



Officers

Barbara Stewart, Chairman Sarah Garvey, Vice Chairman George Lofton, Vice Chairman Thomas McNulty, Vice Chairman Joseph B. Starshak, Treasurer Laurence J. Msall, President

Board of Directors Catherine M. Adduci* Bridget M. Anderson* A.G. Anglum* Adrienne Archia* Murray E. Ascher* Alicia Berg Abel E. Berland 🌣 Brian A. Bernardoni Roger Bickel Aileen Blake* Douglas H. Cameron Whitney Carlisle Richard A. Ciccarone * Jerry Cizek 🌣 Elizabeth Gallagher Coolidge Mark Davis* Amy Anderson Day Kevork Derderian 🌣 Julian C. D'Esposito Martin L. Eisenberg* Brian D. Fabes Timothy J. Faerber Timothy Fair Theresa M. Fredrick Stephen Friedman Charles R. Gardner * Carol W. Garnant 🌣 Anthony Gedeller Judith A. Gold* Steven Gouletas Patrick Hagan Philip Hale Albert C. Hanna Bruce T. Hopple Margaret A. Houlihan Lorna Brett Howard Thomas J. Klutznick James Kranjc* Thomas E. Livingston Michael A. Lovett William Mack* Glenn Mazade Thomas McCracken Susan McKeever Eileen Mitchell* Fred H. Montgomery* Timothy E. Moran Monica M. Mueller Michael E. Murphy 🌣 Bert Nuehring* Michael E. O'Brien Holly O'Connor Gregory O'Leary William Paparella Robert Pasin Kathleen Pasulka-Brown Dorice Pepin Donovan Pepper John H. Peterson Erika Poethig Alexander I. Rorke Scott Saef 🌣 John Sciaccotta James E. Spiotto* Caryn Stancik Theodore M. Swain* Kent A. Swanson Thomas C. Vanden Berk Robert Vihon* John F. Ward, Jr. Jerrold Wolf Charles J. Wooding

* Executive Committee

Begin Past Chairmen's Council

Philip Zinn*

LOCAL GOVERNMENT PENSIONS TAKE ANOTHER DIVE Civic Federation Finds Funding Deficit Quadrupled in Ten Years

Today the Civic Federation released an analysis which finds across-the-board increases in pension deficits for the ten major local government pension funds in northeastern Illinois for FY2006. Collective unfunded liabilities for the funds reached \$18.7 billion, up from \$4.1 billion in FY1997, with taxpayers ultimately on the hook to cover those liabilities. The four City of Chicago pension funds alone account for over half of the deficit.

The funded ratios for each of the ten pensions analyzed fell in FY2006, the most recent year for which comparable data are available. A funded ratio measures whether a pension fund has enough assets on hand to meet promises made to retirees. Two of the lowest funded ratios were attached to the Chicago Police and Fire funds, which slipped to a mere 49.3% and 40.4%, respectively. Every other fund, except the Chicago Laborers, had funding ratios well below the 90% level widely considered to be healthy for government pensions.

"With every passing year Chicago-area governments' pension deficits become more unmanageable," said Laurence Msall, president of the Civic Federation. "Half of the pension funds we examined have funding shortfalls that are several times larger than what the government spends on payroll for its employees. Immediate steps must be taken to reduce future liabilities and increase funding levels before pension pressures cause full-blown fiscal crises, like they did with the CTA."

Although much attention is usually focused on the funding side of the pension equation, it is equally important to focus on growth in liabilities. An increase in funding without a concomitant effort to control the rate of increase of pension liabilities will not solve a government's pension problem. Substantial changes must be made to pension plans in terms of both benefits provided *and* contributions made; the CTA's recent pension reforms provide a good model for such improvements. The Civic Federation's analysis provides numerous and detailed recommendations as to how governments can work with the General Assembly and unions to improve the financial health of the pension funds and address the major causes of funding decline.

- Prohibit benefit enhancements, a major source of increased pension liabilities, unless a retirement fund is over 90% funded.
- Create a "two-tiered" retirement system in which new hires receive reduced benefits, such as an increased retirement age or lower maximum annuity.
- Reduce new hires' annuity increases to the lesser of the rate of inflation or 3%.
- Require employer contributions to relate to funding levels by mandating additional contributions when the funding ratio drops below 90%.

The Civic Federation's annual pensions report not only provides detailed funding data and recommendations, but also serves as a primer on public employee pensions, explaining often arcane terminology and rendering a complicated subject comprehensible to the public and government officials alike. This year's report has been expanded to include more data and information on retiree health care plans and how they are funded. The full report is now available at www.civicfed.org.

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.



Status of Local Pension Funding Fiscal Year 2006

An Evaluation of Ten Local Government Employee Pension Funds in Cook County

> Prepared by The Civic Federation February 4, 2008

* * * * * * * *

In 1894, a group led by several of Chicago's most prominent citizens—including Jane Addams, Bertha Palmer and Lyman J. Gage—coalesced around a serious issue: the need to address deep concerns about the city's economic, political and moral climate at the end of the 19th century. The resulting organization, called The Civic Federation, evolved during the 20th century to become a leading advocate for governmental fiscal responsibility and an effective champion of rational tax policy. The work of the Federation continues to evolve in the 21st century as a greater emphasis is placed on working with government officials to improve the efficiency, effectiveness and accountability of Chicago-area governments.

Today, The Civic Federation remains true to the non-partisan mission established by its founding members. That mission is to work with Chicago area governmental bodies to help them reduce their costs and improve the quality of government services by:

- Promoting opportunities to reform local tax structures;
- Guarding against wasteful expenditure of public funds; and
- Serving as a technical resource to public officials and opinion leaders through non-partisan tax and fiscal research.

Since 1996, the Federation has produced an annual survey of the nine major local government employee pension funds in Cook County. In 2006, we added a tenth fund, the Retirement Plan for Chicago Transit Authority Employees.

This report is intended to provide the lawmakers, pension trustees, and the public with the information they need to make informed decisions regarding these important matters of local government finance.

Laurence Msall President

* * * * * * * *

TABLE OF CONTENTS

EXECUTIVE SUMMARY	4
PUBLIC EMPLOYEE PENSION FUND OVERVIEW	5
Funds Included in Analysis	
ACTIVE EMPLOYEES AND BENEFICIARIES	6
EVALUATING PENSION FUND STATUS	8
PENSION FUND STATUS INDICATORS	8
Funded Ratio	
Unfunded Liabilities	
Investment Rate of Return	
Different Rate of Return for OPEB Benefits	
Sustained Investment Losses or Gains.	
Benefit Enhancements	
Changes to Actuarial Assumptions and Methods	
Employer and Employee Contributions	
SCOPE OF REPORT	16
FUNDED RATIOS: POLICY CONSIDERATIONS	17
FUNDED RATIO TRIGGERS FOR ADDITIONAL CONTRIBUTIONS	
Chicago Teachers' Retirement Fund Additional Contributions	
Chicago Transit Authority 90% Required Ratio	19
ASSETS AND LIABILITIES OF LOCAL PUBLIC PENSION FUNDS	20
ANNUITANT HEALTH INSURANCE BENEFITS (OTHER POST EMPLOYMENT BENEFITS)	23
Government Only Subsidy: MWRD and Park District	24
Pension Fund Only Subsidy: Cook County, Forest Preserve, CTA, Teachers	
Combined Government and Pension Fund Subsidy: City of Chicago Pension Funds	
INVESTMENT RATE OF RETURN OF LOCAL PUBLIC PENSION FUNDS	26
HISTORICAL TRENDS	27
REVENUES OF LOCAL PUBLIC PENSION FUNDS	29
EMPLOYEE AND EMPLOYER CONTRIBUTIONS	30
SHORTFALL IN EMPLOYER CONTRIBUTIONS	
EXPENDITURES OF LOCAL PUBLIC PENSION FUNDS	32
FUNDED RATIOS OF LOCAL PUBLIC PENSION FUNDS	34
ACTUARIAL VALUE OF ASSETS	3/1
MARKET VALUE OF ASSETS	
UNFUNDED ACTUARIAL LIABILITIES OF LOCAL PUBLIC PENSION FUNDS	36
CIVIC FEDERATION PENSION MANAGEMENT RECOMMENDATIONS	
LINK BENEFIT ENHANCEMENTS FOR HEALTHY FUNDS TO FULL FUNDING OF ENHANCEMENTS	
LIMIT ANNUITY INCREASES FOR NEW HIRES AT THE LESSER OF 3% OR CPI	
REQUIRE EMPLOYER CONTRIBUTIONS TO RELATE TO FUNDING LEVELS	
REFORM PENSION BOARDS OF TRUSTEES TO BALANCE STAKEHOLDER INTERESTS, SAFEGUARD ASSETS	
REQUIRE CTA PENSION FUND TO REPORT TO THE ILLINOIS DEPARTMENT OF FINANCIAL AND PROFESSIONAL REGULATION	
APPENDIX A: GLOSSARY	43
APPENDIX B: REVENUE AND EXPENDITURE CALCULATIONS	46
APPENDIX C: SOURCES FOR FY2006	
APPENDIX D: CTA PENSION REFORM IN PUBLIC ACT 95-0708	
AFFEMDIA D: CTA PENSIUM REFURIM IN PUBLIC ACT 75-0/08	50

EXECUTIVE SUMMARY

The Civic Federation recently concluded an analysis of the fiscal year 2006 actuarial valuation reports and financial statements of ten major local government employee pension funds in Cook County. The funds analyzed in our report include the plans for the City of Chicago, Chicago Park District, Chicago Public Schools, Cook County, Cook County Forest Preserve District, Metropolitan Water Reclamation District, and the Chicago Transit Authority.

<u>Ratio of Active Employees to Beneficiaries</u>: Between FY1997 and FY2006, the ratio of total active employees to beneficiaries for the ten funds combined has gradually dropped from 1.79 actives per beneficiary to 1.37.

<u>Assets and Liabilities</u>: Combined, the ten pension funds had approximately \$53.6 billion in accrued liabilities. The funds' assets had an actuarial value of \$34.9 billion and a market value of \$36.4 billion.

<u>Unfunded Liabilities</u>: Between FY1997 and FY2006, aggregate unfunded liabilities for the ten funds more than quadrupled, jumping from \$4.1 billion to **\$18.7 billion**.

<u>Investment Rate of Return</u>: The average rate of return for those funds with a January 1 to December 31 fiscal year was 11.8%, up from 7.5% in FY2005. The average rate of return for funds using a July 1 to June 30 fiscal year was 9.2%, down from 11.8% in FY2005.

Revenues and Expenditures: Investment income represented 72.7%, or \$3.8 billion, of the \$5.3 billion that constituted the ten funds' aggregate income. Employee and employer contributions represented 11.6% and 15.4% of total income, respectively. Pension benefit payments represented 86.9%, or \$2.7 billion, of the \$3.1 billion in total fund expenditures.

<u>Funded Ratios</u>: Each fund's actuarial funding ratio fell in FY2006. The actuarial funded ratio for the aggregate of all ten funds' assets and liabilities was 65.1%, down from 67.2% in FY2005. The CTA Fund's funded ratio has fallen to 25.2% in FY2006. The next lowest FY2006 funded ratios are the Fire Fund at 40.4%, and the Police Fund at 49.3%.

Civic Federation Pension Management Recommendations

Local governments must take immediate action to slow the downward spiral of pension underfunding by controlling factors which lead to increases in liabilities and shortfalls in assets. We urge local governments and pension funds to proactively seek the following changes through state legislation:

- Prohibit benefit enhancements unless the plan is over 90% funded;
- Grant benefit enhancements for healthy plans only if the enhancements are fully funded by increased contributions;
- Consider reducing benefits for new employees, thus reducing liabilities on pension plans that have become unaffordable;
- Limit annuity cost of living increases to the lesser of 3% or inflation for new hires;
- Require employer contributions to relate to funding levels such that additional contributions are required when the funded ratio drops below 90%;
- Consider adopting the funding model of the Illinois Municipal Retirement Fund (funding at the actuarially required contribution level); at a minimum, adjust the property tax multiple at regular intervals of three to five years to reflect the actuarially determined funding needs of the plan;
- Reform the governance of pension boards of trustees so that their composition better balances stakeholder interests and safeguards assets; and
- Require the CTA pension fund to report to the Illinois Department of Financial and Professional Regulation, as do other local government pension funds, in addition to reporting to the Auditor General per Public Act 95-0708.

PUBLIC EMPLOYEE PENSION FUND OVERVIEW

All public pension plans surveyed in this report are defined benefit plans. 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 investment earnings) are insufficient to support the benefits (including health and survivor's benefits), the former employer is required to pay the difference.

By contrast, in a defined contribution plan, the employee and employer contribute fixed amounts. The retiree's annuity is based upon the total amount contributed to the plan over the employee's tenure. In general, the employer's liability ends upon the employee's retirement, apart from ancillary health benefits. Two common examples of defined contribution plans are 401(k) or 403(b) plans. These designations refer to the governing sections of the federal tax code. Some public employee funds in the United States are now "hybrid" plans, offering a combined defined benefit and defined contribution plan to employees.

Funds Included in Analysis

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

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

In addition, six other local government pension funds are analyzed in this report: 1

- County Employees' and Officers' Annuity and Benefit Fund of Cook County
- Forest Preserve District Employees' Annuity and Benefit Fund of Cook County²
- The Metropolitan Water Reclamation District Retirement Fund
- Retirement Plan for Chicago Transit Authority Employees
- Public School Teachers' Pension and Retirement Fund of Chicago³
- Park Employees' & Retirement Board Employees' Annuity and Benefit Fund⁴

Unless otherwise noted, all fund data in this report is taken from the actuarial valuations and financial statements of the funds, as listed in the Sources on page 48. Specific page number references for revenues and expenditures are listed in Appendix A on page 46.

¹ The term "local government" is used here broadly and includes the Chicago Transit Authority, an Illinois municipal corporation. The seven governments and ten funds analyzed in this report were created by Acts of the Illinois General Assembly.

The funds of Cook County and the Cook County Forest Preserve District are governed by the same pension board.

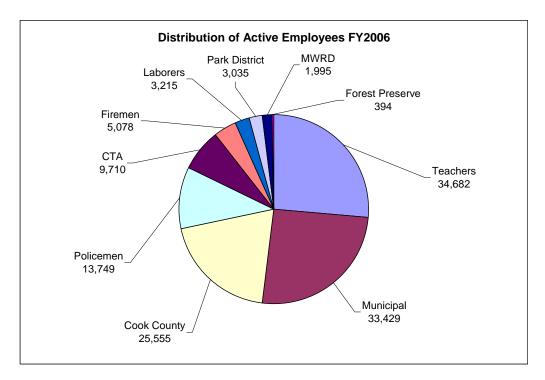
³The Chicago Board of Education enrolls teachers in the Public School Teachers' Pension and Retirement Fund of Chicago. All other employees of the Board of Education are enrolled in the City of Chicago's Municipal Employees' Annuity and Benefit

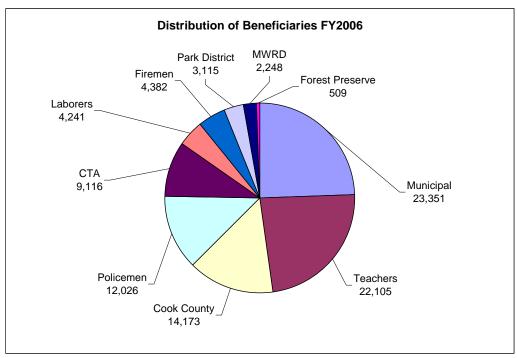
⁴The fiscal year of the Park Employees' and the Public School Teachers' pension funds is July 1-June 30. The other eight funds use a January 1 – December 31 fiscal year.

Active Employees and Beneficiaries

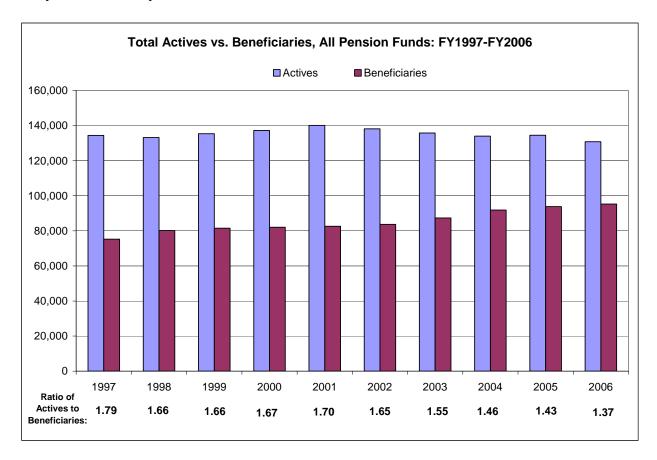
The ten pension funds reviewed in this report collectively covered 130,842 public employees and 95,266 beneficiaries in FY2006.

The three largest funds -- Public School Teachers' Pension and Retirement Fund of Chicago, Municipal Employees' Annuity and Benefit Fund of Chicago, and County Employees' and Officers' Annuity and Benefit Fund of Cook County -- accounted for 71.6% of the active employees covered by these plans and 62.6% of beneficiaries.





The ratio of total active employees to beneficiaries has gradually dropped from 1.79 actives for every one beneficiary in FY1997 to 1.37 in FY2006.



In FY2006 the Cook County Fund had the highest active-to-beneficiary ratio, at 1.80. The Laborers', MWRD, Forest Preserve, and Park District funds all had *more* beneficiaries than actives in FY2006. For most funds, a decline in the ratio results from personnel cuts or early retirement initiatives. These measures simultaneously reduce the number of active employees and increase beneficiaries, which can create fiscal stress for the fund because it means there are less employee contributions and more annuity payments.

	Ratio of Active Employees to Beneficiaries, by Fund: FY1997-FY2006											
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006		
Fire	1.13	1.10	1.07	1.06	1.13	1.13	1.14	1.12	1.15	1.16		
Police	1.36	1.34	1.31	1.28	1.24	1.21	1.20	1.15	1.12	1.14		
Municipal	1.87	1.58	1.72	1.74	1.78	1.72	1.68	1.42	1.44	1.43		
Laborers	0.95	0.85	0.90	0.97	0.99	0.92	0.90	0.71	0.73	0.76		
MWRD	0.98	1.00	0.99	0.97	0.99	0.95	0.94	0.93	0.91	0.89		
Cook County	2.82	2.41	2.40	2.41	2.35	2.33	1.87	1.88	1.85	1.80		
Forest Preserve	2.44	2.16	2.19	2.31	1.80	1.52	0.78	0.70	0.73	0.77		
CTA	1.41	1.23	1.15	1.19	1.25	1.25	1.24	1.21	1.18	1.07		
Teachers	2.12	2.19	2.13	2.12	2.18	2.09	1.97	1.94	1.79	1.57		
Park District	1.25	1.34	1.09	1.12	1.06	1.09	1.03	0.87	0.90	0.97		

EVALUATING PENSION FUND STATUS

The following section describes the primary indicators of pension fund health used in this report.

Pension Fund Status Indicators

Pension fund status indicators show how well a pension fund is meeting its goal of accruing sufficient assets to cover its liabilities. Ideally, a pension fund should hold exactly enough assets to cover all of its current and prospective liabilities. Current liabilities are benefits owed to retirees in the current year, and include pension payments as well as any other retirement benefits provided by the plan, such as retiree health insurance. Prospective liabilities are all of the future retirement benefits promised to past and current employees and their dependents. A pension fund is considered 100% funded when its asset level equals the actuarially determined amount required to meet all accrued current and prospective liabilities. A funding level under 100% means that a fund's current assets are less than the portion of the present value of future benefits that has been allocated for funding in prior years under the actuarial cost method.

Assets and liabilities are calculated using a number of actuarial assumptions. Liabilities are calculated using assumptions about such factors as salary levels, retirement age, and life expectancy. Assets can be reported by their current **market value**, which recognizes unrealized gains and losses immediately in the current year, but this measure is subject to significant market volatility and can be misleading because year-to-year variations typically average out over the life of the pension plan. Under Government Accounting Standards Board (GASB) Statement No. 25, assets of public pension plans may also be reported based on their **actuarial**, **or smoothed, market value**. The actuarial value typically smoothes the effects of short-term market volatility by recognizing deviations from expected returns over a period of three to five years. For example, one smoothing technique recognizes 20% of the difference between the expected (based on the assumed rate of return) and actual investment returns for each of the previous five years. Because such significant changes in reporting required by GASB 25 took effect in FY1997, the majority of trend data in this report begins with that year.

For the sake of comparability and consistency, this report uses only pension fund data that is calculated according to the requirements of GASB Statements. In addition to their GASB reporting, some pension funds also report results using assumptions and methods other than those required by GASB. For example, the 9% investment rate of return (or "discount rate") assumption for CTA pension fund is negotiated through collective bargaining and applies to both the pension and retiree health care obligations of the fund. However, GASB Statements 43 and 45 require a lower discount rate assumption for retiree healthcare benefits that are funded on a pay-as-you-go basis. The CTA pension fund actuaries therefore calculated two sets of results:

-

⁵ 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 recognizing unexpected gains or losses over a period of 3 to 5 years.

one according to the bargained assumptions and one according to GASB requirements. The data reported here reflect only the GASB results.

It is important to consider two critical factors when evaluating the status of pension funds. First, the status of a pension fund is in large part a function of the actuarial methods and assumptions made. Changes to assumptions based on demographic trends, plan experiences, or even a change in actuary can produce substantially different pictures of a fund's status.

Second, because pension financing is long-term in nature, pension fund status is best evaluated by examining multi-year trends, rather than a single year in isolation. Negative multi-year trends are cause for concern, and indicate a need for a change in funding strategy. A given indicator that is low, but has been stable for several years, should occasion a lesser degree of alarm than a once-healthy fund that has experienced precipitous decline in recent years.

The following three common indicators are used in this report:

Funded Ratio

The most basic indicator of pension fund status is its ratio of assets to liabilities, or "funded ratio". Usually this ratio is expressed in terms of actuarial values, as required by GASB 25. When a pension fund has enough assets to cover all its accrued liabilities, it is considered 100% funded. This does not mean that further contributions are no longer required, but rather that the plan is funded at the appropriate level on the date of valuation. A funding level under 100% means that a fund does not have sufficient assets to cover that portion of the present value of future benefits that has been allocated for funding in prior years under the actuarial cost method.

Some people claim that there is no real need for governments to achieve 100% funding. They argue that governments, unlike private corporations, are not at risk of dissolving and, therefore, can meet their obligations in perpetuity. However, public pensions should be funded sufficiently to prevent the *growth* of the unfunded liability. If the unfunded liability is growing and the plan has no practical strategy for reducing it, this is cause for serious concern.

The optimum situation for any pension fund is to be fully funded, with 100% of accrued liabilities covered by assets. There is no *official* industry standard or best practice for an acceptable funded ratio other than 100%. The Pension Protection Act of 2006 changed the federal laws that govern private sector pension funds, requiring private plans to meet a 100% funding target, up from 90% previously under the Employee Retirement Income Security Act (ERISA). Plans that are less than 100% funded must amortize their unfunded liability over seven years. Plans that are less than 80% funded are considered "at-risk," and must make additional contributions to boost their funded ratio.⁶

The Illinois General Assembly has set 90% as a target funded ratio for state pension funds, stating "90% is now the generally-recognized norm throughout the nation for public employee

.

⁶ House Committee on Education & the Workforce, "Bill Summary – Pension Protection Act (H.R. 2830): Strengthening Retirement Security, Protecting Taxpayers by Fixing Outdated Worker Pension Laws" (March 8, 2006) http://www.house.gov/ed_workforce/issues/109th/workforce/pension/ppasummarylong.htm. See also Deloitte, "Securing Retirement: An Overview of the Pension Protection Act of 2006," (August 3, 2006) http://www.deloitte.com/dtt/cda/doc/content/us_gre_securingretirement_310806.pdf.

retirement systems that are considered to be financially secure and funded in an appropriate and responsible manner" (40 ILCS 5/1-103.3). Similarly, the Chicago Teachers' fund requires additional employer contributions when the ratio falls below 90% (40 ILCS 5/17-127ff.). Funded ratio targets are discussed in more detail beginning on page 17 of this report.

Unfunded Liabilities

Unfunded actuarial liabilities are those liabilities, both current and prospective, not covered by actuarial assets. Unfunded liability is calculated by subtracting the actuarial value of assets from the accrued actuarial liability of a fund.

One of the functions of this indicator is to measure a fund's ability to bring assets in line with liabilities. Healthy funds are ones that are able to reduce their unfunded liabilities over time; substantial and sustained increases in unfunded liabilities are cause for concern.

It can be useful to measure unfunded liability as a percentage of payroll covered by the plan. This measurement expresses the unfunded liability in terms of current personnel expenditures and demonstrates the relative size of the unfunded liability. One of this indicator's functions is to measure a fund's ability to manage or make progress in reducing its unfunded liability. A gradual decrease in unfunded liability as a percent of covered payroll over time would indicate that a reasonable funding strategy is being pursued. If unfunded liability continues to increase as a percentage of covered payrolls, then a new funding strategy and a reduction in the level of benefits granted by the fund may need to be considered.

Investment Rate of Return

A pension fund invests the contributions of employers and employees in order to generate additional revenue over an extended period of time. Investment policies should be aligned with the fund's actuarial assumptions in order to achieve appropriate risk and yield levels for the plan's portfolio. The annual rate of return on investments is an important indicator of the strength of a fund's investment strategy. Low or negative investment income usually causes a significant drop in pension fund assets, although this effect is smoothed over time under the actuarial method of calculating assets.

Most of the local funds assume an 8% average annual rate of return on their pension investments for actuarial purposes. A fund's actual rate of return for a given year can be compared to its assumed rate of return. Rates of return for various funds can also be compared to each other, or to specific market indices and benchmarks.

The assumed investment rate of return plays an important role in the calculation of actuarial assets and liabilities. It is used to calculate the "smoothed" value of assets (see page 8) as well as to discount the present value of projected future benefits. The discount rate has an inverse relationship to actuarial liabilities, such that a higher discount rate will result in lower liabilities. A higher assumed rate of return may be desirable because it minimizes liabilities, but it should remain realistic. The CTA pension fund's actuaries warn that the 9% assumed rate of return negotiated in collective bargaining is on the verge of being indefensibly high:

"An investment return assumption of nine percent will be difficult to achieve given current economic conditions and the Plan's current projected cash flow requirements. Based on the Plan's current asset allocation policy, capital market assumptions provided by the Plan's investment consultant, and without considering any liquidity constraints, the Fund only has a 27 percent likelihood of attaining a cumulative average return of nine

percent or better over the next 25 years. Such a low likelihood, combined with liquidity concerns in the near future, implies that a nine percent investment return assumption is an extremely aggressive assumption according to actuarial standards of practice. If the nine percent investment return assumption falls outside the range of reasonableness in subsequent years, as defined in the actuarial standards of practice, then the discount rate used to develop actuarial liabilities for GASB 25 reporting and GASB 27 expensing may need to be reduced. The investment rate of return of nine percent may no longer be defensible if the likelihood of reaching nine percent drops below 25 percent."

Different Rate of Return for OPEB Benefits

GASB Statements 43 and 45 require a lower discount rate assumption for retiree healthcare benefits that are funded on a pay-as-you-go basis rather than prefunded through a designated trust fund. The following table shows the assumed rates of return for the pension benefits and Other Post Employment Benefits (primarily retiree healthcare) for the ten pension funds. None of the plans is currently setting aside investments to prefund OPEB benefits, so all of them use a lower OPEB rate of return. The MWRD has set up an irrevocable trust to prefund retiree health insurance, but this is provided directly by the MWRD government, not through its pension fund. Similarly, Park District retiree health benefits are provided directly by the Park District, not the pension fund. The Teachers' pension fund does reimburse retirees for up to \$65 million in OPEB costs annually, but will not be required to begin reporting OPEB liabilities until FY2007.

FY2006 Assum	FY2006 Assumed Investment Rate of Return									
Fund	Pension	OPEB								
Fire	8.00%	4.50%								
Police	8.00%	4.50%								
Municipal	8.00%	4.50%								
Laborers	8.00%	4.50%								
MWRD	7.75%	n/a								
Cook County	7.50%	5.00%								
Forest Preserve	7.50%	5.00%								
CTA	9.00%	5.00%								
Teachers	8.00%	n/a								
Park District	8.00%	n/a								

Causes of Pension Funding Status Change

The following are four major factors that influence a pension plan's funding status.

Sustained Investment Losses or Gains

Investment income is the primary driver of income for pension funds. It represented 72.7% of the total income for the ten funds combined in FY2006 (see page 30), and 66.7% of total revenues for the ten-year period between FY1997 and FY2006. While employee and employer

⁷ Retirement Plan for Chicago Transit Authority Employees, Actuarial Valuation as of January 1, 2007, p. 2.

⁸ GASB 43 takes effect for the pension plans of large governments (over \$100 million in annual revenues) for the fiscal year beginning after December 15, 2005. For the Teachers' fund, that will be fiscal year 2007, which began July 1, 2006. However, the Chicago Public Schools commissioned a stand alone actuarial analysis of its OPEB liabilities and early implemented GASB 45 in its FY2006 Comprehensive Annual Financial Report.

contribution amounts are relatively stable from year to year, investment income can fluctuate widely. When rates of return are positive, investment income usually represents the majority of a fund's total income. Multi-year investment gains or losses that deviate substantially from the assumed rate of return (often 8%) therefore have a major impact on fund assets.

The strong investment market of the late 1990s produced several years of significant gains for pension funds. Likewise, the market decline of 2000-2002 created major losses for the funds. The effects of these gains and losses are felt for several years beyond their market occurrence due to the actuarial smoothing of assets.

For example, the MWRD fund experienced an overall investment return of roughly 9.6% in FY2006, above its actuarially assumed rate of 7.75%. However, when this return is calculated based on the actuarially smoothed value of assets over 5 years, it drops to 6.98%, increasing the unfunded liability by \$8.9 million for FY2006.⁹

Benefit Enhancements

Enhancements to retirement benefits can take various forms, such as an increase in the annuity formula, reduction in total years of service required for maximum annuity, or a reduction in retirement age for maximum annuity. Specific early retirement initiatives, designed to encourage older employees to retire early, can also be considered benefit enhancements, although they are typically available only for a limited time and sometimes require additional employer or employee contributions.

Benefit enhancements increase the promised payments that will be made to beneficiaries either in the form of pensions or other post retirement benefits, and therefore increase a pension fund's liabilities. Often those enhancements are granted in exchange for short-term employee concessions on salaries or health insurance. Offering benefit enhancements can seem like an attractive option to employers, since achieving short-term savings on other employee costs often feels like a more pressing need than controlling long-term liabilities. Benefit enhancements are part of the overall economic package offered by employers to employees and can be negotiated inside the scope of collective bargaining or outside of it. For the CTA, pension plan changes have been made exclusively through the collective bargaining process. ¹⁰ For the other nine funds analyzed in this report, plan changes that may or may not have been negotiated by labor and management must also be passed by the Illinois General Assembly and codified in state statute. Labor and management are also free to lobby the General Assembly for changes independently.

For example, Public Act 94-0719, effective January 1 2005, doubled the automatic annual cost of living increase for Chicago Police retirees born between 1950 and 1954 from 1.5% to 3.0%. Fund actuaries estimate that this change increased the plan's actuarial liability by \$139.6 million in FY2005. Retroactive pay increases also affect pension costs because higher salaries

_

⁹ Metropolitan Water Reclamation District Retirement Fund, *Comprehensive Annual Financial Report for Fiscal Year Ending December 31, 2006*, p. 39 and Metropolitan Water Reclamation District Retirement Fund *Actuarial Valuation as of December 31, 2006*, p. 13.

¹⁰ This was true until the January 18, 2008 passage of Public Act 95-0708 codified CTA pension benefits in state statute.

¹¹ Policemen's Annuity and Benefit Fund of Chicago, *Actuarial Valuation Report for the Year Ending December 31, 2005*, pp. 9 and 15.

generate higher annuities. Retroactive pay increases awarded to Chicago firefighters created an actuarial loss of \$105.5 million in FY2006. 12

Once granted, pension benefit enhancements cannot be diminished, according to the Constitution of the State of Illinois. The only way for an employer to reduce retirement benefits in order to control liabilities is to reduce benefits for new employees. This is commonly called a "two-tiered" system, in which new and existing employees are promised different retirement benefits.

Changes to Actuarial Assumptions and Methods

Actuarial assumptions and methods can change for various reasons, including demographic trends, analysis of recent plan experiences, or new industry standards such as GASB requirements. There are a number of acceptable methods for computing a plan's assets, liabilities, and funding requirements. It is important to recognize that change from one method to another can produce a significant change in a fund's assets, liabilities, or funding requirements.

For example, in FY2004 the Cook County and Cook County Forest Preserve District pension plans changed actuaries. The new actuary used a different method for smoothing asset values than did the previous actuary. ¹⁴ The new actuary also analyzed the fund experience from 2000-2003 and subsequently made two significant assumption changes: 1) the interest rate assumption was changed from 8.0% to 7.5% per year; and 2) the salary increase assumption was changed from 5.5% to 5.0% per year. ¹⁵ The fund actuary estimates that using the old methods and assumptions, the Cook County FY2004 funded ratio would have been 69.5%, rather than 70.9%. Similarly, the Forest Preserve FY2004 funded ratio would have been 73.1%, rather than 76.0%. ¹⁶

In FY2005 the Cook County and Forest Preserve plans' actuary changed the methods used to calculate actuarial liabilities in order to more accurately model the liabilities of the Funds. These changes resulted in a decrease of \$729.6 million in unfunded liabilities for Cook County and a decrease of \$34.4 million in unfunded liabilities for the Forest Preserve. Without these changes, the FY2005 Cook County funded ratio would have been 70.3%, rather than 75.8%, and the Forest Preserve ratio would have been 75.0% rather than 86.9%.

Employer and Employee Contributions

For eight of the ten plans analyzed in this report, the basic employer contribution is set in state statute as a multiple of the total employee contribution made two years prior. The statute requires that the employer levy a property tax not to exceed the multiple amount. Employers

_

Constitution of the State of Illinois, Article XIII Section 5.

¹⁶ Estimates provided by Sandor Goldstein via e-mail to the Civic Federation, January 24, 2008.

¹² Firemen's Annuity and Benefit Fund of Chicago *Actuarial Valuation Report for the Year Ending December 31, 2006*, p. 7. ¹³ In Illinois, as in many states, pension benefits granted to public employees are guaranteed by the State Constitution.

 ¹⁴ The previous actuary used a 5-year smoothed average ratio of market to book value while the new actuary used a 5-year smoothing unexpected investment gains or losses (market value only), a more common method. County Employees' and Officers' Annuity and Benefit Fund of Cook County, *Actuarial Valuation as of December 31*, 2003, p. 69 and County Employees' and Officers' Annuity and Benefit Fund of Cook County, *Actuarial Valuation as of December 31*, 2004, pp. 7-8.
 ¹⁵ County Employees' and Officers' Annuity and Benefit Fund of Cook County, *Actuarial Valuation as of December 31*, 2004, p.

¹⁷ County Employees' and Officers' Annuity and Benefit Fund of Cook County, *Actuarial Valuation as of December 31*, 2005, pp. 13-14, and Forest Preserve District Employees' Annuity and Benefit Fund of Cook County, *Actuarial Valuation as of December 31*, 2005, pp. 13-14. The actuarial valuation does not describe exactly what methodological changes were made.

levy an amount that, when added to the revenue from the Personal Property Replacement Tax, equals the multiple amount. 18

Employer contributions to the Chicago Teachers' Fund are not based on a property tax levy or multiple. They usually consist of a lump sum from the State of Illinois (roughly \$65 million), as well as additional amounts from the State and the Chicago Board of Education when the funded ratio is below 90%. The employer contributions to the CTA Fund are set at a percentage of pay; the employer contributes 6% of employee compensation and employees contribute 3%, for a total of 9%. The CTA and its labor unions negotiated a pension reform package that doubles these contributions to 12% and 6%, respectively, effective January 18, 2008. 19

The following table lists the basic fund multiples and other employer contribution levels, not including special additions or subtractions specified in statute:

_

¹⁸ The Personal Property Replacement Tax (PPRT) is a corporate income tax, established when the Illinois General Assembly abolished all ad valorem personal property taxes on corporations in 1979. The State distributes PPRT revenues to local taxing districts according to a formula based partly on each district's share of personal property tax collection in 1976 or 1977. ¹⁹ The transit funding and pension reform package was made law on January 18, 2008, Public Act 95-0708. See Appendix D of this report for details of the reform package.

STAT	STATUTORILY REQUIRED EMPLOYER CONTRIBUTION MULTIPLES							
FUND	STATUTE	Required employer contribution: <u>multiple</u> of the employee contribution two years prior						
Fire	40 ILCS 5/6-165	2.26						
Police	40 ILCS 5/5-168	2.00						
Municipal	40 ILCS 5/8-173	1.25						
Laborers	40 ILCS 5/11-169	1.00						
MWRD	40 ILCS 5/13-503	2.19 , excluding employee contributions to optional additional benefits made after January 1, 2003, which are multiplied by 1.00						
Cook County	40 ILCS 5/9-169	1.54						
Forest Preserve	40 ILCS 5/10-107	1.30						
CTA	40 ILCS 5/22-101	12% of payroll ²⁰						
Teachers	40 ILCS 5/17-127 and 40 ILCS 5/17-129	State intends to pay amount equal to 20-30% of the contribution made to TRS.* State pays an additional amount equal to 0.544% of total teacher payroll, unless Fund was 90% or more funded (actuarial) in the previous fiscal year. Beginning 1999, the employer contributes an amount equal to 0.58% of each teacher's salary, to offset a portion of costs associated with P.A. 90-582, unless Fund was 90% or more funded (actuarial) in the previous fiscal year. When the Fund is less than 90% funded, the employer is also required to contribute an additional amount sufficient to bring the ratio to 90% by the year 2045.						
Park District	40 ILCS 5/12-149	1.10						

^{*} The State contribution has not kept pace with this 20-30% of TRS contribution guideline, but has remained flat at roughly \$65 million annually. See page 18 of this report.

These multiples are fixed, and except for the Teachers' fund, the employer is not permitted to reduce its contribution unless the funded ratio reaches 100%. There are sometimes exceptions to this rule, which must be approved by the General Assembly. For example, Public Act 93-0654 allowed the Chicago Park District to reduce its employer contribution by \$5 million in each of calendar years 2004 and 2005, although the District was not required to reduce its property tax levy equivalently. This created roughly a 50% reduction in the employer contributions for the Park District fund in FY2005 and FY2006.

Occasionally there are legislated requirements for additional employer contributions. For example, Public Act 90-766 required the City of Chicago to make additional contributions to the Fire and Police Funds for FY1999-FY2013 in order to reduce their unfunded liabilities. However, Public Act 93-0654 rescinded that requirement for FY2004-FY2013.

⁻

²⁰ Provisions of the CTA Retirement Plan were subject to collective bargaining between the CTA and Locals 241 and 208 of the Amalgamated Transit Union until January 18, 2008 when Public Act 95-0708 codified them in state statute.

GASB Statements 25 and 27 require that actuaries calculate an actuarially required annual employer contribution (ARC). The ARC is equal to the sum of (1) the employer's "normal cost" of retirement benefits earned by employees in the current year, and (2) the amount needed to amortize any existing unfunded accrued liability over a period of not more than 30 years.²¹ Sometimes the fund actuary will express the ARC as a multiple and compare it to the statutory multiple. For example, for the Fire fund's actuaries calculated that the actuarially required employer multiple for FY2007 is 5.61, instead of the statutory 2.26.²² The prior year's gap between the Fire fund's ARC multiple and the statutory multiple resulted in a \$68.6 million increase in the plan's unfunded liability for FY2006.²³

FY2007 Statutory Multiple for Employer Contribution vs. Actuarially Required Multiple							
	Actuarially Required Multiple (Normal Cost + UAAL Amortization)	Statutory Multiple					
Fire	5.61	2.26					
Police	4.95	2.00					
Municipal	3.02	1.25					
Laborers	1.64	1.00					
MWRD	3.40	2.19					
Cook County	2.50	1.54					
Forest Preserve	2.31	1.30					
Park District	1.89	1.10					

Source: Respective Pension Fund FY2006 Actuarial Valuations

In contrast to the Chicago-area public pension funds, all downstate firefighter funds, downstate police funds, and the Illinois Municipal Retirement Fund (IMRF) require employer funding at a level consistent with the ARC. The property taxes levied by these governments for pension purposes fluctuate according to the actuarial needs of the pension plans, not according to a fixed multiple of employee contributions. While funding at the ARC is fiscally responsible, it may require employer contributions that are more volatile and/or more expensive than a simple funding multiple.

Scope of Report

This report presents broad trends for the ten pension funds, often aggregating the results for all ten funds. It is designed to provide an overview of trends for these funds, not to examine the specific causes for changes in the status of individual funds. For such an analysis, readers should consult the Actuarial Valuation Reports and Financial Statements of the individual funds.

²¹ See The Civic Federation, "Pension Fund Actuarially Required Contributions (ARC): A Civic Federation Issue Brief," February 14, 2007 at http://www.civicfed.org/articles/civicfed_241.pdf. ²² The 5.61 multiple is based on the actuary's calculation of normal cost plus amortization of the unfunded liability over 30 years

at a level dollar amount. Firemen's Annuity and Benefit Fund of Chicago Actuarial Valuation Report for the Year Ending December 31, 2006, p. 14.
²³ Firemen's Annuity and Benefit Fund of Chicago Actuarial Valuation Report for the Year Ending December 31, 2006, p. 12.

FUNDED RATIOS: POLICY CONSIDERATIONS

One policy question inherent in an examination of pension funding is, "How should 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 they receive, since a disproportionate amount of their higher tax burden will be used to provide benefits to retirees. Pension benefits are constitutionally protected under Illinois law and therefore take precedence over 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 taxes paid and government services received than will future generations.

Some people believe that there is no real need to achieve 100% funding. They argue that governments, unlike private corporations, are not at risk of dissolving and, therefore, can meet their obligations in perpetuity. However, public pensions should be funded sufficiently to prevent the growth of the unfunded liability. If the unfunded liability is growing and the plan has no practical strategy for reducing it, this is cause for serious concern. As stated by Keith Brainard, the Research Director for the National Association of State Retirement Administrators: "More pertinent considerations with regard to funding a public pension plan may be whether: a) the amount needed to fund the benefit and amortize the unfunded liability is causing fiscal stress, and b) the plan's unfunded liability is diminishing, or there is a plan in place to reduce the unfunded liability."²⁴ An employer's inability or decision not to meet its actuarially required contribution due to fiscal stress indicates a potentially serious problem. In its recommendations to the Governor and General Assembly of Vermont, the Commission on Funding the Vermont State Teachers' Retirement System put it more bluntly: "While [insolvency] may seem somewhat far in the future, actuaries point out that the critical tipping point is not when assets run out or even decline, but when Governors and Legislatures no longer believe the required contributions are realistic and give up trying to fund the actuarially required contributions."²⁵ Insolvency is closer for some funds than for others. Prior to the passage of Public Act 94-0839, the CTA pension fund was expected to run out of money to pay retiree healthcare benefits in 2008²⁶ and become totally insolvent in 2013 if nothing was done to reduce benefits or increase contributions.²⁷ Public Act 94-0839 required increased contributions beginning in 2009 that would bring the funded ratio to 90% by the year 2058 (see page 19). The passage of Public Act 95-0708 established the funding sources required

Funded Ratio Triggers for Additional Contributions

Funded ratio is the core measure of a pension fund's health, and is used in the private sector to trigger increased funding requirements. The Pension Protection Act of 2006 changed the federal laws that govern private sector pension funds, requiring private plans to meet a 100% funding target, up from 90% previously under the Employee Retirement Income Security Act (ERISA). Plans that are less than 100% funded must make payments amortizing their unfunded liability

²⁴ Keith Brainard, *Public Fund Survey Summary of Finding for FY2004*, (National Association of State Retirement Administrators, September 2005), p. 1.

²⁵ Report of the Commission on Funding the Vermont State Teachers' Retirement System: Recommendations to the Governor and the General Assembly, November 2005, p.12.

²⁶ Retirement Plan for Chicago Transit Authority Employees, Actuarial Valuation as of January 1, 2007, p. 3.

²⁷ Retirement Plan for Chicago Transit Authority Employees, *Actuarial Valuation as of January 1, 2006*, Presentation by Gabriel Roeder Smith on September 28, 2006, p. 6.

over seven years. Plans that are less than 80% funded are considered "at-risk," and must make additional contributions to boost their funded ratio.²⁸

Similar triggers and target ratios currently apply to the Chicago Teachers Retirement Fund and the Chicago Transit Authority Retirement Fund, as described below.

Chicago Teachers' Retirement Fund Additional Contributions

The Illinois state statutes governing the Chicago Teachers' Retirement Fund require additional contributions when the plan's funded ratio falls below 90%. The Chicago Teachers' Retirement Fund regular annual employer contributions include roughly \$65 million in contributions by the State of Illinois and \$11 million from other sources (primarily federal government for grantfunded positions). When the ratio falls below 90%, the State must pay amounts equivalent to 0.544% of payroll to offset a portion of the cost of benefit enhancements enacted under Public Act 90-582, and Chicago Public Schools (CPS) must pay 0.58% of payroll for the same purpose. In addition, Public Act 89-15 requires that CPS' minimum contribution to the Teachers' Pension Fund shall be an amount determined to bring the total assets of the Fund up to 90% of the total actuarial liabilities by the end of FY2045. The required CPS contribution is calculated as a level percentage of payroll over the years through FY2045. The CPS required contribution is the total amount of the employer contribution less other employer contributions and additional state and CPS appropriations made under Public Act 90-582.

While a funded ratio of less than 90% triggers additional CPS contributions under both Public Act 90-582 and Public Act 89-15, the payments required under Public Act 89-15 are much more substantial because they require whatever amount is needed to bring the ratio to 90% by 2045. In FY2007, the required CPS contribution under Public Act 89-15 was \$69.4 million, up over 400% from the \$15.8 million required contribution in FY2006. It will nearly double again to \$120.6 million in FY2008 as the unfunded liabilities of the Teachers Pension Fund continue to rise and the funded ratio correspondingly falls.

CPS (Employer) Contribution to Teachers' Pension Fund for State FY2007 & FY2008								
	FY2007	FY2008						
1 Total Required Employer Contribution	\$ 167,245,000	\$ 227,319,000						
2 State Appropriations	\$ 65,000,000	\$ 65,000,000						
3 Additional State Appropriations (P.A. 90-582)	\$ 10,242,000	\$ 10,218,000						
4 Additional CPS Contribution (P.A. 90-582)	\$ 10,920,000	\$ 10,894,000						
5 Other Employer Contributions	\$ 11,663,000	\$ 20,646,000						
CPS Required Contribution (1-2-3-4-5) Under P.A. 89-15	\$ 69,420,000	\$ 120,561,000						

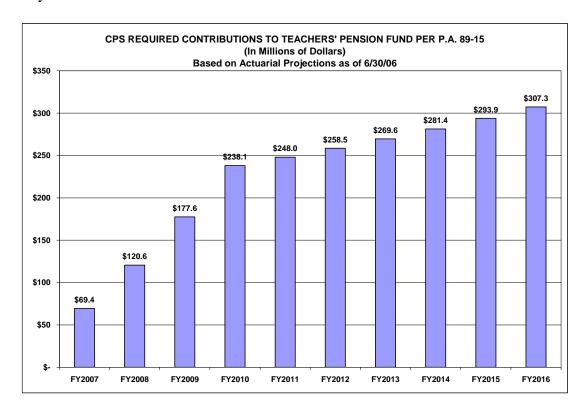
Source: FY2005 & FY2006 Actuarial Reports of the Chicago Teachers Pension Fund

The additional CPS contributions for Public Act 90-582 are projected to increase from \$10.9 million in FY2007 to \$43.2 million in FY2045, while the required CPS contributions under

_

²⁸ House Committee on Education & the Workforce, "Bill Summary – Pension Protection Act (H.R. 2830): Strengthening Retirement Security, Protecting Taxpayers by Fixing Outdated Worker Pension Laws" (March 8, 2006) http://www.house.gov/ed_workforce/issues/109th/workforce/pension/ppasummarylong.htm. See also Deloitte, "Securing Retirement: An Overview of the Pension Protection Act of 2006," (August 3, 2006) http://www.deloitte.com/dtt/cda/doc/content/us_gre_securingretirement_310806.pdf.

Public Act 89-15 will rise from \$69.4 million to \$1.1 billion over the same period.²⁹ The following exhibit shows the projected \$237.9 million increase in required contributions over the next ten years.



The Chicago Public Schools also annually appropriates 7% of its employees' regular salaries in order to pay the majority of the **employee contribution** to the Teachers' Pension Fund. ³⁰ Essentially, the District "picks up" 7% of the 9% required employee contribution for the retirement system.

Chicago Transit Authority 90% Required Ratio

The CTA Retirement Plan FY2006 funded ratio is 25.2%,³¹ and is projected to reach 0% in 2013 if nothing is done to boost assets or reduce liabilities. The fund's poor financial health is primarily the result of insufficient employer and employee contributions, early retirement programs, benefit increases, and dramatic increases in the cost of health care over the past twenty-six years.³²

Although there is no state statute mandating a funded ratio "trigger" for the CTA, the rapid decline of the plan's funded ratio in recent years led to new legislation requiring substantial increases in contributions going forward. Passed in the spring of 2006 as part of the FY2007 Budget Implementation Act, Public Act 94-0839 requires that beginning January 1, 2009 the

19

²⁹ Public School Teachers' Pension and Retirement Fund of Chicago, *Actuarial Valuation as of June 30, 2006*, pp. 17-18. ³⁰ *Chicago Public Schools FY2006 Budget*, p. 88.

³¹ This is the funded ratio calculated according to GASB requirements. See page 8 for an explanation of CTA's bargained assumptions versus GASB assumptions.

³² Retirement Plan for Chicago Transit Authority Employees *Basic Financial Statements and Management's Discussion and Analysis for the Year Ended December 31*, 2006, p. 6.

CTA and its employees make annual pension contributions sufficient to bring the funded ratio to 90% by 2058. The Act specifies that payments are to be made as a level percentage of payroll, and that post employment healthcare benefits administered through the pension fund are to be excluded from the actuarial calculations used to determine required contributions. The 50-year schedule and 90% funding target are similar to the funding plan for the State of Illinois' five retirement systems.³³

The CTA pension fund estimated that the 2009 required combined employer and employee contribution will exceed \$150 million, up from \$51.7 million in 2005 (2005 employer contributions were \$30.5 million). This reflected an increase from the current combined employer and employee contribution of 9% of payroll up to 22.5% of payroll. Required contributions were projected to reach \$1.1 billion (the size of the CTA's entire FY2006 operating budget) by 2059.³⁴ This substantial increase in employer contributions put further pressure on the CTA's already strained operating budget.

In order to address this critical situation, CTA labor and management negotiated changes to their pension and retiree health care agreements in the summer of 2007 and proposed that the changes be codified in state statute for the first time. Unlike other state and local pension funds, CTA pension plan benefits and contributions have always been collectively bargained rather than set in state statute. However, recent contract arbitration failed to address the dire state of the pension fund by changing some pension provisions and increasing contribution levels. The passage of Public Act 95-0708 made changes to the pension and retiree health care benefits and contributions and required that \$1.1 billion in pension obligation bond proceeds be deposited into the fund to bring it to approximately 72% funded. It also requires that the fund stay over 60% funded through 2039, and reach 90% by 2060.

ASSETS AND LIABILITIES OF LOCAL PUBLIC PENSION FUNDS

The most basic question about pension funds is whether or not their assets are sufficient to cover total liabilities incurred. 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. The actuarial value typically smoothes the effects of short-term market volatility by recognizing deviations from expected returns over a period of three to five years.³⁵ The current market value is another measure used to determine the assets of the plan. It reflects the value of

2

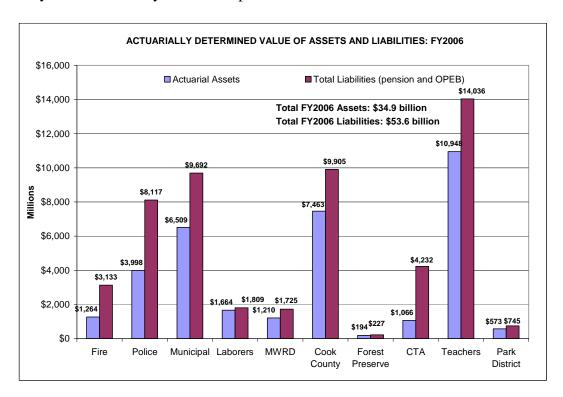
³³ See The Civic Federation, "The State of Illinois Retirement Systems: Funding History and Reform Proposals," (October 26, 2006). http://www.civicfed.org/articles/civicfed_220.pdf

³⁴ In contrast, the State of Illinois' required pension contributions at the end of its 50-year amortization period in 2045 will be \$15.6 billion for the 5 retirement systems, or roughly 33% of the State's FY2006 operating budget.

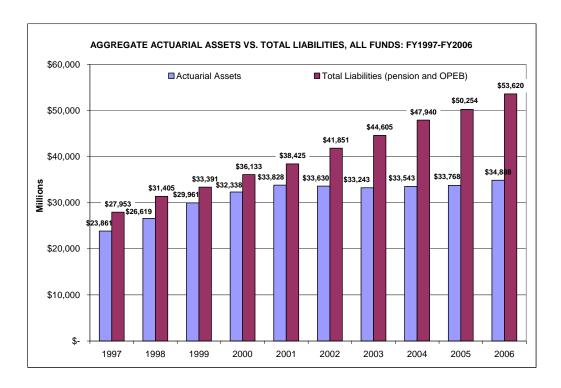
³⁵ In November 1994, the Government Accounting Standards Board (GASB) issued Statement No. 25 that established new standards for the reporting of a pension fund's assets. The requirement became effective June 15, 1996. Up until that statement, most pension funds used two measurements for determining 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 recognizing unexpected gains or losses over a period of 3 to 5 years.

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.

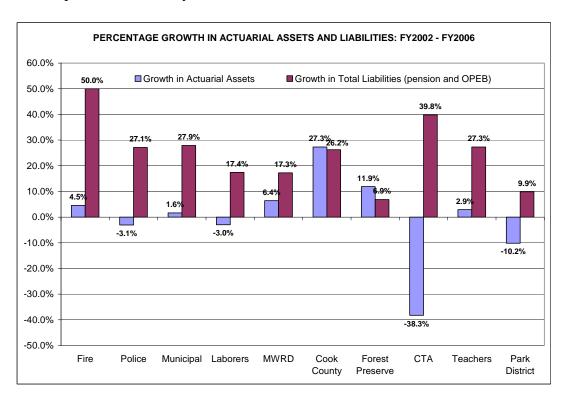
At the close of FY2006, the ten pension funds combined had approximately \$53.6 billion in accrued liabilities. Combined assets had an actuarial value of \$34.9 billion and a market value of \$36.4 billion, indicating that the investment returns in FY2006 were slightly better than the smoothed returns over the last three to five years reflected in the actuarial value. As shown in the following figure, the Teachers Fund had the greatest assets and liabilities in FY2006, followed by the Cook County and Municipal Funds.



The following figure shows the growth of aggregate actuarial assets and liabilities for all funds combined, from FY1997 to FY2006. Aggregate liabilities increased by \$25.7 billion, or 91.8%, over the 10-year period, while actuarial assets increased by \$11.0 billion, or 46.2%, and declined in FY2002 and FY2003. Although actuarial assets have remained relatively flat since FY2002, liabilities have continued to grow by 5 to 12% annually.



Of the ten pension funds, the Fire Fund and the CTA Fund have experienced the fastest growth in liabilities over the past five years, with growth rates of 50.0% and 39.8%, respectively. The CTA Fund experienced the greatest loss in actuarial assets, falling 38.3% during the same period. It is important to recall that the Cook County and Forest Preserve Funds changed actuarial assumptions and methods in FY2004 and FY2005, resulting in different amounts of assets and liabilities than would have been calculated under the previous assumptions (see page 13). Between FY2002 and FY2006, liability growth has significantly exceeded asset growth for all ten funds except the Cook County Fund and the Forest Preserve Fund.



Another point of comparison made in the following figure is the difference between the current market value of assets and the actuarial value of assets. Under actuarial value reporting, unexpected investment gains or losses are smoothed over a period of 3 to 5 years.³⁶ In fiscal year 2006, the aggregate market value for all funds was \$1.5 billion more than actuarial value, indicating that the smoothed actuarial value is still reflecting the market losses of 2002 and has not yet fully realized the gains of more recent years.

COMPARISON OF CURRENT MARKET VALUE VS. ACTUARIAL VALUE OF ASSETS AT THE CLOSE OF FY2006										
Fund	Curre	nt Market Value		Actuarial Value						
Fire	\$	1,391,484,313	\$	1,264,497,434						
Police	\$	4,192,076,199	\$	3,997,990,919						
Municipal	\$	6,841,127,865	\$	6,509,145,626						
Laborers	\$	1,739,660,664	\$	1,664,058,080						
MWRD	\$	1,223,296,794	\$	1,209,601,736						
Cook County	\$	7,670,787,063	\$	7,462,683,122						
Forest Preserve	\$	197,230,303	\$	193,511,049						
CTA	\$	1,119,969,502	\$	1,066,161,000						
Teachers	\$	11,428,518,484	\$	10,947,998,433						
Park District	\$	573,387,500	\$	572,659,129						
TOTAL	\$	36,377,538,687	\$	34,888,306,528						

Annuitant Health Insurance Benefits (Other Post Employment Benefits)

Detailed financial information about public employee non-pension retirement benefits (Other Post-Employment Benefits, or OPEB) is not currently required in governmental audited financial statements. To address this issue, the Governmental Accounting Standards Board (GASB) issued two statements in June 2004, GASB Statements 43 and 45, which provide reporting guidelines for these types of benefits.³⁷ GASB 43 and 45 require governments and associated retirement systems to calculate and report total OPEB liabilities according to guidelines similar to those used in reporting pension liabilities.

GASB 43 requires the retirement systems of large governments (over \$100 million annual revenue) to begin reporting OPEB liabilities for the fiscal year beginning after December 15, 2005, and GASB 45 requires the large governments themselves to begin reporting in the fiscal year beginning after December 15, 2006. All ten governments examined here qualify as "large governments". The four City of Chicago pension funds, Cook County fund, Forest Preserve fund, and CTA fund all implemented GASB 43 in their FY2006 financial statements. The MWRD fund did not report because retiree health insurance is provided directly by the MWRD government, not through its pension fund. The Teachers fund and Park District funds are not required to implement GASB 43 until FY2007 because their first fiscal year beginning after December 15, 2005 is FY2007 (July 1 2006-June 30, 2007). However the Park District fund will

³⁶ The Teachers' pension fund uses a 4-year smoothing period. The nine other funds reviewed here use a 5-year smoothing period. "Unexpected" gains or losses are those that deviate from the assumed rate of return.

The Financial Accounting Standards Board Statement 106 (FASB 106) required private sector employers to reporting accrued

liabilities for retiree health benefits in their financial statements in 1993.

not have to report OPEB liabilities because, like the MWRD, the Park District provides retiree health benefits directly rather than through the pension fund.

The following table shows the pension and OPEB accrued actuarial liabilities of the ten pension funds for FY2006. Overall, OPEB liabilities represent roughly 6.3% of total liabilities for all funds combined. The CTA pension fund has the largest OPEB liabilities, at \$1.8 billion.

Pension and OPEB Accrued Actuarial Liabilities: FY2006											
Fund	Pe	nsion Liabilities	0	PEB Liabilities		Total Liabilities					
Fire	\$	3,088,124,064	\$	45,017,463	\$	3,133,141,527					
Police	\$	7,939,561,277	\$	176,981,897	\$	8,116,543,174					
Municipal	\$	9,476,118,446	\$	216,201,037	\$	9,692,319,483					
Laborers	\$	1,767,682,490	\$	41,553,653	\$	1,809,236,143					
MWRD*	\$	1,724,705,199	\$	-	\$	1,724,705,199					
Cook County	\$	8,826,581,465	\$	1,077,996,709	\$	9,904,578,174					
Forest Preserve	\$	196,983,226	\$	29,597,667	\$	226,580,893					
CTA	\$	2,466,106,000	\$	1,765,884,000	\$	4,231,990,000					
Teachers**	\$	14,035,627,452	\$	-	\$	14,035,627,452					
Park District*	\$	745,244,239	\$	-	\$	745,244,239					
TOTAL	\$	50,266,733,858	\$	3,353,232,426	\$	53,619,966,284					

^{*} MWRD and Park District pension funds have no OPEB liability, as OPEB is provided directly through the governments.

It is important to note that for some funds there are also additional OPEB liabilities borne by the employer. That is because there are three different models for subsidizing OPEB among the ten pension funds reviewed here: employer only subsidy, pension fund only subsidy, or a combination of employer and pension fund subsidies.

Government Only Subsidy	Pension Fund Only Subsidy	Combined Government and
		Pension Fund Subsidy
• MWRD	Cook County	• Fire
Park District	Forest Preserve	Police
	• CTA	Municipal
	• Teachers	Laborers

Government Only Subsidy: MWRD and Park District

• The MWRD and Park District governments provide retiree health insurance but their respective pension funds do not subsidize it. The MWRD subsidizes 75% of retiree premiums. 38

• The Park District subsidizes roughly 50-75% of retiree premium costs for pre-Medicare eligible retirees depending on plan type, number of dependents, and date of retirement. The District does not provide any subsidy for Medicare eligible retirees.³⁹

³⁹ Letter from Timothy J. Mitchell, General Superintendent/CEO of the Chicago Park District to Chicago Park District Retirees, January 30, 2006.

^{**}Teachers fund will begin reporting its OPEB liability in the FY2007 financial statements.

³⁸ Metropolitan Water Reclamation District of Greater Chicago, *Comprehensive Annual Financial Report for the year ended December 31*, 2006, p. 74.

Pension Fund Only Subsidy: Cook County, Forest Preserve, CTA, Teachers

- The Cook County and Forest Preserve District governments allow annuitants to participate in their retiree health insurance programs but do not contribute to their premium costs. However, the respective pension funds do subsidize annuitant premiums, at a rate of 55% for retiree annuitants and 70% for survivor annuitants.⁴⁰
- Until the passage of Public Act 95-0708 in January 2008, the CTA itself did not contribute to retiree health care, but the CTA pension fund paid 100% of retiree health insurance premiums for employees on the payroll on or before September 5, 2001. Employees hired after that date were not to receive any annuitant health care subsidy upon retirement. The pension fund also subsidized retiree dependent health care at a rate of roughly 44% for pre-Medicare dependents and 37% for Medicare eligible dependents in FY2006. Public Act 95-0708 establishes a separate Retiree Health Care Trust that will be seeded with \$528.8 million in bond proceeds and will make retiree health insurance available to retirees and their dependents regardless of the date of hire. See Appendix D for more on the new CTA retiree health care reform package.
- The Chicago Teachers pension fund reimbursed annuitants for 70% of their health insurance single premiums in FY2006, with a total payment not to exceed \$65.0 million annually. Chicago Public Schools does not contribute to retiree health insurance.

Combined Government and Pension Fund Subsidy: City of Chicago Pension Funds

• The four City of Chicago pension funds (Fire, Police, Municipal, and Laborers) all subsidize the participant portion of retiree health insurance premiums for those annuitants participating in the City's retiree health insurance program. The City's contribution is roughly 50% of the premium cost, with the remainder to be paid by the annuitant. The Fire, Police, Municipal, and Laborers' pension funds each contribute roughly 37% of the annuitant contribution, effectively subsidizing 13% of the total premium cost. 43

The following table summarizes the employer, pension fund, and retiree contributions to health insurance premiums.

_

⁴⁰ County Employees' Annuity and Benefit Fund of Cook County *Actuarial Valuation as of December 31, 2006*, p. 27 and Forest Preserve District Employees' Annuity and Benefit Fund of Cook County *Actuarial Valuation as of December 31, 2006*, p. 27. ⁴¹ Retirement Plan for Chicago Transit Authority Employees, *Actuarial Valuation Report for the Year Beginning January 1*,

Retirement Plan for Chicago Transit Authority Employees, Actuarial Valuation Report for the Year Beginning January 1, 2007, pp. 5 and 32. The percentages are derived from the following figures: average dependent contribution rate of \$6,161 for pre-Medicare and \$2,610 for Medicare-eligible. Total blended per capita claim costs for retirees and dependents were \$10,984 for pre-Medicare and \$4,143 for Medicare-eligible.

⁴² Chicago Teachers' Pension Fund, 111th Comprehensive Annual Financial Report for the Year ended June 30, 2006, p. 25. The rebate percentage varies each year. State law requires that total rebates not exceed \$65 million annually, in additional to any carryover amounts from the previous year.

⁴³ Specifically, the pension funds provide subsidies of \$85 per month for non-Medicare eligible annuitants and \$55 per month for

⁴³ Specifically, the pension funds provide subsidies of \$85 per month for non-Medicare eligible annuitants and \$55 per month for Medicare eligible annuitants. See for example the Policemen's Annuity and Benefit Fund of Chicago *Actuarial Valuation Report as of December 31, 2006*, p. 52. Cost allocation estimates provided to The Civic Federation by Ferhan Hamid, City of Chicago, June 20, 2006.

Retiree Health Insurance Premium Subsidies										
	Employer	Pension Plan								
Fund	Contribution	Contribution	Retiree Contribution							
Fire	50%	13%	37%							
Police	50%	13%	37%							
Municipal*	50%	13%	37%							
Laborers	50%	13%	37%							
MWRD	75%	0%	25%							
		55% retiree, 70%	45% retiree, 30%							
Cook County	0%	survivor	survivor							
		55% retiree, 70%	45% retiree, 30%							
Forest Preserve	0%	survivor	survivor							
		100% for employee on	0% for employee on							
		payroll on or before	payroll on or before							
		9/5/2001; 0% for	9/5/2001; 100% for							
		employees hired later.	employees hired later.							
		44% for pre-Medicare	56% for pre-Medicare							
		dependents, 37% for	dependents, 63% for							
CTA	0%	Medicare dependents	Medicare dependents							
Teachers	0%	70%	30%							
	50-75% (pre-									
Park District	Medicare only)	0%	50-25%							

^{*} Applies to retired City workers only, not to retired Chicago Public Schools employees who participate in the Municipal fund.

Note: Percentages are approximations for FY2006 and may vary by plan type or other factors.

Sources: See text footnotes

INVESTMENT RATE OF RETURN OF LOCAL PUBLIC PENSION FUNDS⁴⁴

During FY2006, each of the ten pension funds yielded a positive rate of return. In aggregate, the funds generated a combined investment rate of return of 11.5%, compared to a 7.9% aggregate return for FY2005. It is important to note that the Park District and the Teachers' Funds use a July 1 – June 30 fiscal year instead of the calendar year used by the eight other funds, thus their rates of return reflect the last half of 2005 and the first half of 2006. The investment rates of return for the Teachers and Park Funds are not strictly comparable to those of the other eight funds. The FY2006 average rate of return for those funds with a January 1 to December 31 fiscal year was 11.8%, up from 7.5% in FY2005. The average rate of return for funds using a July 1 to June 30 fiscal year was 9.2%, down from 10.0% in FY2005.

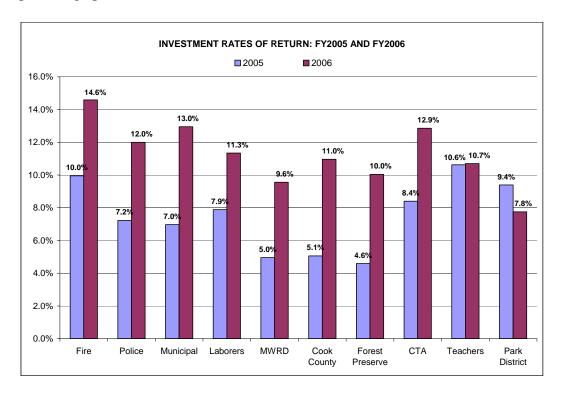
The FY2006 investment returns generated a total of \$3.8 billion for the ten funds combined, compared to \$2.6 billion in FY2005. A comparison of the investment rates of return for

⁴⁶ Investment returns are gross investment income including income from securities lending activities net of borrower rebates.

⁴⁴ The Civic Federation calculates investment rate of return using the following formula for all funds: Current Year Rate of Return = Current Year Gross Investment Income/ (0.5*(Previous Year Market Value of Assets + Current Year Market Value of Assets - Current Year Gross Investment Income)). This is not necessarily the formula used by all funds' actuaries, thus investment rates of return reported here may differ from those reported in a fund's actuarial statements. However, it is a standard actuarial formula. Gross investment income includes income from securities lending activities, net of borrower rebates.

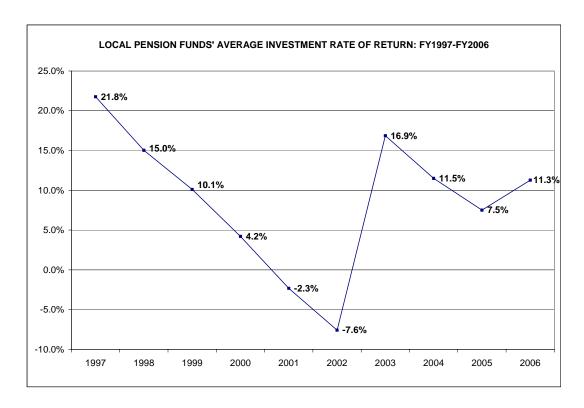
⁴⁵ The "aggregate" rate of return calculates the rate based on the combined investment income of all the pension funds. The "average" rate of return calculates each fund's rate of return separately and averages the results.

FY2005 and FY2006 in the following figure shows that for the eight funds using a calendar year fiscal year, investment returns rose 3 to 6 percentage points in FY2006, with returns for the MWRD, Cook County, and Forest Preserve being the lowest. Of the two funds that use a July 1 to June 30 fiscal year, the Teachers Fund rose 0.1 percentage point while the Park District Fund fell 1.6 percentage points.

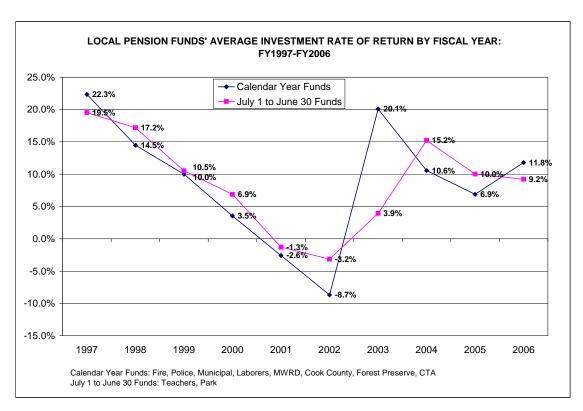


Historical Trends

Investment rates of return should be considered from a historical perspective. During the latter half of the 1990s, strong financial markets significantly increased local pension funds' assets. In 1997 the ten funds experienced rates of return ranging from 18.5% to 37.3%. That positive trend reversed, however, and by the close of FY2002 every fund had a negative rate of return, ranging from -3.4% to -12.9%. In FY2003, the rates of return for all funds turned positive again, with an average rate of 16.9%. The average rate of return was 11.3% in FY2006.



The following figure also presents the average investment rate of return, but splits the ten funds into two groups: those with calendar year fiscal years and those with July 1 to June 30 fiscal years. Differences in the trend lines reflect the timing of market trends. For example, calendar year funds saw 20.1% average returns in FY2003, and July 1 to June 30 funds saw only 3.9% average returns in FY2003 (July 1 2002-June 30 2003). This difference is due to market declines in the second half of 2002 and a steady bull market in the last half of 2003.



REVENUES OF LOCAL PUBLIC PENSION FUNDS

There are three main revenue sources for the pension plans studied here: investment income, employer contributions, and employee contributions. Investment income is the primary driver of total income for all of the pension funds, although it is also the most volatile. Employer contributions are generated by property taxes and personal property replacement taxes for all pension funds except the Teachers and CTA funds, for which employer contributions come from general revenues. Employee contributions are made through payroll deductions.

The increases in asset values experienced in the late 1990's, the subsequent declines in 2001 and 2002, and the economic recovery in 2003 caused significant shifts in the relative prominence of pension fund revenue sources. In FY2003, strong investment returns generated positive income for all of the pension funds for the first time since FY2000. FY2006 total income for all funds was \$5.3 billion, up from \$4.0 billion in FY2005. For each fund, investment income constitutes the greatest portion of total income. Some funds report "Other" income, which includes sources such as transfers from other governments with reciprocal agreements, interest income from operating accounts, and other miscellaneous revenue. See Appendix A for detail on the sources for revenue and expenditure figures presented in this report.

FY2006 REVENUES BY SOURCE										
Fund		Employee		Employer		Investment		Other		TOTAL
Name	(Contribution	(Contribution		Income		Income		INCOME
Fire	\$	44,221,869	\$	78,971,383	\$	181,265,298	\$	88,210	\$	304,546,760
Police	\$	91,965,685	\$	157,689,286	\$	461,113,666	\$	1,069,991	\$	711,838,628
Municipal	\$	129,466,090	\$	157,062,770	\$	802,688,788	\$	-	\$	1,089,217,648
Laborers	\$	18,791,442	\$	-	\$	182,395,911	\$	106,270	\$	201,293,623
MWRD	\$	14,955,252	\$	34,476,332	\$	108,686,551	\$	2,609	\$	158,120,744
Cook County	\$	121,672,773	\$	221,186,219	\$	760,512,899	\$	9,256,991	\$	1,112,628,882
Forest Preserve	\$	1,690,781	\$	2,720,013	\$	18,353,850	\$	175,844	\$	22,940,488
CTA	\$	17,843,026	\$	35,669,974	\$	139,207,833	\$	-	\$	192,720,833
Teachers	\$	163,419,386	\$	117,789,706	\$	1,131,956,799	\$	139,509	\$	1,413,305,400
Park District	\$	9,117,032	\$	5,173,860	\$	42,946,542	\$	-	\$	57,237,434
TOTAL	\$	613,143,336	\$	810,739,543	\$	3,829,128,137	\$	10,839,424	\$	5,263,850,440

The following table shows each fund's FY2006 revenue by source as a percent of total income. Investment income represented 72.7% of total income for all funds combined in FY2006.⁴⁸ Employee and employer contributions represented 11.6% and 15.4% of total income, respectively.

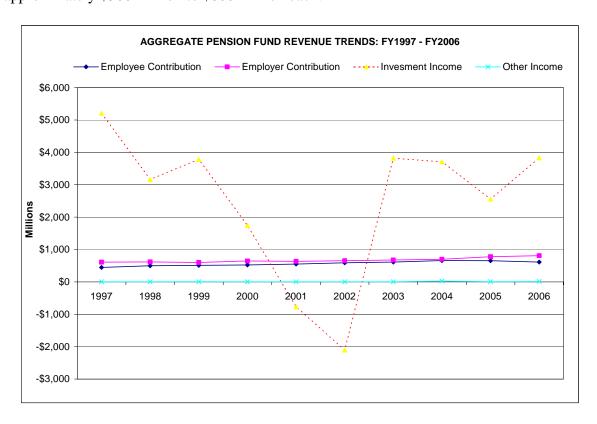
29

⁴⁷ Investment returns are gross investment income including income from securities lending activities net of borrower rebates.

⁴⁸ Investment income is presented as a gross figure, not net of investment costs. Investment costs are counted as an expense, alongside administrative costs and other types of expenditures.

	FY2006 REVENUES BY SOURCE AS % OF TOTAL								
Fund	Employee	Employer	Investment	Other	TOTAL				
Name	Contribution	Contribution	Income	Income	INCOME				
Fire	14.5%	25.9%	59.5%	0.0%	100.0%				
Police	12.9%	22.2%	64.8%	0.2%	100.0%				
Municipal	11.9%	14.4%	73.7%	0.0%	100.0%				
Laborers	9.3%	0.0%	90.6%	0.1%	100.0%				
MWRD	9.5%	21.8%	68.7%	0.0%	100.0%				
Cook County	10.9%	19.9%	68.4%	0.8%	100.0%				
Forest Preserve	7.4%	11.9%	80.0%	0.8%	100.0%				
CTA	9.3%	18.5%	72.2%	0.0%	100.0%				
Teachers	11.6%	8.3%	80.1%	0.0%	100.0%				
Park District	15.9%	9.0%	75.0%	0.0%	100.0%				
TOTAL	11.6%	15.4%	72.7%	0.2%	100.0%				

The following chart illustrates that while historically investment income has fluctuated considerably, aggregate employer and employee contributions have remained relatively constant at approximately \$500 million to \$800 million each.



Employee and Employer Contributions

Employee contributions to pension funds are defined as percentages of salary (with some exceptions for flat dollar amount contributions for items such as death benefits in some plans). For most funds, there are separate contribution rates for regular employee pensions, survivor benefits, and annuity cost of living increases.⁴⁹ The total employee contribution for most funds

⁴⁹ The automatic annual annuity increase for most funds is 3%. The CTA occasionally bargains ad hoc dollar amount increases.

is 8.5% or 9.0%, with a high of 9.125% for firefighters and a low of 3.0% for CTA employees. Of the total 9.0% employee contribution rate for the Teachers fund, 7.0% has been paid by the employer since 1981.⁵⁰

As described on page 15, most employer contributions to the funds examined in this report are set in state statute as multiples of the employee contributions made two years prior, with the exception of the Teachers fund and the CTA. The table below expresses the actual employer contribution for FY2006 as a percent of payroll in order to make a clearer comparison to the employee contribution rate. However, it is important to recall that the two-year lag caused by the multiple formula can create distortions due to subsequent changes in payroll (personnel reductions or salary increases). The MWRD and Fire fund employer contributions as a percent of payroll for FY2006 were the highest at over 20% each. The CTA, Teachers, and Park District employer contributions were low, at 5%-6% of payroll. There was no employer contribution to the Laborers fund for FY2006 because the funded ratio excluding the early retirement initiative was over 100%.⁵¹

FY2006 Employer and Employee Contribution Rates										
	E	Employee Co	ntribution (%	Employer Contribution						
							Actual Employer			
				Annuity			Contribution as %			
Fund	Employee	Survivor	Disability	Increase	TOTAL	Rate*	of payroll FY2006			
Fire	7.125%	1.500%	0.125%	0.375%	9.125%	2.26 multiple	20.38%			
Police	7.00%	1.50%		0.50%	9.00%	2.00 multiple	15.57%			
Municipal	6.50%	1.50%		0.50%	8.50%	1.25 multiple	10.64%			
Laborers	6.50%	1.50%		0.50%	8.50%	1.00 multiple	0.00%			
MWRD	7.00%	1.50%		0.50%	9.00%	2.19 multiple	22.57%			
Cook County	6.50%	1.50%		0.50%	8.50%	1.54 multiple	15.66%			
Forest Preserve	6.50%	1.50%		0.50%	8.50%	1.30 multiple	14.19%			
CTA	3.00%				3.00%	6% of payroll	6.10%			
Teachers**	7.50%	1.00%		0.50%	9.00%	see page 15	6.06%			
Park District	7.00%	1.00%		1.00%	9.00%	1.10 multiple	5.12%			

Note: table does not include any extra amounts that may be contributed for death benefits.

Sources: Respective pension fund FY2006 actuarial valuations and Illinois statutes.

Shortfall in Employer Contributions

GASB 25 and 43 require separate calculation of the employer's actuarially required contributions (ARC) for pensions and OPEB. The ARC is the sum of (1) the employer's normal cost⁵² of retirement benefits earned by employees in the current year, and (2) the amount needed to amortize any existing unfunded accrued liability over a period of not more than 30 years (see page 16). In other words, the ARC is a calculation of the amount of money the employer should contribute each year in order to cover costs attributable to the current year and to reduce

^{*&}quot;Multiple" means multiple of total employee contribution made two years prior.

^{**}Since 1981, the employer has been paying 7% of the total 9% employee contribution. Chicago Teachers' Pension Fund 111th Comprehensive Annual Financial Report for the year ended June 30, 2006, p.78.

⁵⁰ Chicago Teachers' Pension Fund, 111th Comprehensive Annual Financial Report for the year ended June 30, 2006, p. 78.
⁵¹ Pursuant to Public Act 93-0654, the Laborer's Fund is not required to make employer contributions unless the funded ratio excluding early retirement initiative liabilities drops below 100%. The City will be required to resume making contributions to the Laborer's fund in FY2007 (see Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago Actuarial Valuation Report for the Year Ending December 31, 2005, p. 6).

⁵² Normal cost is that portion of the present value of pension plan benefits and administrative expenses which is allocated to a given valuation year, and is calculated using one of six standard actuarial cost methods. See Glossary.

unfunded liabilities, and is computed net of employee contributions. Expressing ARC as a percentage of payroll provides a sense of scale and affordability. The following table shows the FY2006 pension ARC for each of the ten funds examined in this report. None of the employers contributed the full ARC and many contributed less than fifty percent of the ARC. As a percent of payroll, the pension ARC for the Fire fund is the highest of the ten at 41.4% of payroll. The aggregate ARC for the ten funds was 22.3% of payroll, while actual employer contributions were only 10.0%.

Ten Local Government Pension Funds												
		Employer Actuarially	edu	le of Employer	Co	ntributions for F	ension Benet	its: FY2006*		Actual Employer		
Fund	C	Required ontribution (1)		tual Employer entribution (2)		Shortfall (1-2)	% of ARC contributed	Payroll	ARC as % of payroll	Contribution as % of payroll		
Fire	\$	160,246,525	\$	76,763,308	\$	83,483,217	47.9%	\$ 387,442,074	41.4%	19.8%		
Police	\$	262,657,025	\$	150,717,705	\$	111,939,320	57.4%	\$1,012,983,634	25.9%	14.9%		
Municipal	\$	303,271,824	\$	157,062,770	\$	146,209,054	51.8%	\$1,475,877,378	20.5%	10.6%		
Laborers	\$	17,599,766	\$	106,270	\$	17,493,496	0.6%	\$ 193,176,272	9.1%	0.1%		
MWRD	\$	47,368,878	\$	34,476,332	\$	12,892,546	72.8%	\$ 152,767,396	31.0%	22.6%		
Cook County	\$	282,223,686	\$	198,619,984	\$	83,603,702	70.4%	\$ 1,412,878,627	20.0%	14.1%		
Forest Preserve	\$	7,466,836	\$	3,224,743	\$	4,242,093	43.2%	\$ 19,172,756	38.9%	16.8%		
CTA	\$	198,457,000	\$	23,931,000	\$	174,526,000	12.1%	\$ 584,744,000	33.9%	4.1%		
Teachers	\$	328,365,821	\$	117,789,706	\$	210,576,115	35.9%	\$ 1,944,358,215	16.9%	6.1%		
Park District	\$	15,235,000	\$	5,173,860	\$	10,061,140	34.0%	\$ 101,058,024	15.1%	5.1%		
TOTAL	\$	1,622,892,361	\$	767,865,678	\$	855,026,683	47.3%	\$ 7,284,458,376	22.3%	10.5%		

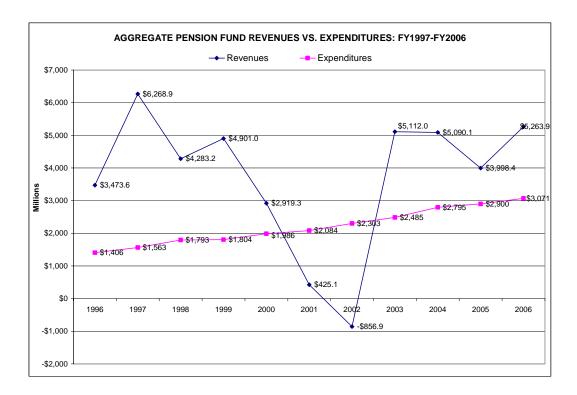
^{*}Does not include OPEB liabilities for those funds that have them

Source: Comprehensive Annual Financial Reports and Actuarial Valuations of the pension plans

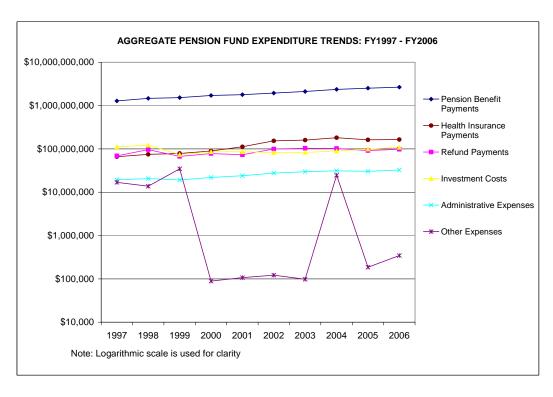
ARCs for OPEB liabilities will be presented in this annual report when they become available in the employer's financial statements in future years.

EXPENDITURES OF LOCAL PUBLIC PENSION FUNDS

In contrast to fluctuating revenues, aggregate pension fund expenditures have grown steadily by an average of 8.2% annually between FY1997 and FY2006. The following table compares aggregate revenues to expenditures between FY1997 and FY2006.



The funds' primary expenditure is for pension benefit payments, which constituted roughly 85.0% of the ten funds' aggregate expenditures between FY1997 and FY2006. As described in the following section, eight of the ten funds also provide a subsidy for retiree health insurance payments. The total amount of pension benefit payments has increased by 108.6% since 1997, from \$1.3 billion to \$2.7 billion. Other types of expenses include retiree health insurance payments, refund payments, administrative expenses, and investment costs.



The following two tables show fund expenditures by type and as a percent of total expenditures. Total expenditures for all funds were \$3.1 billion, of which 86.9% was for benefit payments.

FY 2006 EXPENDITURES BY TYPE															
Fund	Pe	nsion Benefit		Health Ins.		Refund		Other	Administrative			Investment		TOTAL	
Name		Payments		Payments	yments Payments Expenses Expenses		Costs		EXPENDITURES						
Fire	\$	174,387,363	\$	2,208,075	\$	1,619,107	\$	-	\$	2,646,739	\$	6,858,646	\$	187,719,930	
Police	\$	444,747,286	\$	8,040,795	\$	5,271,842	\$	-	\$	2,700,475	\$	13,838,618	\$	474,599,016	
Municipal	\$	538,693,210	\$	8,730,476	\$	27,194,308	\$	-	\$	6,397,685	\$	23,962,837	\$	604,978,516	
Laborers	\$	104,625,271	\$	2,237,641	\$	3,139,938	\$		\$	2,830,920	\$	7,860,555	\$	120,694,325	
MWRD	\$	89,079,089	\$	-	\$	1,410,954	\$	-	\$	1,471,957	\$	2,175,003	\$	94,137,003	
Cook County	\$	334,985,068	\$	30,642,245	\$	24,922,209	\$	-	\$	3,979,155	\$	11,267,898	\$	405,796,575	
Forest Preserve	\$	10,112,423	\$	1,353,489	\$	346,117	\$	345,410	\$	108,566	\$	236,606	\$	12,502,611	
CTA	\$	193,422,881	\$	52,787,382	\$	1,383,559	\$	-	\$	2,805,599	\$	6,407,721	\$	256,807,142	
Teachers	\$	721,106,051	\$	58,279,900	\$	30,685,299	\$	-	\$	8,320,340	\$	34,013,421	\$	852,405,011	
Park District	\$	56,303,466	\$	-	\$	2,067,947	\$	-	\$	1,231,485	\$	1,975,854	\$	61,578,752	
TOTAL	\$ 2	2,667,462,108	\$	164,280,003	\$	98,041,280	\$	345,410	\$	32,492,921	\$	108,597,159	\$	3,071,218,881	

FY 2006 EXPENDITURES BY TYPE: as % of Total											
Fund Name	Pension Benefit Payments	Health Ins. Payments	Refund Payments	Other Expenses	Administrative Expenses	Investment Costs	TOTAL EXPENDITURES				
Fire	92.9%	1.2%	0.9%	0.0%	1.4%	3.7%	100.0%				
Police	93.7%	1.7%	1.1%	0.0%	0.6%	2.9%	100.0%				
Municipal	89.0%	1.4%	4.5%	0.0%	1.1%	4.0%	100.0%				
Laborers	86.7%	1.9%	2.6%	0.0%	2.3%	6.5%	100.0%				
MWRD	94.6%	0.0%	1.5%	0.0%	1.6%	2.3%	100.0%				
Cook County	82.5%	7.6%	6.1%	0.0%	1.0%	2.8%	100.0%				
Forest Preserve	80.9%	10.8%	2.8%	2.8%	0.9%	1.9%	100.0%				
CTA	75.3%	20.6%	0.5%	0.0%	1.1%	2.5%	100.0%				
Teachers	84.6%	6.8%	3.6%	0.0%	1.0%	4.0%	100.0%				
Park District	91.4%	0.0%	3.4%	0.0%	2.0%	3.2%	100.0%				
TOTAL	86.9%	5.3%	3.2%	0.0%	1.1%	3.5%	100.0%				

FUNDED RATIOS OF LOCAL PUBLIC PENSION FUNDS

This report uses two measurements of the pension plans' funded ratios: 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 (see page 5 for an explanation of actuarial value of assets). The market value of assets measurement presents the ratio of assets to liabilities by recognizing investments only at current market value.

Actuarial Value of Assets

The actuarially funded ratios of every fund declined in FY2006. The Cook County and Forest Preserve funds' ratios had improved in FY2004 and FY2005 following changes in actuarial assumptions and methodology,⁵³ but resumed their decline again in FY2006. The 25.2% CTA funded ratio is of serious concern due to that fund's rapid decline from an 80.0% ratio in FY1999. However, a large part of the decline is attributable to a change in actuarial assumptions

-

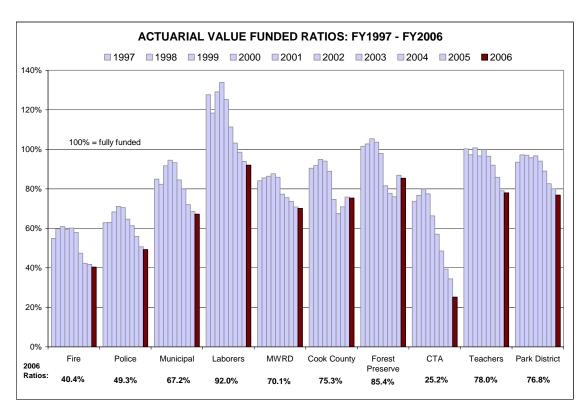
⁵³ See page 13 of this report.

to more fully recognize healthcare liabilities. Taking into account healthcare liabilities, the FY1999 actuarial funded ratio was closer to 65.0%. 54

The low funded ratios of the Fire and Police pension funds are also a continuing cause for concern, since these ratios have fallen to 40.4% and 49.3%, respectively. However, their decline has been less precipitous than that of the CTA fund. On the high end of the scale, the Laborers' fund dipped below 100% funded for the first time in FY2004 and is now 92.0% funded. The employer contribution to this fund was waived when the plan was over 100% funded.⁵⁵

The actuarial funded ratio for the aggregate of all funds' assets and liabilities was 65.1%, down from 67.2% in FY2005.

It is important to consider actuarial funded ratios over time. The following chart illustrates the ten funds' actuarial standing since FY1997.



Market Value of Assets

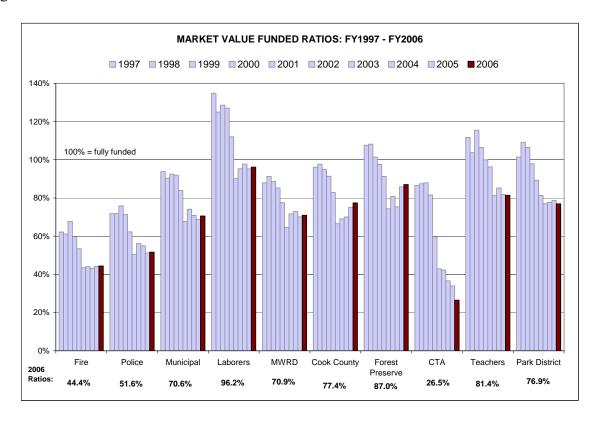
It is also useful to evaluate the pension plans' market value funded ratios over time. The following table illustrates the fluctuations in the market value funded ratios since 1997. Market value funded ratios are more volatile than the actuarial funded ratios due to the smoothing effect

-

⁵⁴ "Historical Information for the Retirement Plan for CTA Employees, 1977-2005," provided by the Retirement Plan for Chicago Transit Authority Employees, February 16, 2006.

⁵⁵ Pursuant to Public Act 93-0654, the Laborer's Fund is not required to make employer contributions unless the funded ratio excluding early retirement initiative liabilities drops below 100%. The City will be required to resume making contributions to the Laborer's fund in FY2007 (see Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago Actuarial Valuation Report for the Year Ending December 31, 2005, p. 6).

of actuarial value (see Glossary). Each fund's FY2006 market value funded ratio is slightly higher than its FY2006 actuarial funded ratio.

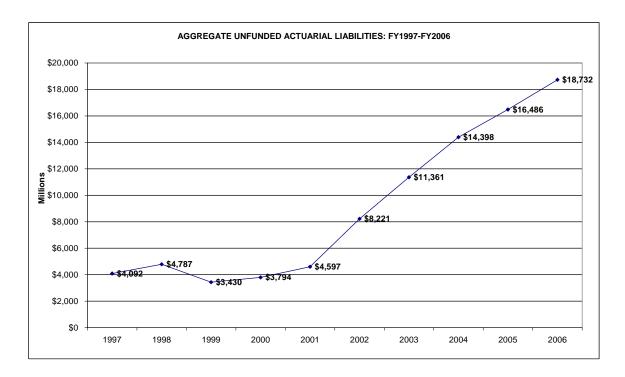


UNFUNDED ACTUARIAL LIABILITIES OF LOCAL PUBLIC PENSION FUNDS

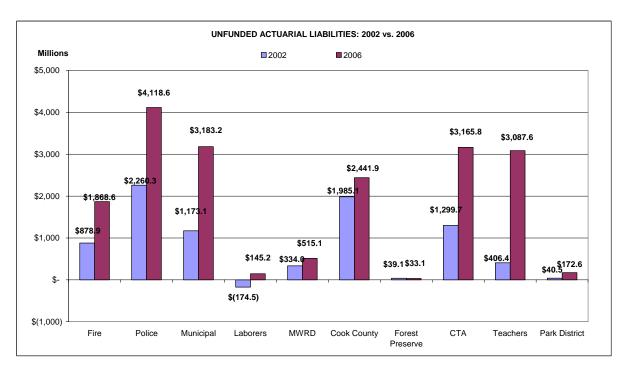
The difference between assets and liabilities is known as the unfunded liability. This figure is derived by subtracting the actuarial value of the assets from the accrued liability of each fund.

One of the functions of this indicator is to measure a fund's ability to bring assets in line with liabilities. Healthy funds are ones that are able to reduce their unfunded liabilities over time; substantial and sustained increases in liabilities are cause for concern.

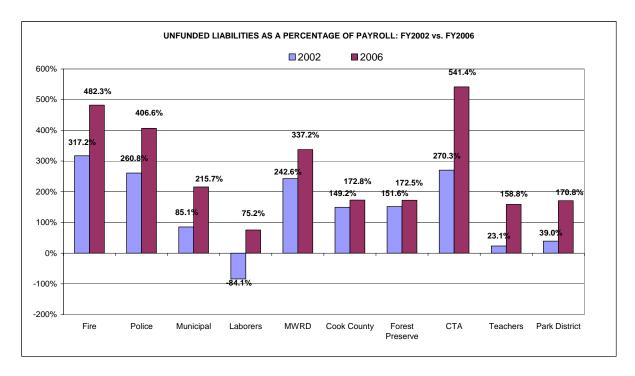
The aggregate unfunded liability of the ten pension funds has increased rapidly in recent years, as shown in the following chart. Between FY1997 and FY2001, the aggregate unfunded liability averaged roughly \$4 billion. But in FY2002 it nearly doubled to \$8.2 billion and has subsequently gained nearly \$3 billion every year, reaching a total of \$18.7 billion in FY2006. Over the past ten years, the aggregate unfunded liability grew by \$14.6 billion, or 357.8%, with most of the growth occurring since FY2001.



The largest FY2006 unfunded liability is in the Police pension fund at \$4.1 billion, an increase of 82.2% over FY2002. The highest rate of increase in unfunded liabilities was experienced by the Teachers' fund, which went from having \$384.5 million in unfunded liabilities to \$3.2 billion—an increase of over 700%. The Forest Preserve fund unfunded liabilities declined in the last five years, but this is due in large part to a change in actuarial assumptions (see page 13). The total unfunded liability for the four City of Chicago pension funds has more than doubled in the past five years, rising from \$4.1 billion in FY2002 to \$9.3 billion in FY2006.



Another indicator of funding progress is the reporting of a fund's unfunded liability as a percentage of covered payroll. This measurement expresses the unfunded liability in terms of the current personnel expenditures and 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 is a gradual decrease in unfunded liabilities as a percent of covered payroll over time. If the opposite is true and unfunded liabilities continue to increase as a percentage of covered payroll, then a new funding strategy and a reduction in the level of benefits granted by the fund should be considered in order to prevent pension obligations from crowding out spending on core services. Every fund has experienced significant increases in unfunded liabilities as a percentage of payroll in the last five years. The CTA fund has the highest unfunded liabilities as a percentage of payroll, at 541.4%, followed by the Fire and Police funds. The CTA fund has experienced the highest rate of growth in its unfunded liabilities as a percentage of payroll, increasing by 271 percentage points in five years.



CIVIC FEDERATION PENSION MANAGEMENT RECOMMENDATIONS

Growth in liabilities has significantly outpaced growth in assets for local pension funds since 1997, resulting in aggregate unfunded liabilities of \$18.7 billion for the ten major funds in FY2006. There is no indication that this trend will reverse, or even slow, unless substantial changes are made to the pension plans both in terms of benefits provided and contributions made.

Local governments must take action now to control the downward spiral of pension underfunding. The problems caused by benefit enhancements and employer contribution shortfalls are real, and reliance on investment returns to compensate for actions that increase liabilities or reduce assets is shortsighted. The CTA pension fund experienced a precipitous descent toward insolvency, plunging from 80% funded in 1999 to only 25% funded in 2006.

This decline was largely the result of years of underfunding combined with investment losses. Other governments are also experiencing fiscal crises brought on by pension pressures. The City of Springfield expects that it will "face a full-blown crisis in coming years because of police and fire obligations" and may need to cut city services or raise property taxes in order to make its pension contributions. The City of Evanston has proposed a 15% property tax increase for fiscal year 2008-2009 primarily to address police and fire pension unfunded liabilities. The Civic Federation applauds the CTA management and labor unions for taking action on their pension crisis and negotiating a landmark pension reform package. We urge other local governments and pension plans to be proactive in seeking similar changes through state legislation.

We offer the following specific recommendations designed to improve the long-term financial health of the local funds and address the major causes of funding decline that are within the control of the governments:

Prohibit Benefit Enhancements Unless Plan is Over 90% Funded

Benefit enhancements are a major source of increased liabilities for pension funds. In the case of collective bargaining, these enhancements are often granted in exchange for short-term employee concessions on salaries or health insurance. Offering benefit enhancements can seem like an attractive option to employers, since achieving short-term savings on other employee costs usually feels like a more pressing need than controlling long-term liabilities.

However, some local governments have offered benefit enhancements that they simply cannot afford in the long-term. Often these enhancements are written into statute by the General Assembly and Governor despite significant existing unfunded liabilities. The Civic Federation recommends that the **General Assembly stop granting any new retirement benefit enhancements for local governments unless their pension funds are over 90% funded**. The Federation believes that 90% is a healthy level of funding for a public pension fund.⁵⁸ Pension funds that are struggling with unfunded liabilities on current benefits should not be permitted to exacerbate the situation by granting greater benefits. The Pension Protection Act of 2006 changed the federal laws that govern private sector pension funds, requiring private plans to meet a 100% funding target, up from 90% previously under the Employee Retirement Income Security Act (ERISA). Plans that are less than 100% funded must make payments amortizing their unfunded liability over seven years. Plans that are less than 80% funded are considered "atrisk," and must make additional contributions to boost their funded ratio.⁵⁹

_

⁵⁶ Chris Wetterich, "Davlin forecasts full-blown fiscal crisis: Tax hikes possible in coming years because of pensions," *State Journal-Register*, December 4, 2007.

⁵⁷ Bob Seidenberg, "Budget proposes 15% tax hike," Evanston Review, January 3, 2008.

⁵⁸ See the discussion of target funded ratios beginning on page 17. The federal target for private sector pension funds under the Employee Retirement Income Security Act was 90% until the Pension Protection Act of 2006 raised the target to 100%.

⁵⁹ House Committee on Education & the Workforce, "Bill Summary – Pension Protection Act (H.R. 2830): Strengthening Retirement Security, Protecting Taxpayers by Fixing Outdated Worker Pension Laws" (March 8, 2006) http://www.house.gov/ed_workforce/issues/109th/workforce/pension/ppasummarylong.htm. See also Deloitte, "Securing Retirement: An Overview of the Pension Protection Act of 2006," (August 3, 2006) http://www.deloitte.com/dtt/cda/doc/content/us_gre_securingretirement_310806.pdf.

Link Benefit Enhancements for Healthy Funds to Full Funding of Enhancements

The Civic Federation believes that **healthy local pension funds** (**over 90% funded**) **should be permitted to grant benefit enhancements** <u>**only**</u> **if employer and/or employee contributions are increased sufficiently to fully fund the benefit enhancements**. Under this pay-as-you-go system, the enhancements would not be permitted to erode the overall health of the fund.

Public Act 94-0004, Illinois' 2005 pension reform law, requires that every new benefit increase made to one of the five state retirement systems must identify and provide for additional funding to fund the resulting annual accrued cost of the increase. The Act also requires that any benefit increase **expire after five years**, subject to renewal. The Civic Federation supports extending this reasonable control on benefit enhancements to the local public pension funds through a change in the state statutes governing these funds.

Reduce Benefits for New Employees

Once granted, benefit enhancements cannot be diminished, according to the Constitution of the State of Illinois. The only way for an employer to reduce liabilities by reducing retirement benefits is to reduce those benefits for new employees. This is commonly called a "two-tiered" system, where new and existing employees are promised different retirement benefits. The New York State and Local Retirement System has four different tiers depending on an employee's hiring date and occupation. ⁶¹

By scaling back on retirement benefits for new hires, governments can undo some of the damage done by excessive benefit enhancements granted in the past. For example, an arbitration award reduced benefits for CTA employees hired after September 5, 2001 by setting an age minimum for the early retirement option and by eliminating a hospitalization supplement for retirees. The pension reform package effective January 18, 2008 (Public Act 95-0708) also reduces certain benefits for new hires. The Civic Federation urges other local governments to consider similar ways to **reduce benefits for new hires**, thus reducing liabilities on pension plans that have become unaffordable. Reducing benefits for new hires is particularly imperative for pension funds with funded ratios well below 90%. Examples of benefit reductions include: **raising retirement age, increasing years of service required for full benefits, reducing the maximum annuity**, and **reducing the benefit formula**. 63

Limit Annuity Increases for New Hires at the Lesser of 3% or CPI

One reasonable way to curb retirement costs would be to limit annuitants' annual automatic cost of living increases to the lesser of 3% or the annual increase in the Consumer Price Index. For

⁶⁰ In Illinois, as in many states, pension benefits granted to public employees are guaranteed by the State Constitution. *Constitution of the State of Illinois, Article XIII Section 5.*

⁶¹ See http://osc.state.ny.us/retire/members/find_your_tier.htm.

⁶² For employees hired before September 5, 2001, early retirement is available after 25 years of service; for employees hired after September 5, 2001, early retirement is available after 25 years of service and attainment of age 55. Similarly, employees hired after September 5, 2001 do not receive the hospitalization supplement paid for by the Plan upon retirement. See the plan text, available at http://www.ctapension.com/about/PlanDocument.asp.

⁶³ A typical benefit formula is years of service X a percentage of final average salary = annuity.

example, Cook County pension fund beneficiaries receive 3% annual cost of living increases.⁶⁴ However, this rate has often exceeded the rate of inflation. To control costs, **annual annuity increases for new hires should be fixed at the equivalent of the projected Consumer Price Index or 3%, whichever is less**.

Require Employer Contributions to Relate to Funding Levels

The basic employer contributions for eight of the ten local funds analyzed here are simply a multiple of past employee contributions, with no relationship to the funding status of the plan. Only the Teachers' fund has a trigger that requires additional contributions when the funded ratio drops below 90%; this is a good provision to ensure that contributions do not fall hopelessly behind when funded ratios begin declining. **The Civic Federation recommends that employer contributions for all funds be tied to funded ratios, such that additional contributions are required when the ratio drops below 90%.** For those funds that are already well below 90%, a plan should be developed to gradually increase contributions until the 90% level is reached. This would entail devoting a greater portion of the property tax levy to pensions for those plans that are supported by a property tax, or seeking legislative authority for the use of general revenues or an alternative revenue source.

In addition, all local pension funds should consider adopting the funding model of the Illinois Municipal Retirement Fund, which requires employer contributions to be funded at levels consistent with the actuarially required contribution (ARC), rather than a multiple of employee contributions made two years prior. At a minimum, the multiple should be adjusted at regular intervals of three to five years to reflect the actuarially determined funding needs of the plan.

Reform Pension Boards of Trustees to Balance Stakeholder Interests, Safeguard Assets

Achieving serious reforms that can have a real impact on the health of local pension funds will require a strong and unwavering commitment on the part of local governments. It will also require that their efforts not be thwarted by the trustees of the pension funds. The mission of a public pension fund board of trustees should be to safeguard the fund's assets through prudent investments and effective management. Unfortunately, some local pension boards also act as advocates on behalf of fund members, lobbying for benefit enhancements that ultimately increase the funds' liabilities. For example, the Chicago Teachers' Pension Fund FY2006 Annual Report lists the Fund's legislative agenda, including benefit enhancements, and states that "The Trustees and Fund administrators will continue to work diligently to represent the interests of the members through further accomplishment of the Trustees' legislative agenda. The Board, in conjunction with the Fund's consultants, continues to work in Springfield toward maintaining the financial stability of the Fund and improving benefits for the members." 66

As outlined in the Civic Federation's *Recommendations to Reform Pension Boards of Trustees Composition in Illinois*, the Federation believes that a pension board should not function as an

⁶⁴ Cook County Employees' Annuity and Benefit Fund *Actuarial Valuation as of December 31*, 2006, p. 25. The CTA retirement fund does not have an automatic annual increase, but periodically grants ad hoc dollar amount annuity increases through collective bargaining.

⁶⁵ See page 13.

⁶⁶ The Chicago Teachers' Pension Fund 2006 111th Comprehensive Annual Financial Report. p. 12.

advocate for the interests of one stakeholder, especially when advocating those interests creates increased liabilities for the fund.⁶⁷ Rather, the trustees should focus on conserving and increasing the fund's assets to ensure that sufficient amounts are available to pay promised benefits when they come due. Although not all pension boards produce results favoring one stakeholder over another, board composition is an indicator of whose interests are most likely to be represented by the board's actions. Unfortunately, the membership of most Illinois public pension boards does not reflect a balance of interests. On the boards of the ten local funds surveyed here, either half or a majority of trustees are active employees or retirees.

In our view, a pension board of trustees should:

- Balance employee and management representation so that employees and retirees do not hold the majority of seats;
- Develop a tripartite structure that includes independent citizen representation on pension boards; and
- Include financial experts on pension boards and require financial training for non-experts.

We urge all local governments to seek legislative reform of their pension boards' governance structure in order to ensure greater balance of interests and ensure that trustees focus on their mission of safeguarding assets, not increasing liabilities.

Require CTA Pension Fund to Report to the Illinois Department of Financial and Professional Regulation

Illinois statute requires that local government pension funds provide annual financial statements to the Illinois Department of Financial and Professional Regulation's Division of Insurance. These statements must include actuarial statements and must be filed no later than nine months after the close of the pension fund's fiscal year. The CTA, however, is exempt from these requirements.

Public Act 95-0708 takes the important step of requiring additional oversight of the CTA pension fund by the Auditor General. However, it would facilitate comparison with other state and local pension funds if the CTA fund were included in the biennial report produced by the Division of Insurance. Therefore, the Civic Federation believes that the **General Assembly should remove** the exemption for the CTA pension fund and require it to report to the Division of Insurance as do other local pension funds. Information on the CTA pension fund would then be included in the Division's biennial report alongside that of other state and local pension funds.

⁶⁷ The Civic Federation, *Recommendations to Reform Pension Boards of Trustees Composition in Illinois*, (Chicago, IL) February 2006.

APPENDIX A: GLOSSARY

Actuarial Value of Assets: Under Government Accounting Standards Board (GASB) Statement No. 25, assets of public pension plans may be reported based on their actuarial, or smoothed, market value. The actuarial value typically smoothes the effects of short-term market volatility by recognizing deviations from expected returns over a period of three to five years. For example, one smoothing technique recognizes 20% of the difference between the expected (based on the assumed rate of return) and actual investment returns for each of the previous five years.

Actuarially Required Annual Employer Contribution (ARC): The sum of (1) the employer's normal cost of retirement benefits earned by employees in the current year, and (2) the amount needed to amortize any existing unfunded accrued liability over a period of not more than 30 years.

<u>Defined Benefit Plan:</u> A type of pension plan. 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 <u>employer</u> is required to pay the difference.

<u>Defined Contribution Plan:</u> A type of pension 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. Two common examples of defined contribution plans are 401(k) and 403(b) plans, named after the governing sections of the Federal tax code. Some public employee funds in the U.S. are now "hybrid" plans, offering a combined defined benefit and defined contribution to employees.

<u>Discount Rate:</u> The assumed investment rate of return. For example, a typical asset investment allocation of 60% equities and 40% fixed income is often assumed to produce a long-term return of 8%. This assumed rate of return is then used in actuarial calculations to discount the present value of projected future benefits (liabilities). The discount rate has an inverse relationship to actuarial liabilities, such that a higher discount rate will result in lower liabilities. If a pension plan expects to owe \$1 million in pension benefits 30 years from now, a 5% discount rate

⁶⁸ 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 recognizing unexpected gains or losses over a period of 3 to 5 years.

assumption would calculate the present value of that liability as \$231,377, while an 8% discount rate would produce a present value of only \$99,377. GASB 43 and 45 specify that the discount rate must reflect the assumed investment rate of return on whatever monies are expected to be used to pay for the OPEB benefits. If OPEB is "pre-funded" through a trust fund with long term investments, a higher discount rate can be used to reflect the investment yield (and actuarial liabilities are smaller). However, if OPEB is paid on a pay-as-you-go basis, the discount rate must reflect short-term investment returns (e.g., money market), typically in the 2-5% range. This lower discount rate will produce a higher actuarial liability.

<u>Funded Ratio:</u> The ratio of assets to liabilities. Usually this ratio is expressed in terms of actuarial values, as required by GASB 25. When a pension fund has enough assets to cover all its accrued liabilities, it is considered 100% funded.

GASB Statement No. 25: The Government Accounting Standards Board (GASB) is an independent, non-profit organization that establishes accounting and reporting guidelines for state and local governments in the United States. GASB Statement 25, issued in November 1994, made a number of changes to reporting requirements for public pension fund assets and liabilities.

GASB Statements Nos. 43 & 45: The Government Accounting Standards Board (GASB) is an independent, non-profit organization that establishes accounting and reporting guidelines for state and local governments in the United States. GASB Statements 43 and 45, issued in June 2004, provide reporting guidelines for Other Post Employment Benefits (OPEB), namely retiree health insurance. GASB 43 and 45 will require governments and retirement systems to calculate and report total OPEB liabilities according to guidelines similar to those used in reporting pension liabilities. These requirements will be phased in from 2005-2008 depending on the size of individual governments.

<u>Market Value of Assets:</u> Assets can be reported by their market value, which recognizes unrealized gains and losses immediately in the current year and can produce significant fluctuation year-to-year. This measure is subject to volatility in the market and can be misleading because the variations typically average out over the life of the pension plan.

<u>Multiple:</u> For eight of the pension funds analyzed in this report, the basic employer contribution is set in state statute as a multiple of the total employee contribution made two years prior. The statute requires that the employer levy a property tax not to exceed the multiple amount. Employers levy an amount that, when added to the revenue from Personal Property Replacement Taxes, equals the multiple amount. For example, the MWRD must contribute an amount equal to 2.19 times the employee contribution made two years prior.

<u>Normal Cost</u>: That portion of the present value of pension plan benefits and administrative expenses which is allocated to a given valuation year, and is calculated using one of six standard actuarial cost methods. Each of these methods provides a way to calculate the present value of future benefit payments owed to active employees. The methods also specify procedures for systematically allocating the present value of benefits to time periods, usually in the form of the normal cost for the valuation year, and the **actuarial accrued liability (AAL).** The actuarial accrued liability is that portion of the present value of benefits which is not covered by future normal costs.

<u>Two-Tiered System:</u> A pension plan where new and existing employees are promised different retirement benefits. Once granted, benefit enhancements cannot be diminished, according to the Constitution of the State of Illinois. The only way for an employer to reduce liabilities by reducing retirement benefits is to reduce those benefits for new employees, creating a "two-tiered" system.

<u>Unfunded Liabilities:</u> Those liabilities, both current and prospective, not covered by actuarial assets. It is calculated by subtracting the actuarial value of assets from the accrued actuarial liability of a fund.

APPENDIX B: REVENUE AND EXPENDITURE CALCULATIONS

The following two tables list the source documents for pension fund revenue and expenditure amounts presented in this report, as well as the line items included in revenue and expenditure totals. In some cases, the Civic Federation calculates income and expenditures differently than does the fund. For example, the Civic Federation considers investment fees as an expenditure rather than a deduction from gross investment income.

Fund Name	Source Document	FY Employee Contribution	2006 REVENUES BY Employer Contribution	SOURCE Investment Income	Other Income
Fire	Financial Report, p. 13	Total Plan Member Contributions	Total Employer Contributions	Net investment income (+investment expenses), net securities lending income (+management fees)	Gift fund donations, litigation settlement, miscellaneous income
Police	Comprehensive Annual Financial Report, p. 24	Plan member salary deductions	Employer contributions	Total investment income, net securities lending income (+ bank fees)	Miscellaneous income
Municipal	Comprehensive Annual Financial Report, p. 26	Member contributions	Contributions from the City of Chicago	Total investment income, net securities lending income (+ bank fees)	none
Laborers	Financial Statements, p. 3 and Actuarial Valuation, p. 28	Plan member contributions	none, because City contribution not required per P.A. 93- 0654	Total investment income, net securities lending income (+ management fees)	City contributions & Misc.
MWRD	Comprehensive Annual Financial Report, p. 23	Employee contributions	Employer contributions	Total investment income	Misc. income Federal subsidized
Cook County	Financial Statements, p. 5	Total plan member contributions	Employer contributions	Total investment income, net securities lending income (+ management fees)	programs, Medicare Part D subsidy, prescription plan rebates, employee transfers from Forest Preserve, miscellaneous
Forest Preserve	Financial Statements, p. 5	Total plan member contributions	Employer contributions	Total investment income, net securities lending income (+ management fees)	Medicare Part D subsidy, prescription plan rebates, miscellaneous
CTA	Actuarial	Member	CTA contributions	Investment income net of expenses + investment expense (iincludes securities lending net of fees, see Financial	Mine revenue
CTA	Valuation, p. 13 Comprehensive Annual Financial	contributions Employee	CTA contributions Intergovernmental net (Total), minimum	Statements p. 17) Invesment income (net appreciation in fair value, interest, dividends, mischellaneous),	Misc. revenue
Teachers Park District	Report, p. 23 Comprehensive Annual Financial Report, p. 24	contributions Employee contributions	funding requirement Employer contributions minus statutory reduction	Total investment income, net securities lending income (+ bank fees)	Miscellaneous

			FY 2006 EXPEN	NDITURES BY	TYPE		
Fund	Source	Benefit	Health Ins.	Refund	Other	Administrative	Investment
Name	Document	Payments	Payments	Payments	Expenses	Expenses	Costs
							Investment expenses,
	Financial Report,		Annuitant	Refunds of		Administrative	securities lending
Fire	p. 13	Total benefits	health care	contributions	none	expenses	management fees
		Employee,					
	O	spouse,				A alaa ia ia taatii .a	Tatal in caster and
	Comprehensive Annual Financial	dependent, ordinary duty		Refunds of		Administrative expenses,	Total investment activity expenses,
	Report, pp. 24,	and children		employee		consulting	securities lending
Police	86	disability, death	Hospitalization	deductions	none	expenses	bank fees
		,		Refund of			Total investment
	Comprehensive		Contribution of	contributions,			activity expenses,
	Annual Financial	Total benefits	insurance	rollover		Administrative	securities lending
Municipal	Report, p. 26	pension	premiums	distributions	none	expenses	bank fees
	Financial		Benefit payments				
	Statements, p.3	Benefit	Health				Investment expenses,
	and Actuarial	payments	Insurance	Refunds and			securities lending
Laborers	Valuation, p. 28	Pension	Supplement	rollovers	none	Administration	management fees
	Comprehensive			Refunds of			
MANAGE	Annual Financial	Total annuities		employee		Administrative	1
MWRD	Report, p. 23	and benefits	none	contributions	none	expense	Investment expenses
						Net	
		Total benefits				administrative	
	Financial	minus group				expenses (net of	Investment expense,
Cook	Statements, pp.	hospital	Group hospital			Forest Preserve	securities lending
County	5-6	premiums	premiums	Refunds	none	portion)	management fees
		Tatal bassafita					
		Total benefits minus group			Employee transfers		Investment expense,
Forest	Financial	hospital	Group hospital		to Cook	Administrative	securities lending
Preserve	Statements, p. 5	premiums	premiums	Refunds	County	expenses	management fees
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				,		Investment expense
							(includes securities
							lending fee, see
OT 4	Actuarial	Pension and		5,			Financial Statement p.
CTA	Valuation, p. 13	death benefits	Health benefits	Refunds	none	Administration	17) Investment advisory
	Comprehensive	Pension	Refund of	Refunds, 2,2		Administrative	and custodial fees,
	Annual Financial	benefits, Death	insurance	contribution		and misc.	Securities lending
Teachers	Report, p. 23	benefits	premiums	refunds	none	expenses	expense
						·	
L .	Comprehensive					Administrative	Investment expenses,
Park	Annual Financial	T. (-1 b 6)		Refund of		and general	securities lending
District	Report, p. 24	Total benefits	none	contributions	none	expenses	bank fees

APPENDIX C: SOURCES FOR FY2006

Fire

- Firemen's Annuity and Benefit Fund of Chicago, *Actuarial Valuation Report for the Year Ending December 31*, 2006, Gabriel Roeder Smith & Company. April 12, 2007.
- Firemen's Annuity and Benefit Fund of Chicago, *Financial Report for the years ended December 31, 2006 and 2005.* June 22, 2007.

Police

- Policemen's Annuity and Benefit Fund of Chicago, *Actuarial Valuation Report for the Year Ending December 31*, 2006, Gabriel Roeder Smith & Company. April 10, 2007.
- Policemen's Annuity and Benefit Fund of Chicago, *Comprehensive Annual Financial Report* for the year ended December 31, 2006.

Municipal

- Municipal Employees' Annuity and Benefit Fund of Chicago, *Actuarial Valuation Report for the Year Ending December 31, 2006*, Gabriel Roeder Smith & Company. April 2007.
- Municipal Employees' Annuity and Benefit Fund of Chicago, *Comprehensive Annual Financial Report for the Year Ended December 31*, 2006. April 11, 2007.

Laborers

- Laborers' & Retirement Board Employees' Annuity and Benefit Fund of Chicago, *Actuarial Valuation Report for the Year Ending December 31*, 2006, Gabriel Roeder Smith & Company. April 2007.
- Laborers' & Retirement Board Employees' Annuity and Benefit Fund of Chicago, *Financial Statements: December 31, 2006.* April 11, 2007.

MWRD

- Metropolitan Water Reclamation District Retirement Fund, *Actuarial Valuation as of December* 31, 2006. Goldstein & Associates. April 11, 2007.
- Metropolitan Water Reclamation District Retirement Fund, *Comprehensive Annual Financial Report for the Year Ending December 31*, 2006. June 25, 2007.

Cook County

- County Employees' and Officers' Annuity and Benefit Fund of Cook County, *Actuarial Valuation as of December 31, 2006*, Goldstein & Hartman. May 29, 2007.
- County Employees' and Officers' Annuity and Benefit Fund of Cook County, *Financial Statements: December 31, 2006.* August 31, 2007.

Forest Preserve

- Forest Preserve District Employees' Annuity and Benefit Fund of Cook County, *Actuarial Valuation as of December 31, 2006*, Goldstein & Hartman. May 29, 2007.
- Forest Preserve District Employees' Annuity and Benefit Fund of Cook County, *Financial Statements: December 31, 2006.* August 31, 2007.

CTA

- Retirement Plan for Chicago Transit Authority Retirees, *Actuarial Valuation Report for the Year Beginning January 1*, 2007, Gabriel Roeder Smith & Company. September 24, 2007.
- Retirement Plan for Chicago Transit Authority Retirees, *Basic Financial Statements and Management's Discussion and Analysis, Year Ended December 31, 2006.* October 12, 2007.

Teachers

- Public School Teachers' Pension and Retirement Fund of Chicago, *Actuarial Valuation as of June 30, 2006.* Goldstein & Associates. December 21, 2006.
- Public School Teachers' Pension and Retirement Fund of Chicago, 111th Comprehensive Annual Report, for the year ended June 30, 2006. December 1, 2006.

Park District

- Park Employees' & Retirement Board Employees' Annuity and Benefit Fund, *Actuarial Valuation as of June 30*, 2006. Goldstein & Associates Actuaries and Consultants. December 15, 2006.
- Park Employees' & Retirement Board Employees' Annuity and Benefit Fund, *Comprehensive Annual Financial Report for Fiscal Year Ended June 30, 2006.* December 20, 2006.

APPENDIX D: CTA PENSION REFORM IN PUBLIC ACT 95-0708

Public Act 95-0708, signed by Governor Blagojevich on January 18, 2008, enacted the following pension and retiree health care reforms for the Chicago Transit Authority.

Source: web site of Representative Julie Hamos (D-Evanston),

http://www.juliehamos.org/pdfs/HB656FinalFactSheet.pdf

Pension Reform

- CTA contribution increases from 6% of payroll to 12%; employee contribution increases from 3% to 6%. CTA gets "credit" for debt service up to 6% of their contribution.
- \$1 billion in pension obligation bond proceeds deposited into pension fund to bring it to approximately 72% funded. The bonds cannot be issued unless the Auditor General certifies the financial data and the reasonableness of the transaction.
- Debt service on pension and health care bonds is paid from CTA's new operating funds. Cap on total bonding is set at \$1.78 billion. Debt service in 2009 is at least 70% of 2012 debt service; 80% in 2010; 90% in 2011; level debt service required in 2012 and thereafter. The CTA can take "credit" for capitalized interest payments against their required pension contributions only for 2008.
- The RTA must approve any pledge of RTA revenues. An intercept is established so that new funding is provided directly to the trustee for the bondholders.
- Pension fund must stay above 60% funded through 2038, and reach 90% funded by 2059. The Auditor General will annually determine if the contributions are sufficient, and additional contributions must be made if he determines it is necessary. If additional contributions are needed to comply with this requirement, they are made 2/3 by CTA, 1/3 by employees.
- Governance reforms by elimination of "bloc" voting (each member would vote independently); 11 member Board of Trustees established: five union, five CTA, and expert member selected by RTA Board.
- Benefits changes for employees hired on or after January 1, 2008:
 - o Reduced pensions available at 55 years of age and 10 years of service (currently 3 years).
 - o Full pension available at 64 years of age (currently 55) and 25 years of service.
 - o CTA executive pension eliminated.
- Auditor General annually submits financial report to General Assembly.

Retiree Healthcare Reform

- An independent healthcare trust is established to manage and provide retiree benefits and is seeded with \$450 million in bond proceeds. No later than January 1, 2009, the Trust is solely responsible for providing retiree health care benefits.
- Contributions by active employees would be at least 3% of compensation on a pre-tax basis (currently they contribute nothing) bringing total pension and health care contribution to at least 9%.
- Retirees and their dependents would contribute up to 45% of the cost of coverage (currently retirees contribute nothing and dependents pay approximately 20% of the costs of coverage).
- If there is a projected funding shortfall, then contribution increases or benefit decreases must be implemented to cure the shortfall within 10 years. The Auditor General will review and must approve any plan to correct a shortfall.
- Governance reforms by elimination of "bloc" voting (each member would vote independently); 7 member Board of Trustees: three union, three CTA, and expert member selected by RTA Board.
- Retiree benefits would be no greater than 90% in network, 70% out of network (currently benefits include 100% indemnity coverage option).
- Auditor General annually submits financial report to General Assembly.