



**VILLAGE OF CARPENTERSVILLE**  
**CARPENTERSVILLE FIREFIGHTERS PENSION FUND**

Actuarial Valuation Report

For the Year

Beginning May 1, 2006

And Ending April 30, 2007

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

## TABLE OF CONTENTS

	<u>Page</u>
Introduction	3
Summary of Results	4
Actuarial Valuation of Assets	6
Asset Changes During Prior Year	7
Normal Cost	8
Accrued Liability	9
Tax Levy Requirement	10
Summary of Plan Participants	11
Duration	12
Projected Pension Payments	12
Summary of Plan Provisions	13
Actuarial Method	14
Actuarial Assumptions	15
GASB Statements No. 25 & 27 Disclosure	16

## 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, 2006, and ending April 30, 2007.

The valuation results reported herein are based on plan provisions in effect as of May 1, 2006, 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, 2006, 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. 05-4384

8/24/07

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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 (2004).

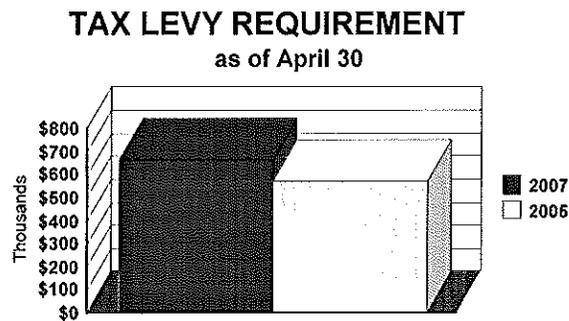
There were no unexpected changes with respect to the participants included in this actuarial valuation (5 new members, 3 terminations, 0 retirements, 1 incident of disability, 2-year annual payroll increase 16.4%, 2-year average salary increase 15.0%).

There were no unexpected changes with respect to the Fund's investments from the prior year (annual investment return 9.15%).

The Village's Tax Levy Requirement has increased from \$575,516 (2004) to \$667,787 this year (16.0%). The increase in the Tax Levy is due to the increase in salaries was greater than expected. The Percent Funded has decreased from 72.8% (2004) to 70.1% this year.

SUMMARY OF RESULTS (Continued)

	For Year Ending April 30	
	<u>2007</u>	<u>2005</u>
Tax Levy Requirement	\$ 667,787	\$ 575,516
		as of May 1
	<u>2006</u>	<u>2004</u>
Village Normal Cost	477,890	443,495
Anticipated Employee Contributions	237,051	182,137
Accrued Liability	11,044,024	8,308,341
Actuarial Value of Assets	7,738,371	6,046,713
Unfunded Accrued Liability/(Surplus)	3,305,653	2,261,628
Amortization of Unfunded Accrued Liability/(Surplus)	146,210	94,370
Percent Funded	70.1%	72.8%
Annual Payroll	\$ 2,507,146	\$ 2,154,190

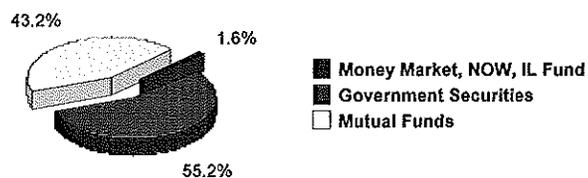


## ACTUARIAL VALUATION OF ASSETS

		as of May 1	
		<u>2006</u>	<u>2004</u>
Money Market, NOW, IL Fund	\$	124,060	\$ 496,291
Government Securities		4,263,568	3,769,071
Mutual Funds		3,331,346	1,768,880
Interest Receivable		18,269	11,343
Miscellaneous Receivable/(Payable)		<u>1,128</u>	<u>1,128</u>
Actuarial Value of Assets	\$	<u>7,738,371</u>	\$ <u>6,046,713</u>

### SUMMARY OF ASSETS

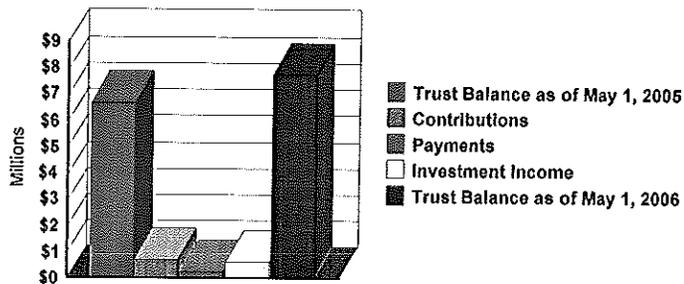
As Of May 1, 2006



## ASSET CHANGES DURING PRIOR YEAR

Trust Balance as of May 1, 2005		\$	6,680,692
Contributions			
Village	456,601		
Employee	<u>245,570</u>		
Total			702,171
Payments			
Benefit Payments	262,006		
Expenses	<u>13,535</u>		
Total			275,541
Investment Income			<u>631,049</u>
Trust Balance as of May 1, 2006		\$	<u>7,738,371</u>
Approximate Annual Rate of Return			9.15%

## ASSET CHANGES DURING PRIOR YEAR



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
25-29	6	3						9	58,294
30-34	1	4						5	64,264
35-39	2	3	1	1				7	61,664
40-44	2	1	2	1				6	65,397
45-49	2	2		1	1	2		8	69,108
50-54	1	1			1			3	67,800
55-59							1	1	80,891
<b>Total</b>	<u>14</u>	<u>14</u>	<u>3</u>	<u>3</u>	<u>2</u>	<u>2</u>	<u>1</u>	<u>39</u>	<u>64,286</u>
<b>Salary</b>	55,869	62,481	74,020	75,806	74,057	85,887	80,891		

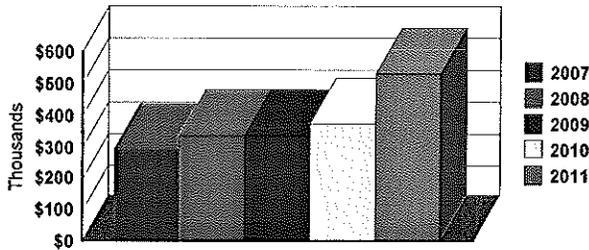
Average Age: 38.4      Average Service: 8.7

DURATION (years)    Active Members: 15.9    Retired Members: 8.8    All Members: 14.5

PROJECTED PENSION PAYMENTS

<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
\$295,521	\$338,599	\$335,146	\$378,596	\$532,434

**PROJECTED PENSION PAYMENTS**  
2007-2011



## 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 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, 2006
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 69)
Marital Status	80% Married, Spouse Same Age
Plan Expenses	None

### Sample Annual Rates Per 100 Participants

<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	40.00
60	1.31		1.84	52.63
69	3.24			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, 2006</u>	<u>April 30, 2004</u>
Retirees and beneficiaries receiving benefits	5	4
Terminated plan members entitled to but not yet receiving benefits	0	0
Active vested plan members	11	10
Active nonvested plan members	<u>28</u>	<u>28</u>
Total	<u>44</u>	<u>42</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)
04/30/03	5,271,327	6,770,237	1,498,910	77.9%	1,871,471	80.1%
04/30/04	6,046,713	8,308,341	2,261,628	72.8%	2,154,190	105.0%
04/30/06	7,738,371	11,044,024	3,305,653	70.1%	2,507,146	131.8%

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

FUNDING POLICY AND ANNUAL PENSION COST

Contribution rates:

Village	18.212%	12.204%
Plan members	9.455%	8.455%

Annual pension cost	592,417	426,863
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Contributions made	456,601	262,905
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Actuarial valuation date	04/30/2006	04/30/2004
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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	27 years	28 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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