

**ROCHELLE FIREFIGHTERS PENSION FUND**  
**Actuarial Valuation Report**

**Showing Assets and Liabilities of the Fund in  
 Accordance with Actuarial Reserve Requirements  
 as of January 1, 2017**

**Summary**

Accrued Liability		\$13,013,676
Actuarial Value of Assets		\$8,653,697
Unfunded Accrued Liability		\$4,359,979
Funded Ratio		67%

**Liabilities**

Reserves for Annuities and Benefits in Force

	Head Count:	Present Value:	
Retirement Annuities	9	8,411,872	
Disability Annuities	1	319,525	
Surviving Spouse Annuities	0	0	
Minor Dependent Annuities	0	0	
Deferred Retirement Annuities	0	0	
Handicapped Dependent Annuities	0	0	
Dependent Parent Annuities	0	0	
Terminated Liabilities	1	37,425	
Total:	11	37,425	\$8,768,823

Accrued Liabilities for Active Members	13	\$4,244,854
Total Accrued Liabilities		\$13,013,676
Total Normal Cost for Active Members		\$278,103
Total Normal Cost as a Percentage of Payroll		28%

Total Annual Payroll		\$988,823
Amortization of Unfunded Liabilities:		
Total Accrued Liability		\$13,013,676
90% Funded Ratio Target		\$11,712,308
Actuarial Value of Assets		\$8,653,697
Liabilities Subject to Amortization		\$3,058,612
Amortization Period		24 years
Amortization Payment, Beginning of Year		\$157,131

This report is provided to the Board and Municipality as part of the Public Pension Division advisory services under Section 1A-106 of the Illinois Pension Code. This report should not be relied upon for purposes other than determining the current tax levy required under the Illinois Pension Code. The assumptions have been set based on expectations for all Article 4 funds in the State of Illinois. The actuarial methods are prescribed by the Illinois Pension Code and do not necessarily represent the approach recommended by either the actuary or the Department of Insurance. This report was prepared under the direct supervision of the undersigned:

Jason Franken  
 Enrolled Actuary #14-06888  
 Foster & Foster

Deputy Director  
 Public Pension Division  
 Illinois Department of Insurance

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**Assets**

Actuarial Value of Assets

Current Year Gain/(Loss):

Market value of assets as of April 30, 2016	\$7,867,783
Benefit payments during partial fiscal year, 5/1/2016 - 12/31/2016	(395,431)
Total contributions during partial fiscal year, 5/1/2016 - 12/31/2016	408,329
Expected return during partial fiscal year, 5/1/2016 - 12/31/2016	341,217
Expected market value of assets as of December 31, 2016	\$8,221,898

Actual market value of assets as of December 31, 2016 \$8,153,424

Investment gain/(loss) during the partial fiscal year, 5/1/2016 - 12/31/2016 (\$68,474)

Investment gain/(loss) during the fiscal year, 5/1/2015 - 4/30/2016 (\$525,827)

Development of Actuarial Value of Assets (market value less unrecognized amounts):

Market value of assets as of December 31, 2016	\$8,153,424
Unrecognized gain/(loss) for period, 5/1/2016 - 12/31/2016	(475,441)
Unrecognized gain/(loss) from fiscal 2015	6,863
Unrecognized gain/(loss) from fiscal 2014	(56,202)
Unrecognized gain/(loss) from fiscal 2013	24,507
Actuarial value of assets as of December 31, 2016	\$8,653,697

**Actuarially Determined Employer Contributions**

Actuarially determined amount to provide the employer normal cost based on the annual payroll of active participants as of January 1, 2017. \$184,610

Amount necessary to amortize the unfunded accrued liability as determined by the State of Illinois Department of Insurance over the remaining 24 years as prescribed by Section 4-118 of the Illinois Pension Code. \$157,131

Interest to the end of the fiscal year. \$22,213

Total suggested amount of employer contributions to arrive at the annual requirements of the fund as prescribed by Section 4-118 of the Illinois Pension Code. \* \$363,955

\*The above figure is the suggested amount which should be obtained by the fund from the municipality exclusive of any other items of income, such as interest on investments, contributions from participants, etc. These items have already been taken into consideration in arriving at this amount.

# ROCHELLE FIREFIGHTERS PENSION FUND

## Actuarial Valuation Report

### Actuarial Information

The following methods have been prescribed in accordance with Section 4-118 of the Illinois Pension Code.

Funding method	Projected Unit Credit
Amortization method	Normal cost, plus an additional amount (determined as a level percentage of payroll) to bring the plan's funded ratio to 90% by the end of fiscal year 2040.
Asset valuation method	Investment gains and losses are recognized over a 5-year period.

### Actuarial Assumptions

Interest rate	6.50%
Interest rate, prior fiscal year	6.50%
Healthy mortality rates - Male	RP-2000 Combined Healthy Mortality, with Blue Collar Adjustment
Healthy mortality rates - Female	RP-2000 Combined Healthy Mortality, with Blue Collar Adjustment
Disability mortality rates - Male	RP-2000 Disabled Retiree Mortality
Disability mortality rates - Female	RP-2000 Disabled Retiree Mortality
Decrement other than mortality	Experience tables
Rate of service-related deaths	5%
Rate of service-related disabilities	90%
Salary increases	Service-related table with rates grading from 12% to 4% at 30 years of service
Payroll growth	4.50%
Tier 2 cost-of-living adjustment	1.25%
Marital assumptions	80% of members are assumed to be married; male spouses are assumed to be 3 years older than female spouses.

The actuarial assumptions used for determining the above amounts are based on experience for all Article 4 funds for the State of Illinois in aggregate. The Department of Insurance has approved the above actuarial assumptions. Contact the Department of Insurance for complete experience tables.

### Data and Fund Information

The above valuation uses personnel data as reported to the Department of Insurance in the Schedule P. Specifically, the following data items have been determined as of the date of the Actuarial Valuation Report: attained age, annual salary or pension, completed years of service of each individual participant.

The fund specific information used in the production of this document was provided to the Department of Insurance by your pension fund board of trustees through the fund's annual statement filing.