The Civic Federation

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Status of Local Pension Funding Fiscal Year 2008:

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

March 8, 2010

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The Civic Federation is an independent, non-partisan government research organization working to maximize the quality and cost-effectiveness of government services in the Chicago region and State of Illinois.

ACKNOWLEDGEMENTS

The Civic Federation would like to thank the staff and actuaries of the pension funds for their feedback and willingness to answer our pension questions.

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EXECUTIVE SUMMARY

This report analyzes basic financial data on ten major local government employee pension funds in Cook County. It is intended to provide lawmakers, pension trustees, pension fund members and taxpayers with the information they need to make informed decisions regarding public employee retirement benefits.

The report reviews fiscal year 2008 actuarial valuation reports and financial statements of the retirement 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. This report analyzes fiscal year 2008 data because it is the most recent *audited* data available for all ten pension funds. FY2008 results reflect market value losses for most funds due to the recession and steep declines in equity prices.

Three main indicators are used to assess the financial health of a local pension fund:

Funded Ratios: The funded ratios decreased for all funds except the CTA fund in FY2008 (due to a $1.1 billion infusion of pension obligation bond revenue into the CTA fund). The funded ratio for the aggregate of all ten funds' assets and liabilities was 67.2% in FY2008. Assets of the ten funds were valued on an actuarially smoothed basis, rather than on market value. Market value funded ratios were considerably lower, at an aggregate ratio of 54.5%. The **Fire Fund's market value funded ratio was only 27.2%**.

Unfunded Liabilities: Between FY1999 and FY2008 aggregate unfunded liabilities for the ten funds increased by $15.1 billion, rising from $3.4 billion to **$18.5 billion**. Unfunded liabilities per capita in Chicago for the ten local funds rose from $1,189 in FY2000 to **$5,821** in FY2008.

Investment Rate of Return and Income: The average rate of return for those funds with a January 1 to December 31 fiscal year was **-25.3%**, down from 8.1% in FY2007. The average rate of return for funds using a July 1 to June 30 fiscal year was -4.0%, down from 17.1% in FY2007. Investment income was negative for all ten funds in FY2008.

This report aggregates other data to assess pension fund performance, including:

Ratio of Active Employees to Beneficiaries: Between FY1999 and FY2008, the ratio of total active employees to beneficiaries for the ten funds combined has gradually dropped from 1.66 actives per beneficiary to 1.28, indicating that there are **fewer active employees supporting more retirees**.

Assets and Liabilities: The ten pension funds had approximately $56.4 billion in combined accrued liabilities for FY2008. The funds' assets had an aggregate actuarial value of $37.9 billion and a market value of $30.7 billion.

Employer Contributions: All funds received their statutorily required employer contributions in FY2008. The CTA was the only pension fund to receive the full actuarially calculated annual required contribution (ARC) for pension obligations,[1] but this was due to the CTA pension

[1] See page 43 for a discussion and definition of ARC.

obligation bond issuance. Aggregate employer contributions across all funds reached $964.8 million.

Employee Contributions: For all ten funds, employee contributions totaled $648.6 million in FY2008.

Growing unfunded liabilities, negative investment income for FY2008, further deteriorating funded ratios and fewer active employees supporting more retirees are all negative financial trends. The Civic Federation makes the following **pension reform recommendations** to slow the downward spiral of pension funding 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 to state statutes governing their funds, described fully beginning on page 53:

- *Benefit Reforms*
    - Create a reduced second-tier of pension benefits for new hires and/or benefits not yet accrued by existing employees by changing retirement age, minimum years of service, annuity cost of living increase, final average salary, and benefit formula multiplier.
    - Prohibit benefit enhancements unless they are fully funded, will expire in five years, and the plan is over 90% funded.
    - Restrict use of early retirement programs and reject DROP benefits.
- *Contribution Reforms*
    - Require employer and employee contributions to relate to actuarial liabilities and funded ratios so that contributions are at levels consistent with the actuarially calculated annual required contribution (ARC). Funds should adopt a strategy whereby required contributions are based on a ratio of employer and employee proportionate shares, such as 50/50 or 60/40.
    - Prohibit pension obligation bonds unless comprehensive benefit reforms are enacted first and bond proceeds are used only to reduce unfunded liabilities, not to pay current contributions.
- *Governance Reforms*
    - Consolidate local pension funds.
    - Reform pension boards of trustees to balance stakeholder interests.
- *Financial Reporting and Disclosure Recommendations*
    - Require reporting of 30 year projections for funded ratio, unfunded liabilities, required contributions, and date of insolvency.
    - Require reporting of any benefit enhancements and their effect on total liabilities.

STATUS OF LOCAL PENSION FUNDS OVERVIEW

This report analyzes basic financial data on ten major local government employee pension funds in Cook County. It is intended to provide lawmakers, pension trustees, pension fund members, and taxpayers with the information they need to make informed decisions regarding public employee retirement benefits.

Scope of Report

This report presents broad trends for 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 of 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.

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: [2]

- County Employees' and Officers' Annuity and Benefit Fund of Cook County
- Forest Preserve District Employees' Annuity and Benefit Fund of Cook County[3]
- The Metropolitan Water Reclamation District Retirement Fund
- Retirement Plan for Chicago Transit Authority Employees
- Public School Teachers' Pension and Retirement Fund of Chicago[4]
- Park Employees' & Retirement Board Employees' Annuity and Benefit Fund[5]

Public Pension Plan Type

All ten public pension plans surveyed in this report are **defined benefit plans**. In these ten defined benefit plans, employers and/or employees annually contribute to an employer-sponsored retirement fund that invests assets in order cover future benefit payments. Upon retirement, the employee receives an annuity based upon a specific formula that considers his or her highest salary (usually based on an average of several years) and length of service—in this sense, the benefit is "defined." If the amounts contributed to the plan over the term of the employee's employment, plus accrued investment earnings, are insufficient to support all

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[2] 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.

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

[4] Certified teachers employed by the Chicago Board of Education participate in the Public School Teachers' Pension and Retirement Fund of Chicago. All other employees of the Board of Education are enrolled in the City of Chicago's Municipal Employees' Annuity and Benefit Fund.

[5] The 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.

benefits (including health and survivor's benefits), the former employer is expected to pay the difference.

By contrast, in a **defined contribution plan**, the employee and/or employer contribute fixed amounts (i.e., the contribution is "defined"). The retirement benefit, whether taken as a lump sum or an annuity, is based upon the total amount contributed to the plan over the employee's tenure as well as any investment return. In general, the employer's liability ends upon the employee's retirement, apart from any ancillary health benefits. Common examples of defined contribution plans are 401(k), 403(b) and 457 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. Some of the governments in this report may also make supplementary 457 plans available to their employees, but those plans are not included in this analysis.

Data Sources and Comparability Issues

Unless otherwise noted, all fund data in this report is taken from the actuarial valuations and financial statements of the funds, as listed in Appendix C on page 64. Specific page number references for revenues and expenditures are listed in Appendix A on page 62. For those plans that also subsidize retiree health care, combined pension and health care results are reported.

Some funds compute their actuarial results in one way to satisfy State reporting requirements and a different way to comply with the standards of the Governmental Accounting Standards Board (GASB). In order to maximize comparability among the funds, the Civic Federation uses the figures computed according to GASB standards with the exception of the Chicago Teachers' Pension fund. For the Teachers' fund we used the figures reported in the combined actuarial valuation, which includes assets and expenses related to the retiree health care obligations of the fund but does not include health care as a long-term liability. State statute (40 ILCS 5/17-142.1) currently limits the fund's annual reimbursements to retirees for their health care expenditures to $65 million, so the fund considers this a fixed annual expenditure rather than an open-ended liability. However, the GASB requires that because there is a history of increases to this statutory maximum, the retiree health care plan should be valued as an ongoing liability.[6]

It is also important to note that the Civic Federation reports the combined pension and retiree health care liabilities for the Retirement Plan for Chicago Transit Authority Employees. Public Act 95-708 removes the liability for retiree health care benefits from the CTA pension fund no earlier than January 1, 2009 but no later than July 1, 2009. The FY2008 actuarial valuation for the CTA fund assumes that by June 30, 2009 the retirement fund will no longer bear any responsibility for funding retiree health care benefits.[7] Although the CTA fund now reports its pension and health care liabilities separately, the Civic Federation continues to report the combined pension and health care liability until the health care trust is fully separated from the pension fund.

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[6] Public School Teachers' Pension and Retirement Fund of Chicago, *Actuarial Valuation of Retiree Health Insurance Plan as of June 30, 2008 For GASB Statement No. 43*, p. 5

[7] Retirement Plan for CTA Employees *Actuarial Valuation as of January 1, 2009*, p. 4.

Fiscal Year 2008 Market Losses and Fiscal Year 2009 Projections

This report analyzes fiscal year 2008 data because it is the most recent audited data available for all ten pension funds. The FY2008 results reflect dramatic decreases in the market values for all pension funds. However, the economic recession that began in December 2007 and the sharp decline in financial markets that began in September 2008 appears to have bottomed out in March of 2009. FY2009 investment results may be strong for funds operating on a January 1 to December 31 fiscal year. Several of these funds reported September 2009 year-to-date returns in the range of 15-20%.[8]

Chicago Transit Authority Pension Reform Legislation

Major reforms of the Chicago Transit Authority (CTA) pension plan were recently passed by the Illinois General Assembly and have had a significant effect on the CTA pension fund beginning in FY2007. The reforms are described here in order to give the reader context with which to understand the status of the CTA pension plan as described in this report, as it is the only fund to have undergone dramatic reform.

The urgency for reform of the CTA pension fund arose from the actuarial projection that the fund would be unable to pay retiree health care costs by 2008 and reach 0% funding by 2013 if nothing was done to boost assets or reduce liabilities. The fund's poor financial health was 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 few decades.[9] The legislated reforms specifically addressed each of these issues.

Passed in the spring of 2006 as part of the FY2007 Budget Implementation Act, **Public Act 94-0839** required that beginning January 1, 2009 the CTA and its employees make annual pension contributions sufficient to bring the funded ratio to 90% by 2058. The Act specified that payments are to be made as a level percentage of payroll, and that post employment health care benefits provided by the pension fund were 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.[10]

The second piece of CTA pension reform legislation, **Public Act 95-0708**, was passed on January 18, 2008 and made changes to the pension and retiree health care benefits and contributions.[11] More specifically, employee and employer contributions were increased to 6% and 12% of payroll, respectively, which doubled their previous contribution rates of 3% and 6%. The employer, however, will receive a "credit" for pension obligation bond debt service payments of up to 6% of payroll.

In addition to the baseline 6% and 12% employee and employer contributions, the legislation also set funded ratio standards and if these standards are not met, additional employer and employee contributions are triggered. P.A. 95-0708 adjusted the 50-year schedule forward one

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[8] Public Act 96-006, enacted in April 2009, requires pension funds (except downstate police and fire funds) to maintain an official web site and to post information including investment policies, contracts, and performance.
[9] 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.
[10] 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
[11] See page 65 for more details.

year to 2059 and required that the fund maintain a minimum 60% funded ratio through FY2039. If the fund falls below this requirement, then the combined contribution is increased with the employer paying two-thirds of the increased contribution and employees covering the remaining one-third of the increased contribution. The same two-third/one-third increased contribution standard applies to the second requirement, which states that beginning in FY2040 the fund must maintain a contribution schedule that is sufficient to bring total assets of the plan to 90% by FY2059. Going forward from FY2060, the fund must collect a minimum contribution amount needed to maintain the funded ratio at or above 90%.

The legislation also changed benefits for employees hired after January 18, 2008, raising the years-of-service requirement for the reduced pension benefit available at 55 years of age from 3 years to 10 years of service. The legislation also raised the age requirement for receiving an unreduced pension, from 55 years of age to 64 years of age and 25 years of service.

P.A. 95-0708 required that no less than $1,110,500,000 in pension obligation bond proceeds be deposited into the retirement fund, and no less than $528,800,000 be deposited into a new Retiree Health Care Trust. The infusion of $1.1 billion into the retirement fund was expected to raise its funded ratio to approximately 80%.[12]

The effects of these two pieces of legislation were first realized in the FY2007 pension financial statements. As a result of legislation that created the separate Retiree Health Care Trust, health care liabilities for the pension fund decreased from $1.766 billion as of January 1, 2007 to $68.8 million as of January 1, 2008.[13] The FY2008 actuarial valuation for the CTA fund assumes that by June 30, 2009 the pension fund will no longer bear any responsibility for funding retiree health care benefits.[14] The new Retiree Health Care Trust will disclose a significant health care liability when it begins producing financial reports beginning with FY2009.

The CTA Fund actuaries also adjusted the retirement probability assumptions due to the changes in retirement eligibility age, required years of service, and health care eligibility that took effect January 18, 2008. These assumption changes reduced the FY2007 actuarial liabilities by $28.0 million.[15]

FY2008 audited CTA pension data reflects the infusion of $1.1 billion in bond proceeds, nearly doubling its total actuarially-valued assets. This cash infusion raised the CTA's pension funded ratio from 38.0% in FY2007 to 75.6% in FY2008.

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 actuarial accrued liabilities. Actuarial accrued liabilities represent liabilities for

[12] Retirement Plan for CTA Employees *Actuarial Valuation as of January 1, 2008*, p. 3.
[13] Retirement Plan for CTA Employees *Actuarial Valuation as of January 1, 2008*, p. 16.
[14] Retirement Plan for CTA Employees *Actuarial Valuation as of January 1, 2009*, p. 4.
[15] Retirement Plan for CTA Employees *Actuarial Valuation as of January 1, 2008*, p. 4.

future benefits due to current beneficiaries as well as liabilities for benefits earned to date by current employees. A pension fund is considered 100% funded when its asset level equals the actuarial accrued liabilities. A funding level under 100% means that a fund's current assets are less than the amount needed to meet all accrued liabilities.

Assets and liabilities are calculated using a number of actuarial assumptions. Liabilities are calculated using assumptions about such factors as future salary increases, 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 **smoothed market value**, which mitigates the effects of short-term market volatility by recognizing deviations from expected returns over a period of three to five years.[16] 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. **GASB 25 allows for the actuarial value to either be smoothed or to equal the current market value.** In 2009, Public Act 96-0043 required the five State of Illinois retirement systems to switch from using current market value as their actuarial value to using a smoothed market value as their actuarial value, as do all ten local funds reviewed in this report.

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 the selection of a different actuarial method 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 or benefit levels. 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 three common indicators used in this report are funded ratio, unfunded liabilities, and actual investment rate of return, as described below.

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

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[16] 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.

Statement 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 on the date of valuation to cover its actuarial accrued liability.

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.[17]

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 retirement systems that are considered to be financially secure and funded in an appropriate and responsible manner" (40 ILCS 5/1-103.3). Similarly, additional employer contributions are required for the Chicago Teachers' fund when the ratio falls below 90% (40 ILCS 5/17-127*ff*). State statutes now require that the CTA pension fund maintain a minimum 60% funded ratio through 2039 and reach 90% funded by 2059 as part of recent pension reform legislation (40 ILCS 5/22-101e3-4). The statute requires that the CTA fund receive sufficient employer and employee contributions to stay above 90% funded after 2059.

A funded ratio based on a smoothed actuarial value of assets does not represent the percentage of liabilities that could be covered by assets if those assets were sold at their current market value. For example, the Fire Fund had an FY2008 actuarial value funded ratio of 39.8% but a market value funded ratio of only 27.2%. In other words, the FY2008 market value of assets was equal to only 27.2% of actuarial accrued liabilities. During a period of substantial investment gains or losses, a smoothed actuarial funded ratio does not reflect the true level of assets held by the fund.

[17] See the Pension Protection Act of 2006, Public Law 109-280, http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109_cong_public_laws&docid=f:publ280.109.pdf . 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. The Worker, Retiree and Employer Recovery Act signed into law by President Bush on December 23, 2008 loosened some of these requirements by, for example, extending from 10 to 13 the number of years an "endangered" (less than 80% funded) plan is given to implement an improvement strategy. See the Worker, Retiree, and Employer Recovery Act of 2008, HR 7327, Public Law 110-458, http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_cong_bills&docid=f:h7327enr.txt.pdf

Unfunded Liabilities

Unfunded actuarial accrued liabilities are those accrued liabilities not covered by actuarial assets. Unfunded liability is calculated by subtracting the actuarial value of assets from the actuarial accrued 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 the functions of this indicator 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 earned on investments is an important indicator of the strength of a fund's investment strategy. As the funds are required to report their assets at fair value, investment income includes unrealized appreciation or depreciation over the time periods reflected. Because of this, investment income can show large fluctuations from year to year. Low or negative investment income usually causes a significant drop in pension fund assets, although this effect may be smoothed over time depending on 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 (see page 33). A fund's actual rate of return for a given year can be compared to its assumed rate of return. Rates of return for similarly structured pension funds can also be compared to each other over time or to specific market indices and benchmarks.

The assumed investment rate of return plays an important role in the calculation of actuarial liabilities. It is used to discount the present value of projected future benefit payments.[18] 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 warned in years past that the 9.0% assumed rate of return negotiated in collective bargaining was on the verge of being indefensibly high. In FY2007 the CTA's discount rate was reduced to 8.75% in response to a call for more reasonable actuarial valuation assumptions.[19]

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[18] The investment rate of return is also used to calculate the "smoothed" value of assets (see page 8).
[19] *See* IL P.A. 94-839 and Retirement Plan for CTA Employees Actuarial Valuation as of January 1, 2008, p. 2.

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

When rates of return are positive, investment income usually represents the majority of a fund's total income. Employee and employer contribution amounts are relatively stable from year to year but investment income can fluctuate widely. Multi-year investment gains or losses that deviate substantially from the assumed rate of return 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 significant losses for the funds, and the steep decline in equity markets beginning in 2008 has resulted in negative returns for all ten funds analyzed in this report. The effects of these gains and losses are felt for several years beyond their market occurrence due to the actuarial smoothing of assets. While most FY2007 financial statements no longer reflected the market decline felt at the beginning of the decade, this respite was brief given the dramatic market decline in FY2008.

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. Sometimes those enhancements are granted in exchange for short-term employee concessions on salaries or health insurance. Offering benefit enhancements can appear to be an attractive option to employers, since achieving immediate short-term savings on other employee costs is often a more pressing need than controlling longer-term pension 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 were made exclusively through the collective bargaining process until the passage of Public Act 95-0708 that codified CTA pension benefits in state statute. Now for all of the 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.[20] Retroactive pay increases also affect pension costs because higher salaries generate higher annuities. Retroactive pay increases awarded to Chicago firefighters created an actuarial loss of $105.5 million in FY2006.[21]

The Constitution of the State of Illinois states that once granted, pension benefit enhancements may not be diminished.[22] The Civic Committee of the Commercial Club suggests that the Illinois Constitution protects the rights of pension benefits that have already been earned by public employees but does not protect benefits that have not yet been earned. The Civic Committee recommends that a second-tier defined benefit pension plan be applied to both new employees and current employees prospectively.[23]

Even vested pension benefits may be placed in jeopardy if a municipality files for bankruptcy. At the point when a municipality receives approval to enter into a bankruptcy proceeding, employees and retirees become creditors of the municipality. Employees and retirees may receive unsecured creditor status during this process, which may limit their ability to fully recover salary and benefit amounts previously agreed to or conferred upon them. While not an intentional or agreed-upon reduction of benefits, the reality of this situation may be a reduction of pension benefits for municipal employees and retirees.

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.[24] The new actuary also analyzed the fund experience from 2000-2003 and subsequently made two significant assumption changes: 1) the discount 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.[25] The fund actuary estimated that using the old methods

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

[21] Firemen's Annuity and Benefit Fund of Chicago *Actuarial Valuation Report for the Year Ending December 31, 2006,* p. 7.

[22] 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.*

[23] Civic Committee of the Commercial Club, Minority Report to the State Pension Modernization Task Force, November 2009. See http://www.ilga.gov/commission/cgfa2006/Upload/112009PensionTaskForceReport.pdf, p. 57 (last visited February 18, 2010).

[24] The previous actuary used a 5-year smoothed average ratio of market to book value while the new actuary used a 5-year smoothing of 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.

[25] County Employees' and Officers' Annuity and Benefit Fund of Cook County, *Actuarial Valuation as of December 31, 2004*, p. 10.

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%.[26]

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.[27] 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%.

In FY2007 the CTA reduced the discount rate for its retirement plan from 9.0% to 8.75%. The result of this shift in the assumed rate of return on the CTA's investments increased the actuarial liabilities for the retirement plan by approximately 1.9% or $46.0 million.[28]

Employer and Employee Contributions

Changes in employer or employee contributions can have a significant effect on the funded status of a defined benefit plan, and stable but consistently inadequate contributions are very detrimental.

Employee contributions are typically fixed at a certain percentage of pay (around 9% for the funds included in this report—see page 39). Employer contributions may be tied to an actuarial estimate of what is needed or may be a fixed rate. As described on page 41, the employer contributions to the Teachers and CTA pension funds are actuarially-related but the other eight local funds in this report all have fixed contribution rates based on the employee contribution two years prior.

Temporary reductions in employer contributions, sometimes referred to as "pension holidays", can have a significant negative effect on the fiscal health of a pension fund. 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 a 50% reduction in the employer contributions for the Park District fund in FY2005 and FY2006, and increased the unfunded liabilities by roughly $20 million.[29]

Chronic shortfalls in employer contributions are a very serious drag on the health of many pension funds. GASB Statements 25 and 27 require that public pension plans calculate an annual required contribution (ARC) that must be reported in the plan's financial statements. 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

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[26] Estimates provided by Sandor Goldstein via e-mail to the Civic Federation, January 24, 2008.
[27] 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 change was a correction to the actuary's computer model. Information provided by Sandor Goldstein, March 20, 2009.
[28] Retirement Plan for CTA Employees, *Actuarial Valuation as of January 1, 2008*, p. 4.
[29] Park Employees' Annuity and Benefit Fund of Chicago Actuarial Valuation as of June 30, 2006, p. 12 and Park Employees' Annuity and Benefit Fund of Chicago Actuarial Valuation as of June 30, 2005, p. 12.

accrued liability over a period of not more than 30 years.[30] Although GASB does not require funding at the level of the ARC, it does require that plans report on how their actual contribution levels compare to the ARC.[31] As will be described beginning on page 35, the employer contributions to four of the pension funds in this report were less than half the ARC in FY2008. The state statutes governing the those pension funds whose employer contributions are set as a multiple of the employee contribution made two years prior do not include a self-adjusting mechanism to change those multiples when they fail to meet the ARC.

In contrast to the Chicago-area public pension funds covered in this report, 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 larger than a simple funding multiple. However, failure to fund at the ARC effectively pushes the costs of today's government services onto tomorrow's taxpayers. Employer funding of public pension plans should be sufficient to keep the promises made to today's employees for their future retirement in order to ensure intergenerational equity for taxpayers.

LOCAL PENSION FUND STATUS INDICATORS

The following section analyzes FY2008 data from ten local pension funds using the primary indicators of pension fund health: funded ratios, unfunded liabilities and investment rates of return.

Funded Ratios

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 recognizing unexpected gains and losses over a period of three to five years (see page 8 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 actuarial funded ratios of almost every fund decreased in FY2008, with the exception of the CTA fund. The funded ratio for the CTA rose from 38.0% in FY2007 to 75.6% in FY2008 due to the infusion of $1.1 billion in bond proceeds, along with increased employer and employee contributions. The remaining funded ratios all decreased slightly in FY2008.

The low funded ratios of the Fire and Police pension funds are a continuing cause for concern because these ratios are 39.8% and 47.3%, respectively for FY2008. They may be at risk of a short slide into insolvency such as the one that threatened the CTA until the reform legislation was

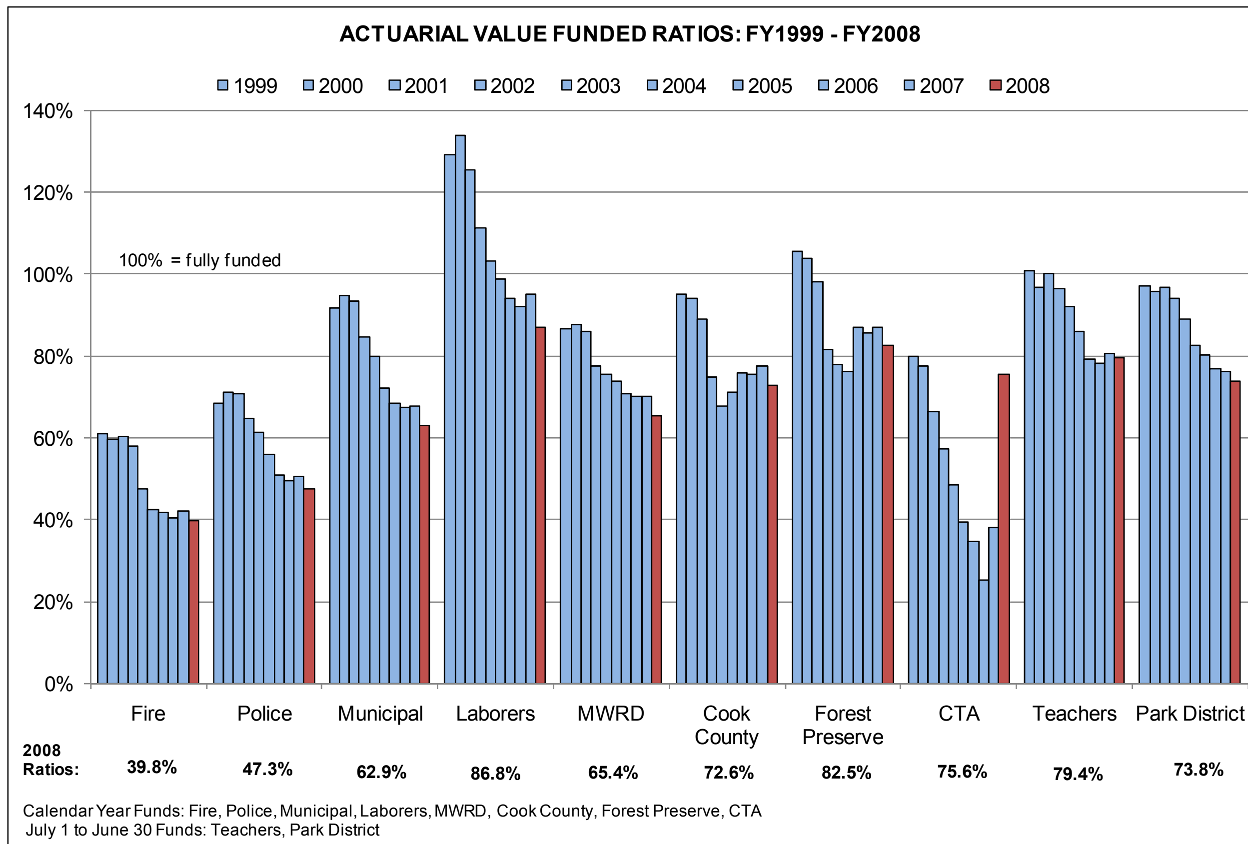
[30] See The Civic Federation, "Pension Fund Actuarially Required Contributions (ARC): A Civic Federation Issue Brief," February 14, 2007 at http://www.civicfed.org/articles/civicfed_241.pdf.
[31] GASB sets accounting standards and has no authority over funding levels.

passed. An additional note of concern with respect to the Police Fund is that a large number of active employees are nearing retirement age.[32]

On the high end of the scale, the Laborers' Fund dipped below 100% funded for the first time in FY2004, but after an increase in FY2007 to 95.0%, it has fallen to 86.8% in FY2008. The employer contribution to this fund was waived when the plan was over 100% funded.[33]

The actuarial funded ratio for the aggregate of all funds' assets and liabilities was 68.6% in FY2008, which is virtually identical to the FY2007 aggregate average of 68.4%.

It is important to consider actuarial funded ratios over time. The following chart illustrates the ten funds' actuarial standing since FY1999.



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 1999. Market value funded ratios are more volatile than the actuarial funded ratios due to the smoothing effect of actuarial value (see Glossary). However, market value funded ratios represent how much

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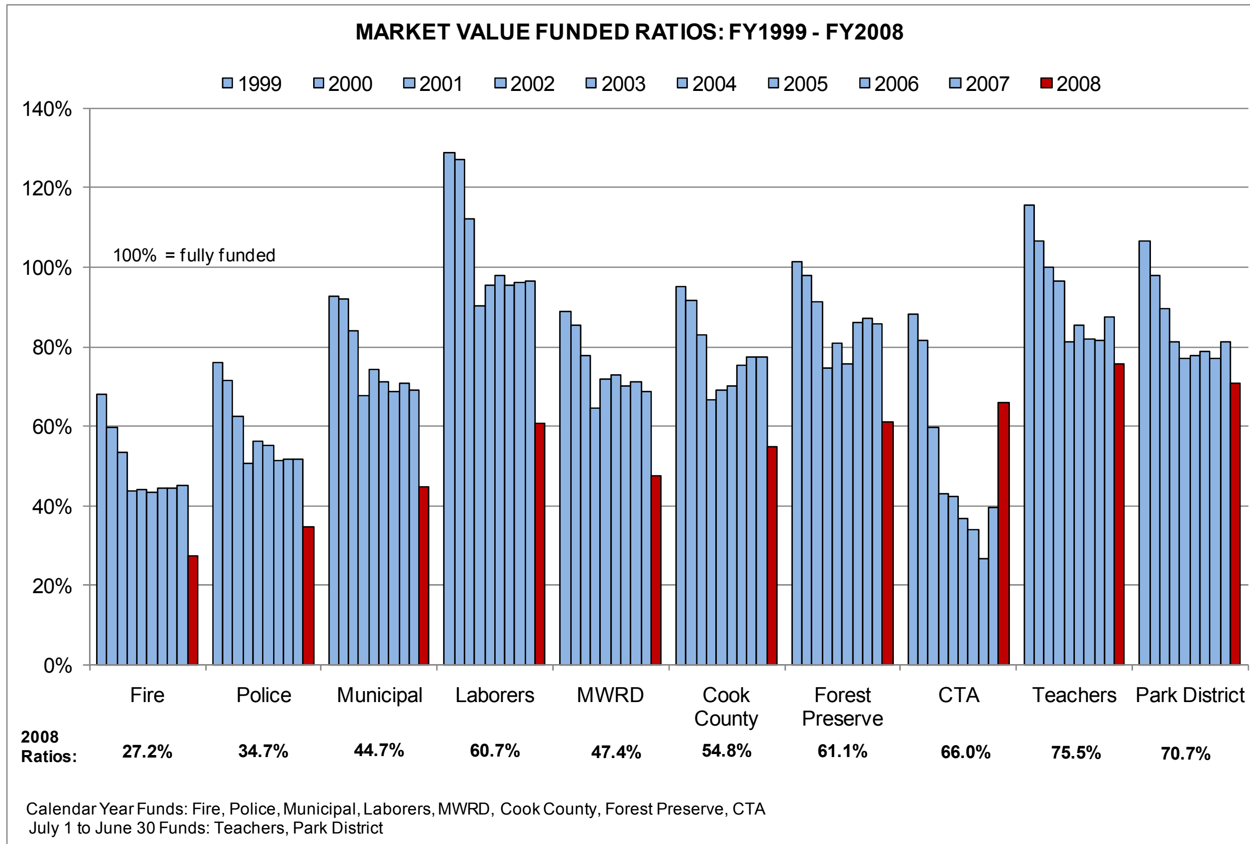
[32] Policemen's Annuity and Benefit Fund of Chicago Actuarial Valuation for the year ending December 31, 2008, p. 3.

[33] 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 was 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).

money is actually available today to cover actuarial accrued liabilities. Each fund's FY2008 market value funded ratio is significantly less than its FY2008 actuarial funded ratio, indicating that FY2008 investment returns were much lower than the smoothed returns of the past five years. The market value funded ratio for the aggregate of all tends funds was 54.5%. The Fire Fund's FY2008 market value funded ratio was only 27.2%.

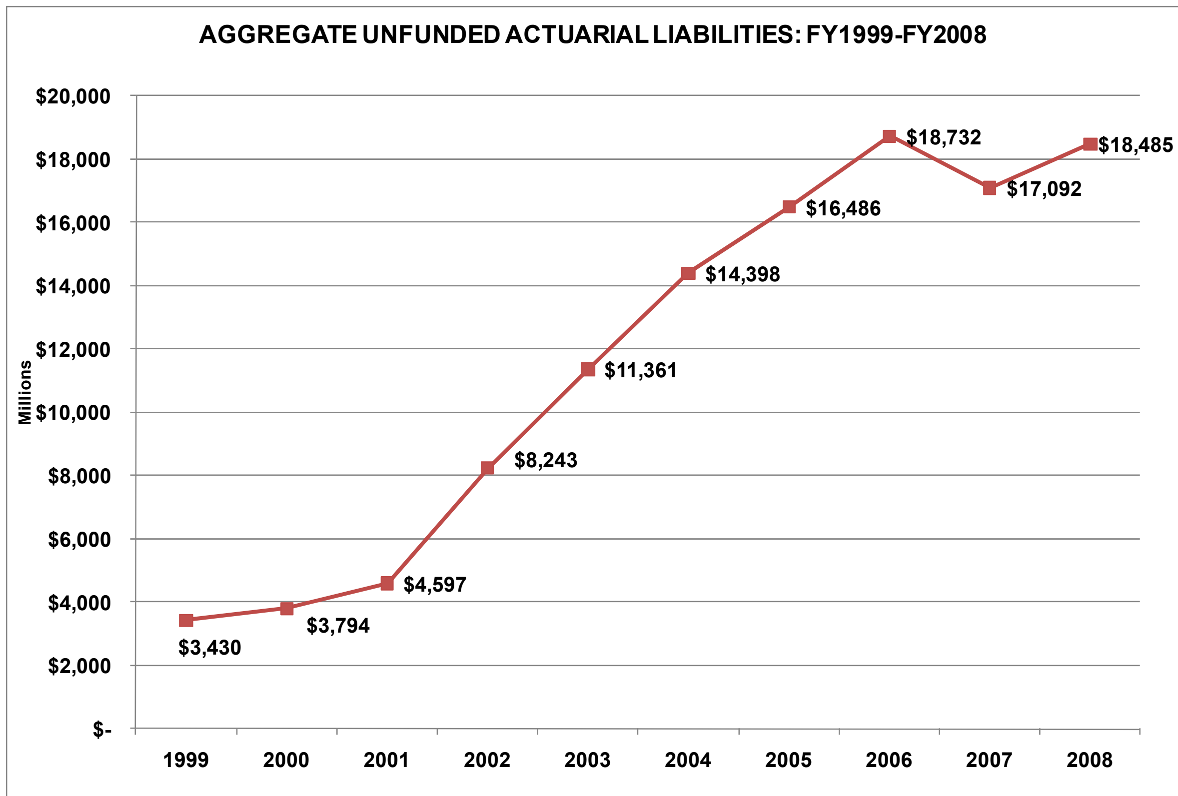


Unfunded Actuarial Liabilities

The difference between assets and liabilities is known as the unfunded liability. This figure is arrived at by subtracting the actuarial value of the assets from the actuarial 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.

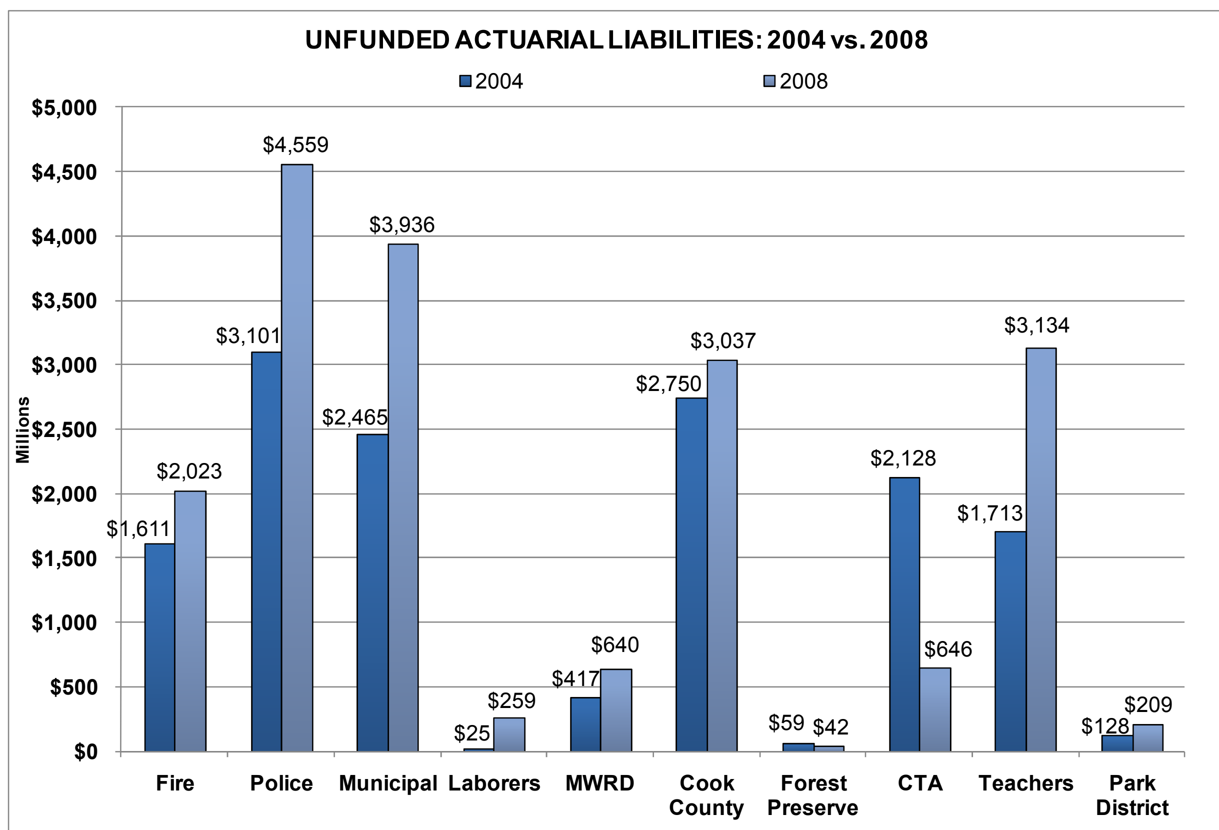
The aggregate unfunded liability of the ten pension funds has increased rapidly in recent years, as shown in the following chart. Between FY1999 and FY2001, the aggregate unfunded liability averaged roughly $4 billion. But in FY2002 it nearly doubled to $8.2 billion and subsequently gained nearly $3 billion every year until reaching a total of $18.7 billion in FY2006. In FY2007 the aggregate unfunded liability has decreased for the first time in ten years, falling to $17.1 billion. However, in FY2008 the aggregate unfunded liability increased again, rising to $18.5 billion. Over the past ten years, the aggregate unfunded liability grew by $15.1 billion, or 444.1%, with most of the growth occurring between FY2001 and FY2006.



The following graph shows the five-year trend in unfunded actuarial liabilities for each fund. The largest FY2008 unfunded liability is in the Police Fund at nearly $4.6 billion, an increase of 47.0% over FY2004.

The highest rate of increase in unfunded liabilities was experienced by the Teachers' Fund, which went from having $1.7 billion in unfunded liabilities in FY2004 to $3.1 billion in FY2008—an increase of over 83.0%.

The Forest Preserve Fund unfunded liabilities declined in the last five years, but this was due in large part to a change in actuarial assumptions (see page 12). The CTA's unfunded liabilities also decreased, mainly due to the shifting of retiree health care costs to a separate trust, $1.1 billion in bond proceeds from a pension obligation bond and increases in both employer and employee contributions.

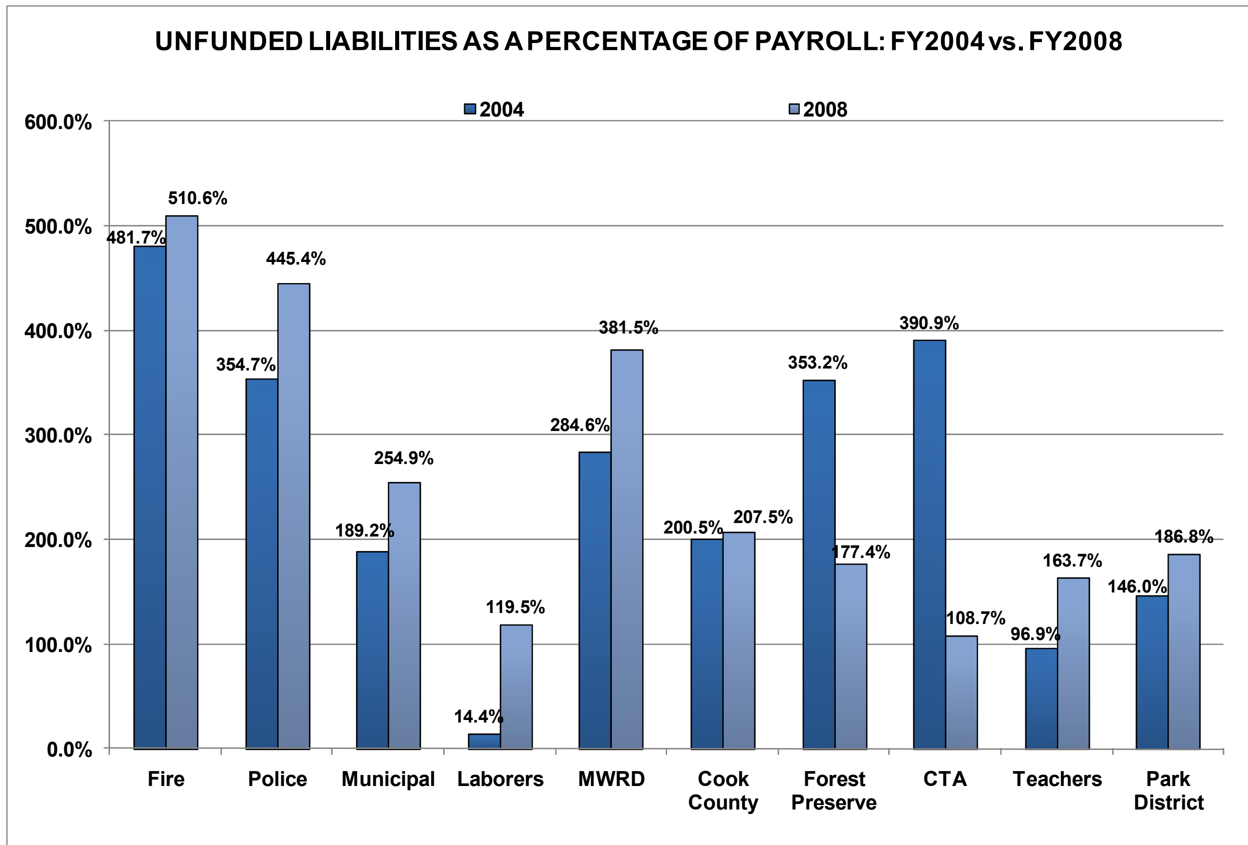


Another indicator of funding progress is a fund's unfunded liability calculated as a percentage of covered payroll. This measurement expresses the unfunded liability in terms of the current personnel expenditures and demonstrates the relative size of the unfunded liability. One of the functions of this 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 may need to be considered in order to prevent pension obligations from crowding out spending on core services.

Seven of the ten funds experienced significant increases in unfunded liabilities as a percentage of payroll in the last five years. The Fire Fund has the highest unfunded liabilities as a percentage of payroll, at 510.6%, followed by the Police Fund. The Laborers Fund experienced the largest growth in its unfunded liabilities as a percentage of payroll, increasing by 105.1 percentage points.



Unfunded Accrued Actuarial Liabilities Per Capita in Chicago

Total combined unfunded liabilities of the ten local pension funds reviewed in this report rose from $3.8 billion in FY2000 to $18.5 billion in FY2008, an increase of $14.7 billion or 387%. Calculating the unfunded liability per capita for residents of the City of Chicago offers a sense of scale for these liabilities.

The following table shows that in FY2000, the unfunded liability per capita for the ten major local government pension funds for which residents of the City of Chicago pay taxes (primarily property taxes and sales taxes) totaled $1,189. The highest per capita unfunded liability was for the Police Fund at $564 per resident of Chicago. The Laborers' and Forest Preserve Funds were both over 100% funded in FY2000 so they showed negative unfunded liabilities per capita. When one includes the five State-sponsored pension funds for which Chicago residents also pay taxes (including income taxes), the unfunded liability per capita in Chicago rises to $2,442.

State and Local Public Pension Funds Unfunded Liabilities Per Capita FY2000
Total Unfunded Liability Per Capita in the City of Chicago

FUND	FY2000 Unfunded Accrued Actuarial Liability	2000 population	Unfunded liability per capita	Funded Ratio
Chicago Fire[1]	$ 833,853,513	2,896,016	$ 288	59.4%
Chicago Police[1]	$ 1,632,563,097	2,896,016	$ 564	71.1%
Chicago Municipal[1]	$ 367,203,474	2,896,016	$ 127	94.5%
Chicago Laborers[1]	$ (440,057,229)	2,896,016	$ (152)	133.9%
MWRD[1]	$ 156,842,220	5,376,741	$ 29	87.6%
Cook County[1]	$ 363,268,964	5,376,741	$ 68	94.0%
Forest Preserve[1]	$ (6,272,752)	5,376,741	$ (1)	103.7%
CTA[2]	$ 530,761,000	3,700,000	$ 143	77.5%
Chicago Teachers[1]	$ 328,168,774	2,896,016	$ 113	96.7%
Chicago Park District[1]	$ 28,029,013	2,896,016	$ 10	95.7%
SUBTOTAL LOCAL FUNDS	**$ 3,794,360,074**		**$ 1,189**	
Downstate Teachers (TRS)[3]	$ 11,404,991,000	12,419,213	$ 918	68.2%
State University Employees (SURS)[3]	$ 1,615,100,000	12,419,213	$ 130	88.2%
State Employees (SERS)[3]	$ 2,002,087,260	12,419,213	$ 161	81.7%
Judges[3]	$ 448,219,698	12,419,213	$ 36	48.6%
General Assembly[3]	$ 98,891,471	12,419,213	$ 8	41.6%
SUBTOTAL STATE FUNDS	**$ 15,569,289,429**		**$ 1,254**	
TOTAL ALL STATE AND LOCAL FUNDS	**$ 19,363,649,503**		**$ 2,442**	

Note: Includes all major public pension funds for which Chicago residents pay taxes.

[1] Supported by local property taxes (indirectly for Chicago Teachers Fund)

[2] Supported by local sales taxes, real estate transfer tax, and fares

[3] Supported by state sales taxes, income taxes, and other general revenues

Source: FY2000 financial statements of the pension funds

Source for population: U.S. Census Bureau estimates, except CTA is CTA budget book estimate

The following table shows that in FY2008, the unfunded liability per capita for the local funds was $5,821 and the total including State pension funds was $10,037. Of the local funds, the Police Fund had the highest unfunded liability per capita at $1,598, although the Municipal and Teachers' Funds also exceeded $1,000 per capita. The Downstate Teachers Fund, however, had an unfunded liability per capita of $2,341 in FY2008.

State and Local Public Pension Funds Unfunded Liabilities Per Capita FY2008 Total Unfunded Liability Per Capita in the City of Chicago				
FUND	**FY2008 Unfunded Accrued Actuarial Liability**	**2008 population**	**Unfunded liability per capita**	**Funded Ratio (Actuarial)**
Chicago Fire[1]	$ 2,022,882,857	2,853,114	$ 709	39.8%
Chicago Police[1]	$ 4,558,826,295	2,853,114	$ 1,598	47.3%
Chicago Municipal[1]	$ 3,936,346,961	2,853,114	$ 1,380	62.9%
Chicago Laborers[1]	$ 258,960,825	2,853,114	$ 91	86.8%
MWRD[1]	$ 640,441,314	5,294,664	$ 121	65.4%
Cook County[1]	$ 3,037,106,552	5,294,664	$ 574	72.6%
Forest Preserve[1]	$ 41,649,951	5,294,664	$ 8	82.5%
CTA[2]	$ 645,885,000	3,800,000	$ 170	75.6%
Chicago Teachers[1]	$ 3,134,053,529	2,853,114	$ 1,098	79.4%
Chicago Park District[1]	$ 208,703,097	2,853,114	$ 73	73.8%
SUBTOTAL LOCAL FUNDS	**$ 18,484,856,381**		**$ 5,821**	
Downstate Teachers (TRS)[3]	$ 30,201,644,000	12,901,563	$ 2,341	56.0%
State University Employees (SURS)[3]	$ 10,331,400,000	12,901,563	$ 801	58.5%
State Employees (SERS)[3]	$ 12,845,913,617	12,901,563	$ 996	46.1%
Judges[3]	$ 844,655,480	12,901,563	$ 65	42.0%
General Assembly[3]	$ 160,374,128	12,901,563	$ 12	32.0%
SUBTOTAL STATE FUNDS	**$ 54,383,987,225**		**$ 4,215**	
TOTAL ALL STATE AND LOCAL FUNDS	**$ 72,868,843,606**		**$ 10,037**	

Note: Includes all major public pension funds for which Chicago residents pay taxes.

[1] Supported by local property taxes (indirectly for Chicago Teachers Fund)

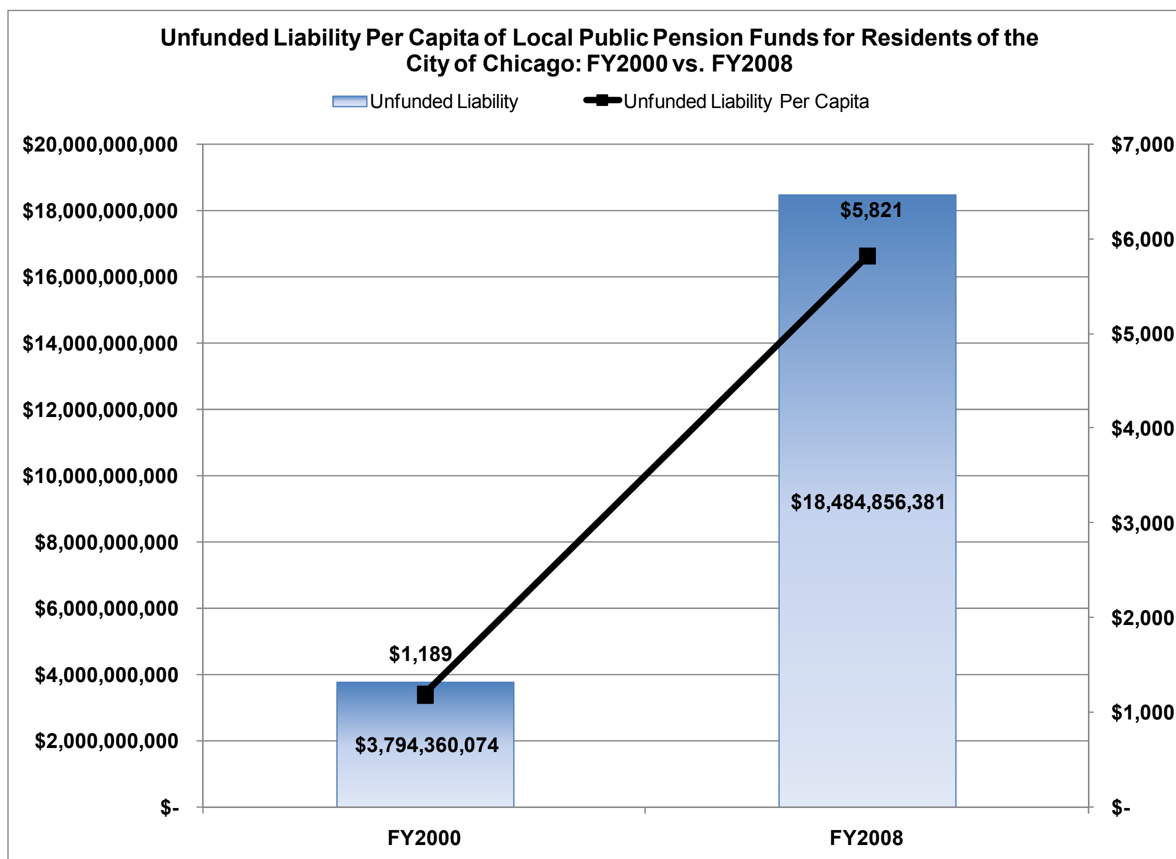
[2] Supported by local sales taxes, real estate transfer tax, and fares

[3] Supported by state sales taxes, income taxes, and other general revenues

Source: FY2008 financial statements of the pension funds

Source for population: U.S. Census Bureau estimates, except CTA is CTA budget book estimate

The following graph summarizes the $14.7 billion increase in local funds' unfunded liabilities between FY2000 and FY2008, alongside the $4,632 increase in unfunded liabilities per capita.



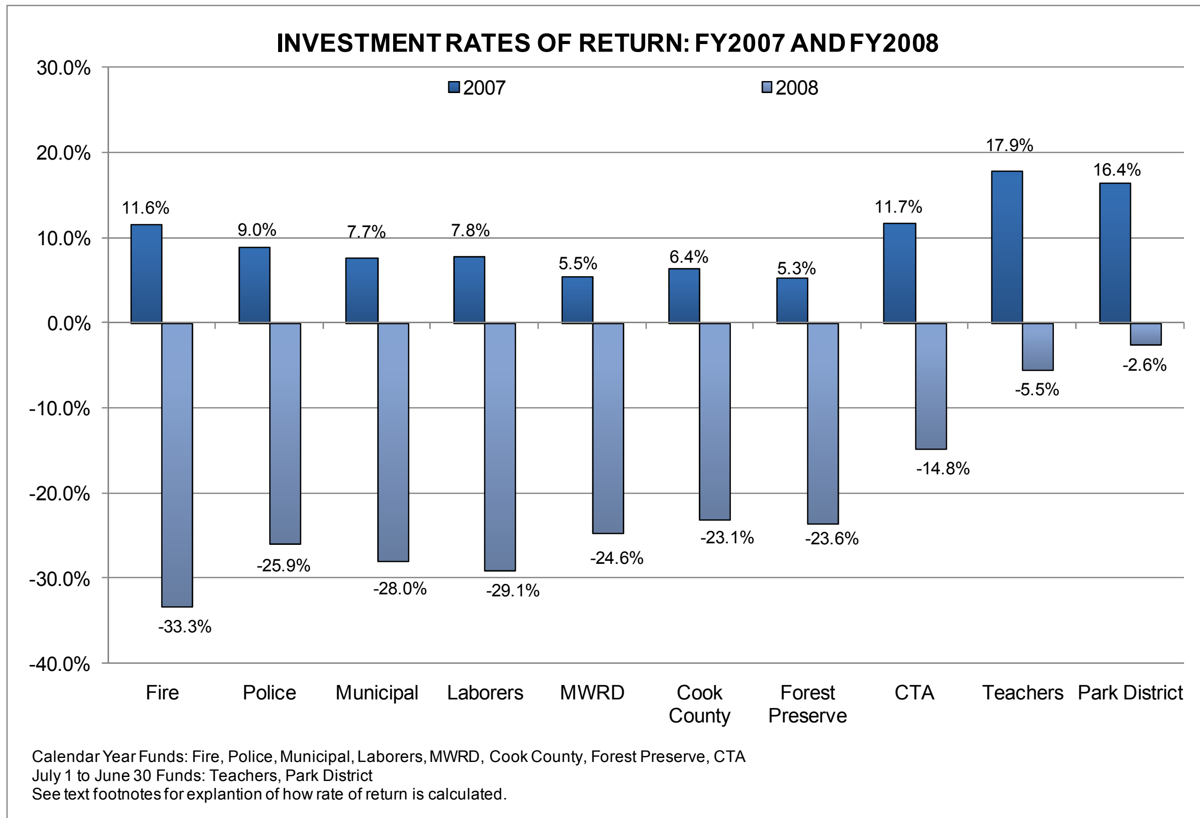
Investment Rate of Return[34]

During FY2008 each of the ten pension funds yielded a negative rate of return. 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 2007 and the first half of 2008. As a result, the investment rates of return for the Teachers and Park Funds are not strictly comparable to those of the other eight funds. The FY2008 average rate of return for those funds with a January 1 to December 31 fiscal year was -25.3%, falling from 8.1% in FY2007. The average rate of return for funds using a July 1 to June 30 fiscal year was -4.0%, falling from 17.1% in FY2007.

The FY2008 investment returns resulted in a loss of $7.1 billion for the ten funds combined, compared to a gain of $3.9 billion in FY2007.[35] A comparison of the investment rates of return

[34] 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. It does not subtract out related investment and securities lending fees, which are treated as expenses.

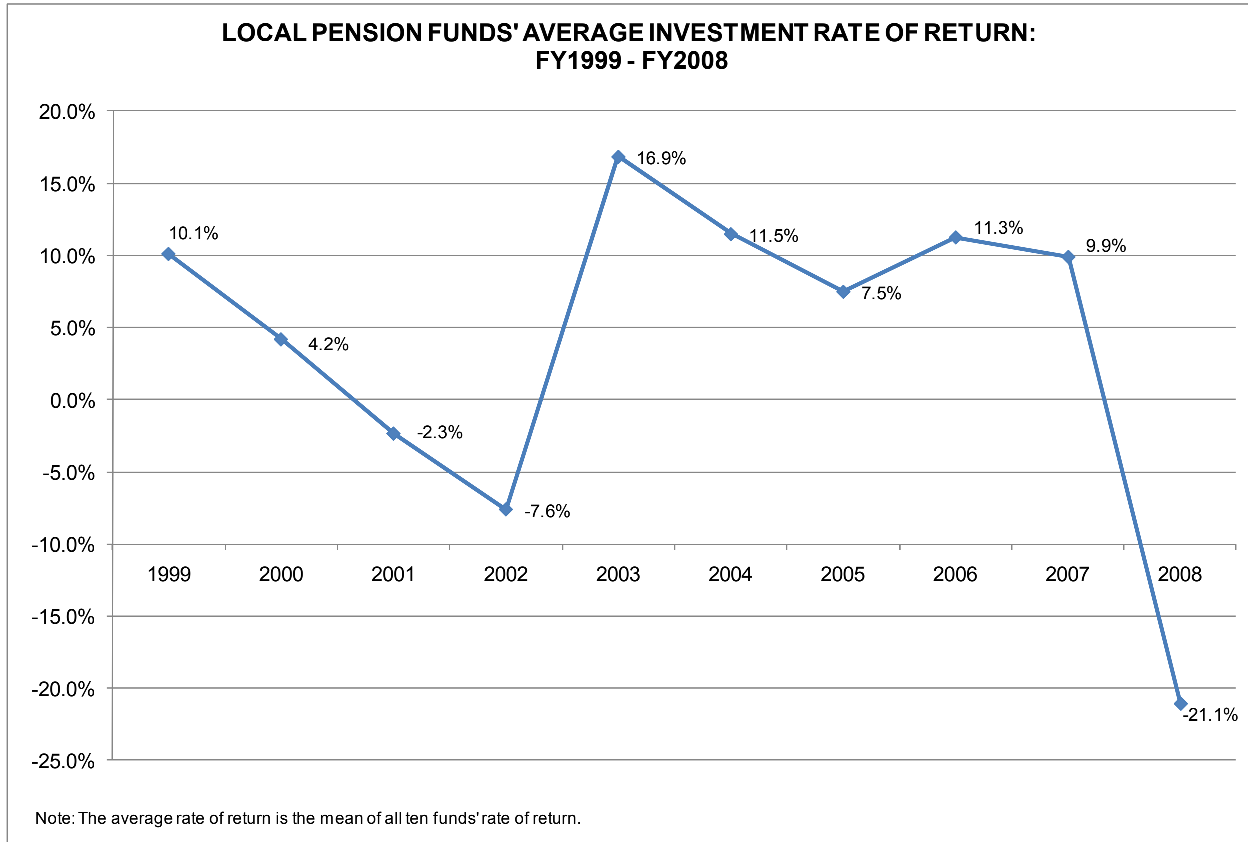
for FY2007 and FY2008 in the following figure shows that for the eight funds using a calendar year fiscal year, investment returns were between -14.8% and -33.3% in FY2008, with returns for the Fire, Laborers and Municipal Funds being the lowest. Of the two funds that use a July 1 to June 30 fiscal year, the Teachers Fund fell by 23.4 percentage points while the Park District Fund fell by 19.0 percentage points. Differences in investment returns may reflect the investment allocation choices of the funds or the performance of investment managers, or both.



[35] Investment returns are gross investment income including income from securities lending activities net of borrower rebates. **Gross investment income** does not subtract out related investment and bank fees, which are treated as expenses.

Historical Trends

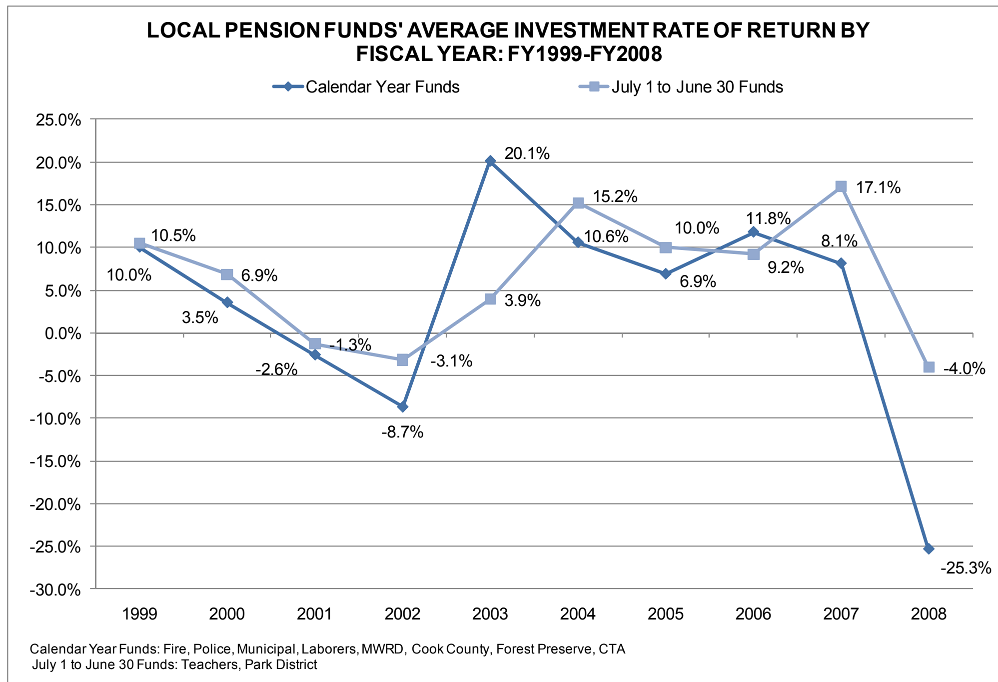
Investment rates of return should be considered from a historical perspective. During the latter half of the 1990s, strong financial markets significantly increased local pension funds' assets. In 1997 the ten funds experienced rates of return ranging from 18.5% to 37.3%. That positive trend reversed, 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 decreased slightly in FY2007, but fell dramatically in FY2008.[36]



[36] The average rate of return is the mean of all ten funds' rate of return.

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 to 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.

Conversely, calendar year funds saw -25.3% returns in FY2008, while July 1 to June 30 funds saw only a -4.0% decrease in returns.



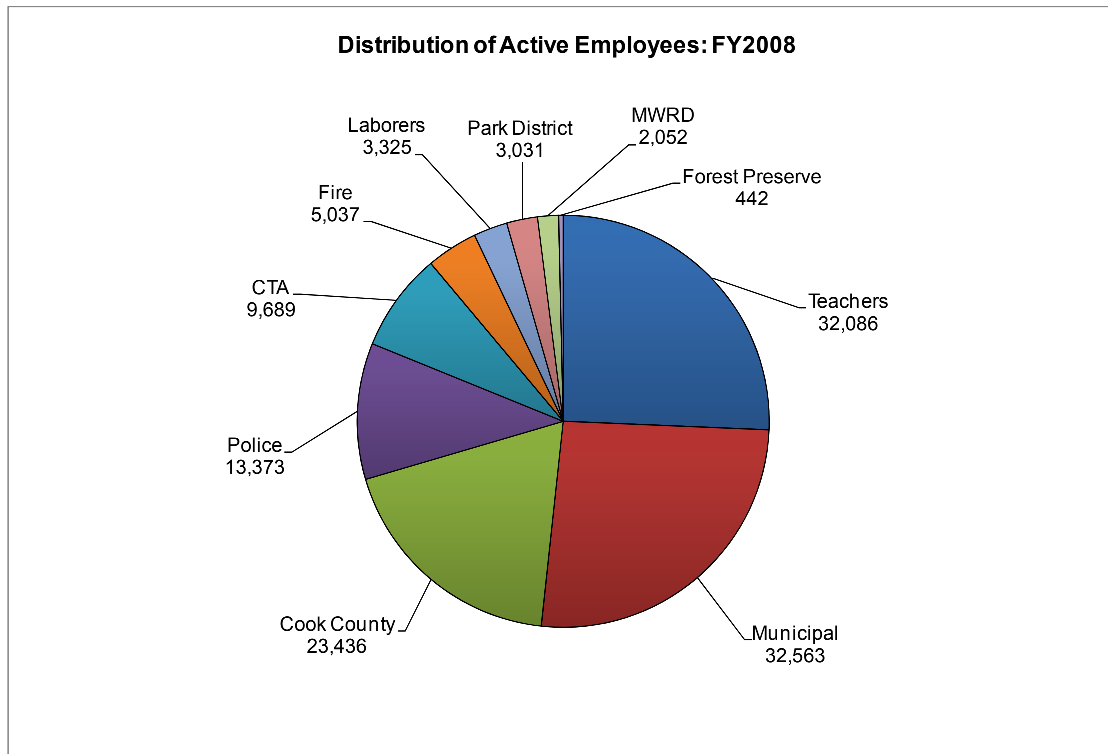
LOCAL PENSION FUND AGGREGATE DATA

In addition to using traditional indicators of pension fund health, the Civic Federation has aggregated pension fund data that depicts the employee-to-beneficiary ratio, total assets and liabilities of local pension funds, revenues and expenditures for each fund.

Active Employees and Beneficiaries

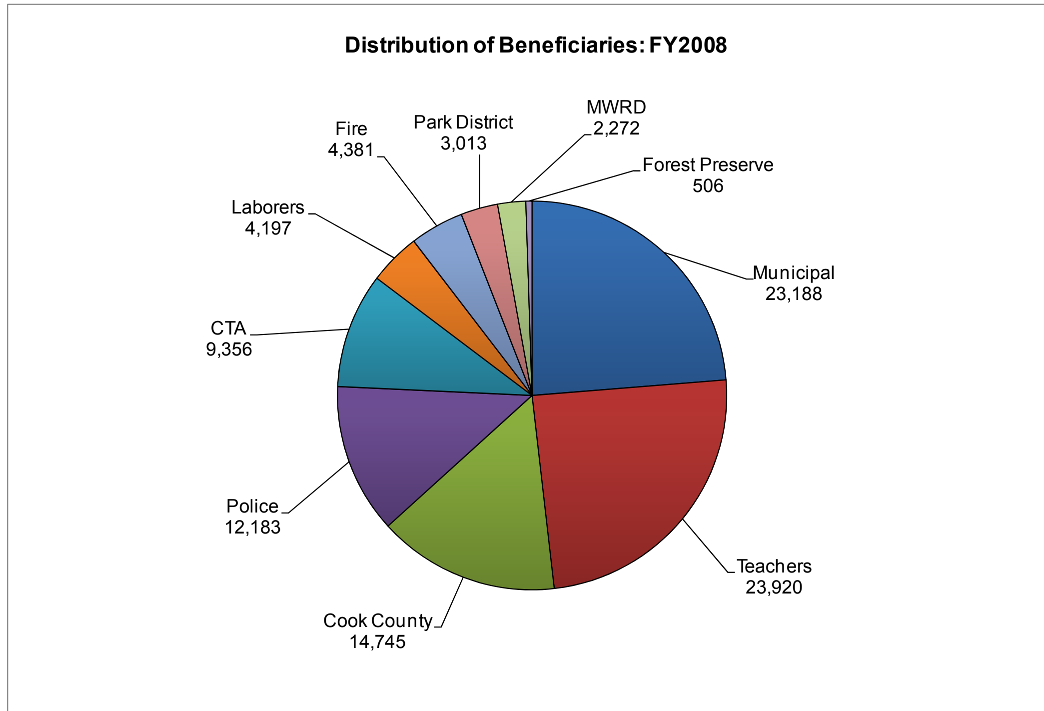
The ten pension funds reviewed in this report collectively covered 125,034 public employees and 97,761 beneficiaries (including spouses, children, and disability recipients) in FY2008.

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 70.4% of the active employees covered by these plans. Roughly half of the Municipal fund's membership consists of Board of Education employees who are not certified teachers (see footnote 4).[37]

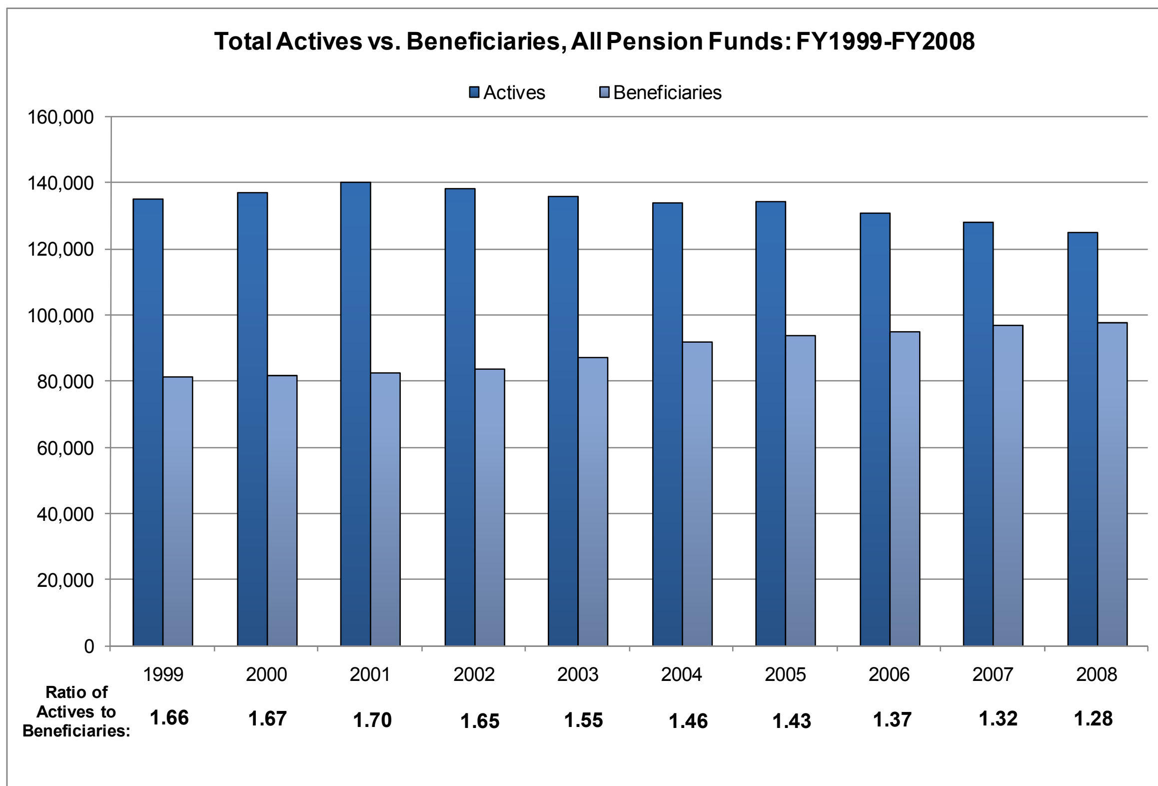


[37] Information provided by Terrance Stefanski, Executive Director, Municipal Employees' Annuity and Benefit Fund of Chicago, March 18, 2009.

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 63.3% of beneficiaries.



The ratio of total active employees to beneficiaries has gradually dropped from 1.66 actives for every one beneficiary in FY1999 to 1.28 in FY2008.



In FY2008 the Cook County Fund had the highest active-to-beneficiary ratio, at 1.59. The Laborers', MWRD and Forest Preserve funds all had *more* beneficiaries than actives in FY2008. The Laborers' Fund, however, instituted a new definition of active members for this valuation. In previous reports only members who were active at the end of the year were valued as active members. This year and going forward, all members who earned any service credit in a given year are valued as actives.[38]

Half of the ten funds saw a decline in their active-to-beneficiary ratio in 2008, while the other half experienced an increase in the number of active employees supporting retirees. 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: FY1999-FY2008

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Fire	1.07	1.06	1.13	1.13	1.14	1.12	1.15	1.16	1.12	1.15
Police	1.31	1.28	1.24	1.21	1.20	1.15	1.12	1.14	1.13	1.10
Municipal	1.72	1.74	1.78	1.72	1.68	1.42	1.44	1.43	1.50	1.40
Laborers	0.90	0.97	0.99	0.92	0.90	0.71	0.73	0.76	0.75	0.79
MWRD	0.99	0.97	0.99	0.95	0.94	0.93	0.91	0.89	0.88	0.90
Cook County	2.40	2.41	2.35	2.33	1.87	1.88	1.85	1.80	1.62	1.59
Forest Preserve	2.19	2.31	1.80	1.52	0.78	0.70	0.73	0.77	0.83	0.87
CTA	1.15	1.19	1.25	1.25	1.24	1.21	1.18	1.07	1.05	1.04
Teachers	2.13	2.12	2.18	2.09	1.97	1.94	1.79	1.57	1.40	1.34
Park District	1.09	1.12	1.06	1.09	1.03	0.87	0.90	0.97	0.99	1.01

Assets and Liabilities

The most basic question about a pension fund is whether its assets are sufficient to cover total liabilities incurred. For this report, we combine the pension liabilities and Other Post Employment Benefit (OPEB) liabilities of each fund, with the exception of the MWRD and the Park District whose OPEB costs are paid exclusively out of the employers' operating budgets, as opposed to the pension fund.

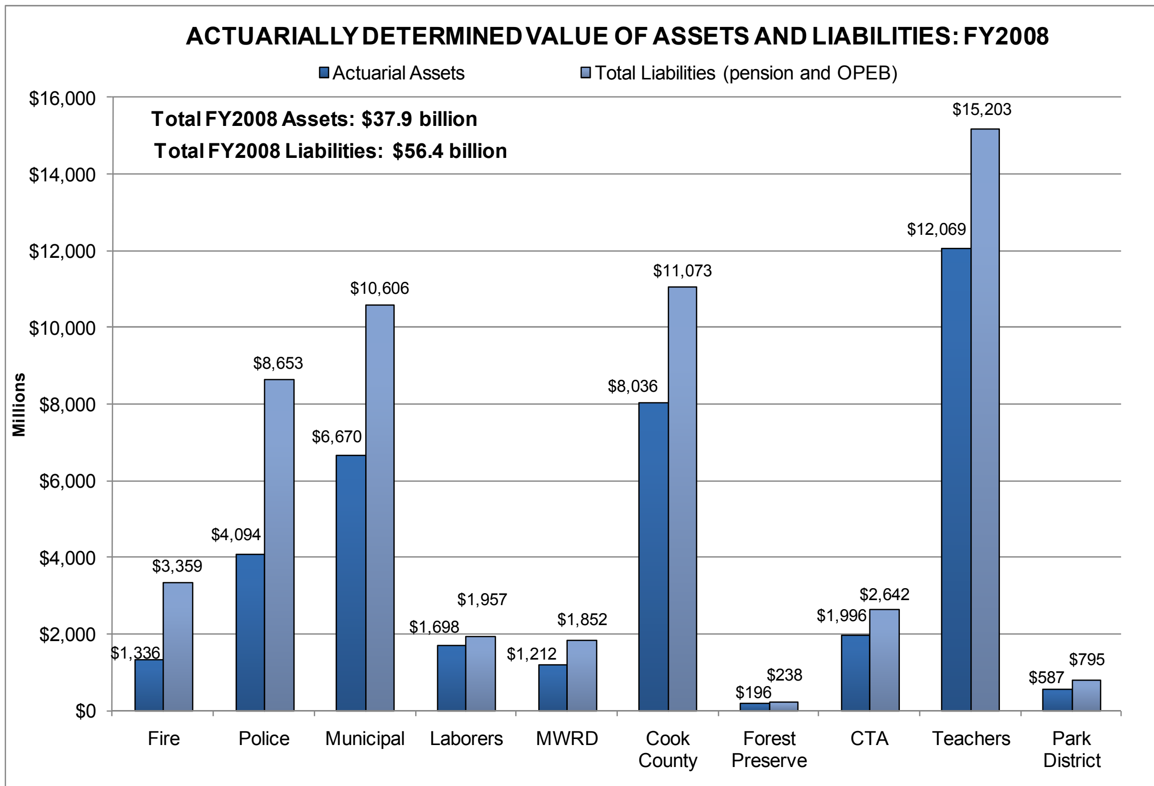
Liabilities are calculated using actuarial assumptions about the value of all future pension payments for both current and retired employees, as well as any other beneficiaries. Under GASB Statement No. 25, assets of public pension plans are reported based on the actuarial value, or smoothed market value, 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 (see page 8).[39] The current market value is another measure used to determine the assets of the plan. It reflects the value of the pension fund's assets at the end of the fiscal

[38] *Laborers' and Retirement Board Employee' Annuity and Benefit Fund of Chicago Actuarial Valuation Report for the Year Ending December 31, 2008* p. 7.

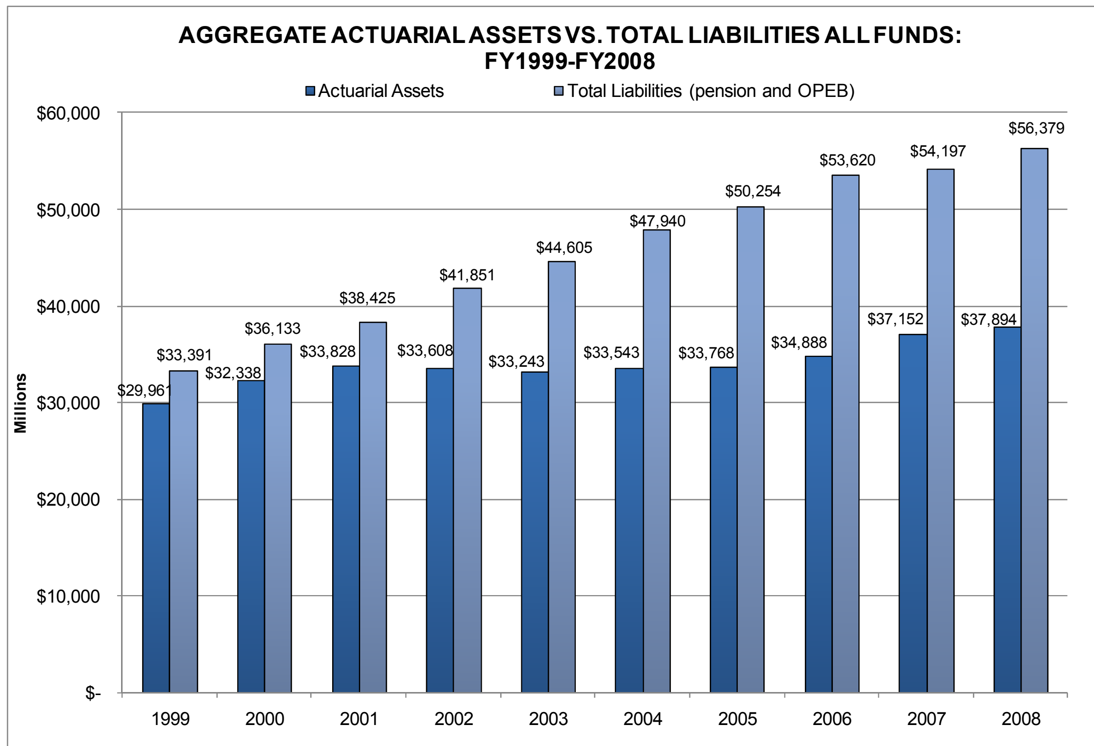
[39] In November 1994, the Government Accounting Standards Board (GASB) issued Statement No. 25 that established new standards for the reporting of a pension fund's assets. The requirement became effective June 15, 1996. Up until that statement, most pension funds used two measurements for determining 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.

year. This measure is subject to fluctuations in the investment market that at any one point in time can be misleading because they should average out over the life of a public pension plan.

At the close of FY2008, the ten pension funds combined had approximately $56.4 billion in actuarial accrued liabilities. Combined assets had an actuarial smoothed value of $37.9 billion and a market value of $30.7 billion, resulting from the negative combined investment returns in FY2008 across all funds. As shown in the following figure, the Teachers Fund had the greatest assets and liabilities in FY2008, 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 FY1999 to FY2008. Aggregate liabilities increased by $23.0 billion, or 68.9%, over the ten-year period, while actuarial assets increased by $7.9 billion, or 26.4%. Between FY2007 and FY2008 total actuarial liabilities rose from $54.2 billion to $56.4 billion.

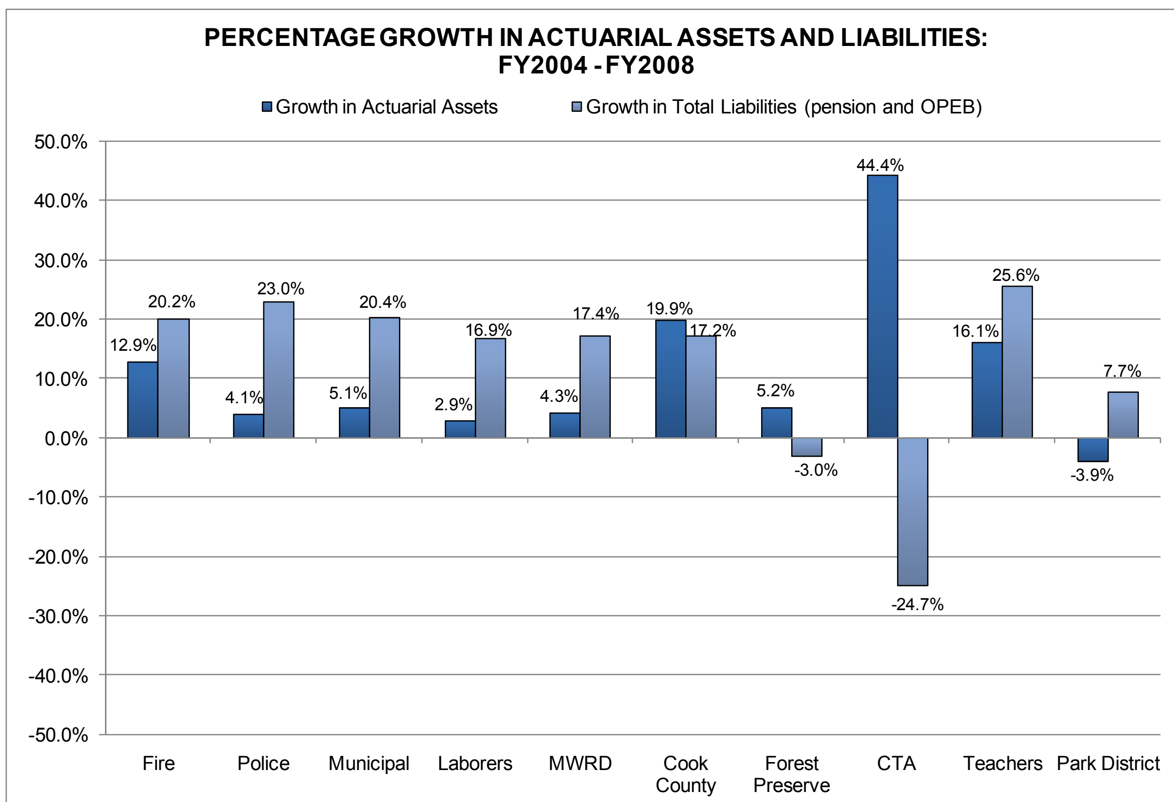


Of the ten pension funds, the Teachers Fund experienced the fastest growth in liabilities over the past five years, with a growth rate of 25.6%. The Police, Municipal and Fire Funds' liabilities also grew between 20.0% and 23.0% each.

Between FY2004 and FY2008, liability growth has significantly exceeded asset growth for all ten funds except the Cook County Fund, the Forest Preserve Fund and the CTA Fund. 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 12).

The Park District fund saw a 3.9% decline in the actuarial value of its assets, a loss that was exacerbated by the $10 million reduction in employer contributions over FY2004-FY2005 (see page 13).

The CTA fund experienced a significant growth in actuarial assets due primarily to the infusion of $1.1 billion in pension obligation bond proceeds from the CTA. The primary reason for the substantial decrease in liabilities was the transfer for retiree health care liabilities from the pension plan to the stand alone Retiree Health Care Trust (see page 6).



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 three to five years.[40] In fiscal year 2008, the aggregate market value for all funds was $7.2 billion less than actuarial value, indicating that investment returns for 2008 were lower than the gains smoothed over the past few years.

COMPARISON OF CURRENT MARKET VALUE VS. ACTUARIAL VALUE OF ASSETS AT THE CLOSE OF FY2008		
Fund	**Current Market Value**	**Actuarial Value**
Fire	$ 914,193,422	$ 1,335,695,474
Police	$ 3,000,998,381	$ 4,093,719,894
Municipal	$ 4,739,613,755	$ 6,669,501,770
Laborers	$ 1,188,580,489	$ 1,698,427,008
MWRD	$ 878,797,192	$ 1,211,838,320
Cook County	$ 6,069,280,072	$ 8,036,074,797
Forest Preserve	$ 145,319,547	$ 196,277,679
CTA	$ 1,743,457,257	$ 1,996,144,000
Teachers	$ 11,483,477,146	$ 12,069,417,038
Park District	$ 562,269,564	$ 586,676,032
TOTAL	**$ 30,725,986,825**	**$ 37,893,772,012**

Liabilities for Retiree Health Insurance Benefits (Other Post Employment Benefits)

FY2008 was the second year that all the local governments covered by this report are required to comply with both Governmental Accounting Standards Board (GASB) Statements 43 and 45, each of which mandates new reporting requirements for Other Post Employment Benefits (OPEB) costs.

Governmental audited financial statements were not previously required to include detailed financial information about OPEB costs. To address this issue, the GASB issued two statements in June 2004, GASB Statements 43 and 45, which provide reporting guidelines for these types of benefits.[41] 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.

Some funds provide health insurance to the retired fund staff. However, **this report focuses only on OPEB obligations for the employees of the sponsoring government, not the fund staff**. The obligation for fund staff is typically very small compared to the obligation for government employee fund members.

GASB 43 requires the retirement systems of large governments—those with over $100 million in 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

[40] 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.
[41] 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.

fiscal year beginning after December 15, 2006. All ten governments examined here qualify as "large governments."

The MWRD pension fund and Park District pension fund do not report OPEB information because retiree health insurance is provided directly by the MWRD and Park District governments, not through their pension funds.

The Teachers fund was not required to implement GASB 43 until FY2007 because its first fiscal year beginning after December 15, 2005 was FY2007 (July 1, 2006 to June 30, 2007).

Before examining the OPEB liabilities of each fund, it is important to note that they are calculated using a different investment rate of return assumption. GASB Statements 43 and 45 require a **lower discount rate assumption for retiree health care benefits that are funded on a pay-as-you-go basis** rather than prefunded through a designated trust fund. The required discount rate for plans funded on a pay-as-you-go basis is the rate of return earned on the actual assets used to pay the benefits. The following table shows the assumed rates of return for the pension benefits and Other Post Employment Benefits (primarily retiree health care) for the ten pension funds.[42]

FY2008 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%	4.50%
Forest Preserve	7.50%	4.50%
CTA	8.75%	5.00%
Teachers	8.00%	4.50%
Park District	8.00%	n/a

Source: Respective Pension Fund FY2008 Actuarial Valuations

[42] 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. Because the OPEB provisions of these two governments are completely separate from their pension funds, there is no OPEB reporting in the pension fund financial statements.

The next table shows the pension and OPEB accrued actuarial liabilities of the ten pension funds for FY2008. Overall, OPEB liabilities represent roughly 3.6% of total liabilities for all funds combined. Public Act 95-708 created a separate Retiree Health Care Trust for CTA retirees, which began operations only July 1, 2009. The CTA pension fund OPEB liabilities decreased dramatically, falling from nearly $1.8 billion in FY2006 to just $9.7 million in FY2008 because the actuaries valued them as a short-term liability expiring in 2009.

Pension and OPEB Accrued Actuarial Liabilities: FY2008			
Fund	**Pension Liabilities**	**OPEB Liabilities**	**Total Liabilities**
Fire	$ 3,311,268,993	$ 47,309,338	$ 3,358,578,331
Police	$ 8,482,574,033	$ 169,972,156	$ 8,652,546,189
Municipal	$ 10,383,157,695	$ 222,691,036	$ 10,605,848,731
Laborers	$ 1,915,324,017	$ 42,063,816	$ 1,957,387,833
MWRD*	$ 1,852,279,634	$ -	$ 1,852,279,634
Cook County	$ 10,097,027,865	$ 1,448,828,756	$ 11,073,181,349
Forest Preserve	$ 212,373,326	$ 36,004,405	$ 237,927,630
CTA	$ 2,632,356,000	$ 9,673,000	$ 2,642,029,000
Teachers**	$ 15,203,470,567	see note**	$ 15,203,470,567
Park District*	$ 795,379,129	$ -	$ 795,379,129
Total	**$ 54,885,211,259**	**$ 1,976,542,507**	**$ 56,378,628,393**

Note: Figures represent OPEB liabilities of the pension funds only. The City of Chicago has additional OPEB liabilities for the portion of retiree health care benefits subsidized by the City.
* MWRD and Park District pension funds have no OPEB liability, as OPEB is provided directly through the governments.
**Teachers Fund provides a fixed $65 million subsidy per state law so it does not value OPEB as an ongoing liability. See discussion of "Data Sources and Comparability Issues" earlier in this report.

It is important to note that for the City of Chicago funds there are additional OPEB liabilities borne by the employer, described on page 36. 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.[43]

Government Only Subsidy	**Pension Fund Only Subsidy**	**Combined Government and Pension Fund Subsidy**
• MWRD • Park District	• Cook County • Forest Preserve • CTA • Teachers • Municipal (Board of Education Employees)	• Fire • Police • Municipal (City employees) • Laborers

[43] As noted on page 33, some funds subsidize OPEB for their retired fund staff. These subsidies are "Pension Fund Only", but they are not addressed in this report. The discussion here is exclusively about the OPEB provided to employees of the sponsoring governments.

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.[44] The MWRD created a dedicated trust fund in 2007 to begin pre-funding its retiree health care obligations.[45] The MWRD FY2008 Comprehensive Annual Financial Report showed a $442.7 million unfunded OPEB liability as of the January 1, 2007 actuarial valuation.[46]
- The Park District subsidizes roughly 19-49% 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.[47] The Park District FY2008 Comprehensive Annual Financial Report showed a $47.2 million unfunded OPEB liability as of the January 1, 2007 actuarial valuation.[48]

Pension Fund Only Subsidy: Cook County, Forest Preserve, CTA, Teachers, Municipal (Board of Education Employees)

- 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.[49]
- Historically, CTA has paid approximately 80% of total retiree and dependent healthcare premium costs[50] Public Act 95-708 created a separate Retiree Health Care Trust for CTA retirees, which began operations only July 1, 2009. The CTA pension fund will no longer have an obligation for OPEB after that date.[51]
- The Chicago Teachers pension fund reimbursed annuitants for 70% of their health insurance single premiums in FY2008, with a total payment not to exceed $65.0 million annually.[52] Chicago Public Schools does not contribute to retiree health insurance.
- CPS employees who are not certified teachers are enrolled in the Municipal Fund (see footnote 4). The Municipal Fund provides $95 per month for non-Medicare eligible

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[44] Metropolitan Water Reclamation District of Greater Chicago, *Comprehensive Annual Financial Report for the year ended December 31, 2007*, p. 75.

[45] The trust was created by Public Act 95-0394. It is not an independent entity like the newly created CTA Retiree Health Care Trust, but is a component unit of the MWRD government. See the trust's financial statements at http://www.mwrd.org/irj/go/km/docs/documents/MWRD/internet/Departments/Finance/docs/CAFR/OPEB_CAFR_2008_FINAL.pdf .

[46] Metropolitan Water Reclamation District of Greater Chicago, *Comprehensive Annual Financial Report for the year ended December 31, 2008*, p. 77. The OPEB Trust is valued biennially so the next valuation will be as of January 1, 2009.

[47] Letter from Timothy J. Mitchell, General Superintendent/CEO of the Chicago Park District to Chicago Park District Retirees, December 20, 2007.

[48] Chicago Park District, *Comprehensive Annual Financial Report for the year ending December 31, 2008*, p. 79.

[49] County Employees' Annuity and Benefit Fund of Cook County *Actuarial Valuation as of December 31, 2008*, p. 28 and Forest Preserve District Employees' Annuity and Benefit Fund of Cook County *Actuarial Valuation as of December 31, 2008,* p. 27.

[50] See http://www.ctaretirement.org/healthPlan/about/history.asp.

[51] Retirement Plan for Chicago Transit Authority Employees, *Actuarial Valuation Report for the Year Beginning January 1, 2009*, p. 4.

[52] Chicago Teachers' Pension Fund, *113th Comprehensive Annual Financial Report for the Year ended June 30, 2008*, p. 25. The rebate percentage varies each year. State law currently requires that total rebates not exceed $65 million annually, in additional to any carryover amounts from the previous year.

annuitants and $65 per month for Medicare eligible annuitants who choose to participate in the CPS retiree health care plan.[53] However, CPS does not subsidize the plan.[54]

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 funds provide $95 per month for non-Medicare eligible annuitants and $65 per month for Medicare eligible annuitants.[55] The City's contribution is roughly 55% of the premium cost, with the remainder to be paid by the annuitant. The Fire, Police, Municipal and Laborers' pension funds each contribute roughly 33% of the annuitant contribution, effectively subsidizing 12% of the total premium cost.[56] **The City of Chicago's financial statements reported an FY2008 unfunded OPEB liability of $482.0 million for the portion subsidized by the pension funds and a FY2007 unfunded OPEB liability of $1.1 billion for the portion subsidized by the City.**[57]

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[53] From July 1, 2003 to June 30, 2008 the Municipal fund provided $85 per month for non-Medicare eligible annuitants and $55 per month for Medicare eligible annuitants. For July 1, 2008 through June 30, 2013, the amounts increase to $95 for non-Medicare eligible and $65 for Medicare-eligible annuitants. See Municipal Employees' Annuity and Benefit Fund of Chicago Actuarial Valuation Report as of December 31, 2008, p. 65.
[54] Information provided by Terrance Stefanski, Executive Director, Municipal Employees' Annuity and Benefit Fund of Chicago, March 18, 2009.
[55] From July 1, 2003 to June 30, 2008 the funds provided $85 per month for non-Medicare eligible annuitants and $55 per month for Medicare eligible annuitants. For July 1, 2008 through June 30, 2013, the amounts increase to $95 for non-Medicare eligible and $65 for Medicare-eligible annuitants. See for example, Municipal Employees' Annuity and Benefit Fund of Chicago Actuarial Valuation Report as of December 31, 2008, p. 65.
[56] Cost allocation estimates provided to The Civic Federation by Sulan Tong, City of Chicago, February 15, 2010.
[57] City of Chicago Comprehensive Annual Financial Report for the Year Ended December 31, 2008, pp. 85 and 87. The FY2008 financial statements state that January 1, 2008 was the most recent actuarial valuation date for the portion of OPEB subsidized by the City. The City does not report a combined total liability for both the pension fund and the City OPEB subsidies, nor does it break out its liabilities by pension fund.

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

Retiree Health Insurance Premium Subsidies			
Fund	**Employer Contribution**	**Pension Plan Contribution**	**Retiree Contribution**
Fire	55%	12%	33%
Police	55%	12%	33%
Municipal*	55%	12%	33%
Laborers	55%	12%	33%
MWRD	75%	0%	25%
Cook County	0%	55% retiree, 70% survivor	45% retiree, 30% survivor
Forest Preserve	0%	55% retiree, 70% survivor	45% retiree, 30% survivor
CTA	0%	approximately 80%	approximately 20%
Teachers	0%	70%	30%
Park District	19-49% (pre-Medicare only)	0%	51-81%

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

Note: Percentages are approximations for FY2008 and may vary by plan type or other factors.

Sources: See text footnotes

Revenues

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 generally funded 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.[58] Employee contributions are made through payroll deductions.

[58] In FY2008 the CTA fund also received $1.1 billion in bond revenue.

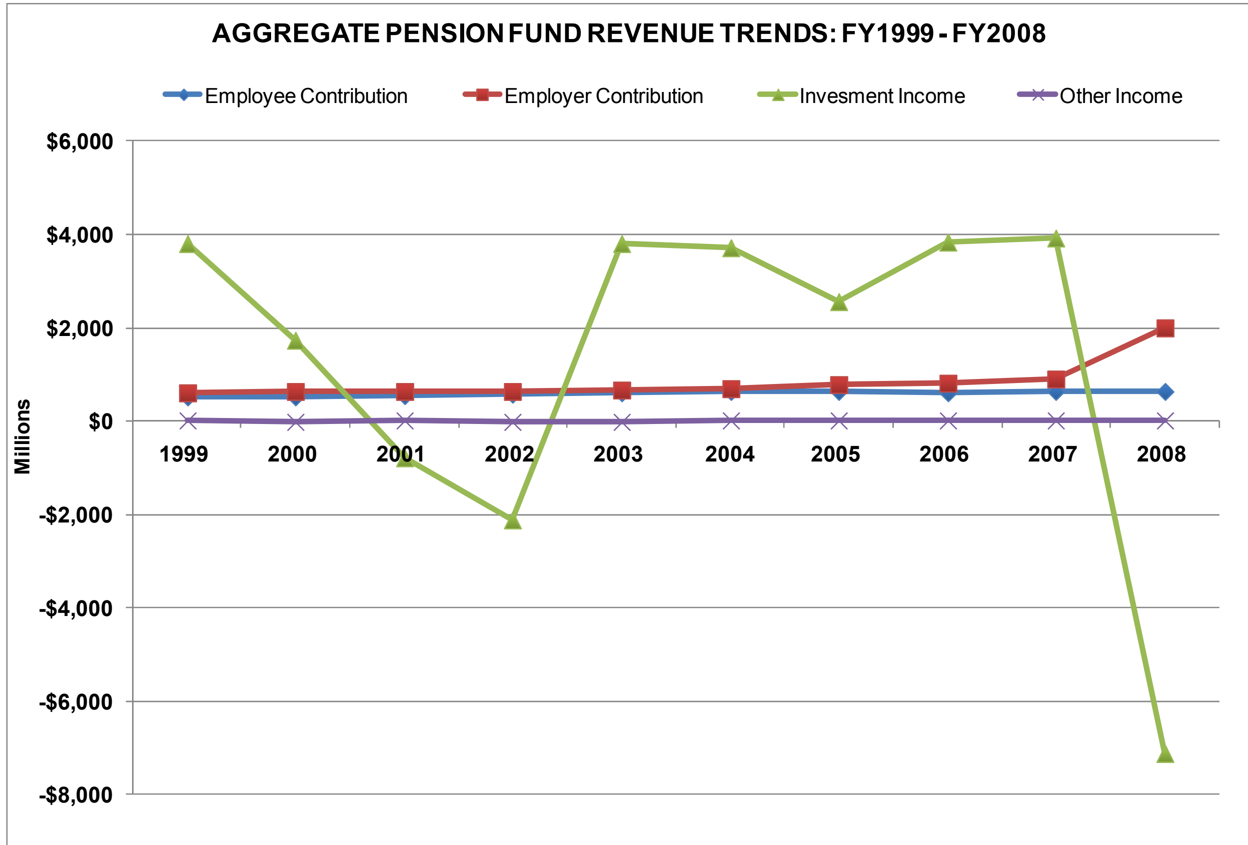
The increases in asset values experienced in the late 1990's, the subsequent declines in 2001 and 2002, and the economic recovery in 2003 caused significant shifts in the relative weight of pension fund revenue sources. In FY2003, strong investment returns generated positive income for all of the pension funds for the first time since FY2000.

FY2007 total income for all funds was $5.5 billion and for each fund, investment income constituted the greatest portion of total income.[59] FY2008, on the other hand, resulted in negative total income for all funds of $4.4 billion. Investment losses totaled $7.1 billion across all ten funds. Employer and contributions totaled $2.0 billion, of which $1.1 billion was the proceeds of a $1.1 billion pension obligation bond issued by the CTA and transferred to the CTA pension fund. Employee contributions totaled $648.6 million. The $7.5 million in "Other" income included transfers from other governments with reciprocal agreements, interest income from operating accounts, and other miscellaneous revenue as part of this calculation. See Appendix A for detail on the sources for revenue and expenditure figures presented in this report.

Revenues by Source: FY2008					
Fund Name	**Employee Contribution**	**Employer Contribution**	**Investment Income**	**Other Income**	**Total Income**
Fire	$ 40,479,884	$ 83,744,704	$ (476,824,548)	$ 107,321	$ (352,492,639)
Police	$ 93,207,408	$ 181,526,448	$ (1,092,502,292)	$ 159,543	$ (817,608,893)
Municipal	$ 137,748,907	$ 155,832,612	$ (1,914,360,421)	$ -	$ (1,620,778,902)
Laborers	$ 19,418,435	$ 17,580,428	$ (505,227,585)	$ -	$ (468,228,722)
MWRD	$ 14,778,404	$ 33,406,819	$ (296,458,287)	$ 18,089	$ (248,254,975)
Cook County	$ 123,776,705	$ 183,916,221	$ (1,847,441,974)	$ 7,081,386	$ (1,532,667,662)
Forest Preserve	$ 2,119,208	$ 2,023,448	$ (46,212,223)	$ 127,464	$ (41,942,103)
CTA	$ 34,324,559	$ 1,178,966,179	$ (220,535,660)	$ -	$ 992,755,078
Teachers	$ 172,504,804	$ 172,504,804	$ (685,127,417)	$ -	$ (340,117,809)
Park District	$ 10,264,805	$ 8,998,687	$ (15,422,357)	$ -	$ 3,841,135
Total	**$ 648,623,119**	**$ 2,018,500,350**	**$ (7,100,112,764)**	**$ 7,493,803**	**$ (4,425,495,492)**

[59] Investment returns are gross investment income including income from securities lending activities net of borrower rebates. **Gross investment income** does not subtract out related investment and securities lending fees, which are treated as expenses.

The following chart illustrates that while investment income has fluctuated considerably over the last ten years, aggregate employee contributions have risen slowly from approximately $512.4 million to $648.6 million. Employer contributions have risen from approximately $600.0 million to an exceptional $2.0 billion in FY2008 due to a $1.1 billion pension obligation bond contribution from the CTA to the CTA fund. Excluding the pension obligation bond proceeds, routine employer contributions for FY2008 were $964.8 million for all ten funds combined.



Employee Contributions

Employee contributions to pension funds are generally 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.[60]

The total employee contribution for most funds is 8.5% or 9.0%, with a high of 9.125% for firefighters and a low of 6.0% for CTA employees, which was increased from 3.0% as of January 18, 2008.

It is important to recognize that the **CTA is the only government included in this report whose employees participate in Social Security**. The CTA and its employees each pay an additional 6.2% of salary to the Social Security administration.[61]

Of the total 9.0% employee contribution rate for the Teachers fund, 7.0% has been paid by the employer since 1981.[62] The Board of Education has also paid 7.0% of the 8.5% employee contribution to the Municipal fund for its non-teacher certified employees (see footnote 4).[63]

Employee Contribution Rates: FY2008
(% of salary)

Fund	Employee	Survivor	Disability	Automatic Annuity Increase	TOTAL
Fire	7.125%	1.500%	0.125%	0.375%	9.125%
Police	7.00%	1.50%	--	0.50%	9.00%
Municipal	6.50%	1.50%	--	0.50%	8.50%
Laborers	6.50%	1.50%	--	0.50%	8.50%
MWRD	7.00%	1.50%	--	0.50%	9.00%
Cook County	6.50%	1.50%	--	0.50%	8.50%
Forest Preserve	6.50%	1.50%	--	0.50%	8.50%
CTA*	6.00%	--	--	--	6.00%
Teachers**	7.50%	1.00%	--	0.50%	9.00%
Park District	7.00%	1.00%	--	1.00%	9.00%

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

*This rate took effect on January 18, 2008, when it increased from 3%.

**Since 1981 the employer has been paying 7% of the total 9% employee contribution. Chicago Teachers' Pension Fund *113th Comprehensive Annual Financial Report for the year ended June 30, 2008*, p.90.

Sources: Respective pension fund FY2008 actuarial valuations and Illinois statutes.

[60] The automatic annual annuity increase for most funds is 3%. The CTA has occasionally bargained ad hoc dollar amount increases, but the CTA pension reform legislation, P.A. 95-0708, does **not** provide any annual annuity increases.

[61] All government employers and employees pay Medicare payroll taxes of 1.45% each.

[62] Chicago Teachers' Pension Fund, *113th Comprehensive Annual Financial Report for the year ended June 30, 2008*, p. 90.

[63] Information provided by Terrance Stefanski, Executive Director, Municipal Employees' Annuity and Benefit Fund of Chicago, March 18, 2009.

Employer 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 levy an amount that, when added to the revenue from the Personal Property Replacement Tax, equals the multiple amount.[64] As discussed beginning on page 13, these multiples are not automatically adjusted to meet the funding needs of the pension plans.

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 (typically $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 Teachers' Fund are discussed in detail on page 47.

The employer contributions to the CTA Fund are set at a percentage of payroll. In FY2007, the employer contributed 6% of payroll, an amount that was determined through collective bargaining. Effective January 18, 2008, employer contributions are now 12% of payroll, less credit for debt service payments on pension obligation bonds, and are set in state statute (40 ILCS 5/22/101) rather than collectively bargained. The State Auditor General may mandate higher employer and employee contributions if necessary to stay at least 60% funded through 2039 and reach 90% by 2059.

[64] 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.

The following table lists the basic fund multiples and other employer contribution levels for FY2008, not including special additions or subtractions specified in statute:

Employer Contribution Rates: FY2008			
Fund	**Statute**	**Statutory Rate***	**Actual employer contribution as % of payroll**
Fire	40 ILCS 5/6-165	2.26 multiple	21.1%
Police	40 ILCS 5/5-168	2.00 multiple	17.7%
Municipal	40 ILCS 5/8-173	1.25 multiple	10.1%
Laborers	40 ILCS 5/11-169	1.00 multiple	8.1%
MWRD	40 ILCS 5/13-503	2.19 multiple, excluding employee contributions to optional additional benefits made after January 1, 2003, which are multiplied by 1.00	19.9%
Cook County	40 ILCS 5/9-169	1.54 multiple	12.6%
Forest Preserve	40 ILCS 5/10-107	1.30 multiple	8.6%
CTA	40 ILCS 5/22/101	12% of payroll**	11.5%
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.	9.0%
Park District	40 ILCS 5/12-149	1.10 multiple	8.1%

*"Multiple" means multiple of total employee contribution made two years prior.
**This rate took effect on January 18, 2008, when it increased from 6% per P.A. 95-0708
*** 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 section below on Chicago Teachers' Retirement Fund Employer Contirbution Requirements.

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%.[65] 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

[65] State statutes allow the City of Chicago to suspend employer contributions to the Municipal and Laborers' funds when they are over 100% funded. See 40 ILCS 5/8-189.4 and 40 ILCS 5/11-178.4

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.

GASB Statements 25 and 27 require that the plans calculate an annual required annual employer contribution (ARC) that must be reported in the plan's annual financial statements. 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.[66] In other words, the ARC represents a reasonable calculation of the amount of money the employer might contribute each year in order to cover costs attributable to the current year and to reduce unfunded liabilities. It is expressed net of employee contributions. Although GASB does not require funding at the level of the ARC, it does require that plans report on how their actual contribution levels compare to the ARC.[67]

The GASB permits the amortization of the unfunded liability to be calculated either as **a level dollar amount or as a level percent of payroll**.[68] A level dollar amount amortization represents a declining burden over time because as payroll increases in the future, the level amortization amount equals a smaller percent of payroll. In contrast, a level percent of payroll amortization has the effect of "back-loading" the amortization payments because as payroll increases, so does the dollar amount of the amortization. This method actually allows the unfunded liability to grow and is not an acceptable amortization method for private sector companies governed by the federal Employee Retirement Income Security Act (ERISA).

The actuarial valuation for the Municipal Fund provides an illustration of the differences in amortizing at a level dollar amount, level percent of payroll, and simply paying interest on the unfunded liability to keep it from growing, shown below. With level dollar amount amortization, the unfunded liability will decrease; paying normal cost plus interest on the unfunded liability will keep the unfunded liability constant; and level percent of payroll amortization will allow the unfunded liability to increase.

Illustration of Different Unfunded Liability Amortization Methods for the Municipal Retirement Fund

Method	Required 2009 Tax Levy	Required Multiple	Unfunded Liability Will…	Amount Applicable to Unfunded Liability
Normal Cost Plus 30-Year Level Dollar Amortization	n/a	3.33	Decrease	$318,522,002
Normal Cost Plus Interest on Unfunded Liability	n/a	3.06	Remain Constant	$284,675,190
Normal Cost Plus 30-Year Level % of Payroll Amortization	n/a	2.31	Increase	$199,124,067
Current Law	$163,672,200	1.25		

Source: Municipal Employees' Annuity and Benefit Fund of Chicago Actuarial Valuation for the Year Ending December 31, 2008, p. 56.

Some actuarial valuations express the ARC as a multiple and compare it to the statutory multiple. For example, the Fire Fund's actuaries calculated that the ARC expressed in terms of an annually required employer multiple for FY2009 is 5.72, as compared to the statutory 2.26.[69]

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[66] 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.
[67] GASB sets accounting standards and has no authority over funding levels.
[68] See Governmental Accounting Standards Board Statement No. 25 paragraph 36 (f).
[69] The 5.72 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. ARC multiples are computed for the subsequent year, such that the FY2008

The prior year's gap between the Fire Fund's ARC multiple and the statutory multiple resulted in a $93.3 million increase in the plan's unfunded liability for FY2008.[70] As noted in the table below, the Police, MWRD, and Park District Funds choose to use the level percent of payroll amortization method, so their annually required multiples are smaller than they would be if calculated as normal cost plus interest or as a level dollar amount amortization. An open amortization period remains the same every year (e.g., each valuation amortizes UAAL over 30 years), while a closed amortization period declines as each year passes (e.g., successive valuations amortize at 30 years, 29 years, 28 years, etc.). Using a closed amortization methodology will pay down the unfunded liability at the end of the amortization period. Using an open amortization methodology will never completely pay down the unfunded liability since each year the amortization period remains the same, although the annual amortization payment will decrease if there are no additions to the unfunded liability due to plan amendments or actuarial losses.

FY2009 Statutory Multiple for Employer Contribution vs. Annual Required Multiple

	Unfunded Actuarial Accrued Liability Amortization Method	Annually Required Multiple (Normal Cost + UAAL Amortization)	Statutory Multiple
Fire	level dollar, open	**5.72**	2.26
Police*	level % of payroll, open	**4.30**	2.00
Municipal	level dollar, open	**3.33**	1.25
Laborers	level dollar, open	**2.12**	1.00
MWRD	level % of payroll, open	**4.65**	2.19
Cook County	level dollar, open	**3.92**	1.54
Forest Preserve	level dollar, open	**3.76**	1.30
Park District	level % of payroll, open	**2.15**	1.10

*Police Fund also computes that the FY2009 annual required multiple using a level dollar amortization would be 5.94. See Police Fund FY2008 actuarial valuation p. 17.

Source: Respective Pension Fund FY2008 Actuarial Valuations

actuarial valuation provides the FY2009 actuarial multiple. Firemen's Annuity and Benefit Fund of Chicago *Actuarial Valuation Report for the Year Ending December 31, 2008,* p. 14.

[70] Firemen's Annuity and Benefit Fund of Chicago *Actuarial Valuation Report for the Year Ending December 31, 2008,* p. 12.

GASB Statements 25 and 43 require separate calculation of the employer's actuarially calculated annual required contributions (ARC) for pensions and OPEB. The following table shows the FY2008 pension ARC for each of the ten funds examined in this report, as reported in the financial statements per GASB Statement 25.[71] Only the CTA contributed the full ARC, but that was due to the infusion of $1.1 billion from a pension obligation bond issuance. None of the remaining employers contributed the full ARC. Expressing ARC as a percent of payroll provides a sense of scale and affordability.

As a percent of payroll, the pension ARC for the Fire Fund is the highest of the ten at 47.9% of payroll. In other words, the City should have contributed an amount equal to 47.9% of current firefighters' pay to the Fire Fund in FY2008 in order to cover the normal costs attributable to that year and to amortize unfunded liabilities (using a 30-year open amortization period and level dollar method in the case of the Fire Fund). The aggregate ARC for the ten funds was 23.3% of payroll. Actual employer contributions were 26.0% of payroll, but this includes the one-time $1.1 billion bond revenue for the CTA fund.

Ten Local Government Pension Funds
Schedule of Employer Contributions for Pension Benefits: FY2008
PENSION ONLY

Fund	Employer Annual Required Contribution (1)	Actual Employer Contribution (2)	Shortfall (1-2)	% of ARC contributed	Payroll	ARC as % of payroll	Actual Employer Contribution as % of payroll
Fire	$ 189,940,561	$ 81,257,754	$ 108,682,807	42.8%	$ 396,181,778	47.9%	20.5%
Police	$ 318,234,870	$ 172,835,805	$ 145,399,065	54.3%	$ 1,023,580,667	31.1%	16.9%
Municipal*	$ 360,387,176	$ 146,677,581	$ 213,709,595	40.7%	$ 1,554,976,553	23.2%	9.4%
Laborers	$ 17,652,023	$ 15,232,804	$ 2,419,219	86.3%	$ 216,744,211	8.1%	7.0%
MWRD*	$ 49,758,238	$ 33,406,819	$ 16,351,419	67.1%	$ 167,865,254	29.6%	19.9%
Cook County	$ 283,892,734	$ 150,227,360	$ 133,665,374	52.9%	$ 1,463,372,408	19.4%	10.3%
Forest Preserve	$ 3,329,502	$ 523,928	$ 2,805,574	15.7%	$ 23,474,621	14.2%	2.2%
CTA**	$ 206,670,000	$ 1,165,947,000	$ (959,277,000)	564.2%	$ 594,139,000	34.8%	196.2%
Teachers	$ 290,072,885	$ 164,466,511	$ 125,606,374	56.7%	$ 1,914,558,916	15.2%	8.6%
Park District	$ 19,237,000	$ 8,998,687	$ 10,238,313	46.8%	$ 111,698,366	17.2%	8.1%
TOTAL	**$ 1,739,174,989**	**$ 1,939,574,249**	**$ (200,399,260)**	**111.5%**	**$ 7,466,591,774**	**23.3%**	**26.0%**

*A dollar amount actual employer contribution was not disclosed in the Schedule of Employer Contributions for this fund so one was computed from the % of ARC contributed.
** Actual employer contribution is taken from the Actuarial Valuation because the employer contribution is combined with the employee contribution in the financial statements.
Source: Financial Reports of the pension funds. ARC and % of ARC are taken from the GASB 25 Schedule of Employer Contributions provided in the financial statements and actuarial valuations.

[71] The OPEB ARC for the four City of Chicago pension funds does not include the City of Chicago's liability for its portion of the OPEB subsidy. See page 37 for total City OPEB liability.

The chart below depicts long-term OPEB liabilities for eight of the ten funds analyzed in this report as reported for GASB Statement 43. The MWRD and Park District do not provide OPEB through their pension funds so they have no GASB 43 liabilities to report in the pension fund financial statements. As discussed on page 5, the Teachers Fund does not consider its $65 million of retiree health care payments to constitute a long-term obligation, but GASB Statement 43 requires that it calculate the OPEB liability so that liability is shown in this chart. Overall, the combined employers' annual required OPEB contribution for FY2008 totaled $454.0 million, while the total actual employer contribution for FY2008 was only $140.2 million.

Ten Local Government Pension Funds
Schedule of Employer Contributions for OPEB: FY2008
OPEB ONLY

Fund	Employer Annual Required Contribution (1)	Actual Employer Contribution (2)	Shortfall (1-2)	% of ARC contributed	Payroll	ARC as % of payroll	Actual Employer Contribution as % of payroll
Fire	$ 4,307,852	$ 2,486,950	$ 1,820,902	57.7%	$ 396,181,778	1.1%	0.6%
Police	$ 11,348,959	$ 8,850,156	$ 2,498,803	78.0%	$ 1,023,580,667	1.1%	0.9%
Municipal*	$ 23,782,660	$ 9,037,411	$ 14,745,249	38.0%	$ 1,554,976,553	1.5%	0.6%
Laborers*	$ 3,564,966	$ 2,347,624	$ 1,217,342	65.9%	$ 216,744,211	1.6%	1.1%
MWRD	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Cook County	$ 169,823,905	$ 37,781,310	$ 132,042,595	22.2%	$ 1,463,372,408	11.6%	2.6%
Forest Preserve	$ 3,785,850	$ 1,499,520	$ 2,286,330	39.6%	$ 23,474,621	16.1%	6.4%
CTA**	$ 24,039,000	$ 13,019,000	$ 11,020,000	54.2%	$ 594,139,000	4.0%	2.2%
Teachers	$ 213,315,753	$ 65,000,000	$ 148,315,753	30.5%	$ 1,914,558,916	11.1%	3.4%
Park District	n/a	n/a	n/a	n/a	n/a	n/a	n/a
TOTAL	**$ 453,968,945**	**$ 140,021,971**	**$ 313,946,974**	**30.8%**	**$ 7,187,028,154**	**6.3%**	**1.9%**

*A dollar amount actual employer contribution was not disclosed in the Schedule of Employer Contributions for this fund so one was computed from the % of ARC contributed.
** Actual employer contribution is taken from the Actuarial Valuation because the employer contribution is combined with the employee contribution in the financial statements.
Source: Financial Reports of the pension funds. ARC and % of ARC are taken from the GASB 43 Schedule of Employer Contributions provided in the financial statements and actuarial valuations.

As noted on page 36, the City of Chicago reports its portion of OPEB liabilities and annual required employer contributions separately from that portion of retiree healthcare premiums subsidized by the four City pension funds. The following table shows the combined pension fund and City OPEB employer ARC of $261.9 million for FY2008, of which 46.1% was actually contributed.

City of Chicago Total OPEB Schedule of Employer Contributions: FY2008

	Employer Annual Required Contribution (1)	Actual Employer Contribution (2)	Shortfall (1-2)	% of ARC contributed	Payroll	ARC as % of payroll	Actual Employer Contribution as % of payroll
Pension Fund Obligations	$ 43,004,437	$ 22,722,141	$ 20,282,296	52.8%	$ 3,191,483,209	1.3%	0.7%
City Obligations	$ 218,897,000	$ 98,065,856	$ 120,831,144	44.8%	$ 3,191,483,209	6.9%	3.1%
TOTAL	**$ 261,901,437**	**$ 120,787,997**	**$ 141,113,440**	**46.1%**	**$ 3,191,483,209**	**8.2%**	**3.8%**

Source: Financial reports and actuarial valuations of the pension funds (GASB 43 Schedule of Employer Contributions), and City of Chicago FY2008 Comprehensive Annual Financial Report pp. 86-87.

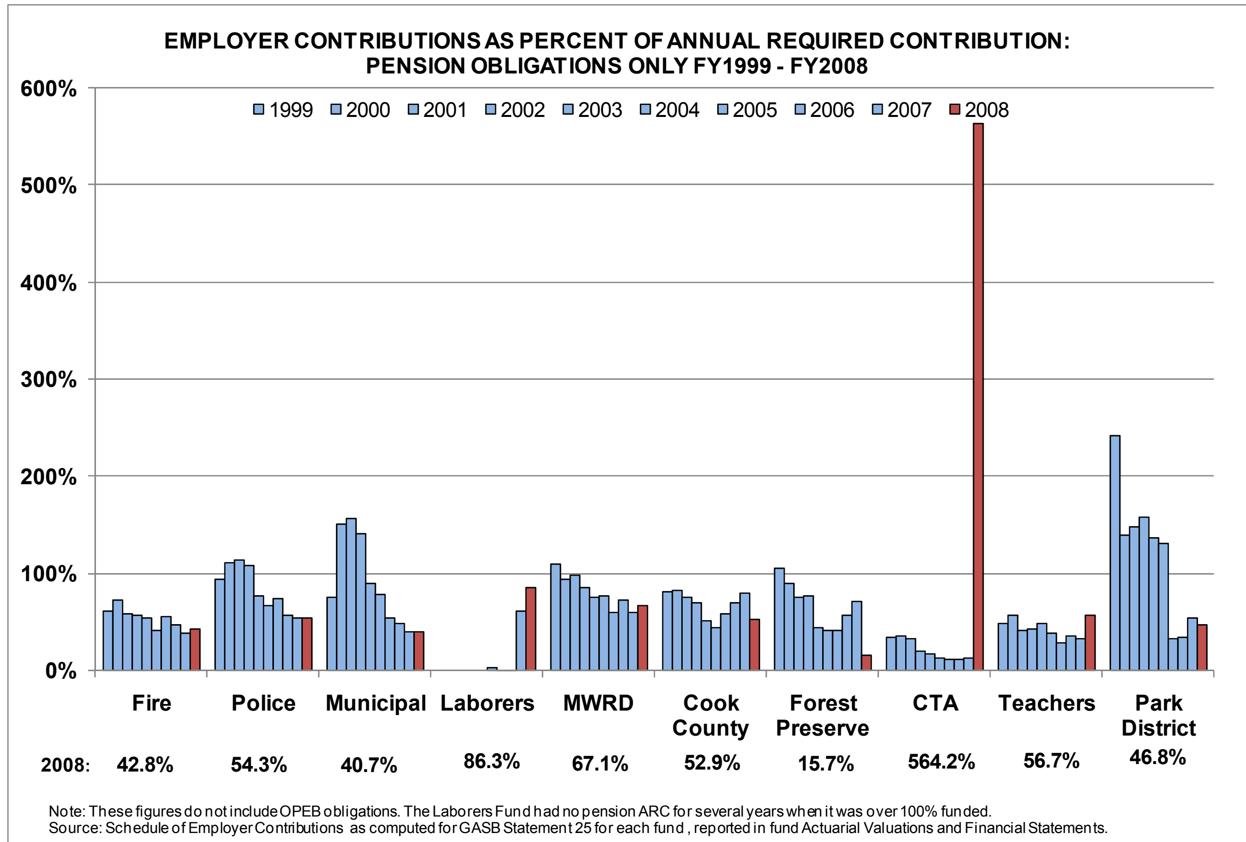
The following graph illustrates the employer contribution as a percent of the actuarially calculated annual required contribution for each fund's pension obligations (not including OPEB) from FY1999 to FY2008. The Fire, Cook County and Teachers' funds did not receive the full annual required employer contribution during any of the last ten years (the Laborer's Fund did not have an ARC for several years while it was over 100% funded).

The MWRD Fund received the full ARC only once and the Forest Preserve Fund received the full ARC for only two years during this time period.

The CTA received less than one-third of the employer ARC during most of this period. However, due the one-time infusion of $1.1 billion in pension obligation bond proceeds, its contribution for FY2008 greatly exceeded its annually required contribution. The Park District

received well over the ARC for several years until the employer cut its contribution in half for FY2004 and FY2005 (see page 13).

The total cumulative employer shortfall for pension liabilities alone from FY1999 to FY2008 was $4.3 billion.



Chicago Teachers' Retirement Fund Employer Contribution Requirements

The employer contributions for the Public School Teachers' Pension and Retirement Fund of Chicago are much more complex than those of the other funds in this report. The Illinois state statutes governing the Teachers' Fund require additional contributions when the plan's funded ratio falls below 90%. The Teachers' Fund regular annual employer contributions have typically included approximately $65 million in contributions by the State of Illinois. 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. 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 FY2010 the required CPS contribution under Public Act 89-15 is $307.5 million, rising 72.9% from the FY2009 required contribution of $177.8 million. Public Act 89-15 requires that the CPS contribution for the years 2000-2010 be increased in equal annual increments such that beginning in FY2011 CPS is contributing at the rate required to reach 90% by 2045.[72]

The table below includes a State contribution of $65 million for FY2010 in the calculation of the annual required employer contribution that must be certified by February 28 each year.[73] However, after this required contribution was certified, the State of Illinois informed CPS that it would contribute only $32.5 million to the Teachers' Pension Fund for FY2010, a 50% reduction from its typical contribution.[74] This is in contrast to 40 ILCS 5/17-127 which declares the General Assembly's "goal and intention" to contribute an amount equivalent to 20% or 30% of the contribution it makes to the downstate Teachers Retirement System.[75] That amount would be roughly $482 million for FY2010.[76] Because this 50% reduction was announced after the CPS required contribution had already been certified, it will not affect CPS' required contribution for FY2010. The 50% reduction may increase CPS's FY2011 employer contribution.

CPS (Employer) Contribution to Teachers' Pension Fund for State FY2009 & FY2010			
		FY2009	FY2010
1	**Total Required Employer Contribution**	**$ 263,002,000**	**$ 393,266,000**
2	State Appropriations	$ 65,000,000	$ 65,000,000
3	Additional State Appropriations (P.A. 90-582)	$ 9,778,000	$ 10,058,000
4	Additional CPS Contribution (P.A. 90-582)	$ 10,426,000	$ 10,723,000
5	Other Employer Contributions	$ -	$ -
	CPS Required Contribution (1-2-3-4-5) Under P.A. 89-15	**$ 177,798,000**	**$ 307,485,000**

Note: In the past, CPS made certain "Other Employer" pension contributions from federal funds but in FY2009 any contribution from federal funds is to be applied to the CPS required contribution. See FY2007 actuarial valuation p.11.

Source: FY2007 & FY2008 Actuarial Valuations of the Chicago Teachers Pension Fund

The additional CPS contributions for Public Act 90-582 are projected to increase from $10.4 million in FY2009 to $30.0 million in FY2045, and the required CPS contributions under Public Act 89-15 will rise from $177.8 million to $975.8 million over the same period.[77]

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[72] 40 ILCS 5/17-129 specifies that these required contributions be calculated as a level percent of payroll using the projected unit credit actuarial cost method.

[73] 40 ILCS 5/17-129.

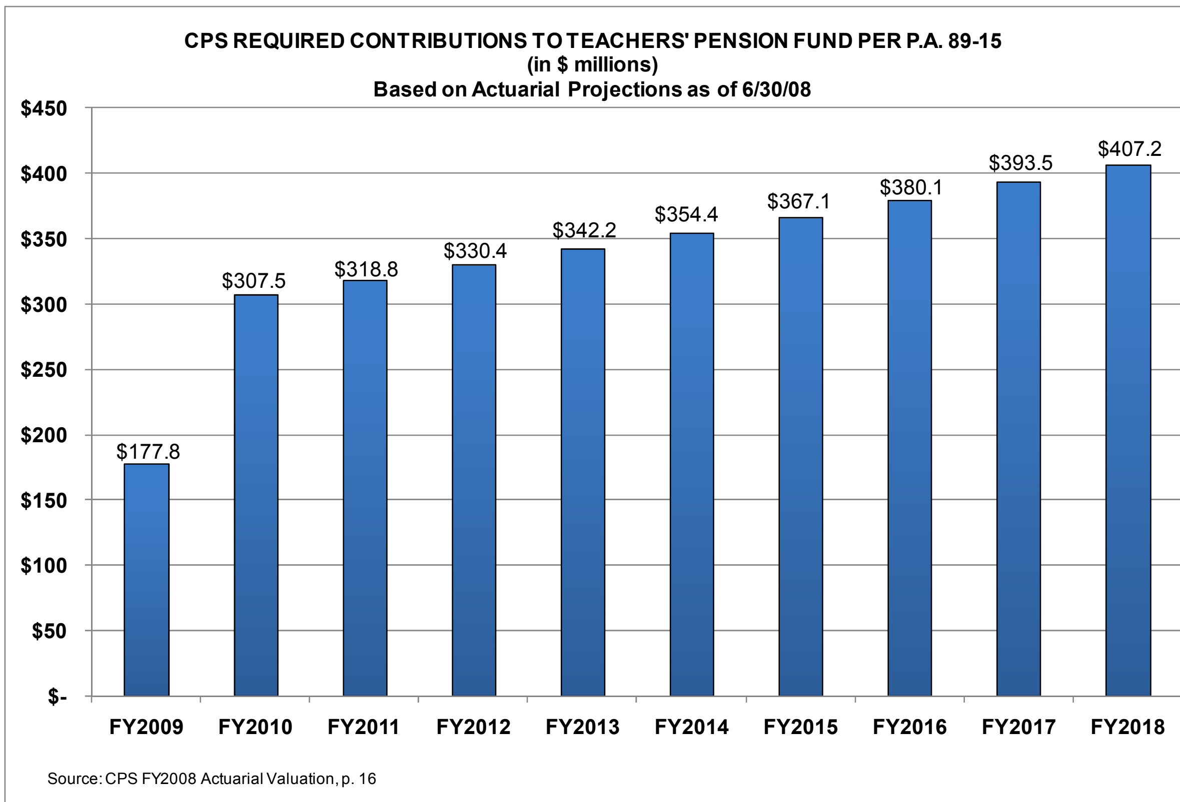
[74] Chicago Public Schools FY2010 Budget, p. 52.

[75] The downstate Teachers Retirement System covers all public school teachers in Illinois except those in the Chicago Public Schools.

[76] Chicago Public Schools FY2010 Budget, p. 52.

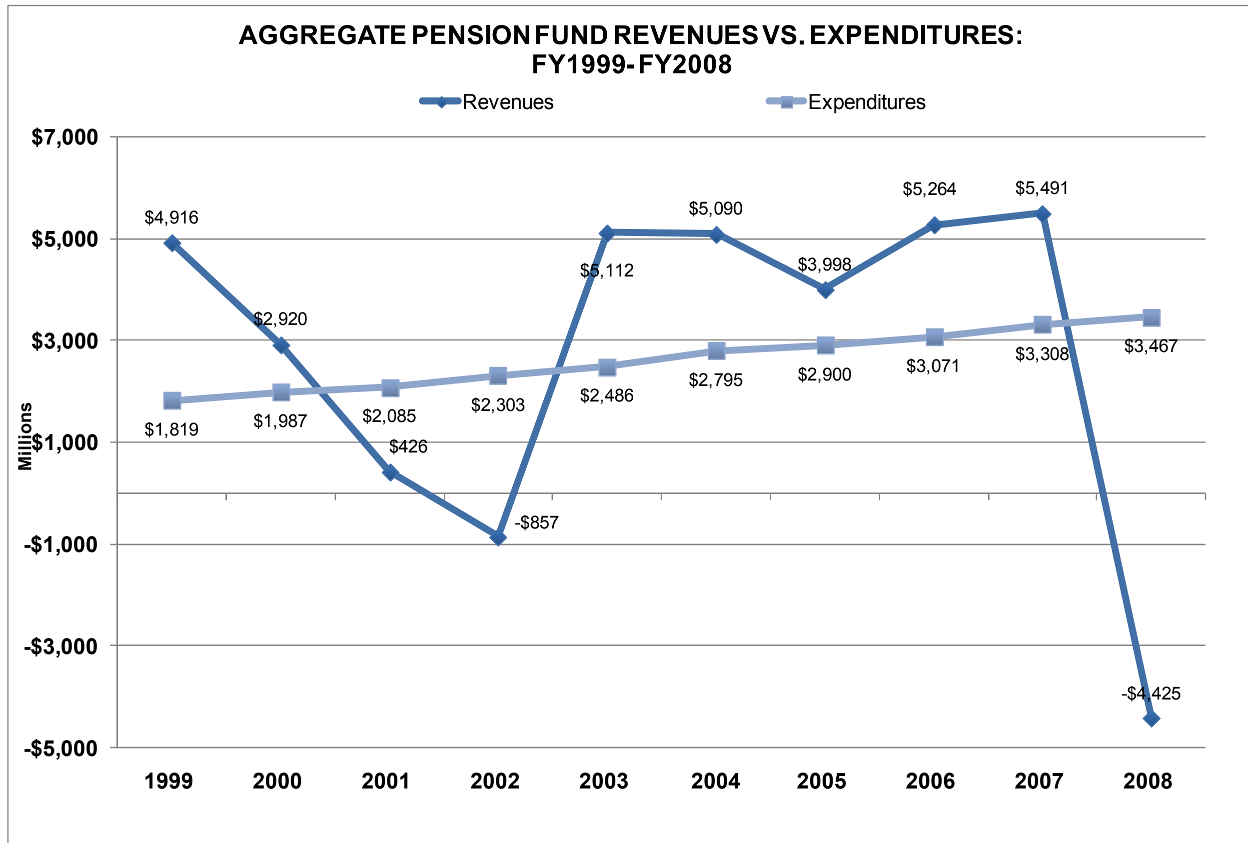
[77] Public School Teachers' Pension and Retirement Fund of Chicago, *Actuarial Valuation as of June 30, 2008*, pp. 16-17.

The following exhibit shows the projected $229.4 million increase in required contributions under Public Act 89-15 over the next ten years, based on the actuarial projections as of June 30, 2008. The recent declines in equity markets have significantly increased the future required contributions above the figures shown below.

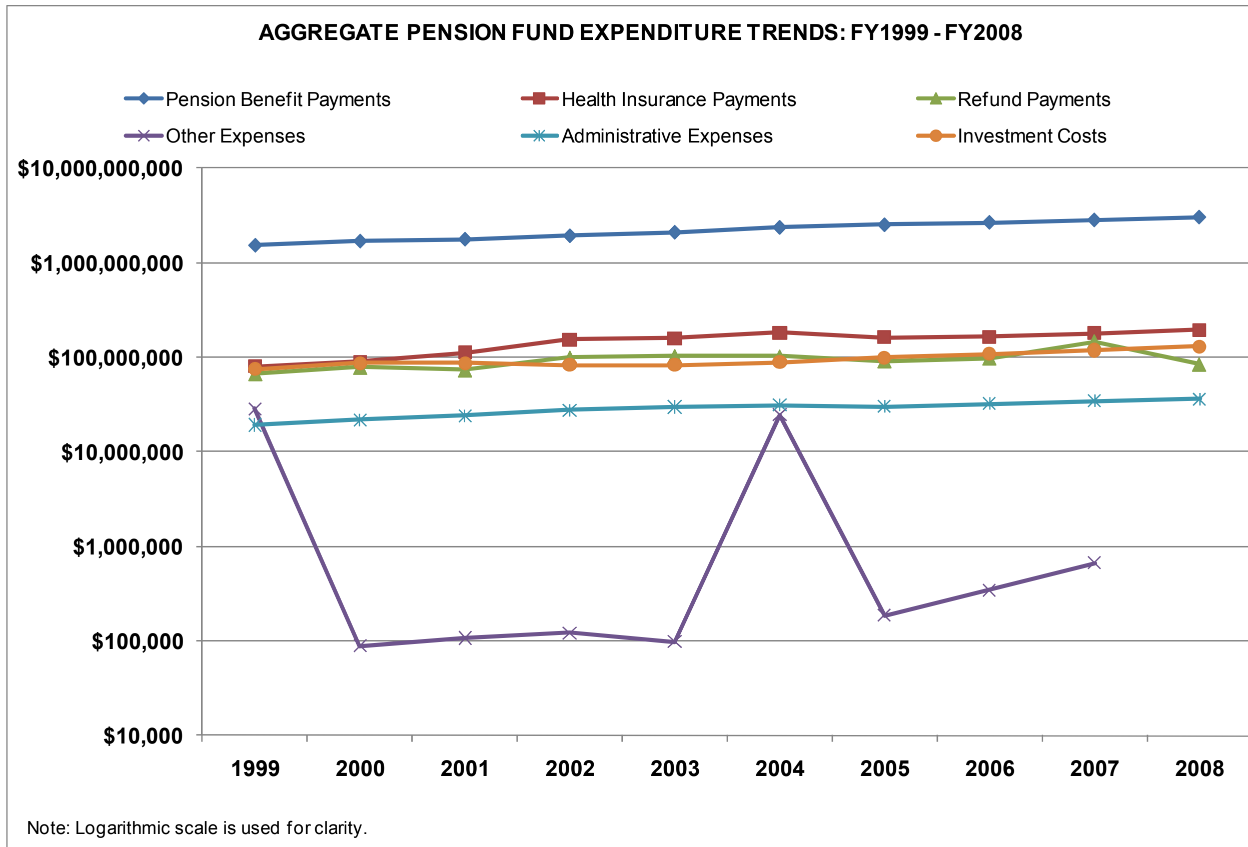


Expenditures

In contrast to fluctuating revenues, aggregate pension fund expenditures have grown steadily by an average of 7.2% annually between FY1999 and FY2008. The following table compares aggregate revenues to expenditures between FY1999 and FY2008.



The funds' primary expenditure is for pension benefit payments, which constituted roughly 87.1% of the ten funds' aggregate expenditures between FY1999 and FY2008. Pension benefit expenditures increased by 95.0% since 1999, from $1.5 billion to $3.0 billion in FY2008. As described on page 32, eight of the ten funds also provide a subsidy for retiree health insurance payments. Other types of expenses include 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 nearly \$3.5 billion, of which 87.1% was for pension benefit payments and 5.6% was for retiree health insurance. In total, the ten funds paid out \$3.2 billion in annuities and health insurance subsidies to retirees and their dependents in FY2008.

Expenditures by Type: FY2008							
Fund Name	Pension Benefit Payments	Health Ins. Payments	Refund Payments	Other Expenses	Administrative Expenses	Investment Costs	Total Expenditures
Fire	$ 187,496,591	$ 2,486,950	$ 2,659,788	$ -	$ 2,856,307	$ 7,268,590	$ 202,768,226
Police	$ 482,752,674	$ 8,850,186	$ 6,118,449	$ -	$ 4,498,170	$ 12,407,174	$ 514,626,653
Municipal	$ 573,634,711	$ 9,029,362	$ 25,501,985	$ -	$ 7,749,714	$ 33,215,514	$ 649,131,286
Laborers	$ 111,305,220	$ 2,347,624	$ 3,494,107	$ -	$ 3,626,393	$ 5,234,983	$ 126,008,327
MWRD	$ 100,068,749	$ -	$ 964,846	$ -	$ 1,280,321	$ 2,702,331	$ 105,016,247
Cook County	$ 386,973,122	$ 40,480,343	$ 24,724,102	$ -	$ 4,578,155	$ 11,006,253	$ 467,761,975
Forest Preserve	$ 10,551,161	$ 1,608,240	$ 518,400	$ (119,434)	$ 147,607	$ 192,733	$ 12,898,707
CTA	$ 201,864,923	$ 61,589,371	$ 1,763,250	$ -	$ 2,462,991	$ 4,347,395	$ 272,027,930
Teachers	$ 907,521,275	$ 68,691,191	$ 16,730,268	$ -	$ 7,827,576	$ 52,411,352	$ 1,053,181,662
Park District	$ 57,973,617	$ -	$ 1,964,838	$ -	$ 1,289,579	$ 1,969,237	$ 63,197,271
Total	**$ 3,020,142,043**	**$ 195,083,267**	**$ 84,440,033**	**$ (119,434)**	**$ 36,316,813**	**$ 130,755,562**	**$ 3,466,618,284**

Note: Investment costs include investment fees and securities lending bank fees.

Expenditures by Type As Percent of Total: FY2008							
Fund Name	Pension Benefit Payments	Health Ins. Payments	Refund Payments	Other Expenses	Administrative Expenses	Investment Costs	Total Expenditures
Fire	92.5%	1.2%	1.3%	0.0%	1.4%	3.6%	100.0%
Police	93.8%	1.7%	1.2%	0.0%	0.9%	2.4%	100.0%
Municipal	88.4%	1.4%	3.9%	0.0%	1.2%	5.1%	100.0%
Laborers	88.3%	1.9%	2.8%	0.0%	2.9%	4.2%	100.0%
MWRD	95.3%	0.0%	0.9%	0.0%	1.2%	2.6%	100.0%
Cook County	82.7%	8.7%	5.3%	0.0%	1.0%	2.4%	100.0%
Forest Preserve	81.8%	12.5%	4.0%	-0.9%	1.1%	1.5%	100.0%
CTA	74.2%	22.6%	0.6%	0.0%	0.9%	1.6%	100.0%
Teachers	86.2%	6.5%	1.6%	0.0%	0.7%	5.0%	100.0%
Park District	91.7%	0.0%	3.1%	0.0%	2.0%	3.1%	100.0%
Total	**87.1%**	**5.6%**	**2.4%**	**0.0%**	**1.0%**	**3.8%**	**100.0%**

Note: Investment costs include investment fees and securities lending bank fees.

CIVIC FEDERATION PENSION REFORM RECOMMENDATIONS

Growth in liabilities has significantly outpaced growth in assets for local pension funds since 1999, resulting in aggregate unfunded liabilities of $18.5 billion for the ten major funds in FY2008.

It is likely that FY2008 results will reflect the bottom of the market decline, and FY2009 results will show gains over the previous year returns. However, there is a very real possibility that some funds have now entered a downward spiral from which they cannot recover without major benefit reductions or contribution increases. While the investment losses have accelerated this process, many local pension funds have been routinely underfunded for years as benefit enhancements were granted without regard for their long-term cost to taxpayers.

The CTA pension fund experienced a precipitous descent toward insolvency between 1999 and 2006, plunging from 80% funded to only 25% funded. This decline was largely the result of years of underfunding combined with investment losses. It was only through major legislative action that the CTA pension fund's complete collapse was averted. 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 seek similar changes through state legislation***. We hope that the work of the Commission to Strengthen Chicago's Pension Funds, a task force convened by Mayor Daley in January 2008, will lead to productive reforms for those funds.[78]

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. Benefit, governance, employer contribution, and reporting reforms are all necessary to help fix the beleaguered local pension systems in Illinois. Specific reforms for each of these four categories are detailed below.

The status quo for Illinois' state and local pension funds is not a responsible option. The Civic Federation urges the General Assembly to take action immediately on four critical areas of pension reform: benefits, contributions, governance, and financial reporting.

Benefit Reforms

Pension benefits have reached unaffordable levels in the State of Illinois and funding these benefits now threatens to crowd out spending on critical public services. The pension problem cannot be solved without reducing benefits to levels that are tolerable to taxpayers and do not shift the cost of today's government to tomorrow's citizens.

1) Reduce Pension Benefits

By scaling back retirement benefits, governments can undo some of the damage done by excessive benefit enhancements granted in the past. The Civic Federation recommends **five general ways to reduce public pension benefits**:

[78] Lorene Yue, "Mayor forms pension study group of city heavyweights," *Crain's Chicago Business*, January 11, 2008. http://www.chicagobusiness.com/cgi-bin/news.pl?id=27728#list

- Increase minimum retirement age for unreduced benefits to match Social Security (currently age 67)
- Increase minimum years of service for unreduced benefits (e.g., from 25 to 30)
- Reduce or eliminate the annuity cost of living increase (e.g., from 3% to 2%)
- Reduce the final average salary used for pension benefits (e.g., from average of last four years to average of last eight years)
- Reduce benefit formula multiplier (e.g., from 2.3% to 1.8%)

Benefit reductions should be considered for every public pension plan for both current and new employees. Where reductions cannot be negotiated for current employees, they should at least be implemented for new hires. Such changes might also include transition to a cash balance or defined contribution plan.

The Civic Committee of the Commercial Club suggests that the Illinois Constitution protects the rights of pension benefits that have already been earned by public employees but does not protect benefits that have not yet been earned. The Civic Committee recommends that a second-tier defined benefit pension plan be applied to both new employees and current employees prospectively.[79]

Some pension funds are so dangerously close to insolvency and some local governments are facing such financial stress that the Civic Federation believes municipal bankruptcy should be a real concern for employees, retirees, and taxpayers. Even vested pension benefits may be placed in jeopardy if a municipality files for bankruptcy. At the point when a municipality receives approval to enter into a bankruptcy proceeding, employees and retirees become creditors of the city. Employees and retirees may receive unsecured creditor status during this process, which may limit their ability to fully recover salary and benefit amounts previously agreed to or conferred upon them. While not an intentional or agreed-upon reduction of benefits, the reality of this situation may be a reduction of pension benefits for municipal employees and retirees.

Finding an affordable solution that avoids both litigation and bankruptcy proceedings is ultimately in the best interest of all stakeholders.

2) Prohibit Benefit Enhancements Unless They Are Fully Funded, Will Expire in Five Years, and the Plan is Over 90% Funded

Benefit enhancements are a major source of increased liabilities for pension funds. Employee groups often advocate for benefit enhancements with the expectation that investment returns or tax increases will finance the enhancements. However, years of enhancements have led to pension benefits that are now unaffordable for many governments and threaten to crowd out spending on public services.

The Civic Federation urges the General Assembly to **prohibit any and all forms of retirement benefit enhancement for any pension plan that is less than 90% funded**.

[79] Civic Committee of the Commercial Club, Minority Report to the State Pension Modernization Task Force, November 2009. See http://www.ilga.gov/commission/cgfa2006/Upload/112009PensionTaskForceReport.pdf, p. 57 (last visited February 18, 2010).

Any enhancements granted for a healthy fund (over 90% funded) **should only be permitted on a pay-as-you-go basis whereby employer and/or employee contributions are increased sufficiently to fully fund the enhancements on an ongoing basis**.

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.

3) Restrict Use of Early Retirement Programs and Reject Adding DROP Benefits

Early retirement programs are designed to reduce current payroll expenses by encouraging senior employees to retire early, but they often create substantial additional pension costs. The general objective of early retirement programs is to create immediate and significant payroll savings that exceed the increase in longer-term pension costs.

The Civic Federation recommends that the State and local governments be **required to conduct and publish comprehensive, independent cost-benefit analyses before being permitted to implement early retirement programs**. These programs typically increase pension costs and effectively shift the price of government services from current taxpayers to future taxpayers. Therefore, they should be thoroughly studied before they are implemented.

The Civic Federation also urges the General Assembly to **reject any proposals to offer Deferred Retirement Option Plans (DROP)** to state or local government employees as a means of retaining employees who have reached retirement age. These plans allow employees to accrue annuity payments while continuing to work for the employer. They constitute a pension benefit enhancement and create significant additional pension liabilities.

Contribution Reforms

Resolving the funding crisis facing state and local pension funds will require contribution reforms in addition to benefit reforms.

1) Require Employer and Employee Contributions to Relate to Funding Levels

The employer contributions for eight major local government pension funds in the Chicago area are simply a multiple of past employee contributions, with no relationship to the funding status or actuarial liabilities of the plan. Most employee contributions are a fixed percentage of payroll.

The Civic Federation recommends that **employer and employee contributions for all funds be tied to actuarial liabilities and funded ratios, such that contributions are at levels consistent with the actuarially calculated annual required contribution (ARC).**

The Civic Federation believes that employees need to share in the rising costs of public pension plans and recommends that employer and employee contributions be restructured such that employees pay a proportion of required contributions, similar to the new structure of the CTA contributions. A **proportional relationship should be set** whereby, for example, the employer

pays 50% and the employees pay 50% of the annual required contribution. Whether the proportion is 50%/50%, 60%/40%, or some other ratio, **it is critical that both parties pay a share of required contributions, and that those contributions relate to the fiscal health of the fund**.

2) Tie Pension Obligation Bond Issuance to Pension Reforms

The Civic Federation recommends that **no state or local government be permitted to issue pension obligation bonds unless comprehensive pension benefit reforms have first been enacted. Furthermore, all proceeds must be used to reduce unfunded liabilities, never to pay current employer contributions**.[80] We supported the issuance of $1.1 billion in pension obligation bonds for the Chicago Transit Authority because Public Act 95-0708 also required major benefit and contribution reforms. The Civic Federation does not support putting more money into pension funds without fixing some of the underlying problems causing chronic underfunding.

Governance Reform

The number and composition of pension boards of trustees should be changed in order to achieve economies of scale and to ensure that the trustees are well prepared for their role as fiduciaries of millions of dollars in invested assets. For example, pension boards should include trustees with expertise in investment, finance, economics, law, actuarial science, or other related disciplines.

1) Consolidate Local Pension Funds

The Civic Federation recommends that the General Assembly consolidate more local pension funds. There are over 600 local pension funds in the state, each with its own governing board, most of which are police and fire funds for individual municipalities. While these funds may enjoy local control over investing and disability decisions, we believe that **overall investment performance and administrative efficiency generated by economies of scale would greatly improve if funds were consolidated** into a multi-employer fund like the Illinois Municipal Retirement Fund. We also recommend exploring consolidations such as moving the Park District, MWRD, Cook County, and Cook County Forest Preserve Funds into IMRF, merging all four City of Chicago funds into a single fund, and combining the Chicago Teachers fund with the State Teachers' Retirement System.

2) Reform Pension Boards of Trustees to Balance Stakeholder Interests

The mission of a public pension fund board of trustees should be to safeguard the fund's assets through prudent investments and effective benefit administration. Unfortunately, many pension boards also act as advocates on behalf of fund members, lobbying for benefit enhancements that ultimately increase the funds' liabilities.

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[80] For example, only $7.3 billion of the State of Illinois' $10 billion pension obligation bond issuance in 2003 went toward reducing unfunded liabilities. Public Act 93-0002 specified that $300 million be used to reimburse the State for part of its FY2003 pension contributions and $1.86 billion be used to make the entire employer contribution for FY2004. The remaining $522.7 million was for payment of fees, commissions, and interest related to the bonds. See Commission on Government Forecasting and Accountability, "Report on the 90% Funding Target of Public Act 88-0593," January 2006, p.31.

As outlined in the Civic Federation's *Recommendations to Reform Pension Boards of Trustees Composition in Illinois,* the membership of most Illinois public pension boards does not reflect a balance of interests. The employer, employees, retirees, and taxpayers all have a stake in the management of the fund. Furthermore, we are concerned that not all pension board members have adequate financial knowledge or training for their role in setting policies and overseeing millions of dollars of investments. We urge the General Assembly to undertake state and local pension governance reform that will:

- **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**.

Financial Reporting and Disclosure Recommendations

Public Act 96-006, enacted in April 2009, requires pension funds (except downstate police and fire funds) to maintain an official web site and to post information including investment policies, contracts, and performance. This is a good step toward more disclosure by pension funds. However, the minimal reporting currently required of pension funds by Illinois state statutes does not give citizens or other interested observers a clear or complete picture of what the public pension situation means for future taxpayers and future budgets.

1) Require Reporting of Basic Projections

The Civic Federation believes that the state pension code should be amended to **require state and local pension funds to report four basic projections** listed below. Although they are necessarily based on many assumptions, these projections can provide important information about fiscal health and potential future costs. For example, the actuarial projection that the CTA fund would be unable to pay retiree health care costs by 2008 and reach 0% funding by 2013 if nothing was done to boost assets or reduce liabilities was critical to the passage of CTA pension reforms 2006 and 2008.

The following projections can easily be calculated by all funds' actuaries and included in actuarial valuation reports. They should also be published for public access on the state Department of Financial Regulation's Division of Insurance web site:

1) Projected funded ratios for the next 30 years
2) Projected unfunded liabilities for the next 30 years
3) Projected required contributions for the next 30 years
4) Projected date of insolvency (0% funded ratio, the year when the pension fund is projected to run out of money to pay retiree benefits)

These measures should be calculated and reported two ways: first according to current state laws governing employer contributions to the funds (i.e., under the current state funding policy), and second under a state funding policy equal to normal cost plus a closed 30-year amortization of the unfunded liability (i.e., what it would take to reach 100% funded in 30 years). Actuarial assumptions for such factors as wage increases, turnover, and investment return will differ

among the funds, so the measurements should also include a disclosure of all underlying actuarial assumptions and methods.

2) Require Benefit Enhancement Reporting

Some pension funds voluntarily report changes to benefits and the effects these changes have on the fund's finances. The Civic Federation recommends that all pension funds be **required to describe any benefit enhancements granted in a given year in their annual financial report and to calculate the effects of those enhancements on the fund's total liabilities**. Taxpayers deserve to know the costs of benefit enhancements.

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.[81] 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 Calculated 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.

Defined Benefit Plan: 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 employer is required to pay the difference.

Defined Contribution Plan: 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.

Discount Rate: 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

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[81] 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.

Funded Ratio: 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.

Market Value of Assets: 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.

Multiple: 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.

Normal Cost: 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.

Two-Tiered System: 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.

Unfunded Liabilities: 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.

FY2008 REVENUES BY SOURCE					
Fund Name	Source Document	Employee Contribution	Employer Contribution	Investment Income	Other Income
Fire	Financial Statements, p. 5	Total Plan Member Contributions	Total Employer Contributions	Net investment income (+investment expenses), net securities lending income (+ management fees)	Gift fund donations, litigation settlements
Police	Comprehensive Annual Financial Report, p. 25	Plan member salary deductions	Employer contributions	Total investment income, net securities lending income (+ bank fees)	Miscellaneous income
Municipal	Comprehensive Annual Financial Report, p. 28	Member contributions	Employer contributions	Total investment income, net securities lending income (+ bank fees)	none
Laborers	Financial Statements, p. 17	Plan member contributions	Employer contributions	Total investment income, net securities lending income (+ management fees)	none
MWRD	Comprehensive Annual Financial Report, p. 29	Employee contributions	Employer contributions	Total investment income, net income from securities lending activities (+ bank fees)	Other
Cook County	Financial Statements, p. 5	Total plan member contributions	Employer -- tax levy contributions	Total investment income, net securities lending income (+ management fees)	Federal subsidized programs, Medicare Part D subsidy, prescription plan rebates, employee transfers (to) from Forest Preserve, miscellaneous
Forest Preserve	Financial Statements, p. 5	Total plan member contributions	Employer -- tax levy contributions	Total investment income, net securities lending income (+ management fees)	Medicare Part D subsidy, prescription plan rebates, miscellaneous
CTA	Actuarial Valuation, p. 12	Member contributions	CTA contributions	Investment income net of expenses + investment expense (includes securities lending net of fees, see Financial Statements p. 21)	Bond proceeds
Teachers	Comprehensive Annual Financial Report, p. 23	Employee contributions	Intergovernmental net (Total), minimum funding requirement	Investment income (net appreciation in fair value, interest, dividends, mischellaneous), securities lending income	Miscellaneous
Park District	Comprehensive Annual Financial Report, p. 24	Employee contributions	Employer contributions	Total investment income, net securities lending income (+ bank fees)	none

FY 2008 EXPENDITURES BY TYPE							
Fund Name	**Source Document**	**Benefit Payments**	**Health Ins. Payments**	**Refund Payments**	**Other Expenses**	**Administrative Expenses**	**Investment Costs**
Fire	Financial Report, pp. 5-6	Total benefits	Annuitant health care	Refunds of contributions	none	Administrative expenses	Investment expenses, securities lending management fees
Police	Comprehensive Annual Financial Report, pp. 25, 96	Pension, Disability and Death Benefits (minus Hospitalization)	Hospitalization	Refunds of employee deductions	none	Administrative expenses, OPEB expense	Total investment activity expenses, securities lending bank fees
Municipal	Comprehensive Annual Financial Report, p. 28	Total benefits--pension	Postemployment healthcare subsidy for City B&E	Refunds of member contributions	none	Administrative and OPEB expenses	Direct investment expenses, securities lending bank fees
Laborers	Financial Statements, p.17 and Actuarial Valuation, p. 27	Benefit payments--Pension	Benefit payments--Health Insurance Supplement	Refunds and rollovers	none	Administration	Investment expenses, securities lending management fees
MWRD	Comprehensive Annual Financial Report, p. 29	Total annuities and benefits	none	Refunds of employee contributions	none	Administrative expense	Investment expenses
Cook County	Financial Statements, pp. 5-6	Total benefits minus group hospital benefits	Group hospital benefits	Refunds	none	Net administrative expenses	Investment expense, securities lending management fees
Forest Preserve	Financial Statements, p. 5	Total benefits minus group hospital benefits	Group hospital benefits	Refunds	Employee transfers to (from) Cook County	Administrative expenses	Investment expense, securities lending management fees
CTA	Actuarial Valuation, p. 12	Pension and death benefits	Health benefits, plan share	Refunds	none	Administration	Investment expense (includes securities lending fee, see Financial Statement p. 21)
Teachers	Comprehensive Annual Financial Report, p. 23	Pension benefits, Death benefits	Refund of insurance premiums	Refunds, 2.2 contribution refunds	none	Administrative and misc. expenses	Investment advisory and custodial fees, Securities lending expense
Park District	Comprehensive Annual Financial Report, p. 24	Total benefits	none	Refund of contributions	none	Administrative and general expenses	Investment expenses, securities lending bank fees

APPENDIX C: SOURCES FOR FY2008

Fire

- Firemen's Annuity and Benefit Fund of Chicago, *Actuarial Valuation Report for the Year Ending December 31, 2008*, Gabriel Roeder Smith & Company. April 13, 2009.
- Firemen's Annuity and Benefit Fund of Chicago, *Comprehensive Annual Financial Report for December 31, 2008.* Legacy Professionals, LLP. June 26, 2009.

Police

- Policemen's Annuity and Benefit Fund of Chicago, *Actuarial Valuation Report for the Year Ending December 31, 2008*, Gabriel Roeder Smith & Company. April 9, 2009.
- Policemen's Annuity and Benefit Fund of Chicago, *Comprehensive Annual Financial Report for the year ended December 31, 2008.* June 1, 2009.

Municipal

- Municipal Employees' Annuity and Benefit Fund of Chicago, *Actuarial Valuation Report for the Year Ending December 31, 2008*, Gabriel Roeder Smith & Company. April 13, 2009.
- Municipal Employees' Annuity and Benefit Fund of Chicago, *Comprehensive Annual Financial Report for the Year Ended December 31, 2008.* June 1, 2009.

Laborers

- Laborers' & Retirement Board Employees' Annuity and Benefit Fund of Chicago, *Actuarial Valuation Report for the Year Ending December 31, 2008*, Gabriel Roeder Smith & Company. April 8, 2009.
- Laborers' & Retirement Board Employees' Annuity and Benefit Fund of Chicago, *Comprehensive Annual Financial Report for the fiscal year ended December 31, 2008.* April 10, 2009.

MWRD

- Metropolitan Water Reclamation District Retirement Fund, *Actuarial Valuation as of December 31, 2008*. Goldstein & Associates. April 9, 2009.
- Metropolitan Water Reclamation District Retirement Fund, *Comprehensive Annual Financial Report for the Year Ending December 31, 2008.* June 22, 2009.

Cook County

- County Employees' Annuity and Benefit Fund of Cook County, *Actuarial Valuation as of December 31, 2008*, Goldstein & Hartman. May 17, 2009.
- County Employees' and Officers' Annuity and Benefit Fund of Cook County, *Financial Statements: December 31, 2008*. May 22, 2009.

Forest Preserve

- Forest Preserve District Employees' Annuity and Benefit Fund of Cook County, *Actuarial Valuation as of December 31, 2008*, Goldstein & Hartman. May 17, 2009.
- Forest Preserve District Employees' Annuity and Benefit Fund of Cook County, *Financial Statements: December 31, 2008*. May 22, 2009.

CTA

- Retirement Plan for Chicago Transit Authority Retirees, *Actuarial Valuation as of January 1, 2009*, Gabriel Roeder Smith & Company. September 11, 2009.
- Retirement Plan for Chicago Transit Authority Retirees, *Financial Statements and Supplementary Information, Year Ended December 31, 2008*. September 30, 2009.

Teachers

- Public School Teachers' Pension and Retirement Fund of Chicago, *Actuarial Valuation as of June 30, 2008*. Goldstein & Associates. February 12, 2009.
- Public School Teachers' Pension and Retirement Fund of Chicago, *113th Comprehensive Annual Financial Report, For the Year Ended June 30, 2008*. September 3, 2009.

Park District

- Park Employees' & Retirement Board Employees' Annuity and Benefit Fund, *Comprehensive Annual Financial Report for Fiscal Year Ended June 30, 2008*. December 22, 2008.

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 2039, 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 18, 2008:
  - Reduced pensions available at 55 years of age and 10 years of service (currently 3 years).
  - Full pension available at 64 years of age (currently 55) and 25 years of service.
  - CTA executive pension eliminated.
- Auditor General annually submits financial report to General Assembly.

Retiree Health care Reform

- An independent health care trust is established to manage and provide retiree benefits and is seeded with $528.8 million in bond proceeds. The Trust is solely responsible for providing retiree health care benefits no earlier than January 1, 2009 and no later than June 30, 2009.
- 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.