The Civic Federation

Status of Local Pension Funding 1997

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
April 1999

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

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Prepared By

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Foreword

FOR THE PAST 104 YEARS, The Civic Federation has monitored the revenues and expenditures of local governments within Cook County. During the last several years, The Civic Federation has specialized in the analysis of the status of public pension funds of nine local governments within Cook County and the collar county funds in the Illinois Municipal Retirement Fund. While our analysis is multifaceted, one consistent theme running throughout our years of analysis is the recommendation that government officials in charge of managing public pension funds must develop a financial plan that addresses both long and short term needs. Losing sight of either can have disastrous consequences. Our approach is conservative, but grounded in the realities of the peaks and valleys of funding sources such as the financial markets.

In terms of this year's report, the actuarially determined asset values of the funds continue to mirror the nation's strong financial markets. A number of these funds continue to be over 100 percent funded. Even though the local funds appear to be adequately funded, we ask the reader to pay particular attention to the liabilities being accrued by these funds. Recent early retirement packages, benefit increases, and salary increases, have greatly increased future obligations in many of the funds reviewed. Because many of these liabilities are backed by local property taxes, property taxpayers will have to pay the obligations to the retirees and their families if investment income declines through a downturn in financial markets.

* * *

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

Lance Pressl, Ph.D.
President

About The Civic Federation

The Civic Federation is a nonpartisan government and fiscal watchdog 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/.

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Overview

For three consecutive years, the financial markets of the United States have continued to grow at a significant pace. In 1997, local pension funds continued to achieve 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 123,872 active employees and 67,410 beneficiaries during this year. These funds invested and managed almost $22.5 billion in assets and had almost $26 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 levies.

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 the local Cook County defined benefit plans in this report, 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 average 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 would be 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 by far the most common for 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 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 with a levy on real property. These amounts are broken out and reported separately on property tax bills.[5]

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 primarily make expenditure payments to cover benefit and administrative costs. Included in benefit payments are

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.

5 See Footnote 4.

disability payments, annuitant medical, and refunds to employees who have separated 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.

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 (GASB requires Unit Credit for accounting disclosure). 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.[6]

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. 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.

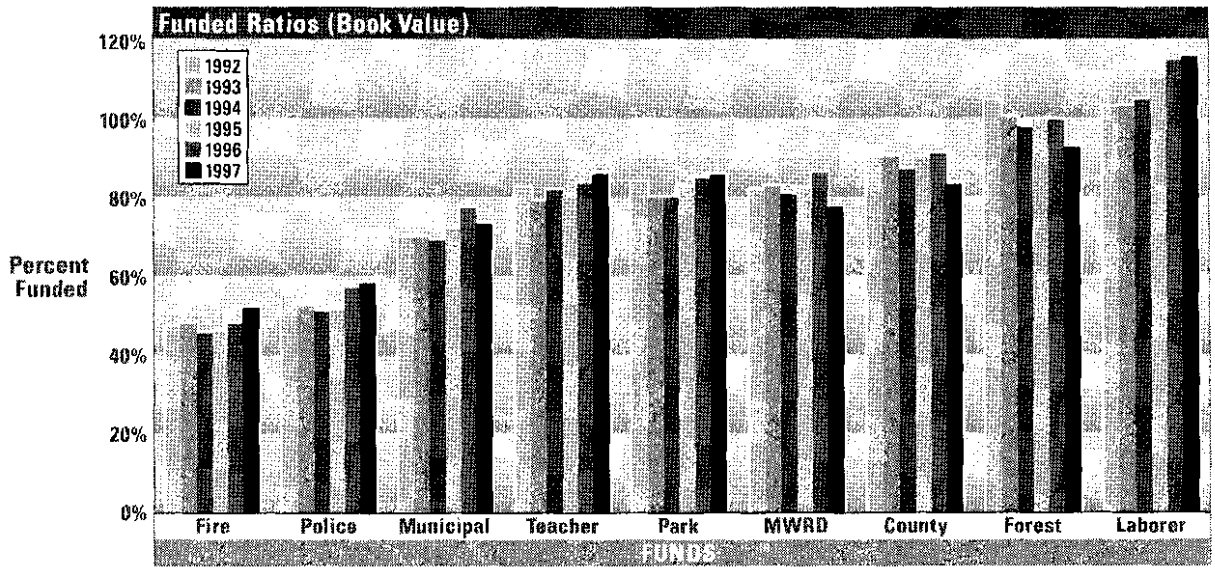
Pension experts agree that the method of funding a public pension fund should prevent growth of the *unfunded liability*, or that portion of future projected costs and interest not currently covered by assets. Most experts concur that in the case of government funds, there is no real need to achieve 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.

6 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

Book Value

In November 1994, GASB issued Statement No. 25 that established new standards for the reporting of a pension fund's assets.[7] 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"[8] market value, also referred to as the actuarial value of assets, in calculations for reporting pension costs and actuarial liabilities. For the purposes of this report only funded ratios based on book and smoothed market values will be presented. Market values will not be reported as they are a poor indicator of trends given that financial markets have a tendency to fluctuate significantly on an annual basis. The following graph shows the funded ratios for each of the nine local public pension funds for years 1992 to 1997 at book value, measured in terms of Entry Age Normal liability.[9]



The funds grouped toward the right of the above chart have had higher funded ratios between 1992 and 1997 than have those toward the left. In 1997, four of the funds in this report had lower funded ratios than experienced in 1996. The decreases in funded ratios 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 1997, the Cook County pension fund's liability increased by over $900 million or 26 percent. This increase was a direct result of legislative changes such as an increase in the automatic increase for employee and spouse annuitants to 3 percent compounded annually and the Early Retirement Incentive.

On the high end of the scale, the Laborers' fund continues to be well over 100 percent funded. Its current funded ratio of 116 percent is over 23 percentage points greater than the next healthiest fund, e.g., the Forest Preserve's funded ratio is at 93 percent. As with last year's ratio, a funded ratio of 116 percent should be viewed cautiously. Although the 116 percent ratio implies that the fund has more assets than projected liabilities accrued to date, The Civic Federation cautions 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 supported recent legislation in the Illinois

7 GASB: *Government Accounting Standards Board.* GASB is currently changing its standards regarding reporting liabilities at Unit Credit versus Entry Age Normal.

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

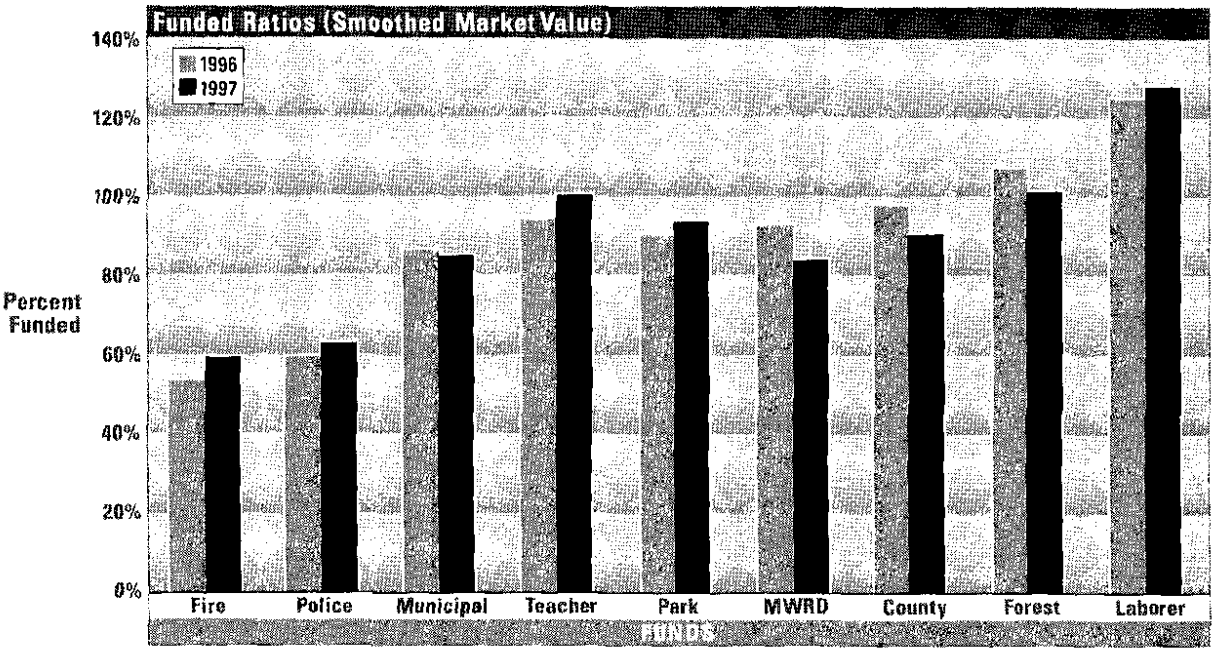
9 Unless otherwise noted, "County" in a descriptive table signifies that the data is for the County Employees' and Officers' Annuity and Benefit Fund of Cook County and does not include other counties.

General Assembly to lower the statutory multiple in the Laborers' Fund from 1.37 to 1.00 and in the Municipal Fund from 1.69 to 1.25. This reduction created a mechanism whereby the two funds would be funded at 100 percent while reducing the property tax levy collected for the funds.

Smoothed Market Value

Given the GASB's recent decision to recommend the use of smoothed market value, few pension funds have calculated this indicator for funds prior to fiscal year 1996. As with any fiscal indicator, The Civic Federation prefers at least six years of data rather than evaluate an indicator based on two data points. However, in this report, smoothed market values are reported for the years 1996 and 1997. Overall, the smoothed market values of the nine pension funds were higher than the book value of the funds in 1996 and 1997 (See Appendix B). The difference between the two figures, smoothed market and book, can change the reported available assets of a fund by hundreds of millions of dollars. For example, the difference between the book value of the Teachers' Fund and its smoothed market value was over $1 billion in 1997. In addition, the investment decisions made by pension boards can also increase or decrease the difference between market and book values for any given year.

The following graph shows the funded ratios for the years 1996 and 1997 at smoothed market value, measured in terms of Entry Age Normal:[10]



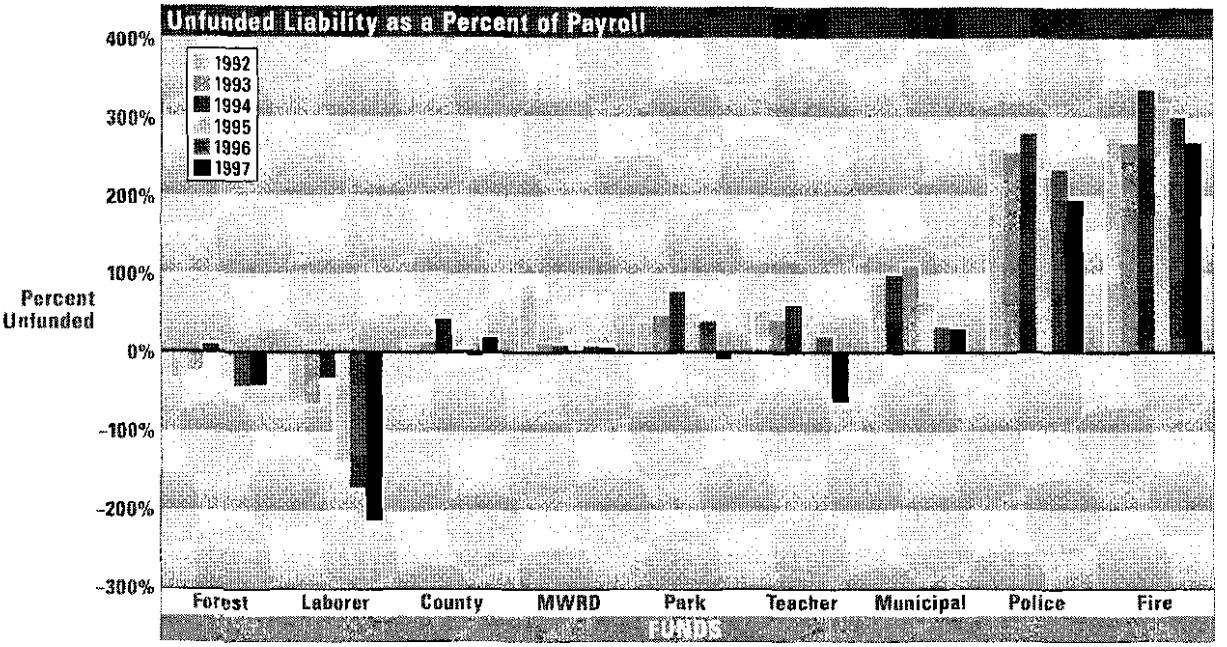
In 1996 and 1997, the funded ratios of the nine funds at smoothed market value ranged from a high of 127.6 percent realized by the Laborers' Fund in 1997 to a low of 53.7 percent realized by the Firemen's Fund in 1996. Similar to the funded ratios at book value, four of the funds had lower funded ratios at smoothed market value than they did at book value. In addition, 7 of the 9 funds have smoothed market values above 80 percent. Similar to its book value, the Firemen's fund was below 60 percent.

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

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 able 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 above chart illustrates, the nine local pension funds have quite different unfunded liabilities as percentage of covered payroll. In generating this indicator, smoothed market value would have been preferred as a means for determining a fund's unfunded liability. However, given that some funds have only calculated this number from fiscal year 1996, the market value (recognizing investments at current value) is used to determine unfunded liability as a percentage.[11]

In terms of funding progress, two of the funds, the Laborers' and Forest Preserve Funds, are negative in 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. During the past year, the Park District, Teachers', and Municipal funds continue to improve their ability to service debt. Although the indicator is now a negative percentage for the Teachers' Fund, this data point is not of concern. In 1997, the smoothed market value of the fund is such that the funds unfunded liability is negligible, the fund is overfunded by $16 million. As with their book values, the Firemen's and Policemen's Funds indicators remain significantly high resulting from unfunded liabilities. However, the last four years indicate that both of these funds have shown significant progress toward decreasing their underfunded liabilities.

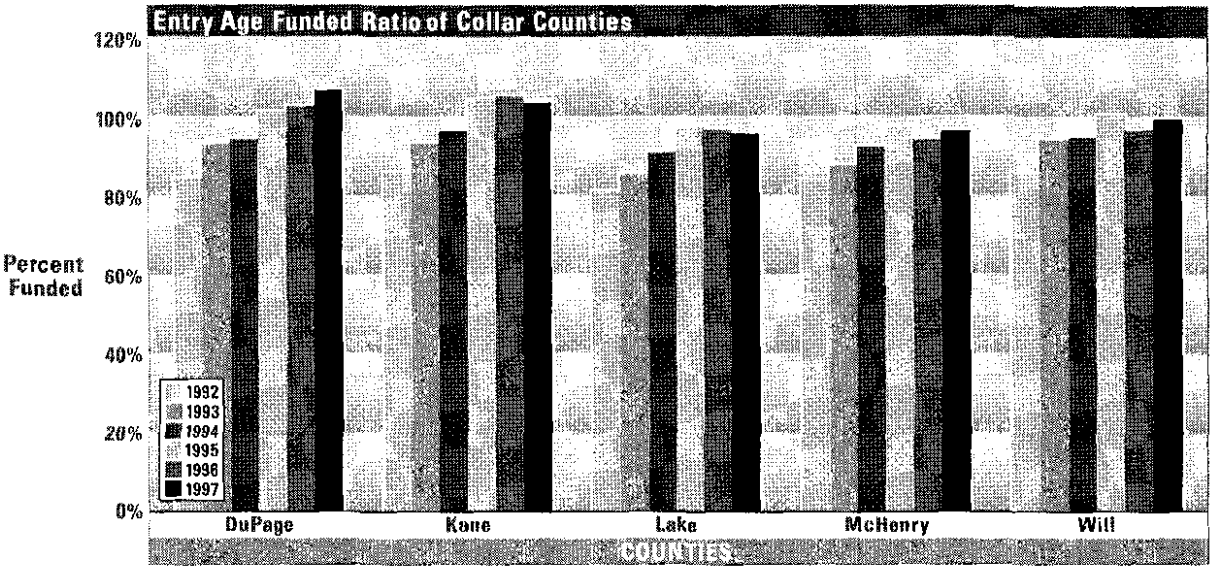
11 Once six years of data has been generated, The Civic Federation will use smoothed market value in calculating this indicator.

Collar Counties

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

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

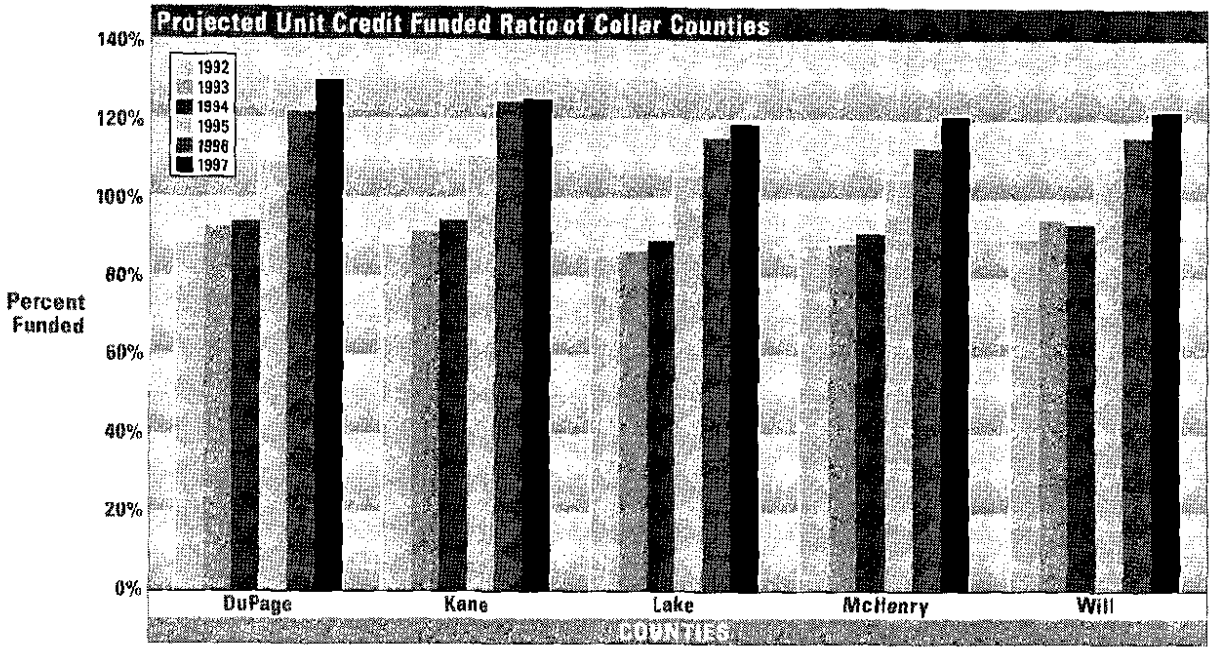
Unlike Cook County, these counties do not have their own self-contained pension funds. Rather, they are all part of the Illinois Municipal Retirement Fund (IMRF). Even though they are part of this larger pool, the funds have their own funded ratios. Each of these funds has assets based on an employer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



* Values from 1995 and 1996 are based on market value rather than book value.

In terms of funded ratios measured using Entry Age, funded ratios in 2 of the 5 counties (Lake and Kane) decreased in 1997.[12] One reason for this decrease in funded ratios is the increase in actuarial liability resulting from recent higher-than-expected salary increases experienced in Kane County. The other 3 funds, DuPage, McHenry, and Will, saw minimal increases. As with 1995 and 1996, 1997 funded ratios are based on market rather than the book value of assets.

12 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.



* Values from 1995 and 1996 are based on market value rather than book value.

When the five collar county funds are compared based on Projected Unit, all five of the funds are well above 100 percent funded, based on market value. Each of the funds' funded ratios increased by approximately 15 percent when market values are used rather than book values for assets.

Recommendations

1. The Civic Federation agrees with the recent action (P.A. 90-766) by the Illinois General Assembly to decrease the statutory multiple of the Municipal and Laborers's Funds.
2. The Civic Federation has significant concerns with recent increases in a number of the liabilities of the local funds in this study. Future decisions such as increasing benefits that increase liabilities must also contain funding mechanisms that guarantee the funding of those liabilities over time. If such mechanisms cannot be determined without increasing the burden on the taxpayer, then the liabilities should not be increased.
3. Policymakers should view recent actuarial reports of the pension funds with caution. Much of the gains realized in these reports may be the result of a change in reporting methodology, rather than financial windfalls as a result of investment or funding strategies.

Sources

1. *Laborers' & Retirement Board Employees' Annuity and Benefit Fund of Chicago, Actuarial Statement,* December 31, 1997, Donald F. Campbell Consulting Actuaries.
2. *Firemen's Annuity and Benefit Fund of Chicago, Actuarial Statement,* December 31, 1997, Donald F. Campbell Consulting Actuaries.
3. *Metropolitan Water Reclamation District Retirement Fund, Actuarial Statement,* December 31, 1997, Donald F. Campbell Consulting Actuaries.
4. *Public School Teachers' Pension and Retirement Fund, 102nd Comprehensive Annual Report,* August 31, 1997, Goldstein & Associates Consulting Actuaries.
5. *Park Employees' & Retirement Board Employees' Annuity and Benefit Fund,* June 30, 1997, Goldstein & Associates Consulting Actuaries.
6. *Policemen's Annuity and Benefit Fund of Chicago, Illinois,* December 31, 1997, The Wyatt Company Consulting Actuaries.
7. *Municipal Employees' Annuity and Benefit Fund of Chicago, Actuarial Statement,* December 31, 1997, Donald F. Campbell Consulting Actuaries.
8. *County Employees' and Officers' Annuity and Benefit Fund of Cook County, Actuarial Statement,* December 31, 1997, Donald F. Campbell Consulting Actuaries.
9. *Forest Preserve District Employees' Annuity and Benefit Fund of Cook County, Actuarial Statement,* December 31, 1997, Donald F. Campbell Consulting Actuaries.
10. *Illinois Municipal Retirement Fund, Prepared Calculations.*

Appendix A: Fiscal Year 1997 Pension Fund Data with Comparable 1996 Year End Totals (in thousands of dollars)

Pension Fund	Annual Yield Cost[1]	Annual Yield Cost[2]	Annual Yield Market[1]	Annual Yield Market[2]	Total Income Cost	Total Outlays	Year-End Assets Cost[3]	Actuarial Asset Value	Accrued Liability	1997 Percent Funded[4]	1996 Percent Funded[4]
Laborer	14.38%	14.72%	17.91%	18.21%	$190,448	$61,233	$1,204,439	$1,328,086	$1,040,651	127.62%	125.16%
Forest	11.10%	11.47%	17.32%	17.64%	$17,645	$5,478	$112,629	$123,397	$121,555	101.52%	107.18%
Cook	11.95%	12.19%	16.94%	17.15%	$637,266	$163,971	$3,676,805	$4,002,726	$4,426,784	90.42%	97.57%
MWRD	10.17%	10.43%	15.39%	15.62%	$121,159	$50,295	$824,801	$894,546	$1,063,733	84.09%	92.42%
Park	12.11%	12.48%	19.01%	19.33%	$72,037	$45,113	$470,789	$513,807	$549,561	93.49%	90.18%
Teacher	10.51%	10.75%	23.42%	23.61%	$809,944	$395,150	$6,220,127	$7,264,692	$7,248,110	100.23%	94.00%
Municipal	11.37%	11.79%	18.58%	18.91%	$660,216	$293,248	$3,853,467	$4,467,101	$5,259,125	84.94%	86.57%
Police	10.06%	10.34%	24.80%	25.03%	$426,028	$239,803	$2,684,562	$2,896,754	$4,609,168	62.85%	59.53%
Firemen	18.25%	18.78%	19.14%	19.59%	$216,936	$113,997	$856,110	$878,313	$1,640,021	53.65%	53.65%
1997	11.45%	11.75%	20.54%	20.79%	$3,151,679	$1,368,285	$19,903,729	$22,469,423	$25,958,708	86.56%	85.09%
1996	8.27%	8.54%			$2,246,871	$1,222,635	$16,201,733	$19,873,610	$21,899,108		

Notes:

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

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

(3) Assets determined at Book 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.

(Entry) = Entry Age Normal

(Unit) = Unit Credit

Source: Information derived from pension funds' 1997 Actuarial Statements and Annual Reports.

Appendix B: Comparison of Funded Ratios: 1992–1997 Market vs. Book[1]

Pension Fund	Valuation Method	1992	1993	1994	1995	1996	1997[2]
Fire	Market	52.10%	54.63%	47.66%	53.00%	56.12%	59.65%
	Book	47.10%	47.90%	45.63%	46.06%	47.77%	52.20%
Police	Market	58.48%	60.02%	55.80%	64.79%	65.51%	62.85%
	Book	53.99%	52.41%	51.28%	51.59%	57.18%	58.24%
Municipal	Market	75.54%	76.27%	71.69%	84.36%	92.65%	84.94%
	Book	69.86%	69.91%	68.96%	71.80%	77.15%	73.27%
Teacher	Market	88.99%	91.72%	88.81%	95.34%	96.68%	100.23%
	Book	82.44%	78.89%	81.73%	80.88%	83.53%	85.82%
Park	Market	88.77%	87.55%	81.37%	89.47%	92.78%	93.49%
	Book	83.92%	79.85%	79.98%	82.40%	84.59%	85.67%
MWRD	Market	88.06%	89.62%	80.94%	91.33%	93.19%	84.09%
	Book	81.81%	82.52%	80.84%	82.19%	86.10%	77.54%
County	Market	95.78%	95.21%	86.73%	100.07%	101.35%	90.42%
	Book	89.86%	90.06%	87.05%	90.01%	91.25%	83.06%
Laborer	Market	112.40%	111.38%	105.66%	124.04%	128.14%	127.62%
	Book	102.61%	102.90%	104.49%	109.96%	114.74%	115.74%
Forest	Market	111.64%	107.84%	97.10%	110.51%	111.28%	101.52%
	Book	104.16%	100.23%	97.79%	99.34%	99.57%	92.66%

1 Market and Book Funded Ratios are calculated using Entry Age liability figures.

2 Market is calculated using Smoothed Market Values for 1997. All other years, Market is the Market Value.