

A Postretirement Welfare Benefit GASB 45 Actuarial Valuation As of July 1, 2013

For:

City of Woonsocket

Prepared by: The USI Consulting Group

October 24, 2014



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October 24, 2014

City of Woonsocket, RI 169 Main Street Woonsocket, RI 02895

RE: July 1, 2013 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 City of Woonsocket as of July 1, 2013. The numbers presented in this report reflect the adoption, by the City of Woonsocket, 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 year beginning July 1, 2013.

The results in this valuation are based on the July 1, 2013 census data and plan information. The assumptions have not changed since the last valuation. This valuation reflects changes in a number of plan provisions since the last valuation. The provisions are summarized in Section III of this report.

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



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Section I

Executive Summary

The section presents the results of the July 1, 2013 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 Year ending June 30, 2014. The June 30, 2014 actuarial accrued liability 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, 2014

Beginning of Year Net OPEB Obligation (NOO)	\$47,789,155
Actuarial Accrued Liability (AAL)	\$101,512,769
Actuarial Value of Assets	\$0
Unfunded Actuarial Accrued Liability (UAAL)	\$101,512,769
Annual Required Contribution (30 year amortization)	\$6,946,549
Annual OPEB Cost	\$6,551,152
Expected Benefit Payments	\$4,015,437

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, 2013</u>		
Funding Interest Rate*	4.00%		
2013 Medical / Dental Trend Rates	8.0% / 5.0%		
Ultimate Medical / Dental Trend Rate	5.0% / 5.0%		
Year Ultimate Trend Rates Reached	2018 / 2012		
Annual Payroll Increase	2.50%		

^{*} Reflects current funding policy (assumes no funding).

EXECUTIVE SUMMARY (cont.)

Changes included in current valuation

The assumptions have not changed since the last valuation. This valuation reflects changes in a number of plan provisions since the last valuation. The provisions are summarized in Section III of this report. The impact of the changes is shown in Appendix II.

Accounting for Postretirement Benefits

Government Accounting Standard No. 45 (GAS 45) addresses the accounting and financial reporting requirements by Employers for Postemployment Benefits Other than Pensions (OPEB). Employers that are required to follow Government Accounting Standards are subject to this standard. The statement does not require that the benefits be pre-funded, however, it defines a financial framework for assessing the costs, design, and sustainability of OPEBs offered by employers.

This report presents the annual expense required to be recognized by the plan sponsor for purposes of complying with the accounting requirements of Governmental Accounting Standards Board Statement No. 45. This report also provides the information needed to prepare the footnote in your financial statements related to your postretirement benefit plans.

The Annual Required Contribution (ARC) and Annual OPEB Cost are developed in the Executive Summary Detail included in this section. Section III presents the disclosure information, including the development of the Net OPEB obligation based on expected contributions / benefits to be paid during the fiscal year.

Actuarial Certification

The financial results of the actuarial valuation are summarized in this report. The valuation has been prepared as of July 1, 2013. 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 July 1, 2013 census data and 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.)

Actuarial Certification (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

EXECUTIVE SUMMARY DETAIL

GASB 45 LIABILITIES, ANNUAL REQUIRED CONTRIBUTION

AND ANNUAL OPEB COST FOR FYE 6/30/2013 BY EMPLOYEE GROUP

		<u>Police</u>	<u>Fire</u>	<u>Pro-Tech</u>	<u>Municipal</u>	<u>Non-Union</u>	<u>Total</u>
I.	Present value of Future benefits						
	A. Retirees/Disableds	\$35,037,250	\$22,841,923	\$2,426,041	\$11,245,110	\$1,488,235	\$73,038,559
	B. Active Employees	\$20,504,291	<u>\$28,007,775</u>	\$1,124,223	<u>\$4,784,240</u>	<u>\$673,706</u>	\$55,094,235
	C. Total	\$55,541,541	\$50,849,698	\$3,550,264	\$16,029,350	\$2,161,941	\$128,132,794
II.	Actuarial Accrued Liability						
	A. Retirees/Disableds	\$35,037,250	\$22,841,923	\$2,426,041	\$11,245,110	\$1,488,235	\$73,038,559
	B. Active Employees	<u>\$8,060,800</u>	<u>\$16,945,566</u>	<u>\$658,151</u>	<u>\$2,487,072</u>	<u>\$322,621</u>	<u>\$28,474,210</u>
	C. Total	\$43,098,050	\$39,787,489	\$3,084,192	\$13,732,182	\$1,810,856	\$101,512,769
III.	Actuarial Assets	\$0	\$0	\$0	\$0	\$0	\$0
IV.	Unfunded Actuarial Accrued Liability (UAAL)	\$43,098,050	\$39,787,489	\$3,084,192	\$13,732,182	\$1,810,856	\$101,512,769
V.	Annual Required Contribution (ARC)						
	A. Normal Cost	\$814,803	\$938,963	\$46,136	\$215,954	\$28,812	\$2,044,668
	B. Supplemental Cost	\$2,085,678	\$1,776,324	\$141,030	\$626,738	\$82,156	\$4,711,926
	C. Compound Interest to Year End	<u>\$85,352</u>	<u>\$82,425</u>	\$4,341	\$15,195	\$2,642	<u>\$189,955</u>
	D. Annual Required Contribution [A. + B. + C.]	\$2,985,833	\$2,797,712	\$191,507	\$857,887	\$113,610	\$6,946,549
VI.	Net OPEB Obligation	\$25,680,360	\$15,889,710	\$1,090,899	\$4,534,713	\$593,473	\$47,789,155
VII.	Interest on net OPEB Obligation	\$1,027,214	\$635,588	\$43,636	\$181,389	\$23,739	\$1,911,566
VIII.	Adjustment to ARC	(\$1,239,688)	(\$767,056)	(\$52,662)	(\$218,908)	(\$28,649)	(\$2,306,963)
IX.	Annual OPEB Cost (Expense) [V.E. + VII. + VIII.]	\$2,773,359	\$2,666,244	\$182,481	\$820,368	\$108,700	\$6,551,152
<i>X</i> .	Expected Benefit Payments A. Retirees/Disableds	\$1.511.997	\$1,336,359	\$155,712	\$917,902	\$89,223	\$4,011,193
	B. Active Employees	\$1,311,997	(\$27,046)	\$1,593	\$7,75 <u>7</u>	\$599 \$599	\$4,244
	C. Total	\$1,533,338	\$1,309,313	\$1,393 \$157,305	\$925,659	\$89,822	\$4,015,437

EXECUTIVE SUMMARY DETAIL

GASB 45 LIABILITIES, ANNUAL REQUIRED CONTRIBUTION

AND ANNUAL OPEB COST FOR FYE 6/30/2013 BY BENEFIT

		<u>Medical</u>	<u>Dental</u>	<u>Life</u>	<u>Total</u>
I.	Present value of Future benefits				
	A. Retirees/Disableds	\$63,276,975	\$4,627,210	\$5,134,374	\$73,038,559
	B. Active Employees	\$52,217,554	\$2,097,559	<u>\$779,122</u>	\$55,094,235
	C. Total	\$115,494,529	\$6,724,769	\$5,913,496	\$128,132,794
II.	Actuarial Accrued Liability				
	A. Retirees/Disableds	\$63,276,975	\$4,627,210	\$5,134,374	\$73,038,559
	B. Active Employees	<u>\$27,209,951</u>	<u>\$844,487</u>	<u>\$419,772</u>	<u>\$28,474,210</u>
	C. Total	\$90,486,926	\$5,471,697	\$5,554,146	\$101,512,769
III.	Actuarial Assets	\$0	\$0	\$0	\$0
IV.	Unfunded Actuarial Accrued Liability (UAAL)	\$90,486,926	\$5,471,697	\$5,554,146	\$101,512,769
V.	Annual Required Contribution (ARC)				
	A. Normal Cost	\$1,926,317	\$83,597	\$34,754	\$2,044,668
	B. Supplemental Cost	\$4,221,992	\$242,877	\$247,057	\$4,711,926
	C. Compound Interest to Year End	\$175,268	\$9,587	\$5,100	\$189,955
	D. Annual Required Contribution [A. + B. + C.]	\$6,323,577	\$336,061	\$286,911	\$6,946,549
VI.	Net OPEB Obligation	\$46,080,014	\$1,220,694	\$488,447	\$47,789,155
VII.	Interest on net OPEB Obligation	\$1,843,200	\$48,828	\$19,538	\$1,911,566
VIII.	Adjustment to ARC	(\$2,224,457)	(\$58,927)	(\$23,579)	(\$2,306,963)
IX.	Annual OPEB Cost (Expense) [V.E. + VII. + VIII.]	\$5,942,320	\$325,962	\$282,870	\$6,551,152
Х.	Expected Benefit Payments				
	A. Retirees/Disableds	\$3,531,615	\$171,807	\$307,771	\$4,011,193
	B. Active Employees	<u>\$1,612</u>	<u>\$1,791</u>	<u>\$841</u>	<u>\$4,244</u>
	C. Total	\$3,533,227	\$173,598	\$308,612	\$4,015,437

EXECUTIVE SUMMARY DETAIL

GASB 45 LIABILITIES, ANNUAL REQUIRED CONTRIBUTION

AND ANNUAL OPEB COST FOR FYE 6/30/2013 BY FUND

		<u>General</u>	<u>User</u>	<u>Wastewater</u>	<u>Water</u>	<u>Total</u>
<i>I</i> .	Present value of Future benefits					
	A. Retirees/Disableds	\$68,300,978	\$386,421	\$398,167	\$3,952,993	\$73,038,559
	B. Active Employees	<u>\$53,705,006</u>	\$18,522	<u>\$46,107</u>	\$1,324,600	\$55,094,235
	C. Total	\$122,005,984	\$404,943	\$444,274	\$5,277,593	\$128,132,794
II.	Actuarial Accrued Liability					
	A. Retirees/Disableds	\$68,300,978	\$386,421	\$398,167	\$3,952,993	\$73,038,559
	B. Active Employees	<u>\$27,672,808</u>	<u>\$14,510</u>	<u>\$35,031</u>	<u>\$751,861</u>	<u>\$28,474,210</u>
	C. Total	\$95,973,786	\$400,931	\$433,198	\$4,704,854	\$101,512,769
III.	Actuarial Assets	\$0	\$0	\$0	\$0	\$0
IV.	Unfunded Actuarial Accrued Liability (UAAL)	\$95,973,786	\$400,931	\$433,198	\$4,704,854	\$101.512,769
V.	Annual Required Contribution (ARC)					
	A. Normal Cost	\$1,990,815	\$1,487	\$1,242	\$51,124	\$2,044,668
	B. Supplemental Cost	\$4,459,824	\$18,143	\$19,576	\$214,383	\$4,711,926
	C. Compound Interest to Year End	\$185,046	<u>(\$103)</u>	\$285	\$4,727	\$189,955
	D. Annual Required Contribution [A. + B. + C.]	\$6,635,685	\$19,527	\$21,103	\$270,234	\$6,946,549
VI.	Net OPEB Obligation	\$46,360,287	(\$119,486)	\$8,060	\$1,540,294	\$47,789,155
VII.	Interest on net OPEB Obligation	\$1,854,411	(\$4,779)	\$322	\$61,612	\$1,911,566
VIII.	Adjustment to ARC	(\$2,237,986)	\$5,768	(\$389)	(\$74,356)	(\$2,306,963)
IX.	Annual OPEB Cost (Expense)	\$6,252,110	\$20,516	\$21,036	\$257,490	\$6,551,152
	[V.E. + VII. + VIII.]					
X.	Expected Benefit Payments					
	A. Retirees/Disableds	\$3,646,282	\$44,427	\$27,304	\$293,180	\$4,011,193
	B. Active Employees	<u>\$2,673</u>	<u>\$0</u>	<u>\$68</u>	<u>\$1,503</u>	<u>\$4,244</u>
	C. Total	\$3,648,955	\$44,427	\$27,372	\$294,683	\$4,015,437

Section II

Census Information

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

CENSUS INFORMATION – A.

EMPLOYEE COUNTS

_	As of July 1, 2013					
·	<u>Actives Inactives* Total</u>					
Male	274	339	613			
Female	<u>64</u>	<u>136</u>	<u>200</u>			
Total	338	475	813			

COUNTS BY AGE AND ELIGIBILITY STATUS

ACTIVE EMPLOYEES:

Age	Currently Eligible to Retire	Not Currently Eligible to Retire	Total
29 and under	0	44	44
30 - 34	0	43	43
35 - 39	0	30	30
40 - 44	11	52	63
45 - 49	24	39	63
50 - 54	13	29	42
55 - 59	6	25	31
60 - 64	9	11	20
65 and over	2	0	2
Total	65	273	338

CURRENT INACTIVES:

Age	Inactive*	Spouse	Total
39 and under	4	8	12
40 - 44	11	11	22
45 - 49	33	26	59
50 - 54	38	27	65
55 - 59	48	32	80
60 - 64	69	46	115
65 - 69	66	44	110
70 - 74	69	24	93
75 - 79	54	16	70
80 - 84	28	10	38
85 - 89	43	8	51
90 and over	12	4	16
Total	475	256	731

^{*} Includes Retirees, Disabled and Survivors

CENSUS INFORMATION – B.

AVERAGE AGE AND SERVICE

ACTIVE EMPLOYEES:	As of July 1, 2013
A. Average Age at Hire	
Males	30.0
Females	36.5
Total	31.2
B. Average Service	
Males	12.3
Females	11.9
Total	12.3
C. Average Current Age	
Males	42.3
Females	48.4
Total	43.5
CURRENT INACTIVES	
D. Average Current Age	
Males	65.3
Females	72.6
Total	67.4

Section III

Financial Statement Disclosure

This section provides the required information and notes to the Financial Statements For the fiscal years ending June 30, 2014.

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 – ALL FUNDS

A.	Annual OPEB Cost and Net OPEB Obligation	7/1/2013 - <u>6/30/2014</u>
	Annual Required Contribution (ARC)	\$6.946.549
	Interest on net OPEB Obligation	\$1,911,566
	3. Adjustment to ARC	(\$2,306,963)
	4. Annual OPEB Cost (Expense)	\$6,551,152
	5. Contribution made (assumed middle of year) *	<u>(\$4,015,437)</u>
	6. Increase in net OPEB Obligation	\$2,535,715
	7. Net OPEB Obligation - beginning of year	<u>\$47,789,155</u>
	8. Net OPEB Obligation - end of year	\$50,324,870

^{*} 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 2014/2015 are as follows:

Fiscal		Percentage of	Net		
Year	Annual	Annual OPEB	OPEB	Covered	OPEB Cost
Ending	OPEB Cost	Cost Contributed	Obligation	<u>Payroll</u>	% of Pay
6/30/2014	\$6,551,152	61.3%	\$50,324,870	#N/A	#N/A

B. Funded Status and Funding Progress

Actuarial Valuation	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	Unfunded AAL (UAAL)	Funded Ratio	Covered Payroll	UAAL as a Percentage of Covered Payroll (AAL)
<u>Date</u>	<u>(a)</u>	<u>(b)</u>	<u>(b - a)</u>	<u>(a/b)</u>	<u>(c)</u>	$\frac{((b-a)/c)}{}$
7/1/2011	\$0	\$145,545,727	\$145,545,727	0.0%	\$15,580,164	934.2%
7/1/2012	\$0	\$157,305,211	\$157,305,211	0.0%	\$13,722,228	1146.4%
7/1/2013	\$0	\$101,512,769	\$101,512,769	0.0%	#N/A	#N/A
6/30/2014	\$0	\$103,603,988	\$103,603,988	0.0%	#N/A	#N/A

_	Interest Rate	4.00%
-	2013 Medical / Dental Trend Rates	8.0% / 5.0%
~	Ultimate Medical / Dental Trend Rate	5.0% / 5.0%
-	Year Ultimate Trend Rates Reached	2018 / 2012
-	Actuarial Cost Method	Entry Age Normal
~	The remaining amortization period at 06/30/2014	24.61
~	Annual Payroll Increase	2.50%

2. GASB 45 DISCLOSURE FINANCIALS – GENERAL FUND

A.	Annual OPEB Cost and Net OPEB Obligation	7/1/2013 - 6/30/2014
	1. Annual Required Contribution (ARC)	\$6,635,685
	2. Interest on net OPEB Obligation	\$1,854,411
	3. Adjustment to ARC	(\$2,237,986)
	4. Annual OPEB Cost (Expense)	\$6,252,110
	5. Contribution made (assumed middle of year) *	(\$3,648,955)
	6. Increase in net OPEB Obligation	\$2,603,155
	7. Net OPEB Obligation - beginning of year	\$46,360,287
	8. Net OPEB Obligation - end of year	\$48,963,442

^{*} 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 2014 / 2015 are as follows:

Fiscal		Percentage of	Net		
Year	Annual	Annual OPEB	OPEB	Covered	OPEB Cost
Ending	OPEB Cost	Cost Contributed	Obligation	<u>Payroll</u>	% of Pay
6/30/2014	\$6,252,110	58.4%	\$48,963,442	#N/A	#N/A

B. Funded Status and Funding Progress

Actuarial Valuation	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	Unfunded AAL (UAAL)	Funded Ratio	Covered Payroll	UAAL as a Percentage of Covered Payroll (AAL)
<u>Date</u>	<u>(a)</u>	<u>(b)</u>	(b-a)	<u>(a/b)</u>	(c)	$((\mathbf{b} - \mathbf{a}) / \mathbf{c})$
7/1/2011	\$0	\$137,878,611	\$137,878,611	0.0%	\$14,497,752	951.0%
7/1/2012	\$0	\$150,107,572	\$150,107,572	0.0%	\$12,765,376	1175.9%
7/1/2013	\$0	\$95,973,786	\$95,973,786	0.0%	#N/A	#N/A
6/30/2014	\$0	\$98,161,251	\$98,161,251	0.0%	#N/A	#N/A

-	Interest Rate	4.00%
-	2013 Medical / Dental Trend Rates	8.0% / 5.0%
-	Ultimate Medical / Dental Trend Rate	5.0% / 5.0%
-	Year Ultimate Trend Rates Reached	2018 / 2012
	Actuarial Cost Method	Entry Age Normal
-	The remaining amortization period at 06/30/2014	24.61
-	Annual Payroll Increase	2.50%

3. GASB 45 DISCLOSURE FINANCIALS – USER FUND

		7/1/2013 -		
A.	Annual OPEB Cost and Net OPEB Obligation	6/30/2014		
	Annual Required Contribution (ARC)	\$19,527		
	2. Interest on net OPEB Obligation	(\$4,779)		
	3. Adjustment to ARC	<u>\$5,768</u>		
	4. Annual OPEB Cost (Expense)	\$20,516		
	5. Contribution made (assumed middle of year) *	(\$44,427)		
	6. Increase in net OPEB Obligation	(\$23,911)		
	7. Net OPEB Obligation - beginning of year	(\$119,486)		
	8. Net OPEB Obligation - end of year	(\$143,397)		

^{*} 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 2014 / 2015 are as follows:

Fiscal		Percentage of	Net		
Year	Annual	Annual OPEB	OPEB	Covered	OPEB Cost
Ending	OPEB Cost	Cost Contributed	Obligation	<u>Payroll</u>	% of Pay
6/30/2014	\$20,516	216.5%	(\$143,397)	#N/A	NA

B. Funded Status and Funding Progress

	Actuarial	Actuarial Accrued	Unfunded			UAAL as a Percentage of Covered
Actuarial	Value of	Liability	AAL	Funded	Covered	Payroll
Valuation	Assets	(AAL)	(UAAL)	Ratio	Payroll	(AAL)
<u>Date</u>	<u>(a)</u>	<u>(b)</u>	(b-a)	<u>(a/b)</u>	<u>(c)</u>	$\frac{((\mathbf{b} - \mathbf{a}) / \mathbf{c})}{\mathbf{c}}$
7/1/2011	\$0	\$719,494	\$719,494	0.0%	#N/A	#N/A
7/1/2012	\$0	\$490,747	\$490,747	0.0%	#N/A	#N/A
7/1/2013	\$ 0	\$400,931	\$400,931	0.0%	#N/A	#N/A
6/30/2014	\$0	\$373,199	\$373,199	0.0%	#N/A	#N/A

-	Interest Rate	4.00%
-	2013 Medical / Dental Trend Rates	8.0% / 5.0%
-	Ultimate Medical / Dental Trend Rate	5.0% / 5.0%
-	Year Ultimate Trend Rates Reached	2018 / 2012
-	Actuarial Cost Method	Entry Age Normal
-	The remaining amortization period at 06/30/2014	24.61
-	Annual Payroll Increase	2.50%

4. GASB 45 DISCLOSURE FINANCIALS – WASTEWATER FUND

Annual OPEB Cost and Net OPEB Obligation	7/1/2013 - <u>6/30/2014</u>
1. Annual Required Contribution (ARC)	\$21,103
2. Interest on net OPEB Obligation	\$322
3. Adjustment to ARC	<u>(\$389)</u>
4. Annual OPEB Cost (Expense)	\$21,036
5. Contribution made (assumed middle of year) *	(\$27,372)
6. Increase in net OPEB Obligation	(\$6,336)
7. Net OPEB Obligation - beginning of year	<u>\$8,060</u>
8. Net OPEB Obligation - end of year	\$1,724
	 Annual Required Contribution (ARC) Interest on net OPEB Obligation Adjustment to ARC Annual OPEB Cost (Expense) Contribution made (assumed middle of year) * Increase in net OPEB Obligation Net OPEB Obligation - beginning of year

^{*} 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 2014/2015 are as follows:

Fiscal		Percentage of	Net		
Year	Annual	Annual OPEB	OPEB	Covered	OPEB Cost
Ending	OPEB Cost	Cost Contributed	Obligation	<u>Payroll</u>	% of Pay
6/30/2014	\$21,036	130.1%	\$1,724	#N/A	#N/A

B. Funded Status and Funding Progress

	Actuarial	Actuarial Accrued	Unfunded			UAAL as a Percentage of Covered
Actuarial	Value of	Liability	AAL	Funded	Covered	Payroll
Valuation	Assets	(AAL)	(UAAL)	Ratio	Payroll	(AAL)
<u>Date</u>	<u>(a)</u>	<u>(b)</u>	(b-a)	<u>(a/b)</u>	<u>(c)</u>	((b - a) / c)
7/1/2011	\$0	\$452,862	\$452,862	0.0%	\$57,022	794.2%
7/1/2012	\$0	\$523,727	\$523,727	0.0%	\$57,044	918.1%
7/1/2013	\$0	\$433,198	\$433,198	0.0%	#N/A	#N/A
6/30/2014	\$0	\$423,898	\$423,898	0.0%	#N/A	#N/A

-	Interest Rate	4.00%
-	2013 Medical / Dental Trend Rates	8.0% / 5.0%
_	Ultimate Medical / Dental Trend Rate	5.0% / 5.0%
_	Year Ultimate Trend Rates Reached	2018 / 2012
-	Actuarial Cost Method	Entry Age Normal
-	The remaining amortization period at 06/30/2014	24.61
-	Annual Payroll Increase	2.50%

5. GASB 45 DISCLOSURE FINANCIALS – WATER FUND

A.	Annual OPEB Cost and Net OPEB Obligation	7/1/2013 - <u>6/30/2014</u>	
	Annual Required Contribution (ARC)	\$270,234	
	2. Interest on net OPEB Obligation	\$61,612	
	3. Adjustment to ARC	<u>(\$74,356)</u>	
	4. Annual OPEB Cost (Expense)	\$257,490	
	5. Contribution made (assumed middle of year) *	(\$294,683)	
	6. Increase in net OPEB Obligation	(\$37,193)	
	7. Net OPEB Obligation - beginning of year	\$1,540,294	
	8. Net OPEB Obligation - end of year	\$1,503,101	

^{*} 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 2014/2015 are as follows:

Fiscal		Percentage of	Net		
Year	Annual	Annual OPEB	OPEB	Covered	OPEB Cost
Ending	OPEB Cost	Cost Contributed	Obligation	<u>Payroll</u>	% of Pay
6/30/2014	\$257,490	114.4%	\$1,503,101	#N/A	#N/A

B. Funded Status and Funding Progress

						UAAL as a
		Actuarial				Percentage of
	Actuarial	Accrued	Unfunded			Covered
Actuarial	Value of	Liability	AAL	Funded	Covered	Payroll
Valuation	Assets	(AAL)	(UAAL)	Ratio	Payroll	(AAL)
<u>Date</u>	<u>(a)</u>	<u>(b)</u>	(b-a)	<u>(a/b)</u>	<u>(c)</u>	((b - a) / c)
7/1/2011	\$0	\$6,494,760	\$6,494,760	0.0%	\$1,025,389	633.4%
7/1/2012	\$ 0	\$6,183,165	\$6,183,165	0.0%	\$899,808	687.2%
7/1/2013	\$0	\$4,704,854	\$4,704,854	0.0%	#N/A	#N/A
6/30/2014	\$0	\$4,645,640	\$4,645,640	0.0%	#N/A	#N/A

-	Interest Rate	4.00%
-	2013 Medical / Dental Trend Rates	8.0% / 5.0%
-	Ultimate Medical / Dental Trend Rate	5.0% / 5.0%
-	Year Ultimate Trend Rates Reached	2018 / 2012
-	Actuarial Cost Method	Entry Age Normal
-	The remaining amortization period at 06/30/2014	24.61
-	Annual Payroll Increase	2.50%

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:

6. A BRIEF DESCRIPTION OF THE RETIREE MEDICAL AND DRUG INSURANCE PLAN (reflects plan provisions in effect on 7/1/2013):

A. PRO-TECH (C94 Local 3851) CBA 7/1/2012 - 6/30/2017

Retire after 7/1/2013

Eligibility: Retirement after 25 years of continuous service and eligible for normal retirement under

ERSRI or eligible to receive Social Security Retirement income

Coverage: <u>Pre-65</u>: Individual to a maximum of 6 years of coverage or until age 65, whichever

occurs sooner.

Post 65: Individual Medicare Supplemental Plan

Cost Sharing: Hired on or before 6/30/12: 20% of working rate

Hired on or after 7/1/12: 50% of working rate

Retired as of 7/1/2013

Coverage: Pre 65: Individual or Family - Uniform Plan or High Deductible Plan

Post 65: Retiree and Spouse - Blue Cross 65

Cost Sharing: Pre 65: Uniform Plan 20%, High-Deductible Plan 10% of working rate

Post 65: Certain retirees pay 1% of their salary at time of retirement.

B. NON-UNION CITY EMPLOYEES

Retire after 7/1/2013

Eligibility: Retire on or after July 1, 2013 with at least 25 years of service to the City of Woonsocket

Coverage: Pre-65: Individual. If retiree has 25 years of continuous service to the City as of July 1,

2013, and is eligible for normal retirement under ERSRI, family coverage may be elected

Post 65: Individual Medicare Supplemental Plan

Cost Sharing: <u>Hired before 7/1/13</u>: 20% of working rate

Hired on or after 7/1/13: 50% of working rate

Retired as of 7/1/2013

Coverage: Pre 65: Individual or Family - Uniform Plan or High Deductible Plan

Post 65: Retiree or Retiree and Spouse - Blue Cross 65

Cost Sharing: Pre 65: Uniform Plan: 20% of working rate; High-Deductible Plan: 10% of

working rate

Post 65: Certain retirees pay 1% of their salary at time of retirement.

6. A BRIEF DESCRIPTION OF THE RETIREE MEDICAL AND DRUG INSURANCE PLAN (reflects plan provisions in effect on 7/1/2013) (cont.):

C. MUNICIPAL EMPLOYEES (C94 Local 670) CBA 7/1/2012 - 6/30/2017

Retire after 7/1/2013

Eligibility: Retirement after 25 years of continuous service and eligible for normal retirement under

RSRI or eligible to receive Social Security Retirement income

Coverage: Pre-65: Individual to a maximum of 6 years of coverage or until age 65, whichever ccurs

sooner.

Post 65: Individual Medicare Supplemental Plan

Cost Sharing: <u>Hired on or before 6/30/12</u>: 20% of working rate

Hired on or after 7/1/12: 50% of working rate

Retired as of 7/1/2013

Coverage: Pre 65: Individual and Spouse - Uniform Plan or High Deductible Plan

<u>Post 65</u>: Retiree and Spouse - Blue Cross 65

Cost Sharing: Pre 65: Uniform Plan: 20% of working rate; High-Deductible Plan: 10% of working rate

Post 65: Certain retirees pay 1% of their salary at time of retirement.

Certain Medicare eligible retirees (Medicare Migrators) are covered by the Medicare Supplement Plan and Part D plan. The City pays Part B surcharges for these retirees, if they enrolled by 7/1/2013.

D. POLICE (IBPO Local 404) Tentative Agreement

Retire after 7/1/2013

Eligibility: Hired prior to 7/01/14: Normal retirement under the ERSRI with at least 25 years of

continuous service to the City (unless "grandfathered" pursuant to State pension reform of 2012 so as to be eligible for normal retirement under the ERSRI after 20 years of

continuous service to the City).

Hired on or after 7/01/14: Eligible for and takes normal retirement under the ERSRI at

age 55 or later and with at least 25 years of continuous service to the City.

Coverage: Pre 65

<u>Hired before 7/1/14</u>: may elect at retirement one or two Individual Plans, or Family plan. Retirees who do not opt for Family Plan at the time of retirement, and retirees who opt out of Family Plan during retirement, shall not be permitted to opt into Family Plan,

thereafter.

Hired on or after 7/1/14: One individual Plan and may purchase an additional Individual

Plan at 100%

Maximum of 10 years of non-Medicare coverage

Post 65:

<u>Hired before 7/1/14</u>: may elect Medicare Supplement Plan for retiree and spouse, with continued spouse/dependent coverage until Medicare eligibility/age 26.

Hired on or after 7/1/14: One individual Medicare Supplement Plan

6. A BRIEF DESCRIPTION OF THE RETIREE MEDICAL AND DRUG INSURANCE PLAN (reflects plan provisions in effect on 7/1/2013) (cont.):

E. POLICE (IBPO Local 404) Tentative Agreement (cont.)

Cost Sharing:

Pre 65: Hired before 7/1/14:

- 20% for Individual Plans

- 25% for dependent coverage

Hired on or after 7/1/14: 50% co-share

Pre 65: Hired before 7/1/14:

- 20% for Individual Plans

- 25% for dependent coverage

Hired on or after 7/1/14: 20% co-share

Retired as of 7/1/2013

Coverage: Pre 65: Individual and Spouse - Uniform Plan or High Deductible Plan

Post 65: Retiree and Spouse - Medicare Supplement Plan. Continued spouse/dependent

coverage until Medicare eligibility/age 26 (subject to contributions.

Cost Sharing: Pre 65: Uniform Plan - 20%; High-Deductible Plan - 10% of working rate

Post 65: 20% of working rate.

The City pays Part B surcharges for retirees who enrolled by 7/1/2013.

Survivor: Members with at least one year of service receive individual or family coverage for their

survivors, until spouse remarries or dependents reach age 19 (not attending college) or

age 23 (attending college).

F. FIRE (IAFF Local 732) CBA 7/1/2011-6/30/2014

Retire after 7/1/2073

Eligibility: Hired before 7/1/1985: LAP – 20 years

Hired after 6/30/1985: Police/Fire MERS

Coverage: Pre 65: Individual or family

Post 65: Blue Cross Plan 65 for retiree and spouse

Cost Sharing: Pre 65: None

Post 65: 1.5% of salary

Retired as of 7/1/2013

Coverage: <u>Pre 65</u>: Individual or Family - Uniform Plan or High Deductible Plan

Post 65: Retiree and Spouse - Medicare Supplement Plan

Cost Sharing: Pre 65: Uniform Plan - 20%; High-Deductible Plan - 10% of working rate

Post 65: 20% of working rate.

Certain Medicare eligible retirees (Medicare Migrators) are covered by the Medicare Supplement Plan with no contributions during negotiations. The City pays Part B surcharges for these retirees, if they enrolled by 7/1/2013.

6. A BRIEF DESCRIPTION OF THE RETIREE MEDICAL AND DRUG INSURANCE PLAN (reflects plan provisions in effect on 7/1/2013) (cont.):

F. FIRE (IAFF Local 732) CBA 7/1/2011-6/30/2014 (cont.)

<u>Survivor</u>: Members who died in the line of duty (within 2 years of injury) receive individual or

family coverage for their survivors, until spouse remarries or dies, and upon death of

surviving spouse until dependents reach age 21

G. Monthly Premiums: 7/1/2013 - 6/30/2014

 Medical
 Individual
 Family

 Firefighters (active)
 534.10
 1,330.33

 Other City
 537.19
 1,338.04

 Plan 65
 155.23

Dental Individual: Average \$33.00

Family Average \$106.00

Life Insurance: Effective 7/1/2013: \$.47 per thousand

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 4.00% was used.

2. <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
<u>Year</u>	<u>Rates</u>
2013	8.0%
2014	7.0%
2015	6.5%
2016	6.0%
2017	5.5%
2018+	5.0%

For the following demographic (mortality, retirement, disability, and other termination of employment) assumptions we utilized rates used in the actuarial valuation of the Employees' Retirement System of Rhode Island.

3. Mortality:

Post-retirement mortality rates:

- a. Male employees: 115% of the RP-2000 Combined Healthy for Males with White Collar adjustments, projected with Scale AA from 2000.
- b. Female employees: 95% of the RP-2000 Combined Healthy for Females with White Collar adjustments, projected with Scale AA from 2000.
- c. Disabled males 60% of the PBGC Table Va for disabled males eligible for Social Security disability benefits.
- d. Disabled females -60% of the PBGC Table VIa for disabled females eligible for Social Security disability benefits.

Pre-retirement mortality (combined ordinary and duty):

- a. Male employees: 75% of RP-2000 Combined Healthy for Males with White Collar adjustments.
- b. Female employees: 75% of RP-2000 Combined Healthy for Females with White Collar adjustments

4. <u>Disability Rates:</u>

Sample rates are shown below:

	<u>Ci</u>	<u>City</u>		
<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Rate</u>	
25	.086%	.035%	.213%	
30	.105%	.042%	.275%	
35	.143%	.057%	.363%	
40	.209%	.084%	.550%	
45	.342%	.137%	.900%	
50	.580%	.232%	1.513%	
55	.960%	.384%	1.513%	
60	1.340%	.536%	1.513%	
61+	0.00%	0.00%	1.513%	

ACTUARIAL ASSUMPTIONS AND METHODOLOGY (cont.)

5. <u>Termination Rates:</u>

Based on service:

	<u>Ci</u>	<u>tv</u>	<u>Police/Fire</u>
<u>Service</u>	<u>Male</u>	<u>Female</u>	<u>Rate</u>
0	17.50%	18.00%	10.00%
1	10.87%	11.43%	5.28%
5	5.52%	5.84%	3.54%
10	2.60%	2.55%	1.91%
15	2.01%	1.59%	0.90%
20	1.75%	1.12%	0.00%
24	0.44%	0.00%	0.00%

6. Retirement Rates:

City employees: Separate male and female rates. Sample rates are shown below:

30 or more years of service prior to age 58:

<u>Service</u>	<u>Male</u>	<u>Female</u>
30	30.0%	30.0%
31	30.0%	25.0%
32-34	25.0%	10.0%
35	25.0%	15.0%
36	25.0%	20.0%
37	25.0%	25.0%
38	35.0%	25.0%
39	50.0%	25.0%
40+	100.0%	100.0%

Age 58 and older

<u>Age</u>	<u>Male</u>	<u>Female</u>
58	12.0%	12.0%
59-61	10.0%	10.0%
62	30.0%	20.0%
63-64	20.0%	15.0%
65	20.0%	20.0%
66-68	25.0%	25.0%
69	30.0%	25.0%
70-74	30.0%	20.0%
75	100.0%	100.0%

ACTUARIAL ASSUMPTIONS AND METHODOLOGY (cont.)

6. Retirement Rates (cont.): Police and Firefighters: Unisex rates based on service are used. Sample rates are shown below:

<u>Service</u>	<u>Rate</u>
20	12.0%
21	10.0%
22-23	10.0%
24	12.0%
25	14.0%
26	16.0%
27	18.0%
28	20.0%
29	20.0%
30+	35.0%

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 and dental plans upon retirement; that 70% of the current active City employees and 60% of the current active Police would enroll in the retiree life insurance plan upon retirement; and that 95% of the current active City employees and 40% of the current active Police would enroll in the retiree life insurance plan upon disability.

8. Percent Married:

It was assumed that 75% of the active 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. Per Capita Claims Cost:

Premiums were age-graded on the current participants in the Medical plan. Further details of the annual per capita claims cost is featured in Section V of the report.

11. Administrative expenses: Included in premiums used.

12. Participant Salary Increases: 2.50% per annum.

13. Payroll Growth Rate: 2.50% annually

ACTUARIAL ASSUMPTIONS AND METHODOLOGY (cont.)

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.

Section V

Representative Claim Costs

Based on combined actual claims and premium experience, age-related representative per capita claims costs were developed. This section shows the development of these costs.

REPRESENTATIVE 2013 PER CAPITA MEDICAL CLAIM COSTS

II. DEVELOPMENT OF PER CAPITA RETIREE CLAIM COSTS

\$4,950,743	Employer Primary Premium Based Claims
\$752,555	Medicare Primary Premium Based Claims
\$5,703,298	Total Premium Based Claims

\$7,745 Retiree (Pre-65) Average Per Capita Claim \$752,555 Retiree (Post-65) Average Per Capita Claim

ALL ACTIVE PARTICIPANTS EMPLOYER PRIMARY

Age		Number	Number	Male Aging	Female Aging	Aged (M) Average	Aged (F) Average	Age Related
<u>Bracket</u>		of Males	of Females	Factor	Factor	<u>Claims</u>	Claims	Claims
24 & under	22	11	3	0.549	1.312	\$2,536	\$6,061	\$46,085
25 - 29	27	27	11	0.591	1.312	\$2,730	\$6,061	\$140,398
30 - 34	32	42	30	0.712	1.312	\$3,289	\$6,061	\$320,001
35 - 39	37	28	31	0.850	1.312	\$3,927	\$6,061	\$297,862
40 - 44	42	54	47	1.000	1.312	\$4,620	\$6,061	\$534,370
45 - 49	47	54	48	1.193	1.456	\$5,512	\$6,727	\$620,515
50 - 54	52	37	30	1.441	1.599	\$6,657	\$7,387	\$467,948
55 - 59	57	23	26	1.753	1.740	\$8,099	\$8,039	\$395,285
60 - 64	62	18	11	2.102	1.968	\$9,711	\$9,092	\$274,817
65 - 69	67	3	4	2.316	2.168	\$10,700	\$10,016	\$72,165
Employer Primary Sub.		297	241					\$3,169,447

ALL RETIREE PARTICIPANTS EMPLOYER PRIMARY

Age <u>Bracket</u>		Number of Males	Number of Females	Male Aging <u>Factor</u>	Female Aging <u>Factor</u>	Aged (M) Average <u>Claims</u>	Aged (F) Average <u>Claims</u>	Age Related <u>Claims</u>
44 & under	42	11	7	1.000	1.312	\$4,620	\$6,061	\$93,251
45 - 49	47	33	2	1.193	1.456	\$5,512	\$6,727	\$195,339
50 - 54	52	33	7	1.441	1.599	\$6,657	\$7,387	\$271,408
55 - 59	57	41	15	1.753	1.740	\$8,099	\$8,039	\$452,638
60 - 64	62	52	29	2.102	1.968	\$9,711	\$9,092	\$768,661
65 - 69	67	0	0	2.316	2.168	\$10,700	\$10,016	\$0
70 - 74	72	0	0	2.557	2.396	\$11,813	\$11,070	\$0
75 - 79	77	0	0	2.769	2.593	\$12,793	\$11,980	\$0
80 - 84	82	0	0	2.910	2.724	\$13,444	\$12,585	\$0
85 - 89	87	0	0	3.059	2.864	\$14,133	\$13,232	\$0
90 & Over	92	<u>0</u>	<u>0</u>	3.215	3.010	\$14,853	\$13,906	<u>\$0</u>
Employer Primary Sub.		170	60					\$1,781,296

ALL RETIREE PARTICIPANTS MEDICARE PRIMARY

Age <u>Bracket</u> 65 - 69	67	Number of Males 56	Number of Females 74	Male Aging Factor 2.316	Female Aging Factor 2.168	Aged (M) Average <u>Claims</u> \$1,691	Aged (F) Average Claims \$1,583	Age Related <u>Claims</u> \$211,819
70 - 74	72	50	44	2.557	2.396	\$1,867	\$1,749	\$170,311
75 - 79	77	38	34	2.769	2.593	\$2,022	\$1,893	\$141,187
80 - 84	82	14	26	2.910	2.724	\$2,125	\$1,989	\$81,452
85 - 89	87	20	32	3.059	2.864	\$2,233	\$2,091	\$111,578
90 & Over	92	7	9	3.215	3.010	\$2,347	\$2,198	\$36,209
Medicare Primary Sub.		185	219					\$752,555
Retiree Subtotal		<u>355</u>	<u>279</u>					\$2,533,851
Grand Tota	1	652	520					\$5,703,298

Section VI

Appendices

APPENDIX - I.

ACTIVE EMPLOYEE BY AGE AND SERVICE

AS OF JULY 1, 2013

<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	14	0	0	0	0	0	0	0	0	14	
25 - 29	25	5	0	0	0	0	0	0	0	30	
30 - 34	15	24	4	0	0	0	0	0	0	43	
35 - 39	6	7	13	4	0	0	0	0	0	30	
40 - 44	6	12	13	16	15	1	0	0	0	63	
45 - 49	8	8	7	8	24	8	0	0	0	63	
50 - 54	7	4	4	7	9	10	1	0	0	42	
55 - 59	5	5	9	5	4	2	0	1	0	31	
60 - 64	3	7	4	1	3	1	0	1	0	20	
65 - 69	0	0	1	0	0	0	0	0	0	1	
70 - 74	0	0	0	0	0	0	0	1	0	1	
75 - 79	0	0	0	0	0	0	0	0	0	0	
80 - 84	0	0	0	0	0	0	0	0	0	0	
85 and Over	00	0	0	0	00	0	0	00	0	0	
Total	89	72	55	41	55	22	1	3	0	338	

<u>APPENDIX – II.</u>

RECONCILIATION OF ACTUARIAL ACCRUED LIABILITY

a.	7/1/2012 Actuarial Accrued Liability	\$157,305,211
b.	2012 Normal Cost	\$3,457,330
c.	Interest Rate	4.00%
d.	Interest on (a. + b.)	\$6,424,763
e.	2012 Expected Benefit Payments	(\$4,581,371)
f.	Interest on f.	<u>(\$91,628)</u>
g.	7/1/2013 Expected Actuarial Accrued Liability	\$162,514,305
	(a. + b. + d. + e. + f.)	
h.	Change in Actuarial Accrued Liability due to	
	i. Demographic and plan cost changes	\$0
	ii. Change in Actuarial Assumptions	\$0
	iii. Plan Change	(\$61,001,536)
	iv. Total	(\$61,001,536)
i.	7/1/2012 Actuarial Accrued Liability	\$101,512,769
	(g. + h. iv.)	

APPENDIX - III.

DEVELOPMENT OF AMORTIZATION PAYMENT

A.	Pri	or Bases	
	1.	Amortization Base Balance as of 7/1/2012	\$157,305,211
	2.	2012 Amortization Payment	(\$6,759,324)
	3.	Interest	4.00%
	4.	Interest on $(1) + (2)$	\$6,021,835
	5.	Amortization Base Balance as of $7/1/2013(1) + (2) + (4)$	\$156,567,722
	6.	Remaining Amortization Period	27.00
	7.	Valuation Interest rate	4.00%
	8.	Assumed payroll growth	2.50%
	9.	2013 Adjusted Amortization Amount	\$6,959,607
В.	Nev	v Amortization Base	
	1.	Experience (Gain)/Loss	\$0
	2.	Assumption Changes	\$0
	3.	Plan Change	(\$61,001,536)
	4.	Loss due to Funding timing	<u>\$5,946,583</u>
	5.	Total $(1) + (2) + (3) + (4)$	(\$55,054,953)
	6.	Remaining Amortization Period	30
	7.	Valuation Interest rate	4.00%
	8.	Assumed payroll growth	2.50%
	9.	Amortization Amount	(\$2,247,681)
C.	Cor	mbined Bases	
	1.	Amortization Base Balance as of 7/1/2012 (A.5. + B.5.)	\$86,282,618
	2.	2013 Preliminary Total Amortization Amount (A.9. + B.9.)	\$4,711,926
	3.	2013 Minimum Total Amortization Amount (30 year)	\$3,522,584
	4.	2013 Total Amortization Amount (greater of 2. and 3.)	\$4,711,926

<u>APPENDIX – II</u>

PROJECTED BENEFIT PAYMENTS

2013 \$ 4.015.437 \$ 4.015.437 \$ 4.015.437 \$ 2.047 \$ 6.6915.107 \$ 211.421.206 \$ 2.081 \$ 893,939 \$ 327,305,270 \$ 2.014 \$ 4.221.838 \$ 8.237.275 \$ 2.048 \$ 6.669.919 \$ 218.091.125 \$ 2.082 \$ 780.224 \$ 328,085.494 \$ 2.015 \$ 4.396.886 \$ 12.634.161 \$ 2.049 \$ 6.464.596 \$ 2.245.370.31 \$ 2.083 \$ 6.755.131 \$ 328,760.807 \$ 2.016 \$ 4.618.693 \$ 17.252.854 \$ 2.050 \$ 6.129.490 \$ 2.30,666.521 \$ 2.084 \$ 5.79.753 \$ 3.29,340.560 \$ 2.017 \$ 4.722.468 \$ 2.1975.322 \$ 2.051 \$ 5.911.968 \$ 2.36.578.489 \$ 2.085 \$ 493.468 \$ 3.29,834.028 \$ 4.991.839 \$ 3.18.66.684 \$ 2.053 \$ 5.477.697 \$ 2.47.823.817 \$ 2.085 \$ 416.305 \$ 330.250.333 \$ 3.02019 \$ 4.991.859 \$ 3.18.66.684 \$ 2.053 \$ 5.477.697 \$ 2.47.823.817 \$ 2.087 \$ 3.47.989 \$ 3.30,886.477 \$ 2.021 \$ \$ 5.314.216 \$ 4.2316.172 \$ 2.055 \$ 4.991.889 \$ 3.18.66.684 \$ 2.053 \$ 5.477.697 \$ 2.47.823.817 \$ 2.087 \$ 3.47.989 \$ 3.30,886.477 \$ 2.021 \$ \$ 5.314.216 \$ 4.2316.172 \$ 2.055 \$ 4.991.889 \$ 2.25.233 \$ 3.30.886.477 \$ 2.021 \$ \$ 5.591.51 \$ 4.78.25.323 \$ 2.056 \$ 4.641.612 \$ 2.62.578.569 \$ 2.090 \$ 1.91.643 \$ 3.31.146.313 \$ 2.022 \$ 5.794.828 \$ 5.37.301.51 \$ 2.057 \$ 4.372.704 \$ 2.66.951.273 \$ 2.091 \$ 1.53.960 \$ 3.31.468.313 \$ 2.024 \$ 5.972.437 \$ 5.95.02.588 \$ 2.058 \$ 4.11.6062 \$ 2.71.063.335 \$ 2.092 \$ 1.25.502 \$ 3.31.590.815 \$ 2.025 \$ 5.509.153 \$ 4.05.258 \$ 2.0	<u>Year</u>	Amount	Accumulated	<u>Year</u>	<u>Amount</u>	A	<u>Accumulated</u>	<u>Year</u>	Amount	A	ccumulated
2015 \$ 4,396,886 \$ 12,634,161 2049 \$ 6,445,906 \$ 224,537,031 2083 \$ 675,313 \$ 328,760,807 2016 \$ 4,618,603 \$ 17,252,854 2050 \$ 6,129,490 \$ 230,666,521 2084 \$ 579,753 \$ 329,340,560 2017 \$ 4,722,468 \$ 21,975,322 2051 \$ 5,911,968 \$ 236,578,489 2085 \$ 416,305 \$ 332,340,580 2018 \$ 4,899,503 \$ 26,874,825 2052 \$ 5,767,631 \$ 242,346,120 2086 \$ 416,305 \$ 330,590,333 2019 \$ 4,991,859 \$ 31,866,684 2053 \$ 5,477,697 \$ 247,823,817 2087 \$ 347,989 \$ 330,580,323 2020 \$ 5,314,216 \$ 42,316,172 2055 \$ 4,916,874 \$ 257,936,957 2089 \$ 236,233 \$ 331,142,210 2022 \$ 5,509,151 \$ 47,825,323 2056 \$ 4,916,874 \$ 266,951,273 2090 \$ 191,643 \$ 331,340,333 2024 \$ 5,972,437 \$ 59,502,588 2058 \$ 4,112,062 \$ 271,633,335 2092 \$ 12	2013 \$	4,015,437	\$ 4,015,437	2047	\$ 6,915,107	\$	211,421,206	2081	\$ 893,939	\$	327,305,270
2015 \$ 4,396,886 \$ 12,634,161 2049 \$ 6,445,906 \$ 224,537,031 2083 \$ 675,313 \$ 328,760,807	2014 \$	4,221,838	\$ 8,237,275	2048	\$ 6,669,919	\$	218,091,125	2082	\$ 780,224	\$	328,085,494
2016 \$ 4,618,693 \$ 17,252,854 2050 \$ 6,129,490 \$ 230,666,521 2084 \$ 579,753 \$ 329,340,560	2015 \$	4,396,886	\$ 12,634,161	2049	\$ 6,445,906	\$			\$	\$	328,760,807
2017 \$ 4,722,468 \$ 21,975,322 2051 \$ 5,911,968 \$ 236,578,489 2086 \$ 493,468 \$ 329,834,028 2018 \$ 4,899,503 \$ 26,874,825 2052 \$ 5,767,631 \$ 242,3346,120 2086 \$ 416,305 \$ 330,250,333 2019 \$ 4,991,859 \$ 31,866,684 2053 \$ 5,476,677 247,823,417 2087 \$ 347,899 \$ 330,250,332 2020 \$ 5,135,272 \$ 37,001,956 2054 \$ 5,196,266 \$ 253,020,083 2088 \$ 288,155 \$ 330,988,247 2021 \$ 5,314,216 \$ 42,316,172 2055 \$ 4,916,874 257,936,957 2089 \$ 236,233 \$ 311,227,10 2022 \$ 5,704,828 \$ 53,530,151 2057 \$ 4,372,704 \$ 266,578,569 2090 \$ 1153,960 \$ 331,468,313 2024 \$ 5,972,437 \$ 59,502,588 2058 \$ 4,112,062 \$ 271,063,335 2092 \$ 122,502 \$ 31,468,213 2025 \$ 6,516,5283 \$ 71,997,188 2069 \$ 3,841,022 278,883,021 2094 \$ 75,046<	2016 \$	4,618,693	\$ 17,252,854	2050	\$	\$			\$	\$	
2018 \$ 4,899,503 \$ 26,874,825 2052 \$ 5,767,631 \$ 242,346,120 2086 \$ 416,305 \$ 330,250,333 2019 \$ 4,991,859 \$ 31,866,684 2053 \$ 5,477,697 \$ 247,823,817 2087 \$ 347,989 \$ 330,598,322 2020 \$ 5,135,272 \$ 37,001,956 2054 \$ 5,196,266 \$ 253,020,083 2088 \$ 288,155 \$ 330,598,322 2021 \$ 5,314,216 \$ 42,316,172 2055 \$ 4,916,874 \$ 257,936,957 2089 \$ 236,233 \$ 331,122,710 2022 \$ 5,509,151 \$ 47,825,323 2056 \$ 4,412,602 \$ 262,578,569 2090 \$ 191,643 \$ 331,1463,313 2024 \$ 5,972,437 \$ 59,502,588 2058 \$ 4,112,602 \$ 271,603,335 2092 \$ 122,502 \$ 31,168,316 2025 \$ 6,112,695 \$ 65,615,283 2059 \$ 3,978,664 \$ 275,041,999 2093 \$ 96,445 \$ 331,762,306 2026 \$ 6,381,955 \$ 7,1997,188 2060 \$ 3,814,602 227,883,201 2094 \$ 75,04	2017 \$	4,722,468	\$ 21,975,322	2051	\$ 5,911,968	\$	236,578,489	2085	\$ 493,468	\$	
2020 \$ 5,135,272 \$ 37,001,956 2054 \$ 5,196,266 \$ 253,020,083 2088 \$ 288,155 \$ 330,886,477 2021 \$ 5,314,216 \$ 42,316,172 2055 \$ 4,916,874 \$ 257,936,957 2089 \$ 236,233 \$ 331,122,710 2022 \$ 5,509,151 \$ 47,825,323 2056 \$ 4,641,612 \$ 266,578,569 2090 \$ 191,643 \$ 331,1343,353 2024 \$ 5,704,828 \$ 53,530,151 2057 \$ 4,372,704 \$ 266,951,273 2091 \$ 153,960 \$ 331,468,313 2024 \$ 5,972,437 \$ 59,502,588 2058 \$ 4,112,062 \$ 271,063,335 2092 \$ 122,502 \$ 331,682,260 2026 \$ 6,381,905 \$ 71,997,188 2060 \$ 3,841,022 \$ 278,883,021 2094 \$ 75,046 \$ 31,819,930 2027 \$ 6,515,558 \$ 78,512,746 2061 \$ 3,715,601 \$ 282,598,622 2095 \$ 57,624 \$ 331,819,930 2028 \$ 6,379,523 \$ 84,892,269 2062 \$ 3,384,415 \$ 289,639,592 2097 \$ 32,4	2018 \$	4,899,503	\$ 26,874,825	2052	\$ 5,767,631	\$	242,346,120	2086	\$	\$	330,250,333
2021 \$ 5,314,216 \$ 42,316,172 2055 \$ 4,916,874 \$ 257,936,957 2089 \$ 236,233 \$ 331,122,710 2022 \$ 5,509,151 \$ 47,825,323 2056 \$ 4,641,612 \$ 262,578,569 2090 \$ 191,643 \$ 331,314,353 2023 \$ 5,704,828 \$ 53,530,151 2057 \$ 4,372,704 \$ 266,951,273 2091 \$ 153,960 \$ 331,468,313 2024 \$ 5,972,437 \$ 59,502,588 2058 \$ 4,112,062 \$ 271,063,335 2092 \$ 122,502 \$ 331,687,260 2025 \$ 6,112,695 \$ 65,615,283 2059 \$ 3,978,664 \$ 275,041,999 2093 \$ 96,445 \$ 331,687,260 2026 \$ 6,381,905 \$ 71,997,188 2060 \$ 3,841,022 \$ 278,883,021 2094 \$ 75,046 \$ 331,819,316 2028 \$ 6,379,523 \$ 84,892,269 2062 \$ 3,586,555 \$ 286,185,177 2096 \$ 43,608 \$ 331,819,318 2030 \$ 6,556,588 \$ 98,095,503 2064 \$ 3,319,739 \$ 292,059,331 2098 \$ 23,78	2019 \$	4,991,859	\$ 31,866,684	2053	\$ 5,477,697	\$	247,823,817	2087	\$ 347,989	\$	330,598,322
2022 \$ 5,509,151 \$ 47,825,323 2056 \$ 4,641,612 \$ 262,578,569 2090 \$ 191,643 \$ 331,314,353 2023 \$ 5,704,828 \$ 53,530,151 2057 \$ 4,372,704 \$ 266,951,273 2091 \$ 153,960 \$ 331,468,313 2024 \$ 5,972,437 \$ 59,502,588 2058 \$ 4,112,062 \$ 271,063,335 2092 \$ 122,502 \$ 331,590,815 2025 \$ 6,112,695 \$ 65,615,283 2059 \$ 3,978,664 \$ 275,041,999 2093 \$ 96,445 \$ 331,687,260 2026 \$ 6,381,905 \$ 71,997,188 2060 \$ 3,841,022 \$ 278,883,021 2094 \$ 75,046 \$ 331,867,230 2027 \$ 6,515,558 \$ 78,512,746 2061 \$ 3,715,601 \$ 282,598,622 2095 \$ 57,624 \$ 331,863,538 2029 \$ 6,646,646 \$ 91,538,915 2063 \$ 3,454,415 \$ 289,639,592 2097 \$ 32,480 \$ 331,96,018 2031 \$ 6,556,588 \$ 98,095,503 2064 \$ 3,319,739 \$ 292,959,331 2098 \$ 23,785<	2020 \$	5,135,272	\$ 37,001,956	2054	\$ 5,196,266	\$	253,020,083	2088	\$ 288,155	\$	330,886,477
2023 \$ 5,704,828 \$ 53,530,151 2057 \$ 4,372,704 \$ 26,951,273 2091 \$ 153,960 \$ 331,468,313 2024 \$ 5,972,437 \$ 59,502,588 2058 \$ 4,112,062 \$ 271,063,335 2092 \$ 122,502 \$ 331,590,815 2025 \$ 6,112,695 \$ 65,615,283 2059 \$ 3,978,664 \$ 275,041,999 2093 \$ 96,445 \$ 331,687,260 2026 \$ 6,381,905 \$ 71,997,188 2060 \$ 3,841,022 \$ 278,883,021 2094 \$ 75,046 \$ 331,762,306 2027 \$ 6,515,558 \$ 78,512,746 2061 \$ 3,715,601 \$ 282,598,622 2095 \$ 57,624 \$ 331,819,308 2028 \$ 6,379,523 \$ 84,892,269 2062 \$ 3,586,555 \$ 286,185,177 2096 \$ 43,608 \$ 331,893,6358 2029 \$ 6,646,646 \$ 91,538,915 2063 \$ 3,454,415 \$ 289,639,592 2097 \$ 32,480 \$ 331,893,631 2031 \$ 6,503,753 \$ 104,599,256 2065 \$ 3,182,648 \$ 296,141,979 2099 \$ 17,113	2021 \$	5,314,216	\$ 42,316,172	2055	\$ 4,916,874	\$	257,936,957	2089	\$ 236,233	\$	331,122,710
2024 \$ 5,972,437 \$ 59,502,588 2058 \$ 4,112,062 \$ 271,063,335 2092 \$ 122,502 \$ 331,590,815 2025 \$ 6,112,695 \$ 65,615,283 2059 \$ 3,978,664 \$ 275,041,999 2093 \$ 96,445 \$ 331,687,260 2026 \$ 6,381,905 \$ 71,997,188 2060 \$ 3,841,022 \$ 278,883,021 2094 \$ 75,046 \$ 331,762,306 2027 \$ 6,515,558 \$ 78,512,746 2061 \$ 3,715,601 \$ 282,598,622 2095 \$ 57,624 \$ 331,819,930 2028 \$ 6,379,523 \$ 84,892,269 2062 \$ 3,586,555 \$ 286,185,177 2096 \$ 43,608 \$ 331,896,018 2030 \$ 6,646,646 \$ 91,538,915 2063 \$ 3,454,415 289,639,592 2097 \$ 32,480 \$ 331,996,018 2031 \$ 6,550,753 \$ 104,599,256 2065 \$ 3,182,648 \$ 296,141,979 2099 \$ 17,113 \$ 331,996,018 2032 \$ 6,452,153 \$ 111,051,409 2066 \$ 3,042,969 \$ 299,184,948 2100 \$ 12,091 </td <td>2022 \$</td> <td>5,509,151</td> <td>\$ 47,825,323</td> <td>2056</td> <td>\$ 4,641,612</td> <td>\$</td> <td>262,578,569</td> <td>2090</td> <td>\$ 191,643</td> <td>\$</td> <td>331,314,353</td>	2022 \$	5,509,151	\$ 47,825,323	2056	\$ 4,641,612	\$	262,578,569	2090	\$ 191,643	\$	331,314,353
2025 \$ 6.112,695 \$ 65,615,283 2059 \$ 3,978,664 \$ 275,041,999 2093 \$ 96,445 \$ 331,687,260 2026 \$ 6,381,905 \$ 71,997,188 2060 \$ 3,841,022 \$ 278,883,021 2094 \$ 75,046 \$ 331,762,306 2027 \$ 6,515,558 \$ 78,512,746 2061 \$ 3,715,601 \$ 282,598,622 2095 \$ 57,624 \$ 331,819,930 2028 \$ 6,379,523 \$ 84,892,269 2062 \$ 3,586,555 \$ 286,185,177 2096 \$ 43,608 \$ 331,896,018 2030 \$ 6,646,646 \$ 91,538,915 2063 \$ 3,454,415 \$ 289,639,592 2097 \$ 32,480 \$ 331,896,018 2031 \$ 6,556,588 \$ 98,095,503 2064 \$ 3,319,739 \$ 292,959,331 2098 \$ 23,785 \$ 331,918,091 2031 \$ 6,507,533 \$ 104,599,256 2065 \$ 3,182,648 \$ 296,141,979 2099 \$ 17,113 \$ 331,949,007 2032 \$ 6,452,153 \$ 111,051,409 2066 \$ 3,042,969 \$ 299,184,948 2100 \$ 12,091<	2023 \$	5,704,828	\$ 53,530,151	2057	\$ 4,372,704	\$	266,951,273	2091	\$ 153,960	\$	331,468,313
2026 \$ 6,381,905 \$ 71,997,188 2060 \$ 3,841,022 \$ 278,883,021 2094 \$ 75,046 \$ 331,762,306 2027 \$ 6,515,558 \$ 78,512,746 2061 \$ 3,715,601 \$ 282,598,622 2095 \$ 57,624 \$ 331,819,930 2028 \$ 6,379,523 \$ 84,892,269 2062 \$ 3,586,555 \$ 286,185,177 2096 \$ 43,608 \$ 331,896,018 2030 \$ 6,646,646 \$ 91,538,915 2063 \$ 3,454,415 \$ 289,639,592 2097 \$ 32,480 \$ 331,896,018 2030 \$ 6,550,788 \$ 98,095,503 2064 \$ 3,182,648 \$ 296,141,979 2099 \$ 17,113 \$ 331,991,9803 2031 \$ 6,503,753 \$ 104,599,256 2065 \$ 3,182,648 \$ 296,141,979 2099 \$ 17,113 \$ 331,949,007 2032 \$ 6,452,153 \$ 111,051,409 2066 \$ 3,042,969 \$ 299,184,948 2100 \$ 12,991 \$ 331,963,184 2034 \$ 6,307,839 \$ 123,755,323 2068 \$ 2,757,323 \$ 302,086,087 2101 \$ 8,405	2024 \$	5,972,437	\$ 59,502,588	2058	\$ 4,112,062	\$	271,063,335	2092	\$ 122,502	\$	331,590,815
2027 \$ 6,515,558 \$ 78,512,746 2061 \$ 3,715,601 \$ 282,598,622 2095 \$ 57,624 \$ 331,819,930 2028 \$ 6,379,523 \$ 84,892,269 2062 \$ 3,586,555 \$ 286,185,177 2096 \$ 43,608 \$ 331,893,538 2029 \$ 6,646,646 \$ 91,538,915 2063 \$ 3,454,415 \$ 289,639,592 2097 \$ 32,480 \$ 331,896,018 2030 \$ 6,556,588 \$ 98,095,503 2064 \$ 3,319,739 \$ 292,959,331 2098 \$ 23,785 \$ 331,919,803 2031 \$ 6,503,753 \$ 104,599,256 2065 \$ 3,182,648 \$ 296,141,979 2099 \$ 17,113 \$ 331,936,916 2032 \$ 6,452,153 \$ 111,051,409 2066 \$ 3,042,969 \$ 299,184,948 2100 \$ 12,091 \$ 331,957,412 2033 \$ 6,396,075 \$ 117,447,484 2067 \$ 2,901,139 \$ 302,086,087 2101 \$ 8,405 \$ 331,957,412 2034 \$ 6,307,839 \$ 123,755,323 2068 \$ 2,757,323 \$ 304,843,410 2102 \$ 5,772<	2025 \$	6,112,695	\$ 65,615,283	2059	\$ 3,978,664	\$	275,041,999	2093	\$ 96,445	\$	331,687,260
2028 \$ 6,379,523 \$ 84,892,269 2062 \$ 3,586,555 \$ 286,185,177 2096 \$ 43,608 \$ 331,863,538 2029 \$ 6,646,646 \$ 91,538,915 2063 \$ 3,454,415 \$ 289,639,592 2097 \$ 32,480 \$ 331,896,018 2030 \$ 6,556,588 \$ 98,095,503 2064 \$ 3,319,739 \$ 292,959,331 2098 \$ 23,785 \$ 331,919,803 2031 \$ 6,503,753 \$ 104,599,256 2065 \$ 3,182,648 \$ 296,141,979 2099 \$ 17,113 \$ 331,936,916 2032 \$ 6,452,153 \$ 111,051,409 2066 \$ 3,042,969 \$ 299,184,948 2100 \$ 12,091 \$ 331,949,007 2033 \$ 6,396,075 \$ 117,447,484 2067 \$ 2,901,139 \$ 302,086,087 2101 \$ 8,405 \$ 331,957,412 2034 \$ 6,307,839 \$ 123,755,323 2068 \$ 2,757,323 \$ 304,843,410 2102 \$ 5,772 \$ 331,967,098 2035 \$ 6,135,366 \$ 129,890,689 2069 \$ 2,611,448 \$ 307,454,858 2103 \$ 3,914<	2026 \$	6,381,905	\$ 71,997,188	2060	\$ 3,841,022	\$	278,883,021	2094	\$ 75,046	\$	331,762,306
2029 \$ 6,646,646 \$ 91,538,915 2063 \$ 3,454,415 \$ 289,639,592 2097 \$ 32,480 \$ 331,896,018 2030 \$ 6,556,588 \$ 98,095,503 2064 \$ 3,319,739 \$ 292,959,331 2098 \$ 23,785 \$ 331,919,803 2031 \$ 6,503,753 \$ 104,599,256 2065 \$ 3,182,648 \$ 296,141,979 2099 \$ 17,113 \$ 331,936,916 2032 \$ 6,452,153 \$ 111,051,409 2066 \$ 3,042,969 \$ 299,184,948 2100 \$ 12,091 \$ 331,949,007 2033 \$ 6,396,075 \$ 117,447,484 2067 \$ 2,901,139 \$ 302,086,087 2101 \$ 8,405 \$ 331,957,412 2034 \$ 6,307,839 \$ 123,755,323 2068 \$ 2,757,323 \$ 304,843,410 2102 \$ 5,772 \$ 331,963,184 2035 \$ 6,135,366 \$ 129,890,689 2069 \$ 2,611,448 \$ 307,454,858 2103 \$ 3,914 \$ 331,967,098 2037 \$ 6,305,483 \$ 142,467,814 2070 \$ 2,463,723 \$ 309,918,581 2104 \$ 2,604<	•	6,515,558	\$ 78,512,746	2061	\$ 3,715,601	\$	282,598,622	2095	\$ 57,624	\$	331,819,930
2030 \$ 6,556,588 \$ 98,095,503 2064 \$ 3,319,739 \$ 292,959,331 2098 \$ 23,785 \$ 331,919,803 2031 \$ 6,503,753 \$ 104,599,256 2065 \$ 3,182,648 \$ 296,141,979 2099 \$ 17,113 \$ 331,919,803 2032 \$ 6,452,153 \$ 111,051,409 2066 \$ 3,042,969 \$ 299,184,948 2100 \$ 12,091 \$ 331,949,007 2033 \$ 6,396,075 \$ 117,447,484 2067 \$ 2,901,139 \$ 302,086,087 2101 \$ 8,405 \$ 331,957,412 2034 \$ 6,307,839 \$ 123,755,323 2068 \$ 2,757,323 \$ 304,843,410 2102 \$ 5,772 \$ 331,963,184 2035 \$ 6,135,366 \$ 129,890,689 2069 \$ 2,611,448 \$ 307,454,858 2103 \$ 3,914 \$ 331,967,098 2036 \$ 6,271,642 \$ 136,162,331 2070 \$ 2,463,723 \$ 309,918,581 2104 \$ 2,604 \$ 331,971,400 2038 \$ 6,381,280 \$ 148,849,094 2072 \$ 2,164,046 \$ 314,396,972 2106 \$ 1,092<		6,379,523	\$ 84,892,269	2062	\$ 3,586,555	\$	286,185,177	2096	\$ 43,608	\$	331,863,538
2031 \$ 6,503,753 \$ 104,599,256 2065 \$ 3,182,648 \$ 296,141,979 2099 \$ 17,113 \$ 331,936,916 2032 \$ 6,452,153 \$ 111,051,409 2066 \$ 3,042,969 \$ 299,184,948 2100 \$ 12,091 \$ 331,949,007 2033 \$ 6,396,075 \$ 117,447,484 2067 \$ 2,901,139 \$ 302,086,087 2101 \$ 8,405 \$ 331,957,412 2034 \$ 6,307,839 \$ 123,755,323 2068 \$ 2,757,323 \$ 304,843,410 2102 \$ 5,772 \$ 331,963,184 2035 \$ 6,135,366 \$ 129,890,689 2069 \$ 2,611,448 \$ 307,454,858 2103 \$ 3,914 \$ 331,967,098 2036 \$ 6,271,642 \$ 136,162,331 2070 \$ 2,463,723 \$ 309,918,581 2104 \$ 2,604 \$ 331,967,098 2037 \$ 6,305,483 \$ 142,467,814 2071 \$ 2,314,345 \$ 312,232,926 2105 \$ 1,698 \$ 331,971,400 2038 \$ 6,381,280 \$ 148,849,094 2072 \$ 2,164,046 \$ 314,396,972 2106 \$ 1,092<	2029 \$	6,646,646	\$ 91,538,915	2063	\$ 3,454,415	\$	289,639,592	2097	\$ 32,480	\$	331,896,018
2032 \$ 6,452,153 \$ 111,051,409 2066 \$ 3,042,969 \$ 299,184,948 2100 \$ 12,091 \$ 331,949,007 2033 \$ 6,396,075 \$ 117,447,484 2067 \$ 2,901,139 \$ 302,086,087 2101 \$ 8,405 \$ 331,957,412 2034 \$ 6,307,839 \$ 123,755,323 2068 \$ 2,757,323 \$ 304,843,410 2102 \$ 5,772 \$ 331,963,184 2035 \$ 6,135,366 \$ 129,890,689 2069 \$ 2,611,448 \$ 307,454,858 2103 \$ 3,914 \$ 331,967,098 2036 \$ 6,271,642 \$ 136,162,331 2070 \$ 2,463,723 \$ 309,918,581 2104 \$ 2,604 \$ 331,967,098 2037 \$ 6,305,483 \$ 142,467,814 2071 \$ 2,314,345 \$ 312,232,926 2105 \$ 1,698 \$ 331,971,400 2038 \$ 6,381,280 \$ 148,849,094 2072 \$ 2,164,046 \$ 314,396,972 2106 \$ 1,092 \$ 331,973,188 2040 \$ 6,722,078 \$ 162,112,231 2074 \$ 1,862,502 \$ 318,272,654 2108 \$ 443 <td>2030 \$</td> <td>6,556,588</td> <td>\$ 98,095,503</td> <td>2064</td> <td>\$ 3,319,739</td> <td>\$</td> <td>292,959,331</td> <td>2098</td> <td>\$ 23,785</td> <td>\$</td> <td>331,919,803</td>	2030 \$	6,556,588	\$ 98,095,503	2064	\$ 3,319,739	\$	292,959,331	2098	\$ 23,785	\$	331,919,803
2033 \$ 6,396,075 \$ 117,447,484 2067 \$ 2,901,139 \$ 302,086,087 2101 \$ 8,405 \$ 331,957,412 2034 \$ 6,307,839 \$ 123,755,323 2068 \$ 2,757,323 \$ 304,843,410 2102 \$ 5,772 \$ 331,963,184 2035 \$ 6,135,366 \$ 129,890,689 2069 \$ 2,611,448 \$ 307,454,858 2103 \$ 3,914 \$ 331,967,098 2036 \$ 6,271,642 \$ 136,162,331 2070 \$ 2,463,723 \$ 309,918,581 2104 \$ 2,604 \$ 331,969,702 2037 \$ 6,305,483 \$ 142,467,814 2071 \$ 2,314,345 \$ 312,232,926 2105 \$ 1,698 \$ 331,971,400 2038 \$ 6,381,280 \$ 148,849,094 2072 \$ 2,164,046 \$ 314,396,972 2106 \$ 1,092 \$ 331,972,492 2039 \$ 6,541,059 \$ 155,390,153 2073 \$ 2,013,180 \$ 316,410,152 2107 \$ 696 \$ 331,973,631 2040 \$ 6,722,078 \$ 162,112,231 2074 \$ 1,862,502 \$ 318,272,654 2108 \$ 443		6,503,753	\$ 104,599,256	2065	\$ 3,182,648	\$	296,141,979	2099	\$ 17,113	\$	331,936,916
2034 \$ 6,307,839 \$ 123,755,323 2068 \$ 2,757,323 \$ 304,843,410 2102 \$ 5,772 \$ 331,963,184 2035 \$ 6,135,366 \$ 129,890,689 2069 \$ 2,611,448 \$ 307,454,858 2103 \$ 3,914 \$ 331,967,098 2036 \$ 6,271,642 \$ 136,162,331 2070 \$ 2,463,723 \$ 309,918,581 2104 \$ 2,604 \$ 331,969,702 2037 \$ 6,305,483 \$ 142,467,814 2071 \$ 2,314,345 \$ 312,232,926 2105 \$ 1,698 \$ 331,971,400 2038 \$ 6,381,280 \$ 148,849,094 2072 \$ 2,164,046 \$ 314,396,972 2106 \$ 1,092 \$ 331,973,188 2040 \$ 6,722,078 \$ 162,112,231 2073 \$ 2,013,180 \$ 316,410,152 2107 \$ 696 \$ 331,973,631 2041 \$ 6,875,555 \$ 168,987,786 2075 \$ 1,712,982 \$ 319,985,636 2109 \$ 270 \$ 331,973,901 2042 \$ 7,044,395 \$ 176,032,181 2076 \$ 1,565,250 \$ 321,550,886 2110 \$ 163 \$ 331,974,158 2044 \$ 7,157,315 \$ 183,189,496 2		6,452,153	\$ 111,051,409	2066	\$ 3,042,969	\$	299,184,948	2100	\$ 12,091	\$	331,949,007
2035 \$ 6,135,366 \$ 129,890,689 2069 \$ 2,611,448 \$ 307,454,858 2103 \$ 3,914 \$ 331,967,098 2036 \$ 6,271,642 \$ 136,162,331 2070 \$ 2,463,723 \$ 309,918,581 2104 \$ 2,604 \$ 331,969,702 2037 \$ 6,305,483 \$ 142,467,814 2071 \$ 2,314,345 \$ 312,232,926 2105 \$ 1,698 \$ 331,971,400 2038 \$ 6,381,280 \$ 148,849,094 2072 \$ 2,164,046 \$ 314,396,972 2106 \$ 1,092 \$ 331,972,492 2039 \$ 6,541,059 \$ 155,390,153 2073 \$ 2,013,180 \$ 316,410,152 2107 \$ 696 \$ 331,973,188 2040 \$ 6,722,078 \$ 162,112,231 2074 \$ 1,862,502 \$ 318,272,654 2108 \$ 443 \$ 331,973,631 2041 \$ 6,875,555 \$ 168,987,786 2075 \$ 1,712,982 \$ 319,985,636 2109 \$ 270 \$ 331,973,901 2042 \$ 7,044,395 \$ 176,032,181 2076 \$ 1,565,250 \$ 321,550,886 2110 \$ 163 \$ 331,974,158 2044 \$ 7,157,315 \$ 183,189,496 207	2033 \$	6,396,075	\$ 117,447,484	2067	\$ 2,901,139	\$	302,086,087	2101	\$ 8,405	\$	331,957,412
2036 \$ 6,271,642 \$ 136,162,331 2070 \$ 2,463,723 \$ 309,918,581 2104 \$ 2,604 \$ 331,969,702 2037 \$ 6,305,483 \$ 142,467,814 2071 \$ 2,314,345 \$ 312,232,926 2105 \$ 1,698 \$ 331,971,400 2038 \$ 6,381,280 \$ 148,849,094 2072 \$ 2,164,046 \$ 314,396,972 2106 \$ 1,092 \$ 331,972,492 2039 \$ 6,541,059 \$ 155,390,153 2073 \$ 2,013,180 \$ 316,410,152 2107 \$ 696 \$ 331,973,188 2040 \$ 6,722,078 \$ 162,112,231 2074 \$ 1,862,502 \$ 318,272,654 2108 \$ 443 \$ 331,973,631 2041 \$ 6,875,555 \$ 168,987,786 2075 \$ 1,712,982 \$ 319,985,636 2109 \$ 270 \$ 331,973,901 2042 \$ 7,044,395 \$ 176,032,181 2076 \$ 1,565,250 \$ 321,550,886 2110 \$ 163 \$ 331,974,064 2043 \$ 7,157,315 \$ 183,189,496 2077 \$ 1,420,471 \$ 322,971,357 2111 \$ 94	2034 \$	6,307,839	\$ 123,755,323	2068	\$ 2,757,323	\$	304,843,410	2102	\$ 5,772	\$	331,963,184
2037 \$ 6,305,483 \$ 142,467,814 2071 \$ 2,314,345 \$ 312,232,926 2105 \$ 1,698 \$ 331,971,400 2038 \$ 6,381,280 \$ 148,849,094 2072 \$ 2,164,046 \$ 314,396,972 2106 \$ 1,092 \$ 331,972,492 2039 \$ 6,541,059 \$ 155,390,153 2073 \$ 2,013,180 \$ 316,410,152 2107 \$ 696 \$ 331,973,188 2040 \$ 6,722,078 \$ 162,112,231 2074 \$ 1,862,502 \$ 318,272,654 2108 \$ 443 \$ 331,973,631 2041 \$ 6,875,555 \$ 168,987,786 2075 \$ 1,712,982 \$ 319,985,636 2109 \$ 270 \$ 331,973,901 2042 \$ 7,044,395 \$ 176,032,181 2076 \$ 1,565,250 \$ 321,550,886 2110 \$ 163 \$ 331,974,064 2043 \$ 7,157,315 \$ 183,189,496 2077 \$ 1,420,471 \$ 322,971,357 2111 \$ 94 \$ 331,974,204 2044 \$ 7,190,394 \$ 190,379,890 2078 \$ 1,279,818 \$ 324,251,175 2112 \$ 46 <td< td=""><td>2035 \$</td><td>6,135,366</td><td>\$ 129,890,689</td><td>2069</td><td>\$ 2,611,448</td><td>\$</td><td>307,454,858</td><td>2103</td><td>\$ 3,914</td><td>\$</td><td>331,967,098</td></td<>	2035 \$	6,135,366	\$ 129,890,689	2069	\$ 2,611,448	\$	307,454,858	2103	\$ 3,914	\$	331,967,098
2038 \$ 6,381,280 \$ 148,849,094 2072 \$ 2,164,046 \$ 314,396,972 2106 \$ 1,092 \$ 331,972,492 2039 \$ 6,541,059 \$ 155,390,153 2073 \$ 2,013,180 \$ 316,410,152 2107 \$ 696 \$ 331,973,188 2040 \$ 6,722,078 \$ 162,112,231 2074 \$ 1,862,502 \$ 318,272,654 2108 \$ 443 \$ 331,973,631 2041 \$ 6,875,555 \$ 168,987,786 2075 \$ 1,712,982 \$ 319,985,636 2109 \$ 270 \$ 331,973,901 2042 \$ 7,044,395 \$ 176,032,181 2076 \$ 1,565,250 \$ 321,550,886 2110 \$ 163 \$ 331,974,064 2043 \$ 7,157,315 \$ 183,189,496 2077 \$ 1,420,471 \$ 322,971,357 2111 \$ 94 \$ 331,974,204 2044 \$ 7,190,394 \$ 190,379,890 2078 \$ 1,279,818 \$ 324,251,175 2112 \$ 46 \$ 331,974,204		6,271,642	\$ 136,162,331	2070	\$ 2,463,723	\$	309,918,581	2104	\$ 2,604	\$	331,969,702
2039 \$ 6,541,059 \$ 155,390,153 2073 \$ 2,013,180 \$ 316,410,152 2107 \$ 696 \$ 331,973,188 2040 \$ 6,722,078 \$ 162,112,231 2074 \$ 1,862,502 \$ 318,272,654 2108 \$ 443 \$ 331,973,631 2041 \$ 6,875,555 \$ 168,987,786 2075 \$ 1,712,982 \$ 319,985,636 2109 \$ 270 \$ 331,973,901 2042 \$ 7,044,395 \$ 176,032,181 2076 \$ 1,565,250 \$ 321,550,886 2110 \$ 163 \$ 331,974,064 2043 \$ 7,157,315 \$ 183,189,496 2077 \$ 1,420,471 \$ 322,971,357 2111 \$ 94 \$ 331,974,158 2044 \$ 7,190,394 \$ 190,379,890 2078 \$ 1,279,818 \$ 324,251,175 2112 \$ 46 \$ 331,974,204		6,305,483	\$ 142,467,814	2071	\$ 2,314,345	\$	312,232,926	2105	\$ 1,698	\$	331,971,400
2040 \$ 6,722,078 \$ 162,112,231 2074 \$ 1,862,502 \$ 318,272,654 2108 \$ 443 \$ 331,973,631 2041 \$ 6,875,555 \$ 168,987,786 2075 \$ 1,712,982 \$ 319,985,636 2109 \$ 270 \$ 331,973,901 2042 \$ 7,044,395 \$ 176,032,181 2076 \$ 1,565,250 \$ 321,550,886 2110 \$ 163 \$ 331,974,064 2043 \$ 7,157,315 \$ 183,189,496 2077 \$ 1,420,471 \$ 322,971,357 2111 \$ 94 \$ 331,974,158 2044 \$ 7,190,394 \$ 190,379,890 2078 \$ 1,279,818 \$ 324,251,175 2112 \$ 46 \$ 331,974,204	2038 \$	6,381,280	\$ 148,849,094		2,164,046	\$	314,396,972	2106	\$ 1,092	\$	331,972,492
2041 \$ 6,875,555 \$ 168,987,786 2075 \$ 1,712,982 \$ 319,985,636 2109 \$ 270 \$ 331,973,901 2042 \$ 7,044,395 \$ 176,032,181 2076 \$ 1,565,250 \$ 321,550,886 2110 \$ 163 \$ 331,974,064 2043 \$ 7,157,315 \$ 183,189,496 2077 \$ 1,420,471 \$ 322,971,357 2111 \$ 94 \$ 331,974,158 2044 \$ 7,190,394 \$ 190,379,890 2078 \$ 1,279,818 \$ 324,251,175 2112 \$ 46 \$ 331,974,204	2039 \$	6,541,059	\$ 155,390,153	2073	\$ 2,013,180	\$	316,410,152	2107	\$ 696	\$	331,973,188
2042 \$ 7.044,395 \$ 176,032,181 2076 \$ 1,565,250 \$ 321,550,886 2110 \$ 163 \$ 331,974,064 2043 \$ 7,157,315 \$ 183,189,496 2077 \$ 1,420,471 \$ 322,971,357 2111 \$ 94 \$ 331,974,158 2044 \$ 7,190,394 \$ 190,379,890 2078 \$ 1,279,818 \$ 324,251,175 2112 \$ 46 \$ 331,974,204		6,722,078	\$ 162,112,231	2074	\$ 1,862,502	\$	318,272,654	2108	\$ 443	\$	331,973,631
2043 \$ 7,157,315 \$ 183,189,496 2077 \$ 1,420,471 \$ 322,971,357 2111 \$ 94 \$ 331,974,158 2044 \$ 7,190,394 \$ 190,379,890 2078 \$ 1,279,818 \$ 324,251,175 2112 \$ 46 \$ 331,974,204	*	6,875,555	\$ 168,987,786	2075	\$ 1,712,982	\$	319,985,636	2109	\$ 270	\$	331,973,901
2044 \$ 7,190,394 \$ 190,379,890 2078 \$ 1,279,818 \$ 324,251,175 2112 \$ 46 \$ 331,974,204	-				\$ 1,565,250	\$	321,550,886	2110	\$ 163	\$	331,974,064
					\$ 1,420,471	\$	322,971,357		\$ 94	\$	331,974,158
2045 \$ 7,144,207 \$ 197,524,097 2079 \$ 1,144,505 \$ 325,395,680 2113 \$ 16 \$ 331,974,220		7,190,394	\$ 190,379,890	2078	\$ 1,279,818	\$	324,251,175		 46	\$	331,974,204
	2045 \$	7,144,207	\$ 197,524,097	2079	\$ 1,144,505	\$	325,395,680	2113	\$ 16	\$	331,974,220

APPENDIX – III 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.