



Actuary

VILLAGE OF CARPENTERSVILLE
CARPENTERSVILLE POLICE PENSION FUND

Actuarial Valuation Report

For the Year

Beginning May 1, 2002

And Ending April 30, 2003

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INTRODUCTION

Police-sworn personnel of the Village of Carpentersville are covered by the Police 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, 2002, and ending April 30, 2003.

The valuation results reported herein are based on plan provisions in effect as of May 1, 2002, 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, 2002, 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. 02-4384

11/21/02

Date

SUMMARY OF RESULTS

There were no changes with respect to Plan Provisions, Actuarial Methods or Actuarial Assumptions from the prior year. There was a change of Actuary from the prior year.

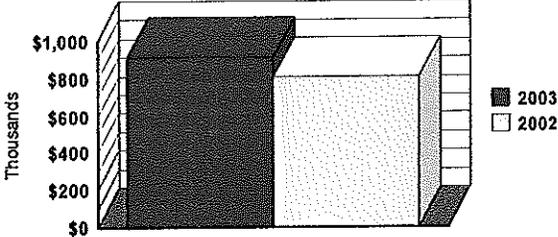
The value of the Fund's investments was adjusted as of the beginning of the year (increased \$573,722). The annual investment return was 2.00%.

The Village's Tax Levy Requirement has increased from \$812,455 last year to \$920,576 this year (13.3%). The increase in the Tax Levy is due to the investment return was less than expected. The Percent Funded is 56.4% this year.

SUMMARY OF RESULTS (Continued)

	For Year Ending April 30	
	<u>2003</u>	<u>2002</u>
Tax Levy Requirement	\$ 920,576	\$ 812,455 as of May 1 <u>2002</u>
Village Normal Cost		468,090
Anticipated Employee Contributions		316,739
Accrued Liability		22,724,473
Actuarial Value of Assets		12,806,480
Unfunded Accrued Liability/(Surplus)		9,917,993
Amortization of Unfunded Accrued Liability/(Surplus)		392,261
Percent Funded		56.4%
Annual Payroll		\$ 3,196,152

TAX LEVY REQUIREMENT
as of April 30

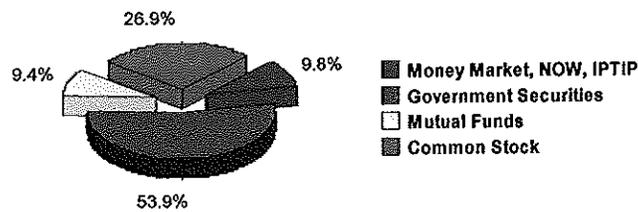


ACTUARIAL VALUATION OF ASSETS

	as of May 1 <u>2002</u>
Money Market, NOW, IPTIP	\$ 1,192,474
Government Securities	6,533,935
Mutual Funds	1,141,081
Common Stock	3,258,852
Interest Receivable	124,814
Miscellaneous Receivable/(Payable)	<u>555,323</u>
Actuarial Value of Assets	\$ <u>12,806,480</u>

SUMMARY OF ASSETS

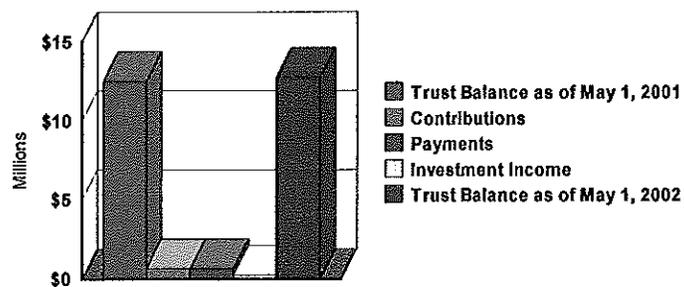
As Of May 1, 2002



ASSET CHANGES DURING PRIOR YEAR

Trust Balance as of May 1, 2001		\$	12,548,434
Contributions			
Village	412,700		
Employee	<u>334,177</u>		
Total			746,877
Payments			
Benefit Payments	645,293		
Expenses	<u>94,334</u>		
Total			739,627
Investment Income			<u>250,796</u>
Trust Balance as of May 1, 2002		\$	<u>12,806,480</u>
Approximate Annual Rate of Return			2.00%

ASSET CHANGES DURING PRIOR YEAR

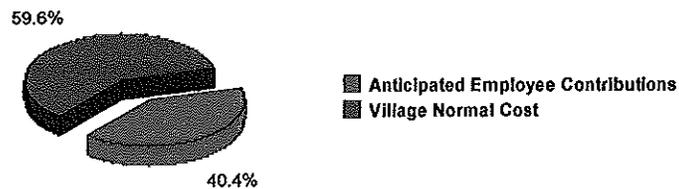


NORMAL COST

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>2002</u>
Total Normal Cost	\$	784,829
Anticipated Employee Contributions		<u>316,739</u>
Village Normal Cost		<u>468,090</u>
Normal Cost Payroll	\$	3,196,152
Village Normal Cost Rate		14.65%
Total Normal Cost Rate		24.56%

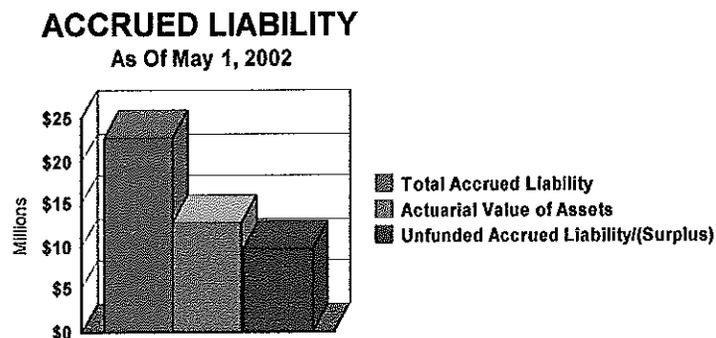
NORMAL COST As Of May 1, 2002



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>2002</u>
Accrued Liability	
Active Employees	\$ 12,605,479
Children Annuities	0
Disability Annuities	885,871
Retirement Annuities	9,103,441
Surviving Spouse Annuities	129,682
Terminated Vested Annuities	<u>0</u>
Total Annuities	10,118,994
 Total Accrued Liability	 22,724,473
 Actuarial Value of Assets	 <u>12,806,480</u>
 Unfunded Accrued Liability/(Surplus)	 \$ <u>9,917,993</u>
 Percent Funded	 56.4%



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>2003</u>
Village Normal Cost as of Beginning of Year	\$ 468,090
Amortization of Unfunded Accrued Liability/(Surplus)	392,261
Interest for One Year	<u>60,225</u>
Tax Levy Requirement as of End of Year	\$ <u>920,576</u>

TAX LEVY REQUIREMENT For Fiscal Year Ending April 30, 2003



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>2002</u>	<u>2002</u>
Current Employees		
Vested	31	
Nonvested	<u>26</u>	
Total	<u>57</u>	
Inactive Participants		<u>Annual Benefits</u>
Children	0 \$	0
Disabled Employees	3	65,428
Retired Employees	19	605,706
Surviving Spouses	1	13,831
Terminated Vesteds	<u>0</u>	<u>0</u>
Total	<u>23</u>	<u>684,965</u>
Annual Payroll	\$	3,196,152

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	44,484
25-29	6							6	50,908
30-34	8	7	5					20	53,465
35-39	4	2	4	2				12	56,557
40-44		2		2				4	59,008
45-49			1	3	6			10	60,558
50-54					3	1		4	64,154
Total	<u>19</u>	<u>11</u>	<u>10</u>	<u>7</u>	<u>9</u>	<u>1</u>	<u>0</u>	<u>57</u>	<u>56,073</u>
Salary	49,680	56,481	57,343	62,764	61,059	68,630			

Average Age: 36.9 Average Service: 9.8

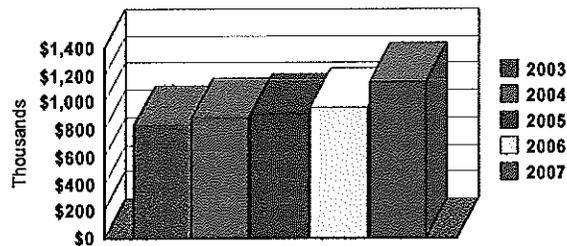
DURATION (years) Active Members: 16.6 Retired Members: 9.6 All Members: 13.5

PROJECTED PENSION PAYMENTS

<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>
\$842,631	\$898,999	\$924,601	\$974,394	\$1,152,462

PROJECTED PENSION PAYMENTS

2003-2007



SUMMARY OF PLAN PROVISIONS

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

The Village of Carpentersville Police Pension Fund was created and is administered as prescribed by "Article 3. Police 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 (2.5%) of final salary for each year of service up to (30) years, to a maximum of (75%) of such salary.

Employees with at least (8) years but less than (20) years of credited service may retire at or after age (60) and receive a reduced benefit of (2.5%) of final salary for each year of service.

Surviving spouses receive the greater of (50%) of final salary or the employee's retirement benefit.

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 originally granted pension. Beginning with increases granted on or after July 1, 1993, the second and subsequent automatic annual increases shall be calculated as (3%) of the amount of the pension payable at the time of the increase.

Employees are required to contribute (9.91%) of their base salary to the Police Pension Plan. If an employee leaves covered employment with less than (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 sum of the Normal Costs for 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, 2002
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

<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	6.00	0.07	
30	0.08	5.10	0.10	
40	0.16	2.85	0.20	
50	0.53		0.52	40.00
60	1.31		0.60	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, 2002</u>
Retirees and beneficiaries receiving benefits	23
Terminated plan members entitled to but not yet receiving benefits	0
Active vested plan members	31
Active nonvested plan members	<u>26</u>
Total	<u>80</u>
Number of participating employers	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)
04/30/00	NA	NA	NA	NA	NA	NA
04/30/01	NA	NA	NA	NA	NA	NA
04/30/02	12,806,480	22,724,473	9,917,993	56.4%	3,196,152	310.3%

Palmer

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

ANNUAL PENSION COST AND NET PENSION OBLIGATION

	<u>April 30, 2002</u>
Annual required contribution	731,102
Interest on net pension obligation	0
Adjustment to annual required contribution	<u>0</u>
Annual pension cost	731,102
Contributions made	<u>412,700</u>
Increase (decrease) in net pension obligation	318,402
Net pension obligation beginning of year	<u>0</u>
Net pension obligation end of year	<u>318,402</u>

THREE-YEAR TREND INFORMATION

<u>Fiscal</u> <u>Year</u> <u>Ending</u>	<u>Annual</u> <u>Pension</u> <u>Cost (APC)</u>	<u>Percentage</u> <u>of APC</u> <u>Contributed</u>	<u>Net</u> <u>Pension</u> <u>Obligation</u>
04/30/00	NA	NA	NA
04/30/01	NA	NA	NA
04/30/02	731,102	56.4%	318,402

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

FUNDING POLICY AND ANNUAL PENSION COST

Contribution rates:

Village	12.91%
Plan members	9.91%

Annual pension cost 731,102

Contributions made 412,700

Actuarial valuation date 04/30/02 04/30/01

Actuarial cost method Entry age same

Amortization period Level percentage of pay, closed same

Remaining amortization period 31 years 32 years

Asset valuation method Market same

Actuarial assumptions:

Investment rate of return* 7.00% same

Projected salary increases* 5.50% same

*Includes inflation at 3.00% same

Cost-of-living adjustments 3.00% per year same