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**TOWN OF GUILFORD  
OTHER POST-EMPLOYMENT BENEFITS PROGRAM**

**GASB 75 DISCLOSURE**

**Fiscal Year: July 1, 2017 to June 30, 2018**

**Prepared by**

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## Certification

Actuarial computations presented in this report under Statements 75 of the Governmental Accounting Standards Board are for purposes of assisting the Town in fulfilling its financial accounting requirements. No attempt is being made to offer any accounting opinion or advice. This report is for fiscal year July 1, 2017 to June 30, 2018. The reporting date for determining plan assets and obligations is June 30, 2018. The calculations enclosed in this report have been made on a basis consistent with our understanding of the plan provisions. Determinations for purposes other than meeting financial reporting requirements may be significantly different than the results contained in this report. Accordingly, additional determinations may be needed for other purposes, such as judging benefit security or meeting employer funding requirements.

In preparing this report, we relied, without audit, on information as of July 1, 2016 and June 30, 2017 furnished by the Town. This information includes, but is not limited to, statutory provisions, member census data, and financial information.

We performed a limited review of the census and financial information used directly in our analysis and have found them to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

We hereby certify that, to the best of our knowledge, this report, including all costs and liabilities based on actuarial assumptions and methods, is complete and accurate and determined in conformance with generally recognized and accepted actuarial principles and practices, which are consistent with the Actuarial Standards of Practice promulgated by the Actuarial Standards Board and the applicable Code of Professional Conduct, amplifying Opinions and supporting Recommendations of the American Academy of Actuaries.

This valuation report is only an estimate of the plan's financial condition as of a single date. It can neither predict the plan's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of plan benefits, only the timing of plan contributions. While the valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct. Determining results using alternative assumptions is outside the scope of our engagement.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to factors such as, but not limited to, the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of the actuarial assignment, we did not perform an analysis of the potential range of such future measurements.

## Certification

Milliman's work is prepared solely for the internal use and benefit of the Town of Guilford. To the extent that Milliman's work is not subject to disclosure under applicable public records laws, Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exceptions: (a) the Plan Sponsor may provide a copy of Milliman's work, in its entirety, to the Plan Sponsor's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit the Town; and (b) the Plan Sponsor may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law.

No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their specific needs.

The consultants who worked on this assignment are actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

Assumptions related to the claims cost and healthcare trend (cost inflation) rates for the retirees healthcare program discussed in this report were determined by Milliman actuaries qualified in such matters.

The Patient Protection and Affordable Care Act of 2010 (ACA) has been reflected in this valuation with respect to the following:

- Anticipation of fees and surcharges effective in future calendar years, including fees associated with Patient-Centered Outcomes Research Trust Fund, reinsurance fees, and insured plan fees, to the extent applicable.
- Expectation of the excise tax on high cost

This valuation reflects the Consolidated Appropriations Act, 2016, which waived the insured plan fees for 2017, and made changes to the implementation of the excise tax.

The results reflect our current understanding of the ACA based on the proposed and final regulations that have been released. Since the regulations are emerging and constantly changing, future results may need to

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and has been prepared in accordance with generally recognized accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.



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Markella Roma, FSA, EA, MAAA  
Actuary

November 9, 2018



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Jeff Reardon, EA, MAAA  
Actuary

## Overview of GASB 74 and GASB 75

The Governmental Accounting Standards Board (GASB) released new accounting standards for public postemployment benefit plans other than pension (OPEB) and participating employers in 2015. These standards, GASB Statements No. 74 and 75, have substantially revised the accounting requirements previously mandated under GASB Statements No. 43 and 45. The most notable change is that the Annual Required Contribution (ARC) has been eliminated and the Net OPEB Liability will be an item on the employer's financial statement rather than a footnote entry.

GASB 74 applies to financial reporting for public OPEB plans funded by OPEB trusts and is required to be implemented for plan fiscal years beginning after June 15, 2016. Note that a plan's fiscal year might not be the same as the employer's fiscal year. Even if the plan does not issue standalone financial statements, but rather is considered a trust fund of a government, it is subject to GASB 74. Under GASB 74, enhancements to the financial statement disclosures are required, along with certain required supplementary information.

GASB 75 governs the specifics of accounting for public OPEB plan obligations for participating employers and is required to be implemented for employer fiscal years beginning after June 15, 2017. GASB 75 requires a liability for OPEB obligations, known as the Net OPEB Liability (Total OPEB Liability for unfunded plans), to be recognized on the balance sheets of participating employers. Changes in the Net OPEB Liability (Total OPEB Liability for unfunded plans) will be immediately recognized as OPEB Expense on the income statement or reported as deferred inflows/outflows of resources depending on the nature of the change.

## Executive Summary

### Relationship Between Valuation Date, Measurement Date, and Reporting Date

The Valuation Date is July 1, 2016. This is the date as of which the actuarial valuation is performed. The Measurement Date is June 30, 2017. This is the date as of which the total OPEB liability is determined. The Reporting Date is June 30, 2018. This is the plan's and/or employer's fiscal year ending date.

### Significant Changes

There have been no significant changes between the valuation date and fiscal year end.

### Funding Method

As required by GASB 75, the funding method was changed from Projected Unit Credit to Entry Age Normal, and the discount rate was changed to use a municipal bond index. These changes increased the liability by approximately \$0.9 million

### Assumptions

The following changes from the assumptions in the prior valuation were made:

At the end of the fiscal year, the discount rate changed from 2.85% to 3.58%. This change decreased the liability by approximately \$1.1 million.

## Total OPEB Liability

Total OPEB Liability	June 30, 2016	June 30, 2017
Total OPEB liability	\$11,835,194	\$11,082,369
Covered payroll	N/A	N/A
Total OPEB liability as a % of covered payroll	N/A	N/A

The total OPEB liability was determined by an actuarial valuation as of the valuation date, calculated based on the discount rate and actuarial assumptions below, and was then projected forward to the measurement date. Any significant changes during this period have been reflected as prescribed by GASB 75.

### Discount Rate

Discount rate	2.85%	3.58%
20 Year Tax-Exempt Municipal Bond Yield	2.85%	3.58%

The discount rate was based on the Bond Buyer General Obligation 20-Bond Municipal Index. Discount rates are as of the measurement dates.

Please refer to Appendix A for a summary of actuarial methods and assumptions used in this valuation.

Please see Milliman's valuation report dated November 2, 2017 for more detail.

## Changes in Total OPEB Liability

Changes in Total OPEB Liability	Increase / (Decrease) Total OPEB Liability
Balance as of June 30, 2017 (Measurement date June 30, 2016)	\$11,835,194
Changes for the year:	
Service cost	442,590
Interest on total OPEB liability	343,257
Effect of plan changes	0
Effect of economic/demographic gains or losses	0
Effect of assumptions changes or inputs	(1,068,029)
Benefit payments	(470,643)
Balance as of June 30, 2018 (Measurement date June 30, 2017)	11,082,369

### Sensitivity Analysis

The following presents the total OPEB liability of the Town, calculated using the discount rate of 3.58%, as well as what the Town's total OPEB liability would be if it were calculated using a discount rate that is 1 percentage point lower (2.58%) or 1 percentage point higher (4.58%) than the current rate.

	1% Decrease 2.58%	Discount Rate 3.58%	1% Increase 4.58%
Total OPEB liability	\$12,589,935	\$11,082,369	\$9,856,223

The following presents the total OPEB liability of the Town, calculated using the current healthcare cost trend rates as well as what the Town's total OPEB liability would be if it were calculated using trend rates that are 1 percentage point lower or 1 percentage point higher than the current trend rates.

	1% Decrease	Current Trend Rate	1% Increase
Total OPEB liability	\$9,700,492	\$11,082,369	\$12,805,502



## Schedule of Changes in Total OPEB Liability and Related Ratios

	Fiscal Year Ending June 30									
	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
<b>Total OPEB Liability</b>										
Service cost	\$442,590	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Interest on total OPEB liability	343,257	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Effect of plan changes	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Effect of economic/demographic gains or (losses)	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Effect of assumption changes or inputs	(1,068,029)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benefit payments	(470,643)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Net change in total OPEB liability	(752,825)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total OPEB liability, beginning	11,835,194	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total OPEB liability, ending (a)	11,082,369	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Covered payroll	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total OPEB liability as a % of covered payroll	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

This schedule is presented to illustrate the requirement to show information for 10 years. However, recalculations of prior years are not required, and if prior years are not reported in accordance with the current GASB standards, they should not be reported.

### Notes to Schedule

*Changes of assumptions:* Changes of assumptions include the effects of changes in the discount rate each period.

## OPEB Expense

OPEB Expense	July 1, 2016 to June 30, 2017	July 1, 2017 to June 30, 2018
Service cost	N/A	\$442,590
Interest on total OPEB liability	N/A	343,257
Effect of plan changes	N/A	0
Recognition of Deferred Inflows/Outflows of Resources		
Recognition of economic/demographic gains or losses	N/A	0
Recognition of assumption changes or inputs	N/A	(197,783)
OPEB Expense	N/A	588,064

As of June 30, 2018, the deferred inflows and outflows of resources are as follows:

Deferred Inflows / Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources
Differences between expected and actual experience	\$0	\$0
Changes of assumptions	(870,246)	0
Net differences between projected and actual earning	0	0
Contributions made subsequent to measurement date	Employer Determined	Employer Determined
Total	(870,246)	0

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

Year ended June 30:	
2019	(\$197,783)
2020	(197,783)
2021	(197,783)
2022	(197,783)
2023	(79,114)
Thereafter*	0

\* Note that additional future deferred inflows and outflows of resources may impact these numbers.

## Schedule of Deferred Inflows and Outflows of Resources

	Original Amount	Date Established	Original Rec. Period*	Amount Recognized in Expense for FYE 06/30/2018	Amount Recognized in Expense through 06/30/2018	Balance of Deferred Inflows 06/30/2018	Balance of Deferred Outflows 06/30/2018
<b>Economic/ demographic (gains) or losses</b>	\$0	6/30/2018	0.0	\$0	\$0	\$0	\$0
		Total		0	0	0	0
<b>Assumption changes or inputs</b>	(1,068,029)	6/30/2018	5.4	(197,783)	(197,783)	(870,246)	0
		Total		(197,783)	(197,783)	(870,246)	0
<b>Total deferred (inflows)/outflows</b>						(870,246)	0
<b>Total net deferrals</b>						(870,246)	

\* Economic/demographic (gains)/losses and assumption changes or inputs are recognized over the average remaining service life for all active and inactive members.

**Milliman Financial Reporting Valuation**

	Total OPEB Liability	Deferred Inflows	Deferred Outflows	Net Deferrals	Total OPEB Liability plus Net Deferrals	Annual Expense
<b>Balances as of June 30, 2017</b>	(\$11,835,194)	\$0	\$0	\$0	(\$11,835,194)	
Service cost	(442,590)					442,590
Interest on total OPEB liability	(343,257)					343,257
Effect of plan changes	0					0
Effect of liability gains or losses	0			0		
Effect of assumption changes or inputs	1,068,029	(1,068,029)		(1,068,029)		
Benefit payments	470,643				470,643	
Recognition of liability gains or losses				0		0
Recognition of assumption changes or inputs		197,783		197,783		(197,783)
Annual expense					(588,064)	588,064
<b>Balances as of June 30, 2018</b>	(11,082,369)	(870,246)	0	(870,246)	(11,952,615)	

## Projected Benefit Payments

The table below shows the expected annual payments for retiree medical benefits for the next 10 years for the Town.

Valuation Year	Expected Benefit Payments
2018	515,581
2019	566,222
2020	645,403
2021	788,124
2022	774,965
2023	686,490
2024	662,589
2025	654,473
2026	573,830
2027	629,726

**Liability and OPEB Expense for the Fiscal Year 2018 under GASB No. 75**  
 Split by Status and Group

<u>Town</u>	<u>Management</u>	<u>GEA</u>	<u>GSA</u>	<u>UPSEU</u>	<u>Total</u>
Active Liability	480,850	313,765	357,725	70,266	1,222,606
Inactive Liability	<u>0</u>	<u>122,060</u>	<u>21,455</u>	<u>6,079</u>	<u>149,594</u>
Total	480,850	435,825	379,180	76,345	1,372,200
Service Cost	43,331	28,977	10,000	8,777	91,085
Interest on total OPEB liability	14,621	13,189	11,803	2,410	42,023
Effect of Plan Change	0	0	0	0	0
Recognition of Deferred Inflows/Outflows	<u>(8,666)</u>	<u>(6,029)</u>	<u>(7,419)</u>	<u>(1,928)</u>	<u>(24,042)</u>
OPEB Expense for Fiscal Year	49,286	36,137	14,384	9,259	109,066
<u>Fire</u>	<u>Management</u>	<u>IAFF</u>			<u>Total</u>
Active Liability	425,120	743,383			1,168,503
Inactive Liability	<u>0</u>	<u>0</u>			<u>0</u>
Total	425,120	743,383			1,168,503
Service Cost	13,612	61,697			75,309
Interest on total OPEB liability	13,664	23,313			36,977
Effect of Plan Change	0	0			0
Recognition of Deferred Inflows/Outflows	<u>(8,588)</u>	<u>(18,127)</u>			<u>(26,715)</u>
OPEB Expense for Fiscal Year	18,688	66,883			85,571
<u>Police</u>	<u>Management</u>	<u>AFSCME</u>			<u>Total</u>
Active Liability	1,429,226	3,468,912			4,898,138
Inactive Liability	<u>92,080</u>	<u>3,551,448</u>			<u>3,643,528</u>
Total	1,521,306	7,020,360			8,541,666
Service Cost	45,440	230,756			276,196
Interest on total OPEB liability	46,833	217,424			264,257
Effect of Plan Change	0	0			0
Recognition of Deferred Inflows/Outflows	<u>(29,131)</u>	<u>(117,895)</u>			<u>(147,026)</u>
OPEB Expense for Fiscal Year	63,142	330,285			393,427

## Glossary

<b>Deferred Inflows/Outflows of Resources</b>	Portion of changes in net OPEB liability that is not immediately recognized in OPEB Expense. These changes include differences between expected and actual experience, changes in assumptions, and differences between expected and actual earnings on plan investments.
<b>Discount Rate</b>	Single rate of return that, when applied to all projected benefit payments, results in an actuarial present value of projected benefit payments equal to the sum of:  <ol style="list-style-type: none"><li>1) The actuarial present value of benefit payments projected to be made in future periods where the plan assets are projected to be sufficient to meet benefit payments, calculated using the Long-Term Expected Rate of Return.</li><li>2) The actuarial present value of projected benefit payments not included in (1), calculated using the Municipal Bond Rate.</li></ol>
<b>Municipal Bond Rate</b>	Yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher.
<b>Projected Benefit Payments</b>	All benefits estimated to be payable through the OPEB plan to current active and inactive employees as a result of their past service and expected future service.
<b>Service Cost</b>	The portion of the actuarial present value of projected benefit payments that is attributed to a valuation year.
<b>Total OPEB Liability</b>	The portion of actuarial present value of projected benefit payments that is attributable to past periods of member service using the Entry Age Normal cost method based on the requirements of GASB 74 and 75.

# Appendix A

## Summary of Actuarial Methods and Assumptions



## Actuarial Methods

**Actuarial Cost Method:** Entry Age Normal as required by GASB 75.

**Asset Valuation Method:** Not applicable. The plan is not funded.

## Economic Assumptions

### Discount Rates

**June 30, 2017 Assumption:** 2.85%, compounded annually.

**June 30, 2018 Assumption:** 3.58%, compounded annually.

**Rationale:** This assumption is based on the 20-Bond GO Bond Buyer municipal bond index based on a 6/30 measurement date. This is a prescribed assumption.

### CPI

**Assumption:** 2.60%, compounded annually.

**Rationale:** We considered the 30-year breakeven inflation rate in combination with the CBO's 75-year forecast to arrive at this assumption.

### Payroll Growth

**Assumption:** Constant rate for all ages as shown below:

Plan	Cost Center	Rate of Salary Increase
Town	Confidential Supervisors (CSU)	3.25%
Town	Firefighters (IAFF)	3.25%
Town	Guilford Employees Association (GEA)	2.75%
Town	Confidential Non-Supervisors (CNSU)	2.75%
Town	Guilford Supervisors Association (GSA)	2.75%
Town	Dispatchers (as of 7/1/15, represented by UPSEU; formerly represented by NAGE)	2.75%
Police	Police	2.75%

**Rationale:** This assumption was selected based upon the results of our analyses of plan experience as described in our report on the 2015 Salary Increase Experience Study dated November 16, 2015.

## Demographic Assumptions

We believe the demographic assumptions shown below are reasonable for the contingencies they are measuring and are not anticipated to produce significant cumulative actuarial gains or losses over the measurement period.

### Mortality

**Assumption:**

**Healthy Mortality:** RPH-2014 Employee/Healthy Annuitant sex distinct Mortality Tables adjusted to reflect scale MP2014 from the 2006 base year, and projected forward using scale MP-2016.

**Disabled Mortality:** RP-2014 Disabled Annuitant sex distinct Mortality Tables adjusted to reflect scale MP-2014 from the 2006 base year, and projected forward using scale MP-2016.

**Rationale:** This plan is not large enough to develop a credible mortality table based exclusively on plan experience. We have relied on the above mentioned published mortality table in which credible mortality experience was analyzed.

**Withdrawal**

**Assumption:** Rates are based on age and length of service for the first ten years and age thereafter. Sample rates are as follows:

Age	Male Rate	Female Rate
25	6.0%	20.0%
35	2.0%	6.3%
45	1.0%	1.8%
55	0.1%	0.7%
58	0.02%	0.4%
59	0.0%	0.3%
60	0.0%	0.2%
61	0.0%	0.1%
62	0.0%	0.0%

We assume participants that withdraw prior to their assumed retirement date do not receive retiree medical or dental coverage.

**Rationale:** This assumption was developed based on industry standard termination rates as well as the plan’s historical experience.

**Retirement**

**Assumption:** For Police employees, retirement was assumed to occur at the earlier of (a) attainment of age 65, (b) attainment of age 55 and completion of 25 years of service. For Police employees who have or will have 20 or more years of service, the following retirement rates were used:

Service	Rate
20	40.0%
21-24	20.0%
25	50.0%
26-34	20.0%
35	100.0%

For police management, retirement is assumed to occur at the earlier of (a) attainment of age 65, or (b) attainment of age 55 and completion of 25 years of service.

**Assumption:** For town (non-union) employees, Supervisor Association Members (GSA), and Employees Association Members (GEA), retirement was assumed to occur at the earlier of (a) attainment of age 65 and the fifth anniversary of plan participation and (b) attainment of age 60 and completion of 25 years of service.

For the current Finance Director and the current Director of Human Resources, retirement was assumed to occur at attainment of age 60 with at least 10 years of service.

**Assumption:** For IAFF and Fire Department Management members, retirement was assumed to occur at the earlier of (a) attainment of age 65 and the fifth anniversary of plan participation and (b) attainment of age 55 and completion of 25 years of service.

**Rationale:** These assumptions were selected based upon actual retirement experience and the results of our analysis of plan experience as described in our reports on the 2011 Experience Study dated June 17, 2011.

### Disability

**Assumption:** Average rates of disability were assumed in the valuation for police and IAFF employees. Town employees are not subject to disability decrements. Representative disability rates per 1,000 employees are presented below:

Age	Rate
25	0.1
35	0.7
45	3.0
55	9.6

**Rationale:** This assumption was developed based on industry standard disability rates as well as the plan's historical experience.

### Marriage Assumption

**Assumption:** Percent of future retirees assumed to be married is included with the spouse medical plan election assumption. Males are assumed to be three years older than their spouses.

Retirees – Actual Data.

This assumption represents an estimate of future experience.

**Rationale:** This assumption is based on the provisions of the plan, the plan's historical experience and observations of similar populations and industries.

### Benefit Assumptions

Town of Guilford retirees are enrolled in one of four medical plans offered through Anthem Blue Cross Blue Shield.

The Town provided premium equivalents for actives and pre-Medicare retirees and for Medicare retirees for the period July 1, 2016 through June 30, 2017. Claim costs were calculated independently for pre-Medicare retirees and Medicare retirees by using the premium equivalent rates provided by the Town. The experience for all pre Medicare plans in the town is pooled by Anthem, and renewal rates for all plans are based on the overall required premium adjustment.

Standard demographics from Milliman’s Health Cost Guidelines™ (HCGs) were assumed to reflect the average demographic distribution of lives for the entire Town of Guilford. Factors based on the HCGs were then determined that would adjust the average age cost per life into per life costs over a range of ages, separately by gender and status (retiree and dependent). The HCGs are developed by Milliman health actuaries from an extensive amount of data, which is updated regularly. The cost models consider utilization and average charge levels for roughly 60 benefit categories, and can provide relative value factors in per capita plan costs between programs of different design, demographics, or geography.

Premium equivalents for actives and pre-Medicare retirees and for Medicare retirees for the period July 1, 2016 through June 30, 2017 were used to calculate the average contribution per employee.

July 1, 2016 through June 30, 2017 annual claim costs are shown below:

**Century Preferred**

Age	Retiree		Spouse	
	Male	Female	Male	Female
45	\$16,805	\$23,062	\$12,557	14,450
50	16,604	19,997	13,761	15,934
55	17,705	19,005	15,781	17,543
60	21,199	20,967	18,934	19,405
64	26,287	23,862	23,210	21,563

**Century 90**

Age	Retiree		Spouse	
	Male	Female	Male	Female
45	\$3,555	\$4,879	\$2,656	\$3,057
50	3,513	4,231	2,911	3,371
55	3,746	4,021	3,339	3,711
60	4,485	4,436	4,006	4,105
64	5,561	5,048	4,910	4,562

**Century 90 & Hospital**

Age	Retiree		Spouse	
	Male	Female	Male	Female
45	\$11,526	\$15,818	\$8,612	\$9,911
50	11,388	13,716	9,438	10,929
55	12,143	13,035	10,824	12,032
60	14,540	14,381	12,987	13,309
64	18,030	16,366	15,919	14,789

**Supplemental A&B**

Age	Retiree		Spouse	
	Male	Female	Male	Female
65	\$1,542	\$1,659	\$1,542	\$1,659
70	1,924	1,921	1,924	1,921
75	2,313	2,190	2,313	2,190
80	2,633	2,435	2,633	2,435
85	2,960	2,741	2,960	2,741
90	3,261	3,050	3,261	3,050

**Major Medical**

Age	Retiree		Spouse	
	Male	Female	Male	Female
65	\$2,292	\$2,326	\$2,292	\$2,326
70	2,468	2,485	2,468	2,485
75	2,560	2,564	2,560	2,564
80	2,525	2,531	2,525	2,531
85	2,370	2,353	2,370	2,353
90	2,213	2,165	2,213	2,165

**Dental Benefits**

Town of Guilford retirees have the option of enrolling in a dental plan offered through Anthem Blue Cross Blue Shield.

Claim costs were calculated for all retirees by using the July 1, 2016 through June 30, 2017 premium equivalent rates provided by the town.

Sample July 1, 2016 through June 30, 2017 annual claim costs are shown below:

**Dental Costs**

Age	Retiree		Spouse	
	Male	Female	Male	Female
45	\$365	\$419	\$404	\$458
50	406	453	445	491
55	460	491	499	529
60	516	530	554	569
65	564	547	602	585
70	599	545	638	583

We have assumed that active employees who elect post-retirement medical coverage will also elect Dental coverage upon retirement prior to age 65.

**Life Insurance**

The liability for life insurance is assumed to be valued by the current group term premium.

**Increase in Benefit Costs by Year (“Trend”):**

The Society of Actuaries (SOA) developed and regularly updates a long-term medical trend model based on detailed research performed by a committee of economists and actuaries, which included a representative from Milliman. Milliman uses this model as the foundation for the trend that it recommends to our clients for postretirement medical valuations, with certain adjustments designed to produce trends that are appropriate for employer plans. These adjustments include incorporating assumed administrative cost trend where applicable and reflect the GASB45 methodology that requires removing the impact of age-related morbidity (since age-related morbidity assumptions are applied separately in the valuation when applicable).

Ultimate rates were determined considering historic and projected rates of real growth, long-term inflation and additional growth attributable to technology, and medical costs as a component of gross domestic product (GDP).

Adjustments have been made to reflect an anticipation of fees and surcharges effective in future calendar years, including fees associated with Patient-Centered Outcomes Research Trust Fund, Reinsurance fees, and insured plan fees, to the extent applicable as well as for the expectation of the excise tax on high cost health plans effective for plan years after 2017. The 2017 trend rates take into account the 2017 premiums/premium equivalent rates.

Years	Century Preferred	Century 90	Century 90 Hospital	Supp A&B + Major Medical	Dental
2016 - 2017	10.30%	12.10%	12.10%	7.90%	4.80%
2017 - 2018	6.80%	6.80%	6.80%	7.80%	5.00%
2018 - 2019	12.50%	6.20%	10.10%	6.10%	5.00%
2019 - 2020	11.60%	5.70%	9.70%	5.60%	5.00%
2020 - 2021	6.10%	5.40%	6.30%	5.40%	5.00%
2021 - 2022	6.10%	5.40%	6.20%	5.40%	5.00%
2022 - 2023	6.00%	5.40%	6.10%	5.40%	5.00%
2023 - 2024	5.90%	5.30%	6.10%	5.30%	5.00%
2024 - 2027	5.90%	5.30%	6.00%	5.30%	5.00%
2027 - 2032	5.80%	5.30%	5.90%	5.30%	5.00%
2032 - 2039	5.80%	5.40%	5.90%	5.40%	5.00%
2039 - 2040	5.80%	5.40%	5.80%	5.40%	5.00%
2040 - 2041	5.70%	5.30%	5.70%	5.30%	5.00%
2041 - 2042	5.60%	5.20%	5.60%	5.30%	5.00%
2042 - 2043	5.50%	5.20%	5.60%	5.50%	5.00%
2043 - 2044	5.50%	5.20%	5.50%	5.60%	5.00%
2044 - 2045	5.40%	5.10%	5.50%	5.60%	5.00%
2045 - 2046	5.40%	5.10%	5.50%	5.50%	5.00%

Years	Century Preferred	Century 90 + Major Medical	Century 90 Hospital + Major Medical	Supp A&B + Major Medical	Dental
2046 - 2048	5.40%	5.10%	5.40%	5.50%	5.00%
2048 - 2049	5.30%	5.10%	5.40%	5.50%	5.00%
2049 - 2050	5.30%	5.10%	5.40%	5.40%	5.00%
2050 - 2051	5.30%	5.10%	5.30%	5.40%	5.00%
2051 - 2054	5.30%	5.00%	5.30%	5.40%	5.00%
2054 - 2055	5.20%	5.00%	5.30%	5.50%	5.00%
2055 - 2056	5.20%	5.00%	5.30%	5.80%	5.00%
2056 - 2057	5.20%	5.40%	5.30%	5.80%	5.00%
2057 - 2058	5.20%	5.90%	5.20%	5.80%	5.00%
2058 - 2060	5.20%	5.90%	5.20%	5.70%	5.00%
2060 - 2061	5.20%	5.80%	5.20%	5.70%	5.00%
2061 - 2062	5.20%	5.80%	5.20%	5.60%	5.00%
2062 - 2063	5.10%	5.80%	5.20%	5.60%	5.00%
2063 - 2064	5.10%	5.70%	5.10%	5.60%	4.90%
2064 - 2065	5.10%	5.60%	5.10%	5.50%	4.90%
2065 - 2066	5.00%	5.50%	5.00%	5.40%	4.80%
2066 - 2067	4.90%	5.40%	4.90%	5.30%	4.70%
2067 - 2068	4.80%	5.30%	4.80%	5.20%	4.70%
2068 - 2069	4.70%	5.20%	4.70%	5.00%	4.60%
2069 - 2070	4.60%	5.10%	4.70%	5.00%	4.50%
2070 - 2071	4.60%	5.00%	4.60%	4.90%	4.50%
2071 - 2072	4.50%	4.90%	4.50%	4.80%	4.40%
2072 - 2073	4.40%	4.80%	4.40%	4.70%	4.30%
2073 - 2074	4.40%	4.70%	4.40%	4.60%	4.30%
2074 - 2076	4.30%	4.60%	4.30%	4.60%	4.20%
2076 - 2087	4.30%	4.60%	4.30%	4.50%	4.20%
2087 - 2096	4.30%	4.50%	4.30%	4.50%	4.20%
2096+	4.30%	4.50%	4.30%	4.40%	4.20%

\*First year trend reflects actual July 1, 2017 through June 30, 2018 plan rates.

### Coverage Elections

The benefit assumptions listed below represent estimate of future experience in the plan. They were developed based on the plan's experience and discussions with the plan sponsor. We believe they are reasonable for the contingencies they are measuring and are not anticipated to produce significant cumulative gains or losses over the measurement period.

### Medical Plan

We have assumed that active employees including those currently receiving a buyout in lieu of coverage who elect post-retirement medical coverage will choose Century Preferred (pre 65) upon retirement and Retiree Major Medical/Over 65 Supplement (65 and older).

We have assumed that the Century Preferred, Century 90, and Retiree Major Medical/Over 65 Supplement currently offered will continue in existence.

**Spousal Coverage**

We received data on the covered spouses of retired members. For active members, we assumed 80% of future retirees who elect medical coverage will have a covered spouse at retirement.

**Dependent Coverage**

We assume the coverage for non-spouse dependents will not extend beyond the coverage for spouses.

**Former Employees**

No former employees who left employment with the Town prior to eligibility for retirement are assumed to receive benefits.

**Surviving Spouse Coverage**

We assumed that 94% of all spouses will continue coverage upon death of the retiree.

**Coverage Elections**

We assumed the following election percentages for future retirees and their spouses at their assumed retirement date:

	Century Preferred (pre 65) & Dental (pre65)	Retiree Major Medical (post 65)	Over 65 Supplement
Management Participants with Special Contracts	100%	100%	100%
AFSCME	94%	94%	94%
GEA	25%	25%	25%
UPSEU	25%	25%	25%
GSA w/ less than 25 years of service at retirement	25%	25%	25%
GSA w/ more than 25 years of service at retirement	50%	50%	50%
Spouse	37.5%	37.5%	37.5%
IAFF	25%	25%	25%
Surviving Spouse	94%	94%	94%

Current retirees, who are receiving Century Preferred and Century 90 coverage, will also elect Retiree Major Medical Plan upon attainment of age 65.



# Appendix B

## Summary of Principal Plan Provisions

Our understanding of the program and provisions is summarized below. The administration of the program is not governed by this summary, but is governed by the documents and procedures adopted by the sponsor. If this description is inaccurate the results presented in this report may require revision.

### **General Plan Provisions**

**Pre-65 Medical Coverage:** Certain future retirees prior to age 65 are eligible to elect the Century Preferred plan. Century 90 plan is a closed plan and is only available to retirees who previously elected this plan prior to age 65. Retiree contribution rates vary based on contracts.

**Post 65 Medical Coverage:** Certain retirees and future retirees can elect the Major Medical and Supplement A+B plans upon attainment of age 65. Retirees who elect the Major Medical Plan must contribute 100% of the premium for coverage. Retiree contribution rates for Supplement A+B vary based on contracts.

**Dental Coverage:** Certain retirees must contribute 100% of the premium for dental coverage for them and their spouses upon attainment of age 65. Retiree contribution rates vary based on contracts prior to age 65.

### **Town Employees**

**Town Management: Sheila Villano (Finance Director), Mitchell Goldblatt (Director of Human Resources) and Pamela Millman (In-House Counsel)**

#### *Eligibility*

Mr. Goldblatt: Attainment of age 55 with at least 10 years of service.

Ms. Villano: Retirement with at least 10 years of service.

Ms. Millman: Attainment of age 55 with at least 5 years of service.

#### *Benefit*

For Mr. Goldblatt, the employer pays 25% of the individual premium for medical for the lifetime of the retiree. The employer pays 25% of the individual premium for dental coverage until the retiree attains age 65. There is no spouse coverage provided by the Plan.

For Ms. Villano, the employer pays 80% of the premium for medical and dental for her and her spouse until age 65. Ms. Villano and her spouse will receive Supplemental coverage for their lifetime at no cost to them.

For Ms. Millman, the employer pays 50% of the premium for medical and dental for her and her spouse for their lifetime.

Mr. Goldblatt, Ms. Villano and Ms. Millman are eligible to receive \$100,000 5-year term life insurance benefit.

### **Guilford Employees Association (GEA)**

#### *Eligibility*

Attainment of age 55 with at least 10 years of service.

#### *Benefit*

Employee and spouse medical and dental benefits continued at the retirees expense until age 65.

**Guilford Supervisor's Association (GSA)***Eligibility*

Attainment of age 60 with at least 10 years of service.

*Benefit*

Employee and spouse medical and dental benefits continued at the retirees expense.

Employees hired prior to July 1, 2007 who retire on or after July 1, 2012 with 25 years or more of service, may request to enroll in the Town's "Over 65" supplemental plan. The town will pay 40% of the cost of the supplemental insurance for the employee and spouse.

Employees hired between July 1, 2007 and July 1, 2008 who retire on or after July 1, 2012 with 25 years or more of service, may request to enroll in the Town's "Over 65" supplemental plan. The town will pay 50% of the cost of the supplemental insurance for the employee and spouse.

Member's life insurance will continue at the Town's expense for 5 additional years.

**United Public Service Employees Union (UPSEU)***Eligibility*

Attainment of age 55 with at least 10 years of service.

*Benefit*

Employee and spouse medical and dental benefits continued at the retirees expense.

**Fire Department****Fire Department Management: Charles Herrschaft (Fire Chief / Fire Marshal) and Wayne Vetre (Assistant Chief of Operations, Guilford Fire Department)***Eligibility*

Attainment of age 55 with at least 10 years of service.

*Benefit*

Prior to attainment of age 65, the employer contributes 80% of the individual and spouse premium.

After the retiree's attainment of age 65, the employer contributes 100% of the individual and spouse premium for Over 65 Supplement.

Mr. Herrschaft and Mr. Vetre are both eligible to receive a \$100,000 10-year term life insurance upon retirement.

**IAFF Employees***Eligibility*

Retirement (including disability retirement) at age 55 with at least 10 years of service.

*Benefit*

Employee and spouse medical and dental benefits continued at the retirees expense.

**Police Department**

**Police Department Management: Jeffrey Hutchinson (Chief of Police) and John Dunn (Deputy Chief of Police)**

*Eligibility*

Attainment of age 50 with at least 25 years of service.

*Benefit*

The employer pays 83.6% of the individual and spouse premium for medical and dental coverage until the retiree attains age 65. After the retiree's attainment of age 65, the employer contributes 100% of the individual and spouse premium for Over 65 Supplement. After the retiree's attainment of age 65, the employer contributes 0% of the individual and spouse premium for dental coverage for the retiree and/or their spouse.

Eligible to receive a \$100,000 life insurance until age 65 upon retirement.

**AFSCME**

*Eligibility*

Retirement (including disability retirement) with 25 years of service.

*Benefit*

A retired police officer shall pay the same percentage of premium contribution for individual and spouse coverage in effect at the time of his/her retirement for Century Preferred (pre-65) and for dental coverage until the attainment of age 65. Upon attainment of age 65, the town shall provide Over 65 Supplement (post-65) at no cost to the retiree. Retirees can continue dental coverage at their own expense.

<b>Retirement Dates</b>	<b>Employee Contribution</b>
July 1, 2016 – June 30, 2017	17%
July 1, 2017 – June 30, 2018	18%
July 1, 2018 – June 30, 2019	19%
July 1, 2019 and after	20%

All police employees who meet the requirement for normal retirement under the Town's pension plan are eligible to receive a \$40,000 life insurance until age 65 upon retirement, except those who retire with a service-related disability are eligible to receive a \$100,000 life insurance policy until age 65.

**Certain retirees retired under Special Contracts or Provisions.**

This summary is intended only to describe our understanding of the essential features of the benefits that will be provided to future retirees based on copies of bargaining agreements, the Town personnel rules and the benefits being currently provided to retired members. All eligibility requirements and benefit amounts are determined in accordance with any relevant plan documents and administrative procedures and/or in compliance with practices and procedures adopted by the parties administering the plan. The information herein is based on conditions in existence as of the valuation date. Changes in the plan provisions or personnel developments after that date will be reflected in future valuations. To the extent that this summary does not accurately reflect the plan provisions, then the results of this valuation may not be accurate.

The primary provisions of the medical, prescription drug, and dental plans the town provides to retirees are below:

Century Preferred		
	In-Network	Out-Of-Network
Deductible		
Individual	N/A	\$200
Two-Person	N/A	\$400
Family	N/A	\$600
Annual Out-of-Pocket Maximum		
Individual	\$6,350	\$1,200
Two-Person	N/A	\$2,400
Family	\$12,700	\$3,000
Office Visits	\$5	20% Coinsurance
Emergency Room Copay	\$25	\$25
Hospital Inpatient	\$0	20% Coinsurance
Prescription Drugs - Retail	\$5 / \$15 / \$25	20% Coinsurance
Prescription Drugs - Mail Order (Maintenance Drugs)	\$3 / \$3	20% Coinsurance

Century 90 & Century 90 + Hospital		
	In-Network	Out-Of-Network
Hospital	Covers most hospital services in full	80% of Maximum Allowable Amount (MAA) in US, 100% MAA out of US.
Major Medical		
Deductible	\$100 individual, \$300 family	
Member Coinsurance	20%	
OOP Maximum	\$500 per covered person	
Prescription Drugs	Covered under major medical	

Supp A+B & Major Medical	
Hospital	Pays for most additional expenses not covered under Part A
Major Medical	
Deductible	\$100 Individual, \$300 Family
Coinsurance	20%
OOP Maximum	N/A
Prescription Drugs	Covered under major medical

Dental		
	Participating Dentists	Non-Participating Dentists
<b>Full Service Basic Benefits*</b>	The lesser of the dentist's usual charge or 100% of the Maximum Allowable Amount (MAA)	100% of MAA
<b>Additional Basic Benefits**</b>	The lesser of 50% of the dentist's usual charge or 50% of (MAA)	50% of MAA

\*Full service basic benefits include services such as cleanings, x-rays, repairing and relining of dentures, fillings, and simple extractions.

\*\*Additional basic benefits include services such as inlays, onlays, crowns, space maintainers, and basic oral surgeries.

# Appendix C

## Summary of Census Data

Summary of Participant Data as of July 1, 2016

Number of members	Town	Fire	Police	Total
Active	75	34	36	145
Retired members	15	0	26	41
Spouses of retirees	4	0	9	13
Spouses of deceased participants	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>
Total	94	34	72	200

Average Age	Town	Fire	Police	Total
Active	50.6	42.5	39.8	46.0
Retired members	77.1	0.0	59.5	65.8

Expected Lifetime	Town	Fire	Police	Total
Active [to retirement]	10.9	14.0	8.3	11.3
Retired members [lifetime]	11.8	0.0	18.6	16.2

Number of Active Participants by Age and Service Groups  
Years of Service

Age	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40&Up	Total
0-24	3	2	-	-	-	-	-	-	-	-	5
25-29	-	9	4	-	-	-	-	-	-	-	13
30-34	2	7	11	-	-	-	-	-	-	-	20
35-39	-	-	7	7	-	-	-	-	-	-	14
40-44	1	-	1	6	2	-	-	-	-	-	10
45-49	2	3	3	7	3	3	-	-	-	-	21
50-54	-	5	4	1	2	1	4	-	-	-	17
55-59	1	2	5	5	8	4	1	-	2	-	28
60-64	-	-	-	4	2	2	1	-	3	-	12
65-69	-	-	-	-	1	-	-	1	1	-	3
70&Up	-	-	-	-	1	-	-	-	-	1	2
<b>Total</b>	9	28	35	30	19	10	6	1	6	1	145
<b>% Male</b>											68%



<u>Age</u>	<u>Retirees</u>	<u>Spouses of Living Retirees</u>	<u>Spouses of Deceased Participants</u>
0-24	-	-	-
25-29	-	-	-
30-34	-	-	-
35-39	-	-	-
40-44	1	-	-
45-49	3	1	-
50-54	7	-	-
55-59	5	3	-
60-64	4	1	-
65-69	5	3	1
70-74	5	2	-
75-79	5	1	-
80&Up	6	2	-
Total	41	13	1
% Male	61%	38%	0%