The Civic Federation

Status of Local Pension Funding 1998

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

Prepared by
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January 2000

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

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Myer Blank

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Foreword

For the past 105 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, The Civic Federation is becoming uncomfortable with the funding progression of the local funds. Although the nation's financial markets remain strong, thereby significantly increasing the assets of many of the funds, long term liabilities continue to escalate. If the nation's economy begins to falter, many of these funds may experience decreases on earnings in their investments resulting in a decrease in asset growth. Should the nation's financial markets falter, however, a concomitant decrease will not automatically occur on the liability side of the ledger. In most pension plans, as is the case with all of the funds in this study, annuitants are guaranteed payments for any benefits accrued. Although the assets of these funds may stop growing, the liabilities will continue to grow and are due to the annuitants. A question for policymakers is whether local pension funds are positioned to meet present and future obligations. The answer to that question is unclear at this time. What is clear is that future significant increases to the liabilities of these funds may eventually pose a financial burden on future taxpayers.

* * *

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.

Carol W. Garnant
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) 341-9603 or visit our website at **http://www.mcs.net/~civicfed/.**

Contents

Overview

For four consecutive years, the financial markets of the United States have continued to grow at a significant pace. In 1998, eight of the nine local pension funds achieved yields higher than actuarially anticipated returns on investments contributing to record setting asset valuations (see Appendix A).[1] Taken as a whole, these funds covered 123,604 active employees and 86,031 beneficiaries during this year. These funds invested and managed over $25. 25 billion in assets and had over $29. 35 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[2], 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.[3]

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.[4] 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 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.

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 pay-

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

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

3 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 the State University Employees' Pension Fund, in which some City College employees are enrolled.

4 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.

ments, 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 administrating 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.[5]

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 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.

5 When looking at the cost of an entire fund, the Unit Credit cost may not be greater than the Entry Age cost.

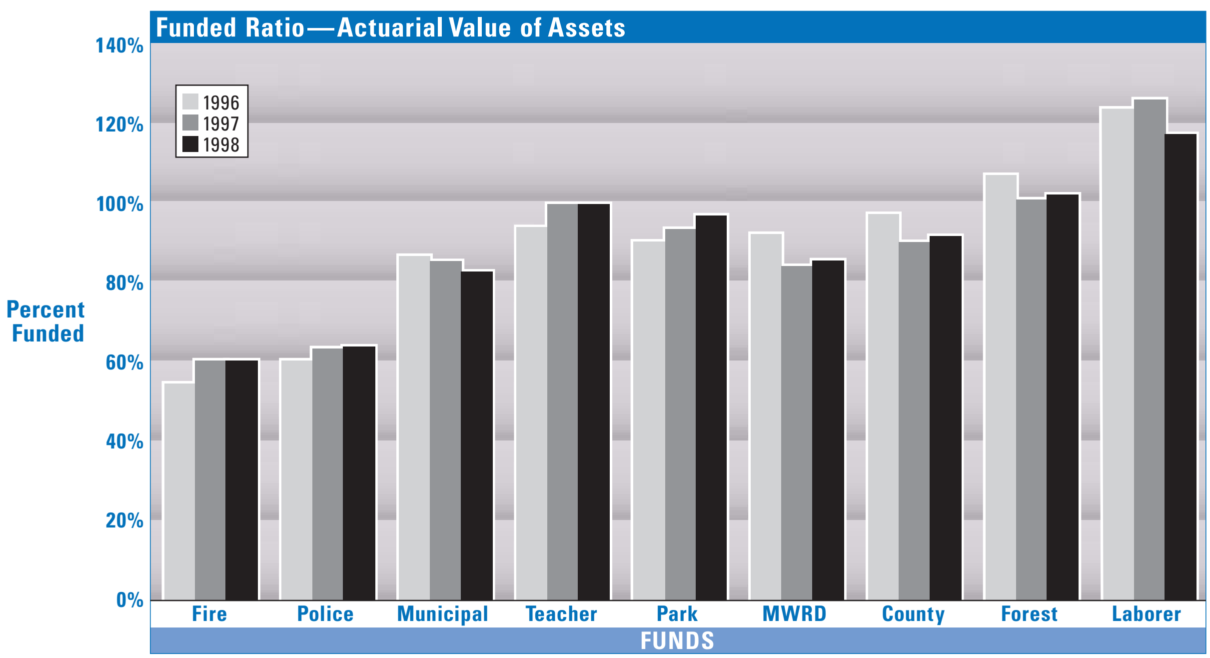
Status of Local Funding

In November 1994, GASB issued Statement No. 25 that established new standards for the reporting of a pension fund's assets.[6] 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"[7] 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

Given that the GASB's decision to recommend the use of smoothed market value became effective in 1996, few pension funds have calculated this indicator for funds prior to fiscal year 1996.[8] As with any fiscal indicator, The Civic Federation prefers a minimum six years of data to evaluate an indicator instead of the three data points currently available. However, some observations can be made as to the overall health of the local pension funds in this report based on the three years of data that are available.

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 86% (see Appendix A). The following graph shows the funded ratios for each of the nine local public pension funds for years 1996 to 1998 at smoothed market value or the actuarial value of assets.



6 GASB: *Government Accounting Standards Board.* The reporting recommendation became effective June 15, 1996.

7 Accounting for assets at market values by averaging unexpected gains and losses over a period of 3–5 years.

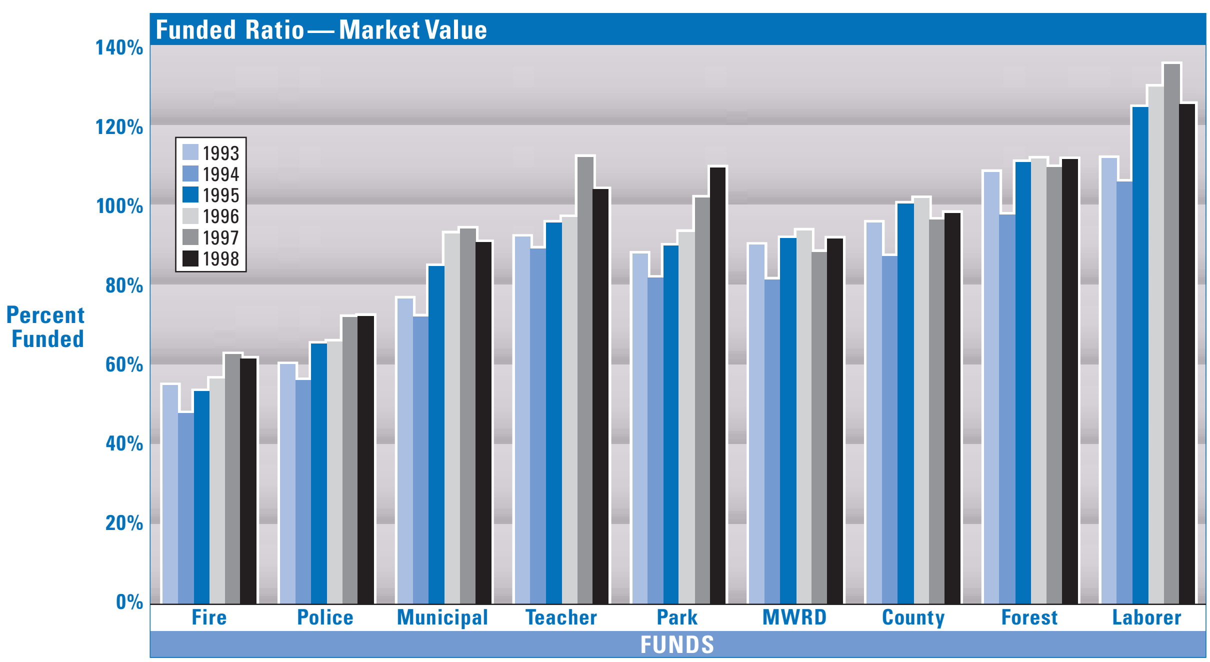
8 The Teachers' and Park District Funds' use a smoothed market value of four years. The other seven funds use a five year period.

In last year's report, it was mentioned that four of the nine funds had lower funded ratios than 1996. This trend is continuing with now five of the funds having their 1998 funded ratios lower than their 1996 funded ratios. The decreases in the funded ratios experienced in 1997 and continuing into 1998 were caused by an increase in liabilities resulting from increased benefits, e.g., early retirement programs and annual benefit increases for employee and spouse annuitants, enacted by the Illinois General Assembly. For example, between 1996 and 1998, the Cook County Fund's liability increased by over $1. 4 billion. In 1998, similar legislation, e.g., increasing the automatic increase for employee annuitants to 3% compounded, was passed relating to the Laborers' Fund. The liability of that fund increased by over $250 million between 1997 and 1998.

On the high end of the scale, the Laborers' Fund continues to be well over 100 percent funded. It's current funded ratio of 118 percent is over 15 percentage points greater than the next healthiest fund, the Forest Preserve, whose funded ratio is at 103 percent. Although the 118 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 over-funded funds based on a responsible amortization schedule.

Market Value

Evaluating these funds based on market value shows two trends. First, given the recent strength of the financial markets, the market values of all nine funds continue to be greater than the smoothed market values for those funds. For example, the Park District Funds' market value was almost 12 percentage points higher than its smoothed market value for 1998 (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. For example, between 1997 and 1998, the market value funded ratio of the Teachers' Fund decreased by over 8 percentage points while its smoothed market value realized little change, .33 percentage points, during that time period. A 5.3 percent annual yield on investments, which is lower than the 8 percent actuarially assumed yield, is primarily responsible for the decrease in the Teachers' Fund.

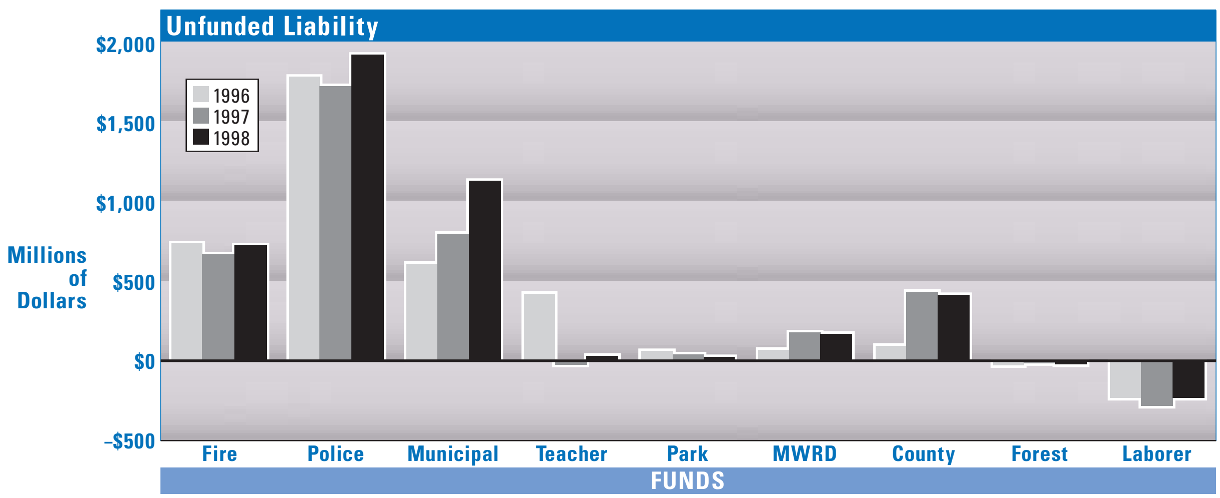


Status of Local Funding, continued

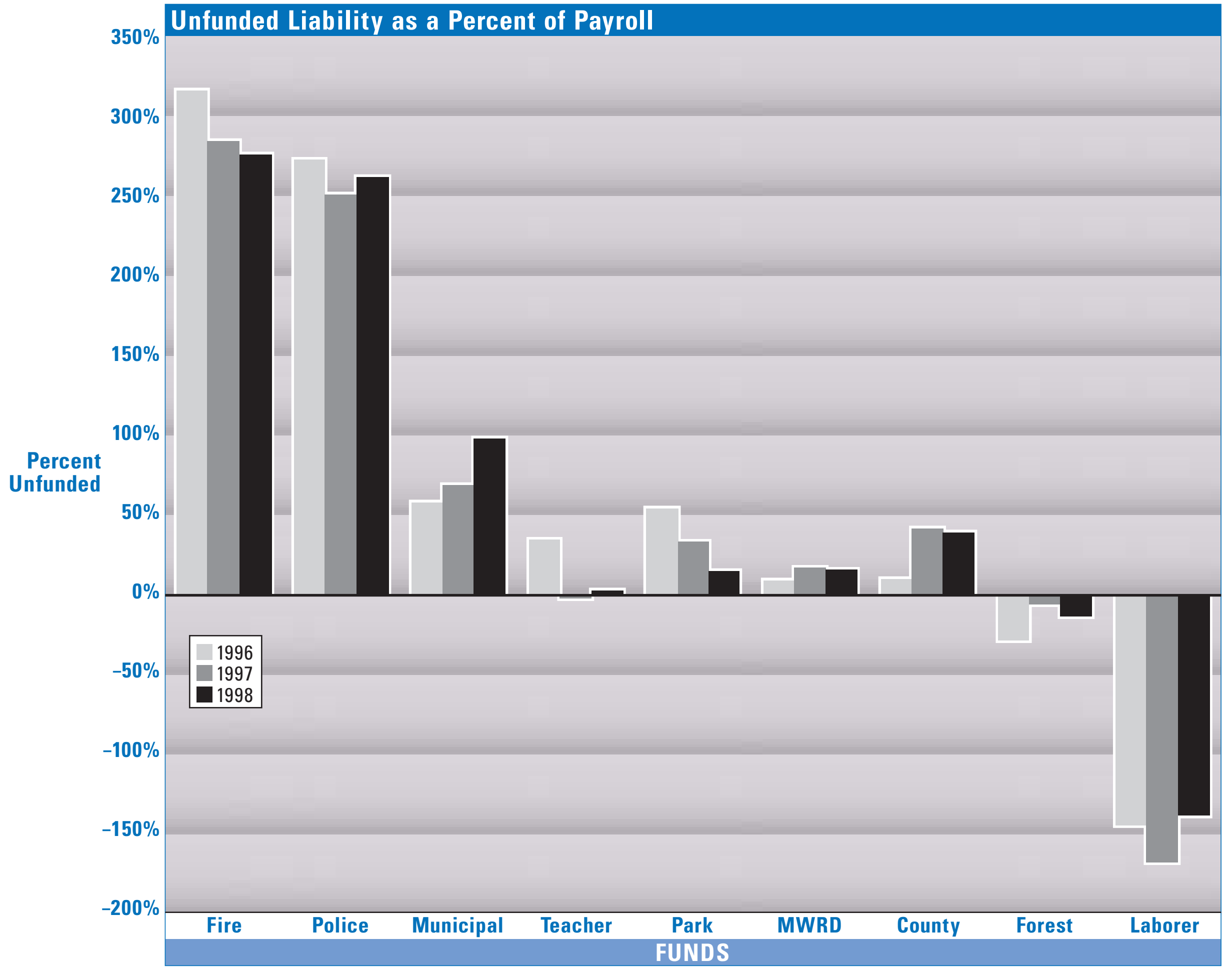
Unfunded Liability as a Percent of Covered Payroll

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 funds 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 below 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 over $4.1 billion in unfunded liabilities. The largest unfunded liability is the Policemens' Fund at over $1.9 billion. As mentioned above, although the aggregate funded ratio of the nine funds appears to be adequate, The Civic Federation reminds the reader that the aggregate unfunded liability of these funds continues to increase. Between 1996 and 1998, the net unfunded liability for the nine funds increased from $3. 5 billion to $4. 1 billion.



As the chart on the next page 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 smoothed market values, the Firemen's and Policemen's Funds' indicators remain significant resulting from high unfunded liabilities.

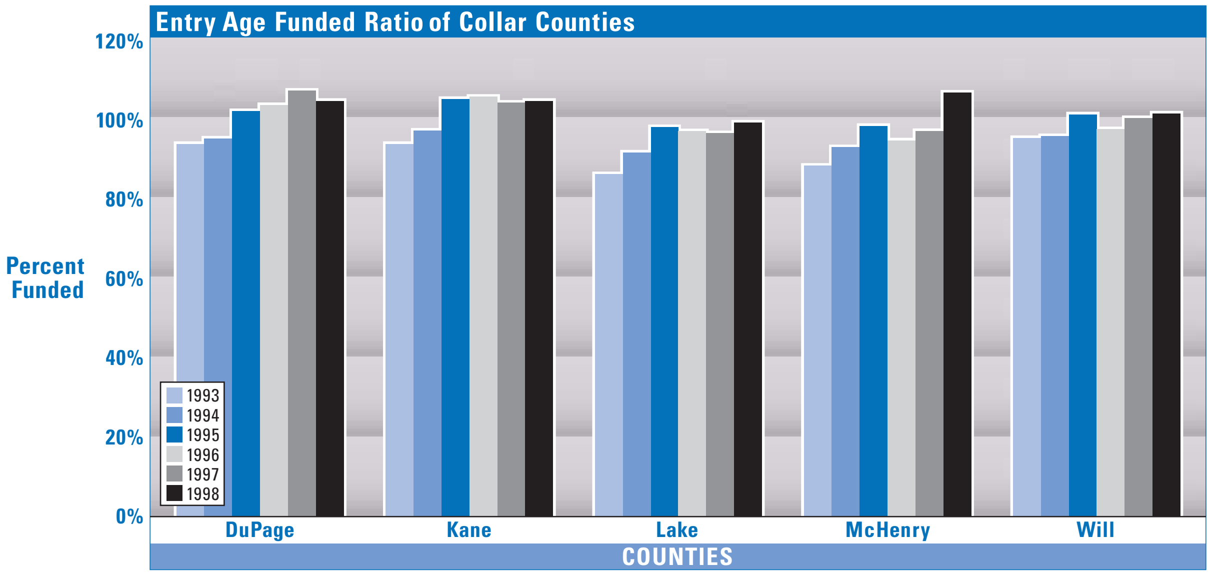

Unfunded Liability as a Percent of Payroll
350%
300%
250%
200%
150%
100%
Percent Unfunded
50%
0%
–50%
–100%
–150%
–200%
1996
1997
1998
Fire
Police
Municipal
Teacher
Park
MWRD
County
Forest
Laborer
FUNDS

Collar Counties

The Civic Federation has traditionally analyzed the local governments within Cook County. As part of our effort to gradually expand our focus to 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, funded ratios in 4 of the 5 counties increased in 1998.[9] DuPage County's funded ratio decreased because of an early retirement program that increased its liability by almost $3. 1 million. McHenry County saw an increase in its funded ratio as a result of its distribution of residual investment income. Between 1997 and 1998, McHenry County's actuarial assets increased by more than $6. 2 million or 20.6 percent.

9 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.

Recommendations

1. Policymakers should show restraint during the current strength of the financial markets before approving additional early retirement programs and additional benefit increases. A number of the funds in this report now have significant unfunded liabilities.

2. Additional steps should be taken, such as further decreases in the statutory multiples of the nine local Cook County funds, for those funds that are now overfunded.

Sources

1. *Laborers' & Retirement Board Employees' Annuity and Benefit Fund of Chicago, Actuarial Statement,* December 31, 1998, Donald F. Campbell Consulting Actuaries.
2. *Firemen's Annuity and Benefit Fund of Chicago, Actuarial Statement,* December 31, 1998, Donald F. Campbell Consulting Actuaries.
3. *Metropolitan Water Reclamation District Retirement Fund, Comprehensive Annual Financial Report,* December 31, 1998.
4. *Public School Teachers' Pension and Retirement Fund, 103rd Comprehensive Annual Report,* August 31, 1998, Goldstein & Associates Consulting Actuaries.
5. *Park Employees' & Retirement Board Employees' Annuity and Benefit Fund,* June 30, 1998, Goldstein & Associates Consulting Actuaries.
6. *Policemen's Annuity and Benefit Fund of Chicago, Illinois,* December 31, 1998, The Wyatt Company Consulting Actuaries.
7. *Municipal Employees' Annuity and Benefit Fund of Chicago, Actuarial Statement,* December 31, 1998, Donald F. Campbell Consulting Actuaries.
8. *County Employees' and Officers' Annuity and Benefit Fund of Cook County, Actuarial Statement,* December 31, 1998, Donald F. Campbell Consulting Actuaries.
9. *Forest Preserve District Employees' Annuity and Benefit Fund of Cook County, Actuarial Statement,* December 31, 1998, Donald F. Campbell Consulting Actuaries.
10. *Illinois Municipal Retirement Fund, Prepared Calculations.*

Appendix A: Fiscal Year 1998 Pension Fund Data with Comparable 1997 Year End Totals (in thousands of dollars)

Pension Fund	Average Return[1]	Average Return[2]	Total Income[3]	Total Outlays	Year-End Assets Market[3]	Actuarial Asset Value	Accrued Liability	1998 Percent Funded[4]	1997 Percent Funded[4]
Laborer	17.55%	17.86%	$285,972	$73,682	$1,615,741	$1,530,395	$1,292,612	118.40%	127.62%
Forest	14.35%	14.54%	$25,501	$6,658	$151,604	$140,121	$136,367	102.75%	101.52%
Cook	12.51%	12.65%	$792,604	$218,712	$4,827,809	$4,535,297	$4,942,155	91.77%	90.42%
MWRD	12.03%	12.23%	$152,877	$54,102	$1,034,219	$969,114	$1,132,408	85.58%	84.09%
Park	15.72%	16.22%	$105,889	$46,161	$617,323	$549,728	$565,582	97.20%	93.49%
Teacher	5.30%	5.54%	$632,635	$421,945	$8,310,158	$8,007,098	$8,015,603	99.89%	100.23%
Municipal	17.28%	17.56%	$1,142,563	$359,496	$5,715,858	$5,202,095	$6,323,966	82.26%	84.94%
Police	14.53%	14.75%	$670,452	$272,037	$3,705,535	$3,249,730	$5,158,196	63.00%	62.85%
Firemen	11.73%	12.17%	$196,750	$126,067	$1,090,392	$1,066,891	$1,783,569	59.82%	59.65%
1998	11.70%	11.94%	$4,005,242	$1,578,861	$27,068,638	$25,250,470	$29,350,459	86.03%	86.56%
1997	19.93%	20.17%	$5,190,837	$1,384,815	$24,642,256	$22,469,423	$25,958,708		

Notes:

(1) Average Return =
(Investment Income – Investment Expenses) /
(½ (Beginning Assets + Ending Assets – Investment Income – Investment Expenses))

(2) Average Return =
Gross Investment Income /
(½ (Beginning Assets + Ending Asset – Gross Investment Income))

(3) Assets determined at Market Value.

(4) Funded Ratio at Smoothed Market Value

***NOTE:** The total funded ratios shown at the bottom of the columns are computed separately, dividing total assets by total liabilities.

Source: Information derived from pension funds' 1998 Actuarial Statements and Annual Reports.

Appendix B: Comparison of Funded Ratios: 1996–1998 Smoothed Market vs. Market

Pension Fund	Valuation Method	1996	1997	1998	1998 Diff. Market from Smooth
Fire	Market	56.12%	62.18%	61.14%	1.32%
	Smoothed	53.65%	59.65%	59.82%	
Police	Market	65.51%	71.75%	71.84%	8.84%
	Smoothed	59.53%	62.85%	63.00%	
Municipal	Market	92.65%	93.79%	90.38%	8.12%
	Smoothed	86.57%	84.94%	82.26%	
Teacher	Market	96.68%	111.75%	103.67%	3.78%
	Smoothed	94.00%	100.23%	99.89%	
Park	Market	92.78%	101.46%	109.15%	11.95%
	Smoothed	90.18%	93.49%	97.20%	
MWRD	Market	93.19%	87.94%	91.33%	5.75%
	Smoothed	92.42%	84.09%	85.58%	
County	Market	101.35%	96.09%	97.69%	5.92%
	Smoothed	97.57%	90.42%	91.77%	
Forest	Market	111.28%	109.22%	111.17%	8.42%
	Smoothed	107.93%	101.52%	102.75%	
Laborer	Market	129.38%	134.86%	125.00%	6.60%
	Smoothed	125.16%	127.62%	118.40%	

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