



GASB 74/75 ACTUARIAL VALUATION

Fiscal Year Ending June 30, 2020

TOWN OF JOHNSTON

(including Johnston School Department)

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November 6, 2020

**Joseph L. Chiodo
Town of Johnston
1385 Hartford Avenue
Johnston, RI 02919**

This report summarizes the GASB actuarial valuation for the Town of Johnston 2019/20 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. 74 (Financial Reporting for Post-Employment Benefit Plans Other Than Pension Plans) and 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.

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.



Suraj M. Datta, ASA, MAAA
Consulting Actuary



Matt Sherertz, ASA, MAAA
Valuation Actuary

Executive Summary

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

Summary of Results

Presented below is the summary of GASB 75 results for the fiscal year ending June 30, 2020 compared to the prior fiscal year as shown in the Town's Notes to Financial Statement.

	As of June 30, 2019	As of June 30, 2020
Total OPEB Liability	\$ 194,907,704	\$ 215,916,124
Actuarial Value of Assets	\$ (5,016,651)	\$ (5,474,837)
Net OPEB Liability	\$ 189,891,053	\$ 210,441,287
Funded Ratio	2.6%	2.5%

	FY 2018/19	FY 2019/20
OPEB Expense	\$ 3,705,970	\$ 4,325,317
Annual Employer Contributions	\$ 7,618,528	\$ 7,673,184
Actuarially Determined Contribution	\$ 18,140,760	\$ 15,779,391

	As of June 30, 2019	As of June 30, 2020
Discount Rate	3.51%	3.00%
Expected Return on Assets	3.50%	6.60%

	As of June 30, 2020
Total Active Participants	634
Total Retiree Participants	612

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.

* Of the \$215,916,124 Total OPEB Liability, it is estimated that \$74,140,453 is the portion attributed to implicit subsidies.

Executive Summary

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

Summary of Results

Below is a breakdown of total GASB 75 liabilities allocated to past and current service compared to the prior year. 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	As of June 30, 2019	As of June 30, 2020
Active Employees	\$ 125,379,347	\$ 145,464,601
Retired Employees	125,047,678	137,102,323
Total Present Value of Future Benefits	\$ 250,427,025	\$ 282,566,924

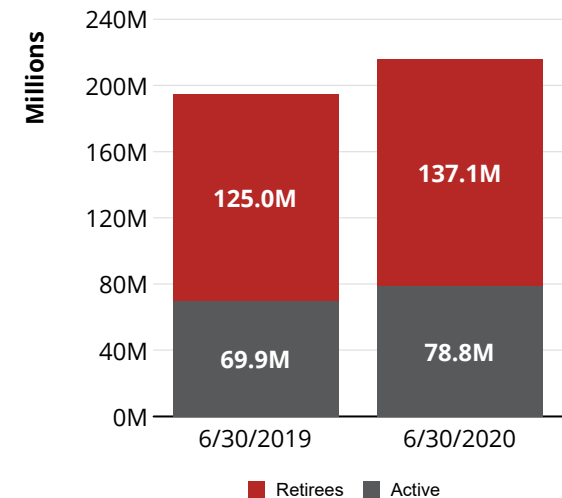
Total OPEB Liability	As of June 30, 2019	As of June 30, 2020
Active Pre-Medicare	\$ 23,472,771	\$ 28,502,979
Active Post-Medicare	46,387,255	50,310,822
Active Liability	\$ 69,860,026	\$ 78,813,801

Retiree Pre-Medicare	\$ 34,700,201	\$ 39,478,357
Retiree Post-Medicare	90,347,477	97,623,966
Retiree Liability	\$ 125,047,678	\$ 137,102,323

Total OPEB Liability	\$ 194,907,704	\$ 215,916,124
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	As of June 30, 2019	As of June 30, 2020
Discount Rate	3.51%	3.00%

Changes In Total OPEB Liability



Present Value of Future Benefits (PVFB) is the amount needed as of June 30, 2020 and June 30, 2019, to fully fund the Town'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, 2020 and June 30, 2019. This amount is a required disclosure in the Required Supplementary Information section.

* Of the \$215,916,124 Total OPEB Liability, it is estimated that \$74,140,453 is the portion attributed to implicit subsidies.

GASB Disclosures

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

Schedule of Changes in Net OPEB Liability and Related Ratios

OPEB Liability	FY 2019/20	FY 2018/19	FY 2017/18	FY 2016/17
Total OPEB Liability				
Total OPEB Liability - beginning of year	\$ 194,907,704	\$ 203,520,505	\$ 215,380,378	\$ 228,846,782
Service cost	5,219,371	6,198,704	7,067,566	8,833,235
Interest	6,899,657	7,987,364	7,777,513	6,598,353
Change of benefit terms	0	0	1,555,927	0
Changes in assumptions	16,571,033	(4,383,253)	(7,400,008)	(26,076,367)
Differences between expected and actual experience	(508,457)	(11,697,088)	(12,833,741)	2,971,612
Benefit payments	(7,173,184)	(6,718,528)	(8,027,130)	(5,793,237)
Net change in total OPEB liability	\$ 21,008,420	\$ (8,612,801)	\$ (11,859,873)	\$ (13,466,404)
Total OPEB Liability - end of year	\$ 215,916,124	\$ 194,907,704	\$ 203,520,505	\$ 215,380,378
Plan Fiduciary Net Position				
Plan fiduciary net position - beginning of year	\$ 5,016,651	\$ 3,796,828	\$ 2,447,319	\$ 2,099,992
Contributions - employer	7,673,184	7,618,528	9,367,130	6,043,237
Contributions - active employees	0	0	0	0
Net investment income	(28,426)	330,700	15,818	102,793
Benefit payments	(7,173,184)	(6,718,528)	(8,027,130)	(5,793,237)
Trust administrative expenses	(13,388)	(10,877)	(6,309)	(5,466)
Net change in plan fiduciary net position	\$ 458,186	\$ 1,219,823	\$ 1,349,509	\$ 347,327
Plan fiduciary net position - end of year	\$ 5,474,837	\$ 5,016,651	\$ 3,796,828	\$ 2,447,319
Net OPEB Liability - end of year	\$ 210,441,287	\$ 189,891,053	\$ 199,723,677	\$ 212,933,059
Plan fiduciary net position as % of total OPEB liability	2.5%	2.6%	1.9%	1.1%
Covered employee payroll	N/A	N/A	N/A	N/A
Net OPEB liability as % of covered payroll	N/A	N/A	N/A	N/A

GASB Disclosures

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

Schedule of Employer Contributions

The Actuarially Determined Contributions (ADC) shown below are based on the Annual Required Contribution (ARC) calculated in prior GASB 45 actuarial valuations as shown in the Town's financial statements.

	FY 2019/20	FY 2018/19	FY 2017/18	FY 2016/17	FY 2015/16
Actuarially Determined Contribution (ADC)	\$ 15,779,391	\$ 18,140,760	\$ 18,051,553	\$ 16,785,322	\$ 16,032,814
Contributions in relation to the ADC	7,673,184	7,618,528	8,812,130	6,043,237	6,167,417
Contribution deficiency/(excess)	\$ 8,106,207	\$ 10,522,232	\$ 9,239,423	\$ 10,742,085	\$ 9,865,397
Covered employee payroll	N/A	N/A	N/A	N/A	N/A
Contribution as a % of covered payroll	N/A	N/A	N/A	N/A	N/A

	FY 2014/15	FY 2013/14	FY 2012/13	FY 2011/12	FY 2010/11
Actuarially Determined Contribution (ADC)	\$ 15,214,424	\$ 15,214,424	\$ 14,727,631	\$ 17,249,186	\$ 17,249,187
Contributions in relation to the ADC	4,764,265	4,764,265	5,189,692	5,284,569	5,755,376
Contribution deficiency/(excess)	\$ 10,450,159	\$ 10,450,159	\$ 9,537,939	\$ 11,964,617	\$ 11,493,811
Covered employee payroll	N/A	N/A	N/A	N/A	N/A
Contribution as a % of covered payroll	N/A	N/A	N/A	N/A	N/A

GASB Disclosures

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

OPEB Expense

OPEB Expense	FY 2019/20	FY 2018/19
Discount Rate		
Beginning of year	3.51%	3.87%
End of year	3.00%	3.51%
Service cost	\$ 5,219,371	\$ 6,198,704
Interest	6,899,657	7,987,364
Change of benefit terms	0	0
Projected earnings on OPEB plan investments	(184,025)	(148,315)
Reduction for contributions from active employees	0	0
OPEB plan administrative expenses	13,388	10,877
Current period recognition of deferred outflows / (inflows) of resources		
Differences between expected and actual experience	\$ (3,624,610)	\$ (3,539,867)
Changes in assumptions	(4,016,137)	(6,777,976)
Net difference between projected and actual earnings on OPEB plan investments	17,673	(24,817)
Total current period recognition	\$ (7,623,074)	\$ (10,342,660)
Total OPEB expense	\$ 4,325,317	\$ 3,705,970

GASB Disclosures

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

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. Differences between projected and actual earnings in OPEB plan investments (for funded plans only)

The initial amortization period for the first two items noted above is based on expected future service lives while the difference between the 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 items above.

Differences between expected and actual experience for FYE	Initial Balance	Initial Amortization Period	Annual Recognition	Unamortized Balance as of June 30, 2020
June 30, 2017	\$ 2,971,612	6	\$ 548,605	\$ 1,097,211
June 30, 2018	\$ (12,833,741)	6	\$ (2,138,957)	\$ (6,416,870)
June 30, 2019	\$ (11,697,088)	6	\$ (1,949,515)	\$ (7,798,058)
June 30, 2020	\$ (508,457)	6	\$ (84,743)	\$ (423,714)

Changes in assumptions for FYE	Initial Balance	Initial Amortization Period	Annual Recognition	Unamortized Balance as of June 30, 2020
June 30, 2017	\$ (26,076,367)	6	\$ (4,814,099)	\$ (9,628,196)
June 30, 2018	\$ (7,400,008)	6	\$ (1,233,335)	\$ (3,700,003)
June 30, 2019	\$ (4,383,253)	6	\$ (730,542)	\$ (2,922,169)
June 30, 2020	\$ 16,571,033	6	\$ 2,761,839	\$ 13,809,194

GASB Disclosures

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

Deferred Outflows / (Inflows) of Resources (Continued)

Net Difference between projected and actual earnings in OPEB plan investments for FYE	Initial Balance	Initial Amortization Period	Annual Recognition	Unamortized Balance as of June 30, 2020
June 30, 2017	\$ (25,051)	5	\$ (5,010)	\$ (5,011)
June 30, 2018	\$ 83,348	5	\$ 16,670	\$ 33,338
June 30, 2019	\$ (182,385)	5	\$ (36,477)	\$ (109,431)
June 30, 2020	\$ 212,451	5	\$ 42,490	\$ 169,961

As of fiscal year ending June 30, 2020	Deferred Outflows	Deferred Inflows
Differences between expected and actual experience	\$ 1,097,211	\$ (14,638,642)
Changes in assumptions	13,809,194	(16,250,368)
Net difference between projected and actual earnings in OPEB plan investments	203,299	(114,442)
Total	\$ 15,109,704	\$ (31,003,452)

Annual Amortization of Deferred Outflows / (Inflows)

The balances as of June 30, 2020 of the deferred outflows / (inflows) of resources will be recognized in OPEB expense in the future fiscal years as noted below.

FYE	Balance
2021	\$ (7,623,075)
2022	\$ (7,618,063)
2023	\$ (3,369,237)
2024	\$ 39,531
2025	\$ 2,677,096
Thereafter	\$ 0

GASB Disclosures

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

Sensitivity Results

The following presents the Net OPEB Liability as of June 30, 2020, 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 3.00%.
- The 1% decrease in discount rate would be 2.00%.
- The 1% increase in discount rate would be 4.00%.

As of June 30, 2020	Net OPEB Liability
1% Decrease	\$ 251,871,293
Current Discount Rate	\$ 210,441,287
1% Increase	\$ 178,483,650

The following presents the Net OPEB Liability as of June 30, 2020, 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 8.00%, decreasing to an ultimate rate of 4.50%.
- The 1% decrease in health care trend rates would assume an initial rate of 7.00%, decreasing to an ultimate rate of 3.50%.
- The 1% increase in health care trend rates would assume an initial rate of 9.00%, decreasing to an ultimate rate of 5.50%.

As of June 30, 2020	Net OPEB Liability
1% Decrease	\$ 176,952,228
Current Trend Rates	\$ 210,441,287
1% Increase	\$ 254,115,225

GASB Disclosures

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

Asset Information

Asset Breakdown	FY 2018/19	FY 2019/20
Assets		
Cash and deposits	\$ 0	\$ 0
Securities lending cash collateral	0	0
Total cash	\$ 0	\$ 0
Receivables		
Contributions	\$ 0	\$ 0
Accrued interest	0	0
Total receivables	\$ 0	\$ 0
Investments		
Fixed income	\$ 0	\$ 0
Equities	0	0
Mutual Funds	5,016,651	5,474,837
Total investments	\$ 5,016,651	\$ 5,474,837
Total Assets	\$ 5,016,651	\$ 5,474,837
Liabilities		
Payables		
Investment management fees	\$ 0	\$ 0
Securities lending expense	0	0
Total liabilities	\$ 0	\$ 0
Net Position Restricted to OPEB	\$ 5,016,651	\$ 5,474,837

GASB Disclosures

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

Asset Information (Continued)

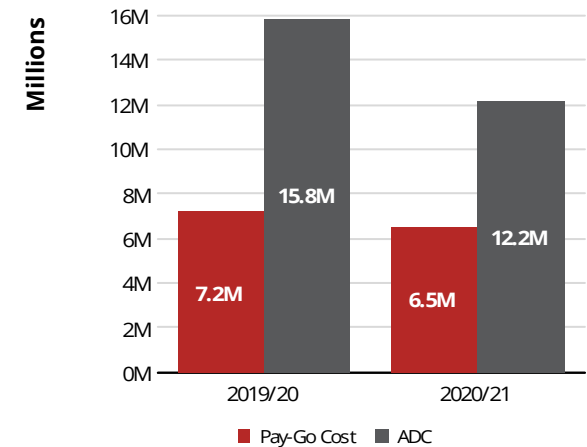
Asset Reconciliation	FY 2018/19	FY 2019/20
Additions		
Contributions Received		
Employer	\$ 7,618,528	\$ 7,673,184
Active employees	0	0
Total contributions	\$ 7,618,528	\$ 7,673,184
Investment Income		
Net increase in fair value of investments	\$ 0	\$ (28,426)
Interest and dividends	330,700	0
Investment expense, other than from securities lending	0	0
Securities lending income	0	0
Securities lending expense	0	0
Net investment income	\$ 330,700	\$ (28,426)
Total additions	\$ 7,949,228	\$ 7,644,758
Deductions		
Benefit payments	\$ 6,718,528	\$ 7,173,184
Administrative expenses	10,877	13,388
Other	0	0
Total deductions	\$ 6,729,405	\$ 7,186,572
Net increase in net position	\$ 1,219,823	\$ 458,186
Net position restricted to OPEB		
Beginning of year	\$ 3,796,828	\$ 5,016,651
End of year	\$ 5,016,651	\$ 5,474,837

Actuarially Determined Contributions

Town of Johnston GASB 74/75 Valuation For Fiscal Year Ending June 30, 2020

	FY 2019/20	FY 2020/21
Discount rate (Funding)	3.50%	6.60%
Payroll growth factor used for amortization	3.50%	3.00%
Actuarial cost method	Entry Age Normal Level % of Salary	Entry Age Normal Level % of Salary
Amortization type	Level % of Salary	Level % of Salary
Amortization period (years)	19	18
Actuarial Accrued Liability (AAL) - beginning of year	\$ 195,232,481	\$ 128,844,924
Actuarial Value of Assets (AVA) - beginning of year	(5,016,651)	(5,474,837)
Unfunded AAL - beginning of year	\$ 190,215,830	\$ 123,370,087
Normal Cost	\$ 5,234,429	\$ 2,392,699
Amortization of Unfunded AAL	10,011,359	9,034,015
Total normal cost plus amortization	\$ 15,245,788	\$ 11,426,714
Interest to end of year	533,603	754,163
Actuarially Determined Contribution - Preliminary	\$ 15,779,391	\$ 12,180,877
Expected Benefit Payments	7,173,184	6,542,742
Actuarially Determined Contribution - Final	\$ 15,779,391	\$ 12,180,877

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.

Projection of GASB Disclosures

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

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 when 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 (TOL)	FY 2019/20	FY 2020/21
TOL as of beginning of year	\$ 194,907,704	\$ 215,916,124
Normal cost as of beginning of year	5,219,371	6,181,660
Exp. benefit payments during the year	(7,173,184)	(6,542,742)
Interest adjustment to end of year	6,899,657	6,565,518
Exp. TOL as of end of year	\$ 199,853,548	\$ 222,120,560
Actuarial Loss / (Gain)	16,062,576	TBD
Actual TOL as of end of year	\$ 215,916,124	\$ TBD

Discount rate as of beginning of year	3.51%	3.00%
Discount rate as of end of year	3.00%	TBD

Projection of Actuarial Value of Assets (AVA)	FY 2019/20	FY 2020/21
AVA as of beginning of year	\$ 5,016,651	\$ 5,474,837
Exp. employer contributions during the year	7,673,184	7,540,742
Exp. benefit payments during the year	(7,173,184)	(6,542,742)
Expected investment income	184,025	393,267
Exp. Trust administrative expenses	(13,388)	(14,768)
Exp. AVA as of end of year	\$ 5,687,288	\$ 6,851,336
Differences between expected and actual experience	(212,451)	TBD
AVA as of end of year	\$ 5,474,837	\$ TBD

Expected asset return as of beginning of year	3.50%	6.60%
Expected asset return as of end of year	6.60%	TBD

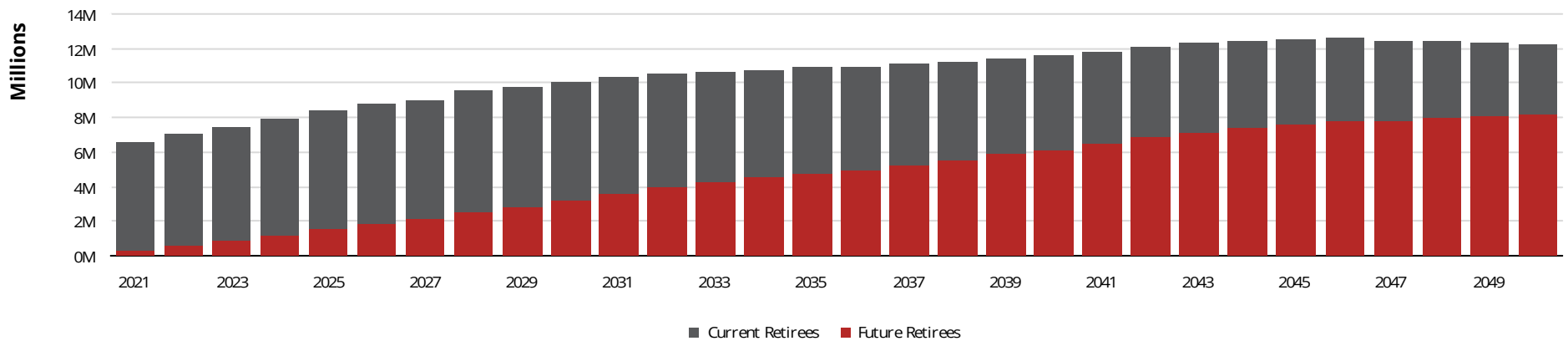
Cash Flow Projections

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

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. These projections include explicit and implicit subsidies.

FYE	Current Retirees	Future Retirees*	Total	FYE	Current Retirees	Future Retirees*	Total	FYE	Current Retirees	Future Retirees*	Total
2021	\$ 6,210,024	\$ 332,718	\$ 6,542,742	2031	\$ 6,750,713	\$ 3,583,584	\$ 10,334,297	2041	\$ 5,342,987	\$ 6,465,533	\$ 11,808,520
2022	\$ 6,493,575	\$ 579,225	\$ 7,072,800	2032	\$ 6,596,018	\$ 3,928,639	\$ 10,524,657	2042	\$ 5,276,822	\$ 6,839,632	\$ 12,116,454
2023	\$ 6,606,062	\$ 824,602	\$ 7,430,664	2033	\$ 6,374,350	\$ 4,238,947	\$ 10,613,297	2043	\$ 5,201,685	\$ 7,131,903	\$ 12,333,588
2024	\$ 6,817,990	\$ 1,136,242	\$ 7,954,232	2034	\$ 6,228,663	\$ 4,510,125	\$ 10,738,788	2044	\$ 5,061,833	\$ 7,420,370	\$ 12,482,203
2025	\$ 6,941,281	\$ 1,506,572	\$ 8,447,853	2035	\$ 6,124,735	\$ 4,764,964	\$ 10,889,699	2045	\$ 4,898,694	\$ 7,606,582	\$ 12,505,276
2026	\$ 6,938,673	\$ 1,806,185	\$ 8,744,858	2036	\$ 5,955,359	\$ 4,956,921	\$ 10,912,280	2046	\$ 4,774,453	\$ 7,827,582	\$ 12,602,035
2027	\$ 6,868,747	\$ 2,156,168	\$ 9,024,915	2037	\$ 5,910,330	\$ 5,205,105	\$ 11,115,435	2047	\$ 4,604,967	\$ 7,857,773	\$ 12,462,740
2028	\$ 7,067,750	\$ 2,468,421	\$ 9,536,171	2038	\$ 5,769,197	\$ 5,479,940	\$ 11,249,137	2048	\$ 4,373,142	\$ 8,044,921	\$ 12,418,063
2029	\$ 6,929,026	\$ 2,802,724	\$ 9,731,750	2039	\$ 5,559,277	\$ 5,845,135	\$ 11,404,412	2049	\$ 4,210,593	\$ 8,141,530	\$ 12,352,123
2030	\$ 6,842,735	\$ 3,187,212	\$ 10,029,947	2040	\$ 5,496,267	\$ 6,081,790	\$ 11,578,057	2050	\$ 4,042,404	\$ 8,242,389	\$ 12,284,793

Projected Employer Pay-go Cost



* Projections for future retirees do not take into account future new hires.

Discussion of Discount Rates

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

Under GASB 74, 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 assumed to be 6.60%. This was determined using a building block method in which expected future real rates of return (expected returns, net of OPEB plan investment expense and inflation) are developed for each major asset class. These expected future real rates of return are then combined to produce the long-term expected rate of return by weighting them based on the target asset allocation percentage and adding in expected inflation (1.60%). The best estimates of arithmetic real rates of return for each major asset class included in the OPEB Plan's target asset allocation as of June 30, 2020 are summarized in the following table.
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.

Asset Class	Target Allocation	L/T Expected Real ROR
U.S. Equity	48.3%	5.10%
Non-U.S. Equity	20.7%	7.40%
U.S. Aggregate Bonds	9.0%	1.20%
Intermediate-Term Credit	5.4%	1.90%
Short-Term Credit	3.6%	1.70%
Intermediate-Term TIPS	5.0%	0.70%
REITs	8.0%	4.00%
Total	100.0%	

Yield as of	July 1, 2019	June 30, 2020
Bond Buyer Go 20-Bond Municipal Bond Index	3.51%	2.21%
S&P Municipal Bond 20-Year High Grade Rate Index	2.79%	2.66%
Fidelity 20-Year Go Municipal Bond Index	3.13%	2.45%
Bond Index Range	2.79% - 3.51%	2.21% - 2.66%

3. The final equivalent single discount rate used for this year's valuation is 3.51% as of July 1, 2019 and 3.00% as of June 30, 2020 based on the expectation that the Town will continue to pay pay-go costs out of the General Fund and make discretionary pre-funding contributions to the OPEB Trust.

Summary of Plan Participants

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

Active Employees

Actives with coverage	Single ¹	Non-Single	Total	Avg. Age	Avg. Svc	Salary
Town Fire HSA (0001)	15	54	69	43.0	13.6	\$ N/A
Town General Classic (0001)	2	0	2	67.5	5.5	\$ N/A
Town General HM (0001)	10	8	18	52.8	10.8	\$ N/A
Town General Plan 65 (0002)	1	0	1	83.0	12.0	\$ N/A
Town Police HSA (0002)	16	50	66	41.2	12.2	\$ N/A
School Non-Certified HSA (0002)	25	67	92	52.2	10.4	\$ N/A
Town Fire HRA (0003)	1	14	15	52.2	9.5	\$ N/A
Town General HSA (0005)	1	4	5	55.9	12.1	\$ N/A
Town General HSA (0006)	23	23	46	46.1	13.0	\$ N/A
Town General HSA (0007)	0	1	1	32.0	5.1	\$ N/A
School Certified HSA (0011)	94	194	288	46.5	14.6	\$ N/A
School Certified HRA (0012)	1	4	5	69.1	24.2	\$ N/A
School Non-Certified HRA (0014)	2	4	6	67.2	10.3	\$ N/A
Total actives with coverage	191	423	614	47.3	13.2	\$ N/A

Actives without coverage	Total	Avg. Age	Avg. Svc	Salary
Town General	2	47.3	10.0	\$ N/A
Town Fire	4	52.0	10.1	\$ N/A
Town Police	1	45.0	3.2	\$ N/A
School Certified	7	48.2	10.1	\$ N/A
School Non-Certified	6	55.0	7.3	\$ N/A
Total actives without coverage	20	50.7	8.9	\$ N/A

School Certified employees without coverage shown above have dental coverage. They are assumed to elect dental coverage only at retirement. They have been included in the GASB valuation.

¹ Includes those with Single and EE+Ch coverage

Summary of Plan Participants

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

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	4											4
25 to 29	16	26	7									49
30 to 34	4	22	17	10								53
35 to 39	1	20	12	18	15							66
40 to 44	3	13	11	16	28	8	1					80
45 to 49	3	14	16	14	17	32	6					102
50 to 54	5	15	11	11	17	39	13	2				113
55 to 59	5	8	8	14	9	22	11	3	1			81
60 to 64	2	8	4	11	14	17	3	2	3			64
65 to 69		1	1		3	6	3	1				15
70 & up		2	1	2	1	1						7
Total	43	129	88	96	104	125	37	8	4	0		634

Summary of Plan Participants

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

Retirees

Retirees with coverage	Single ²	Non-Single	Total	Avg. Age
Town Fire HM (0004 / 6)	13	33	46	56.5
Town Fire Plan 65 (0012)	56	0	56	71.3
Town General HM (0005 / 9)	13	8	21	61.2
Town General Classic (0009)	3	0	3	63.6
Town General Plan 65 (0010)	82	0	82	76.1
Town Police HM (0008)	5	43	48	56.5
Town Police Classic (0008)	6	4	10	67.8
Town Police HRA (0004)	0	7	7	52.1
Town Police Plan 65 (0011)	45	0	45	76.2
School Certified HM (0001 / 8)	3	2	5	66.1
School Certified Classic (0001)	1	2	3	72.0
School Certified HRA (0013)	6	0	6	62.7
School Certified Plan 65 (0003 / 7)	259	0	259	75.1
School Non-Certified HM (0005)	3	2	5	61.6
School Non-Certified HRA (0015)	2	6	8	62.3
Total retirees with coverage	497	107	604	70.7

Retirees without coverage	Total	Avg. Age
Town Fire	3	50.9
Town General	2	72.3
Town Police	2	37.1
School Non-Certified	1	67.5
Total retirees without coverage	8	54.9

² Includes those with Single and EE+Ch coverage

Retiree Age Distribution

Age	Retirees
< 45	5
45 to 49	13
50 to 54	25
55 to 59	43
60 to 64	74
65 to 69	115
70 to 74	162
75 to 79	85
80 to 84	38
85 to 89	35
90 & up	17
Total	612

Substantive Plan Provisions

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

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.

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).

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.

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).

Substantive Plan Provisions

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

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.

Substantive Plan Provisions

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

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.

Effective on July 1, 2015, employees are also 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.

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.

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, 2020 is \$144.60. 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.

HRA Benefit

Retired police officers and firefighters in the HSA plan receive an annual HRA contribution of \$1,500 for single coverage and \$3,000 for family coverage to a Town controlled account. Claims processed through the HRA are paid out of that account.

Dental Benefit

Monthly dental working rate for School Certified employee is \$33.17 effective on July 1, 2020.

Substantive Plan Provisions

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

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 and Classic premiums including the stop-loss administration fees effective on July 1, 2020 for pre-Medicare current and future retirees:

Subgroup	Status	Subgroup Name	Plan	Single	Family
0001	Active	Town General Employees	HealthMate	\$ 951.84	\$ 2,328.30
0001	Active	Town General Employees	Classic	\$ 1,091.86	\$ 2,671.25
0001	Active	Town Fire HSA	HSA	\$ 787.86	\$ 1,902.12
0002	Active	Town Police HSA	HSA	\$ 787.86	\$ 1,902.12
0005	Active	Town General HSA	HSA	\$ 837.13	\$ 2,016.07
0006	Active	Town General HSA	HSA	\$ 837.13	\$ 2,016.07
0007	Active	Town General HSA	HSA	\$ 837.13	\$ 2,016.07
0004	Retired	Town Fire Retirees (2)	HealthMate	\$ 973.35	\$ 2,384.18
0005	Retired	Town Retirees	HealthMate	\$ 951.84	\$ 2,328.30
0006	Retired	Town Fire Retirees	Classic	\$ 1,091.86	\$ 2,671.25
0006	Retired	Town Fire Retirees	HealthMate	\$ 962.12	\$ 2,355.02
0008	Retired	Town Police Retirees	Classic	\$ 1,091.86	\$ 2,671.25
0008	Retired	Town Police Retirees	HealthMate	\$ 951.84	\$ 2,328.30
0009	Retired	Town Retirees (2)	Classic	\$ 1,091.86	\$ 2,671.25
0009	Retired	Town Retirees (2)	HealthMate	\$ 951.84	\$ 2,328.30
0003	Retired	Town Retired Fire HRA	HRA	\$ 787.86	\$ 1,902.12
0004	Retired	Town Retired Police HRA	HRA	\$ 787.86	\$ 1,902.12
0002 / 14	Active	School Non-Certified	HealthMate	\$ 837.13	\$ 2,016.07
0011 / 12	Active	School Teachers HSA / HRA	HSA / HRA	\$ 837.13	\$ 2,016.07
0001	Retired	School Certified Retirees	Classic	\$ 1,094.76	\$ 2,676.14
0001	Retired	School Certified Retirees	HealthMate	\$ 1,021.06	\$ 2,485.47
0005	Retired	School Non-Certified Retirees 2010	HealthMate	\$ 1,058.69	\$ 2,585.52
0008	Retired	School Certified Retirees (2)	HealthMate	\$ 1,003.17	\$ 2,444.55
0013 / 15	Retired	School Retirees HRA	HealthMate	\$ 837.13	\$ 2,016.07

Upon Medicare eligibility, the Town and School provide Blue Medicare Rx plan with monthly premium of \$199.00 effective on July 1, 2020. Plan 65 monthly premiums are \$196.98 for the Town (with SNF) and \$185.93 for the School (without SNF) effective on July 1, 2020.

Actuarial Methods and Assumptions

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

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, 2019. 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 discount rate, health care trend rates, mortality table, and per capita costs again in the next full GASB valuation, which will be for the fiscal year ending June 30, 2021.

Measurement Date	For fiscal year ending June 30, 2020, a June 30, 2020 measurement date was used.
Actuarial Valuation Date	June 30, 2020 with no adjustments to get to the June 30, 2020 measurement date. Liabilities as of July 1, 2019 are based on an actuarial valuation date of June 30, 2019 with no adjustments.
Discount Rate	3.51% as of July 1, 2019 and 3.00% as of June 30, 2020 for accounting disclosure purposes. 3.50% as of July 1, 2019 and 6.60% as of June 30, 2020 for funding disclosure purposes (for calculating the Actuarially Determined Contribution). Refer to the Discussion of Discount Rates section for more information on selection of the discount rate.
Inflation Rate	1.60% per year
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: <ul style="list-style-type: none">• 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.
Employer Funding Policy	The Town / School currently pays for the pay-go costs from the General Fund. Ongoing pre-funding contributions above pay-go costs to the OPEB Trust will be made at the Town's discretion.
Census Data	Census information was provided by the Town and it was provided in September 2020. We have reviewed it for reasonableness and no material modifications were made to the census data.

Actuarial Methods and Assumptions

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

Experience Study

Best actuarial practices call for a periodic assumption review and the Town completed an actuarial assumption review (also referred to as an experience study) in 2019. Nyhart recommends the Town to complete another experience study prior to the fiscal year ending June 30, 2024 valuation.

Payroll Growth

Payroll growth is based on the assumptions used in the RI ERS and MERS actuarial valuations as of June 30, 2019. Sample payroll growths that include wage inflation and merit / productivity increases are as shown below:

YOS	Town Police / Fire	Town General / School Non-Certified	School Certified
0	14.00%	7.25%	13.00%
5	7.00%	5.25%	8.00%
10	4.00%	3.50%	3.00%
15	4.00%	3.25%	3.00%
20	4.00%	3.25%	3.00%

Health Care Coverage Election Rate

90% 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, unless they are eligible for subsidized dental benefit; in which case, we have assumed that employees who currently have dental coverage will elect dental coverage only 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

40% of male and 30% of female employees are assumed to be married at retirement. Husbands are assumed to be three years older than wives.

Actual spousal coverage and age is used for retirees.

Actuarial Methods and Assumptions

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

Mortality

Healthy Police/Fire participants: SOA Pub-2010 Public Safety Headcount Weighted Mortality Table fully generational using Scale MP-2019
Healthy School Certified participants: SOA Pub-2010 Teachers Headcount Weighted Mortality Table fully generational using Scale MP-2019
All other healthy participants: SOA Pub-2010 General Headcount Weighted Mortality Table fully generational using Scale MP-2019
Disabled Police/Fire participants: SOA Pub-2010 Public Safety Disabled Headcount Weighted Mortality Table fully generational using Scale MP-2019
All other disabled participants: SOA Pub-2010 Non-Safety Disabled Headcount Weighted Mortality Table fully generational using Scale MP-2019
Surviving Spouses: SOA Pub-2010 Continuing Survivor Headcount Weighted Mortality Table fully generational using Scale MP-2019

Disability

Sample annual disability rates are as shown below.

Age	Town			School Teachers		School General
	Police	Fire	General	Male	Female	
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%

Actuarial Methods and Assumptions

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

Retirement Rates

For Police and Firefighters

YOS	Police			Firefighters		
	Age			Age		
	< 40	40-64	65+	< 45	45-64	65+
< 18	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
18	0.0%	5.0%	100.0%	0.0%	0.0%	0.0%
19	0.0%	45.0%	100.0%	0.0%	0.0%	0.0%
20	0.0%	20.0%	100.0%	0.0%	20.0%	100.0%
21	0.0%	20.0%	100.0%	0.0%	20.0%	100.0%
22	0.0%	20.0%	100.0%	0.0%	50.0%	100.0%
23	0.0%	20.0%	100.0%	0.0%	50.0%	100.0%
24	0.0%	20.0%	100.0%	0.0%	50.0%	100.0%
25	0.0%	100.0%	100.0%	0.0%	50.0%	100.0%
26+	0.0%	100.0%	100.0%	0.0%	100.0%	100.0%

For Town's General and School Non-Certified Employees

Age	Service				
	<10	10 - 24	25 - 26	27 - 34	35+
<46	0.0%	0.0%	0.0%	0.0%	0.0%
46 - 57	0.0%	2.0%	20.0%	10.0%	100.0%
58 - 60	0.0%	10.0%	20.0%	10.0%	100.0%
61	0.0%	5.0%	10.0%	5.0%	100.0%
62	0.0%	10.0%	20.0%	10.0%	100.0%
63	0.0%	5.0%	10.0%	5.0%	100.0%
64	0.0%	10.0%	20.0%	10.0%	100.0%
65 - 72	0.0%	20.0%	20.0%	20.0%	100.0%
73+	100.0%	100.0%	100.0%	100.0%	100.0%

Actuarial Methods and Assumptions

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

Retirement Rates (continued)

For School Certified Employees

Age	ERS A and ERS AB			ERS B1	ERS B2
	Service				
	0 - 24	25	26+		
<59	0.0%	0.0%	0.0%	0.0%	0.0%
59	10.0%	24.0%	10.0%	0.8%	0.0%
60	5.0%	24.0%	5.0%	0.8%	0.0%
61	5.0%	24.0%	5.0%	0.8%	0.0%
62	5.0%	24.0%	5.0%	1.2%	0.8%
63	5.0%	24.0%	5.0%	1.6%	0.8%
64	10.0%	24.0%	10.0%	10.0%	0.8%
65	15.0%	24.0%	15.0%	15.0%	10.0%
66	5.0%	24.0%	5.0%	10.0%	10.0%
67 - 69	10.0%	24.0%	10.0%	10.0%	10.0%
70+	100.0%	100.0%	100.0%	100.0%	100.0%

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. Sample annual turnover rates are shown below:

For Police and Firefighters

YOS	Rates
0	15.0%
5	3.5%
10	1.9%
15	1.0%
20+	0.0%

Actuarial Methods and Assumptions

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

Turnover Rate (continued)

For Town's General and School Non-Certified Employees

YOS	Rates
0	20.0%
5	11.0%
10	6.5%
15	2.9%
20	2.5%
25+	0.0%

For School Certified Employees

YOS	Rates
0	6.0%
5	6.0%
10	2.8%
15	1.8%
20	1.4%
25+	1.1%

Health Care Trend Rates

FYE	Medical/Rx	Part B	Dental	HRA
2021	8.00%	3.00%	5.00%	1.70%
2022	7.50%	3.25%	5.00%	1.50%
2023	7.00%	3.50%	5.00%	1.35%
2024	6.50%	3.75%	5.00%	1.20%
2025	6.00%	4.00%	5.00%	1.00%
2026	5.50%	4.25%	5.00%	0.80%
2027	5.00%	4.50%	5.00%	0.70%
2028	4.50%	4.50%	5.00%	0.60%
2029	4.50%	4.50%	5.00%	0.50%
2030+	4.50%	4.50%	5.00%	0.40%

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.

Actuarial Methods and Assumptions

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

Per Capita Costs

Annual per capita costs were calculated based on the weighted average premium rates as of July 1, 2020 actuarially increased using health index factors and current enrollment separately for actives and retirees. Annual per capita costs are as shown below:

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.

Age	Town Actives (non-HSA)		Town Retirees (non-HRA)		Town Active (HSA)		Town Retirees (HRA)	
	Male	Female	Male	Female	Male	Female	Male	Female
<55	\$ 11,600	\$ 12,500	\$ 11,700	\$ 12,600	\$ 9,600	\$ 10,400	\$ 9,600	\$ 10,400
55 – 59	\$ 15,000	\$ 14,500	\$ 15,100	\$ 14,600	\$ 12,400	\$ 12,000	\$ 12,400	\$ 12,000
60 – 64	\$ 20,300	\$ 17,900	\$ 20,400	\$ 18,000	\$ 16,800	\$ 14,800	\$ 16,800	\$ 14,800
65+	\$ 4,752	\$ 4,752	\$ 4,752	\$ 4,752	\$ 4,752	\$ 4,752	\$ 4,752	\$ 4,752

Age	School Actives (non-HSA)		School Retirees		School (HSA)	
	Male	Female	Male	Female	Male	Female
<55	\$ 10,000	\$ 10,900	\$ 12,600	\$ 13,600	\$ 10,000	\$ 10,900
55 – 59	\$ 13,000	\$ 12,500	\$ 16,200	\$ 15,700	\$ 13,000	\$ 12,500
60 – 64	\$ 17,600	\$ 15,500	\$ 22,000	\$ 19,400	\$ 17,600	\$ 15,500
65+	\$ 4,619	\$ 4,619	\$ 4,619	\$ 4,619	\$ 4,619	\$ 4,619

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 \$1,735 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.

The actuarial value of the HRA benefit is assumed to be \$1,266 and expected to increase with HRA trend rates.

The annual dental per capita cost for School Certified retirees is \$398 and it is assumed to increase with dental trend rates.

Actuarial Methods and Assumptions

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

Retiree Contributions

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

Explicit Subsidy

The difference between (a) the premium rate and (b) the retiree contribution. Below is an example of the monthly explicit subsidies for a Town retiree who is enrolled in a non-HRA plan.

	Premium Rate	Retiree Contribution	Explicit Subsidy
	A	B	C = A - B
Retiree	\$ 951.84	\$ 0.00	\$ 951.84
Spouse	\$ 1,376.46	\$ 0.00	\$ 1,376.46

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 a female Town retiree age 64 with spouse of the same age enrolled in a non-HRA plan.

	Per Capita Cost	Premium Rate	Implicit Subsidy
	A	B	C = A - B
Retiree	\$ 1,500.00	\$ 951.84	\$ 548.16
Spouse	\$ 1,700.00	\$ 1,376.46	\$ 323.54

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.

Actuarial Methods and Assumptions

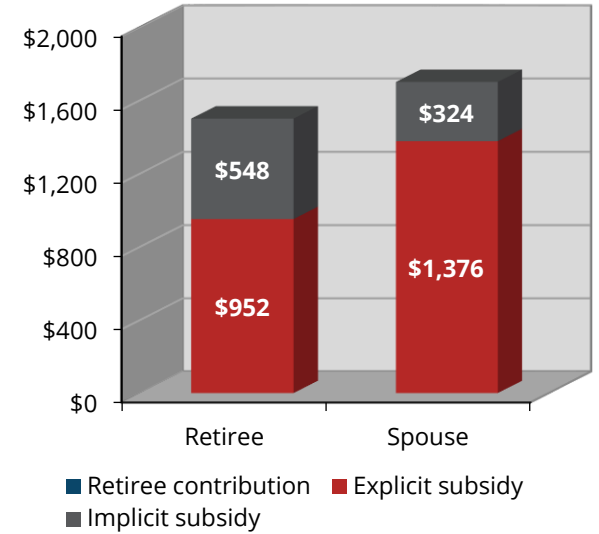
Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

GASB Subsidy Breakdown

Below is a breakdown of the GASB 75 monthly total cost for a female Town retiree age 64 with spouse of the same age enrolled in a non-HRA plan.

	Retiree		Spouse	
Retiree contribution	\$	0.00	\$	0.00
Explicit subsidy	\$	951.84	\$	1,376.46
Implicit subsidy	\$	548.16	\$	323.54
Total monthly cost	\$	1,500.00	\$	1,700.00

GASB Subsidy Breakdown



APPENDIX

The background features a complex geometric design. It consists of several overlapping, semi-transparent shapes. A large, dark gray shape occupies the upper portion of the frame. Below it, there are various shapes in lighter shades of gray and white, some of which are defined by dashed lines. A prominent, solid red shape is located in the lower right corner, extending towards the center. The overall composition is modern and minimalist.

Appendix

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

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 June 30, 2019	As of June 30, 2020
Active Participants	659	634
Retired Participants	587	612
Averages for Active		
Age	47.6	47.4
Service	13.3	13.1
Averages for Inactive		
Age	70.1	70.5

Appendix

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

Detailed Actuary's Notes

There have been no substantive plan provision changes since the last full valuation, which was for the fiscal year ending June 30, 2019.

The following assumptions have been updated:

1. The mortality assumption has been updated to use the MP-2019 mortality improvement scale rather than the MP-2018 mortality improvement scale. All base mortality tables remain unchanged from the prior valuation. This change led to a slight decrease in liabilities.
2. Discount rate as of the Measurement Date has been updated based on 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) and the Town's expected asset rate of return. The current valuation uses a discount rate of 3.51% as of July 1, 2019 and 3.00% as of June 30, 2020. This change has caused an increase in liabilities.
3. The payroll growth assumption has been updated to follow the most recent tables from the RI ERS and MERS actuarial valuations as of June 30, 2019. This change led to a slight increase in liabilities.
4. Health care trend rates have been updated as follows. This change caused a slight decrease in the Town's liabilities.
 - a. For medical and rx benefits, the trend rates have been updated to an initial rate of 8.00% decreasing by 0.50% annually to an ultimate rate of 4.50%.
 - b. For HRA benefit, the trend rates have been reset to an initial rate of 1.70% decreasing annually to an ultimate rate of 0.40% in 9 years.
 - c. For Medicare Part B benefit, the trend rates have been reset to an initial rate of 3.00% increasing by 0.25% annually to an ultimate rate of 4.50%.

Appendix

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

GASB Results by Group

Below is the summary of the GASB results for fiscal year ending June 30, 2020 based on the Entry Age Normal Level % of Pay cost method with a discount rate of 3.00%. The Actuarially Determined Contributions (ADC) shown below for FY 2020/21 are calculated using Entry Age Normal % of Salary cost method with a discount rate of 6.60% and a linear amortization of unfunded liability over an 18-year closed period.

Union Groups	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
	As of June 30, 2020	As of June 30, 2020	As of June 30, 2020
Fire	\$ 62,695,558	\$ 1,469,265	\$ 61,226,293
Town	\$ 31,383,549	\$ 735,471	\$ 30,648,078
Police	\$ 71,313,752	\$ 1,671,232	\$ 69,642,520
School	\$ 50,523,265	\$ 1,598,869	\$ 48,924,396
Total	\$ 215,916,124	\$ 5,474,837	\$ 210,441,287

Union Groups	Unamortized Balance of Deferred Outflows	Unamortized Balance of Deferred Inflows	OPEB Expense	Actuarially Determined Contribution
	As of June 30, 2020	As of June 30, 2020	FY 2019/20	FY 2020/21
Fire	\$ 7,048,189	\$ (11,953,960)	\$ 1,916,361	\$ 3,789,061
Town	\$ 1,991,532	\$ (7,680,113)	\$ (256,595)	\$ 1,742,337
Police	\$ 7,346,481	\$ (6,414,766)	\$ 2,738,285	\$ 3,953,603
School	\$ 3,418,408	\$ (9,649,519)	\$ (72,734)	\$ 2,695,876
Total	\$ 19,804,610	\$ (35,698,358)	\$ 4,325,317	\$ 12,180,877

GLOSSARY

The background features a complex geometric design. The top half is a solid dark gray. The bottom half is composed of several overlapping triangles in shades of light gray, white, and a vibrant red. The red triangles are primarily located in the bottom right corner, while the white and light gray triangles form a large, abstract shape on the left and bottom.

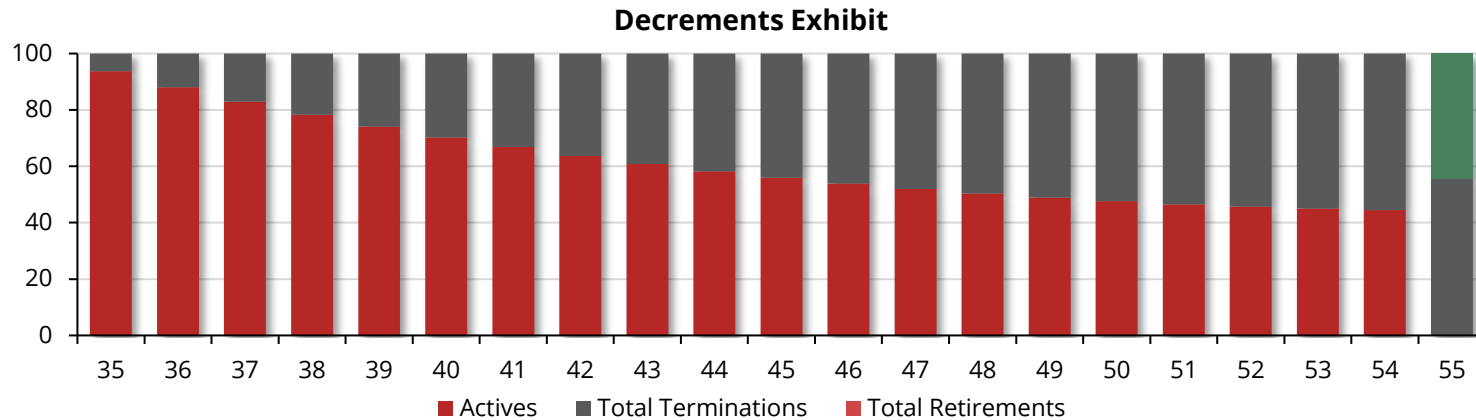
Glossary – Decrements Exhibit

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

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 44.43 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 ³	# 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



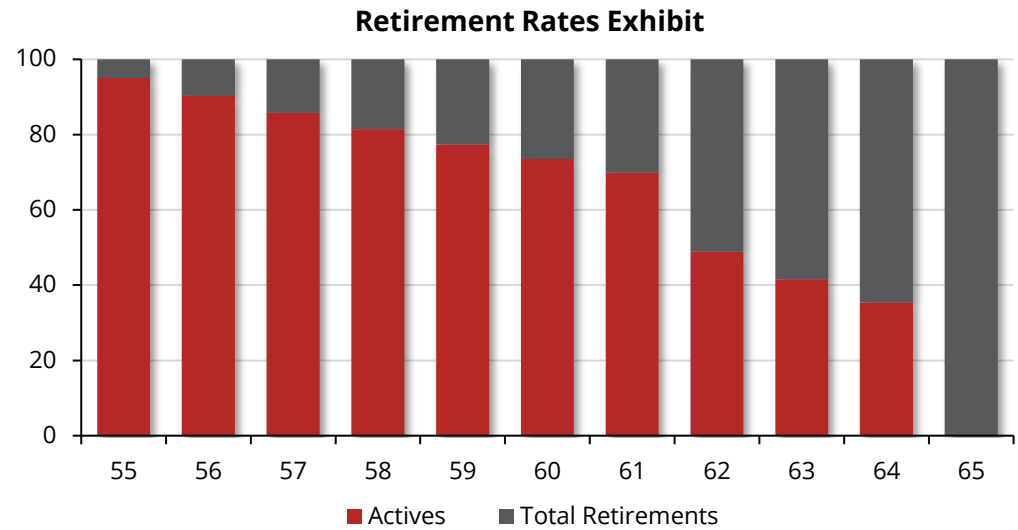
³ The above rates are illustrative rates and are not used in our GASB calculations.

Glossary – Retirement Rates Exhibit

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

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.

Glossary – Definitions

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

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.

Glossary – Definitions

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

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.

Glossary – Definitions

Town of Johnston GASB 74/75 Valuation for Fiscal Year Ending June 30, 2020

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).