup> Participants		Acti	ive Partici	pant – Ye	ears of Se	ervice	
		0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25+	Total
< 25	0	0	0	0	0	0	0	0
25 - 29	0	6	0	0	0	0	0	6
30 - 34	0	4	0	0	0	0	0	4
35 - 39	0	2	0	1	0	0	0	3
40 - 44	0	3	0	0	1	1	0	5
45 - 49	0	1	0	1	1	0	0	3
50 - 54	0	3	0	0	0	0	0	3
55 - 59	2	3	1	0	2	0	1	7
60 - 64	6	2	0	0	0	2	1	5
65 - 69	7	0	0	1	0	0	0	1
> 70	6	0	0	0	0	0	0	0
Total	21	24	1	3	4	3	2	37

<sup>\*</sup> Retired participants include retirees, disabled participants, and surviving family members. Does not include covered dependents.



## **Section IV Plan Provision Summary**

#### A) Plan Description

#### **Eligibility and Contribution Requirements**

The Town of Tiburon provides retiree medical benefits to employees who retire from the Town at age 50 or later with at least 5 years of service and are eligible for a CalPERS pension. Employees who retire due to disability are also eligible.

Dental benefits are not provided to retirees.

Eligible retirees are entitled to the minimum CalPERS medical benefit, which is \$128.00 per month in 2017 and \$133.00 in 2018. This amount is expected to increase annually. This benefit continues for the life of the retiree and for the life of any surviving spouse.

In addition to the above, retirees with 15 or more years of Town service are eligible to receive a monthly benefit based on the monthly premium charged by CalPERS for Kaiser single person coverage (\$733.39 in 2017, \$779.86 in 2018). (However, this benefit does not apply to Manager and Mid-Management employees hired after July 1, 2009, Police employees hired after July 1, 2010, or SEIU employees hired after July 1, 2014.) The benefit amount is the below percentage of the Kaiser premium at the time of retirement. The amounts, which are paid by the Town directly to retirees, are fixed at retirement and do not increase in subsequent years. The benefit amount does not decrease at age 65 even though Kaiser premiums decrease substantially at that age. This benefit continues only for the life of the retiree.

15 – 19 years of service
20 – 24 years of service
25 or more years of service
100%

Retirees may select any retiree medical plan offered by CalPERS, including spouse or family coverage, but must incur the cost of premiums exceeding the above benefits.



# **Section IV Plan Provision Summary**

Pre-Medicare Premiums*					
	2017 Plan	EE	EE+SP	EE+Fam	
	Anthem HMO Traditional	990.05	1,980.10	2,574.13	
	Blue Shield Access+	1,024.85	2,049.70	2,664.61	
	Kaiser	733.39	1,466.78	1,906.81	
	PERS Choice	830.30	1,660.60	2,158.78	
	PERS Select	736.27	1,472.54	1,914.30	
	PORAC	699.00	1,467.00	1,876.00	
	UnitedHealthcare	1,062.26	2,124.52	2,761.88	
Medicare Premiums	2017 Plan	EE		EE+SP	
	Kaiser	300.4	8	600.96	
	PERS Choice	353.6	3	707.26	
	PERS Select	353.6	3	707.26	
	PORAC	464.0	0	924.00	
	UnitedHealthcare 324.21		21	648.42	
PEMHCA Minimum			2017	2018	
			128.00	133.00	
Pre-Medicare Premiums*					
	2018 Plan	EE	EE+SP	EE+Fam	
	Anthem HMO Traditional	925.47	1,850.94	2,406.22	
	Anthem HMO Traditional Blue Shield Access+	925.47 889.02	1,850.94 1,778.04	2,406.22 2,311.45	
	Anthem HMO Traditional Blue Shield Access+ Kaiser	925.47 889.02 779.86	1,850.94 1,778.04 1,559.72	2,406.22 2,311.45 2,027.64	
	Anthem HMO Traditional Blue Shield Access+ Kaiser PERS Choice	925.47 889.02 779.86 800.27	1,850.94 1,778.04 1,559.72 1,600.54	2,406.22 2,311.45 2,027.64 2,080.70	
	Anthem HMO Traditional Blue Shield Access+ Kaiser PERS Choice PERS Select	925.47 889.02 779.86 800.27 717.50	1,850.94 1,778.04 1,559.72 1,600.54 1,435.00	2,406.22 2,311.45 2,027.64 2,080.70 1,865.50	
	Anthem HMO Traditional Blue Shield Access+ Kaiser PERS Choice PERS Select PORAC	925.47 889.02 779.86 800.27 717.50 734.00	1,850.94 1,778.04 1,559.72 1,600.54 1,435.00 1,540.00	2,406.22 2,311.45 2,027.64 2,080.70	
	Anthem HMO Traditional Blue Shield Access+ Kaiser PERS Choice PERS Select PORAC UnitedHealthcare	925.47 889.02 779.86 800.27 717.50 734.00 1,371.84	1,850.94 1,778.04 1,559.72 1,600.54 1,435.00	2,406.22 2,311.45 2,027.64 2,080.70 1,865.50 1,970.00 3,566.78	
Medicare Premiums	Anthem HMO Traditional Blue Shield Access+ Kaiser PERS Choice PERS Select PORAC UnitedHealthcare 2018 Plan	925.47 889.02 779.86 800.27 717.50 734.00 1,371.84	1,850.94 1,778.04 1,559.72 1,600.54 1,435.00 1,540.00 2,743.68	2,406.22 2,311.45 2,027.64 2,080.70 1,865.50 1,970.00 3,566.78 EE+SP	
Medicare Premiums	Anthem HMO Traditional Blue Shield Access+ Kaiser PERS Choice PERS Select PORAC UnitedHealthcare	925.47 889.02 779.86 800.27 717.50 734.00 1,371.84 EE 316.3	1,850.94 1,778.04 1,559.72 1,600.54 1,435.00 1,540.00 2,743.68	2,406.22 2,311.45 2,027.64 2,080.70 1,865.50 1,970.00 3,566.78 EE+SP 632.68	
Medicare Premiums	Anthem HMO Traditional Blue Shield Access+ Kaiser PERS Choice PERS Select PORAC UnitedHealthcare 2018 Plan Kaiser PERS Choice	925.47 889.02 779.86 800.27 717.50 734.00 1,371.84 EE 316.3	1,850.94 1,778.04 1,559.72 1,600.54 1,435.00 1,540.00 2,743.68	2,406.22 2,311.45 2,027.64 2,080.70 1,865.50 1,970.00 3,566.78 EE+SP 632.68 691.94	
Medicare Premiums	Anthem HMO Traditional Blue Shield Access+ Kaiser PERS Choice PERS Select PORAC UnitedHealthcare 2018 Plan Kaiser	925.47 889.02 779.86 800.27 717.50 734.00 1,371.84 EE 316.3 345.9	1,850.94 1,778.04 1,559.72 1,600.54 1,435.00 1,540.00 2,743.68	2,406.22 2,311.45 2,027.64 2,080.70 1,865.50 1,970.00 3,566.78 EE+SP 632.68 691.94 691.94	
Medicare Premiums	Anthem HMO Traditional Blue Shield Access+ Kaiser PERS Choice PERS Select PORAC UnitedHealthcare 2018 Plan Kaiser PERS Choice	925.47 889.02 779.86 800.27 717.50 734.00 1,371.84 EE 316.3	1,850.94 1,778.04 1,559.72 1,600.54 1,435.00 1,540.00 2,743.68	2,406.22 2,311.45 2,027.64 2,080.70 1,865.50 1,970.00 3,566.78 EE+SP 632.68 691.94	

<sup>\*</sup>CalPERS Bay Area Premiums



### A) Actuarial Assumptions

Discount Rate	6.66% for 6/30/2017 and 2.58% for 6/30/2016.

Discount Rate	6.66% for 6/30/2017	and 2.58% for 6/30/	/2016.
Health Care Trend	Year Beginning	Increase in l Pre-65	Premium Rates Post-65
	2019	7.8%	5.0%
	2020	7.55%	5.0%
	2021	7.3%	5.0%
	2022	7.05%	5.0%
	2023	6.8%	5.0%
	2024	6.55%	5.0%
	2025	6.3%	5.0%
	2026	6.05%	5.0%
	2027	5.8%	5.0%
	2028	5.55%	5.0%
	2029	5.3%	5.0%
	2030	5.05%	5.0%
	2031 and later	5.0%	5.0%
Amortization Methodology	We used straight-ling changes and expense Average Future Working years assumed 5 years.	rience gains/losses orking Lifetime, avo (retirees are assur	erages over all med to have no
Baseline Cost	Pre-Medicare: \$9,447 Post-Medicare: \$3,89	. •	
Plan Distribution	70% Kaiser, 9% PER	•	Shield Access+,

Baseline Cost	Pre-Medicare: \$9,441 per year
	Post-Medicare: \$3,899 per year

Pla istributio 4% Anthem Blue Cross, 4% PORAC, 4% PERS Select,

and 2% United Healthcare CalPERS 2013 study CalPERS 2013 study

Morbidity Factors Population for Curving Age-Weighted Claims Costs

Age	Age-Weighted Claim Cost	
50	\$9,272	
55	\$11,792	
60	\$14,064	
65	\$3,065	
70	\$3,559	
75	\$4,044	
80	\$4,439	
85	\$4,597	
11/	10.050/	

Inflation We assumed 2.25% annual inflation.

Payroll increases 3.25% annual increases.

Administrative Expenses \$2,083

Percent Married We assumed that all future retirees would cover their

current spouses, if any.

Net Investment Return 6.66% for 6/30/2017 and 4.0% for 6/30/2016.



Health Plan Participation We assumed that 100% of eligible participants will

participate.

Percent Married Active employees and retirees are assumed to continue to

cover their current spouse through retirement.

Medicare Coverage We assumed that all future retirees will be eligible for

Medicare when they reach age 65.



## A) Actuarial Assumptions (continued)

Non-Safety Mortality

The mortality rates used in this valuation are those used in the most recent CalPERS valuations.

**Pre-Retirement:** CalPERS 2014 Mortality pre-retirement

Post-Retirement: CalPERS 2014 Mortality post-retirement

Sample Mortality Rates					
	Active En	nployees	Retired E	mployees	
Age	Male	Female	Male	Female	
55	0.23%	0.14%	0.60%	0.42%	
60	0.31%	0.18%	0.71%	0.44%	
65	0.40%	0.26%	0.83%	0.59%	
70	0.52%	0.37%	1.31%	0.99%	
75	0.71%	0.53%	2.21%	1.72%	
80	0.99%	0.81%	3.90%	2.90%	
85	0.00%	0.00%	6.97%	5.24%	
90	0.00%	0.00%	12.97%	9.89%	

Police Mortality

Sample Mortality Rates					
	Active E	mployees	Retired E	mployees	
Age	Male	Female	Male	Female	
55	0.24%	0.15%	0.60%	0.42%	
60	0.33%	0.20%	0.71%	0.44%	
65	0.42%	0.28%	0.83%	0.59%	
70	0.54%	0.39%	1.31%	0.99%	
75	0.73%	0.55%	2.21%	1.72%	
80	1.01%	0.84%	3.90%	2.90%	
85	0.00%	0.00%	6.97%	5.24%	
90	0.00%	0.00%	12.97%	9.89%	

<sup>\*</sup> Source: NCG has not performed an experience study to select these assumptions. NCG has not observed materially consistent gains or consistent losses associated with these assumptions

For the 2014 valuation, we used 2010 rates with Projection Scale AA.



#### A) Actuarial Assumptions (continued)

Non-Safety Retirement

We used the retirement rates that were used in the most recent CalPERS Public Agency Miscellaneous 2% @ 55 for actives hired before January 1, 2013, and 2% @ 62 for actives hired on or after January 1, 2013.

2% @ 55

		Years of Service				
Age	5	10	15	20	25	
50	1.4%	1.8%	2.1%	2.5%	2.7%	
55	4.8%	6.1%	7.4%	8.8%	10.0%	
60	6.7%	8.6%	10.3%	12.3%	13.9%	
65	15.5%	19.7%	23.8%	28.5%	32.5%	
70	13.0%	16.5%	20.0%	24.0%	27.2%	
75	100.0%	100.0%	100.0%	100.0%	100.0%	

2% @ 62

		Years of Service				
Age	5	10	15	20	25	
50	0.0%	0.0%	0.0%	0.0%	0.0%	
55	4.4%	5.6%	6.8%	8.0%	9.2%	
60	6.2%	7.8%	9.5%	11.2%	12.9%	
65	12.9%	16.4%	19.9%	23.4%	26.9%	
70	12.5%	16.0%	19.4%	22.8%	26.2%	
75	100.0%	100.0%	100.0%	100.0%	100.0%	

Non-Safety Withdrawal

We selected withdrawal rates that were used in the most recent CalPERS Public Agency Miscellaneous valuations.

		Years of Service					
Age	0	5	10	15	20		
25	16.7%	8.7%	7.5%	0.0%	0.0%		
30	16.1%	7.9%	6.7%	5.8%	0.0%		
35	15.4%	7.1%	5.9%	5.0%	4.5%		
40	14.7%	6.3%	5.1%	4.2%	3.7%		
45	14.0%	5.5%	4.3%	3.5%	2.9%		
50	13.3%	1.2%	0.7%	0.3%	0.2%		



#### A) Actuarial Assumptions (continued)

-1	Retiremen	•

We used the retirement rates that were used in the most recent CalPERS Police 3% @ 50 for actives hired before January 1, 2013, and 2.7% @ 57 for actives hired on or after January 1, 2013.

3% @	<sup>2</sup> 50
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		Years of Service				
Age	5	10	15	20	25	
50	5.00%	5.00%	5.00%	9.90%	24.00%	
55	5.20%	5.20%	5.20%	10.50%	24.80%	
60	6.00%	6.00%	6.00%	12.10%	27.20%	
65	100.0%	100.0%	100.0%	100.0%	100.0%	

2.7%	<b>@</b>	57
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		Years of Service				
Age	5	10	15	20	25	
50	1.38%	1.38%	1.38%	1.38%	2.53%	
55	8.54%	8.54%	8.54%	8.54%	15.63%	
60	13.96%	13.96%	13.96%	13.96%	17.19%	
65	100.0%	100.0%	100.0%	100.0%	100.0%	

#### Police Withdrawal

We selected withdrawal rates that were used in the most recent CalPERS Police valuations.

	Years of Service					
Age	5	10	15	20	25	
<50	2.49%	1.79%	1.09%	0.82%	0.70%	
50+	0.86%	0.53%	0.27%	0.17%	0.12%	

#### Police Disability

Age	Disability Incidence
30	0.50%
40	1.14%
50	1.93%
60	6.22%
70	8.75%
80	11.36%

For the 2014 valuation, we used 2010 CalPERS retirement, withdrawal, and disability rates.



#### B) Actuarial Methods **Actuarial Cost Method Entry Age Normal** An actuarial cost method under which the Actuarial Present Value of the Projected Benefits of each individual included in the valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age(s). The portion of this Actuarial Present Value allocated to a valuation year is called the Normal Cost. Financial and Census Data The Town provided the participant data, financial information and plan descriptions used in this valuation. The actuary has checked the data for reasonableness, but has not independently audited the data. The actuary has no reason to believe the data is not complete and accurate, and knows of no further information that is essential to the preparation of the actuarial valuation. Plan Fiduciary Net Position Market value of assets as of the measurement date

Measurement Date June 30, 2017

Valuation Date June 30, 2017

Funding Policy The Town intends to fund 1% of covered payroll each year,

plus pay-go costs. Also, lump sum contributions may be

made at The Town's discretion.



# **Section IV Actuarial Assumptions and Methods used in Actuarially Determined Contribution**

#### C) Actuarial Considerations

Health Care Reform

Health care delivery is going through an evolution due to enactment of Health Care Reform. The Patient Protection and Affordable Care Act (PPACA), was signed March 23, 2010, with further changes enacted by the Health Care and Education Affordability Reconciliation Act (HCEARA), signed March 30, 2010. This valuation uses various assumptions that may have been modified based on considerations under PPACA. This section discusses particular legislative changes that were reflected in our assumptions. We have not identified any other specific provision of PPACA that would be expected to have a significant impact on the measured obligation. As additional guidance on the Act continues to be issued, we'll continue to monitor impacts.

Individual Mandate

Under PPACA, individuals (whether actively employed or otherwise) must be covered by health insurance or else pay a penalty tax to the government. While it is not anticipated that the Act will result in universal coverage, it is expected to increase the overall portion of the population with coverage. We believe this will result in an increased demand on health care providers, resulting in higher trend for medical services for non-Medicare eligible retirees. (Medicare costs are constrained by Medicare payment mechanisms already in place, plus additional reforms added by PPACA and HCEARA.) While we believe that the mandate may result in somewhat higher participation overall, this issue would have a marginal impact since we assume 100% participation upon retirement.

**Employer Mandate** 

Health Care Reform includes various provisions mandating employer coverage for active employees, with penalties for non-compliance. Those provisions do not directly apply to the postemployment coverage included in this valuation.



# **Section IV Actuarial Assumptions and Methods used in Actuarially Determined Contribution**

#### C) Actuarial Considerations (continued)

Medicare Advantage Plans

Effective January 1, 2011, the Law provides for reductions to the amounts that would be provided to Medicare Advantage plans starting in 2011. We considered the effect of these reductions in federal payments to Medicare Advantage plans when setting our trend assumption.

Expansion of Child Coverage to Age 26

Health Care Reform mandates that coverage be offered to any child, dependent or not, through age 26, consistent with coverage for any other dependent. We assume that this change has been reflected in current premium rates. While this plan covers dependents, we do not currently assume non-spouse dependent coverage other than for firefighters. We believe the impact this assumption has on the valuation is immaterial due to the lack of retirees that have had or are expected to have non-spouse dependents for any significant amount of time during retirement.

Elimination of Annual or Lifetime Maximums

Health Care Reform provides that annual or lifetime maximums have to be eliminated for all "essential services." We assume that current premium rates already reflect the elimination of any historic maximums.

Cadillac Tax (High Cost Plan Excise Tax) The PPACA legislation added a new High-Cost Plan Excise Tax (also known as the "Cadillac Tax") starting in calendar year 2020. For valuation purposes, we assumed that the value of the tax will be passed back to the plan in higher premium rates.

- The tax is 40% of the excess of (a) the cost of coverage over (b) the limit. We modeled the cost of the tax by calculating (a) using the working rates projected with trend. We calculated (b) starting with the statutory limits (\$10,200 single and \$27,500 family), adjusted for the following:
  - Limits will increase from 2018 to 2019 by 4.25% (CPI plus 1%);
  - Limits will increase after 2019 by 3.25% (CPI); and
  - For retirees over age 55 and not on Medicare, the limit is increased by an additional dollar amount of \$1,650 for single coverage and \$3,450 for family coverage.
- Based on the above assumptions, we estimate that the tax will apply as early as 2031 for some of The Town's pre-Medicare plans. In addition, we estimate that the tax will not apply for The Town's post-Medicare plans.



#### A) Key Terms

Annual OPEB Expense The amount recognized by an employer in each

accounting period for contributions to a defined benefit OPEB plan on the modified accrual basis of accounting.

Deferred outflows and inflows of

resources related to OPEB

Deferred outflows of resources and deferred inflows of resources related to OPEB arising from certain changes in the collective net OPEB liability or collective total OPEB

liability

Covered Payroll Annual compensation paid (or expected to be paid) to

active employees covered by an OPEB plan, in aggregate.

Net OPEB Liability (NOL) The liability of employers and non-employer contributing

entities to plan members for benefits provided through a defined benefit OPEB plan that is administered through a

trust that meets the criteria of the GASB Statements.

attributed to employee service during the current fiscal year by the actuarial cost method. These terms are used

interchangeably.

Other Postemployment

Benefits (OPEB)

Retiree health care benefits and post-employment benefits provided separately from a pension plan (excluding

termination offers and benefits).

Plan Fiduciary Net Position (FNP) Set equal to the market value of assets as of the

measurement date.

Present Value of

Future Benefits (PVFB)

The value, as of the valuation date, of the projected benefits payable to all members for their accrued service and their expected future service, discounted to reflect the time value (present value) of money and adjusted for the probabilities of retirement, withdrawal, death and disability.

Total OPEB Liability (TOL)

The portion of the actuarial present value of projected

benefit payments that is attributed to past period of member service in conformity with the GASB Statements. The total OPEB liability is the liability of employers and non-employer contributing entities to plan members for benefits provided through a defined benefit OPEB plan that is not administered through a trust that meets the

criteria of the GASB Statements.