

# GASB 74/75 ACTUARIAL VALUATION

Fiscal Year Ending June 30, 2016

# Town of South Kingstown

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**December 16, 2016** 

Patricia Sunderland Town of South Kingstown 180 High Street Wakefield, RI 02879

This report summarizes the GASB actuarial valuation for the Town of South Kingstown FY 2015/16 fiscal year. To the best of our knowledge, the report presents a fair position of the funded status of the plan in accordance with GASB Statement No. 75 (Accounting and Financial Reporting by Employers for Post-Employment Benefits Other Than Pensions).

The information presented herein is based on the actuarial assumptions and substantive plan provisions summarized in this report and participant information furnished to us by the Plan Sponsor. We have reviewed the employee census provided by the Plan Sponsor for reasonableness when compared to the prior information provided but have not audited the information at the source, and therefore do not accept responsibility for the accuracy or the completeness of the data on which the information is based. When relevant data may be missing, we may have made assumptions we feel are neutral or conservative to the purpose of the measurement. We are not aware of any significant issues with and have relied on the data provided.

The discount rate, other economic assumptions, and demographic assumptions have been selected by the Plan Sponsor with the concurrence of Nyhart. In our opinion, the actuarial assumptions are individually reasonable and in combination represent our estimate of anticipated experience of the Plan. All calculations have been made in accordance with generally accepted actuarial principles and practice.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as 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); and
- changes in plan provisions or applicable law.

We did not perform an analysis of the potential range of future measurements due to the limited scope of our engagement.

To our knowledge, there have been no significant events prior to the current year's measurement date or as of the date of this report that could materially affect the results contained herein.

# nyhart

Neither Nyhart nor any of its employees has any relationship with the plan or its sponsor that could impair or appear to impair the objectivity of this report. Our professional work is in full compliance with the American Academy of Actuaries "Code of Professional Conduct" Precept 7 regarding conflict of interest. The undersigned meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Should you have any questions please do not hesitate to contact us.

Randy Gomez, FSA, MAAA

**Consulting Actuary** 

Evi Laksana, ASA, MAAA Valuation Actuary

#### **Summary of Results**

Presented below is the summary of GASB 75 results for the fiscal year ending June 30, 2016.

	As of Ju	ıne 30, 2016
Total OPEB Liability	\$	18,326,804
Actuarial Value of Assets	\$	(10,196,288)
Net OPEB Liability	\$	8,130,516
Funded Ratio		
		FY 2015/16
OPEB Expense	\$	1,549,455
Annual Employer Contribution	\$	1,727,619 <sup>1</sup>
	As of Ju	ıne 30, 2016
Discount Rate		6.75%
Expected Return on Assets		6.75%
	As of Ju	ıne 30, 2016
	Town	School
Total Active Participants	204	479
Total Retiree Participants	35	47

The active participants' number above may include active employees who currently have no health care coverage. Refer to Summary of Participants section for an accurate breakdown of active employees with and without coverage.

 $<sup>^{1}</sup>$  Includes actual employer contribution for pay-go cost of \$1,127,619 and \$600,000 pre-funding contribution.

Below is a breakdown of total GASB 75 liabilities allocated to past and current service as of June 30, 2016. The table below also provides a breakdown of the Total OPEB Liability allocated to pre and post Medicare eligibility. The liability shown below includes explicit (if any) and implicit subsidies. Refer to the Substantive Plan Provisions section for complete information on the Plan Sponsor's GASB subsidies.

Present Value of Future Benefits	Town	School
Active Employees	\$ 9,468,592	\$ 10,294,628
Retired Employees	4,484,160	1,364,721
Total Present Value of Future Benefits	\$ 13,952,752	\$ 11,659,349

Total OPEB Liability	Town	School
Active Pre-Medicare	\$ 5,292,011	\$ 3,553,854
Active Post-Medicare	0	3,632,058
Active Liability	\$ 5,292,011	\$ 7,185,912
Retiree Pre-Medicare	\$ 4,484,160	\$ 773,646
Retiree Post-Medicare	0	591,075
Retiree Liability	\$ 4,484,160	\$ 1,364,721
Total OPEB Liability	\$ 9,776,171	\$ 8,550,633

	Town	School
Discount Rate	6.75%	6.75%

**Present Value of Future Benefits (PVFB)** is the amount needed as of June 30, 2016, to fully fund the Plan Sponsor's retiree health care subsidies for existing and future retirees and their dependents assuming all actuarial assumptions are met.

**Total OPEB Liability** is the portion of PVFB considered to be accrued or earned as of June 30, 2016. This amount is a required disclosure in the Required Supplementary Information section.

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

OPEB Liability	FY 2015/16
Total OPEB Liability	
Total OPEB liability – beginning of year	\$ 19,435,296
Service cost	820,802
Interest	1,416,126
Changes of benefit terms	0
Changes in assumptions	788,258
Differences between expected and actual experience	(3,006,059)
Benefit payments	(1,127,619)
Net change in total OPEB liability	\$ (1,108,492)
Total OPEB liability – end of year	\$ 18,326,804
Plan Fiduciary Net Position	
Plan fiduciary net position – beginning of year	\$ 9,714,523
Contributions – employer	1,727,619
Contributions – retired members	0
Net investment income	(62,732)
Benefit payments	(1,127,619)
Trust administrative expenses	(55,503)
Net change in plan fiduciary net position	\$ 481,765
Plan fiduciary net position – end of year	\$ 10,196,288
Net OPEB Liability – end of year	\$ 8,130,516
Plan fiduciary net position as % of total OPEB liability	55.6%
Covered employee payroll	\$ 40,859,060
Net OPEB liability as % of covered payroll	19.9%

#### **Schedule of Employer Contributions**

The Actuarially Determined Contribution (ADC) prior to FY 2015/16 is based on the Annual Required Contribution (ARC) calculated in the prior GASB 45 actuarial valuations and they are for both the Town and School combined as shown in the Town's financial statements.

	FY 2015/16	FY 2014/15	FY 2013/14	FY 2012/13	FY 2011/12
Actuarially Determined Contribution (ADC)	\$ 1,812,425 <sup>2</sup>	\$ 1,665,055	\$ 1,722,851	\$ 1,878,000	\$ 1,878,000
Contributions in relation to the ADC <sup>3</sup>	1,727,619 <sup>4</sup>	4,859,217	2,948,054	2,896,704	1,986,031
Contribution deficiency / (excess)	\$ 84,806	\$ (3,194,162)	\$ (1,225,203)	\$ (1,018,704)	\$ (108,031)
Covered employee payroll	\$ 40,859,060	\$ 42,546,253	\$ 42,546,253	\$ 43,016,000	\$ 43,016,000
Contribution as a % of covered employee payroll	4.2%	11.4%	6.9%	6.7%	4.6%
	FY 2010/11	FY 2009/10	FY 2008/09		
Actuarially Determined Contribution (ADC)	\$ 1,922,000	\$ 1,780,100	\$ 1,694,400		
Contributions in relation to the ADC <sup>1</sup>	2,202,000	1,784,100	1,694,400		
Contribution deficiency / (excess)	\$ (280,000)	\$ (4,000)	\$ 0		
Covered employee payroll	\$ 41,868,678	\$ 41,868,678	\$ 42,961,106		

<sup>&</sup>lt;sup>2</sup> Refer to the Actuarially Determined Contributions section for the calculation details.

<sup>&</sup>lt;sup>3</sup> Includes employer contribution for pay-go cost paid from General Fund and pre-funding contributions deposited into the OPEB Trust.

 $<sup>^4</sup>$  Includes actual employer contribution for pay-go cost of \$1,127,619 and \$600,000 pre-funding contribution.

## **OPEB Expense**

OPEB Expense	FY 2015/16
Discount Rate	6.75%
Service cost	\$ 820,802
Interest	1,416,126
Changes of benefit terms	0
Projected earnings on OPEB plan investments	(675,650)
Reduction for contributions from active employees	0
OPEB plan administrative expenses	0
Current period recognition of deferred outflows / (inflows) of resources	
Differences between expected and actual experience	\$ (231,235)
Changes in assumptions	60,635
Net difference between projected and actual earnings on OPEB plan investments	158,777
Total current period recognition	\$ (11,823)
Total OPEB expense	\$ 1,549,455

#### **Deferred Outflows / (Inflows) of Resources**

Deferred Outflows / (Inflows) of Resources represents the following items that have not been recognized in the OPEB Expense:

- 1. Differences between expected and actual experience of the OPEB plan
- 2. Changes of assumptions
- 3. Difference between projected an actual earnings in OPEB plan investments

The initial amortization period for the first two items noted above is based on the average future service to retirement while the difference between projected and actual earnings in OPEB plan investment is amortized over five years. All balances are amortized linearly on a principal only basis and new bases will be created annually for each of the item above.

Differences between expected and actual experience for FYE	Initial Balance	Initial Amortization Period	Annu	al Recognition	namortized Ince as of June 30, 2016
June 30, 2016	\$ (3,006,059)	13	\$	(231,235)	\$ (2,774,824)

Changes in assumptions for FYE	Initial Balance	Initial Amortization Period	Annua	l Recognition	Unamortized lance as of June 30, 2016
June 30, 2016	\$ 788,258	13	\$	60,635	\$ 727,623

Net difference between projected and actual earnings in OPEB plan investments for FYE	Initial Balance	Initial Amortization Period	Annua	l Recognition	Unamortized lance as of June 30, 2016
June 30, 2016	\$ 793,885	5	\$	158,777	\$ 635,108

As of fiscal year ending June 30, 2016	Defe	red Outflows	Deferred Inflows			
Differences between expected and actual experience	\$	0	\$	(2,774,824)		
Changes in assumptions		727,623		0		
Net difference between projected and actual earnings in OPEB plan investments		635,108		0		
Total	\$	1,362,731	\$	(2,774,824)		

#### Deferred Outflows / (Inflows) of Resources - Continued

#### Annual Amortization of Deferred Outflows / (Inflows)

The balances of June 30, 2016 of the deferred outflows / (inflows) of resources will be recognized in OPEB expense in the future fiscal years as noted below.

FYE	Balance
2017	\$ (11,823)
2018	\$ (11,823)
2019	\$ (11,823)
2020	\$ (11,823)
2021	\$ (170,600)
Thereafter	\$ (1,194,201)

#### **Sensitivity Results**

The following presents the net OPEB liability as of June 30, 2016, calculated using the discount rate assumed and what it would be using a 1% higher and 1% lower discount rate.

- The current discount rate is 6.75%.
- The 1% decrease in discount rate would be 5.75%.
- The 1% increase in discount rate would be 4.75%.

As of June 30, 2016	Net O	PEB Liability
1% Decrease	\$	9,385,501
Current Discount Rate	\$	8,130,516
1% Increase	\$	6,965,622

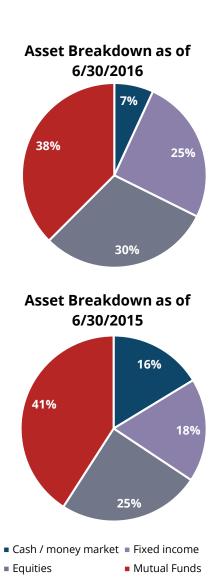
The following presents the net OPEB liability as of June 30, 2016, using the health care trend rates assumed and what it would be using 1% higher and 1% lower health care trend rates.

- The current health care trend rate starts at an initial rate of 9.0% decreasing by 0.5% annually to an ultimate rate of 5.0%.
- The 1% decrease in health care trend rates would assume an initial rate of 8.0% decreasing by 0.5% annually to an ultimate rate of 4.0%.
- The 1% increase in health care trend rates would assume an initial rate of 10.0% decreasing by 0.5% annually to an ultimate rate of 6.0%.

As of June 30, 2016	Net C	PEB Liability
1% Decrease	\$	6,625,630
Current Health Care Trend Rates	\$	8,130,516
1% Increase	\$	9,859,237

#### **Asset Information**

As of	June 30, 2015	June 30, 2016
Assets		
Cash and cash equivalents	\$ 1,587,740	\$ 683,170
Securities lending cash collateral	0	0
Total cash	\$ 1,587,740	\$ 683,170
Receivables		
Contributions	\$ 0	\$ 0
Accrued interest	0	18,042
Total receivables	\$ 0	\$ 18,042
Investments		
Fixed income	\$ 1,757,870	\$ 2,596,385
Equities	2,409,376	3,076,269
Mutual Funds	3,985,114	3,822,422
Total investments	\$ 8,152,360	\$ 9,495,076
Total assets	\$ 9,740,100	\$ 10,196,288
Liabilities		
Payables		
Investment management fees	\$ 0	\$ 0
Securities lending expense	(25,577)	0
Total liabilities	\$ (25,577)	\$ 0
Net position restricted to OPEB	\$ 9,714,523	\$ 10,196,288



#### **Asset Information** – Continued

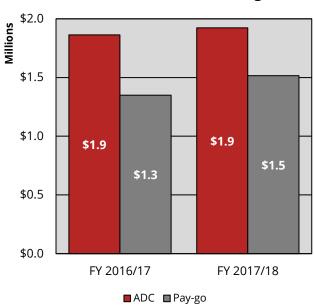
Reconciliation of Assets	FY 2015/16
Additions	
Contributions received	
Employer	\$ 1,727,619
Employee	0
Total contributions	\$ 1,727,619
Investment income	
Net increase in fair value of investments	\$ (300,240)
Interests and dividends	237,508
Investment expense, other than from securities lending	0
Securities lending income	0
Securities lending expense	0
Net investment income	\$ (62,732)
Total additions	\$ 1,664,887
Deductions	
Benefit payments	\$ (1,127,619)
Administrative expenses	(55,503)
Other	0
Total deductions	\$ (1,183,122)
Net increase in net position	\$ 481,765
Net position restricted to OPEB	
Beginning of year	9,714,523
End of year	\$ 10,196,288

		FY 2015/16		FY 2016/17		FY 2017/18
Discount rate (Funding)		6.75%		6.75%		6.75%
Payroll growth factor used for amortization		3.25%		3.25%		3.25%
Actuarial cost method	En	try age normal	Er	itry age normal	En	itry age normal
Amortization type		Level Dollar		Level Dollar		Level Dollar
Amortization period		10 years		10 years		9 years
AAL beginning of year	\$	17,724,514	\$	18,326,804	\$	18,888,873
AVA beginning of year		(9,714,523)		(10,196,288)		(11,415,680) <sup>5</sup>
Unfunded AAL – beginning of year	\$	8,009,991	\$	8,130,516	\$	7,473,193
Normal Cost		641,804		673,894		719,382
Amortization of UAAL		1,056,018		1,071,908		1,063,106
Total normal cost plus amortization	\$	1,697,822	\$	1,745,802	\$	1,782,488
Interest to the end of year		114,603		117,842		120,318
Actuarially Determined Contribution	\$	1,812,425	\$	1,863,644	\$	1,902,806
Expected benefit payments	\$	1,238,136	\$	1,349,568	\$	1,516,128

The recommended ADC represents the total employer cash contributions for retiree health benefits paid from General Fund plus contributions deposited into the OPEB Trust.

For example, assuming the benefit payment for FY 2016/17 is \$1,349,568, the Town should deposit \$514,076 to the OPEB Trust for a total employer contribution of \$1,863,644.

#### **Cash vs Accrual Accounting**



Actuarially Determined Contribution (ADC) is the target or recommended contribution to a defined benefit OPEB plan, which if paid on an ongoing basis, will provide sufficient resources to fund future costs for services to be earned and liabilities attributed to past services. This is typically higher than the pay-as-you-go cost because it includes recognition of employer costs expected to be paid in future accounting periods.

<sup>&</sup>lt;sup>5</sup> Asset as of July 1, 2017 is projected from July 1, 2016 asset balance assuming a 6.75% asset return and \$1,863,644 total contribution in FY 2016/17 (\$514,076 for pre-funding and \$1,349,568 for pay-go cost).

The Total OPEB Liability (TOL) is expected to change on an annual basis as a result of expected and unexpected events. Under normal circumstances, it is generally expected to have a net increase each year. Below is a list of the most common events affecting the total OPEB liability and whether they increase or decrease the liability.

#### **Expected Events**

- Increases in TOL due to additional benefit accruals as employees continue to earn service each year
- Increases in TOL due to interest as the employees and retirees age
- Decreases in TOL due to benefit payments

#### **Unexpected Events**

- Increases in TOL when actual premium rates increase more than expected. A liability decrease occurs of the reverse happens.
- Increases in TOL when more new retirements occur than expected or fewer terminations occur than anticipated. Liability decreases occur when the opposite outcomes happen.
- Increases or decreases in TOL depending on whether benefits are improved or reduced.

Projection of Total OPEB Liability	FY 2015/16	FY 2016/17
Total OPEB Liability as of beginning of year	\$ 19,435,296	\$ 18,326,804
Normal cost as of beginning of year	763,537	673,894
Expected benefit payments during the year	(1,390,328)	(1,349,568)
Interest adjustment to end of year	1,463,717	1,237,743
Expected Actuarial Accrued Liability as of end of year	\$ 20,272,222	\$ 18,888,873
Actuarial Loss/(Gain)	(1,945,418)	TBD
Actual Total OPEB Liability as of end of year	\$ 18,326,804	\$ TBD

Projection of Actuarial Value of Assets <sup>6</sup>	FY 2015/16	FY 2016/17
Actuarial Value of Assets as of beginning of year	\$ 9,714,523	\$ 10,196,288
Expected employer contributions during the year	1,727,619	1,863,644
Expected benefit payments during the year	(1,127,619)	(1,349,568)
Expected investment income	675,650	705,316
Expected Actuarial Value of Assets as of end of year	\$ 10,990,173	\$ 11,415,680
Differences between expected and actual experience	(793,885)	TBD
Actual Actuarial Value of Assets as of end of year	\$ 10,196,288	\$ TBD

 $<sup>^{\</sup>rm 6}$  Assumes a 6.75% expected asset return.

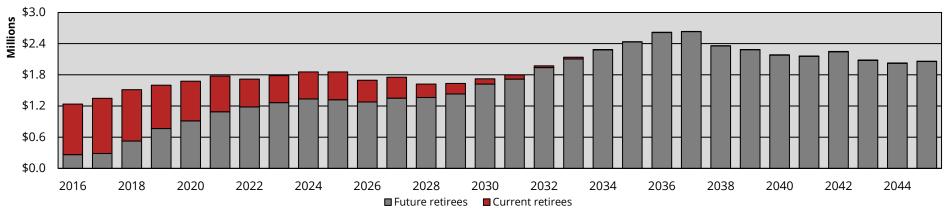
The below projections show the actuarially estimated employer-paid contributions for retiree health benefits for the next thirty years. Results are shown separately for a closed group of current /future retirees and gross claim costs/retiree contributions. These projections include explicit and implicit subsidies.

FYE	Current Retirees	ı	Future Retirees <sup>7</sup>	Total
2016	\$ 974,819	\$	263,317	\$ 1,238,136
2017	\$ 1,062,553	\$	287,015	\$ 1,349,568
2018	\$ 988,744	\$	527,384	\$ 1,516,128
2019	\$ 836,112	\$	765,259	\$ 1,601,371
2020	\$ 763,970	\$	914,986	\$ 1,678,956
2021	\$ 685,334	\$	1,091,004	\$ 1,776,338
2022	\$ 536,484	\$	1,182,736	\$ 1,719,220
2023	\$ 518,571	\$	1,265,983	\$ 1,784,554
2024	\$ 519,558	\$	1,336,644	\$ 1,856,202
2025	\$ 535,365	\$	1,320,331	\$ 1,855,696

FYE	Current Retirees	ı	Future Retirees <sup>7</sup>	Total
2026	\$ 417,743	\$	1,278,721	\$ 1,696,464
2027	\$ 403,902	\$	1,352,215	\$ 1,756,117
2028	\$ 258,192	\$	1,362,959	\$ 1,621,151
2029	\$ 206,099	\$	1,430,078	\$ 1,636,177
2030	\$ 102,793	\$	1,621,905	\$ 1,724,698
2031	\$ 79,449	\$	1,716,945	\$ 1,796,394
2032	\$ 31,913	\$	1,940,627	\$ 1,972,540
2033	\$ 33,264	\$	2,105,276	\$ 2,138,540
2034	\$ 4,528	\$	2,281,618	\$ 2,286,146
2035	\$ 4,750	\$	2,433,766	\$ 2,438,516

FYE	Current Retirees	I	Future Retirees <sup>7</sup>	Total
2036	\$ 4,959	\$	2,613,817	\$ 2,618,776
2037	\$ 5,146	\$	2,631,163	\$ 2,636,309
2038	\$ 5,308	\$	2,356,054	\$ 2,361,362
2039	\$ 5,432	\$	2,283,321	\$ 2,288,753
2040	\$ 5,516	\$	2,181,064	\$ 2,186,580
2041	\$ 5,551	\$	2,156,921	\$ 2,162,472
2042	\$ 5,533	\$	2,245,496	\$ 2,251,029
2043	\$ 5,479	\$	2,077,960	\$ 2,083,439
2044	\$ 5,371	\$	2,023,223	\$ 2,028,594
2045	\$ 5,227	\$	2,056,036	\$ 2,061,263

#### **Projected Employer Pay-go Cost (TOTAL)**



<sup>&</sup>lt;sup>7</sup> Projections for future retirees do not take into account future new hires.

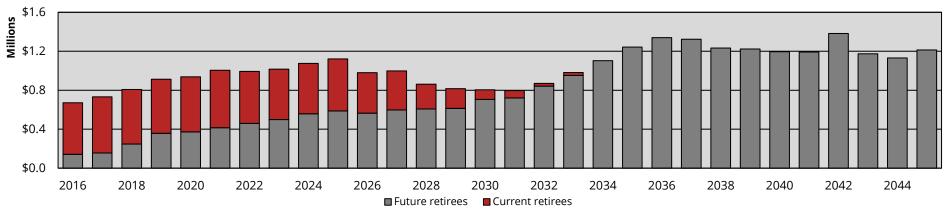
The below projections show the actuarially estimated employer-paid contributions for retiree health benefits for the next thirty years for the Town only.

FYE	Current Retirees		Future Retirees <sup>8</sup>		Total
2016	\$ 528,983	\$	142,683	\$	671,666
2017	\$ 576,592	\$	155,524	\$	732,116
2018	\$ 559,337	\$	248,562	\$	807,899
2019	\$ 555,879	\$	357,626	\$	913,505
2020	\$ 564,163	\$	373,019	\$	937,182
2021	\$ 589,222	\$	415,963	\$	1,005,185
2022	\$ 534,385	\$	459,666	\$	994,051
2023	\$ 516,324	\$	499,292	\$	1,015,616
2024	\$ 517,151	\$	558,110	\$	1,075,261
2025	\$ 532,788	\$	588,212	\$	1,121,000

FYE	Current Retirees	Future Retirees <sup>8</sup>	Total
2026	\$ 414,983	\$ 565,105	\$ 980,088
2027	\$ 400,946	\$ 598,153	\$ 999,099
2028	\$ 255,030	\$ 607,070	\$ 862,100
2029	\$ 202,720	\$ 613,778	\$ 816,498
2030	\$ 99,192	\$ 705,217	\$ 804,409
2031	\$ 75,618	\$ 719,955	\$ 795,573
2032	\$ 27,849	\$ 842,646	\$ 870,495
2033	\$ 28,967	\$ 953,014	\$ 981,981
2034	\$ 0	\$ 1,103,510	\$ 1,103,510
2035	\$ 0	\$ 1,242,847	\$ 1,242,847

FYE	Current Retirees		I	Future Retirees <sup>8</sup>	Total
2036	\$	0	\$	1,340,110	\$ 1,340,110
2037	\$	0	\$	1,323,664	\$ 1,323,664
2038	\$	0	\$	1,233,764	\$ 1,233,764
2039	\$	0	\$	1,223,336	\$ 1,223,336
2040	\$	0	\$	1,195,802	\$ 1,195,802
2041	\$	0	\$	1,192,139	\$ 1,192,139
2042	\$	0	\$	1,382,119	\$ 1,382,119
2043	\$	0	\$	1,173,977	\$ 1,173,977
2044	\$	0	\$	1,130,759	\$ 1,130,759
2045	\$	0	\$	1,212,823	\$ 1,212,823

#### **Projected Employer Pay-go Cost (TOWN)**



<sup>&</sup>lt;sup>8</sup> Projections for future retirees do not take into account future new hires.

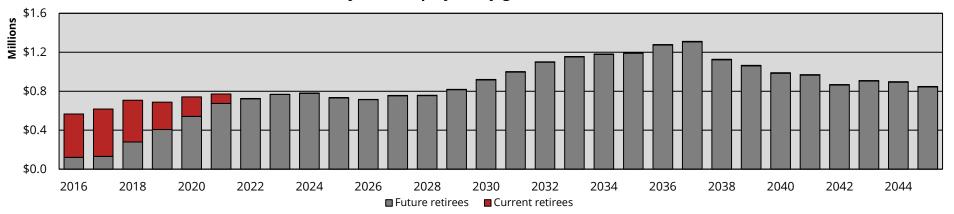
The below projections show the actuarially estimated employer-paid contributions for retiree health benefits for the next thirty years for the School only.

FYE	Current Retirees	I	Future Retirees <sup>9</sup>	Total
2016	\$ 445,836	\$	120,634	\$ 566,470
2017	\$ 485,961	\$	131,491	\$ 617,452
2018	\$ 429,407	\$	278,822	\$ 708,229
2019	\$ 280,233	\$	407,633	\$ 687,866
2020	\$ 199,808	\$	541,966	\$ 741,774
2021	\$ 96,112	\$	675,041	\$ 771,153
2022	\$ 2,099	\$	723,070	\$ 725,169
2023	\$ 2,247	\$	766,691	\$ 768,938
2024	\$ 2,407	\$	778,534	\$ 780,941
2025	\$ 2,578	\$	732,118	\$ 734,696

FYE	Current Retirees	Future Retirees <sup>9</sup>	Total
2026	\$ 2,761	\$ 713,615	\$ 716,376
2027	\$ 2,956	\$ 754,062	\$ 757,018
2028	\$ 3,162	\$ 755,889	\$ 759,051
2029	\$ 3,379	\$ 816,300	\$ 819,679
2030	\$ 3,601	\$ 916,688	\$ 920,289
2031	\$ 3,831	\$ 996,990	\$ 1,000,821
2032	\$ 4,064	\$ 1,097,981	\$ 1,102,045
2033	\$ 4,298	\$ 1,152,261	\$ 1,156,559
2034	\$ 4,527	\$ 1,178,109	\$ 1,182,636
2035	\$ 4,750	\$ 1,190,919	\$ 1,195,669

	 	_		_	
FYE	Current Retirees		Future Retirees <sup>9</sup>		Total
2036	\$ 4,959	\$	1,273,707	\$	1,278,666
2037	\$ 5,146	\$	1,307,499	\$	1,312,645
2038	\$ 5,308	\$	1,122,290	\$	1,127,598
2039	\$ 5,432	\$	1,059,985	\$	1,065,417
2040	\$ 5,516	\$	985,262	\$	990,778
2041	\$ 5,551	\$	964,782	\$	970,333
2042	\$ 5,533	\$	863,377	\$	868,910
2043	\$ 5,479	\$	903,983	\$	909,462
2044	\$ 5,370	\$	892,465	\$	897,835
2045	\$ 5,227	\$	843,213	\$	848,440

#### **Projected Employer Pay-go Cost (SCHOOL)**



<sup>&</sup>lt;sup>9</sup> Projections for future retirees do not take into account future new hires.

Under GASB 75, the discount rate used in valuing OPEB liabilities for funded plans as of the Measurement Date must be based on the long-term expected rate of return on OPEB plan investments that are expected to be used to finance future benefit payments to the extent that (a) they are sufficient to pay for the projected benefit payments and (b) the OPEB plan assets are invested using a strategy that will achieve that return. When the OPEB plan investments are insufficient to cover future benefit payments, a yield for 20-year tax-exempt general obligation municipal bonds with an average rating of AA /Aa or higher (or equivalent quality on another rating scale) must be used.

#### For the current valuation:

- 1. The long-term expected rate of return on OPEB plan investment is 6.75%.
- 2. The discount rate used when the OPEB plan investments are insufficient to pay for future benefit payments are selected from the range of indices as shown in the table below, where the range is given as the spread between the lowest and highest rate shown.
- 3. The final equivalent single discount rate used for this year's valuation is 6.75%. This is based on the expectation that the Town/School will pay for the pay-go cost from the Trust beginning in FYE 2018 and they will continue making contributions into the Trust in perpetuity until significant changes occur to the retiree health benefit provisions that will necessitate different funding contribution strategy.

	Bond Buyer Go 20- Bond Municipal Bond Index	S&P Municipal Bond 20-Year High Grade Rate Index	Bonds Online 20- Year Municipal AA Index	Fidelity 20-Year Go Municipal Bond Index	Nyhart Recommendation
Yield as of June 30, 2016	2.85%	2.71%	2.59%	2.92%	6.75%

#### **Active Employees**

Actives with coverage - TOWN	Single	Non-Single	Total	Avg. Age	Avg. Svc	Salary
Council 94	11	29	40	47.1	15.9	\$ 1,752,834
EMT	7	9	16	38.7	9.1	\$ 780,906
IBPO	11	35	46	39.8	12.2	\$ 2,887,748
NEA	13	28	41	53.6	16.2	\$ 1,653,963
Non-Union	5	31	36	55.0	17.3	\$ 2,086,467
Total TOWN actives with coverage	47	132	179	47.5	14.7	\$ 9,161,918

Actives with coverage - SCHOOL	Single	Non-Single	Total	Avg. Age	Avg. Svc	Salary
Administrators / Non-Union	3	21	24	48.9	9.5	\$ 2,412,024
Council 94	12	17	29	53.4	13.8	\$ 1,136,846
Clerks and Aides	13	70	83	56.0	15.8	\$ 2,260,363
NEA	28	224	252	47.8	16.1	\$ 19,761,922
Total SCHOOL actives with coverage	56	332	388	50.0	15.5	\$ 25,571,155

Actives without coverage	Total	Avg. Age	Avg. Svc	Salary
TOWN	25	47.5	8.5	\$ 1,335,894
SCHOOL	91	48.3	10.5	\$ 4,790,093

Active employees who currently have no coverage are assumed to elect coverage at retirement. They have been included in the GASB valuation.

#### Active Age-Service Distribution - TOWN

		Years of Service									
Age	< 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
Under 25	2										2
25 to 29	8	11	2								21
30 to 34	3	7	6								16
35 to 39		6	4	9	5						24
40 to 44		1	4	12	7	3					27
45 to 49	2	2	5	3	4	1					17
50 to 54		4	2	2	7	6	6	1			28
55 to 59		4	1	3	7	8	3	5	3		34
60 to 64		1	2	3	6	4	4	1		1	22
65 to 69				3	3	3	1			1	11
70 & up						1			1		2
Total	15	36	26	35	39	26	14	7	4	2	204

#### **Active Age-Service Distribution - SCHOOL**

		Years of Service									
Age	< 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
Under 25	1	3									4
25 to 29	2	9	3								14
30 to 34	3	13	13								29
35 to 39	1	5	12	15	3						36
40 to 44	1	10	7	19	18	5					60
45 to 49	5	12	11	23	24	18	5				98
50 to 54	2	6	10	22	13	4	13	2			72
55 to 59		5	5	19	24	12	19	5			89
60 to 64	2	2	8	12	10	10	12	2			58
65 to 69		1		2	5	2	4	1	1		16
70 & up				1			2				3
Total	17	66	69	113	97	51	55	10	1	0	479

#### Retirees

Retirees with coverage – TOWN	Single	Non-Single	Total	Avg. Age
Council 94		8	8	59.2
IBPO	5	17	22	57.7
NEA	1		1	63.8
Non-Union	1	1	2	58.8
Total TOWN retirees with coverage	7	26	33	58.3

Retirees with coverage - SCHOOL	Single	Non-Single	Total	Avg. Age
Administrators / Non-Union		5	5	65.3
NEA	9	33	42	64.3
Total SCHOOL retirees with coverage	9	38	47	64.4

In addition to the above, there are 2 Town IBPO retirees who are receiving buyback benefit. They have been included in the GASB valuation.

#### Retiree Age Distribution<sup>10</sup>

Age	TOWN	SCHOOL
< 45		
45 to 49	1	
50 to 54	9	1
55 to 59	11	4
60 to 64	13	20
65 to 69		21
70 to 74	1	1
75 to 79		
80 to 84		
85 to 89		
90 & up		
Total	35	47

<sup>&</sup>lt;sup>10</sup> Includes buyback retirees.

#### Eligibility

Employees are eligible for retiree health benefits once they meet retirement eligibility requirements of Rhode Island Employees Retirement System (RI ERS) or Rhode Island Municipal Employees Retirement System (RI MERS). The applicable retirement systems by employee groups are noted below.

Employer	<b>Employee Groups</b>	Retirement System
School	NEA (Teachers)	ERS
School	Administrators	ERS
School	Clerks/Aides	MERS
School	Council 94	MERS
Town	All	MERS

#### **RI ERS Eligibility Requirements**

RI ERS eligibility requirements is the earlier of each employee's (a) Article 7 or (b) RIRSA eligibility dates which vary by Schedules summarized below:

_	Schedules	Vested with 10 years of contributing service credit as of 7/1/2005	Eligible to retire as of 9/30/2009		
	Α	Υ	Υ*		
	В	N	γ**		
	AB	Υ	N		
	B1	N	N		
	B2	Employees that became a member of RI ERS after 9/30/2009			

<sup>\*</sup> Schedule A members were eligible to retire as of 9/30/2009 if they had (i) 28 years of service as of 9/30/2009 or (ii) had 10 years of contributing service and were age 60 as of 9/30/2009.

<sup>\*\*</sup> Schedule B members were eligible to retire as of 9/30/2009 if they had 10 years of contributing service and were age 65 as of 9/30/2009.

#### RI ERS Eligibility Requirements (Continued) Article 7 Eligibility Date

There are no changes to Schedule A and Schedule B members retirement eligibility dates. These employees may retire at any time once they met the prior RI ERS eligibility rules. The prior RI ERS eligibility rules are:

- Schedule A earlier of (i) 28 years of service or (ii) age 60 with 10 years of contributing service.
- Schedule B earlier of (i) age 65 with 10 years of contributing service or (ii) age 59 with 29 years of contributing service.

Minimum retirement age under Article 7 for Schedule AB and B1 members is 62 with "proportional downward adjustment" toward an earlier retirement age based on years of service as of 9/30/2009 (referred to as "frozen service credit").

Schedule B2 members minimum retirement age under Article 7 is age 62 without "proportional downward adjustment" toward an earlier retirement age.

#### RIRSA Eligibility Date

Employees with less than five years of contributing service credit on 6/30/2012 may retire at the Social Security normal retirement age (not higher than 67).

For employees with at least five years of contributing service credit on 6/30/2012, minimum retirement age is 62 with "proportional downward adjustment" toward an earlier retirement date based on years of service prior to 7/1/2012, but not earlier than 59.

Employees with at least 10 years of contributing service credit on 6/30/2012 may retire at their Article 7 eligibility date if they continue to work and contribute until that date. If they are within five years of reaching RIRSA retirement eligibility date and have at least 20 years of service, they may retire at any time.

Public school teachers may retire with a reduced pension if they have 20 years of service credit and are within five years of their RIRSA retirement date.

Effective on July 1, 2015, employees are now eligible to retire upon attainment of age 65 with 30 years of service, age 64 with 31 years of service, age 63 with 32 years of service, or age 62 with at least 33 years of service. These are additional eligibility requirements, which means that if employees are eligible to retire under the current eligibility requirements, they may do so.

#### **MERS Eligibility Requirements**

#### **General Employees**

Employees eligible to retire as of 7/1/2012 are not impacted by the new eligibility requirements described below. Prior to 7/1/2012, employees were eligible to retire at the earlier of: (i) age 58 with 10 years of service credit or (ii) 30 years of service (no age requirement).

For employees who are not eligible to retire as of 7/1/2012:

- a) Members with less than five years of contributing service credit on 6/30/2012 may retire at their Social Security normal retirement age.
- b) Members with at least five years of contributing service credit on 6/30/2012 may retire at an individually determined age, which is the result of interpolating the member's prior Retirement Date (described in previous paragraph) and the retirement age applicable to members hired after 6/30/2012 (described in item (a) above).
- c) Members with at least ten years of contributing service credit on 6/30/2012 may retire at their prior Retirement Date (described in previous paragraph) if they continue to work and contribute until that date.

All members who are within five years of reaching their retirement eligibility date (described in the paragraphs above) may retire at any time if they have at least 20 years of service.

#### MERS Eligibility Requirements (Continued)

#### Police/EMT (Emergency Medical Technician)

Employees eligible to retire as of 7/1/2012 are not impacted by the new eligibility requirements described below. Prior to 7/1/2012, employees were eligible to retire at the earlier of: (i) age 55 with 10 years of service credit or (ii) 25 years of service (no age requirement). Employees who are at least age 50 with 20 years of service are eligible to retire with reduced pension benefit. For municipality that adopts the 20-year retirement provisions for police officers and/or EMTs, members are eligible to retire at any age with 20 or more years of service.

For employees who are not eligible to retire as of 7/1/2012:

- a) Members who are at least age 45 with 10 years of service as of 7/1/2012 and are eligible to retire prior to age 52 under the old eligibility requirements may retire at age 52.
- b) All other members are eligible to retire at age 50 with 25 years of service or at any age if they have 27 years of contributing service. For members with at least five years of service but less than 25, they are eligible to retire at their Social Security normal retirement age.

All members who are within five years of reaching their retirement eligibility date (described in the paragraphs above) may retire at any time if they have at least 20 years of service.

Effective on July 1, 2015, police officers and EMTs are eligible to retire with full benefit upon attainment of age 50 with 25 years of service or any age with 27 years of service. These are <u>additional</u> eligibility requirements, which means that if employees are eligible to retire under the current eligibility requirements, they may do so.

#### **Disability Retirement Benefit**

#### Town EMT/IBPO

Employees who became disabled in the line of duty are eligible for paid medical and dental benefits until Medicare eligibility, subject to the same co-share as active employees.

#### Town Council 94

Employees who retired due to disability after July 1, 2005 are eligible for paid medical benefits for a 60-month period from the date of retirement or until Medicare eligibility, whichever comes first, and subject to the same co-share as active employees.

#### **Active Contribution Requirements**

Active employees contribution requirements are as shown below:

- 20% for EMT
- According to the table below for NEA Teachers. For GASB valuation purposes, we have assumed that all teachers will be in steps 9 to 10 at retirement.

Steps	Contribution %	Steps	Contribution %
1 – 3	15.0%	7 – 8	18.0%
4 - 6	17.0%	9 – 10	20.0%

• According to the table below for Town NEA and Town Non-Union.

FYE	NEA	Non-Union
2016	18.5%	20.0%
2017 – 2019	19.5%	20.0%
2020+	20.0%	20.0%

• According to the table below for IBPO and Council 94:

	Town IBPO		Town Council 94
	DOH < 7/1/2002	DOH ≥ 7/1/2002	All
Eff. 7/1/2015	20.0%	20.0%	20.0%

#### **Spouse Coverage**

#### Town EMT/IBPO

Surviving spouse of employees killed in the line of duty are eligible for paid medical and dental coverage for five years (for EMT) and ten years (for IBPO) from the date of death, subject to the same co-share as active employees. The Town may revoke this benefit if the surviving spouse remarries or has access to alternative medical insurance.

#### School NEA (Teachers)/Admin Management

Surviving spouse of retirees who die in the first five years of retirement when the members are receiving subsidized retiree health benefits (medical and dental) are eligible to continue coverage for the balance of the five years. School's explicit subsidy will continue to the surviving spouse.

For all other employee groups, surviving spouses of retirees and active employees are eligible for COBRA coverage only.

#### **Explicit Subsidy / Retiree Contributions**

#### Town EMT

Employees are eligible for a fixed annual dollar subsidy based on the following table at retirement for 3 years (but not past Medicare eligibility). COBRA runs concurrently with the Town's three-year subsidy and at the end of the third year, retirees do not have the option to continue coverage in the Town's health plans.

	Service at	Annual
_	Retirement	Subsidy
-	30	\$ 4,000
	25	\$ 2,666
	20	\$ 1,333

#### Town IBPO

Employees retiring on/after July 1, 2013 are required to contribute the same co-share of the medical premium as active employees at retirement.

Existing retirees have varying contribution requirements based on the bargaining unit provisions effective at the time of retirement.

There is no coverage after Medicare eligibility. If the retiree has a younger spouse, there is no benefit for the spouse once the retiree attains Medicare eligibility. If the retiree has an older spouse, there is no benefit for the spouse when the spouse attains Medicare eligibility.

#### **Town Council 94**

Employees hired prior to July 1, 2005 contribute the same co-share of the medical premium as active employees at retirement until Medicare eligibility.

Employees hired on/after July 1, 2005 are eligible for a fixed annual dollar subsidy based on the following table at retirement for 3 years (but not past Medicare eligibility). COBRA runs concurrently with the Town's three-year subsidy and at the end of the third year, retirees do not have the option to continue coverage in the Town's health plans.

Service at	Annual
Retirement	Subsidy
30	\$ 4,000
25	\$ 2,666
20	\$ 1,333

# **Explicit Subsidy / Retiree Contributions** (Continued)

#### Town NEA/Non-Union

Employees are eligible for a fixed annual dollar subsidy for a specified number of years (not past Medicare eligibility) based on the following table at retirement. COBRA runs concurrently with the Town's three-year subsidy and at the end of the third year, retirees do not have the option to continue coverage in the Town's health plans.

Service at	Annual Subsidy		Subsidy Duration	
Retirement	DOH < 7/1/2006	DOH ≥ 7/1/2006	DOH < 7/1/2006	DOH ≥ 7/1/2006
30	\$ 5,500	\$ 4,000	4 years	3 years
25	\$ 4,500	\$ 2,666	3 years	3 years
20	\$ 2,500	\$ 1,333	3 years	3 years

#### School NEA (Teachers)/Admin Management

Employees retiring on/after September 1, 2008 are eligible for paid medical and dental benefits for five years or until age 70, whichever is earlier, subject to the same co-share as active employees at retirement. This co-share will remain the same for the duration of this retiree health benefit. At the end of the subsidized period, retirees are eligible for COBRA coverage for 18 months.

#### School Clerks and Aides/Council 94/Admin Technical or Clerical

Retiree health benefits are eligible for the following specified duration:

- Clerks and Aides 7 years
- Council 94 and Admin Technical or Clerical 5 years

There is no explicit subsidy available to these retirees and they must pay the full cost of coverage.

#### **School NEA (Teachers)**

Employees who retire under the state pension plan with 10 years of service are eligible to continue life insurance coverage of \$30,000 paid by the District for a period of five years. After five years the retiree can elect to continue coverage at their expense, paying the rate in effect at their retirement date.

#### **School Admin Management**

Employees are eligible to continue life insurance coverage in effect at retirement as follows:

- Retirees pay the non-banded rate plus any yearly premium increase on the first \$30,000 of coverage.
- Coverage amount beyond the first \$30,000 are paid fully by the retiree at the current banded rates. The retiree also has the option of reducing the coverage to \$30,000.

#### Life Insurance

#### **Medical Benefit**

Same benefit options are available to retirees as active employees. Both Town of South Kingstown and South Kingstown School Department health plans are fully-insured through Rhode Island Interlocal Risk Management Trust. Depending on its size, the entity's experience is blended with the community pool (the community used is all of the municipal accounts in Rhode Island, not just the collaborative pool that they are a part of). There is no asset used to suppress premium rates increases. Premium rates are calculated to fund the expected costs (including claims and administrative costs).

The monthly premiums effective on July 1, 2016 are as shown below.

Employer	Division / Plan	<b>Employee Groups</b>	Single	Family
Town	2506-0006 Classic <sup>11</sup>	Council 94	N/A	\$ 2,061.92
Town	2506-0006 HM \$50 ER	Council 94	\$ 630.24	\$ 1,492.10
Town	2506-0006 HM \$75 ER	Council 94	\$ 614.78	\$ 1,455.48
Town	2506-0005 Classic <sup>11</sup>	IBPO	\$ 868.97	\$ 2,068.38
Town	2506-0005 HM \$25 ER	IBPO	\$ 639.72	\$ 1,515.16
Town	2506-0005 HM \$50 ER	IBPO	\$ 635.72	\$ 1,504.55
Town	2506-0005 HM \$100 ER	IBPO	\$ 630.12	\$ 1,492.43
Town	2506-0003 HM <sup>12</sup>	IBPO	\$ 626.81	\$ 1,476.98
Town	2506-0002 HM	NEA	\$ 626.71	\$ 1,483.55
Town	2506-0001 HM	Non-Union	\$ 623.50	\$ 1,476.12
Town	2506-0004 HM <sup>12</sup>	EMT	\$ 637.95	\$ 1,494.68
School	161-0002 Classic	NEA / Admin	\$ 633.27	\$ 1,500.92
School	161-0002 HM	NEA / Admin	\$ 609.98	\$ 1,443.40
School	161-0003 Classic	Clerks and Aides	\$ 632.04	\$ 1,499.93
School	161-0003 HM	Clerks and Aides	\$ 609.98	\$ 1,443.40
School	161-0001 HM	Council 94	\$ 609.34	\$ 1,441.80
Town	Dental	All groups	\$ 29.16	\$ 80.16
School	Dental	All groups	\$ 29.20	\$ 88.92

<sup>&</sup>lt;sup>11</sup> Only available to a closed group of retirees currently enrolled in these plans.

<sup>&</sup>lt;sup>12</sup> Excluding WRI.

The actuarial assumptions used in this report represent a reasonable long-term expectation of future OPEB outcomes. As national economic and Town experience change over time, the assumptions will be tested for ongoing reasonableness and, if necessary, updated.

There are changes to the actuarial methods and assumptions since the last GASB valuation, which was for the fiscal year ending June 30, 2014. Refer to Actuary's Notes section for complete information on these changes. For the current year GASB valuation, we have also updated the per capita costs. We expect to update health care trend rates and per capita costs again in the next full GASB valuation, which will be for the fiscal year ending June 30, 2018.

**Measurement Date** June 30, 2016

**Discount Rate** Accounting: 6.75% as of June 30, 2016 (refer to the Discussion of Discount Rates section for more

information on selection of the discount rate)

Funding: 6.75%, based on the expected rate of return of the Trust

**Inflation Rate** 2.75% per year

**Payroll Growth** For amortization purposes: 3.25%

For valuation purposes (to determine Actuarial Accrued Liability): 4.00% wage inflation for IBPO/EMT and 3.50% wage inflation for all other employees plus merit and longevity increases shown below. These assumptions are based on the RI ERS and MERS actuarial valuation as of June 30, 2015.

YOS	IBPO / EMT	All others Town	Teachers	
1	10.00%	4.00%	10.00%	
2	9.00%	3.00%	9.00%	
3	7.00%	2.75%	6.25%	
4	4.00%	2.50%	5.50%	
5	2.50%	2.25%	5.00%	
6	3.00%	2.00%	5.00%	
7	0.50%	1.25%	4.50%	
8	0.50%	0.75%	4.25%	
9 – 10	0.00%	0.50%	4.00%	
11 – 15	0.00%	0.25%	0.00%	
16+	0.00%	0.00%	0.00%	

**Cost Method** 

Allocation of Actuarial Present Value of Future Benefits for services prior and after the Measurement Date was determined using Entry Age Normal Level % of Salary method where:

- Service Cost for each individual participant, payable from date of employment to date of retirement, is sufficient to pay for the participant's benefit at retirement; and
- Annual Service Cost is a constant percentage of the participant's salary that is assumed to increase according to the Payroll Growth.

**Asset Method** 

Market value of assets

**Experience Study** 

Best actuarial practices call for a periodic assumption review and Nyhart recommends the Town to complete an actuarial assumption review (also referred to as an experience study). The actuarial assumptions have not been updated since at least the 2014 valuation.

**Census Data** 

Census information was provided by the Town in September 2016. We have reviewed it for reasonableness and no material modifications were made to the census data.

**Employer Funding Policy** 

The Town pays the full Annual OPEB Cost annually from a combination of pay-go cost and additional prefunding contribution.

Mortality

RPH-2015 Total Dataset Mortality Table fully generational using scale MP-2015 (RPH-2015 table is created based on RPH-2014 Total Dataset Mortality Table with eight years of MP-2014 mortality improvement backed out, projected to 2015 using MP-2015 improvement).

Disability

Annual disability rates applicable to IBPO and EMT employees are based on the assumption used in the RI MERS actuarial valuation as of June 30, 2015. Sample annual rates are as shown below.

Age	Ordinary	Accidental
25	0.026%	0.170%
30	0.033%	0.220%
35	0.044%	0.290%
40	0.066%	0.440%
45	0.108%	0.720%
50	0.182%	1.210%

#### **Turnover Rate**

Assumption used to project terminations (voluntary and involuntary) prior to meeting minimum retirement eligibility for retiree health coverage. The rates represent the probability of termination in the next 12 months. The termination rates are based on the RI ERS and MERS June 30, 2015 actuarial valuation assumptions. Sample annual turnover rates are shown below:

YOS	School	Town General	Town IBPO / EMT
1	18.00%	17.50%	10.00%
5	4.82%	7.29%	2.65%
10	2.09%	3.14%	1.43%
15	1.32%	1.83%	0.77%
20	0.96%	1.57%	0.00%

#### **Retirement Rate**

Annual rates of retirement by group are based on the RI ERS and MERS June 30, 2015 actuarial valuation assumptions.

School Teachers/Administrators

A flat 25% per year retirement probability for members eligible for unreduced retirement. A 60% retirement probability at first eligibility will be applied if the member has reached age 65 or with at least 25 years of service. Reduced retirement rates are assumed for Schedule B members based on the years from normal retirement age (assumed to be age 65) as shown below:

Years from NRA	Rate		
5	2.0%		
4	2.0%		
3	2.0%		
2	3.4%		
1	4.0%		

Town non-IBPO/EMT

A flat 25% per year retirement probability for members eligible for unreduced retirement. A 50% retirement probability at first eligibility will be applied if the member has reached age 65 or with at least 25 years of service.

#### Retirement Rate - Continued

Town IBPO/EMT

According to the table below. All members are assumed to retire upon reaching age 65 with at least ten years of service.

YOS	Rates		
20	12%		
21 – 23	10%		
24	12%		
25	14%		
26	16%		
27	18%		
28 – 29	20%		
30	35%		

#### **Health Care Trend Rates**

FYE	Medical/Rx	FYE	Medical/Rx
2017	9.0%	2022	6.5%
2018	8.5%	2023	6.0%
2019	8.0%	2024	5.5%
2020	7.5%	2025+	5.0%
2021	7.0%		

The initial trend rate was based on a combination of employer history, national trend surveys, and professional judgment.

The ultimate trend rate was selected based on historical medical CPI information.

Annual dental trend is assumed to be 4.0% in the future.

#### **Retiree Contributions**

Retiree contributions are assumed to increase according to health care trend rates.

#### **Per Capita Costs**

The per capita costs represent the cost of coverage for a retiree-only population.

Actuarial standards require the recognition of higher inherent costs for a retired population versus an active population.

Annual per capita costs were calculated based on the weighted average July 1, 2016 premiums separately for the Town and School, actuarially increased using health index factors and current enrollment. The costs are assumed to increase with health care trend rates. Annual per capita costs by employee group are as shown below:

School		Town HM		Town Classic*		
Age	Male	Female	Male	Female	Male	Female
<55	\$ 8,030	\$ 8,470	\$ 7,500	\$ 8,800	\$ 10,400	\$ 12,200
55 - 59	\$ 9,680	\$ 9,460	\$ 10,100	\$ 9,800	\$ 14,000	\$ 13,600
60 - 64	\$ 12,430	\$ 11,220	\$ 12,900	\$ 11,600	\$ 17,900	\$ 16,100
65+	\$ 5,500	\$ 5,500	N/A	N/A	N/A	N/A

<sup>\*</sup> Only applicable to a closed group of Town retirees currently enrolled in this plan.

#### **Health Care Coverage Election Rate**

Active employees (regardless of current health care coverage election):

- 100% for NEA (Teachers) and School Administrators
- 20% for School Clerks/Aides
- 5% for School Council 94
- 100% for all Town employees

Inactive employees with current coverage: 100%

Inactive employees with no coverage: 0%

#### **Spousal Coverage**

Spousal coverage for current retirees is based on actual data.

85% of employees are assumed to be married at retirement. Husbands are assumed to be three years older than wives.

#### **Explicit Subsidy**

The difference between (a) the premium rate and (b) the retiree contribution. Below are examples of the monthly explicit subsidies for:

- IBPO employee who retires on/after July 1, 2015 enrolled in 2506-0005 HM \$100 ER plan.
- Teacher who retires on/after July 1, 2016 enrolled in 161-0002 HM plan.

		Town – IBPO		School – Teacher			
	Premium Rate	Retiree Contribution	Explicit Subsidy	Premium Rate	Retiree Contribution	Explicit Subsidy	
	Α	B = 20% x A	C = A - B	Α	B = 20% x A	C = A - B	
Retiree	\$ 630.12	\$ 126.02	\$ 504.10	\$ 609.98	\$ 122.00	\$ 487.98	
Spouse	\$ 862.31	\$ 172.46	\$ 689.85	\$ 833.42	\$ 166.68	\$ 666.74	

#### **Implicit Subsidy**

The difference between (a) the per capita cost and (b) the premium rate. Below is an example of the monthly implicit subsidies for:

- Male retired IBPO employee age 60 with spouse of the same age enrolled in the HM plan.
- Male retired Teachers age 60 with spouse of the same age.

All employers that utilize premium rates based on blended active/retiree claims experience will have an implicit subsidy. There is an exception for Medicare plans using a true community-rated premium rate.

	Town – IBPO			School – Teacher			
	Per Capita Cost	Premium Rate	Implicit Subsidy	Per Capita Cost	Premium Rate	Implicit Subsidy	
	Α	В	C = A - B	Α	В	C = A - B	
Retiree	\$ 1,075.00	\$ 630.12	\$ 444.88	\$ 1,035.83	\$ 609.98	\$ 425.85	
Spouse	\$ 966.67	\$ 862.31	\$ 104.36	\$ 935.00	\$ 833.42	\$ 101.58	

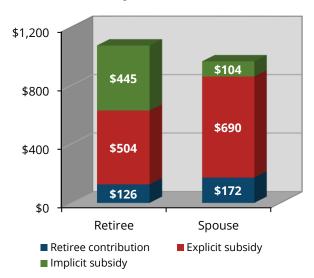
#### **GASB Subsidy Breakdown**

Below is a breakdown of the GASB 75 monthly total cost for:

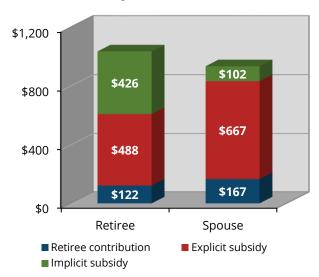
- Male IBPO employee who retires on/after July 1, 2015 at age 60 with spouse of the same age enrolled in 2506-0005 HM \$100 ER plan.
- Male Teacher who retires on/after July 1, 2016 at age 60 with spouse of the same age enrolled in 161-0002 HM plan.

	Town – IBPO			School – Teacher			
	Retiree	S	pouse	Retiree	S	pouse	
Retiree contribution	\$ 126.02	\$	172.46	\$ 122.00	\$	166.68	
Explicit subsidy	\$ 504.10	\$	689.85	\$ 487.98	\$	666.74	
Implicit subsidy	\$ 444.88	\$	104.36	\$ 425.85	\$	101.58	
Total monthly cost	\$ 1,075.00	\$	966.67	\$ 1,035.83	\$	935.00	

### **GASB Subsidy Breakdown (Town)**



## **GASB Subsidy Breakdown (School)**



# **APPENDIX**

# Appendix A - GASB Results by Fund / Union

Below is the summary of the GASB results for fiscal year ending June 30, 2016 based on the Entry Age Normal Level % of Pay cost method with a discount rate of 6.75%. The Actuarially Determined Contribution for 2016/17 has been calculated using an Entry Age Normal Level % of Pay cost method using a 6.75% discount rate and level dollar amortization over a closed 10-year period.

	Total (	OPEB Liability		arial Value of ets (AVA) <sup>13</sup>	Net 0	PEB Liability	Funded Ratio		ially Determined ribution (ADC)
Fund	As of J	lune 30, 2016	As of	June 30, 2016	As of J	lune 30, 2016		F	For 2016/17
101 – General	\$	8,538,917	\$	4,750,706	\$	3,788,211	55.6%	\$	894,441
210 – Water	\$	72,489	\$	40,330	\$	32,159	55.6%	\$	5,980
215 – Wastewater	\$	1,038,373	\$	577,709	\$	460,664	55.6%	\$	78,970
225 – Transfer Station	\$	8,390	\$	4,668	\$	3,722	55.6%	\$	686
310 - PDOB	\$	15,171	\$	8,440	\$	6,731	55.6%	\$	1,232
340 – Guild	\$	54,870	\$	30,527	\$	24,343	55.6%	\$	4,952
345 – Elderly Service	\$	47,961	\$	26,684	\$	21,277	55.6%	\$	4,679
School	\$	8,550,633	\$	4,757,224	\$	3,793,409	55.6%	\$	872,704
Total	\$	18,326,804	\$	10,196,288	\$	8,130,516	55.6%	\$	1,863,644

<sup>&</sup>lt;sup>13</sup> Actuarial Value of Assets have been distributed among the different Funds based on each Fund's proportion of Actuarial Accrued Liability (AAL) to the total so that each Fund has the same funded ratio.

## **Appendix A** – Continued

Below is the summary of the GASB results for fiscal year ending June 30, 2016 based on the Entry Age Normal Level % of Pay cost method with a discount rate of 6.75%. The Actuarially Determined Contribution for 2016/17 has been calculated using an Entry Age Normal Level % of Pay cost method using a 6.75% discount rate and level dollar amortization over a closed 10-year period.

	Total (	OPEB Liability		arial Value of sets (AVA) <sup>14</sup>	Net (	OPEB Liability	Funded Ratio	rially Determined ntribution (ADC)
Union	As of J	lune 30, 2016	As of	June 30, 2016	As of	June 30, 2016		For 2016/17
Town Council 94	\$	3,247,117	\$	1,806,564	\$	1,440,553	55.6%	\$ 265,128
Town EMT	\$	143,762	\$	79,983	\$	63,779	55.6%	\$ 47,014
Town IBPO	\$	5,440,494	\$	3,026,870	\$	2,413,624	55.6%	\$ 591,659
Town NEA	\$	423,399	\$	235,562	\$	187,837	55.6%	\$ 41,732
Town Non-Union	\$	521,399	\$	290,085	\$	231,314	55.6%	\$ 45,407
School Admin / Non-Union	\$	747,108	\$	415,661	\$	331,447	55.6%	\$ 92,345
School Council 94	\$	7,644	\$	4,252	\$	3,392	55.6%	\$ 819
School Clerks and Aides	\$	124,502	\$	69,268	\$	55,234	55.6%	\$ 14,038
School NEA	\$	7,671,379	\$	4,268,043	\$	3,403,336	55.6%	\$ 765,502
Total	\$	18,326,804	\$	10,196,288	\$	8,130,516	55.6%	\$ 1,863,644

<sup>&</sup>lt;sup>14</sup> Actuarial Value of Assets have been distributed among the different Funds based on each Fund's proportion of Actuarial Accrued Liability (AAL) to the total so that each Fund has the same funded ratio.

# **Appendix B - Comparison of Participant Demographic Information**

The active participants' number below may include active employees who currently have no health care coverage. Refer to Summary of Participants section for an accurate breakdown of active employees with and without coverage.

		As of July 1, 2013			of June 30, 201	5
	Town	School	Total	Town	School	Total
Active Participants	203	553	756	204	479	683
Retired Participants						
Members	38	73	111	35	47	82
Spouses	33	59	73	26	38	64
Averages for Active						
Age	46.7	49.1	48.5	47.5	49.7	49.0
Service	13.6	13.1	13.2	13.9	14.5	14.3
Averages for Inactive						
Age	57.5	62.6	60.9	58.3	64.4	61.8

### **Appendix C - Detailed Actuary's Notes**

There have been no substantive plan provision changes since the last valuation, which was for the fiscal year ending June 30, 2015.

Town of South Kingstown and South Kingstown School Department have opted to disclose OPEB liabilities under GASB 75 for the current valuation. The prior valuation was disclosed under GASB 45. The following assumptions have been updated in accordance with GASB 75.

- 1. The actuarial cost method has been updated from Projected Unit Credit with linear proration to decrement to Entry Age Normal Level % of Salary. This change has caused an increase in liabilities for both the Town and the School.
- 2. Discount rate as of the Measurement Date has been reduced from 7.50% to 6.75% for accounting disclosure purposes, which was calculated using a discounted cash flow method. This update caused an increase in the Town's / School's liabilities. For funding purposes, we are also using a 6.75% discount rate in calculating the Actuarially Determined Contribution.

The discount rate will be updated annually to reflect market conditions as of the Measurement Date.

Additionally, the following assumptions have also been updated since the last full valuation, which was for the fiscal year ending June 30, 2014.

- 1. Mortality table has been updated from RP-2000 Combined Mortality Table fully generational using Scale AA to SOA RPH-2015 Total Dataset Mortality Table fully generational using Scale MP-2015. The impact of this change is a decrease in Town's and School's liabilities.
- 2. Disability, termination, and retirement rates have been updated to be consistent with the RI ERS and MERS actuarial valuation as of June 30, 2015. The net impact of these changes is a decrease in liabilities.
- 3. Health care trend rates have been reset to an initial rate of 9.0% decreasing by 0.5% annually to an ultimate rate of 5.0% as shown below. This change caused an increase in liabilities for both the Town and School.

Year	Prior	Current		Year	Prior	Curren
2017	8.0%	9.0%		2022	5.5%	6.5%
2018	7.5%	8.5%	2	2023	5.0%	6.0%
2019	7.0%	8.0%	2	2024	5.0%	5.5%
2020	6.5%	7.5%	2	025+	5.0%	5.0%
2021	6.0%	7.0%				

# **Appendix D - Summary of Medical Benefits**

A brief summary of all health plans offered by the Town and School effective on July 1, 2016 is as shown below. The out-of-pocket maximum includes the deductible, coinsurance, and copayments.

In-Network	SCHOOL 161-0001 / 0002 / 0003 HM	TOWN 2506-0001 HM, 2506-0006 HM \$75 <sup>15</sup>	TOWN 2506-0002 HM	TOWN 2506-0003 HM
Deductible (Individual / Family)	\$200 / \$600	\$200 / \$600	\$200 / \$600	\$200 / \$600
Coinsurance (for most services)	80%	100%	100%	100%
Out-of-Pocket Maximum (EE / EE + Sp)	\$ 6,350 / \$12,700	\$ 6,350 / \$12,700	\$ 6,350 / \$12,700	\$ 6,350 / \$12,700
Co-pay / co-insurances for:				
Office Visit (PCP / SCP) Emergency Room Urgent Care	\$10 / \$10 per visit \$100 per visit \$10 per visit	\$15 / \$20 per visit \$75 per visit \$20 per visit	\$10 / \$15 per visit \$75 per visit \$20 per visit	\$10 / 10 per visit \$100 per visit \$10 per visit
Prescription drugs				
Retail (Tier 1 / Tier 2 / Tier 3 / Tier 4)  Mail Order (Tier 1 / Tier 2 / Tier 3 / Tier 4)	20% for all tiers 20% for all tiers	20% for all tiers 20% for all tiers	20% for all tiers 20% for all tiers	\$5 / \$15/ \$30 / \$30 \$15 / \$45 / \$90 / \$30

In-Network	TOWN 2506-0004 HM	TOWN 2506-0005 HM <sup>16</sup>	TOWN 2506-0006 HM \$50
Deductible (EE / Family)	\$200 / \$600	\$200 / \$600	\$200 / \$600
Coinsurance (for most services)	100%	100%	100%
Out-of-Pocket Maximum (EE / Family)	\$ 6,350 / \$12,700	\$ 6,350 / \$12,700	\$ 6,350 / \$12,700
Copay / co-insurances for:			
Office Visit (PCP / SCP) Emergency Room Urgent Care	\$10 / 10 per visit \$75 per visit \$10 per visit	\$10 / \$10 per visit \$25 per visit \$10 per visit	\$10 / \$10 per visit \$50 per visit \$10 per visit
Prescription drugs			
Retail (Tier 1 / Tier 2 / Tier 3 / Tier 4)  Mail Order (Tier 1 / Tier 2 / Tier 3 / Tier 4)	20% for all tiers 20% for all tiers	\$5 / \$15/ \$30 / \$30 \$15 / \$45 / \$90 / \$30	20% for all tiers 20% for all tiers

<sup>&</sup>lt;sup>15</sup> There is a second 2506-0006 HM \$75 plan where the only difference is the office visit co-payments, which are \$10 for PCP and \$15 for SCP.

<sup>&</sup>lt;sup>16</sup> There are three different plans under 2506-0005 HM suffix where the only difference between the 3 is the emergency room co-payments: \$25, \$50, and \$100.

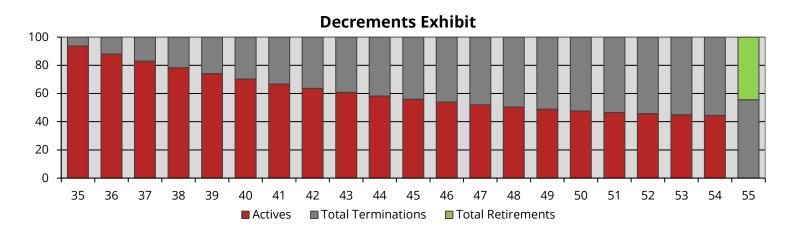
# **GLOSSARY**

### **Decrements Exhibit**

The table below illustrates how actuarial assumptions can affect a long-term projection of future liabilities. Starting with 100 employees at age 35, the illustrated actuarial assumptions show that 44.430 employees out of the original 100 are expected to retire and could elect retiree health benefits at age 55.

Age	# Remaining Employees	# of Terminations per Year*	# of Retirements per Year*	Total Decrements
35	100.000	6.276	0.000	6.276
36	93.724	5.677	0.000	5.677
37	88.047	5.136	0.000	5.136
38	82.911	4.648	0.000	4.648
39	78.262	4.209	0.000	4.209
40	74.053	3.814	0.000	3.814
41	70.239	3.456	0.000	3.456
42	66.783	3.131	0.000	3.131
43	63.652	2.835	0.000	2.835
44	60.817	2.564	0.000	2.564
45	58.253	2.316	0.000	2.316

Age	# Remaining Employees	# of Terminations per Year*	# of Retirements per Year*	Total Decrements
46	55.938	2.085	0.000	2.085
47	53.853	1.866	0.000	1.866
48	51.987	1.656	0.000	1.656
49	50.331	1.452	0.000	1.452
50	48.880	1.253	0.000	1.253
51	47.627	1.060	0.000	1.060
52	46.567	0.877	0.000	0.877
53	45.690	0.707	0.000	0.707
54	44.983	0.553	0.000	0.553
55	44.430	0.000	44.430	44.430



<sup>\*</sup> The above rates are illustrative rates and are not used in our GASB calculations.

### **Retirement Rates Exhibit**

The table below illustrates how actuarial assumptions can affect a long-term projection of future liabilities. The illustrated retirement rates show the number of employees who are assumed to retire annually based on 100 employees age 55 who are eligible for retiree health care coverage. The average age at retirement is 62.0.

Age	Active Employees BOY	Annual Retirement Rates*	# Retirements per Year	Active Employees EOY
55	100.000	5.0%	5.000	95.000
56	95.000	5.0%	4.750	90.250
57	90.250	5.0%	4.513	85.738
58	85.738	5.0%	4.287	81.451
59	81.451	5.0%	4.073	77.378
60	77.378	5.0%	3.869	73.509
61	73.509	5.0%	3.675	69.834
62	69.834	30.0%	20.950	48.884
63	48.884	15.0%	7.333	41.551
64	41.551	15.0%	6.233	35.318
65	35.318	100.0%	35.318	0.000



<sup>\*</sup> The above rates are illustrative rates and are not used in our GASB calculations.

#### **Definitions**

GASB 75 defines several unique terms not commonly employed in the funding of pension and retiree health plans. The definitions of the terms used in the GASB actuarial valuations are noted below.

- 1. **Actuarial Assumptions** Assumptions as to the occurrence of future events affecting health care costs, such as: mortality, withdrawal, disablement and retirement; changes in compensation and Government provided health care benefits; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; characteristics of future entrants for Open Group Actuarial Cost Methods; and other relevant items.
- 2. **Actuarial Cost Method** A procedure for determining the Actuarial Present Value of Future Benefits and expenses and for developing an actuarially equivalent allocation of such value to time periods, usually in the form of a Service Cost and a Total OPEB Liability.
- 3. **Actuarially Determined Contribution** A target or recommended contribution to a defined benefit OPEB plan for the reporting period, determined in accordance with the parameters and in conformity with Actuarial Standards of Practice.
- 4. **Actuarial Present Value** The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:
  - a. adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, Social Security, marital status, etc.);
  - b. multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned; and
  - c. discounted according to an assumed rate (or rates) of return to reflect the time value of money.
- 5. **Deferred Outflow / (Inflow) of Resources** represents the following items that have not been recognized in the OPEB Expense:
  - a. Differences between expected and actual experience of the OPEB plan
  - b. Changes in assumptions
  - c. Differences between projected and actual earnings in OPEB plan investments (for funded plans only)
- 6. **Explicit Subsidy** The difference between (a) the amounts required to be contributed by the retirees based on the premium rates and (b) actual cash contribution made by the employer.
- 7. **Funded Ratio** The actuarial value of assets expressed as a percentage of the Total OPEB Liability.

#### **Definitions** - Continued

- 8. **Healthcare Cost Trend Rate** The rate of change in the per capita health claims costs over time as a result of factors such as medical inflation, utilization of healthcare services, plan design, and technological developments.
- 9. **Implicit Subsidy** In an experience-rated healthcare plan that includes both active employees and retirees with blended premium rates for all plan members, the difference between (a) the age-adjusted premiums approximating claim costs for retirees in the group (which, because of the effect of age on claim costs, generally will be higher than the blended premium rates for all group members) and (b) the amounts required to be contributed by the retirees.
- 10. **OPEB** Benefits (such as death benefits, life insurance, disability, and long-term care) that are paid in the period after employment and that are provided separately from a pension plan, as well as healthcare benefits paid in the period after employment, regardless of the manner in which they are provided. OPEB does not include termination benefits or termination payments for sick leave.
- 11. **OPEB Expense** Changes in the Net OPEB Liability in the current reporting period, which includes Service Cost, interest cost, changes of benefit terms, expected earnings on OPEB Plan investments, reduction of active employees' contributions, OPEB plan administrative expenses, and current period recognition of Deferred Outflows / (Inflows) of Resources.
- 12. **Pay-as-you-go** A method of financing a benefit plan under which the contributions to the plan are generally made at about the same time and in about the same amount as benefit payments and expenses becoming due.
- 13. **Per Capita Costs** The current cost of providing postretirement 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.
- 14. **Present Value of Future Benefits** Total projected benefits include all benefits estimated to be payable to plan members (retirees and beneficiaries, terminated employees entitled to benefits but not yet receiving them, and current active members) as a result of their service through the valuation date and their expected future service. The actuarial present value of total projected benefits as of the valuation date is the 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. 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.
- 15. **Real Rate of Return** the rate of return on an investment after adjustment to eliminate inflation.

### **Definitions** – Continued

- 16. **Select and Ultimate Rates** Actuarial assumptions that contemplate different rates for successive years. Instead of a single assumed rate with respect to, for example, the investment return assumption, the actuary may apply different rates for the early years of a projection and a single rate for all subsequent years. For example, if an actuary applies an assumed investment return of 8% for year 20W0, then 7.5% for 20W1, and 7% for 20W2 and thereafter, then 8% and 7.5% select rates, and 7% is the ultimate rate.
- 17. **Service Cost** The portion of the Actuarial Present Value of projected benefit payments that are attributed to a valuation year by the Actuarial Cost Method.
- 18. **Substantive Plan** The terms of an OPEB plan as understood by the employer(s) and plan members.
- 19. **Total OPEB Liability** That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of Future Benefits which is attributed to past periods of employee service (or not provided for by the future Service Costs).