



# ***Town of Johnston***

*GASB 45 Actuarial Valuation*

*Fiscal Year Ending June 30, 2014*

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July 25, 2014

Joe Chiodo  
Town of Johnston  
1385 Hartford Avenue  
Johnston, RI 02919

This report summarizes the GASB actuarial valuation for the Town of Johnston's 2013/14 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. 45 (Accounting and Financial Reporting by Employers for Post-Employment Benefits Other Than Pensions). The valuation is also based upon our understanding of the plan provisions as summarized within the report.

The information presented herein is based on the information furnished to us by the Plan Sponsor that has been reconciled and reviewed for reasonableness. We are not aware of any material inadequacy in employee census provided by the Plan Sponsor. We 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.

The actuarial assumptions were 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 computations have been made in accordance with generally accepted actuarial principles and practice.

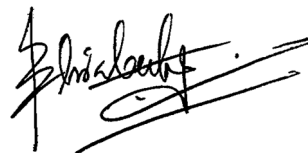
To our knowledge, there have been no significant events prior to the current year's measurement date or as of the date of this report that could materially affect the results contained herein.

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.

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



Randy Gomez, FSA, MAAA  
Consulting Actuary



Evi Laksana, ASA, MAAA  
Valuation Actuary

Changes since the last full valuation, which was for the fiscal year ending June 30, 2012:

1. Retiree health eligibility requirements for School Certified employees have changed due to the enactment of Article 7 in 2009 (for Rhode Island Employees Retirement System (RI ERS) members only) and the RIRSA in 2011. For many employees, this change has delayed the earliest date an employee could retire. Refer to Substantive Plan Provisions section for the complete retiree health benefits eligibility requirements. This change reduced the Town's liabilities slightly.
2. Retirement rate for School Certified employees have been updated to be consistent with the most recent assumption used in the RI ERS actuarial valuation as of June 30, 2012. This change created an increase in liabilities.

## Summary of Results

Presented below is the summary of GASB 45 results for the fiscal year ending June 30, 2014 compared to the prior fiscal years as shown in the Town's Notes to Financial Statement.

	<i>As of July 1, 2012</i>		<i>As of July 1, 2013</i>	
<b>Actuarial Accrued Liability</b>	\$	186,959,602	\$	199,586,608
<b>Actuarial Value of Assets</b>	\$	0	\$	0
<b>Unfunded Actuarial Accrued Liability</b>	\$	186,959,602	\$	199,586,608
<b>Funded Ratio</b>		0.0%		0.0%

	<i>FY 2012/13</i>		<i>FY 2013/14</i>	
<b>Annual Required Contribution</b>	\$	14,727,631	\$	15,214,424
<b>Annual OPEB Cost</b>	\$	14,479,364	\$	14,824,478
<b>Annual Employer Contribution</b>	\$	5,189,692	\$	4,764,265

	<i>As of June 30, 2013</i>		<i>As of June 30, 2014</i>	
<b>Net OPEB Obligation</b>	\$	60,929,100	\$	70,989,313

	<i>As of July 1, 2013</i>	
<b>Total Active Participants</b>		621
<b>Total Retiree Participants</b>		583

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.

Below is a breakdown of total GASB 45 liabilities allocated to past, current, and future service as of July 1, 2013 compared to the prior year.

	<i>As of July 1, 2012</i>		<i>As of July 1, 2013</i>	
<b>Present Value of Future Benefits</b>	\$	<b>282,832,594</b>	\$	<b>286,983,914</b>
Active Employees		166,427,797		162,524,635
Retired Employees		116,404,797		124,459,279
<b>Actuarial Accrued Liability</b>	\$	<b>186,959,602</b>	\$	<b>199,586,608</b>
Active Employees		70,554,805		75,127,329
Retired Employees		116,404,797		124,459,279
<b>Normal Cost</b>	\$	<b>7,038,841</b>	\$	<b>6,716,463</b>
<b>Future Normal Cost</b>	\$	<b>88,834,151</b>	\$	<b>80,680,843</b>

**Present Value of Future Benefits** is the amount needed as of July 1, 2012 and 2013 to fully fund the Town’s retiree health care subsidies for existing and future retirees and their dependents assuming all actuarial assumptions are met.

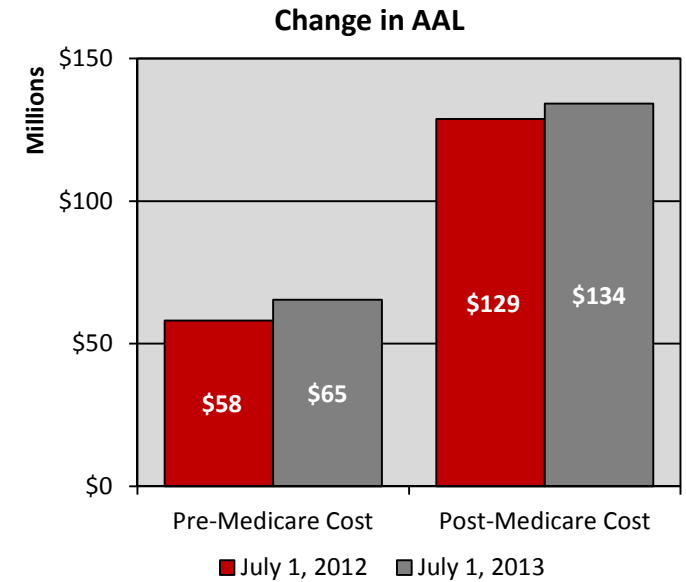
**Actuarial Accrued Liability** is the portion of PVFB considered to be accrued or earned as of July 1, 2012 and 2013. This amount is a required disclosure in the Required Supplementary Information section.

**Normal Cost** is the portion of the total liability amount that is attributed and accrued for current year’s active employee service by the actuarial cost method.

**Future Normal Cost** is the portion of the total liability amount that is attributed to the future employee service by the current year’s valuation by the actuarial cost method.

Below is a breakdown of total GASB 45 Actuarial Accrued Liability (AAL) 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.

<b>Actuarial Accrued Liability (AAL)</b>	<b>As of July 1, 2012</b>		<b>As of July 1, 2013</b>	
Active Pre-Medicare	\$	25,533,774	\$	28,472,446
Active Post-Medicare		45,021,031		46,654,883
<b>Total Active AAL</b>	<b>\$</b>	<b>70,554,805</b>	<b>\$</b>	<b>75,127,329</b>
Retirees Pre-Medicare	\$	32,565,437	\$	36,952,015
Retirees Post-Medicare		83,839,360		87,507,264
<b>Total Retirees AAL</b>	<b>\$</b>	<b>116,404,797</b>	<b>\$</b>	<b>124,459,279</b>
<b>Total AAL</b>	<b>\$</b>	<b>186,959,602</b>	<b>\$</b>	<b>199,586,608</b>

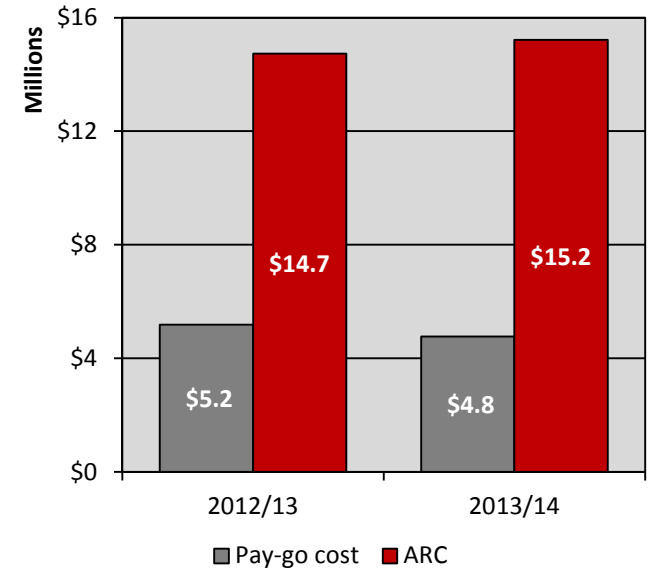


### Development of Annual Required Contribution (ARC)

Required Supplementary Information	FY 2012/13	FY 2013/14
Actuarial Accrued Liability as of beginning of year	\$ 186,959,602	\$ 199,586,608
Actuarial Value of Assets as of beginning of year	0	0
<b>Unfunded Actuarial Accrued Liability (UAAL)</b>	<b>\$ 186,959,602</b>	<b>\$ 199,586,608</b>
Covered payroll	N/A	N/A
UAAL as a % of covered payroll	N/A	N/A

Annual Required Contribution	FY 2012/13	FY 2013/14
Normal cost as of beginning of year	\$ 7,038,841	\$ 6,716,463
Amortization of the UAAL	7,190,754	7,983,464
Total normal cost and amortization payment	\$ 14,229,595	\$ 14,699,927
Interest to end of year	498,036	514,497
<b>Total Annual Required Contribution (ARC)</b>	<b>\$ 14,727,631</b>	<b>\$ 15,214,424</b>

### Cash vs Accrual Accounting



**Annual Required Contribution (ARC)** is the annual expense recorded in the income statement under GASB 45 accrual accounting. It replaces the cash basis method of accounting recognition with an accrual method. The GASB 45 ARC is higher than the pay-as-you-go cost because it includes recognition of employer costs expected to be paid in future accounting periods.



### Development of Annual OPEB Cost and Net OPEB Obligation

Net OPEB Obligation		FY 2012/13		FY 2013/14
ARC as of end of year	\$	14,727,631	\$	15,214,424
Interest on Net OPEB Obligation (NOO) to end of year		1,807,380		2,132,519
NOO amortization adjustment to the ARC		(2,055,647)		(2,522,465)
Annual OPEB cost	\$	14,479,364	\$	14,824,478
Annual employer contribution for pay-go cost		(5,189,692)		(4,764,265)
Annual employer contribution for pre-funding		0		0
Change in NOO	\$	9,289,672	\$	10,060,213
NOO as of beginning of year		51,639,428		60,929,100
<b>NOO as of end of year</b>	<b>\$</b>	<b>60,929,100</b>	<b>\$</b>	<b>70,989,313</b>

**Pay-as-you-go Cost** is the expected total employer cash cost for the coming period based on all explicit and implicit subsidies. It is also the amount recognized as expense on the Income Statement under pay-as-you-go accounting.

**Net OPEB Obligation** is the cumulative difference between the annual OPEB cost and employer contributions. This obligation will be created if cash contributions are less than the current year expense under GASB 45 accrual rules.

The net obligation is recorded as a liability on the employer's balance sheet which will reduce the net fund balance.

The value of implicit subsidies is considered as part of cash contributions for the current period. Other cash expenditures that meet certain conditions are also considered as contributions for GASB 45 purposes.

**Summary of GASB 45 Financial Results**

Presented below is the summary of GASB 45 results for the fiscal year ending June 30, 2014 and prior fiscal years as shown in the Town’s Notes to Financial Statements.

**Schedule of Funding Progress**

<i>As of</i>	<i>Actuarial Accrued Liability (AAL)</i>	<i>Actuarial Value of Assets (AVA)</i>	<i>Unfunded Actuarial Accrued Liability (UAAL)</i>	<i>Funded Ratio</i>	<i>Covered Payroll</i>	<i>UAAL as % of Covered Payroll</i>
	<i>A</i>	<i>B</i>	<i>C = A - B</i>	<i>D = B / A</i>	<i>E</i>	<i>F = C / E</i>
July 1, 2013	\$ 199,586,608	\$ -	\$ 199,586,608	0.0%	N/A	N/A
July 1, 2012	\$ 186,959,602	\$ -	\$ 186,959,602	0.0%	N/A	N/A
July 1, 2011	\$ 229,015,277	\$ -	\$ 229,015,277	0.0%	N/A	N/A

**Schedule of Employer Contributions**

<i>FYE</i>	<i>Employer Contributions</i>	<i>Annual Required Contribution (ARC)</i>	<i>% of ARC Contributed</i>
	<i>A</i>	<i>B</i>	<i>C = A / B</i>
June 30, 2014	\$ 4,764,265	\$ 15,214,424	31.3%
June 30, 2013	\$ 5,189,692	\$ 14,727,631	35.2%
June 30, 2012	\$ 5,284,569	\$ 17,249,186	30.6%

**Historical Annual OPEB Cost**

<i>As of</i>	<i>Annual OPEB Cost</i>	<i>% of Annual OPEB Cost Contributed</i>	<i>Net OPEB Obligation</i>
June 30, 2014	\$ 14,824,478	32.1%	\$ 70,989,313
June 30, 2013	\$ 14,479,364	35.8%	\$ 60,929,100
June 30, 2012	\$ 17,194,189	30.7%	\$ 51,639,428

The Actuarial Accrued Liability (AAL) 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 AAL and whether they increase or decrease the liability.

Expected Events

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

Unexpected Events

- Increases in AAL when actual premium rates increase more than expected. A liability decrease occurs when premium rates increase less than expected.
- Increases in AAL 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 AAL depending on whether benefit provisions are improved or reduced.

	<i>2012/13</i>	<i>2013/14<sup>1</sup></i>
Actuarial Accrued Liability as of beginning of year	\$ 186,959,602	\$ 199,586,608
Normal cost as of beginning of year	7,038,841	6,716,463
Expected benefit payments during the year	(4,451,602)	(4,773,177)
Interest adjustment to end of year	6,712,712	7,137,795
Expected Actuarial Accrued Liability as of end of year	\$ 196,259,553	\$ 208,667,689
Actuarial (gain) / loss due to experience	2,436,879	TBD
Actuarial (gain) / loss due to provisions / assumptions changes	890,176	TBD
Actual Actuarial Accrued Liability as of end of year	\$ 199,586,608	\$ TBD

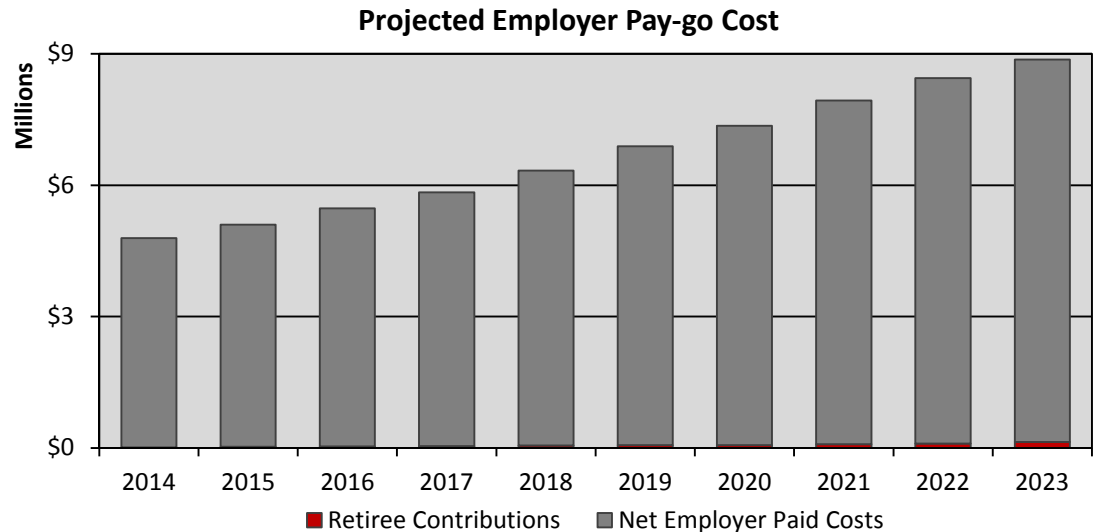
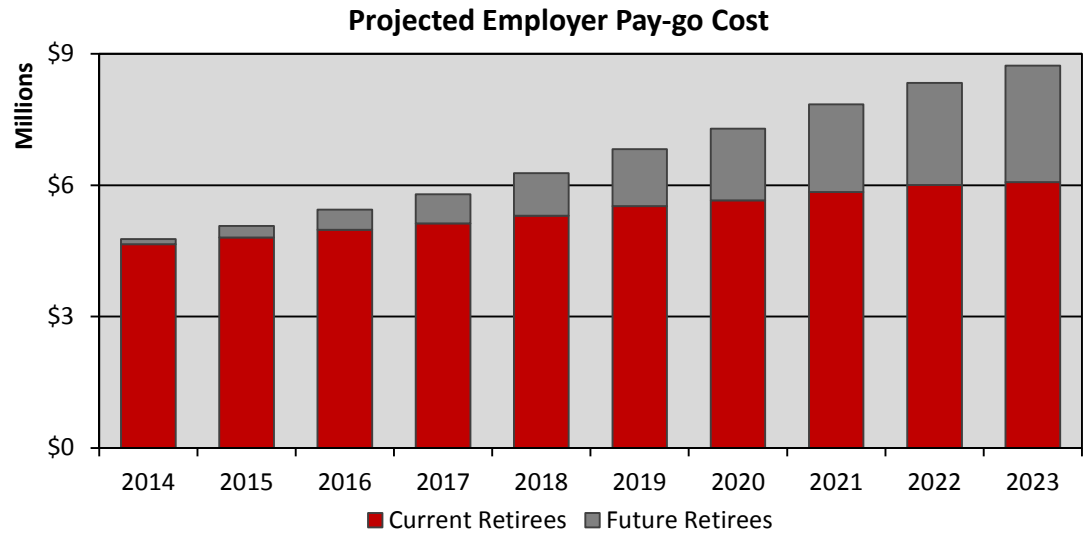
**Reconciliation of AAL** shows what the actuary expects the actuarial accrued liability to be at the beginning of the following fiscal year based on current assumptions and plan provisions. The expected end of year AAL will change as actual plan experience varies from assumptions. Generally, the AAL is expected to have a net increase each year.

<sup>1</sup> Actuarial Accrued Liability (AAL) as of beginning of year was actuarially rolled-back from end of year AAL on a “no gain/loss” basis.

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

FYE	Current Retirees	Future Retirees <sup>2</sup>	Total
2014	\$ 4,653,032	\$ 120,145	\$ 4,773,177
2015	\$ 4,809,796	\$ 261,194	\$ 5,070,990
2016	\$ 4,983,736	\$ 457,247	\$ 5,440,983
2017	\$ 5,125,482	\$ 669,807	\$ 5,795,289
2018	\$ 5,306,199	\$ 971,506	\$ 6,277,705
2019	\$ 5,522,669	\$ 1,302,010	\$ 6,824,679
2020	\$ 5,650,155	\$ 1,643,104	\$ 7,293,259
2021	\$ 5,847,091	\$ 1,999,226	\$ 7,846,317
2022	\$ 6,005,426	\$ 2,331,345	\$ 8,336,771
2023	\$ 6,069,346	\$ 2,657,652	\$ 8,726,998

FYE	Estimated Claims Costs	Retiree Contributions	Net Employer-Paid Costs
2014	\$ 4,788,462	\$ 15,285	\$ 4,773,177
2015	\$ 5,098,332	\$ 27,342	\$ 5,070,990
2016	\$ 5,473,848	\$ 32,865	\$ 5,440,983
2017	\$ 5,837,758	\$ 42,469	\$ 5,795,289
2018	\$ 6,332,064	\$ 54,359	\$ 6,277,705
2019	\$ 6,886,743	\$ 62,064	\$ 6,824,679
2020	\$ 7,355,050	\$ 61,791	\$ 7,293,259
2021	\$ 7,932,500	\$ 86,183	\$ 7,846,317
2022	\$ 8,441,770	\$ 104,999	\$ 8,336,771
2023	\$ 8,865,079	\$ 138,081	\$ 8,726,998



<sup>2</sup> Projections for future retirees do not take into account future new hires.

**Eligibility**

Firefighters are eligible for lifetime retiree health benefits upon attainment of 20 years of service.

Police officers are eligible for lifetime retiree health benefits upon attainment of 18 years of service. Officers who retire after 18 years of service (early retirement) will receive health coverage benefits that were in existence on July 1, 2012. Those who retire after 20 years of service will receive health coverage benefits in existence on July 1, 2010.

Town general employees are eligible for lifetime retiree health benefits upon attainment of age 58 with 10 years of service or 26 years of service with no age requirement. For Laborers' Local 808, only employees hired prior to April 19, 2012 are eligible for retiree health benefits.

School Certified employees are eligible for retiree health benefits upon meeting Rhode Island Employees Retirement System eligibility requirements as described in the next section. Retirees electing spousal coverage are required to pay the full incremental spouse cost. No spousal coverage is available once the retiree reaches Medicare eligibility.

School Non-Certified employees are eligible for retiree health benefits according to the requirements below:

- Hired prior to September 1, 1999: age 58 with 15 years of service or 25 years of service
- Hired on/after September 1, 1999: Age 60 with 20 years of service or age 55 with 25 years of service

There is no spousal coverage available at retirement (pre or post Medicare).

**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
A	Y	Y*
B	N	Y**
AB	Y	N
B1	N	N
B2	Employees that became a member of RI ERS after 9/30/2009	

\* 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.

\*\* 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.

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.

**RI ERS Eligibility Requirements**  
(Continued)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.

**Disability Benefits**

Firefighters and police officers are eligible for disability retiree health benefits with no age or service requirement.

All other employees are eligible for disability retiree health benefits upon attainment of 20 years of service (no age requirements).

**Spouse Benefit**

Upon death of retiree, coverage continues to surviving spouses. Town’s subsidy will continue to spouses for those who are receiving subsidized health benefits.

**Retiree Cost Sharing**

Retiree medical benefits are non-contributory for all retirees and their spouses. Only School Certified employees receive free dental benefits for employee-only coverage at retirement. This dental coverage will terminate at Medicare eligibility.

**Explicit Subsidy**

The Town and School pay the full cost of coverage for pre and post-Medicare retiree health benefits.

**Part B Subsidy**

Town retirees receive Medicare Part B premium subsidy upon Medicare eligibility for themselves and their spouses. The monthly Part B premium effective on January 1, 2014 is \$104.90. The Town also pays for the Medicare Part B premium penalty for a closed group of existing retirees and spouses who were not enrolled in Medicare Part B when first eligible. The Town will not pay for the Part B premium penalty for future retirees.

**Medical Benefit**

Same benefit options are available to retirees as active employees. All pre Medicare health plans are self-insured. Post-Medicare Blue Medicare Rx plan is fully-insured and community-rated. Below are the monthly Healthmate premiums effective on July 1, 2013 for pre-Medicare current and future retirees:

Subgroup	Subgroup Name	Plan	Single	Family
<b>Active Employees</b>				
0001	Town of Johnston Employees	HM 259938	\$ 568.08	\$ 1,475.97
0003	Town of Johnston Fire	HM 260050	\$ 581.70	\$ 1,511.34
0007	Town of Johnston Police	HM 260007	\$ 568.08	\$ 1,475.97
0002	Johnston School Non Certified	HM 260041	\$ 635.70	\$ 1,638.75
0006	Johnston School Department	HM 259998	\$ 600.58	\$ 1,549.53
<b>Retirees</b>				
0005	Town of Johnston Retirees	HM 260062	\$ 568.08	\$ 1,475.97
0009	Town of Johnston Retirees (2)	HM 260083	\$ 568.08	\$ 1,475.97
0004	Town of Johnston Firefighters Retirees (2)	HM 260085	\$ 581.70	\$ 1,511.34
0006	Town of Johnston Firefighters Retirees	HM 260064	\$ 574.59	\$ 1,492.88
0008	Town of Johnston Police Retirees	HM 260141	\$ 568.08	\$ 1,475.97
0001	Johnston School Retirees	HM 260000	\$ 611.89	\$ 1,575.44
0008	Johnston School Retirees II	HM 260015	\$ 600.58	\$ 1,549.53
0004	Johnston School Non Cert – Retirees	HM 260009	\$ 644.64	\$ 1,661.81
0005	Johnston School Non Cert – Retirees 2010	HM 260030	\$ 635.70	\$ 1,638.75

Upon Medicare eligibility, the Town and School provide Blue Medicare Rx plan with monthly premium of \$179. Plan 65 monthly premiums are \$182.53 for the Town (with SNF) and \$155.23 for the School (without SNF).

**Dental Benefit**

Monthly dental working rate for School Certified employee is \$28.15 effective on July 1, 2013.



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 have been changes to the actuarial methods and assumptions since the last GASB valuation, which was for the fiscal year ending June 30, 2012. Refer to Actuary’s Notes on page 2 for complete information on these changes. For the current year GASB valuation, we have updated the per capita costs. We expect to update health care trend rates and per capita costs again for the next full GASB valuation, which will be for the fiscal year ending June 30, 2016.

<b>Measurement Date</b>	July 1, 2013
<b>Discount Rate</b>	3.5% unfunded
<b>Payroll Growth</b>	N/A
<b>Cost Method</b>	Projected Unit Credit
<b>Amortization</b>	Payments increasing at 3.5% and amortization period is a closed 25 years.
<b>Census Data</b>	Census data was provided by the Town and it was provided in March 2014. We have reviewed it for reasonableness and no material modifications were made to the census data.
<b>Mortality</b>	Healthy retiree: RP-2000 Healthy Mortality Table fully generational projected using Scale AA Disabled retiree: RP-2000 Disabled Mortality Table fully generational projected using Scale AA
<b>Disability</b>	Sample annual disability rates are as shown below.

Age	Town			School Teachers		School
	Police	Fire	General	Male	Female	General
20	0.17%	0.34%	0.04%	0.02%	0.01%	0.04%
25	0.17%	0.34%	0.05%	0.02%	0.02%	0.05%
30	0.22%	0.44%	0.06%	0.03%	0.02%	0.06%
35	0.29%	0.58%	0.09%	0.04%	0.03%	0.09%
40	0.44%	0.88%	0.13%	0.06%	0.05%	0.13%
45	0.72%	1.44%	0.22%	0.09%	0.08%	0.22%
50	1.21%	2.42%	0.37%	0.15%	0.14%	0.37%
55	1.21%	2.42%	0.61%	0.25%	0.23%	0.61%
60	1.21%	2.42%	0.85%	0.35%	0.31%	0.85%

**Withdrawal Rate**

Assumption used to project terminations (voluntary and involuntary) prior to meeting minimum retirement eligibility for retiree health coverage. Annual rates are as shown below.

No terminations are assumed for Police and Firefighters hired before 1/1/1999.

YOS	Fire hired after 1998	Teachers		All others	
		Male	Female	Male	Female
0	10.00%	17.00%	13.00%	17.50%	18.00%
1	5.28%	9.00%	7.59%	9.59%	10.69%
2	4.81%	5.62%	6.56%	8.25%	9.06%
3	4.36%	4.55%	5.66%	7.13%	7.69%
4	3.94%	3.64%	4.86%	6.18%	6.53%
5	3.54%	2.89%	4.18%	5.41%	5.58%
6	3.16%	2.29%	3.59%	4.80%	4.81%
7	2.81%	1.81%	3.09%	4.31%	4.20%
8	2.49%	1.45%	2.67%	3.95%	3.74%
9	2.19%	1.20%	2.33%	3.68%	3.41%
10	1.91%	1.04%	2.05%	3.50%	3.18%
11	1.66%	0.95%	1.83%	3.38%	3.04%
12	1.43%	0.94%	1.65%	3.30%	2.97%
13	1.23%	0.94%	1.52%	3.26%	2.95%
14	1.05%	0.94%	1.42%	3.23%	2.95%
15	0.90%	0.94%	1.34%	3.19%	2.97%
16	0.77%	0.94%	1.28%	3.12%	2.97%
17	0.67%	0.94%	1.22%	3.02%	2.95%
18	0.59%	0.94%	1.16%	2.85%	2.87%
19	0.00%	0.94%	1.09%	2.61%	2.73%
20	0.00%	0.94%	1.01%	2.27%	2.50%
21	0.00%	0.94%	0.90%	1.82%	2.17%
22	0.00%	0.94%	0.75%	1.24%	1.70%
23	0.00%	0.94%	0.56%	0.52%	1.10%
24	0.00%	0.94%	0.33%	0.52%	0.32%

**Retirement Rate**

**For Police and Firefighters**

YOS	Police	Firefighters	
		Hired before 1999	Hired after 1998*
20	5%	20%	15%
21	10%	20%	10%
22 – 23	20%	50%	5%
24	20%	50%	10%
25	20%	50%	12%
26	50%	100%	12%
27	100%	100%	14%
28	100%	100%	16%
29	100%	100%	18%
30+	100%	100%	35%

\* All employees are assumed to retire no later than age 65.

**For Town’s General and School Non-Certified Employees**

For members who reach 30 years of service prior to age 58, service-based rates are used. For all other members, age-based rates are used.

YOS	Service-based rates (00/30)		Age	Age-based rates (58/10)	
	Male	Female		Male	Female
30	30%	30%	58	12%	12%
31	30%	25%	59 – 61	10%	10%
32 – 34	25%	10%	62	30%	20%
36	25%	20%	63 – 64	20%	15%
37	25%	25%	65	20%	20%
38	35%	25%	66 – 68	25%	25%
39	50%	25%	69	30%	25%
40+	100%	100%	70 – 74	30%	20%
			75+	100%	100%

**Retirement Rates (continued)**

**For School Certified Employees**

For members who reach 28 years of service before age 60, service-based rates are used. For members who reach age 60 before reaching 28 years of service, age-based rates are used instead.

Because of the enactment of Article 7 in 2009 and the RIRSA in 2011, the retirement assumption was modified for members whose retirement ages were delayed. Members who would have been assumed to retire under the rules in effect before the enactment of the provision changes are assumed to retire when first eligible for an unreduced benefit. This demand is recognized by adding a 10% probability for every year the member has been deferred.

<u>YOS</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>
28	25%	20%	60	20%	20%
29	15%	15%	61	15%	15%
30 – 31	20%	20%	62	30%	25%
32 – 33	30%	30%	63	25%	20%
34	40%	35%	64	10%	20%
35	55%	50%	65+	100%	100%
36 – 39	40%	40%			
40+	100%	100%			

**Health Care Trend Rates**

<u>FYE</u>	<u>Medical</u>	<u>Part B</u>	<u>Dental</u>
2014	9.00%	3.25%	5.00%
2015	8.50%	3.50%	5.00%
2016	8.00%	3.75%	5.00%
2017	7.50%	4.00%	5.00%
2018	7.00%	4.25%	5.00%
2019	6.50%	4.50%	5.00%
2020	6.00%	4.50%	5.00%
2021	5.50%	4.50%	5.00%
2022+	5.00%	4.50%	5.00%

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.

**Per Capita Costs**

Annual per capita costs were calculated based on the weighted average premium rates as of July 1, 2013 actuarially increased using aging factors and current enrollment. Sample annual per capita costs at select ages are as shown below:

Age	Town		School	
	Male	Female	Male	Female
<55	\$ 6,900	\$ 7,800	\$ 7,300	\$ 8,300
55 – 59	\$ 8,900	\$ 8,700	\$ 9,600	\$ 9,300
60 – 64	\$ 11,400	\$ 10,300	\$ 12,200	\$ 11,000
65+	\$ 4,338	\$ 4,338	\$ 4,011	\$ 4,011

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 administrative fees are included in the above per capita costs. The costs are assumed to increase with health care trend rates.

In addition to the above per capita costs, for the Town’s Medicare retirees there is the additional cost for Medicare Part B premium subsidy in the amount of \$1,259 annually for future retirees. For current retirees, there are additional Part B premium subsidy penalties that vary by retiree. The Part B costs and penalties are assumed to increase with Part B trend rates.

Annual dental per capita cost for School Certified retiree is \$338 and it is assumed to increase with dental trend rates.

**Employer Funding Policy**

Pay-as-you-go cash basis

**Health Care Coverage Election Rate**

100% of active employees with current coverage are assumed to continue coverage at retirement.  
0% of active employees without current coverage are assumed to elect coverage at retirement.

100% of retirees with current coverage are assumed to continue coverage.  
0% of retirees without current coverage are assumed to elect coverage in the future.

**Spousal Coverage**

60% of male and 50% of female employees are assumed to be married at retirement. Husbands are assumed to be three years older than wives.

Spousal coverage for current retirees is based on actual data.

**Explicit Subsidy**

The difference between (a) the premium rates and (b) the retiree contribution. Below is an example of the monthly explicit subsidies for a Town retiree enrolled in Subgroup 0005.

	Premium Rate	Retiree Contribution	Explicit Subsidy
	A	B	C = A - B
Retiree	\$ 568.08	\$ 0.00	\$ 568.08
Spouse	\$ 907.89	\$ 0.00	\$ 907.89

**Implicit Subsidy**

The difference between (a) the per capita cost and (b) the premium rates. Below is an example of the monthly implicit subsidies for a male Town retiree age 60 enrolled in Subgroup 0005.

	Per Capita Cost	Premium Rate*	Implicit Subsidy
	A	B	C = A - B
Retiree	\$ 950.00	\$ 568.08	\$ 381.92
Spouse	\$ 858.33	\$ 858.33	\$ 0.00

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

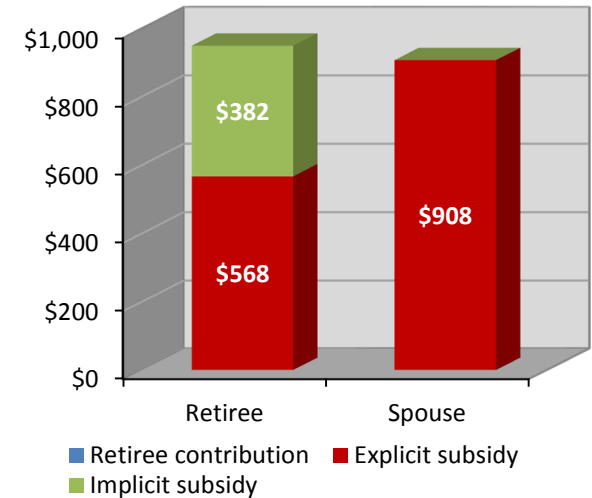
\* The spouse incremental premium rate is limited to the per capita cost.

**GASB Subsidy Breakdown**

Below is a breakdown of the GASB 45 monthly total cost for a male Town retiree age 60 and his spouse enrolled in Subgroup 0005.

	Retiree	Spouse
Retiree contribution	\$ 0.00	\$ 0.00
Explicit subsidy	\$ 568.08	\$ 907.89
Implicit subsidy	\$ 381.92	\$ 0.00
Total monthly cost	\$ 950.00	\$ 907.89

**GASB Subsidy Breakdown**



<i>Actives with coverage</i>	<i>Single</i>	<i>Non-Single</i>	<i>Total</i>	<i>Avg. Age</i>	<i>Avg. Svc</i>	<i>Salary</i>
General employees (0001)	N/A	N/A	93	47.9	10.9	N/A
Firefighters (0003)	N/A	N/A	75	40.2	11.0	N/A
Police (0007)	N/A	N/A	72	38.0	8.5	N/A
School Non-Certified (0002)	N/A	N/A	108	54.1	13.0	N/A
School Certified (0006)	N/A	N/A	273	46.0	13.7	N/A
<b>Total actives with coverage</b>	<b>N/A</b>	<b>N/A</b>	<b>621</b>	<b>46.1</b>	<b>12.2</b>	<b>N/A</b>

No information was provided on active employees without coverage.

<i>Retirees with coverage</i>	<i>Single</i>	<i>Non-Single</i>	<i>Total</i>	<i>Avg. Age</i>
General (0002)	N/A	N/A	3	77.5
General (0005)	N/A	N/A	8	58.5
General (0009)	N/A	N/A	22	64.4
General with SNF (0010)	N/A	N/A	83	75.3
Firefighters (0004)	N/A	N/A	34	50.4
Firefighters (0006)	N/A	N/A	30	58.8
Firefighters with SNF (0012)	N/A	N/A	26	70.3
Police (0008)	N/A	N/A	61	54.4
Police with SNF (0011)	N/A	N/A	42	71.1
School Non-Certified (0004)	N/A	N/A	8	63.0
School Non-Certified (0005)	N/A	N/A	9	60.8
School Non-Certified Plan 65 (0007)	N/A	N/A	20	77.0
School Certified (0001)	N/A	N/A	46	62.6
School Certified (0008)	N/A	N/A	17	61.4
School Certified Plan 65 (0003)	N/A	N/A	174	72.5
<b>Total retirees with coverage</b>	<b>N/A</b>	<b>N/A</b>	<b>583</b>	<b>67.1</b>

Active Age-Service Distribution

Age	Years of Service										Total
	< 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	
Under 25	3	4									7
25 to 29	12	22	5								39
30 to 34	6	16	42	5							69
35 to 39	2	13	13	33	7	1					69
40 to 44	3	8	16	35	36	6					104
45 to 49	4	13	14	25	30	16	1				103
50 to 54	1	5	9	32	18	9	5	1			80
55 to 59	2	3	13	25	23	8	8	2	1		85
60 to 64		2	8	14	11	16	1				52
65 to 69		1	1	3	6			1			12
70 & up						1					1
<b>Total</b>	<b>33</b>	<b>87</b>	<b>121</b>	<b>172</b>	<b>131</b>	<b>57</b>	<b>15</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>621</b>



**APPENDIX**

## Appendix A – Required Supplementary Information by Group

## Schedule of Funding Progress for Fiscal Year Ending June 30, 2014

<i>Groups</i>	<i>Actuarial Accrued Liability (AAL) As of July 1, 2013</i>	<i>Actuarial Value of Assets (AVA) As of July 1, 2013</i>	<i>Unfunded Actuarial Accrued Liability (UAAL) As of July 1, 2013</i>	<i>AVA as a % of AAL</i>	<i>Covered Payroll For 2013/14</i>	<i>UAAL as a % of Covered Payroll</i>
	<i>A</i>	<i>B</i>	<i>C = B - A</i>	<i>D = A / B</i>	<i>E</i>	<i>F = C / E</i>
Fire	\$ 60,170,429	\$ -	\$ 60,170,429	0.0%	N/A	N/A
Police	\$ 57,587,658	\$ -	\$ 57,587,658	0.0%	N/A	N/A
Sewer	\$ 1,116,250	\$ -	\$ 1,116,250	0.0%	N/A	N/A
Water	\$ 181,707	\$ -	\$ 181,707	0.0%	N/A	N/A
Town General	\$ 29,000,480	\$ -	\$ 29,000,480	0.0%	N/A	N/A
School	\$ 51,530,084	\$ -	\$ 51,530,084	0.0%	N/A	N/A
<b>Total</b>	<b>\$ 199,586,608</b>	<b>\$ -</b>	<b>\$ 199,586,608</b>	<b>0.0%</b>	<b>N/A</b>	<b>N/A</b>

## Schedule of Employer Contributions for Fiscal Year 2013/14

	<i>Annual OPEB Costs (AOC) For 2013/14</i>	<i>Actual Contributions For 2013/14</i>	<i>% of AOC Contributed For 2013/14</i>
	<i>A</i>	<i>B</i>	<i>C = A / B</i>
Fire	\$ 4,343,508	\$ 1,084,167	25.0%
Police	\$ 4,434,178	\$ 1,220,751	27.5%
Sewer	\$ 138,268	\$ 0	0.0%
Water	\$ 13,464	\$ 0	0.0%
Town General	\$ 2,308,873	\$ 852,968	36.9%
School	\$ 3,586,187	\$ 1,606,379	44.8%
<b>Total</b>	<b>\$ 14,824,478</b>	<b>\$ 4,764,265</b>	<b>32.1%</b>

## Appendix A – Continued

## Net OPEB Obligation (NOO) as of June 30, 2014

<i>Groups</i>	<i>Annual Required Contribution (ARC) For 2013/14</i>	<i>Interest on Existing NOO For 2013/14</i>	<i>ARC Adjustment For 2013/14</i>	<i>AOC For 2013/14</i>	<i>Actual Contributions For 2013/14</i>	<i>Net Increase in NOO For 2013/14</i>	<i>NOO As of June 30, 2014</i>
	<i>A</i>	<i>B</i>	<i>C</i>	<i>D = A + B + C</i>	<i>E</i>	<i>F = D - E</i>	<i>G</i>
Fire	\$ 4,463,431	\$ 655,829	\$ (775,752)	\$ 4,343,508	\$ 1,084,167	\$ 3,259,341	\$ 21,997,305
Police	\$ 4,550,729	\$ 637,388	\$ (753,939)	\$ 4,434,178	\$ 1,220,751	\$ 3,213,427	\$ 21,424,508
Sewer	\$ 138,665	\$ 2,167	\$ (2,564)	\$ 138,268	\$ 0	\$ 138,268	\$ 200,196
Water	\$ 13,528	\$ 353	\$ (417)	\$ 13,464	\$ 0	\$ 13,464	\$ 23,545
Town General	\$ 2,358,646	\$ 272,198	\$ (321,971)	\$ 2,308,873	\$ 852,968	\$ 1,455,905	\$ 9,232,977
School	\$ 3,689,425	\$ 564,584	\$ (667,822)	\$ 3,586,187	\$ 1,606,379	\$ 1,979,808	\$ 18,110,782
<b>Total</b>	<b>\$ 15,214,424</b>	<b>\$ 2,132,519</b>	<b>\$ (2,522,465)</b>	<b>\$ 14,824,478</b>	<b>\$ 4,764,265</b>	<b>\$ 10,060,213</b>	<b>\$ 70,989,313</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.

	<i>As of July 1, 2012</i>	<i>As of July 1, 2013</i>
Active Participants	664	621
Retired Participants	680	583
Averages for Active		
Age	47.0	46.1
Service	10.3	12.2
Averages for Inactive		
Age	64.6	67.1

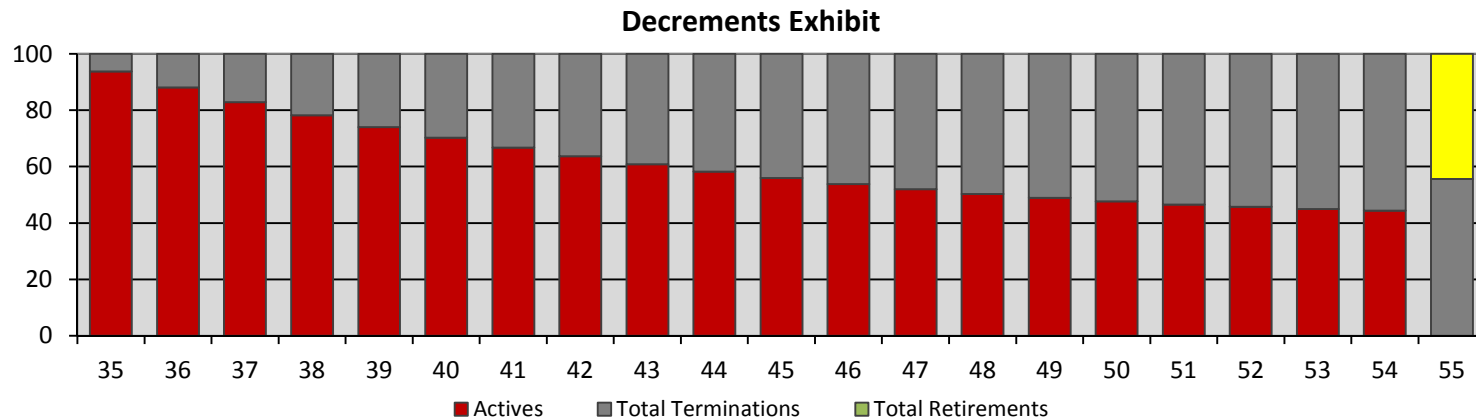
## Glossary

### 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

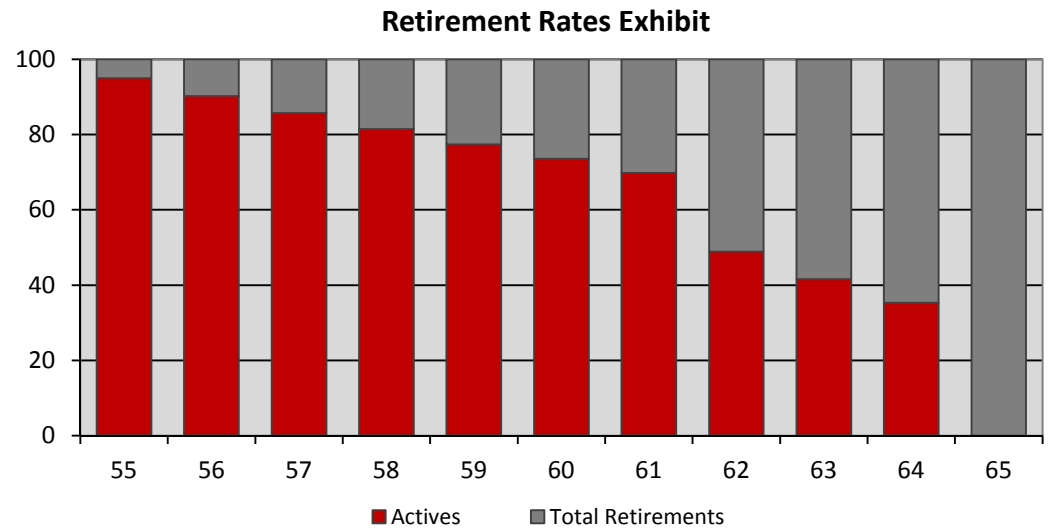


\* The above rates are illustrative rates and are not used in our GASB calculations.

### 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



\* The above rates are illustrative rates and are not used in our GASB calculations.

## Illustration of GASB Calculations

The purpose of the illustration is to familiarize non-actuaries with the GASB 45 actuarial calculation process.

### I. Facts

1. The employer provides subsidized retiree health coverage worth \$100,000 to employees retiring at age 55 with 25 years of service. The employer funds for retiree health coverage on a pay-as-you-go basis.
2. Employee X is age 50 and has worked 20 years with the employer.
3. Retiree health subsidies are paid from the general fund assets which are expected to earn 4.5% per year on a long-term basis.
4. Based on Employee X's age and sex he has a 98.0% probability of living to age 55 and a 95.0% probability of continuing to work to age 55.

### II. Calculation of Present Value of Future Benefits

**Present Value of Future Benefits** represents the cost to finance benefits payable in the future to current and future retirees and beneficiaries, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.

	Value	Description
A.	\$100,000	Projected benefit at retirement
B.	80.2%	Interest discount for five years = $(1 / 1.045)^5$
C.	98.0%	Probability of living to retirement age
D.	95.0%	Probability of continuing to work to retirement age
E.	\$74,666	Present value of projected retirement benefit measured at employee's current age = A x B x C x D



## Illustration of GASB Calculations (continued)

### III. Calculation of Actuarial Accrued Liability

**Actuarial Accrued Liability** represents the portion of the Present Value of Future Benefits which has been accrued recognizing the employee's past service with the employer. The Actuarial Accrued Liability is a required disclosure in the Required Supplementary Information section of the employer's financial statement.

	Value	Description
A.	\$74,666	Present value of projected retirement benefit measured at employee's current age
B.	20	Current years of service with employer
C.	25	Projected years of service with employer at retirement
D.	\$59,733	Actuarial accrued liability measured at employee's current age = $A \times B / C$

### IV. Calculation of Normal Cost

**Normal Cost** represents the portion of the Present Value of Future Benefits allocated to the current year.

	Value	Description
A.	\$74,666	Present value of projected retirement benefit measured at employee's current age
B.	25	Projected years of service with employer at retirement
C.	\$2,987	Normal cost measured at employee's current age = $A / B$

### V. Calculation of Annual Required Contribution

**Annual Required Contribution** is the total expense for the current year to be shown in the employer's income statement.

	Value	Description
A.	\$2,987	Normal Cost for the current year
B.	\$3,509	30-year amortization (level dollar method) of Unfunded Actuarial Accrued Liability using a 4.5% interest rate discount factor
C.	\$292	Interest adjustment = $4.5\% \times (A + B)$
D.	\$6,788	Annual Required Contribution = $A + B + C$

## Definitions

GASB 45 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 Accrued Liability** – That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of plan benefits and expenses which is not provided for by the future Normal Costs.
2. **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.
3. **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 Normal Cost and an Actuarial Accrued Liability.
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. **Annual OPEB Cost** – An accrual-basis measure of the periodic cost of an employer’s participation in a defined benefit OPEB plan.
6. **Annual Required Contribution (ARC)** – The employer’s periodic required contributions to a defined benefit OPEB plan, calculated in accordance with the parameters.
7. **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.
8. **Funded Ratio** – The actuarial value of assets expressed as a percentage of the actuarial accrued liability.
9. **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.

**Definitions (continued)**

10. **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.
11. **Net OPEB Obligation** – The cumulative difference since the effective date of this Statement between annual OPEB cost and the employer’s contributions to the plan, including the OPEB liability (asset) at transition, if any, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to OPEB-related debt.
12. **Normal Cost** – The portion of the Actuarial Present Value of plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.
13. **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.
14. **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.
15. **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.
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. **Substantive Plan** – The terms of an OPEB plan as understood by the employer(s) and plan members.