Town of Portsmouth

GASB 45 Actuarial Valuation

Fiscal Year Ending June 30, 2013

Prepared by:
Nyhart
8415 Allison Pointe Blvd., Suite 300
Indianapolis, IN 46250
Ph: (317) 845-3500
www.nyhart.com

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nyhart

October 31, 2013

David Faucher
2200 East Main Road
Portsmouth, RI 02871

This report summarizes the GASB actuarial valuation for the Town of Portsmouth 2012/13 fiscal year. To the best of our knowledge, the report presents a fair position of the funded status of the plan in accordance with GASB Statement No. 45 (Accounting and Financial Reporting by Employers for Post-Employment Benefits Other Than Pensions). The valuation is also based upon our understanding of the plan provisions as summarized within the report.

The information presented herein is based on the information furnished to us by the Plan Sponsor that has been reconciled and reviewed for reasonableness. We are not aware of any material inadequacy in employee census provided by the Plan Sponsor. We have not audited the information at the source, and therefore do not accept responsibility for the accuracy or the completeness of the data on which the information is based.

The actuarial assumptions were selected by the Plan Sponsor with the concurrence of Nyhart. In our opinion, the actuarial assumptions are individually reasonable and in combination represent our estimate of anticipated experience of the Plan. All computations have been made in accordance with generally accepted actuarial principles and practice.

To our knowledge, there have been no significant events prior to the current year's measurement date or as of the date of this report that could materially affect the results contained herein.

Neither Nyhart nor any of its employees has any relationship with the plan or its sponsor that could impair or appear to impair the objectivity of this report.

Should you have any questions please do not hesitate to contact us.

Randy Gomez

Randy Gomez, FSA, MAAA
Consulting Actuary

Evi Laksana, ASA, MAAA
Valuation Actuary

Summary of Results

Presented below is the summary of GASB 45 results for the fiscal year ending June 30, 2013 compared to the prior fiscal years as shown in the Town's Notes to Financial Statement.

		As of July 1, 2011		*As of July 1, 2012*
Actuarial Accrued Liability	$	12,527,599	$	13,090,922
Actuarial Value of Assets	$	203,392	$	402,179
Unfunded Actuarial Accrued Liability	$	12,324,207	$	12,688,743
Funded Ratio		1.6%		3.1%

		FY 2011/12		*FY 2012/13*
Annual Required Contribution	$	1,248,914	$	1,297,531
Annual OPEB Cost	$	1,212,030	$	1,256,912
Annual Employer Contribution[1]	$	953,389	$	800,908

		As of June 30, 2012		*As of June 30, 2013*
Net OPEB Obligation	$	2,812,586	$	3,268,590

	As of July 1, 2010	*As of July 1, 2013*
Active Participants	106	101
Total Retiree Participants	36	43

The active participants' number above may include active employees who currently have no health care coverage. Refer to Summary of Participants section for an accurate breakdown of active employees with and without coverage.

[1] FY 2012/13 total annual employer contribution for pay-go costs is the sum of (a) $724,032 in actual premium payments for retirees and (b) $76,876 for the implicit portion of pay-go costs.

Below is a breakdown of total GASB 45 liabilities allocated to past, current, and future service as of July 1, 2012 compared to the prior year.

		As of July 1, 2011		*As of July 1, 2012*
Present Value of Future Benefits	**$**	**18,257,248**	**$**	**18,997,927**
Active Employees		11,770,272		10,456,596
Retired Employees		6,486,976		8,541,331
Actuarial Accrued Liability	**$**	**12,527,599**	**$**	**13,090,922**
Active Employees		6,040,623		4,549,591
Retired Employees		6,486,976		8,541,331
Normal Cost	**$**	**463,562**	**$**	**484,538**
Future Normal Cost	**$**	**5,266,087**	**$**	**5,422,467**

Present Value of Future Benefits is the amount needed as of July 1, 2012 to fully fund the Town's retiree health care subsidies for existing and future retirees and their dependents assuming all actuarial assumptions are met.

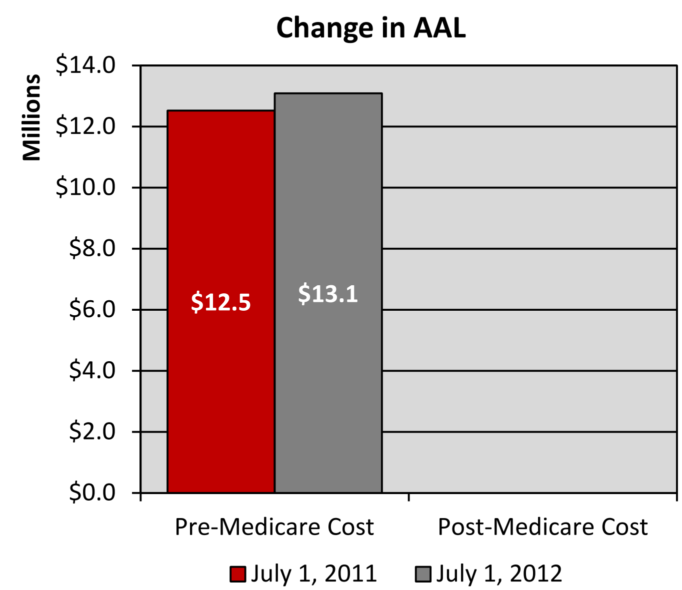
Actuarial Accrued Liability is the portion of PVFB considered to be accrued or earned as of July 1, 2012. This amount is a required disclosure in the Required Supplementary Information section.

Normal Cost is the portion of the total liability amount that is attributed and accrued for current year's active employee service by the actuarial cost method.

Future Normal Cost is the portion of the total liability amount that is attributed to the future employee service by the current year's valuation by the actuarial cost method.

Below is a breakdown of total GASB 45 Actuarial Accrued Liability (AAL) allocated to pre and post Medicare eligibility. The liability shown below includes explicit (if any) and implicit subsidies. Refer to the Substantive Plan Provisions section for complete information on the Plan Sponsor's GASB subsidies.

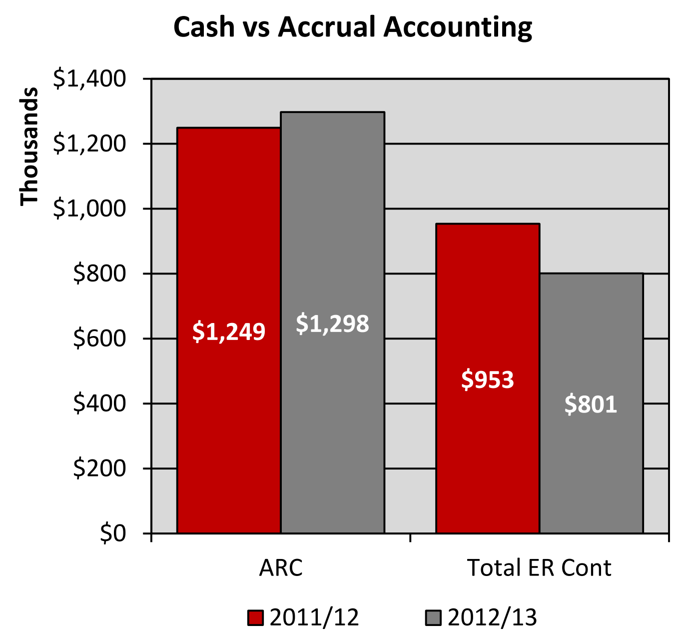
Actuarial Accrued Liability (AAL)		***As of July 1, 2011***		***As of July 1, 2012***
Active Pre-Medicare	$	6,040,623	$	4,549,591
Active Post-Medicare		0		0
Total Active AAL	$	6,040,623	$	4,549,591
Retirees Pre-Medicare	$	6,486,976	$	8,541,331
Retirees Post-Medicare		0		0
Total Retirees AAL	$	6,486,976	$	8,541,331
Total AAL	**$**	**12,527,599**	**$**	**13,090,922**



Development of Annual Required Contribution (ARC)

Required Supplementary Information		2011/12		2012/13
Actuarial Accrued Liability as of beginning of year	$	12,527,599	$	13,090,922
Actuarial Value of Assets as of beginning of year		(203,392)		(402,179)
Unfunded Actuarial Accrued Liability (UAAL)	**$**	**12,324,207**	**$**	**12,688,743**
Covered payroll[2]	$	6,574,650	$	5,407,210
UAAL as a % of covered payroll		187.5%		234.7%

Annual Required Contribution		2011/12		2012/13
Normal cost as of beginning of year	$	463,562	$	484,538
Reduction for employee contributions		(59,590)		(57,522)
Net normal cost	$	403,972	$	427,016
Amortization of the UAAL		782,757		805,910
Total normal cost and amortization payment	$	1,186,729	$	1,232,926
Interest to end of year		62,185		64,605
Total Annual Required Contribution (ARC)	**$**	**1,248,914**	**$**	**1,297,531**



Annual Required Contribution (ARC) is the annual expense recorded in the income statement under GASB 45 accrual accounting. It replaces the cash basis method of accounting recognition with an accrual method. The GASB 45 ARC is higher than the pay-as-you-go cost because it includes recognition of employer costs expected to be paid in future accounting periods.

[2] 2011/12 covered payroll is based on 2010/11 covered payroll ($6,383,155) increased by the payroll growth assumption (3.0%).

Development of Annual OPEB Cost and Net OPEB Obligation

Net OPEB Obligation		2011/12		2012/13
ARC as of end of year	$	1,248,914	$	1,297,531
Interest on Net OPEB Obligation (NOO) to end of year		133,827		147,380
NOO amortization adjustment to the ARC		(170,711)		(187,999)
Annual OPEB cost	$	1,212,030	$	1,256,912
Annual employer contribution for pay-go cost		(813,281)[3]		(800,908)[4]
Annual employer contribution for pre-funding		(140,108)[5]		0
Change in NOO	$	258,641	$	456,004
NOO as of beginning of year		2,553,945		2,812,586
NOO as of end of year	**$**	**2,812,586**	**$**	**3,268,590**

Pay-as-you-go Cost is the expected total employer cash cost for the coming period based on all explicit and implicit subsidies. It is also the amount recognized as expense on the Income Statement under pay-as-you-go accounting.

Net OPEB Obligation is the cumulative difference between the annual OPB cost and employer contributions. This obligation will be created if cash contributions are less than the current year expense under GASB 45 accrual rules.

The net obligation is recorded as a liability on the employer's balance sheet which will reduce the net fund balance.

The value of implicit subsidies is considered as part of cash contributions for the current period. Other cash expenditures that meet certain conditions are also considered as contributions for GASB 45 purposes.

[3] FY 2011/12 annual employer contribution for pay-go cost is the sum of (a) $736,115 in actual premium payments for retirees and (b) $77,166 for the implicit portion of pay-go costs.
[4] FY 2012/13 annual employer contribution for pay-go cost is the sum of (a) $724,032 in actual premium payments for retirees and (b) $76,876 for the implicit portion of pay-go costs.
[5] FY 2011/12 annual employer contribution for pre-funding is the sum of (a) $133,041 in Early Retiree Reinsurance Program subsidy payment and (b) $7,067 refund due to medical insurance overpayment.

Summary of GASB 45 Financial Results

Presented below is the summary of GASB 45 results for the fiscal year ending June 30, 2013 and prior fiscal years as shown in the Town's Notes to Financial Statements.

Schedule of Funding Progress

As of	*Actuarial Accrued Liability (AAL)*	*Actuarial Value of Assets (AVA)*	*Unfunded Actuarial Accrued Liability (UAAL)*	*Funded Ratio*	*Covered Payroll*	*UAAL as % of Covered Payroll*
	A	*B*	*C = A - B*	*D = B / A*	*E*	*F = C / E*
July 1, 2012	$ 13,090,922	$ 402,179	$ 12,688,743	3.1%	$ 5,407,210	234.7%
July 1, 2011	$ 12,527,599	$ 213,392	$ 12,324,207	1.6%	$ 6,574,650	187.5%
July 1, 2010	$ 13,248,340	$ 153,249	$ 13,248,340	1.2%	$ 6,383,155	205.2%

Schedule of Employer Contributions

FYE	*Employer Contributions*	*Annual Required Contribution (ARC)*	*% of ARC Contributed*
	A	*B*	*C = A / B*
June 30, 2013	$ 800,908	$ 1,297,531	61.7%
June 30, 2012	$ 953,389	$ 1,248,914	76.3%
June 30, 2011	$ 792,174	$ 1,345,177	58.9%

Historical Annual OPEB Cost

As of	*Annual OPEB Cost*	*% of Annual OPEB Cost Contributed*	*Net OPEB Obligation*
June 30, 2013	$ 1,256,912	63.7%	$ 3,268,590
June 30, 2012	$ 1,212,030	78.7%	$ 2,812,586
June 30, 2011	$ 1,315,857	60.2%	$ 2,553,945

The Actuarial Accrued Liability (AAL) is expected to change on an annual basis as a result of expected and unexpected events. Under normal circumstances, it is generally expected to have a net increase each year. Below is a list of the most common events affecting the AAL and whether they increase or decrease the liability.

Expected Events

- Increases in AAL due to additional benefit accruals as employees continue to earn service each year
- Increases in AAL due to interest as the employees and retirees age
- Decreases in AAL due to benefit payments

Unexpected Events

- Increases in AAL when actual premium rates increase more than expected. A liability decrease occurs when premium rates increase less than expected.
- Increases in AAL when more new retirements occur than expected or fewer terminations occur than anticipated. Liability decreases occur when the opposite outcomes happen.
- Increases or decreases in AAL depending on whether benefit provisions are improved or reduced.

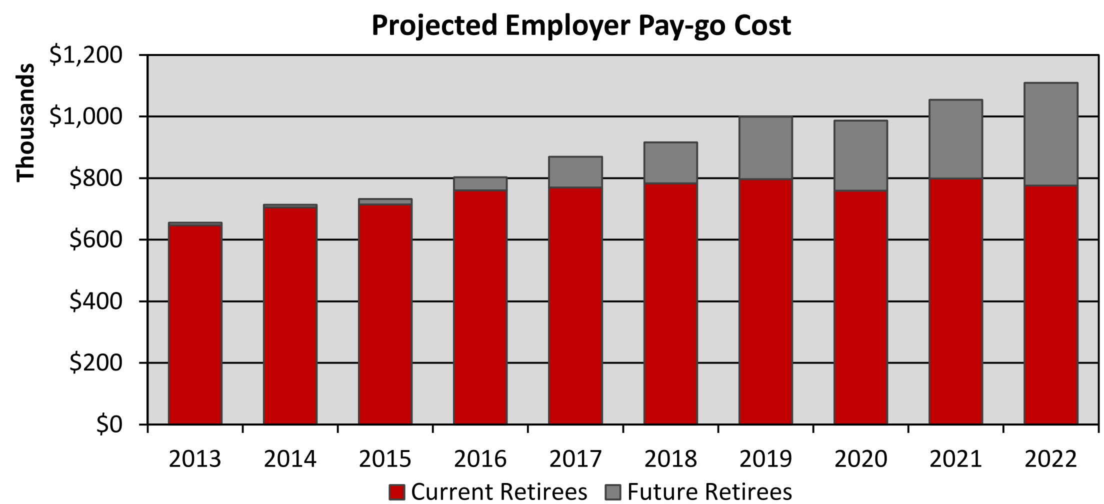
		2011/12		***2012/13***[6]
Actuarial Accrued Liability as of beginning of year	$	12,527,599	$	13,090,922
Normal cost as of beginning of year		463,562		484,538
Expected benefit payments during the year		(698,476)		(655,154)
Interest adjustment to end of year		662,670		694,408
Expected Actuarial Accrued Liability as of end of year	$	12,955,355	$	13,614,714
Actuarial (gain) / loss due to experience		(230,645)		0
Actuarial (gain) / loss due to provisions / assumptions changes		366,212		0
Actual Actuarial Accrued Liability as of end of year	$	13,090,922	$	13,614,714

Reconciliation of AAL shows what the actuary expects the actuarial accrued liability to be at the beginning of the following fiscal year based on current assumptions and plan provisions. The expected end of year AAL will change as actual plan experience varies from assumptions. Generally, the AAL is expected to have a net increate each year.

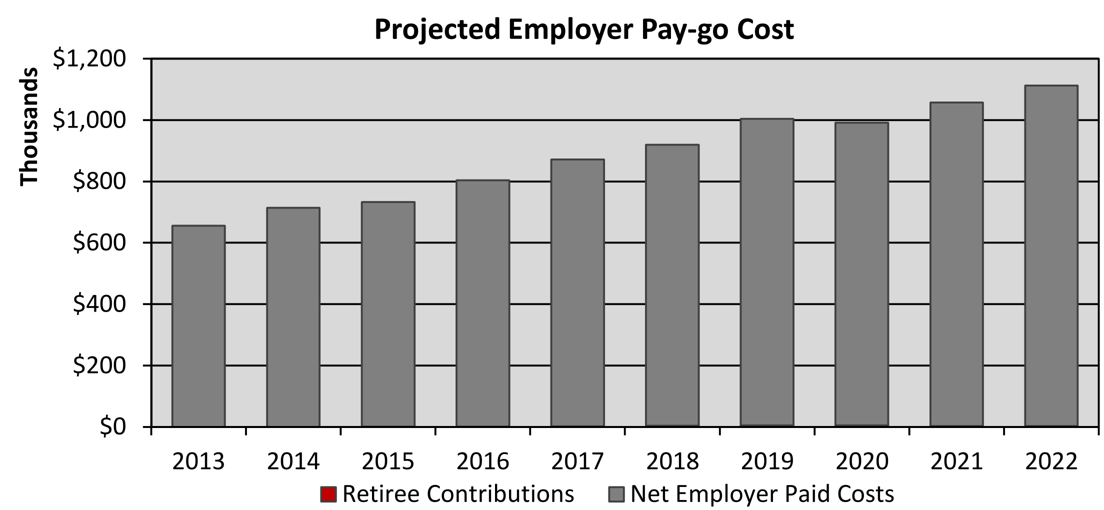
[6] Actuarial Accrued Liability (AAL) as of beginning of year was actuarially rolled-back from end of year AAL on a “no gain/loss” basis.

The below projections show the actuarially estimated employer-paid contributions for retiree health benefits for the next ten years. Results are shown separately for current /future retirees and gross claim costs/retiree contributions. These projections include explicit and implicit subsidies.

FYE	Current Retirees	Future Retirees[7]	Total
2013	$ 647,483	$ 7,671	$ 655,154
2014	$ 705,756	$ 8,361	$ 714,117
2015	$ 714,884	$ 17,532	$ 732,416
2016	$ 760,867	$ 42,435	$ 803,302
2017	$ 769,798	$ 99,345	$ 869,143
2018	$ 783,742	$ 132,422	$ 916,164
2019	$ 797,164	$ 202,063	$ 999,227
2020	$ 759,146	$ 227,495	$ 986,641
2021	$ 798,660	$ 255,298	$ 1,053,958
2022	$ 776,268	$ 333,422	$ 1,109,690



FYE	Estimated Claims Costs	Retiree Contributions	Net Employer-Paid Costs
2013	$ 655,294	$ 140	$ 655,154
2014	$ 714,270	$ 153	$ 714,117
2015	$ 732,737	$ 321	$ 732,416
2016	$ 804,304	$ 1,002	$ 803,302
2017	$ 871,281	$ 2,138	$ 869,143
2018	$ 920,024	$ 3,860	$ 916,164
2019	$ 1,003,737	$ 4,510	$ 999,227
2020	$ 991,777	$ 5,136	$ 986,641
2021	$ 1,057,335	$ 3,377	$ 1,053,958
2022	$ 1,112,924	$ 3,234	$ 1,109,690



[7] Projections for future retirees do not take into account future new hires.

Retiree Health Care Eligibility

Police and Fire	Police and Fire employees are eligible for retiree health care benefits until Medicare eligibility upon attainment of 20 years of service with the Town.
General employees	General employees (PMEA, Public Works union groups and Non-Union groups) are eligible for retiree health care benefits until Medicare eligibility at the earlier of: 1. Age 60 with 20 years of service (normal retirement) 2. Age 55 with 25 years of service and within 5 years of normal retirement

Disability Health Care Eligibility

Police	Police officers injured in the line of duty are eligible for disability health care until Medicare eligibility without any age or years of service requirement. Police officers injured not in the line of duty are eligible for disability health care until Medicare eligibility once they attain 10 years of service with the Town.
Fire	Firefighters injured in the line of duty are eligible for disability health care until Medicare eligibility without any age or years of service requirement. Firefighters injured not in the line of duty are eligible for disability health care until Medicare eligibility once they attain 10 years of service with the Town.

Spouse Benefit

Police and Fire	Upon death of the retiree, health care coverage continues to unmarried surviving spouse and dependent children up to age 19.
General employees	Retiree health care coverage is discontinued upon death of the retiree. Surviving spouse will be offered COBRA.

Explicit Subsidy

Fire	Firefighters receive free retiree health care coverage (medical, dental, and vision) until Medicare eligibility.
	In addition to the free retiree health care coverage, for firefighters who retired between July 1, 2010 and December 31, 2012, the Town will contribute $2,000 annually for single plan and $4,000 annually for family plan for retired firefighters enrolled in the HDHP plan. This amount is reduced to $1,000 annually for single coverage and $2,000 annually for family coverage for firefighters who retire on/after January 1, 2013.
Police	Police officers receive free retiree health care coverage (medical, dental, and vision) until Medicare eligibility.
PMEA	PMEA employees receive free retiree health care coverage (medical, dental, and vision) until age 67 or Medicare eligibility, whichever is earlier.
Public Works	The Town will contribute 80% of the medical and dental costs for Public Works employees until Medicare eligibility. Vision coverage is free for retirees.
	At the current time, Public Works is the only group required to pay health contributions while in retirement status.
Non-Union groups	Non-Union group employees receive free retiree health care coverage (medical, dental, and vision) until Medicare eligibility.
Retiree Cost Sharing	Retirees are responsible for the portion of premium rates not covered by the Town.

Active Cost Sharing

Fire	Active firefighters contribute 1.5% of gross earnings to OPEB Trust Fund that was set up to defray the cost of post-employment benefits. Gross earnings include base salary, longevity, EMT bonus, overtime, and holiday pay.
Police	Active police officers contribute 1% of salary to OPEB Trust Fund that was set up to defray the cost of post-employment benefits.
Public Works	Public works employees contribute 0.25% of salary and longevity to OPEB Trust Fund that was set up to defray the cost of post-employment benefits.

Medical Benefit

Same benefit options are available to retirees as active employees.

The Town and the School is in a collaborative pool with more than 30 entities in Rhode Island. All health plans are fully-insured and experience-rated. Each entity in the collaborative pool is viewed individually. Depending on its size the entity's experience is blended with the community pool (the community used is all of the municipal accounts in Rhode Island, not just the collaborative pool that they are a part of). In the case of Portsmouth (both Town and School), their final rates are based on 80% of their own experience and 20% of the community average.

There is no asset used to suppress premium rates increases. Premium rates are calculated to fund the expected costs (including claims and administrative costs).

The monthly premium rates by plan effective on July 1, 2013 are as shown below:

Health Plan	Group	Single	Family
Healthmate 0001	PMEA and NUG	$ 511.89	$ 1,322.12
Healthmate 0007	Retired Fire (post-4/08, pre-7/10)	$ 512.05	$ 1,322.49
Healthmate 0002, 0004, and 0009	Police Public Works Retired Fire (pre-4/08)	$ 530.98	$ 1,371.41
Healthmate 0005 HDHP	Fire (post-7/10 retirement)	$ 459.50	$ 995.43
Classic 0001	Retired Fire	$ 606.42	$ 1,558.47
Classic 0007	PMEA and NUG	$ 613.96	$ 1,578.03
Classic 0009	Retired Police	$ 705.59	$ 1,862.90

Dental Benefit

Dental monthly premium rates effective on July 1, 2013 are as shown below:

Group	Single	Family
Police, Fire, and Public Works	$ 30.26	$ 81.51
PMEA and NUG	$ 30.26	$ 82.34

Vision Benefit

Vision benefit is funded annually through the budget based on the vision benefits agreed upon by the Town and the union groups. The annual budget for 2012/13 FY is $4,000 for all active employees and retirees. The Town is responsible for any vision requests for reimbursement that exceed the budgeted amount.

The actuarial assumptions used in this report represent a reasonable long-term expectation of future OPEB outcomes. As national economic and Town experience change over time, the assumptions will be tested for ongoing reasonableness and, if necessary, updated.

There are no changes to the actuarial methods and assumptions since the last GASB valuation, which was for the fiscal year ending June 30, 2011. For the current year GASB valuation, we have updated the per capita costs, mortality table, and health care trend rates. We expect to update health care trend rates and per capita costs again in the next full GASB valuation, which will be for the fiscal year ending June 30, 2015.

Measurement Date June 30, 2013 with results actuarially rolled-back to July 1, 2012 on a “no loss/no gain” basis.

Census Data Census data was provided by the Town and it was collected as of July 2013. We have reviewed it for reasonableness and no material modifications were made.

Discount Rate 5.24% partially funded

Payroll Growth 3.0% per year (used for total covered payroll projection only)

Inflation Rate 3.0% per year

Cost Method Projected Unit Credit with linear proration to decrement

Amortization Level dollar amount over thirty years based on an open group

Employer Funding Policy Partially pre-funded by active employees’ contributions

Healthy Mortality RP-2000 Combined Mortality Table fully generational using Scale AA (prior valuation used RP-2000 Combined Mortality Table projected to 2012 using Scale AA).

Disability Sample rates are as shown below:

Age	Annual Rate
25	0.1%
35	0.1%
45	0.4%

Disability Mortality Disability mortality is based on IRS Revenue Ruling 96-7 Post 1994 Table (male/female)

Withdrawal Rate

Assumption used to project terminations (voluntary and involuntary) prior to meeting minimum retirement eligibility for retiree health coverage.

Annual withdrawal rates are based on Saranson T-1 table. Sample annual rates are as shown below:

Age	Annual Rate
20	5.4%
25	4.9%
35	2.3%
45	0.3%
50	0.0%

Retirement Rate

Annual rates of retirement by group are as shown below:

Age	Public Works, NUG, PMEA	Police	Fire
40 – 44	0%	5%	2%
45	0%	5%	5%
46 – 47	0%	15%	5%
48 – 49	0%	10%	5%
50	0%	25%	25%
51 – 54	0%	10%	15%
55	15%	100%	100%
56 – 58	5%	100%	100%
59	10%	100%	100%
60	25%	100%	100%
61	10%	100%	100%
62	20%	100%	100%
63 – 64	10%	100%	100%
65	100%	100%	100%

Health Care Trend Rates

FYE	Medical	FYE	Medical
2014	9.0%	2019	6.5%
2015	8.5%	2020	6.0%
2016	8.0%	2021	5.5%
2017	7.5%	2022+	5.0%
2018	7.0%		

The initial trend rate was based on a combination of employer history, national trend surveys, and professional judgment.

The ultimate trend rate was selected based on historical medical CPI information.

Dental

Dental costs are assumed to increase by 5.00% annually, decreasing by 0.25% per year to an ultimate rate of 4.00% per year.

Vision

Vision costs are assumed to increase by 3.25% annually, decreasing by 0.25% per year to an ultimate rate of 3.00% per year.

Retiree Contributions

Retiree contributions are assumed to increase with health care trend rates.

Health Care Coverage Election Rate

Active employees with current coverage: 100%
Active employees with no coverage: 0%

Inactive employees with current coverage: 100%
Inactive employees with no coverage: 0%

Spousal Coverage

80% of employees are assumed to be married at retirement. Husbands are assumed to be three years older than wives.

Spousal coverage and ages for current retirees is based on actual data.

Per Capita Costs

Annual per capita costs were calculated based on the Town's monthly premium rates effective on July 1, 2013 actuarially increased using health index factors and current enrollment. The costs are assumed to increase with health care trend rates. Annual per capita costs by plan are as shown below:

	Classic 004 and 007		Classic 0009	
Age	**Male**	**Female**	**Male**	**Female**
< 50	$ 7,400	$ 7,400	$ 8,500	$ 8,500
50 – 54	$ 7,400	$ 8,600	$ 8,500	$ 9,900
55 – 59	$ 9,900	$ 9,600	$ 11,400	$ 11,100
60 – 64	$ 12,700	$ 11,400	$ 14,500	$ 13,100

The per capita costs represent the cost of coverage for a retiree-only population.

Actuarial standards require the recognition of higher inherent costs for a retired population versus an active population.

	Healthmate 0001 and 0007		Healthmate 0002, 0004, and 0009	
Age	**Male**	**Female**	**Male**	**Female**
< 50	$ 6,100	$ 6,100	$ 6,400	$ 6,400
50 – 54	$ 6,100	$ 7,200	$ 6,400	$ 7,400
55 – 59	$ 8,300	$ 8,000	$ 8,600	$ 8,300
60 – 64	$ 10,600	$ 9,500	$ 10,900	$ 9,800

	Healthmate 0005 HDHP	
Age	**Male**	**Female**
< 50	$ 5,500	$ 5,500
50 – 54	$ 5,500	$ 6,400
55 – 59	$ 7,400	$ 7,200
60 – 64	$ 9,500	$ 8,500

Annual dental per capita cost is $363. This cost is assumed to increase with dental trend rates.

Annual vision per capita cost is $30. This cost is assumed to increase with vision trend rates.

Explicit Subsidy

The difference between (a) the premium rate and (b) the retiree contribution. Below is an example of the monthly explicit subsidies for an employee retiring after January 1, 2013 and his spouse enrolled in the Healthmate 0005 HDHP plan.

	Premium Rate	HSA Contribution	Retiree Contribution	Explicit Subsidy
	A	B	C	D = A + B – C
Retiree	$ 459.50	$ 83.33	$ 0.00	$ 542.83
Spouse	$ 535.93	$ 83.33	$ 0.00	$ 619.26

Implicit Subsidy

The difference between (a) the per capita cost and (b) the premium rate. Below is an example of the monthly implicit subsidies for a 60 – 64 male retiree and his spouse enrolled in the Healthmate HDHP plan.

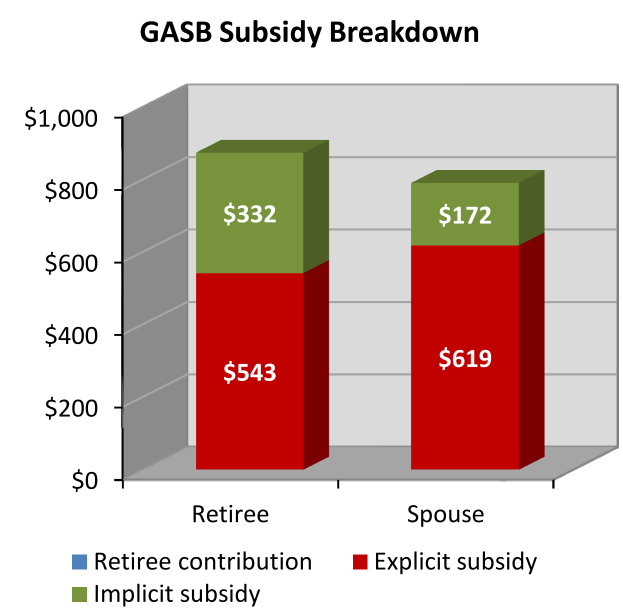
	Per Capita Cost	Premium Rate	Implicit Subsidy
	A	B	C = A – B
Retiree	$ 791.67	$ 459.50	$ 332.17
Spouse	$ 708.33	$ 535.93	$ 172.40

All employers that utilize premium rates based on blended active/retiree claims experience will have an implicit subsidy. There is an exception for plans using a true community-rated premium rate.

GASB Subsidy Breakdown

Below is a breakdown of the GASB 45 monthly total cost for a male 60 – 64 employee retiring after January 1, 2013 and his spouse of the same age enrolled in the Healthmate 0005 HDHP plan.

	Retiree	Spouse
Retiree contribution	$ 0.00	$ 0.00
Explicit subsidy	$ 542.83	$ 619.26
Implicit subsidy	$ 332.17	$ 172.40
Total monthly cost	$ 875.00	$ 791.66



Actives with coverage	*Single*	*Non-Single*	*Total*	*Avg. Age*	*Avg. Svc*	*Salary*
Classic 0007		2	2	58.2	13.0	$ 157,720
Healthmate 0007	3	11	14	50.3	14.7	$ 731,282
Healthmate 0002, 0004, 0009	9	33	42	40.3	9.9	$ 2,302,461
Healthmate 0005 HDHP	11	18	29	36.5	8.4	$ 1,484,572
Total actives with coverage	**23**	**64**	**87**	**41.0**	**10.2**	**$ 4,676,035**

Actives with coverage	*Total*	*Avg. Age*	*Avg. Svc*	*Salary*
Total actives without coverage	**14**	**44.9**	**8.9**	**$ 731,175**

Active employees without coverage are assumed not to elect health care coverage at retirement. They have been excluded from the GASB valuation.

Retirees with coverage	*Single*	*Non-Single*	*Total*	*Avg. Age*
Classic 0001	1	2	3	62.7
Classic 0007		2	2	61.1
Classic 0009		3	3	61.5
Healthmate 0001		3	3	54.0
Healthmate 0007	1	1	2	62.1
Healthmate 0002, 0004, 0009	4	17	21	53.6
Healthmate 0005 HDHP		9	9	52.0
Total retirees with coverage	**6**	**37**	**43**	**55.2**

Active Age-Service Distribution

Age	Years of Service										Total
	< 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	
Under 25	4	1									5
25 to 29	2	6	1								9
30 to 34	4	3	5								12
35 to 39	1	1	9	3	2						16
40 to 44	3	1	12	3	7	1					27
45 to 49	1	1	3	1	3						9
50 to 54	1			2	5		3				11
55 to 59					2	2	3				7
60 to 64			3		1						4
65 to 69			1								1
70 & up											0
Total	**16**	**13**	**34**	**9**	**20**	**3**	**6**	**0**	**0**	**0**	**101**

APPENDIX

Actuarial Gain / Loss Reconciliation

Actual AAL as of July 1, 2011	$	12,527,599
Expected AAL as of July 1, 2012	$	12,955,355
Total (gain) / loss		135,567
Actual AAL as of July 1, 2012	$	13,090,922

(Gain) / loss components:

Loss due to data	$	356,671
(Gain) due to lower than expected per capita costs		(587,316)
Loss due to updated mortality		35,330
Loss due to updated health care trend rates		330,882
Total (gain) / loss	$	135,567

Comparison of Participant Demographic Information

The active participants' number below may include active employees who currently have no health care coverage. Refer to Summary of Participants section for an accurate breakdown of active employees with and without coverage.

	As of July 1, 2010	*As of July 1, 2013*
Active Participants	106	101
Retired Participants	36	43
Averages for Active		
Age	43.1	41.5
Service	11.5	10.0
Averages for Inactive		
Age	55.5	55.2

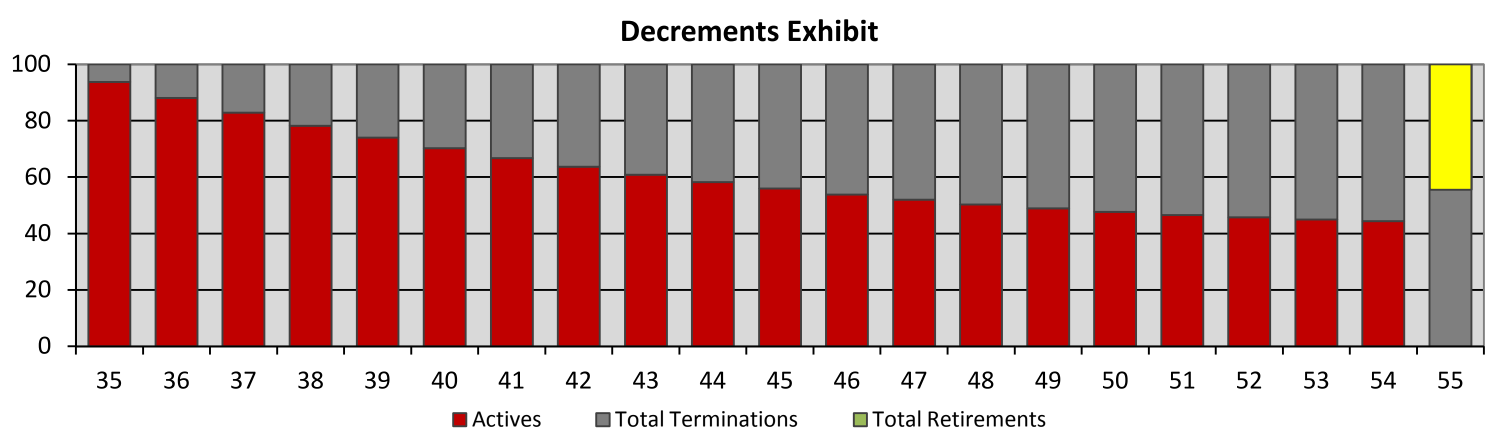
Glossary

Decrements Exhibit

The table below illustrates how actuarial assumptions can affect a long-term projection of future liabilities. Starting with 100 employees at age 35, the illustrated actuarial assumptions show that 44.430 employees out of the original 100 are expected to retire and could elect retiree health benefits at age 55.

Age	# Remaining Employees	# of Terminations per Year*	# of Retirements per Year*	Total Decrements
35	100.000	6.276	0.000	6.276
36	93.724	5.677	0.000	5.677
37	88.047	5.136	0.000	5.136
38	82.911	4.648	0.000	4.648
39	78.262	4.209	0.000	4.209
40	74.053	3.814	0.000	3.814
41	70.239	3.456	0.000	3.456
42	66.783	3.131	0.000	3.131
43	63.652	2.835	0.000	2.835
44	60.817	2.564	0.000	2.564
45	58.253	2.316	0.000	2.316

Age	# Remaining Employees	# of Terminations per Year*	# of Retirements per Year*	Total Decrements
46	55.938	2.085	0.000	2.085
47	53.853	1.866	0.000	1.866
48	51.987	1.656	0.000	1.656
49	50.331	1.452	0.000	1.452
50	48.880	1.253	0.000	1.253
51	47.627	1.060	0.000	1.060
52	46.567	0.877	0.000	0.877
53	45.690	0.707	0.000	0.707
54	44.983	0.553	0.000	0.553
55	44.430	0.000	44.430	44.430

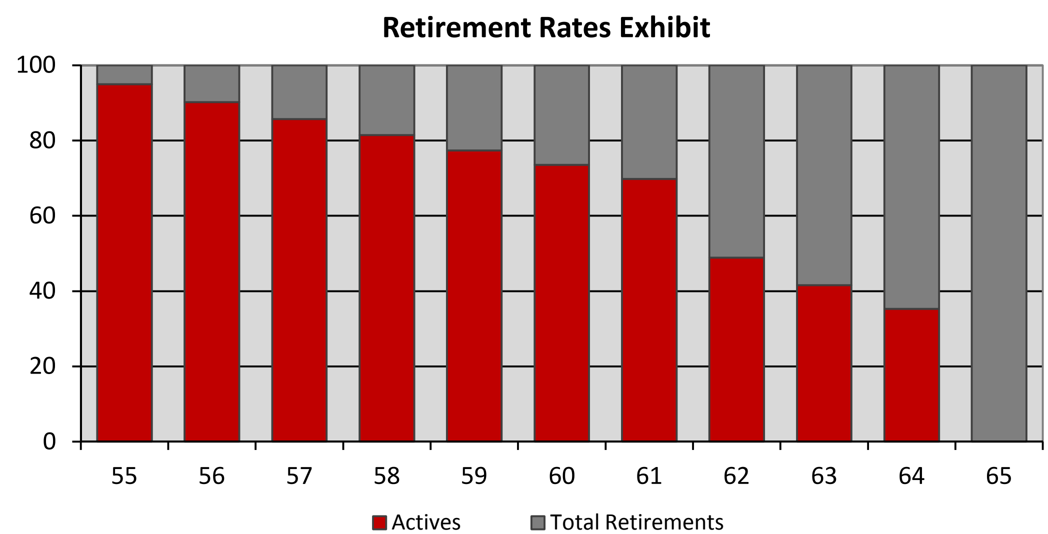


* The above rates are illustrative rates and are not used in our GASB calculations.

Retirement Rates Exhibit

The table below illustrates how actuarial assumptions can affect a long-term projection of future liabilities. The illustrated retirement rates show the number of employees who are assumed to retire annually based on 100 employees age 55 who are eligible for retiree health care coverage. The average age at retirement is 62.0.

Age	Active Employees BOY	Annual Retirement Rates*	# Retirements per Year	Active Employees EOY
55	100.000	5.0%	5.000	95.000
56	95.000	5.0%	4.750	90.250
57	90.250	5.0%	4.513	85.738
58	85.738	5.0%	4.287	81.451
59	81.451	5.0%	4.073	77.378
60	77.378	5.0%	3.869	73.509
61	73.509	5.0%	3.675	69.834
62	69.834	30.0%	20.950	48.884
63	48.884	15.0%	7.333	41.551
64	41.551	15.0%	6.233	35.318
65	35.318	100.0%	35.318	0.000



* The above rates are illustrative rates and are not used in our GASB calculations.

Illustration of GASB Calculations

The purpose of the illustration is to familiarize non-actuaries with the GASB 45 actuarial calculation process.

I. Facts

1. The employer provides subsidized retiree health coverage worth $100,000 to employees retiring at age 55 with 25 years of service. The employer funds for retiree health coverage on a pay-as-you-go basis.

2. Employee X is age 50 and has worked 20 years with the employer.

3. Retiree health subsidies are paid from the general fund assets which are expected to earn 4.5% per year on a long-term basis.

4. Based on Employee X's age and sex he has a 98.0% probability of living to age 55 and a 95.0% probability of continuing to work to age 55.

II. Calculation of Present Value of Future Benefits

Present Value of Future Benefits represents the cost to finance benefits payable in the future to current and future retirees and beneficiaries, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.

	Value	Description
A.	$100,000	Projected benefit at retirement
B.	80.2%	Interest discount for five years = $(1 / 1.045)^5$
C.	98.0%	Probability of living to retirement age
D.	95.0%	Probability of continuing to work to retirement age
E.	$74,666	Present value of projected retirement benefit measured at employee's current age = A x B x C x D

Illustration of GASB Calculations (continued)

III. Calculation of Actuarial Accrued Liability

Actuarial Accrued Liability represents the portion of the Present Value of Future Benefits which has been accrued recognizing the employee's past service with the employer. The Actuarial Accrued Liability is a required disclosure in the Required Supplementary Information section of the employer's financial statement.

	Value	Description
A.	$74,666	Present value of projected retirement benefit measured at employee's current age
B.	20	Current years of service with employer
C.	25	Projected years of service with employer at retirement
D.	$59,733	Actuarial accrued liability measured at employee's current age = A x B / C

IV. Calculation of Normal Cost

Normal Cost represents the portion of the Present Value of Future Benefits allocated to the current year.

	Value	Description
A.	$74,666	Present value of projected retirement benefit measured at employee's current age
B.	25	Projected years of service with employer at retirement
C.	$2,987	Normal cost measured at employee's current age = A / B

V. Calculation of Annual Required Contribution

Annual Required Contribution is the total expense for the current year to be shown in the employer's income statement.

	Value	Description
A.	$2,987	Normal Cost for the current year
B.	$3,509	30-year amortization (level dollar method) of Unfunded Actuarial Accrued Liability using a 4.5% interest rate discount factor
C.	$292	Interest adjustment = 4.5% x (A + B)
D.	$6,788	Annual Required Contribution = A + B + C

Definitions

GASB 45 defines several unique terms not commonly employed in the funding of pension and retiree health plans. The definitions of the terms used in the GASB actuarial valuations are noted below.

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

2. **Actuarial Assumptions** – Assumptions as to the occurrence of future events affecting health care costs, such as: mortality, withdrawal, disablement and retirement; changes in compensation and Government provided health care benefits; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; characteristics of future entrants for Open Group Actuarial Cost Methods; and other relevant items.

3. **Actuarial Cost Method** – A procedure for determining the Actuarial Present Value of future benefits and expenses 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.

4. **Actuarial Present Value** – The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:

   a) adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, Social Security, marital status, etc.);
   b) multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned; and
   c) discounted according to an assumed rate (or rates) of return to reflect the time value of money.

5. **Annual OPEB Cost** – An accrual-basis measure of the periodic cost of an employer's participation in a defined benefit OPEB plan.

6. **Annual Required Contribution (ARC)** – The employer's periodic required contributions to a defined benefit OPEB plan, calculated in accordance with the parameters.

7. **Explicit Subsidy** – The difference between (a) the amounts required to be contributed by the retirees based on the premium rates and (b) actual cash contribution made by the employer.

8. **Funded Ratio** – The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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

Definitions (continued)

10. **Implicit Subsidy** – In an experience-rated healthcare plan that includes both active employees and retirees with blended premium rates for all plan members, the difference between (a) the age-adjusted premiums approximating claim costs for retirees in the group (which, because of the effect of age on claim costs, generally will be higher than the blended premium rates for all group members) and (b) the amounts required to be contributed by the retirees.

11. **Net OPEB Obligation** – The cumulative difference since the effective date of this Statement 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.

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

13. **Pay-as-you-go** – A method of financing a benefit plan under which the contributions to the plan are generally made at about the same time and in about the same amount as benefit payments and expenses becoming due.

14. **Per Capita Costs** – The current cost of providing postretirement health care benefits for one year at each age from the youngest age to the oldest age at which plan participants are expected to receive benefits under the plan.

15. **Present Value of Future Benefits** – Total projected benefits include all benefits estimated to be payable to plan members (retirees and beneficiaries, terminated employees entitled to benefits but not yet receiving them, and current active members) as a result of their service through the valuation date and their expected future service. The actuarial present value of total projected benefits as of the valuation date is the present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment. Expressed another way, 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.

16. **Select and Ultimate Rates** – Actuarial assumptions that contemplate different rates for successive years. Instead of a single assumed rate with respect to, for example, the investment return assumption, the actuary may apply different rates for the early years of a projection and a single rate for all subsequent years. For example, if an actuary applies an assumed investment return of 8% for year 20W0, then 7.5% for 20W1, and 7% for 20W2 and thereafter, then 8% and 7.5% select rates, and 7% is the ultimate rate.

17. **Substantive Plan** – The terms of an OPEB plan as understood by the employer(s) and plan members.