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June 26, 2013

Mr. Robert Ross Director of Administration Exeter-West Greenwich Regional School District 940 Nooseneck Hill Road West Greenwich, RI 02817

#### RE: July 1, 2012 Actuarial Valuation of Postretirement Welfare Benefits

Dear Bob,

Enclosed are two copies of the report covering the July 1, 2012 valuation of postretirement benefits offered to current and future retirees of the Exeter-West Greenwich Regional School District, RI.

The financial results of the actuarial valuation are summarized in the report. The Executive Summary highlights the results of the valuation. Additional information summarizing census information, actuarial assumptions, and the methodology for developing them, as well as a glossary of selected terms used in this study, is also included in the report.

All calculations are made in accordance with our understanding of the provisions of the Statement of Governmental Accounting Standards Board Number 45 (GASB 45).

Please call me if you have any questions.

Sincerely,

**USI CONSULTING GROUP** 

Robert W. Webb, FSA, EA, MAAA

Vice President and Actuary

**Enclosures** 



## A Postretirement Welfare Benefit GASB 45 Actuarial Valuation As of July 1, 2012

For:

## Exeter-West Greenwich Regional School District, RI

Prepared by: The USI Consulting Group

June 26, 2013



June 26, 2013

Exeter-West Greenwich Regional School District 940 Nooseneck Hill Road West Greenwich, RI 02817

RE: July 1, 2012 Actuarial Valuation of Postretirement Welfare Benefits

We enclose the report covering the actuarial valuation of the postretirement medical insurance plan for the employees of the Exeter-West Greenwich Regional School District, RI as of July 1, 2012. The numbers presented in this report reflect the adoption, by the Exeter-West Greenwich Regional School District, RI, of the Statement of Governmental Accounting Standard No. 45 (GASB 45).

The financial results of the actuarial valuation are summarized in the report. The Executive Summary highlights the results of the valuation, including the calculation of the Annual OPEB Costs for the fiscal years beginning July 1, 2012 and July 1, 2013.

Additional information summarizing census information, actuarial assumptions, and the methodology for developing them, as well as a glossary of selected terms used in this study, are also included in the report.

All calculations are made in accordance with our understanding of the provisions of the Statement of Governmental Accounting Standards Board Number 45 (GASB 45). We believe this report provides all of the information your auditor requires. We would appreciate a copy of the footnote to your financial statement related to the postretirement benefits.

Respectfully submitted,

**USI Consulting Group** 

Robert W. Webb, FSA, EA, MAAA

Vice President and Actuary

John Sheaves

Senior Actuarial Consultant



## TABLE OF CONTENTS

		Page
I.	Executive Summary	1
II.	Census Information	7
III.	Financial Statement Disclosure	10
IV.	Actuarial Assumptions And Methodology	13
v.	Appendices	17

#### **Section I**

## **Executive Summary**

The section presents the results of the July 1, 2012 valuation. The first section provides a brief summary of the valuation results. The Executive Summary Detail provides a more detailed development of the expenses and liabilities. Items I through V show the development of the Annual Required Contribution (ARC). Items VI through IX show the calculation of the Annual OPEB Cost. Item XII provides a brief summary of the key assumptions used in developing the plan's costs and liabilities.

#### **EXECUTIVE SUMMARY**

#### Introduction

This report details the development of the Annual OPEB Cost for the Fiscal Years ending June 30, 2013 and June 30, 2014. Estimated disclosure information is included in Section III.

The liabilities developed in this report are only valid for purposes of meeting employer accounting requirements as required by Statement of Governmental Accounting Standards Number 45 (GASB 45). Liabilities developed for other purposes could be significantly different than those shown in this report.

#### Summary of Results

The Actuarial Accrued Liability and Normal Cost are calculated as of the valuation date. The Annual OPEB Cost and Expected Benefit Payments are for the year beginning on the valuation date. Additional detail is developed in the exhibits included in this actuarial valuation report.

Fiscal Year Ending June 30, 2013	<u>Total</u>
Beginning of Year Net OPEB Obligation (NOO)	\$780,590
Actuarial Accrued Liability (AAL)	\$3,792,980
Actuarial Value of Assets	\$0
Unfunded Actuarial Accrued Liability (UAAL)	\$3,792,980
Annual Required Contribution (30 year amortization)	\$450,414
Annual OPEB Cost	\$446,463
Expected Benefit Payments	\$150,248
Fiscal Year Ending June 30, 2014	
Beginning of Year Net OPEB Obligation (NOO)	\$1,076,805
Actuarial Accrued Liability (AAL)	\$4,073,948
Actuarial Value of Assets	\$0
Unfunded Actuarial Accrued Liability (UAAL)	\$4,073,948
Annual Required Contribution (30 year amortization)	\$474,330
Annual OPEB Cost	\$467,729
Expected Benefit Payments	\$158,420

#### **Economic Assumptions**

The employer, with the approval of the auditor, is responsible for selecting the economic assumptions as of the disclosure date. The following table details the selected economic assumptions for the current fiscal year:

Assumption Selection Date	<u>July 1, 2012</u>
Funding Interest Rate*	4.00%
2012 Medical Trend Rates	9.00%
Ultimate Medical Trend Rate	5.00%
Year Ultimate Trend Rates Reached	2016
Annual Payroll Increase	2.50%

\* Reflects current funding policy (assumes no funding).

#### **EXECUTIVE SUMMARY (cont.)**

#### **Experience Gains and Losses**

The plan had an accumulated experience gain over the past two years, primarily due to plan costs increasing less than assumed, offset somewhat by changes made to the actuarial assumptions. The impact of the loss on the actuarial accrued liability is provided in Appendix II in Section VI.

#### Changes included in current valuation

The plan assumptions are summarized in Section IV of the report. The impact on plan liabilities is shown in Appendix II in Section VI.

The new <u>Health Care Reform Law</u> is not expected to have a significant impact on the plan costs other than the provision for a "High Cost Plan Excise Tax", which is effective in 2018. This provision of the law is described in more detail in Section IV. The impact on plan liabilities is shown in Appendix II in Section VI.

#### **Accounting for Postretirement Benefits**

This report provides the information needed to prepare the footnote in your financial statements related to your postretirement benefit plans. The unfunded actuarial accrued liability and the ARC are developed in the Executive Summary Detail included in this section. For this Fiscal Year / Valuation Report, Section III presents the disclosure information based on estimated contributions made.

#### **Actuarial Certification**

The financial results of the actuarial valuation are summarized in this report. The valuation has been prepared as of July 1, 2012. The detail charts included in this Executive Summary highlight the results of the valuation. Additional information summarizing the census, actuarial assumptions, plan provisions, and a glossary of selected terms used in this study are also included in this report.

The valuation is based on the September 1, 2012 census data and July 1, 2012 plan information as provided by the employer. We have reviewed both the census and financial data for reasonableness, but have not completed an independent audit of the information.

All costs, liabilities, and other factors under the plan were determined in accordance with generally accepted actuarial principles and procedures. The calculations are consistent and undertaken with our understanding of Statement of Governmental Accounting Standards Number 45 (GAS 45). In our opinion, the actuarial assumptions are reasonable, taking in account the experience of the plan and reasonable expectations and, individually represent our best estimate of the anticipated experience under the plan.

#### **EXECUTIVE SUMMARY (cont.)**

I have no relationship with the employer or the plan that would objectively impair, or appear to impair, my ability to perform the work detailed in this report.

I certify that I am a member of the American Academy of Actuaries and meet its Qualification Standards to provide an actuarial opinion in accordance with GASB 45.

Robert W. Webb, FSA, EA, MAAA

Vice President and Actuary

Adeniyi Olaiya, ASA, MAAA

Associate Vice President and Actuary

# EXECUTIVE SUMMARY DETAIL GASB 45 LIABILITIES, ANNUAL REQUIRED CONTRIBUTION AND ANNUAL OPEB COST FOR 2012

		<u>Medical</u>	<u>Dental</u>	<u>Total</u>
I.	Present value of Future benefits			
	A. Retirees/Disableds	\$455,384	\$16,237	\$471,621
	B. Active Employees	\$8,032,226	<u>\$456,692</u>	\$8,488,918
	C. Total	\$8,487,610	\$472,929	\$8,960,539
II.	Actuarial Accrued Liability			
	A. Retirees/Disableds	\$455,384	\$16,237	\$471,621
	B. Active Employees	\$3,140,793	\$180,566	\$3,321,359
	C. Total	\$3,596,177	\$196,803	\$3,792,980
III.	Actuarial Assets	\$0	\$0	\$0
IV.	Unfunded Actuarial Accrued Liability (UAAL)	\$3,596,177	\$196,803	\$3,792,980
V.	Annual Required Contribution (ARC)			
	A. Normal Cost	\$256,951	\$14,685	\$271,636
	B. Supplemental Cost	\$155,565	\$8,779	\$164,344
	C. Compound Interest to Year End	<u>\$13,622</u>	<u>\$812</u>	<u>\$14,434</u>
	D. Annual Required Contribution [A. + B. + C.]	\$426,138	\$24,276	\$450,414
VI.	Net OPEB Obligation	\$727,281	\$53,309	\$780,590
VII.	Interest on net OPEB Obligation	\$29,091	\$2,132	\$31,223
VIII.	Adjustment to ARC	(\$32,772)	(\$2,402)	(\$35,174)
IX.	Annual OPEB Cost (Expense)	\$422,457	\$24,006	\$446,463
	[V.D. + VII. + VIII.]			
Х.	Expected Benefit Payments			
	A. Retirees/Disableds	\$134,558	\$5,764	\$140,322
	B. Active Employees	<u>\$9,354</u>	<u>\$572</u>	<u>\$9,926</u>
	C. Total	\$143,912	\$6,336	\$150,248

# EXECUTIVE SUMMARY DETAIL GASB 45 LIABILITIES, ANNUAL REQUIRED CONTRIBUTION AND ANNUAL OPEB COST FOR 2013

		<u>Medical</u>	<u>Dental</u>	<u>Total</u>
I.	Present value of Future benefits			
	A. Retirees/Disableds	\$398,590	\$14,428	\$413,018
	B. Active Employees	\$8,380,725	<u>\$476,004</u>	\$8,856,729
	C. Total	\$8,779,315	\$490,432	\$9,269,747
II.	Actuarial Accrued Liability			
	A. Retirees/Disableds	\$398,590	\$14,428	\$413,018
	B. Active Employees	<u>\$3,461,873</u>	\$199,057	\$3,660,930
	C. Total	\$3,860,463	\$213,485	\$4,073,948
III.	Actuarial Assets	\$0	\$0	\$0
IV.	Unfunded Actuarial Accrued Liability (UAAL)	\$3,860,463	\$213,485	\$4,073,948
V.	Annual Required Contribution (ARC)			
	A. Normal Cost	\$263,375	\$15,052	\$278,427
	B. Supplemental Cost	\$180,493	\$9,967	\$190,460
	C. Compound Interest to Year End	<u>\$14,723</u>	<u>\$864</u>	<u>\$15,587</u>
	D. Annual Required Contribution [A. + B. + C.]	\$458,591	\$25,883	\$484,474
VI.	Net OPEB Obligation	\$1,013,276	\$71,075	\$1,084,351
VII.	Interest on net OPEB Obligation	\$40,531	\$2,843	\$43,374
VIII.	Adjustment to ARC	(\$49,266)	(\$3,456)	(\$52,722)
IX.	Annual OPEB Cost (Expense)	\$449,856	\$25,270	\$475,126
	[V.D. + VII. + VIII.]			
Χ.	Expected Benefit Payments			
	A. Retirees/Disableds	\$118,927	\$4,902	\$123,829
	B. Active Employees	<u>\$32,647</u>	<u>\$1,944</u>	<u>\$34,591</u>
	C. Total	\$151,574	\$6,846	\$158,420

## **Section II**

## **Census Information**

This section details statistics related to the participants in the postretirement benefit plan.

#### **CENSUS INFORMATION – A.**

#### **EMPLOYEE COUNTS**

_	As of September 1, 2012			As o	2011	
•	<u>Actives</u>	tives <u>Retirees Total</u>		<u>Actives</u>	<u>Retirees</u>	<u>Total</u>
Male	38	5	43	47	8	55
Female	<u>128</u>	9	<u>137</u>	<u>145</u>	<u>23</u>	<u> 168</u>
Total	166	14	180	192	31	223

#### **COUNTS BY AGE AND ELIGIBILITY STATUS**

#### **ACTIVE EMPLOYEES:**

Age	Currently Eligible to Retire	Not Currently Eligible to Retire	Total
29 and under	2	0	2
30 - 34	10	0	10
35 - 39	25	0	25
40 - 44	27	0	27
45 - 49	29	0	29
50 - 54	37	2	39
55 - 59	24	1	25
60 - 64	5	4	9
65 and over	0	0	0
Total	159	7	166

#### **CURRENT RETIREES:**

Age	Retirees	Spouse	Total
54 and under	1	0	1
55 - 59	5	0	5
60 - 64	8	0	8
65 - 69	0	0	0
70 - 74	0	0	0
75 - 79	0	0	0
80 and over	0	0	0
Total	14	0	14

#### **CENSUS INFORMATION – B.**

#### **AVERAGE AGE AND SERVICE**

	As of September 1, 2012	As of October 1, 2011
ACTIVE EMPLOYEES:		
A. Average Age at Hire		
Males	31.2	31.5
Females	33.5	34.1
Total	33.0	33.5
B. Average Service		
Males	13.2	12.2
Females	15.0	13.4
Total	14.6	13.1
C. Average Current Age		
Males	44.4	43.7
Females	48.5	47.5
Total	47.6	46.6
CURRENT RETIREES		
D. Average Current Age		
Males	59.1	60.6
Females	61.3	60.2
Total	60.5	60.3

### **Section III**

## **Financial Statement Disclosure**

This section provides the required information and notes to the Financial Statements For the fiscal year ending June 30, 2013.

#### FINANCIAL STATEMENT DISCLOSURE

The GASB standard on accounting for postretirement benefits other than pensions requires the following disclosures in the financial statements with regard to the retiree benefit liability:

#### 1.) GASB 45 DISCLOSURE FINANCIALS

		7/1/2012 -	7/1/2013 -
A.	Annual OPEB Cost and Net OPEB Obligation	<u>6/30/2013</u>	<u>6/30/2014</u>
	Annual Required Contribution (ARC)	\$450,414	\$474,330
	2. Interest on net OPEB Obligation	\$31,223	\$43,072
	3. Adjustment to ARC	<u>(\$35,174)</u>	(\$49,673)
	4. Annual OPEB Cost (Expense)	\$446,463	\$467,729
	5. Contribution made (assumed middle of year) *	<u>(\$150,248)</u>	(\$158,420)
	6. Increase in net OPEB Obligation	\$296,215	\$309,309
	7. Net OPEB Obligation - beginning of year	<u>\$780,590</u>	<u>\$1,076,805</u>
	8. Net OPEB Obligation - end of year	\$1,076,805	\$1,386,114

<sup>\*</sup> Contribution made was assumed to equal Expected Benefit Payments

The annual OPEB Cost, the percentage of annual OPEB cost contributed to the plan, and the net OPEB obligation for fiscal years ending 2013 / 2014 are as follows:

Fiscal		Percentage of	Net		
Year	Annual	Annual OPEB	OPEB	Covered	OPEB Cost
Ending	OPEB Cost	Cost Contributed	<b>Obligation</b>	<u>Payroll</u>	% of Pay
6/30/2013	\$446,463	33.7%	\$1,076,805	N/A	N/A
6/30/2014	\$467,729	33.9%	\$1,386,114	N/A	N/A

#### B. Funded Status and Funding Progress

Funded Ratio <u>(a/b)</u>	Covered Payroll <u>(c)</u>	Percentage of Covered Payroll (AAL) ((b - a) / c)
0.0%	N/A	N/A
0.0%	N/A	N/A
0.0%	N/A	N/A
	Ratio (a/b) 0.0% 0.0%	Ratio         Payroll           (a/b)         (c)           0.0%         N/A           0.0%         N/A

#### C. Methods and Assumptions

-	Interest Rate	4.00%
-	2012 Medical Trend Rates	9.00%
-	Ultimate Medical Trend Rate	5.00%
-	Year Ultimate Trend Rates Reached	2016
-	Actuarial Cost Method	Entry Age Normal
-	The remaining amortization period at 06/30/2013	26.86
-	Annual Payroll Increase	2.50%

#### FINANCIAL STATEMENT DISCLOSURE (cont.)

#### 2.) A BRIEF DESCRIPTION OF THE RETIREE MEDICAL INSURANCE PLAN:

a. Plan Types: Medical/Dental

Retirees are enrolled in a Blue Cross Blue Shield PPO.

Eligibility: If vested (10 years of service) by July 1, 2005:

Either age 60 with 10 years of service, or any age with 28 years of service.

If not vested by July 1, 2005: Age 55 with 20 years of service.

Employees who retire with 20 years of service receive two years of coverage Expiration Date:

plus accrued sick time converted to years of healthcare coverage.

Employees who retire with 15 years of service receive one year of coverage

plus accrued sick time converted to years of healthcare coverage.

The expiration date is the earlier of the date healthcare coverage runs out and

age 65.

d. Benefit/Cost Sharing: Prior to the employees' expiration date, the School District pays 100% of the

> medical premium, except for any annual increases over 5%. After the employees' expiration date, employees pay 100% of the premium plus a 2%

carrying charge until age 65.

e. Spouse Benefit: Yes, at the same cost sharing rate as the employee.

f. Surviving Spouse Benefit: Yes, the Town covers surviving spouses medical coverage at the same rate as

the above spouse benefit.

g. Annual Medical

Premiums:

Effective July 1, 2012

Medical

Individual: \$ 7,184.40

Family: \$ 18,376,92

**Dental** 

Individual: 408.36

Family: \$ 1,320.12 **JULY 1, 2012 GASB 45 VALUATION** 

### **Section IV**

## **Actuarial Assumptions And Methodology**

The following pages detail the assumptions used in the calculations.

#### ACTUARIAL ASSUMPTIONS AND METHODOLOGY

1. Funding Interest Rate: An interest rate of 4.0% was used.

2. Mortality: The mortality rates are from the RP-2000 Combined mortality table

projected fully generationally with projection scale AA.

3. Retirement Rates: Sample rates are shown below:

<u>Age</u>	<u>Rate</u>
<45	0.0%
45-49	5.0%
50-54	10.0%
55-69	20.0%
70+	100.0%

**4. Disability Rates:** None assumed.

5. Termination Rates:

Years of Service	<u>Male</u>	<u>Female</u>
0	17.00%	13.00%
5	2.89%	4.18%
10	1.04%	2.05%
15	0.94%	1.34%
20	0.94%	1.01%
24	0.94%	0.33%

**6.** <u>Health Care Trend Rates:</u> It was assumed that health care costs would increase in accordance with the trend rates in the following table:

	Medical	Dental				
<u>Year</u>	<u>Rates</u>	<u>Rates</u>				
2012	9.0%	5.0%				
2013	8.0%	5.0%				
2014	7.0%	5.0%				
2015	6.0%	5.0%				
2016+	5.0%	5.0%				

7. Participation Rate:

It was assumed that 100% of the current active employees covered under the active plan on the day before retirement would enroll in the retiree medical plan upon retirement.

#### ACTUARIAL ASSUMPTIONS AND METHODOLOGY (cont.)

8. Percent Married: It was assumed that 30% of the employees who elect retiree health

care coverage for themselves would also elect coverage for their spouse upon retirement. It was assumed that male spouses are three years older than their wives and female spouses are three years younger than the retiree. For current retirees, actual census

information was used.

9. Actuarial Value of Assets: N/A

10. Administrative Expenses: Included in premiums used, except for a 2% carrying charge for

employees who are past their expiration date.

11. Participant Salary

**Increases:** 3.50% annually

**12.** Payroll Growth Rate: 2.50% annually

13. Per Capita Claims Cost Per Capita Claim Costs were developed by applying morbidity aging

factors to the average premium rates reflecting the demographic characteristics of the insured group. Below are the annual per capita

claim costs used:

Age	<u>Male</u>	<b>Female</b>	Age	<u>Male</u>	<b>Female</b>
45	5,515	6,923	55	8,039	8,342
46	5,713	7,072	56	8,362	8,486
47	5,917	7,221	57	8,694	8,629
48	6,130	7,355	58	9,016	8,843
49	6,373	7,494	59	9,349	9,066
50	6,621	7,638	60	9,696	9,294
51	6,879	7,781	61	10,053	9,522
52	7,147	7,930	62	10,425	9,760
53	7,429	8,064	63	10,623	9,949
54	7,727	8,203	64	10,826	10,137

#### ACTUARIAL ASSUMPTIONS AND METHODOLOGY (cont.)

#### 14. <u>High Cost Plan Excise</u> Tax:

Effective in 2018. The law apply a 40% tax to the cost of plan benefits in excess of statutory thresholds, which are \$10,200 for single coverage and \$27,500 for family coverage for Medicare eligible retirees. An additional \$1,650 and \$3,450 are added for single and family coverage respectively, for retirees who are between ages 55 and 65. We assume the thresholds will start to increase in 2018 at the rate of 3.4%. The plan costs for pre 65 and post 65 benefits are based on the plans' premium costs adjusted for aging and trended at the health care trend rates shown above.

#### **ACTUARIAL COST METHOD**

An Actuarial Cost Method develops an orderly allocation of the actuarial present value of benefits payments over the working lifetime of the participants in the plan. The actuarial present value of benefits allocated to a particular fiscal year is called the Normal Cost. The actuarial present value of benefits allocated to all periods prior to a valuation date is called the Actuarial Accrued Liability. The Unfunded Actuarial Accrued Liability is amortized over future years in accordance with the employer's established accounting policy.

The Entry Age Actuarial Cost Method is used in this valuation. Under this method, the Actuarial Present Value of Projected Benefits of each individual included in the Actuarial Valuation is allocated on a level basis over future earnings of the individual between entry age and assumed exit age(s). The portion of this Actuarial Present Value allocated to a valuation year is called the Normal Cost. The portion of this Actuarial Present Value not provided for at a valuation date by the Actuarial Present Value of future Normal Costs is called the Actuarial Accrued Liability.

The amortization of the unfunded actuarial accrued liability may be determined in level dollar amounts or as a level percentage of projected payroll of active plan members. The total unfunded actuarial accrued liability may be amortized as one amount, or components of the total may be separately amortized. The equivalent single amortization period for all components combined may not exceed the maximum acceptable period of 30 years.

#### **ADDITIONAL COMMENTS**

The values in this GASB 45 valuation represent a closed group and do not reflect new entrants after the census collection date. We assumed that the years of healthcare coverage based on accrued sick time was equivalent to 20% of years of service at retirement.

## Section V

## **Appendices**

#### APPENDIX - I.

#### **ACTIVE EMPLOYEE BY AGE AND SERVICE**

#### AS OF SEPTEMBER 1, 2012

<u>Service</u>										
Age	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40+	Total
0 - 19	0	0	0	0	0	0	0	0	0	0
20 - 24	0	0	0	0	0	0	0	0	0	0
25 - 29	1	1	0	0	0	0	0	0	0	2
30 - 34	3	5	1	0	0	0	0	0	0	9
35 - 39	2	9	11	1	0	0	0	0	0	23
40 - 44	3	3	14	5	4	0	0	0	0	29
45 - 49	5	3	5	7	8	0	0	0	0	28
50 - 54	0	4	9	4	14	5	0	0	0	36
55 - 59	1	2	4	7	11	1	0	0	0	26
60 - 64	0	3	2	2	5	0	1	0	0	13
65 - 69	0	0	0	0	0	0	0	0	0	0
Total	15	30	46	26	42	6	1	0	0	166

#### **APPENDIX - II.**

#### RECONCILIATION OF ACTUARIAL ACCRUED LIABILITY

a.	7/1/2010 Actuarial Accrued Liability	\$3,999,389			
b.	2010 Normal Cost	\$276,552			
c.	Interest Rate	4.00%			
d.	Interest on (a. + b.)	\$171,037			
e.	2010 Expected Benefit Payments	(\$220,544)			
f.	Interest on f.	<u>(\$4,411)</u>			
g.	7/1/2011 Expected Actuarial Accrued Liability	\$4,222,023			
	(a. + b. + d. + e. + f.)				
h.	2011 Normal Cost	\$283,466			
i.	Interest Rate	4.00%			
j.	Interest on (g. + h.)	\$180,220			
k.	2011 Expected Benefit Payments	(\$245,099)			
1.	Interest on k.	(\$4,902)			
m.	7/1/2012 Expected Actuarial Accrued Liability	\$4,435,708			
	(g. + h. + j. + k. + l.)				
n.	Change in Actuarial Accrued Liability due to				
	i. Demographic and plan cost changes	(\$680,448)			
	ii. Change in Actuarial Assumptions	\$37,720			
	iii. High Cost Plan Excise Tax	\$19,490			
	iv. Plan Changes	<u>\$0</u>			
	v. Total	(\$642,728)			
o.	7/1/2012 Actuarial Accrued Liability	\$3,792,980			
	(m. + n.v.)				

#### APPENDIX - III.

#### **DEVELOPMENT OF NORMAL COST AND AMORTIZATION PAYMENT**

A.	Prior Bases	
	1. Amortization Base Balance as of 7/1/2010	\$3,999,389
	2. 2010 Amortization Payment	(\$171,495)
	3. Interest	4.00%
	4. Interest on $(1) + (2)$	<u>\$153,116</u>
	5. Amortization Base Balance as of $7/1/2011(1) + (2) + (4)$	\$3,981,010
	6. 2011 Amortization Payment	(\$172,369)
	7. Interest	4.00%
	8. Interest on $(5) + (6)$	<u>\$152,346</u>
	9. Amortization Base Balance as of $7/1/2012(5) + (6) + (8)$	\$3,960,987
	10. Remaining Amortization Period	28
	11. Valuation Interest rate	4.00%
	12. Assumed payroll growth	2.50%
	13. 2012 Adjusted Amortization Amount	\$170,937
В.	New Amortization Base	
	1. Experience (Gain)/Loss	(\$680,448)
	2. Assumption Changes	\$37,720
	3. High Cost Plan Excise Tax	\$19,490
	4. Plan Change	\$0
	5. Loss due to Funding timing	<u>\$455,231</u>
	6. Total $(1) + (2) + (3) + (4) + (5)$	(\$168,007)
	7. Remaining Amortization Period	30
	8. Valuation Interest rate	4.00%
	9. Assumed payroll growth	2.50%
	10. Amortization Amount	(\$6,859)
C.	Combined Bases	#a #0a 000
	1. Amortization Base Balance as of 7/1/2012 (A.19. + B.5.)	\$3,792,980
	2. 2012 Preliminary Total Amortization Amount (A.13. + B.10.)	\$164,078
	3. 2012 Minimum Total Amortization Amount (30 year)	\$154,853
	4. 2012 Total Amortization Amount (greater of 2. and 3.)	\$164,078

#### APPENDIX - IV

#### PROJECTED BENEFIT PAYMENTS

<u>Year</u>	Amount	Ac	cumulated	<u>Year</u>	<b>Amount</b>	A	ccumulated	<u>Year</u>	<b>Amount</b>	A	ccumulated
2012	\$ 150,248	\$	150,248	2026	\$ 629,144	\$	5,532,692	2040	\$ 466,075	\$	15,907,737
2013	\$ 158,420	\$	308,668	2027	\$ 654,171	\$	6,186,863	2041	\$ 421,214	\$	16,328,951
2014	\$ 154,477	\$	463,145	2028	\$ 719,185	\$	6,906,048	2042	\$ 362,837	\$	16,691,788
2015	\$ 157,736	\$	620,881	2029	\$ 809,749	\$	7,715,797	2043	\$ 368,016	\$	17,059,804
2016	\$ 187,930	\$	808,811	2030	\$ 842,974	\$	8,558,771	2044	\$ 367,203	\$	17,427,007
2017	\$ 212,789	\$	1,021,600	2031	\$ 840,651	\$	9,399,422	2045	\$ 313,118	\$	17,740,125
2018	\$ 239,141	\$	1,260,741	2032	\$ 904,616	\$	10,304,038	2046	\$ 205,948	\$	17,946,073
2019	\$ 331,824	\$	1,592,565	2033	\$ 961,758	\$	11,265,796	2047	\$ 102,775	\$	18,048,848
2020	\$ 427,257	\$	2,019,822	2034	\$ 920,189	\$	12,185,985	2048	\$ 53,899	\$	18,102,747
2021	\$ 482,134	\$	2,501,956	2035	\$ 763,396	\$	12,949,381	2049	\$ 9,155	\$	18,111,902
2022	\$ 545,847	\$	3,047,803	2036	\$ 733,977	\$	13,683,358	2050	\$ 639	\$	18,112,541
2023	\$ 580,987	\$	3,628,790	2037	\$ 732,631	\$	14,415,989	2051	\$ 518	\$	18,113,059
2024	\$ 625,356	\$	4,254,146	2038	\$ 522,456	\$	14,938,445	2052	\$ 88	\$	18,113,147
2025	\$ 649,402	\$	4,903,548	2039	\$ 503,217	\$	15,441,662	2053	\$ -	\$	18,113,147

#### APPENDIX – V GLOSSARY

**Actuarial Accrued Liability.** The portion, as determined by a particular Actuarial Cost Method, of the present value of benefits which is not provided for by future Normal Costs.

**Actuarial Cost Method.** A procedure for determining the Actuarial Present Value of Total Projected Benefits and for developing an actuarially equivalent allocation of such value to time periods, usually in the form of a Normal Cost and an Actuarial Accrued Liability.

**Actuarially Equivalent.** Of equal Actuarial Present Value, determined as of a given date with each value based on the same set of Actuarial Assumptions.

Actuarial Present Value of Total Projected Benefits. The present value, as of the valuation date, of the cost of future benefits to be paid to employees, retirees, and covered dependents, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment. It is the amount that would have to be invested on the valuation date so that the amount invested plus investment earnings will provide sufficient assets to pay total projected benefits when due.

**Annual OPEB Cost.** The accrual-basis measure of the periodic cost of an employer's participation in a defined benefit OPEB Plan.

Annual Required Contributions of the Employer (ARC). The employer's periodic required contributions to a defined benefit OPEB plan, calculated in accordance with the parameters defined in GAS 45.

**Investment Return Assumption (Discount Rate).** The rate used to adjust a series of future benefit payments to reflect the time value of money.

**Healthcare Cost Trend Rate.** The rate of change in per capita health claims costs over time as a result of factors such as medical inflation, utilization of healthcare services and technological developments.

**Net OPEB Obligation.** The cumulative difference since the effective date of GAS 45 between the annual OPEB cost and the employer's contributions to the plan.

**Normal Cost.** The portion of the Actuarial Present Value of plan benefits which is allocated to a valuation year by the Actuarial Cost Method.

**OPEB.** Postemployment benefits other than pension benefits.

Pay-As-You-Go. The amount of the benefits paid out to plan participants during the year.

**Per Capita Claims Cost.** The current average annual cost of providing postretirement health care benefits per individual.

**Supplemental Cost.** The amount of the Annual Required Contribution attributable to the amortization of the unfunded Actuarial Accrued Liability.