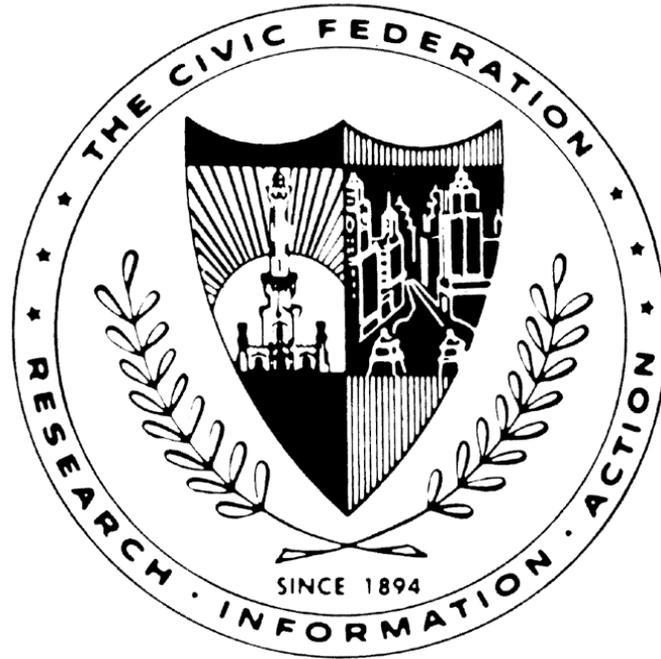


# Status of Local Pension Funding - 2001

An Evaluation of Nine Local Pension Funds within Cook County  
& The Five Collar County Funds in the Illinois  
Municipal Retirement Fund



Prepared by  
The Civic Federation  
January 2003

This study made possible through the generosity of the Arthur Rubloff Residuary Trust.

## **INTRODUCTION**

The Civic Federation recently concluded an analysis of the fiscal year 2001 actuarial valuation reports for the 9 major local government pension funds, which are supported by City of Chicago and Cook County property tax dollars. The pension funds include in this report are listed below:

- The Municipal Employees' Annuity and Benefit Fund of Chicago
- The Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago
- The Firemen's Annuity and Benefit Fund of Chicago
- The Policemen's Annuity and Benefit Fund of Chicago
- County Employees' and Officers Annuity and Benefit Fund of Cook County
- The Forest Preserve District Employees' Annuity and Benefit Fund of Cook County
- Park Employee's & Retirement Board Employee's Annuity and Benefit Fund
- The Metropolitan Water Reclamation District Retirement Fund
- Public School Teachers' Pension and Retirement Fund of Chicago

Based upon that review, we would like to offer the following key findings. The full text of our analysis follows this summary.

### **Assets And Liabilities**

- *The 9 pension funds had approximately \$32 billion in assets and \$35.6 billion in liabilities.*

### **Revenues And Expenditures**

- *Government (employer) contributions have replaced investment income as the primary source of revenue.*

### **Rate Of Return**

- *The average rate of return for the 9 pension funds' assets has declined from 18% in 1997 to -2% in 2001.*

### **Funded Ratios**

- *The City of Chicago's Firemen's and Policemen's Pension Funds continue to be at funding levels low enough to cause concern (60% and 70% respectively).*

### **Unfunded Liabilities**

- *The aggregate unfunded liability of the 9 funds is \$3.6 billion, an increase of nearly \$400 million from fiscal year 2000.*

## PUBLIC PENSION FUND OVERVIEW

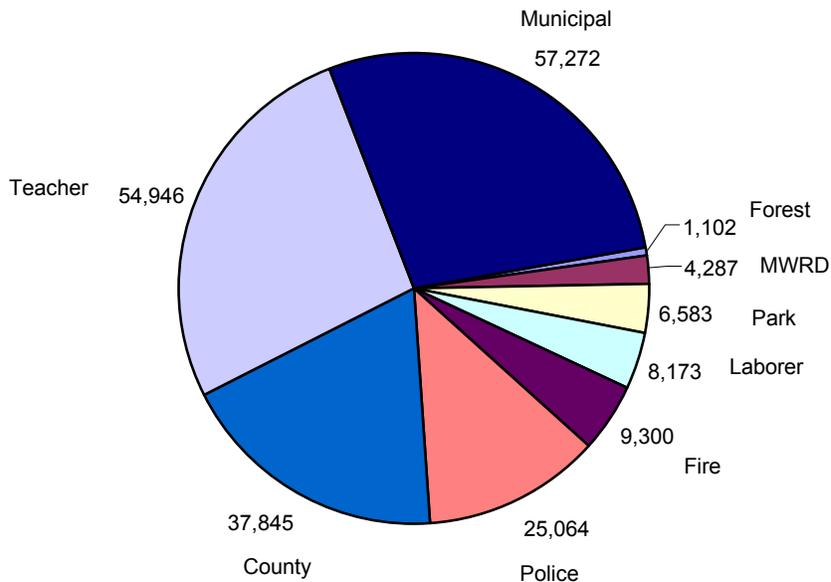
The City of Chicago enrolls its employees in four different pension systems:

- The Municipal Employees' Annuity and Benefit Fund
- The Laborers' and Retirement Board Employees' Annuity and Benefit Fund
- The Firemen's Annuity and Benefit Fund
- The Policemen's Annuity and Benefit Fund

In addition to the City's four separate pension funds, five other pension funds are funded in part by Chicago and Cook County property tax dollars:

- County Employees' and Officers Annuity and Benefit Fund of Cook County<sup>1</sup>
- The Forest Preserve District Employees' Annuity and Benefit Fund of Cook County
- Park Employee's & Retirement Board Employee's Annuity and Benefit Fund
- The Metropolitan Water Reclamation District Retirement Fund
- Public School Teachers' Pension and Retirement Fund of Chicago<sup>2</sup>

**DISTRIBUTION OF ACTIVE EMPLOYEES AND BENEFICIARIES**



<sup>1</sup> Cook County's and the Forest Preserve's funds are governed by the same pension board.

<sup>2</sup> The Chicago Board of Education enrolls teachers in the Public School Teachers' Pension and Retirement Fund of Chicago. All other employees of the Board of Education are enrolled in the City of Chicago's Municipal Employees' Annuity and Benefit Fund. Two other major funds cover a number of local public employees but are not supported by property taxes and are not included in this analysis: The Chicago Transit Authority Employees' Pension Plan and State University Employees' Pension Fund (some City College Employees are enrolled in this fund).

Taken as a whole, these funds cover 130,000 active employees and provide benefits to nearly 75,000 beneficiaries. The three largest funds, the City of Chicago Municipal Employees, the Public School Teacher's, and Cook County Employees', account for 73% of the people covered by these plans.

All public pension plans surveyed in this report are defined benefit plans.<sup>3</sup> In defined benefit plans, employers and employees annually contribute fixed amounts to investments intended to cover future benefit payments. Upon retirement, the employee receives an annuity based upon his or her highest salary (usually based on an average of several years) and length of service. *If the amounts contributed to the plan over the term of the employee's employment plus accrued earnings are insufficient to support the benefits (including health and survivor's benefits) the former employer is required to pay the difference.*

The policy question inherent in an examination of pension funding is, "How shall the burden of payment be apportioned between current and future taxpayers?" If funding levels are too low, future taxpayers will experience a disparity between the level of taxes and the level of services: higher taxes will be paid to provide benefits to persons who are retired (pension benefits are constitutionally protected under Illinois law and therefore take precedence over all other obligations of government). On the other hand, if funding levels are too high, current taxpayers are being asked to endure a greater disparity between the level of taxes and services received from government than future generations.

Pension experts consulted for this report agree that the method of funding a public pension fund should prevent growth of the *unfunded liability*, or that portion of future projected costs and interest not currently covered by assets. Most experts concur that there is no real need to achieve full funding. They argue that governments, unlike private corporations, are not at risk of dissolving and, therefore, can meet their obligations in perpetuity.

## **ASSETS AND LIABILITIES**

The basic issue at hand is whether or not the pension funds' assets are sufficient to cover liabilities. Liabilities are determined using actuarial assumptions. The assumptions are used to calculate the value of all future pension payments for both current and retired employees as well as any other beneficiaries. Under GASB Statement No. 25, assets of public pension plans are reported based on the Actuarial Value or Smoothed Market Value of the assets, which uses an average of the assets' market values from previous

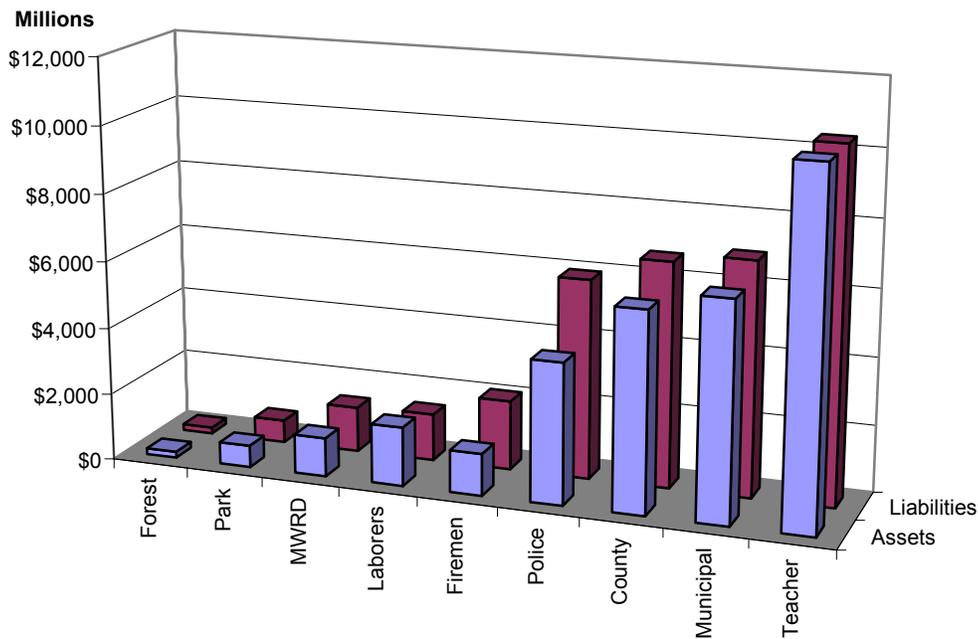
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<sup>3</sup> The other type of pension plan is a defined contribution plan. In a defined contribution plan, the employee and the employer contribute fixed amounts. Upon retirement, the employee receives an annuity and interest based upon the amount contributed to the plan over the term of his or her employment. Once the employee retires, the employer has no further liability to the employee (except, perhaps, for ancillary health benefits). Historically, defined benefit plans were the most common type of plan, but changes in tax laws encouraged numerous conversions in the private sector to defined contribution plans. These plans are known as 401(k) or 403(b) plans, named after the governing sections of the Internal Revenue Service Code.

years.<sup>4</sup> The Current Market Value is another measure used to determine the assets of the plan. It reflects the value of the pension fund's assets at the end of the fiscal year. This measure is subject to variations in the market that can be misleading because the variations should average out over the life of the pension plan. Unless otherwise noted, the Actuarial Value of assets is used throughout the report.

The aggregate assets of the 9 funds in FY2001 were \$32 billion. The aggregate liability was \$35.6 billion. Only the City of Chicago's Laborers' Fund has assets in excess of its liabilities. The other funds vary in their differences between assets and liabilities from a low of \$3.7 million at the Forest Preserve to \$1.7 billion at the Policemen's Fund. The difference between assets and liabilities is known as the Unfunded Liability, which is examined more closely later in this report.

**Actuarially Determined Value of Assets and Liabilities FY2001**

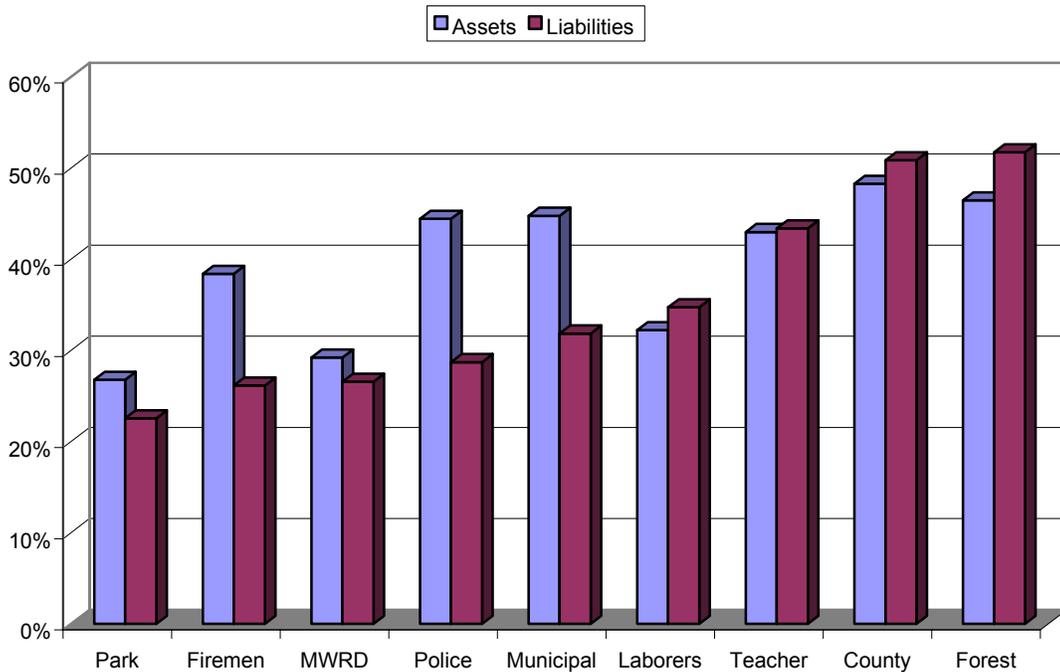


Over the last five years, the aggregate assets of the plans have grown faster than liabilities. The aggregate assets of the plans have grown by 43% and the aggregate liabilities have grown by 37%. Cook County and the Forest Preserve District have experienced the greatest growth rates for both assets and liabilities, with both growing by

<sup>4</sup> In November 1994, the Government Accounting Standards Board (GASB) issued Statement No. 25 that established new standards for the reporting of a pension fund's assets. The requirement became effective June 15, 1996. Up until that statement, most pension funds used two measurements for determining the net worth of assets, book value (recognizing investments at initial cost or amortized cost) and market value (recognizing investments at current value). In Statement No. 25, GASB recommends a "smoothed" market value, also referred to as the actuarial value of assets, in calculations for reporting pension costs and actuarial liabilities. The smoothed market value or actuarial value of assets accounts for assets at market values by averaging unexpected gains or losses over a period of 3 to 5 years.

nearly 50% over the past five years. The growth in the liabilities is due in large measure to changes in the actuarial assumptions used by the County and the Forest Preserve. The retiree health care cost of living factor was increased to 10%. This change in assumptions added \$281 million to the County's liabilities. These funds, along with the Chicago's Laborer's Fund, are also the only funds to experience faster growth in liabilities than in assets. The Laborer's fund has historically been overfunded; the greater growth rate in liabilities reflects attempts to bring the assets in line with liabilities. The City of Chicago's other three funds (Firemen, Policemen and Municipal Employees) have experienced growth in assets between 12% and 15% greater than growth in liabilities.

**PERCENTAGE GROWTH IN ASSETS AND LIABILITIES 1997-2001**



Another point of comparison is the difference between the Actuarial Value of assets and the Current Market Value of assets. The market value of assets is consistently below the smoothed market value of the assets in 2001. The aggregate market value of the 9 funds is \$29.7 billion, \$1.3 billion less than the aggregate smoothed market value. This represents a 4% decline in the market value of assets from the previous year. This is the first time in at least the last 6 years that the market value of assets has declined. Only the Park District Fund has a market value of assets greater than its smoothed market value.

FUND NAME	MARKET VALUE	SMOOTHED MARKET VALUE
Firemen	\$1,104,939,587	\$1,245,129,955
Police	\$3,696,943,403	\$4,183,796,025
Municipal	\$5,820,765,697	\$6,466,797,543
Laborers	\$1,570,707,258	\$1,756,080,291
Teacher	\$10,111,548,946	\$10,387,568,945
Park	\$666,701,900	\$651,343,906
MWRD	\$1,014,983,960	\$1,155,825,153
County	\$5,530,302,748	\$5,935,506,269
Forest	\$168,411,797	\$180,733,922
<b>TOTAL</b>	<b>\$29,685,305,296</b>	<b>\$31,962,782,009</b>

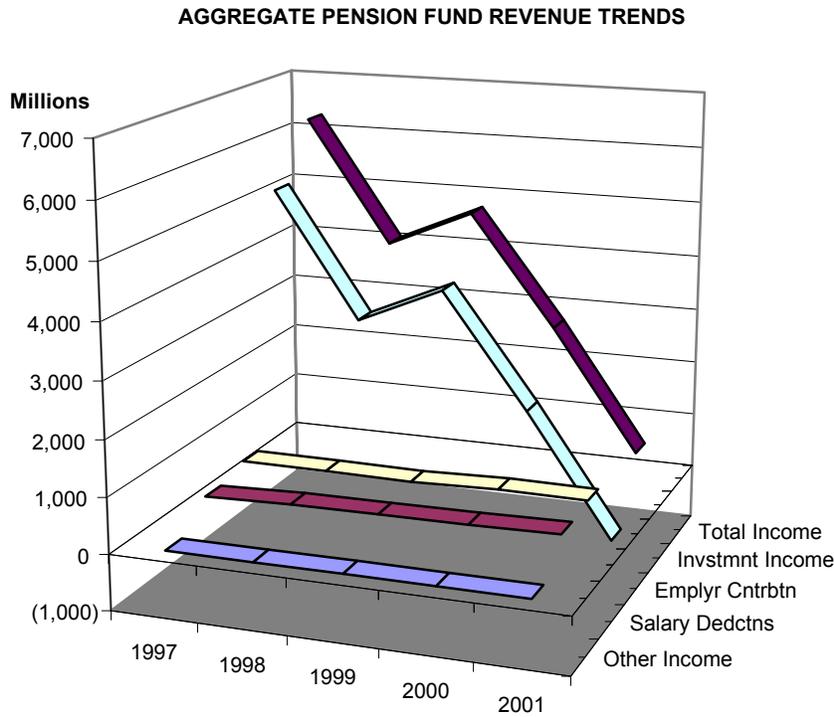
## REVENUES AND EXPENDITURES

The increases in assets experienced during the last half of the 1990's are no longer occurring. Revenues are declining while expenditures are increasing. Of the three primary sources of revenue for the pension plans studied here (investment income, employer contributions, and employee contributions) investment income drove the increases in assets seen above. The recent declines in equities markets are causing a significant redistribution of the sources of pension fund revenue. Between 1997 and 2001, employer and employee contributions grew from 17% to 336% of total pension fund revenues; meanwhile investment income declined from 83% of total pension fund revenues to negative 137%. Taken together, the 9 funds lost over \$663 million on their investments in 2001.

FUND NAME	EMPLOYEE CONTRIBUTION	EMPLOYER CONTRIBUTION	INVESTMENT INCOME	OTHER INCOME	TOTAL INCOME
POLICE	\$71,146,651	\$139,411,046	-\$205,065,056	\$264,720	\$5,757,361
LABOR	\$20,017,224	\$659,946	-\$13,223,109		\$7,454,061
FOREST	\$3,098,098	\$3,726,766	\$1,749,482	\$1,050	\$8,575,396
PARK	\$8,977,309	\$9,206,851	-\$4,733,654		\$13,450,506
FIRE	\$27,615,475	\$60,399,909	-\$68,704,276	\$62,437	\$19,373,545
MWRD	\$14,986,546	\$28,249,866	-\$13,622,833	-\$111,451	\$29,502,128
TEACHER	\$149,094,964	\$77,065,122	-\$162,551,287	\$70,078	\$63,678,877
MUNICIPAL	\$118,240,723	\$131,439,834	-\$141,678,789		\$108,001,768
COOK	\$125,848,928	\$155,842,905	-\$55,979,901	\$3,945,144	\$229,657,076
<b>TOTAL</b>	<b>\$539,025,918</b>	<b>\$606,002,245</b>	<b>-\$663,809,423</b>	<b>\$4,231,978</b>	<b>\$485,450,718</b>

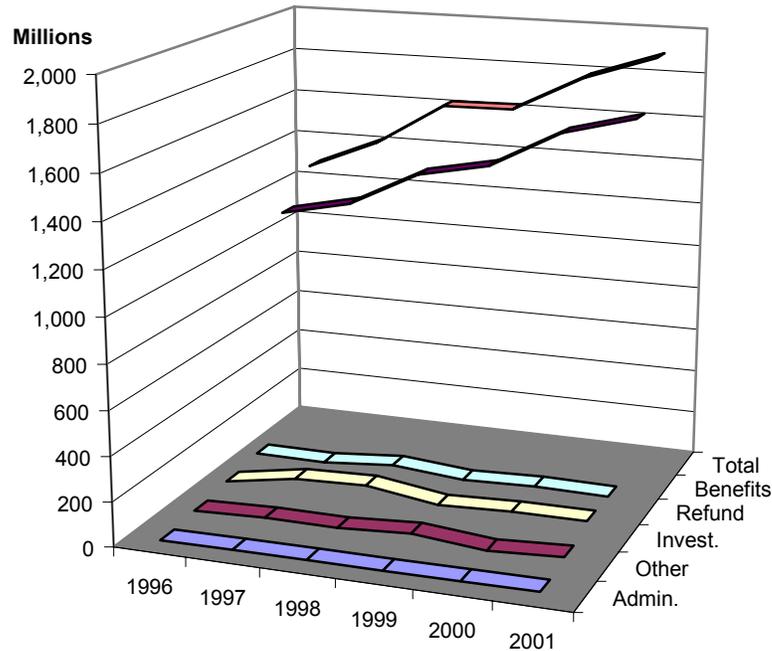
Investment revenue's status as the main driver of total revenues is apparent from the close relationship seen over the last five years between investment income and total revenue. While aggregate employer contributions have remained virtually constant over the last five years at approximately \$600 million, and employee contributions have increased slightly from \$440 million to \$540 million, investment income has plummeted from \$5.2 billion to

negative \$663 million. At the same time, the total income for the pension funds has dropped from \$6.2 billion to \$485 million.



In contrast to the revenues, pension fund expenditures have been consistently growing. The primary expenditure of the pension funds is benefit payments, which constitute nearly 90% of all expenditures. The other types of expenses are refund payments, administrative costs and investment costs. The aggregate amount of benefit payments paid out has increased by 48% since 1997, from \$1.1 billion to \$1.7 billion.

### AGGREGATE PENSION FUND EXPENDITURE TREND



The City of Chicago's Municipal Employees Fund and the Teachers Fund account for 50% of all expenditures by the funds included in this report. With nearly 38,000 beneficiaries between them they also account for approximately 50% of the people currently receiving benefits payments.

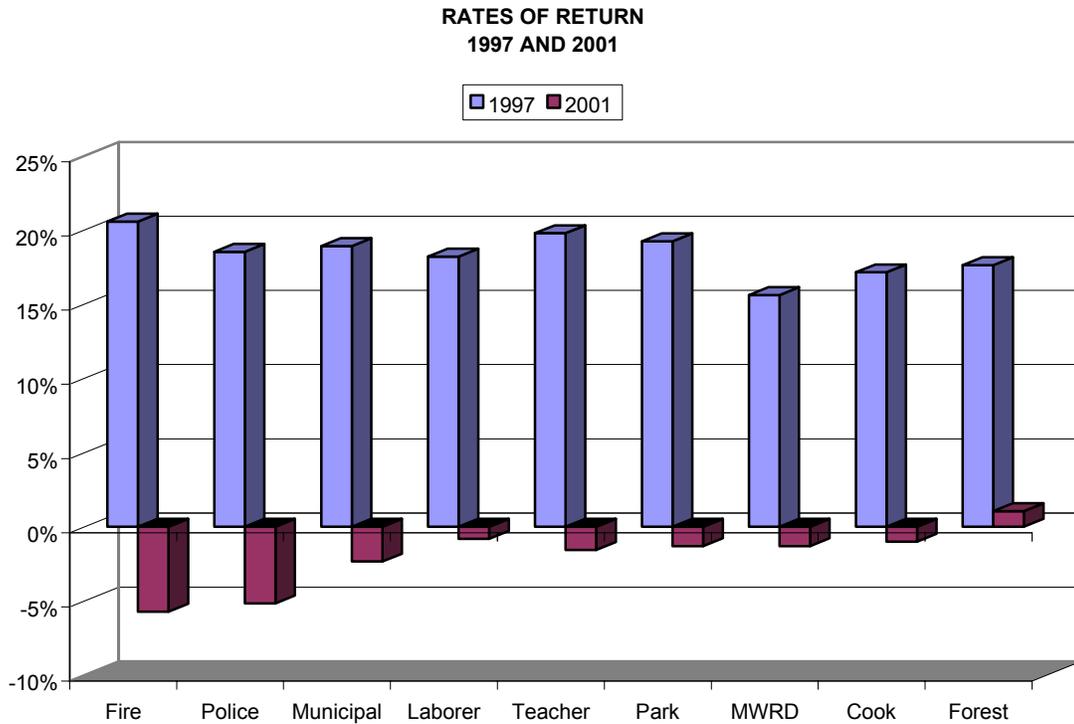
FUND NAME	BENEFIT PAYMENTS	REFUND PAYMENTS	OTHER EXPENSES	ADMISTRATIVE EXPENSES	INVESTMENT COSTS	TOTAL EXPENDITURES
FOREST	\$6,827,998	\$500,538		\$146,758	\$233,286	\$7,708,580
PARK	\$46,461,023	\$3,050,168		\$1,082,588	\$3,856,885	\$54,450,664
MWRD	\$62,542,156	\$701,766		\$1,141,258	\$1,592,038	\$66,977,218
LABOR	\$75,503,260	\$2,354,116		\$1,806,263	\$5,902,056	\$85,565,695
FIRE	\$133,278,828	\$1,184,014		\$1,975,988	\$4,820,968	\$136,438,830
COOK	\$212,456,712	\$22,274,689		\$4,859,602	\$8,245,316	\$247,836,319
POLICE	\$324,836,321	\$5,664,009		\$2,451,822	\$8,968,325	\$341,920,477
MUNICIPAL	\$370,741,229	\$21,951,793		\$4,086,514	\$16,694,784	\$413,474,320
TEACHER	\$448,576,787	\$14,988,165	\$44,088,569	\$4,856,487	\$28,996,103	\$541,506,111
<b>TOTAL</b>	<b>\$1,681,224,314</b>	<b>\$72,669,258</b>	<b>\$44,088,569</b>	<b>\$22,407,280</b>	<b>\$79,309,761</b>	<b>\$1,894,878,214</b>

The net result of the revenue declines and expenditure increases is a \$1.4 billion decline in the net assets of the nine plans. Only the Forest Preserve District experienced an increase in its net assets. The Teacher's Fund's expenditures outpaced its revenues by the largest amount: \$447 million.

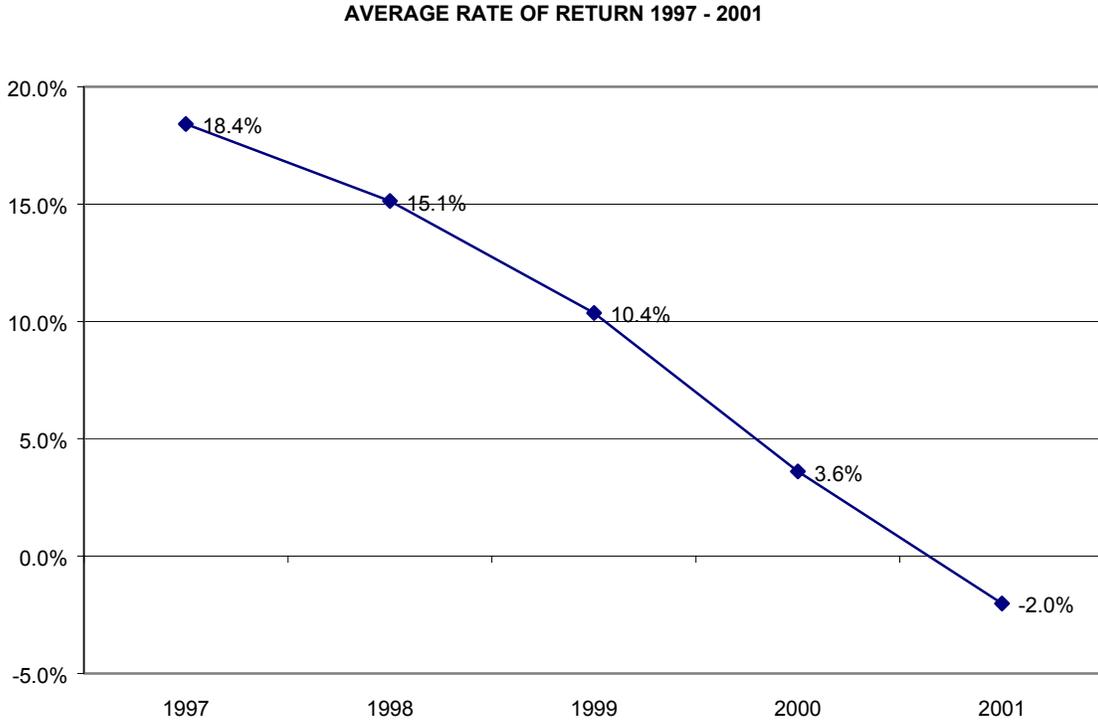
FUND NAME	REVENUE	EXPENDITURE	DIFFERENCE
FOREST	\$8,575,396	\$7,708,580	\$866,816
COOK	\$229,657,076	\$247,836,319	-\$18,179,243
MWRD	\$29,502,128	\$65,977,218	-\$36,475,090
PARK	\$13,450,506	\$54,450,664	-\$41,000,158
LABOR	\$7,454,061	\$85,565,695	-\$78,111,634
FIRE	\$19,373,545	\$136,438,830	-\$117,065,285
MUNI	\$108,001,768	\$413,474,320	-\$305,472,552
POLICE	\$5,757,361	\$341,920,477	-\$336,163,116
TEACHER	\$63,678,877	\$541,506,111	-\$477,827,234
TOTAL	\$485,450,718	\$1,894,878,214	-\$1,409,427,496

### RATE OF RETURN

The key finding of this year's study is the sharp decline in investment revenue. During the last half of the 1990s, strong financial markets enabled the funds to increase their assets significantly through investment income. In 1997 the 9 funds were experiencing 15% to 20% growth in their assets. However, in 2001 every fund except the Forest Preserve had a negative rate of return on its investments.



This trend in rate of return is also visible when the average rate of return of all 9 funds is tracked over the last five years. The average rate of return declines from 18% to -2% in 2001.



## FUNDED RATIOS

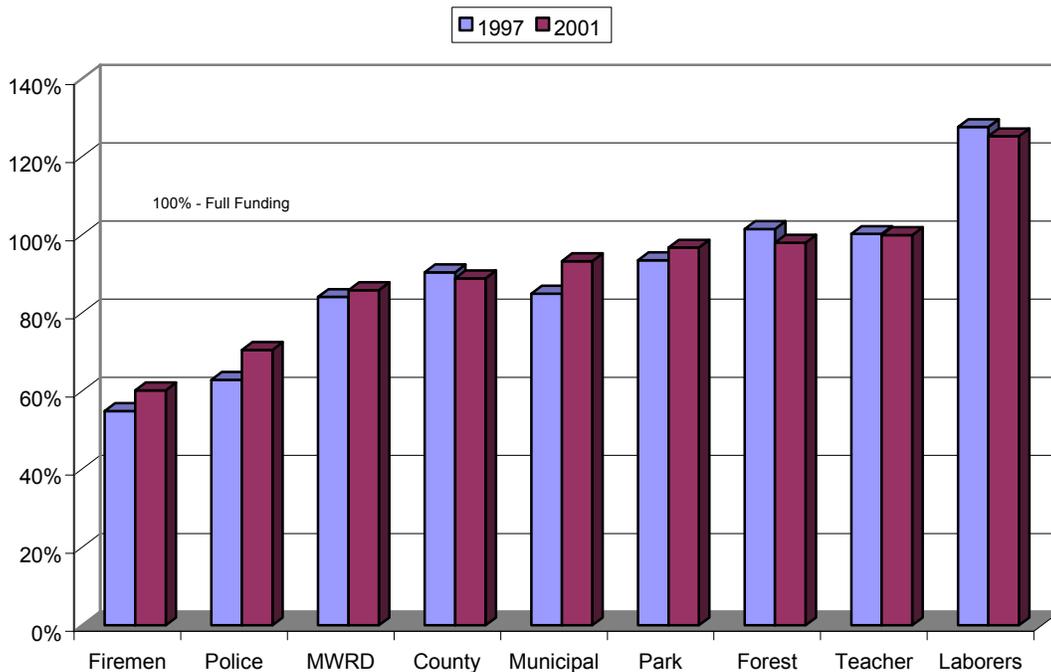
Two measurements of the funded ratios of the pension plans are used in this year's report: the Actuarial Value of Assets measurement and the Market Value of Assets measurement. The Actuarial Value of Assets measurement looks at the ratio of assets to liabilities and accounts for assets by averaging unexpected gains and losses over a period of three to five years. The Market Value of Assets measurement looks at the ratio of assets to liabilities by recognizing investments only at current value. Despite the weaker financial markets, none of the nine funds lost significant ground in terms of their funded ratios as a result of decreasing investment returns. However, a number of years in which growth in liabilities outpaces growth in assets will be a cause for concern.

The low funded ratios of the Firemen's and Policemen's pension funds are a continuing cause for concern. While the funded ratios for these two funds have been increasing, the recent downturn in the financial markets may impede further improvements. In 1995, The Civic Federation stated, "The funded ratios of these funds will continue to improve provided that the financial markets remain strong and other factors remain equal. However, if the markets do not remain strong, the other sources of funding for these funds will not provide

enough income to compensate for substantial increases in salary or additional, unanticipated years of service earned by employees.”<sup>5</sup>

On the high end of the scale, the Laborers’ Fund continues to be well over 100 percent funded. Although it has more assets than projected liabilities accrued to date, The Civic Federation continues to caution policymakers against viewing this “surplus” as an opportunity to dramatically increase benefits. The City’s contributions to this fund have been declined over the past several years to compensate for this overfunding.

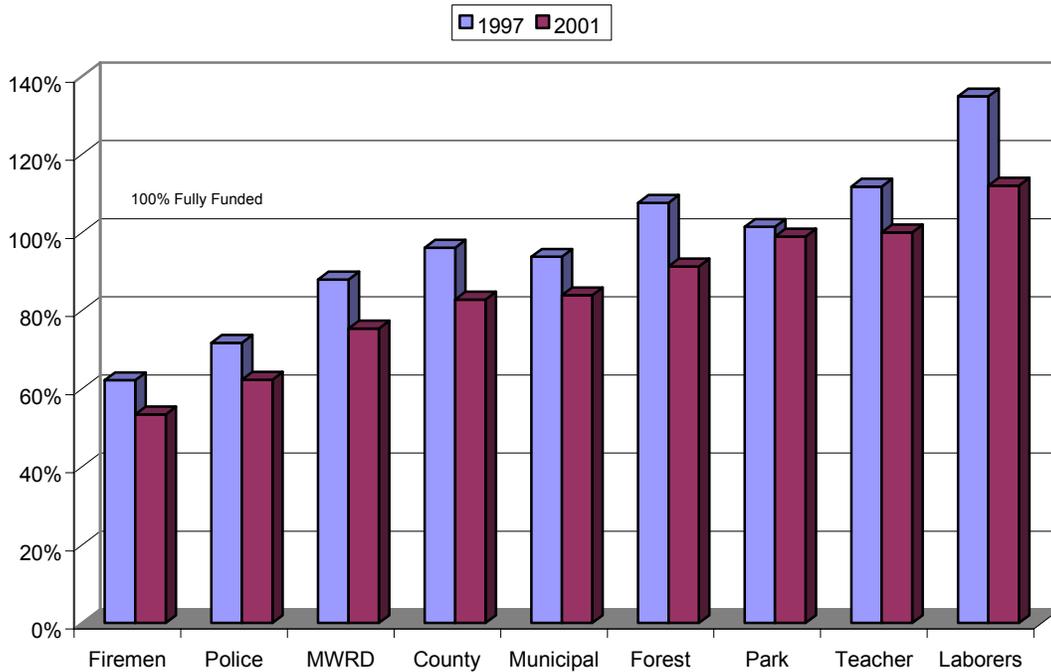
**FUNDED RATIOS - ACTUARIAL VALUE ASSETS 1997 & 2001**



Evaluating these funds based on market value shows two trends. First, the Market Value funded ratios are significantly below the Actuarial Value funded ratios. The effect of the five-year average in the Actuarial Value is to compensate for the current declines in value with the gains made in the past. Second, all the funds have lost value in the last five years. The most significant declines occurred in the Forest Preserve and the Laborers’ Fund.

<sup>5</sup> The Civic Federation. *Status of Local Pension Funding 1995*.

### FUNDED RATIO - MARKET VALUE OF ASSETS

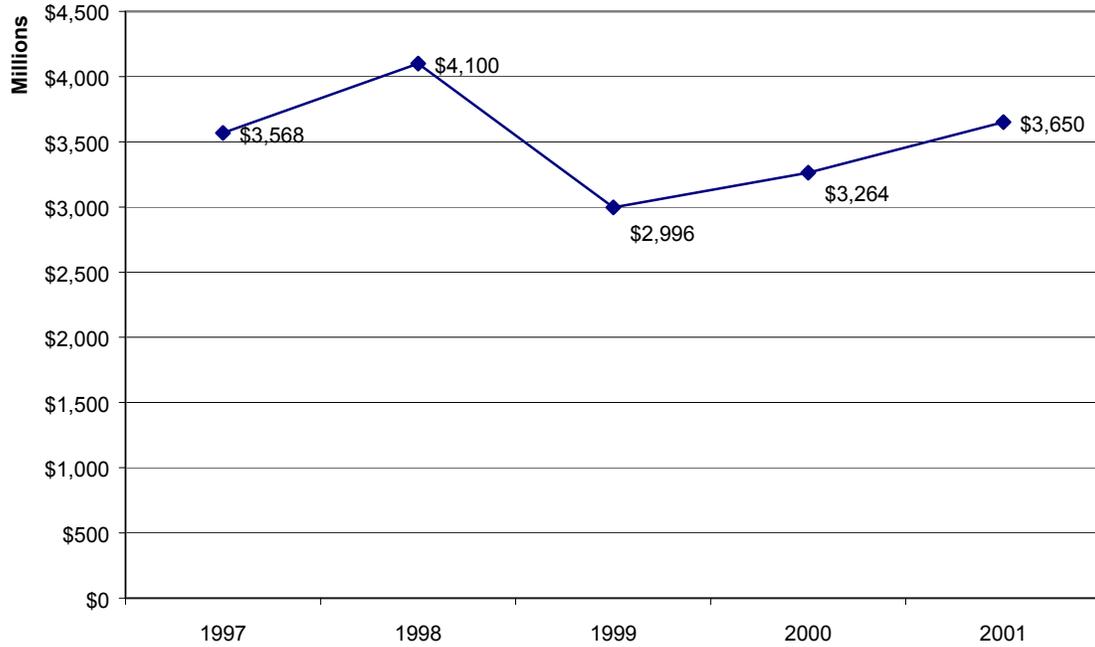


### UNFUNDED LIABILITIES

Another indicator of funding progress is the reporting of a fund's unfunded liability. One of the functions of this indicator is to measure a fund's ability to bring assets in line with liabilities. Much like funded ratios, healthy funds continue to reduce debt over time without dramatic reductions at the expense of employees or taxpayers.

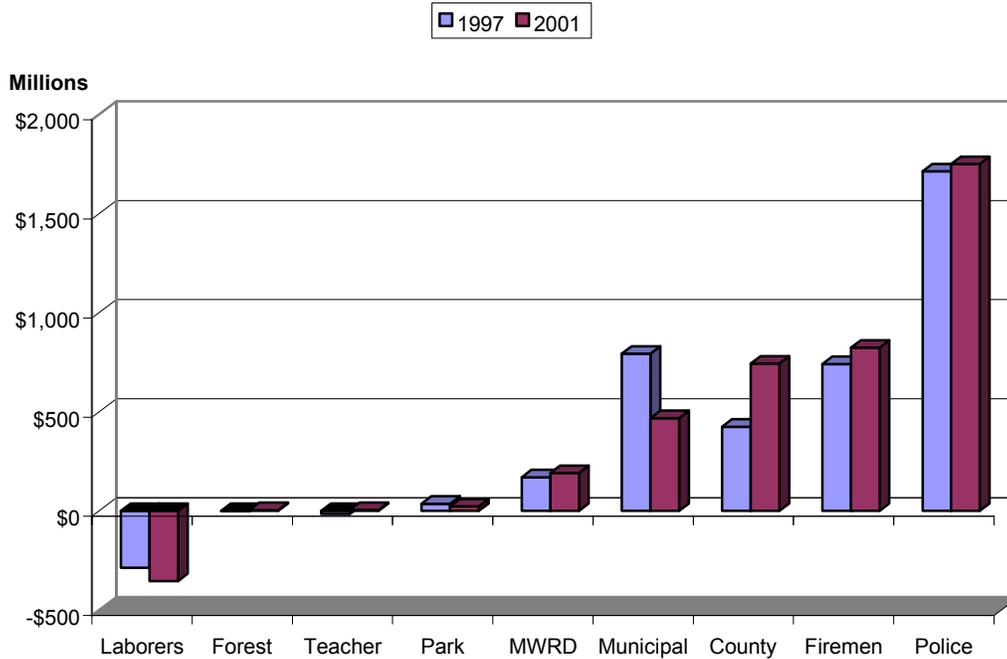
The aggregate unfunded liability of the 9 pension funds is increasing. In part this is due to a \$379 million increase in Cook County's unfunded liabilities due in large part to an increase in the retiree health care cost of living factor to 10%. This change in assumptions added \$281 million to the County's unfunded liability.

### AGGREGATE UNFUNDED LIABILITIES 1997 - 2001



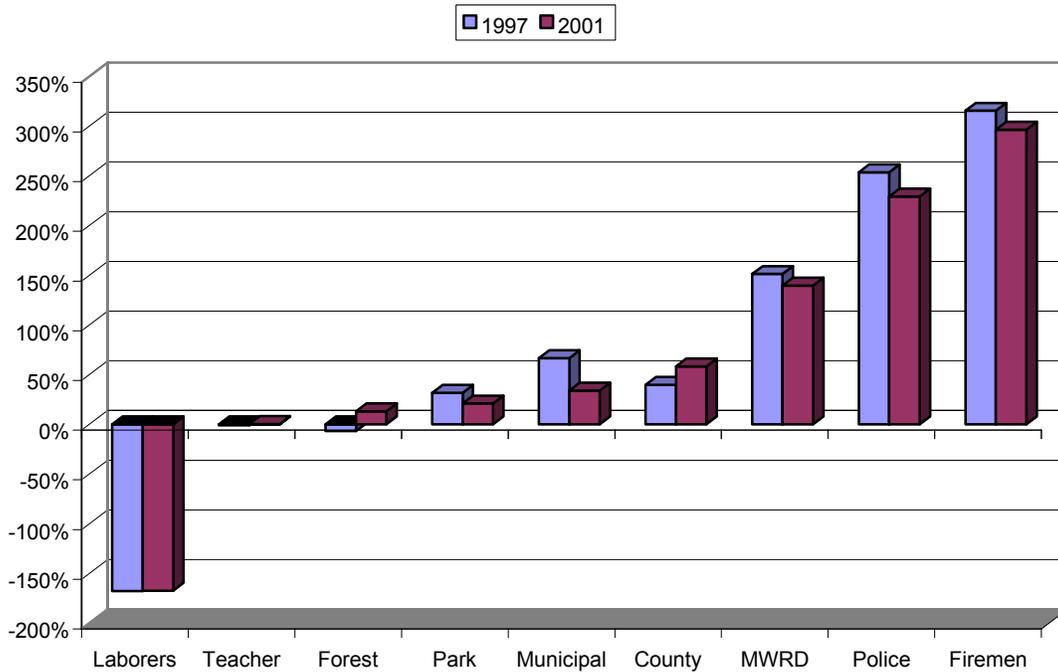
The largest unfunded liability, \$1.7 billion, is in the Policemen's Fund. As mentioned above, the large increase in Cook County's unfunded liability is due to a change in actuarial assumptions. The Firemen's unfunded liability remained virtually the same, growing only slightly. The Forest Preserve, Park District and MWRD funds had only minimal liabilities.

### UNFUNDED LIABILITIES 1997- 2001



Another indicator of funding progress is the reporting of a fund's unfunded liability as a percentage of covered payrolls. This measurement expresses the unfunded liability in terms of the current personnel expenditures. It demonstrates the relative size of the unfunded liability. One of the functions of this indicator is to measure a fund's ability to manage or make progress on reducing its unfunded liability. An indication of a reasonable funding strategy would be a gradual decrease in unfunded liability as a percent of covered payroll over time. If the opposite is true, unfunded liability continues to increase as a percentage of covered payrolls, then a new funding strategy and/or benefits granted by the fund need to be reevaluated. Progress is being made in reducing the unfunded liabilities as a percentage of payroll in both the Policemen's and Firemen's Fund.

## UNFUNDED LIABILITIES AS A PERCENTAGE OF PAYROLL 1997 - 2001



## CONCLUSION

Based on the preceding analysis The Civic Federation believes that great caution in the management of public pension funds is warranted in the near future. While the Actuarial Value of assets remains strong due to the smoothing effect of averaging five years of data, the Current Market Values and the rates of return indicate that the current economic climate is having a detrimental impact on the funding ratios of these funds.

The reasons for this warning are as follow:

- *Negative investment income makes tax revenue the primary source of revenue for the pension funds;*
- *In an environment of negative returns on investments, full or increased funding of the pension obligations can only be achieved through tax increases;*
- *Any increases in liabilities, most likely to result from increases in benefits, will further exacerbate the current situation.*

The decline in rates of return is not cause for panic. However, a number of years in which growth in liabilities outpaces growth in assets will cause serious funding problems. It is prudent for policy makers to take steps now to address this problem because most observers expect to see lower equity markets for the next several years.

## Sources

1. County Employees' and Officers' Annuity and Benefit Fund of Cook County, Actuarial Statement, December 31, 2001, Donald F. Campbell Consulting Actuaries. June 2002.
2. Firemen's Annuity and Benefit Fund of Chicago Actuarial Valuation for the Year Ending December 31, 2001, Gabriel, Roeder, Smith & Co. April 2002.
3. Forest Preserve District Employees' Annuity and Benefit Fund of Cook County, Actuarial Statement, December 31, 2001, Donald F. Campbell Consulting Actuaries. June 2002.
4. Laborers' & Retirement Board Employees' Annuity and Benefit Fund of Chicago Actuarial Valuation for the Year Ending December 31, 2001, Gabriel, Roeder, Smith & Co. April 2002.
5. Metropolitan Water Reclamation District Retirement Fund, Comprehensive Annual Financial Report, December 31, 2001. June 2002
6. Municipal Employees' Annuity and Benefit Fund of Chicago Actuarial Valuation for the Year Ending December 31, 2001, Gabriel, Roeder, Smith & Co. April 2002.
7. Park Employees' & Retirement Board Employees' Annuity and Benefit Fund, Comprehensive Annual Financial Report June 30, 2001. October 2001.
8. Policemen's Annuity and Benefit Fund of Chicago Actuarial Valuation for the Year Ending December 31, 2001, Gabriel, Roeder, Smith & Co. April 2002.
9. Public School Teachers' Pension and Retirement Fund, 106<sup>th</sup> Comprehensive Annual Report, June 30, 2001. December 2001.