Town of Scituate, RI Postretirement Health Insurance Program

Financial Disclosure Information

in accordance with Statement of Governmental Accounting Standards Board No. 45

for the period beginning April 1, 2016 and ending March 31, 2017

Prepared By:

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I. INTRODUCTION

The purpose of this report is to present certain financial information relative to the Town of Scituate, Rhode Island Postretirement Health Insurance Program in accordance with the Statement of Governmental Accounting Standards Board No. 45 (GASB45).

The report presents information regarding the Town of Scituate, Rhode Island Postretirement Health Insurance Program for the period beginning April 1, 2016 and ending March 31, 2017. This information includes the determination of Annual Required Contribution (ARC) and OPEB cost, disclosure of the Net OPEB Obligation and Funding Progress as well as other Required Supplementary Information. Sensitivity analysis on various financial and demographic assumptions is also provided.

This report was based on information submitted to our firm in the form of census data, medical insurance premiums and rates, and other plan claims information and descriptions of Plan benefits. Although the data has been reviewed for reasonableness, an audit of the data was not performed. We have relied on the information provided, including plan provisions and participant data, as complete and accurate.

Actuarial computations under GASB45 are for purposes of fulfilling employer accounting requirements and require assumptions about future events. We believe that the calculations and assumptions reported herein have been made on a basis consistent with our understanding of GASB45 and are reasonable for this purpose. In addition, no relationship exists with the plan or plan sponsor that impairs the objectivity of our work.

I meet the GASB No. 45 Qualification Standards of the American Academy of Actuaries, based upon my education, experience and continuing education.

Simon R. Eucanación

Simon R. Encarnacion, F.S.A., E.A. Consulting Actuary

<u>8/25/2017</u> Date

II. DESCRIPTIVE INFORMATION

Plan Description:	Single-employer, defined benefit postretirement health and dental insurance program.
Groups Covered & Eligibility:	The Town of Scituate, Rhode Island can be separated under five groups of employees. Each group is covered under a separate contract with the Town. The groups are:
	Certified Teachers Non-Certified School Employees Department of Public Works (DPW) Police Department Other Non-Union Town Employees
	Town and school members are eligible for retirement at age 58 with 10 years of service or at any age with 30 years of service. Police officers are eligible at age 55 with 10 years of service or at any age with 25 years of service (20 years of service if hired before July 1, 2000).
Benefit Formula:	<u>Certified Teachers</u> : Upon retirement, certified teachers are eligible to purchase medical and dental insurance (single or family) up to age 65 and pay 100% of the premium. The postretirement cost to the Town will be the implicit rate subsidy.
	<u>Non-Certified School Employees</u> : Upon retirement, non-certified school employees are eligible to purchase medical and dental insurance (single or family) for 18 months under COBRA. The COBRA benefits do not constitute a benefit to be included in determination of OPEB liabilities. Therefore, we note this provision exists but it is not included in liabilities or costs valued in this report
	Police Department : Police officers that are hired after July 1, 2000 with 25 years of service (20 years of service if hired before July 1, 2000) are eligible for medical and dental insurance (single or family). The police officer will contribute 50% of

the premium towards his/her coverage.

II. DESCRIPTIVE INFORMATION (cont'd)

Benefit Formula (cont'd): DPW and Town Employees: DPW and Non-Union Town Employees upon retirement are eligible for individual medical insurance coverage. Retired members must contribute the following towards their premium coverage:

Service	Contribution
10-15	100%
16-22	21%
23-29	10.5%
30+	0%

Town employees are also eligible to contribute 100% of the remaining premium towards family coverage.

In addition, a town employee may purchase dental insurance through COBRA for up to 18 months. The COBRA benefits do not constitute a benefit to be included in determination of OPEB liabilities. Therefore, we note this provision exists but it is not included in liabilities or costs valued in this report.

Life Insurance coverage is not provided to retirees.

Significant Events: None

III. ACTUARIAL METHODS

Measurement Date: April 1, 2016 for all purposes.

Actuarial Cost Method: The Annual Required Contribution has been determined utilizing the projected unit credit funding method (with service proration). Under this funding method, projected benefits are assumed to accrue on a straight line basis from date of hire to the date of retirement for each participant. Normal cost for a participant is the present value of the projected benefit which accrues in the current plan year. Normal cost for the Plan is the sum of the normal costs for all participants.

Asset Valuation Method: The actuarial value of plan assets used in determining the Annual Required Contribution is equal to the the fair market value.

Amortization of UnfundedThe portion of unfunded actuarial liabilities included in
Liabilities:Liabilities:the ARC is determined using the level dollar thirty year
open amortization basis.

Census Information: Census data and premium information as of April 1, 2016 were used to calculate the ARC, OPEB cost and Net Obligation.

Net OPEB Obligation at
Fiscal Year End:Based on actual benefit payments, contributions to the
Plan trust, and implicit rate subsidy, if any, for the fiscal
year ending March 31, 2017

IV. ACTUARIAL ASSUMPTIONS

Actuarial assumptions are estimates as to the occurrence of future events impacting the costs of the plan such as mortality rates, withdrawal rates, medical trend rates, retirement ages, rates of investment earnings, etc. The assumptions have been chosen to anticipate the long-term experience of the plan.

Assumptions for the Current Valuation

Discount Rate:	4.50%				
Long Term Rate of Return					
on Assets:	7.50%				
Healthy Mortality:	RP-2014 Scale M 2006 (M	Employed AP-2016 g ale/Female)	e and Healt enerational i	hy Annuitant w mprovements fr	vith om
Turnover:	Sarason below:	Crocker S	traight Table	T-1. Sample ra	ites
		Age	Rate		
		20	5.4%		
		25	4.9%		
		35	2.3%		
		45	0.3%		
		50	0.0%		
Retirement Rates:	Police O	fficers:			
		Age	Rate		
		40-44	5%		
		45-49	15%		
		50	25%		
		51-54	15%		
		55-59	50%		
		60	100%		
	Town ar	d School E	mployees:		
		Age	Rate		
		50-54	2%		
		55	15%		
		56-59	10%		

60-64 65 25%

100%

IV. ACTUARIAL ASSUMPTIONS (cont'd)

Health Care Monthly Premium Rates:	See Per Capita Medical Costs in Section XII.
Health Care Cost Trend Rates - Medical Costs:	6.00% per year graded down by the Getzen model to an ultimate rate of 3.94% per year.
Health Care Cost Trend Rates - Dental Costs:	4.50% per year graded off 0.25% per year to an ultimate rate of 4.00% per year.
Plan Election:	All current retirees are assumed to elect medical coverage under the Healthmate Coast to Coast plans. Retirees eligible for benefits past age 65 are assumed to be Medicare eligible and will begin receiving benefits under Plan 65.
Participation:	Police and Town Employees: 80% of eligible future retirees are assumed to elect medical coverage under the Plan.
	School Employees: 45% of eligible future retirees are assumed to elect medical coverage under the Plan.
Marital Status:	75% of future retirees are assumed to be married and elect family medical coverage. Female spouses are assumed to be 3 years younger than males.
	Actual spousal information is used for current retirees if available.

IV. ACTUARIAL ASSUMPTIONS (cont'd)

Aging Assumption: Claims costs under Healthmate Coast to Coast are assumed to increase by the following rates per year of age to reflect higher healthcare costs for older individuals:

Age	Rate
45-69	3.0%
70-74	2.5%
75-79	2.0%
80-84	1.0%
85-89	0.5%
90+	0%

It is our understanding that Plan 65 premiums are community rated and do not include aging assumptions. In addition, claims costs for dental benefits are not assumed to include an aging assumption past age 70.

V. CALCULATION OF ANNUAL REQUIRED CONTRIBUTION

The Annual Required Contribution (ARC) of the employer is the portion of the present value of future benefits that is to be recognized in the current fiscal year. It is made of the following components:

A.	Normal cost, or the portion of the APV attributable to service in the current year			
B.	Amortization of the unfunded AAL-PUC resulting from plan ame actuarial (gains)/losses or initial adoption(s) of the plan	ndmer	nts,	
C.	Interest Cost, or the expected increase in the AAL attributable to the passage of			
	time (during the year)			
D.	Expected return on OPEB liability/asset, if any, (may reduce the other costs)			
A.	Normal cost as of April 1, 2016	\$	244,326	
B.	Amortization of Unfunded Liability			
1.	Amortization of initial unfunded liability	\$	304,943	
2.	Amortization of UAAL: plan amendments		0	
3.	Amortization of UAAL: (gains)/losses		0	
4.	Amortization of UAAL, $[(1) + (2) + (3)]$	\$	304,943	
C.	Interest on Normal Cost and Unfunded Liability			
C. 1.	Interest on Normal Cost and Unfunded Liability Normal Cost + Amortization of UAAL, [(A) + (B.4)]	\$	549,269	
C. 1. 2.	Interest on Normal Cost and Unfunded Liability Normal Cost + Amortization of UAAL, [(A) + (B.4)] Interest to end of period at 4.50%	\$ \$	549,269 24,717	
 C. 1. 2. D. 	Interest on Normal Cost and Unfunded Liability Normal Cost + Amortization of UAAL, [(A) + (B.4)] Interest to end of period at 4.50% Interest Cost on OPEB liability/(asset)	\$ \$	549,269 24,717	
 C. 1. 2. D. 1. 	Interest on Normal Cost and Unfunded Liability Normal Cost + Amortization of UAAL, [(A) + (B.4)] Interest to end of period at 4.50% Interest Cost on OPEB liability/(asset) OPEB liability/(asset)	\$ \$ \$	549,269 24,717 0	
 C. 1. 2. D. 1. 2. 	Interest on Normal Cost and Unfunded Liability Normal Cost + Amortization of UAAL, [(A) + (B.4)] Interest to end of period at 4.50% Interest Cost on OPEB liability/(asset) OPEB liability/(asset) Interest to end of period at 4.50%	\$ \$ \$	549,269 24,717 0 0	
 C. 1. 2. D. 1. 2. E. 	Interest on Normal Cost and Unfunded Liability Normal Cost + Amortization of UAAL, [(A) + (B.4)] Interest to end of period at 4.50% Interest Cost on OPEB liability/(asset) OPEB liability/(asset) Interest to end of period at 4.50% Annual Required Contribution [(A) + (B.4) + (C.2) + (D.2)]	\$ \$ \$ \$	549,269 24,717 0 0 573,986	
 C. 1. 2. D. 1. 2. E. 	Interest on Normal Cost and Unfunded Liability Normal Cost + Amortization of UAAL, [(A) + (B.4)] Interest to end of period at 4.50% Interest Cost on OPEB liability/(asset) OPEB liability/(asset) Interest to end of period at 4.50% Annual Required Contribution [(A) + (B.4) + (C.2) + (D.2)]	\$ \$ \$ \$	549,269 24,717 0 0 573,986	
 C. 1. 2. D. 1. 2. E. F. 	Interest on Normal Cost and Unfunded LiabilityNormal Cost + Amortization of UAAL, [(A) + (B.4)] Interest to end of period at 4.50%Interest Cost on OPEB liability/(asset) Interest to end of period at 4.50%OPEB liability/(asset) Interest to end of period at 4.50%Annual Required Contribution [(A) + (B.4) + (C.2) + (D.2)]Expected Benefit Payments	\$ \$ \$ \$	549,269 24,717 0 0 573,986 190,089	

VI. DEVELOPMENT OF NET OPEB OBLIGATION

A. Fiscal Year Ending March 31, 2017

1.	Annual Required Contribution	\$ 573,986
2.	Interest on net OPEB obligation	80,209
3.	Adjustment to ARC (amortization of OPEB obligation)	(109,425)
4.	Annual OPEB cost $[(1) + (2) + (3)]$	544,770
5.	Actual Plan Contributions During Fiscal Yeara. Contributions for Actual Benefit Payments:b. Additional Contributions to Plan Trust:c. Allocation for Expected Benefit Payments (implicit subsidy):d. Total Plan Contributions:	 121,576 100,000 60,590 282,166
6.	Increase in net OPEB obligation [(4) - (5.d)]	262,604
7.	Net OPEB obligation as of April 1, 2016	1,782,425
8.	Net OPEB obligation as of March 31, 2017 [(6) + (7)]	\$ 2,045,029

B. Recent OPEB Obligation History

			Percentage of Annual OPEB	
Fiscal Year	Annual	Plan	Cost	Net OPEB
End	OPEB Cost	Contributions	Contributed	Obligation
3/31/2011	471,035	192,360	40.8%	1,014,865
3/31/2012	466,467	198,953	42.7%	1,282,379
3/31/2013	395,984	177,700	44.9%	1,500,663
3/31/2014	392,407	189,818	48.4%	1,703,252
3/31/2015	422,329	181,584	43.0%	1,943,997
3/31/2016	418,382	579,954	138.6%	1,782,425
3/31/2017	544,770	282,166	51.8%	2,045,029

VII. SCHEDULE OF FUNDING PROGRESS

A. Actuarial Present Value of Total Projected Benefits

Actuarial Present Value of Total Projected Benefits (APV) is the actuarial present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment. Set forth below are the results of the valuation of the present value of future benefits as of the valuation date, April 1, 2016.

1. Actuarial Present Value of total projected benefits

a. APV, Active participants totalb. APV, Retirees	\$ 6,645,971 2,045,376
c. Total APV, $[(a) + (b)]$	\$ 8,691,347

B. Actuarial Accrued Liability

Actuarial Accrued Liability (AAL-PUC) is defined as the actuarial present value of benefits allocated to all periods prior to the valuation date. The Projected Unit Credit (PUC) Actuarial Cost Method was used to allocate costs to various years. Set forth below are the results of the valuation of the AAL-PUC as of the valuation date, April 1, 2016.

Actuarial Accrued Liability		
a. AAL-PUC, Active participants total	\$	3,546,484
b. AAL-PUC, Retirees		2,045,376
c. Total AAL-PUC, $[(a) + (b)]$	\$	5,591,860
Fair Value of Assets as of April 1, 2016	\$	401,145
Statement of Funded Status as of April 1, 2016		
a. Actuarial Present Value - total projected benefits, [(1.c)]	\$	8,691,347
b. Future accruals for active participants		3,099,487
c. Actuarial Accrued Liability, [(2.c)]		5,591,860
d. Fair Value of Assets, [(3)]		401,145
e. Funded status, [(d) - (c)]	\$	(5,190,715)
f. Unfunded Actuarial Accrued Liability (UAAL)		5,190,715
Funding Percentage as of April 1, 2016		7.17%
	 Actuarial Accrued Liability a. AAL-PUC, Active participants total b. AAL-PUC, Retirees c. Total AAL-PUC, [(a) + (b)] Fair Value of Assets as of April 1, 2016 Statement of Funded Status as of April 1, 2016 a. Actuarial Present Value - total projected benefits, [(1.c)] b. Future accruals for active participants c. Actuarial Accrued Liability, [(2.c)] d. Fair Value of Assets, [(3)] e. Funded status, [(d) - (c)] f. Unfunded Actuarial Accrued Liability (UAAL) Funding Percentage as of April 1, 2016 	Actuarial Accrued Liabilitya. AAL-PUC, Active participants total\$b. AAL-PUC, Retirees

VII. SCHEDULE OF FUNDING PROGRESS (cont'd)

C. Fair Value of Assets - Reconciliation of Plan Assets through March 31, 2017

The following table projects the reconciliation of the change in the market value of assets over the past plan year based upon financial information provided by the Town of Scituate, Rhode Island:

1.	Market Value of Assets April 1, 2016		\$	401,145
2.	Additions during the year			
	a. Town's contributions expected to fund	\$ 221,576		
	b. Town's allocation for implicit rate subsidy	60,590		
	c. Retiree contributions	66,460		
	d. Interest earned	48,497		
	e. Total additions		\$	397,123
3.	Disbursements during the year			
	a. Actual benefit payments	N/A		
	b. Allocation for expected benefit payments	\$ (188,036)		
	c. Allocation for implicit rate subsidy	(60,590)		
	d. Other disbursements from fund	0		
	e. Total disbursements		\$ ((248,626)
4.	Market Value of Assets March 31, 2017		\$	549,642
5.	Estimated investment rate of return (net of expenses)			10.75%

VII. SCHEDULE OF FUNDING PROGRESS (cont'd)

						UAAL as a
	Actuarial	Actuarial				Percentage
Actuarial	Value of	Accrued	Unfunded	Funded	Covered	of Covered
Valuation	Assets	Liability	AAL	Ratio	Payroll	Payroll
Date	(a)	(b)	(b - a)	(a / b)	(c)	((b - a) / c)
4/1/2008	N/A	4,713,768	4,713,768	N/A	14,863,696	31.7%
4/1/2010	N/A	4,385,028	4,385,028	N/A	15,355,605	28.6%
4/1/2012	N/A	3,977,363	3,977,363	N/A	15,672,979	25.4%
4/1/2014	N/A	4,321,044	4,321,044	N/A	16,250,162	26.6%
4/1/2016	\$ 401,145	5,591,860	5,190,715	7.17%	16,457,772	34.0%

D. Funded Ratio and UAAL as a Percentage of Covered Payroll

VIII. AMORTIZATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY

Actuarial Accrued Liability is amortized over 30 or fewer years. The 30 year level dollar amortization is presumed to be established on an open amortization basis. This means that the period of amortization is reset each year to be 30 years.

	Initial Amount	Date of First Charge or (Credit)	Amort. Period (years)	Amort. Interest Rate	Outstanding Balance (boy)	Amort. Charge or (Credit)
Initial UAAL	5,190,715	4/1/2016	30.00	4.50%	5,190,715	304,943
UAAL from amendments	0	N/A	N/A	N/A	0	0
UAAL (gain)/loss	0	N/A	N/A	N/A	0	0

IX. BREAKOUT OF LIABILITY BY GROUP

A.	Headcounts		DPW	N	lon Union	Police	(Certified	N Cei	Non- rtified	Total
1.	Actives		10		31	14		144		174	373
2.	Retirees		8		22	12		11		0	53
3.	Total		18		53	26		155		174	426
4.	Payroll for Actives	\$	425,099	\$	1,211,245	\$ 1,171,612	\$ 1	10,335,812	\$3,	314,004	\$ 16,457,772
B.	Actuarial Accrued Liability	(AA	L)								
1.	Actives' AAL	\$	400,488	\$	1,147,583	\$ 1,166,406	\$	832,007	\$	0	\$ 3,546,484
2.	Retirees' AAL	\$	201,610	\$	727,982	\$ 1,083,440	\$	32,344	\$	0	\$ 2,045,376
3.	Total AAL	\$	602,098	\$	1,875,565	\$ 2,249,846	\$	864,351	\$	0	\$ 5,591,860
4.	Assets	\$	41,007	\$	119,393	\$ 158,473	\$	82,272	\$	0	\$ 401,145
5.	Total UAAL	\$	561,091	\$	1,756,172	\$ 2,091,373	\$	782,079	\$	0	\$ 5,190,715
6.	Normal Cost	\$	26,848	\$	79,551	\$ 84,207	\$	53,720	\$	0	\$ 244,326
C.	Annual Required Contribut	ion									
1.	NC w/ interest	\$	28,056	\$	83,131	\$ 87,996	\$	56,137	\$	0	\$ 255,320
2.	Amort. of UAAL	\$	34,446	\$	107,814	\$ 128,393	\$	48,013	\$	0	\$ 318,666
3.	Total	\$	62,502	\$	190,945	\$ 216,389	\$	104,150	\$	0	\$ 573,986
4.	ARC as a Percent of Payroll		14.70%		15.76%	18.47%		1.01%		0.00%	3.49%
D.	Exp. Benefit Payments	\$	18,175	\$	88,225	\$ 63,421	\$	20,268	\$	0	\$ 190,089
E.	AAL as a Percent of		141 60/		154 90/	102.00/		8 40/		0.00/	24 00/
	rayroll		141.0%		134.070	192.0%		0.470		0.0%	34.0%

X. CASH FLOW PROJECTIONS

The Plan liability will be satisfied through the payment of benefits for current and future retirees. Using the same assumptions for retirement, mortality, and increases in claims costs that were used to perform the valuation, the cash requirements are projected for each of the next fifteen years. The cash requirements are based on projected claims costs, less retiree contributions, if applicable, for both current and future retirees.

The cash flow projections show costs under the current funding (Pay-as-You-Go), compared to the Annual Required Contribution (ARC). The Total ARC equals the sum of the Normal Cost, Interest Cost, and Amortization Payment. The projections show total cash flows for the thirty year open amortization method. This means that the period of amortization is reset each year to be 30 years. Amortization may also be allowed as a percent of payroll under the GASB standards, or may be on a closed basis amortization. This means that the period of amortization decreases each year by one year. The first year amortization period being 30 years, the second being 29 years and so forth until in the thirtieth year the amortization period is 1 year.

The projections below are prepared on a closed group basis, meaning no new employees are added to the existing population for future years.

The cost projection in subsection A below, Projection with Partial Prefunding, applies only if the plan is not prefunded and contributions are only the Pay-As-You-Go (PAYGO) costs. However, if the OPEB Trust Fund has an initial balance, plan assets continue to grow with investment return.

The cost projection in subsection B below, Projection with Prefunding, applies only if the Plan is prefunded and the employer makes annual contributions to the plan equal to the ARC. If the employer does not make annual contributions, as shown, or makes only partial annual contributions, the ARC for years after March 31, 2017 will be higher than those shown in subsection B. Please note that if the Town contributes to the OPEB Trust Fund an amount equal to the ARC that is less than the PAYGO amount, benefit payments reduce the plan's assets resulting in a lower funded position than if the Town contribute the PAYGO amount.

X. CASH FLOW PROJECTIONS (cont'd)

Plan Year Ending	Contribution (PAYGO)	Annual Required Contribution	Annual OPEB Cost	Net OPEB Obligation	Projected Actuarial Liability	Plan Assets (beg. yr.)	Funding Percentage (beg. yr.)
2/21/2017	¢292.166	¢572.000	ф <i>с 1 4 7</i> 70	¢2.045.020	¢5 501 960	¢401 145	7 170/
3/31/2017	\$282,100	\$373,986	\$544,770	\$2,045,029	\$5,591,860	\$401,145	/.1/%
3/31/2018	254,000	554,000	520,000	2,311,000	5,810,000	431,000	7.42%
3/31/2019	268,000	568,000	530,000	2,573,000	6,035,000	464,000	7.68%
3/31/2020	300,000	582,000	540,000	2,813,000	6,258,000	498,000	7.96%
3/31/2021	292,000	594,000	548,000	3,069,000	6,461,000	536,000	8.29%
3/31/2022	281,000	608,000	558,000	3,346,000	6,683,000	576,000	8.62%
3/31/2023	296,000	622,000	567,000	3,617,000	6,929,000	619,000	8.93%
3/31/2024	283,000	634,000	575,000	3,909,000	7,173,000	666,000	9.28%
3/31/2025	297,000	645,000	581,000	4,193,000	7,441,000	715,000	9.61%
3/31/2026	308,000	655,000	586,000	4,471,000	7,704,000	769,000	9.98%
3/31/2027	347,000	656,000	583,000	4,707,000	7,964,000	827,000	10.38%
3/31/2028	366,000	657,000	580,000	4,921,000	8,185,000	889,000	10.86%
3/31/2029	405,000	660,000	579,000	5,095,000	8,388,000	955,000	11.39%
3/31/2030	416,000	663,000	579,000	5,258,000	8,554,000	1,027,000	12.01%
3/31/2031	429,000	666,000	580,000	5,409,000	8,714,000	1,104,000	12.67%

A. Projection with Partial Prefunding (4.50% discount rate)

Results show the impact of the funding projections assuming the Annual Required Contribution is recalculated each year. Projections are based on the closed population as of April 1, 2016.

X. CASH FLOW PROJECTIONS (cont'd)

Plan Year Ending	Contribution (ARC)	Annual Required Contribution	Annual OPEB Cost	Net OPEB Obligation	Projected Actuarial Liability	Plan Assets (beg. yr.)	Funding Percentage (beg. yr.)
3/31/2017	\$282,166	\$573,986	\$544,770	\$2,045,029	\$5,591,860	\$401,145	10.54%
3/31/2018	426,000	426,000	406,000	2,025,000	3,945,000	431,000	10.93%
3/31/2019	424,000	424,000	404,000	2,005,000	4,105,000	649,000	15.80%
3/31/2020	423,000	423,000	404,000	1,986,000	4,266,000	865,000	20.28%
3/31/2021	421,000	421,000	402,000	1,967,000	4,409,000	1,063,000	24.11%
3/31/2022	420,000	420,000	401,000	1,948,000	4,573,000	1,281,000	28.02%
3/31/2023	419,000	419,000	400,000	1,929,000	4,765,000	1,527,000	32.04%
3/31/2024	417,000	417,000	398,000	1,910,000	4,959,000	1,774,000	35.77%
3/31/2025	412,000	412,000	394,000	1,892,000	5,184,000	2,051,000	39.57%
3/31/2026	408,000	408,000	390,000	1,874,000	5,411,000	2,329,000	43.04%
3/31/2027	397,000	397,000	379,000	1,856,000	5,643,000	2,611,000	46.27%
3/31/2028	388,000	388,000	370,000	1,838,000	5,845,000	2,861,000	48.94%
3/31/2029	382,000	382,000	364,000	1,820,000	6,038,000	3,099,000	51.32%
3/31/2030	378,000	378,000	360,000	1,802,000	6,203,000	3,307,000	53.32%
3/31/2031	375,000	375,000	358,000	1,785,000	6,368,000	3,514,000	55.19%

B. Projection with Full Prefunding (7.50% discount rate)

Results for 3/31/2017 are based on actual no prefunding (4.50% discount rate). Results show the impact of the funding projections assuming the Annual Required Contribution is recalculated each year. Projections are based on the closed population as of April 1, 2016.

XI. ASSUMPTION SENSITIVITY ANALYSIS

A. Discount Rate of 4.50% (ARC Not Contributed to Trust)

	Normal Cost Actuarial Accrued Liability	\$244,326 \$5,591,860
	Annual Required Contribution Covered Payroll ARC as a Percent of Payroll	\$573,986 \$16,457,772 3.49%
B.	Discount Rate of 7.50% (ARC Contributed to Trust)	
	Normal Cost Actuarial Accrued Liability	\$136,065 \$3,806,745
	Annual Required Contribution Increase/(Decrease) to ARC in Section V ARC as a Percent of Payroll	\$434,625 (139,361) 2.64%
C.	Increase Medical Trend by 1%	
	Normal Cost Actuarial Accrued Liability	\$305,411 \$6,507,195
	Annual Required Contribution Increase/(Decrease) to ARC in Section V ARC as a Percent of Payroll	\$694,014 120,028 4.22%
D.	Decrease Medical Trend by 1%	
	Normal Cost Actuarial Accrued Liability	\$197,934 \$4,859,202
	Annual Required Contribution Increase/(Decrease) to ARC in Section V ARC as a Percent of Payroll	\$480,528 (93,458) 2.92%

XII. PER CAPITA MEDICAL COSTS

A. Under Age 65 Per Capita Costs, April 1, 2016

		Town/	
		Police	School
1.	Average annual medical premium, per person:		
	a. Average annual premium for individual coverage:	7,655.52	5,770.08
	b. Average annual premium for family coverage:	20,330.28	15,321.12
	c. Average annual premium for spouse:	12,674.76	9,551.04
	d. Marriage Assumption:	75.00%	75.00%
	e. Average annual premium, per person:	9,806.62	7,390.49
	[100.00% x (a) + 75.00% x (c)] / 175.00%		
2.	Estimate fiscal 2016 per person medical claims costs adjusted to	age 65 basis:	
	a. Average age of covered participants under 65:	48.41	48.83
	b. Factor to adjust to age 65 per assumptions	163.29%	161.28%
	[1.03 ^ (65.00 - (3))]		
	c. Estimate fiscal 2016 per person medical claims costs	16,013.60	11,919.31
	$[(1.e) \times (b)]$		
3.	Average annual dental premium, per person:		
	a. Average annual premium for individual coverage:	347.79	416.52
	b. Average annual premium for family coverage:	1,036.60	1,274.88
	c. Average annual premium for spouse:	688.81	858.36
	d. Marriage Assumption:	75.00%	75.00%
	e. Average annual premium, per person:	493.94	605.88
	[100.00% x (a) + 75.00% x (c)] / 175.00%		
4.	Estimate fiscal 2016 per person dental claims costs adjusted to a	ge 65 basis:	
	a. Average age of covered participants under 65:	50.10	49.47
	b. Factor to adjust to age 65 per assumptions	155.34%	158.26%
	[1.03 ^ (65.00 - (3))]		
	c. Estimate fiscal 2016 per person medical claims costs	767.27	958.85
	[(1.e) x (b)]		
B.	Post Age 65 Per Capita Costs, April 1, 2016	Town/	
		Police	<u>School</u>
1.	Average annual medical premium, per person	2,144.28	N/A
2.	Factor to adjust to age 65 per assumptions	100.00%	N/A
3.	Estimate fiscal 2016 per person post 65 medical claims costs	2,144.28	N/A

XII. PER CAPITA MEDICAL COSTS (cont'd)

		Town/Police	Town/Police	School	School
	Aging	Per Person	Per Person	Per Person	Per Person
Age	Assumption	Medical	<u>Dental</u>	Medical	<u>Dental</u>
40	3.00%	7,648.19	366.45	5,692.73	457.95
45	3.00%	8,866.34	424.82	6,599.43	530.89
50	3.00%	10,278.52	492.48	7,650.55	615.45
55	3.00%	11,915.62	570.92	8,869.09	713.47
60	3.00%	13,813.47	661.86	10,281.70	827.11
65	3.00%	2,144.28	767.27	N/A	958.85
70+	3.00%	2,144.28	889.48	N/A	1,111.56

C. Projected Per Capita Medical and Dental Costs

The projected costs as of the 4/1/2016 valuation date are based on the 7/1/2016 medical and dental rates since when these rates are combined with the Health Care Cost Trend Rates they produce our best estimate of future medical and dental claims costs.

D.	Historical Medical Premiums - Monthly	7/1/2014	7/1/2015	7/1/2016
1.	Healthmate Coast to Coast - Town/Police a. Single Coverage b. Family Coverage	613.19 1,628.40	625.45 1,660.97	637.96 1,694.19
2.	Classic Blue Cross - Town/Police a. Single Coverage b. Family Coverage	676.66 1,755.22	690.19 1,790.32	704.00 1,826.13
3.	Healthmate Coast to Coast - School a. Single Coverage b. Family Coverage	471.42 1,251.72	471.42 1,251.72	480.84 1,276.76
4.	Classic Blue Cross - School a. Single Coverage b. Family Coverage	523.73 1,390.61	523.73 1,390.61	534.21 1,418.42
5.	Plan 65 - Town/Police	163.33	169.31	178.69
6.	Dental - Police a. Single Coverage b. Family Coverage	28.27 85.98	28.27 85.98	28.84 87.70
7.	Dental - School a. Single Coverage b. Family Coverage	34.71 106.24	34.71 106.24	34.71 106.24

XIII. PARTICIPANT DATA

A. Reconciliation of Participant Data

	<u>Actives</u>	<u>Retirees</u>	<u>Total</u>
Total as of April 1, 2014	362	52	414
New Entrants	68	n/a	68
Terminations	(52)	n/a	(52)
Active deaths	-	n/a	0
New retirees	(6)	6	0
New beneficiaries	n/a	-	0
Retiree/beneficiary deaths	n/a	(10)	(10)
Dropped coverage	n/a	-	0
Data adjustments	1	5	6
Total as of March 31, 2016	373	53	426

XIII. PARTICIPANT DATA (cont'd)

B. Age and Service Distribution of Members

1. Eligible Active Members:

Complete Years of Service as of April 1, 2016

Attained							• •	
<u>Age</u>	<u>0 - 4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u> 30+</u>	<u>Total</u>
Under 25	15	-	-	-	-	-	-	15
25-29	15	3	2	-	-	-	-	20
30-34	3	13	5	-	-	-	-	21
35-39	5	5	11	5	-	-	-	26
40-44	15	5	14	11	5	-	-	50
45-49	29	7	9	15	4	5	1	70
50-54	10	10	3	12	1	9	-	45
55-59	7	5	13	16	5	4	3	53
60-64	7	4	8	8	8	7	2	44
65-69	1	2	4	2	1	3	1	14
70+	-	3	4	3	2	1	2	15
Total	107	57	73	72	26	29	9	373

In addition, 122 employees are excluded from the Plan as they are Committee/ Appointed, Contractors, Elected Council, Seasonal, or other temporary employees.

2. Retired Members:

<u>Attained Age</u>	<u>Total</u>
Under 50	2
50-54	5
55-59	6
60-64	14
65-69	7
70-74	9
75+	10
Total	53

XIII. PARTICIPANT DATA (cont'd)

C. Participant Statistics

1. Eligible Active Members:

	DRW	NonUnion	Police	Certified	Non-Cert.	Total
Count:	10	31	14	144	209	408
Average age:	43.1	52.9	40.1	46.8	N/A	47.1
Average past service:	12.2	13.5	13.5	15.2	N/A	14.6
Average future service until retirement:	9.9	8.5	13.7	13.9	N/A	12.8
Average age of retirement:	53.0	61.4	53.7	60.7	N/A	59.9

2. Retired Members and Spouses:

	DPW -	on Union	Police	Certified	Non-Cert.	Total
Count:	8	22	12	11	0	53
Average age under 65:	64.8	58.5	54.9	63.0	N/A	59.6
Average age over 65:	77.6	75.6	78.9	77.2	N/A	76.6
Average age all retirees:	76.0	70.1	58.9	65.6	N/A	67.5
Expected future lifetime:	12.6	18.5	27.2	22.3	N/A	20.3

3. All Covered Members on Health Insurance (Active andRetiree)

	Medical	Dental
Town/Police - Average age:	48.41	50.10
School - Average age:	48.83	49.47

- <u>Actuarial Accrued Liability (AAL)</u> That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value (APV) of plan benefits and expenses allocated to all periods prior to the valuation date. This is the amount of the APV not provided by future Normal Costs. For example, AAL-PUC references the fact that the Projected Unit Credit Actuarial Cost Method was used to allocate costs to various years.
 - a) 100% of the actuarial present value of benefits expected to be paid (APV) to:
 - i) Retirees and their dependants
 - ii) Active employees who have attained their expected retirement date and their dependants
 - b) Proportionate amount, based on employee service recognized up to the valuation date, of the actuarial present value of benefits expected to be paid (AAL) for active employees who have not yet attained their expected retirement date.

The AAL is the benefit obligation disclosed in the financial statements representing current plan liability.

- <u>Active Plan Participant</u> Any active employee who has rendered service during the credited service period and is expected to receive benefits, including benefits to or for any beneficiaries and covered dependents, under the Postemployment benefit plan.
- <u>Actuarial Cost Method or Funding Method</u> A procedure for determining the Actuarial Present Value of OPEB plan benefits and expenses and for developing an actuarial equivalent allocation of such value to time periods, usually in the form of a Normal Cost and an Actuarial Accrued Liability.
- <u>Actuarial Present Value of Total Projected Benefits (APV)</u> The actuarial present value of the cost to finance, as of a specified date, all future benefit costs or a series of benefit costs, with each amount adjusted to reflect (a) the time value of money (through discounts for interest) and (b) the probability of payment (for example, by means of decrements for events such as death, disability, withdrawal or retirement) between the specified date and the expected date of payment. This includes benefits to current active members, terminated employees entitled to benefits but not yet receiving them, if any, retirees, their beneficiaries and any covered dependents pursuant to the terms of the OPEB plan. Expressed another way, it is the amount that would have to be invested on the valuation date so that the amount invested plus investment earnings will provide sufficient assets to pay total projected benefits when due.
- <u>Amortization Payment</u> That portion of the plan contribution which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability (UAAL).
- <u>Annual Required Contribution of the Employer (ARC)</u> The amount recognized in an employer's financial statement as the required annual contribution to a defined benefit OPEB plan. Components include normal cost, interest cost, actual return on OPEB liability/asset, gain and loss, amortization of gains and losses.
- <u>Attribution Period</u> The period of an employee's service to which the actuarial present value of total projected benefits for that employee is assigned. The beginning of that period is generally the employee's date of hire and the end of the attribution period is the full eligibility date.

<u>Discount Rate</u> – The interest rate used in developing present values to reflect the time value of money. The discount rate is used to determine the present value, as of the valuation date, of future cash flows currently expected to be required to satisfy the OPEB obligation.

Determined as the rate of investment return used to discount future cash flows currently expected to be required to satisfy the Postemployment obligation. The discount rate assumption should be based on the rates of return on high quality, fixed-income investments currently available whose cash flows match the timing and amount of expected payments.

- <u>Full Eligibility Date</u> The date at which an employee has rendered all service necessary to receive full benefits under the plan.
- <u>Gains and Losses</u> Changes in the Unfunded Actuarial Accrued Liability (UAAL) that is the result of actual experience of the plan being different than what was expected.
- <u>Health Care Cost Trend Rate (HCCTR)</u> An assumption about the annual rate(s) of change in the cost of health care benefits which are currently provided by the Postemployment benefit plan, due to factors other than changes in the composition of the plan population by age and dependency status, for each year from the measurement date until the end of the period in which benefits are expected to be paid. The Health Care Cost Trend Rate implicitly considers estimates of health care inflation, changes in health care utilization or delivery patterns, technological advances, and changes in the health status of the plan participants.

Differing types of service, such as hospital care and dental care, may have different trend rates as may service for different portions of the plan population, such as Medicare eligible and non-Medicare eligible members.

<u>Implicit Rate Subsidy</u> – It is a common practice to permit retired employees to continue in the town's group health insurance plan at their own cost once eligibility for town paid benefits is exhausted. This practice creates an OPEB liability based on the theory that retirees have higher utilization of health care benefits than active employees. Therefore, unless the premium rate for retirees is set to fully recover their health costs, the premium for active employees is implicitly overstated to subsidize utilization by retirees. This is called implicit rate subsidy. This rate subsidy is considered a benefit subject to OPEB valuation, included in GASB45.

The OPEB liability normally includes the cost of the implicit rate subsidy for the years in which the retiree is paying the insurance costs for continued coverage. When the retiree is eligible for Medicare, the cost of coverage is generally much closer to the premium cost. Therefore, there is no OPEB liability assumed for Medicare-eligible retirees paying 100% of the premium.

- <u>Interest Cost (component of Annual Required Contribution (ARC))</u> The accrual of interest on the Normal Cost and Amortization of UAAL for the year of the valuation. It is calculated by applying the beginning of year Discount Rate to the sum of the NC and UAAL as of the beginning of year.
- <u>Market Value (or Fair Value) of Plan Assets</u> The amount that a plan could reasonable expect to receive for an investment in a current sale between a willing buyer and a willing seller.

- <u>Market-Related Value of Plan Assets</u> A balance used to calculate the Expected Return of Plan Assets. Market-related value can be either fair value or a calculated value that recognizes changes in fair value in a systematic and rational manner over not more than five years.
- <u>Normal Cost (component of Annual Required Contribution (ARC))</u> The portion of the Actuarial Present Value of Total Projected Benefits (APV) attributed to employee service during a valuation year by the Actuarial Cost Method.
- <u>OPEB Assets</u> The amount recognized by an employer for contributions to an OPEB plan greater than the OPEB expense.
- <u>OPEB Expenditures</u> The amount recognized by an employer in each accounting period for contributions to an OPEB plan on the modified accrual basis of accounting.
- <u>OPEB Expense</u> The amount recognized by an employer in each accounting period for contributions to an OPEB plan on the accrual basis of accounting.
- <u>OPEB Liabilities</u> The amount recognized by an employer in each accounting period for contributions to an OPEB plan less than OPEB expense/expenditures.
- <u>Open Group/Closed Group</u> Terms used to distinguish between two classes of Actuarial Cost Methods. Under an Open Group Actuarial Cost Method, Actuarial Present Values associated with expected future entrants are considered; under a Closed Group Actuarial Cost Method, Actuarial Present Values associated with expected future entrants are not considered.
- <u>Pay-As-You-Go (PAYGO)</u> A method of expensing retiree medical benefits recognizing as an expense the cash currently paid as benefits to retirees, spouses and covered dependents. The minimum method of financing a plan, having no pre-funding until benefits actually become payable.
- <u>Per Capita Benefit Cost by Age</u> The current cost of providing OPEB health care benefits for one year at each age from the youngest age to the oldest age at which plan participants are expected to receive benefits under the plan.
- <u>Plan Assets</u> Assets which have been irrevocably dedicated to the payment of benefits under the plan.
- <u>Postemployment</u> The period between termination of employment and retirement as well as the period after retirement.
- <u>Postemployment Benefits</u> All forms of benefits, other than retirement income (pensions), provided by the employer to the retiree, including, but not limited to, health care, life insurance and legal assistance.

- <u>Projected Unit Credit Actuarial Cost Method</u> -- A method under which the projected benefits of each individual included in an Actuarial Valuation are allocated by a consistent formula to valuation years. The Actuarial Present Value of benefits allocated to a valuation year is called the Normal Cost. The Actuarial Present Value of benefits allocated to all periods prior to a valuation year is called the Actuarial Accrued Liability.
- <u>Substantive Plan</u> The terms of a postemployment benefit plan as understood by an employer and plan members that provides postemployment benefits to the employees who render services in exchange for those benefits. The substantive plan is the basis for the accounting for this transaction. In some situations an employer's cost-sharing policy, as evidenced by past practice or by communication of intended changes to a plan's cost-sharing provisions, or a past practice of regular increases in certain monetary benefits may indicate that the substantive plan differs from the existing written plan.
- <u>Unfunded Actuarial Accrued Liability (UAAL)</u> -- The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets.
- Valuation Date The date as of which the plan assets and OPEB obligations are measured.