

# The Town of Smithfield

## Retirement Plan for Former Employees of the Police Department of the Town of Smithfield

Revised Actuarial Valuation Report

Plan Year July 1, 2015 – June 30, 2016

November 2015





**David L. Driscoll**  
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September 30, 2015

Mr. Randy R. Rossi  
*Finance Director*  
Town of Smithfield  
64 Farnum Pike  
Smithfield, RI 02917

Dear Randy:

Buck Consultants, LLC (Buck) was retained to complete this revised actuarial valuation of the Retirement Plan for Former Employees of the Police Department of the Town of Smithfield. This report presents the results of the valuation for the plan year and the fiscal year ending June 30, 2016, including the recommended contribution. The revision was made to reflect receivable contributions of \$101,774 in the asset value.

### **Purpose of this Report**

The plan sponsor may use this report for determining plan contributions. The report may also be used to prepare the plan's and the plan sponsor's audited financial statements.

Use of this report for any other purpose or by anyone other than the plan sponsor may not be appropriate and may result in mistaken conclusions because of failure to understand applicable assumptions, methods, 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 Buck Consultants' written consent.

Future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the economic and demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law. An analysis of the potential range of such future differences is beyond the scope of this valuation.

### **Recent Guidance**

This report reflects information required as part of GASB Statements Nos. 67 and 68, which were issued in 2012. These standards came into effect in this fiscal year and will continue to be implemented for fiscal years beginning after June 15, 2014.

### **Data Used**

Buck performed the valuation using participant and financial data supplied by the Town and John Hancock Life Insurance Company. Buck did not audit the data, although they were reviewed for reasonableness and consistency with the prior year data. The accuracy of the results of the valuation is dependent on the accuracy of the data.

### **Actuarial Certification**

The plan sponsor selected the assumptions used for the accounting results and funding policy calculations in the report with our advice. We believe that these assumptions are reasonable and comply with the requirements of GASB Statements Nos. 67 and 68. We prepared this report's accounting exhibits in accordance with the requirements of these standards.

Mr. Randi Rossi  
Town of Smithfield

September 2015  
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Based on the individually reasonable assumptions used in the preparation of this report, and on the data furnished us, we certify that projection of the costs under this plan has been made using generally accepted actuarial principles and practices, and that our recommended contributions make adequate provision for the funding of future benefits.

The report was prepared under the supervision of David L. Driscoll. We are members of the Society of Actuaries and of the American Academy of Actuaries. We meet the Qualification Standards of the Academy to render the actuarial opinions contained in this report. This report has been prepared in accordance with all applicable Actuarial Standards of Practice, and we are available to answer questions about it.

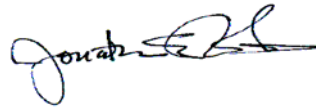
The Table of Contents, which immediately follows, outlines the material contained in the report.

Respectfully submitted,

BUCK CONSULTANTS, LLC

A handwritten signature in black ink that reads "David L. Driscoll".

David L. Driscoll, FSA, EA, MAAA  
Principal, Consulting Actuary

A handwritten signature in black ink that reads "Jonathan E. Dobbs".

Jonathan E. Dobbs, ASA, EA, MAAA  
Director, Retirement Actuary

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Smithfield Police 091715 DLD.JED\_ValRpt2015

cc: Mr. Dennis Finlay

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## Section 1 – Summary

This report presents the results of the actuarial valuation of the Retirement Plan for Former Employees of the Police Department of the Town of Smithfield for the plan year beginning July 1, 2015. In summary, the following is a comparison of the recommended contributions, expenses, assets, liabilities, and participant data for the plan year beginning July 1, 2015 and the prior plan year.

	2014 Plan Year	2015 Plan Year
<b>Recommended Employer Contributions</b>		
Recommended Employer Contribution	\$ 2,079,553	\$ 2,095,635
Minimum Recommended Employer Contribution	\$ 1,455,595	\$ 1,417,055
Actuarial Value of Assets	\$ 5,942,754	\$ 6,972,689
Unfunded Actuarial Accrued Liability	\$ 19,231,932	\$ 18,757,445
Present Value of Future Benefits	\$ 25,174,686	\$ 25,730,134
	<b>June 30, 2014</b>	<b>June 30, 2015</b>
<b>GASB 67 and 68 Information</b>		
Discount rate	7.75%	7.75%
Total pension liability	\$ 25,174,686	\$ 25,730,134
Fiduciary net position	\$ 5,952,209	\$ 6,918,093
Net pension liability	\$ 19,222,477	\$ 18,812,041
Pension expense	N/A	\$ 1,848,957

## Section 1 – Summary (continued)

### Recommended Contribution

The recommended contribution increased from \$2,079,553 for the 2014 plan year to \$2,095,635 for the 2015 plan year.

Details regarding the recommended contribution are shown in Section 2.

### Plan Assets

John Hancock Life Insurance Company furnished the financial data. The market value of plan assets increased from \$5,952,209 as of June 30, 2014 to \$6,918,093 as of June 30, 2015. The actuarial value of plan assets increased from \$5,942,754 as of June 30, 2014 to \$6,972,689 as of June 30, 2015.

Details regarding plan assets are shown in Section 3, Statement of Fiduciary Net Position.

### Plan Participants

The plan sponsor and John Hancock provided the data concerning plan participants as of the valuation date.

VALUATION DATE	July 1, 2014	July 1, 2015
Number of Participants		
Active	0	0
Terminated Vested	0	0
Disabled	5	5
Retirees and Beneficiaries <sup>1</sup>	<u>40</u>	<u>41</u>
Total	45	46

A reconciliation of the plan participants and a summary of participant characteristics are included in Section 5 of this report.

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<sup>1</sup> Includes 3 alternate payees in 2014 and 4 alternate payees in 2015.

## Section 1 – Summary (continued)

### Actuarial Assumptions and Methods

The economic and demographic assumptions used in this actuarial valuation are based upon a review of the existing portfolio and current economic conditions as well as the experience study that was performed in 2015 and published in May, 2015. The basis for the mortality assumption this year has been changed. The mortality rates used for the prior year were based on RP-2000 Mortality Table with projections specified by IRS Regulation 1.430(h)(3)-1, as applicable to the valuation year using a combined static table for both annuitants and non-annuitants. The mortality assumption was changed to: for male annuitants, 115% of RP-2000 Combined Healthy for Males with White Collar adjustments, projected generationally with Scale AA from 2000, and for female annuitants, 95% of RP-2000 Combined Healthy for Females with White Collar adjustments, projected generationally with Scale AA from 2000. The change in the mortality table increased the accrued liability by \$339,700. This change was made in accordance with the experience study published in May, 2015.

The rest of the actuarial assumptions and methods are the same as were used in the prior actuarial valuation.

Section 6 contains a summary of the actuarial assumptions and methods used in this actuarial valuation.

### Plan Provisions

The actuarial valuation results contained in this report are based on the plan provisions in effect on July 1, 2015. These plan provisions are the same as those used in the prior actuarial valuation. A summary of the plan provisions is in Section 7.

### Plan Experience

Plan experience in the 2014-2015 plan year was less favorable than that anticipated under the funding assumptions used in the valuation, which led to the development of an overall experience loss for the year.

The primary source of the loss was mortality experience. Fewer participants than expected died during the year.

In addition, the mortality assumption was updated in accordance with the experience study performed in 2015 and published in May, 2015. This change increased the unfunded liability by about \$340,000, and increased the recommended contribution by about \$38,000. The following table quantifies the various sources of gains and losses.

Source (positive numbers indicate a gain, negative numbers a loss)	Effect on Employer Liability
Demographic	
• Inactive mortality	\$ (96,247)
• Active mortality	0
• Retirement	0
• Termination	0
• Disability	0
• Other (e.g., data changes)	(21,444)
• Total	\$ (117,691)
Salary growth	0
Investment growth	42,732
Total experience gain/(loss)	\$ (74,959)

## Section 2 – Recommended Contribution

Funded Status	July 1, 2014	July 1, 2015
1. Actuarial Accrued Liability		
a. Retired participants and beneficiaries	\$ 20,239,790	\$ 20,651,457
b. Non-contributing and terminated participants entitled to deferred vested pensions	0	0
c. Disabled participants	4,934,896	5,078,677
d. Contributing active participants	<u>0</u>	<u>0</u>
e. Total actuarial accrued liability	\$ 25,174,686	\$ 25,730,134
2. Actuarial value of assets	\$ 5,942,754	\$ 6,972,689
3. Unfunded Actuarial Liability at valuation date: (1) – (2)	\$ 19,231,932	\$ 18,757,445
4. Funded status: (2) ÷ (1)	23.6%	27.1%



## Section 2 – Recommended Contribution (continued)

Recommended Employer Contribution	July 1, 2014	July 1, 2015
1. Normal cost	\$ 0	\$ 0
2. Expected expenses	\$ 19,000	\$ 16,000
3. 15-year amortization of unfunded actuarial liability	\$ 1,984,371	\$ 2,002,864
4. Recommended employer contribution (1.) + (2.) + (3.)	\$ 2,003,371	\$ 2,018,864
5. Adjustment for interest to mid-year	\$ 76,182	\$ 76,771
6. Total recommended employer contribution: (4.) + (5.)	\$ 2,079,553	\$ 2,095,635

Minimum Recommended Employer Contribution	July 1, 2014	July 1, 2015
1. Normal cost	\$ 0	\$ 0
2. Expected expenses	\$ 19,000	\$ 16,000
3. Interest on unfunded actuarial liability, discounted to beginning of year	\$ 1,383,271	\$ 1,349,143
4. Minimum recommended employer contribution (1.) + (2.) + (3.)	\$ 1,402,271	\$ 1,365,143
5. Adjustment for interest to mid-year	\$ 53,324	\$ 51,912
6. Total recommended employer contribution (4.) + (5.)	\$ 1,455,595	\$ 1,417,055

## Section 3 – Statement of Fiduciary Net Position

### Reconciliation of Actuarial Value of Assets

	IPG Contract	S&P 500 Stock Index Fund 1A	Diversified Stock Fund 1K	Total
1				
Assets as of July 1, 2014				
a. Fund assets as of July 1, 2014	\$ 2,055,539	\$ 1,958,824	\$ 1,928,391	\$ 5,942,754
b. Receivables (employer)	0	0	0	0
c. Receivables (employee)	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
d. Actuarial Value of assets	\$ 2,055,539	\$ 1,958,824	\$ 1,928,391	\$ 5,942,754
2				
Income				
a. Employer Contributions	\$ 800,000	\$ 687,783	\$ 687,783	\$ 2,175,566
b. Employee Contributions	0	0	0	0
c. Investment Return	82,091	230,433	265,501	578,025
d. Transfers	<u>1,100,000</u>	<u>(550,000)</u>	<u>(550,000)</u>	<u>0</u>
e. Total	\$ 1,982,091	\$ 368,216	\$ 403,284	\$ 2,753,591
3				
Expenses				
a. Benefit Payments	\$ 1,785,098	\$ 0	\$ 0	\$ 1,785,098
b. Administrative Expense	15,018	0	0	15,018
c. Investment Expense	<u>0</u>	<u>8,674</u>	<u>16,640</u>	<u>25,314</u>
d. Total	\$ 1,800,116	\$ 8,674	\$ 16,640	\$ 1,825,430
4				
Assets as of June 30, 2015				
a. Fund assets (1d. + 2e. - 3d.)	\$ 2,237,514	\$ 2,318,366	\$ 2,315,035	\$ 6,870,915
b. Receivables (employer)	0	50,887	50,887	101,774
c. Receivables (employee)	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
d. Actuarial Value of assets	\$ 2,237,514	\$ 2,369,253	\$ 2,365,922	\$ 6,972,689

### Determination of Market Value of Assets

	IPG contract Book Value	Market Value Adjustment for IPG	IPG Contract Market Value	Separate Stock Funds	Total Market Value
	(a)	(b)	(c) = (a) x [1 + (b)]	(d)	(c) + (d)
1. Assets as of July 1, 2014	\$ 2,055,539	0.46%	\$ 2,064,994	\$ 3,887,215	\$ 5,952,209
2. Assets as of July 1, 2015	\$ 2,237,514	(2.44%)	\$ 2,182,918	\$ 4,735,175	\$ 6,918,093

## Section 3 – Statement of Fiduciary Net Position (continued)

Statement of Changes in Fiduciary Net Position		2015
<b>Additions</b>		
Contributions		
Employer		\$ 2,277,340
Member		<u>0</u>
Total contributions		\$ 2,277,340
Net investment income		488,660
Other		<u>0</u>
Total additions		\$ 2,276,000
<b>Deductions</b>		
Benefit payments		\$ 1,785,098
Administrative expense		15,018
Other		<u>0</u>
Total deductions		\$ 1,800,116
<b>Net increase in net position</b>		\$ 965,884
<b>Net position restricted for pensions</b>		
Beginning of the year		\$ 5,952,209
End of the year		\$ 6,918,093

## Section 4 – GASB 67 and 68 Information

### A. Summary of Significant Accounting Policies

#### Method used to value investments.

Investments are reported at fair value.

### B. Plan Description

#### Plan administration

The Town of Smithfield, Rhode Island administers the Retirement Plan for Former Employees of the Police Department of the Town of Smithfield (Plan), a single-employer defined benefit pension plan that provides pensions for former members of the Police Department. Only former employees specifically listed in Schedule A of the plan document participate in this plan.

#### Plan membership

At June 30, 2015, pension plan membership consisted of the following:

Membership Status	Count
Inactive plan members or beneficiaries currently receiving	46
Inactive plan members entitled to but not yet receiving	0
Active plan members	0
Total	46

#### Benefits provided

Please see Section 7 of the report for a summary of plan provisions.

#### Contributions

The Town establishes contributions based on an actuarially determined contribution recommended by an independent actuary. The actuarially determined contribution is developed using the Unit Credit Actuarial Cost Method. For the year ended June 30, 2015, the Town contributed \$2,277,340 to the plan.

### C. Investments

#### Rate of return

For the year ended June 30, 2015, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 7.42%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

### D. Receivables

Plan assets as of June 30, 2015 include a receivable contribution in the amount of \$101,774.

## Section 4 – GASB 67 and 68 Information (continued)

### E. Net Pension Liability

The components of the net pension liability at June 30, 2015, were as follows:

Components of Net Pension Liability	
Total pension liability	\$ 25,730,134
Plan fiduciary net position	(6,918,093)
Authority's net pension liability	\$ 18,812,041
Plan fiduciary net position as a percentage of the total pension liability	26.89%

### F. Pension Expense as of June 30, 2015

Pension Expense	Fiscal Year Ending June 30, 2015
Service Cost	\$ 0
Interest Cost on Total Pension Liability	1,883,156
Differences between Expected and Actual Experience	117,690
Changes of Assumptions	339,700
Contributions-Member	0
Projected Earnings on Plan Investments	(511,094)
Differences between Projected and Actual Earnings	4,487
Administrative Expenses	15,018
Other	0
Total Pension Expense	\$ 1,848,957

The difference between projected and actual investment earnings is recognized over five years, in accordance with the provisions of GASB 68.

### G. Actuarial assumptions

The total pension liability was determined by an actuarial valuation as of June 30, 2015, using the following actuarial assumptions, applied to all periods included in the measurement:

Actuarial Assumptions	
Inflation	3.00%
Salary Increases	Not applicable.
Investment rate of return	7.75%, net of pension plan investment expenses. This is based on an average inflation rate of 3.00% and a real rate of return of 4.75%.

The mortality assumption was changed to: for male annuitants, 115% of RP-2000 Combined Healthy for Males with White Collar adjustments, projected generationally with Scale AA from 2000, and for female annuitants, 95%

## Section 4 – GASB 67 and 68 Information (continued)

of RP-2000 Combined Healthy for Females with White Collar adjustments, projected generationally with Scale AA from 2000.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2015 are summarized in the following table (note that the rates shown below include the inflation component):

Asset Class	Long-Term Expected Rate of Return
Domestic equity	12.2%
International equity	10.5%
Fixed income	5.7%
Real estate	9.9%
Cash	4.1%

### Discount rate

The discount rate used to measure the total pension liability was 7.75%. The projection of cash flows used to determine the discount rate assumed that Town contributions will continue to follow the pattern of contributions observed over the last five years. During that period, the Town contributed 102.2% of the cumulative recommended contribution level. Accordingly, the fiduciary net position was projected assuming that 100% of future recommended contribution levels will be contributed. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Had the fiduciary net position been projected to be depleted, a municipal bond rate of 3.73% would have been used in the development of the blended GASB discount rate after that point. The 3.73% rate is based on the S&P Municipal Bond 20 Year High Grade Rate Index.

### Sensitivity of the net pension liability to changes in the discount rate

The following presents the net pension liability, calculated using the discount rate of 7.75%, as well as what the Town's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.75%) or 1-percentage-point higher (8.75%) than the current rate:

	1% Decrease (6.75%)	Current Discount Rate (7.75%)	1% Increase (8.75%)
Net Pension Liability	\$ 21,791,732	\$ 18,812,041	\$ 16,335,898

## Section 4 – GASB 67 and 68 Information (continued)

### Schedules of Required Supplementary Information

#### Schedule of Changes in Town's Net Pension Liability and Related Ratios

	2015
<b>Total pension liability</b>	
Service cost	\$ 0
Interest	1,883,156
Changes of benefit terms	0
Differences between expected and actual experience	117,690
Changes of assumptions	339,700
Benefit payments	<u>(1,785,098)</u>
Net change in total pension liability	\$ 555,448
Total pension liability-beginning	\$ 25,174,686
Total pension liability-ending (a)	\$ 25,730,134
<b>Plan fiduciary net pension</b>	
Contributions-employer	\$ 2,277,340
Contributions-employee	0
Net investment income	488,660
Benefit payments, including refunds of employee contributions	(1,785,098)
Administrative expense	(15,018)
Other	<u>0</u>
Net change in plan fiduciary net position	\$ 965,884
Plan fiduciary net position-beginning	\$ 5,952,209
Plan fiduciary net position-ending (b)	\$ 6,918,093
Authority's net pension liability-ending (a)-(b)	\$ 18,812,041
Plan fiduciary net position as a percentage of the total pension liability	26.89%

#### Notes to Schedule:

##### A. Benefit changes

None.

##### B. Changes of assumptions

The mortality rates used for the prior year were based on RP-2000 Mortality Table with projections specified by IRS Regulation 1.430(h)(3)-1, as applicable to the valuation year using a combined static table for both annuitants and non-annuitants. The mortality assumption was changed to: for male annuitants, 115% of RP-2000 Combined Healthy for Males with White Collar adjustments, projected generationally with Scale AA from 2000, and for female annuitants, 95% of RP-2000 Combined Healthy for Females with White Collar adjustments, projected generationally with Scale AA from 2000. This change was made in accordance with the experience study performed in 2015 and published in May, 2015.

## Section 4 – GASB 67 and 68 Information (continued)

### Schedules of Required Supplementary Information (continued)

#### Schedule of Town Contributions

	2015
Actuarially determined contribution	\$ 2,079,553
Contributions related to the actuarially determined contribution	(2,277,340)
Contribution deficiency (excess)	\$ (197,787)

#### Notes to Schedule:

##### A. Valuation date

Actuarially determined contribution rates are calculated as of July 1, in the fiscal year in which contributions are reported. That is, the contribution calculated as of July 1, 2015 will be made during the fiscal year ended June 30, 2016.

##### B. Methods and assumptions used to determine contribution rates:

###### Actuarial cost method

Unit Credit

###### Amortization method

Level dollar

###### Amortization period

20 years beginning in 2010

###### Asset valuation method

The book value of the IPG assets and the market value of all other assets.

###### Inflation

N/A

###### Salary increases

N/A

###### Investment rate of return

7.75%, net of pension plan investment expenses. This is based on an average inflation rate of 3.00% and a real rate of return of 4.75%.

###### Retirement age

Not applicable as all participants are currently in receipt of benefits.

###### Mortality

For male annuitants, 115% of RP-2000 Combined Healthy for Males with White Collar adjustments, projected generationally with Scale AA from 2000, and for female annuitants, 95% of RP-2000 Combined Healthy for Females with White Collar adjustments, projected generationally with Scale AA from 2000.

###### Other information

Please see Section 7 of the report.

#### Schedule of Investment Returns

	2015
Annual money-weighted rate of return, net of investment expenses	7.42%



## Section 4 – GASB 67 and 68 Information (continued)

Table 1 – Projection of Fiduciary Net Position (000's omitted)

Fiscal Year Ending 6/30	Beginning Fiduciary Net Position	Member Contributions	Employer Contributions	Benefit Payments	Administrative Expenses	Investment Earnings	Ending Fiduciary Net Position
2016	\$ 6,918	\$ 0	\$ 2,096	\$ 1,810	\$ 16	\$ 550	\$ 7,737
2017	7,737	0	2,096	1,847	17	616	8,585
2018	8,585	0	2,095	1,883	17	683	9,462
2019	9,462	0	2,095	1,919	18	751	10,371
2020	10,371	0	2,094	1,955	18	820	11,313
2021	11,313	0	2,094	1,989	19	890	12,288
2022	12,288	0	2,093	2,022	19	962	13,301
2023	13,301	0	2,092	2,055	20	1,036	14,355
2024	14,355	0	2,091	2,085	20	1,114	15,454
2025	15,454	0	2,090	2,114	21	1,197	16,606
2026	16,606	0	2,088	2,142	21	1,284	17,815
2027	17,815	0	2,086	2,166	22	1,376	19,088
2028	19,088	0	2,084	2,189	23	1,474	20,434
2029	20,434	0	2,079	2,208	23	1,577	21,858
2030	21,858	0	2,070	2,224	24	1,686	23,366
2031	23,366	0	16	2,237	25	1,724	22,845
2032	22,845	0	17	2,246	26	1,684	22,273
2033	22,273	0	17	2,251	26	1,639	21,651
2034	21,651	0	18	2,252	27	1,591	20,981
2035	20,981	0	19	2,248	28	1,539	20,263
2036	20,263	0	19	2,237	29	1,484	19,500
2037	19,500	0	20	2,221	30	1,425	18,695
2038	18,695	0	20	2,197	30	1,364	17,852
2039	17,852	0	21	2,165	31	1,300	16,977
2040	16,977	0	22	2,125	32	1,233	16,075

## Section 4 – GASB 67 and 68 Information (continued)

Table 1 – Projection of Fiduciary Net Position (000's omitted)

Fiscal Year Ending 6/30	Beginning Fiduciary Net Position	Member Contributions	Employer Contributions	Benefit Payments	Administrative Expenses	Investment Earnings	Ending Fiduciary Net Position
2041	16,075	0	23	2,078	33	1,165	15,153
2042	15,153	0	25	2,022	34	1,096	14,217
2043	14,217	0	26	1,958	35	1,026	13,276
2044	13,276	0	27	1,885	36	955	12,337
2045	12,337	0	28	1,805	37	886	11,408
2046	11,408	0	29	1,717	38	817	10,499
2047	10,499	0	32	1,623	40	750	9,618
2048	9,618	0	33	1,524	41	685	8,771
2049	8,771	0	34	1,423	42	624	7,964
2050	7,964	0	36	1,320	43	565	7,203
2051	7,203	0	37	1,218	44	510	6,488
2052	6,488	0	40	1,118	46	458	5,823
2053	5,823	0	42	1,022	47	410	5,205
2054	5,205	0	44	931	49	366	4,635
2055	4,635	0	46	845	50	325	4,111
2056	4,111	0	47	763	51	287	3,631
2057	3,631	0	50	686	53	253	3,195
2058	3,195	0	52	614	55	222	2,800
2059	2,800	0	54	547	56	194	2,445
2060	2,445	0	56	485	58	169	2,128
2061	2,128	0	59	428	60	146	1,844
2062	1,844	0	60	377	61	126	1,593
2063	1,593	0	63	331	63	108	1,370
2064	1,370	0	65	289	65	93	1,174
2065	1,174	0	67	251	67	79	1,002

## Section 4 – GASB 67 and 68 Information (continued)

Table 1 – Projection of Fiduciary Net Position (000's omitted)

Fiscal Year Ending 6/30	Beginning Fiduciary Net Position	Member Contributions	Employer Contributions	Benefit Payments	Administrative Expenses	Investment Earnings	Ending Fiduciary Net Position
2066	1,002	0	70	217	69	67	852
2067	852	0	72	188	71	56	721
2068	721	0	74	162	73	47	606
2069	606	0	76	139	75	39	507
2070	507	0	80	119	78	32	421
2071	421	0	82	102	80	26	347
2072	347	0	84	86	82	20	284
2073	284	0	87	72	85	16	230

## Section 4 – GASB 67 and 68 Information (continued)

Table 2 – Actuarial Present Values of Projected Benefit Payments (000's omitted)

Fiscal Year Ending 6/30	Beginning Fiduciary Net Position	Benefit Payments	Benefit Payments		Present Value of Benefit Payments		
			Funded Portion	Unfunded Portion	Funded Portion at 7.75%	Unfunded Portion at 3.73%	Using a Single Discount Rate of 7.75%
2016	\$6,918	\$1,810	\$1,810	\$ 0	\$1,744	\$ 0	\$1,744
2017	7,737	1,847	1,847	0	1,651	0	1,651
2018	8,585	1,883	1,883	0	1,563	0	1,563
2019	9,462	1,919	1,919	0	1,478	0	1,478
2020	10,371	1,955	1,955	0	1,397	0	1,397
2021	11,313	1,989	1,989	0	1,319	0	1,319
2022	12,288	2,022	2,022	0	1,245	0	1,245
2023	13,301	2,055	2,055	0	1,174	0	1,174
2024	14,355	2,085	2,085	0	1,106	0	1,106
2025	15,454	2,114	2,114	0	1,040	0	1,040
2026	16,606	2,142	2,142	0	978	0	978
2027	17,815	2,166	2,166	0	918	0	918
2028	19,088	2,189	2,189	0	861	0	861
2029	20,434	2,208	2,208	0	806	0	806
2030	21,858	2,224	2,224	0	754	0	754
2031	23,366	2,237	2,237	0	703	0	703
2032	22,845	2,246	2,246	0	656	0	656
2033	22,273	2,251	2,251	0	610	0	610
2034	21,651	2,252	2,252	0	566	0	566
2035	20,981	2,248	2,248	0	524	0	524
2036	20,263	2,237	2,237	0	484	0	484
2037	19,500	2,221	2,221	0	446	0	446
2038	18,695	2,197	2,197	0	410	0	410

## Section 4 – GASB 67 and 68 Information (continued)

Table 2 – Actuarial Present Values of Projected Benefit Payments (000's omitted)

Fiscal Year Ending 6/30	Beginning Fiduciary Net Position	Benefit Payments	Benefit Payments		Present Value of Benefit Payments		
			Funded Portion	Unfunded Portion	Funded Portion at 7.75%	Unfunded Portion at 3.73%	Using a Single Discount Rate of 7.75%
2039	17,852	2,165	2,165	0	375	0	375
2040	16,977	2,125	2,125	0	341	0	341
2041	16,075	2,078	2,078	0	310	0	310
2042	15,153	2,022	2,022	0	280	0	280
2043	14,217	1,958	1,958	0	251	0	251
2044	13,276	1,885	1,885	0	225	0	225
2045	12,337	1,805	1,805	0	200	0	200
2046	11,408	1,717	1,717	0	176	0	176
2047	10,499	1,623	1,623	0	155	0	155
2048	9,618	1,524	1,524	0	135	0	135
2049	8,771	1,423	1,423	0	117	0	117
2050	7,964	1,320	1,320	0	100	0	100
2051	7,203	1,218	1,218	0	86	0	86
2052	6,488	1,118	1,118	0	73	0	73
2053	5,823	1,022	1,022	0	62	0	62
2054	5,205	931	931	0	53	0	53
2055	4,635	845	845	0	44	0	44
2056	4,111	763	763	0	37	0	37
2057	3,631	686	686	0	31	0	31
2058	3,195	614	614	0	26	0	26
2059	2,800	547	547	0	21	0	21
2060	2,445	485	485	0	17	0	17
2061	2,128	428	428	0	14	0	14

## Section 4 – GASB 67 and 68 Information (continued)

Table 2 – Actuarial Present Values of Projected Benefit Payments (000's omitted)

Fiscal Year Ending 6/30	Beginning Fiduciary Net Position	Benefit Payments	Benefit Payments		Present Value of Benefit Payments		
			Funded Portion	Unfunded Portion	Funded Portion at 7.75%	Unfunded Portion at 3.73%	Using a Single Discount Rate of 7.75%
2062	1,844	377	377	0	12	0	12
2063	1,593	331	331	0	10	0	10
2064	1,370	289	289	0	8	0	8
2065	1,174	251	251	0	6	0	6
2066	1,002	217	217	0	5	0	5
2067	852	188	188	0	4	0	4
2068	721	162	162	0	3	0	3
2069	606	139	139	0	3	0	3
2070	507	119	119	0	2	0	2
2071	421	102	102	0	2	0	2
2072	347	86	86	0	1	0	1
2073	284	72	72	0	1	0	1

## Section 5 – Plan Participant Data

### A. Reconciliation of Participant Data

	Actives	Terminated Vested	Retirees and Beneficiaries	Disabled Participants	Total
Participants as of July 1, 2014	0	0	40	5	45
New entrants	0	0	0	0	0
Rehires	0	0	0	0	0
Vested terminations	0	0	0	0	0
Non-vested terminations	0	0	0	0	0
Lump sum distributions	0	0	0	0	0
Retirements	0	0	0	0	0
Deaths	0	0	(1)	0	0
New beneficiaries	0	0	1	0	0
New alternate payees per QDRO	0	0	1	0	1
Benefits expired	0	0	0	0	0
Data corrections	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Participants as of July 1, 2015	0	0	41	5	46

### B. Inactive Participant Statistics – Average Annual Benefits

	July 1, 2014	July 1, 2015
Terminated Vested Participants	N/A	N/A
Retirees	\$ 41,217	\$ 42,131
Beneficiaries	\$ 19,541	\$ 20,176
Disabled Participants	\$ 59,550	\$ 61,336

## Section 6 – Actuarial Assumptions and Methods

### Actuarial Assumptions

#### Interest rate for funding

7.75% per annum.

#### Interest rate for accounting

7.75% per year, compounded annually. Projected benefit payments that are expected to be paid from available plan assets are discounted at the valuation interest rate of 7.75%. After the point where plan assets are not available to pay benefits, projected benefit payments are discounted at the municipal bond rate. The valuation rate for accounting purposes is the effective rate resulting from this process.

#### Municipal bond rate

3.73%. This rate is based on the S&P Municipal Bond 20 Year High Grade Rate Index.

#### Mortality

For male annuitants, 115% of RP-2000 Combined Healthy for Males with White Collar adjustments, projected generationally with Scale AA from 2000, and for female annuitants, 95% of RP-2000 Combined Healthy for Females with White Collar adjustments, projected generationally with Scale AA from 2000.

#### Loading for expenses

Prior year's administrative expenses increased by 4%, rounded to the nearest thousand

#### Asset valuation method

For purposes of determining the recommended contribution level, the actuarial value of assets consists of the book value of the IPG assets and the market value of all other assets.

For accounting purposes, the fair value of assets is used.

#### Married participants

No assumption is necessary, as actual marital information is used.

#### Changes from prior valuation

The mortality assumption was changed to: for male annuitants, 115% of RP-2000 Combined Healthy for Males with White Collar adjustments, projected generationally with Scale AA from 2000, and for female annuitants, 95% of RP-2000 Combined Healthy for Females with White Collar adjustments, projected generationally with Scale AA from 2000. This change was made in accordance with the experience study performed in 2015 and published in May, 2015.



## Section 6 – Actuarial Assumptions and Methods (continued)

### Actuarial Cost Method

For purposes of determining the recommended contribution level, the Unit Credit Actuarial Cost Method is used. The unfunded accrued liability is amortized as a level dollar amount over a 20-year period starting July 1, 2010.

For accounting purposes, the Entry Age Normal Actuarial Cost Method is used.

### Changes from prior valuation

The Entry Age Normal method is required to be used for GASB accounting results.

## Section 7 – Summary of Plan Provisions

### Eligibility

Only former employees specifically listed in Schedule A of the plan document participate in this plan.

### Non-Disabled Retirees

Benefit: Non-guaranteed portion of the benefit amounts listed in Schedule B of the plan document.

### Deferred Vested Members in Receipt of Benefits

Benefit: Non-guaranteed portion of the benefit amounts listed in Schedule C of the plan document. These benefits are not eligible for cost-of-living adjustments.

### Disabled Retirees

Benefit: Non-guaranteed portion of the benefit amounts listed in Schedule E of the plan document.

### Lump Sum Death Benefit

Disabled retirees: greater of

- (a) accumulated contributions, or
- (b) \$400 times years of service (minimum \$2,000, maximum \$8,000)

Non-disabled retirees: greater of

- (a) excess of accumulated contributions over benefits received, or
- (b) \$400 times years of service (minimum \$2,000, maximum \$8,000), reduced 25% per year retired, but not less than \$2,000.

Terminated vested employees (pre- and post-retirement):

Non-guaranteed portion of the accumulated contributions in excess of benefits received

### Cost-of Living Adjustments

Employees retiring or becoming disabled on or after July 1, 1992 shall receive an increase of 3% in their benefit on each anniversary date of retirement.

## Section 8 – Deferred Outflows/Inflows

Schedule of Differences Between Projected and Actual Earnings		Outflows	Inflows	Total
Measurement Year:	2015			
Amount Established:	22,434			
Recognition Period:	5.00			
Annual Recognition:	4,487			
Amount Recognized				
2015	4,487	4,487	0	4,487
2016	4,487	4,487	0	4,487
2017	4,487	4,487	0	4,487
2018	4,487	4,487	0	4,487
2019	4,486	4,486	0	4,486
2020	0	0	0	0
2021	0	0	0	0
2022	0	0	0	0
2023	0	0	0	0
2024	0	0	0	0
2025	0	0	0	0
2026	0	0	0	0
2027	0	0	0	0
Deferred Balance				
2015	17,947	17,947	0	17,947
2016	13,460	13,460	0	13,460
2017	8,973	8,973	0	8,973
2018	4,486	4,486	0	4,486
2019	0	0	0	0
2020	0	0	0	0
2021	0	0	0	0
2022	0	0	0	0
2023	0	0	0	0
2024	0	0	0	0
2025	0	0	0	0
2026	0	0	0	0
2027	0	0	0	0