Township of Old Bridge

Other Post-Employment Benefits Actuarial Valuation

Actuarial Valuation as of January 1, 2011

October, 2011

Submitted by

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October 27, 2011

Township of Old Bridge One Old Bridge Plaza Old Bridge, NJ 08857

This report presents the January 1, 2011 actuarial valuation results for the Township of Old Bridge (the "Township") Other Post-Employment Benefit Plans. The purposes of this report are to:

(1) Determine the plan's January 1, 2011 obligations;

(2) Determine the Township's 2011 fiscal year accrual for the Governmental Accounting Standards Board (GASB) standard and

(3) Provide information that may be helpful in future planning for the Other Post-Employment Benefit ("OPEB") Plans.

A summary of the major results is shown in the Executive Summary, while the Principal Valuation Results section provides more detail.

The Accounting Information section summarizes GASB Other Post-Employment Benefit (OPEB) accounting treatment including the 2011 accrual and the December 31, 2010 net obligation on a pay-as-you-go approach.

This report's costs and liabilities are based upon the data and plan provisions provided by the Township, as summarized in the Demographic Information and Plan Provisions Sections, respectively, and the funding method and actuarial assumptions outlined in the Methods and Assumptions Section of this report. This Report presents our best estimate of the costs of the Post-Employment Benefit Plans in accordance with accepted actuarial principles and our understanding of GASB Statements 43 and 45.

To the best of our knowledge, this report is complete and accurate and conforms to generally accepted actuarial principles and methodology.

This report is intended for the sole use of the addressee. It is intended only to supply sufficient information for the Township to comply with the stated purposes of the report, and may not be appropriate for other business purposes. Reliance on information contained in the report by anyone for other than the intended purposes puts the relying entity at risk of being misled because of confusion or failure to understand applicable assumptions, methodologies, or limitations of the reports conclusions.

Respectfully submitted,

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BOOMERSHINE CONSULTING GROUP, L.L.C.

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Executive Summary

The Township of Old Bridge (the Township) provides healthcare and prescription drug insurance benefits to retirees and their dependents. The Township pays the total premium cost. All full time active employees who retire or are disabled directly from the Township and meet the eligibility criteria may participate.

The following table summarizes the valuation results. These results have been calculated based on assumptions as to current claim cost, projected increases in health care costs, morbidity, turnover, and interest discount.

Information on plan provisions and participation was provided by the Township.

This summary identifies the value of benefits at January 1, 2011 and costs for the 2011 fiscal year, reflecting the pay-as-you-go funding approach, utilizing a discount rate of 4.50% and amortizing the Unfunded Actuarial Accrued Liability as a level percentage of payroll.

	As of January 1, 2011
Present Value of all Projected Benefits (PVPB)	\$194,228,051
Actuarial Accrued Liability (AAL)	157,819,533
Plan Asset Value	0
Unfunded Actuarial Accrued Liability	157,819,533
2011 Annual Required Contribution (ARC)	9,488,711
2011 Annual OPEB Cost (AOC)	8,999,859
2011 Expected Employer Contributions	4,241,177
Net OPEB Obligation (NOO) at 12/31/2010	22,562,428
Expected Net OPEB Obligation (NOO) at 12/31/2011	27,321,110

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



Principal Valuation Results

This section presents detailed valuation results for the Township's retiree OPEB programs.

- 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 total PVPB (at January 1, 2011) is \$194,228,051. About 65% (\$126,762,423) of this liability 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 total AAL (at January 1, 2011) is \$157,819,533. About 57% of this obligation is for active employees. The AAL represents approximately 81% of the PVPB.
- The Normal Cost is the value of benefits expected to be earned during the year, again based on certain actuarial methods and assumptions. The 2011 total Normal Cost is \$3,462,765.

This report develops the AAL and Normal Cost using the Projected Unit Credit actuarial cost method.

The following table shows results by active and retired employee groups.

	As of January 1, 2011
Present Value of Projected Benefits	
Actives	\$ 126,762,423
Retirees	67,465,628
Total	\$ 194,228,051
Actuarial Accrued Liability (AAL)	
Actives	\$ 90,353,905
Retirees	67,465,628
Total	\$ 157,819,533
Assets	\$ 0
Unfunded AAL	157,819,533
Normal Cost	\$ 3,462,765

Note: Under the GASB standard, only funds set aside exclusively to pay plan benefits are considered plan assets.



Accounting Information

The effective date for the new GASB OPEB accounting standard is the fiscal year beginning July 1, 2008. Adoption before this fiscal year is optional. The following shows the Annual Required Contribution (ARC), Annual OPEB Cost (AOC), and the December 31, 2011 Net OPEB Obligation.

Annual Required Contribution (ARC)

The GASB standard sets the method for determining the Township's retiree Post-Retirement Benefits accrual to include both the value of benefits earned during the year (Normal Cost) and an amortization of the Unfunded Actuarial Accrued Liability (AAL). Accordingly, the following table shows the Township's 2011 accrual based on an open-period 30 year amortization of the unfunded AAL, as a level percentage of pay amount.

	As of January 1, 2011
Normal Cost	\$3,462,765
Unfunded AAL Amortization	\$6,025,946
Total Accrual, end of year	\$9,488,711

The following illustrates the Township's AOC, which is equal to the ARC plus adjustments due to the prior year's NOO.

	Total
ARC	\$9,488,711
Interest on NOO	\$1,015,309
Adjustment to ARC	\$1,504,162
Total AOC	\$8,999,859



Accounting Information

AOC Summary

Fiscal Year Ending	AOC	Total Employer Contributions	Net OPEB Obligation
06/30/2009	\$12,290,622	\$2,268,687	\$10,021,935
12/31/2010*	\$18,017,693	\$5,477,200	\$22,562,428

^{*} Note: 18 month period

Required Supplementary Information

Below is the Projected Schedule of Funding Progress

Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) - Projected Unit Credit (b)	Unfunded AAL (UAAL) (b-a)	Funded Ration (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll (b – a) / (c)
07/01/2008	\$0	\$111,325,563	\$111,325,563	0%	N/A	N/A
07/01/2011	\$0	\$157,819,533	\$157,819,533	0%	N/A	N/A

Projected December 31, 2011 Net OPEB Obligation (NOO)

Based on the AOC developed above, the following is the projected December 31, 2011 Net OPEB Obligation.

December 31, 2010 Net OPEB Obligation (NOO)		\$ 22,562,428
Annual OPEB Cost (AOC)		8,999,859
Expected Employer Contri	butions	
- Retirees Premiums	\$ 3,029,412	
- Implicit Rate Subsidy	\$ 1,211,765	
- To Trust Fund	<u>\$0</u>	
Total		\$ 4,241,177
Expected December 31, 2011 Net OPEB obligation (NOO)		\$ 27,321,110



Accounting Information

Payout Projection

Annual Payments expected based on assumptions and contributions detailed in the Methods and Assumptions section.

Year Ending	Payout
06/30/2012	\$3,650,746
06/30/2013	4,118,394
06/30/2014	4,601,948
06/30/2015	5,093,791
06/30/2016	5,505,268
06/30/2017	5,927,353
06/30/2018	6,344,311
06/30/2019	6,752,208
06/30/2020	7,150,492
06/30/2021	7,528,750



Demographic Information

The following Table summarizes active and retiree demographic information.

	Number of Participants Valued	
	Medical/Drug	
Actives	270	
Retirees and Beneficiaries	139	
Spouses	95	
Total Participants	504	

	Total
Average Age (Medical/Drug)	
Active	46.92
Retired	65.71
Average Service (for actives)	15.25

Note: Assumed that 100% of active employees elect retiree medical coverage upon retirement.



Plan Provisions

Medical

Medical: BC/BS Traditional, BlueCard PPO, Horizon POS,

or Oxford PPO

Dental: BC/BS Dental or Horizon Dental Choice

Vision: Vision Plan

Prescription Drug: BC/BS Prescription or Prescription 5/12

co-pay

There is a grandfathered group that has one choice of Prescription Drug, Dental and Health Insurance that differs

from the above.

Eligibility

Township of Old Bridge employees are eligible to continue group insurance coverage after retirement provided that:

- a. Retiring employees have coverage in effect when they stop working.
- b. Retirement commences on the first of the month, following the last day they are employed.
- c. An employee must have been a permanent active employee.
- d. Employee must have 25 or more years of continuous service with the Township of Old Bridge or be age 62 with 15 or more years of service with the Township of Old Bridge.

Retiree Payment

The Township of Old Bridge pays the entire cost of the premium.



Valuation Methodology and Terminology

GASB Statement 45 accounting methodology to determine the

post-retirement medical benefit obligations.

Amortization Period

30 Years.

Amortization Method

Level Percentage of Pay.

Actuarial Method

Projected Unit Credit Method.

Normal Cost

Determined for each active employee as the Actuarial Present Value of benefits allocated to the valuation year. The benefit attributed to the valuation year is that incremental portion of the total projected benefit earned during the year in accordance with the plan's benefit formula. This allocation is based on each individual's service between date of hire and date of full benefit eligibility.

Accumulated Post-Retirement Benefit Obligation The Actuarial Present Value of Benefits allocated to all periods prior to the valuation year.

Discount rate

4.50%

Trend rates for medical and prescription drug are as follows:

Plan Year	Medical	Dental	Prescription Drug
2011	8.5%	5.8%	10.5%
2012	8.0%	5.7%	10.0%
2013	7.5%	5.6%	9.5%
2014	7.0%	5.5%	9.0%
2015	6.5%	5.4%	8.5%
2016	6.0%	5.3%	8.0%
2017	5.5%	5.2%	7.5%
2018	5.0%	5.1%	7.0%
2019	5.0%	5.0%	6.5%
2020	5.0%	5.0%	6.0%
2021	5.0%	5.0%	5.5%
2022	5.0%	5.0%	5.0%

Salary Scale

3.5%, utilized for purposes of determining the level percentage

of pay amortization cost.

Mortality Table

RP-2000 Health Mortality Table for males and females.



Retirement Tables (Sample Rates are shown below):

Civilian		
Age	Rate	
55	15.4%	
56	11.2%	
57	11.2%	
58	11.2%	
59	21.0%	
60	8.8%	
61	8.8%	
62	18.0%	
63	14.0%	
64	15.0%	
65	23.1%	
66	18.0%	
67	15.0%	
68	15.0%	
69	15.0%	
70	100.0%	

Police				
	Years of Service			
Age	25	More than 25		
37	0%	5%		
38-42	25%	5%		
43-47	20%	5%		
48-52	20%	15%		
53-54	20%	22%		
55+	100%	100%		

Disability Rates (Sample rates shown below):

Age	Civilian	Police
20	0.01%	0.05%
25	0.01%	0.08%
30	0.10%	0.12%
35	0.16%	0.17%
40	0.20%	0.28%
45	0.43%	0.44%
50	0.56%	0.76%
55	0.77%	0.00%



Withdrawal

Samples Rates are shown below:

Civilians Years of Service						
Age	1	2	3	4-9	10+	
20	22.8%	17.7%	12.6%	8.5%	0.0%	
25	23.4%	18.2%	13.1%	8.4%	0.0%	
30	22.1%	17.1%	12.1%	5.3%	0.0%	
35	17.9%	13.4%	8.9%	3.3%	3.4%	
40	16.7%	12.3%	8.0%	2.5%	2.6%	
45	15.7%	11.5%	7.2%	1.7%	1.9%	
50	14.7%	10.6%	6.5%	1.4%	2.3%	
55	14.1%	10.0%	6.0%	1.4%	2.2%	

	Police		
	Years of Service		
Age	< 50	5-20	
20	0.00%	0.00%	
25	0.83%	0.00%	
30	0.50%	0.40%	
35	0.83%	0.10%	
40	0.00%	0.15%	
45	0.00%	0.20%	
50	0.00%	0.00%	
55	0.00%	0.00%	



Retirement Age Employee must have 25 or more years of continuous service

with the Township of Old Bridge or be age 62 with 15 or more

years of service with the Township of Old Bridge.

Age Difference/ Family

Assumptions

Males are assumed to be 3 years older than females;

For current retirees and actives, actual family status and ages

were used when available.

Coverage We have assumed that 100% of current active employees

would elect coverage by retirement age under the medical plans. For current retirees, we have valued only those who have current coverage elections, with the assumption that retirees without coverage cannot elect coverage in the future. Spouses are eligible for coverage while retiree is alive with up

to 2 years of additional coverage upon death of the retiree.

All post 65 retirees are covered by Blue Care PPO.