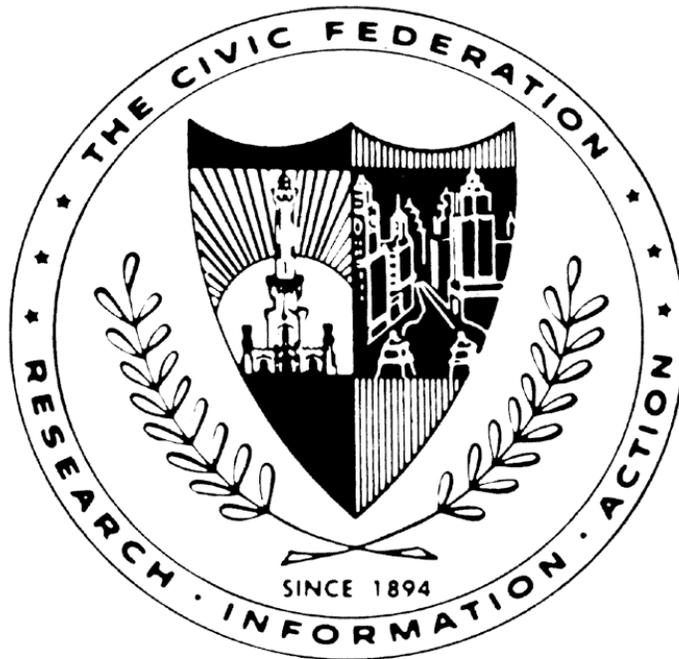


## Status of Local Pension Funding - 2000

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  
September 2001

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

## FOREWORD

For the past 107 years, The Civic Federation has monitored the revenues and expenditures of local governments within Cook County. For much of its history, The Civic Federation has commented on the annual budgets of the local governments on the City of Chicago tax bill. These annual budgets detail the annual expenditures of eight local governments whose operations, debt service, and pension funds are funded by local property tax dollars. This report on the status of nine local government public pension funds within Cook County and the collar county funds in the Illinois Municipal Retirement Fund is one component of that monitoring role.

In terms of this year's report, significantly weaker financial markets had a detrimental impact on the rate of return for the funds' invested assets. All of the nine local funds achieved lower rates of return on investments. Only one fund, the Teachers' Fund was above its assumed rate of return. Policymakers should take this year's data and resulting trends very seriously. The substantial growth realized by these funds during the later half of the 1990s might not be replicated in the near future. Given the potential for loss in the value of assets, The Civic Federation iterates its longstanding position that policymakers need to be concerned with the present and future liabilities of these funds. Failure to limit the growth of those liabilities, compiled with the loss of assets experienced in 2000, will result in a large *due* bill for taxpayers in the future.

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The Civic Federation is grateful to Myer Blank, Director of Policy Analysis and principal author of this report, for his admirable leadership on this project. We are also grateful for the expert editorial comments from Dr. Woods Bowman, Cameron Clark, Dr. Penelope Wardlow, and earlier research conducted by Leonard Kazmerski. We would also like to thank the staff and actuaries of the nine local pension funds for providing additional information and editorial comments during our research process.

The Civic Federation is indebted to the generosity of the Arthur Rubloff Residuary Trust for funding this publication.

Jerry Cizek  
Chairman

John Currie  
President

## **About The Civic Federation**

The Civic Federation is a nonpartisan government and fiscal watchdog group and research organization founded in 1894. The Federation provides three primary services. First, it promotes efficiency and economy in the organization and management of public business. Second, it guards against excessive taxation and wasteful expenditure of public funds. Finally, the organization serves as a technical resource providing objective information regarding state and local governmental revenues and expenditures.

The Civic Federation fulfills its mission by analyzing public finance and government service delivery through research reports and public commentary. Recent research reports have assessed the impact of tax increment finance in northeastern Illinois, looked at local government reliance on fees, and analyzed Cook County property tax trends.

The Federation is a tax-exempt organization under Section 501 (c) (3) of the Internal Revenue Code and is incorporated as a nonprofit Illinois corporation. For more information, please contact The Civic Federation at (312) 201-9066 or visit our website at <http://www.mcs.net/~civicfed/>.

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## OVERVIEW

During the last half of the 1990s, the financial markets of the United States continued to grow at a significant pace. This growth in the financial markets enabled the funds in this study to increase their assets significantly. Funds were regularly achieving higher than actuarially determined, usually 8%, rates of return. In 2000, only one fund achieved a yield higher than actuarially anticipated returns on investments (see Appendix A).<sup>1</sup> Taken as a whole, these funds covered 127,670 active employees and 69,322 beneficiaries during this year. These funds invested and managed over \$30.5 billion in assets and had over \$33.8 billion in liabilities. As with many public pension funds, the liabilities of these funds are backed by the local governments through their respective property tax levys.

The City of Chicago enrolls its employees in four different pension systems: the Laborers' and Retirement Board Employees' Annuity and Benefit Fund; the Firemen's Annuity and Benefit Fund; the Municipal Employees' Annuity and Benefit Fund; and the Policemen's Annuity and Benefit Fund. Cook County<sup>2</sup>, the Forest Preserve District, the Chicago Park District, and the Metropolitan Water Reclamation District (MWRD) each have their own pension systems. 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.<sup>3</sup>

## FUNDING REQUIREMENTS

There are two kinds of pension plans: 1) defined contributions and 2) defined benefits.

- 1) In a defined contribution plan, fixed amounts are contributed by the employee and the employer. 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).
- 2) In the case of defined benefit plans, fixed amounts are contributed just like the defined contributions plan.<sup>4</sup> However, 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. Consequently accurate valuation of the potential future liability becomes essential to responsible management of such plans.

Historically, defined benefit plans were the most common of the pensions, but changes in tax laws encouraged numerous conversions in the private sector to defined contributions plans. These plans

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<sup>1</sup> An 8% investment rate of return is actuarially assumed for each of the nine local pension funds in this study.

<sup>2</sup> Cook County's and the Forest Preserve's funds are under the same pension board.

<sup>3</sup> 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).

<sup>4</sup> The Public School Teachers' Pension and Retirement Fund of Chicago is funded differently than the other local funds. For Fiscal Years 1999-2010, the contribution shall be increased to bring the Fund to 90%. Between 2011-2045, the minimum contribution shall be made on an actuarial basis to maintain the Fund at 90% of its total liabilities.

are known as 401(k) or 403(b) plans, named after the governing sections of the Internal Revenue Service Code. Few public pension plans have converted. All public pension plans surveyed in this report are of the defined benefits variety. Under Illinois law, all employer contributions to the local pension funds within Cook County in this report must be made by a levy on real property. These amounts are broken out and reported separately on property tax bills.<sup>5</sup>

In order to meet benefit requirements, pension funds receive assets from three sources: 1) employer contributions; 2) employee contributions; and 3) investment income. Pension funds make expenditure payments to cover benefit and administrative costs. Included in benefit payments are disability payments, annuitant medical, and refunds to employees who have left before becoming fully vested. Administrative expenses include the cost of paying for investment managers and the salaries of those responsible for administering the fund. Each of these components plays a major role in determining the health and growth potential of a public pension fund.

The fundamental 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 receive a “due bill” which *must* be paid (pension benefits are constitutionally protected under Illinois law and therefore take precedence over all other obligations of government) and disparity between the level of taxes and services received from government will grow exponentially -- the difference of course being the payments needed to support persons who are retired. 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 of taxpayers by putting more “into the bank” than may be required.

The calculation of adequate funding levels is very sensitive to a host of factors including: assumptions made about expected length of continued service by current employees, expected pay raises, inflation, investment income, and the expected life of present and future annuitants. Two of the methods used to determine the required amount are the Unit Credit Actuarial Cost Method and the Entry Age Actuarial Cost Method. Entry Age is the most common method used to determine the liabilities of the local pension funds. According to one actuary consulted:

*The Unit Credit method assigns in a particular year that portion of the ultimate benefit earned by an employee in that year. An Entry Age method assigns costs to a particular year as the amount which would fund an individual's projected benefit, including the effects of future salary increases, if it were contributed from date of entry until retirement date. Therefore, if all assumptions are realized, the Entry Age method levels out costs throughout the working lifetime of the participant while the Unit Credit would result in increasing costs as the employee nears retirement.... i.e., costs under the Unit Credit method would initially be less than under Entry Age, but would cross over at some point and become higher.*<sup>6</sup>

An important point to note is that these assumptions can be different depending on the plan. For example, police and fire pension plans usually assume that their employees will earn more years of service than plans for areas of government that have higher rates of employee turnover. In addition to differences between plans, the actuarial assumptions of an individual plan can change over time. Until recently, the overriding assumption was that once employed in government, the employee

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<sup>5</sup> See Footnote 4.

<sup>6</sup> When looking at the cost of an entire fund, the Unit Credit cost may not be greater than the Entry Age cost.

would hold that job for the majority of his or her employment career. Given the current downsizing and fluidity of government employment, an actuary using the Entry Age Normal calculation may need to decrease the assumption regarding years of service in the calculation of a fund's future liabilities.

Pension experts 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 in the case of government funds, there is no real need to achieve full funding. The argument is that governments, unlike private corporations, are not at risk of dissolving and, therefore, can meet their obligations in perpetuity. The *normal cost plus interest method* creates a funding mechanism whereby the plan pays its obligations over time but does not attempt to decrease its unfunded liability. Paying the interest on the unfunded liability stabilizes it, and paying the "normal cost" covers the accruing costs of the fund as employees earn benefits through the span of their employment. Other methods of funding generally seek to systematically amortize the unfunded liability over a period of time.

## **STATUS OF LOCAL FUNDING**

In November 1994, GASB issued Statement No. 25 that established new standards for the reporting of a pension fund's assets.<sup>7</sup> 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"<sup>8</sup> market value, also referred to as the actuarial value of assets, in calculations for reporting pension costs and actuarial liabilities. This report will focus on the actuarial value of assets (smoothed market value) and market value in evaluating the financial health of the nine local pension funds.

### *Actuarial Value of Assets*

Overall, the funding status of the nine local pension funds continues to remain strong. The aggregate funded ratio, total assets divided by total liabilities, for the funds is 90% (See Appendix A). The following graph shows the funded ratios for each of the nine local public pension funds for years 1996 to 2000 at smoothed market value or the actuarial value of assets.

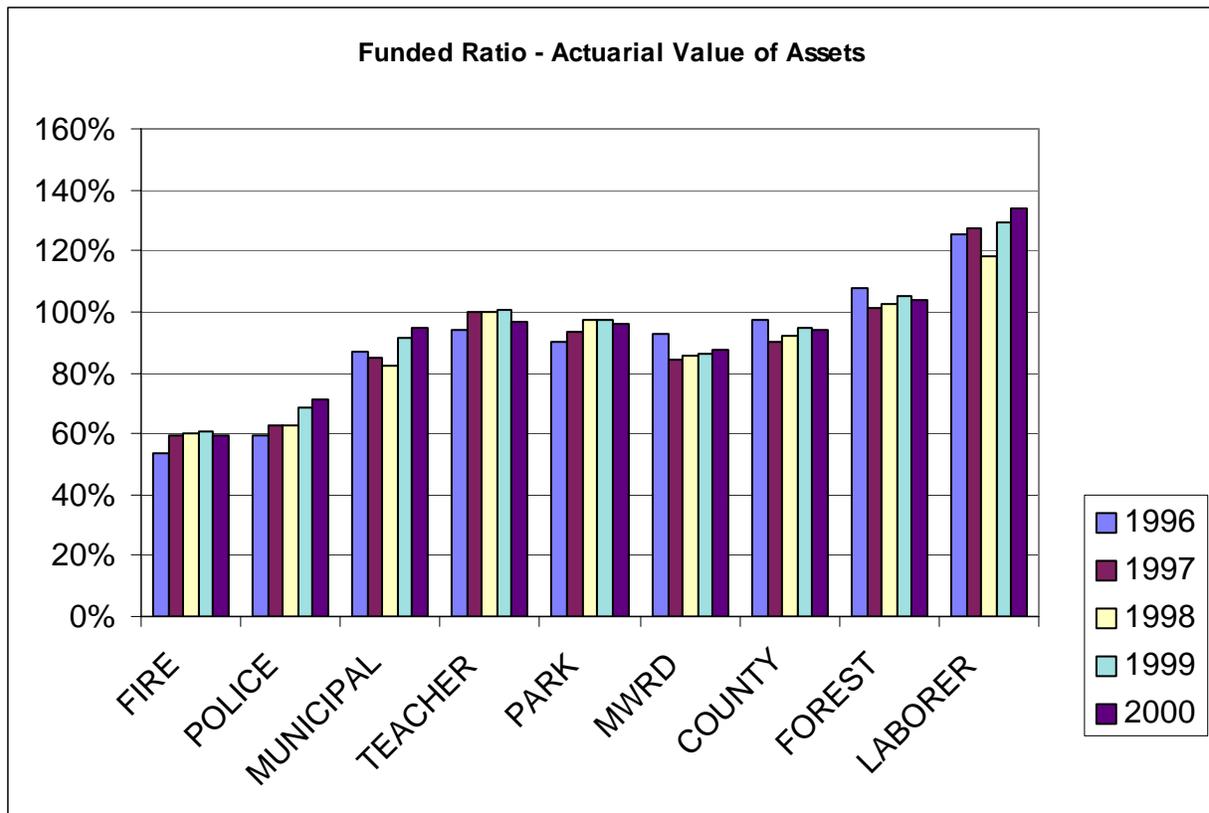
Despite the weaker financial markets, none of the nine funds lost significant ground in terms of their funded ratios as a result of decreasing investment returns. One reason is that investment earnings are only one part of each of the fund's income sources. In 2000, on aggregate, the funds earned \$1.568 billion from investments, \$.512 billion from employee salary deductions, and \$.625 billion from employer contributions, property taxes. As a whole, the funds increased the actuarial value of assets by \$2.271 billion and increased their aggregate accrued liabilities by \$2.539 billion. Given that the funds combined assets are over \$30.5 billion and the funds' liabilities total over \$33.8 billion, a deficit of \$268 million between increases in assets versus increases in liabilities is not cause for concern. However, a number of years of the growth in liabilities outpacing the growth in assets will be a cause for concern. Another reason is that because assets are measured on a five year basis

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<sup>7</sup> GASB: Government Accounting Standards Board. The reporting recommendation became effective June 15, 1996.

<sup>8</sup> Accounting for assets at market values by averaging unexpected gains and losses over a period of 3-5 years.

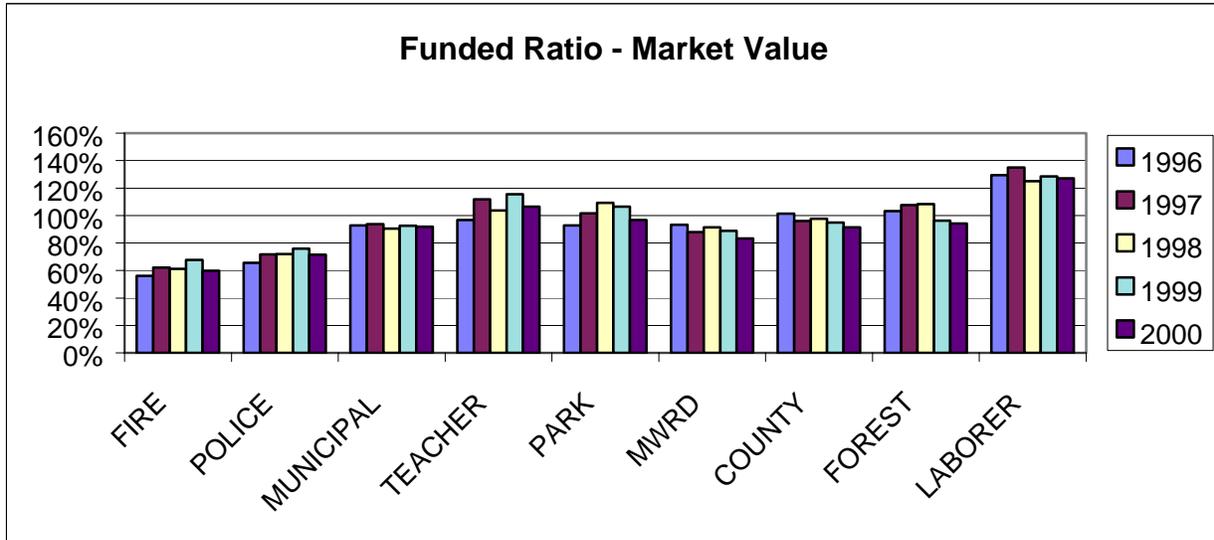
rather than year to year, significant losses in one year can be tempered by the other four years in the smoothed market calculation.



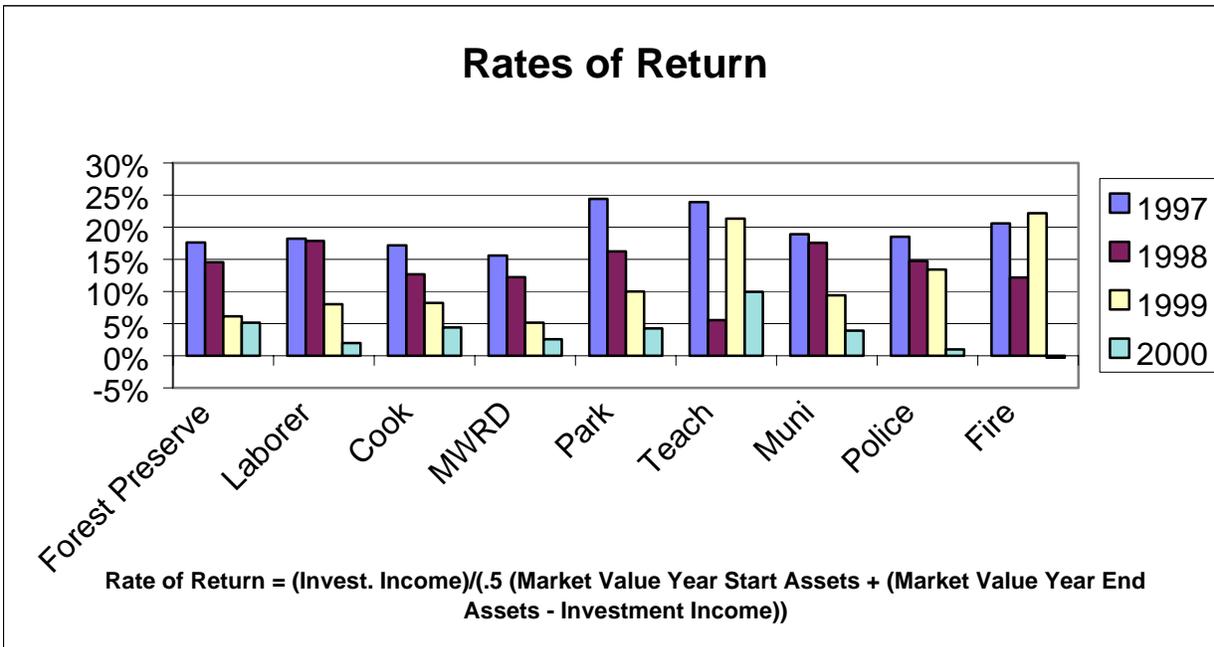
On the high end of the scale, the Laborers’ Fund continues to be well over 100 percent funded. It’s current funded ratio of 134 percent is over 30 percentage points greater than the next healthiest fund, the Forest Preserve, whose funded ratio is at 104 percent. Although the 134 percent ratio implies that the fund 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 or to decrease contributions, specifically the tax levy, during any given year. Rather, the Federation continues to support legislation that would further lower the statutory multiples for overfunded funds based on a responsible amortization schedule.

Another item to be noted is the significant drop in the Teachers’ Fund funded ratio. The funded ratio decreased from 100.8% to 96.7% between 1999 and 2000. According to the *Public School Teachers’ Pension and Retirement Fund 105<sup>th</sup> Comprehensive Annual Financial Report*, “The Fund made changes in the mortality, retirement, disability, termination and salary increase assumptions for FY2000. The impact of these assumptions is to increase the total actuarial liability by \$525 million.”

Market Value

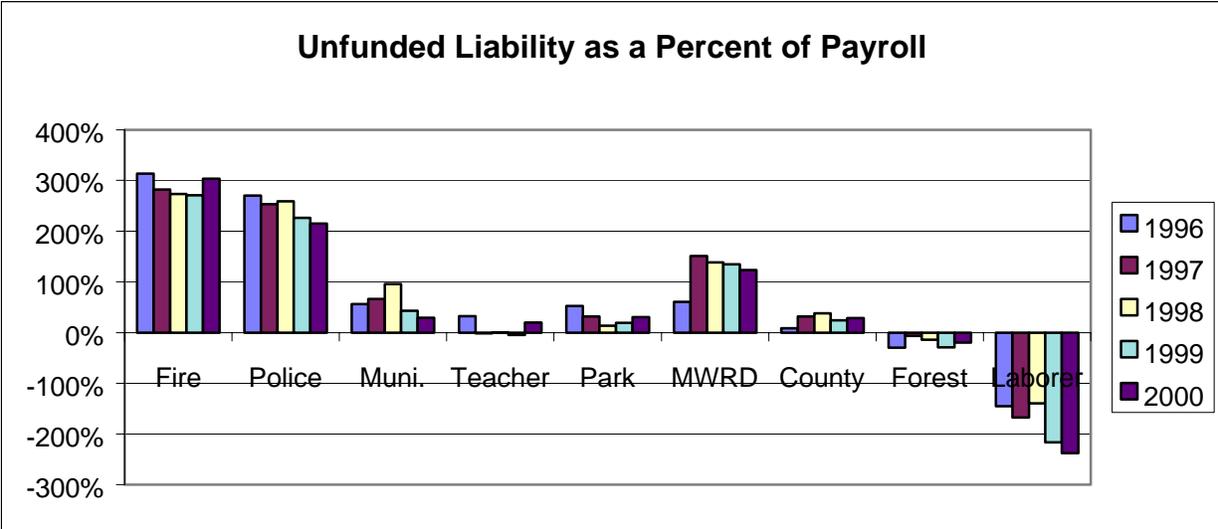


Evaluating these funds based on market value shows two trends. First, market values are at the smoothed market levels if not below them for all nine of the funds. Five of the nine funds have market values lower than their smoothed market values. For example, for the second year in a row, the Forest Preserve Fund’s market value is 9.4 percentage points lower than its smoothed market value for 2000 (see Appendix B). Second, as the chart below illustrates, the market values for the nine funds have experienced significant fluctuations during the last six years. As discussed earlier, the magnitude of the fluctuations in the financial markets obviously are the cause of this.

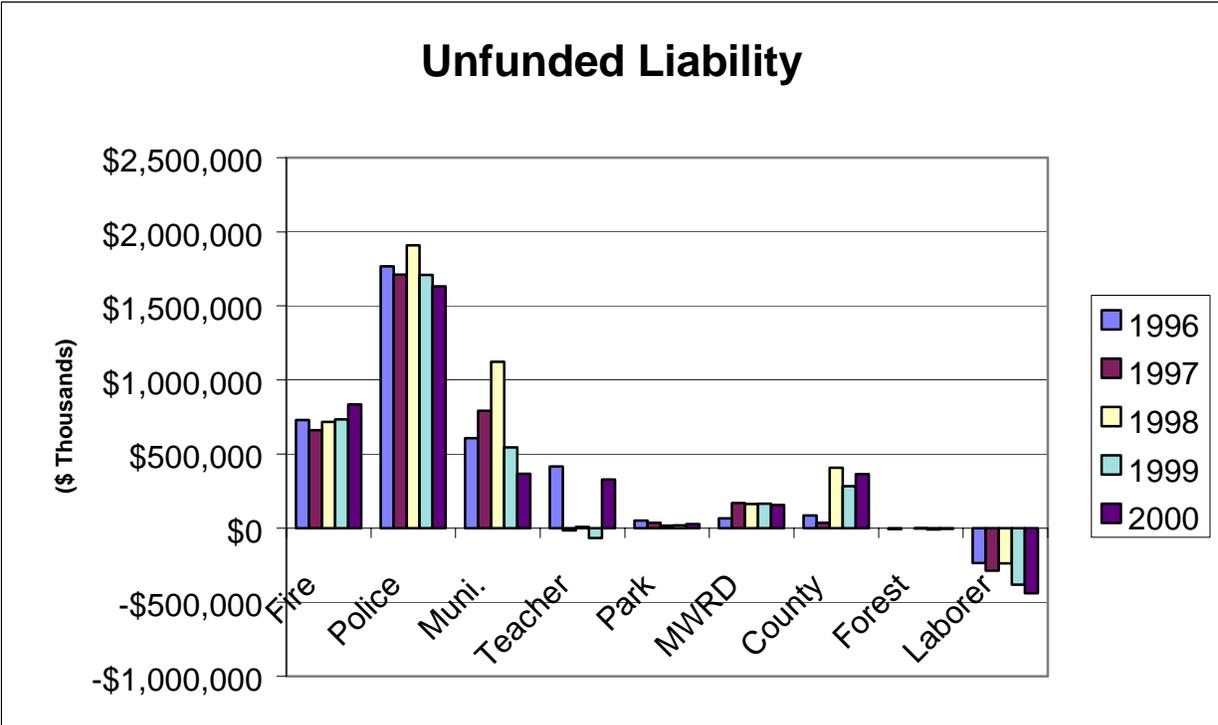


Another example of the weaker financial market can be seen in the rates of return of the various funds. All of the funds experienced equal or lower rates of return in 2000 than they did in 1999. The only fund that was higher than its actuarially anticipated rate of return as part of its amortization schedule was the Teachers’ Fund. The Firemen’s Fund actually had a negative rate or return.

Unfunded Liability as a Percent of Covered Payroll



As discussed above, more than one way exists to report on the status of pension funds. In addition to reporting on a fund's funded ratio, another indicator of funding progress is the reporting of a fund's unfunded liability as a percentage of covered payroll. One of the functions of this indicator is a measure of a fund's ability to manage or make progress on reducing its debt or unfunded liability. Much like funded ratios, healthy funds are ones that continue to reduce debt over time without dramatic reductions at the expense of employees or taxpayers. 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 payroll, then a new funding strategy and/or benefits granted by the fund needs to be reevaluated. As the chart above indicates, seven of the nine funds have unfunded liabilities. The Forest and



Laborers' Funds are overfunded. Subtracting out the overfunding of these two funds, the nine funds

have almost \$3.26 billion in unfunded liabilities. The largest unfunded liability is the Policemens' Fund at over \$1.6 billion.

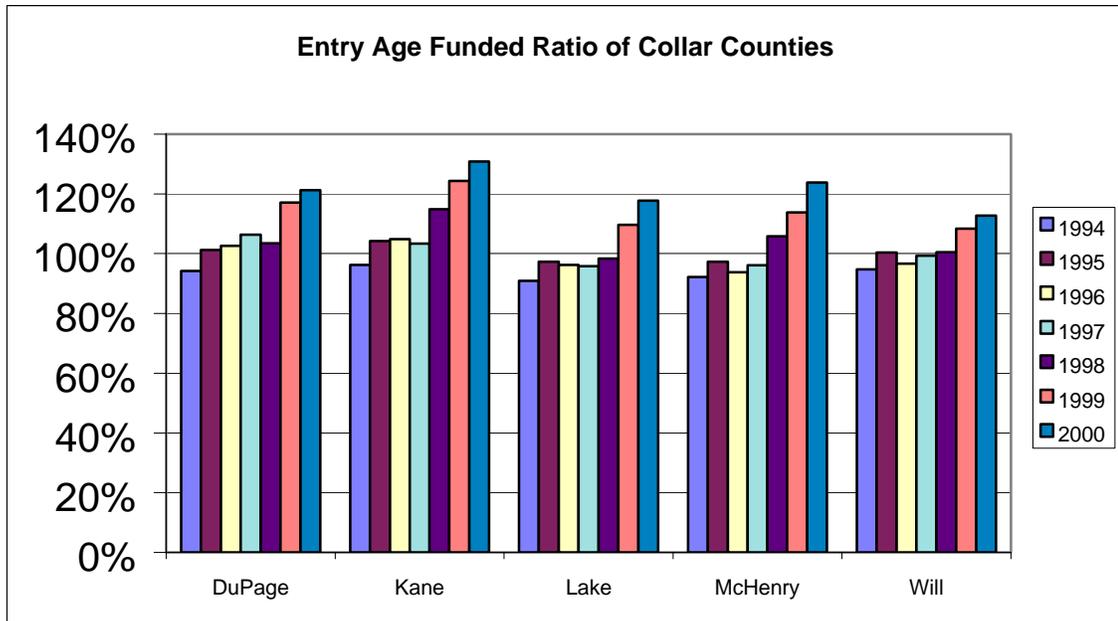
As the chart above illustrates, the nine local pension funds have quite different unfunded liabilities as percentage of covered payroll. In generating this indicator, smoothed market value was used to determine a fund's unfunded liability. In terms of funding progress, two of the funds, the Laborers' and Forest Preserve Funds, are negative in terms of this indicator. A negative indicator shows that a fund's current and projected assets are in surplus of its current and projected liability. Simply stated, its current and projected revenue stream exceed its current and projected debt. Consistent with their book values, the Firemen's and Policemen's Funds' indicators remain significant resulting from high unfunded liabilities.

## **COLLAR COUNTIES**

The Civic Federation has traditionally analyzed the local governments within Cook County. As part of our effort to expand gradually our focus to taxation policy in the collar counties, The Civic Federation has expanded its database on pension funding to include information regarding the following collar counties:

- DuPage County;
- Kane County;
- Lake County;
- McHenry County; and
- Will County.

Unlike Cook County, these counties do not have their own self-contained pension funds. Rather, they are all part of the Illinois Municipal Retirement Fund (IMRF). Even though they are part of this larger pool, the funds have their own funded ratios. Each of these funds has assets based on an employer contribution from the county, an employee contribution, and income generated from the IMRF's investments.



In terms of funded ratios measured using Entry Age, although the IMRF reports that investment gains were lower than in 1999, funded ratios for all 5 counties increased in 2000.<sup>9</sup> All of the counties are now well over 100% in terms of their funded ratio. Kane County's funded ratio is the highest at 130.8%. The lowest ratio amongst the five, keeping in mind that all five of the funds are now overfunded, was Will County at 112.7%.

## RECOMMENDATIONS

1. Local pension funds need to pay particular attention to the liabilities resulting from any future changes in policy. Specifically, if options such as early retirement programs are put forth, a long term funding strategy must be presented for funding the new liabilities resulting from the new policy.
2. Given the recent downturn in the financial markets, local pension funds need to assess their investments to discern whether their investment holdings put their assets at too much risk.
3. Governments in this study may wish to conduct an analysis of the efficacy of alternative pension plans, defined contribution versus defined benefit plans, as an alternative to their existing pension policies.

<sup>9</sup> The assets and liabilities of the Sheriff's Law Enforcement Employees are included in the data for each of the respective counties other than Cook, which does not participate in the IMRF.

## Sources

1. Laborers' & Retirement Board Employees' Annuity and Benefit Fund of Chicago, Actuarial Valuation, December 31, 2000, The Wyatt Company Consulting Actuaries.
2. Firemen's Annuity and Benefit Fund of Chicago, Actuarial Valuation, December 31, 2000, The Wyatt Company Consulting Actuaries.
3. Metropolitan Water Reclamation District Retirement Fund, Comprehensive Annual Financial Report, December 31, 2000.
4. Public School Teachers' Pension and Retirement Fund, 103rd Comprehensive Annual Report, June 30, 2000.
5. Park Employees' & Retirement Board Employees' Annuity and Benefit Fund, June 30, 2000.
6. Policemen's Annuity and Benefit Fund of Chicago, Illinois, Actuarial Valuation, December 31, 2000, The Wyatt Company Consulting Actuaries.
7. Municipal Employees' Annuity and Benefit Fund of Chicago, Actuarial Statement, Actuarial Valuation, December 31, 2000, The Wyatt Company Consulting Actuaries.
8. County Employees' and Officers' Annuity and Benefit Fund of Cook County, Actuarial Statement, December 31, 2000, Donald F. Campbell Consulting Actuaries.
9. Forest Preserve District Employees' Annuity and Benefit Fund of Cook County, Actuarial Statement, December 31, 2000, Donald F. Campbell Consulting Actuaries.
10. Illinois Municipal Retirement Fund, Prepared Calculations.