



VILLAGE OF CARPENTERSVILLE
CARPENTERSVILLE FIREFIGHTERS PENSION FUND

Actuarial Valuation Report

For the Year

Beginning May 1, 2010

And Ending April 30, 2011

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

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INTRODUCTION

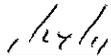
Fire-sworn personnel of the Village of Carpentersville are covered by the Firefighters Pension Plan that is a defined-benefit, single-employer pension plan. The purpose of this report is to disclose the Tax Levy Requirement and GASB Statements No. 25 & 27 financial information and related actuarial information for the year beginning May 1, 2010, and ending April 30, 2011.

The valuation results reported herein are based on plan provisions in effect as of May 1, 2010, the employee data furnished by the Village, the financial data provided by the Fund's trustee and the actuarial methods and assumptions described later in this report. I hereby certify that this report is complete and accurate and fairly presents the actuarial position of the Fund as of April 30, 2010, 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.

Respectfully submitted,



Timothy W. Sharpe, EA, MAAA
Enrolled Actuary No. 08-4384



Date

SUMMARY OF RESULTS

There were no changes with respect to Plan Provisions, Actuarial Methods, or Actuarial Assumptions from the prior year. The last actuarial valuation was completed two years ago (2008).

There were no unexpected changes with respect to the participants included in this actuarial valuation (4 new members, 2 terminations, 2 retirements, 3 incident of disability, 2-year annual payroll increase 3.2%, 2-year average salary increase 16.0%).

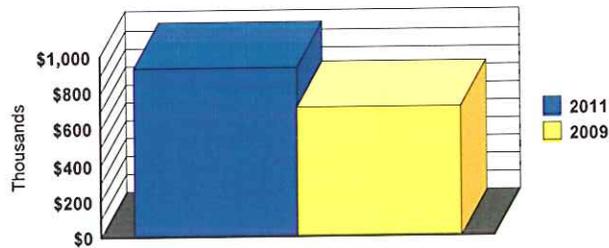
There were no unexpected changes with respect to the Fund's investments from the prior year (annual investment return 15.97%).

The Village's Tax Levy Requirement has increased from \$721,243 (2008) to \$944,684 this year (31.0%). The increase in the Tax Levy is due to the increase in salaries was greater than assumed, the new incidents of disability, and the investment returns were less than assumed. The Percent Funded has decreased from 76.3% (2008) to 66.1% this year.

SUMMARY OF RESULTS (Continued)

	For Year Ending April 30	
	<u>2011</u>	<u>2009</u>
Tax Levy Requirement	\$ 944,684	\$ 721,243
	as of May 1	
	<u>2010</u>	<u>2008</u>
Village Normal Cost	566,223	527,547
Anticipated Employee Contributions	278,211	269,617
Accrued Liability	18,494,208	13,133,495
Actuarial Value of Assets	12,261,276	10,025,463
Unfunded Accrued Liability/(Surplus)	6,232,932	3,108,032
Amortization of Unfunded Accrued Liability/(Surplus)	316,659	146,512
Percent Funded	66.3%	76.3%
Annual Payroll	\$ 2,942,475	\$ 2,851,584

TAX LEVY REQUIREMENT
as of April 30

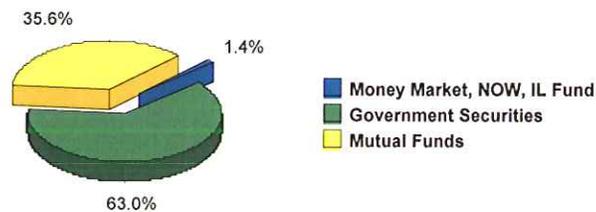


ACTUARIAL VALUATION OF ASSETS

		as of May 1	
	<u>2010</u>		<u>2008</u>
Money Market, NOW, IL Fund	\$ 169,213	\$	133,078
Government Securities	7,673,602		6,410,278
Mutual Funds	4,341,189		3,458,258
Interest Receivable	86,082		82,214
Miscellaneous Receivable/(Payable)	<u>(8,809)</u>		<u>(58,365)</u>
Actuarial Value of Assets	\$ <u>12,261,276</u>	\$	<u>10,025,463</u>

SUMMARY OF ASSETS

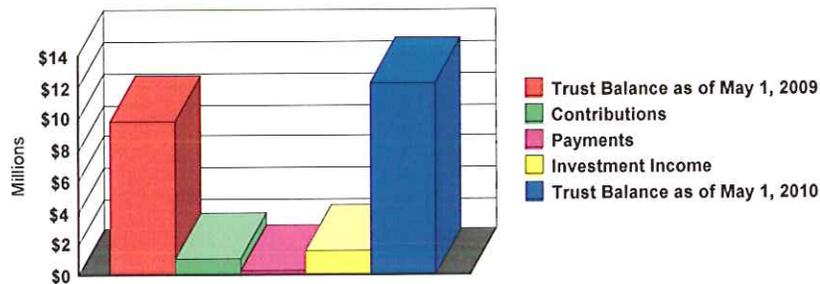
As Of May 1, 2010



ASSET CHANGES DURING PRIOR YEAR

Trust Balance as of May 1, 2009		\$	9,852,414
Contributions			
Village	716,781		
Employee	<u>315,475</u>		
Total			1,032,256
Payments			
Benefit Payments	256,492		
Expenses	<u>29,453</u>		
Total			285,944
Investment Income			<u>1,632,551</u>
Trust Balance as of May 1, 2010		\$	<u>12,231,276</u>
Approximate Annual Rate of Return			15.97%

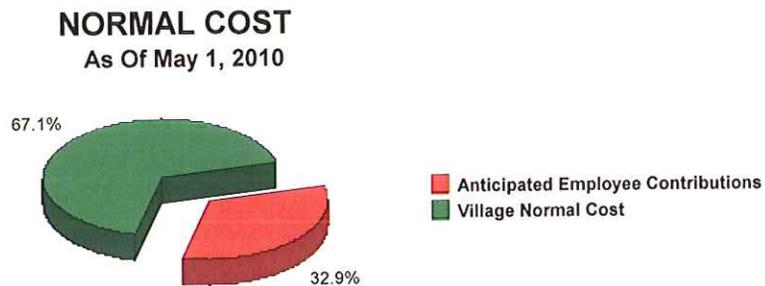
ASSET CHANGES DURING PRIOR YEAR



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.

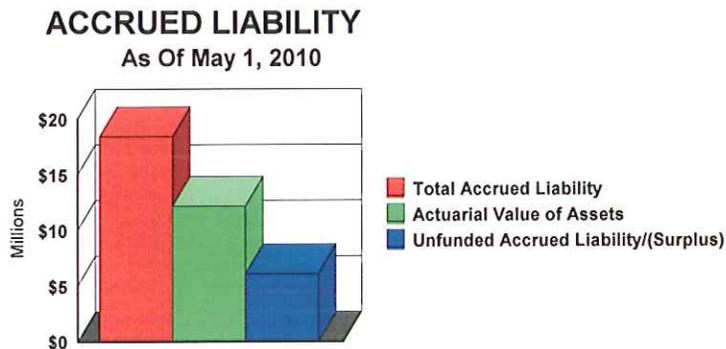
		as of May 1	
		<u>2010</u>	<u>2008</u>
Total Normal Cost	\$	844,434	\$ 797,164
Anticipated Employee Contributions		<u>278,211</u>	<u>269,617</u>
Village Normal Cost		<u>566,223</u>	<u>527,547</u>
Normal Cost Payroll	\$	2,942,475	\$ 2,851,584
Village Normal Cost Rate		19.24%	18.50%
Total Normal Cost Rate		28.70%	27.96%



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	
Accrued Liability	<u>2010</u>	<u>2008</u>
Active Employees	\$ 11,127,051	\$ 11,159,374
Children Annuities	8,754	0
Disability Annuities	3,153,045	643,802
Retirement Annuities	4,011,625	1,120,082
Surviving Spouse Annuities	193,733	210,237
Terminated Vested Annuities	<u>0</u>	<u>0</u>
Total Annuities	7,367,157	1,974,121
Total Accrued Liability	18,494,208	13,133,495
Actuarial Value of Assets	<u>12,261,276</u>	<u>10,025,463</u>
Unfunded Accrued Liability/(Surplus)	\$ <u>6,232,932</u>	\$ <u>3,108,032</u>
Percent Funded	66.3%	76.3%

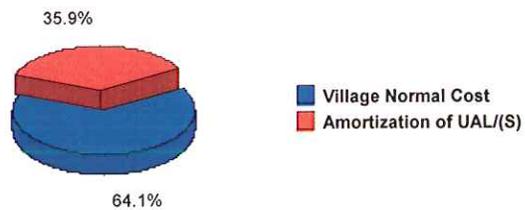


TAX LEVY REQUIREMENT

The Tax Levy Requirement is determined as the annual contribution necessary to fund the normal cost, plus the amount to amortize the unfunded accrued liability as a level percentage of payroll over a forty (40) year period which commenced in 1993, plus an adjustment for interest.

	For Year Ending April 30	
	<u>2011</u>	<u>2009</u>
Village Normal Cost as of Beginning of Year	\$ 566,223	\$ 527,547
Amortization of Unfunded Accrued Liability/(Surplus)	316,659	146,512
Interest for One Year	<u>61,802</u>	<u>47,184</u>
Tax Levy Requirement as of End of Year	\$ <u>944,684</u>	\$ <u>721,243</u>

TAX LEVY REQUIREMENT For Fiscal Year Ending April 30, 2011



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>2010</u>	<u>2010</u>	<u>2008</u>	<u>2008</u>
Current Employees				
Vested	16		13	
Nonvested	<u>22</u>		<u>28</u>	
Total	<u>38</u>		<u>41</u>	
Inactive Participants		<u>Annual Benefits</u>		<u>Annual Benefits</u>
Children	5 \$	1,258	0 \$	0
Disabled Employees	4	190,020	1	39,344
Retired Employees	6	319,302	3	106,299
Surviving Spouses	1	34,812	1	34,812
Terminated Vesteds	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	<u>16</u>	<u>545,392</u>	<u>5</u>	<u>180,455</u>
Annual Payroll	\$	2,942,475	\$	2,851,584

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	59,440
25-29	2							2	66,971
30-34	8	4	1					13	70,743
35-39	1	2	4					7	79,667
40-44		1	1		2			4	79,548
45-49		1	1	1				3	89,845
50-54		2			1	2	1	6	88,878
55-59			2					2	75,382
60+									
Total	<u>12</u>	<u>10</u>	<u>9</u>	<u>1</u>	<u>3</u>	<u>2</u>	<u>1</u>	<u>38</u>	<u>77,434</u>
Salary	65,654	77,545	80,977	101,574	90,106	79,992	118,508		

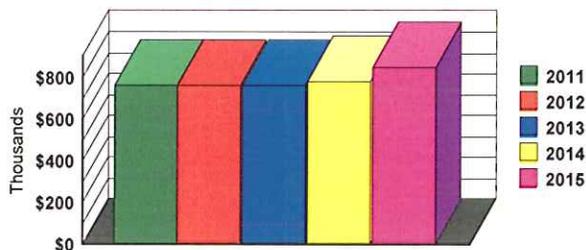
Average Age: 38.9 Average Service: 9.3

DURATION (years) Active Members: 17.2 Retired Members: 11.4 All Members: 14.9

PROJECTED PENSION PAYMENTS

<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
\$763,448	\$762,222	\$760,386	\$786,029	\$848,716

PROJECTED PENSION PAYMENTS
2011-2015



SUMMARY OF PLAN PROVISIONS

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

The Village of Carpentersville 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.

ACTUARIAL METHODS

The Actuarial Methods used for determining the Tax Levy and GASB Statements No. 25 & 27 financial disclosure have not been changed from the prior year. The Actuarial Method employed for this valuation is as follows:

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 and have not been changed from the prior year. The Actuarial Assumptions employed for this valuation are as follows:

Valuation Date	May 1, 2010
Asset Valuation Method	Market Value
Investment Return	7.00%
Salary Scale	5.50%
Mortality	1971 Group Annuity Mortality Table
Withdrawal	State of Illinois DOI Experience Rates
Disability	State of Illinois DOI Experience Rates
Retirement	State of Illinois DOI Experience Rates (100% by Age 62)
Marital Status	80% Married, Spouse Same Age
Plan Expenses	None

<u>Sample Annual Rates Per 100 Participants</u>				
<u>Age</u>	<u>Mortality</u>	<u>Withdrawal</u>	<u>Disability</u>	<u>Retirement</u>
20	0.05	4.02	0.17	
30	0.81	2.56	0.20	
40	0.16	1.14	0.30	
50	0.53		0.62	20.00
60	1.31		1.84	83.33
62	1.59			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, 2010</u>	<u>April 30, 2008</u>
Retirees and beneficiaries receiving benefits	16	5
Terminated plan members entitled to but not yet receiving benefits	0	0
Active vested plan members	16	13
Active nonvested plan members	<u>22</u>	<u>28</u>
Total	<u>54</u>	<u>46</u>
Number of participating employers	1	1

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	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)
04/30/06	7,738,371	11,044,024	3,305,653	70.1%	2,507,146	131.8%
04/30/08	10,025,463	13,133,495	3,108,032	76.3%	2,851,584	109.0%
04/30/10	12,261,276	18,494,208	6,232,932	66.3%	2,942,475	211.8%

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

ANNUAL PENSION COST AND NET PENSION OBLIGATION

	<u>April 30, 2010</u>	<u>April 30, 2008</u>
Annual required contribution	721,243	667,787
Interest on net pension obligation	63,656	54,226
Adjustment to annual required contribution	<u>(44,988)</u>	<u>(35,849)</u>
Annual pension cost	739,911	686,164
Contributions made	<u>716,781</u>	<u>551,460</u>
Increase (decrease) in net pension obligation	23,130	134,704
Net pension obligation beginning of year	<u>909,367</u>	<u>774,663</u>
Net pension obligation end of year	<u>932,497</u>	<u>909,367</u>

THREE-YEAR TREND INFORMATION

Fiscal Year <u>Ending</u>	Annual Pension <u>Cost (APC)</u>	Percentage of APC <u>Contributed</u>	Net Pension <u>Obligation</u>
04/30/06	592,417	77.1%	774,663
04/30/08	686,164	80.4%	909,367
04/30/10	739,911	96.9%	932,497

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

FUNDING POLICY AND ANNUAL PENSION COST

Contribution rates:

Village	24.360%	19.339%
Plan members	9.455%	Same

Annual pension cost	739,911	686,164
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Contributions made	716,781	551,460
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Actuarial valuation date	04/30/2010	04/30/2008
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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	23 years	24 years
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Asset valuation method	Market	Same
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Actuarial assumptions:

Investment rate of return*	7.00%	Same
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Projected salary increases*	5.50%	Same
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*Includes inflation at	3.00%	Same
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Cost-of-living adjustments	3.00% per year	Same
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