Town of Sudbury

Postemployment Benefits Other Than Pensions (OPEB)

July 1, 2013 GASB 45 Valuation

January 13, 2015

Linda L. Bournival, FSA Consulting Actuary KMS Actuaries, LLC



Table of Contents

- What is GASB 45?
- Census Data
- Plan Provisions
- Economic Assumptions
- Demographic Assumptions
- Implicit Subsidy
- Sudbury OPEB Liability
- Funding Options
- OPEB Liability Sensitivity Analysis
- OPEB Costs and OPEB Liabilities



What is GASB 45?

- Accrual accounting for Other Post Employment Benefits (OPEB)
- Benefits valued are retiree medical, dental, life insurance, etc.
- Establishes standards for measurement, recognition and display of OPEB expense and liabilities in the financial statements of governmental employers
- GASB 45 does not require funding OPEB liabilities, just reporting them



What is GASB 45?

- Perform actuarial valuation every other year
- Develop expense called Annual Required Contribution (ARC)
 - Value of benefits earned by active employees in current year (Normal Cost)
 - Amortization of existing unfunded actuarial accrued liability (UAAL)
- Disclose information about plan, plan assets and liabilities



Census Data

Valuation Date	July 1, 2013
Active employees	529
Retired employees, covered spouses and survivors:	
Enrolled in Pre-Medicare plans	82
Enrolled in Medicare Supplement plans	358
Life Insurance Only	0
Total Retired employees, covered spouses and survivors	440



Plan Provisions

- Eligibility General Employees (Group 1)
 - Attainment of age 55 with 10+ years of service or 20+ years of service
 - Age 60 with 10+ years of service for hires after April 1, 2012
- Eligibility Public Safety (Group 4)
 - Attainment of age 55 or 20+ years of service
 - Attainment of age 55 for hires after April 1, 2012
- Coverage through Group Insurance Commission (GIC) medical plans
- Retirees contribute 50% of total premium
- \$1,000 life insurance coverage
 - Town pays 50% of premium



Economic Assumptions

- Discount rate used to calculate present value of expected future benefit payments
 - -3.5%
 - Based on feedback from auditors
 - Based on long-term rate of return on General Fund assets used to satisfy obligation
- Health care cost trend rate (HCCTR)
 - 7% year 1, declining 1% per year to ultimate 5%
 - Previously, 9% declining to ultimate 5%



Demographic Assumptions

- Assumptions other than health care related are consistent with Middlesex County and Mass Teachers Retirement System
- Retirement, disability and turnover depend on employee type
 - General employee, public safety or teacher
- Mortality includes mortality improvement
- Participation rates 70%
- Spouse coverage 55%



Implicit Subsidy

- Benefits provided to both active employees and retirees
- Projection of future retiree benefits based on age-adjusted premiums for retirees
 - Expected medical costs increase as people age
- Exception for community-rated plan, e.g. GIC
 - Premium rates reflect projected health experience of all participating employers
 - Provider charges the same unadjusted premiums for both active employees and retirees
 - Actuarial Standard of Practice (ASOP) change removes exception for 2015 and later



Sudbury OPEB Liability

(in millions)

- Accrued Liability as of July 1, 2011 = \$34.275
 - Based on census data, plan provisions and assumptions utilized in 2011 valuation
- Changes during period July 1, 2011 June 30, 2013
 - Decreases to Liability

•	Premium rates	less than expected	(4.317)
---	---------------	--------------------	---------

Increases to Liability

•	Demographic experience	1.360
---	------------------------	-------

 Excise tax imposed by Patient Protection and Affordable Care Act, effective 2018

.308

Total Changes to Liability (\$2.649)

Accrued Liability as of July 1, 2013 = \$36.005



Funding Options

- Pay-as-you-go (PAYG)
 - Must use discount rate close to long-term expected rate of return on cash (3.5%)
 - Potential ramification on bond rating
 - Many municipalities finance OPEB on a PAYG basis
 - FY14 ~ \$1,003,000
- Fully Pre-Fund the Annual Required Contribution (ARC)
 - Requires Irrevocable OPEB Trust
 - Allows use of higher discount rate, e.g. 7.5%
 - FY14 ~ \$2,148,000
 - FY14 Net OPEB Trust Contribution ~ \$1,145,000
 - \$2,148,000 less \$1,003,000 = \$1,145,000
- Partially Pre-Fund
 - Requires Irrevocable OPEB Trust
 - Blended discount rate



OPEB Liability Sensitivity Analysis Discount Rate

	Baseline	-1%	+1%
Discount Rate	3.5%	2.5%	4.5%
Actuarial Liability	\$36.005	\$43.777	\$30.160
Absolute Change	-	+ 7.772	- 5.845
Percentage Change	-	+ 21.6%	- 16.2%



OPEB Liability Sensitivity Analysis Health Care Cost Trend Rate

	Baseline	-1%	+1%
Health Care Trend	7% - 5%	6% - 4%	8% - 6%
Actuarial Liability	\$36.005	\$30.355	\$43.316
Absolute Change	-	- 5.650	+ 7.311
Percentage Change	-	- 15.7%	+ 20.3%



OPEB Liability Sensitivity Analysis Census Data

- Every valuation in sensitive to Census Data
 - How many employees are working?
 - How many retirees and beneficiaries are receiving benefits?
 - How old are active employees and retirees?
 - When will employees retire?



OPEB Liability Sensitivity Analysis Plan Provisions

- Every valuation in sensitive to Plan Provisions
 - What are the benefits promised?
 - How long with benefits continue after retirement?
 - What health plans are offered?
 - What are the costs of the plans?
 - What are the retiree cost-sharing provisions?



OPEB Liability Sensitivity Analysis Actuarial Assumptions

- Every valuation in sensitive to Assumptions
 - Assumptions can have a significant impact on size of liability
 - Assumptions are used to project *estimated* future benefit payments
 - Assumptions are used to calculate Present Values (OPEB Liability)
- Health Care Cost Trend Rates can vary
 - 7%-10% initially, 4%-5% ultimate
- Discount rate depends on assets used to finance benefits
 - Lower discount rate means higher liabilities
- Implicit Subsidy is required by GASB 45 and ASOPS
 - Actuarial Standards of Practice
 - Included if "experience rated"
 - Not included if "community rated"
 - But ASOP change will require in 2015 and later



OPEB Costs and OPEB Liabilities

OPEB Costs

- Plan offerings and cost-sharing provisions drive the COSTS
- Periodically review health plan choices
- Medicare-eligible retirees
 - Section 18A of Chapter 32B requires Medicare-eligible retirees to transfer to a Medicare health plan at age 65

OPEB Liabilities

- Costs and Assumptions drive the LIABILITY
- Establish OPEB Policy
- Establish Irrevocable OPEB Trust
- Perform biennial OPEB Actuarial Valuation
 - Most recent valuation as of July 1, 2013
 - Next valuation required as of July 1, 2015

