

Actuarial Valuation for Other Postemployment Benefits Accounting

As of July 1, 2018

Town of North Kingstown Postemployment Benefits Plan

For purposes of

Governmental Accounting Standards Board Statement No. 74/75

for Fiscal Year July 1, 2018 to June 30, 2019

Town of North Kingstown Postemployment Benefits Plan
Actuarial Valuation as of July 1, 2018 for Fiscal Year Ending June 30, 2019
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Disclosure Statement

Purpose

Actuarial computations under Governmental Accounting Standards Board Statement No. 74 (GASB No. 74) and No. 75 (GASB No. 75) are for purposes of fulfilling plan and employer accounting requirements. The calculations reported herein have been performed in accordance with generally accepted actuarial principles and practices, and on a basis consistent with our understanding of GASB No. 74/75. In preparing this report, we have relied upon information furnished to us by Town of North Kingstown. This information includes data pertaining to the Plan, as well as a description of the substantive plan. The information has been reviewed and determined to be reasonable and consistent; however, we have not audited the data or reviewed plan provisions for compliance with IRS or DOL regulations.

Determinations for purposes other than meeting the employer financial accounting requirements may be significantly different from the results reported herein. The funded status, measured by comparing the Accrued Liability against the Actuarial Value of Plan Assets, is not an appropriate measure for assessing the sufficiency of the plan assets to cover the estimated cost of settling the plan's benefit obligations upon plan termination nor is it appropriate for measuring the need for, or the amount of, future contributions. Accordingly, additional determinations are needed for other purposes, such as judging benefit security at termination or adequacy of funding for an ongoing plan. The actuarial calculations contained in this report are not intended or written to be used, and cannot be used, for the purposes of avoiding penalties under the Internal Revenue Code.

This valuation involves estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future.

Calculations are based on the types of benefits provided under the terms of the substantive plan at the time of the valuation and on the pattern of sharing of costs between the employer and plan members to that point. Calculations reflect a long-term perspective, so methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets.

Benefits Not Included

Defined contribution benefits and insured benefits under GASB No. 75 paragraph 11, pension benefits accounted for under GASB 68, and benefits for compensated absences under GASB 16 are not included in this valuation.

Multiple Year Reporting

Pursuant to GASB No. 74/75, an actuarial valuation can be used over a two-year period. The figures in this report are reflected as of the measurement date for the specified fiscal year and are based on an actuarial valuation date or rolled forward from an actuarial valuation date. Some figures have been determined based on estimated contributions for the period. These figures may need to be adjusted for actual contributions deposited to the trust or claims paid on behalf of plan benefits.

A new valuation should be performed if, between the actuarial valuation date and measurement date, material changes have occurred that affect the results of this valuation, including significant changes in benefit provisions, the size or composition of the population covered by the plan, or other changes that impact long-term assumptions. If roll forward procedures have been used, this report reflects any necessary adjustments to the interest rate as of the measurement date.

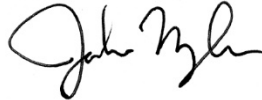
Valuation For Funded Plans

The interest rate used for this valuation reflects future contributions as allowed under GASB No. 74/75. If there are any changes to the formal, written funding policy or changes in the statute or contract which

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determines the contribution amount, a new valuation that reflects the appropriate interest rate may need to be completed.

I am a member of the American Academy of Actuaries and a Fellow of the Society of Actuaries, and I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this valuation.



Joshua R. Mayhue, FSA, EA, MAAA
Consulting Actuary

11/13/2019
Date

JRM/ELH

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Summary of Plan Provisions

Police

Eligibility: 20 years of Town service. Member also must meet retirement eligibility under MERS.

Benefits: Town pays 100% for medical and prescription drug coverage until eligible for Medicare for employees hired before 7/1/1995. Town pays 80% for all employees hired on or after 7/1/1995.

Spouse coverage is included. Spouse coverage lasts until the earliest of member Medicare age, spouse Medicare age, or member death.

No benefit is offered to surviving spouse.

Firefighters

Eligibility: 25 years of Town service. Member also must meet retirement eligibility under MERS.

Benefits: Retiree pays 20% of premium for medical and prescription drug coverage until eligible for Medicare. Some exempted retirees pay 0% or 15% of premiums.

Spouse coverage is included. Spouse coverage lasts until the earliest of member Medicare age, spouse Medicare age, or member death.

No benefit is offered to surviving spouse.

Municipal Employees (Local 1033)

Eligibility: 25 years of Town service. Member also must meet retirement eligibility under MERS.

Benefits: Medical and prescription drug coverage

Town pays 100% for retirees hired before 4/1/2000 and retired before 1/1/2012.

Town pays 85% for retirees hired before 4/1/2000 and retired on 1/1/2012.

Town pays 80% for retirees hired on or after 4/1/2000, or for retirees retired after 1/1/2012.

Town contributes \$3,008.40 (as of July 1, 2018) per year towards pre-65 prescription drug coverage (same amount for single or family) regardless of hire date.

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Summary of Plan Provisions

Town provides free Medicare Supplemental coverage for life for both member and spouse upon becoming eligible for Medicare for those hired before 9/24/2008.

Municipal employees hired after 9/24/2008 do not receive coverage after Medicare age.

For Municipal Employees (Local 1033) hired before 9/24/2008, spouse coverage is included. Spouse coverage lasts until member death.

No benefit is offered to surviving spouse.

Spouse coverage is not provided to Municipal Employees (Local 1033) hired after 9/24/2008.

Nonunion Employees

Eligibility: Member must meet retirement eligibility under MERS. No minimum Town service required.

Benefits: Town pays 100% of premium. Town also provides free Medicare Supplemental coverage for life upon becoming eligible for Medicare for both member and spouse.

Spouse coverage is included. Spouse coverage lasts until member death.

No benefit is offered to surviving spouse.

*Surviving spouses are not offered benefits. However, several surviving spouses are exempted from this policy due to special agreements.

*Several retired police and firefighters have special agreement and may continue coverage for life.

*Retirees have the option of purchasing life insurance at a non-group rate that is separately rated from the active employees.

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Actuarial Assumptions and Methods (1 of 2)

Discount Rate

6.25%¹

Salary

An assumption for salary increases is used only for spreading contributions over future pay under the the entry age normal cost method. For this purpose, annual salary increases are assumed to be 2.5%.

Withdrawal

Rates of withdrawal vary by years of service. Sample rates are shown below.

Years of Service	Local 1033 and Non-Union	Police and Fire
1	17.5000%	10.0000%
5	7.2887%	2.6506%
10	3.1408%	1.4342%
15	1.8263%	0.7714%
20	1.5669%	0.0000%
25	0.5841%	0.0000%

Mortality

Police and Firefighters

PubS-2010 Generational Headcount-Weighted Mortality MP-2018

Incorporated into the table are rates projected generationally using Scale MP-2018 to reflect mortality improvement.

Municipal Union (Local 1033) and Non-Union Employees

PubG-2010 Generational Headcount-Weighted Mortality MP-2018

Incorporated into the table are rates projected generationally using Scale MP-2018 to reflect mortality improvement.

Disability

No disability was assumed.

Retirement

Municipal Union (Local 1033) and Non-Union Employees

A flat 20% per year retirement probability for members eligible for MERS unreduced retirement benefits. A 35% retirement probability at first eligibility will be applied if members have reached age 65 or with at least 25 years of MERS service.

Retirement rates for employees eligible for MERS reduced retirement benefits are shown below.

Years from Eligibility for Unreduced Benefits	Retirement Rates
5	2.00%
4	2.00%
3	2.00%
2	3.00%
1	4.00%

Police and Firefighters: Unisex rates based on service. Sample rates are shown below.

Service	Rate	Service	Rate	Service	Rate
20	12.0%	25	14.0%	28-29	20.0%
21-23	10.0%	26	16.0%	30+	35.0%
24	12.0%	27	18.0%		

¹The discount rate is determined following the procedures of Illustration B2 in the GASB 74 implementation guide. The long-term expected rate of return on OPEB plan investments is 6.25% and the municipal bond rate is 2.79% based on the S&P Municipal Bond 20 Year High Grade Rate Index as of June 30, 2019.

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Actuarial Assumptions and Methods (2 of 2)

Percent of Eligible Retirees Electing Coverage in Plan

100% of employees are assumed to elect coverage.

Percent Married at Retirement

85% of police and firefighters and 40% of other employees are assumed to be married and have a spouse covered by the plan at retirement.

Non-Spouse dependents are assumed to be immaterial.

Spouse Age

Wives are assumed to be three years younger than their husbands.

Per Capita Claims Cost

Making use of weighted averages for various plan designs, the per capita claims cost for medical and prescription drug is based on the expected portion of the group's overall cost attributed to individuals in the specified age and gender brackets. The resulting costs are as follows:

Age	Medical and Prescription Drug Combined	
	Males	Females
45-49	\$5,546	\$8,009
50-54	\$7,347	\$9,051
55-59	\$8,943	\$9,469
60-64	\$11,673	\$10,878
65+	\$2,094	\$2,094

Pre-65 claims are then adjusted based on individual plan enrollment by factors ranging from 0.7171 to 1.4153.

Retiree Contributions

Retiree contributions are assumed to increase at the same rate as the Health Care Cost Trend Rate.

Health Care Cost Trend Rate

6.0% in 2018, and 5.5% in 2019 through 2021. Rates gradually decrease from 5.4% in 2022 to 3.8% in 2075 and later based on the Society of Actuaries Long-Run Medical Cost Trend Model.

Actuarial Value of Assets

Equal to the Market Value of Assets

Actuarial Cost Method - Entry Age Normal

Under the Entry Age Normal Cost Method, the Normal Cost is the present value of benefits allocated to the year following the valuation date. Benefits are allocated on a level basis over the earnings of an individual between the date of hire and the assumed retirement age. The Accrued Liability as of the valuation date is the excess of the present value of future benefits over the present value of future Normal Cost. The Unfunded Accrued Liability is the excess of the Accrued Liability over the Actuarial Value of Assets. Actuarial gains and losses serve to reduce or increase the Unfunded Accrued Liability.

Participant Data

Based on census information as of July 1, 2018.

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as of July 1, 2018
for Purposes of Other Postemployment Benefits Plan Accounting
for Fiscal Year July 1, 2018 to
June 30, 2019

Section 1

Asset Information

Town of North Kingstown Postemployment Benefits Plan
 Actuarial Valuation as of July 1, 2018 for Fiscal Year Ending June 30, 2019
Plan Fiduciary Net Position

Receipts and Disbursements

Market Value at June 30, 2018 \$ 1,104,997.68

Receipts

Contributions - Employer \$ 1,457,719.00

Contributions - Employee 0.00

Net Investment Income 81,970.84

Total Receipts **1,539,689.84**

Disbursements

Benefit Payments \$ (1,341,871.00)

Administrative Expenses (2,820.78)

Total Disbursements **(1,344,691.78)**

Market Value at June 30, 2019 **\$ 1,299,995.74**

Assets and Liabilities

Assets

Cash \$ 0.00

Money Markets 0.00

Common Stocks 0.00

Corporate Bonds 0.00

Municipal Bonds 0.00

Master Trust 0.00

Mutual Funds 1,299,995.74

Total Assets in Fund \$ 1,299,995.74

Benefits Receivable 0.00

Accrued Income 0.00

Total Assets **\$ 1,299,995.74**

Liabilities

Benefits Payable \$ 0.00

Administrative Expenses Payable 0.00

Total Liabilities **0.00**

Market Value at June 30, 2019 **\$ 1,299,995.74**

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for Purposes of Other Postemployment Benefits Accounting
for Fiscal Year July 1, 2018 to
June 30, 2019

Section 2

Calculations for GASB No. 74/75 Reporting

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GASB No. 75 Summary Information

Demographic Information	Total
Active Participants	224
Vested Former Participants	0
Retired Participants	138
Total	362

Annual Payroll of Active Participants \$14,527,723

Financial Information

Total OPEB Liability	\$ 21,408,749
Plan Fiduciary Net Position	1,299,996
Net OPEB Liability (Asset)	\$ 20,108,753
Deferred Outflows of Resources	\$ 0
Deferred Inflows of Resources	\$ 11,536,447

Plan Fiduciary Net Position as a
 % of Total OPEB Liability 6.07%

Net OPEB Liability as a % of
 Covered-Employee Payroll 138.42%

OPEB Expense \$ (587,813)

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Changes in the Net OPEB Liability

Total OPEB Liability	Total
Fiscal Year Ending 6/30/2019	
Balance at 6/30/2018	\$ 25,890,949
Service Cost	629,298
Interest ²	1,663,671
Changes of Benefit Terms	(1,300,309)
Differences between Expected and Actual Experience ¹	(3,790,267)
Changes of Assumptions ¹	(342,722)
Benefit Payments ²	(1,341,871)
Other Changes	0
Net Changes	(4,482,200)
Balance at 6/30/2019	\$ 21,408,749

Plan Fiduciary Net Position

Fiscal Year Ending 6/30/2019	
Balance at 6/30/2018	\$ 1,104,998
Contributions - Employer	1,457,719
Contributions - Employee	0
Net Investment Income	81,971
Benefit Payments ²	(1,341,871)
Administrative Expense	(2,821)
Net Changes	194,998
Balance at 6/30/2019	\$ 1,299,996

Net OPEB Liability (Asset)

Balance at 6/30/2019	\$ 20,108,753
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Changes of Assumptions

The discount rate changed from 6.45% to 6.25%. The mortality, retirement, withdrawal, and trend assumptions were updated. It is now assumed that husbands are three years older than wives for all employees.

Changes of Benefit Terms

Prior valuation describes different eligibility requirements for firefighters and police (Age 55 and 10 years of service or 20 years of service), Local 1033 (Age 58 and 20 years of service or 30 years of service), and Non-Union (Age 58 and 10 years of service or 30 years of service).

¹Each year's loss (or gain) is recognized over a closed period, using the average of the expected remaining service lives of all active and inactive employees that are currently receiving a benefit or may be eligible to receive a benefit in the future.

²These figures are based on estimated benefit payments. These amounts may be adjusted for actual benefit payments made during the year.

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Deferred Outflows/Inflows and Sensitivity

Deferred Outflows of Resources	Total
Differences between Expected and Actual Experience	\$ 0
Changes of Assumptions	0
Net Difference between Projected and Actual Earnings	0
Benefit Payments subsequent to the Measurement Date (6/30/2019) ¹	0
Total Deferred Outflows	\$ 0

Deferred Inflows of Resources	
Differences between Expected and Actual Experience	\$ 3,369,126
Changes of Assumptions	8,148,583
Net Difference between Projected and Actual Earnings	18,738
Total Deferred Inflows	\$ 11,536,447

Sensitivity of Net OPEB Liability to Changes in the Discount Rate

The following presents the net OPEB liability of the Plan, as well as what the Plan's net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate:

Net OPEB Liability (Asset)

1% Increase (7.25%)	\$ 18,377,234
Current Discount Rate (6.25%)	\$ 20,108,753
1% Decrease (5.25%)	\$ 22,086,904

Sensitivity of Net OPEB Liability to Changes in the Healthcare Cost Trend Rate

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

Net OPEB Liability (Asset)

1% Increase	\$ 22,783,996
Current Rates	\$ 20,108,753
1% Decrease	\$ 17,849,125

¹These figures are based on estimated benefit payments. These amounts may be adjusted for actual benefit payments made.

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OPEB Expense and Future Recognition of Deferred Outflows and (Inflows)

OPEB Expense

	Total
Fiscal Year Ending 6/30/2019	
Service Cost	\$ 629,298
Interest on Total OPEB Liability	1,663,671
Changes of Benefit Terms	(1,300,309)
Expected Investment Income	(72,594)
Contributions - Employee	0
Amortization of Deferred Outflows	0
Amortization of Deferred Inflows	(1,510,700)
Administrative Expense	2,821
Other Changes	0
Total OPEB Expense	\$ (587,813)

Future Deferred Outflows and (Inflows) to be Recognized as OPEB Expense (Income)

Fiscal Year Ending	
June 30, 2020	\$ (1,510,700)
June 30, 2021	(1,510,700)
June 30, 2022	(1,510,701)
June 30, 2023	(1,506,957)
June 30, 2024	(1,505,080)
Thereafter	(3,992,309)

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Deferred Outflows and Inflows of Resources Bases

Deferred Inflows of Resources

Date	Initial Balance	Annual Recognition	Remaining Balance	Remaining Recognition Period	Type
June 30, 2018	9,935,659	1,045,859	7,843,941	7.5 years	Assumption Change
June 30, 2018	16,743	3,745	11,236	3 years	Asset Gain
June 30, 2019	3,790,267	421,141	3,369,126	8 years	Experience Change
June 30, 2019	342,722	38,080	304,642	8 years	Assumption Change
June 30, 2019	9,377	1,875	7,502	4 years	Asset Gain
Total		1,510,700	11,536,447		

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Required Supplementary Information

Fiscal Year Ending ¹	2019	2018
Total OPEB Liability		
Service Cost	\$ 629,298	\$ 1,272,219
Interest	1,663,671	1,107,847
Changes of Benefit Terms	(1,300,309)	0
Differences between Expected and Actual Experience	(3,790,267)	0
Changes of Assumptions	(342,722)	(9,935,659)
Benefit Payments	(1,341,871)	(1,341,095)
Other Changes	0	0
Net Change	(4,482,200)	(8,896,688)
Total OPEB Liability - Beginning	25,890,949	34,787,637
Total OPEB Liability - Ending	\$ 21,408,749	\$ 25,890,949
Plan Fiduciary Net Position		
Contributions - Employer	\$ 1,457,719	\$ 2,431,147
Contributions - Employee	0	0
Net Investment Income	81,971	19,422
Benefit Payments	(1,341,871)	(1,431,147)
Administrative Expense	(2,821)	0
Net change	194,998	1,019,422
Plan Fiduciary Net Position - Beginning	1,104,998	85,576
Plan Fiduciary Net Position - Ending	\$ 1,299,996	\$ 1,104,998
Net OPEB Liability (Asset)	\$ 20,108,753	\$ 24,785,951
Plan Fiduciary Net Position as a % of Total OPEB Liability	6.07%	4.27%
Covered-Employee Payroll	\$ 14,527,723	\$ 12,603,767
Net OPEB Liability as a % of Covered-Employee Payroll	138.42%	196.66%

¹This information is shown for the last 10 years, if available.

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Schedule of Investment Returns and Long-Term Expected Rate of Return

Schedule of Investment Returns

Fiscal Year Ending ¹	Annual Money-Weighted Rate of Return, Net of Investment Expense
2018	2.82%
2019	7.04%

Long-Term Expected Rate of Return

The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of OPEB plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage.

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return	*The real rate of returns presented are net of inflation. Inflation is assumed to be 2.5%.
U.S. Equity	24.50%	5.50%	
Non-U.S. Equity	10.50%	6.00%	
U.S. Aggregate Bonds	21.00%	3.00%	
Intermediate-Term Credit	12.60%	3.00%	
Short-Term Credit	8.40%	2.50%	
Intermediate-Term TIPS	15.00%	1.00%	
REITs	8.00%	5.00%	

The discount rate used to measure the total OPEB liability was 6.25%. The projection of cash flows used to determine the discount rate assumed that contributions from the Town will be \$400,000 annually. Based on those assumptions, the OPEB plan's fiduciary net position was projected to be available to make all projected OPEB payments for current active and inactive employees. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

¹This information is shown for the last 10 years, if available.

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Schedule of Employer Contributions

Year ¹	Actuarially Determined Contribution	Contributions From Employer	Contribution Deficiency/(Excess)	Covered Employee Payroll	Contributions as a % of Payroll
2018	\$ 2,012,090	\$ 2,431,147	\$ (419,057)	\$ 12,603,767	19.29%
2019	\$ 2,038,110	\$ 1,457,719	\$ 580,391	\$ 14,527,723	10.03%

The Actuarially Determined Contribution (ADC) has two components: 1) amortized portion of the unfunded accrued liability and 2) the service cost. The methods and assumptions used in determining the ADC are consistent with assumptions and methods from this valuation used to determine the Total OPEB liability. The unfunded actuarial liability is determined using market value and is amortized over 30 years.

¹This information is shown for the last 10 years, if available.