180456

VILLAGE OF LOMBARD
REQUEST FOR BOARD OF TRUSTEES ACTION
For Inclusion on Board Agenda

DISTRICT #

_____ **Resolution or Ordinance (Blue)** **Waiver of First Requested** ____
_____ **Recommendations of Boards, Commissions & Committees (Green)**
__X__ **Other Business (Pink)**

TO : PRESIDENT AND BOARD OF TRUSTEES

FROM : Scott R. Niehaus, Village Manager

DATE : October 22, 2018 **B of T** November 1, 2018

SUBJECT: **Fire Pension Fund Municipal Compliance Report**

SUBMITTED BY: Terry Davis, Secretary, Lombard Firefighters' Pension Fund

BACKGROUND/POLICY IMPLICATIONS:

Attached is the Lombard Fire Pension Fund's Municipal Compliance Report for the year ended December 31, 2017. The Village of Lombard utilizes an actuarial service to assist in determining the Fire Pension tax levy for the year for which the report is made.

We ask that the Village Board accept and file the report.

Fiscal Impact/Funding Source:

Review (as necessary):
Finance Director ______________________ Date ______
Village Manager Scott Niehaus Date 10/22/18

NOTE: **All materials must be submitted to and approved by the Village Manager's Office by 12:00 noon, Wednesday, prior to the Agenda distribution.**

Submit fire pension muni compliance report 2018

THE VILLAGE OF LOMBARD, ILLINOIS
FIREFIGHTERS' PENSION FUND

PUBLIC ACT 95-0950 - MUNICIPAL COMPLIANCE REPORT

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2017

Lauterbach & Amen, LLP
CERTIFIED PUBLIC ACCOUNTANTS
668 N. RIVER ROAD · NAPERVILLE, ILLINOIS 60563
PHONE 630.393.1483 · FAX 630.393.2516
www.lauterbachamen.com

September 20, 2018

Members of the Pension Board of Trustees
Lombard Firefighters' Pension Fund
Lombard, Illinois

Enclosed please find a copy of your Municipal Compliance Report for the Lombard Firefighters' Pension Fund for the fiscal year ended December 31, 2017. We have prepared the report with the most recent information available at our office. Should you have more current information, or notice any inaccuracies, we are prepared to make any necessary revisions and return them to you.

The President and Secretary of the Pension Fund are required to sign the report on page 3. If not already included with the enclosed report, please also include a copy of the Pension Fund's most recent investment policy.

The signed Public Act 95-0950 - Municipal Compliance Report must be provided to the Municipality before the tax levy is filed on the last Tuesday in December. We are sending the report via email to promote an environmentally-friendly work atmosphere.

If you have any questions regarding this report, please contact your Client Manager or PSA.

Respectfully submitted,

LAUTERBACH & AMEN, LLP

THE VILLAGE OF LOMBARD, ILLINOIS
FIREFIGHTERS' PENSION FUND

Public Act 95-950 - Municipal Compliance Report
For the Fiscal Year Ending December 31, 2017

The Pension Board certifies to the Board of Trustees of the Village of Lombard, Illinois on the condition of the Pension Fund at the end of its most recently completed fiscal year the following information:

1) The total cash and investments, including accrued interest, of the fund at market value and the total net position of the Pension Fund:

	Current Fiscal Year	Preceding Fiscal Year
Total Cash and Investments (including accrued interest)	$61,256,009	$54,595,825
Total Net Position	$61,213,301	$54,554,946

2) The estimated receipts during the next succeeding fiscal year from deductions from the salaries of firefighters' and from other sources:

Estimated Receipts - Employee Contributions	$616,400
Estimated Receipts - All Other Sources	
Investment Earnings	$4,287,900
Municipal Contributions	$2,147,099

3) The estimated amount necessary during the fiscal year to meet the annual actuarial requirements of the pension fund as provided in Sections 4-118 and 4-120:

Annual Requirement of the Fund as Determined by:	
Illinois Department of Insurance	N/A
Private Actuary - Timothy W. Sharpe, Actuary	
Recommended Municipal Contribution	$2,147,099
Statutory Municipal Contribution	$1,790,076

THE VILLAGE OF LOMBARD, ILLINOIS
FIREFIGHTERS' PENSION FUND

Public Act 95-950 - Municipal Compliance Report
For the Fiscal Year Ending December 31, 2017

4) The total net income received from investment of assets along with the assumed investment return and actual investment return received by the fund during its most recently completed fiscal year compared to the total net income, assumed investment return, and actual investment return received during the preceding fiscal year:

	Current Fiscal Year	Preceding Fiscal Year
Net Income Received from Investment of Assets	$7,095,086	$2,827,909
Assumed Investment Return		
Illinois Department of Insurance	N/A	6.75%
Private Actuary - Timothy W. Sharpe, Actuary	7.00%	7.00%
Actual Investment Return	12.25%	5.30%

5) The increase in employer pension contributions that results from the implementation of the provisions of P.A. 93-0689:

Illinois Department of Insurance	N/A
Private Actuary - Timothy W. Sharpe, Actuary	$107,355

6) The total number of active employees who are financially contributing to the fund:

Number of Active Members	64

7) The total amount that was disbursed in benefits during the fiscal year, including the number of and total amount disbursed to (i) annuitants in receipt of a regular retirement pension, (ii) recipients being paid a disability pension, and (iii) survivors and children in receipt of benefits:

	Number of	Total Amount Disbursed
(i) Regular Retirement Pension	32	$2,444,463
(ii) Disability Pension	11	$694,245
(iii) Survivors and Child Benefits	5	$148,439
Totals	48	$3,287,147

8) The funded ratio of the fund:

	Current Fiscal Year	Preceding Fiscal Year
Illinois Department of Insurance	N/A	76.14%
Private Actuary - Timothy W. Sharpe, Actuary	75.92%	73.72%

9) The unfunded liability carried by the fund, along with an actuarial explanation of the unfunded liability:

Unfunded Liability:

Illinois Department of Insurance	N/A
Private Actuary - Timothy W. Sharpe, Actuary	$19,245,797

The accrued liability is the actuarial present value of the portion of the projected benefits that has been accrued as of the valuation date based upon the actuarial valuation method and the actuarial assumptions employed in the valuation. The unfunded accrued liability is the excess of the accrued liability over the actuarial value of assets.

10) The investment policy of the Pension Board under the statutory investment restrictions imposed on the fund.

Investment Policy - See Attached.

Please see Notes Page attached.

CERTIFICATION OF MUNICIPAL FIREFIGHTERS' PENSION FUND COMPLIANCE REPORT

The Board of Trustees of the Pension Fund, based upon information and belief, and to the best of our knowledge, hereby certify pursuant to §4-134 of the Illinois Pension Code 40 ILCS 5/4-134, that the preceding report is true and accurate.

Adopted this 18TH day of OCTOBER, 2018

President George E. Seagraves Date 10/18/18

Secretary [signature] Date 10/18/18

THE VILLAGE OF LOMBARD, ILLINOIS
FIREFIGHTERS' PENSION FUND

Public Act 95-950 - Municipal Compliance Report
For the Fiscal Year Ending December 31, 2017

INDEX OF ASSUMPTIONS

1) Total Cash and Investments - as Reported at Market Value in the Audited Financial Statements for the Years Ended December 31, 2017 and 2016.

   Total Net Position - as Reported in the Audited Financial Statements for the Years Ended December 31, 2017 and 2016.

2) Estimated Receipts - Employee Contributions as Reported in the Audited Financial Statements for the Year Ended December 31, 2017 plus 3.5% Increase (Actuarial Salary Increase Assumption) Rounded to the Nearest $100.

   Estimated Receipts - All Other Sources:

   Investment Earnings - Cash and Investments as Reported in the Audited Financial Statements for the Year Ended December 31, 2017, times 7% (Actuarial Investment Return Assumption) Rounded to the Nearest $100.

   Municipal Contributions - Recommended Tax Levy Requirement as Reported by Timothy W. Sharpe, Actuary, Actuarial Valuation for the Year Ended December 31, 2017.

3) Annual Requirement of the Fund as Determined by:

   Illinois Department of Insurance - No December 31, 2017 Actuarial Valuation available at the time of this report.

   Private Actuary - Timothy W. Sharpe, Actuary:

   Recommended Amount of Tax Levy as Reported by Timothy W. Sharpe, Actuary in the December 31, 2017 Actuarial Valuation.

   Statutorily Required Amount of Tax Levy as Reported by Timothy W. Sharpe, Actuary in the December 31, 2017 Actuarial Valuation.

INDEX OF ASSUMPTIONS - Continued

4) Net Income Received from Investment of Assets - Investment Income (Loss) net of Investment Expense, as Reported in the Audited Financial Statements for the Years Ended December 31, 2017 and 2016.

   Assumed Investment Return:

   Illinois Department of Insurance - Preceding Fiscal Year Interest Rate Assumption as Reported in the December 31, 2016 Actuarial Valuation. No December 31, 2017 Actuarial Valuation available at the time of this report.

   Private Actuary - Current and Preceding Fiscal Year Interest Rate Assumption as Reported in the Timothy W. Sharpe, Actuary, December 31, 2017 and 2016 Actuarial Valuations.

   Actual Investment Return - Net Income Received from Investments as Reported Above as a Percentage of the Average of the Beginning balance of the Cash and Investments and the Ending balance of the Cash and Investments, excluding the fiscal year net investment income, as Reported in the Audited Financial Statements for the Fiscal Years Ended December 31, 2017 and 2016.

5) Illinois Department of Insurance - Amount of total suggested tax levy to be excluded from the property tax extension limitation law as contemplated by 35 ILCS 200/18-185.

   Private Actuary - Timothy W. Sharpe, Actuary - Amount of total suggested tax levy to be excluded from the property tax extension limitation law as contemplated by 35 ILCS 200/18-185.

6) Number of Active Members - Illinois Department of Insurance Annual Statement for December 31, 2017 - Schedule P.

7) (i) Regular Retirement Pension - Illinois Department of Insurance Annual Statement for December 31, 2017 - Schedule P for Number of Participants and Expense page 1 for Total Amount Disbursed.

   (ii) Disability Pension - Same as above.

   (iii) Survivors and Child Benefits - Same as above.

INDEX OF ASSUMPTIONS - Continued

8) The funded ratio of the fund:

Illinois Department of Insurance - Preceding Fiscal Year Actuarial Value of Assets as a percentage of Accrued Liability as Reported in the December 31, 2016 Actuarial Valuation. No December 31, 2017 Actuarial Valuation available at the time of this report.

Private Actuary - Current and Preceding Fiscal Year Actuarial Value of Assets as a percentage of Accrued Liability as Reported in the Timothy W. Sharpe, Actuary, December 31, 2017 and 2016 Actuarial Valuations.

9) Unfunded Liability:

Illinois Department of Insurance - Deferred Asset (Unfunded Accrued Liability) - No December 31, 2017 Actuarial Valuation available at the time of this report.

Private Actuary - Deferred Asset (Unfunded Accrued Liability) as Reported by Timothy W. Sharpe, Actuary in the December 31, 2017 Actuarial Valuation.

TSW
Actuary

VILLAGE OF LOMBARD

LOMBARD FIREFIGHTERS PENSION FUND

Actuarial Valuation Report

For the Year

Beginning January 1, 2018

And Ending December 31, 2018

Timothy W. Sharpe, Actuary, Geneva, IL (630) 262-0600

TABLE OF CONTENTS

INTRODUCTION

Fire-sworn personnel of the Village of Lombard are covered by the Firefighters Pension Plan that is a defined-benefit, single-employer pension plan. The purpose of this report is to provide to the Intended Users of this report, specifically the Intended Users are the Village Officials, the Pension Board and the Village and Pension Board auditors, the reporting requirements of the Illinois Pension Code, the GASB Statements No. 67 & 68 financial information and related actuarial information for the year stated in this report. This report is not intended for distribution or usage to or by anyone who is not an Intended User and should not be used for any other purpose.

The valuation results reported herein are based on the employee data, plan provisions and the financial data provided by the Village. The actuary has relied on this information and does not assume responsibility for the accuracy or completeness of this information. I hereby certify that to the best of my knowledge this report is complete and accurate and fairly presents the actuarial position of the Fund in accordance with generally accepted actuarial principles and procedures. In my opinion, the assumptions used are reasonably related to the experience of the Plan and to reasonable expectations. A reasonable request for supplementary information not included in this report should be directed to the undersigned actuary.

The actuary cautions the Intended Users of the possibility of uncertainty or risks in any of the results in this report.

I, Timothy W. Sharpe, am an Enrolled Actuary, and I meet the Qualifications Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,

Timothy W. Sharpe, EA, MAAA
Enrolled Actuary No. 17-4384

5/15/2018
Date

SUMMARY OF RESULTS

There was a change with respect to Actuarial Assumptions from the prior year to reflect revised expectations with respect to mortality rates and the new Department of Insurance assumptions reported in the GRS Experience Study released in 2017. The mortality rates have been changed to the RP-2014 Mortality Table (BCHA) projected to 2018 using improvement scale MP-2017 (previously improvement scale MP-2016). The Disability, Withdrawal, Retirement, Salary Increase and Payroll Growth assumptions were changed to those reported in the GRS 2017 Experience Study. The impact of reducing the Payroll Growth assumption will increase the Unfunded Liability amortization payments in the early years, and thus will reduce the amortization payments in later years. Although the GRS 2017 Experience Study recommends an interest rate of 6.50%, the Village based on its analysis has decided to use an interest rate of 7.00%.

Scale MP-2017 is based on the same underlying methodology and committee selected assumption set used to develop Scale MP-2016 and reflects historical U.S. population mortality experience through 2015. The age-adjusted mortality rates in the United States increased from 724.6 (per 100,000) in 2014 to 733.1 in 2015, an increase of 1.2%. This was the first year-over-year increase in the age-adjusted U.S. mortality rates since 2005, and only the seventh time since 1980 that those annual rates went up rather than down. The Scale MP-2017 mortality improvement rates are generally lower than the corresponding Scale MP-2016 rates. Starting with RP-2014 base mortality rates adjusted back to 2006, most 2018 pension obligations calculated using Scale MP-2017 are anticipated to be lower than those calculated using Scale MP-2016.

There were no changes with respect to Plan Provisions or Actuarial Methods from the prior year.

Based on the plan sponsor's funding policy and future expected plan contributions and funded status, the plan is to be expected to produce adequate assets to make benefit payments when they are due.

The benefit payment default risk or the financial health of the plan sponsor was not deemed to be material.

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 or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.

SUMMARY OF RESULTS (Continued)

There were no unexpected changes with respect to the participants included in this actuarial valuation (1 new member, 0 terminations, 2 retirements, 0 incidents of disability, annual payroll increase 1.4%, average salary increase 4.0%).

There were no unexpected changes with respect to the Fund's investments from the prior year (annualized investment return 13.06%).

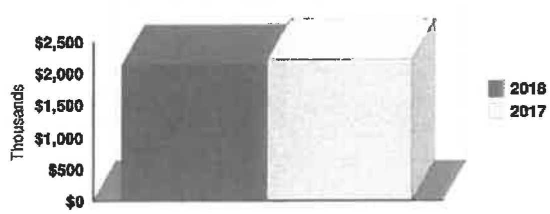
The Village's Tax Levy Requirement has decreased from $2,232,003 last year to $2,147,099 this year (3.8%). The decrease in the Tax Levy is due to the investment return was greater than assumed and the changes to the assumptions, and was offset due to the increase in salaries. The Percent Funded has increased from 73.7% last year to 75.9% this year.

The amount of the Village Tax Levy due to PA 93-0689 is $107,355.

SUMMARY OF RESULTS (Continued)

	For Year Ending December 31 2018	2017
Tax Levy Requirement	$ 2,147,099	$ 2,232,003
Tax Levy as a Percentage of Payroll	33.29%	35.11%
	as of January 1 2018	2017
Village Normal Cost	754,128	934,945
Anticipated Employee Contributions	609,762	601,097
Accrued Liability	79,936,816	77,782,977
Actuarial Value of Assets	60,691,019	57,340,153
Unfunded Accrued Liability/(Surplus)	19,245,797	20,442,824
Amortization of Unfunded Accrued Liability/(Surplus)	1,252,507	1,151,039
Percent Funded	75.9%	73.7%
Annual Payroll	$ 6,449,094	$ 6,357,452

TAX LEVY REQUIREMENT
as of December 31



ACTUARIAL VALUATION OF ASSETS

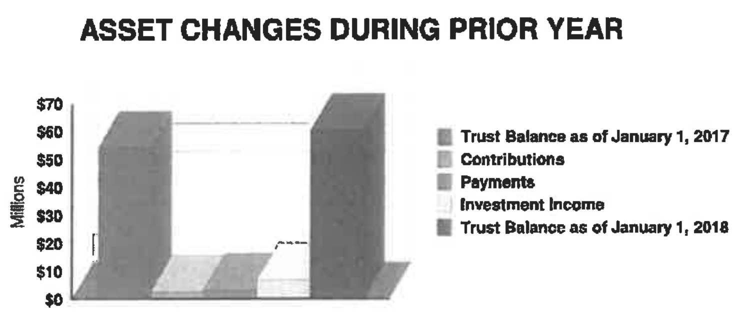
		as of January 1		
		2018		2017
Money Market, NOW, IL Fund	$	2,035,309	$	4,202,422
Government Securities		25,222,668		20,266,797
Equities		3,483,876		3,224,617
Mutual Funds		30,249,979		26,555,727
Interest Receivable		264,176		346,261
Miscellaneous Receivable/(Payable)		(42,708)		(40,879)
Market Value of Assets		61,213,301		54,554,946
Actuarial Value of Assets	$	60,691,019	$	57,340,153

FYE 2014-2017 (Gain)/Loss: $864,046; $3,633,616; $807,807; ($3,291,526)

SUMMARY OF ASSETS
As Of January 1, 2018

ASSET CHANGES DURING PRIOR YEAR

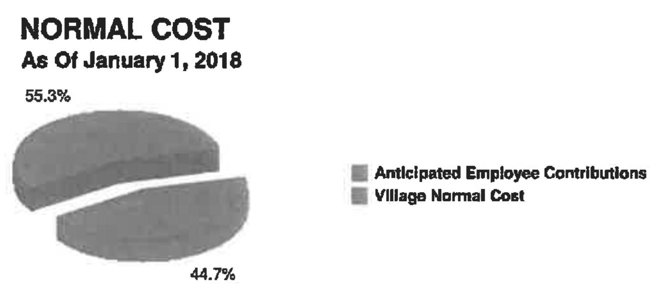
Trust Balance as of January 1, 2017		$	54,554,946
Contributions			
Village	2,237,228		
Employee	658,618		
Total			2,895,847
Payments			
Benefit Payments	3,290,005		
Expenses	42,572		
Total			3,332,578
Investment Income			7,095,086
Trust Balance as of January 1, 2018		$	61,213,301
Approximate Annual Rate of Return)			13.06%



NORMAL COST

The Normal Cost is the actuarial present value of the portion of the projected benefits that are expected to accrue during the year based upon the actuarial valuation method and actuarial assumptions employed in the valuation.

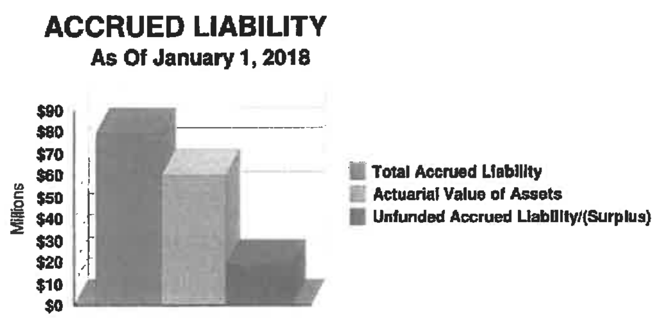
	as of January 1 2018	2017
Total Normal Cost	$ 1,363,890	$ 1,536,042
Anticipated Employee Contributions	609,762	601,097
Village Normal Cost	754,128	934,945
Normal Cost Payroll	$ 6,449,094	$ 6,357,452
Village Normal Cost Rate	11.69%	14.71%
Total Normal Cost Rate	21.15%	24.16%



ACCRUED LIABILITY

The Accrued Liability is the actuarial present value of the portion of the projected benefits that has been accrued as of the valuation date based upon the actuarial valuation method and actuarial assumptions employed in the valuation. The Unfunded Accrued Liability is the excess of the Accrued Liability over the Actuarial Value of Assets.

	as of January 1	
Accrued Liability	2018	2017
Active Employees	$ 29,741,593	$ 30,906,112
Children Annuities	1,131	1,369
Disability Annuities	10,468,682	10,373,684
Retirement Annuities	37,372,682	34,046,298
Surviving Spouse Annuities	1,508,714	1,530,974
Terminated Vested Annuities	844,014	924,540
Total Annuities	50,195,223	46,876,865
Total Accrued Liability	79,936,816	77,782,977
Actuarial Value of Assets	60,691,019	57,340,153
Unfunded Accrued Liability/(Surplus)	$ 19,245,797	$ 20,442,824
Percent Funded	75.9%	73.7%



TAX LEVY REQUIREMENT

The Public Act 096-1495 Tax Levy Requirement is determined as the annual contribution necessary to fund the normal cost, plus the amount to amortize the excess (if any) of ninety percent (90%) of the accrued liability over the actuarial value of assets as a level percentage of payroll over a thirty (30) year period which commenced in 2011, plus an adjustment for interest. The 100% amortization amount is equal to the amount to amortize the unfunded accrued liability as a level percentage of payroll over a thirty (30) year period which commenced in 2009.

	For Year Ending December 31			
		2018		2017
Village Normal Cost as of Beginning of Year	$	754,128	$	934,945
Amortization of Unfunded Accrued Liability/(Surplus)		1,252,507		1,151,039
Interest for One Year		140,464		146,019
Tax Levy Requirement as of End of Year	$	2,147,099	$	2,232,003
Public Act 096-1495 Tax Levy Requirement				
1) Normal Cost (PUC)		1,161,038		1,215,186
2) Accrued Liability (PUC)		76,731,296		75,406,828
3) Amortization Payment		511,930		553,993
4) Interest for One Year		117,108		123,843
5) PA 096-1495 Tax Levy Requirement (1 + 3 + 4)	$	1,790,076		1,893,022

TAX LEVY REQUIREMENT

For Fiscal Year Ending December 31, 2018

SUMMARY OF PLAN PARTICIPANTS

The actuarial valuation of the Plan is based upon the employee data furnished by the Village. The information provided for Active participants included:

Name
Sex
Date of Birth
Date of Hire
Compensation
Employee Contributions

The information provided for Inactive participants included:

Name
Sex
Date of Birth
Date of Pension Commencement
Monthly Pension Benefit
Form of Payment

Membership	2018	2018	2017	2017
Current Employees				
Vested	36		37	
Nonvested	28		28	
Total	64		65	
Inactive Participants		Annual Benefits		Annual Benefits
Children	1	$ 323	1	$ 323
Disabled Employees	11	694,245	11	686,654
Retired Employees	32	2,464,719	30	2,229,604
Surviving Spouses	4	148,116	4	148,116
Terminated Vesteds	2	55,204	2	55,204
Total	50	3,362,607	48	3,119,901
Annual Payroll		$ 6,449,094		$ 6,357,452

SUMMARY OF PLAN PARTICIPANTS (Continued)

Age and Service Distribution

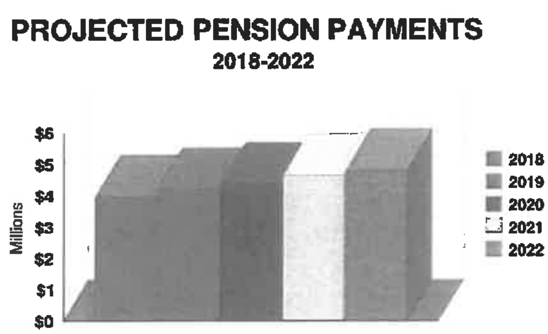
Service Age	0-4	5-9	10-14	15-19	20-24	25-29	30+	Total	Salary
20-24	1							1	69,218
25-29	4							4	77,078
30-34	3	6						9	91,495
35-39	3	9	7	1				20	99,500
40-44		1	4					5	97,295
45-49			2	5	3			10	110,272
50-54			2	2	1	4		9	109,259
55-59	1			1		3		5	112,819
60+				1				1	121,492
Total	12	16	15	10	4	7	0	64	100,767
Salary	85,174	97,239	103,740	106,670	105,684	117,949			

Average Age: 41.4 Average Service: 12.0 Average Future Service: 12.4

DURATION (years) Active Members: 18.9 Retired Members: 11.2 All Members: 14.1

PROJECTED PENSION PAYMENTS

2018	2019	2020	2021	2022
$4,008,721	$4,274,554	$4,433,450	$4,668,015	$4,877,598



SUMMARY OF PLAN PROVISIONS

The Plan Provisions have not been changed from the prior year.

The Village of Lombard Firefighters Pension Fund was created and is administered as prescribed by "Article 4. Firefighters' Pension Fund - Municipalities 500,000 and Under" of the Illinois Pension Code (Illinois Compiled Statutes, 1992, Chapter 40). A brief summary of the plan provisions is provided below.

Employees attaining the age of (50) or more with (20) or more years of creditable service are entitled to receive an annual retirement benefit of one-half of the salary attached to the rank held on the last day of service. The pension shall be increased by (1/12) of (2.5%) of such monthly salary for each additional month of service over (20) years up to (30) years, to a maximum of (75%) of such monthly salary.

Employees with at least (10) years but less than (20) years of credited service may retire at or after age (60) and receive a reduced benefit ranging from (15%) of final salary for (10) years of service to (45.6%) for 19 years of service.

Surviving spouses receive (100%) of final salary for fatalities resulting from an act of duty, or otherwise the greater of (54%) of final salary or the monthly retirement pension that the deceased firefighter was receiving at the time of death. Surviving children receive (12%) of final salary. The maximum family survivor benefit is (75%) of final salary.

Employees disabled in the line of duty receive (65%) of final salary.

The monthly pension of a covered employee who retired with (20) or more years of service after January 1, 1977, shall be increased annually, following the first anniversary date of retirement and be paid upon reaching the age of at least (55) years, by (3%) of the amount of the pension payable at the time of the increase.

Employees are required to contribute (9.455%) of their base salary to the Firefighters' Pension Plan. If an employee leaves covered employment with less than twenty (20) years of service, accumulated employee contributions may be refunded without accumulated interest.

For Employees hired after January 1, 2011, the annual retirement benefit is (2.5%) of final average salary for each year of service up to (30) years, to a maximum of (75%) of such salary, the Normal Retirement age is attainment of age 55 and completion of 10 years of service; Early Retirement age is attainment of age 50, completion of 10 years of service and the Early Retirement Factor is 6% per year; the Employee's Accrued Benefit is based on the Employee's final 8-year average salary not to exceed $106,800 (as indexed); Cost-of-living adjustments are simple increases (not compounded) of the lesser of 3% or 50% of CPI beginning the later of the anniversary date and age 60; Surviving Spouse's Benefits are 66 2/3% of the Employee's benefit at the time of death.

ACTUARIAL METHODS

The Actuarial Methods employed for this valuation are as follows:

Projected Unit Credit Cost Method (for years beginning on or after 2011 for PA 096-1495)

Under the Projected Unit Credit Cost Method, the Normal Cost is the present value of the projected benefit (including projected salary increases) earned during the year.

The Accrued Liability is the present value of the projected benefit (including projected salary increases) earned as of the actuarial valuation date. The Unfunded Accrued Liability is the excess of the Accrued Liability over the plan's assets. Experience gains or losses adjust the Unfunded Accrued Liability.

Entry Age Normal Cost Method

Under the Entry Age Normal Cost Method the Normal Cost for each participant is computed as the level percentage of pay which, if paid from the earliest age the participant is eligible to enter the plan until retirement or termination, will accumulate with interest to sufficiently fund all benefits under the plan. The Normal Cost for the plan is determined as the greater of a) the sum of the Normal Costs for all active participants, and b) 17.5% of the total payroll of all active participants.

The Accrued Liability is the theoretical amount that would have accumulated had annual contributions equal to the Normal Cost been paid. The Unfunded Accrued Liability is the excess of the Accrued Liability over the plan's assets. Experience gains or losses adjust the Unfunded Accrued Liability.

ACTUARIAL ASSUMPTIONS

The Actuarial Assumptions used for determining the Tax Levy Requirement and GASB Statements No. 67 & 68 Disclosure Information are the same (except where noted) and have been changed from the prior year (discussion on page 4). The methods and assumptions disclosed in this report may reflect statutory requirements and may reflect the responsibility of the Principal and its advisors. Unless specifically noted otherwise, each economic and demographic assumption was selected in accordance with Actuarial Standards of Practice 27 and 35 and may reflect the views and advice of advisors to the Principal. In the event a method or assumption conflicts with the actuary's professional judgment, the method or assumption is identified in this report. The Actuarial Assumptions employed for this valuation are as follows:

Valuation Date	January 1, 2018
Asset Valuation Method	5-year Average Market Value (PA 096-1495)
Investment Return	7.00% net of investment expenses. The investment return assumption reflects the advice of the Fund's investment advisors, and past experience and future expectations were considered.
Salary Scale & Payroll Growth	GRS 2017 Experience Study (3.50%-12.50%; Payroll Growth 3.50%)
Mortality	RP 2014 Mortality Table (BCHA) projected to 2018 using improvement scale MP-2017.
Withdrawal	GRS 2017 Experience Study
Disability	GRS 2017 Experience Study
Retirement	GRS 2017 Experience Study (100% by age 70)
Marital Status	80% Married, Female spouses 3 years younger

ACTUARIAL ASSUMPTIONS *(Continued)*

Sample Annual Rates Per 100 Participants

Age	Withdrawal	Disability	Retirement (T1/T2)
20	5.80	0.01	
25	5.00	0.02	
30	3.50	0.07	
35	1.75	0.22	
40	1.10	0.42	
45	1.00	0.65	
50	1.00	0.90	10.00/3.00
55		1.58	15.00/30.00
60			25.00
65			50.00
70			100.00

STATEMENTS NO. 67 & 68 DISCLOSURE INFORMATION

Plan Membership	December 31, 2017
Inactive plan members or beneficiaries currently receiving benefits	48
Inactive plan members entitled to but not yet receiving benefits	2
Active plan members	64
Total	114

Net Pension Liability of the Village	
Total pension liability	79,936,816
Plan fiduciary net position	61,213,301
Village's net pension liability	18,723,515
Plan fiduciary net position as a percentage of the total pension liability	76.58%

Actuarial Assumptions	
Inflation	2.50%
Salary increases	3.50%-12.50%
Investment rate of return	7.00% net of expenses

The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that Village contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. 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 members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

	1% Decrease 6.00%	Current Discount Rate 7.00%	1% Increase 8.00%
Net Pension Liability	29,232,563	18,723,515	10,010,905

STATEMENTS NO. 67 & 68 DISCLOSURE INFORMATION (continued)

Schedule of Changes in the Village's Net Pension Liability and Related Ratios

Total Pension Liability	December 31, 2017
Service cost	1,643,565
Interest	5,329,658
Changes of benefit terms	0
Differences between expected and actual experience	1,170
Changes of assumptions	(1,530,549)
Benefit payments, including refunds of member contributions	3,290,005
Net change in total pension liability	2,153,839
Total pension liability - beginning	77,782,977
Total pension liability - ending	79,936,816
Plan Fiduciary Net Position	
Contributions - employer	2,237,228
Contributions - member	658,618
Net investment income	7,095,086
Benefit payments, including refunds of member contributions	3,290,005
Administrative expense	42,572
Other	0
Net change in plan fiduciary net position	6,658,356
Plan fiduciary net position - beginning	54,554,946
Plan fiduciary net position - ending	61,213,301
Village's net pension liability	18,723,515
Plan fiduciary net position as a percentage of the total pension liability	76.58%
Covered-employee payroll	6,449,094
Village's net pension liability as a percentage of covered-employee payroll	290.33%

STATEMENTS NO. 67 & 68 DISCLOSURE INFORMATION (continued)

Schedule of Village Contributions

	December 31, 2017
Actuarially determined contribution	2,190,707
Contributions in relation to the actuarially determined contribution	2,237,228
Contribution deficiency (Excess)	(46,521)
Covered-employee payroll	6,449,094
Contributions as a percentage of covered-employee payroll	34.69%

Notes to schedule

Valuation date	December 31, 2017
Methods and assumptions used to determine contribution rates:	
Actuarial cost method	Entry Age Normal
Amortization method	Level Percentage of Pay
Remaining amortization period	21 years
Asset valuation method	Market Value
Inflation	2.50%
Salary increases	3.50%-12.50%
Investment rate of return	7.00%
Retirement age	50-70
Mortality	RP 2014 projected to 2018
Other	

Mortality rates were based on the RP 2014 Mortality Table (BCHA) projected to 2018 using improvement scale MP-2017. The other non-economic actuarial assumptions used in the December 31, 2017 valuation were based on the results of an actuarial experience study conducted by the Illinois Department of Insurance (GRS) in 2017.