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October 10, 2013

Jacky DiPietro Town of Glocester, RI 1145 Putnam Pike, P. O. Box B Chepachet, RI 02814

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

Dear Jacky,

Enclosed are two copies of the report covering the July 1, 2012 valuation of postretirement benefits offered to current and future retirees of the Town of Glocester, RI.

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

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

Please call me if you have any questions.

Sincerely,

**USI CONSULTING GROUP** 

Robert W. Webb, FSA, EA, MAAA

Vice President and Actuary

Enclosures



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

For:

### **Town of Glocester, RI**

Prepared by: The USI Consulting Group

October 10, 2013



October 10, 2013

Town of Glocester, RI 1145 Putnam Pike, P.O. Box B Chepachet, RI 02814

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

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

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

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

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

Respectfully submitted,

**USI Consulting Group** 

Robert W. Webb, FSA, EA, MAAA

obertwww.

Vice President and Actuary

Denise Reed

**Actuarial Consultant** 

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### Section I

### **Executive Summary**

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

### **EXECUTIVE SUMMARY**

### Introduction

This report details the development of the Annual OPEB Cost for the Fiscal Year ending June 30, 2013. Estimated June 30, 2013 and June 30, 2014 disclosures are included in Section III.

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

### **Summary of Results**

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

Fiscal Year Ending June 30, 2013	
Beginning of Year Net OPEB Obligation (NOO)	\$120,439
Actuarial Accrued Liability (AAL)	\$2,104,978
Actuarial Value of Assets	\$0
Unfunded Actuarial Accrued Liability (UAAL)	\$2,104,978
Annual Required Contribution (30 year amortization)	\$193,828
Annual OPEB Cost	\$192,667
Expected Benefit Payments	\$171,820
Fiscal Year Ending June 30, 2014	
Beginning of Year Net OPEB Obligation (NOO)	\$141,286
Actuarial Accrued Liability (AAL)	\$2,106,719
Actuarial Value of Assets	\$0
Unfunded Actuarial Accrued Liability (UAAL)	\$2,106,719
Annual Required Contribution (30 year amortization)	\$199,386
Annual OPEB Cost	\$197,790
Expected Benefit Payments	\$187,444

### **Economic Assumptions**

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

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

<sup>\*</sup> Reflects current funding policy (assumes no funding).

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

### Changes included in current valuation

The trend rates were reset to 9.0% in 2012 grading down 1.0% per annum to an ultimate trend rate of 5.0% in 2016. The plan's favorable health care cost experience over the past two years resulted in a gain, and was partially offset by the assumption changes. More detail is provided in Appendix II.

### **Accounting for Postretirement Benefits**

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

### **Actuarial Certification**

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

The valuation is based on the July 1, 2012 census data and plan information as provided by the employer. We have reviewed both the census and financial data for reasonableness, but have not completed an independent audit of the information. Actuarial adjustments were made to the data to produce appropriate results for the valuation.

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

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

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

Robert W. Webb, FSA, EA, MAAA

Vice President and Actuary

Adeniyi Olaiya ASA, MAAA

Associate Vice President and Actuary

### **Section II**

### **Census Information**

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

### CENSUS INFORMATION – A.

### **EMPLOYEE COUNTS**

		As of	July 1, 20	012		As of Se	ptember 1,	2011
		Actives	Retirees	Total	-	Actives	Retirees	Total
Clerks	Male	0	0	0		0	0	0
	Female	<u>8</u> 8	$\frac{1}{1}$	<u>9</u> 9		<u>9</u> 9	1	<u>10</u>
	Total	8	1	9		9	$\frac{1}{1}$	10
Police	Male	12	5	17		12	5	17
	Female	1		1		1		<u>1</u>
	Total	13	<u>0</u> 5	18		13	<u>0</u> 5	18
Town	Male	14	1	15		16	2	18
Non-Contract	Female	<u>4</u>	0	<u>4</u>				
	Total	18	<u>0</u> 1	19		<u>5</u> 21	$\frac{0}{2}$	<u>5</u> 23
Educational	Male	4	1	5		3	0	3
Support	Female	<u>48</u>	<u>10</u>	58		20	4	<u>24</u>
	Total	52	11	<u>58</u> 63		$\frac{20}{23}$	$\frac{4}{4}$	27
Teachers	Male	2	0	2		4	3	7
	Female	<u>19</u>	I	20		<u>48</u>	10	
	Total	21	<u>1</u> 1	20 22		52	13	<u>58</u> 65
Total	Male	32	7	39		35	10	45
	Female	80	12	<u>92</u>		83	<u>15</u>	98
	Total	112	19	131		118	25	143

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

### **ACTIVE EMPLOYEES:**

,	Currently Eligible	Not Currently Eligible	
Age	to Retire	to Retire	Total
29 and under	0	4	4
30 - 34	0	9	9
35 - 39	0	7	7
40 - 44	1	14	15
45 - 49	2	14	16
50 - 54	2	30	32
55 - 59	1	16	17
60 - 64	6	6	12
65 and over	0	0	0
Total	12	100	112

### **CENSUS INFORMATION - B.**

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

Age	Retirees	Spouse	Total
54 and under	3	0	3
55 - 59	4	0	4
60 - 64	12	0	12
65 - 69	0	0	0
70 - 74	0	0	0
75 - 79	0	0	0
80 and over	0	0	0
Total	19	0	19

### AVERAGE AGE AND SERVICE

	As of July 1, 2012	As of September 1, 2011
ACTIVE EMPLOYEES:		
A. Average Age at Hire		
Males	30.7	31.4
Females	34.7	35.3
Total	33.5	34.1
B. Average Service		
Males	13.4	13.4
Females	15.5	14.5
Total	14.9	14.2
C. Average Current Age		
Males	44.1	44.8
Females	50.2	49.8
Total	48.4	48.3
CURRENT RETIREES		
D. Average Current Age		
Males	55.9	57.6
Females	62.0	61.7
Total	59.7	60.0

### **Section III**

### Financial Statement Disclosure

This section provides the required information and notes to the Financial Statements for the fiscal year ending June 30, 2013 and June 30, 2014.

# EXECUTIVE SUMMARY DETAIL GASB 45 LIABILITIES, ANNUAL REQUIRED CONTRIBUTION AND ANNUAL OPEB COST JULY 1, 2012 BY EMPLOYEE GROUP

Page 4		-			g Group	USI Consulting Group	1308 84 05 00 600.	October 13
	\$164,227 <u>\$7,593</u> \$171,820	\$9,628 \$0 \$9,628	\$96,202 \$6,727 \$102,929	016'6\$ 0\$ 616'6\$	\$39,012 \$866 \$39,878	\$9,466 <u>\$0</u> \$9,466	Expected Benefit Payments  A. Retirecs/Disableds  B. Active Employees  C. Total	×
	\$192,667	\$19,262	\$80,043	\$9,762	\$79,462	\$4,138	Annual OPEB Cost (Expense) [V.D. + VII. + VIII.]	IX.
	(\$5,979)	\$451	\$3,268	(\$227)	(\$9,740)	\$269	Adjustment to ARC	MII.
	\$4,818	(\$363)	(\$2,633)	\$183	\$7,848	(\$217)	Interest on net OPEB Obligation	VII.
	\$120,439	(\$9,080)	(\$65,836)	\$4,580	\$196,197	(\$5,422)	Net OPEB Obligation	И.
	\$89,198 \$100,480 <u>\$4,150</u> \$193,828	\$11,221 \$7,401 \$ <u>\$552</u> & \$19,174	\$36,407 \$41,926 \$1,075 \$79,408	\$5,075 \$4,545 <u>\$186</u> A \$9,806	\$34,529 \$44,463 <u>\$2,362</u> 유 \$81,354	\$1,966 \$2,145 ( <u>\$25)</u> A \$4,086	<ul> <li>Annual Required Contribution (ARC)</li> <li>A. Normal Cost</li> <li>B. Supplemental Cost</li> <li>C. Compound Interest to Year End</li> <li>D. Annual Required Contribution</li> <li>[A. + B. + C.]</li> </ul>	
	\$2,104,978	\$150,381	\$873,386	\$93,691	\$942,527	\$44,993	Unfunded Actuarial Accrued Liability (UAAL)	IV.
	\$0	\$0	\$0	\$0	\$0	\$0	Actuarial Assets	III.
	\$979,068 <u>\$1,125,910</u> \$2,104,978	\$19,473 <u>\$130,908</u> \$150,381	\$324,980 <u>\$548,406</u> \$873,386	\$30,858 <u>\$62,833</u> \$93,691	\$584,605 <u>\$357,922</u> \$942,527	\$19,152 <u>\$25,841</u> \$44,993	Actuarial Accrued Liability  A. Retirees/Disableds  B. Active Employees  C. Total	11.
	\$979,068 <u>\$2,538,125</u> \$3,517,193	\$19,473 <u>\$294,193</u> \$313,666	\$324,980 <u>\$1,094,993</u> \$1,419,973	\$30,858 <u>\$162,553</u> \$193,411	\$584,605 \$941,230 \$1,525,835	\$19,152 <u>\$45,156</u> \$64,308		
	<u>Total</u>	School Non- Certified	<u>School</u> Cartified	Town Non- Contract	Police	Clerks	Present value of Future benefits	<del>.</del>

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Page 4

# EXECUTIVE SUMMARY DETAIL GASB 45 LIABILITIES, ANNUAL REQUIRED CONTRIBUTION AND ANNUAL OPEB COST JULY 1, 2013 BY EMPLOYEE GROUP

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Expected Benefit Payments  A. Retirees/Disableds  B. Active Employees  C. Total	Annual OPEB Cost (Expense) [V.D. + VII. + VIII.]	Adjustment to ARC	Interest on net OPEB Obligation	Net OPEB Obligation	<ul> <li>Annual Required Contribution (ARC)</li> <li>A. Normal Cost</li> <li>B. Supplemental Cost</li> <li>C. Compound Interest to Year End</li> <li>D. Annual Required Contribution</li> <li>[A. + B. + C.]</li> </ul>	Unfunded Actuarial Accrued Liability (UAAL)	Actuarial Assets	Actuarial Accrued Liability A. Retirees/Disableds B. Active Employees C. Total	A. Retirees/Disableds  B. Active Employees  C. Total	Proposition of France Lands
\$10,468 <u>\$1,986</u> \$12,454	\$4,026	\$551	(\$430)	(\$10,750)	\$2,015 \$1,979 (\$89) \$3,905	\$39,184	\$0	\$10,265 <u>\$28,919</u> • \$39,184	\$10,265 <u>\$48.206</u> \$58,471	Clerks
\$43,837 <u>\$2,041</u> \$45,878	\$82,388	(\$12,093)	\$9,431	\$235,781	\$35,392 \$47,269 \$ <u>2.389</u> \$85,050	\$975,470	\$0	\$601,185 <u>\$374,285</u> \$975,470	\$601,185 \$1,102.083 \$1,703,268	Police
\$10,936 <u>\$0</u> \$10,936	\$9,982	(\$227)	\$177	\$4,423	\$5,202 \$4,654 <u>\$176</u> \$10,032	\$92,601	\$0	\$21,977 <u>\$70,624</u> \$92,601	\$21,977 <u>\$169,055</u> \$191,032	Town Non- Contract
\$97,206 <u>\$9,469</u> \$106,675	\$81,373	\$4,550	(\$3,549)	(\$88,722)	\$37,317 \$42,015 \$1.040 \$80,372	\$841,217	\$0	\$266,483 \$574.734 \$841,217	\$266,483 \$1,105,324 \$1,371,807	<u>School</u> Certified
\$10,639 <u>\$862</u> \$11,501	\$20,021	(\$28)	\$22	\$554	\$11,502 \$7,976 <u>\$549</u> \$20,027	\$158,247	\$0	\$10,432 <u>\$147.815</u> \$158,247	\$10,432 <u>\$305,959</u> \$316,391	School Non- Certified
\$173,086 <u>\$14.358</u> \$187,444	\$197,790	(\$7,247)	\$5,651	\$141,286	\$91,428 \$103,893 <u>\$4,065</u> \$199,386	\$2,106,719	\$0	\$910,342 <u>\$1.196,377</u> \$2,106,719	\$910,342 \$2,730.627 \$3,640,969	<u>Total</u>

### FINANCIAL STATEMENT DISCLOSURE

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

### 1.) A BRIEF DESCRIPTION OF THE RETIREE MEDICAL AND LIFE INSURANCE PLANS:

a. Plan Types:

Clerks:

Medical: HealthMate

Police:

Medical: HealthMate

Dental: Rhode Island Delta Dental

Town Non-Contract: Medical: HealthMate

**Teachers:** 

Medical: Blue Cross/Blue Shield Classic or HealthMate

**Educational Support:** 

Medical: Blue Cross/ Blue Shield or HealthMate

Dental: Rhode Island Delta Dental

b. Eligibility:

<u>Clerks:</u> 10 years of service and age 62. Benefits cease at age 65 or when retiree is Medicare eligible, whichever occurs first.
Employees hired after 12/15/2011 are ineligible.

<u>Police:</u> Members hired before 1/1/2001 must have at least 20 years of service. Members that are hired on or after 1/1/2001 must have at least 25 years of service. Benefits cease at age 65 or when the retiree is Medicare eligible, whichever occurs first. If the spouse becomes eligible for Medicare or reaches age 65 before the retiree, the retiree shall continue to be eligible for coverage.

<u>Town Non-Contract</u>: 10 years of service and age 62. Benefits cease at age 65 or when retiree is Medicare eligible, whichever occurs first. Employees hired after 7/1/2009 are ineligible.

<u>Teachers:</u> If vested prior to 7/2/2005, 28 years of service or at age 60 with 10 years of contributing service. If vested after 7/1/2005, age 59 with 29 years of service or age 62 with 10 years of service.

Retire prior to 7/1/2012: Benefits cease at age 65 or when retiree is Medicare eligible, whichever occurs first.

Retire on or after 7/1/2012: Benefits cease after 6 years or until retiree is Medicare eligible, whichever occurs first.

Employees hired after 7/1/2010 are ineligible.

Educational Support: 10 years of service and age 60. Benefits cease at age 65 or when retiree is Medicare eligible, whichever occurs first. Employees hired after 1/1/2009 are ineligible.

### FINANCIAL STATEMENT DISCLOSURE (cont.)

c. Benefit/Cost Sharing:

<u>Clerks:</u> The Town pays 100% of the premium cost of the individual health care coverage until eligible for Medicare.

<u>Police:</u> The Town pays 100% of the premium cost of the individual health care coverage until eligible for Medicare.

<u>Town Non-Contract:</u> The Town pays 100% of the premium cost of the individual health care coverage until eligible for Medicare.

### **Teachers:**

- a) Individuals who retired before 7/1/2006 do not contribute.
- b) Individuals who retired after 6/30/2006, but on or before 6/30/2010, pay \$600 annually for single coverage.
- c) Individuals who retired after 6/30/2010, but on or before 6/30/2011, pay 20% of the cost of a single plan up to a maximum of \$1,296 for each year of coverage
- d) Individuals who retire after 6/30/2011, but on or before 6/30/2012, pay 20% of the cost of a single plan up to a maximum of \$1,400 for each year of coverage
- e) Individuals who retire on or after 7/1/2012 pay the same co-payment of medical insurance premiums as then current employees for each year of coverage up to a maximum of six years.

Educational Support: Retired as of 1/1/2009: The Town pays 100% of the premium cost of the individual health care coverage until eligible for Medicare. Retired after 1/1/2009: the employee contributes the same amount as they were contributing during their final year of service until Medicare eligible.

d. Spouse Benefit:

No.

e. Surviving Spouse Benefit:

: No.

f. Annual Premiums:

Medical:	## 273 2 <b>3</b>
Clerks:	\$7,372.32
Police:	\$7,489.44
Town Non-Contract:	\$7,372.32
Teachers:	
Classic	\$7,793.04
HealthMate	\$6,480.60
Educational Support:	
Classic	\$7,793.04
HealthMate	\$6,480.60
Dental:	
Police:	\$417.72
Educational Support:	\$445.80

### FINANCIAL STATEMENT DISCLOSURE (cont.)

### GASB 45 DISCLOSURE REQUIREMENTS 2.)

2.) GASB 45 DISCLOSURE REQUIREMENT	7/1/2012 -	7/1/2013 -
A. Annual OPEB Cost and Net OPEB Obligation	6/30/2013	6/30/2014
<ol> <li>Annual Required Contribution (ARC)</li> <li>Interest on net OPEB Obligation</li> <li>Adjustment to ARC</li> <li>Annual OPEB Cost (Expense)</li> <li>Contribution made (assumed middle of year) *</li> <li>Increase in net OPEB Obligation</li> <li>Net OPEB Obligation - beginning of year</li> <li>Net OPEB Obligation - end of year</li> </ol>	\$193,828 \$4,818 (\$5,979) \$192,667 (\$171,820) \$20,847 \$120,439 \$141,286	\$199,386 \$5,651 (\$7,247) \$197,790 (\$187,444) \$10,346 \$141,286 \$151,632

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

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

Fiscal Year <u>Ending</u>	Annual <u>OPEB Cost</u>	Percentage of Annual OPEB <u>Cost Contributed</u>	Net OPEB Obligation	Covered <u>Payroll</u>	OPEB Cost <u>% of Pay</u>
6/30/2013	\$192,667	89.2%	\$141,286	N/A	N/A
6/30/2014	\$197,790	94.8%	\$151,632	N/A	N/A

### B. Funded Status and Funding Progress

nded Status and Actuarial Valuation <u>Date</u>	Funding Progress  Actuarial  Value of  Assets  (a)		Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) <u>(b - a)</u>	Funded Ratio <u>(a/b)</u>	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll (AAL) ((b-a)/c)
7/1/2008	\$	-	\$2,199,146	\$2,199,146	0.0%	N/A	N/A
7/1/2010	\$	-	\$2,307,873	\$2,307,873	0.0%	N/A	N/A
7/1/2012	\$	-	\$2,104,978	\$2,104,978	0.0%	N/A	N/A

### C. Methods and Assumptions

_	Interest Rate	4.00%
	2012 Medical Trend Rates	9.00%
	Ultimate Medical Trend Rate	5.00%
	Year Ultimate Trend Rates Reached	2016
	Actuarial Cost Method	Entry Age Normal
	The remaining amortization period at 06/30/2013	22.81
		2.50%
-	Annual Payroll Increase	

### **Section IV**

### **Actuarial Assumptions And Methodology**

The following pages detail the assumptions used in the calculations.

### ACTUARIAL ASSUMPTIONS AND METHODOLOGY

1. Funding Interest Rate:

An interest rate of 4.0% was used.

2. Mortality:

<u>Post-retirement mortality rates:</u> Sex distinct rates from the 1994 Group Annuity Mortality Table with male rates set forward 1 year. <u>Pre-retirement mortality rates:</u> 65% of the pre-retirement mortality rates.

3. Retirement Rates:

**Non-Police employees:** Separate male and female rates. Sample rates are shown below:

30 or more years of service prior to age 58:

<u>Service</u>	<u>Male</u>	<u>Female</u>
30	30.0%	20.0%
31	25.0%	15.0%
32-34	15.0%	7.5%
35	25.0%	15.0%
36-37	25.0%	20.0%
38-39	25.0%	15.0%
40+	100.0%	100.0%

Age 58 and older:

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

**Police and Firefighters:** Unisex rates based on service are used. Sample rates are shown below:

<u>Service</u>	<u>Rate</u>
20	15.0%
21	10.0%
22-23	5.0%
24	10.0%
25-26	12.0%
27	14.0%
28	16.0%
29	18.0%
30-39	35.0%
40+	100.0%

### ACTUARIAL ASSUMPTIONS AND METHODOLOGY (cont.)

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

None assumed.

5. Termination Rates:

Base on service:

	<u>C</u>	<u>ity</u>	<u>Police/Fire</u>
<u>Service</u>	<u>Male</u>	<u>Female</u>	<u>Rate</u>
0	17.50%	18.00%	10.00%
1	9.59%	10.69%	5.28%
5	5.41%	5.58%	3.54%
10	3.50%	3.18%	1.91%
15	3.19%	2.97%	0.90%
20	2.27%	2.50%	0.00%

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

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

### 7. Participant Salary

Increases:

Annual rates vary based on service:

<u>Service</u>	Non-Police	<b>Police</b>
0	8.50%	14.75%
1	8.00%	13.25%
2	7.50%	9.75%
3	7.25%	6.75%
4	7.00%	6.50%
5	6.75%	6.75%
6	6.00%	5.25%
7	5.50%	5.00%
8	5.25%	5.00%
9	5.00%	5.00%
10+	4.50%	4.75%

**USI Consulting Group** 

- 8. Payroll Growth Rate:
- 2.50% annually
- 9. Participation Rate:

It is assumed that 100% of the active employees currently participating, will enroll in the retiree medical plan upon retirement.

10. Percent Married:

N/A

11. Actuarial Value of Assets: N/A

### ACTUARIAL ASSUMPTIONS AND METHODOLOGY (cont.)

12. Per Capita Claims Cost:

Per Capita Claim Costs were developed by applying morbidity aging factors to the average premium rates reflecting the demographic characteristics of the insured group. Below are the annual per capita claim costs used:

To	wn Non-Po	lice	Town Police			
Age	Male	Female	Age	Male	Female	
45	5,247	6,588	45	5,331	6,692	
46	5,436	6,729	46	5,523	6,836	
47	5,630	6,871	47	5,719	6,980	
48	5,833	6,998	48	5,925	7,109	
49	6,064	7,130	49	6,160	7,244	
50	6,300	7,267	50	6,400	7,383	
51	6,545	7,404	51	6,649	7,522	
52	6,800	7,546	52	6,908	7,666	
53	7,069	7,673	53	7,181	7,795	
54	7,352	7,805	54	7,469	7,929	
55	7,649	7,937	55	7,771	8,063	
56	7,956	8,074	56	8,083	8,202	
57	8,272	8,211	57	8,404	8,341	
58	8,579	8,414	58	8,715	8,548	
59	8,895	8,626	59	9,037	8,763	
60	9,226	8,843	60	9,372	8,984	
61	9,565	9,060	61	9,717	9,204	
62	9,919	9,287	62	10,077	9,434	
63	10,108	9,466	63	10,269	9,617	
64	10,302	9,646	64	10,465	9,799	
	Sahaal		C	lassic Scho	no!	
Age	School	Female		lassic Scho		
Age 45	Male	Female	Age	Male	<u>Female</u>	
45	<u>Male</u> 4,613	5,791	<u>Age</u> 45	<u>Male</u> 5,547	<u>Female</u> 6,964	
45 46	<u>Male</u> 4,613 4,779	5,791 5,915	<u>Age</u> 45 46	<u>Male</u> 5,547 5,746	Female 6,964 7,113	
45 46 47	<u>Male</u> 4,613 4,779 4,949	5,791 5,915 6,040	Age 45 46 47	Male 5,547 5,746 5,951	Female 6,964 7,113 7,263	
45 46 47 48	Male 4,613 4,779 4,949 5,127	5,791 5,915 6,040 6,152	Age 45 46 47 48	Male 5,547 5,746 5,951 6,166	Female 6,964 7,113 7,263 7,398	
45 46 47 48 49	Male 4,613 4,779 4,949 5,127 5,330	5,791 5,915 6,040 6,152 6,268	Age 45 46 47 48 49	Male 5,547 5,746 5,951 6,166 6,410	Female 6,964 7,113 7,263 7,398 7,537	
45 46 47 48 49 50	Male 4,613 4,779 4,949 5,127 5,330 5,538	5,791 5,915 6,040 6,152 6,268 6,388	Age 45 46 47 48 49 50	Male 5,547 5,746 5,951 6,166 6,410 6,659	Female 6,964 7,113 7,263 7,398 7,537 7,682	
45 46 47 48 49 50 51	Male 4,613 4,779 4,949 5,127 5,330 5,538 5,754	5,791 5,915 6,040 6,152 6,268 6,388 6,509	Age 45 46 47 48 49 50	Male 5,547 5,746 5,951 6,166 6,410 6,659 6,919	Female 6,964 7,113 7,263 7,398 7,537 7,682 7,827	
45 46 47 48 49 50 51 52	Male 4,613 4,779 4,949 5,127 5,330 5,538 5,754 5,978	5,791 5,915 6,040 6,152 6,268 6,388 6,509 6,633	Age 45 46 47 48 49 50	Male 5,547 5,746 5,951 6,166 6,410 6,659 6,919 7,188	Female 6,964 7,113 7,263 7,398 7,537 7,682 7,827 7,976	
45 46 47 48 49 50 51 52 53	Male 4,613 4,779 4,949 5,127 5,330 5,538 5,754 5,978 6,214	5,791 5,915 6,040 6,152 6,268 6,388 6,509 6,633 6,745	Age 45 46 47 48 49 50 51 52	Male 5,547 5,746 5,951 6,166 6,410 6,659 6,919	Female 6,964 7,113 7,263 7,398 7,537 7,682 7,827	
45 46 47 48 49 50 51 52 53 54	Male 4,613 4,779 4,949 5,127 5,330 5,538 5,754 5,978 6,214 6,463	5,791 5,915 6,040 6,152 6,268 6,388 6,509 6,633 6,745 6,861	Age 45 46 47 48 49 50 51 52 53 54	Male 5,547 5,746 5,951 6,166 6,410 6,659 6,919 7,188 7,472	Female 6,964 7,113 7,263 7,398 7,537 7,682 7,827 7,976 8,111	
45 46 47 48 49 50 51 52 53 54 55	Male 4,613 4,779 4,949 5,127 5,330 5,538 5,754 5,978 6,214 6,463 6,724	5,791 5,915 6,040 6,152 6,268 6,388 6,509 6,633 6,745 6,861 6,977	Age 45 46 47 48 49 50 51 52 53 54 55	Male 5,547 5,746 5,951 6,166 6,410 6,659 6,919 7,188 7,472 7,772	Female 6,964 7,113 7,263 7,398 7,537 7,682 7,827 7,976 8,111 8,251	
45 46 47 48 49 50 51 52 53 54 55 56	Male 4,613 4,779 4,949 5,127 5,330 5,538 5,754 5,978 6,214 6,463 6,724 6,994	5,791 5,915 6,040 6,152 6,268 6,388 6,509 6,633 6,745 6,861 6,977 7,098	Age 45 46 47 48 49 50 51 52 53 54	Male 5,547 5,746 5,951 6,166 6,410 6,659 6,919 7,188 7,472 7,772 8,086	Female 6,964 7,113 7,263 7,398 7,537 7,682 7,827 7,976 8,111 8,251 8,390	
45 46 47 48 49 50 51 52 53 54 55	Male 4,613 4,779 4,949 5,127 5,330 5,538 5,754 5,978 6,214 6,463 6,724	5,791 5,915 6,040 6,152 6,268 6,388 6,509 6,633 6,745 6,861 6,977	Age 45 46 47 48 49 50 51 52 53 54 55	Male 5,547 5,746 5,951 6,166 6,410 6,659 6,919 7,188 7,472 7,772 8,086 8,410	Female 6,964 7,113 7,263 7,398 7,537 7,682 7,827 7,976 8,111 8,251 8,390 8,535	
45 46 47 48 49 50 51 52 53 54 55 56 57	Male 4,613 4,779 4,949 5,127 5,330 5,538 5,754 5,978 6,214 6,463 6,724 6,994 7,272 7,541	5,791 5,915 6,040 6,152 6,268 6,388 6,509 6,633 6,745 6,861 6,977 7,098 7,218 7,396	Age 45 46 47 48 49 50 51 52 53 54 55 56 57	Male 5,547 5,746 5,951 6,166 6,410 6,659 6,919 7,188 7,472 7,772 8,086 8,410 8,744	Female 6,964 7,113 7,263 7,398 7,537 7,682 7,827 7,976 8,111 8,251 8,390 8,535 8,680	
45 46 47 48 49 50 51 52 53 54 55 56 57 58 59	Male 4,613 4,779 4,949 5,127 5,330 5,538 5,754 5,978 6,214 6,463 6,724 6,994 7,272 7,541 7,819	5,791 5,915 6,040 6,152 6,268 6,388 6,509 6,633 6,745 6,861 6,977 7,098 7,218 7,396 7,583	Age 45 46 47 48 49 50 51 52 53 54 55 56 57 58	Male 5,547 5,746 5,951 6,166 6,410 6,659 6,919 7,188 7,472 7,772 8,086 8,410 8,744 9,069	Female 6,964 7,113 7,263 7,398 7,537 7,682 7,827 7,976 8,111 8,251 8,390 8,535 8,680 8,894	
45 46 47 48 49 50 51 52 53 54 55 56 57 58	Male 4,613 4,779 4,949 5,127 5,330 5,538 5,754 5,978 6,214 6,463 6,724 6,994 7,272 7,541	5,791 5,915 6,040 6,152 6,268 6,388 6,509 6,633 6,745 6,861 6,977 7,098 7,218 7,396	Age 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59	Male 5,547 5,746 5,951 6,166 6,410 6,659 6,919 7,188 7,472 7,772 8,086 8,410 8,744 9,069 9,403	Female 6,964 7,113 7,263 7,398 7,537 7,682 7,827 7,976 8,111 8,251 8,390 8,535 8,680 8,894 9,119	
45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60	Male 4,613 4,779 4,949 5,127 5,330 5,538 5,754 5,978 6,214 6,463 6,724 6,994 7,272 7,541 7,819 8,110	5,791 5,915 6,040 6,152 6,268 6,388 6,509 6,633 6,745 6,861 6,977 7,098 7,218 7,396 7,583 7,774	Age 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60	Male 5,547 5,746 5,951 6,166 6,410 6,659 6,919 7,188 7,472 7,772 8,086 8,410 8,744 9,069 9,403 9,752	Female 6,964 7,113 7,263 7,398 7,537 7,682 7,827 7,976 8,111 8,251 8,390 8,535 8,680 8,894 9,119 9,348	
45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61	Male 4,613 4,779 4,949 5,127 5,330 5,538 5,754 5,978 6,214 6,463 6,724 6,994 7,272 7,541 7,819 8,110 8,408	5,791 5,915 6,040 6,152 6,268 6,388 6,509 6,633 6,745 6,861 6,977 7,098 7,218 7,396 7,583 7,774 7,965	Age 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61	Male 5,547 5,746 5,951 6,166 6,410 6,659 6,919 7,188 7,472 7,772 8,086 8,410 8,744 9,069 9,403 9,752 10,111	Female 6,964 7,113 7,263 7,398 7,537 7,682 7,827 7,976 8,111 8,251 8,390 8,535 8,680 8,894 9,119 9,348 9,577	

### ACTUARIAL ASSUMPTIONS AND METHODOLOGY (cont.)

### ACTUARIAL COST METHOD

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

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

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

### ADDITIONAL COMMENTS

The values in this GASB 45 valuation represent a closed group and do not reflect new entrants after the census collection date.

### Section V

### **Appendices**

### APPENDIX - I.

### ACTIVE EMPLOYEE BY AGE AND SERVICE

### **AS OF JULY 1, 2012**

<u>Service</u>										
Age	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40+	Total
0 - 19	0	0	0	0	0	0	0	0	0	0
20 - 24	1	0	0	0	0	0	0	0	0	j
25 - 29	2	1	0	0	0	0	0	0	0	3
30 - 34	2	6	1	0	0	0	0	0	0	9
35 - 39	2	4	1	0	0	0	0	0	0	7
40 - 44	2	4	4	1	4	0	0	0	0	15
45 - 49	0	1	5	4	5	1	0	0	0	16
50 - 54	2	6	7	4	8	5	0	0	0	32
55 - 59	1	0	4	7	3	2	0	0	0	17
60 - 64	1	1	0	2	5	1	1	1	0	12
65 - 69	0	0	0	0	0	0	0	0	0	0
70 - 74	0	0	0	0	0	0	0	0	0	0
75 - 79	0	0	0	0	0	0	0	0	0	0
80 - 84	0	0	0	0	0	0	0	0	0	0
85 and Over	0	0	0	0	0	0	. 0	0	0	0
Total	13	23	22	18	25	9	1	1	0	112

### APPENDIX - II.

### RECONCILIATION OF ACTUARIAL ACCRUED LIABILITY

_	7/1/2010 Actuarial Accrued Liability	\$2,307,873
	2010 Normal Cost	\$88,664
b.	— · · · · · · · · · · · · · · · · · · ·	•
c.	Interest Rate	4.00%
d.	Interest on $(b. + c.)$	\$95,862
e.	2010 Expected Benefit Payments	(\$174,182)
f.	Interest on e.	<u>(\$3,483)</u>
g.	7/1/2011 Expected Actuarial Accrued Liability	\$2,314,734
	(a. + b. + d. + e. + f.)	
h.	2011 Normal Cost	\$90,882
i.	Interest Rate	4.00%
j.	Interest on (g. + h.)	\$96,225
k,	2011 Expected Benefit Payments	(\$198,727)
1.	Interest on 1.	<u>(\$3,974)</u>
m.	7/1/2012 Expected Actuarial Accrued Liability	\$2,299,140
	(g. + h. + j. + k. + l.)	
n.	Change in Actuarial Accrued Liability due to	
	i. Demographic and plan cost changes	(\$263,596)
	ii. Change in Actuarial Assumptions	\$69,434
	iii. Plan Change	<u>\$0</u>
	iv. Total	(\$194,162)
0.	7/1/2012 Actuarial Accrued Liability	\$2,104,978
٥.	(m. + n. iv.)	•
	(1111 - 111 111)	

### APPENDIX - III.

### **DEVELOPMENT OF AMORTIZATION PAYMENT**

A.	Prior Bases	
	1. Amortization Base Balance as of 7/1/2010	\$2,307,873
	2. 2010 Amortization Payment	(\$99,361)
	3. Interest	4.00%
	4. Interest on $(1) + (2)$	<u>\$88,341</u>
	5. Amortization Base Balance as of $\frac{7}{1/2011}(1) + (2) + (4)$	\$2,296,853
	6. 2011 Amortization Payment	(\$102,574)
	7. Interest	4.00%
	8. Interest on $(5) + (6)$	<u>\$87,771</u>
	9. Amortization Base Balance as of 7/1/2012 (5) + (6) + (8)	\$2,282,050
	6. Remaining Amortization Period	25.10
	7. Valuation Interest rate	4.00%
	8. Assumed payroll growth	2.50%
	9. 2012 Adjusted Amortization Amount	\$107,709
В.	New Amortization Base	
	1. Experience (Gain)/Loss	(\$263,596)
	2. Assumption Changes	\$69,434
	3. Plan Change	\$0
	5. Loss due to Funding timing	<u>\$17,090</u>
	6. Total $(1) + (2) + (3) + (4)$	(\$177,072)
	7. Remaining Amortization Period	30
	8. Valuation Interest rate	4.00%
	9. Assumed payroll growth	2.50%
	10. Amortization Amount	(\$7,229)
C.	Combined Bases	
	1. Amortization Base Balance as of 7/1/2012 (A.5. + B.5.)	\$2,104,978
	2. 2012 Preliminary Total Amortization Amount (A.9. + B.9.)	\$100,480
	3. 2012 Minimum Total Amortization Amount (30 year)	\$85,938
	4. 2012 Total Amortization Amount (greater of 2. and 3.)	\$100,480

### TOWN OF GLOCESTER, RI JULY 1, 2012 GASB 45 VALUATION

## APPENDIX - IV. PROJECTED BENEFIT PAYMENTS

APPENDIX SECTION V.

Accumulated	5,450,402	5,668,936	5,828,538	6,000,950	6 139 650	0,10,700	6,221,614	6,321,439	A 110 505	0,410,00	6,446,449	6,485,784	200 005 3	0,720,407	6,528,487	6 528 487	10160	6,528,487	6 528 487	0,040,0
AC.	A (	A	↔	₩	4	<del>)</del>	64)	69	6	9	<del>69</del>	64)	6	4	6/3	G.	•	∌	¥	9
Amount	151,789	212,474	159,602	172,412	129 700	136,700	81,964	99,825	90 156	02,130	35,854	39,335	107	47,/03	ı	1		1		1
	A	€9	↔	64)	6	9	€9	<del>6</del> 9	6	Ą	↔	64	€	A	₩	4	•	₩	¥	9
Year	2042	2043	2044	2045	7700	Z040	2047	2048	0,00	V04V	2050	2051	0	707	2053	2054	+007	2055	2056	0007
lo	7	7	7	9		<b>-</b>	-	<i>L</i>		ō	λ	2	1 (	<u></u>	0	<b>*</b>	<b>‡</b>	3.1	5	2
Accumulated	3,184,90	3,431,69	3,590,44	3 768 79	6,600,6	3,950,20	, 4,133,13	4 282 75		4,413,86	4.559,24	4 704 94	76.016.	4,823,14	3 4,941,61	27 20 2 3	2,000,00	5,174,33	7 700 0	5,504,0
Amount	215,244	246,795	158.750	178 349	\	181,404	182,931	149,626	0406714	131,109	145.379	145,607	1,0,0,1	118,201	118.467	114,000	114,044	118,677		130,342
·	€	69	4	· 6/	•	64	69	4	•	↔	4	6	9	64)	<del>\$</del>	•	•	69	•	<del>59</del>
Year	2027	2028	2020	2020	7070	2031	2032	2033	207	2034	2035	3000	2020	2037	2038		2039	2040		2041
umulated	171,820	359 264	511.407	11,40	004,501	818,437	984 689	1 120 000	1,130,700	1.297.965	1 472 306	1,177,000	1,680,545	1.940.381	777 505 6	4,404,111	2,470,666	2735241		\$ 2,969,658
Acc	8	4	<del>)</del>	<del>,</del> 6	A	69	¥	<b>,</b> 6	A	69		<del>)</del>	A	64	•	9	69	4	•	64
Amount	171.820	187 444	150 142	1,72,004	152,894	154,136	166,257	101,00	104,799	158,977	174 241	1+0+1	208,239	259 836	762 206	065,202	267.889	264 575	1,1	234,417
*4	<b>'</b>	6	9 6	<b>A</b> (	A	63	4				. 6									64
Year	2012	2013	2102	4107	2012	2016	2017	107	2018	2019	, ,	2070	2021	2022	1 6	7073	2024	2004	777	2026

### APPENDIX – V. GLOSSARY

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

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

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

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

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

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

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

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

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

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

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

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

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

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