Milliman Actuarial Valuation

Milliman

TOWN OF NORTH PROVIDENCE
OTHER POST-EMPLOYMENT BENEFITS PROGRAM

July 1, 2014 Actuarial Valuation

Prepared by
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October 20, 2014

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Certification

We have performed an actuarial valuation of the Town of North Providence Other Post-Employment Benefits Program as of July 1, 2014. The results of this valuation, along with supporting data, are set forth in the following report.

Milliman has prepared this report in compliance with Government Accounting Standard No. 45. No attempt is being made to offer any accounting opinion or advice. The calculations reported herein have been made on a basis consistent with our understanding of the plan provisions. Additional determinations may be needed for purposes other than meeting accounting requirements.

In preparing this report, we relied on employee census data, claims and premium information as of the valuation date, furnished by the Town of North Providence. We performed a limited review of the information used directly in our analysis for reasonableness and consistency and have found them to be reasonably consistent and comparable with data used for other purposes. If the information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete and our calculations may need to be revised. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge, this report is complete and accurate, all costs and liabilities were determined in conformance with generally accepted actuarial principles and practices, and the methods and assumptions produced results which are reasonable. 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 or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

The actuarial method and assumptions used in this valuation are discussed on pages 18-24 of this report. A summary of the plan provisions starts on page 25 of this report.

Milliman's work is prepared solely for the internal business use of the Town of North Providence. To the extent that Milliman's work is not subject to disclosure under applicable public records laws, Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exception(s): (a) The Town of North Providence may provide a copy of Milliman's work, in its entirety, to the Town of North Providence's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit the Town of North Providence; and (b) The Town of North Providence may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law.

Certification

No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension and health actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

October 20, 2014

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Discussion of Experience

This valuation reflects a number of changes relative to the July 1, 2012 valuation:

Demographic Changes from 2012 to 2014

From July 1, 2012 to July 1, 2014, the overall membership decreased from 977 to 933. The total number of active members decreased from 705 to 683 and the total number of retirees and spouses of retirees decreased from 272 to 250.

The average age of active members increased from 45.2 to 46.4 and the average age of retired members increased from 55.7 to 56.9.

Assumption Changes

Medical age curves: We updated the age curves with respect to expected claims costs, based on our analysis of the claims experience and premium information provided to us for this valuation.

Medical inflation: The medical cost inflation trend used in this valuation was derived from the "Getzen Model" established by the Society of Actuaries for developing long term medical cost trends. This assumption was revised to an initial inflation rate of 5.65%, grading down to an ultimate inflation rate of 4.40% over a period of 83 years (Prior valuation: an initial inflation rate of 7.30% graded down to an ultimate inflation rate of 4.70% over a period of 70 years for Pre-65 and an initial inflation rate of 7.30% graded down to an ultimate inflation rate of 4.70% over a period of 69 years for Post-65).

The combined effect of the above changes reduced the Accrued Liability by about $6.4 million and reduced the Annual Required Contribution by about $610,000.

Overview of GASB 43 and GASB 45

GASB 43 requires OPEB plans to disclose information about asset and liability levels and show historical contribution information. GASB 43 only applies in situations where a separate trust is established to prefund these benefits. GASB 45 requires employers to perform periodic actuarial valuations to determine annual accounting costs, and to keep a running tally of the extent to which these amounts are over or under funded. GASB 43 was effective starting in FY 2006-07 for a Phase I government, FY 2007-08 for a Phase II government, and FY 2008-09 for a Phase III government. GASB 45 was effective for the fiscal year following implementation of GASB 43.

GASB 43 and 45 apply to just about any benefit that is provided after retirement except for pension benefits: medical insurance, dental, vision, and hearing benefits plus life insurance and long term care insurance. The benefits provided by the Town to retirees include medical and dental insurance. The philosophy driving the accounting standard is that these post-employment benefits are part of the compensation that is paid to employees in return for their services, and the cost of these benefits should be recognized while the employees are providing those services, rather than after they have retired. This philosophy has already been applied for years to defined benefit pensions; GASB 43 and 45 extend the same thinking to all other post-employment benefits.

The Valuation Process

The process of determining the liability for OPEB benefits is based on many assumptions about future events. The key actuarial assumptions are:

Turnover and retirement rates: How likely is it that an employee will qualify for post-employment benefits and when will they start?

Medical inflation and claims costs assumptions: When an employee starts receiving post-employment benefits many years from now, how much will be paid each year for the benefits and how rapidly will the costs grow?

Mortality assumption: How long is a retiree likely to receive the benefits?

Discount rate assumption: What is the present value of those future benefit payments in terms of today's dollars?

Since the liability is being recognized over the employee's whole career with the Town, the present value is divided into three pieces: the part that is attributed to past years (the "Accrued Liability" or "Past Service Liability"), the part that is being earned this year (the "Normal Cost"), and the part that will be earned in future years (the "Future Service Liability").

Once the Accrued Liability and the Normal Cost have been calculated, the next step is to determine an annual contribution. This consists of two pieces:

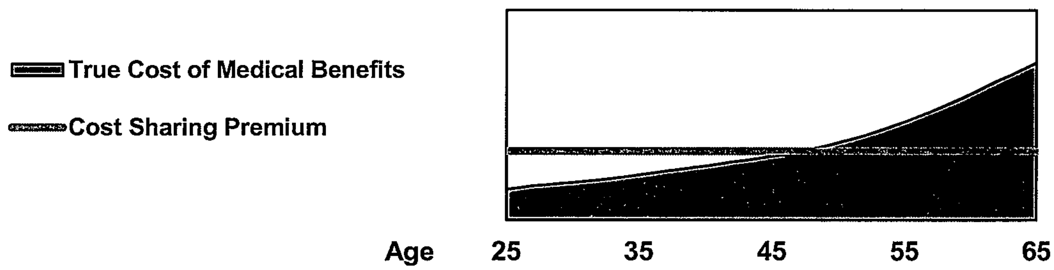
- Normal Cost – because the benefits earned each year should be paid for each year
- Past Service Cost – a catch-up payment to fund the Accrued Liability over time.

The final step is to keep track going forward of how much of the contribution is actually paid. There is no requirement to actually fund these benefits, but the cumulative deficiency must be disclosed on the Town's financial statements. In addition, the Discount Rate used to calculate the liabilities must reflect the expected investment income of whatever funds are set aside to prefund the benefits; if there is no prefunding then the Discount Rate will be much lower and the liabilities significantly higher than if the benefits are prefunded.

Implicit Rate Subsidies

As part of the Other Post-Employment Benefits Program, there are situations where the cost is borne partly or entirely by retirees. In most cases, the premium that is used to split the cost is lower than the true cost of providing the medical benefits, for two reasons:

- The cost sharing premium is usually a fixed amount such as a COBRA premium that does not take into account the age of the retiree and his/her dependents. Since medical costs generally increase with age, the cost sharing premium is often lower than the true cost of the medical benefits:



- The cost sharing premium is usually a blended rate that takes into account the cost of medical benefits for active employees as well as retirees. Medical costs are generally higher for retirees than for active employees of the same age. This means that, again, the cost sharing premium is often lower than the true cost of the medical benefits.

Because of these two factors, a retiree who is paying 100% of the cost sharing premium is most likely not paying 100% of the true cost of the medical benefits. This situation is known as an "implicit rate subsidy". GASB 43 and 45 require the plan sponsor to measure the liability for this subsidy; that is, the difference between the true cost of the medical benefits and the cost sharing premiums paid by the retiree. To do this, our valuation consists of several steps:

First, we calculate the liability for the true cost of medical benefits expected to be received by retirees and their dependents. This liability is based on factors developed by Milliman's health actuaries that reflect how the cost of medical benefits varies by age and gender, as well as the other assumptions discussed on the prior page. We term this amount the "gross liability".

Next, we calculate the liability for the future premiums expected to be paid by the retiree for their own and their dependents' coverage. This liability is based on the current premium rates without adjustment for age or gender. It also is based on the terms of the retiree medical program – different retirees pay different percentages based on their union, date of retirement, age at retirement, and other factors. We term this amount the "offset liability".

Finally, the net liability for the Town is calculated as the difference between the gross liability and the offset liability.

Summary of Liabilities as of July 1, 2014

We have calculated the Accrued Liability separately for five groups of Town employees, who are eligible for different OPEB benefits. We have broken the accrued liability into several pieces: benefits that are expected to be paid prior to age 65 (i.e. prior to Medicare) and after age 65 (i.e. after Medicare) to current active members and their covered dependents after retirement, and the same figures for members who have already retired and are currently receiving benefits. In all cases, the Accrued Liability only reflects benefits that are paid for by the Town, taking into account any implicit rate subsidies.

	Fire	Police	Town Others	School Teachers	School Others	Total
Current active members						
Employees under age 65	$5,348,321	$6,996,059	$1,094,104	$3,067,215	$455,875	$16,961,574
Employees over age 65	0	0	502,665	0	370,149	872,814
Dependents under age 65	5,345,975	7,409,827	587,117	907,924	175,385	14,426,228
Dependents over age 65	0	0	330,715	0	546,401	877,116
Total	10,694,296	14,405,886	2,514,601	3,975,139	1,547,810	33,137,732
Current retired members						
Employees under age 65	8,619,994	4,863,213	121,267	1,721,395	13,316	15,339,185
Employees over age 65	0	0	9,323	0	0	9,323
Dependents under age 65	8,773,128	4,890,412	92,926	921,671	0	14,678,137
Dependents over age 65	0	0	0	0	0	0
Total	17,393,122	9,753,625	223,516	2,643,066	13,316	30,026,645
Total Accrued Liability	28,087,418	24,159,511	2,738,117	6,618,205	1,561,126	63,164,377

Annual Required Contribution

The Annual Required Contribution (ARC) for the OPEB program consists of two pieces: a **Normal Cost** (the cost of benefits earned each year should be accrued in that year) plus a **Past Service Cost** (a catch-up accrual to amortize the Unfunded Accrued Liability).

The amortization period is 30 years starting for FYE 2009. The amortization method produces annual payments that will increase by 3.50% annually. On this basis, the ARC is determined as follows:

	Fire	Police	Town Others	School Teachers	School Others	Total
At 4.00% Discount Rate:						
Accrued Liability	$28,087,418	$24,159,511	$2,738,117	$6,618,205	$1,561,126	$63,164,377
Assets	0	0	0	0	0	0
Unfunded Accrued Liability	28,087,418	24,159,511	2,738,117	6,618,205	1,561,126	63,164,377
Amortization Period	23	23	23	23	23	23
Amortization Growth Rate	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Past Service Cost	1,287,019	1,107,035	125,466	303,259	71,534	2,894,313
Net Normal Cost	639,135	1,208,563	191,672	171,618	100,289	2,311,277
Interest	77,046	92,624	12,686	18,995	6,873	208,224
ARC for FY 2016	2,003,200	2,408,222	329,824	493,872	178,696	5,413,814
Expected Benefit Payouts	1,629,168	732,662	193,952	545,448	43,633	3,144,863

The ARC is assumed to be paid at the beginning of the Fiscal Year.

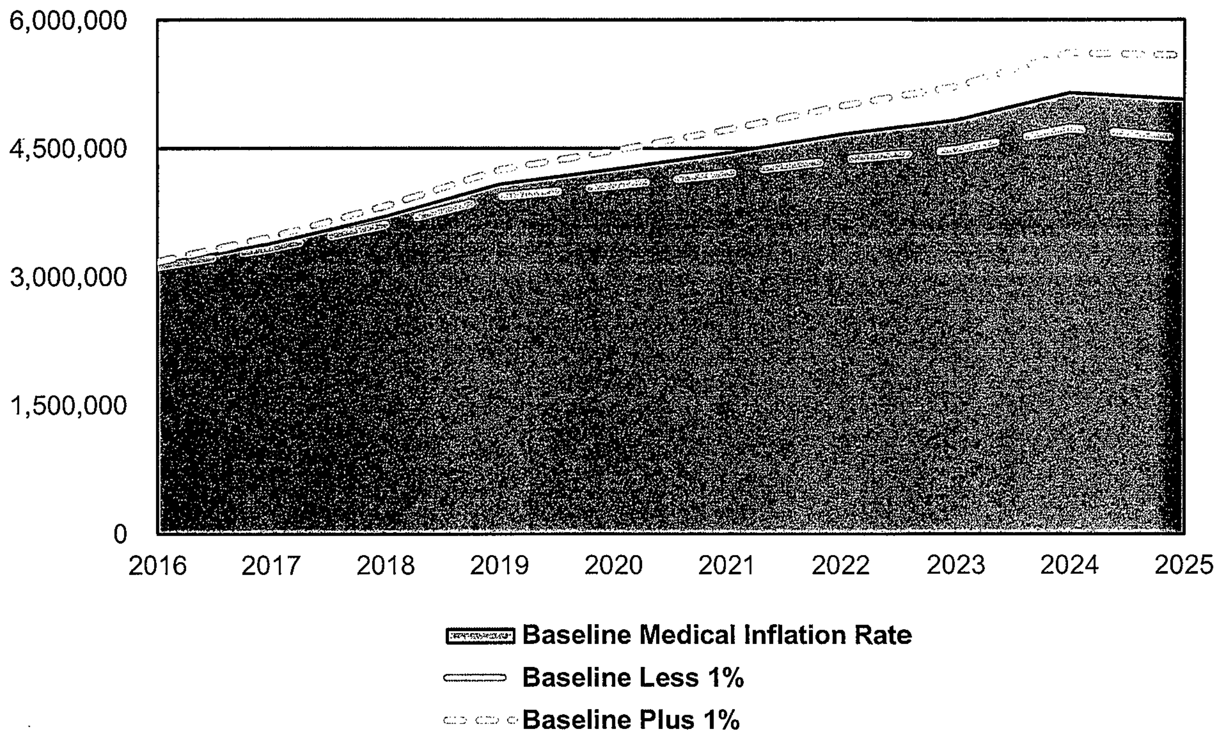
We also looked at a prefunding scenario that assumes annual contributions to fully prefund the OPEB benefits are paid to an OPEB trust that is expected to earn 7.00% over the long term:

	Fire	Police	Town Others	School Teachers	School Others	Total
At 7.00% Discount Rate:						
Accrued Liability	$21,617,333	$17,072,761	$2,000,506	$5,319,206	$1,182,462	$47,192,268
Assets	0	0	0	0	0	0
Unfunded Accrued Liability	21,617,333	17,072,761	2,000,506	5,319,206	1,182,462	47,192,268
Amortization Period	23	23	23	23	23	23
Amortization Growth Rate	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Past Service Cost	1,322,621	1,044,569	122,398	325,447	72,347	2,887,382
Net Normal Cost	382,465	700,270	136,165	120,403	71,471	1,410,774
Interest	119,356	122,139	18,099	31,210	10,067	300,871
ARC for FY 2016	1,824,442	1,866,978	276,662	477,060	153,885	4,599,027
Expected Benefit Payouts	1,629,168	732,662	193,952	545,448	43,633	3,144,863
Net Budget Impact	195,274	1,134,316	82,710	(68,388)	110,252	1,454,164

Projected Payouts

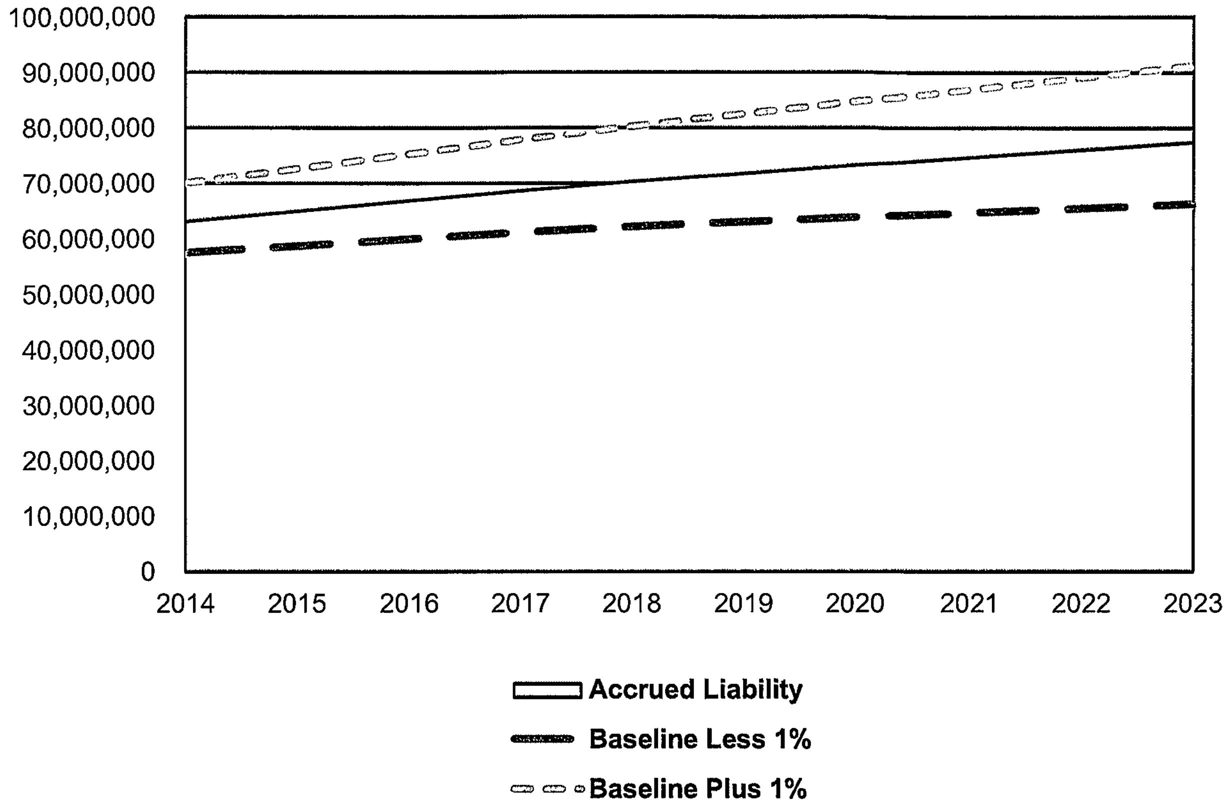
The table and graph below show the expected annual payments for OPEB benefits for the next 10 years.

Fiscal Year	Baseline Less 1%	Baseline Medical Inflation Rate	Baseline Plus 1%
2016	$3,115,036	$3,144,863	$3,174,690
2017	3,329,313	3,393,481	3,458,259
2018	3,605,444	3,710,224	3,817,013
2019	3,932,113	4,085,183	4,242,675
2020	4,059,141	4,257,592	4,463,723
2021	4,199,345	4,446,880	4,706,445
2022	4,360,128	4,661,341	4,980,204
2023	4,475,935	4,830,859	5,210,151
2024	4,727,177	5,150,701	5,607,599
2025	4,612,417	5,073,595	5,575,839



Projected Liabilities

The graph below shows how the Town's accrued liability for OPEB benefits is expected to grow over the next 10 years.



GASB 45 Schedule of Funding Progress

The following information is required to be disclosed in the Town's financial statement.

($ 000s)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Accrued Liability (b)	Unfunded Accrued Liability (UAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAL as a Percentage of Covered Payroll ((b - a) / c)
7/1/2008	$0	$52,758	$52,758	0.00%	N/A	N/A
7/1/2010	0	61,278	61,278	0.00%	N/A	N/A
7/1/2012	0	66,227	66,227	0.00%	41,332	160%
7/1/2014	0	63,164	63,164	0.00%	37,460	169%

GASB 45 Schedule of Employer Contributions

The following information is required to be disclosed in the Town's financial statement.

($ 000s)

Year Ended June 30	Annual Required Contribution	Actual Contribution Made	Percentage Contributed
2009	$4,039	$1,613	39.9%
2010	4,289	1,945	45.3%
2011	4,549	2,208	48.5%
2012	4,686	2,771	59.1%
2013	4,955	2,841	57.3%
2014	5,332	2,961	55.5%
2015	5,651	N/A	N/A
2016	5,414	N/A	N/A

Summary of Census Data

The following were included in our analysis based on information provided as of July 1, 2014 by the Town.

	Fire	Police	Town Others	School Teachers	School Others	Total
Number of members						
Active	90	65	112	318	98	683
Retired members	55	29	7	49	1	141
Spouses of retirees	52	27	5	25	0	109
Total	197	121	124	392	99	933
Average age						
Active	41.2	38.6	51.2	44.9	55.5	46.4
Retired members	54.1	52.7	65.1	61.3	64.0	56.9
Average retirement age						
Active	54.8	48.6	63.7	63.0	64.7	60.9
Retired members	47.0	43.5	62.5	55.5	62.0	50.1
Expected lifetime						
Active [to retirement]	13.6	10.0	12.5	18.1	9.2	14.5
Retired [lifetime]	28.8	30.0	21.9	27.2	23.4	28.1

The retiree census data excludes post 65 Medicare eligible retired members who are paying 100% of the premium.

Where complete census data was not available, we have made assumptions which we believe to be reasonable.

Current Premiums

Based on information provided by the Town regarding current plan elections, the following weighted average blended actual premiums were used:

2014 - 2015 Monthly Premiums		Employee	Spouse
Medical -	Town	$656.11	$1,086.22
Medical -	BOE	559.45	903.75
Dental -	Town	30.32	62.07
Dental -	BOE	31.27	70.55

Health Cost Adjustment Factors

Milliman's Health Cost Guidelines were used to develop the expected true cost of health care benefits by age. Representative health care costs (per person per month) are shown below.

	Fire and Police - Medical		Town - Medical	
Age	Employee	Spouse*	Employee	Spouse
40	$519	$976	$519	$617
45	611	1,045	611	686
50	742	1,165	742	805
55	940	1,313	940	953
60	1,202	1,500	1,202	1,140
65	765	714	765	714
70	898	824	898	824
75	1,044	936	1,044	936
80	1,171	1,049	1,171	1,049

	BOE - Medical	
Age	Employee	Spouse
40	$551	$387
45	599	465
50	678	584
55	793	743
60	954	942
65	589	611
70	682	714
75	779	825
80	873	926

* Child dependent claim costs are included with pre-65 spouse claim costs.

Glossary

The following is an explanation of many of the terms referenced by the Statement of the Governmental Accounting Standards Board, "Accounting and Financial Reporting by Employers for Postemployment Benefits Other than Pensions".

Actuarial Cost Method - This is a procedure for determining the Actuarial Present Value of Benefits and allocating it to time periods to produce the Actuarial Accrued Liability and the Normal Cost. The Statement assumes a closed group of employees and other participants unless otherwise stated; that is, no new entrants are assumed. Six methods are permitted – Unit Credit, Entry Age Normal, Attained Age, Aggregate, Frozen Entry Age, and Frozen Attained Age.

Accrued Liability - This is the portion of the Actuarial Present Value of Benefits attributable to periods prior to the valuation date by the Actuarial Cost Method (i.e., that portion not provided by future Normal Costs).

Actuarial Assumptions - With any valuation of future benefits, assumptions of anticipated future events are required. If actual events differ from the assumptions made, the actual cost of the plan will vary as well. Some examples of key assumptions include the discount rate, medical cost inflation, and rates of mortality, turnover and retirement.

Actuarial Present Value of Benefits - This is the value, as of the applicable date, of future payments for benefits and expenses under the Plan, where each payment is: a) Multiplied by the probability of the event occurring on which the payment is conditioned, such as the probability of survival, death, disability, termination of employment, etc.; and b) Discounted at the assumed discount rate.

Actuarial Value of Assets - This is the value of cash, investments and other property belonging to the Plan, as used by the actuary for the purpose of an Actuarial Valuation.

Amortization Payment - This is the amount of the contribution required to pay interest on and to amortize over a given period the Unfunded Actuarial Accrued Liability or the Unfunded Frozen Actuarial Accrued Liability. A closed amortization period is a specific number of years counted from one date and reducing to zero with the passage of time; an open amortization period is one that begins again or is recalculated at each actuarial valuation date.

Annual Required Contribution ("ARC") - This is the employer's periodic required contribution to a defined benefit OPEB plan, calculated in accordance with the set of requirements for calculating actuarially determined OPEB information included in financial reports.

Attribution Period - The period of an employee's service to which the expected postretirement benefit obligation for that employee is assigned. The beginning of the attribution period is the employee's date of hire and costs are spread across all employment.

Benefit Payments - The monetary or in-kind benefits or benefit coverage to which participants may be entitled under a post employment benefit plan, including health care benefits and life insurance not provided through a pension plan.

Glossary

Discount Rate - GASB 45 requires that the interest rate used to discount future benefit payments back to the present day be based on the expected rate of return on any investments set aside to pay for these benefits. If no funds are set aside for this purpose, the discount rate would be based on the expected return of the employer's general funds.

Funding Excess - This is the excess of the Actuarial Value of Assets over the Actuarial Accrued Liability.

Health Cost Trend - This is the rate at which health costs are assumed to increase over time.

Implicit Rate Subsidy - This is the excess of the expected health care cost per retired member over the gross premium charged for that coverage. In most cases, the gross premium charged to a retiree is less than the expected health care cost, since the premium is a blended average rate that does not fully reflect the above-average, increasing costs by age that apply during retirement.

Normal Cost - This is the portion of the Actuarial Present Value of Benefits allocated to a valuation year by the Actuarial Cost Method.

Net OPEB Obligation - This is the cumulative difference since the effective date of this statement between the 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.

Other Post-employment Benefits ("OPEB") - This refers to post-employment benefits other than pension benefits, including healthcare benefits regardless of the type of plan that provides them, and all other post-employment benefits provided separately from a pension plan, excluding benefits defined as termination benefits or offers.

Past Service Cost - This is a catch-up payment to fund the Unfunded Actuarial Accrued Liability over time (generally 10 to 30 years). Also known as the **Amortization Payment**.

Return on Plan Assets - This is the actual investment return on plan assets during the fiscal year.

Substantive Plan - The terms of the postretirement benefit plan as understood by an employer that provides postretirement benefits and the employees who render services in exchange for those benefits. The substantive plan is the basis for the accounting for the plan.

Unfunded Actuarial Accrued Liability - This is the excess of the Actuarial Accrued Liability over the Actuarial Value of Assets.

Actuarial Method

The actuarial funding method used is the **Projected Unit Credit Cost Method**. Recommended annual contributions consist of two pieces: Normal Cost plus a payment towards the Unfunded Accrued Liability.

The **Accrued Liability** is determined directly as the present value of benefits accrued to date, where the accrued benefit for each Member is the pro-rata portion (based on service to date) of the **projected** benefit payable at death, disability, retirement or termination.

The **Normal Cost** is similarly determined as the present value of the portion of the **projected** benefit attributable to the current year.

The **Unfunded Accrued Liability** is the Accrued Liability less the value of any plan assets.

Actuarial Assumptions

Discount Rate 4.00%

Medical Inflation Rate 5.65% - 4.40% over 83 years (Prior: Pre-65: 7.30% - 4.70% over 70 years and Post-65: 7.30% - 4.70% over 69 years)

Dental Inflation Rate 3.00%

Amortization Growth Rate 3.50%

Post-Retirement Mortality

Healthy

Teachers#: 97% of rates in a GRS table based on male teacher experience, projected with Scale AA from 2000. 92% of rates in a GRS table based on female teacher experience, projected with Scale AA from 2000. This assumption includes a margin for mortality improvement beyond the valuation date. Sample rates are shown below:

	Number of Deaths per 100	
Age	**Male**	**Female**
50	0.27	0.14
55	0.46	0.35
60	0.43	0.43
65	0.55	0.40
70	1.45	0.82
75	2.42	1.31
80	4.78	2.92

Police: RP-2000 Combined Healthy Table for males and females with generational projection per Scale AA. This assumption includes a margin for mortality improvement beyond the valuation date.

All Others#: 115% of the RP-2000 Combined Healthy for Males with White Collar adjustments, projected with Scale AA. 95% of the RP-2000 Combined Healthy for Females with White Collar adjustments, projected with Scale AA. This assumption includes a margin for mortality improvement beyond the valuation date.

Disabled

Police: RP-2000 Disabled Table. This assumption does not include a margin for mortality improvement beyond the valuation date.

All Others#: 60% of the PBGC Table Va for disabled males eligible for Social Security disability benefits. 60% of the PBGC Table VIa for disabled females eligible for Social Security disability benefits. This assumption does not include a margin for mortality improvement beyond the valuation date.

Actuarial Assumptions

Pre-Retirement Mortality

Police: RP-2000 Combined Healthy Table for males and females with generational projection per Scale AA. This assumption includes a margin for mortality improvement beyond the valuation date.

Teachers#: 50% of RP-2000 Combined Healthy for Males with White Collar adjustments. 50% of RP-2000 Combined Healthy for Females with White Collar Adjustments. This assumption does not include a margin for mortality improvement beyond the valuation date.

All Others#: 75% of RP-2000 Combined Healthy for Males with White Collar adjustments. 75% of RP-2000 Combined Healthy for Females with White Collar Adjustments. This assumption does not include a margin for mortality improvement beyond the valuation date.

Turnover

Teachers#: rates based on gender and length of service:

Service	Male Rate	Female Rate
0	17.00%	8.90%
5	2.89%	4.55%
10	1.20%	2.33%
15	1.20%	1.19%
20	0.94%	0.61%

General Employees#: rates based on gender and length of service:

Service	Male Rate	Female Rate
0	17.50%	18.00%
5	5.52%	5.84%
10	2.60%	2.55%
15	2.01%	1.59%
20	1.75%	1.12%

Police: rates based on age:

Age	Rate
20	2.90%
25	2.90%
30	2.90%
35	1.90%
40	1.70%
45	0.00%

Actuarial Assumptions

Turnover

Fire#: rates based on length of service:

Service	Rate
0	10.00%
5	3.54%
10	1.91%
15	0.90%
20	0.00%

Disability

Teachers#: sample rates are shown below:

Age	Service-Connected	Non Service-Connected
25	0.004%	0.023%
35	0.006%	0.038%
45	0.014%	0.090%
55	0.040%	0.253%
65	0.000%	0.000%

Police: 50% of the 1985 Pension Disability Table (DP-85) Class 4. 50% of disabilities are assumed to be duty related.

Fire#: sample rates are shown below:

Age	Service-Connected	Non Service-Connected
25	0.255%	0.043%
35	0.435%	0.073%
45	1.080%	0.180%
55	1.815%	0.303%
65	1.815%	0.303%

All Others#: sample rates are shown below:

	Service-Connected		Non Service-Connected	
Age	Male	Female	Male	Female
25	0.023%	0.008%	0.063%	0.027%
35	0.038%	0.012%	0.105%	0.045%
45	0.090%	0.029%	0.252%	0.108%
55	0.253%	0.081%	0.707%	0.303%
65	0.000%	0.000%	0.000%	0.000%

Actuarial Assumptions

Retirement

Teachers – Schedule A/AB Members#: rates are based on gender, age and length of service. 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.

Teachers – Schedule B Members#: 75% of members are assumed to retire when first eligible. The rates in the table below are applied after first eligibility.

Because of the enactment of Article 7 in 2009 and the Rhode Island Retirement Security Act (RIRSA) in 2011, the retirement assumption was modified for members not eligible for retirement as of September 30, 2009. Members who would have been assumed to retire prior to age 62 under the previous rules, are assumed to retire when first eligible for an unreduced benefit. This is recognized by adding 10% probability for every year the member has been deferred.

Male Rate				Female Rate			
Service (0/28)		Age (60/10)		Service (0/28)		Age (60/10)	
Service	Rate	Age	Rate	Sevice	Rate	Age	Rate
28	25%	60	20%	28	20%	60	20%
29	15%	61	15%	29	15%	61	15%
30	20%	62	30%	30	20%	62	25%
31	20%	63	25%	31	20%	63	20%
32	30%	64	10%	32	30%	64	20%
33	30%	65	25%	33	30%	65	35%
34	40%	66	25%	34	35%	66	25%
35	55%	67	25%	35	50%	67	25%
36	40%	68	25%	36	40%	68	25%
37	40%	69	25%	37	40%	69	25%
38	40%	70	25%	38	40%	70	25%
39	40%	71	25%	39	40%	71	25%
40	100%	72	25%	40	100%	72	25%
		73	25%			73	25%
		74	25%			74	25%
		75	100%			75	100%

Early retirement rates are based on age:

Age	Rate
55-58	0%
59	1%
60-62	2%
63	3%
64	4%
65	5%
66	6%

Actuarial Assumptions

Retirement

General Employees#: separate male and female rates. For members who reach 30 years of service before age 58, rates are based on length of service. For other members, rates are based on age.

Because of the enactment of the Rhode Island Retirement Security Act (RIRSA) in 2011, the retirement assumption was modified for members not eligible for retirement as of June 30, 2012. Members who would have been assumed to retire at an earlier age under the previous rules, are assumed to retire when first eligible for an unreduced benefit. This is recognized by adding 10% probability for every year the member has been deferred.

Male Rate				Female Rate			
Service (0/30)		Age (58/10)		Service (0/30)		Age (58/10)	
Service	Rate	Age	Rate	Sevice	Rate	Age	Rate
30	30%	58	12%	30	30%	58	12%
31	30%	59	10%	31	25%	59	10%
32	25%	60	10%	32	10%	60	10%
33	25%	61	10%	33	10%	61	10%
34	25%	62	30%	34	10%	62	20%
35	25%	63	20%	35	15%	63	15%
36	25%	64	20%	36	20%	64	15%
37	25%	65	20%	37	25%	65	20%
38	35%	66	25%	38	25%	66	25%
39	50%	67	25%	39	25%	67	25%
40	100%	68	25%	40	100%	68	25%
		69	30%			69	25%
		70-74	30%			70-74	20%
		75	100%			75	100%

Early retirement rates are based on years from normal retirement age:

Years from Normal Retirement Age	Rate
3-5	2%
2	3%
1	4%

Police: rates based on service:

Service	Rate
20	40%
21-22	30%
23-25	40%
26-27	5%
28	100%

Actuarial Assumptions

Retirement

Fire#: rates are based on length of service. All members are assumed to retire upon reaching age 65 with at least 10 years of service.

Because of the enactment of the Rhode Island Retirement Security Act (RIRSA) in 2011, the retirement assumption was modified for members not eligible for retirement as of June 30, 2012. Members who would have been assumed to retire at an earlier age under the previous rules, are assumed to retire when first eligible for an unreduced benefit. This is recognized by adding 10% probability for every year the member has been deferred.

Service	Rate
20	12%
21-23	10%
24	12%
25	14%
26	16%
27	18%
28-29	20%
30+	35%

Future Retire Coverage

Active members are assumed to elect coverage at retirement as follows.

	Percentage
School Teachers	95%
School Others	100%
Police	90%
Fire	100%
Town Others	100%

Future Dependent Coverage

Current active members are assumed to elect dependent coverage at retirement as follows. All female spouses are assumed to be 3 years younger than males.

	Male	Female
School Teachers	50%	40%
School Others	90%	90%
Police and **Fire**	90%	90%
Town Others	80%	50%

Valuation of Dental Benefits

It is assumed that there is no implicit rate subsidy associated with dental benefits.

Valuation of Benefits for Children

Benefits attributed to children have been excluded from this valuation for all groups, except Police and Fire, as they were determined to be de minimis.

Certain actuarial demographic assumptions are based on the assumptions used in the June 30, 2012 valuations of the Employees Retirement System of Rhode Island and the Municipal Employees' Retirement System State of Rhode Island.

Summary of Plan Provisions

This summary is intended only to describe our understanding of the essential features of the benefits that will be provided to future retirees based on copies of bargaining agreements, applicable personnel rules and the benefits being currently provided to retired members. All eligibility requirements and benefit amounts shall be determined in strict accordance with the relevant plan documents. To the extent that this summary does not accurately reflect the plan provisions, then the results of this valuation may not be accurate.

Eligibility

School Teachers and **Administrators**

Members who have retired under the Employees' Retirement System of Rhode Island (ERSRI), with a minimum of 15 years of service (20 years of service for Schedule B members) with the North Providence School System, shall be eligible to receive medical and dental benefits for self and spouse.

Eligibility for retirement is as follows:

Schedule A Members (Vested by 7/1/2005 with 10 years of service):

Members eligible for retirement by September 30, 2009 (Grandfathered Schedule A):

The earlier of 28 years of service, or age 60 with 10 years of service.

Members ineligible for retirement at September 30, 2009 (Schedule AB):

Eligible for Normal Retirement at an individually determined age. This age is the result of interpolating between the retirement age under Schedule A and the retirement age applicable to members hired after September 30, 2009.

Schedule B Members (Vested after 7/1/2005 with 10 years of service):

Members eligible for retirement by September 30, 2009 (Grandfathered Schedule B) or members eligible for retirement after September 30, 2009 and prior to July 1, 2012:

The earlier of age 65 with 10 years of service, or age 59 with 29 years of service.

Summary of Plan Provisions

Eligibility

Members eligible for retirement after July 1, 2012, with at least five years of service as of June 30, 2012:

Eligible for Normal Retirement at an individually determined age. This age is based on the members' social security retirement age with a proportional downward adjustment based on years of service prior to July 1, 2012. The minimum retirement age is 59 with 5 years of service.

Members eligible for retirement on or after July 1, 2012 but with less than five years of service as of June 30, 2012 and members hired on or after that date:

Normal Retirement is on or after their Social Security normal retirement age with 5 years of service.

Transition Rules for Retirement Age:

Members with ten or more years of service by June 30, 2012 may retire at their retirement age under the previous rules.

Members who are within 5 years of reaching normal retirement age with at least 20 years of service.

Police

Members who have retired under the Town of North Providence Police Retirement Plan with at least 20 years of service, shall be eligible to receive medical and dental benefits for self and spouse.

Fire

Members who have retired under the Municipal Employees Retirement System (MERS) for Firefighters, shall be eligible to receive medical and dental benefits for self and spouse.

For all members eligible to retire prior to July 1, 2012, eligibility for retirement is completion of 20 years of service regardless of age.

For all members eligible to retire on or after July 1, 2012, eligibility for retirement is age 55 with 25 years of service.

Summary of Plan Provisions

Eligibility

General Employees

For all members eligible to retire prior to July 1, 2012, eligibility for retirement is the earlier of completion of 30 years of service regardless of age, or age 58 with 10 years of service.

For all new hires or members with less than five years of service on June 30, 2012, the new retirement age will match their Social Security Retirement Age.

Members with five or more years of service on June 30, 2012, will be eligible to retire at their social security retirement age but will receive a proportional downward adjustment based on years of service prior to July 1, 2012, with a minimum retirement age of 59.

Transition Rules for Retirement Age:

> Members with ten or more years of service by June 30, 2012 may retire at their retirement age under the previous rules.
>
> Members who are within 5 years of reaching normal retirement age with at least 20 years of service.

Town Council 94:

Members who have retired under the Municipal Employees Retirement System (MERS) with at least 18 years of service, shall be eligible to receive medical and dental benefits for self and spouse.

Town Local 1033, Town Non-Union, School Teacher Assistants, Clerks, and Secretaries:

Members who have retired under the Municipal Employees Retirement System (MERS) with at least 20 years of service, shall be eligible to receive medical and dental benefits for self and spouse.

School Local 2435:

Members hired after 7/1/1989, and who have retired under the Municipal Employees Retirement System (MERS) with at least 20 years of service (10 years of service if hired prior to 7/1/1989), shall be eligible to receive medical and dental benefits for self and spouse.

Summary of Plan Provisions

Cost Sharing

School Teachers and **Administrators**

Retiree/Spouse – 50% retiree-paid. Coverage is pre-65 only.

Police and **Fire**

Retiree/Spouse – 100% Town-paid. Coverage is pre-65 only. Upon retiree reaching age 65, under 65 spouse and dependents can elect COBRA for 36 months.

Town Others

Retiree/Spouse – 100% Town-paid. Coverage is provided for a period up to 36 months.

School Others

Retiree/Spouse – 100% School-paid. Coverage is provided for a period up to 36 months (coverage is pre-65 only for School Local 2435 hired after July 1, 1989).

Disability

Police

- Disability retirement after 7/1/1979, but before 7/1/2004: 100% Town-paid

- Disability retirement after 7/1/2004: Same co-pay as active ($20.00 per week currently).