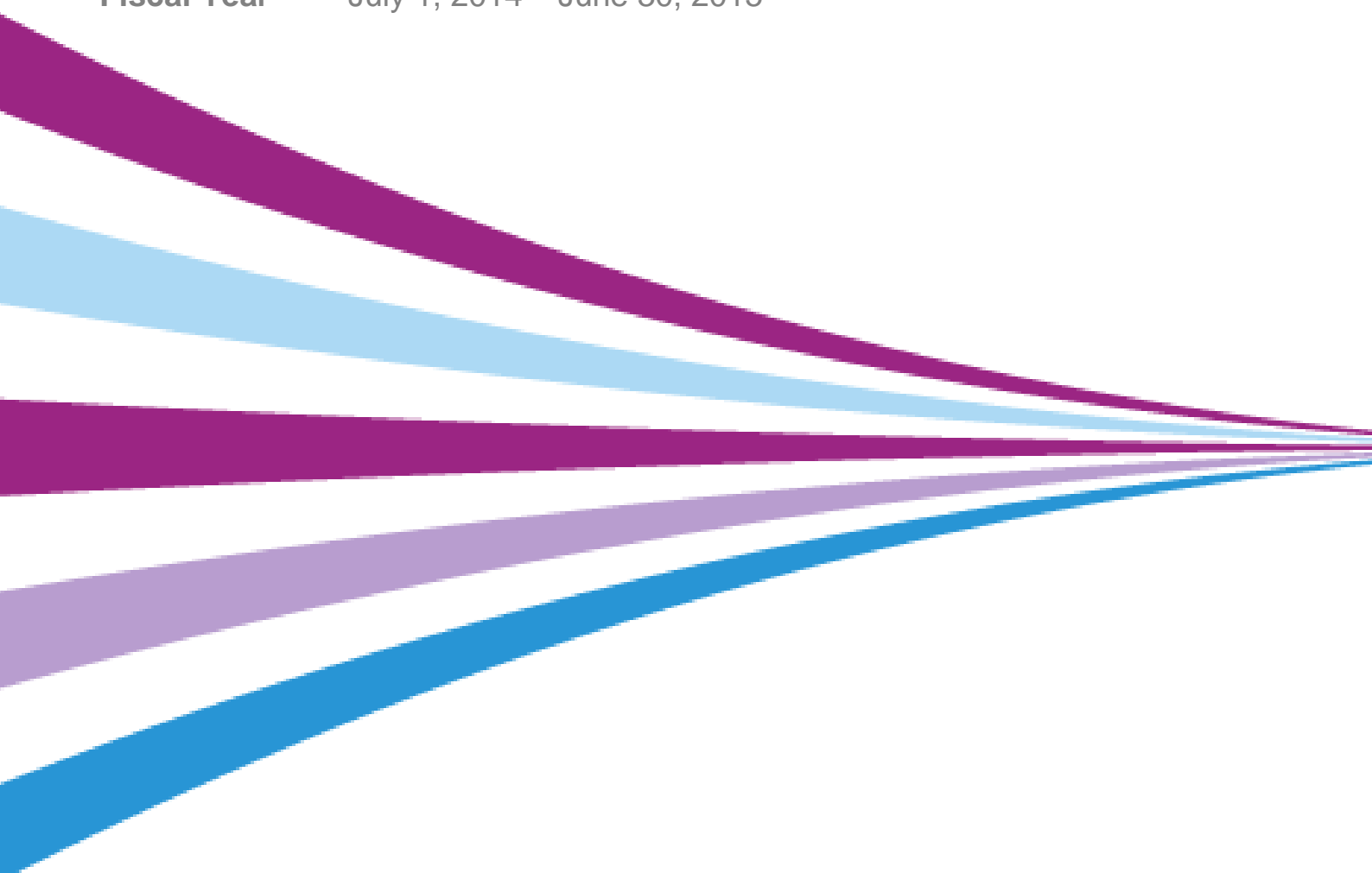


# The Town of Smithfield

## Postretirement Benefits Analysis

### Actuarial Valuation Report

Fiscal Year July 1, 2014 – June 30, 2015



October 22, 2015

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## *Section I – Overview*

The Town of Smithfield has engaged Buck Consultants to prepare a roll-forward actuarial valuation of their post-retirement benefits program as of June 30, 2015. This valuation was performed using employee census data, enrollment data, claims, premiums, participant contributions and plan provision information provided by personnel of the Town of Smithfield for the previous valuation. Buck did not audit these data, although they were reviewed for reasonability. The results of the valuation are dependent on the accuracy of the data.

Based on the foregoing, the cost results and actuarial exhibits presented in this report were determined on a consistent and objective basis in accordance with applicable Actuarial Standards of Practice and generally accepted actuarial procedures.

The purposes of the valuation are to analyze the current funded position of the Town's post-retirement benefits program, determine the level of contributions necessary to assure sound funding and provide reporting and disclosure information for financial statements, governmental agencies and other interested parties. This valuation report contains information required by the Government Accounting Standards Board's Statements Nos. 43 and 45, respectively entitled "Financial Reporting for Post-employment Benefit Plans Other Than Pension Plans" and "Accounting and Financial Reporting by Employers for Post-employment Benefits Other Than Pensions." Use of this report for any other purpose may not be appropriate and may result in mistaken conclusions due to failure to understand applicable assumptions, methodologies, or inapplicability of the report for that purpose. No one may make any representations or warranties based on any statements or conclusions contained in this report without the written consent of Buck. The attached pages should not be provided without a copy of this report in its entirety.

This report is intended to replace the report sent on October 9, 2015. This report reflects the following updates:

- Assets held by Smithfield as of June 30, 2015 were updated from \$2,367,008 to \$2,369,807 to reflect an additional receivable of \$2,799.
- FY15 contributions by Smithfield were updated from \$1,409,658 to \$1,409,946 to reflect an additional receivable of \$288 for cash in transit.

According to GASB principles, if the benefits are not prefunded, the rate earned by the General Asset Account of the employer must be used to select the discount rate used to measure the plan. If the benefits had been fully pre-funded (i.e., the Town had been contributing the full ARC (Annual Required Contribution) each year), the discount rate would be based on the expected return that the qualified assets would be assumed to earn, which in turn depends upon the asset allocation of those funds. In the event of partial funding (i.e., the Town had been contributing a portion of the ARC each year to a qualified trust), a "blended" discount rate would be used. In the current valuation, a blended discount rate of 5.75% was used since the plan's assets became qualified during FY13 but the Town had not been contributing the full ARC in previous years.

The Fiscal Year 2015 valuation results are based on a roll-forward of the Fiscal Year 2014 valuation results, adjusted for the blended discount rate noted above. The blended discount rate was determined based on the value of the assets in relation to the accumulated fully funded ARC on a hypothetical basis.

To estimate the effect of fully prefunding the obligation, we have used an alternative discount rate of 8.0%, which implicitly assumes a relatively high proportion of equity investments. Section II provides a summary of the principal valuation results. Section V provides a projection of funding amounts.

The 6/30/2015 Actuarial Accrued Liability (AAL) is approximately \$1.0 million higher than expected from the prior valuation. If all the assumptions of the FYE 2014 valuation had been met, we would have expected the AAL to increase from approximately \$24.5 million to \$25.4 million. The difference between the expected AAL and the actual AAL of \$26.4 million is due to an updated discount rate (5.75%).

The economic and demographic assumptions used for financial accounting purposes were chosen by the plan sponsor with our advice. We believe these assumptions are reasonable for financial accounting purposes. Given the assumptions selected, the costs and actuarial exhibits presented in this report have been prepared in accordance with the requirements of GASB 43 & 45. It should be recognized, however, that there can be significant differences between actual experience and these assumptions. Moreover, other sets of reasonable assumptions can yield materially lesser or greater results.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: retiree group benefits program experience differing from that anticipated by the assumptions; changes in assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and changes in retiree group benefits program provisions or applicable law. Retiree group benefits models necessarily rely on the use of approximations and estimates, and are sensitive to changes in these approximations and estimates. Small variations in these approximations and estimates may lead to significant changes in actuarial measurements. Because of limited scope, Buck performed no analysis of the potential range of such future differences.

The results of the valuation are appropriate for the purposes noted above. As the results are sensitive to the underlying assumptions and methods, the results of calculations prepared for other purposes could differ significantly. Accordingly, these results should not be relied upon for other purposes.

The valuation was prepared under my supervision. I am an Associate of the Society of Actuaries and a Member of the American Academy of Actuaries and have met the Qualifications Standard of the American Academy of Actuaries to render the actuarial opinions contained herein. I am available to answer questions about this report.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Brian Hlava".

Brian Hlava, ASA, MAAA, FCA  
Director, Consulting Actuary

Enc  
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## Section II - Required Information

	<u>Partial Prefunding</u>	<u>Full Prefunding</u>	<u>Difference</u>
Discount Rate:	6.10%	8.00%	
<b><u>At 7/1/2014</u></b>			
a) Market Value of Assets	2,085,228	2,085,228	0
b) Actuarial Accrued Liability			
Active participants	13,258,640	10,124,192	3,134,448
Retired participants	11,208,527	9,874,285	1,334,242
Total AAL	24,467,167	19,998,477	4,468,690
c) Unfunded Actuarial Liability "UAL" [ b - a ]	22,381,939	17,913,249	4,468,690
d) Funded ratio [ a / b ]	8.5%	10.4%	-1.9%
e) Annual covered payroll	34,258,672	34,258,672	0
f) UAL as percent of covered payroll	65.33%	52.29%	N/A
<hr/>			
<b><u>For Fiscal Year 2015</u></b>			
g) Normal Cost	738,218	513,191	225,027
h) Amortization of UAL*	1,548,973	1,473,323	75,650
i) Interest to middle of fiscal year	68,727	77,932	-9,205
j) Annual Required Contribution (ARC) [= g + h + i ]	2,355,918	2,064,446	291,472
k) Expected benefit payments**	1,299,759	1,299,759	0

\* 30-year amortization, 6.10% amortization is based on a total UAL of \$22,381,939 and 8.00% amortization is based on a total UAL of \$17,913,249

\*\* On an expected "true cost" basis.

## Section III – Valuation Information

### Annual Post Retirement Premiums effective July 1, 2014

Benefits are available to employees and retirees through a number of Plans depending on the contract negotiated. The following are the annual current rates being paid by the town and by members.

Rates in effect from July 1, 2014 through June 30, 2015		
Plan	Individual	Family
Police		
Medical	\$ 7,850	\$ 19,808
Dental	\$ 382	\$ 949
Fire		
Medical	\$ 7,903	\$ 20,019
Dental	\$ 382	\$ 949
Town		
Medical	\$ 7,457	\$ 18,815
Dental	\$ 382	\$ 919
Classic – School		
Medical	\$ 7,955	\$ 20,083
Dental	\$ 388	\$ 944
HealthMate – School		
Medical	\$ 6,673	\$ 17,125
Dental	\$ 388	\$ 944
HealthMate 100/80 – School		
Medical	\$ 6,286	\$ 16,129
Dental	\$ 388	\$ 944

## Section III - Valuation Information

### 06/30/2015 Valuation

#### Number of Employees included in valuations as of 6/30/2014

	Town	Police	Fire	Ice Rink	Water Fund	School	Total
Actives	54	39	54	3	2	313	465
Retired & Spouses (medical &/or dental)	4	21	16	0	0	40	81
<b>Total</b>	<b>58</b>	<b>60</b>	<b>70</b>	<b>3</b>	<b>2</b>	<b>353</b>	<b>546</b>

#### Average Age as of 6/30/2014

	Town	Police	Fire	Ice Rink	Water Fund	School	Total
Actives	51.0	37.8	38.9	34.1	47.4	46.3	45.2
Retired & Spouses (medical &/or dental)	59.9	51.6	53.0	n/a	n/a	60.7	56.1
<b>Total</b>	<b>51.6</b>	<b>54.1</b>	<b>53.0</b>	<b>51.0</b>	<b>51.0</b>	<b>52.0</b>	<b>52.3</b>

#### Accrued Liability as of 6/30/2014 @ 6.10%

Active	1,102,807	3,391,794	5,623,986	6,258	168,550	2,965,245	13,258,640
Retired	474,812	5,176,469	3,863,295	0	0	1,693,951	11,208,527
<b>Total</b>	<b>1,577,619</b>	<b>8,568,263</b>	<b>9,487,281</b>	<b>6,258</b>	<b>168,550</b>	<b>4,659,196</b>	<b>24,467,167</b>

#### Annual Required Contribution for FY15

Normal Cost	63,613	187,306	357,340	550	6,390	123,019	738,218
Amortization of UAL	99,876	542,442	600,623	396	10,671	294,965	1,548,973
Interest to middle of fiscal year	4,913	21,928	28,785	28	513	12,560	68,727
<b>Total</b>	<b>168,402</b>	<b>751,676</b>	<b>986,748</b>	<b>974</b>	<b>17,574</b>	<b>430,544</b>	<b>2,355,918</b>
Pay-as-you-go for FY2015	101,054	380,897	314,809	0	16	502,984	1,299,759
Difference	67,348	370,779	671,939	974	17,558	(72,440)	1,056,159

## *Section IV – Schedule of Employer Contributions*

The Government Accounting Standards Board's Statement No. 45 "Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions" outlines various requirements of a funding schedule that will amortize the unfunded actuarial liability and cover normal costs. Amortization of the unfunded actuarial liability is to be based on a schedule that extends no longer than 30 years. The contribution towards the amortization of the unfunded actuarial liability may be made in level payments or in payments increasing at the same rate as salary increases.

In the amortization schedule shown for the fully prefunded case, the amortization of the unfunded accrued liability is shown in a closed, level dollar basis. In the amortization schedule shown for the non-fully prefunded case, the amortization of the unfunded accrued liability is shown on an open level dollar basis. In both cases, the amortization period is 30 years. The normal costs are expected to increase at the same rate as the assumed ultimate health care trend rate. The contributions were computed assuming that the contribution is paid on January 1 (i.e. the middle of the fiscal year).

Paragraph 12 of GASB 45 stipulates that valuations must be performed at least biennially or triennially, depending on the number of plan members. The following projections are intended only to illustrate long-term implications of prefunding versus pay-as-you-go.



## Section IV - Schedule of Employer Contributions

### Assumed Partial Prefunding Interest Rate of 5.75%\*

Fiscal Year	Normal Cost	Amortization of UAL	Interest	ARC	Pay-as-You-Go
<u>Ending In</u>					
2015	738,218	1,548,973	68,727	2,355,918	1,299,759
2016	828,310	1,609,964	69,121	2,507,395	1,370,472
2017	865,584	1,666,869	71,790	2,604,243	1,426,780
2018	904,535	1,725,810	74,566	2,704,911	1,491,223
2019	945,239	1,786,463	77,439	2,809,141	1,519,926
2020	987,775	1,851,507	80,489	2,919,771	1,647,642
2021	1,032,225	1,914,518	83,535	3,030,278	1,702,616
2022	1,078,675	1,980,514	86,722	3,145,911	1,735,451
2023	1,127,215	2,051,332	90,106	3,268,653	1,861,067
2024	1,177,940	2,121,016	93,519	3,392,475	2,053,550
2025	1,230,947	2,185,058	96,838	3,512,843	2,089,771
2026	1,286,340	2,254,040	100,363	3,640,743	2,128,719
2027	1,344,225	2,328,227	104,107	3,776,559	2,261,417
2028	1,404,715	2,401,648	107,904	3,914,267	2,484,290
2029	1,467,927	2,468,243	111,583	4,047,753	2,463,282
2030	1,533,984	2,544,581	115,620	4,194,185	2,607,372
2031	1,603,013	2,620,071	119,717	4,342,801	2,617,509
2032	1,675,149	2,704,086	124,143	4,503,378	2,639,312
2033	1,750,531	2,796,534	128,901	4,675,966	2,630,983
2034	1,829,305	2,900,202	134,073	4,863,580	2,609,192
2035	1,911,624	3,016,899	139,715	5,068,238	2,733,832
2036	1,997,647	3,137,557	145,574	5,280,778	2,826,275
2037	2,087,541	3,264,878	151,731	5,504,150	2,910,184
2038	2,181,480	3,400,108	158,228	5,739,816	2,988,136
2039	2,279,647	3,544,395	165,101	5,989,143	3,027,353
2040	2,382,231	3,701,225	172,455	6,255,911	2,862,320
2041	2,489,431	3,885,675	180,723	6,555,829	2,954,454
2042	2,601,455	4,081,976	189,463	6,872,894	2,892,613
2043	2,718,520	4,301,739	199,012	7,219,271	2,713,130
2044	2,840,853	4,554,759	209,652	7,605,264	2,676,957
2045	2,968,691	4,833,466	221,177	8,023,334	2,453,854

- \* 1. FY2014 Annual ARC uses a 6.10% discount rate (based on the prior valuation).  
 2. Projection assumes the Town only funds at Pay-as-You-Go cost going forward. For illustrative purposes only (as partial funding discount rate may decrease over time.) The projection of normal cost assumes new entrants.

## Section IV - Schedule of Employer Contributions

### Assumed Full Prefunding Interest Rate of 8.00%

Fiscal Year	Normal Cost	Amortization of UAL	Interest	ARC	Pay-as-You-Go
<u>Ending In</u>	<u>Normal Cost</u>	<u>of UAL</u>	<u>Interest</u>	<u>ARC</u>	<u>Pay-as-You-Go</u>
2015	513,191	1,473,323	77,932	2,064,446	1,299,759
2016	536,285	1,473,323	78,838	2,088,446	1,370,472
2017	560,418	1,473,323	79,785	2,113,526	1,426,780
2018	585,637	1,473,323	80,774	2,139,734	1,491,223
2019	611,991	1,473,323	81,808	2,167,122	1,519,926
2020	639,531	1,473,323	82,888	2,195,742	1,647,642
2021	668,310	1,473,323	84,017	2,225,650	1,702,616
2022	698,384	1,473,323	85,197	2,256,904	1,735,451
2023	729,811	1,473,323	86,430	2,289,564	1,861,067
2024	762,652	1,473,323	87,718	2,323,693	2,053,550
2025	796,971	1,473,323	89,065	2,359,359	2,089,771
2026	832,835	1,473,323	90,472	2,396,630	2,128,719
2027	870,313	1,473,323	91,942	2,435,578	2,261,417
2028	909,477	1,473,323	93,478	2,476,278	2,484,290
2029	950,403	1,473,323	95,084	2,518,810	2,463,282
2030	993,171	1,473,323	96,762	2,563,256	2,607,372
2031	1,037,864	1,473,323	98,515	2,609,702	2,617,509
2032	1,084,568	1,473,323	100,347	2,658,238	2,639,312
2033	1,133,374	1,473,323	102,262	2,708,959	2,630,983
2034	1,184,376	1,473,323	104,263	2,761,962	2,609,192
2035	1,237,673	1,473,323	106,354	2,817,350	2,733,832
2036	1,293,368	1,473,323	108,539	2,875,230	2,826,275
2037	1,351,570	1,473,323	110,822	2,935,715	2,910,184
2038	1,412,391	1,473,323	113,208	2,998,922	2,988,136
2039	1,475,949	1,473,323	115,701	3,064,973	3,027,353
2040	1,542,367	1,473,323	118,307	3,133,997	2,862,320
2041	1,611,774	1,473,323	121,030	3,206,127	2,954,454
2042	1,684,304	1,473,323	123,875	3,281,502	2,892,613
2043	1,760,098	1,473,323	126,849	3,360,270	2,713,130
2044	1,839,302	1,473,323	129,956	3,442,581	2,676,957
2045	1,922,071	-	75,404	1,997,475	2,453,854

## Section V - GASB 45 Disclosure Requirements

### GASB 45 DISCLOSURE REQUIREMENTS

A. Annual OPEB Cost and Net OPEB Obligations	07/01/2012 -	07/01/2013 -	07/01/2014 -	07/01/2015 -
	<u>06/30/2013</u>	<u>06/30/2014</u>	<u>06/30/2015</u>	<u>06/30/2016**</u>
1. Annual Required Contribution (ARC)	2,278,427	2,339,552	2,355,918	2,507,395
2. Interest on net OPEB Obligation	253,494	270,176	270,064	305,798
3. Adjustment to ARC	<u>-323,106</u>	<u>-325,221</u>	<u>-325,086</u>	<u>-376,085</u>
4. Annual OPEB Cost (Expense)	2,208,815	2,284,507	2,300,896	2,437,108
5. Contribution made (assumed middle of year)*	<u>2,608,161</u>	<u>2,286,345</u>	<u>1,409,946</u>	<u>1,370,472</u>
6. Increase in OPEB Obligation	-399,346	-1,838	890,950	1,066,636
7. Net OPEB Obligation - beginning of year	<u>4,828,465</u>	<u>4,429,119</u>	<u>4,427,280</u>	<u>5,318,230</u>
8. Net OPEB Obligation - end of year	4,429,119	4,427,280	5,318,230	6,384,866

The annual OPEB Cost, the percentage of annual OPEB cost contributed to the plan, and the net OPEB obligation for fiscal years ending 2012 - 2015 are as follows:

Fiscal Year Ending	Annual OPEB Cost	Percentage of Annual OPEB Cost Contributed	Net OPEB Obligation	Covered Payroll	AOC as Percentage of Covered Payroll
06/29/2012	2,886,483	46.5%	4,828,465	33,209,399	8.69%
06/30/2013	2,208,815	118.1%	4,429,119	34,537,775	6.40%
06/30/2014	2,284,507	100.1%	4,427,280	34,258,672	6.67%
06/30/2015	2,300,896	61.3%	5,318,230	34,940,336	6.59%
06/30/2016**	2,437,108	56.2%	6,384,866	34,940,336**	6.98%

### B. Funded Status and Funding Progress

Actuarial Valuation Date	(a) Actuarial Value of Assets	(b) Actuarial Accrued Liability (AAL)	(b) - (a) Unfunded AAL (UAL)	(a) / (b) Funded Ratio	Covered Payroll	[(b)-(a)]/(c) UAL as Percentage of Covered Payroll
06/30/09	0	26,277,277	26,277,277	0.00%	31,424,385	83.62%
06/30/10	0	26,748,967	26,748,967	0.00%	32,276,437	82.87%
06/30/11	0	31,168,449	31,168,449	0.00%	32,311,568	96.46%
06/30/12	0	33,727,292	33,727,292	0.00%	33,209,399	101.56%
06/30/13	977,467	24,768,046	23,790,579	3.95%	34,537,775**	68.88%
06/30/14	2,085,228	24,467,167	22,381,939	8.52%	34,258,672	62.82%
06/30/15	2,369,807	26,445,425	24,075,618	8.96%	34,940,336	68.90%

### C. Methods and Assumptions used for 7/1/2015 AAL and FY2016 ARC

- Interest Rate	5.75%
- 2015 Medical Trend Rate	7.50%
- Ultimate Medical Trend Rate	4.50%
- Year Ultimate Medical Trend Rate Reached	2021
- Actuarial Cost Method	Projected Unit Credit
- The remaining amortization period at 06/29/2015	30
- Increase in amortization payments	0%
- Annual Payroll Increase	0.00%

\* Contribution made reflects actual benefit payments for FY2015, including the FYE2015 asset balance as benefit payments

\*\* Estimated

## Schedule A – Actuarial Assumptions and Methods Town of Smithfield, All Groups

**Interest:** Fully prefund: 8.0% per year, net of investment expenses  
Partially Funded: 5.75% per year, net of investment expenses

**Actuarial Cost Method:** Projected Unit Credit attributed to benefit eligibility.

**Assets:** Market value is used.

**Medical Care Inflation:**

Year	Inflation Rate
2015	7.5%
2016	7.0%
2017	6.5%
2018	6.0%
2019	5.5%
2020	5.0%
2021 & after	4.5%

- Note: For school retirees hired before June 20, 1989, who do not meet 60/20 or 28 years of service with at least 15 with Smithfield, the Town's portion of the cost of retiree benefits are frozen at retirement and not increased for post-retirement inflation.

**Amortization period:** For the fully prefunded scenario, 30-year level-dollar payments, closed basis. For the non-fully prefunded scenario, 30-year level dollar, open basis. Amortization is performed on the plan as a whole and may not be appropriate on a component basis for funding purposes.

**Participation:** For non-School non-union employees hired after December 31, 1988, 50% for all future retirees. For all other non-School employees, 100% for all future retirees. For School employees, 100% for future retirees expecting to receive full subsidy and 85% for future retirees without full subsidy. Future School retirees are expected to elect same medical plan coverage as their current active medical plan.

**Marital status:** 80% of male employees and 60% of female employees are assumed to have a covered spouse at retirement. Wives are assumed to be three years younger than their husbands.

## Schedule A – Actuarial Assumptions and Methods Town of Smithfield, All Groups

### Medical Plan Costs:

Because the plans are experience rated and limited claims information was available, the assumed per capita costs are based on reported premiums as shown in Section III. The costs were adjusted to age 65 and then adjusted to age-specific rates using the age-based morbidity factors discussed further below. The costs for the 2015 valuation were trended back from 7/1/2015 to 7/1/2014 using the FY2014 trend of 7.50%. These costs are assumed to include any associated administrative expenses.

	Individual @ Age 65 FY2015
Police	\$15,178
Fire	\$15,281
Town	\$14,418
School - Deductible (Co-Ins 100/80)	\$10,886
School - Standard	\$11,557
School - Classic	\$13,777

### Dental Plan Benefits:

Per capita costs based on the premiums as shown in Section III were projected using a 4% trend. No age-based morbidity was applied. All future retirees are assumed to elect post-retirement dental coverage.

### Age-based Morbidity:

Per capita costs are adjusted to reflect expected cost increases related to age. The increase in the net incurred claims was based on the 2014 aging tables published by the SOA and are assumed to be:

Age	Annual Increase Retiree
29 and below	0.0%
30-49	varies, between 1.0 and 3.5%
50-64	varies, between 4.0 and 4.7%
65-79	varies, between -2.0 and 2.1%
80 and over	0.0%

- Note: Age-based morbidity is applied to the gross medical claims but not to retiree contributions nor to the gross dental claims.

## Schedule A – Actuarial Assumptions and Methods General Employees

### Separations from Active Service

Withdrawal and retirements rates below are based on eligibility under the pension plan, which includes the changes under the Rhode Island pension reform. For those individuals affected by the reform, dates of retirement eligibility were provided by the Town.

**Withdrawal Rates:** For teachers, withdrawal rates are based on the Teachers termination rate table published in the 2010 ERS Experience Study<sup>1</sup>.

For non-teacher general employees, withdrawal rates are based on the General Employees' termination rate table published in the 2010 MERS Experience Study<sup>2</sup>.

**Retirement Rates:** For employees who become eligible for OPEB benefits prior to becoming eligible for pension (i.e., age 60 with at least 10 years of service or with at least 28 years of service for teachers, and age 58 with at least 10 years of service or at least 30 years of service for non-teacher general employees), retirement rates are assumed to follow the respective withdrawal rate tables described above.

**Disability Rates:** For teachers, accidental and ordinary disability rates are based on the Teachers retirement rate table published in the 2010 ERS Experience Study.

For non-teacher general employees, accidental and ordinary disability rates are based on the General Employees' disability rate table published in the 2010 MERS Experience Study.

Ordinary disability rates were assumed to continue for members eligible for retirement.

**Mortality Rates:** RP-2014 projecting mortality improvements generationally using MP-2014, to reflect the Society of Actuaries' new mortality rate study.

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<sup>1</sup> Employees' Retirement System of Rhode Island: Actuarial Experience Study for the Six-Year Period Ending June 30, 2010. May 23, 2011, <https://www.ersri.org/public/actuarialValuations/ExpStudyRpt2010.pdf>

<sup>2</sup> Employees' Retirement System of Rhode Island: Actuarial Experience Study for the Six-Year Period Ending June 30, 2010, Supplement Covering The Municipal Employees' Retirement System. May 23, 2011, [https://www.ersri.org/public/actuarialValuations/ExpStudyRpt2010\\_MERS\\_Supplement.pdf](https://www.ersri.org/public/actuarialValuations/ExpStudyRpt2010_MERS_Supplement.pdf)

## Schedule A – Actuarial Assumptions and Methods Police and Fire

### Separations From Active Service

**Withdrawal Rates:** For police and fire, withdrawal rates are based on the General Employees' termination rate table published in the 2010 MERS Experience Study<sup>3</sup>.

**Retirement Rates:** For police and fire with at least 20 years of service, retirement rates are based on the General Employees' retirement rate table published in the 2010 MERS Experience Study. For police and fire retiring prior to meeting the above eligibility criteria, retirement rates are assumed to follow the withdrawal rate table for administrators described above.

**Disability Rates:** For police and fire, accidental and ordinary disability rates are based on the General Employees' disability rate table published in the 2010 MERS Experience Study. Ordinary disability rates were assumed to continue for members eligible for retirement.

**Mortality Rates:** RP-2014 projecting mortality improvements generationally using MP-2014, to reflect the Society of Actuaries' new mortality rate study.

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<sup>3</sup> Employees' Retirement System of Rhode Island: Actuarial Experience Study for the Six-Year Period Ending June 30, 2010, Supplement Covering The Municipal Employees' Retirement System. May 23, 2011, [https://www.ersri.org/public/actuarialValuations/ExpStudyRpt2010\\_MERS\\_Supplement.pdf](https://www.ersri.org/public/actuarialValuations/ExpStudyRpt2010_MERS_Supplement.pdf)

## Schedule B - Plan Provisions

For purposes of this valuation, active employees are assumed to keep their current coverage level (family or individual) after they retire, with any spouse coverage assumed to continue until age 65.

**Pre/Post-65 Coverage** Retiree Medical only to age 65.

**Retirement Eligibility**

Group	Eligibility
<b>Town (except Police and Fire)</b>	
Service Retirement	Age 58 with 20 years of service
Disability Retirement	No service requirement
<b>Police and Fire</b>	
Service Retirement	20 years of service
Disability Retirement	No service requirement
<b>School</b>	
Hired before 6/20/1989	Age 60 with 15 years of service
Hired on or after 6/20/1989	Age 60 with 20 years of service; or 28 years of service with at least 15 years with Smithfield

**Cost-Sharing**

Group	Contribution Structure
<b>Town</b>	
Non-Union hired after 12/31/1988	Participants contribute 100%.
Other Town employees	Participants are non-contributory
<b>Police and Fire</b>	
Participants are non-contributory	
<b>School</b>	
Hired before 6/20/1989	If either (1) age 60 with 20 years of service; or (2) 28 years of service with at least 15 years with Smithfield, participant is non contributory.  Otherwise (i.e., 60/15 but not 60/20, or service < 28), plan contribution is frozen at the date of retirement.
Hired on or after 6/20/1989 but before 7/1/1992	If 28 years of service with at least 15 years with Smithfield, participant is non contributory  Otherwise (i.e., 60/20 and service < 28), 50% contribution
Hired on or after 7/1/1992	Plan contributes a maximum of \$5,000 annually



## *Schedule C – Consideration of Health Care Reform*

### *Summary of Effects of Selected Provisions*

**Removal of Lifetime Maximum:** This does not apply since the current medical plans have no lifetime maximums. Note that this valuation reflects a \$5,000 annual maximum for school retirees with either 28 years of service or 60 years of age and 20 years of service. We have been advised by the client that these benefits constitute a Retiree Only plan, and so are not subject to restrictions on annual maximums under the Patient Protection and Affordable Care Act.

**Medicare Advantage Plans - Effective 1/1/2011:** The law provides for reductions to the amounts that would be provided to Medicare Advantage plans starting in 2011. This does not apply since none of the current plans are Medicare Advantage plans.

**Expansion of Child Coverage to Age 26:** Since few retirees cover children on retiree health plans, this provision will likely have a relatively small effect on the gross benefit cost. We have not reflected the impact of any cost increase due to the expansion of coverage.

**Public Exchanges – Starting 1/1/2014:** Since 2014, the health care exchanges (marketplaces) have made available health insurance to non-Medicare retirees with the possibility of federal income based subsidies. These alternative options could result in reduced participation in the Town's plans. Potential reduced participation due to the availability of this alternative coverage was considered when setting the participation assumption.

**Excise Tax on High-Cost Employer Health Plans (aka Cadillac Tax) - Effective 1/1/2018:** The excise tax is not reflected since we have ruled it to be non-material due to its minor impact on the liabilities (less than 0.1% of AAL).

**Other:** We have not identified any other specific provision of health care reform that would be expected to have a significant impact on the measured obligation. As additional guidance on the legislation is issued, we will continue to monitor any potential impacts.

## *Schedule D – Glossary of Terms*

### **Actuarial accrued liability**

That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of OPEB benefits and expenses which is not provided for by future Normal Costs and therefore is the value of benefits already earned.

### **Actuarial assumptions**

Assumptions as to the occurrence of future events affecting OPEB costs, such as: mortality, withdrawal, disablement and retirement; changes in compensation and Government provided OPEB 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.

### **Actuarial cost method**

A procedure for determining the Actuarial Present Value of OPEB 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.

### **Actuarial experience gain or loss**

A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates, as determined in accordance with a particular Actuarial Cost Method.

### **Amortization (of unfunded actuarial accrued liability)**

That portion of the OPEB plan contribution which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability or the Unfunded Frozen Actuarial Accrued Liability.

### **Annual OPEB cost**

An 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 expense to a defined benefit OPEB plan, calculated in accordance with the parameters. It is the value of the cash contributions for a funded plan and the value of the expense entry in the profit and loss section of the financial statements.

### **Closed amortization period (closed basis)**

A specific number of years that is counted from one date and, therefore, declines to zero with the passage of time. For example, if the amortization period initially is thirty years on a closed basis, twenty-nine years remain after the first year, twenty-eight years after the second year, and so forth. In contrast, an open amortization period (open basis) is one that begins again or is recalculated at each actuarial valuation date. Within a maximum number of years specified by law or policy (for example, thirty years), the period may increase, decrease, or remain stable.

### **Covered payroll**

Annual compensation paid to active employees covered by an OPEB plan. If employees also are covered by a pension plan, the covered payroll should include all elements included in compensation on which contributions to the pension plan are based. For example, if pension contributions are calculated on base pay including overtime, covered payroll includes overtime compensation.

**Defined benefit OPEB plan**

An OPEB plan having terms that specify the benefits to be provided at or after separation from employment. The benefits may be specified in dollars (for example, a flat dollar payment or an amount based on one or more factors such as age, years of service, and compensation), or as a type or level of coverage (for example, prescription drugs or a percentage of healthcare insurance premiums).

**Funded ratio**

The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

**Funding policy**

The program for the amounts and timing of contributions to be made by plan members, employer(s), and other contributing entities (for example, state government contributions to a local government plan) to provide the benefits specified by an OPEB plan.

**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, plan design, and technological developments.

**Investment return assumption (discount rate)**

The rate used to adjust a series of future payments to reflect the time value of money.

**Level dollar amortization method**

The amount to be amortized is divided into equal dollar amounts to be paid over a given number of years; part of each payment is interest and part is principal (similar to a mortgage payment on a building). Because payroll can be expected to increase as a result of inflation, level dollar payments generally represent a decreasing percentage of payroll; in dollars adjusted for inflation, the payments can be expected to decrease over time.

**Level percentage of projected payroll amortization method**

Amortization payments are calculated so that they are a constant percentage of the projected payroll of active plan members over a given number of years. The dollar amount of the payments generally will increase over time as payroll increases due to inflation; in dollars adjusted for inflation, the payments can be expected to remain level.

**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. It will be included as a balance sheet entry on the financial statements.

**Normal cost**

That portion of the Actuarial Present Value of OPEB benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method. It is the value of benefits to be accrued in the valuation year by active employees.

**OPEB-related debt**

All long-term liabilities of an employer to an OPEB plan, the payment of which is not included in the annual required contributions of a sole or agent employer (ARC) or the actuarially determined required contributions of a cost-sharing employer. Payments generally are made in accordance with installment contracts that usually include interest. Examples include contractually deferred contributions and amounts assessed to an employer upon joining a multiple-employer plan.

**Other postemployment benefits**

Postemployment benefits other than pension benefits. Other postemployment benefits (OPEB) include postemployment healthcare benefits, regardless of the type of plan that provides them, and all postemployment benefits provided separately from a pension plan, excluding benefits defined as termination offers and benefits.

**Pay-as-you-go**

A method of financing an OPEB 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.

**Required supplementary information (RSI)**

Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.