

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

**Showing Assets and Liabilities of the Fund in  
 Accordance with Actuarial Reserve Requirements  
 as of January 1, 2018**

**Summary**

Accrued Liability		\$14,164,779
Actuarial Value of Assets		\$9,059,161
Unfunded Accrued Liability		\$5,105,618
Funded Ratio		64%

**Liabilities**

Reserves for Annuities and Benefits in Force

	Head Count:	Present Value:	
Retirement Annuities	9	9,148,404	
Disability Annuities	1	352,719	
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		\$9,538,548

Accrued Liabilities for Active Members	13	\$4,626,231
Total Accrued Liabilities		\$14,164,779
Total Normal Cost for Active Members		\$310,672
Total Normal Cost as a Percentage of Payroll		30%

Total Annual Payroll \$1,026,096

Amortization of Unfunded Liabilities:

Total Accrued Liability	\$14,164,779
90% Funded Ratio Target	\$12,748,301
Actuarial Value of Assets	\$9,059,161
Liabilities Subject to Amortization	\$3,689,140
Amortization Period	23 years
Amortization Payment, Beginning of Year	\$210,825

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:

Brad Lee Armstrong (Enrolled Actuary #17-5614 )  
 Lance Weiss (Enrolled Actuary #17-2468)  
 GRS

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 December 31, 2016	\$8,153,424
Benefit payments during fiscal year 2017	(611,828)
Total contributions during fiscal year 2017	541,788
Expected return during fiscal year 2017	527,696
Expected market value of assets as of December 31, 2017	\$8,611,080
Actual market value of assets as of December 31, 2017	\$8,938,461
Investment gain/(loss) during the fiscal year	\$327,381

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

Market value of assets as of December 31, 2017	\$8,938,461
Unrecognized gain/(loss) from fiscal 2017	261,905
Unrecognized gain/(loss) from fiscal 2016	(359,079)
Unrecognized gain/(loss) from fiscal 2015	4,575
Unrecognized gain/(loss) from fiscal 2014	(28,101)
Actuarial value of assets as of December 31, 2017	\$9,059,161

**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, 2018.	\$213,655
Amount necessary to amortize the unfunded accrued liability as determined by the State of Illinois Department of Insurance over the remaining 23 years as prescribed by Section 4-118 of the Illinois Pension Code.	\$210,825
Interest to the end of the fiscal year.	\$26,530
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. *	\$451,010

\*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	6.25%
Interest rate, prior fiscal year	6.50%
Healthy mortality rates - Male	RP-2014 Healthy Annuitant with Blue Collar Adjustment, males
Healthy mortality rates - Female	RP-2014 Healthy Annuitant with Blue Collar Adjustment, females
Disability mortality rates - Male	115% of RP-2014 Healthy Annuitant with Blue Collar Adjustment, males
Disability mortality rates - Female	115% of RP-2014 Healthy Annuitant with Blue Collar Adjustment, females
Decrements other than mortality	Experience tables
Rate of service-related deaths	20%
Rate of service-related disabilities	80%
Salary increases	Service-related table with rates grading from 12.50% to 3.50% at 31 years of service
Payroll growth	3.50%
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.

Additional critical information regarding actuarial assumptions and methods, and important actuarial disclosures are provided in the Actuarial Valuation Report Disclosures Document located on the following Illinois DOI Website (<https://insurance.illinois.gov/Applications/Pension/FOIAReporting/FOIAPortal.aspx>)