

The logo for nyhart, featuring the word "nyhart" in a white, lowercase, sans-serif font centered within a black horizontal bar. This bar is part of a larger graphic consisting of a thick black vertical bar on the left and a thin red vertical bar to its right.

nyhart

***Town of Lincoln  
Retirement Plan***

*January 1, 2017  
Actuarial Valuation Report*

<b>Actuarial Certification</b>	<b>3</b>
<b>Executive Summary</b>	<b>5</b>
Summary Results	5
Changes Since Prior Valuation and Key Notes	6
<b>Assets and Liabilities</b>	<b>7</b>
Present Value of Future Benefits	7
Funding Liabilities	8
Asset Information	9
Reconciliation of Gain/Loss	11
Reconciliation of Unfunded Actuarial Accrued Liability (UAAL)	12
<b>Contribution Recommendations</b>	<b>13</b>
Development of Actuarial Recommended Contribution	13
Development of Actuarial Recommended Contribution by Division	14
<b>Demographic Information</b>	<b>15</b>
<b>Participant Reconciliation</b>	<b>18</b>
<b>Plan Provisions</b>	<b>20</b>
<b>Actuarial Assumptions</b>	<b>24</b>
<b>Other Measurements</b>	<b>27</b>
Exhibit 1 - Schedule of Amortizations	28

At the request of the plan sponsor, this report summarizes the Town of Lincoln Retirement Plan as of January 1, 2017. The purpose of this report is to communicate the following results of the valuation:

- Funded Status; and
- Determine Actuarial Recommended Contribution for the calendar year ending December 31, 2017.

This report has been prepared in accordance with the applicable Federal and State laws. Consequently, it may not be appropriate for other purposes. Please contact Nyhart prior to disclosing this report to any other party or relying on its content for any purpose other than that explained above. Failure to do so may result in misrepresentation or misinterpretation of this report.

The results in this report were prepared using information provided to us by other parties. The census and asset information has been provided to us by the employer. We have reviewed the provided data for reasonableness when compared to prior information provided, but have not audited the data. Where relevant data may be missing, we have made assumptions we believe to be reasonable. We are not aware of any significant issues with and have relied on the data provided. Any errors in the data provided may result in a different result than those provided in this report. A summary of the data used in the valuation is included in this report.

The actuarial assumptions and methods were chosen by the Board. In our opinion, all actuarial assumptions and methods are individually reasonable and in combination represent our best estimate of anticipated experience of the plan. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following:

- plan experience differing from that anticipated by the economic or demographic assumptions;
- changes in economic or demographic 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 plan provisions or applicable law.

We did not perform an analysis of the potential range of future measurements due to the limited scope of our engagement. This report has been prepared in accordance with generally accepted actuarial principles and practice.

Neither Nyhart nor any of its employees have any relationship with the plan or its sponsor which could impair or appear to impair the objectivity of this report. To the extent that this report or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

The undersigned are compliant with the continuing education requirements of the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States and are available for any questions.

Nyhart

*David D. Harris*

---

David D. Harris, ASA, EA, MAAA

*Sally Ray*

---

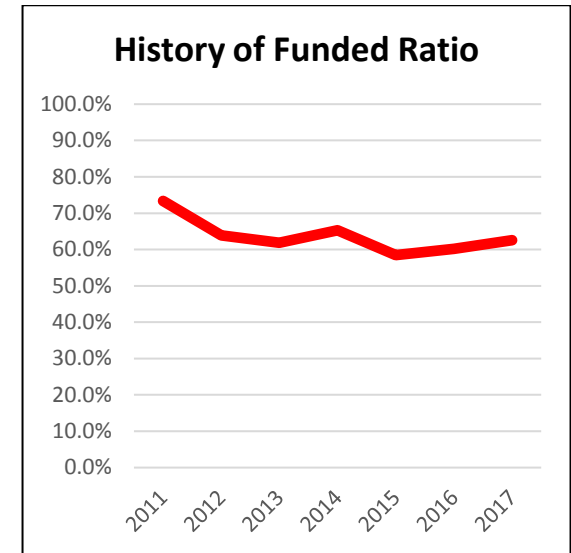
Sally Ray, ASA

March 27, 2017  
Date

**Summary Results**

The actuarial valuation's primary purpose is to produce a scorecard measure displaying the funding progress of the plan toward the ultimate goal of paying benefits at retirement. The accrued liability is based on an entry age level percentage of pay.

	January 1, 2016	January 1, 2017	January 1, 2018
<b>Funded Status Measures</b>			
Accrued Liability	\$36,646,784	\$38,383,370	
Actuarial Value of Assets	22,070,043	24,022,939	
Unfunded Actuarial Accrued Liability (UAAL)	\$14,576,741	\$14,360,431	
Funded Percentage (AVA)	60.2%	62.6%	
Funded Percentage (MVA)	58.9%	61.1%	
<b>Cost Measures</b>			
Recommended Contribution	\$1,608,486	\$1,812,602	\$1,864,970
As a percentage of payroll	31.3%	32.2%	32.2%
<b>Asset Performance</b>			
Market Value of Assets (MVA)	\$21,604,114	\$23,466,310	
Actuarial Value of Assets (AVA)	\$22,070,043	\$24,022,939	
Actuarial Value/Market Value	102.2%	102.4%	
Market Value Rate of Return	0.67%	7.13%	
Actuarial Value Rate of Return	6.69%	7.40%	
<b>Participant Information</b>			
Active Participants	113	114	
Terminated Vested Participants	22	22	
Retirees and Beneficiaries	96	98	
Total	231	234	
Expected Payroll	\$5,142,178	\$5,623,140	\$5,791,834



### Changes since Prior Valuation and Key Notes

There have been no changes to the plan provisions since the last valuation.

To better reflect anticipated experience, the mortality improvement assumption has been updated from the Social Security improvement assumptions from the 2015 Trustees' report to the Social Security improvement assumptions from the 2016 Trustees' report. The base mortality table is unchanged. This change results in a small decrease in the actuarial accrued liability and a small decrease in the actuarial recommended funding contribution.

Under the terms of the new Saylesville Fire Collective Bargaining Agreement covering the period from January 1, 2016 to December 1, 2018, the plan is closed to any new Saylesville Firefighter hired after January 1, 2016. Any new participant will be provided a pension plan through the State of Rhode Island MERS Plan (Police and Fire).

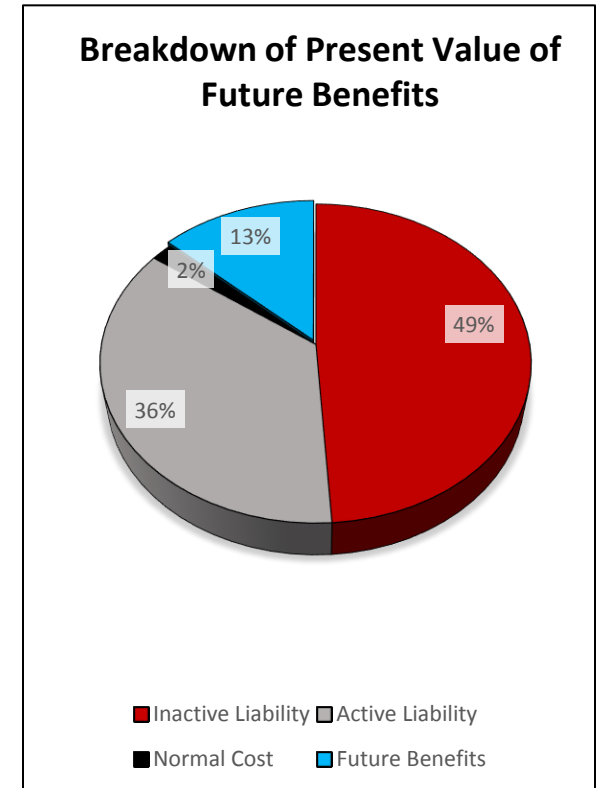
**Present Value of Future Benefits**

The Present Value of Future Benefits represents the future benefits payable to the existing participants.

January 1, 2017

**Present Value of Future Benefits**

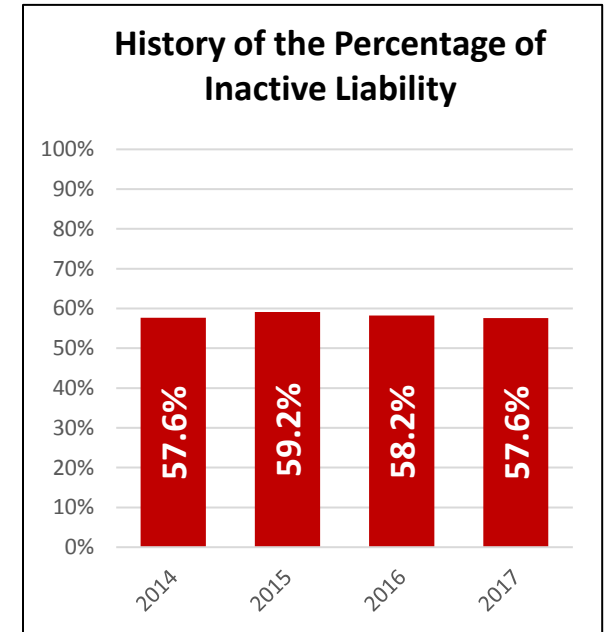
Active participants	
Retirement	\$22,543,995
Disability	0
Death	102,588
Termination	406,286
Refund of contributions	0
Total active	\$23,052,869
Inactive participants	
Retired participants	\$20,328,636
Beneficiaries	943,984
Disabled participants	0
Terminated vested participants	832,504
Total inactive	\$22,105,124
Total	\$45,157,993
 Present value of future payrolls	 \$40,683,779



**Accrued Liability**

The Funding Liability measures the present value of benefits earned as of the valuation date, using a specified set of actuarial assumptions.

	January 1, 2017
<b>Funding Liabilities</b>	
Active participants	
Retirement	\$16,212,026
Disability	0
Death	58,861
Termination	7,359
Refund of contributions	0
Total Active	<u>\$16,278,246</u>
Inactive participants	
Retired participants	\$20,328,636
Beneficiaries	943,984
Disabled participants	0
Terminated vested participants	832,504
Total Inactive	<u>\$22,105,124</u>
Total	<u>\$38,383,370</u>
 Normal Cost	 \$833,576

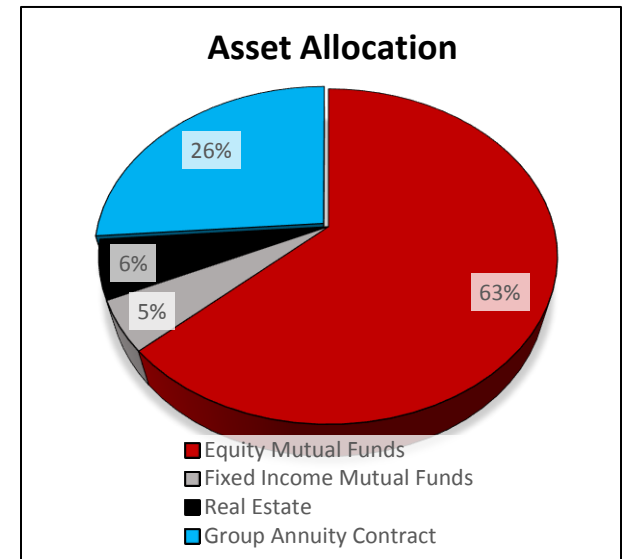
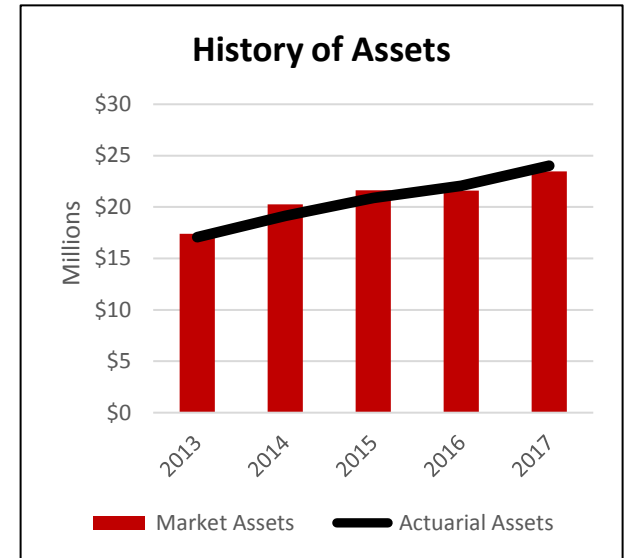




**Asset Information**

The amount of assets backing the pension promise is the most significant driver of volatility and future costs within a pension plan. The investment performance of the assets directly offsets the ultimate cost.

	January 1, 2017
<b>Market Value Reconciliation</b>	
Market value of assets, beginning of prior year	\$21,604,114
Contributions	
Employer contributions	1,693,414
Employee contributions	342,891
Total	\$2,036,305
Investment income	1,504,124
Benefit payments	(1,678,233)
Administrative expenses	0
Market value of asset, beginning of current year	\$23,466,310
Return on Market Value	7.13%
Market value of assets available for pension benefits	\$23,466,310
 <b>Actuarial Value of Assets</b>	
Value at beginning of current year	\$24,022,939



**Asset Information (continued) – 20% Phase in**

Plan Assets are used to develop funded percentages and contribution recommendations.

**January 1, 2017**

**Investment Gain or (Loss)**

1. Prior year's market value of assets	\$21,604,114
2. Employer contributions for the prior plan year	1,693,414
3. Employee contributions for the prior plan year	342,891
4. Benefit payments during the prior plan year	(1,678,233)
5. Expected earnings at 7.00% to the end of the plan year on	
(a) Market value of assets	\$1,512,288
(b) Contributions	22,328
(c) Benefit payments	(57,745)
(d) Total expected earnings, (a) + (b) + (c)	\$1,476,871
6. Expected market value of assets, (1) + (2) + (3) + (4) + (5d)	\$23,439,057
7. Actual market value of assets	\$23,466,310
8. Investment Gain or (Loss), (7) – (6)	\$27,253

**Actuarial Value of Assets**

9. Market value of assets	\$23,466,310
10. Deferred Investment gains or (losses)	
(a) Current year: 80% x \$27,253	\$21,802
(b) First prior year: 60% x (\$1,348,080)	(808,848)
(c) Second prior year: 40% x (\$123,678)	(49,471)
(d) Third prior year: 20% x \$1,399,442	279,888
(e) Total	(\$556,629)
11. Final actuarial value of assets, (9 – (10e))	\$24,022,939
12. Return on actuarial value of assets	7.4%

**Reconciliation of Gain/Loss**

January 1, 2017

**Liability (gain)/loss**

Actuarial liability, beginning of prior year	\$36,646,784
Normal cost	794,114
Benefit payments	(1,678,233)
Expected Interest	2,563,118
Change in Assumptions	<u>(122,657)</u>
Expected actuarial liability, beginning of current year	\$38,203,126
Actual actuarial liability	<u>\$38,383,370</u>
Liability (gain)/loss	\$180,244

**Asset (gain)/loss**

Actuarial value of assets, beginning of prior year	\$22,070,043
Employer Contributions	1,693,414
Employee Contributions	342,891
Benefit payments	(1,678,233)
Expected Investment return	<u>1,509,486</u>
Expected actuarial value of assets, beginning of current year	\$23,937,601
Actual actuarial value of assets, beginning of current year	<u>\$24,022,939</u>
Asset (gain)/loss	<u>(\$85,338)</u>

**Total (gain)/loss**

\$94,906

Reconciliation of Unfunded Actuarial Accrued Liability (UAAL)

	January 1, 2017
1. UAAL beginning of prior year	\$14,576,741
2. Normal Cost	794,114
3. Expenses	0
4. Employer Contributions	(1,693,414)
5. Employee Contributions	(342,891)
6. Interest	1,053,632
7. Expected UAAL, beginning of current year	\$14,388,182
8. Changes due to:	
(a) Amendments	\$0
(b) Assumptions	
(1) Mortality Update	(121,904)
(2) Project annualized salary for new hires	(753)
(c) Funding Methods	0
(d) (Gain)/Loss	94,906
(e) Total	(\$27,251)
9. UAAL beginning of current year	\$14,360,431

**Development of Actuarial Recommended Contribution**

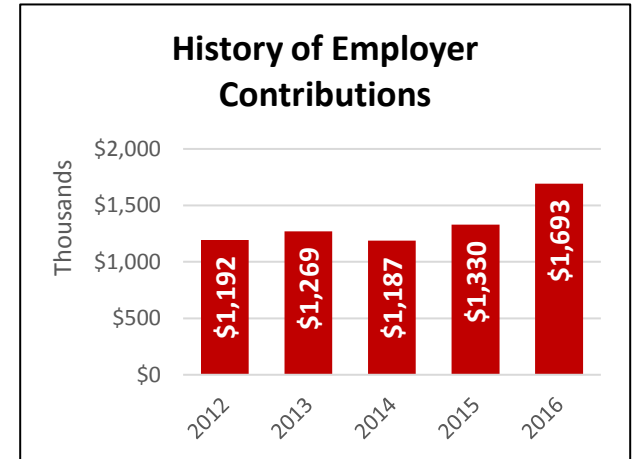
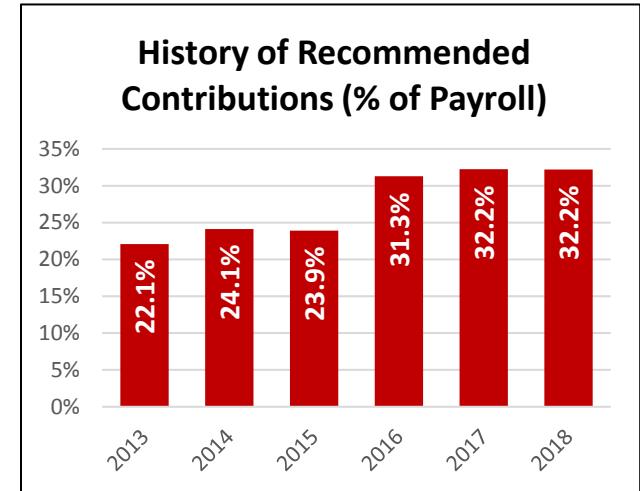
The actuarial recommended contribution is the annual amount necessary to fund the plan according to funding policies and/or applicable laws.

**Funded Position**

1. Entry age accrued liability	\$38,383,370
2. Actuarial value of assets	24,022,939
3. Unfunded actuarial accrued liability (UAAL)	\$14,360,431

**Employer Contributions**

1. Normal Cost	
(a) Total normal cost	\$833,576
(b) Expected participant contributions	289,657
(c) Net normal cost	\$543,919
2. Net Amortization Payment (Exhibit 1)	1,207,465
3. Interest at Valuation Rate on (1) + (2)	60,262
4. Adjustment due to limit on individual divisions	956
5. Actuarial recommended funding contribution for valuation year	\$1,812,602
6. Valuation payroll	\$5,623,140
7. Calculated contribution as a percentage of payroll	32.2%
8. Projected payroll	\$5,791,834
9. Projected actuarial recommended funding contribution for next year (6) x (7)	\$1,864,970



**Development of Actuarial Recommended Contribution – by Division**

The actuarial recommended contribution is the annual amount necessary to fund the plan according to funding policies and/or applicable laws.

	<b>Police</b>	<b>School</b>	<b>Lonsdale Firefighters</b>	<b>Saylesville Firefighters</b>	<b>Firefighters</b>	<b>Town Hall</b>	<b>Water</b>	<b>Total</b>
(1) Total Normal Cost	553,772	249,199	0	30,605	0	0	0	833,576
(2) Expected Employee Contributions	<u>177,728</u>	<u>100,314</u>	<u>0</u>	<u>11,615</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>289,657</u>
(3) Employer Normal Cost (1)–(2)	376,044	148,885	0	18,990	0	0	0	543,919
(4) Net Amortization Payment	890,570	216,854	15,604	45,220	(924)	23,913	16,228	1,207,465
(5) Interest at Valuation Rate on (3)+(4)	43,583	12,584	537	2,209	(32)	823	558	60,262
(6) Adjustment due to floor limit of \$0	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>956</u>	<u>0</u>	<u>0</u>	<u>956</u>
(7) Actuarial Recommended Funding Contribution (3)+(4)+(5)+(6)	1,310,197	378,323	16,141	66,419	0	24,736	16,786	1,812,602
(8) Payroll	2,345,787	3,082,680	0	194,673	0	0	0	5,623,140
(9) Actuarial Recommended Funding Contribution as a % of Payroll (8)/(9)	55.9%	12.3%	N/A	34.1%	N/A	N/A	N/A	32.2%
Accrued Liability	27,622,024	7,596,283	886,527	1,630,392	10,179	356,879	281,086	38,383,370
Valuation Assets	<u>16,969,641</u>	<u>5,043,719</u>	<u>731,882</u>	<u>1,097,446</u>	<u>31,531</u>	<u>64,730</u>	<u>83,990</u>	<u>24,022,939</u>
Unfunded Accrued Liability	10,652,383	2,552,564	154,645	532,946	(21,352)	292,149	197,096	14,360,431

**Demographic Information**

The foundation of a reliable actuarial report is the participant information provided by the plan sponsor. Monitoring trends in demographic information is crucial for long-term pension planning.

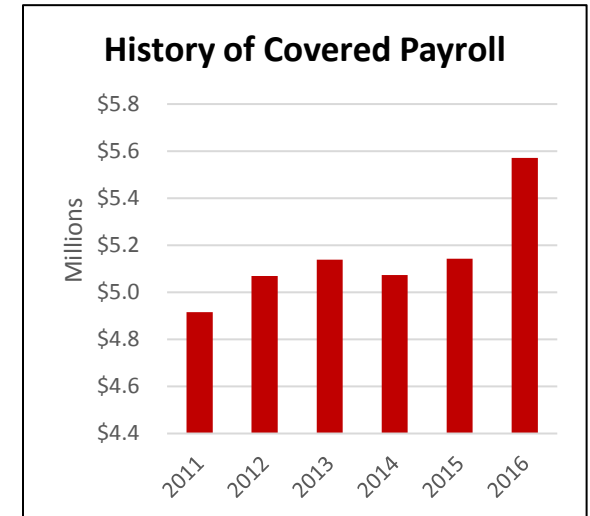
**January 1, 2017**

**Participant Counts**

Active Participants	114
Retired Participants	84
Beneficiaries	14
Disabled Participants	0
Terminated Vested Participants	<u>22</u>
<b>Total Participants</b>	<b>234</b>

**Active Participant Demographics**

Average Age	49.7
Average Service	12.5
Average Compensation	\$49,326
Covered Payroll	\$5,623,140
<b>Total Payroll</b>	<b>\$5,623,140</b>



Demographic Information (continued)

---

	January 1, 2017
<b>Retiree Statistics</b>	
Average Age	70.7
Average Monthly Benefit	\$1,552
<b>Beneficiary Statistics</b>	
Average Age	78.1
Average Monthly Benefit	\$706
<b>Terminated Participants Statistics</b>	
Average Age	50.1
Average Employee Contribution Balance Owed	\$855
<b>Terminated Participants Statistics – Return of Employee Contributions Only</b>	
Average Age	44.4
Average Employee Contribution Balance Owed	\$9,409



Demographic Information (continued) - Participants by Division

	School	Police	Lonsdale Firefighters	Saylesville Firefighters	Firefighters	Water	Town Hall	Totals
<b>Actives</b>								
Eligible for normal retirement benefit	17	3	0	1	0	0	0	21
Non-vested benefit	28	13	0	2	0	0	0	43
Not yet eligible for retirement benefit	<u>32</u>	<u>18</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>50</u>
Total	77	34	0	3	0	0	0	114
<b>Receiving</b>								
Currently receiving benefit – retiree	28	40	2	2	1	2	9	84
Currently receiving benefit – beneficiary	<u>3</u>	<u>9</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>14</u>
Total	31	49	2	3	1	2	10	98
<b>Terminated Vested</b>								
Entitled to deferred benefit	16	3	2	0	0	0	1	22
<b>Totals</b>	124	86	4	6	1	2	11	234

Participant Reconciliation

	Active	Terminated Vested	Disabled	Retired	Beneficiaries	Totals
<b>Prior Year</b>	113	22	0	84	12	231
<b>Active</b>						
To Retired	(2)	0	0	2	0	0
To Terminated Vested	(2)	2	0	0	0	0
<b>Terminated Vested</b>						
To Retired	0	(1)	0	1	0	0
To Lump Sum Cash-Out	0	(1)	0	0	0	(1)
<b>Retired</b>						
To Death	0	0	0	(3)	0	(3)
<b>Survivor</b>						
To Death	0	0	0	0	0	0
<b>Additions</b>	5	0	0	0	2	7
<b>Departures</b>	0	0	0	0	0	0
<b>Current Year</b>	114	22	0	84	14	234

**Active Participant Schedule**

Active participant information grouped based on age and service.

Age Group	Years of Service										Total
	Under 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											0
25 to 29		6	1								7
30 to 34	1	6	1	2							10
35 to 39		1		4							5
40 to 44	1	3	1	4	3						12
45 to 49		4	4	3	5	2					18
50 to 54	2	2	1	9	3	1		1			19
55 to 59		3	2	7	6	2	2				22
60 to 64	1	1	2	4	4	1	1				14
65 to 69				1	1	2	2				6
70 & up				1							1
<b>Total</b>	<b>5</b>	<b>26</b>	<b>12</b>	<b>35</b>	<b>22</b>	<b>8</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>114</b>

**Plan Effective Date:**

The plan was originally effective September 1, 1970.

**Plan Status:**

The plan is closed to any new Saylesville Firefighter hired after January 1, 2016. Otherwise, the plan is open to new participants and all participants are eligible to accrue additional benefits.

**Eligibility for 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)*

Eligibility: 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

Benefit: A monthly 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 5 additional years of credited service.

*Police (hired after July 1, 2013)*

Eligibility: 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

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

*Saylesville Firefighters*

Eligibility: 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

Benefit: A monthly 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 10 additional years of credited service.

*Lonsdale Firefighters*

Eligibility: 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

Benefit: A monthly 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 5 additional years of credited service.

*All other participants*

Eligibility: Attainment of age 60 and completion of 10 years of credited service

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

**Average Monthly Salary:**

Average compensation during the highest 3 consecutive years out of the final 10 years of employment

**Pre-Retirement 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 but excluding overtime pay

**Credited Service:**

Contributing employees will receive credit for all service rendered to the Town from their 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.

**Employee Contributions:**

As a requirement for participation, employees are required to contribute the following to the plan:

Police	8% of compensation
Firefighters	6% of compensation
All Others	4% of compensation

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

**Actuarial Equivalence**

Actuarial Equivalence will be computed using 8.0% interest and the mortality table is the UP-1984 Table.

**Plan Provisions Not Included**

We are not aware of any plan provisions not included in the report.

**Adjustments Made for Subsequent Events**

We are not aware of any event following the measurement date and prior to the date of this report that would materially impact the results of this report.

**Changes Since Prior Report**

Under the terms of the new Saylesville Fire Collective Bargaining Agreement covering the period from January 1, 2016 to December 1, 2018, the plan is closed to any new Saylesville Firefighter hired after January 1, 2016. Any new participant will be provided a pension plan through the State of Rhode Island MERS Plan (Police and Fire).

Except where otherwise indicated, the following assumptions were selected by the plan sponsor with the concurrence of the actuary. Prescribed assumptions are based on the requirements of the relevant law, the Internal Revenue Code, and applicable regulation. The actuary was not able to evaluate the prescribed assumptions for reasonableness for the purpose of the measurement.

**Valuation Date:** January 1, 2017

**Participant and Asset Information as of:** January 1, 2017

**Retirement Rates (FE):**

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 (FE):**

Healthy	
Police and Fire	RP-2014 Blue Collar Mortality with 2016 Social Security Generational Improvement Scale from 2006
Others and Beneficiaries	RP-2014 Total Mortality with 2016 Social Security Generational Improvement Scale from 2006
Disabled	
Police and Fire	RP-2014 Blue Collar Mortality with 2016 Social Security Generational Improvement Scale from 2006
Others and Beneficiaries	RP-2014 Total Mortality with 2016 Social Security Generational Improvement Scale from 2006

**Disability (FE):** None



**Withdrawal (FE):**

Sample Rates shown below

Police and Fire

Age	Male	Female
25	5.00%	7.50%
30	3.50%	5.00%
35	2.50%	3.50%
40	1.50%	2.50%
45	1.00%	1.50%
50	0.50%	1.00%
55	0.00%	0.50%
60	0.00%	0.00%

All other participants

Age	Male	Female
25	10.00%	15.00%
30	7.00%	10.00%
35	5.00%	7.00%
40	3.00%	5.00%
45	2.00%	3.00%
50	1.00%	2.00%
55	0.00%	1.00%
60	0.00%	0.00%

**Salary Projection Scale (FE):**

Age	Increase
<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%

**Interest Rate (CO):**

7.0%

**Expense and/or  
Contingency Loading (FE):**

None

**Marital Status and Ages (FE):**

85% of Participants assumed to be married with wives assumed to be 3 years younger than husbands.

**Cost of Living Increases (FE):**

3.00% increase is assumed for Police retiring after June 30, 2004

**Funding method**

Liabilities and contributions in the report are based on application of an Entry Age Normal cost method.

In determining the Actuarially Recommended 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 percentage of pay. For this purpose, pay is assumed to grow at 3.0% annually.

**Asset Valuation Method:**

Market value of assets with a five year phase in of gains and losses, subject to a 20% corridor.

**Amortization Method:**

Closed 20-year level percent of pay amortization of Unfunded Actuarial Accrued Liability; for this purpose, pay is assumed to grow at 3.00% annually; the effect of assumption changes at January 1, 2015 on the calculated annual contribution is being phased in over three years

**Changes Since Prior Report:**

To better reflect anticipated experience, the mortality improvement assumption has been updated from the Social Security improvement assumptions from the 2015 Trustees' report to the Social Security improvement assumptions from the 2016 Trustees' report. The base mortality table is unchanged. This change results in a small decrease in the actuarial accrued liability and a small decrease in the actuarial recommended funding contribution.

FE indicates an assumption representing an estimate of future experience

MD indicates an assumption representing observations of estimates inherent in market data

CO indicates an assumption representing a combination of an estimate of future experience and observations of market data

The actuarial report also shows the necessary items required for plan reporting and any state requirements.

- ✓ Schedule of amortizations

**Exhibit 1 - Schedule of Amortizations**

<u>Date Established</u>	<u>Remaining Period (Years)</u>	<u>Outstanding Balance</u>	<u>Annual Payment</u>
01/01/2011	14	\$5,581,810	\$504,765
01/01/2012	15	3,273,757	281,134
01/01/2013	16	1,171,341	95,937
01/01/2014	17	(280,785)	(22,017)
01/01/2015	18	4,660,648	351,049
01/01/2016	19	(62,815)	(4,558)
01/01/2017	20	16,475	1,155
		<u>\$14,360,431</u>	<u>\$1,207,465</u>