

The Town of Lunenburg, Massachusetts

Post Retirement Benefits Other Than Pensions Actuarial Valuation as of July 1, 2008

Prepared March 2009 by

Aon Consulting

ACTUARIAL VALUATION CERTIFICATE

March 2009

This report presents the Town of Lunenburg Post Retirement Benefits Other Than Pensions Plan July 1, 2008 Actuarial Valuation results. The purposes of this report are to:

- (1) Estimate the plan's July 1, 2008 obligations;
- (2) Estimate the Town's 2008/2009 fiscal year accrual as if the Governmental Accounting Standards Board (GASB) standard is adopted for this fiscal year based on the GASB Statement 45; and
- (3) Provide information that may be helpful in future planning for the Post Retirement Benefits Other Than Pensions Plan.

A summary of the major results is shown in Section I, while Section II provides more detailed results.

This report's costs and liabilities are based upon the data and plan provisions provided by the Town (as summarized in Sections VI and VII respectively) and the funding method and actuarial assumptions (outlined in Section VIII). This Report presents our best estimate of the costs of the Post Retirement Benefits Other Than Pensions Plan in accordance with accepted actuarial principles and our understanding of the GASB Accounting Standard.

The undersigned are members of the Society of Actuaries and meets the Qualification Standards of Aon Consulting to render the actuarial opinion contained herein.

Respectfully submitted,
Aon Consulting



Charles D. Cahill, FSA, EA
Enrollment Number: 08-4636
Senior Vice President
Aon Consulting
One Federal St.
20th Floor
Boston, MA 02110
617.457.4603 phone

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SECTION I EXECUTIVE SUMMARY

The Town of Lunenburg provides healthcare and life insurance benefits to its retirees and their spouses and dependants. The amount the Town pays for the medical and life insurance premiums for retirees and spouses is uniform across all groups. All regular active employees who retire directly from the Town and meet the eligibility criteria may participate.

The following table summarizes valuation results. These results have been calculated based upon assumptions as to current claim cost, projected increases in health care costs, mortality, turnover, and interest discounting factor.

This summary identifies the value of benefits at July 1, 2008 and costs for the 2009 fiscal year:

	<u>July 1, 2008</u>
◆ Present Value of all Projected Benefits (PVPB)	\$52,377,000
◆ Present Value of benefits earned to date (AAL)	\$40,584,000
◆ 2009 Annual Required Contribution (ARC) ¹	\$4,182,000
◆ 2009 Annual OPEB Cost	\$4,182,000
◆ 2009 Expected Benefit Retiree Premiums ²	\$1,146,000

The balance of this report provides greater detail for the above results.

The current valuation uses a discount rate of 5.00%. This rate is appropriate if the assets used to pay benefits come directly from the general funds of the Town. By contrast, if the program is funded, a discount rate closer to 7.00% may be appropriate. See Section IX for more detail. Such a change would result in a significant decrease in liability measurement, but would require increased cash payments.

¹ The ARC reflects a 30-year, level amortization of the unfunded AAL.

² Based on age-adjusted rates.

SECTION II PRINCIPAL VALUATION RESULTS

This section presents detailed valuation results for the Town's retiree healthcare program.

- ◆ The Present Value of all Projected Benefits (PVPB) is the total present value of all expected future benefits, based on certain actuarial assumptions. The PVPB is a measure of total liability or obligation. Essentially, the PVPB is the value (on the valuation date) of the benefits promised to current and future retirees. The Plan's PVPB (at July 1, 2008) is \$52,377,000. The majority of this liability (61%) is for current active employees (future retirees).
- ◆ The Actuarial Accrued Liability (AAL) is the liability or obligation for benefits earned through the valuation date, based on certain actuarial methods and assumptions. The Plan's AAL (at July 1, 2008) is \$40,584,000. Approximately half of this obligation (50%) is for active employees. The AAL represents 77% of the PVPB.
- ◆ Service Cost is the value of benefits expected to be earned during the year, again based on certain actuarial methods and assumptions. The 2009 Service Cost (with interest) is \$1,542,000.

This report develops the AAL and Service Cost using the Entry Age Normal actuarial cost method.

	Total
PVPB	
Active	\$31,916,000
Retired	<u>20,461,000</u>
Total	\$52,377,000
AAL	
Active	\$20,123,000
Retired	<u>20,461,000</u>
Total	\$40,584,000
Assets	\$ 0
Unfunded AAL	\$40,584,000
ARC	
Service Cost	\$ 1,542,000
Amortization	<u>2,640,000</u>
Total	\$ 4,182,000

SECTION III ACCOUNTING INFORMATION

The anticipated effective date for the new GASB OPEB accounting standard is fiscal year beginning July 1, 2007 with deferred effective dates if annual revenue is below \$100 million (see Exhibit IX). The following shows the Annual Required Contribution (ARC), Annual OPEB Cost (AOC), and Projected June 30, 2009 Healthcare Reserve, assuming the accounting standard is first adopted for fiscal year ending June 30, 2009.

Annual Required Contribution (ARC)

The proposed standard sets the method for determining the Town's retiree healthcare accrual to include both the value of benefits earned during the year (Service Cost) and an amortization of the unfunded AAL. Accordingly, the following table shows the Town's 2009 accrual based on a 30 year amortization of the unfunded AAL as a level dollar amount.

	<i>Fiscal Year Ending June 30, 2009</i>
♦ Service Cost (with interest)	\$1,542,000
♦ AAL Amortization	<u>2,640,000</u>
♦ Total Accrual	\$4,182,000

Annual OPEB Cost (AOC)

If there is no OPEB obligation on the Town's financial statements at transition, then the Annual OPEB Cost (AOC) is equal to the ARC. However, if there is an initial obligation at transition, the AOC should reflect an adjustment for the transition obligation. Note that the GASB OPEB standard in general, directs sponsors to set their initial OPEB obligation to zero at transition. However, this may result in awkward accounting results. We recommend you discuss this issue with your auditors if there is currently anything recorded.

♦ ARC	\$4,182,000
♦ Adjustment to ARC	<u>0</u>
♦ Total AOC	\$4,182,000

SECTION III ACCOUNTING INFORMATION

Summary AOC (After adoption a three-year display will be shown):

Fiscal Year Ending	AOC	Percentage of Annual OPEB Cost Contributed *	Net OPEB Obligation
6/30/2009	\$4,182,000	27%	\$3,036,000

* Based on expected premium payments.

Projected June 30, 2009 Post Retirement Benefits Other Than Pensions Reserve

Based on the AOC developed above, the following is the projected June 30, 2009 Post Retirement Benefits Other Than Pensions Reserve (GASB refers to this as "Other Post-Employment Benefit Obligation" or "OPEB").

	Total
• June 30, 2008 Net OPEB Obligation ³ (NOO)	\$ 0
• Annual OPEB Cost (AOC)	\$ 4,182,000
• Expected Premium Payments:	\$ <u>(1,146,000)</u>
• Expected June 30, 2008 Net OPEB Obligation ⁴ (NOO)	\$ 3,036,000

Required Supplementary Information

Below is the Projected Schedule of Funding Progress

<u>Valuation Date</u>	<u>Actuarial Value of Assets (a)</u>	<u>Actuarial Accrued Liability (AAL) - EAN (b)</u>	<u>Unfunded AAL (UAAL) (b-a)</u>	<u>Funded Ratio (a / b)</u>	<u>Covered Payroll (Estimated)⁵ (c)</u>	<u>UAAL as a Percentage of Covered Payroll⁵ (b - a) / (c)</u>
6/30/2008	\$0	\$40,584,000	\$40,584,000	0%	\$13,909,371	291%

³ Assumes July 1, 2008 Net OPEB Obligation is set equal to Retiree Benefit Fund Balance.

⁴ Actual reserves would use FY 2009 benefit payments.

⁵ Based on calendar year 2008 budget payroll.

SECTION IV PAYOUT PROJECTION

The Town of Lunenburg Principal Valuation Results

Expected Annual Payments for current participants based on assumptions and premiums detailed in Section IX.

Year Beginning July 1,	Total
2008	\$1,146,000
2009	1,263,000
2010	1,395,000
2011	1,515,000
2012	1,624,000
2013	1,715,000
2014	1,817,000
2015	1,912,000
2016	2,036,000
2017	2,168,000
2018	2,331,000
2019	2,511,000
2020	2,673,000
2021	2,809,000
2022	2,969,000
2023	3,110,000
2024	3,255,000
2025	3,390,000
2026	3,511,000
2027	3,659,000

SECTION V PRE-FUNDING IMPACT

Results in this report are based on a 5.0% interest rate since the plan is not currently funded. If the plan were to start to be funded the interest rate would change to reflect a reasonable long-term rate of return on those assets. The chart below shows the effect funding the plan would have on the liabilities and costs.

	<u>5.0%</u> <u>Interest Rate</u>	<u>Impact of Funding: 7% Return</u>		
		<i>Decrease</i>	<i>Total</i>	<i>Percent Change</i>
♦ Funded Status				
➤ AAL	\$40,584,000	\$(10,351,000)	\$30,233,000	(26%)
➤ Assets	<u>-</u>	<u>-</u>	<u>-</u>	
➤ Unfunded AAL	\$40,584,000	\$(10,351,000)	\$30,233,000	(26%)
♦ Expense				
➤ Service Cost	\$ 1,542,000	\$ (608,000)	\$ 934,000	(39%)
➤ AAL Amortization	<u>2,640,000</u>	<u>(204,000)</u>	<u>2,436,000</u>	(8%)
➤ Total	<u>\$ 4,182,000</u>	<u>\$ (812,000)</u>	<u>\$3,370,000</u>	(19%)

To be considered funded, the Town would need to contribute at least the AOC of \$3,370,000 or an additional \$2,224,000 above the expected contribution (benefit payment) level.

**SECTION VI
DEMOGRAPHIC INFORMATION**

	Active Employees	Currently Retired*	Total
Counts:			
<i>Total</i>	301	198	499
<i>Average Age</i>	46.63	68.15	
<i>Average Service</i>	9.48	N/A	

*Includes 126 retirees and 72 spouses for the Medical valuation; 106 retirees were included in the Life Insurance valuation.

SECTION VII PLAN PROVISIONS

- Eligibility: Retire on or after reaching the earlier of 20 years of service or age 55 and completing 10 years of service.
- Benefit:
- Medical coverage continues for the lifetime of the retiree.
 - In general, the retirees and their spouses not eligible for Medicare pay 20% of the cost of coverage. Retirees and their spouses eligible for Medicare pay either 20% or 50% of the cost of coverage based on which plan they enroll in.
 - Surviving spouses can remain enrolled under the same cost sharing arrangement.
 - A \$5,000 life insurance benefit is provided, with retirees paying 50% of the cost.
- Coordination with Medicare:
- The Town has adopted Chapter 18 of Section 32B as of July 2008.
 - The Town will reimburse each retiree and spouse 75% of the Medicare Part B premium.
 - The Town has a number of retirees who are eligible for Medicare Part B but have not yet enrolled as of the valuation date. These retirees will be required to enroll before the end of the Fiscal Year. In addition to 75% of the Medicare Part B premium, the Town will also pay the Part B premium penalty for late enrollment.

SECTION IX GASB OPEB SUMMARY

Medical Costs

A blended premium is computed for all employees and retirees not yet eligible for Medicare benefits. Under GASB Statements 43 and 45, the non-blended (or age adjusted) premium is used for computing plan costs. Below are the representative premium costs:

	<u>Gross Annual Medical Cost</u>	
	<u>Not Eligible for Medicare</u>	<u>Eligible for Medicare</u>
Age Adjusted to Age 50	\$5,033	N/A
Age Adjusted to Age 55	\$5,937	N/A
Age Adjusted to Age 60	\$7,126	N/A
Age Adjusted to Age 65	\$8,653	\$4,022
Age Adjusted to Age 70	\$9,982	\$4,663
Blended pre-Medicare rate (Retiree)	\$5,033	
Blended pre-Medicare rate (Dependent)	\$8,194	
Blended post -Medicare rate	\$5,278	
Medicare Part B premium	\$1,157	

Medicare Part B

The Town has a number of retirees who are eligible for Medicare Part B but have not yet enrolled as of the valuation date. These retirees will be required to enroll before the end of the Fiscal Year. For these retirees, the Town will pay the Part B premium penalty for late enrollment.

We have assumed the medical costs and contributions to be based on post-Medicare rates for these retirees as of the valuation date. The Town's obligation for the Part B premium penalty is assumed to be 10% of the annual premium for each year an eligible retiree was not enrolled in Medicare Part B.

Plan Utilization

It is assumed that the future retirees and retirees under age 65 will enroll in one of the Medicare Supplemental Plans when reach age 65.

Life Insurance – \$5,000. It is assumed that 85% of all future retirees will elect life insurance coverage.

Valuation Methodology and Terminology

We have used final GASB accounting methodology to determine the postretirement medical benefit obligations.

The Government Accounting Standards Board (GASB) has issued an accounting standard for the recognition and disclosure for public entities sponsoring other (than pensions) post-retirement benefit plans.

This Exhibit summarizes pertinent issues from the above statements and includes comments about GASB's OPEB standard.

SECTION IX GASB OPEB SUMMARY

Why Pay-As-You-Go Accounting Will Be Unacceptable

The FASB believes, and GASB agrees, other post-retirement benefits, like pensions, are a form of deferred compensation. Accordingly, GASB is saying these benefits should be recognized (in an organization's financial statement) when earned by employees, rather than when paid out. Under SFAS 106, pay-as-you-go accounting is replaced with accrual accounting for these benefits. *This approach is similar to (although more restrictive than) GASB's approach under Statement No. 27.* GASB has followed the Statement No. 27 approach in their new OPEB statement.

Allocating Costs (Attribution)

The FASB defines attribution as the process of assigning other post-retirement benefit cost to periods of employee service. SFAS 106 specifies how (the attribution method) and over what accounting periods (the attribution period) the postretirement benefits promise must be allocated.

The attribution (actuarial cost) method specified by SFAS 106 is the "projected unit credit actuarial cost method". This method attributes an equal amount of the total postretirement benefit to each year of service during the "attribution period".

The attribution period is the period over which the total postretirement benefit is earned. Unless the plan states that post-retirement benefits are not earned until a later date, the attribution period is from the employee's hire date until the employee is first eligible for the benefit. *The GASB standard does not restrict entities to a single attribution method, but instead allows sponsors (and actuaries) to choose from several acceptable methods (similar to GASB 27).* GASB allows all six funding methods. GASB will also allow attribution to the expected retirement age rather than the earliest eligibility age.

Defining the Plan

SFAS 106 refers to the substantive plan as the basis for accounting. The substantive plan may differ from the written plan in that it reflects the employer's cost sharing policy based on past practice or communication of intended changes, or a past practice of cost increases in monetary benefits. Under SFAS 106, the substantive plan is the basis for allowing recognition of potential future changes to the plan. *GASB follows FASB's lead on this issue, requiring entities to recognize the underlying promise, not just the written plan.*

The important similarity between GASB and FASB relates to the implied subsidy when retirees participate in the active healthcare plan, but are charged a rate based on composite active and retiree experience. Under SFAS 106 the plan sponsor must recognize this implied subsidy.

Actuarial Assumptions

SFAS 106 says actuarial assumptions should be explicit. This means each individual assumption should represent the actuary's best estimate. GASB also, generally, requires explicit assumptions.

GASB requires the discount rate be based on the source of funds used to pay the benefits. This means the underlying expected long-term rate of return on plan assets for funded plans. However, since the source of funds for unfunded plans is usually the agency's general fund, and agencies are usually restricted by State law as to what investments they can have in their general fund, unfunded plans will need to use a relatively low discount rate.

SECTION IX GASB OPEB SUMMARY

Transition Issues

Because historical annual required contribution information will rarely be available, *GASB is taking a prospective approach on transition issues*. This means there will be no requirement for any initial transition obligation.

Effective Dates

The new standard will have staggered effective dates, similar to GASB Statement No. 34, as follows:

	Annual Revenue	Effective for Fiscal Years Beginning After
Phase I	≥ \$100 million	December 15, 2006
Phase II	≥ \$10 million but < \$100 million	December 15, 2007
Phase III	< \$10 million	December 15, 2008

SECTION IX GASB OPEB SUMMARY

Differences Between SFAS 106 and GASB 45

Conceptually, Statement No. 45 is similar to SFAS 106. They both require current recognition of the promise to pay future benefits. However, they differ somewhat in how that recognition should occur. Specifically:

<u>Concept</u>	<u>SFAS 106</u>	<u>GASB 45</u>
1. Attribution Method	<ul style="list-style-type: none"> • Mandates use of a particular method, regardless of method used to determine contribution. 	<ul style="list-style-type: none"> • Allows sponsor to use same method used to determine contribution, provided it meets certain criteria.
2. Assumptions (excluding discount rate)	<ul style="list-style-type: none"> • Requires each assumption stand on its own – Explicit assumptions. 	<ul style="list-style-type: none"> • Requires each assumption stand on its own and, in addition, meet certain other criteria.
3. Discount Rate	<ul style="list-style-type: none"> • Long term high quality bond rates (e.g., Moody Aa). 	<ul style="list-style-type: none"> • Expected long term rate of return on source used to pay benefits (e.g. sponsor's general fund).
4. Benefit Cost	<ul style="list-style-type: none"> • Mandates use of a specific method, regardless of method used to determine contribution. 	<ul style="list-style-type: none"> • Provides that if entity always contributes Annual Required Contribution (ARC) then benefit cost equals ARC. If entity does not contribute ARC, then benefit cost equals ARC, adjusted for the difference.
5. Annual Required Contribution	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • The Plan's funding contribution, with actuarial assumptions and methods (including amortization periods) restricted as indicated above.
6. Liability Recognition	<ul style="list-style-type: none"> • The historical difference between actual contributions and benefit costs become an accrued liability (or prepaid asset) on the sponsor's financial statement. 	<ul style="list-style-type: none"> • If sponsor consistently contributes the ARC, then no recognition is required. However, if sponsor has not historically contributed the ARC, then difference becomes a Net Pension Obligation on the sponsor's financial statement.