

**Town of Medway Other
Postemployment Benefits Plan**

GASB 45 Actuarial Valuation

as of

July 1, 2015

For the fiscal years ending

June 30, 2016

June 30, 2017

Delivered August 2016

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August 19, 2016

Personal and Confidential

Ms. Carol Pratt
Town Accountant
Town of Medway
155 Village Street
Medway, MA 02053

Dear Ms. Pratt:

We have performed an actuarial valuation of the Town of Medway Other Postemployment Benefits Plan for the fiscal year ending June 30, 2016. The figures presented in this report reflect the adoption, by the Town of Medway, of Statement No. 45 of the Governmental Accounting Standards Board ("GASB 45") effective July 1, 2009.

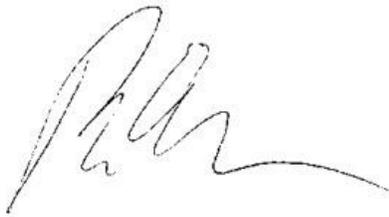
The financial results of the actuarial valuation are summarized in the report. The Executive Summaries highlight the results of the valuation. Additional information summarizing census data, actuarial assumptions, claim rates and the methodology for developing them, as well as a glossary of selected 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.

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

Very truly yours,

A handwritten signature in black ink, appearing to read 'P. Elmore', written in a cursive style.

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

August 19, 2016

ACTUARIAL CERTIFICATION

This is to certify that Odyssey Advisors has conducted an actuarial valuation of certain benefit obligations of the Town of Medway other postemployment benefit programs as of July 1, 2015 for the fiscal year ending June 30, 2016 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

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

**Town of Medway
Assuming Pay-as-you-go Funding - 3.50% discount rate
Comparison of Plan Liabilities to Prior Valuation**

	<u>July 1, 2015</u>	<u>July 1, 2013</u>
I. Present Value of Future Benefits		
A. Actives	43,170,857	41,796,391
B. Retirees/Disabled	<u>14,706,284</u>	<u>15,207,846</u>
C. Total	57,877,141	57,004,237
II. Present Value of Future Normal Cost	21,304,916	18,596,665
III. Actuarial Accrued Liability (Individual Entry Age Normal)		
A. Actives	21,865,941	23,199,726
B. Retirees/Disabled	<u>14,706,284</u>	<u>15,207,846</u>
C. Total	36,572,225	38,407,572
IV. Plan Assets	250,887	50,489
V. Unfunded Actuarial Accrued Liability ("UAAL") [III. - IV.]	36,321,338	38,357,083
VI. Funded Ratio [IV. / III.]	0.69%	0.13%
VII. Annual Covered Payroll	19,023,211	18,282,384
VIII. UAAL as % of Covered Payroll	190.90%	209.8%
IX. Net OPEB Obligation (Asset) @ Beginning of Fiscal Year	21,086,376	15,097,892
X. Number of Eligible Participants		
A. Actives	280	310
B. Retirees/Disabled	268	217
C. Total	548	527
For Fiscal Year Ending June 30, 2016	<u>June 30, 2016</u>	<u>June 30, 2014</u>
XI. Normal Cost	1,658,506	1,906,754
XII. Amortization of UAAL - 30 year flat dollar	2,204,666	2,283,446
XIII. Annual Required Contribution ('ARC') [XI. + XII.]	3,863,172	4,190,200
XIV. Interest on Net OPEB Obligation (Asset)	738,023	603,916
XV. Adjustment to Annual Required Contribution	(1,107,726)	(934,749)
XVI. Amortization of Actuarial (Gains) / Losses	(16,871)	81,091
XVII. Annual OPEB Expense [XIII. + XIV. + XV. + XVI.]	3,476,598	3,940,458
XVIII. Employer Share of Costs	963,846	925,505
XIX. Employer Payments (Withdrawals) to/from OPEB Trust	100,000	50,000
XX. Total Employer Contribution [XVIII. + XIX.]	1,063,846	975,505
XXI. Percentage of Annual OPEB Expense Contributed	30.6%	24.8%
XXII. Net OPEB Obligation (Asset) at Beginning of Year [IX.]	21,086,376	15,097,892
XXIII. Increase (Decrease) in Net OPEB Obligations (Asset) [XVII. - XX.]	2,412,752	2,964,953
XXIV. Net OPEB Obligation (Asset) at End of Year [XXII. + XXIII.]	23,499,128	18,062,845
XXV. Discount Rate	3.50%	4.00%

SECTION I
PRINCIPAL RESULTS OF THE VALUATION
(continued)

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

	<u>Pay-as-you-go Funding -</u> <u>3.50% discount rate</u>	<u>Plan Funding -7.00%</u> <u>discount rate</u>
I. Present Value of Future Benefits		
A. Actives	43,170,857	18,549,145
B. Retirees/Disabled	14,706,284	10,318,265
C. Total	57,877,141	28,867,410
II. Present Value of Future Normal Cost	21,304,916	6,225,349
III. Actuarial Accrued Liability (Individual Entry Age Normal)		
A. Actives	21,865,941	12,323,796
B. Retirees/Disabled	14,706,284	10,318,265
C. Total	36,572,225	22,642,061
IV. Plan Assets	250,887	250,887
V. Unfunded Actuarial Accrued Liability ("UAAL") [III. - IV.]	36,321,338	22,391,174
VI. Funded Ratio [IV. / III.]	0.69%	1.11%
VII. Annual Covered Payroll	19,023,211	19,023,211
VIII. UAAL as % of Covered Payroll	190.90%	117.70%
IX. Net OPEB Obligation (Asset) @ Beginning of Fiscal Year	21,086,376	21,086,376
X. Number of Eligible Participants		
A. Actives	280	280
B. Retirees/Disabled	268	268
C. Total	548	548
For Fiscal Year Ending June 30, 2016		
XI. Normal Cost	1,658,506	649,338
XII. Amortization of UAAL - 30 year flat dollar	2,204,666	2,896,461
XIII. Annual Required Contribution ('ARC') [XI. + XII.]	3,863,172	3,545,799
XIV. Interest on Net OPEB Obligation (Asset)	738,023	1,476,047
XV. Adjustment to Annual Required Contribution	(1,107,726)	(1,588,108)
XVI. Amortization of Actuarial (Gains) / Losses	(16,871)	(1,073,327)
XVII. Annual OPEB Expense [XIII. + XIV. + XV. + XVI.]	3,476,598	2,360,411
XVIII. Employer Share of Costs	963,846	963,846
XIX. Employer Payments (Withdrawals) to/from OPEB Trust	100,000	100,000
XX. Total Employer Contribution [XVIII. + XIX.]	1,063,846	1,063,846
XXI. Percentage of Annual OPEB Expense Contributed	30.6%	45.1%
XXII. Net OPEB Obligation (Asset) at Beginning of Year [IX.]	21,086,376	21,086,376
XXIII. Increase (Decrease) in Net OPEB Obligations (Asset) [XVII. - XX.]	2,412,752	1,296,565
XXIV. Net OPEB Obligation (Asset) at End of Year [XXII. + XXIII.]	23,499,128	22,382,941
XXV. Discount Rate	3.50%	7.00%

SECTION I
PRINCIPAL RESULTS OF THE VALUATION
(continued)

Town of Medway
Assuming Pay-as-you-go Funding - 3.50% discount rate
Plan Liabilities as of July 1, 2015

	<u>Medical</u>	<u>Dental</u>	<u>Life</u>	<u>Excise Tax</u>	<u>Total</u>
I. Present Value of Future Benefits					
A. Actives	40,548,643	0	71,852	2,550,362	43,170,857
B. Retirees/Disabled	<u>14,381,898</u>	<u>0</u>	<u>156,938</u>	<u>167,448</u>	<u>14,706,284</u>
C. Total	54,930,541	0	228,790	2,717,810	57,877,141
II. Present Value of Future Normal Cost	19,463,238	0	22,975	1,818,703	21,304,916
III. Actuarial Accrued Liability (Individual Entry Age Normal)					
A. Actives	21,085,405	0	48,877	731,659	21,865,941
B. Retirees/Disabled	<u>14,381,898</u>	<u>0</u>	<u>156,938</u>	<u>167,448</u>	<u>14,706,284</u>
C. Total	35,467,303	0	205,815	899,107	36,572,225
IV. Plan Assets	243,400	0	1,453	6,034	250,887
V. Unfunded Actuarial Accrued Liability ("UAAL") [III. - IV.]	35,223,903	0	204,362	893,073	36,321,338
VI. Annual Covered Payroll	19,023,211	19,023,211	19,023,211	19,023,211	19,023,211
VII. UAAL as % of Covered Payroll	185.2%	0.0%	1.1%	4.7%	190.9%
VIII. Net OPEB Obligation (Asset) @ Beginning of Fiscal Year	20,449,314	0	118,666	518,396	21,086,376
IX. Number of Eligible Participants					
A. Actives	280	280	280	280	
B. Retirees/Disabled	<u>268</u>	<u>0</u>	<u>252</u>	<u>268</u>	
C. Total	548	280	532	548	
For Fiscal Year Ending June 30, 2016					
X. Normal Cost	1,554,535	0	2,518	101,453	1,658,506
XI. Amortization of UAAL - 30 year flat dollar	2,138,059	0	12,407	54,200	2,204,666
XII. Annual Required Contribution ('ARC') [X. + XI.]	3,692,594	0	14,925	155,653	3,863,172
XIII. Interest on Net OPEB Obligation (Asset)	715,726	0	4,152	18,145	738,023
XIV. Adjustment to Annual Required Contribution	(1,074,258)	0	(6,235)	(27,233)	(1,107,726)
XV. Amortization of Actuarial (Gains) / Losses	(16,365)	0	(97)	(409)	(16,871)
XVI. Annual OPEB Expense [XII. + XIII. + XIV. + XV.]	3,317,697	0	12,745	146,156	3,476,598
XVII. Employer Share of Costs	955,610	0	8,236	0	963,846
XVIII. Employer Payments (Withdrawals) to/from OPEB Trust	96,979	0	563	2,458	100,000
XIX. Total Employer Contribution [XVII. + XVIII.]	1,052,589	0	8,799	2,458	1,063,846
XX. Percentage of Annual OPEB Expense Contributed	31.7%	0.0%	69.0%	1.7%	30.6%
XXI. Net OPEB Obligation (Asset) at Beginning of Year [VIII.]	20,449,314	0	118,666	518,396	21,086,376
XXII. Increase (Decrease) in Net OPEB Obligations (Asset) [XVI. - XIX.]	2,265,108	0	3,946	143,698	2,412,752
XXIII. Net OPEB Obligation (Asset) at End of Year [XXI. + XXII.]	22,714,422	0	122,612	662,094	23,499,128

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

(continued)

**Town of Medway
Plan Liabilities as of July 1, 2015
Assuming Pay-as-you-go Funding Method**

	General Government Employees and Retirees	Teacher Employees	School Non-Teacher Employees	Police Employees and Retirees	Fire Employees and Retirees	School Retirees	Water Enterprise Employees and Retirees	Ambulance Enterprise Employees and Retirees	Sewer Enterprise Employees and Retirees	Solid Waste Enterprise Employees and Retirees	Total
I. Present Value of Future Benefits											
A. Actives	2,999,459	24,469,648	7,557,403	4,026,523	1,672,397	0	755,417	995,577	379,857	314,576	43,170,857
B. Retirees/Disabled	<u>2,096,880</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>12,609,404</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>14,706,284</u>
C. Total	5,096,339	24,469,648	7,557,403	4,026,523	1,672,397	12,609,404	755,417	995,577	379,857	314,576	57,877,141
II. Present Value of Future Normal Cost	1,577,595	12,114,936	3,314,825	1,724,647	1,226,509	0	393,745	647,588	179,093	125,978	21,304,916
III. Actuarial Accrued Liability (Individual Entry Age Normal)											
A. Actives	1,421,864	12,354,712	4,242,578	2,301,876	445,888	0	361,672	347,989	200,764	188,598	21,865,941
B. Retirees/Disabled	<u>2,096,880</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>12,609,404</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>14,706,284</u>
C. Total	3,518,744	12,354,712	4,242,578	2,301,876	445,888	12,609,404	361,672	347,989	200,764	188,598	36,572,225
IV. Plan Assets	24,769	81,721	28,786	15,322	2,788	90,141	2,462	2,230	1,372	1,296	250,887
V. Unfunded Actuarial Accrued Liability ("UAAL") [III. - IV.]	3,493,975	12,272,991	4,213,792	2,286,554	443,100	12,519,263	359,210	345,759	199,392	187,302	36,321,338
VI. Annual Covered Payroll	2,086,260	10,967,240	3,323,847	1,285,076	321,303	N/A	426,587	206,472	158,371	248,055	19,023,211
VII. UAAL as % of Covered Payroll	167.5%	111.9%	126.8%	177.9%	137.9%	N/A	84.2%	167.5%	125.9%	75.5%	190.9%
VIII. Net OPEB Obligation (Asset) @ Beginning of Fiscal Year	2,022,120	6,967,535	2,392,404	1,298,161	251,511	7,535,933	220,122	126,533	104,513	167,544	21,086,376
IX. Number of Eligible Participants											
A. Actives	27	147	66	18	6	0	6	4	3	3	280
B. Retirees/Disabled	<u>37</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>231</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>268</u>
C. Total	64	147	66	18	6	231	6	4	3	3	548
For Fiscal Year Ending June 30, 2016											
X. Normal Cost	137,801	947,254	305,053	114,228	53,145	0	37,571	32,160	18,498	12,796	1,658,506
XI. Amortization of UAAL - 30 year flat dollar	150,671	750,832	257,719	139,884	27,124	811,657	21,970	21,160	12,196	11,453	2,204,666
XII. Annual Required Contribution ("ARC") [X. + XI.]	288,472	1,698,086	562,772	254,112	80,269	811,657	59,541	53,320	30,694	24,249	3,863,172
XIII. Interest on Net OPEB Obligation (Asset)	70,774	243,864	83,734	45,436	8,803	263,758	7,704	4,428	3,658	5,864	738,023
XIV. Adjustment to Annual Required Contribution	(106,228)	(366,024)	(125,679)	(68,196)	(13,213)	(395,883)	(11,563)	(6,647)	(5,491)	(8,802)	(1,107,726)
XV. Amortization of Actuarial (Gains) / Losses	(1,642)	(5,565)	(1,911)	(1,037)	(201)	(6,020)	(163)	(157)	(90)	(85)	(16,871)
XVI. Annual OPEB Expense [XII. + XIII. + XIV. + XV.]	251,376	1,570,361	518,916	230,315	75,658	673,512	55,519	50,944	28,771	21,226	3,476,598
XVII. Employer Share of Costs	145,482	94,388	22,905	2,892	8	695,676	1,172	51	10	1,262	963,846
XVIII. Employer Payments (Withdrawals) to/from OPEB Trust	9,620	33,782	11,601	6,294	1,219	34,478	989	952	549	516	100,000
XIX. Total Employer Contribution [XVII. + XVIII.]	155,102	128,170	34,506	9,186	1,227	730,154	2,161	1,003	559	1,778	1,063,846
XX. Percentage of Annual OPEB Expense Contributed	57.9%	6.0%	4.4%	1.3%	0.0%	103.3%	2.1%	0.1%	0.0%	5.9%	27.7%
XXI. Net OPEB Obligation (Asset) at Beginning of Year [VIII.]	2,022,120	6,967,535	2,392,404	1,298,161	251,511	7,535,933	220,122	126,533	104,513	167,544	21,086,376
XXII. Increase (Decrease) in Net OPEB Obligations (Asset) [XVI. - XIX.]	96,274	1,442,191	484,410	221,129	74,431	(56,642)	53,358	49,941	28,212	19,448	2,412,752
XXIII. Net OPEB Obligation (Asset) at End of Year [XXI. + XXII.]	2,118,394	8,409,726	2,876,814	1,519,290	325,942	7,479,291	273,480	176,474	132,725	186,992	23,499,128

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

(continued)

Town of Medway
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, 2015

	<u>Present Value of Future Benefits</u>	<u>Actuarial Accrued Liability (Individual Entry Age Normal)</u>	<u>Normal Cost</u>
Actives			
Under Age 65			
A. Participants	10,286,257	4,939,143	386,847
B. Spouses	<u>3,781,368</u>	<u>1,869,454</u>	<u>144,401</u>
C. Total	14,067,625	6,808,597	531,248
Age 65 and Over			
A. Participants	18,367,616	9,447,171	710,124
B. Spouses	<u>10,735,616</u>	<u>5,610,173</u>	<u>417,134</u>
C. Total	29,103,232	15,057,344	1,127,258
Actives Total			
A. Participants	28,653,873	14,386,314	1,096,971
B. Spouses	<u>14,516,984</u>	<u>7,479,627</u>	<u>561,535</u>
C. Total	43,170,857	21,865,941	1,658,506
Retirees/Disabled			
Under Age 65			
A. Participants	932,421	932,421	0
B. Spouses	<u>215,396</u>	<u>215,396</u>	<u>0</u>
C. Total	1,147,817	1,147,817	0
Age 65 and Over			
A. Participants	12,537,442	12,537,442	<u>0</u>
B. Spouses	<u>1,021,025</u>	<u>1,021,025</u>	<u>0</u>
C. Total	13,558,467	13,558,467	0
Retirees/Disabled Total			
A. Participants	13,469,863	13,469,863	0
B. Spouses	<u>1,236,421</u>	<u>1,236,421</u>	<u>0</u>
C. Total	14,706,284	14,706,284	0
Total Population			
A. Participants	42,123,736	27,856,177	1,096,971
B. Spouses	<u>15,753,405</u>	<u>8,716,048</u>	<u>561,535</u>
C. Total	57,877,141	36,572,225	1,658,506

SECTION I
PRINCIPAL RESULTS OF THE VALUATION
(continued)

Town of Medway
Assuming Funding over 30 years at 7.00% discount rate
Plan Liabilities as of July 1, 2015

	<u>Medical</u>	<u>Dental</u>	<u>Life</u>	<u>Excise Tax</u>	<u>Total</u>
I. Present Value of Future Benefits					
A. Actives	17,757,219	0	28,069	763,857	18,549,145
B. Retirees/Disabled	<u>10,127,738</u>	<u>0</u>	<u>109,116</u>	<u>81,411</u>	<u>10,318,265</u>
C. Total	27,884,957	0	137,185	845,268	28,867,410
II. Present Value of Future Normal Cost	5,786,720	0	5,761	432,868	6,225,349
III. Actuarial Accrued Liability (Individual Entry Age Normal)					
A. Actives	11,970,499	0	22,308	330,989	12,323,796
B. Retirees/Disabled	<u>10,127,738</u>	<u>0</u>	<u>109,116</u>	<u>81,411</u>	<u>10,318,265</u>
C. Total	22,098,237	0	131,424	412,400	22,642,061
IV. Plan Assets	244,861	0	1,456	4,570	250,887
V. Unfunded Actuarial Accrued Liability ("UAAL") [III. - IV.]	21,853,376	0	129,968	407,830	22,391,174
VI. Annual Covered Payroll	19,023,211	19,023,211	19,023,211	19,023,211	19,023,211
VII. UAAL as % of Covered Payroll	114.9%	0.0%	0.7%	2.1%	117.7%
VIII. Net OPEB Obligation (Asset) @ Beginning of Fiscal Year	20,449,314	0	118,666	518,396	21,086,376
IX. Number of Eligible Participants					
A. Actives	280	280	280	280	
B. Retirees/Disabled	<u>268</u>	<u>0</u>	<u>252</u>	<u>268</u>	
C. Total	548	280	532	548	
For Fiscal Year Ending June 30, 2016					
X. Normal Cost	613,045	0	838	35,455	649,338
XI. Amortization of UAAL - 30 year flat dollar	2,824,747	0	17,331	54,383	2,896,461
XII. Annual Required Contribution ('ARC') [X. + XI.]	3,437,792	0	18,169	89,838	3,545,799
XIII. Interest on Net OPEB Obligation (Asset)	1,431,452	0	8,307	36,288	1,476,047
XIV. Adjustment to Annual Required Contribution	(1,540,128)	0	(8,937)	(39,043)	(1,588,108)
XV. Amortization of Actuarial (Gains) / Losses	(1,047,548)	0	(6,230)	(19,549)	(1,073,327)
XVI. Annual OPEB Expense [XII. + XIII. + XIV. + XV.]	2,281,568	0	11,309	67,534	2,360,411
XVII. Employer Share of Costs	955,610	0	8,236	0	963,846
XVIII. Employer Payments (Withdrawals) to/from OPEB Trust	97,599	0	580	1,821	100,000
XIX. Total Employer Contribution [XVII. + XVIII.]	1,053,209	0	8,816	1,821	1,063,846
XX. Percentage of Annual OPEB Expense Contributed	46.2%	0.0%	78.0%	2.7%	45.1%
XXI. Net OPEB Obligation (Asset) at Beginning of Year [VIII.]	20,449,314	0	118,666	518,396	21,086,376
XXII. Increase (Decrease) in Net OPEB Obligations (Asset) [XVI. - XIX.]	1,228,359	0	2,493	65,713	1,296,565
XXIII. Net OPEB Obligation (Asset) at End of Year [XXI. + XXII.]	21,677,673	0	121,159	584,109	22,382,941

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

(continued)

**Town of Medway
Plan Liabilities as of July 1, 2015
Assuming Funding over 30 years at 7.00% discount rate**

	General Government Employees and Retirees	Teacher Employees	School Non-Teacher Employees	Police Employees and Retirees	Fire Employees and Retirees	School Retirees	Water Enterprise Employees and Retirees	Ambulance Enterprise Employees and Retirees	Sewer Enterprise Employees and Retirees	Solid Waste Enterprise Employees and Retirees	Total
I. Present Value of Future Benefits											
A. Actives	1,288,772	10,513,830	3,247,176	1,730,069	718,576	0	324,579	427,768	163,212	135,163	18,549,145
B. Retirees/Disabled	<u>1,471,219</u>	0	0	0	0	<u>8,847,046</u>	0	0	0	0	<u>10,318,265</u>
C. Total	2,759,991	10,513,830	3,247,176	1,730,069	718,576	8,847,046	324,579	427,768	163,212	135,163	28,867,410
II. Present Value of Future Normal Cost	460,978	3,540,014	968,600	503,946	358,389	0	115,053	189,227	52,331	36,811	6,225,349
III. Actuarial Accrued Liability (Individual Entry Age Normal)											
A. Actives	801,373	6,963,201	2,391,146	1,297,353	251,306	0	203,841	196,129	113,152	106,295	12,323,796
B. Retirees/Disabled	<u>1,471,219</u>	0	0	0	0	<u>8,847,046</u>	0	0	0	0	<u>10,318,265</u>
C. Total	2,272,592	6,963,201	2,391,146	1,297,353	251,306	8,847,046	203,841	196,129	113,152	106,295	22,642,061
IV. Plan Assets	24,769	81,721	28,786	15,322	2,788	90,141	2,462	2,230	1,372	1,296	250,887
V. Unfunded Actuarial Accrued Liability ("UAAL") [III. - IV.]	2,247,823	6,881,480	2,362,360	1,282,031	248,518	8,756,905	201,379	193,899	111,780	104,999	22,391,174
VI. Annual Covered Payroll	2,086,260	10,967,240	3,323,847	1,285,076	321,303	N/A	426,587	206,472	158,371	248,055	19,023,211
VII. UAAL as % of Covered Payroll	107.7%	62.7%	71.1%	99.8%	77.3%	N/A	47.2%	93.9%	70.6%	42.3%	117.7%
VIII. Net OPEB Obligation (Asset) @ Beginning of Fiscal Year	2,022,120	6,967,535	2,392,404	1,298,161	251,511	7,535,933	220,122	126,533	104,513	167,544	21,086,376
IX. Number of Eligible Participants											
A. Actives	27	147	66	18	6	0	6	4	3	3	280
B. Retirees/Disabled	<u>37</u>	0	0	0	0	<u>231</u>	0	0	0	0	<u>268</u>
C. Total	64	147	66	18	6	231	6	4	3	3	548
For Fiscal Year Ending June 30, 2016											
X. Normal Cost	53,952	370,869	119,434	44,723	20,807	0	14,710	12,591	7,242	5,010	649,338
XI. Amortization of UAAL - 30 year flat dollar	197,949	986,433	338,588	183,778	35,635	1,066,344	28,864	27,800	16,023	15,047	2,896,461
XII. Annual Required Contribution ("ARC") [X. + XI.]	251,901	1,357,302	458,022	228,501	56,442	1,066,344	43,574	40,391	23,265	20,057	3,545,799
XIII. Interest on Net OPEB Obligation (Asset)	141,549	487,728	167,468	90,872	17,606	527,516	15,408	8,856	7,316	11,728	1,476,047
XIV. Adjustment to Annual Required Contribution	<u>(152,295)</u>	<u>(524,756)</u>	<u>(180,182)</u>	<u>(97,770)</u>	<u>(18,943)</u>	<u>(567,564)</u>	<u>(16,577)</u>	<u>(9,530)</u>	<u>(7,872)</u>	<u>(12,619)</u>	<u>(1,588,108)</u>
XV. Amortization of Actuarial (Gains) / Losses	<u>(104,463)</u>	<u>(354,043)</u>	<u>(121,577)</u>	<u>(65,974)</u>	<u>(12,788)</u>	<u>(382,990)</u>	<u>(10,370)</u>	<u>(9,988)</u>	<u>(5,726)</u>	<u>(5,408)</u>	<u>(1,073,327)</u>
XVI. Annual OPEB Expense [XII. + XIII. + XIV. + XV.]	136,692	966,231	323,731	155,629	42,317	643,306	32,035	29,729	16,983	13,758	2,360,411
XVII. Employer Share of Costs	145,482	94,388	22,905	2,892	8	695,676	1,172	51	10	1,262	963,846
XVIII. Employer Payments (Withdrawals) to/from OPEB Trust	10,037	30,753	10,561	5,730	1,110	39,074	900	866	500	469	100,000
XIX. Total Employer Contribution [XVII. + XVIII.]	155,519	125,141	33,466	8,622	1,118	734,750	2,072	917	510	1,731	1,063,846
XX. Percentage of Annual OPEB Expense Contributed	113.8%	13.0%	10.3%	5.5%	2.6%	114.2%	6.5%	3.1%	3.0%	12.6%	45.1%
XXI. Net OPEB Obligation (Asset) at Beginning of Year [VIII.]	2,022,120	6,967,535	2,392,404	1,298,161	251,511	7,535,933	220,122	126,533	104,513	167,544	21,086,376
XXII. Increase (Decrease) in Net OPEB Obligations (Asset) [XVI. - XIX.]	<u>(18,827)</u>	841,090	290,265	147,007	41,199	<u>(91,444)</u>	29,963	28,812	16,473	12,027	1,296,565
XXIII. Net OPEB Obligation (Asset) at End of Year [XXI. + XXII.]	2,003,293	7,808,625	2,682,669	1,445,168	292,710	7,444,489	250,085	155,345	120,986	179,571	22,382,941

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 post-employment benefits and when will they start?

Medical inflation and claims cost assumptions: When an employee starts receiving post-employment 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, 2010. 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 earned 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, 2016, the Plan saw an experience gain of \$7,082,459 or 16.32%. Plan experience was more favorable than expected. This was mainly due to premiums for non-Medicare integrated plans increasing less than the expected 16% increase. This was somewhat offset by the preparations for GASB 75 including a decrease in the discount rate from 4% to 3.5% (increasing disclosed liabilities by \$2.5 million) and a more conservative mortality table as recommended by PERAC. The actuarial experience gain is amortized into the annual OPEB costs over a 30-year period. The net impact of plan experience is a decrease in the annual OPEB cost.

Commentary on Plan Experience and Contribution Amounts
(continued)

3. **Balance Sheet Items**

	July 1, 2015	July 1, 2013
Actuarial Accrued Liability	\$36,572,225	\$38,407,572
Plan Assets	\$250,887	\$50,489
Unfunded Actuarial Accrued Liability	\$36,321,338	\$38,357,083
Funded %	0.69%	0.13%
Net OPEB Obligation	\$21,086,376	\$15,097,892

4. **Income Statement Items**

	June 30, 2016	June 30, 2014
Normal Cost	\$1,658,506	\$1,906,754
Amortization of UAAL	\$2,204,666	\$2,283,446
Interest on Net OPEB Obligation	\$738,023	\$603,916
Adjustment to Annual Required Contribution	\$(1,107,726)	\$(934,749)
Amortization of Actuarial (Gains)/Losses	\$(16,871)	\$81,091
Annual OPEB Expense	\$3,476,598	\$3,940,458
Employer Share of Costs Employer Contributions/(Withdrawals) to/from OPEB Trust	\$963,846	\$925,505
Total Employer Contribution	\$1,063,846	\$975,505
Discount Rate	3.50%	4.00%

Commentary on Plan Experience and Contribution Amounts
(continued)

5. **GASB 75 – Where we’re going:**

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 largely mirrors the GASB 68 standard for pension plans. The new standards require increased disclosures 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. For more information, please review our white papers at www.GASB75.com or on our website.

SECTION II

SUMMARY OF PLAN PROVISIONS

<u>Effective Date</u>	July 1, 2009; GASB 45 is adopted.
<u>Plan Year</u>	July 1 through June 30.
<u>Eligibility</u>	An employee hired before April 2, 2012 shall become eligible to retire under this plan upon attainment of age 55 as an active member and completion of 10 years of service or an employee shall be able to retire with 20 years of service regardless of age. Those hired on or after April 2, 2012 shall be eligible to retire upon attainment of age 60 with 10 years of creditable service.
<u>Creditable Service</u>	Elapsed time from date of hire to termination of service date.
<u>Participant Contributions</u>	50% of premiums for Medical & 50% of premiums for life insurance.
<u>Benefits Offered</u>	Comprehensive Medical, Dental and Group Term Life Insurance.
<u>Normal Retirement Date</u>	The normal retirement date is the first day of the month following a participant's 65th birthday.
<u>Early Retirement</u>	Early retirement is available for any participant who has attained benefit eligibility.

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS

A. ACTUARIAL COST METHOD

The actuarial cost method used to calculate the costs and liabilities of the plan is the Individual Entry Age Normal Actuarial Cost Method. Under this method, the annual normal cost for each individual active member, 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.

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD
AND ACTUARIAL ASSUMPTIONS

(continued)

C. ACTUARIAL ASSUMPTIONS

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 generationally with scale BB and a base year 2009 for males and females. Disabled employees were assumed to follow the RP-2000 Mortality Table set forward 2 years for males and females.

Discount Rate

3.50% per annum (previously 4.00%)

Employee Termination

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

<u>Service</u>	<u>Non Public</u>		<u>Public</u> <u>Safety</u>
	<u>Non Public</u> <u>Safety Male</u>	<u>Safety</u> <u>Female</u>	
0	15.00%	15.00%	1.50%
5	7.60%	7.60%	1.50%
10	5.40%	5.40%	1.50%
15	3.30%	3.30%	0.00%
20	2.00%	2.00%	0.00%
25	1.00%	1.00%	0.00%
30	0.00%	0.00%	0.00%

SECTION III

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:

<u>Age</u>	<u>Non Public Safety Male</u>	<u>Non Public Safety Female</u>	<u>Public Safety</u>
45	0.00%	0.00%	1.00%
46	0.00%	0.00%	1.00%
47	0.00%	0.00%	1.00%
48	0.00%	0.00%	1.00%
49	0.00%	0.00%	1.00%
50	1.00%	1.50%	2.00%
51	1.00%	1.50%	2.00%
52	1.00%	2.50%	2.00%
53	1.00%	2.50%	5.00%
54	2.00%	2.50%	7.50%
55	2.00%	5.50%	15.00%
56	2.50%	6.50%	10.00%
57	2.50%	6.50%	10.00%
58	5.00%	6.50%	10.00%
59	6.50%	6.50%	15.00%
60	12.00%	5.00%	20.00%
61	20.00%	13.00%	20.00%
62	30.00%	15.00%	25.00%
63	25.00%	12.50%	25.00%
64	22.00%	18.00%	30.00%
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%

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD
AND ACTUARIAL ASSUMPTIONS

(continued)

C. ACTUARIAL ASSUMPTIONS (continued)

Retirement Rates for teachers

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

<u>Age</u>	<u>Male Teachers</u>	<u>Female Teachers</u>
45	0.00%	0.00%
46	0.00%	0.00%
47	0.00%	0.00%
48	0.00%	0.00%
49	0.00%	0.00%
50	2.00%	2.00%
51	2.00%	2.00%
52	2.00%	2.00%
53	2.00%	2.00%
54	6.00%	2.00%
55	20.00%	6.00%
56	35.00%	15.00%
57	50.00%	30.00%
58	50.00%	35.00%
59	50.00%	35.00%
60	50.00%	35.00%
61	50.00%	35.00%
62	40.00%	35.00%
63	40.00%	40.00%
64	50.00%	30.00%
65	50.00%	35.00%
66	50.00%	35.00%
67	50.00%	35.00%
68	50.00%	30.00%
69	50.00%	30.00%
70	100.00%	100.00%
71	100.00%	100.00%
72	100.00%	100.00%

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD
AND ACTUARIAL ASSUMPTIONS

(continued)

C. ACTUARIAL ASSUMPTIONS (continued)

Disability rates

It was assumed that the following percentage of eligible employees would become permanently disabled each year:

<u>Age</u>	<u>Non Public Safety</u>	<u>Public Safety</u>
20	0.01%	0.01%
25	0.02%	0.02%
30	0.03%	0.03%
35	0.07%	0.17%
40	0.10%	0.30%
45	0.15%	0.78%
50	0.19%	1.25%
55	0.24%	1.20%
60	0.28%	0.85%

SECTION III

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:

<u>Year</u>	<u>Medical</u>	<u>Dental</u>
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

It was assumed that 100% 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 100% of eligible employees would elect coverage upon retirement.

Percent Married

It was assumed that 65% of male participants and 65% of female participants who elect retiree healthcare coverage for themselves would also elect coverage for a spouse upon retirement. It was further assumed that a male spouse is three years older than a female spouse and same sex spouses are assumed to be the same age. For current retirees, the actual census information was used.

SECTION III

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

C. ACTUARIAL ASSUMPTIONS (continued)

Compensation Increases

3.00% per year.

Open Group Forecast

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 replaced with new employees with the demographics below:

Open Group Forecast Population Demographics

<u>Age</u>	<u>Male</u>	<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>	<u>4.0%</u>
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.

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS

(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.

SECTION III

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			
	<u>Single</u>	<u>Two-Person</u>	<u>Family</u>	<u>Total</u>
HMO Basic	141		204	345
POS	3			3
PPO	3		4	7
Medicare Preferred	197			197
Total	344	0	208	552

	Per Contract Costs (monthly) - FY 2015		
	<u>Single</u>	<u>Two-Person</u>	<u>Family</u>
HMO Basic	650.90	0.00	1,667.64
POS	690.75	0.00	1,974.32
PPO	1,267.98	0.00	3,173.41
Medicare Preferred	336.00	672.00	

Gross Expected FY 2015 Incurred Premiums	6,200,847
Adjustment to reflect children's claims	(926,174)
Total Expected FY 2015 Incurred Premiums (adults only)	5,274,674

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

	<u>Employer</u> <u>Primary</u>	<u>Medicare</u> <u>Primary</u>
Age 65	11,172	4,032
Average Age	9,904	4,032

SECTION III

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

D. DEVELOPMENT OF REPRESENTATIVE MEDICAL PER CAPITA CLAIMS COSTS

III. BREAKDOWN OF CLAIM COSTS

5,274,674 Active and Retired Claims (No Children)

ALL ACTIVE EMPLOYEES AND SPOUSES

Age Bracket	Number of Females	Number of Males	Female Aging Factor	Male Aging Factor	Aged (F) Average Claims	Aged (M) Average Claims	Age Related Claims
24 & Under	1	5	1.312	0.549	6,854	2,868	21,194
25 to 29	21	8	1.312	0.591	6,854	3,087	168,630
30 to 34	26	23	1.312	0.712	6,854	3,719	263,741
35 to 39	18	16	1.312	0.850	6,854	4,440	194,412
40 to 44	28	19	1.312	1.000	6,854	5,224	291,168
45 to 49	42	36	1.456	1.193	7,606	6,232	543,804
50 to 54	32	44	1.599	1.441	8,353	7,528	598,528
55 to 59	38	36	1.740	1.753	9,090	9,158	675,108
60 to 64	28	24	1.968	2.102	10,281	10,981	551,412
65 to 69	4	6	2.168	2.316	11,326	12,099	117,898
70 & Over	2	1	2.396	2.557	12,517	13,358	38,392
Total	240	218					3,464,287

ALL RETIREES AND SPOUSES - NOT MEDICARE ELIGIBLE

Age Bracket	Number of Females	Number of Males	Female Aging Factor	Male Aging Factor	Aged (F) Average Claims	Aged (M) Average Claims	Age Related Claims
44 & Under	9	5	1.312	1.000	6,854	5,224	87,806
45 to 49	2	2	1.456	1.193	7,606	6,232	27,676
50 to 54	2	0	1.599	1.441	8,353	7,528	16,706
55 to 59	10	3	1.740	1.753	9,090	9,158	118,374
60 to 64	30	21	1.968	2.102	10,281	10,981	539,031
65 to 69	6	1	2.168	2.316	11,326	12,099	80,055
70 to 74	5	3	2.396	2.557	12,517	13,358	102,659
75 to 79	1	1	2.593	2.769	13,546	14,465	28,011
80 to 84	0	0	2.724	2.910	14,230	15,202	0
85 to 89	0	0	2.864	3.059	14,962	15,980	0
90 & Over	0	0	3.010	3.215	15,724	16,795	0
Total	65	36					1,000,318

ALL RETIREES AND SPOUSES - MEDICARE ELIGIBLE

Age Bracket	Number of Females	Number of Males	Female Aging Factor	Male Aging Factor	Aged (F) Average Claims	Aged (M) Average Claims	Age Related Claims
65 to 69	47	40	2.168	2.316	4,032	4,032	350,784
70 to 74	23	20	2.396	2.557	4,032	4,032	173,376
75 to 79	17	19	2.593	2.769	4,032	4,032	145,152
80 to 84	8	12	2.724	2.910	4,032	4,032	80,640
85 to 89	4	3	2.864	3.059	4,032	4,032	28,224
90 & Over	7	1	3.010	3.215	4,032	4,032	32,256
Total	106	95					810,432
Grand Totals	411	349					5,275,037

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD
AND ACTUARIAL ASSUMPTIONS

(continued)

E. DEVELOPMENT OF REPRESENTATIVE DENTAL PER CAPITA CLAIMS COSTS

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

	Per Contract Costs (monthly) - FY 2015		
	<u>Single</u>	<u>Two-Person</u>	<u>Family</u>
Dental Plan	N/A		N/A
		FY 2015 Expected Per Person Rate	N/A

EXHIBIT A

Financial Statement Disclosure

(As of July 1, 2015)

The GASB Standards for accounting and financial reporting for postemployment benefits other than pensions require 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
- b. Administrator: Town of Medway
- c. Eligibility: An employee hired before April 2, 2012 shall become eligible to retire under this plan upon attainment of age 55 as an active member and completion of 10 years of service or an employee shall be able to retire with 20 years of service regardless of age. Those hired on or after April 2, 2012 shall be eligible to retire upon attainment of age 60 with 10 years of creditable service.
- d. Cost Sharing: Employees will pay 50% of premiums in retirement.

2. A DESCRIPTION OF THE DENTAL INSURANCE PROGRAM:

- a. Plan Type: Comprehensive Dental Insurance
- b. Administrator: Town of Medway
- c. Eligibility: Same as above
- d. Cost sharing: Employees will pay 100% of premiums in retirement

3. A DESCRIPTION OF THE RETIREE LIFE INSURANCE PROGRAM:

- a. Plan Type: Group Term Life Insurance - \$2,000
- b. Administrator: Town of Medway
- c. Eligibility: Same as above
- d. Cost sharing: Employees will pay 50% of premiums in retirement.

EXHIBIT A

Financial Statement Disclosure
(As of July 1, 2015)
(continued)

4. RETIREE MEDICAL AND LIFE INSURANCE CONTRIBUTIONS:

Group	Individual	Family
Medical	50%	50%
Dental	100%	100%
Life	50%	N/A

5. FUNDING POLICY

The contribution requirements of plan members and the Town are established and may be amended through Town ordinances. The Town expects to contribute \$100,000 beyond the pay-as-you-go. For the 2016 fiscal year, total Town premiums plus implicit costs for the retiree medical program are \$963,846. The Town is also projected to make a contribution to an OPEB Trust of \$100,000 for the 2016 fiscal year for a total contribution of \$1,063,846 .

EXHIBIT A

Financial Statement Disclosure

(As of July 1, 2015)

(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	\$3,863,172
Interest on net OPEB Obligation (Asset)	\$738,023
Adjustment to annual required contribution	(\$1,107,726)
Amortization of Actuarial (Gains) / Losses	(\$16,871)
Annual OPEB expense	\$3,476,598
Contributions made to pay benefits	\$963,846
Contributions made to OPEB Trust	\$100,000
Increase (Decrease) in net OPEB Obligation (Asset)	\$2,412,752
Net OPEB Obligation (Asset) – beginning of year	\$21,086,376
Net OPEB Obligation (Asset) – end of year	\$23,499,128

EXHIBIT A

Financial Statement Disclosure

(As of July 1, 2015)

(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 2016 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)
06/30/2018 (est.)	\$3,772,667	\$1,244,888	33.0%	\$2,527,779	\$28,495,152
06/30/2017 (est.)	\$3,622,657	\$1,154,410	31.9%	\$2,468,247	\$25,967,373
06/30/2016	\$3,476,596	\$1,063,846	30.6%	\$2,412,750	\$23,499,126
06/30/2015	\$4,096,263	\$1,072,732	26.2%	\$3,023,531	\$21,086,376
06/30/2014	\$3,940,458	\$975,505	24.8%	\$2,964,953	\$18,062,845
06/30/2013	\$3,251,584	\$910,444	28.0%	\$2,341,140	\$15,097,892

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
07/01/2017 (est.)	\$465,301	\$39,839,885	\$39,374,584	1.2%	\$20,181,725	195.1%
07/01/2016 (est.)	\$351,272	\$38,153,030	\$37,801,758	0.9%	\$19,593,907	192.9%
07/01/2015	\$250,887	\$36,572,225	\$36,321,338	0.7%	\$19,023,211	190.9%
07/01/2014	\$100,588	\$40,863,877	\$40,763,289	0.2%	\$18,739,444	217.5%
07/01/2013	\$50,489	\$38,407,572	\$38,357,083	0.1%	\$18,282,384	209.8%
07/01/2012	\$0	N/A	N/A	N/A	N/A	N/A

EXHIBIT A

Financial Statement Disclosure
(As of July 1, 2015)
(continued)

Fiscal Year Ending June 30, 2016											
	General Government Employees and Retirees		School Non-Teacher Employees	Police Employees and Retirees	Fire Employees and Retirees	School Retirees	Water Enterprise Employees and Retirees	Ambulance Enterprise Employees and Retirees	Sewer Enterprise Employees and Retirees	Solid Waste Enterprise Employees and Retirees	Total
	Teacher Employees	Retirees									
OPEB Obligation (Asset) at beginning of year	2,022,120	6,967,535	2,392,404	1,298,161	251,511	7,535,933	220,122	126,533	104,513	167,544	21,086,376
Annual Required Contribution	288,472	1,698,086	562,772	254,112	80,269	811,657	59,541	53,320	30,694	24,249	3,863,172
Interest on Net OPEB Obligation	70,774	243,864	83,734	45,436	8,803	263,758	7,704	4,428	3,658	5,864	738,023
Adjustment to the ARC	(106,228)	(366,024)	(125,679)	(68,196)	(13,213)	(395,883)	(11,563)	(6,647)	(5,491)	(8,802)	(1,107,726)
Amortization of Actuarial (Gains)/Losses	(1,642)	(5,565)	(1,911)	(1,037)	(201)	(6,020)	(163)	(157)	(90)	(85)	(16,871)
Annual OPEB Cost	251,376	1,570,361	518,916	230,315	75,658	673,512	55,519	50,944	28,771	21,226	3,476,598
Expected Employer Contribution	145,482	94,388	22,905	2,892	8	695,676	1,172	51	10	1,262	963,846
Contribution (Withdrawal) to/from Trust Fund over 30 Years	9,620	33,782	11,601	6,294	1,219	34,478	989	952	549	516	100,000
Total Expected Employer Payments	155,102	128,170	34,506	9,186	1,227	730,154	2,161	1,003	559	1,778	1,063,846
Increase (Decrease) in OPEB Obligation (Asset)	96,274	1,442,191	484,410	221,129	74,431	(56,642)	53,358	49,941	28,212	19,448	2,412,752
OPEB Obligation (Asset) at end of year	2,118,394	8,409,726	2,876,814	1,519,290	325,942	7,479,291	273,480	176,474	132,725	186,992	23,499,128
AAL as of July 1, 2015	3,518,744	12,354,712	4,242,578	2,301,876	445,888	12,609,404	361,672	347,989	200,764	188,598	36,572,225
Plan Assets as of July 1, 2015	24,769	81,721	28,786	15,322	2,788	90,141	2,462	2,230	1,372	1,296	250,887
Unfunded Actuarial Liability as of July 1, 2015	3,493,975	12,272,991	4,213,792	2,286,554	443,100	12,519,263	359,210	345,759	199,392	187,302	36,321,338

Fiscal Year Ending June 30, 2017											
	General Government Employees and Retirees		School Non-Teacher Employees	Police Employees and Retirees	Fire Employees and Retirees	School Retirees	Water Enterprise Employees and Retirees	Ambulance Enterprise Employees and Retirees	Sewer Enterprise Employees and Retirees	Solid Waste Enterprise Employees and Retirees	Total
	Teacher Employees	Retirees									
OPEB Obligation (Asset) at beginning of year	2,118,394	8,409,726	2,876,814	1,519,290	325,942	7,479,291	273,480	176,474	132,725	186,992	23,499,128
Annual Required Contribution	293,072	1,725,168	571,748	258,165	81,549	824,602	60,491	54,170	31,184	24,636	3,924,785
Interest on Net OPEB Obligation	78,871	271,767	93,315	50,635	9,810	293,938	8,586	4,935	4,077	6,535	822,469
Adjustment to the ARC	(118,383)	(407,904)	(140,059)	(75,999)	(14,725)	(441,180)	(12,886)	(7,408)	(6,119)	(9,809)	(1,234,472)
Amortization of Actuarial (Gains)/Losses	8,376	47,304	15,713	7,190	2,203	24,448	1,660	1,387	838	756	109,875
Annual OPEB Cost	261,936	1,636,335	540,717	239,991	78,837	701,808	57,851	53,084	29,980	22,118	3,622,657
Expected Employer Contribution	158,687	105,299	25,842	3,674	112	757,833	1,356	136	58	1,413	1,054,410
Contribution (Withdrawal) to/from Trust Fund over 30 Years	9,620	33,782	11,601	6,294	1,219	34,478	989	952	549	516	100,000
Total Expected Employer Payments	168,307	139,081	37,443	9,968	1,331	792,311	2,345	1,088	607	1,929	1,154,410
Increase (Decrease) in OPEB Obligation (Asset)	93,629	1,497,254	503,274	230,023	77,506	(90,503)	55,506	51,996	29,373	20,189	2,468,247
OPEB Obligation (Asset) at end of year	2,212,023	9,906,980	3,380,088	1,749,313	403,448	7,388,788	328,986	228,470	162,098	207,181	25,967,375
AAL as of July 1, 2016	3,670,839	12,888,734	4,425,960	2,401,373	465,161	13,154,435	377,305	363,031	209,442	196,750	38,153,030
Plan Assets as of July 1, 2016	25,292	118,949	41,596	22,261	4,126	128,372	3,555	3,277	1,978	1,866	351,272
Unfunded Actuarial Liability as of July 1, 2016	3,645,547	12,769,785	4,384,364	2,379,112	461,035	13,026,063	373,750	359,754	207,464	194,884	37,801,758

EXHIBIT AFinancial Statement Disclosure

(As of July 1, 2015)

(continued)

7. FUNDED STATUS AND FUNDING PROGRESS

As of July 1, 2015, the most recent valuation date, the plan was 0.69% funded. The actuarial liability for benefits was \$36,572,225, and the actuarial value of assets was \$250,887, resulting in an unfunded actuarial accrued liability (UAAL) of \$36,321,338. The covered payroll (annual payroll of active employees covered by the plan) was \$ 19,023,211 and the ratio of the UAAL to the covered payroll was 190.9%.

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 \$50,970,456 or by 39.4% and the corresponding Normal Cost would increase to \$2,701,498 or by 62.9%. 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 \$26,124,409 or by 28.6% and the corresponding Normal Cost would decrease to \$925,525 or by 44.2%.

EXHIBIT A

Financial Statement Disclosure

(As of July 1, 2015)

(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: Individual Entry Age Normal
 Investment Rate of Return: 3.50% per annum (previously 4.00%)
 Healthcare Trend Rates

<u>Year</u>	<u>Medical</u>	<u>Dental</u>
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: 2.75% per annum
 Annual Compensation Increases: 3.00% per annum
 Actuarial Value of Assets: Market Value
 Amortization of UAAL: Level dollar amortization over 30 years
 Remaining Amortization Period: 24 years at July 1, 2015

EXHIBIT A

Financial Statement Disclosure

(As of July 1, 2015)

(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

1. Actuarial Accrued Liability at prior valuation date	38,407,572
2. Actuarial Value of Assets at prior valuation date	<u>50,489</u>
3. Unfunded Actuarial Accrued Liability at prior valuation date [1. - 2.]	38,357,083
4. Normal Cost for prior periods	3,813,508
5. Employer Contributions for prior periods	(2,048,237)
6. Interest to current valuation date	<u>3,281,443</u>
7. Expected Unfunded Actuarial Accrued Liability [3. + 4. + 5. + 6.]	43,403,797

Actual Unfunded Actuarial Liability

8. Actuarial Accrued Liability at current valuation date	36,572,225
9. Actuarial Value of Assets at current valuation date	<u>250,887</u>
10. Unfunded Actuarial Accrued Liability at current valuation date [8. - 9.]	36,321,338

Net Actuarial (Gain) / Loss from Plan Experience [10. - 7.] **(7,082,459)**

11. Unfunded Actuarial Accrued Liability at current valuation date [10.]	36,321,338
12. Remaining Initial Unfunded to be amortized	<u>36,642,462</u>
13. Actuarial (Gain) / Loss to be amortized: [11. - 12.]	(321,124)

EXHIBIT A

Financial Statement Disclosure
(As of July 1, 2015)
(continued)

Amortization of Initial Unfunded and Plan Experience under GASB 45						
Date Established	Description	Initial Amount	Initial Amortization Period	Remaining Balance at Valuation Date	Remaining Amortization Period	Annual Amortization Payment
July 1, 2009	GASB 45 Liability	29,616,372	30	36,642,462	24	2,204,666
July 1, 2015	Cumulative (Gain) / Loss	(321,124)	30	(321,124)	30	(16,871)
July 1, 2015	Adjustment to ARC	(21,086,376)	30	(21,086,376)	30	(1,107,724)
Total				15,234,962		1,080,071

11. Recognition of OPEB trust assets

The State of Massachusetts has recently passed legislation allowing municipal entities to establish a trust for Other Postemployment Benefits (“OPEB”) under M.G.L. Chapter 32B, Section 20 for purposes of accumulating assets to pre-fund the liabilities under GASB 45. To the best of our knowledge, Town of Medway has established an irrevocable trust for the purposes of prefunding liabilities under GASB 45.

EXHIBIT AFinancial Statement Disclosure

(As of July 1, 2015)

(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, 2019 (formerly December 31, 2017, but amended by Consolidated Appropriations Act) 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 threshold amounts for 2018 (original legislation) were \$10,200 for single coverage and \$27,500 for family coverage and a "kicker" amount of \$1,650 for single coverage and \$3,450 for family coverage. These threshold and kicker amounts are expected to be updated because of the Consolidated Appropriations Act before the tax takes effect in 2020, but currently the updated amounts have not been released.

The excise tax liability will vary significantly over time as it is highly leveraged with the basic threshold amount increased with general CPI and medical costs increasing with medical trend (generally higher). For purposes of the fiscal year ending June 30, 2016, the AAL for the excise tax is \$899,107 and the increase in annual OPEB Cost is \$146,156. Given your premiums through the 2015 fiscal year and the excise tax threshold, your single premiums are within 78.45% of the excise tax and your family premiums are within 35.08% of the excise tax. As more regulatory guidance becomes available, the calculation of the excise tax liability will evolve.

EXHIBIT AFinancial Statement Disclosure

(As of July 1, 2015)

(continued)

13. Impact of Section 9A 1/2 of M.G.L. Chapter 32B

For employees who retire on or after January 1, 2011 whenever a retired employee or beneficiary receives a healthcare premium contribution from a governmental unit in a case where a portion of the retiree's creditable service is attributable to service in 1 or more other governmental units, the first governmental unit shall be reimbursed in full, in accordance with this paragraph, by the other governmental units for the portion of the premium contributions that corresponds to the percentage of the retiree's creditable service that is attributable to each governmental unit. The other governmental units shall be charged based on their own contribution rate or the contribution rate of the first employer, whichever is lower.

For purposes of the valuation we have not attempted to value the impact of prior governmental service at other entities in the State of Massachusetts for current employees of the Town of Medway nor have we attempted to value the impact of prior Town of Medway employees currently working at other governmental entities in the State of Massachusetts.

EXHIBIT B

Reconciliation of Plan Participation
(As of July 1, 2015)

ACTIVE EMPLOYEES

	<u>July 1, 2015</u>	<u>July 1, 2013</u>
A. Average Age at Hire	36.18	36.80
B. Average Service	11.03	11.10
C. Average Current Age	47.21	47.90

RETIRED EMPLOYEES & DEPENDENTS

	<u>July 1, 2015</u>	<u>July 1, 2013</u>
I. Retirees		
A. Under Age 65	32	28
B. Age 65 & Over	<u>220</u>	<u>124</u>
C. Total Retirees	252	152
II. Dependents of Retirees		
A. Under Age 65	9	11
B. Age 65 & Over	<u>7</u>	<u>54</u>
C. Total Retirees	16	65
III. Retirees & Dependents		
A. Under Age 65	41	39
B. Age 65 & Over	<u>227</u>	<u>178</u>
C. Total Retirees	268	217

EXHIBIT C

Projected Cash Flows (Open Group) - Pay-as-you-go Funding Approach

Total Medical, Dental & Life Insurance - Pay-as-you-go Funding - 3.50% discount rate

Fiscal Year	I. Total Actuarial Accrued Liability ("AAL") as of		III. Unfunded Accrued Actuarial Liability ("UAAAL") [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. Excess Employer Payments (beyond claims)	
	July 1	II. Plan Assets as of July 1																				
2016	36,572,225	250,887	36,321,338	1,658,506	2,204,666	738,023	(1,107,726)	(16,871)	3,476,596	23,499,126	100,000											
2017	38,153,030	351,272	37,801,758	1,720,119	2,204,666	822,469	(1,234,472)	109,875	3,622,657	25,967,373	100,000											
2018	39,839,885	465,301	39,374,584	1,783,740	2,204,666	908,858	(1,364,135)	239,538	3,772,667	28,495,152	100,000											
2019	41,575,195	583,321	40,991,874	1,846,254	2,204,666	997,331	(1,496,927)	372,330	3,923,654	31,106,750	100,000											
2020	43,377,388	705,472	42,671,916	1,912,733	2,204,666	1,088,736	(1,634,120)	509,523	4,081,538	33,815,661	100,000											
2021	45,264,543	831,898	44,432,645	1,983,927	2,204,666	1,183,548	(1,776,428)	651,831	4,247,544	36,609,254	100,000											
2022	47,493,253	962,749	46,530,504	2,078,751	2,204,666	1,281,324	(1,923,182)	798,585	4,440,144	39,510,420	100,000											
2023	49,802,644	1,098,180	48,704,464	2,169,830	2,204,666	1,382,865	(2,075,589)	950,992	4,632,764	42,554,677	100,000											
2024	52,247,775	1,238,351	51,009,424	2,271,380	2,204,666	1,489,414	(2,235,512)	1,110,915	4,840,863	45,701,941	100,000											
2025	54,767,360	1,383,428	53,383,932	2,374,711	2,204,666	1,599,568	(2,400,846)	1,276,249	5,054,348	48,980,372	100,000											
2026	57,368,713	1,533,583	55,835,130	2,477,960	2,204,666	1,714,314	(2,573,071)	1,448,474	5,272,343	52,375,392	100,000											
2027	60,084,667	1,688,993	58,395,674	2,582,239	2,204,666	1,833,139	(2,751,420)	1,626,823	5,495,447	55,861,237	100,000											
2028	62,805,688	1,849,843	60,955,845	2,686,371	2,204,666	1,955,144	(2,934,541)	1,809,944	5,721,584	59,482,646	100,000											
2029	65,639,905	2,016,322	63,623,583	2,810,238	2,204,666	2,081,893	(3,124,784)	2,000,187	5,972,200	63,267,892	100,000											
2030	68,474,234	2,188,628	66,285,606	2,920,309	2,204,666	2,214,376	(3,323,633)	2,199,036	6,214,754	67,166,312	100,000											
2031	71,448,082	2,366,965	69,081,117	3,044,757	2,204,666	2,350,822	(3,528,427)	2,403,830	6,475,648	71,270,954	100,000											
2032	74,664,451	2,551,544	72,112,907	3,177,724	2,204,666	2,494,483	(3,744,054)	2,619,457	6,752,276	75,537,111	100,000											
2033	77,837,996	2,742,583	75,095,413	3,305,088	2,204,666	2,643,799	(3,968,167)	2,843,570	7,028,956	80,007,612	100,000											
2034	81,142,809	2,940,308	78,202,501	3,444,949	2,204,666	2,800,267	(4,203,015)	3,078,418	7,325,285	84,720,241	100,000											
2035	84,769,199	3,144,954	81,624,245	3,598,442	2,204,666	2,965,208	(4,450,582)	3,325,985	7,643,719	89,654,010	100,000											
2036	88,299,031	3,356,762	84,942,269	3,746,583	2,204,666	3,137,891	(4,709,766)	3,585,169	7,964,543	94,839,464	100,000											
2037	92,480,885	3,575,984	88,904,901	3,910,554	2,204,666	3,319,381	(4,982,171)	3,857,574	8,310,004	100,291,231	100,000											
2038	96,804,994	3,802,878	93,002,116	4,076,973	2,204,666	3,510,193	(5,268,568)	4,143,971	8,667,235	105,952,324	100,000											
2039	101,026,435	4,037,714	96,988,721	4,258,647	2,204,666	3,708,331	(5,565,960)	4,441,363	9,047,047	111,851,642	100,000											
2040	105,645,986	4,280,769	101,365,217	4,449,269	0	3,914,808	(5,875,867)	4,751,270	7,239,480	115,769,935	100,000											
2041	110,393,242	4,532,331	105,860,911	4,652,296	0	4,051,948	(6,081,706)	4,957,109	7,579,647	119,824,842	100,000											
2042	115,251,155	4,792,698	110,458,457	4,866,772	0	4,193,869	(6,294,721)	5,170,124	7,936,044	124,053,895	100,000											
2043	120,477,124	5,062,177	115,414,947	5,096,360	0	4,341,887	(6,516,885)	5,392,288	8,313,650	128,457,028	100,000											
2044	125,832,726	5,341,088	120,491,638	5,336,859	0	4,495,996	(6,748,193)	5,623,596	8,708,258	133,144,401	100,000											
2045	131,552,190	5,629,761	125,922,429	5,600,772	0	4,660,054	(6,994,433)	5,869,836	9,136,229	138,050,187	100,000											
2046	137,531,046	5,928,538	131,602,508	5,870,025	0	4,831,756	(7,252,147)	7,252,147	10,701,781	144,400,259	100,000											
2047	143,708,538	6,237,772	137,470,766	6,154,391	0	5,054,009	(7,585,734)	7,585,734	11,208,400	151,121,608	100,000											

EXHIBIT D

Projected Cash Flows (Open Group) - Funded Approach

Total Medical, Dental & Life Insurance - Funding over 30 years at 7.00% discount rate using current funding schedule

Fiscal Year	I. Total Actuarial Accrued Liability ("AAL") as of		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)
	July 1	II. Plan Assets as of July 1																	
2016	22,642,061	250,887	22,391,174		688,298	2,896,461	1,476,047	(1,588,108)	(1,073,327)	2,399,371	21,086,376					22,421,901	963,846	100,000	
2017	23,705,815	FALSE	23,705,815		712,396	2,896,461	1,569,534	(1,688,692)	(972,743)	2,516,956	22,935,847					22,935,847	1,054,410	948,600	
2018	24,798,998	948,600	23,850,398		737,014	2,896,461	1,605,510	(1,727,400)	(934,035)	2,577,550	23,419,909					23,419,909	1,144,888	948,600	
2019	25,911,971	1,963,602	23,948,369		760,882	2,896,461	1,639,394	(1,763,855)	(897,580)	2,635,302	23,894,555					23,894,555	1,212,056	948,600	
2020	27,065,871	3,049,654	24,016,217		785,932	2,896,461	1,672,620	(1,799,604)	(861,831)	2,693,578	24,366,906					24,366,906	1,272,627	948,600	
2021	28,275,171	4,211,730	24,063,441		813,166	2,896,461	1,705,683	(1,835,179)	(826,256)	2,753,875	24,818,230					24,818,230	1,353,951	948,600	
2022	29,671,256	5,455,151	24,216,105		849,513	2,896,461	1,737,277	(1,869,170)	(792,265)	2,821,816	25,252,468					25,252,468	1,438,978	948,600	
2023	31,108,626	6,785,612	24,323,014		883,431	2,896,461	1,767,673	(1,901,875)	(759,560)	2,886,130	25,701,491					25,701,491	1,488,507	948,600	
2024	32,637,259	8,209,205	24,428,054		921,919	2,896,461	1,799,104	(1,935,692)	(725,743)	2,956,049	26,115,340					26,115,340	1,593,600	948,600	
2025	34,197,189	9,732,449	24,464,740		961,098	2,896,461	1,828,073	(1,966,861)	(694,574)	3,024,197	26,515,019					26,515,019	1,675,918	948,600	
2026	35,802,946	11,362,320	24,440,626		999,405	2,896,461	1,856,051	(1,996,962)	(664,473)	3,090,482	26,879,578					26,879,578	1,777,323	948,600	
2027	37,467,581	13,106,282	24,361,299		1,037,496	2,896,461	1,881,570	(2,024,420)	(637,015)	3,154,092	27,175,469					27,175,469	1,909,601	948,600	
2028	39,110,935	14,972,322	24,138,613		1,074,840	2,896,461	1,902,282	(2,046,704)	(614,731)	3,212,148	27,438,842					27,438,842	2,000,175	948,600	
2029	40,811,966	16,968,985	23,842,981		1,120,483	2,896,461	1,920,720	(2,066,540)	(594,895)	3,276,229	27,679,518					27,679,518	2,086,953	948,600	
2030	42,496,250	19,105,414	23,390,836		1,160,004	2,896,461	1,937,567	(2,084,667)	(576,768)	3,332,597	27,847,181					27,847,181	2,216,334	948,600	
2031	44,247,955	21,391,393	22,856,562		1,205,229	2,896,461	1,949,303	(2,097,294)	(564,141)	3,389,558	28,017,133					28,017,133	2,271,006	948,600	
2032	46,154,091	23,837,391	22,316,700		1,254,319	2,896,461	1,961,199	(2,110,093)	(551,342)	3,450,544	28,132,958					28,132,958	2,386,119	948,600	
2033	48,009,967	26,454,608	21,555,359		1,300,692	2,896,461	1,969,307	(2,118,817)	(542,618)	3,505,025	28,230,928					28,230,928	2,458,455	948,600	
2034	49,959,089	29,255,031	20,704,058		1,352,222	2,896,461	1,976,165	(2,126,196)	(535,239)	3,563,413	28,333,085					28,333,085	2,512,656	948,600	
2035	52,105,763	32,251,483	19,854,280		1,409,328	2,896,461	1,983,316	(2,133,889)	(527,546)	3,627,670	28,402,206					28,402,206	2,609,949	948,600	
2036	54,183,618	35,457,687	18,725,931		1,464,012	2,896,461	1,988,155	(2,139,095)	(522,340)	3,687,193	28,461,709					28,461,709	2,679,090	948,600	
2037	56,668,146	38,888,325	17,779,821		1,525,281	2,896,461	1,992,320	(2,143,577)	(517,858)	3,752,627	28,507,499					28,507,499	2,758,237	948,600	
2038	59,251,010	42,559,108	16,691,902		1,587,242	2,896,461	1,995,525	(2,147,025)	(514,410)	3,817,793	28,470,549					28,470,549	2,906,143	948,600	
2039	61,765,918	46,486,846	15,279,072		1,655,182	2,896,461	1,992,938	(2,144,242)	(517,193)	3,883,146	28,357,367					28,357,367	3,047,728	948,600	
2040	64,507,361	50,689,525	13,817,836		1,726,638	0	1,985,015	(2,135,718)	(525,717)	1,050,218	25,237,798					25,237,798	3,221,187	948,600	
2041	67,311,897	55,186,392	12,125,505		1,803,011	0	1,766,646	(1,900,769)	(759,580)	909,308	21,773,766					21,773,766	3,424,740	948,600	
2042	70,140,747	59,998,039	10,142,708		1,883,648	0	1,524,163	(1,639,878)	(1,018,460)	749,473	17,967,648					17,967,648	3,606,991	948,600	
2043	73,152,823	65,146,502	8,006,321		1,970,229	0	1,257,736	(1,353,223)	(1,303,135)	571,607	13,780,137					13,780,137	3,810,518	948,600	
2044	76,208,383	70,655,357	5,553,026		2,060,983	0	964,610	(1,037,843)	(1,616,566)	371,184	9,281,836					9,281,836	3,920,885	948,600	
2045	79,477,678	76,549,832	2,927,846		2,160,974	0	649,728	(699,056)	(1,953,437)	158,209	4,361,003					4,361,003	4,130,442	948,600	
2046	82,849,258	82,856,920	(7,662)		2,262,781	0	305,271	(328,446)	339,270	2,578,876	2,695,832					2,695,832	4,251,709	(7,662)	
2047	86,352,390	88,649,242	(2,296,852)		2,370,462	0	188,708	(203,036)	214,467	2,570,601	3,176,234					3,176,234	4,387,051	(2,296,852)	

EXHIBIT D

Projected Cash Flows (Open Group) - Funded Approach

Total Medical, Dental & Life Insurance - Funding over 30 years at 7.00% discount rate using current funding schedule

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)
2016	22,642,061	250,887	22,391,174	688,298	2,896,461	1,476,047	(1,588,108)	(1,073,327)	2,399,371	21,086,376	22,421,901	963,846	100,000
2017	23,705,815	FALSE	23,705,815	712,396	2,896,461	1,569,534	(1,688,692)	(972,743)	2,516,956	23,148,747	1,054,410	735,700	
2018	24,798,998	735,700	24,063,298	737,014	2,896,461	1,605,510	(1,727,400)	(934,035)	2,577,550	23,827,316	1,144,888	754,093	
2019	25,911,971	1,541,292	24,370,679	760,882	2,896,461	1,639,394	(1,763,855)	(897,580)	2,635,302	24,477,617	1,212,056	772,945	
2020	27,065,871	2,422,127	24,643,744	785,932	2,896,461	1,672,620	(1,799,604)	(861,831)	2,693,578	25,106,299	1,272,627	792,269	
2021	28,275,171	3,383,945	24,891,226	813,166	2,896,461	1,705,683	(1,835,179)	(826,256)	2,753,875	25,694,147	1,353,951	812,076	
2022	29,671,256	4,432,897	25,238,359	849,513	2,896,461	1,737,277	(1,869,170)	(792,265)	2,821,816	26,244,607	1,438,978	832,378	
2023	31,108,626	5,575,578	25,533,048	883,431	2,896,461	1,767,673	(1,901,875)	(759,560)	2,886,130	26,789,043	1,488,507	853,187	
2024	32,637,259	6,819,055	25,818,204	921,919	2,896,461	1,799,104	(1,935,692)	(725,743)	2,956,049	27,276,975	1,593,600	874,517	
2025	34,197,189	8,170,906	26,026,283	961,098	2,896,461	1,828,073	(1,966,861)	(694,574)	3,024,197	27,728,874	1,675,918	896,380	
2026	35,802,946	9,639,249	26,163,697	999,405	2,896,461	1,856,051	(1,996,962)	(664,473)	3,090,482	28,123,243	1,777,323	918,790	
2027	37,467,581	11,232,786	26,234,795	1,037,496	2,896,461	1,881,570	(2,024,420)	(637,015)	3,154,092	28,425,974	1,909,601	941,760	
2028	39,110,935	12,960,841	26,150,094	1,074,840	2,896,461	1,902,282	(2,046,704)	(614,731)	3,212,148	28,672,643	2,000,175	965,304	
2029	40,811,966	14,833,404	25,978,562	1,120,483	2,896,461	1,920,720	(2,066,540)	(594,895)	3,276,229	28,872,482	2,086,953	989,437	
2030	42,496,250	16,861,179	25,635,071	1,160,004	2,896,461	1,937,567	(2,084,667)	(576,768)	3,332,597	28,974,572	2,216,334	1,014,173	
2031	44,247,955	19,055,635	25,192,320	1,205,229	2,896,461	1,949,303	(2,097,294)	(564,141)	3,389,558	29,053,597	2,271,006	1,039,527	
2032	46,154,091	21,429,056	24,725,035	1,254,319	2,896,461	1,961,199	(2,110,093)	(551,342)	3,450,544	29,052,507	2,386,119	1,065,515	
2033	48,009,967	23,994,605	24,015,362	1,300,692	2,896,461	1,969,307	(2,118,817)	(542,618)	3,505,025	29,006,924	2,458,455	1,092,153	
2034	49,959,089	26,766,380	23,192,709	1,352,222	2,896,461	1,976,165	(2,126,196)	(535,239)	3,563,413	28,938,224	2,512,656	1,119,457	
2035	52,105,763	29,759,484	22,346,279	1,409,328	2,896,461	1,983,316	(2,133,889)	(527,546)	3,627,670	28,808,502	2,609,949	1,147,443	
2036	54,183,618	32,990,091	21,193,527	1,464,012	2,896,461	1,988,155	(2,139,095)	(522,340)	3,687,193	28,640,476	2,679,090	1,176,129	
2037	56,668,146	36,475,526	20,192,620	1,525,281	2,896,461	1,992,320	(2,143,577)	(517,858)	3,752,627	28,429,334	2,758,237	1,205,532	
2038	59,251,010	40,234,345	19,016,665	1,587,242	2,896,461	1,995,525	(2,147,025)	(514,410)	3,817,793	28,105,314	2,906,143	1,235,670	
2039	61,765,918	44,286,419	17,479,499	1,655,182	2,896,461	1,992,938	(2,144,242)	(517,193)	3,883,146	27,674,170	3,047,728	1,266,562	
2040	64,507,361	48,653,030	15,854,331	1,726,638	0	1,985,015	(2,135,718)	(525,717)	1,050,218	24,204,975	3,221,187	1,298,226	
2041	67,311,897	53,356,968	13,954,929	1,803,011	0	1,766,646	(1,900,769)	(759,580)	909,308	20,358,861	3,424,740	1,330,682	
2042	70,140,747	58,422,638	11,718,109	1,883,648	0	1,524,163	(1,639,878)	(1,018,460)	749,473	16,137,394	3,606,991	1,363,949	
2043	73,152,823	63,876,172	9,276,651	1,970,229	0	1,257,736	(1,353,223)	(1,303,135)	571,607	11,500,435	3,810,518	1,398,048	
2044	76,208,383	69,745,552	6,462,831	2,060,983	0	964,610	(1,037,843)	(1,616,566)	371,184	6,517,735	3,920,885	1,432,999	
2045	79,477,678	76,060,740	3,416,938	2,160,974	0	649,728	(699,056)	(1,953,437)	158,209	1,076,678	4,130,442	1,468,824	
2046	82,849,258	82,853,816	(4,558)	2,262,781	0	305,271	(328,446)	339,270	2,578,876	(591,597)	4,251,709	(4,558)	

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	VII. Present	VIII. Present Value at 3.50% of Total Funding Costs + VII.]	IX. Plan Assets at Beginning of year	X. Unfunded Accrued Actuarial Liability ("UAAL") - IX.]	XI. Present Value at 3.50% of Unfunded Accrued Actuarial Liability ("UAAL")
						Value at 3.50% of Employer Share of Premiums / Claims including "implicit cost"	Value at 3.50% of Funding beyond claims			Value at 3.50% of Total Funding Costs + VII.]	Value at 3.50% of Unfunded Accrued Actuarial Liability ("UAAL") - IX.]
2016	36,572,225	1,658,506	963,846	694,660	1,658,506	963,846	694,660	1,658,506	250,887	36,321,338	36,321,338
2017	38,153,030	1,720,119	1,054,410	665,709	1,720,119	1,018,754	643,197	1,661,951	954,328	37,198,702	35,940,775
2018	39,839,885	1,783,740	1,144,888	638,852	1,783,740	1,068,765	596,375	1,665,140	1,653,438	38,186,447	35,647,457
2019	41,575,195	1,846,254	1,212,056	634,198	1,846,254	1,093,205	572,010	1,665,215	2,350,160	39,225,035	35,378,734
2020	43,377,388	1,912,733	1,272,627	640,106	1,912,733	1,109,021	557,815	1,666,836	3,066,614	40,310,774	35,128,511
2021	45,264,543	1,983,927	1,353,951	629,976	1,983,927	1,139,990	530,423	1,670,413	3,814,051	41,450,492	34,900,202
2022	47,493,253	2,078,751	1,438,978	639,773	2,078,751	1,170,610	520,456	1,691,066	4,577,519	42,915,734	34,911,977
2023	49,802,644	2,169,830	1,488,507	681,323	2,169,830	1,169,953	535,514	1,705,467	5,377,505	44,425,139	34,917,758
2024	52,247,775	2,271,380	1,593,600	677,780	2,271,380	1,210,198	514,714	1,724,912	6,247,041	46,000,734	34,933,489
2025	54,767,360	2,374,711	1,675,918	698,793	2,374,711	1,229,673	512,726	1,742,399	7,143,467	47,623,893	34,943,125
2026	57,368,713	2,477,960	1,777,323	700,637	2,477,960	1,259,978	496,695	1,756,673	8,092,281	49,276,432	34,932,990
2027	60,084,667	2,582,239	1,909,601	672,638	2,582,239	1,307,973	460,721	1,768,694	9,076,148	51,008,519	34,938,066
2028	62,805,688	2,686,371	2,000,175	686,196	2,686,371	1,323,682	454,113	1,777,795	10,066,451	52,739,237	34,901,946
2029	65,639,905	2,810,238	2,086,953	723,285	2,810,238	1,334,406	462,471	1,796,877	11,104,973	54,534,932	34,869,862
2030	68,474,234	2,920,309	2,216,334	703,975	2,920,309	1,369,211	434,903	1,804,114	12,216,932	56,257,302	34,754,737
2031	71,448,082	3,044,757	2,271,006	773,751	3,044,757	1,355,542	461,845	1,817,387	13,348,500	58,099,582	34,679,095
2032	74,664,451	3,177,724	2,386,119	791,605	3,177,724	1,376,089	456,523	1,832,612	14,589,449	60,075,002	34,645,609
2033	77,837,996	3,305,088	2,458,455	846,633	3,305,088	1,369,860	471,747	1,841,607	15,891,685	61,946,311	34,516,719
2034	81,142,809	3,444,949	2,512,656	932,293	3,444,949	1,352,716	501,910	1,854,626	17,294,527	63,848,282	34,373,434
2035	84,769,199	3,598,442	2,609,949	988,493	3,598,442	1,357,580	514,170	1,871,750	18,832,128	65,937,071	34,297,543
2036	88,299,031	3,746,583	2,679,090	1,067,493	3,746,583	1,346,419	536,486	1,882,905	20,479,745	67,819,286	34,083,659
2037	92,480,885	3,910,554	2,758,237	1,152,317	3,910,554	1,339,320	559,532	1,898,852	22,264,029	70,216,856	34,095,262
2038	96,804,994	4,076,973	2,906,143	1,170,830	4,076,973	1,363,419	549,296	1,912,715	24,195,587	72,609,407	34,064,749
2039	101,026,435	4,258,647	3,047,728	1,210,919	4,258,647	1,381,491	548,892	1,930,383	26,213,263	74,813,172	33,911,736
2040	105,645,986	4,449,269	3,221,187	1,228,082	4,449,269	1,410,742	537,847	1,948,589	28,341,646	77,304,340	33,855,987
2041	110,393,242	4,652,296	3,424,740	1,227,556	4,652,296	1,449,168	519,437	1,968,605	30,561,686	79,831,556	33,780,483
2042	115,251,155	4,866,772	3,606,991	1,259,781	4,866,772	1,474,674	515,046	1,989,720	32,858,901	82,392,254	33,685,057
2043	120,477,124	5,096,360	3,810,518	1,285,842	5,096,360	1,505,201	507,923	2,013,124	35,268,744	85,208,380	33,658,353
2044	125,832,726	5,336,859	3,920,885	1,415,974	5,336,859	1,496,423	540,413	2,036,836	37,788,992	88,043,734	33,602,273
2045	131,552,190	5,600,772	4,130,442	1,470,330	5,600,772	1,523,093	542,181	2,065,274	40,527,581	91,024,609	33,565,157
2046	137,531,046	5,870,025	4,251,709	1,618,316	5,870,025	1,514,792	576,571	2,091,363	43,416,376	94,114,670	33,531,025

EXHIBIT D

Projected Cash Flows (Open Group) – Funded Approach

Total Medical, Dental & Life Insurance - Pay-as-you-go Funding

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"
2016	268	36,572,225	36,572,225	963,846	963,846
2017	286	38,153,030	36,862,831	1,054,410	1,018,754
2018	300	39,839,885	37,190,959	1,144,888	1,068,765
2019	310	41,575,195	37,498,444	1,212,056	1,093,205
2020	320	43,377,388	37,800,888	1,272,627	1,109,021
2021	328	45,264,543	38,111,531	1,353,951	1,139,990
2022	334	47,493,253	38,635,792	1,438,978	1,170,610
2023	339	49,802,644	39,144,428	1,488,507	1,169,953
2024	342	52,247,775	39,677,564	1,593,600	1,210,198
2025	345	54,767,360	40,184,508	1,675,918	1,229,673
2026	347	57,368,713	40,669,760	1,777,323	1,259,978
2027	349	60,084,667	41,154,735	1,909,601	1,307,973
2028	350	62,805,688	41,563,755	2,000,175	1,323,682
2029	351	65,639,905	41,970,428	2,086,953	1,334,406
2030	351	68,474,234	42,302,135	2,216,334	1,369,211
2031	350	71,448,082	42,646,690	2,271,006	1,355,542
2032	349	74,664,451	43,059,430	2,386,119	1,376,089
2033	346	77,837,996	43,371,626	2,458,455	1,369,860
2034	342	81,142,809	43,684,135	2,512,656	1,352,716
2035	339	84,769,199	44,093,181	2,609,949	1,357,580
2036	335	88,299,031	44,376,081	2,679,090	1,346,419
2037	331	92,480,885	44,906,027	2,758,237	1,339,320
2038	327	96,804,994	45,416,124	2,906,143	1,363,419
2039	324	101,026,435	45,793,832	3,047,728	1,381,491
2040	322	105,645,986	46,268,413	3,221,187	1,410,742
2041	319	110,393,242	46,712,568	3,424,740	1,449,168
2042	316	115,251,155	47,119,014	3,606,991	1,474,674
2043	315	120,477,124	47,589,939	3,810,518	1,505,201
2044	313	125,832,726	48,024,606	3,920,885	1,496,423
2045	312	131,552,190	48,509,627	4,130,442	1,523,093
2046	311	137,531,046	48,999,342	4,251,709	1,514,792
2047	310	143,708,538	49,468,840	4,387,051	1,510,156
2048	309	150,485,302	50,049,863	4,544,669	1,511,510
2049	308	157,357,925	50,565,823	4,671,630	1,501,194
2050	309	164,987,283	51,224,600	4,831,070	1,499,932
2051	309	173,090,884	51,923,260	5,005,101	1,501,414
2052	309	181,308,278	52,549,071	5,111,832	1,481,576
2053	309	190,272,910	53,282,429	5,258,278	1,472,484
2054	309	199,634,977	54,013,627	5,363,184	1,451,073
2055	308	209,807,096	54,846,198	5,550,596	1,450,995

EXHIBIT E**GLOSSARY**

AAI – 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.”

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 been 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.