Milliman

TOWN OF CHARLESTOWN
OTHER POST-EMPLOYMENT BENEFITS PROGRAM

JULY 1, 2012 VALUATION

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October 31, 2012

PERSONAL & CONFIDENTIAL

Ms. Patricia Anderson
Treasurer
Town of Charlestown
4540 South County Trail
Charlestown, RI 02813

Re: Town of Charlestown Other Post-Employment Benefits

Dear Pat:

We are pleased to provide this actuarial report for the Town of Charlestown Other Post-Employment Benefits. The report shows the financial status of the plan as of July 1, 2012 and presents cost figures for the 2013-14 fiscal year.

We have included 10 bound copies of the report and one unbound copy in case you need to make additional copies.

Please let me know if you have any questions.

Sincerely,

Steve

Steve A. Lemanski, FSA, FCA
Consulting Actuary

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TOWN OF CHARLESTOWN
OTHER POST-EMPLOYMENT BENEFITS PROGRAM

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CERTIFICATION

We have performed an actuarial valuation of the Town of Charlestown Other Post-Employment Benefits Program as of July 1, 2012. 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, asset information, claims and premium information as of the valuation date, furnished by the Town of Charlestown. 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.

The results contained in this report do not reflect potential changes in future health cost due to the passage of the Patient Protection and Affordable Care Act.

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 17-20 of this report. A summary of the plan provisions starts on page 21 of this report.

TOWN OF CHARLESTOWN
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CERTIFICATION

Milliman's work is prepared solely for the internal business use of the Town of Charlestown. 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 Charlestown may provide a copy of Milliman's work, in its entirety, to the Town of Charlestown'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 Charlestown; and (b) The Town of Charlestown may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law. 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 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 31, 2012

Steve A. Lemanski, FSA, FCA
Consulting Actuary

S. Boustany

Samuel Boustani, ASA
Actuary

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 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").

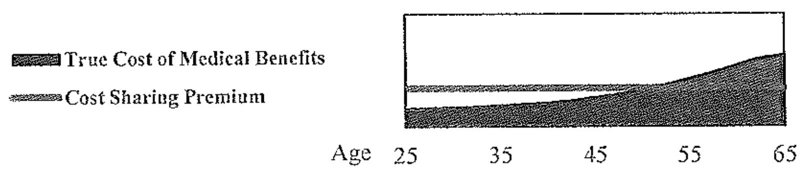
Once the Accrued Liability and the Normal Cost have been calculated, the next step is to determine an annual contribution. This consists of two pieces:

- 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.

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.

DISCUSSION OF EXPERIENCE

This valuation reflects a number of changes relative to the July 1, 2009 valuation:

Demographic Changes from 2009 to 2012

From July 1, 2009 to July 1, 2012, the overall membership decreased from 46 to 42. The total number of active members decreased from 23 to 22 and the total number of retirees and spouses of retirees decreased from 23 to 20.

The average age of active members increased from 40.7 to 42.2, and the average age of retired members increased from 59.8 to 63.4.

Changes in Plan Provisions

Police: Employees retiring on or after July 1, 2012 but before June 30, 2014 shall pay 15% of the cost for retiree coverage and employees retiring on or after July 1, 2014 shall pay 20% of the cost for retiree coverage (Prior: retirees hired prior to July 1, 2006 pay 10% of the cost of retiree coverage and retirees hired on or after July 1, 2006 pay 15% of the cost of retiree coverage).

Police hired on or after July 1, 2011: Employees hired on or after July 1, 2011 must complete 25 years of service to be eligible for retiree health benefits (Prior: 20 years of service). This change, along with its corresponding change in retirement assumption, had no impact on the results of this valuation. Longer term, the change in retirement eligibility requirements will reduce the Town's liability.

The combined effect of the above changes reduced the Accrued Liability by about $180,000 and reduced the Annual Required Contribution by about $30,000.

Assumption Changes

All groups: We updated the Healthy and Disabled Mortality assumptions from RP-2000 Combined Healthy Participant Mortality Table to RP-2000 Combined Healthy Mortality Table with generational projection per Scale AA.

All Groups: This valuation includes the applicable assumption changes reflecting the impact of changes in retirement eligibility under the Rhode Island Retirement Security Act of 2011.

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

The combined effect of the above changes reduced the Accrued Liability by about $70,000 and reduced the Annual Required Contribution by about $20,000.

KEY ASSUMPTIONS

Our results are highly dependent on two key assumptions: the rate at which we assume medical costs will increase over time, and the discount rate we use to translate future payments into current dollars.

	Medical Benefits	
Medical inflation rate	**Pre-65**	**Post-65**
Initial inflation rate	5.60%	5.60%
Ultimate inflation rate	4.60%	4.60%
Years until ultimate inflation rate	49	49

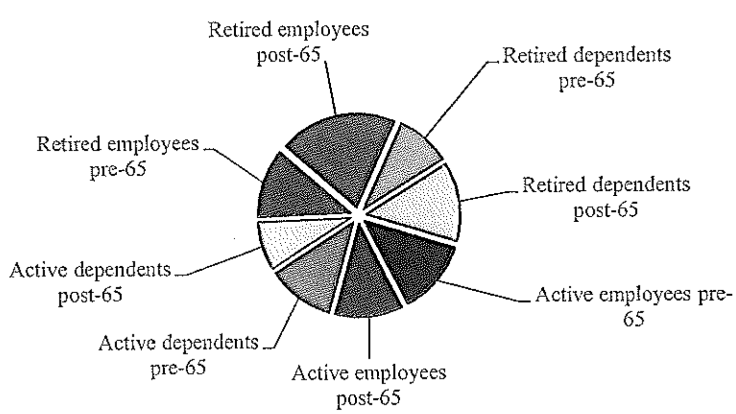
Discount rate 7.50%

The 7.50% discount rate reflects that the Town has established an OPEB trust and is prefunding OPEB benefits.

SUMMARY OF LIABILITIES AS OF JULY 1, 2012

We have calculated the Accrued Liability separately for two groups of Town employees, who are eligible for different OPEB benefits. We have broken the accrued liability for each group 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.

	CPMA	Police	Total
Current active members			
Employees under age 65	$0	$686,000	$686,000
Employees over age 65	59,000	574,000	633,000
Dependents under age 65	9,000	614,000	623,000
Dependents over age 65	44,000	407,000	451,000
Total	112,000	2,281,000	2,393,000
Current retired members			
Employees under age 65	0	645,000	645,000
Employees over age 65	314,000	778,000	1,092,000
Dependents under age 65	0	502,000	502,000
Dependents over age 65	78,000	651,000	729,000
Total	392,000	2,576,000	2,968,000
Total Accrued Liability	504,000	4,857,000	5,361,000



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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 FY 2009 for CPMA and 20 years starting FY 2009 for Police. The amortization method produces annual payments that will increase over time as payroll grows. On this basis, the ARC is determined as follows:

	CPMA	Police	Total
Accrued Liability	$504,000	$4,857,000	$5,361,000
Assets	236,000	1,558,000	1,794,000
Unfunded Accrued Liability	268,000	3,299,000	3,567,000
Amortization Period	25	15	
Payroll Growth Rate	3.00%	3.00%	3.00%
Past Service Cost	17,000	292,000	309,000
Normal Cost	2,000	160,000	162,000
Interest	1,000	34,000	35,000
ARC for FY 2014	**20,000**	**486,000**	**506,000**
Expected Benefit Payouts	35,000	157,000	192,000
Net Budget Impact	**(15,000)**	**329,000**	**314,000**

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

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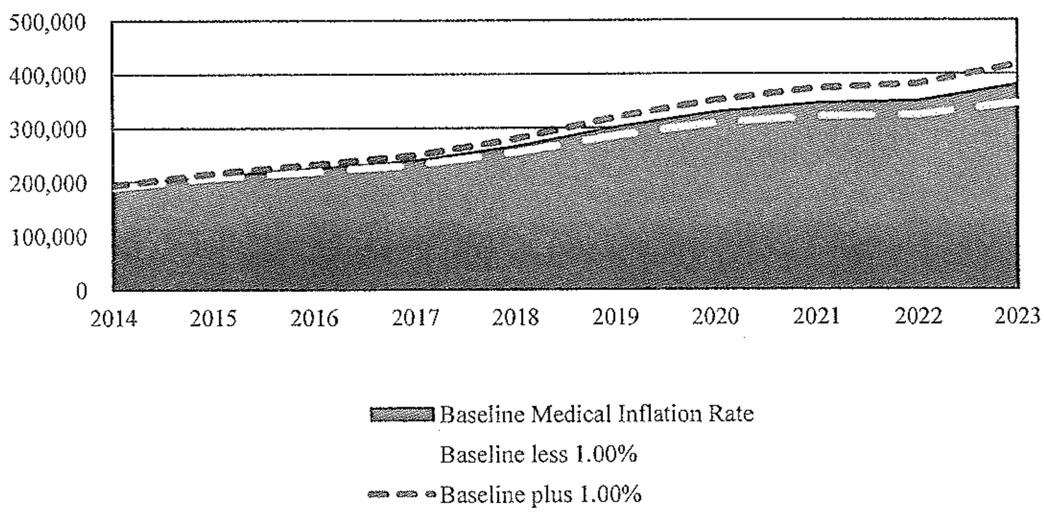
PROJECTED PAYOUTS

The annual Town payments for OPEB benefits are expected to rise in coming years, both because medical costs are expected to rise over time and because more employees will retire and start to receive Town-paid OPEB benefits. The table and graph below show the expected annual payments for OPEB benefits for the next 10 years.

Fiscal Year	Baseline less 1.00%	Baseline Medical Inflation Rate	Baseline plus 1.00%
2014	$190,000	$192,000	$194,000
2015	208,000	212,000	216,000
2016	219,000	225,000	232,000
2017	231,000	240,000	249,000
2018	254,000	266,000	279,000
2019	285,000	301,000	319,000
2020	308,000	329,000	351,000
2021	320,000	346,000	373,000
2022	322,000	350,000	381,000
2023	345,000	380,000	417,000



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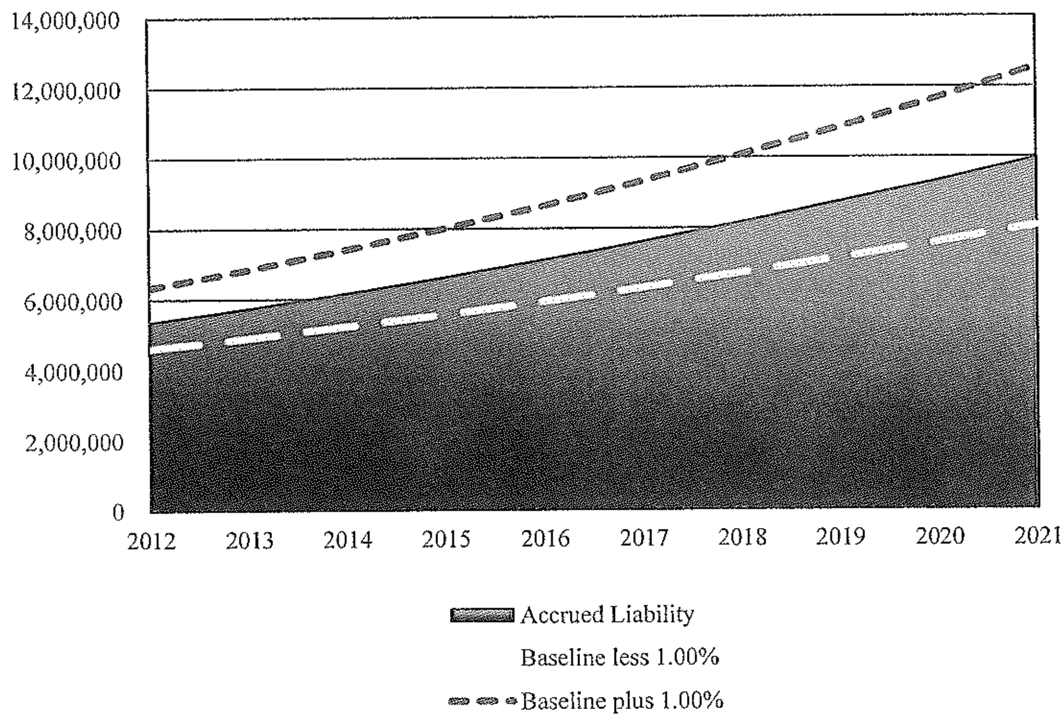
PROJECTED LIABILITIES

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



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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)
7/1/2006	$0	$3,391	$3,391	0%	N/A	N/A
7/1/2009	502	4,947	4,445	10%	N/A	N/A
7/1/2012	1,794	5,361	3,567	33%	1,497	238.3%

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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	$385	$637	165.5%
2010	401	449	112.0%
2011	527	566	107.4%
2012	527	531	100.8%
2013	527	N/A	N/A
2014	506	N/A	N/A

SUMMARY OF CENSUS DATA

The following were included in our analysis based on information provided as of July 1, 2012 by the Town.

	CPMA	Police	Total
Number of members			
Active	3	19	22
Retired members	4	8	12
Spouses of retirees	1	7	8
Total	8	34	42
Average age			
Active	55.7	40.1	42.2
Retired	74.5	57.8	63.4
Average retirement age			
Active	70.4	55.1	57.2
Retired	62.5	48.1	52.9
Expected lifetime			
Active [to retirement]	14.7	15.0	14.9
Retired [lifetime]	13.9	26.3	22.2

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 actual premiums were used:

2012 - 2013 Monthly Premiums			**Employee**	**Spouse**
	Medical	Pre 65	$669.98	$684.36
		Post 65	329.15	329.15

HEALTH COST ADJUSTMENT FACTORS

Milliman's Health Cost Guidelines were used to develop the expected relationship of the true cost of health benefits across age and gender. Representative factors are shown below.

	Medical	
Age	Employee	Spouse
40	2.87%	1.66%
45	4.16%	3.17%
50	4.90%	4.23%
55	5.06%	4.03%
60	4.54%	4.07%
65	2.12%	1.97%
70	2.24%	2.11%
75	1.59%	1.35%
80	1.06%	1.30%

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

Payroll Growth Rate 3.0%

Mortality

Healthy

Prior: RP-2000 Combined Healthy Participant Table.

Current: RP-2000 Combined Healthy Mortality Table with generational projection per Scale AA, with separate tables for males and females.

Disabled

Prior: RP-2000 Combined Healthy Participant Table.

Current: RP-2000 Combined Healthy Mortality Table with generational projection per Scale AA, with separate tables for males and females.

Turnover

Police: None

CPMA: rates based on age:

Age	Rates
20	6.6%
30	4.8
40	3.8
50	1.5
60	0.0

Disability

Police: rates based on age:

Age	Rates
40-59	1%

CPMA: None

ACTUARIAL ASSUMPTIONS

Retirement

Because of the enactment of the RIRSA in 2011, the retirement assumption was modified for members not eligible for retirement by June 30, 2012. Members who would have been assumed to retire at an earlier age under the rules in effect before the enactment of the provision changes are assumed to retire when first eligible for an unreduced benefit. This demand is recognized by adding a 10% probability for every year the member has been deferred.

Police hired prior to July 1, 2011: rates are based on attained age:

Age	Rates
45-49	5%
50-54	10%
55	20%
56	30%
57	40%
58-59	50%
60+	100%

Police hired on or after July 1, 2011: 25% of members are assumed to retire when first eligible. The rates in the table above are applied after first eligibility.

CPMA: rates are based on attained age:

Age	Rates
55-61	20%
62-64	30%
65	50%
66-67	10%
68+	100%

ACTUARIAL ASSUMPTIONS

Cost Blending

In order to dampen the volatility of premium changes, this valuation is based on 75% of expected costs/premiums plus 25% of actual costs/premiums.

Future Retiree Coverage

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

	Percentage
Police	100%
CPMA	40%

Future Dependent Coverage

75% of active members are assumed to elect dependent coverage at retirement as follows. All female spouses are assumed to be 3 years younger than males.

Future Post-65 Coverage

All current actives and pre-65 retirees are assumed to continue past age 65.

SUMMARY OF PLAN PROVISIONS

Eligibility

Police:

A police-officer retiring, who is at least 60 years old, or who has completed at least 20 years of service regardless of age (25 years of service if hired on or after July 1, 2011) and eligible for pension benefits under the State of Rhode Island, Optional Retirement for Members of Police Force and Firefighters, shall be eligible to continue health insurance coverage for self and spouse.

CPMA:

Eligible for 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 as of June 30, 2012. The minimum retirement age is 59.

Cost Sharing

Police:

Retiring on or after July 1, 2012:

Pre-65	85% Town-paid for retiree and spouse.
Post-65	85% Town-paid for retiree and spouse (BC Plan 65); Medicare Part B reimbursement for retiree and spouse.

Retiring on or after July 1, 2014:

Pre-65	80% Town-paid for retiree and spouse.
Post-65	80% Town-paid for retiree and spouse (BC Plan 65); Medicare Part B reimbursement for retiree and spouse.

CPMA:

Hired prior to July 1, 1996:

Pre-65	85% Town-paid for retiree and spouse.
Post-65	85% Town-paid for retiree and spouse (BC Plan 65).

Hired on or after July 1, 1996:

Not eligible for Town-paid Post Retirement Health Benefits.

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, the Town's 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.