

***Town of Lincoln Rhode Island
Retirement Plan***

***Actuarial Valuation Report
January 1, 2015***

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Highlights

Purpose of the Valuation

This report summarizes actuarial information regarding the plan's liabilities and benefit obligations as compared to assets available for benefits on the valuation date. The report was prepared by Nyhart to:

- determine the acceptable range of employer contributions; and
- determine the plan's funded status

Principal results of actuarial valuations are shown in the following sections.

Plan Year Beginning	01/01/15	01/01/14	01/01/13
Employer Contributions			
Total payroll	\$ 5,073,432	\$ 5,139,367	\$ 5,068,754
Actuarial Recommended Funding Contribution	\$ 1,374,183	\$ 1,227,757	NA
As percent of payroll	27.1%	23.9%	NA
Employer contribution	NA	\$ 1,187,373	\$ 1,269,103
Total as percent of payroll	NA	23.1%	25.0%
Plan Assets			
Fair market value	\$ 21,635,674	\$ 20,272,090	\$ 17,395,943
Actuarial value for funding	\$ 20,871,819	\$ 19,157,225	\$ 17,070,295
Funded Status			
Actuarial Accrued Liability	\$ 35,695,305	\$ 29,350,192	\$ 27,608,150
Unfunded Accrued Liability	\$ 14,823,486	\$ 10,192,967	\$ 10,537,855
Funded Ratio			
Market Value Basis	60.6%	69.1%	63.0%
Actuarial Value Basis	58.5%	65.3%	61.8%

Highlights – Continued

Plan Year Beginning	01/01/15	01/01/14	01/01/13
Participants			
Number of participants:			
Active	110	111	109
Inactive with deferred benefits	20	20	20
Inactive receiving benefits	<u>95</u>	<u>92</u>	<u>94</u>
Total in valuation	225	223	223
Active participant averages:			
Age nearest birthday	48.9	48.8	48.2
Years of employment to date	12.3	12.1	11.9
Compensation for benefits	\$ 46,122	\$ 46,301	\$ 46,502

Changes Since the Last Valuation

The mortality table for police and fire members has been updated to the RP-2014 Blue Collar Mortality with Social Security Generational Improvement Scale from 2006.

The mortality table for all other members and beneficiaries has been updated to the RP-2014 Total Mortality with Social Security Generational Improvement Scale from 2006.

The valuation interest rate has been updated from 8.0% to 7.0%.

The effect of the assumption changes on the calculated annual contribution is being phased in over three years. See Section 2.2 for a detailed calculation of the phase-in.

Actuary's Opinion

This report provides information regarding the actuarial valuation prepared for

Town of Lincoln Rhode Island Retirement Plan

The actuarial valuation was prepared as of January 1, 2015 using information which has been reconciled and reviewed for reasonableness.

- employee census information was provided by the plan administrator; and
- asset information was provided by the plan administrator.

Our review was not performed at the source, and we therefore do not accept responsibility for the accuracy or completeness of the data on which the information is based.

Actuarial values have been prepared in accordance with generally accepted actuarial principles and practice and to the best of our knowledge these values fairly reflect our best estimate of anticipated experience under the plan provisions which are summarized in Section 3.3 of this report.

Information has been prepared in accordance with applicable governmental standards of financial reporting for defined benefit pension plans.

Nyhart

Valuation prepared by:



Matt Sherertz, ASA, EA

Valuation reviewed by:



Tayt V. Odom, FSA, EA, MAAA

June 18, 2015

Date

Section 1 - Assets

1.1 Reconciliation of Plan Assets

Transaction activity is summarized in Section A and market value of assets is reconciled in Section B for the plan year ending 12/31/14 as follows:

A. Net income (loss):

(1) Contributions:			
From town	\$ 1,187,373		
From participants	286,495		
Other	<u>0</u>		\$ 1,473,868
(2) Interest and Dividends			212,552
(3) Net appreciation/depreciation in fair market value of investments			1,280,459
(4) Other income			0
(5) Disbursements:			
Benefit payments	\$ 1,603,295		
Other	0		
Administrative expenses	<u>0</u>		1,603,295
(6) Net income (loss) = (1) + (2) + (3) + (4) – (5)			\$ 1,363,584

B. Reconciliation of market value of assets:

(1) Market value of assets as of 12/31/13		\$ 20,272,090
(2) Net income (loss) from A(6)		1,363,584
(3) Market value of assets as of 12/31/14 = (1) + (2)		\$ 21,635,674

Section 1 – Continued**1.2 Summary of Assets**

(1) Cash and Cash Equivalents				\$	0
(2) General investments:					
Equity Mutual Funds	\$ 13,422,949	(62%)			
Fixed Income Mutual Funds	1,117,601	(5%)			
Real Estate	1,478,740	(7%)			
Group Annuity Contract	<u>5,616,384</u>	(26%)			
					21,635,674
(3) Receivables:					
Employer contributions	\$	0			
Income	<u>0</u>				0
(4) Prepaid Expenses					0
(5) Liabilities:					
Due to Other Funds	\$	0			
Internal Balances		0			
Accounts Payable & Accrued Expenses	<u>0</u>				0
(6) Total assets = (1) + (2) + (3) + (4) – (5)					\$ 21,635,674

1.3 Actuarial Value of Assets

The market value of plan assets has been adjusted for valuation purposes to smooth the effects of appreciation and/or depreciation in assets over a 5-year period. Determination of the actuarial value of plan assets is detailed below.

(1) Fair market value of assets as of 12/31/2014					\$21,635,674
(2) Five-year smoothing of gains/(losses):					
2014	\$ (123,678)	x 80%	=	\$ (98,942)	
2013	\$ 1,399,442	x 60%	=	\$ 839,665	
2012	\$ 634,826	x 40%	=	\$ 253,930	
2011	\$ (1,153,989)	x 20%	=	\$ (230,798)	\$ 763,855
(3) Actuarial value of assets = (1) – (2)					\$20,871,819

Section 1 – Continued

1.4 Average Rates of Return

Average rates of investment return have been determined using the formula

Two times (I) divided by (A + B - I), where

I is the dollar amount of earnings (including unrealized appreciation or depreciation of plan assets) for the plan year;

A is the value of assets at the beginning of the plan year; and

B is the value of assets at the end of the plan year

Under this formula, all transactions are assumed to occur in the middle of the year, therefore, rates of return determined in this manner are estimates and should be used only for comparison with actuarial assumptions.

Plan Year Ending	12/31/14	12/31/13	12/31/12
Based on average market value:			
Earnings after expenses	7.39%	16.04%	12.11%
Based on actuarial value:			
Earnings after expenses	9.67%	11.73%	2.31%

Section 2 – Contribution Recommendation – All Divisions

2.1 Actuarial Recommended Funding Contribution

Plan Year Ending	12/31/15	12/31/14	12/31/13
(1) Employer normal cost	\$ 516,713	\$ 342,088	NA
(2) Net amortization payment (Exhibit 1)	1,141,361	838,087	NA
(3) Interest at valuation rate on (1)+(2)	57,051	46,299	NA
(4) Adjustment due to limit on individual divisions	1,089	1,283	NA
(5) Adjustment due to phasing in effect of assumption changes	(342,031)	NA	NA
(6) Actuarial recommended funding contribution (1)+(2)+(3)+(4)+(5)	\$ 1,374,183	\$ 1,227,757	NA

2.2 Phase-In of Assumption Changes

The Actuarial Recommended Funding Contribution (shown above) has been adjusted for valuation purposes to smooth the effects of the assumption changes made effective 1/1/2015. Determination of the Actuarial Recommended Funding Contribution is shown below.

(1) Actuarial recommended funding contribution (prior to assumption changes)	\$1,203,167
(2) Actuarial recommended funding contribution (after assumption changes)	1,716,214
(3) Increase due to assumption changes (2) – (1)	513,047
(4) Adjustment to actuarial recommended funding contribution (3) x 2 / 3	342,031
(5) Actuarial recommended funding contribution (2) – (4)	\$1,374,183

Section 2 – Continued

2.3 Actuarial Recommended Funding Contribution – By Division

Plan Year Ending: December 31, 2015

	Police	School	Lonsdale Firefighters	Saylesville Firefighters	Firefighters	Town Hall	Water	Total
(1) Total Normal Cost	500,702	229,620	20,565	29,376	0	0	0	780,263
(2) Expected Employee Contributions	<u>154,814</u>	<u>91,540</u>	<u>6,145</u>	<u>11,051</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>263,550</u>
(3) Employer Normal Cost (1) – (2)	345,888	138,080	14,420	18,325	0	0	0	516,713
(4) Net Amortization Payment	825,974	213,954	25,791	44,002	(1,053)	19,190	13,503	1,141,361
(5) Interest at Valuation rate on (3) + (4)	40,320	12,113	1,384	2,145	(36)	660	465	57,051
(6) Adjustment due to floor limit of \$0	0	0	0	0	1,089	0	0	1,089
(7) Adjustment due to phasing in effect of assumption changes	<u>(241,580)</u>	<u>(72,572)</u>	<u>(8,290)</u>	<u>(12,849)</u>	<u>0</u>	<u>(3,956)</u>	<u>(2,784)</u>	<u>(342,031)</u>
(8) Actuarial Recommended Funding Contribution (3)+(4)+(5)+(6)+(7)	970,602	291,575	33,305	51,623	0	15,894	11,184	1,374,183
(9) Payroll	2,060,473	2,724,321	103,136	185,502	0	0	0	5,073,432
(10) Actuarial Recommended Funding Contribution as a % of payroll (8) / (9)	47.1%	10.7%	32.3%	27.8%	N/A	N/A	N/A	27.1%
Accrued Liability	25,618,391	6,890,072	987,815	1,500,004	11,150	385,342	302,531	35,695,305
Valuation Assets	<u>14,868,862</u>	<u>4,116,671</u>	<u>659,599</u>	<u>929,452</u>	<u>34,220</u>	<u>135,896</u>	<u>127,119</u>	<u>20,871,819</u>
Unfunded Accrued Liability	10,749,529	2,773,401	328,216	570,552	(23,070)	249,446	175,412	14,823,486

Section 3 – Basis for the Valuation

3.1 Plan Participants

Participant information provided by the plan administrator is summarized in the following table.

	Active	Inactive Participants		Total
		Benefits Deferred	Receiving Benefits	
Participants at 12/31/13	111	20	92	223
Retired	(4)	(1)	5	0
Rehires	1	(1)	0	0
Deaths without survivor	0	0	(3)	(3)
Deaths with survivor benefits	0	0	(2)	(2)
Beneficiary added	0	0	2	2
Vested terminations	(2)	2	0	0
Nonvested terminations	0	0	0	0
Add alternate payees	0	0	1	1
Benefits paid in full	0	(1)	0	(1)
Data corrections	0	0	0	0
New participants during the plan year	4	1	0	5
Participants as of 12/31/14	110	20	95	225

Section 3 – Continued

3.1 Plan Participants – Continued

	School	Police	Lonsdale Firefighters	Saylesville Firefighters	Firefighters	Water	Town Hall	Totals
Actives								
Eligible for normal retirement benefits	14	4	0	1	0	0	0	19
Non-vested benefits	32	13	0	2	0	0	0	47
Not yet eligible for retirement benefits	27	15	2	0	0	0	0	44
Total	73	32	2	3	0	0	0	110
Receiving								
Currently receiving benefits	29	48	2	3	1	2	10	95
Terminated Vested								
Entitled to deferred benefit	15	4	0	0	0	0	1	20
Totals	117	84	4	6	1	2	11	225

Section 3 – Continued**3.2 Information about Participants****Active Participants**

Number accruing benefits	110
Average age for valuation	48.9
Average years of employment	12.3
Average pay	\$ 46,122

Inactive Participants with Deferred Retirement Benefits

Number of former participants with deferred benefits	10
Average age for valuation	59.3
Total deferred monthly benefits	\$ 7,185
Average deferred monthly benefit	\$ 719

Inactive Participants Due Return of Contributions

Number of former participants with deferred benefits	10
Average age for valuation	45.6
Total employee contributions (with interest)	\$ 92,625
Average employee contribution amount (with interest)	\$ 9,263

Retired Participants and Beneficiaries

Number of retired pensioners	80
Number of disabled pensioners	0
Number of beneficiaries	12
Number of alternate payees	3
Total monthly benefits	\$ 133,057
Average monthly benefit	\$ 1,401

Section 3 – Continued**3.3 Summary of Plan Provisions****Name of plan**

Town of Lincoln Rhode Island Retirement Plan

Effective date

The plan was originally effective as of September 1, 1970.

Participation

Employees who work 20 or more hours per week and more than five months per year are eligible to participate in the Plan.

Normal retirement benefit

Police (hired on or before July 1, 2013) and Lonsdale Firefighters

A benefit equal to 2.5% of average monthly salary multiplied by credited service up to 20 years, plus 2% of average monthly salary multiplied by up to five additional years of credited service.

Police (hired after July 1, 2013)

A benefit equal to 2.0% of average monthly salary multiplied by credited service up to 30 years.

Saylesville Firefighters

A benefit equal to 2.5% of average monthly salary multiplied by credited service up to 20 years, plus 2% of average monthly salary multiplied by up to ten additional years of credited service.

All other participants

A benefit equal to 1.5% of average monthly salary multiplied by credited service, with maximum benefit of 60% of average monthly salary.

Normal retirement date

Police (hired on or before July 1, 2013)

Police employees hired on or before July 1, 2013 may retire upon the earlier of attainment of age 58 and completion of 10 years of credited service or the completion of 20 years of credited service regardless of age.

Police (hired after July 1, 2013)

Police employees hired after July 1, 2013 may retire upon the earlier of attainment of age 58 and completion of 10 years of credited service or the completion of 25 years of credited service regardless of age.

Section 3 – Continued

3.3 Summary of Plan Provisions – Continued

Normal retirement date

Saylesville Firefighters	Saylesville Firefighters may retire upon the earlier of attainment of age 55 and completion of 10 years of credited service or the completion of 30 years of credited service regardless of age.
Lonsdale Firefighters	Lonsdale Firefighters may retire upon the earlier of attainment of age 60 and completion of 10 years of credited service or the completion of 20 years of credited service regardless of age.
All other participants	All other participants may retire upon the attainment of age 60 and completion of 10 years of credited service.

Average monthly salary

Average compensation during the highest three consecutive years out of the final ten years of employment.

Preretirement death benefit

The beneficiary of a participant who dies prior to retirement receives the participant's accumulated contributions. In lieu of this benefit, the surviving spouse of the participant who dies prior to retirement can elect to receive a monthly benefit equal to 50% of the participant's benefit accrued to the date of death, payable at the participant's normal retirement date.

Termination before 10 years of credited service

Refunded employee contributions with annual interest credited at 5% after 1997 (3.5% before 1998).

Termination after 10 years of credited service

100% vested after 10 years of credited service in accrued benefit deferred to Normal Retirement.

Compensation

Annual base compensation plus holiday pay and longevity pay excluding overtime pay.

Credited service

Contributing employees will receive credit for all service rendered to the Town from date of membership.

Cost of living adjustments

Police Department employees who retire after June 30, 2004 receive an automatic 3% annual compounded Cost of Living Adjustment to their monthly pension benefit.

Section 3 – Continued

3.3 Summary of Plan Provisions – Continued

Normal form of payment

For participants other than Police and Firefighters, the normal form of benefit is a monthly life annuity. For Police and Firefighters, the normal form of benefit is a monthly benefit payable for the participant's lifetime with 67.5% of such benefit continued to a surviving contingent annuitant following the participant's death.

Optional forms of payment

A participant may choose to receive distributable benefits in an actuarially equivalent alternative form of benefit as follows.

- a monthly benefit payable for the participant's lifetime;
- a monthly benefit payable for the participant's lifetime with a guarantee that the remainder, if any, of 120 monthly payments will be made to the participant's beneficiary following the participant's death;
- a monthly benefit payable for the participant's lifetime with a percentage, 50%, 66 2/3%, 75%, or 100%, of such benefit continued to a surviving contingent annuitant following the participant's death.

Participant contributions

As a requirement for participation, employees are required to contribute the following to the plan as of January 1, 2015:

Police	8% of compensation
Firefighters	6% of compensation
All other participants	4% of compensation

Section 3 – Continued**3.4 Actuarial Assumptions**

Actuarial assumptions concerning future events are described below. Please see *Highlights* section for comments regarding changes in assumptions since the last valuation.

Retirement age

Police	100% retirement at the completion of 10 years of service and attainment of age 58. 100% retirement at the completion of 20 years of service and attainment of age 55. 20% retirement at the completion of 20 years of service and attainment of ages 40-49, 51-54. 50% retirement at the completion of 20 years of service and attainment of age 50.
School	100% retirement at the completion of 10 years of service and attainment of age 63.
Lonsdale Fire	100% retirement at the completion of 10 years of service and attainment of age 60. 100% retirement at the completion of 20 years of service and attainment of age 55. 20% retirement at the completion of 20 years of service and attainment of ages 40-49, 51-54. 50% retirement at the completion of 20 years of service and attainment of age 50.
Saylesville Fire	100% retirement at the completion of 10 years of service and attainment of age 55.
All other participants	100% retirement at the completion of 10 years of service and attainment of age 63.

Mortality of healthy lives

Police and Fire	RP-2014 Blue Collar Mortality with Social Security Generational Improvement Scale from 2006
Others and Beneficiaries	RP-2014 Total Mortality with Social Security Generational Improvement Scale from 2006

Mortality of disabled lives

Police and Fire	RP-2014 Blue Collar Mortality with Social Security Generational Improvement Scale from 2006
Others and Beneficiaries	RP-2014 Total Mortality with Social Security Generational Improvement Scale from 2006

Disablement

None assumed

Section 3 – Continued

3.4 Actuarial Assumptions – Continued

Withdrawal (Police/Fire)

Rates below at illustrative ages indicate the withdrawal assumption used for police and fire employees in the valuation:

<u>Age</u>	<u>Rate of Withdrawal</u>	
	<u>Male</u>	<u>Female</u>
25	0.050	0.075
30	0.035	0.050
35	0.025	0.035
40	0.015	0.025
45	0.010	0.015
50	0.005	0.010
55	0.000	0.005
60	0.000	0.000

Withdrawal (all other participants)

Rates below at illustrative ages indicate the withdrawal assumption used for non-police/fire employees in the valuation:

<u>Age</u>	<u>Rate of Withdrawal</u>	
	<u>Male</u>	<u>Female</u>
25	0.100	0.150
30	0.070	0.100
35	0.050	0.070
40	0.030	0.050
45	0.020	0.030
50	0.010	0.020
55	0.000	0.010
60	0.000	0.000

Future salary increases

Salary increase rates used in the valuation are shown below:

<u>Age</u>	<u>Increases</u>
<25	6.00%
25-29	5.00%
30-34	4.00%
35-39	3.50%
40-44	3.50%
45-49	3.50%
50-54	3.50%
55-59	3.50%
60+	3.00%

Valuation interest rate

7.0%

Section 3 – Continued

3.4 Actuarial Assumptions – Continued

Eligible spouse	85% of participants assumed to be married with female spouse 3 years younger
Cost of Living Adjustment	3.0% increase is assumed for Police retiring after June 30, 2004

Section 3 – Continued**3.5 Valuation Procedures****Funding method****Actuarial Recommended Funding Contribution – Entry Age Normal Cost Method**

The actuarial cost method used in determining the Actuarial Recommended Funding Contribution is the entry age normal cost method.

In determining the Actuarial Recommended Funding Contribution, the excess of the entry age actuarial accrued liability over the actuarial value of plan assets is amortized over a closed 20 year period as a level % of pay. For this purpose, pay is assumed to grow at 3.0% annually.

Asset valuation method

The actuarial value of assets is equal to the fair market value of assets on the valuation date adjusted for a 5 year phase in of gains and losses on fair market value of assets.

Other procedures

Benefits projected to assumed retirement age for active participants have been limited so as not to exceed maximum benefit limits imposed by Code Section 415(b) and/or maximum compensation limits of Code Section 401(a)(17).

Exhibit 1 – Unfunded Actuarial Liability**A. Unfunded Entry-Age Actuarial Accrued Liability**

(1)	Active participants	\$ 14,581,585
(2)	Inactive participants with deferred benefits	815,413
(3)	Participants/beneficiaries receiving benefits	20,298,307
(4)	Total entry-age actuarial accrued liability (1) + (2) + (3)	35,695,305
(5)	Actuarial value of assets as of 01/01/15	20,871,819
(6)	Unfunded actuarial liability as of 01/01/15 = (4) – (5), not less than zero	\$ 14,823,486

B. Actuarial Recommended Funding Contribution Amortization Schedule

	First Payment	Remaining Amortization Period (Years)	Outstanding Balance	Annual Payment
Charges:	01/01/2011	16	\$ 5,809,163	\$ 475,790
	01/01/2012	17	\$ 3,379,512	\$ 264,996
	01/01/2013	18	\$ 1,200,573	\$ 90,430
	01/01/2014	19	\$ (285,979)	\$ (20,753)
	01/01/2015	20	<u>\$ 4,720,217</u>	<u>\$ 330,898</u>
	Total		\$ 14,823,486	\$1,141,361