

**CITY OF NEWTON**

ACTUARIAL VALUATION OF  
OTHER THAN PENSION POST- EMPLOYMENT BENEFITS  
(OPEB)  
FOR FISCAL YEAR ENDING JUNE 30, 2013

**AUGUST 16, 2013**

**FINANCIAL RISK ANALYSTS**



August 16, 2013

**Sent Via Email**

Mr. David C. Wilkinson  
Comptroller  
City of Newton  
Commonwealth Avenue and Walnut St.  
Newton Centre, MA 02159

Dear David:

Enclosed please find our report regarding indicated other than pension post-employment benefit (OPEB) liabilities for the City of Newton's fiscal year ending June 30, 2013. The valuation is in accordance with Governmental Accounting Standards Board Statement 45 (GASB-45).

It has been a pleasure being of service to you again on this project. If after reviewing this report you have any questions please do not hesitate to call.

Sincerely,

Robert W. Van Epps, FCAS, MAAA  
Managing Principal

John D. Stiefel, FSA, MAAA  
Associated Consultant

# CITY OF NEWTON

## TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION .....	2
CONDITIONS AND LIMITATIONS.....	3
DISTRIBUTION AND USE .....	5
REQUIRED DISCLOSURES .....	6
ANALYSIS.....	9
SCHEDULES OF EMPLOYER CONTRIBUTIONS.....	13
EXHIBITS	

# CITY OF NEWTON

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## **INTRODUCTION**

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Financial Risk Analysts, LLC has been retained by the City of Newton (the City) to provide an actuarial valuation of the City's retiree medical and life insurance post-retirement benefits program for the fiscal year ending June 30, 2013. The City initially complied with GASB-45 for the fiscal year July 1, 2007 to June 30, 2008, so this is the sixth year of GASB-45 compliance.

Medical and life insurance are the two most common types of other (than pension) post-retirement employee benefits (OPEB) provided by an employer to retirees and their beneficiaries.

The City presently provides life and health insurance benefits for active and retired employees and their covered dependents. The City has reported to us 2,317 active employees, 301 pre-Medicare retirees, 2,932 Medicare retirees and 164 over age 65 non-Medicare retirees who have elected health insurance.

Harvard Pilgrim, Tufts EPO, Tufts POS and Tufts Medicare Complement Plan are self insured. Both the Legacy and Advantage plans are self insured. Tufts Medicare Preferred and Medicare HMO Blue are fully insured.

Life insurance benefits provided by the City are fully insured. For health insurance, active have a choice among the Harvard, Tufts-EPO and Tufts-POS Preferred Advantage plans while retirees not on Medicare can access these 3 "Legacy" plans as well as the "Advantage" plans. Most retirees on Medicare are in the Tufts Medicare Complement Plan. For life insurance, the only option is a flat \$5,000 benefit which does not reduce at retirement. As required by Massachusetts law, retirees not on Medicare have the same benefit options as active employees.

A detailed description of the City's census, benefit, and premium information is presented on Exhibits 7, 8, and 9.

# CITY OF NEWTON

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## **CONDITIONS AND LIMITATIONS**

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### *DATA*

Within this report we used data and other information provided to us by the City. This data consisted of the following:

- Census Information - the demographics of the active, pre-Medicare retiree and Medicare retiree population covered for medical and life insurance benefits as of the date of the most recent pension valuation. For active employees, date of hire was also included.
- Benefit Information - a description of the different health and life insurance plans available to participants.
- Funding Information – a description of how the life and health insurance plans are funded including the contributions required from employees and retirees.
- Premium Rates – the premium rates for the various plans and the percentage of each premium rate that the City pays.
- Life Insurance In-Force Information – a summary of the life insurance schedules for actives and retirees and the participant contributions required.
- Requirements for Retirement – the age/service requirements for retirement with an unreduced pension benefit and the amount of benefit reduction for early retirement.
- Probabilities of Retirement – the probability that a general or uniformed employee eligible to retire will actually retire.
- Retirement Election Rates - The percentage of active participants who opt to continue their life and health insurance benefits (and pay the associated premiums) at retirement.

Although the data supplied were reviewed for purposes of reasonability, we have not independently audited or verified this information and we assume it to be accurate and complete. The results of our analysis will be contingent upon the reliability of the information supplied to us and such reliability is the responsibility of the City. Should the City become aware of any significant discrepancies in the data reported to us, we should be notified of such discrepancies and this report will be amended, if necessary.

## **CITY OF NEWTON**

### ***UNCERTAINTY***

Actuarial projections, by their nature, are estimates of future contingent events, which cannot be known with certainty. The City's ultimate liability for medical and life insurance benefits will be subject to events that have yet to occur such as the future employee attrition rate, retirements, and particularly interest rates and medical cost inflation.

While we believe the results presented in this report are reasonable and reflect the use of accepted actuarial principles and standards of practice, it is possible that the actual future OPEB liability of the City will differ, perhaps materially, from what we have projected herein. Nothing in this report should be construed as a warranty or guarantee as to the adequacy of the liability estimates contained herein.

# CITY OF NEWTON

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## **DISTRIBUTION AND USE**

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This report is provided solely for the use of the City of Newton in evaluating its OPEB liability for the fiscal year July 1, 2012 through June 30, 2013. A copy of this report may also be provided to the City's auditor with the proviso that the report is copied in its entirety and that each party receiving a copy of this report agrees to not distribute the report to any other third party.

We request that the City inform us of distribution of this report to parties other than those referenced above.

**CITY OF NEWTON**

**REQUIRED DISCLOSURES**

**Required Information for the Fiscal Year July 1, 2012 through June 30, 2013**

<b>City of Newton</b>			
<b>GASB-45 Required Disclosures</b>			
	<b>Unfunded Discount Rate</b>		
	<u>FY 2010-11</u>	<u>FY 2011-12</u>	<u>FY 2012-13</u>
	2.00%	2.00%	2.00%
<b>A. Expected Post Retirement Benefit Obligation</b>	\$1,007,933,551	\$966,938,192	\$905,697,206
1. Impact of a 1% Change in Interest Assumption			21%
<b>B. Funded Status</b>			
1. Actuarial Accrued Liability (AAL)			
Active Employees	\$280,553,245	\$235,579,731	\$233,792,635
Retirees	\$358,557,048	\$365,719,948	\$368,516,636
Total	\$639,110,293	\$601,299,679	\$602,309,271
2. Actuarial Value of Assets	\$137,295	\$312,973	\$538,537
3. Unfunded Actuarial Accrued Liability (1) - (2)	\$638,972,998	\$600,986,706	\$601,770,734
4. Funded Ratio (2)/(3)	0.02%	0.05%	0.09%
5. Annual Covered Payroll	\$ 176,190,563	\$ 176,524,732	\$182,513,121
6. Ratio of Unfunded AAL to Covered Payroll (3)/(5)	363%	340%	330%
<b>C. Annual Required Contribution (ARC)</b>			
1. Normal Cost (Service Cost)	\$21,921,755	\$20,512,617	\$18,833,849
2. Amortization of Unfunded Accrued Liability	\$30,259,420	\$29,298,168	\$30,245,632
3. Annual Required Contribution (ARC) (1) + (2)	\$52,181,175	\$49,810,785	\$49,079,482
<b>D. Annual OPEB Cost</b>			
1. ARC	\$52,181,175	\$49,810,785	\$49,079,482
2. Interest on Net OPEB Obligation	\$1,669,996	\$2,361,795	\$2,957,502
3. Adjustment to ARC	\$3,953,395	\$5,753,892	\$5,930,009
4. Annual OPEB Cost (1) + (2) - (3)	\$49,897,776	\$46,418,688	\$46,106,974
<b>E. Net OPEB Obligation Estimates</b>			
1. Net OPEB Obligation - beginning of year	\$83,499,791	\$118,089,758	\$147,875,079
2. Annual OPEB Cost	\$49,897,776	\$46,418,688	\$46,106,974
3. Expected Contributions during the year	\$15,307,809	\$16,633,367	\$16,322,331
4. Net OPEB Obligation - end of year (1)+(2)-(3)	\$118,089,758	\$147,875,079	\$177,659,722

## CITY OF NEWTON

As displayed on Exhibit 1, the table above presents a summary of the results of our analysis. We present the 2011 and 2012 results along side of the 2013 results as required by GASB-45.

The 2.00% discount rate was selected by the City for purposes of discounting an unfunded liability. The 2.00% rate is a meant to approximate a risk free rate of return based on current risk-free marketplace yields. We believe this is a reasonable discount rate to use for an unfunded liability.

The following is an explanation of the terms used in the table above:

**Expected Post-Retirement Benefit Obligation (EPBO)** – This is the present value of the future post-retirement life and health insurance benefits for all currently retired employees and active employees eligible for those benefits. For active employees, the EPBO includes the full present value of benefits even though some employees have not yet fully earned or vested in those benefits. The government needs to be aware of this liability but does not need to disclose or recognize it on any of its financial statements.

**Actuarial Accrued Liability (AAL)** – This is also known as the Accumulated Post-Retirement Benefit Obligation (APBO). This is that portion of the EPBO that has been accrued to date. For existing retirees and active employees who have fully earned their benefit, the AAL equals the EPBO. The AAL is the current liability that must be recognized on the government's balance sheet if the government chooses immediate recognition. Alternatively, the government can choose to amortize the current APBO.

**Actuarial Value of Plan Assets** – The amount of assets held in trust to fund the plan (if the plan is being funded).

**Unfunded Actuarial Accrued Liability** – The excess of the AAL over the plan assets.

**Normal Cost** – Also known as the Service Cost, this is the portion of the EPBO for active employees attributable to employee service during the year.

## CITY OF NEWTON

**Amortization of Unfunded Accrued Liability** – This is the annual amortization of the AAL if the Government chooses to amortize the AAL. Under GASB-45, the entity can choose to amortize the current AAL or not. GASB-45 permits amortization over a period of from 10 to 30 years. If the government chooses to amortize the AAL, the amortization cost should be booked as a current year expense. The City elected to amortize the AAL over 30 years, and we use the level dollar amortization method for this calculation. GASB allows amortization on an open, closed or level % of payroll basis. We selected the closed basis; i.e. the amortization period begins at 30 years and declines 1 year every year.

**Annual Required Contribution (ARC)** – This is the total amount that should be booked as a current year expense. The ARC is the sum of the Normal Cost (Service Cost) and Amortization of Actuarial Accrued Liability. GASB-45 recommends, but does not require, that the ARC actually be contributed (funded) each year.

**Net OPEB Obligation – Beginning of Year** – This is last year's End of Year Net OPEB Obligation.

**Interest of Net OPEB Obligation** – This is interest, at the assumed interest rate, on the Beginning of Year Net OPEB Obligation.

**Adjustment to ARC** – This is the Beginning of Year Net OPEB Obligation divided by the amortization factor.

**Annual OPEB Cost** – This is the ARC + Interest on Net OPEB Obligation - Adjustment to the ARC

**Expected Contributions During the Year** – This is the amount of OPEB payments the Government made for retiree OPEB during the just-completed fiscal year.

**Net OPEB Obligation – End of Year Estimate** – This is the Beginning of Year Net OPEB Obligation + Annual OPEB Cost - the Expected Contributions during the Year.

# CITY OF NEWTON

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## ANALYSIS

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### Assumptions

1. **Interest discount rate** – 2.00% per year, net of expenses, for an unfunded plan. GASB-45 requires that the selection of an interest discount rate be based on the expected long term rate of return on the (General Fund) assets expected to be available to pay the benefits when due. (We considered a slightly higher interest rate assumption, since Newton has funded its liabilities to the extent of \$538,537; but we decided to stick with 2% because the City’s Net OPEB Obligation at 2% is almost \$200 million.) We note that a level 1% increase in assumed interest rate will decrease the City’s liability by about 21%.
2. **Trend** – Medical Costs are assumed to increase each year according to the following schedule:

<u>Year</u>	<u>Medical Trend</u>
2013	1.57%
2014	2.67%
2015	3.76%
2016	4.86%
2017	5.96%
2018	5.93%
2019	5.91%
2020	5.89%
2025	5.78%
2030	5.81%
2040	5.19%
2050	5.00%
2060	4.83%
2070	4.35%
2080+	4.35%

The above trend rates were developed using the baseline projection of the SOA Long-Run Medical Cost Trend Model v12.2 (November 2012). The short-term (first 4 years) trend rates were based on the fact that the City’s most recent rate increase averaged 1.57% for retirees. The long-term (after 4 years) trend rates were based on the following assumptions:

Rate of Inflation 2.8%  
Rate of Growth in Real Income / GDP per capita 1.5%  
Income Multiplier for Health Spending 1.30  
Extra Trend due to Technology and other factors 1.1%

## CITY OF NEWTON

Health Share of GDP Resistance Point 23.0%  
Year for Limiting Cost Growth to GDP Growth 2060

The Society of Actuaries' (SOA's) Long-Run Medical Cost Trend Model and its baseline projection are based on an econometric analysis of historical US medical expenditures and the judgments of experts in the field. The long-run baseline projection and input variables have been developed under the guidance of an SOA Project Oversight Group. The above schedule represents a reasonable medical trend projection for the current plan provisions and demographics of the City's Retiree Welfare Benefits Plan, and no changes to these baseline assumptions are necessary.

3. **Amortization Period** – Thirty years (initial), 25 years (remaining). 30 years is the maximum period permitted by GASB-45. GASB-45 permits amortization payments to increase at a rate not to exceed projected salary growth. We assumed level amortization payments, which we think are more realistic for budgeting purposes.
4. **Retirement Eligibility** – As prescribed by the terms of the City's Retirement System.
5. **Marital Status** – Active participants are assumed to keep their current marital status upon retirement.
6. **Turnover** – Representative values of assumed annual turnover rates for general and uniformed employees are as follows.

Age Group	General Employees	Uniformed Employees
<20	15.00%	1.50%
20-24	13.13%	1.50%
25-29	10.12%	1.50%
30-34	8.33%	1.46%
35-39	6.78%	1.22%
40-44	5.96%	0.28%
45-49	5.13%	0.03%
50-54	3.23%	0.03%
55-59	2.45%	0.00%
60-64	2.07%	0.00%
65-69	1.94%	0.00%
70-74	1.22%	0.00%
75+	0.00%	0.00%

7. **Mortality** – Mortality assumptions are used to project the expected number of employees who will be receiving benefits each year in the future. We used the RP-2000 mortality table (combined healthy lives) with projected mortality.
8. **Disability** – Disability assumptions are used to project the number of people who will retire early due to disability. The possibility of disability was accounted for by assuming

## CITY OF NEWTON

average retirement ages that were 1 year younger than were observed by the City (see (10) below)

9. **Requirements for Retirement**-The City has informed us it requires attainment of age 65 for general employees to retire with an unreduced pension benefit. For uniformed employees this age is 55. Early retirement is available with twenty years of service with a reduced benefit. Retirement is no longer mandatory at age 70 for general employees and age 65 for uniformed employees.
10. **Age at Retirement**-Representative assumed average retirement ages are shown below. These values are consistent with the requirements for retirement stated above, the input provided by the City about average retirement ages (about 65 for General and 60 for Uniform) and the adjustment for disability retirements (see (8) and (9) above).

<u>Age</u>	<u>General Employees</u>	<u>Uniformed Employees</u>
45	63	58
50	63	59
55	64	61
60	66	64
62	67	65
65	69	65
69	72	69
70	72	70

11. **Retirement Election Rates**-The City provided us data for each group showing total retirees and how many retirees have elected to continue post-retirement benefits and pay the associated premiums. That data showed that retirement election rates have been as follows.

	<u>All Employees</u>
Health Insurance	100%
Life Insurance	23%

12. **Plan Changes**- the City has informed us that two significant plan changes were implemented in 2011. The first change is that all active employees must elect one of the (less expensive) “Advantage” plans. This change reduces what the City’s cost will be when these employees retire. The second change is that all active employees must contribute 25% (for unions constituting 88% of actives) or 30% (for the other 12%) instead of the previous 20%. This further reduces what the City’s cost will be when these employees retire. The financial impact of both these changes (which increases over time) was reflected in our 2012 valuation and in this valuation.
13. **Expenses**- We did not make an explicit assumption for expenses because our assumed interest discount rates are net of expenses.

# CITY OF NEWTON

## Methodology

We used the Projected Unit Credit actuarial cost method to perform our estimate of the OPEB liability. The following is a summary of the steps employed in our analysis.

- 1. Determine current annual subsidy for life and health insurance for the pre-Medicare retirees, Medicare retirees and retirees over age 65 not on Medicare.** We used the most recently available census data, current premiums, participant contribution requirements and age-sex adjustment factors to make these calculations.
- 2. Calculate the EPBO.** This is the present value of future subsidies for life and health insurance for the actives, pre-Medicare retirees, retirees over 65 not on Medicare and Medicare retirees. Separate calculations were required for active general and active uniformed employees.
- 3. Calculate the AAL from the EPBO and the active employee age and service information from the census.**
- 4. Calculate the other GASB-45 required disclosures.**

# CITY OF NEWTON

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## **SCHEDULES OF EMPLOYER CONTRIBUTIONS**

The schedule below is based on the normal cost and amortization of the unfunded actuarial accrued liability calculated for the fiscal year beginning June 30, 2013, future normal costs increasing at 5.0% per year and future amortization payments increasing at the assumed future healthcare trend rates.

## CITY OF NEWTON

<b>Schedule of Employer Contributions</b>						
2.00% Discount Rate						
Fiscal Year Ending in		Normal Cost		Amortization Payment		Total City ARC
2013		\$18,833,849		\$30,245,632		\$49,079,482
2014		\$19,775,542		\$30,720,489		\$50,496,030
2015		\$20,764,319		\$31,539,904		\$52,304,223
2016		\$21,802,535		\$32,727,271		\$54,529,806
2017		\$22,892,661		\$34,318,463		\$57,211,125
2018		\$24,037,295		\$36,363,604		\$60,400,898
2019		\$25,239,159		\$38,521,644		\$63,760,803
2020		\$26,501,117		\$40,798,532		\$67,299,649
2021		\$27,826,173		\$43,200,520		\$71,026,693
2022		\$29,217,482		\$45,734,180		\$74,951,662
2023		\$30,678,356		\$48,406,417		\$79,084,773
2024		\$32,212,274		\$51,224,488		\$83,436,762
2025		\$33,822,887		\$54,196,020		\$88,018,908
2026		\$35,514,032		\$57,329,027		\$92,843,059
2027		\$37,289,733		\$60,631,929		\$97,921,662
2028		\$39,154,220		\$64,189,363		\$103,343,583
2029		\$41,111,931		\$67,943,300		\$109,055,231
2030		\$43,167,528		\$71,904,181		\$115,071,709
2031		\$45,325,904		\$76,082,989		\$121,408,893
2032		\$47,592,199		\$80,457,727		\$128,049,926
2033		\$49,971,809		\$85,034,385		\$135,006,194
2034		\$52,470,399		\$89,818,928		\$142,289,327
2035		\$55,093,919		\$94,817,278		\$149,911,198
2036		\$57,848,615		\$100,035,301		\$157,883,916
2037		\$60,741,046		\$105,478,783		\$166,219,829
2038		\$63,778,099		\$111,153,417		\$174,931,515
2039		\$66,967,003		\$117,064,782		\$184,031,785
2040		\$70,315,354		\$123,218,321		\$193,533,674
2041		\$73,831,121		\$129,619,322		\$203,450,444
2042		\$77,522,677		\$136,328,044		\$213,850,721
2043		\$81,398,811		\$143,357,904		\$224,756,715

**CITY OF NEWTON**  
**GASB 45 DETERMINATION**

REQUIRED DISCLOSURES-SUMMARY  
 2.00% Interest

	<u>Active</u>	<u>Retired</u>	<u>Total</u>
A. Expected Post-Retirement Benefit Obligation	\$537,180,570	\$368,516,636	\$905,697,206
B. Actuarial Accrued Liability (AAL)	\$233,792,635	\$368,516,636	\$602,309,271
C. Plan Assets			\$0
D. Unfunded Actuarial Accrued Liability			\$602,309,271
E. Service Cost (Normal Cost)	\$18,833,849	\$0	\$18,833,849
F. Amortization of unfunded accrued liability	\$11,740,158	\$18,505,474	\$30,245,632
G. Annual Required Contribution (ARC)	\$30,574,007	\$18,505,474	\$49,079,482
H. Unamortized Portion of AAL	\$222,052,476	\$350,011,162	\$572,063,638
I. Expected Benefit (Premium) Payments	n/a	\$16,322,331	\$16,322,331

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A-B. Exhibit 2.1

C. Since plan is not funded, current assets = 0.

D. B - C

E-H. Exhibit 2.1

I. These are the City's share of the annual retiree life and health insurance premiums.

**CITY OF NEWTON  
GASB 45 DETERMINATION**

REQUIRED DISCLOSURES-DETAIL

2.00% Interest

	Active Employees			Retirees			Total
	General (1)	Uniformed (2)	Total (3)=(1)+(2)	Pre-Medicare (4)	Age 65+ Not on MC (5)	Medicare (6)	Total (7)=(3)+(4)+(5)+(6)
A. Number of Members Generating a Liability (Medical)	1,995	322	2,317	301	164	2,932	5,714
B. Expected Post Retirement Benefit Obligation							
Medical/Rx/Vision	\$356,782,148	\$178,957,499	\$535,739,647	\$98,431,372	\$75,005,990	\$194,090,772	\$903,267,781
Dental	\$0	\$0	\$0	\$0	Incl in PMR	Incl in PMR	\$0
Life	\$959,600	\$481,323	\$1,440,923	\$264,741	\$201,736	\$522,026	\$2,429,426
Total	\$357,741,748	\$179,438,822	\$537,180,570	\$98,696,112	\$75,207,726	\$194,612,798	\$905,697,206
C. Actuarial Accrued Liability	\$160,154,751	\$73,637,884	\$233,792,635	\$98,696,112	\$75,207,726	\$194,612,798	\$602,309,271
D. Service Cost (Normal Cost)	\$13,137,736	\$5,696,113.08	\$18,833,849	\$0	\$0	\$0	\$18,833,849
E. Amortization Factor	19.91	19.91	19.91	19.91	19.91	19.91	19.91
F. Amortization of Actuarial Accrued Liability	\$8,042,350	\$3,697,809	\$11,740,158	\$4,956,135	\$3,776,640	\$9,772,699	\$30,245,632
G. Annual Required Contribution	\$21,180,086	\$9,393,922	\$30,574,007	\$4,956,135	\$3,776,640	\$9,772,699	\$49,079,482
H. Unamortized Portion of Actuarial Accrued Liability	\$152,112,401	\$69,940,075	\$222,052,476	\$93,739,977	\$71,431,086	\$184,840,099	\$572,063,638

- A. Exhibit 9
- B. Exhibit 4. Dental EPBO = \$0 because there is only 1 retiree dental plan and retirees pay the full cost.  
Life EPBO = ratio of Life premium to Medical premium x Medical EPBO
- C. For retired lives AAL = EPBO. For active lives AAL = EPBO x C from Exhibit 3
- D. For retired lives Service Cost = 0. For active lives Service Cost = EPBO X D from Exhibit 3
- E. Amortization factor = present value at 2.00% interest of a 25-year annuity due
- F. C/E
- G. D + F
- H. C - F

**CITY OF NEWTON  
GASB 45 DETERMINATION**

ACTIVE EMPLOYEE ACCRUED BENEFITS  
2.00% Interest

	Active Employees	
	<u>General</u> (1)	<u>Uniform</u> (2)
A. Average Projected Service at Retirement = Attribution Period	27.8	31
B. Weighted Average Service to Date	12.4	12.7
C. Weighted Average Percent of Retirement Benefits Accrued to Date	44.8%	41.0%
D. Percent of OPEB Accrued in Fiscal Year 2008	3.7%	3.2%

- 
- A. Calculated from the census data
  - B. Calculated from the census data
  - C. B/A
  - D. Calculated from the census data

**CITY OF NEWTON  
GASB 45 DETERMINATION**

EXPECTED POST-RETIREMENT BENEFIT OBLIGATION - MEDICAL/Rx  
2.00% interest

	Active Employees		Retirees			Total (6)
	(1)	(2)	(3)	(4)	(5)	
	General	Uniformed	Pre-Medicare	Age 65+ Not on MC	Medicare	
A. Number of Contracts	1,995	322	301	164	2,932	5,714
B. Annual Subsidy per Contract	n/a	n/a	\$19,548	\$25,188	\$4,767	
C. PV of Future Subsidies for All Employees	\$360,314,644	\$180,729,355	\$99,405,940	\$75,748,623	\$195,255,037	\$911,453,600
D. Percent Expected to Elect Medical at Retirement	100%	100%	100%	100%	100%	
E. Expenses	0%	0%	0%	0%	0%	0%
F. Adjustment to Account for Survivor Benefits	101%	101%	101%	101%	101%	101%
G. PV of Medicare Part B Late Enrollment Penalties					\$750,000	
H. Interest Adjustment	0.9804	0.9804	0.9804	0.9804	0.9804	
I. Expected Post-Retirement Benefit Obligation	\$356,782,148	\$178,957,499	\$98,431,372	\$75,005,990	\$194,090,772	\$903,267,781
J. EPBO per Contract	\$178,838	\$555,769	\$327,015	\$457,354	\$66,197	\$158,080

- A. Exhibit 9
- B. Exhibit 5
- C. Calculated from B and the age and sex of each contractholder.
- D. Calculation only considered participants who actually elected medical.
- E. Expenses are 0% because the assumed interest rate is net of expenses.
- F. Survivors can continue coverage and pay the same 20% their deceased spouse paid.  
Also, retirees and survivors can resume coverage any time even if they decline it initially.
- G. Assumes an annual cost of \$15,000 per year, as estimated by the City (down from \$20,000 per year estimated in 2012).
- H. This is interest discount from the "data date" back to 7/1/12, the calculation date.
- I.  $C \times D \times (1+E) \times F \times H + G$
- J. I/A

**CITY OF NEWTON  
GASB 45 DETERMINATION**

CURRENT ANNUAL SUBSIDY - MEDICAL/Rx

	Current Actives During Pre-Med <u>Retirement</u> (1)	Current Actives During Med <u>Retirement</u> (2)	Current Pre-Med. <u>Retirees</u> (3)	Retirees >65 Not on <u>Medicare</u> (4)	Current Medicare <u>Retirees 65+</u> (5)
A. Average Annual Premium per Contract excluding Med Part B	\$14,332	\$4,802	\$14,907	\$10,857	\$4,802
B. Actual Annual Cost per Contract excluding Med Part B	\$21,661	\$4,802	\$22,530	\$27,360	\$4,802
C. Flat Annual City Contribution Toward the Medicare Part B Premium	n/a	\$925.44	n/a	\$0	\$925.44
D. Blended Annual ASO/Stop Loss Premium paid by the City	\$0	\$0	\$0	\$0	\$0
E. Total Actual Annual City Cost per Contract	\$21,661	\$5,728	\$22,530	\$27,360	\$5,728
F. Annual Member Contributions per Contract	\$2,866	\$960	\$2,981	\$2,171	\$960
G. Current Annual Subsidy per Contract	\$18,795	\$4,767	\$19,548	\$25,188	\$4,767

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- A. Exhibit 6
  - B. For PMR, equal to A times an age-sex factor to account for the "implicit subsidy". This factor is 151.14%  
For retirees > 65 not on Medicare, equal to an age-sex factor to account for no Medicare. This is 252.00%
  - C. The City reimburses its retirees and their spouses \$925.44 a year for the Medicare Part B premium. This is a flat amount that does not increase when the Medicare Part B premium increases. Previously the City reimbursed 80% of the then-current Medicare Part B premium.
  - D. Since the City's insurance contracts are insured, the stop loss costs are included in the premium rates.
  - E. B + C + D
  - F. Exhibit 6
  - G. E - F

**CITY OF NEWTON  
GASB 45 DETERMINATION**

MEMBER CONTRIBUTIONS

	<u>Medical/Rx</u>	<u>Life Insurance</u>
<u>Current Pre-Medicare Retirees - &lt; 65</u>		
Average Monthly Premium per Contract	\$1,242.22	\$9.45
Average Annual Premium per Contract	\$14,906.68	\$113.40
Percent Paid By Members	20.00%	50.00%
Current Annual Amount Members Pay	\$2,981.34	\$56.70
<u>Future Pre-Medicare Retirees - &lt;65</u>		
Average Monthly Premium per Contract	\$1,194.32	\$9.45
Average Annual Premium per Contract	\$14,331.79	\$113.40
Percent Paid By Members Hired <8/31/11	20.00%	50.00%
Current Annual Amount Members Pay	\$2,866.36	\$56.70
<u>Retirees &gt;65 Not on Medicare</u>		
Average Monthly Premium per Contract	\$904.75	\$9.45
Average Annual Premium per Contract	\$10,856.99	\$113.40
Percent Paid By Members	20.00%	50.00%
Current Annual Amount Members Pay	\$2,171.40	\$56.70
<u>Current Medicare Retirees</u>		
Average Monthly Premium per Contract	\$400.20	\$9.45
Average Annual Premium per Contract	\$4,802.43	\$113.40
Percent Paid By Members	20.00%	50.00%
Current Annual Amount Members Pay	\$960.49	\$56.70

Monthly costs calculated from census and premium rates.

Percent paid by members from Exhibit 7

Per the City, current group of post 8/31/11 hires will pay an average of 25.6% during retirement.

Our calculations consider the savings to the City from requiring post 8/31/11 hires to pay more.

**CITY OF NEWTON  
GASB 45 DETERMINATION**

FUNDING INFORMATION

<u>Actives</u>		
Medical		Pre-8/31/11 hires pay 20% of blended cost of actives and retirees not on Medicare. Employees hired on or after 8/31/11 currently pay an average of 100.0% of the cost. They will also pay this amount when they retire. Harvard Pilgrim, Tufts EPO, Tufts POS and Tufts MCP are self insured Both the Legacy Plans and Advantage plans are self insured.
Drugs		Included with Medical
Dental		Actives pay <100% of the cost of the coverage.
Life Insurance		Fully insured. Current 100% monthly premium rate is \$9.45 per month for \$5,000 of coverage. Members pay 50% of the total premium - so they pay \$4.72 per month.
<u>Retirees Not on Medicare</u>		
Medical		Retirees hired before 8/31/11 and their spouses pay 20% of blended cost of actives and retirees not on Medicare. Retirees hired on or after 8/31/11 will pay >20% (depending on their bargaining unit). On average, they will pay 25.6%.
Drugs		Same as for Actives
Dental		For the only plan available, retirees have to pay 100% of the cost of the coverage.
Life Insurance		Retirees pay 50% of the premium.
<u>Retirees on Medicare</u>		
Medical		Plans designed for these participants are fully insured. When eligible for Medicare, retiree is transferred to a Medicare Supplement plan. Tufts Medicare Complement plan is self insured. Tufts Medicare Preferred and Medicare HMO Blue are fully insured. Pre-8/31/11 retirees and their spouses pay 20% of the cost. Retirees hired on or after 8/31/11 will pay >20% (depending on their bargaining unit). On average, they will pay 25.6%.
Drugs and Vision		Since plan is fully insured, stop loss coverage is included in the insurance rates. Post - 8/31/11 retirees will pay more.
Drugs		Same as for Actives
Dental		For the only plan available, retirees have to pay 100% of the cost of the coverage.
Life Insurance		Retirees pay 50% of the premium.

Data provided by the City of Newton

**CITY OF NEWTON  
GASB 45 DETERMINATION**

BENEFIT INFORMATION

<u>Actives</u>		
Medical		Choice of Harvard Pilgrim, Tufts EPO and Tufts POS Advantage plans. These plans are new effective 12/1/11. Rates depend on choice of coverage The City only offers Individual and Family plans.
Drugs and Vision		Included if Medical Elected (Drug Copays per Medical Plan Elected Apply)
Dental		Several plans are available.
Life Insurance		All life insurance benefits are a flat \$5,000 with no reduction at retirement.
<u>Retirees Not on Medicare</u>		
Medical		Same Choices as for Actives plus Harvard Pilgrim, Tufts EPO and Tufts POS "Legacy" plans are available for those who retired before 8/31/11. Those who retired after 8/31/11 can only chose among the Harvard Pilgrim, Tufts EPO and Tufts POS Advantage plans. Survivors from family contracts can continue coverage until they die. They may also re-enter the plan after initially declining coverage.
Drugs and Vision		Same Choices as for Actives
Dental		Only 1 plan is available. It is not subsidized by the City, so the City has no GASB-45 liability for dental benefits.
Life Insurance		Flat \$5,000
<u>Retirees on Medicare</u>		
Medical		Most participants have elected the Tufts Medicare Complement Plan (Medicare Supplement). A minority have elected Tufts Medicare Preferred. The City reimburses a flat \$925.44 per year toward the cost of the Medicare Part B premium for retirees and their spouses. This flat amount does not increase when the Medicare Part B premium increases. Surviving spouse can continue coverage on the same terms as the deceased retiree, per Massachusetts law. Survivors from family contracts can continue coverage until they die. They may also re-enter the plan after initially declining coverage. The City has adopted Section 18 of MGL Chapter 32B. Effective July 1, 2010, the City is responsible to reimburse 100% of the penalties paid by retirees for enrolling late in Medicare B. The City is still gathering information to determine how much this will cost. Its best current estimate is about \$20,000 per year.
Drugs and Vision		Same Choices as for Actives Drug Plan Not Eliminated When Medicare Part D Took Effect
Dental		Only 1 plan is available. It is not subsidized by the City, so the City has no GASB-45 liability for dental benefits.
Life Insurance		Flat \$5,000

Data provided by the City of Newton

**CITY OF NEWTON  
GASB 45 DETERMINATION**

CENSUS INFORMATION

	<u>General</u> (1)	<u>Uniformed</u> (2)	<u>Elected No Coverage</u> (3)	<u>Total</u> (4)
<u>Actives - Medical</u>				
Number of Contracts	1,995	322	50	2,367
Average Age	45	44		45
Average Service Years	10	16		
<u>Pre-Medicare Retirees - Medical/Under 65</u>				
Number of Contracts	301	Incl in Gen	Incl Above	301
Average Age	60			
<u>Retirees &gt; 65 Not on Medicare</u>				
Number of Contracts	164	Incl in Gen	Incl Above	164
Average Age	74			
<u>Medicare Retirees - Medical</u>				
Number of Contracts	2,932	Incl in Gen	Incl Above	2,932
Average Age	77			
<u>Life Insurance</u>				
Number of Contracts - Actives	908	Incl in Gen	1,409	2,317
Number of Contracts - Retirees	773	Incl in Gen	2,620	3,393
Number Electing Life Insurance - Total	1,681	Incl in Gen	4,029	5,710
Percent of New Retirees Electing Medical				100%
Percent Under-65 Retirees Keeping Medical at Age 65				100%
Percent of New Retirees Electing Life Insurance				23%

Data provided by the City of Newton  
The City has noted that the declination rate for retiree medical insurance is negligible.