

# Status of Local Pension Funding - 2002

An Evaluation of Nine Local Government Employee  
Pension Funds within Cook County



Prepared by  
The Civic Federation  
January 2004

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The Civic Federation is an independent, non-partisan government research organization founded in 1894. The Federation's membership includes business and professional leaders from a wide range of Chicago area corporations, professional service firms and institutions.

The mission of the federation is to maximize the quality and cost effectiveness of government services in the Chicago region by:

- Serving as a technical resource, providing non-partisan research and information;
- Promoting rational tax policies and efficient delivery of quality government services; and,
- Offering solutions, which guard against excessive taxation, enhance financial reporting, and improve the quality of public expenditures.

Since 1996 the Federation has produced this annual survey of the 9 major local government employee pension plans in Cook County. The importance of public employee pension plans to local government finance can be seen in the amount of tax revenue that is dedicated to funding these plans every year.

This report is intended to provide the public with the information they need to make informed decisions regarding the important public policy questions involved in discussions of local government finance.

Laurence Msall  
President

## **EXECUTIVE SUMMARY**

The Civic Federation recently concluded an analysis of the fiscal year 2002 actuarial valuation reports for 9 major local government employee pension funds. 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 combined had approximately \$38.8 billion in accrued liabilities, assets with an actuarial value of \$31.9 billion and a market value of \$26.9 billion.*

### **Revenues And Expenditures**

- *For the second year in a row, investment income was negative (-\$703 billion) and government (employer) contributions remained the primary source of revenue.*

### **Rate Of Return**

- *The average rate of return for the 9 pension funds' assets has declined from 12% in 1998 to -6.5% in 2002.*

### **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 (58% and 65% respectively).*

### **Unfunded Liabilities**

- *The aggregate unfunded liability of the 9 funds nearly doubled in fiscal year 2002, from \$3.6 billion in fiscal year 2001 to \$6.9 billion in 2002.*

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 three to five years of data, the Current Market Values and the rates of return indicate that the 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 funding increases;*
- *Any increases in liabilities, most likely to result from increases in benefits, will further exacerbate the current situation.*

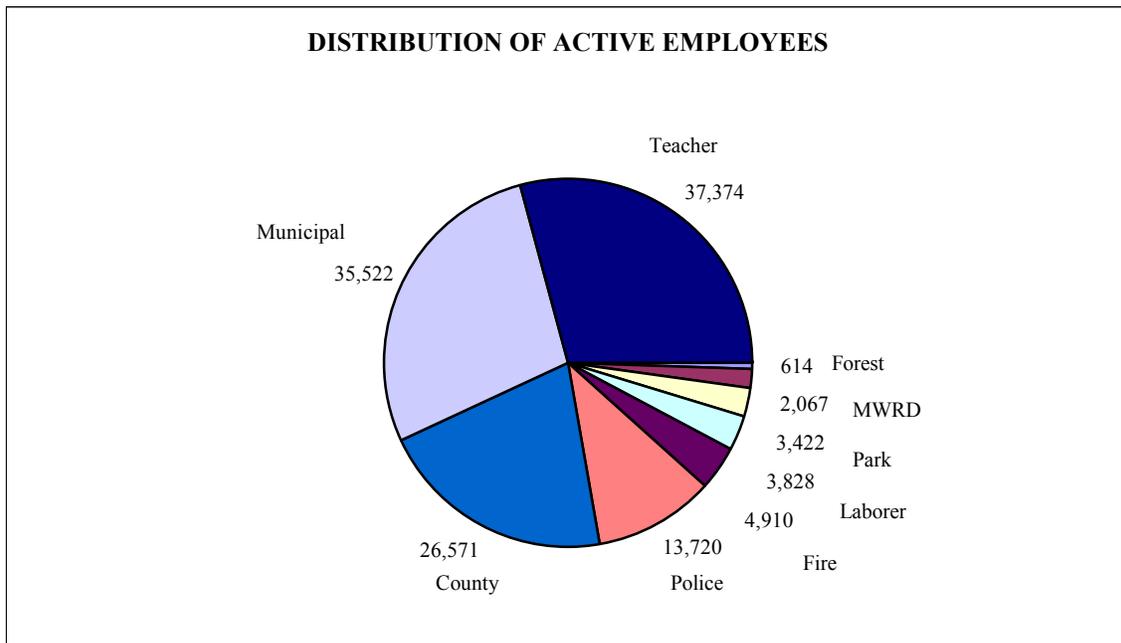
Continued growth in liabilities with little or no growth in assets could cause serious funding problems. It is prudent for policy makers to take steps now to address this problem because most observers expect to see lower equity markets for the next several years. Pension fund managers must be wary of any proposal that would increase liabilities and must engage in strategies to protect and increase their assets.

## PUBLIC EMPLOYEE PENSION FUND OVERVIEW

The pension funds included in this report are listed below:

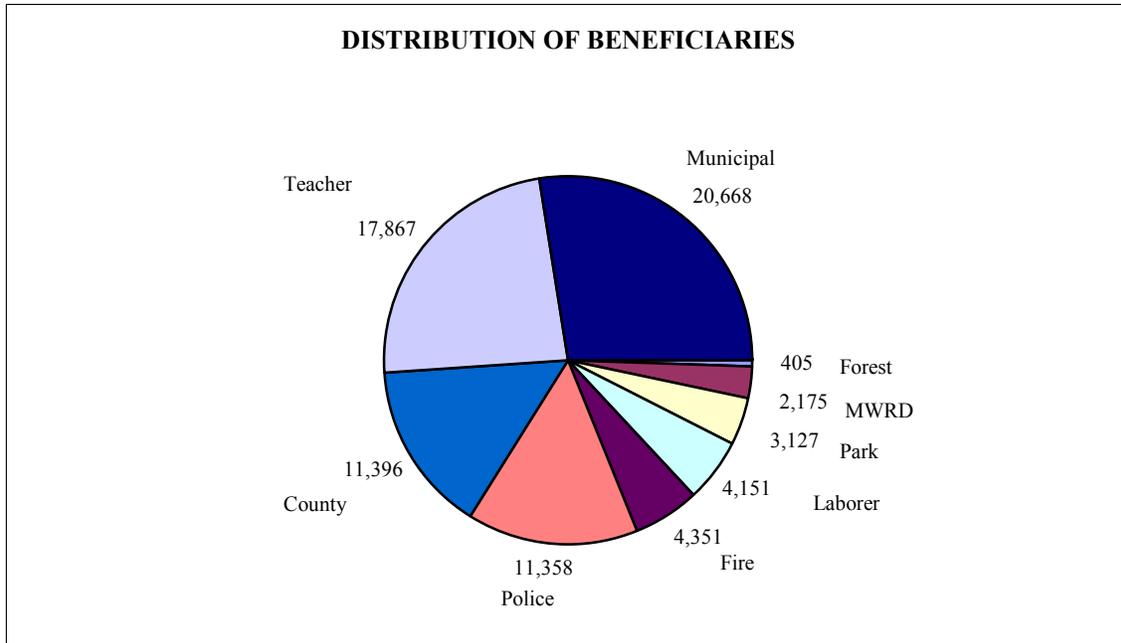
- The Municipal Employees' Annuity and Benefit Fund of Chicago
- The Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago
- The Firemen's Annuity and Benefit Fund of Chicago
- The Policemen's Annuity and Benefit Fund of Chicago
- County Employees' and Officers Annuity and Benefit Fund of Cook County
- The Forest Preserve District Employees' Annuity and Benefit Fund of Cook County<sup>1</sup>
- 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>

The City of Chicago enrolls its employees in four different pension systems. In addition to the City's four pension funds, five other pension funds are analyzed in this report. Taken as a whole, these funds collectively cover 128,028 active employees and provide benefits to over 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.



<sup>1</sup> Cook County's and the Forest Preserve District'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).



### **POLICY CONSIDERATIONS**

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.

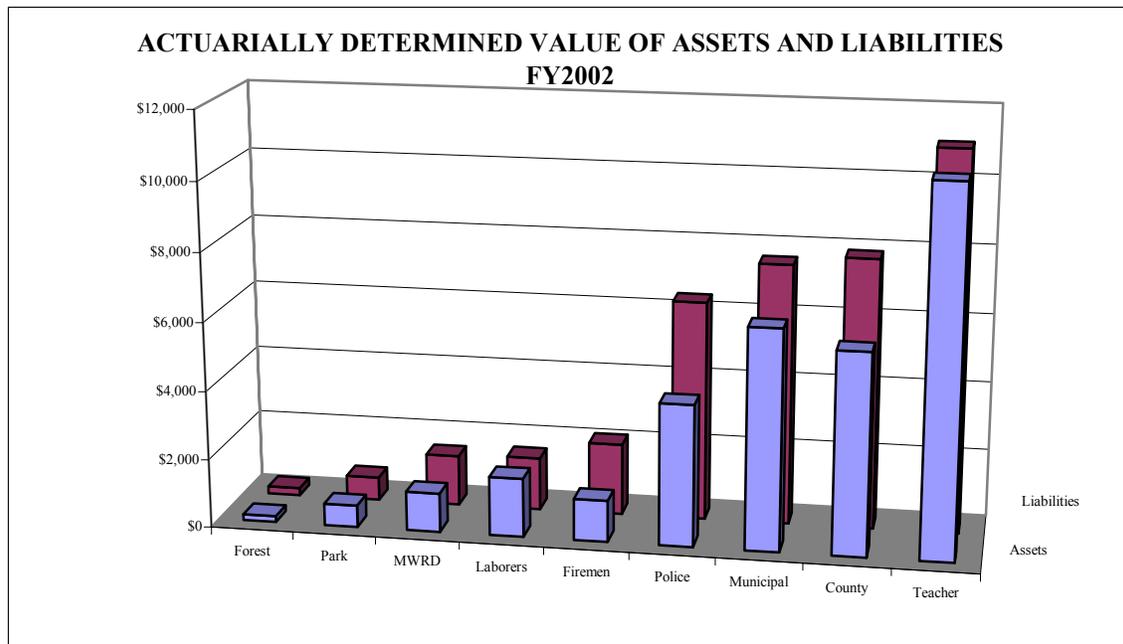
Funding of a public pension fund should prevent growth of the *unfunded liability*, or that portion of future projected costs and interest not currently covered by assets. Most experts concur that there is no real need to achieve full funding. They argue that governments, unlike private corporations,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

<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.

## ASSETS AND LIABILITIES

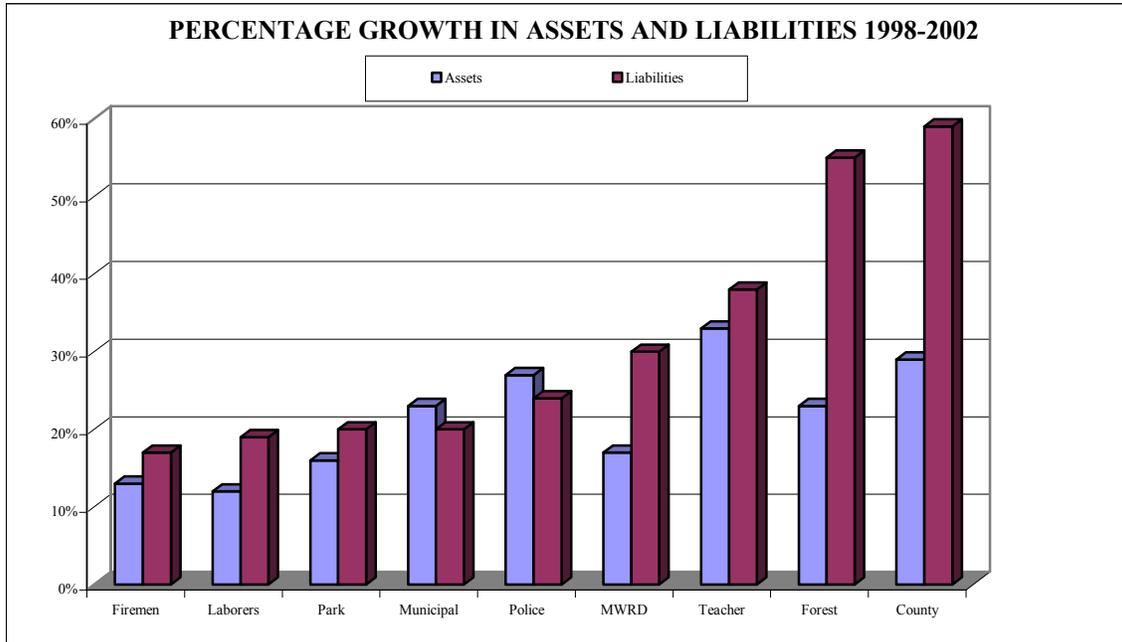
The basic issue at hand is whether or not the pension funds' assets are sufficient to cover liabilities. Liabilities are determined using actuarial assumptions. The assumptions are used to calculate the value of all future pension payments for both current and retired employees as well as any other beneficiaries. 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 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.

The Actuarial Value of the 9 pension funds' aggregate assets in FY2002 was \$31.9 billion. The aggregate accrued liability was \$38.8 billion. Only the City of Chicago's Laborers' Fund has assets in excess of its liabilities. The differences between assets and liabilities vary in dollar amounts from a low of \$39.1 million at the Forest Preserve District to \$2.3 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.



<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.

Over the last five years, aggregate liabilities have grown faster than the aggregate assets. The aggregate assets of the plans have grown by 26.3% and the aggregate liabilities have grown by 32.3%. Cook County and the Forest Preserve District have experienced the greatest growth rates for liabilities, with both growing by 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 District in FY2001. Only the Police Fund and the Municipal City Fund experienced greater percentage growth in assets than in liabilities.



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 2002. The aggregate market value of the 9 funds is \$26.9 billion, \$5 billion less than the aggregate smoothed market value. This represents a 9.5% decline in the market value of assets from the previous year. This is the second year in a row that the market value of assets has declined. Since fiscal year 2000, the aggregate market value of assets has declined over 13%.

FUND NAME	MARKET VALUE	SMOOTHED MARKET VALUE
Firemen	\$907,801,957	\$1,209,218,603
Police	\$3,224,036,980	\$4,124,579,960
Municipal	\$5,128,210,403	\$6,403,982,494
Laborers	\$1,388,088,950	\$1,715,073,438
Teacher	\$9,342,101,122	\$10,619,061,458
Park	\$551,276,156	\$637,749,858
MWRD	\$949,796,088	\$1,136,907,158
County	\$5,221,853,532	\$5,861,233,506
Forest	\$157,678,575	\$172,954,688
<b>TOTAL</b>	<b>\$26,870,843,763</b>	<b>\$31,880,761,163</b>

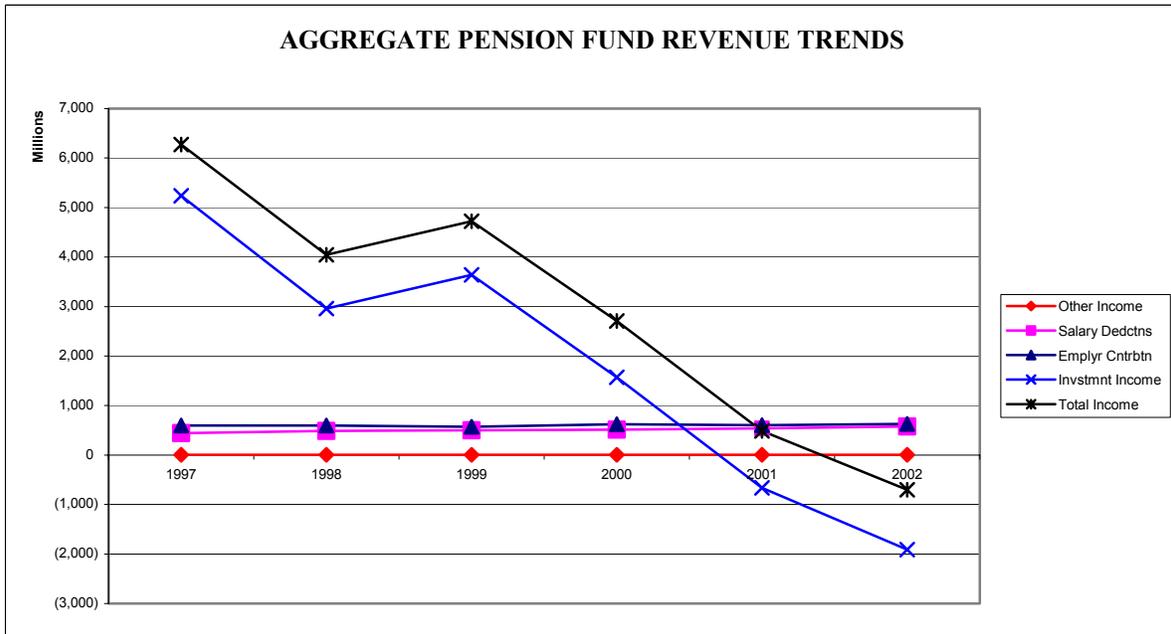
## REVENUES AND EXPENDITURES

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.

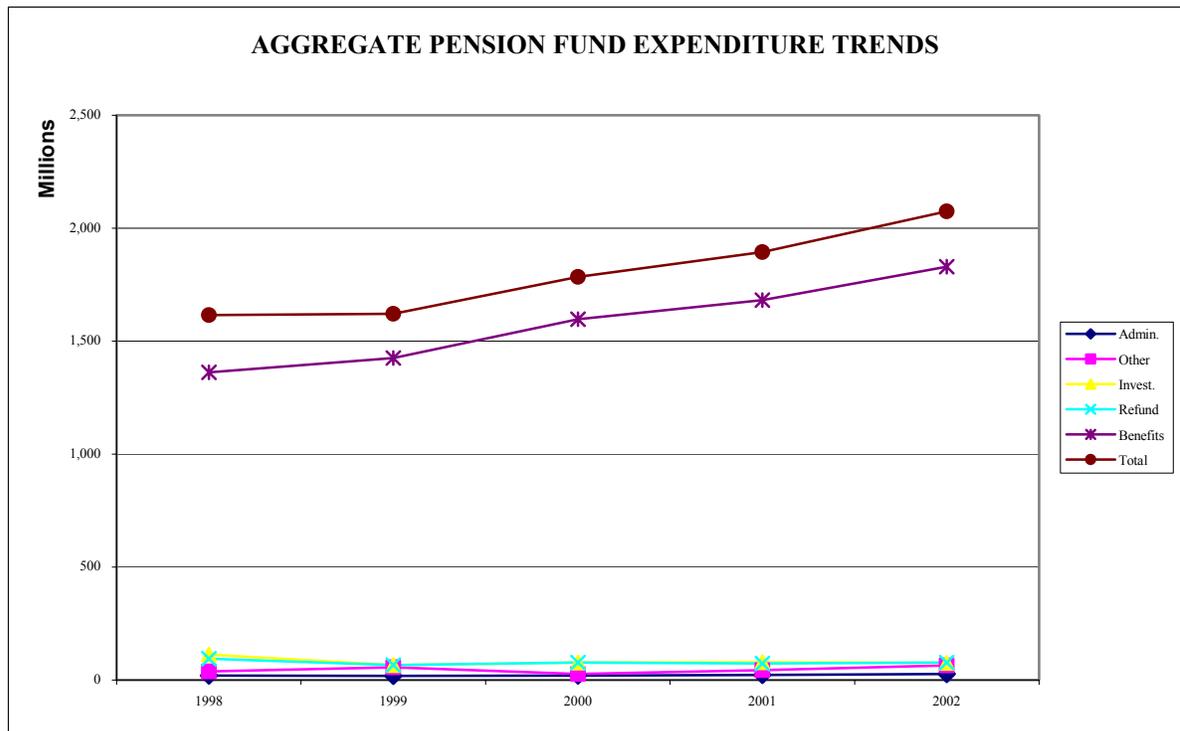
In FY2002, the total income for each pension fund except the Chicago Park District was negative. Although aggregate employee and employer contributions totaled \$1.2 billion, there was a \$1.9 billion loss in investment income. The result was that for the first time since this report has been written, the total aggregate income of all the funds in the study was a negative amount (-\$703.5 million).

<b>FY 2002 REVENUES BY SOURCE</b>					
<b>FUND NAME</b>	<b>EMPLOYEE CONTRIBUTION</b>	<b>EMPLOYER CONTRIBUTION</b>	<b>INVESTMENT INCOME</b>	<b>OTHER INCOME</b>	<b>TOTAL INCOME</b>
POLICE	\$79,238,513	\$141,935,241	-\$327,675,731	\$53,813	-\$106,448,164
LABOR	\$20,189,214	\$82,865	-\$113,865,825	\$0	-\$93,593,746
FOREST	\$3,256,643	\$3,847,544	-\$9,148,709	\$0	-\$2,044,522
PARK	\$9,273,269	\$9,897,372	-\$15,656,275	\$0	\$3,514,366
FIRE	\$27,576,384	\$58,838,300	-\$138,580,783	\$257,645	-\$51,908,454
MWRD	\$16,308,414	\$30,066,953	-\$68,092,272	-\$1,403,217	-\$23,120,122
TEACHER	\$145,498,027	\$76,850,005	-\$341,708,017	\$829,063	-\$118,530,922
MUNICIPAL	\$128,395,307	\$130,966,381	-\$522,283,568	\$0	-\$262,921,880
COOK	\$146,979,954	\$174,590,244	-\$373,664,852	\$3,627,815	-\$48,466,839
<b>TOTAL</b>	<b>\$576,715,725</b>	<b>\$627,074,905</b>	<b>-\$1,910,676,032</b>	<b>\$3,365,119</b>	<b>-\$703,520,283</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 \$486 million to \$577 million, investment income has plummeted from \$3.0 billion to negative \$2 billion. At the same time, the total income for the pension funds has dropped from \$4 billion to negative \$703.5 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 88% 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 34% since 1998, from \$1.4 billion to \$1.8 billion.



The City of Chicago's Municipal Employees Fund and the Teachers Fund account for 52% of all expenditures by the funds included in this report. With 38,500 beneficiaries between them they also account for approximately 51% of the people currently receiving benefits payments.

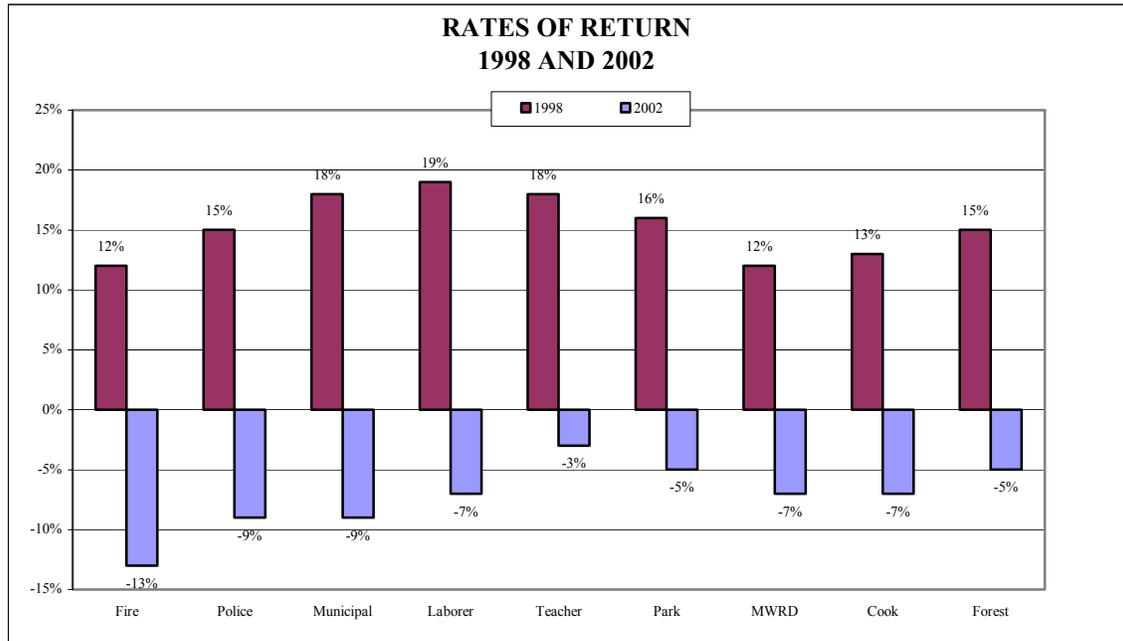
<b>FY 2002 EXPENDITURES BY TYPE</b>						
<b>FUND NAME</b>	<b>BENEFIT PAYMENTS</b>	<b>REFUND PAYMENTS</b>	<b>OTHER EXPENSES</b>	<b>ADMISTRATIVE EXPENSES</b>	<b>INVESTMENT COSTS</b>	<b>TOTAL EXPENDITURES</b>
FOREST	\$7,715,408	\$615,562		\$200,849	\$302,943	\$8,834,762
PARK	\$46,949,481	\$2,477,077		\$1,122,634	\$3,119,456	\$53,668,648
MWRD	\$67,574,253	\$951,614		\$1,165,816	\$1,535,679	\$71,227,362
LABOR	\$78,260,481	\$3,368,053		\$1,814,283	\$5,581,745	\$89,024,562
FIRE	\$137,710,209	\$1,080,393		\$1,959,055	\$4,479,519	\$145,229,176
COOK	\$225,191,082	\$20,254,536		\$6,250,988	\$8,478,686	\$260,175,292
POLICE	\$350,413,759	\$5,238,859		\$2,544,860	\$8,260,754	\$366,458,232
MUNICIPAL	\$386,871,664	\$22,425,917		\$4,557,088	\$15,778,745	\$429,633,414
TEACHER	\$529,144,028	\$21,518,236	\$64,850,215	\$6,459,734	\$28,944,689	\$650,916,902
<b>TOTAL</b>	<b>\$1,829,830,365</b>	<b>\$77,930,247</b>	<b>\$64,850,215</b>	<b>\$26,075,307</b>	<b>\$76,482,216</b>	<b>\$2,075,168,350</b>

The net result of the revenue declines and expenditure increases is a \$2.8 billion decline in the net assets of the nine plans. None of the nine funds experienced an increase in its net assets. The Teacher's Fund's expenditures outpaced its revenues by the largest amount: \$769 million.

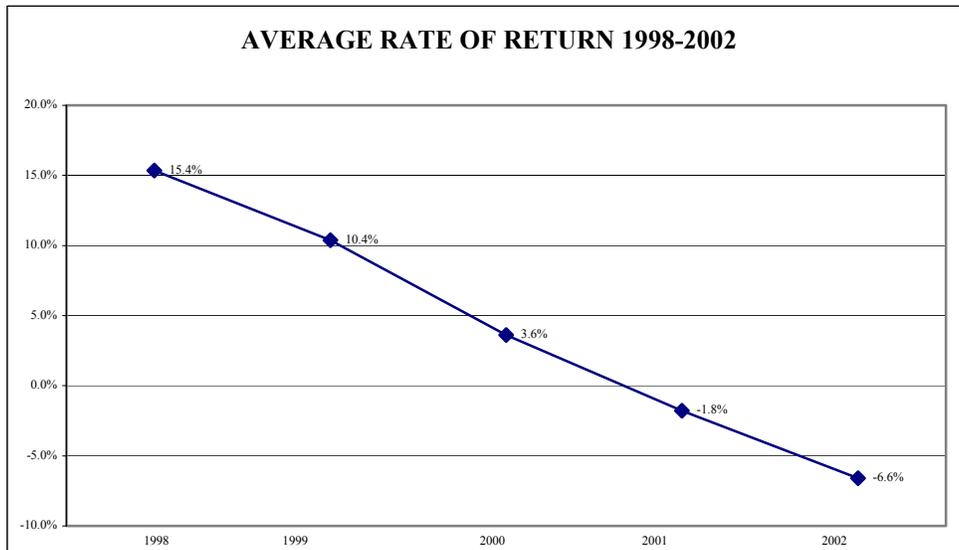
<b>FY 2002 REVENUES vs. EXPENDITURES</b>			
<b>FUND</b>	<b>REVENUE</b>	<b>EXPENDITURE</b>	<b>DIFFERENCE</b>
FOREST	-\$2,044,522	\$8,834,763	-\$10,879,285
PARK	\$3,514,366	\$53,668,648	-\$50,154,282
MWRD	-\$23,120,122	\$71,227,362	-\$94,347,484
LABOR	-\$93,593,746	\$89,024,562	-\$182,618,308
FIRE	-\$51,908,454	\$145,229,176	-\$197,137,630
COOK	-\$48,466,839	\$260,175,292	-\$308,642,131
POLICE	-\$106,448,164	\$366,458,232	-\$472,906,396
MUNI	-\$262,921,880	\$429,633,414	-\$692,555,294
TEACHER	-\$118,530,922	\$650,916,902	-\$769,447,824
<b>TOTAL</b>	<b>-\$703,520,283</b>	<b>\$2,075,168,351</b>	<b>-\$2,778,688,634</b>

## 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 1998 the 9 funds were experiencing 12% to 20% growth in their assets. However, in 2002 every fund had a negative rate of return on its investments.<sup>5</sup>



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 15.4% to -6.6% in 2002.



<sup>5</sup> Rates of return are calculated using the fair value of all assets.

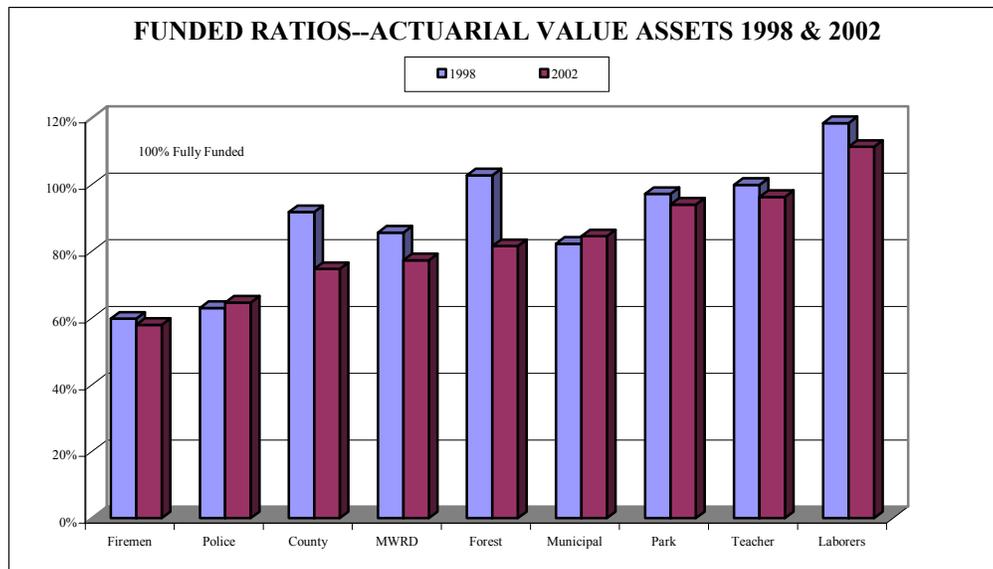
## FUNDED RATIOS

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. Due to the weaker financial markets, each of the nine funds lost ground in terms of their funded ratios as a result of decreasing investment returns with decreases varying from a low of 2.3% decrease in the Firemen's Fund to a 16.4% decrease at the Forest Preserve.

The low funded ratios of the Firemen's and Policemen's pension funds are a continuing cause for concern. Reversing the trend of increased funds through fiscal year 2000, the recent downturn in the financial markets have decreased both funds to 57.9% and 64.6% respectively. 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>6</sup>

### Actuarial Value of Assets

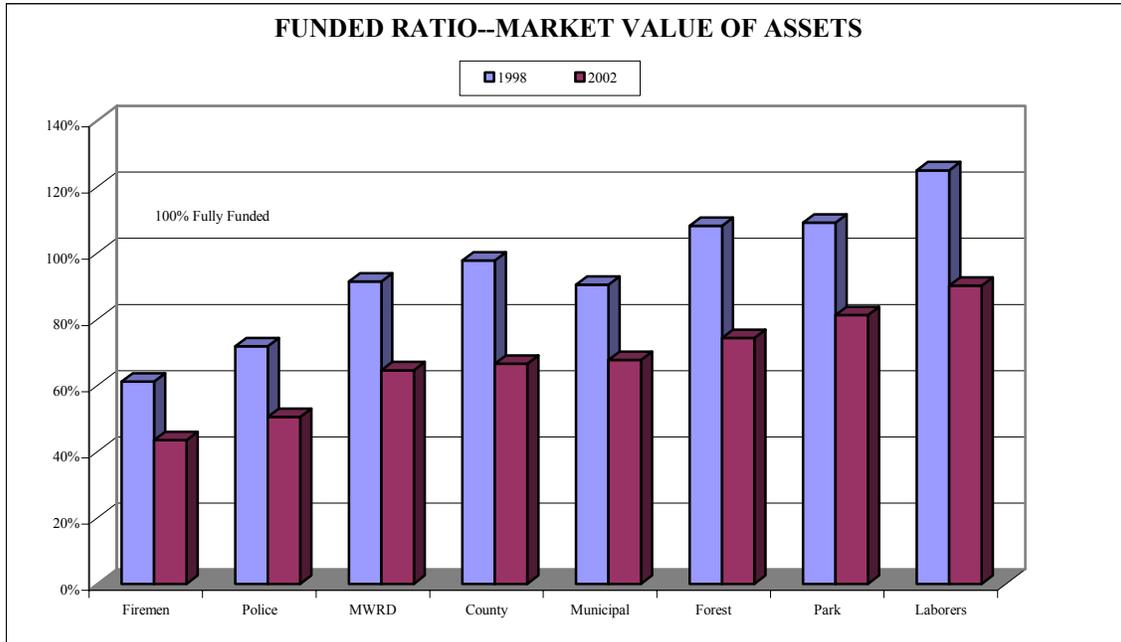
On the high end of the scale, the Laborers' Fund continues to be well over 100 % funded. Still, the Laborers' funded ratio has dropped 14% in the past year. Although it has more assets than projected liabilities accrued to date, The Civic Federation continues to caution policymakers against viewing this "surplus" as an opportunity to dramatically increase benefits. The City's contributions to this fund have declined over the past several years to compensate for this overfunding.



<sup>6</sup> The Civic Federation. *Status of Local Pension Funding 1995*.

### Market Value of Assets

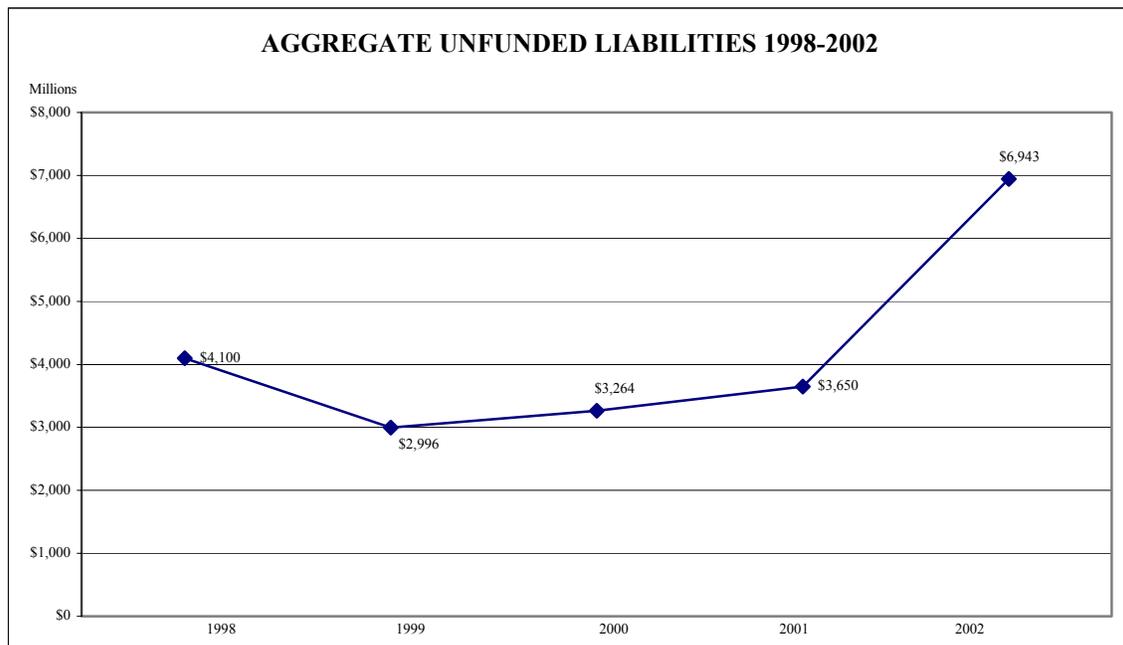
Evaluating these funds based on market value shows two trends. First, the Market Value funded ratios are significantly below the Actuarial Value funded ratios. The effect of the three-to-five-year average in the Actuarial Value is to compensate for the current declines in value with the gains made in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



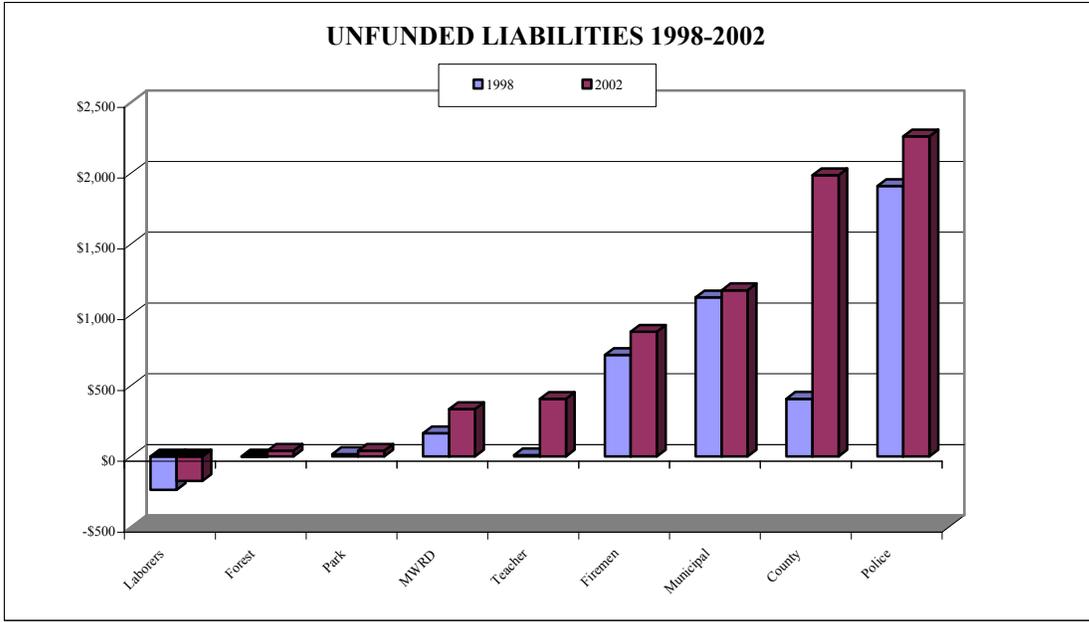
## UNFUNDED LIABILITIES

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.

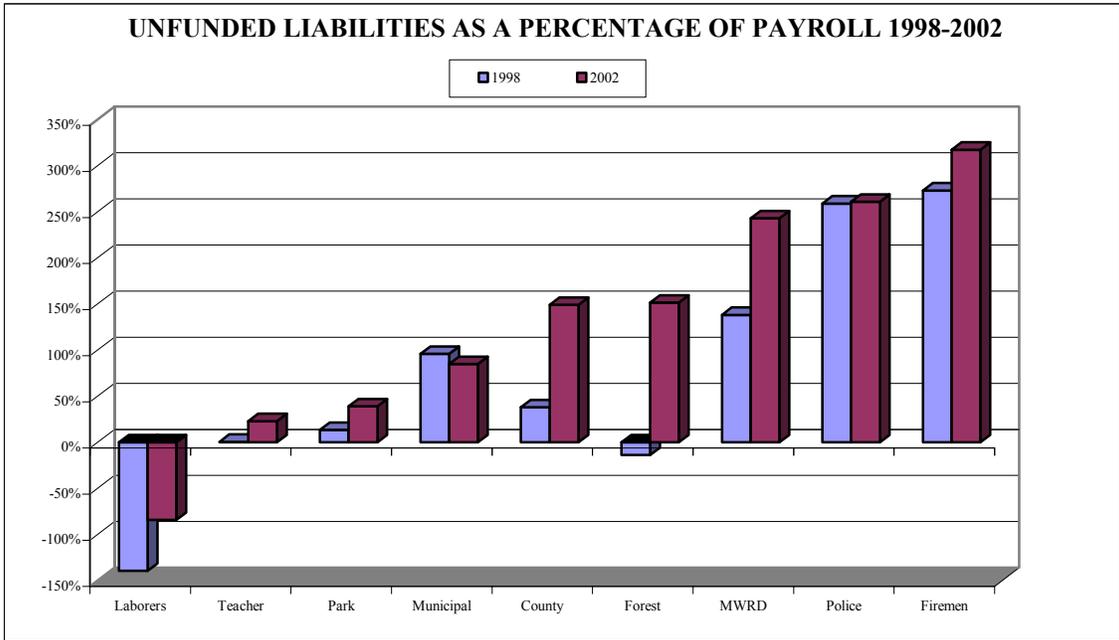
The aggregate unfunded liability of the 9 pension funds is increasing. Between fiscal years 2001 and 2002, the aggregate unfounded liability nearly doubled, from \$3.6 billion to \$6.9 billion. This figure is derived by subtracting the actuarial value of the assets from the accrued liability of each fund. Substantial increases occurred across all of the funds and are largely the result of steady or declining values of assets and increasing liabilities.



The largest unfunded liability, \$2.3 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 District, Park District and MWRD funds had only minimal liabilities.



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 only in the Municipal Fund.



## CONCLUSION

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 three to five years of data, the Current Market Values and the rates of return indicate that the economic climate is having a detrimental impact on the funding ratios of these funds. The reasons for this warning are as follow:

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Continued growth in liabilities with little or no growth in assets could 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. Pension fund managers must be wary of any proposal that would increase liabilities and must engage in strategies to protect and increase their assets.

## Sources

1. County Employees' and Officers' Annuity and Benefit Fund of Cook County, Actuarial Statement, December 31, 2002, Donald F. Campbell Consulting Actuaries. June 2003.
2. Firemen's Annuity and Benefit Fund of Chicago Actuarial Valuation for the Year Ending December 31, 2002, Gabriel, Roeder, Smith & Co. April 2003.
3. Forest Preserve District Employees' Annuity and Benefit Fund of Cook County, Actuarial Statement, December 31, 2002, Donald F. Campbell Consulting Actuaries. June 2003.
4. Laborers' & Retirement Board Employees' Annuity and Benefit Fund of Chicago Actuarial Valuation for the Year Ending December 31, 2002, Gabriel, Roeder, Smith & Co. April 2003.
5. Metropolitan Water Reclamation District Retirement Fund, Comprehensive Annual Financial Report, December 31, 2002. June 2003
6. Municipal Employees' Annuity and Benefit Fund of Chicago Actuarial Valuation for the Year Ending December 31, 2002, Gabriel, Roeder, Smith & Co. April 2003.
7. Park Employees' & Retirement Board Employees' Annuity and Benefit Fund, Comprehensive Annual Financial Report June 30, 2002. October 2002.
8. Policemen's Annuity and Benefit Fund of Chicago Actuarial Valuation for the Year Ending December 31, 2002, Gabriel, Roeder, Smith & Co. April 2003.
9. Public School Teachers' Pension and Retirement Fund, 106<sup>th</sup> Comprehensive Annual Report, June 30, 2002. December 2002.