

West Coast 3960 Howard Hughes Pkwy, Suite 500 Las Vegas, NV 89169 (702) 979-2880

# Town of Tiverton Other Postemployment Benefits Plan

# **GASB 45 Actuarial Valuation**

as of

# <u>July 1, 2014</u>

For the fiscal years ending

June 30, 2015 June 30, 2016

Delivered August 2015



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West Coast 3960 Howard Hughes Pkwy, Suite 500 Las Vegas, NV 89169 (702) 979-2880

August 15, 2015

Personal and Confidential

Ms. Denise Saurette Town Treasurer Town of Tiverton 343 Highland Road Tiverton, RI 02878

Dear Ms. Saurette:

We have performed an actuarial valuation of the Town of Tiverton Other Postemployment Benefits Plan for the fiscal year ending June 30, 2015. The figures presented in this report reflect the adoption, by the Town of Tiverton, of Statement No. 45 of the Governmental Accounting Standards Board ("GASB 45") effective July 1, 2008.

The financial results of the actuarial valuation are summarized in the report. The Executive Summaries highlight the results of the valuation. Additional information summarizing census data, actuarial assumptions, claim rates 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 costs, liabilities and other factors under the plan were determined in accordance with generally accepted actuarial principles and procedures. In our opinion, the actuarial assumptions used are reasonable, taking into account the experience of the plan and reasonable expectations and, in combination, represent our best estimate of the anticipated experience under the plan.

We refer you to Section I of this report for a detailed summary and commentary on the results of the valuation and a comparison with the prior valuation. Section II is a summary of the plan provisions, and Section III describes the actuarial cost method and assumptions. Details for cost calculations, supporting data, and disclosures are provided in Exhibits A through C.



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We will be pleased to answer any questions that you may have regarding this actuarial valuation report.

Very truly yours,

1/hu

Parker E. Elmore, ASA, EA, FCA, MAAA President, CEO & Actuary



August 15, 2015

# ACTUARIAL CERTIFICATION

This is to certify that Odyssey Advisors has conducted an actuarial valuation of certain benefit obligations of the Town of Tiverton other postemployment benefit programs as of July 1, 2014 for the fiscal year ending June 30, 2015 in accordance with generally accepted actuarial principles and practices. The actuarial calculations presented in this report have been made on a basis consistent with our understanding of GASB Statements Number 43 and 45 for the determination of the liability for postemployment benefits other than pensions.

The actuarial data is based on the plan of benefits verified by the Town and on participant claims or premium data provided by the Town and/or vendors employed by the Town.

The actuarial computations made are for purposes of fulfilling plan accounting requirements. Determinations for purposes other than meeting financial accounting requirements may yield results significantly different than those reported here. As such, additional determinations may be needed for other purposes including determining the benefit security at termination and/or adequacy of the funding of an ongoing plan.

To the best of our knowledge, this report is complete and accurate and in our opinion represents the information necessary to comply with GASB Statements Number 43 and 45 with respect to the benefit obligations addressed. The signing actuaries are members of the Society of Actuaries, the American Academy of Actuaries and other professional actuarial organizations and meet their "General Qualification Standards for Statements of Actuarial Opinion" to render the actuarial opinion contained herein. Further, in our opinion, the assumptions as approved by the Town are reasonably related to the experience and expectations of the postemployment benefits programs.

Parker E. Elmore, ASA, EA, FCA, MAAA President, CEO & Actuary



### PRINCIPAL RESULTS OF THE VALUATION

### Town of Tiverton Assuming Pay-as-you-go funding - 3.50% discount rate Comparison of Plan Liabilities to Prior Valuation

		<u>July 1, 2014</u>	July 1, 2012
I.	<ul><li>Present Value of Future Benefits</li><li>A. Actives</li><li>B. Retirees/Disabled</li><li>C. Total</li></ul>	19,403,545 <u>13,983,037</u> 33,386,582	18,428,107 <u>17,438,500</u> 35,866,607
II.	Present Value of Future Normal Cost	12,019,664	11,374,391
III.	<ul><li>Actuarial Accrued Liability (Entry Age Normal)</li><li>A. Actives</li><li>B. Retirees/Disabled</li><li>C. Total</li></ul>	7,383,881 <u>13,983,037</u> 21,366,918	7,053,716 <u>17,438,500</u> 24,492,216
IV.	Plan Assets	0	0
V.	Unfunded Actuarial Accrued Liability ("UAAL") [III IV.]	21,366,918	24,492,216
VI.	Funded Ratio [IV. / III.]	0.00%	0.00%
VII.	Annual Covered Payroll	N/A	N/A
VIII.	UAAL as % of Covered Payroll	N/A	N/A
IX.	Net OPEB Obligation (Asset) @ Beginning of Fiscal Year	4,831,657	4,021,319
X.	Number of Eligible Participants A. Actives B. Retirees/Disabled C. Total	276 <u>123</u> 399	274 <u>162</u> 436
	For Fiscal Year Ending June 30, 2015	June 30, 2015	<u>June 30, 2013</u>
XI.	<b>For Fiscal Year Ending June 30, 2015</b> Normal Cost	<u>June 30, 2015</u> 656,052	<u>June 30, 2013</u> 655,631
XI. XII.			
XII.	Normal Cost	656,052	655,631
XII.	Normal Cost Amortization of UAAL - 30 year flat dollar Annual Required Contribution ('ARC') [ XI. + XII.]	656,052 1,830,154	655,631 1,830,154
XII. XIII.	Normal Cost Amortization of UAAL - 30 year flat dollar Annual Required Contribution ('ARC') [ XI. + XII.]	656,052 1,830,154 2,486,206	655,631 1,830,154 2,485,785
XII. XIII. XIV. XV.	Normal Cost Amortization of UAAL - 30 year flat dollar Annual Required Contribution ('ARC') [ XI. + XII.] Interest on Net OPEB Obligation (Asset)	656,052 1,830,154 2,486,206 169,107	655,631 1,830,154 2,485,785 140,746
XII. XIII. XIV. XV. XVI.	Normal Cost Amortization of UAAL - 30 year flat dollar Annual Required Contribution ('ARC') [ XI. + XII.] Interest on Net OPEB Obligation (Asset) Adjustment to Annual Required Contribution	656,052 1,830,154 2,486,206 169,107 (253,818)	655,631 1,830,154 2,485,785 140,746 (337,345)
XII. XIII. XIV. XV. XVI. XVII	Normal Cost Amortization of UAAL - 30 year flat dollar Annual Required Contribution ('ARC') [ XI. + XII.] Interest on Net OPEB Obligation (Asset) Adjustment to Annual Required Contribution Amortization of Actuarial (Gains) / Losses	656,052 1,830,154 2,486,206 169,107 (253,818) (473,799)	655,631 1,830,154 2,485,785 140,746 (337,345) (629,304)
XII. XIII. XIV. XV. XVI. XVII XVII	Normal Cost Amortization of UAAL - 30 year flat dollar Annual Required Contribution ('ARC') [ XI. + XII.] Interest on Net OPEB Obligation (Asset) Adjustment to Annual Required Contribution Amortization of Actuarial (Gains) / Losses . Annual OPEB Expense [XIII. + XIV. + XV. + XVI.]	656,052 1,830,154 2,486,206 169,107 (253,818) (473,799) 1,927,696	655,631 1,830,154 2,485,785 140,746 (337,345) (629,304) 1,659,882
XII. XIII. XIV. XV. XVI. XVII XVII	Normal Cost Amortization of UAAL - 30 year flat dollar Annual Required Contribution ('ARC') [ XI. + XII.] Interest on Net OPEB Obligation (Asset) Adjustment to Annual Required Contribution Amortization of Actuarial (Gains) / Losses . Annual OPEB Expense [XIII. + XIV. + XV. + XVI.] I. Employer Share of Costs	656,052 1,830,154 2,486,206 169,107 (253,818) (473,799) 1,927,696 960,875	655,631 1,830,154 2,485,785 140,746 (337,345) (629,304) 1,659,882 1,292,835
XII. XIV. XV. XVI. XVII XVII XIX. XX.	Normal Cost Amortization of UAAL - 30 year flat dollar Annual Required Contribution ('ARC') [XI. + XII.] Interest on Net OPEB Obligation (Asset) Adjustment to Annual Required Contribution Amortization of Actuarial (Gains) / Losses . Annual OPEB Expense [XIII. + XIV. + XV. + XVI.] I. Employer Share of Costs Employer Payments (Withdrawals) to/from OPEB Trust	656,052 1,830,154 2,486,206 169,107 (253,818) (473,799) 1,927,696 960,875 0	655,631 1,830,154 2,485,785 140,746 (337,345) (629,304) 1,659,882 1,292,835 0
XII. XIII. XIV. XVI. XVII XVII XIX. XX. XXI.	Normal Cost Amortization of UAAL - 30 year flat dollar Annual Required Contribution ('ARC') [ XI. + XII.] Interest on Net OPEB Obligation (Asset) Adjustment to Annual Required Contribution Amortization of Actuarial (Gains) / Losses . Annual OPEB Expense [XIII. + XIV. + XV. + XVI.] I. Employer Share of Costs Employer Payments (Withdrawals) to/from OPEB Trust Total Employer Contribution [XVIII. + XIX.]	656,052 1,830,154 2,486,206 169,107 (253,818) (473,799) 1,927,696 960,875 0 960,875	655,631 1,830,154 2,485,785 140,746 (337,345) (629,304) 1,659,882 1,292,835 0 1,292,835
XII. XIII. XIV. XVI. XVII XVII XIX. XXI. XXI	Normal Cost Amortization of UAAL - 30 year flat dollar Annual Required Contribution ('ARC') [ XI. + XII.] Interest on Net OPEB Obligation (Asset) Adjustment to Annual Required Contribution Amortization of Actuarial (Gains) / Losses Annual OPEB Expense [XIII. + XIV. + XV. + XVI.] I. Employer Share of Costs Employer Payments (Withdrawals) to/from OPEB Trust Total Employer Contribution [XVIII. + XIX.] Percentage of Annual OPEB Expense Contributed	656,052 1,830,154 2,486,206 169,107 (253,818) (473,799) 1,927,696 960,875 0 960,875 49.8%	655,631 1,830,154 2,485,785 140,746 (337,345) (629,304) 1,659,882 1,292,835 0 1,292,835 77.9%
XII. XIII. XIV. XVI. XVII XVII XIX. XX. XXI. XXI	Normal Cost Amortization of UAAL - 30 year flat dollar Annual Required Contribution ('ARC') [XI. + XII.] Interest on Net OPEB Obligation (Asset) Adjustment to Annual Required Contribution Amortization of Actuarial (Gains) / Losses Annual OPEB Expense [XIII. + XIV. + XV. + XVI.] I. Employer Share of Costs Employer Payments (Withdrawals) to/from OPEB Trust Total Employer Contribution [XVIII. + XIX.] Percentage of Annual OPEB Expense Contributed . Net OPEB Obligation (Asset) at Beginning of Year [IX.]	656,052 1,830,154 2,486,206 169,107 (253,818) (473,799) 1,927,696 960,875 0 960,875 49.8% 4,831,657	655,631 1,830,154 2,485,785 140,746 (337,345) (629,304) 1,659,882 1,292,835 0 1,292,835 77.9% 4,021,319



### PRINCIPAL RESULTS OF THE VALUATION

### (continued)

### Town of Tiverton Comparison of Plan Funding vs. Pay-as-you-go Funding

		pay-as-you-go-3.50% discount rate	Plan Funding -7.00% discount rate
I.	Present Value of Future Benefits		
	A. Actives	19,403,545	8,273,262
	B. Retirees/Disabled	<u>13,983,037</u> 22,286,582	<u>9,765,617</u>
	C. Total	33,386,582	18,038,879
II.	Present Value of Future Normal Cost	12,019,664	3,770,230
III.	Actuarial Accrued Liability (Entry Age Normal)		
	A. Actives	7,383,881	4,503,032
	<ul><li>B. Retirees/Disabled</li><li>C. Total</li></ul>	<u>13,983,037</u> 21,366,918	<u>9,765,617</u> 14,268,649
IV.	Plan Assets	0	0
V.	Unfunded Actuarial Accrued Liability ("UAAL") [III IV.]	21,366,918	14,268,649
VI.	Funded Ratio [IV. / III.]	0.00%	0.00%
VII.	Annual Covered Payroll	N/A	N/A
VIII.	UAAL as % of Covered Payroll	N/A	N/A
IX.	Net OPEB Obligation (Asset) @ Beginning of Fiscal Year	4,831,657	4,831,657
Х.	Number of Eligible Participants		
	<ul><li>A. Actives</li><li>B. Retirees/Disabled</li></ul>	276 123	276 123
	C. Total	<u>125</u> 399	399
	For Fiscal Year Ending June 30, 2015		
XI.	Normal Cost	656,052	294,860
XII.	Amortization of UAAL - 30 year flat dollar	1,830,154	2,478,606
XIII.	Annual Required Contribution ('ARC') [ XI. + XII.]	2,486,206	2,773,466
XIV.	Interest on Net OPEB Obligation (Asset)	169,107	338,216
XV.	Adjustment to Annual Required Contribution	(253,818)	(363,894)
XVI.	Amortization of Actuarial (Gains) / Losses	(473,799)	(1,216,272)
XVII	. Annual OPEB Expense [XIII. + XIV. + XV. + XVI.]	1,927,696	1,531,516
XVII	I. Employer Share of Costs	960,875	960,875
XIX.	Employer Payments (Withdrawals) to/from OPEB Trust	0	431,853
XX.	Total Employer Contribution [XVIII. + XIX.]	960,875	1,392,728
XXI.	Percentage of Annual OPEB Expense Contributed	49.8%	90.9%
XXII	. Net OPEB Obligation (Asset) at Beginning of Year [IX.]	4,831,657	4,831,657
XXII	I. Increase (Decrease) in Net OPEB Obligations (Asset) [XVII XX.]	966,821	138,788
XXIV	7. Net OPEB Obligation (Asset) at End of Year [XXII. + XXIII.]	5,798,478	4,970,445
XXV	. Discount Rate	3.50%	7.00%



### PRINCIPAL RESULTS OF THE VALUATION

(continued)

### Town of Tiverton Assuming pay-as-you-go - 3.50% discount rate Plan Liabilities as of July 1, 2014

		Medical	<u>Dental</u>	Life	Excise Tax	<u>Total</u>
I.	<ul><li>Present Value of Future Benefits</li><li>A. Actives</li><li>B. Retirees/Disabled</li><li>C. Total</li></ul>	16,401,551 <u>12,917,450</u> 29,319,001	1,977,943 <u>972,450</u> 2,950,393	61,710 <u>39,750</u> 101,460	962,341 <u>53,387</u> 1,015,728	19,403,545 <u>13,983,037</u> 33,386,582
II.	Present Value of Future Normal Cost	10,035,753	1,228,585	29,137	726,189	12,019,664
III.	<ul><li>Actuarial Accrued Liability (Entry Age Normal)</li><li>A. Actives</li><li>B. Retirees/Disabled</li><li>C. Total</li></ul>	6,365,798 <u>12,917,450</u> 19,283,248	749,358 <u>972,450</u> 1,721,808	32,573 <u>39,750</u> 72,323	236,152 <u>53,387</u> 289,539	7,383,881 <u>13,983,037</u> 21,366,918
IV.	Plan Assets	0	0	0	0	0
V.	Unfunded Actuarial Accrued Liability ("UAAL") [III IV.]	19,283,248	1,721,808	72,323	289,539	21,366,918
VI.	Annual Covered Payroll	N/A	N/A	N/A	N/A	N/A
VII.	UAAL as % of Covered Payroll	N/A	N/A	N/A	N/A	N/A
VIII.	Net OPEB Obligation (Asset) @ Beginning of Fiscal Year	4,360,481	389,349	16,354	65,473	4,831,657
IX.	Number of Eligible Participants A. Actives B. Retirees/Disabled C. Total	276 <u>123</u> 399	276 <u>71</u> 347	211 <u>34</u> 245	115 <u>56</u> 171	
	For Fiscal Year Ending June 30, 2015					
X.	Normal Cost	552,562	66,977	2,055	34,458	656,052
XI.	Amortization of UAAL - 30 year flat dollar	1,651,680	147,479	6,195	24,800	1,830,154
XII.	Annual Required Contribution ('ARC') [ X. + XI.]	2,204,242	214,456	8,250	59,258	2,486,206
XIII.	Interest on Net OPEB Obligation (Asset)	152,617	13,626	572	2,292	169,107
XIV.	Adjustment to Annual Required Contribution	(229,068)	(20,452)	(859)	(3,439)	(253,818)
XV.	Amortization of Actuarial (Gains) / Losses	(429,107)	(38,314)	(256)	(6,122)	(473,799)
XVI.	Annual OPEB Expense [XII. + XIII. + XIV. + XV.]	1,698,684	169,316	7,707	51,989	1,927,696
XVII	. Employer Share of Costs	908,690	39,551	12,634	0	960,875
XVII	I. Employer Payments (Withdrawals) to/from OPEB Trust	0	0	0	0	0
XIX.	Total Employer Contribution [XVII. + XVIII.]	908,690	39,551	12,634	0	960,875
XX.	Percentage of Annual OPEB Expense Contributed	53.5%	23.4%	163.9%	0.0%	49.8%
XXI.	Net OPEB Obligation (Asset) at Beginning of Year [VIII.]	4,360,481	389,349	16,354	65,473	4,831,657
XXII	. Increase (Decrease) in Net OPEB Obligations (Asset) [XVI XIX.]	789,994	129,765	(4,927)	51,989	966,821
XXII	I. Net OPEB Obligation (Asset) at End of Year [XXI. + XXII.]	5,150,475	519,114	11,427	117,462	5,798,478



### PRINCIPAL RESULTS OF THE VALUATION

#### (continued)

#### Town of Tiverton Plan Liabilities as of July 1, 2014 Assuming maintain pay-as-you-go funding method

		General Town Employees and Retirees	School Employees and Retirees	Police Employees and Retirees	Fire Employees and Retirees	DPW Employees and Retirees	Total
I.	Present Value of Future Benefits						
	A. Actives	334,631	4,973,873	7,194,201	6,830,821	70,019	19,403,545
	<ul><li>B. Retirees/Disabled</li><li>C. Total</li></ul>	<u>50,852</u> 385,483	<u>1,173,247</u> 6,147,120	<u>6,963,083</u> 14,157,284	<u>4,790,174</u> 11,620,995	1,005,681 1,075,700	<u>13,983,037</u> 33,386,582
		505,405	0,147,120	14,157,204	11,020,775	1,075,700	55,566,562
II.	Present Value of Future Normal Cost	206,822	2,747,360	4,518,457	4,537,416	9,609	12,019,664
III.	Actuarial Accrued Liability (Entry Age Normal)						
	A. Actives	127,809	2,226,513		2,293,405	60,410	7,383,881
	B. Retirees/Disabled C. Total	<u>50,852</u> 178,661	<u>1,173,247</u> 3,399,760	<u>6,963,083</u> 9,638,827	<u>4,790,174</u> 7,083,579	<u>1,005,681</u> 1,066,091	<u>13,983,037</u> 21,366,918
		,	-,,	,,,	.,,	-,,	
IV.	Plan Assets	0	0	0	0	0	0
V.	Unfunded Actuarial Accrued Liability ("UAAL") [III IV.]	178,661	3,399,760	9,638,827	7,083,579	1,066,091	21,366,918
VI.	Annual Covered Payroll	N/A	N/A	N/A	N/A	N/A	N/A
VII.	UAAL as % of Covered Payroll	N/A	N/A	N/A	N/A	N/A	N/A
VIII.	Net OPEB Obligation (Asset) @ Beginning of Fiscal Year	40,401	768,781	2,179,608	1,601,795	241,072	4,831,657
IX.	Number of Eligible Participants						
	A. Actives	3	211	30	30	2	276
	<ul><li>B. Retirees/Disabled</li><li>C. Total</li></ul>	<u>2</u> 5	<u>55</u> 266		<u>31</u> 61	<u>3</u> 5	<u>123</u> 399
	For Fiscal Year Ending June 30, 2015						
Х.	Normal Cost	11,330	167,460	241,083	234,543	1,636	656,052
XI.	Amortization of UAAL - 30 year flat dollar	150,619	279,458	761,579	549,526	88,972	1,830,154
XII.	Annual Required Contribution ('ARC') [ X. + XI.]	161,949	446,918	1,002,662	784,069	90,608	2,486,206
XIII.	Interest on Net OPEB Obligation (Asset)	1,414	26,907	76,286	56,063	8,437	169,107
XIV.	Adjustment to Annual Required Contribution	(2,122)	(40,386)	) (114,500)	(84,146)	(12,664)	(253,818)
XV.	Amortization of Actuarial (Gains) / Losses	(3,963)	(75,654)	) (213,765)	(157,095)	(23,322)	(473,799)
XVI.	Annual OPEB Expense [XII. + XIII. + XIV. + XV.]	157,278	357,785	750,683	598,891	63,059	1,927,696
XVII	. Employer Share of Costs	18,013	367,115	318,362	210,909	46,476	960,875
XVII	I. Employer Payments (Withdrawals) to/from OPEB Trust	0	0	0	0	0	0
XIX.	Total Employer Contribution [XVII. + XVIII.]	18,013	367,115	318,362	210,909	46,476	960,875
XX.	Percentage of Annual OPEB Expense Contributed	11.5%	102.6%	42.4%	35.2%	73.7%	49.8%
XXI.	Net OPEB Obligation (Asset) at Beginning of Year [VIII.]	40,401	768,781	2,179,608	1,601,795	241,072	4,831,657
XXII	. Increase (Decrease) in Net OPEB Obligations (Asset) [XVI XIX.]	139,265	(9,330)	432,321	387,982	16,583	966,821
XXII	I. Net OPEB Obligation (Asset) at End of Year [XXI. + XXII.]	179,666	759,451	2,611,929	1,989,777	257,655	5,798,478



# SECTION I

### PRINCIPAL RESULTS OF THE VALUATION (continued)

# **Town of Tiverton**

# Detail of Plan Liabilities by Group and Dependency Status Assuming Pay-as-you-go funding - 3.50% discount rate Plan Liabilities as of July 1, 2014

		<u>Present Value of</u> <u>Future Benefits</u>	<u>Actuarial Accrued</u> <u>Liability (Entry Age</u> <u>Normal)</u>	<u>Normal Cost</u>
Actives				
	Under Age 65			
	A. Participants	6,348,998	2,598,430	212,754
	B. Spouses	<u>5,291,875</u>	2,030,514	<u>177,560</u>
	C. Total	11,640,873	4,628,944	390,314
	Age 65 and Over			
	A. Participants	4,157,553	1,419,277	143,089
	B. Spouses	3,605,119	1,335,660	122,649
	C. Total	7,762,672	2,754,937	265,738
	Actives Total			
	A. Participants	10,506,551	4,017,707	355,843
	B. Spouses	<u>8,896,994</u>	3,366,174	300,209
	C. Total	19,403,545	7,383,881	656,052
Retirees/	Disabled			
	Under Age 65			
	A. Participants	3,396,353	3,396,353	0
	B. Spouses	2,729,384	<u>2,729,384</u>	<u>0</u>
	C. Total	6,125,737	6,125,737	0
	Age 65 and Over			
	A. Participants	4,296,995	4,296,995	<u>0</u>
	B. Spouses	3,560,305	3,560,305	<u>0</u>
	C. Total	7,857,300	7,857,300	0
	Retirees/Disabled Total			
	A. Participants	7,693,348	7,693,348	0
	B. Spouses	6,289,689	6,289,689	<u>0</u>
	C. Total	13,983,037	13,983,037	$\overline{0}$
Total Poj	oulation			
-	A. Participants	18,199,899	11,711,055	355,843
	B. Spouses	<u>15,186,683</u>	9,655,863	300,209
	C. Total	33,386,582	21,366,918	656,052



### PRINCIPAL RESULTS OF THE VALUATION

(continued)

### Town of Tiverton Assuming Funding over 30 years at 7.00% discount rate Plan Liabilities as of July 1, 2014

		Medical	<u>Dental</u>	Life	Excise Tax	<u>Total</u>
I.	Present Value of Future Benefits A. Actives B. Retirees/Disabled C. Total	7,130,416 <u>9,093,212</u> 16,223,628	708,234 <u>606,875</u> 1,315,109	38,203 <u>37,877</u> 76,080	396,409 <u>27,653</u> 424,062	8,273,262 <u>9,765,617</u> 18,038,879
II.	Present Value of Future Normal Cost	3,184,325	321,313	12,688	251,904	3,770,230
III.	<ul><li>Actuarial Accrued Liability (Projected Unit Credit)</li><li>A. Actives</li><li>B. Retirees/Disabled</li><li>C. Total</li></ul>	3,946,091 <u>9,093,212</u> 13,039,303	386,921 <u>606,875</u> 993,796	25,515 <u>37,877</u> 63,392	144,505 <u>27,653</u> 172,158	4,503,032 <u>9,765,617</u> 14,268,649
IV.	Plan Assets	0	0	0	0	0
V.	Unfunded Actuarial Accrued Liability ("UAAL") [III IV.]	13,039,303	993,796	63,392	172,158	14,268,649
VI.	Annual Covered Payroll	N/A	N/A	N/A	N/A	N/A
VII.	UAAL as % of Covered Payroll	N/A	N/A	N/A	N/A	N/A
VIII.	Net OPEB Obligation (Asset) @ Beginning of Fiscal Year	4,360,481	389,349	16,354	65,473	4,831,657
IX.	Number of Eligible Participants A. Actives B. Retirees/Disabled C. Total	276 <u>123</u> 399	276 <u>71</u> 347	211 <u>34</u> 245	115 <u>56</u> 171	
	For Fiscal Year Ending June 30, 2015					
X.	Normal Cost	250,913	25,143	1,209	17,595	294,860
XI.	Amortization of UAAL - 30 year flat dollar	2,265,056	172,632	11,012	29,906	2,478,606
XII.	Annual Required Contribution ('ARC') [ X. + XI.]	2,515,969	197,775	12,221	47,501	2,773,466
XIII.	Interest on Net OPEB Obligation (Asset)	305,234	27,254	1,145	4,583	338,216
XIV.	Adjustment to Annual Required Contribution	(328,407)	(29,324)	(1,232)	(4,931)	(363,894)
XV.	Amortization of Actuarial (Gains) / Losses	(1,111,481)	(84,712)	(5,404)	(14,675)	(1,216,272)
XVI.	Annual OPEB Expense [XII. + XIII. + XIV. + XV.]	1,381,315	110,993	6,730	32,478	1,531,516
XVII	. Employer Share of Costs	908,690	39,551	12,634	0	960,875
XVII	I. Employer Payments (Withdrawals) to/from OPEB Trust	333,837	71,442	(5,904)	32,478	431,853
XIX.	Total Employer Contribution [XVII. + XVIII.]	1,242,527	110,993	6,730	32,478	1,392,728
XX.	Percentage of Annual OPEB Expense Contributed	90.0%	100.0%	100.0%	100.0%	90.9%
XXI.	Net OPEB Obligation (Asset) at Beginning of Year [VIII.]	4,360,481	389,349	16,354	65,473	4,831,657
XXII	. Increase (Decrease) in Net OPEB Obligations (Asset) [XVI XIX.]	138,788	0	0	0	138,788
XXII	I. Net OPEB Obligation (Asset) at End of Year [XXI. + XXII.]	4,499,269	389,349	16,354	65,473	4,970,445



### PRINCIPAL RESULTS OF THE VALUATION

#### (continued)

#### Town of Tiverton Plan Liabilities as of July 1, 2014 Assuming Funding over 30 years at 7.00% discount rate

		General Town Employees and Retirees	School Employees and Retirees	Police Employees and Retirees	Fire Employees and Retirees	DPW Employees and Retirees	Total
I.	Present Value of Future Benefits						
	A. Actives	142,680	2,120,754	3,067,455	2,912,518	29,855	8,273,262
	<ul><li>B. Retirees/Disabled</li><li>C. Total</li></ul>	<u>35,515</u> 178,195	<u>819,384</u> 2,940,138	<u>4,862,949</u> 7,930,404	<u>3,345,411</u> 6,257,929	702,358 732,213	<u>9,765,617</u> 18,038,879
			_,,,	.,,.			
II.	Present Value of Future Normal Cost	64,874	861,769	1,417,313	1,423,260	3,014	3,770,230
III.	Actuarial Accrued Liability (Entry Age Normal)						
	A. Actives	77,944	1,357,831	1,631,792	1,398,624	36,841	4,503,032
	B. Retirees/Disabled C. Total	<u>35,515</u> 113,459	<u>819,384</u> 2,177,215	<u>4,862,949</u> 6,494,741	<u>3,345,411</u> 4,744,035	702,358 739,199	<u>9,765,617</u> 14,268,649
		110,109	2,177,210	0,171,711	1,711,000	,,,,,,,	11,200,017
IV.	Plan Assets	0	0	0	0	0	0
V.	Unfunded Actuarial Accrued Liability ("UAAL") [III IV.]	113,459	2,177,215	6,494,741	4,744,035	739,199	14,268,649
VI.	Annual Covered Payroll	N/A	N/A	N/A	N/A	N/A	N/A
VII.	UAAL as % of Covered Payroll	N/A	N/A	N/A	N/A	N/A	N/A
VIII.	Net OPEB Obligation (Asset) @ Beginning of Fiscal Year	40,401	768,781	2,179,608	1,601,795	241,072	4,831,657
IX.	Number of Eligible Participants						
	A. Actives	3	211	30	30	2	276
	<ul><li>B. Retirees/Disabled</li><li>C. Total</li></ul>	<u>2</u> 5	<u>55</u> 266	32 62	<u>31</u> 61	<u>3</u> 5	<u>123</u> 399
		5	200	02	01	5	399
	For Fiscal Year Ending June 30, 2015						
Χ.	Normal Cost	5,093	75,264	108,354	105,414	735	294,860
XI.	Amortization of UAAL - 30 year flat dollar	203,986	378,474	1,031,418	744,232	120,496	2,478,606
XII.	Annual Required Contribution ('ARC') [ X. + XI.]	209,079	453,738	1,139,772	849,646	121,231	2,773,466
XIII.	Interest on Net OPEB Obligation (Asset)	2,828	53,814	152,573	112,127	16,874	338,216
XIV.	Adjustment to Annual Required Contribution	(3,042)	(57,901)	(164,156)	(120,639)	(18,156)	(363,894)
XV.	Amortization of Actuarial (Gains) / Losses	(10,173)	(194,209)	(548,748)	(403,273)	(59,869)	(1,216,272)
XVI.	Annual OPEB Expense [XII. + XIII. + XIV. + XV.]	198,692	255,442	579,441	437,861	60,080	1,531,516
XVII	. Employer Share of Costs	18,013	367,115	318,362	210,909	46,476	960,875
XVII	I. Employer Payments (Withdrawals) to/from OPEB Trust	3,435	65,895	196,569	143,582	22,372	431,853
XIX.	Total Employer Contribution [XVII. + XVIII.]	21,448	433,010	514,931	354,491	68,848	1,392,728
XX.	Percentage of Annual OPEB Expense Contributed	10.8%	169.5%	88.9%	81.0%	114.6%	90.9%
XXI.	Net OPEB Obligation (Asset) at Beginning of Year [VIII.]	40,401	768,781	2,179,608	1,601,795	241,072	4,831,657
XXII	. Increase (Decrease) in Net OPEB Obligations (Asset) [XVI XIX.]	177,244	(177,568)	64,510	83,370	(8,768)	138,788
XXII	I. Net OPEB Obligation (Asset) at End of Year [XXI. + XXII.]	217,645	591,213	2,244,118	1,685,165	232,304	4,970,445



# Overview of GASB 43 and 45

GASB 43 requires retiree medical plans to disclose information about asset and liability levels and show historical contribution information. GASB 43 only applies in situations where a separate trust is established to prefund these benefits. GASB 45 requires employers to perform periodic actuarial valuations to determine annual accounting costs, and to keep a running tally of the extent to which these amounts are over or under funded.

GASB 43 and 45 apply to those benefits provided after retirement except for pension benefits such as medical insurance, dental and life insurance. The philosophy behind the accounting standard is that these post-employment benefits are part of the compensation earned by employees in return for their services, and the cost of these benefits should be recognized while employees are providing those services, rather than after they have retired. This philosophy has already been applied for years to defined benefit pensions; GASB 43 and 45 extend this practice to all other post-employment benefits.



# Overview of GASB 43 and 45 (continued)

The process of determining the liability for OPEB benefits is based on many assumptions about future events. The key actuarial assumptions are:

**Turnover and retirement rates:** How likely is it that an employee will qualify for postemployment benefits and when will they start?

**Medical inflation and claims cost assumptions:** When an employee starts receiving postemployment benefits many years from now, how much will be paid each year for the benefits and how rapidly will the costs grow?

Mortality assumption: How long is a retiree likely to receive benefits?

**Discount rate assumption:** What is the present value of those future benefit payments in terms of today's dollars?

Since the liability is being recognized over the employee's whole career with the Town, the present value is divided into three pieces: the part that is attributed to past years (the "Accrued Liability" or "Past Service Liability"), the part that is being earned this year (the "Normal Cost"), and the part that will be earned in future years (the "Future Service Liability").

Once the Accrued Liability and the Normal Cost have been calculated, the next step is to determine an annual contribution. This consists of two pieces:

- ✓ Normal Cost because the benefits earned each year should be paid for each year
- ✓ Past Service Cost a catch-up payment to fund the Accrued Liability over the next 10-30 years

The final step is to keep track going forward of how much of the contribution is actually paid. There is no requirement to actually fund these benefits, but the cumulative deficiency must be disclosed on the Town's financial statements as the Net OPEB Obligation. If you decide to fully fund the OPEB obligation this will appear in the financial statement as a Net OPEB Asset. In addition, the Discount Rate used to calculate the liabilities must reflect the expected investment income of whatever funds are set aside to prefund the benefits; if there is no prefunding then the Discount Rate will be much lower and the liabilities significantly higher than if the benefits are prefunded.



# Commentary on Plan Experience and Contribution Amounts

# 1. **GASB 45 – How we got here:**

The Plan adopted and implemented GASB 45 ("Accounting and Financial Reporting by Employers for Postemployment Benefits other than Pensions") effective for the fiscal year ending June 30, 2009. GASB 45 is designed to recognize the Other Postemployment Benefits ("OPEB") earned by employees throughout their working career vs. when they are actually paid in retirement – accrual accounting vs. "pay-as-you-go" accounting. When GASB 45 was adopted, there was an Unfunded Actuarial Accrued Liability ("UAAL") or "past service liability" which reflected all benefits earning until the date of such adoption. To smooth the impact of transitioning to GASB 45 on your financial statement, the UAAL was amortized over a 30 year period using a flat dollar amortization. Additionally, each eligible active employee earns benefits each year representing benefits to be paid in retirement or a "Normal Cost". These amounts are reflected in your financial statement each year so that OPEB benefits for an eligible employee shall be fully charged to the financial statement when that eligible employee terminates employment.

# 2. Summary of Results:

During the fiscal year ending June 30, 2015, the Plan saw an experience loss of \$3625458 or 14.51%. Plan experience was more favorable than expected. This was mainly due to premiums for Plan 65 remaining largely flat vs. an expected 11% increase as well as a reduction in the retiree population (School retiree & beneficiary count dropped from 81 to 55). This was somewhat offset by the introduction of a new Actuarial Cost Method in preparation for GASB 75, a more conservative mortality table, and the ACA excise tax. The actuarial experience gain is amortized into the annual OPEB costs over a 30-year period. The net impact of plan experience is an increase in the annual OPEB cost. Please note there was a change in methodology to include spouses of retirees in the count.



# Commentary on Plan Experience and Contribution Amounts (continued)

3.

# **Balance Sheet Items**

	July 1, 2014	July 1, 2012
Actuarial Accrued Liability	\$21,366,918	\$24,492,216
Plan Assets	\$0	\$0
Unfunded Actuarial Accrued Liability	\$21,366,918	\$24,492,216
Funded %	0.00%	0.00%
Net OPEB Obligation	\$4,831,657	\$4,021,319

4.

# **Income Statement Items**

	June 30, 2015	June 30, 2013
Normal Cost	\$656,052	\$655,631
Amortization of UAAL	\$1,830,154	\$1,830,154
Interest on Net OPEB Obligation	\$169,107	\$140,746
Adjustment to Annual Required Contribution	\$(253,818)	\$(337,345)
Amortization of Actuarial (Gains)/Losses	\$(473,799)	\$(629,304)
Annual OPEB Expense	\$1,927,696	\$1,659,882
Employer Share of Costs Employer	\$960,875	\$1,292,835
Contributions/(Withdrawals)	\$0	\$0
to/from OPEB Trust Total Employer Contribution	\$960,875	\$1,292,835
Discount Rate	3.50%	3.50%



### Commentary on Plan Experience and Contribution Amounts (continued)

### 2. <u>GASB 75 – Where we're going:</u>

The Governmental Accounting Standards Board ("GASB") issued GASB 75 "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions" on June 2, 2015 which will become effective for your 2018 fiscal year. This standard will largely mirror the GASB 68 standard for pension plans. The new standards will require increased disclosure and will tie interest rates used in the valuation to the plan's underlying investment and funding policy. This may increase the pressure on many entities to begin funding their OPEB liabilities. The final text of the GASB 75 was released on July 2, 2015 and we will be communicating more information about the new standard and the impact as more information becomes available.



### SUMMARY OF PLAN PROVISIONS

Effective Date July 1, 2008; GASB 45 is adopted. Plan Year

July 1 through June 30.

Eligibility for benefits in retirement varies by classification. Certified personnel of the Schools shall be eligible to retire with 20 years of service and eligibility to retire under the State Retirement System or where their age plus service is at least eighty (80). Non-certified personnel of the Schools shall be eligible either upon attainment of age 58 with age plus service of at least eighty or age 60 with 10 years of service. Town personnel (hired on or before July 1, 1993) shall be eligible to retire upon attainment of age 58 with 10 years of service. Teamsters personnel (hired on or before July 1, 1994) shall be eligible to retire upon attainment of age 58 with 25 years of service. Police personnel shall be eligible upon attainment of the earlier of age 55 or 20 years of service (25 if hired after July 1, Fire personnel shall be eligible upon 2012). attainment of 25 years of service.

Creditable Service

Eligibility

Elapsed time from date of hire to termination of service date.



# SUMMARY OF PLAN PROVISIONS (continued)

Participant Contributions	Participant contributions shall vary by contract & class upon retirement. AFSCME covered retirees shall pay the co-pay in effect upon retirement (10%, 12% or 15%). Teamsters hired prior to July 1, 1994 shall have no contributions in retirement. Effective July 1, 2012, members of the Fire Department shall contribute one-half percent (0.5%) of the member's salary toward the OPEB obligation of the Town. Effective July 1, 2014, said contribution shall increase to one percent (1%) of the member's salary. Fire Department retirees who retire after June 30, 2012 shall contribute 1% of their Pension Benefit towards their Health Plan. Police shall contribute 1% of their Pension Benefit towards their Health Plan. Certified personnel of the Schools shall pay 25%-50% of gross premiums for both Medical & Dental insurance. Non-Certified personnel of the Schools shall pay 33% to 50% of gross premiums for both Medical & Dental insurance depending upon their age & service at retirement.
<u>Benefits Offered</u>	Comprehensive Medical Insurance offered through Blue Cross of Rhode Island and Dental Insurance. School retirees shall receive \$50,000 group term life insurance until attainment of age 65 (at that point, they become responsible for premiums and the benefit decreases to \$25,000 in group term life upon attainment of age 70).
Normal Retirement Date	The normal retirement date is the first day of the month following a participant's 65th birthday.
Early Retirement	Early retirement is available for any participant who has attained benefit eligibility.



# SECTION III

### ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS (continued)

# A. <u>ACTUARIAL COST METHOD</u>

The actuarial cost method used to calculate the costs and liabilities of the plan is the Individual Entry Age Actuarial Cost Method. Under this method, the annual normal cost for each individual active members, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement, each individual's annual normal cost is a level dollar amount. The actuarial accrued liability is the actuarial present value of the projected benefit times the ratio of past service to expected total service at retirement/termination.

Actuarial gains and losses are calculated each year and amortized over a 30 year period.

All employees who are plan participants on a valuation date are included in the actuarial valuation.

# B. ASSET VALUATION METHOD

The actuarial value of assets is equal to the Market Value of the Plan's assets as of the valuation date.



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# SECTION III

### ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS (continued)

# C. <u>ACTUARIAL ASSUMPTIONS</u>

We used the following assumptions in this year's actuarial valuation:

Pre- and Post-Retirement Mortality

It is assumed that both pre-retirement and post-retirement mortality are represented by the RP-2000 Mortality Table projected to 2017 for males and females.

**Discount Rate** 

**Employee** Termination

3.50% per annum (previously 3.50%)

It was assumed that employees would terminate employment in accordance with the sample rates shown in the following table:

	<u>Non Public</u>	<u>Non Public</u> <u>Safety</u>	<u>Public</u>
Age	Safety Male	<u>Female</u>	<u>Safety</u>
20	12.00%	12.00%	2.10%
25	8.78%	8.78%	1.88%
30	5.55%	5.55%	1.65%
35	3.93%	3.93%	1.11%
40	2.31%	2.31%	0.56%
45	1.89%	1.89%	0.28%
50	1.46%	1.46%	0.00%



### ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS (continued)

# C. ACTUARIAL ASSUMPTIONS (continued)

Retirement Rates for non-teachers

It was assumed that the following percentage of eligible employees would retire each year:

	Non PublicNon PublicSafety		Public
Age	Safety Male	<u>Safety</u> Female	<u>Safety</u>
45	0.00%	0.00%	5.00%
46	0.00%	0.00%	5.00%
47	0.00%	0.00%	5.00%
48	0.00%	0.00%	5.00%
49	0.00%	0.00%	5.00%
50	1.00%	1.50%	5.00%
51	1.00%	1.50%	5.00%
52	1.00%	2.50%	5.00%
53	1.00%	2.50%	5.00%
54	2.00%	2.50%	5.00%
55	2.00%	5.50%	10.00%
56	2.50%	6.50%	5.00%
57	2.50%	6.50%	5.00%
58	5.00%	6.50%	10.00%
59	6.50%	6.50%	5.00%
60	12.00%	5.00%	5.00%
61	20.00%	13.00%	5.00%
62	30.00%	15.00%	25.00%
63	25.00%	12.50%	25.00%
64	22.00%	18.00%	25.00%
65	40.00%	15.00%	100.00%
66	25.00%	20.00%	100.00%
67	25.00%	20.00%	100.00%
68	30.00%	25.00%	100.00%
69	30.00%	20.00%	100.00%
70	100.00%	100.00%	100.00%
71	100.00%	100.00%	100.00%
72	100.00%	100.00%	100.00%



### ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS (continued)

# C. ACTUARIAL ASSUMPTIONS (continued)

Healthcare Trend

It was assumed that healthcare costs would increase in accordance with the trend rates in the following table:

Year	Medical	<b>Dental</b>
FY 2013	6.0%	5.5%
FY 2014	5.0%	5.0%
FY 2015	5.0%	5.0%
FY 2016	5.0%	5.0%
FY 2017	5.0%	5.0%
FY 2018	5.0%	5.0%
FY 2019	5.0%	5.0%
FY 2020+	5.0%	5.0%

# Participation Rate

Percent Married

It was assumed that 80% of employees eligible to receive retirement benefits would enroll in the retiree medical and dental plans upon retirement. For life insurance plans, it was assumed that 80% of eligible employees would elect coverage upon retirement.

It was assumed that 80% of participants who elect retiree healthcare coverage for themselves would also elect coverage for a spouse upon retirement. It was further assumed that husbands are three years older than their wives. For current retirees, the actual census information was used.



### ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS (continued)

# C. ACTUARIAL ASSUMPTIONS (continued)

**Compensation Increases** 

3.00% per year.

<u>Open Group Forecast</u>

It was assumed for projecting plan liabilities in future years that the active population would remain unchanged and that those who terminate employment or retire will be replace with new employees with the demographics below:

### **Open Group Forecast Population Demographics**

Age	Male	<u>Female</u>
20	8.0%	5.0%
30	7.0%	14.0%
40	20.0%	19.0%
50	10.0%	10.0%
60	<u>3.0%</u>	4.0%
Total	48.0%	52.0%

# Additional Comments

The values in this report reflect a closed group and do not reflect any new entrants after the valuation date.

For purposes of this valuation, retiree contributions were assumed to increase with the same trend rate as health care claims.



### ACTUARIAL COST METHOD, ASSET VALUATION METHOD <u>AND ACTUARIAL ASSUMPTIONS</u> (continued)

# D. DEVELOPMENT OF REPRESENTATIVE MEDICAL PER CAPITA CLAIMS COSTS

As part of the Other Post-Employment Benefits Program, there are situations where the cost is borne partly or entirely on the retirees. In most cases, the premium that is used to split the cost is lower than the true cost of providing the medical benefits, for two reasons:

- ✓ The cost sharing program is usually a fixed amount such as a COBRA premium that does not take into account the age of the retiree and his/her dependents. Since medical costs generally increase with age, the cost sharing premium is often lower than the true cost of the medical benefits:
- ✓ The cost sharing premium is usually a blended rate that takes into account the cost of medical benefits for active employees as well as retirees. Medical costs are generally higher for retirees than for active employees of the same age. This means that, again, the cost sharing premium is often lower than the true cost of the medical benefits.

Because of these two factors, a retiree who is paying 100% of the cost sharing premium is most likely not paying 100% of the true cost of the medical benefits. This situation is known as an "implicit subsidy". GASB 43 and 45 require the plan sponsor to measure the liability for this subsidy; that is, the difference between the true cost of the medical benefits and the cost sharing premiums paid by the retiree. To do this, our valuation consists of several steps:

First, we calculate the liability for the true cost of medical benefits expected to be received by retirees and their dependents. This liability is based factors developed by actuaries that reflect how the cost of medical benefits varies by age and gender, as well as the other assumptions discussed on the prior page.

Next, we calculate the liability for the future premiums expected to be paid by the retiree for their own and their dependents' coverage. This liability is based on the current premium rates without adjustment for age or gender. It also is based on the terms of the retiree medical program – different retirees pay different percentages based on their union, date of retirement, age at retirement, and other factors.



# ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS

(continued)

### D. DEVELOPMENT OF REPRESENTATIVE MEDICAL PER CAPITA CLAIMS COSTS

#### I. CLAIMS COSTS DEVELOPMENT - Based on Active & Retiree Incurred Claims & Premiums

	Number of Participants			
	Single	Two-Person	Family	Total
Classic 5B39-1				0
Health Mate C2C 4A74-1			2	2
Blue Solutions 4W01-1	8		18	26
Blue Solutions 8828-1	4		22	26
Blue Solutions 5B39-1	7		21	28
Classic 102438-1			3	3
Health Mate C2C 102438-1	2		9	11
Health Mate C2C 102439-1	2		17	19
Blue Chip HP School Non-Certified	1		2	3
Classic School Non-Certified			1	1
Health Mate C2C School Non-Certified	10		38	48
Blue Chip HP School Certified				0
Classic School Certified	3		4	7
Health Mate C2C School Certified	64		124	188
Plan 65	<u>6</u>			<u>6</u>
Total	107	0	261	368
	Per	Contract Costs (mo	onthly) - FY 2016	;
	Single	Two-Person	<u>Family</u>	
Classic 5B39-1	715.17	0.00	1,834.28	
Health Mate C2C 4A74-1	645.56	0.00	1,630.87	
Blue Solutions 4W01-1	554.40	0.00	1,266.67	
Blue Solutions 8828-1	461.55		1,165.92	

Gross Expected FY 2016 Incurred Premiums	5,457,946
Adjustment to reflect children's claims	<u>(916,653)</u>
Total Expected FY 2016 Incurred Premiums (adults only)	4,541,293

#### II. PRE-65 AND POST-65 PER CAPITA RETIREE ANNUAL CLAIM COSTS

	Employer <u>Primary</u>	Medicare <u>Primary</u>
Age 65	10,295	2,262
Average Age	9,266	2,262

606.75

712.39

645.56

651.08

619.40

657.67

644.77

587.86

649.94

611.58

188.47

1,321.97

1,826.03

1,630.87

1,644.72

1,564.70

1,661.48

1,628.91

1,484.88

1,641.92

1,544.93

376.94

**Blue Solutions 5B39-1** 

Health Mate C2C 102438-1

Health Mate C2C 102439-1

**Classic School Non-Certified** 

**Blue Chip HP School Certified** 

Health Mate C2C School Certified

**Classic School Certified** 

Plan 65

**Blue Chip HP School Non-Certified** 

Health Mate C2C School Non-Certified

Classic 102438-1



# ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS

### (continued)

### D. DEVELOPMENT OF REPRESENTATIVE MEDICAL PER CAPITA CLAIMS COSTS

#### III. BREAKDOWN OF CLAIM COSTS

4,541,293 Active and Retired Claims (No Children)

#### ALL ACTIVE EMPLOYEES AND SPOUSES (non-GIC)

	Number of 1	Number of	Female Aging	Male Aging	Aged (F) Average	Aged (M) Average	Age Related
Age Bracket	Females	Males	Factor	Factor	Claims	Claims	Claims
24 & Under	3	3	1.312	0.549	6,316	2,643	26,877
25 to 29	8	8	1.312	0.591	6,316	2,845	73,288
30 to 34	19	17	1.312	0.712	6,316	3,428	178,280
35 to 39	42	24	1.312	0.850	6,316	4,092	363,480
40 to 44	44	45	1.312	1.000	6,316	4,814	494,534
45 to 49	45	39	1.456	1.193	7,009	5,743	539,382
50 to 54	30	38	1.599	1.441	7,698	6,937	494,546
55 to 59	28	24	1.740	1.753	8,376	8,439	437,064
60 to 64	30	28	1.968	2.102	9,474	10,119	567,552
65 to 69	7	18	2.168	2.316	10,437	11,149	273,741
70 & Over	<u>2</u>	<u>4</u>	2.396	2.557	11,534	12,309	72,304
Total	258	248					3,521,048

#### ALL RETIREES AND SPOUSES - NOT MEDICARE ELIGIBLE (non-GIC)

	Number of 1	Number of	Female Aging	Male Aging	Aged (F) Average	Aged (M) Average	Age Related
Age Bracket	Females	Males	Factor	Factor	Claims	Claims	Claims
44 & Under	3	1	1.312	1.000	6,316	4,814	23,762
45 to 49	6	7	1.456	1.193	7,009	5,743	82,255
50 to 54	4	4	1.599	1.441	7,698	6,937	58,540
55 to 59	11	3	1.740	1.753	8,376	8,439	117,453
60 to 64	25	22	1.968	2.102	9,474	10,119	459,468
65 to 69	5	2	2.168	2.316	10,437	11,149	74,483
70 to 74	2	5	2.396	2.557	11,534	12,309	84,613
75 to 79	1	1	2.593	2.769	12,483	13,330	25,813
80 to 84	1	2	2.724	2.910	13,113	14,009	41,131
85 to 89	0	1	2.864	3.059	13,787	14,726	14,726
90 & Over	<u>0</u>	<u>0</u>	3.010	3.215	14,490	15,477	<u>0</u>
Total	58	48					982,244

#### ALL RETIREES AND SPOUSES - MEDICARE ELIGIBLE (non-GIC)

	Number of 1	Number of	Female Aging	Male Aging	Aged (F) Average	Aged (M) Average	Age Related
Age Bracket	Females	Males	Factor	Factor	Claims	Claims	Claims
65 to 69	4	9	2.168	2.316	2,262	2,262	29,406
70 to 74	0	1	2.396	2.557	2,262	2,262	2,262
75 to 79	1	1	2.593	2.769	2,262	2,262	4,524
80 to 84	0	1	2.724	2.910	2,262	2,262	2,262
85 to 89	0	0	2.864	3.059	2,262	2,262	0
90 & Over	<u>0</u>	<u>0</u>	3.010	3.215	2,262	2,262	<u>0</u>
Total	5	12					38,454
Grand Totals	321	308					4,541,746



### ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS (continued)

# E. <u>DEVELOPMENT OF REPRESENTATIVE DENTAL PER CAPITA CLAIMS COSTS</u>

# I. CLAIMS COSTS DEVELOPMENT - with Active & Retiree Incurred Premiums

	Per Contract Costs (monthly) - FY 2016		
	<u>Single</u>	Two-Person	<u>Family</u>
Town of Tiverton Municapal	22.88		70.96
Town of Tiverton Public Safety	26.50		86.07
Town of Tiverton School Department	26.38		83.01



# Financial Statement Disclosure (As of July 1, 2014)

The GASB Standards for accounting and financial reporting for postemployment benefits other than pensions requires the following disclosures in the financial statements with regard to the retiree medical and life insurance benefits;

# 1. A DESCRIPTION OF THE RETIREE MEDICAL INSURANCE PROGRAM:

- a. Plan Type: Comprehensive Medical Insurance offered through Blue Cross of Rhode Island
- b. Administrator: Town of Tiverton
- Eligibility: Eligibility for benefits in retirement varies by classification. C. Certified personnel of the Schools shall be eligible to retire with 20 years of service and eligibility to retire under the State Retirement System or where their age plus service is at least eighty (80). Non-certified personnel of the Schools shall be eligible either upon attainment of age 58 with age plus service of at least eighty or age 60 with 10 years of service. Town personnel (hired on or before July 1, 1993) shall be eligible to retire upon attainment of age 58 with 10 years of service. Teamsters personnel (hired on or before July 1, 1994) shall be eligible to retire upon attainment of age 58 with 25 years of service. Police personnel shall be eligible upon attainment of the earlier of age 55 or 20 years of service (25 if hired after July 1, 2012). Fire personnel shall be eligible upon attainment of 25 years of service. Varies by contract & classification d. Cost Sharing:

# 2. A DESCRIPTION OF THE DENTAL INSURANCE PROGRAM:

a.	Plan Type:	Comprehensive Dental Insurance
b.	Administrator:	Town of Tiverton
c.	Eligibility:	Same as above
d.	Cost sharing:	Varies by contract & classification



# Financial Statement Disclosure (As of July 1, 2014) (continued)

# 3. A DESCRIPTION OF THE RETIREE LIFE INSURANCE PROGRAM:

- a. Plan Type: Group Term Life Insurance \$50,000, reduces to \$25,000 at age 70
- b. Administrator: Town of Tiverton
- c. Eligibility: Same as above (only available to School retirees only)
- d. Cost sharing: None, then 100% at age 65

# 4. RETIREE MEDICAL AND LIFE INSURANCE CONTRIBUTIONS:

Group	Individual	Family
Medical	Varies	Varies
Dental	Varies	Varies
Life	100% Employer Paid	N/A
	until age 65, then 100%	
	participant paid	

# 5. FUNDING POLICY

The contribution requirements of plan members and the Town are established and may be amended through Town ordinances. The required contribution is based on the projected pay-as-you-go financing requirements. For the 2015 fiscal year, total Town premiums plus implicit costs for the retiree medical program are \$960,875. The Town is also projected to make a contribution to an OPEB Trust of \$0 for the 2015 fiscal year for a total contribution of \$960,875.



### Financial Statement Disclosure (As of July 1, 2014) (continued)

# 6. ANNUAL OPEB COST AND NET OPEB OBLIGATION

The Town's annual other postemployment benefit ("OPEB") cost (expense) is calculated based on the annual required contribution of the employer ("ARC"), an amount actuarially determined in accordance with the parameters of GASB Statement No. 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty (30) years. The following table shows the components of the Town's annual OPEB costs for the fiscal year, the amount actually contributed to the plan and changes in the Town's net OPEB obligation to the plan:

Annual Required Contribution	\$2,486,206
Interest on net OPEB Obligation (Asset)	\$169,107
Adjustment to annual required contribution	(\$253,818)
Amortization of Actuarial (Gains) / Losses	(\$473,799)
Annual OPEB expense	\$1,927,696
Contributions made to pay benefits	\$960,875
Contributions made to OPEB Trust	<u>\$0</u>
Increase (Decrease) in net OPEB Obligation (Asset)	\$966,821
Net OPEB Obligation (Asset) – beginning of year	\$4,831,657
Net OPEB Obligation (Asset) – end of year	\$5,798,478



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# EXHIBIT A

### <u>Financial Statement Disclosure</u> (As of July 1, 2014) (continued)

The Town's annual OPEB cost, the percentage of the annual OPEB cost contributed to the plan, and the net OPEB obligation for the 2015 fiscal year and the three preceding years were as follows:

Fiscal Year Ended	Annual OPEB Cost	Expected Employer Payments	Percentage of OPEB Cost Contributed	Increase (Decrease) in Net OPEB Obligation (Asset)	Net OPEB Obligation (Asset)
06/30/2017 (est.)	\$2,070,132	\$965,270	46.6%	\$1,104,862	\$7,930,843
06/30/2016 (est.)	\$1,992,708	\$965,205	48.4%	\$1,027,503	\$6,825,981
06/30/2015	\$1,927,696	\$960,875	49.8%	\$966,821	\$5,798,478
06/30/2014	\$1,729,511	\$1,286,220	74.4%	\$443,291	\$4,831,657
06/30/2013	\$1,659,882	\$1,292,835	77.9%	\$367,047	\$4,388,366
06/30/2012	\$1,475,092	\$1,358,131	92.1%	\$116,961	\$4,021,319

# **Schedule of Funding Progress:**

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Funded Ratio	Covered Payroll	UAAL as a % of Covered Payroll
07/01/2016 (est.)	\$0	\$22,274,528	\$22,274,528	0.0%	N/A	N/A
07/01/2015 (est.)	\$0	\$21,799,264	\$21,799,264	0.0%	N/A	N/A
07/01/2014	\$0	\$21,366,918	\$21,366,918	0.0%	N/A	N/A
07/01/2013	\$0	\$24,689,939	\$24,689,939	0.0%	N/A	N/A
07/01/2012	\$0	\$24,492,216	\$24,492,216	0.0%	N/A	N/A
07/01/2011	\$0	\$24,271,652	\$24,271,652	0.0%	N/A	N/A



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# EXHIBIT A

# Financial Statement Disclosure (As of July 1, 2014) (continued)

		Fiscal Year Ending June 30, 2015							
	General Town Employees and Retirees	School Employees and Retirees	Police Employees and Retirees	Fire Employees and Retirees	DPW Employees and Retirees	Total			
OPEB Obligation (Asset) at beginning of year	40,401	768,781	2,179,608	1,601,795	241,072	4,831,657			
Annual Required Contribution	161,949	446,918	1,002,662	784,069	90,608	2,486,206			
Interest on Net OPEB Obligation	1,414	26,907	76,286	56,063	8,437	169,107			
Adjustment to the ARC Amortization of Actuarial (Gains)/Losses	(2,122) (3,963)	(40,386) (75,654)	(114,500) (213,765)	(84,146) (157,095)	(12,664) (23,322)	(253,818) (473,799)			
Annual OPEB Cost	157,278	357,785	750,683	598,891	63,059	1,927,696			
Expected Employer Contribution Contribution (Withdrawal) to/from Trust Fund over 30 Years	18,013	367,115	318,362	210,909	46,476	960,875			
Total Expected Employer Payments	18,013	367,115	318,362	210,909	46,476	960,875			
Increase (Decrease) in OPEB Obligation (Asset)	139,265	(9,330)	432,321	387,982	16,583	966,821			
OPEB Obligation (Asset) at end of year	179,666	759,451	2,611,929	1,989,777	257,655	5,798,478			
AAL as of July 1, 2014 Plan Assets as of July 1, 2014	178,661	3,399,760	9,638,827	7,083,579	1,066,091	21,366,918			
Unfunded Actuarial Liability as of July 1, 2014	178,661	3,399,760	9,638,827	7,083,579	1,066,091	21,366,918			

		Fiscal Year Ending June 30, 2016						
	General Town Employees and Retirees	School Employees and Retirees	Police Employees and Retirees	Fire Employees and Retirees	DPW Employees and Retirees	Total		
OPEB Obligation (Asset) at beginning of year	179,666	759,451	2,611,929	1,989,777	257,655	5,798,478		
Annual Required Contribution	163,980	452,521	1,015,233	793,900	91,744	2,517,378		
Interest on Net OPEB Obligation	1,697	32,291	91,552	67,282	10,125	202,947		
Adjustment to the ARC	(2,547)	(48,468)	(137,412)	(100,984)	(15,198)	(304,609)		
Amortization of Actuarial (Gains)/Losses	(548)	(66,493)	(193,373)	(141,109)	(21,485)	(423,008)		
Annual OPEB Cost	162,582	369,851	776,000	619,089	65,186	1,992,708		
Expected Employer Contribution	18,095	368,769	319,797	211,859	46,685	965,205		
Contribution (Withdrawal) to/from Trust Fund over 30 Years	-		-		-	-		
Total Expected Employer Payments	18,095	368,769	319,797	211,859	46,685	965,205		
Increase (Decrease) in OPEB Obligation (Asset)	144,487	1,082	456,203	407,230	18,501	1,027,503		
OPEB Obligation (Asset) at end of year	324,153	760,533	3,068,132	2,397,007	276,156	6,825,981		
AAL as of July 1, 2015	182,275	3,468,552	9,833,863	7,226,911	1,087,663	21,799,264		
Plan Assets as of July 1, 2015			-	-	<u> </u>	-		
Unfunded Actuarial Liability as of July 1, 2015	182,275	3,468,552	9,833,863	7,226,911	1,087,663	21,799,264		



# EXHIBIT A

# Financial Statement Disclosure (As of July 1, 2014) (continued)

# 7. FUNDED STATUS AND FUNDING PROGRESS

As of July 1, 2014, the most recent valuation date, the plan was 0.00% funded. The actuarial liability for benefits was \$21,366,918, and the actuarial value of assets was \$0, resulting in an unfunded actuarial accrued liability (UAAL) of \$21,366,918. The covered payroll (annual payroll of active employees covered by the plan) was \$N/A and the ratio of the UAAL to the covered payroll was N/A.

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contribution of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedule of funding progress, presented in the required supplementary information following the financial statements, presents multiyear trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

# 8. EFFECT OF 1% CHANGE IN HEALTHCARE TREND RATES

In the event that healthcare trend rates were 1% higher than forecast and employee contributions were to increase at the forecast rates, the Actuarial Accrued Liability would increase to \$25,302,317 or by 18.4% and the corresponding Normal Cost would increase to \$882,421 or by 34.5%. If such healthcare trend rates were 1% less than forecast and employee contributions were to increase at the forecast rate, the Actuarial Accrued Liability would decrease to \$18,259,373 or by 14.5% and the corresponding Normal Cost would decrease to \$493,743 or by 24.7%.



# EXHIBIT A

# **Financial Statement Disclosure** (As of July 1, 2014) (continued)

#### 9. **ACTUARIAL METHODS AND ASSUMPTIONS**

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

Actuarial Cost Method: Investment Rate of Return: Healthcare Trend Rates

Projected Unit Credit

3.50% per annum (previously 3.50%)

<u>Year</u>	Medical	<b>Dental</b>
FY 2013	6.0%	5.5%
FY 2014	5.0%	5.0%
FY 2015	5.0%	5.0%
FY 2016	5.0%	5.0%
FY 2017	5.0%	5.0%
FY 2018	5.0%	5.0%
FY 2019	5.0%	5.0%
FY 2020+	5.0%	5.0%

General Inflation Assumption:	2.50% per annum
Annual Compensation Increases:	3.00% per annum
Actuarial Value of Assets:	Market Value
Amortization of UAAL:	Level dollar amortization over 30 years at
	the last valuation
Remaining Amortization Period:	24 years at July 1, 2014



# EXHIBIT A

# <u>Financial Statement Disclosure</u> (As of July 1, 2014) (continued)

# 10. Remaining Amortization Bases

The initial Actuarial Accrued Liability as of the date GASB 45 was adopted is amortized as a component of the Annual Required Contribution ("ARC"). The Unfunded Actuarial Accrued Liability at transition was amortized over a 30 year period and a flat dollar amortization of the Unfunded Actuarial Accrued Liability at transition. For years subsequent to the initial adoption of GASB 45, cumulative gains/losses are amortized on a level dollar basis over a 30 year period. Gains and losses arise from experience and contribution deficiencies and excess contributions in relation to each year's ARC under GASB 45.

# **Changes in Unfunded Actuarial Liability Since Prior Valuation**

# Expected Unfunded Actuarial Liability

<ol> <li>Actuarial Accrued Liability at prior valuation date</li> <li>Actuarial Value of Assets at prior valuation date</li> <li>Unfunded Actuarial Accrued Liability at prior valuation date [1 2.]</li> <li>Normal Cost for prior periods</li> <li>Employer Contributions for prior periods</li> <li>Interest to current valuation date</li> <li>Expected Unfunded Actuarial Accrued Liability [3. + 4. + 5. + 6.]</li> </ol>	24,492,216 <u>0</u> 24,492,216 1,311,262 (2,579,055) <u>1,767,953</u> 24,992,376
Actual Unfunded Actuarial Liability	
8. Actuarial Accrued Liability at current valuation date	21,366,918
9. Actuarial Value of Assets at current valuation date	<u>0</u>
10. Unfunded Actuarial Accrued Liability at current valuation date [8 9.]	21,366,918
Net Actuarial (Gain) / Loss from Plan Experience [10 7.]	(3,625,458)
<ol> <li>11. Unfunded Actuarial Accrued Liability at current valuation date [10.]</li> <li>12. Remaining Initial Unfunded to be amortized</li> <li>13. Actuarial (Gain) / Loss to be amortized: [11 12.]</li> </ol>	21,366,918 <u>30,417,911</u> (9,050,993)



### <u>Financial Statement Disclosure</u> (As of July 1, 2014) (continued)

			Initial Amortization	Remaining Balance at	Remaining Amortization	Annual Amortization
Date Established	Description	Initial Amount	Period	Valuation Date	Period	Payment
July 1, 2008	GASB 45 Liability	34,838,331	30	30,417,911	24	1,830,154
July 1, 2014	Cumulative (Gain) / Loss	(9,050,993)	30	(9,050,993)	30	(473,799)
July 1, 2014	Adjustment to ARC	(4,831,657)	30	(4,831,657)	30	(253,820)

Total

16,535,261

1,102,535

# 11. Recognition of OPEB trust assets

To the best of our knowledge, Town of Tiverton has not established an irrevocable trust for the purposes of prefunding liabilities under GASB 45.



# <u>Financial Statement Disclosure</u> (As of July 1, 2014) (continued)

# 12. Impact of Patient Protection and Affordable Care Act ("PPACA") Excise Tax

Under the Patient Protection and Affordable Care Act ("PPACA"), an excise tax will be imposed for tax years beginning after December 31, 2017 for high cost employer sponsored health coverage. The law specifies a 40% excise tax to be paid by the provider of such coverage of the excess value beyond a basic dollar amount plus an additional "kicker" for qualified retirees or those engaged in a high risk profession. The basic dollar amount for 2018 is \$10,200 for single coverage and \$27,500 for family coverage and the "kicker" amount for 2018 is \$1,650 for single coverage and \$3,450 for family coverage.

The excise tax liability will vary significantly over time as it is highly leveraged with the basic amount increased with general CPI and medical costs increasing with medical trend (generally higher). For purposes of the fiscal year ending June 30, 2015, the AAL for the excise tax is \$289,539 and the increase in annual OPEB Cost is \$51,989. Given your premiums through the 2016 fiscal year and the excise tax threshold, your single premiums are within 45.74% of the excise tax and your family premiums are within 52.42% of the excise tax. As more regulatory guidance becomes available, the calculation of the excise tax liability will evolve.



# EXHIBIT B

# Reconciliation of Plan Participation (As of July 1, 2014)

# ACTIVE EMPLOYEES

	<b>July 1, 2014</b>	<b>July 1, 2012</b>
A. Average Age at Hire	32.82	32.39
B. Average Service	12.22	12.61
C. Average Current Age	45.04	45.00

# **RETIRED EMPLOYEES & DEPENDENTS**

	<b>July 1, 2014</b>	July 1, 2012
I. Retirees		
A. Under Age 65	59	79
B. Age 65 & Over	<u>17</u>	<u>17</u>
C. Total Retirees	76	96
II. Dependents of Retirees		
A. Under Age 65	37	50
B. Age 65 & Over	<u>10</u>	<u>16</u>
C. Total Retirees	47	66
III. Retirees & Dependents		
A. Under Age 65	96	129
B. Age 65 & Over	27	<u>33</u>
C. Total Retirees	123	162



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# EXHIBIT C

# Projected Cash Flows (Open Group) - pay-as-you-go Approach

### Total Medical, Dental & Life Insurance - pay-as-you-go - 3.50% discount rate

Fiscal Year	I. Total Actuarial Accrued Liability ("AAL") as of July <u>1</u>	II. Plan Assets as of July 1	III. Unfunded Accrued Actuarial Liability ("UAAL") [I II.]	IV. Normal Cost	V. Expected Amortization	VI. Interest on Net OPEB Obligation (Asset)	VII. Adjustment to ARC	VIII. Amortization of Actuarial (Gain) / Loss	IX. Expected Annual OPEB Expense [IV. + V. + VI. + VII. + VIII.]	X. OPEB Obligation (Asset) as of June 30 4,831,657	XI. Employer Share of Premiums / Claims	XII. Excess Employer Payments (beyond claims)
2015	21,366,918	0	21,366,918	656,052	1,830,154	169,107	(253,818)	(473,799)	1,927,696	5,798,478	960,875	0
2015	21,799,264	0	21,799,264	687,224	1,830,154	202,947	(304,609)	(423,008)	1,992,708	6,825,981	965,205	0
2017	22,274,528	0	22,274,528	728,686	1,830,154	238,909	(358,588)	(369,029)	2,070,132	7,930,843	965,270	0
2018	22,809,272	0	22,809,272	769,285	1,830,154	277,580	(416,628)	(310,989)	2,149,402	9,152,330	927,915	0
2019	23,443,413	0	23,443,413	820,044	1,830,154	320,332	(480,797)	(246,820)	2,242,913	10,513,045	882,198	0
2020	24,199,604	0	24,199,604	868,411	1,830,154	367,956	(552,278)	(175,339)	2,338,904	12,012,872	839,077	0
2021	25,076,949	0	25,076,949	922,300	1,830,154	420,450	(631,068)	(96,549)	2,445,287	13,614,261	843,898	0
2022	26,035,788	0	26,035,788	988,246	1,830,154	476,499	(715,194)	(12,423)	2,567,282	15,284,961	896,582	0
2023	27,041,912	0	27,041,912	1,048,079	1,830,154	534,973	(802,960)	75,343	2,685,589	17,026,509	944,041	0
2024	28,096,059	0	28,096,059	1,126,069	1,830,154	595,928	(894,449)	166,832	2,824,534	18,885,071	965,972	0
2025	29,245,121	0	29,245,121	1,204,152	1,830,154	660,978	(992,083)	264,466	2,967,667	20,778,322	1,074,416	0
2026	30,396,963	0	30,396,963	1,281,561	1,830,154	727,241	(1,091,541)	363,924	3,111,339	22,732,153	1,157,508	0
2027	31,589,397	0	31,589,397	1,362,867	1,830,154	795,624	(1,194,180)	466,563	3,261,028	24,766,339	1,226,842	0
2028	32,835,813	0	32,835,813	1,439,696	1,830,154	866,822	(1,301,043)	573,426	3,409,055	26,835,095	1,340,299	0
2029	34,088,407	0	34,088,407	1,520,582	1,830,154	939,228	(1,409,720)	682,103	3,562,347	28,971,374	1,426,068	0
2030	35,379,325	0	35,379,325	1,610,842	1,830,154	1,013,998	(1,521,944)	794,327	3,727,377	31,228,451	1,470,300	0
2031	36,755,768	0	36,755,768	1,698,943	1,830,154	1,092,995	(1,640,514)	912,897	3,894,475	33,540,540	1,582,386	0
2032	38,159,880	0	38,159,880	1,794,534	1,830,154	1,173,919	(1,761,975)	1,034,358	4,070,990	35,951,280	1,660,250	0
2033	39,618,105	0	39,618,105	1,897,686	1,830,154	1,258,295	(1,888,617)	1,161,000	4,258,518	38,567,481	1,642,317	0
2034	41,256,609	0	41,256,609	1,999,327	1,830,154	1,349,862	(2,026,054)	1,298,437	4,451,726	41,244,641	1,774,566	0
2035	42,911,696	0	42,911,696	2,119,545	1,830,154	1,443,562	(2,166,693)	1,439,076	4,665,644	44,026,895	1,883,390	0
2036	44,658,025	0	44,658,025	2,235,466	1,830,154	1,540,940	(2,312,852)	1,585,235	4,878,943	46,959,670	1,946,168	0
2037	46,493,421	0	46,493,421	2,356,177	1,830,154	1,643,589	(2,466,918)	1,739,301	5,102,303	50,018,597	2,043,376	0
2038	48,398,665	0	48,398,665	2,486,753	1,830,154	1,750,651	(2,627,611)	1,899,994	5,339,941	53,187,720	2,170,818	0
2039	50,418,574	0	50,418,574	2,622,165	0	1,861,570	(2,794,094)	2,066,477	3,756,118	54,628,879	2,314,959	0
2040	52,490,733	0	52,490,733	2,756,435	0	1,912,010	(2,869,802)	2,142,185	3,940,828	56,236,549	2,333,158	0
2041	54,619,936	0	54,619,936	2,895,824	0	1,968,279	(2,954,257)	2,226,640	4,136,486	57,958,128	2,414,907	0
2042	56,957,685	0	56,957,685	3,042,479	0	2,028,534	(3,044,696)	2,317,079	4,343,396	59,723,661	2,577,863	0
2043	59,432,081	0	59,432,081	3,195,546	0	2,090,329	(3,137,444)	2,409,827	4,558,258	61,664,862	2,617,057	0
2044	62,033,236	0	62,033,236	3,357,810	0	2,158,270	(3,239,421)	2,511,804	4,788,463	63,764,128	2,689,197	0
2045	64,917,790	0	64,917,790	3,519,891	0	2,231,744	(3,349,700)	3,349,700	5,751,635	66,661,708	2,854,055	0
2046	67,814,328	0	67,814,328	3,695,055	0	2,333,160	(3,501,919)	3,501,919	6,028,215	69,764,506	2,925,417	0



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### EXHIBIT D

# Projected Cash Flows (Open Group) – Funded Approach

### Total Medical, Dental & Life Insurance - Funding over 30 years at 7.00% discount rate increasing at 0.00% per year

	I. Total Actuarial Accrued Liability ("AAL") as of	II. Plan Assets	III. Unfunded Accrued Actuarial Liability ("UAAL")	IV. Normal	V. Expected	VI. Interest on Net OPEB Obligation	VII. Adjustment to	VIII. Amortization of Actuarial	IX. Expected Annual OPEB Expense [IV. + V. + VI. +	X. OPEB Obligation (Asset) as of	XI. Employer Share of Premiums /	XII. Annual Funding /
Fiscal Year	July 1	as of July 1	[1 11.]	Cost	Amortization	(Asset)	ARC	(Gain) / Loss	VII. + VIII.]	June 30 4,831,657	Claims	(Payments)
2015	14,268,649	0	14,268,649	294,860	2,478,606	338,216	(363,894)	(1,216,272)	1,531,516	4,970,445	960,875	431,853
2016	14,351,782	431,853	13,919,929	292,633	2,478,606	347,931	(374,347)	(1,205,819)	1,557,631	5,131,018	965,205	431,853
2017	14,636,753	893,936	13,742,817	312,682	2,478,606	359,171	(386,440)	(1,193,726)	1,590,148	5,324,043	965,270	431,853
2018	14,963,057	1,388,365	13,574,692	332,388	2,478,606	372,683	(400,978)	(1,179,188)	1,624,412	5,588,687	927,915	431,853
2019	15,373,256	1,917,404	13,455,852	356,877	2,478,606	391,208	(420,909)	(1,159,257)	1,668,609	5,943,245	882,198	431,853
2020	15,887,291	2,483,475	13,403,816	380,344	2,478,606	416,027	(447,613)	(1,132,553)	1,717,870	6,390,185	839,077	431,853
2021	16,508,557	3,089,171	13,419,386	406,463	2,478,606	447,313	(481,274)	(1,098,892)	1,776,241	6,890,675	843,898	431,853
2022	17,196,099	3,737,266	13,458,833	438,366	2,478,606	482,347	(518,968)	(1,061,198)	1,844,249	7,406,489	896,582	431,853
2023	17,909,600	4,430,728	13,478,872	467,379	2,478,606	518,454	(557,816)	(1,022,350)	1,910,247	7,940,842	944,041	431,853
2024	18,653,862	5,172,732	13,481,130	505,092	2,478,606	555,859	(598,060)	(982,106)	1,986,396	8,529,413	965,972	431,853
2025	19,468,162	5,966,676	13,501,486	543,046	2,478,606	597,059	(642,388)	(937,778)	2,066,455	9,089,599	1,074,416	431,853
2026	20,262,664	6,816,196	13,446,468	580,417	2,478,606	636,272	(684,578)	(895,588)	2,143,834	9,644,072	1,157,508	431,853
2027	21,067,707	7,725,183	13,342,524	619,606	2,478,606	675,085	(726,338)	(853,828)	2,222,531	10,207,908	1,226,842	431,853
2028	21,898,280	8,697,799	13,200,481	656,598	2,478,606	714,553	(768,803)	(811,363)	2,299,531	10,735,287	1,340,299	431,853
2029	22,711,355	9,738,498	12,972,857	695,409	2,478,606	751,470	(808,522)	(771,644)	2,375,708	11,253,074	1,426,068	431,853
2030	23,537,772	10,852,046	12,685,726	738,751	2,478,606	787,715	(847,519)	(732,647)	2,455,700	11,806,621	1,470,300	431,853
2031	24,426,518	12,043,542	12,382,976	781,072	2,478,606	826,463	(889,209)	(690,957)	2,537,090	12,329,472	1,582,386	431,853
2032	25,315,628	13,318,443	11,997,185	827,194	2,478,606	863,063	(928,587)	(651,579)	2,620,078	12,857,447	1,660,250	431,853
2033	26,235,892	14,682,587	11,553,305	877,392	2,478,606	900,021	(968,352)	(611,814)	2,707,413	13,490,690	1,642,317	431,853
2034	27,305,317	16,142,221	11,163,096	926,839	2,478,606	944,348	(1,016,044)	(564,122)	2,801,247	14,085,518	1,774,566	431,853
2035	28,370,845	17,704,029	10,666,816	985,441	2,478,606	985,986	(1,060,843)	(519,323)	2,901,466	14,671,741	1,883,390	431,853
2036	29,489,456	19,375,164	10,114,292	1,041,673	2,478,606	1,027,022	(1,104,994)	(475,172)	2,998,551	15,292,271	1,946,168	431,853
2037	30,674,644	21,163,278	9,511,366	1,100,736	2,478,606	1,070,459	(1,151,729)	(428,437)	3,100,683	15,917,725	2,043,376	431,853
2038	31,903,522	23,076,560	8,826,962	1,164,815	2,478,606	1,114,240	(1,198,835)	(381,331)	3,207,964	16,523,018	2,170,818	431,853
2039	33,202,448	25,123,772	8,078,676	1,231,612	0	1,156,611	(1,244,422)	(335,744)	837,774	14,613,980	2,314,959	431,853
2040	34,531,389	27,314,289	7,217,100	1,298,120	0	1,022,978	(1,100,644)	(479,522)	769,725	12,618,694	2,333,158	431,853
2041	35,946,970	29,658,142	6,288,828	1,367,592	0	883,308	(950,370)	(629,796)	698,424	10,470,358	2,414,907	431,853
2042	37,485,582	32,166,065	5,319,517	1,440,689	0	732,925	(788,569)	(791,597)	619,931	8,080,573	2,577,863	431,853
2043	39,088,486	34,849,543	4,238,943	1,516,575	0	565,640	(608,584)	(971,582)	527,263	5,558,926	2,617,057	431,853
2044	40,793,128	37,720,864	3,072,264	1,597,049	0	389,125	(418,668)	(1,161,498)	429,857	2,867,733	2,689,197	431,853
2045	42,689,709	40,793,177	1,896,532	1,677,430	0	200,741	(215,982)	215,982	1,900,552	1,482,377	2,854,055	431,853
2046	44,584,617	44,080,552	504,065	1,764,420	0	103,766	(111,645)	111,645	1,888,971	14,078	2,925,417	431,853



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## EXHIBIT D

# Projected Cash Flows (Open Group) – Funded Approach

### Total Medical, Dental & Life Insurance - Funding over 30 years at 7.00% discount rate and increasing at 2.50% per year

Fiscal Year	I. Total Actuarial Accrued Liability ("AAL") as of July 1	II. Plan Assets as of July 1	III. Unfunded Accrued Actuarial Liability ("UAAL") [I II.]	IV. Normal Cost	V. Expected Amortization	VI. Interest on Net OPEB Obligation (Asset)	VII. Adjustment to ARC	VIII. Amortization of Actuarial (Gain) / Loss	IX. Expected Annual OPEB Expense [IV. + V. + VI. + VII. + VIII.]	X. OPEB Obligation (Asset) as of June 30	XI. Employer Share of Premiums / Claims	XII. Annual Funding / (Payments)
										4,831,657		
2015	14,268,649	0	14,268,649	294,860	2,478,606	338,216	(363,894)	(1,216,272)	1,531,516	5,069,425	960,875	332,873
2016	14,351,782	332,873	14,018,909	292,633	2,478,606	347,931	(374,347)	(1,205,819)	1,557,631	5,320,656	965,205	341,195
2017	14,636,753	697,369	13,939,384	312,682	2,478,606	359,171	(386,440)	(1,193,726)	1,590,148	5,595,809	965,270	349,725
2018	14,963,057	1,095,910	13,867,147	332,388	2,478,606	372,683	(400,978)	(1,179,188)	1,624,412	5,933,838	927,915	358,468
2019	15,373,256	1,531,092	13,842,164	356,877	2,478,606	391,208	(420,909)	(1,159,257)	1,668,609	6,352,819	882,198	367,430
2020	15,887,291	2,005,698	13,881,593	380,344	2,478,606	416,027	(447,613)	(1,132,553)	1,717,870	6,854,996	839,077	376,616
2021	16,508,557	2,522,713	13,985,844	406,463	2,478,606	447,313	(481,274)	(1,098,892)	1,776,241	7,401,308	843,898	386,031
2022	17,196,099	3,085,334	14,110,765	438,366	2,478,606	482,347	(518,968)	(1,061,198)	1,844,249	7,953,293	896,582	395,682
2023	17,909,600	3,696,989	14,212,611	467,379	2,478,606	518,454	(557,816)	(1,022,350)	1,910,247	8,513,925	944,041	405,574
2024	18,653,862	4,361,352	14,292,510	505,092	2,478,606	555,859	(598,060)	(982,106)	1,986,396	9,118,636	965,972	415,713
2025	19,468,162	5,082,360	14,385,802	543,046	2,478,606	597,059	(642,388)	(937,778)	2,066,455	9,684,569	1,074,416	426,106
2026	20,262,664	5,864,231	14,398,433	580,417	2,478,606	636,272	(684,578)	(895,588)	2,143,834	10,234,136	1,157,508	436,759
2027	21,067,707	6,711,486	14,356,221	619,606	2,478,606	675,085	(726,338)	(853,828)	2,222,531	10,782,147	1,226,842	447,678
2028	21,898,280	7,628,968	14,269,312	656,598	2,478,606	714,553	(768,803)	(811,363)	2,299,531	11,282,509	1,340,299	458,870
2029	22,711,355	8,621,866	14,089,489	695,409	2,478,606	751,470	(808,522)	(771,644)	2,375,708	11,761,807	1,426,068	470,342
2030	23,537,772	9,695,739	13,842,033	738,751	2,478,606	787,715	(847,519)	(732,647)	2,455,700	12,265,106	1,470,300	482,101
2031	24,426,518	10,856,542	13,569,976	781,072	2,478,606	826,463	(889,209)	(690,957)	2,537,090	12,725,656	1,582,386	494,154
2032	25,315,628	12,110,654	13,204,974	827,194	2,478,606	863,063	(928,587)	(651,579)	2,620,078	13,178,976	1,660,250	506,508
2033	26,235,892	13,464,908	12,770,984	877,392	2,478,606	900,021	(968,352)	(611,814)	2,707,413	13,724,901	1,642,317	519,171
2034	27,305,317	14,926,623	12,378,694	926,839	2,478,606	944,348	(1,016,044)	(564,122)	2,801,247	14,219,432	1,774,566	532,150
2035	28,370,845	16,503,637	11,867,208	985,441	2,478,606	985,986	(1,060,843)	(519,323)	2,901,466	14,692,054	1,883,390	545,454
2036	29,489,456	18,204,346	11,285,110	1,041,673	2,478,606	1,027,022	(1,104,994)	(475,172)	2,998,551	15,185,347	1,946,168	559,090
2037	30,674,644	20,037,740	10,636,904	1,100,736	2,478,606	1,070,459	(1,151,729)	(428,437)	3,100,683	15,669,587	2,043,376	573,067
2038	31,903,522	22,013,449	9,890,073	1,164,815	2,478,606	1,114,240	(1,198,835)	(381,331)	3,207,964	16,119,339	2,170,818	587,394
2039	33,202,448	24,141,784	9,060,664	1,231,612	0	1,156,611	(1,244,422)	(335,744)	837,774	14,040,075	2,314,959	602,079
2040	34,531,389	26,433,788	8,097,601	1,298,120	0	1,022,978	(1,100,644)	(479,522)	769,725	11,859,511	2,333,158	617,131
2041	35,946,970	28,901,284	7,045,686	1,367,592	0	883,308	(950,370)	(629,796)	698,424	9,510,469	2,414,907	632,559
2042	37,485,582	31,556,933	5,928,649	1,440,689	0	732,925	(788,569)	(791,597)	619,931	6,904,164	2,577,863	648,373
2043	39,088,486	34,414,291	4,674,195	1,516,575	0	565,640	(608,584)	(971,582)	527,263	4,149,788	2,617,057	664,582
2044	40,793,128	37,487,873	3,305,255	1,597,049	0	389,125	(418,668)	(1,161,498)	429,857	1,209,251	2,689,197	681,197
2045	42,689,709	40,793,221	1,896,488	1,677,430	0	200,741	(215,982)	215,982	1,900,552	(442,479)	2,854,055	698,227



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# EXHIBIT D

# Projected Cash Flows (Open Group) - Funded Approach

#### Total Medical, Dental & Life Insurance - Funding Annual Normal Cost - 3.50% discount rate

Fiscal Year	I. Total Actuarial Accrued Liability ("AAL")	II. Normal Cost	III. Employer Share of Premiums / Claims including "implicit cost"	IV. Funding Normal Cost beyond claims	V. Total Funding Costs [III. + IV.]	VI. Present Value at 3.50% of Employer Share of Premiums / Claims including "implicit cost"	VII. Present Value at 3.50% of Funding Normal Cost beyond claims	-	IX. Plan Assets at Beginning of year	X. Unfunded Accrued Actuarial Liability ("UAAL") [I. - IX.]	XI. Present Value at 3.50% of Unfunded Accrued Actuarial Liability ("UAAL")
2015	21,366,918	656,052	960,875	(304,823)	656,052	960,875	(304,823)	656,052	0	21,366,918	21,366,918
2016	21,799,264	687,224	965,205	(277,981)	687,224	932,565	(268,581)	663,984	(304,823)	22,104,087	21,356,606
2017	22,274,528	728,686	965,270	(236,584)	728,686	901,090	(220,854)	680,236	(593,473)	22,868,001	21,347,524
2018	22,809,272	769,285	927,915	(158,630)	769,285	836,926	(143,075)	693,851	(850,829)	23,660,101	21,340,056
2019	23,443,413	820,044	882,198	(62,154)	820,044	768,785	(54,164)	714,621	(1,039,238)	24,482,651	21,335,216
2020	24,199,604	868,411	839,077	29,334	868,411	706,480	24,698	731,178	(1,137,765)	25,337,369	21,333,385
2021	25,076,949	922,300	843,898	78,402	922,300	686,512	63,780	750,292	(1,148,253)	26,225,202	21,334,219
2022	26,035,788	988,246	896,582	91,664	988,246	704,705	72,047	776,752	(1,110,040)	27,145,828	21,336,375
2023	27,041,912	1,048,079	944,041	104,038	1,048,079	716,916	79,008	795,924	(1,057,227)	28,099,139	21,338,811
2024	28,096,059	1,126,069	965,972	160,097	1,126,069	708,764	117,468	826,232	(990,192)	29,086,251	21,341,483
2025	29,245,121	1,204,152	1,074,416	129,736	1,204,152	761,674	91,972	853,646	(864,752)	30,109,873	21,345,455
2026	30,396,963	1,281,561	1,157,508	124,053	1,281,561	792,830	84,970	877,800	(765,282)	31,162,245	21,344,446
2027	31,589,397	1,362,867	1,226,842	136,025	1,362,867	811,904	90,019	901,923	(668,014)	32,257,411	21,347,416
2028	32,835,813	1,439,696	1,340,299	99,397	1,439,696	856,993	63,555	920,548	(555,369)	33,391,182	21,350,460
2029	34,088,407	1,520,582	1,426,068	94,514	1,520,582	880,999	58,389	939,388	(475,410)	34,563,817	21,352,897
2030	35,379,325	1,610,842	1,470,300	140,542	1,610,842	877,608	83,888	961,496	(397,535)	35,776,860	21,354,872
2031	36,755,768	1,698,943	1,582,386	116,557	1,698,943	912,571	67,219	979,790	(270,907)	37,026,675	21,353,502
2032	38,159,880	1,794,534	1,660,250	134,284	1,794,534	925,098	74,824	999,922	(163,832)	38,323,712	21,354,117
2033	39,618,105	1,897,686	1,642,317	255,369	1,897,686	884,160	137,481	1,021,641	(35,282)	39,653,387	21,347,843
2034	41,256,609	1,999,327	1,774,566	224,761	1,999,327	923,051	116,911	1,039,962	218,852	41,037,757	21,346,023
2035	42,911,696	2,119,545	1,883,390	236,155	2,119,545	946,528	118,683	1,065,211	451,273	42,460,423	21,339,160
2036	44,658,025	2,235,466	1,946,168	289,298	2,235,466	945,003	140,475	1,085,478	703,223	43,954,802	21,343,173
2037	46,493,421	2,356,177	2,043,376	312,801	2,356,177	958,651	146,751	1,105,402	1,017,134	45,476,287	21,335,229
2038	48,398,665	2,486,753	2,170,818	315,935	2,486,753	984,001	143,209	1,127,210	1,365,535	47,033,130	21,319,442
2039	50,418,574	2,622,165	2,314,959	307,206	2,622,165	1,013,853	134,543	1,148,396	1,729,264	48,689,310	21,323,831
2040	52,490,733	2,756,435	2,333,158	423,277	2,756,435	987,269	179,108	1,166,377	2,096,994	50,393,739	21,323,959
2041	54,619,936	2,895,824	2,414,907	480,917	2,895,824	987,305	196,617	1,183,922	2,593,666	52,026,270	21,270,299
2042	56,957,685	3,042,479	2,577,863	464,616	3,042,479	1,018,287	183,529	1,201,816	3,165,361	53,792,324	21,248,627
2043	59,432,081	3,195,546	2,617,057	578,489	3,195,546	998,811	220,783	1,219,594	3,740,765	55,691,316	21,254,832
2044	62,033,236	3,357,810	2,689,197	668,613	3,357,810	991,636	246,550	1,238,186	4,450,181	57,583,055	21,233,645
2045	64,917,790	3,519,891	2,854,055	665,836	3,519,891	1,016,838	237,223	1,254,061	5,274,550	59,643,240	21,249,599



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# EXHIBIT D

# Projected Cash Flows (Open Group) - Funded Approach

### Total Medical, Dental & Life Insurance - pay-as-you-go

Fiscal Year	Number of Retirees, Spouses & Surviving Spouses	Total Actuarial Accrued Liability ("AAL")	Present Value at 3.50% of Total Actuarial Accrued Liability ("AAL")	Employer Share of Premiums / Claims including "implicit cost"	Present Value at 3.50% of Employer Share of Premiums / Claims including "implicit cost"
2015	123	21,366,918	21,366,918	960,875	960,875
2016	127	21,799,264	21,062,091	965,205	932,565
2017	132	22,274,528	20,793,510	965,270	901,090
2018	137	22,809,272	20,572,657	927,915	836,926
2019	144	23,443,413	20,429,580	882,198	768,785
2020	150	24,199,604	20,375,417	839,077	706,480
2021	157	25,076,949	20,400,114	843,898	686,512
2022	166	26,035,788	20,463,894	896,582	704,705
2023	174	27,041,912	20,535,940	944,041	716,916
2024	184	28,096,059	20,614,949	965,972	708,764
2025	193	29,245,121	20,732,416	1,074,416	761,674
2026	201	30,396,963	20,820,270	1,157,508	792,830
2027	210	31,589,397	20,905,335	1,226,842	811,904
2028	219	32,835,813	20,995,355	1,340,299	856,993
2029	227	34,088,407	21,059,197	1,426,068	880,999
2030	236	35,379,325	21,117,587	1,470,300	877,608
2031	244	36,755,768	21,197,269	1,582,386	912,571
2032	252	38,159,880	21,262,829	1,660,250	925,098
2033	261	39,618,105	21,328,848	1,642,317	884,160
2034	269	41,256,609	21,459,860	1,774,566	923,051
2035	279	42,911,696	21,565,954	1,883,390	946,528
2036	287	44,658,025	21,684,638	1,946,168	945,003
2037	296	46,493,421	21,812,418	2,043,376	958,651
2038	304	48,398,665	21,938,420	2,170,818	984,001
2039	311	50,418,574	22,081,174	2,314,959	1,013,853
2040	317	52,490,733	22,211,296	2,333,158	987,269
2041	323	54,619,936	22,330,687	2,414,907	987,305
2042	328	56,957,685	22,498,983	2,577,863	1,018,287
2043	332	59,432,081	22,682,512	2,617,057	998,811
2044	337	62,033,236	22,874,641	2,689,197	991,636
2045	340	64,917,790	23,128,807	2,854,055	1,016,838
2046	343	67,814,328	23,343,750	2,925,417	1,007,017
2047	346	70,988,715	23,610,116	3,032,446	1,008,560
2048	348	74,498,074	23,939,413	3,166,732	1,017,606
2049	350	78,010,598	24,220,422	3,368,406	1,045,809
2050	352	81,695,549	24,506,774	3,417,707	1,025,233
2051	353	85,668,528	24,829,542	3,525,776	1,021,885
2052	354	90,045,433	25,215,568	3,685,820	1,032,146
2053	354	94,690,193	25,619,563	3,763,684	1,018,310
2054	355	99,521,704	26,016,218	3,980,963	1,040,674



# EXHIBIT E

# GLOSSARY

**AAL** – Actuarial Accrued Liability. That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of pension plan benefits and expenses which is not provided for by future Normal Costs.

**Accrual Accounting -** A system of accounting in which revenues are recorded when earned and outlays are recorded when goods are received or services performed, even though the actual receipt of revenues and payment for goods or services may occur, in whole or in part, at a different time.

Actuarial Value of Assets – The value of cash, investments, other assets and property belonging to an OPEB trust, pension fund or similar entity, as used by the actuary for the purpose of actuarial valuation. Some funds may be restricted for other purposes, and "smoothing" of investment gains and losses often make the actuarial value of assets different from the market value of assets.

**Annual Required Contribution –** Normal Cost plus an amortization of the funding shortfall over a period of no more than 30 years.

**Cash Basis Accounting -** A system of accounting in which revenues are recorded when actually received and outlays are recorded when payment is made.

**Discount Rate –** The interest rate used to calculate present value of a series of future cash flows. Under GASB 45, the rate should be "long term expected yield on the investments that are expected to be used to pay benefits as they come due. These would be plan investments for a funded plan, the employer's investments for a pay as you go plan [e.g. short term county investment pool], or a weighted average of expected plan and employer investments for a plan that is partially funded".

**FASB – Financial Accounting Standards Board.** "Since 1973, the Financial Accounting Standards Board (FASB) has been the designated organization in the private sector for establishing standards of financial accounting and reporting".

**GASB - Government Accounting Standards Board.** "The Governmental Accounting Standards Board (GASB) was organized in 1984 by the Financial Accounting Foundation (FAF) to establish standards of financial accounting and reporting for state and local governmental entities. Its standards guide the preparation of external financial reports of those entities."



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# EXHIBIT E

### GLOSSARY (continued)

**GFOA – Government Finance Officers Association.** "GFOA is the professional association of state/provincial and local finance officers in the United States and Canada, and has served the public finance profession since 1906. Approximately 16,000 GFOA members are dedicated to the sound management of government financial resources."

**Implicit Subsidy –** "The difference between a premium rate charged to retirees for a particular benefit and the estimated rate that would have be applicable to those retirees if that benefit was acquired for them as a separate group."

**Irrevocable Contribution –** "Irrevocably transferred assets to a qualifying trust, or equivalent arrangement, in which plan assets are dedicated to providing benefits to retirees and their beneficiaries in accordance with the terms of the plan and are legally protected from creditors of the employer(s) or plan administrator. The preceding criteria preclude counting as [irrevocable] contributions (a) designations of net assets of a governmental or proprietary fund to be used for OPEB or (b) internal transfers of assets to a separate governmental or proprietary fund for the same purpose. Rather, such actions should be regarded as earmarking of employer assets."

**Level Dollar Amortization –** Funding a shortfall in OPEB assets with equal dollar payments over a designated number of years (no more than 30 years). The present value of the level payments equals the present value of unfunded liabilities, the UAAL.

**Level Percent of Payroll Amortization –** Funding a shortfall in OPEB assets as a level percent of payroll over a designated number of years (no more than 30 years). The present value of the payments equals the present value of unfunded liabilities, the UAAL. Level percent of payroll typically has lower payments in the early years than level dollar amortization. When using level payroll amortization, employee count is assumed to be constant, and the payroll differences arise from overall wage trends.



# EXHIBIT E

### GLOSSARY (continued)

**Normal Cost** - The actuarially determined present value contribution needed to fund benefits which are earned for employee service rendered during the current year. Normal cost depends on many factors, including the interest rate used to discount future cashflows, and expected inflation.

**NOA** – Net OPEB Asset. The amount recognized by an employer for contributions to an OPEB plan greater than OPEB expenses.

**NOO** – Net OPEB Obligation. The cumulative difference since the effective date of GASB Statement number 45 between annual OPEB cost and the employer's contributions to the plan, including the OPEB liability (asset) at transition, if any, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to OPEB-related debt.

**OPEB -** Other Post Employment Benefits

**OPEB Trust** – An entity other than a pension or retirement system which manages OPEB assets. In many respects it is similar to a pension fund for OPEB. For reasons detailed in GASB 45, contributions to an OPEB trust should be irrevocable in order to obtain the most favorable accounting treatment.

**Pay-as-you-go funding –** Paying benefits (such as pensions or OPEB) on a cash basis, with no money set aside for future liabilities which are already incurred.

**POB –** Pension Obligation Bond. Generally yielding taxable interest, POBs are issued to help fund a previously unfunded or underfunded pension liability.

**UAAL –** Unfunded Accrued Actuarial Liability. Actuarial Accrued Liability minus the Actuarial Value of Assets.