



Actuary

VILLAGE OF CLARENDON HILLS
CLARENDON HILLS FIREFIGHTERS PENSION FUND

Actuarial Valuation Report

For the Year

Beginning May 1, 2014

And Ending April 30, 2015

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

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INTRODUCTION

Fire-sworn personnel of the Village of Clarendon Hills 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. 25 & 27 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 a member of the American Academy of Actuaries, 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. 14-4384

7/30/2014

Date

SUMMARY OF RESULTS

There was a change with respect to Actuarial Assumptions from the prior year to reflect revised expectations with respect to future interest rates, salary increases, and retirement ages. The interest rate assumption has been reduced to 5.00% from 7.25%, and the salary increase assumption has been reduced to 3.50% from 5.00%.

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

There were no unexpected changes with respect to the participants included in this actuarial valuation (0 new members, 0 terminations, 0 retirements, 0 incidents of disability, annual payroll increase 2.0%, average salary increase 2.0%).

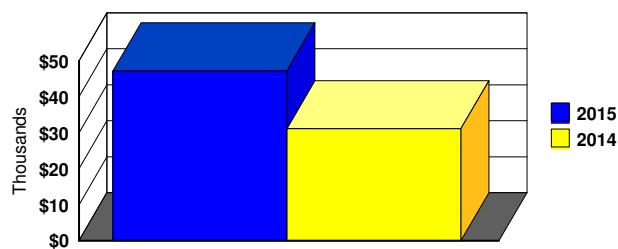
There were no unexpected changes with respect to the Fund's investments from the prior year (annual investment return 0.74%).

The Village's Tax Levy Requirement has increased from \$31,386 last year to \$47,421 this year (51.1%). The increase in the Tax Levy is due to the increase in salaries, the investment return was less than assumed and the change to the interest rate assumption, and was offset due to the change to the salary increase assumption. The Percent Funded has decreased from 93.1% last year to 78.9% this year.

SUMMARY OF RESULTS (Continued)

	For Year Ending April 30	
	<u>2015</u>	<u>2014</u>
Tax Levy Requirement	\$ 47,421	\$ 31,386
	as of May 1	
Village Normal Cost	<u>2014</u> 14,216	<u>2013</u> 10,037
Anticipated Employee Contributions	11,573	11,346
Accrued Liability	1,412,918	1,106,103
Actuarial Value of Assets	1,115,222	1,029,786
Unfunded Accrued Liability/(Surplus)	297,696	76,317
Amortization of Unfunded Accrued Liability/(Surplus)	17,779	4,633
Percent Funded	78.9%	93.1%
Annual Payroll	\$ 122,400	\$ 120,000

TAX LEVY REQUIREMENT
as of April 30

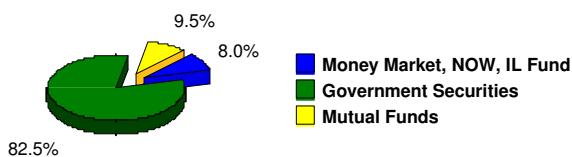


ACTUARIAL VALUATION OF ASSETS

		as of May 1	
	<u>2014</u>		<u>2013</u>
Money Market, NOW, IL Fund	\$ 82,380		\$ 57,827
Government Securities	846,133		833,246
Mutual Funds	96,983		96,376
Interest Receivable	<u>5,760</u>		<u>5,087</u>
Market Value of Assets	<u>1,031,256</u>		<u>992,536</u>
Actuarial Value of Assets	\$ 1,115,222		\$ 1,029,786

FYE 2012-2014 (Gain)/Loss: \$26,898; \$26,389; \$71,718

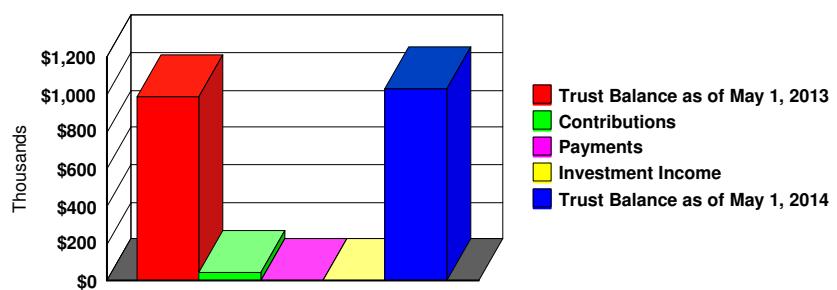
SUMMARY OF ASSETS As Of May 1, 2014



ASSET CHANGES DURING PRIOR YEAR

Trust Balance as of May 1, 2013	\$	992,536
Contributions		
Village		31,438
Employee		<u>11,567</u>
Total		43,005
Payments		
Benefit Payments		0
Expenses		<u>5,873</u>
Total		5,873
Investment Income		<u>1,587</u>
Trust Balance as of May 1, 2014	\$	<u>1,031,256</u>
Approximate Annual Rate of Return		0.16%

ASSET CHANGES DURING PRIOR YEAR



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 May 1	
		<u>2014</u>	<u>2013</u>
Total Normal Cost	\$	25,789	\$ 21,383
Anticipated Employee Contributions		<u>11,573</u>	<u>11,346</u>
Village Normal Cost		<u>14,216</u>	<u>10,037</u>
Normal Cost Payroll	\$	122,400	\$ 120,000
Village Normal Cost Rate		11.61%	8.36%
Total Normal Cost Rate		21.07%	17.82%

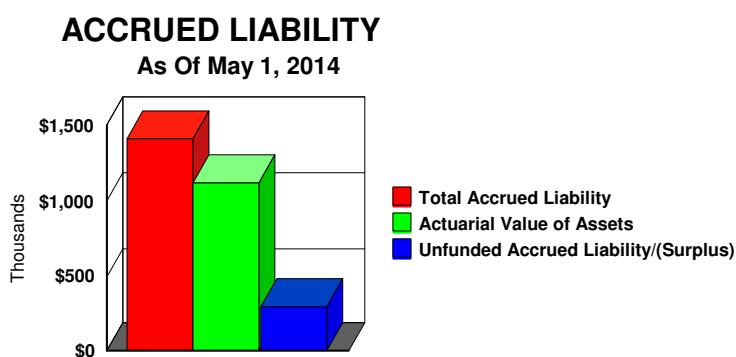
NORMAL COST As Of May 1, 2014



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 May 1	
	<u>2014</u>	<u>2013</u>
Accrued Liability		
Active Employees	\$ 1,412,918	\$ 1,106,103
Children Annuities	0	0
Disability Annuities	0	0
Retirement Annuities	0	0
Surviving Spouse Annuities	0	0
Terminated Vested Annuities	0	0
Total Annuities	0	0
Total Accrued Liability	1,412,918	1,106,103
Actuarial Value of Assets	<u>1,115,222</u>	<u>1,029,786</u>
Unfunded Accrued Liability/(Surplus)	\$ <u>297,696</u>	\$ <u>76,317</u>
Percent Funded	78.9%	93.1%

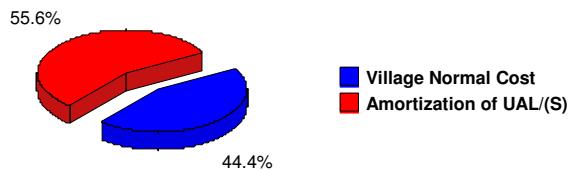


TAX LEVY REQUIREMENT

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. Prior to 2011, the amortization amount was equal to the amount to amortize the unfunded accrued liability as a level percentage of payroll over a forty (40) year period which commenced in 1993. Beginning in 2011, the amortization period remains a forty (40) year period which commenced in 1993.

	For Year Ending April 30	
	<u>2015</u>	<u>2014</u>
Village Normal Cost as of Beginning of Year	\$ 14,216	\$ 10,037
Amortization of Unfunded Accrued Liability/(Surplus)	17,779	4,633
Interest for One Year	<u>1,600</u>	<u>1,064</u>
Tax Levy Requirement as of End of Year	<u>\$ 33,595</u>	<u>\$ 15,734</u>
Public Act 096-1495 Tax Levy Requirement		
1) Normal Cost (PUC)	38,719	29,264
2) Accrued Liability (PUC)	1,400,473	1,086,121
3) Amortization Payment	6,444	0
4) Interest for One Year	2,258	2,122
5) PA 096-1495 Tax Levy Requirement (1 + 3 + 4)	\$ 47,421	\$ 31,386

TAX LEVY REQUIREMENT For Fiscal Year Ending April 30, 2015



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	<u>2014</u>	<u>2014</u>	<u>2013</u>	<u>2013</u>
Current Employees				
Vested	1		1	
Nonvested	0		0	
Total	<u>1</u>		<u>1</u>	
Inactive Participants		<u>Annual Benefits</u>		<u>Annual Benefits</u>
Children	0	\$ 0	0	\$ 0
Disabled Employees	0	0	0	0
Retired Employees	0	0	0	0
Surviving Spouses	0	0	0	0
Terminated Vesteds	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Annual Payroll	\$	122,400	\$	120,000

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
55-59							1		1 122,400
60+							0		
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>122,400</u>
Salary							122,400		

Average Age: 59.0 Average Service: 28.0

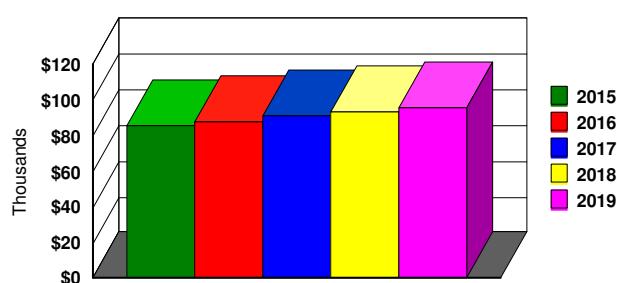
DURATION (years) Active Members: 12.1 Retired Members: NA All Members: 12.1

PROJECTED PENSION PAYMENTS

<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
\$85,680	\$88,250	\$90,898	\$93,625	\$96,434

PROJECTED PENSION PAYMENTS

2015-2019



SUMMARY OF PLAN PROVISIONS

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

The Village of Clarendon Hills 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. 25 & 27 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	May 1, 2014
Asset Valuation Method	5-year Average Market Value (PA 096-1495)
Investment Return	5.00% net of investment expenses.
Salary Scale	3.50%
Mortality	RP 2000 Mortality Table (BCA, +1M, -4F, 2x>105), adjusted for future mortality improvement using 1-year setback after 15 years.
Withdrawal	Based on studies of the Fund and the Department of Insurance, Sample Rates below
Disability	Based on studies of the Fund and the Department of Insurance, Sample Rates below
Retirement	Uniform distribution from ages 50-62 (100% by age 62)
Marital Status	80% Married, Female spouses 3 years younger

ACTUARIAL ASSUMPTIONS (*Continued*)

<u>Age</u>	<u>Sample Annual Rates Per 100 Participants</u>			
	<u>Mortality</u>	<u>Withdrawal</u>	<u>Disability</u>	<u>Retirement</u>
20	0.04	4.02	0.17	
25	0.04	3.45	0.19	
30	0.08	2.56	0.20	
35	0.12	1.79	0.24	
40	0.14	1.14	0.30	
45	0.19	0.62	0.41	
50	0.27		0.62	20.00
55	0.50		1.09	41.67
60	0.94		1.84	83.33
62	1.23			100.00

GASB STATEMENTS NO. 25 & 27 DISCLOSURE INFORMATION

The Governmental Accounting Standards Board (GASB) issued Statements No. 25 & 27 that established generally accepted accounting principles for the annual financial statements for defined benefit pension plans. The required information is as follows:

Membership in the plan consisted of the following as of:

	<u>April 30, 2014</u>	<u>April 30, 2013</u>
Retirees and beneficiaries receiving benefits	0	0
Terminated plan members entitled to but not yet receiving benefits	0	0
Active vested plan members	1	1
Active nonvested plan members	<u>0</u>	<u>0</u>
Total	<u>1</u>	<u>1</u>
Number of participating employers	1	1

SCHEDULE OF FUNDING PROGRESS

<u>Actuarial Valuation Date</u>	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) -Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
04/30/12	911,420	1,064,630	153,210	85.6%	120,000	127.7%
04/30/13	992,536	1,106,103	113,567	89.7%	120,000	94.6%
04/30/14	1,031,256	1,412,918	381,662	73.0%	122,400	311.8%

GASB STATEMENTS NO. 25 & 27 DISCLOSURE INFORMATION (Continued)

ANNUAL PENSION COST AND NET PENSION OBLIGATION

	<u>April 30, 2014</u>	<u>April 30, 2013</u>
Annual required contribution	19,011	21,333
Interest on net pension obligation	(1,813)	(948)
Adjustment to annual required contribution	<u>1,551</u>	<u>780</u>
Annual pension cost	18,749	21,165
Contributions made	<u>31,438</u>	<u>33,099</u>
Increase (decrease) in net pension obligation	(12,689)	(11,934)
Net pension obligation beginning of year	<u>(25,011)</u>	<u>(13,077)</u>
Net pension obligation end of year	<u>(37,700)</u>	<u>(25,011)</u>

THREE-YEAR TREND INFORMATION

<u>Fiscal Year Ending</u>	<u>Annual Pension Cost (APC)</u>	<u>Percentage of APC Contributed</u>	<u>Net Pension Obligation</u>
04/30/12	16,710	102.8%	(13,077)
04/30/13	21,165	156.4%	(25,011)
04/30/14	18,749	167.7%	(37,700)

GASB STATEMENTS NO. 25 & 27 DISCLOSURE INFORMATION (Continued)

FUNDING POLICY AND ANNUAL PENSION COST

Contribution rates:

Village	25.685%	27.583%
Plan members	9.455%	Same

Annual pension cost	18,749	21,165
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Contributions made	31,438	33,099
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Actuarial valuation date	04/30/2014	04/30/2013
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Actuarial cost method	Entry age	Same
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Amortization period	Level percentage of pay, closed	Same
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Remaining amortization period	19 years	20 years
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Asset valuation method	Market	Same
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Actuarial assumptions:

Investment rate of return*	5.00%	7.25%
Projected salary increases*	3.50%	5.00%

*Includes inflation at	3.00%	Same
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Cost-of-living adjustments	Tier 1: 3.00% per year, compounded Tier 2: 2.00% per year, simple	Same
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