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Status of Local Pension Funding Fiscal Year 2010:

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

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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.

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EXECUTIVE SUMMARY

The purpose of this report is to compile and analyze basic financial data on ten major local government employee pension funds in the Chicago area.[1] It explains common indicators of pension fund fiscal health and causes for change in the health of the local funds.

The report reviews fiscal year 2010 actuarial valuation reports and financial statements of the retirement funds for the City of Chicago (four separate funds – Municipal, Laborers', Police and Fire), Chicago Park District, Chicago Public Schools (Teachers' Fund), Cook County, Forest Preserve District of Cook County, Metropolitan Water Reclamation District (MWRD) and the Chicago Transit Authority (CTA). Fiscal year 2010 data is the most recent audited data available for all ten pension funds.

Public Act 96-0889, enacted in April 2010, created a new tier of benefits for many public employees hired on or after January 1, 2011, including members of the following funds analyzed in this report: Municipal, Laborers', Cook County, Forest Preserve, MWRD, Teachers' and Park Funds. The Act did not change employee or employer contributions. Over time these benefit changes will slowly reduce liabilities from what they would have been as new employees are hired and fewer members remain in the old benefit tier. However, Public Act 96-0889 does not guarantee the future solvency of the affected funds. Even with reduced benefits for new employees, the Laborers', Municipal, Park and County Funds are projected to run out of assets during the years 2035, 2030, 2025 and 2038, respectively.[2]

Public Act 96-1495, enacted in December 2010, created a new tier of benefits for public employees who become members of many public safety pension funds on or after January 1, 2011, including the Chicago Police and Fire funds. Unlike Public Act 96-0889, Public Act 96-1495 also changed the level of employer contributions and set a schedule for the funds to reach 90% funded by the end of 2040. Prior to the enactment of Public Act 96-1495, the Fire Fund was projected to run out of assets during 2021 and the Police Fund was projected to run out of assets during 2025.[3]

Highlights of the data compiled on the ten pension funds are summarized below.

Funded Ratios:[4] The actuarial value funded ratio of each fund fell in FY2010.[5] All ten funds now have actuarial value funded ratios under 75%, ranging from a low of 32.4% for the Fire Fund to a high of 73.8% for the Laborers' Fund. The actuarial value funded ratio for the aggregate of all ten funds' assets and liabilities was 56.2% in FY2010, down from 88.0% in FY2001. Market value funded ratios were considerably lower, at an aggregate ratio of 50.3% in FY2010. The lowest market value funded ratio was the Fire Fund at 29.9%, and the highest was the Laborers' Fund at 68.9%.

Unfunded Liabilities: Between FY2001 and FY2010 the aggregate unfunded actuarial accrued liabilities for the ten funds increased by $22.8 billion, rising from $4.6 billion to $27.4 billion. Unfunded liabilities per capita in Chicago for the ten local funds rose from $1,189 in FY2000 to $8,993 in FY2010. For the four City of Chicago pension funds alone, FY2010 unfunded liabilities were $14.8 billion, or $5,473 per capita.

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[1] In this report the terms "pension fund" and "pension plan" are used interchangeably.
[2] Illinois Commission on Government Forecasting and Accountability, *Illinois Public Retirement Systems: A Report on the Financial Condition of the Chicago, Cook County and Illinois Municipal Retirement Fund Systems of Illinois*, January 2012, p. iii.
[3] Illinois Commission on Government Forecasting and Accountability, *Illinois Public Retirement Systems: A Report on the Financial Condition of the Chicago, Cook County and Illinois Municipal Retirement Fund Systems of Illinois*, November 2010, pp. 46, 108.
[4] See page 10 for more information on pension fund status indicators. Also see the glossary beginning on page 59.
[5] Actuarial value of assets smoothes asset gains and losses over four or five years. See page 10 for details.

Investment Income and Rate of Return: The average rate of return on pension plan assets for those funds with a January 1 to December 31 fiscal year was 13.7% in FY2010, down from 18.6% in FY2009. The average rate of return for funds using a July 1 to June 30 fiscal year was 12.7% in FY2010, up from -20.2% in FY2009. Investment income represented approximately 56% to 86% of total FY2010 income.

Ratio of Active Employees to Beneficiaries: Between FY2001 and FY2010, the ratio of total active employees to beneficiaries for the ten funds combined has gradually dropped from 1.70 actives per beneficiary to 1.23, indicating that there are fewer active employees supporting more retirees. The Laborers', MWRD, CTA, Park District and Forest Preserve Funds all had more beneficiaries than actives in FY2010.

Assets and Liabilities: The ten pension funds had approximately $62.5 billion in combined pension and Other Post Employment Benefit (OPEB) accrued liabilities for FY2010.[6] Pension liabilities totaled $60.9 billion and OPEB liabilities of the funds totaled $1.6 billion. The funds' assets had an aggregate actuarial value of $35.1 billion and a market value of $31.4 billion. Total pension and OPEB liabilities of the seven governments reviewed in this report were $67.1 billion ($31.9 billion unfunded) as reported in their audited financial statements.[7]

Employee Contributions: For all ten funds, employee contributions totaled $697.2 million in FY2010. Most employees contribute at rates ranging from 8.5% to 9.125% of salary.[8]

Employer Contributions and ARC: All funds received their statutorily required employer contributions in FY2010. However, none of the employers contributed the full actuarially calculated annual required employer contribution (ARC) in FY2010 and only two funds, the Teachers' Fund and the CTA Fund, contributed more than 50% of the pension ARC.[9] In the aggregate, in order to meet the pension ARC in FY2010, employers should have contributed $2.1 billion. Instead they contributed less than half that amount, $959.1 million, falling short by approximately $1.2 billion. Employers contributed an aggregate equivalent of 12.6% of payroll to the pension funds for pension obligations, but in order to meet the ARC, they should have contributed an additional 15.2% for a total of 27.8% of payroll in FY2010.

[6] 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.
[7] See page 37 for details on this liability.
[8] In FY2009, CTA employees paid 6.0% of salary, but this increased to 8.345% in FY2010. CTA is the only government reviewed in this report whose employees also participate in Social Security. See discussion beginning on page 46.
[9] See page 47 for a discussion of ARC, which is an accounting reporting requirement but not a funding requirement. However, it does represent 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.

STATUS OF LOCAL PENSION FUNDING OVERVIEW

This report analyzes basic financial data on ten major local government employee pension funds in Cook County. It is intended to provide policymakers, pension trustees, pension fund members and taxpayers with 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: [10]

- County Employees' and Officers' Annuity and Benefit Fund of Cook County
- Forest Preserve District Employees' Annuity and Benefit Fund of Cook County[11]
- Metropolitan Water Reclamation District Retirement Fund
- Retirement Plan for Chicago Transit Authority Employees
- Public School Teachers' Pension and Retirement Fund of Chicago[12]
- Park Employees' & Retirement Board Employees' Annuity and Benefit Fund[13]

Public Pension Plan Type

All ten public pension plans surveyed in this report are **defined benefit pension plans**. In these ten defined benefit pension plans, employers and/or employees annually contribute to an employer-sponsored retirement fund that invests assets in order to 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 –

[10] 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.

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

[12] Certified Teachers employed by the Chicago Board of Education participate in the Public School Teachers' Pension and Retirement Fund of Chicago. Most other employees of the Board of Education are enrolled in the City of Chicago's Municipal Employees' Annuity and Benefit Fund. Approximately 16,061, or 52.3%, of Municipal Fund members considered to be active by the Fund are Board of Education employees. Chicago Public Schools, *Comprehensive Annual Financial Report for the fiscal year ended June 30, 2011*, p. 75. A very small number of Board of Education employees are enrolled in the Laborers' Fund.

[13] 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.

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 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 some features of both defined benefit and defined contribution plans to employees.[14] 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.

Of the ten funds covered in this analysis, only the participants in the Chicago Transit Authority (CTA) pension fund also participate in the federal **Social Security** program. CTA retirees are eligible for Social Security benefits in addition to their CTA pension benefits.[15] The CTA and its employees each pay an additional 6.2% of the employee's Social Security taxable salary to the Social Security Administration.

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 B on page 62. For those plans that also subsidize retiree healthcare, combined pension and healthcare results are reported.

Some funds compute their actuarial results in one way to satisfy State reporting requirements and in a second 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 three notable exceptions:

1. The Teachers' Fund figures shown in this report are from the "Combined" actuarial valuation, which includes assets and expenses related to the retiree healthcare obligations of the fund but does not include healthcare as a long-term liability. State statute (40 ILCS 5/17-142.1) currently limits the fund's annual reimbursements to retirees for their healthcare expenditures to $65 million, so the fund considers this a fixed annual expenditure rather than an open-ended liability. However, GASB requires that the retiree healthcare plan be valued as an ongoing liability because there is a history of increases to this statutory maximum.[16]

[14] For example, see "What are the Rhode Island Pension Reforms?" http://www.civicfed.org/iifs/blog. Civic Federation, April 19, 2012.
[15] The majority of all government employers and employees hired after March 31, 1986 each pay Medicare payroll taxes of 1.45%. See Internal Revenue Service Publication 963 at http://www.irs.gov/pub/irs-pdf/p963.pdf for further information.
[16] Public School Teachers' Pension and Retirement Fund of Chicago, *Actuarial Valuation of Retiree Health Insurance Plan as of June 30, 2010 for GASB Statement No. 43*, p. 83.

2. The Cook County Fund figures shown in this report are from the "Combined" actuarial valuation required by State law, which values pension and OPEB liabilities using a 7.5% discount rate rather than a lower discount rate of 4.5% for OPEB liabilities as required for GASB reporting. Cook County government does not directly subsidize OPEB. OPEB is provided entirely by the pension fund (see page 37). The pension fund pays pension and OPEB benefits from the same asset pool.
3. The Forest Preserve Fund figures shown in this report are from the "Combined" actuarial valuation required by State law, which values pension and OPEB liabilities using a 7.5% discount rate rather than a lower discount rate of 4.5% for OPEB liabilities as required for GASB reporting. The Forest Preserve District does not directly subsidize OPEB. OPEB is provided entirely by the pension fund (see page 37). The pension fund pays pension and OPEB benefits from the same asset pool.

The sum of the pension and OPEB liabilities reported according to GASB standards is higher than the total liabilities reported in the "Combined" valuations of Teachers', Cook County and Forest Preserve Funds required pursuant to Illinois statute. The reported FY2010 OPEB liabilities according to GASB standards are $2.9 billion higher for the Teachers' Fund, $605.7 million higher for the Cook County Fund and $13.6 million higher for the Forest Preserve Fund. A total actuarial value funded ratio for pension and OPEB liabilities calculated using GASB standards is therefore lower for each fund. In the "Combined" valuations, the FY2010 ratios are 67.1% for the Teachers' Fund, 60.7% for the Cook County Fund and 65.2% for the Forest Preserve Fund.[17] Using the GASB-reported liabilities those ratios fall to 57.1%, 58.1% and 62.2%, respectively.[18]

It is also important to note that the Civic Federation reports the combined pension and retiree healthcare liabilities for the Retirement Plan for CTA employees in prior years when the plan funded those benefits. Public Act 95-708 removed the liability for retiree healthcare benefits from the CTA pension fund and FY2009 was the first year that CTA pension fund data did not include healthcare liabilities.

Recent Pension Reforms

Second Tier of Benefits for New Hires as of January 1, 2011: Public Acts 96-0889 and 96-1495

Public Act 96-0889 creates a new tier of benefits for public employees who become members of many public pension plans on or after January 1, 2011.[19] The Act affects new members of the following funds analyzed in this report: Municipal, Laborers', Cook County, Forest Preserve, MWRD, Teachers' and Park Funds. Current benefit provisions differ among the funds. In

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[17] Chicago Teachers' Pension Fund, *115th Comprehensive Annual Financial Report for the year ended June 30, 2010*; County Employees' Annuity and Benefit Fund of Cook County, *Actuarial Valuation as of December 31, 2010*; and Forest Preserve District Employees' Annuity and Benefit Fund of Cook County, *Actuarial Valuation as of December 31, 2010*.

[18] GASB-based actuarial value funded ratios are calculated by the Civic Federation by dividing the total reported actuarial value of assets by the sum of GASB 25 and GASB 43 reported liabilities. It should be noted that these GASB standards are reporting, not funding requirements. However, they provide a useful basis of comparison between funds. The Cook County and Forest Preserve Funds prefer the "Combined" valuation used throughout most of this report for evaluation of funding status.

[19] A "trailer bill" to correct technical problems with Public Act 96-0889 was enacted in December 2010 as Public Act 96-1490.

general, for many funds the major benefit changes are an increase in full retirement age from 60 to 67 and early retirement age from 55 to 62, reduction of final average salary from the highest 4 year average to the highest 8 year average, a $106,800 cap on pensionable earnings, and the reduction of the automatic cost of living adjustment from 3% compounded to the lesser of 3% or one half of the increase in Consumer Price Index simple interest. Over time these benefit changes will slowly reduce liabilities from what they would have been as new employees are hired and fewer members remain in the old benefit tier. However, Public Act 96-0889 does not guarantee the future solvency of the affected funds. Even with reduced benefits for new employees, the Laborers', Municipal, Park and County Funds are projected to run out of assets during the years 2035, 2030, 2025 and 2038, respectively.[20]

Public Act 96-0889 does not change employer or employee contribution rates, with the significant exception of a partial employer contribution holiday granted to Chicago Public Schools (CPS). The Act reduces CPS' required employer pension contribution for FY2011, FY2012 and FY2013 to an amount estimated to be equivalent to the employer's normal cost, thereby revising the funding standards set in Public Act 89-0015.[21] It also delays the year that the Teachers' pension fund must reach a 90% funded ratio from 2045 to 2060. Prior to the passage of Public Act 96-0889, the CPS required contribution for FY2011 was calculated to be $586.9 million, or almost double the FY2010 amount. Public Act 96-0889 reduced the District's required FY2011 contribution to $187.0 million, which is $120.5 million, or 39.2% less than the prior year contribution.[22] In FY2014, the year when the reduced payment provision sunsets, the District's pension payment is projected to increase to $647.8 million, an increase of $451.8 million over the currently projected FY2013 pension contribution.[23]

Public Act 96-1495 creates a new tier of benefits for public employees who become members of many public safety pension funds on or after January 1, 2011. The Act affects new members of the Chicago Police and Chicago Fire Funds. In general, the major benefit changes are as follows: an increase in full retirement age from 50 to 55; reduction of final average salary from the highest 4-year average to the highest 8-year average; a $106,800 cap on pensionable earnings; and change in the automatic cost of living adjustment from 1.5% simple interest to the lesser of 3% or one half of the increase in Consumer Price Index simple interest. Over time these benefit changes will slowly reduce liabilities from what they would have been as new employees are hired and fewer members remain in the old benefit tier.

Public Act 96-1495 also changes employer contributions. The change for the City of Chicago will be significant. The City's contribution is currently a fixed multiple of the employee contributions made two years prior: a multiple of 2.26 for the Fire Fund and 2.00 for the Police

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[20] Illinois Commission on Government Forecasting and Accountability, *Illinois Public Retirement Systems: A Report on the Financial Condition of the Chicago, Cook County and Illinois Municipal Retirement Fund Systems of Illinois*, January 2012, p. iii.

[21] "Normal cost" is an actuarially-calculated amount representing that portion of the present value of pension plan benefits which is allocated to a given valuation year.

[22] Actuarial projection by Goldstein & Associates for Kevin Huber, Executive Director of the Public School Teachers' Pension and Retirement Fund of Chicago, March 31, 2010. See also Illinois Commission on Government Forecasting and Accountability, *Illinois Public Retirement Systems: A Report on the Financial Condition of the Chicago, Cook County and Illinois Municipal Retirement Fund Systems of Illinois*, November 2010, p.119.

[23] Chicago Teachers' Pension Fund, *115th Comprehensive Annual Financial Report for the year ended June 30, 2010*, p. 16. See also Illinois Commission on Government Forecasting and Accountability, *Illinois Public Retirement Systems: A Report on the Financial Condition of the Chicago, Cook County and Illinois Municipal Retirement Fund Systems of Illinois*, February 2012, p. 121.

Fund (see page 48 of this report). These multiples have provided much less funding than the amount needed to adequately fund the plans for at least the last ten years (see page 47). Public Act 96-1495 requires the City in 2015 to begin making contributions sufficient to bring the funded ratio of the Police Fund and the Fire Fund to 90% by the end of 2040, using a level percentage of payroll and projected unit credit actuarial valuation method. If the City fails to make its required contributions, the Illinois Comptroller will withhold State fund transfers to the City. Prior to the enactment of Public Act 96-1495, the Fire Fund was projected to run out of assets during 2021 and the Police Fund was projected to run out of assets during 2025.[24]

See Appendix E for more on these pension reform Acts.

Chicago Transit Authority Pension Reform Legislation

Major reforms of the Chicago Transit Authority (CTA) pension plan passed by the Illinois General Assembly 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.

The urgency for reform of the CTA pension fund arose from the actuarial projection that the fund would be unable to pay retiree healthcare costs by 2008 and would 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 healthcare over the past few decades.[25] 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 the end of 2058. The Act specified that payments are to be made as a level percentage of payroll and that post-employment healthcare 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.[26]

The second piece of CTA pension reform legislation, **Public Act 95-0708**, was passed on January 18, 2008 and made changes to pension and retiree healthcare contributions and benefits.[27] 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.

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[24] Illinois Commission on Government Forecasting and Accountability, *Illinois Public Retirement Systems: A Report on the Financial Condition of the Chicago, Cook County and Illinois Municipal Retirement Fund Systems of Illinois*, November 2010, pp. 46 and 108.
[25] 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.
[26] See Civic Federation, "The State of Illinois Retirement Systems: Funding History and Reform Proposals," (October 26, 2006). http://www.civicfed.org/articles/civicfed_220.pdf
[27] See page 41 for more details.

In addition to the baseline 6% employee and 12% employer contributions, the legislation also set funded ratio standards. If these standards are not met, additional employer and employee contributions are triggered. Public Act 95-0708 adjusted the 50-year schedule forward one year to 2059, requiring 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 a 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 receive a minimum contribution amount needed to maintain the funded ratio at or above 90%.

The legislation changed benefits for CTA 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 with 25 years of service.

Public Act 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%.[28]

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, healthcare liabilities for the pension fund decreased from $1.766 billion as of January 1, 2007 to $68.8 million as of January 1, 2008.[29] The CTA and the CTA pension fund have no further obligations regarding retiree health insurance. The Chicago Transit Authority Retiree Health Care Trust reported total present value of projected benefits of $693.5 million for FY2010 and total income and assets of $737.9 million, for a 106.4% coverage ratio.[30]

The CTA Fund actuaries adjusted the retirement probability assumptions due to the changes in retirement eligibility age, required years of service and healthcare eligibility that took effect January 18, 2008. These assumption changes reduced the FY2007 actuarial liabilities by $28.0 million.[31]

FY2008 audited CTA pension data reflected the infusion of $1.1 billion in bond proceeds, nearly doubling its total actuarial value of 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.

[28] Retirement Plan for CTA Employees, *Actuarial Valuation as of January 1, 2008*, p. 3.
[29] Retirement Plan for CTA Employees, *Actuarial Valuation as of January 1, 2008*, p. 16.
[30] Chicago Transit Authority Retiree Health Care Trust, *Funding Results as of January 1, 2011*, p. 3.
[31] Retirement Plan for CTA Employees, *Actuarial Valuation as of January 1, 2008*, p. 4.

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 future benefit payments 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. This measure is subject to significant market volatility. 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 each year's investment gains or losses over a period of three to five years.[32] 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 equal to 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. Public Act 96-1495 requires all the public safety pension funds it affects to reset their actuarial value at the market value as of March 30, 2011 and then to proceed with five-year asset smoothing from that time forward.

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, may occasion a lesser degree of alarm than a once-healthy fund that has experienced precipitous decline in recent years.

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[32] 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. GASB is currently considering revising its standards such that pension assets would be valued at market value for reporting purposes. http://www.gasb.org/

The three common indicators used in this report are funded ratio, unfunded liabilities and actual investment rate of return and are 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 the actuarial value of assets, as required by GASB 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.

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 required under the Employee Retirement Income Security Act (ERISA). Private sector pension plans that are less than 100% funded must amortize, or pay off, their unfunded liability over seven years. Private sector pension plans that are less than 80% funded are considered "at-risk," and must make additional contributions to boost their funded ratio.[33]

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 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. Public Act 96-1495 will also

[33] 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.hreonline.com/pdfs/01012007Extra_Pension_SecuringRetirement.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.

require most public safety pension funds in Illinois to make contributions sufficient to reach 90% funded by 2041, although not all public safety pension funds will be held to such a target.[34]

Unfunded Actuarial Accrued Liabilities

Unfunded actuarial accrued liabilities (UAAL) 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 an unfunded liability as a percentage of payroll covered by the plan (see page 22 of this report). 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 the unfunded liability as a percent of covered payroll over time would indicate that a reasonable funding strategy is being pursued. If the unfunded liability continues 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.

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 income provides the majority of revenue for an employee's pension over the course of a typical career. The fund's actuarial assumptions should be aligned with its investment policies in order to achieve appropriate risk and yield levels for the plan's portfolio. Funds' investment policies are validated by achieving their annualized risk adjusted rate of return on investments over time. The funds are required to report their assets at fair market value so 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 reviewed in this report assume an 8% average annual rate of return on their pension investments for actuarial purposes (see page 38). The assumed rate of return utilized by funds, normally close to 8%, is compared to the actual annualized rate of return earned by the funds over time (usually 10 years). Four of the five State of Illinois pension funds

[34] 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 Chicago Fire Fund had an FY2010 funded ratio of 32.4% based on the actuarial value of assets, but a funded ratio of 29.9% based on the market value of assets. In other words, the FY2010 market value of assets was equal to only 29.9% 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.

reduced their expected rates of return in 2011.[35] 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.[36] 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. As of January 1, 2011 the CTA's discount rate was reduced to 8.5% in response to a call for more reasonable actuarial valuation assumptions.[37]

The appropriate discount rate to use for public pension funds has been a subject of considerable debate in recent years. The Governmental Accounting Standards Board is expected to promulgate new pension accounting standards in the near future that will require a blended discount rate for financial reporting that will likely be lower than the rate currently used by most funds, increasing reported liabilities.[38]

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 for a mature pension plan that has been in existence for a while. 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 resulted in negative returns for all ten funds analyzed in this report. The funds with January 1 to December 31 fiscal years all experienced positive returns for 2009, and all ten funds experienced positive returns for 2010. 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 investment losses of FY2008.

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[35] See "State Pension Liabilities Rise Due to Lower Expected Investment Returns," http://www.civicfed.org/iifs/blog. Civic Federation, November 5, 2010. The rate of return for the State Employees' Retirement System and the State Universities Retirement System of Illinois was reduced to 7.75% from 8.5%. The rate of return was reduced to 7.0% from 8.0% for the Judges' Retirement System and the General Assembly Retirement System.

[36] The investment rate of return is also used to calculate the "smoothed" value of assets (see page 10).

[37] *See* IL P.A. 94-839 and Retirement Plan for CTA Employees, *Actuarial Valuation as of January 1, 2011*, p. 2.

[38] Read about post-employment benefit accounting and financial reporting at www.gasb.org.

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 pension annuities 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 may be an attractive option to employers, since achieving immediate short-term savings on other employee costs often appears to be 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 may be negotiated either inside the scope of collective bargaining or outside of it.

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.[39] 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.[40] Retroactive pay increases also affect pension costs because higher salaries generate higher annuities. For example, retroactive pay increases awarded to Chicago firefighters created an actuarial loss of $105.5 million in FY2006.[41]

Benefit Reductions

The Constitution of the State of Illinois states that once granted, pension benefit enhancements may not be diminished.[42] 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 may be applied to both new employees and current employees prospectively.[43]

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[39] 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.

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

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

[42] 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.*

[43] 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). This idea was considered but not approved in the 2011 spring and fall veto sessions of the Illinois General Assembly.

In April 2012, Illinois Governor Pat Quinn proposed a pension reform framework for the five State pension systems in which employees are given a choice between two pension options, thereby avoiding the issue of unconstitutionally imposing pension reforms on current employees. Pension participants hired before January 1, 2011 would continue to receive subsidized retiree healthcare as a consideration for choosing a lower level of pension benefits. Employees who do not choose the new benefit level would have their pensionable salary frozen and receive no healthcare subsidy after retirement, but keep their other pension benefit provisions.[44]

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. It is considered standard practice for actuaries to review and reassess assumptions, such as mortality rates and salary levels, every five years. 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.[45] 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.[46] The fund actuary estimated that using the old methods and assumptions, the Cook County FY2004 funded ratio would have been 69.5% rather than 70.9%. Similarly, the Forest Preserve FY2004 funded ratio would have been 73.1% rather than 76.0%.[47]

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

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[44] A bill similar to the Governor's framework was considered by the General Assembly during the 2012 spring legislative session as amendments to Senate Bill 1673, but was not passed before adjournment on May 31, 2012.
[45] 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.
[46] County Employees' and Officers' Annuity and Benefit Fund of Cook County, *Actuarial Valuation as of December 31, 2004*, p. 10.
[47] Estimates provided by Sandor Goldstein via e-mail to the Civic Federation, January 24, 2008.

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.[48] 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 FY2009 the Cook County and Forest Preserve plans made additional changes to assumptions following an experience study for the period 2005 through 2008. The plans changed from 1983 mortality tables to 1994 mortality tables, increased termination rates and revised retirement rates to reflect fewer expected retirements and lower average age at retirement. These changes resulted in an increase of $810.8 million in unfunded liabilities for Cook County and an increase of $24.8 million in unfunded liabilities for the Forest Preserve.[49] Without these changes, the FY2009 Cook County funded ratio would have been 67.5% rather than 63.2% and the Forest Preserve ratio would have been 75.6% rather than 68.7%.[50]

In FY2007 the CTA reduced the discount rate for its retirement plan from 9.0% to 8.75%, and in 2011 the discount rate was again reduced by 0.25% to 8.5%. 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.[51]

Employer and Employee Contributions

Changes in employer or employee contributions can have a significant effect on the funded status of a defined benefit plan. Specifically, 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 46). Employer contributions may be tied to an actuarial estimate of what is needed or may be a fixed rate. As described on page 47, 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 contributions 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

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[48] 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.

[49] County Employees' and Officers' Annuity and Benefit Fund of Cook County, *Actuarial Valuation as of December 31, 2009,* pp. 11-15, and Forest Preserve District Employees' Annuity and Benefit Fund of Cook County, *Actuarial Valuation as of December 31, 2009,* pp. 11-15.

[50] In FY2010, the Municipal Fund updated its actuarial assumptions with regard to payroll growth, salary increases, retirement rates, turnover rates, and mortality rates that resulted in a $577 million increase in the actuarial accrued liability and unfunded actuarial accrued liability. Municipal Employees' Annuity and Benefit Fund of Chicago, *Actuarial Valuation Report for the Year Ending December 31, 2010,* pp. 9-10.

[51] Retirement Plan for CTA Employees, *Actuarial Valuation as of January 1, 2008,* p. 4.

employer contributions for the Park District fund in FY2005 and FY2006 and increased the unfunded liabilities by roughly $20 million.[52]

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 financial statements of the plan and the government employer. 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.[53] 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.[54] As described beginning on page 46, the employer contributions to nine of the ten pension funds in this report were less than half the ARC in FY2010. The state statutes governing 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. For example, the City of Chicago contribution multiple for its Police pension fund has not increased since 1982, when it was raised from 1.97 to 2.00 times the employee contribution made two years prior.[55] In 1999 the Municipal Fund contribution multiple was reduced from 1.69 to 1.25 and has not been raised again despite the fact that the actuarial value funded ratio has fallen below 50%.[56]

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 FY2010 data from ten local pension funds using the primary indicators of pension fund health: funded ratios, unfunded liabilities and investment rates of return.

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[52] 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.
[53] See Civic Federation, "Pension Fund Actuarially Required Contributions (ARC): A Civic Federation Issue Brief," February 14, 2007, http://www.civicfed.org/articles/civicfed_241.pdf.
[54] GASB sets accounting standards and has no authority over funding levels.
[55] Effective beginning in 2015, employer contributions will be actuarially-determined. Policemen's Annuity and Benefit Fund of Chicago, *Comprehensive Annual Financial Report for the year ended December 31, 2010*, pp.7-8.
[56] 40 ILCS 5/8-173. The difference between the 1.69 multiple and 1.25 is equivalent to approximately $50 million each year.

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 presents a ratio of assets to liabilities that accounts for assets by recognizing unexpected gains and losses over a period of three to five years (see Appendix A 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. It is important to note that the major investment losses experienced by most funds in FY2008 are not fully reflected in the actuarial value of assets. The market value of assets funded ratio represents the percentage of liabilities that could be covered by assets if those assets were sold at their current market value.

Actuarial Value of Assets

The actuarial funded ratio of every fund declined in FY2010. All ten funds are now less than 75% funded. The largest declines were in Chicago's Municipal Fund and Teachers' Fund. Much of the decline in the Municipal Fund can be attributed to changes in actuarial assumptions that increased the actuarial accrued liability and unfunded actuarial accrued liability by $577 million.[57] The drop in the Teachers' fund is mostly attributable to investment losses incurred in FY2008 and FY2009 and recognized in FY2010.[58]

The lowest actuarial value funded ratios for FY2010 are those of the Fire and Police pension funds at 32.4% and 39.7%, respectively. The Commission to Strengthen Chicago's Pension Funds projected in April 2010 that the Fire and Police funds would run out of money in approximately ten years barring any major changes to benefits or contributions.[59] A similar projection had been made for the CTA Fund prior to the passage of reform legislation (see page 8). An additional note of concern with respect to the Police Fund is that a large number of active employees are nearing retirement age, which will result in lower employee contributions and more benefit payments.[60]

The Laborers' Fund had the highest actuarial value funded ratio at 73.8% in FY2010. The Laborers' Fund dipped below 100% funded for the first time in FY2004 and the employer contribution had previously been waived when the plan was over 100% funded.[61]

It is important to consider actuarial funded ratios over time. The following chart illustrates the ten funds' actuarial standings since FY2001. The actuarial value funded ratio for the aggregate of

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[57] Municipal Employees' Annuity and Benefit Fund of Chicago, *Actuarial Valuation Report as of December 31, 2010*, pp. 9-10. See also note 49.

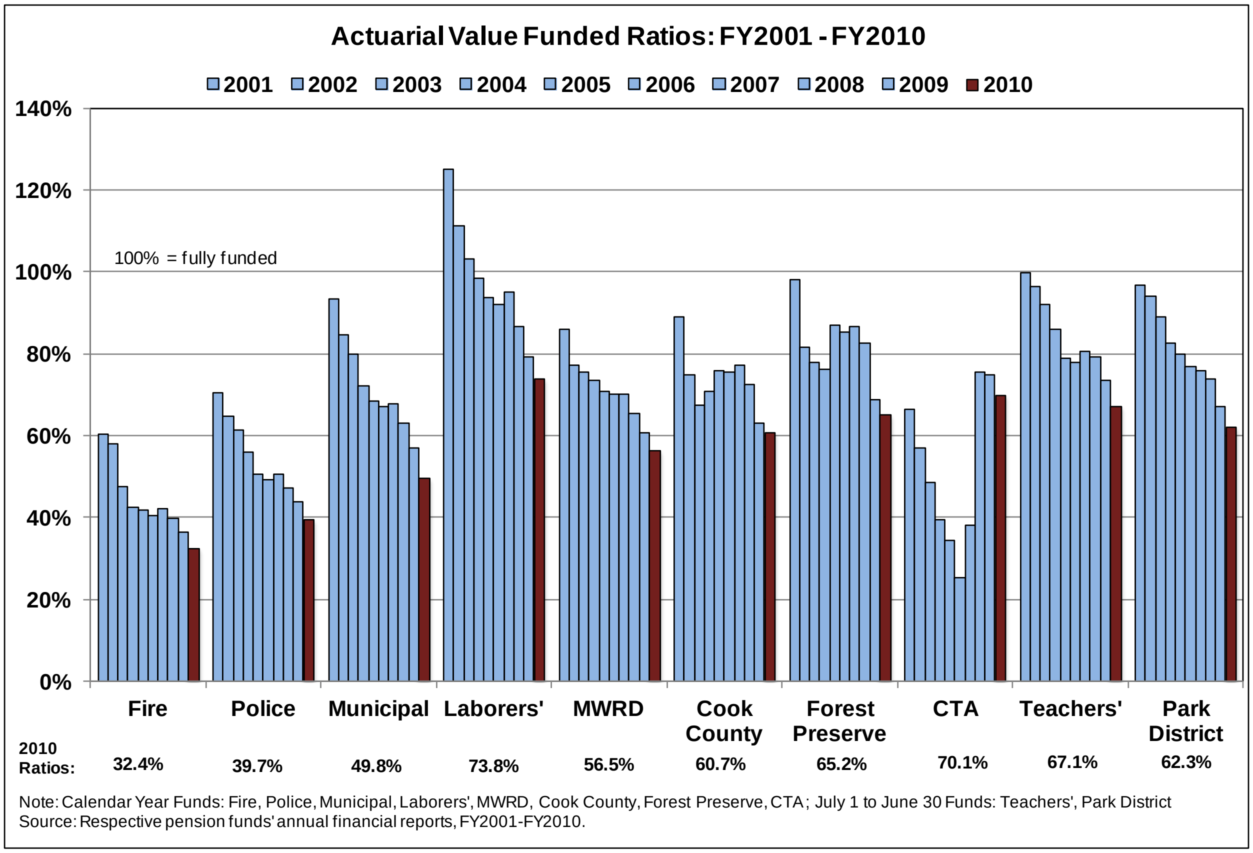
[58] Public School Teachers' Pension and Retirement Fund of Chicago, *Actuarial Valuation as of June 30, 2010*, pp. 11-12.

[59] City of Chicago, Commission to Strengthen Chicago's Pension Funds, April 30, 2010, p. 22. Available at http://www.cityofchicago.org/city/en/depts/obm/provdrs/perf_mang/news/2010/apr/commission_to_strengthenchicagospensionfundsreleasesreportonfisc.html.

[60] Policemen's Annuity and Benefit Fund of Chicago, *Actuarial Valuation for the year ending December 31, 2009*, pp. 3 and 8.

[61] Pursuant to Public Act 93-0654, the City of Chicago 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 Laborers' 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).

all ten funds' assets and liabilities was 56.2% in FY2010, down from 61.3% in FY2009 and 88.0% in FY2001.

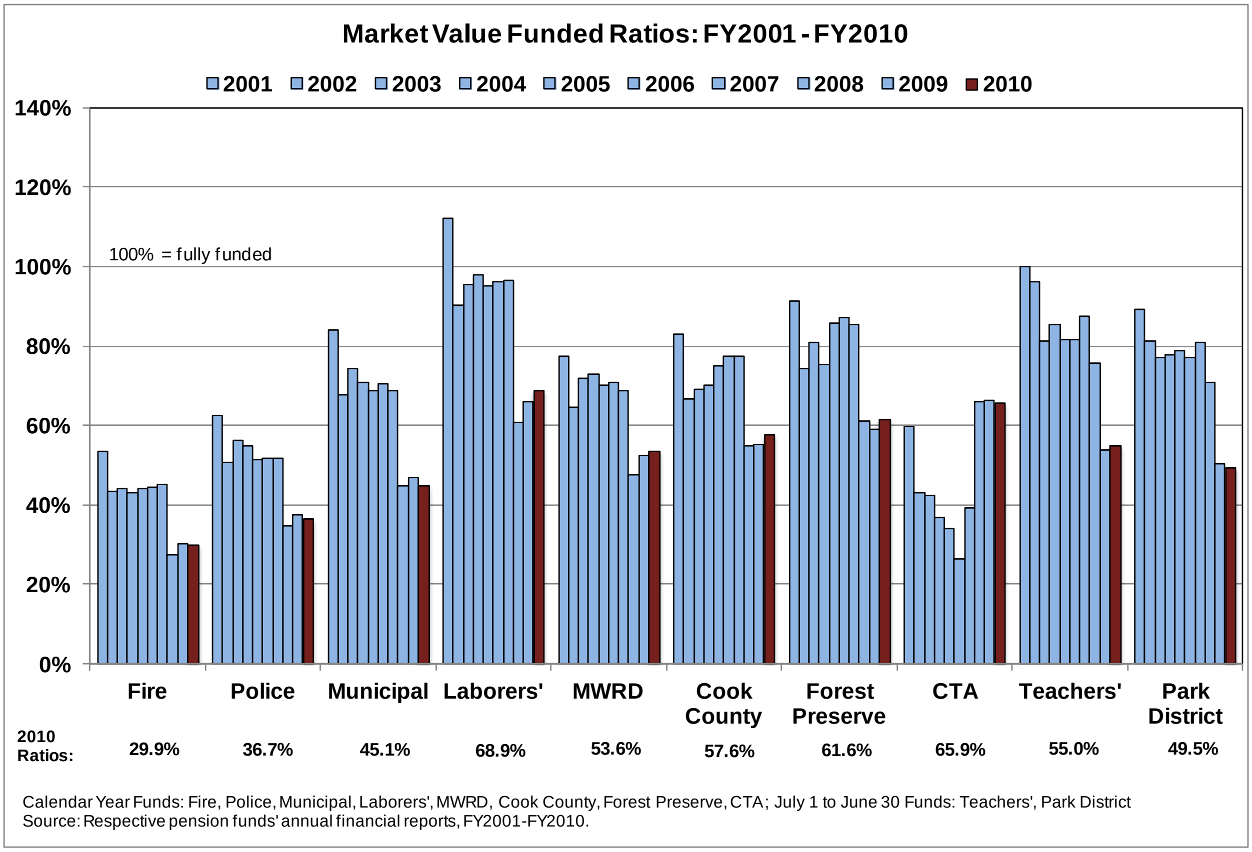


Market Value of Assets

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 2001. 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 money is actually available as of the valuation date to cover actuarial accrued liabilities.

Each fund's FY2010 market value funded ratio is less than its FY2010 actuarial funded ratio because 2008-2009 investment losses have not yet been fully recognized in the actuarial asset values smoothed over four or five years. Even though all ten funds experienced positive returns in FY2010, mixed funded ratio movement is indicative of pressures or changes other than investment returns. The market value funded ratio for most funds increased in FY2009 over FY2008 as investment returns rebounded during 2009. However, the Teachers' and Park District market value funded ratios are significantly less than their actuarial values because those funds are on a July 1 to June 30 fiscal year, and they sustained investment losses during their 2009 fiscal year July 1, 2008 to June 30, 2009.

The market value funded ratios for the Fire and Police Funds were only 29.9% and 36.7%, respectively. The highest market value funded ratio was the Laborers' Fund at 68.9%. Most funds were in the approximately 45% to 65% range. The market value funded ratio for the aggregate of all ten funds' assets and liabilities was 50.3% in FY2010, up slightly from 49.8% in FY2009 and down from 81.5% in FY2001.



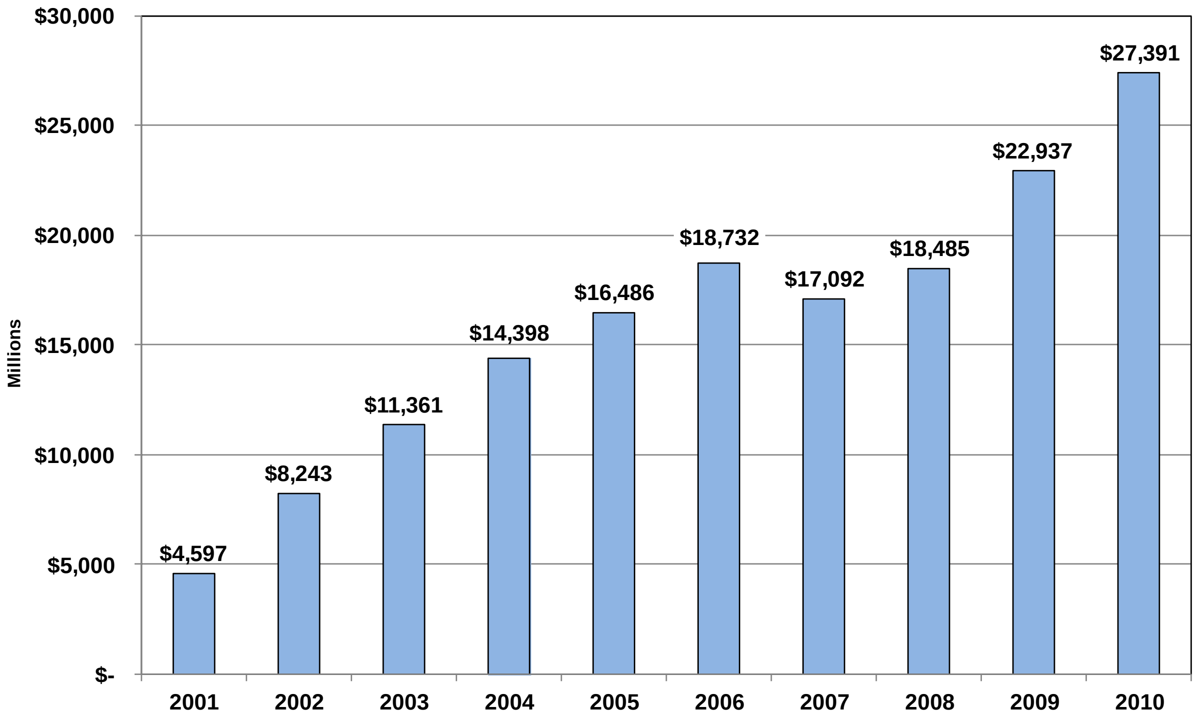
Unfunded Actuarial Accrued Liabilities

The difference between assets and accrued liabilities is known as the unfunded liability. The unfunded actuarial accrued liability (UAAL) is calculated by subtracting the actuarial value of the assets from the actuarial accrued liability (AAL) 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 while 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. The aggregate unfunded liability grew from $4.6 billion in FY2001 to $27.4 billion in FY2010, an increase of $22.8 billion, or 495.8%, over ten years. In FY2007 the aggregate UAAL fell by $1.7 billion due in part to strong investment returns, but it rose again by $10.3 billion over the following three years.

Aggregate Unfunded Actuarial Accrued Liabilities of the Ten Pension Funds: FY2001 - FY2010

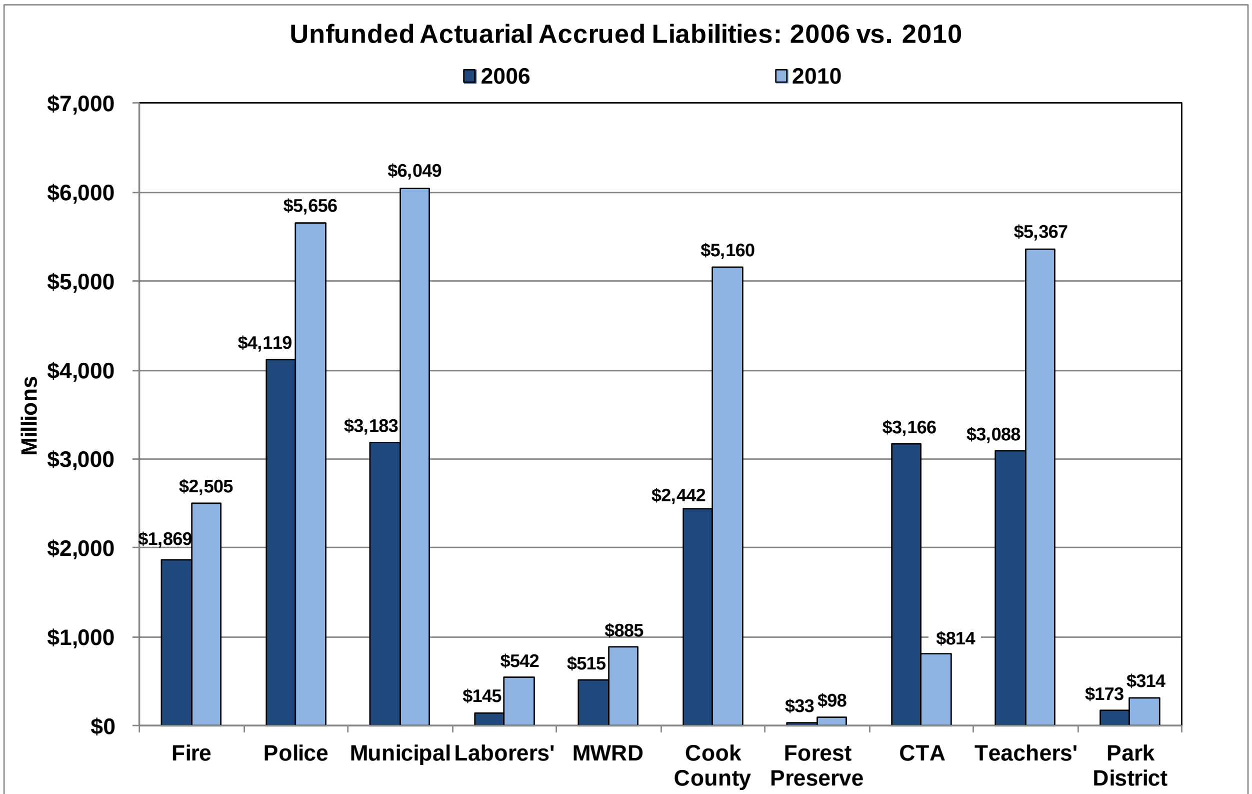


Source: Respective pension funds' annual financial reports, FY2001-FY2010.

The following graph shows the five-year trend in UAAL for each fund. The largest FY2010 unfunded liability is in the Municipal Fund at $6.0 billion, an increase of 90.0%, or $2.9 billion, over FY2006. The Police, Cook County and Teachers' Funds each had over $5.0 billion in unfunded liabilities in FY2010.

The highest rate of increase in unfunded liabilities was in the Laborers' Fund, which had $145.0 million in unfunded liabilities in FY2006 and $542.0 million in FY2010. This is an increase of 273.5%.

The UAAL of the CTA Fund decreased between FY2006 and FY2010 primarily as a result of the transfer of retiree healthcare obligations to a separate trust fund, $1.1 billion in bond proceeds deposited from a pension obligation bond and increases in both employer and employee contributions.



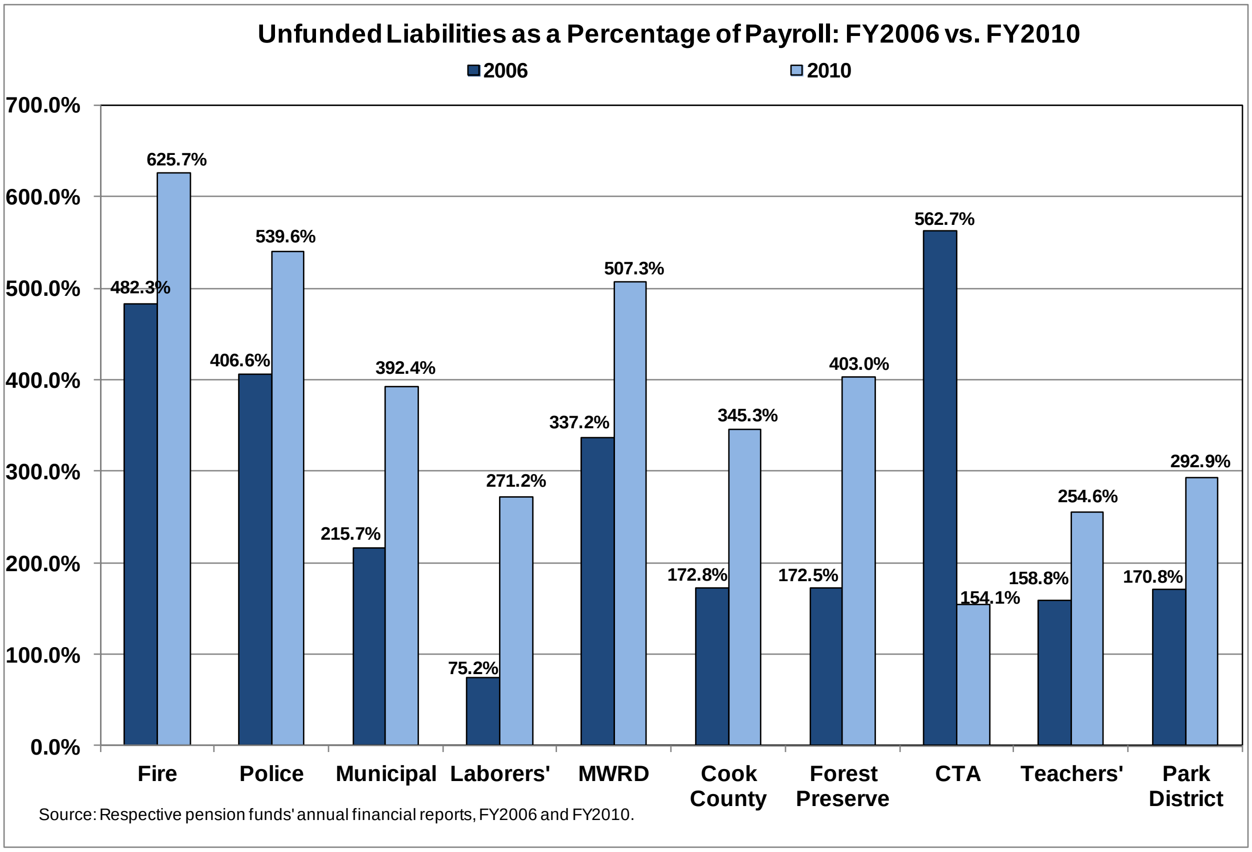
Source: Respective pension funds' annual financial reports, FY2006 and FY2010.

Unfunded Accrued Actuarial Liabilities as a Percentage of Payroll

Another indicator of funding progress is a fund's UAAL expressed as a percentage of covered payroll. This measurement demonstrates the relative size of the unfunded liability by expressing it in terms of the current personnel expenditures.

An indication of a reasonable funding strategy is a gradual decrease in unfunded liabilities as a percentage 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. Otherwise, pension obligations may crowd out spending on core government services.

Except for the CTA Fund, every fund experienced a significant increase in unfunded liabilities as a percentage of payroll over the last five years. The Fire Fund has the highest unfunded liabilities as a percentage of payroll, at 625.7% in FY2010, followed by the Police Fund at 539.6%. The Forest Preserve Fund experienced the largest growth in its unfunded liabilities as a percentage of payroll, increasing by 230.5 percentage points. The aggregate UAAL of the ten funds combined is equal to 359.2% of their combined payroll in FY2010, up from 257.9% in FY2006.



Unfunded Accrued Actuarial Liabilities Per Capita in Chicago

Calculating the unfunded liability per capita offers another sense of scale for unfunded liabilities. The following table shows that the UAAL per capita for the four City of Chicago pension funds was $827 in FY2000. The total for all ten local pension funds was $1,189 per resident of Chicago. When one includes the five State-sponsored pension funds for which Chicago residents also pay taxes (including income taxes), the FY2000 unfunded liability per capita in Chicago rises to $2,443.

The highest per capita unfunded liability in FY2000 among the local funds 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. The downstate Teachers' Retirement System, which Chicago taxpayers support in addition to the Chicago Teachers' Fund, had the highest unfunded liabilities per capita at $918.

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%
Subtotal Four City Funds	**$ 2,393,562,855**		**$ 827**	
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 Ten 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 Five State Funds	**$ 15,569,289,429**		**$ 1,254**	
Total All Local and State Funds	**$ 19,363,649,503**		**$ 2,443**	

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 next table shows that by FY2010, the UAAL per capita for the four City of Chicago pension funds had grown to $5,473. This is more than six times the amount of UAAL per capita for these same four pension funds in FY2000. The total for all ten local pension funds was $8,993 per resident of Chicago, and the grand total including statewide funds was $14,896. Among the local funds, the Municipal Fund had the highest unfunded liability per capita at $2,244, although the Police and Teachers' Funds also exceeded $1,000 per capita. The downstate Teachers' Retirement System had the highest unfunded liability per capita at $3,106 in FY2010.

State and Local Public Pension Funds Unfunded Liabilities Per Capita FY2010 Total Unfunded Liability Per Capita in the City of Chicago				
Fund	**FY2010 Unfunded Actuarial Accrued Liability**	**2010 population**	**Unfunded liability per capita**	**Funded Ratio (Actuarial Value of Assets)**
Chicago Fire[1]	$ 2,505,134,046	2,695,598	$ 929	32.4%
Chicago Police[1]	$ 5,655,898,338	2,695,598	$ 2,098	39.7%
Chicago Municipal[1]	$ 6,048,840,271	2,695,598	$ 2,244	49.8%
Chicago Laborers[1]	$ 541,982,320	2,695,598	$ 201	73.8%
Subtotal Four City Funds	**$ 14,751,854,975**		**$ 5,473**	
MWRD[1]	$ 885,084,518	5,194,675	$ 170	56.5%
Cook County[1]	$ 5,159,768,516	5,194,675	$ 993	60.7%
Forest Preserve[1]	$ 98,313,637	5,287,037	$ 19	65.2%
CTA[2]	$ 814,223,496	3,530,000	$ 231	70.1%
Chicago Teachers[1]	$ 5,367,468,940	2,695,598	$ 1,991	67.1%
Chicago Park District[1]	$ 314,443,347	2,695,598	$ 117	62.3%
Subtotal Ten Local Funds	**$ 27,391,157,429**		**$ 8,993**	
Downstate Teachers (TRS)[3]	$ 39,854,106,000	12,830,632	$ 3,106	48.4%
State University Employees (SURS)[3]	$ 16,153,784,000	12,830,632	$ 1,259	46.4%
State Employees (SERS)[3]	$ 18,347,924,132	12,830,632	$ 1,430	37.4%
Judges[3]	$ 1,199,522,040	12,830,632	$ 93	34.1%
General Assembly[3]	$ 185,552,590	12,830,632	$ 14	26.3%
Subtotal Five State Funds	**$ 75,740,888,762**		**$ 5,903**	
Total All Local and State Funds	**$ 103,132,046,191**		**$ 14,896**	

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

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

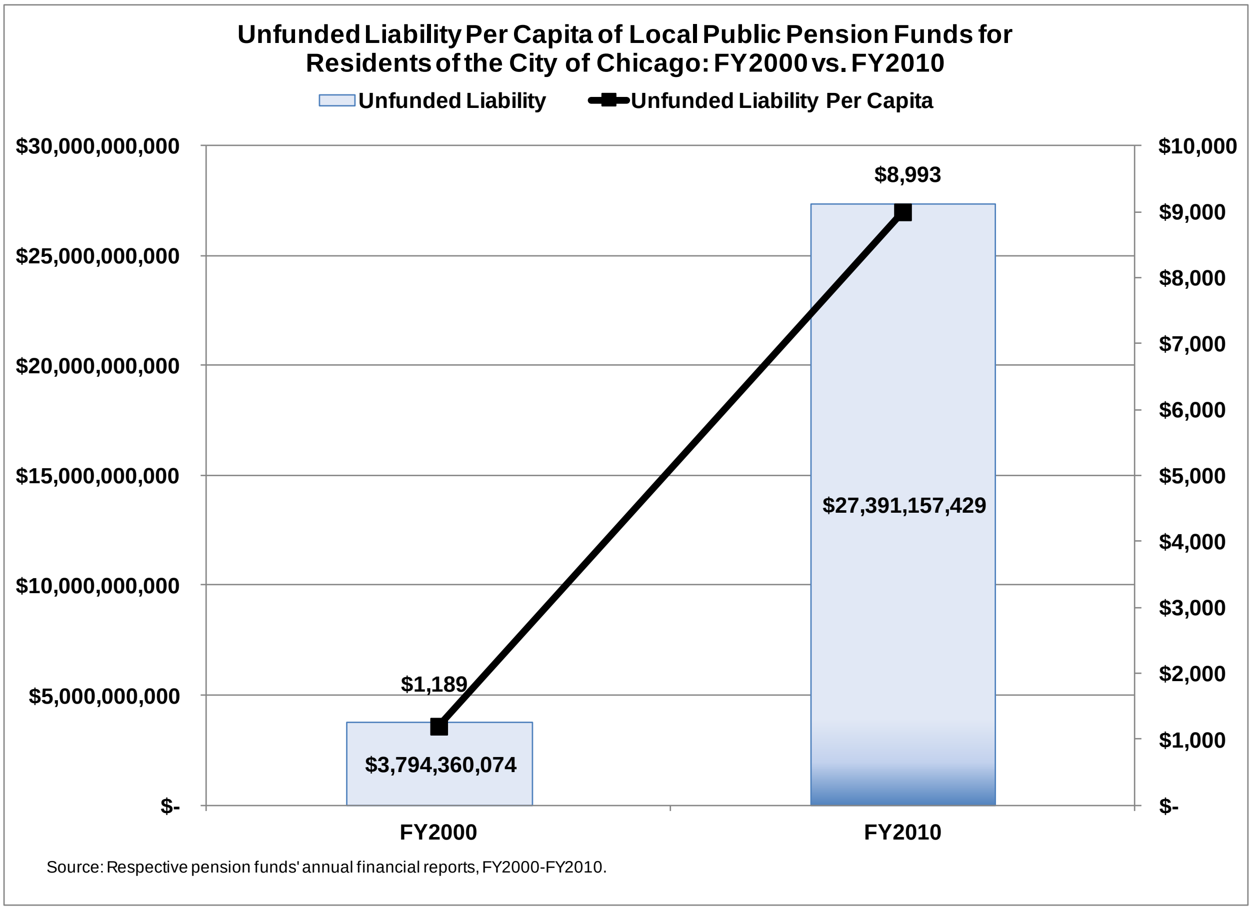
[2] Supported by local sales taxes, real estate transfer tax, and fares.

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

Source: Respective pension funds' FY2010 annual financial reports.

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

The following graph illustrates the $23.6 billion increase in the ten local funds' unfunded liabilities between FY2000 and FY2010, alongside the $7,804 increase in unfunded liabilities per capita.



Investment Rate of Return[62]

In FY2010 each of the ten pension funds had a positive rate of return, in contrast with the double-digit negative returns experienced in FY2009 for the Teachers' and Park District Funds.

The FY2010 average rate of return for those funds with a January 1 to December 31 fiscal year was 13.7%, falling from 18.6% in FY2009. The average rate of return for funds using a July 1 to June 30 fiscal year was 12.7%, rising from -20.2% in FY2009.

The FY2010 investment returns resulted in a gain of $3.8 billion for the ten funds combined, compared to a $0.7 billion gain in FY2009 and a loss of $7.1 billion in FY2008.[63] A comparison of

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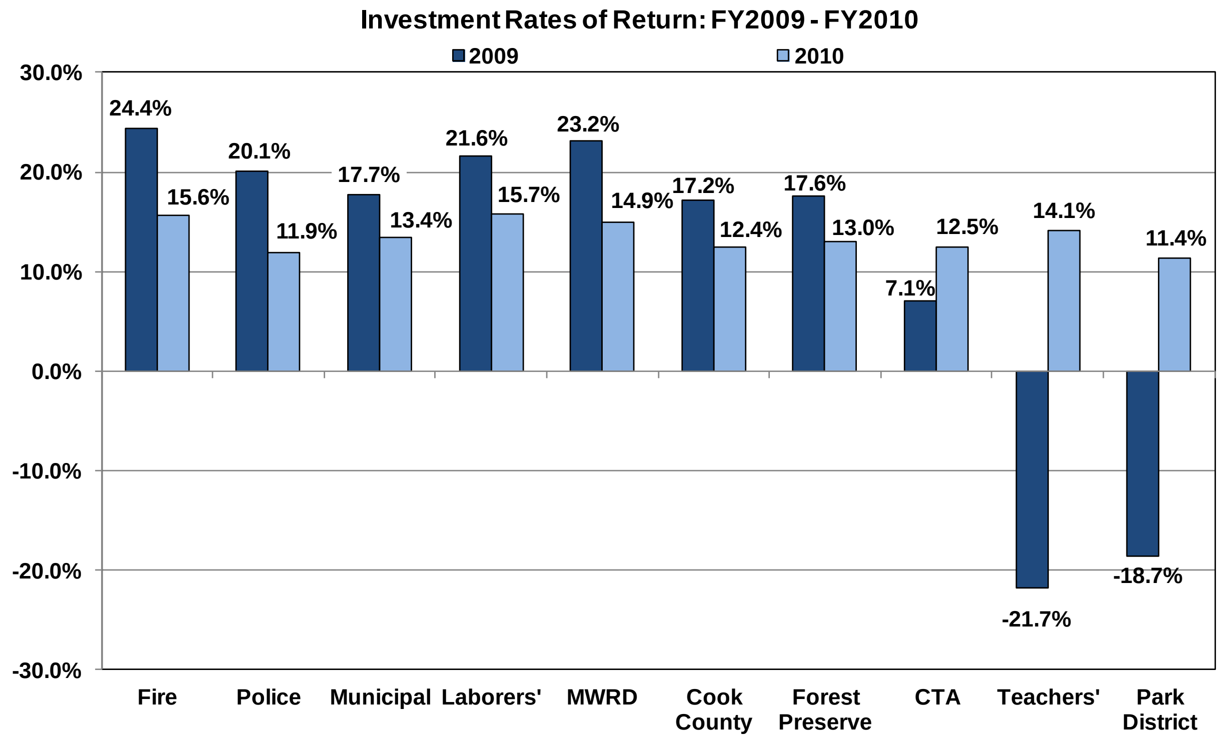
[62] The Civic Federation calculates investment rate of return using the following formula for all funds: Current Year Rate of Return = Current Year Gross Investment Income/ (0.5*(Previous Year Market Value of Assets + Current Year Market Value of Assets – Current Year Gross Investment Income)). This is not necessarily the formula used by all funds' actuaries and investment managers, 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.

the investment rates of return for FY2009 and FY2010 in the following figure shows that for the eight funds using a calendar year fiscal year, investment returns were between 11.9% and 15.7% in FY2010. These returns are calculated gross of investment fees and are not time-weighted so they may differ from the returns reported by the funds.[64] As shown in the graph below, returns for the Fire and Laborers' Funds were the highest and the Police Fund the lowest in FY2010.

The two funds that use a July 1 to June 30 fiscal year, the Teachers' and Park District Funds, experienced gains of 14.1% and 11.4%, respectively.[65] Differences in investment returns may reflect the investment allocation choices of the funds or the performance of investment managers, or both.



Calendar Year Funds: Fire, Police, Municipal, Laborers, MWRD, Cook County, Forest Preserve, CTA; July 1 to June 30 Funds: Teachers', Park District
See text footnotes for explanation of how rate of return is calculated.
Source: Respective pension funds' annual financial reports, FY2009 and FY2010.

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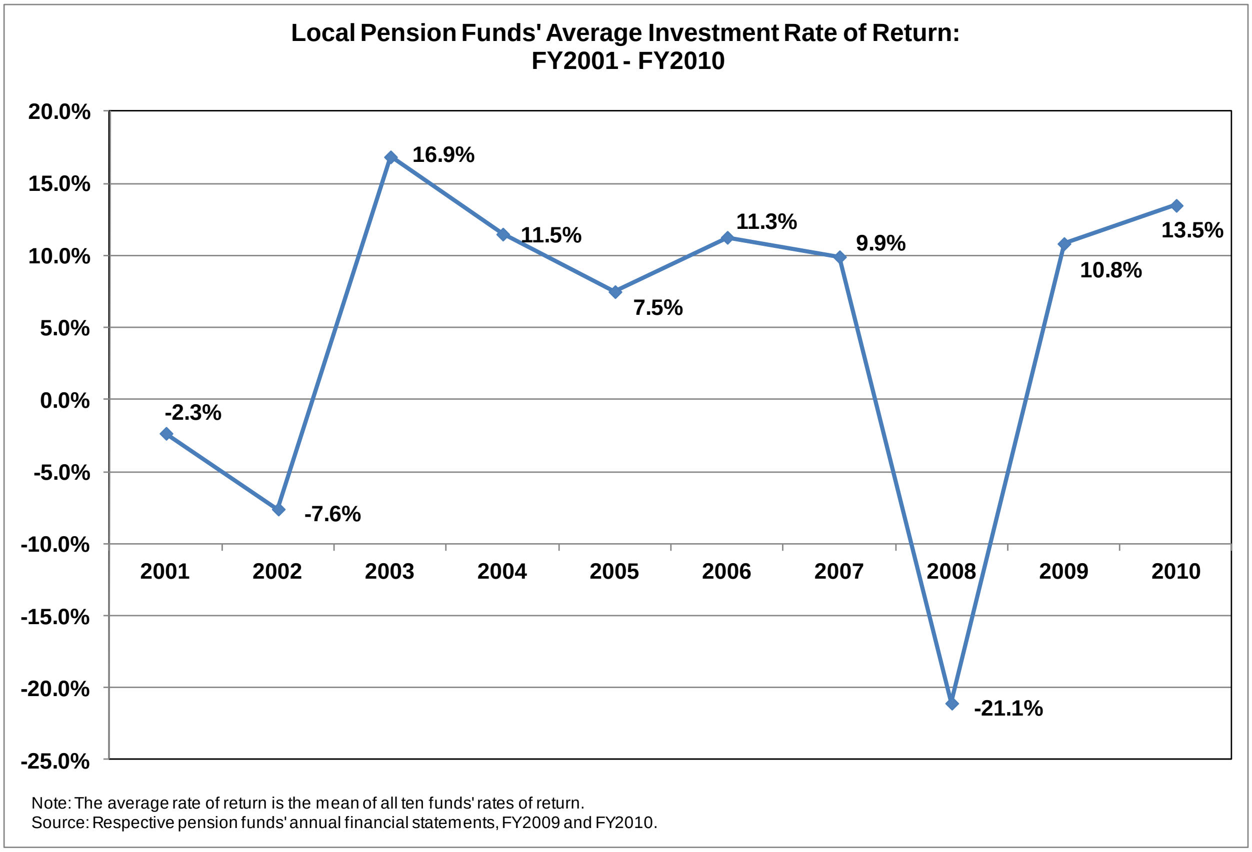
[63] Investment returns are gross investment income including income from securities lending activities net of borrower rebates. **Gross investment income** does not subtract out related investment and bank fees, which are treated as expenses in this report.

[64] 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 and investment managers, 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.

[65] On May 31, 2012, the Illinois General Assembly passed Senate Bill 3629, which, if signed into law, would amend the Park District Fund's fiscal year to be concurrent with the calendar year and the sponsoring government's fiscal year, beginning January 1, 2013.

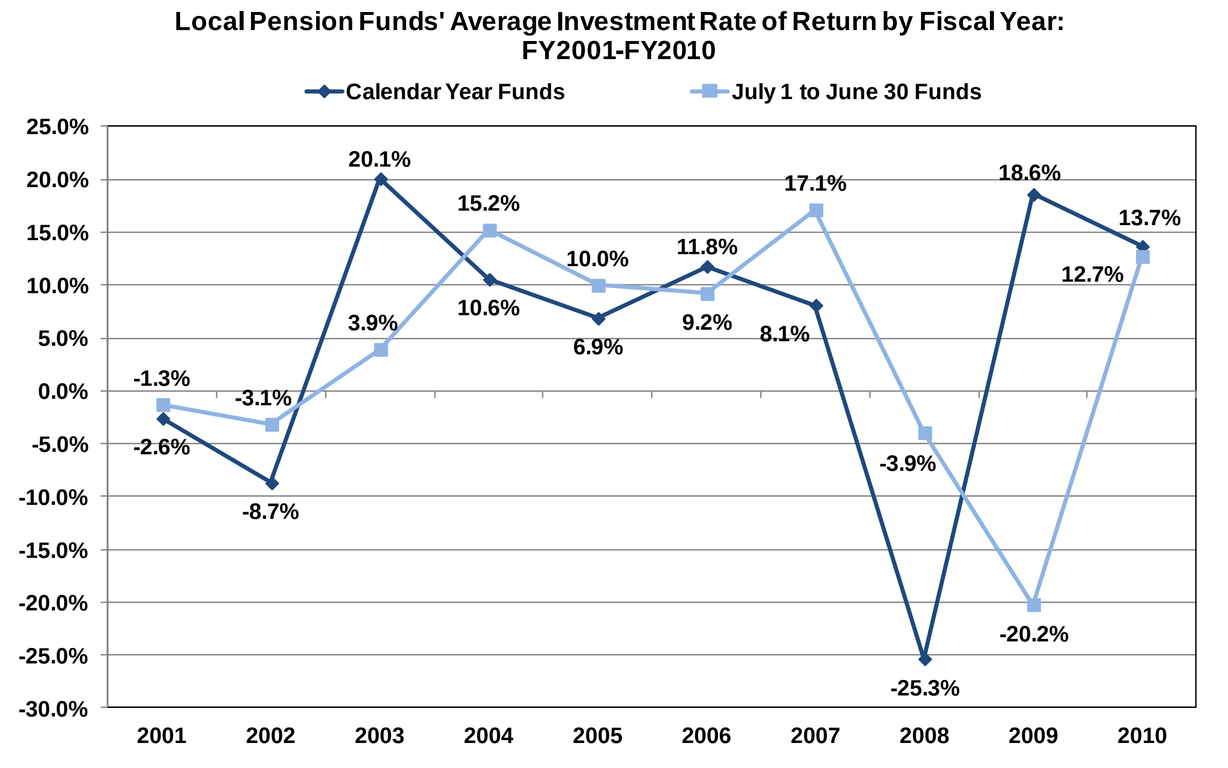
Investment rates of return should be considered from a historical perspective. During the latter half of the 1990s, strong financial markets significantly increased local pension funds' assets. However, that positive trend reversed and by the close of FY2002 every fund had a negative rate of return, ranging from -2.8% 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 fell dramatically in FY2008 following the financial market crisis and rebounded in FY2009 to an average of 10.8% for all ten funds. The average rate of return rose again in FY2010 to 13.5%.[66]



[66] The average rate of return is the mean of all ten funds' rates 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 average returns of 20.1% in FY2003 and July 1 to June 30 funds saw average returns of only 3.9% 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 -3.9% decrease in returns. In FY2009 the calendar year funds experienced an average return of 18.6% while the July 1 to June 30 funds had an average return of -20.2%. In FY2010 both types of funds experienced similar rates of return as calendar year funds saw an average return of 13.7% and the July 1 to June 30 funds had an average return of 12.7%.



Calendar Year Funds: Fire, Police, Municipal, Laborers', MWRD, Cook County, Forest Preserve, CTA ; July 1 to June 30 Funds: Teachers', Park District
Source: Respective pension funds' annual financial reports, FY2001-FY2010.

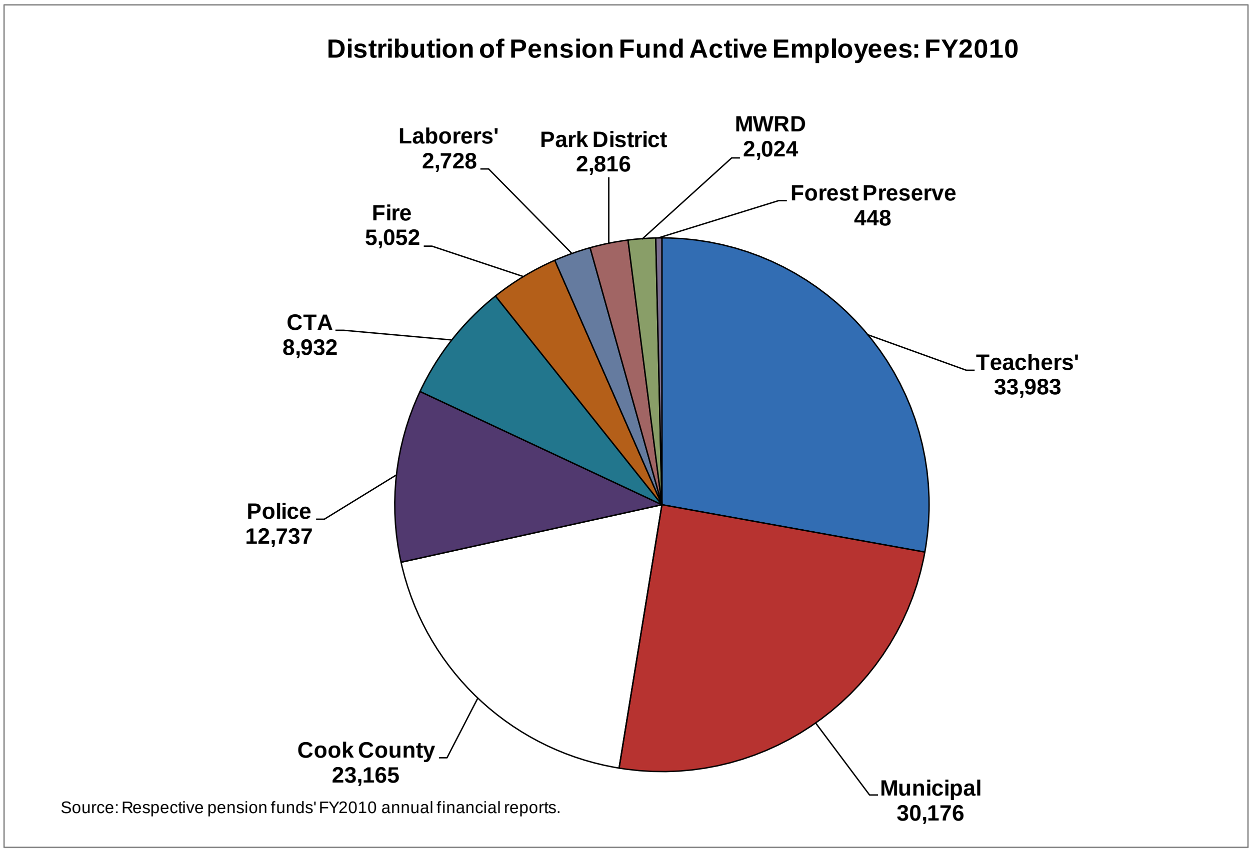
LOCAL PENSION FUND AGGREGATE DATA

In addition to using traditional indicators of individual 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

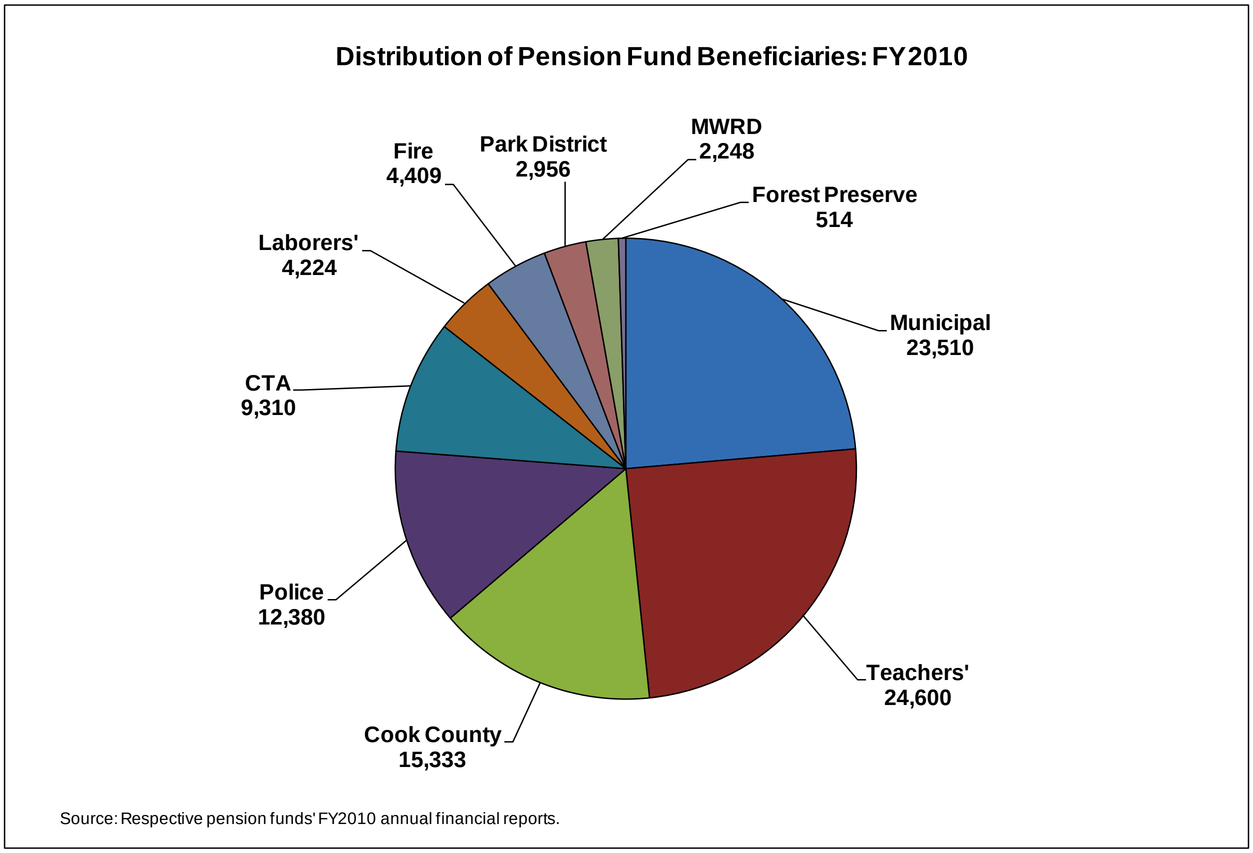
The ten pension funds reviewed in this report collectively covered 122,061 public employees and 99,484 beneficiaries (including spouses, children and disability recipients) in FY2010.

The three largest funds—the Teachers', Municipal and County Funds—accounted for 71.5% 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.[67]

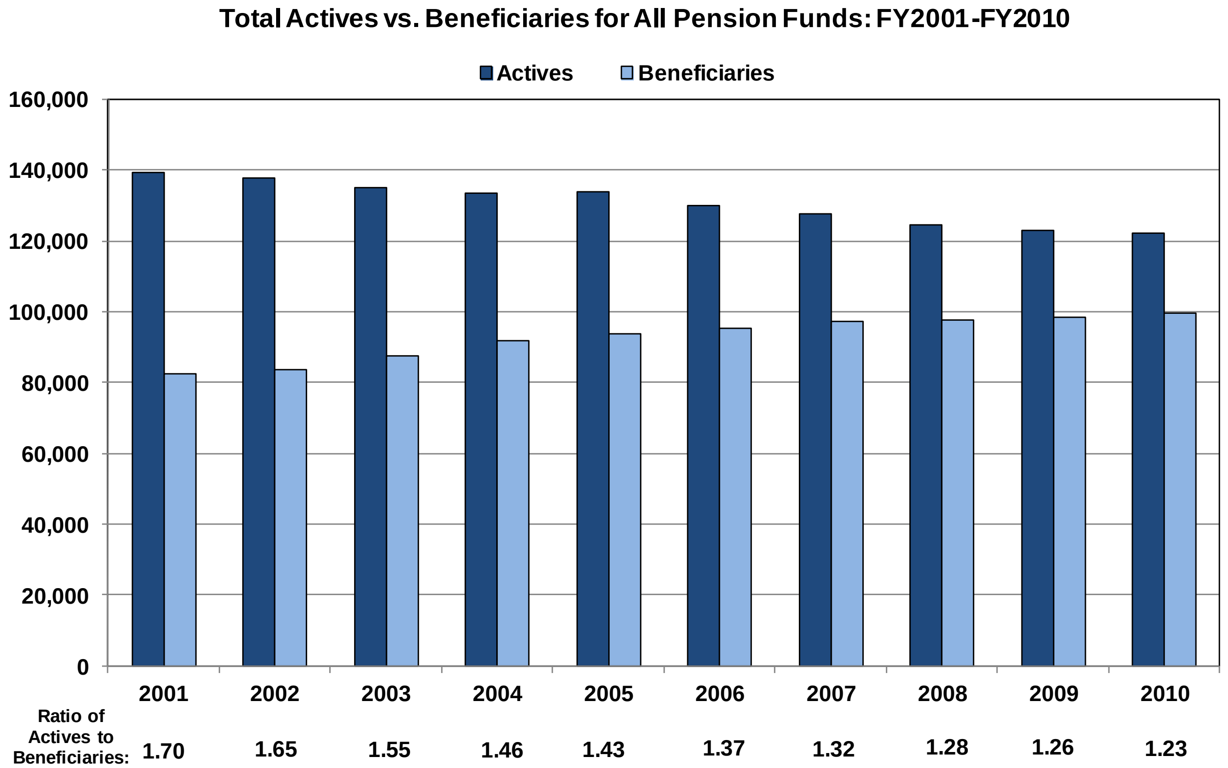


[67] Certified teachers employed by the Chicago Board of Education participate in the Public School Teachers' Pension and Retirement Fund of Chicago. Most other employees of the Board of Education are enrolled in the City of Chicago's Municipal Employees' Annuity and Benefit Fund. Approximately 16,061, or 52.3%, of Municipal Fund members considered to be active by the Fund are Board of Education employees. Chicago Public Schools, *Comprehensive Annual Financial Report for the fiscal year ended June 30, 2011*, p. 75. The Laborers' Fund also includes some Board of Education retirees and beneficiaries. Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago, *Actuarial Valuation Report as of December 31, 2010*, p. 60.

The three largest funds — Municipal, Teachers' and County Funds' —accounted for 63.8% of beneficiaries.



The ratio of total active employees to beneficiaries has gradually dropped from 1.70 actives for every one beneficiary in FY2001 to 1.23 in FY2010.



Source: Respective pension funds' annual financial reports, FY2001-FY2010.

In FY2010 the Cook County Fund had the highest active-to-beneficiary ratio, at 1.51. The Laborers', MWRD, Forest Preserve, CTA and Park District Funds all had *more* beneficiaries than actives in FY2010.[68]

With the exception of the Teachers' Fund, all of the ten funds saw a decline in their active-to-beneficiary ratio in 2010. 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 is less funding from employee contributions and more annuity payments.

Ratio of Active Employees to Beneficiaries by Pension Fund: FY2001-FY2010

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	FY2009-FY2010 Change
Fire	1.13	1.13	1.14	1.12	1.15	1.16	1.12	1.15	1.16	1.15	(0.01)
Police	1.24	1.21	1.20	1.15	1.12	1.14	1.13	1.10	1.08	1.03	(0.05)
Municipal	1.76	1.71	1.65	1.41	1.42	1.41	1.48	1.38	1.33	1.28	(0.05)
Laborers'	0.96	0.87	0.86	0.67	0.68	0.72	0.71	0.74	0.69	0.65	(0.04)
MWRD	0.99	0.95	0.94	0.93	0.91	0.89	0.88	0.90	0.92	0.90	(0.02)
Cook County	2.35	2.33	1.87	1.88	1.85	1.80	1.62	1.59	1.58	1.51	(0.07)
Forest Preserve	1.80	1.52	0.78	0.70	0.73	0.77	0.83	0.87	0.91	0.87	(0.03)
CTA	1.25	1.25	1.24	1.21	1.18	1.07	1.05	1.04	1.06	0.96	(0.10)
Teachers'	2.18	2.09	1.97	1.94	1.79	1.57	1.40	1.34	1.32	1.38	0.06
Park District	1.06	1.09	1.03	0.87	0.90	0.97	0.99	1.01	0.96	0.95	(0.01)

Source: Respective pension funds' annual financial reports, FY2001-FY2010.

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. The exceptions are the MWRD and the Park District whose OPEB costs are paid exclusively out of the employers' operating budgets, as opposed to the pension funds.

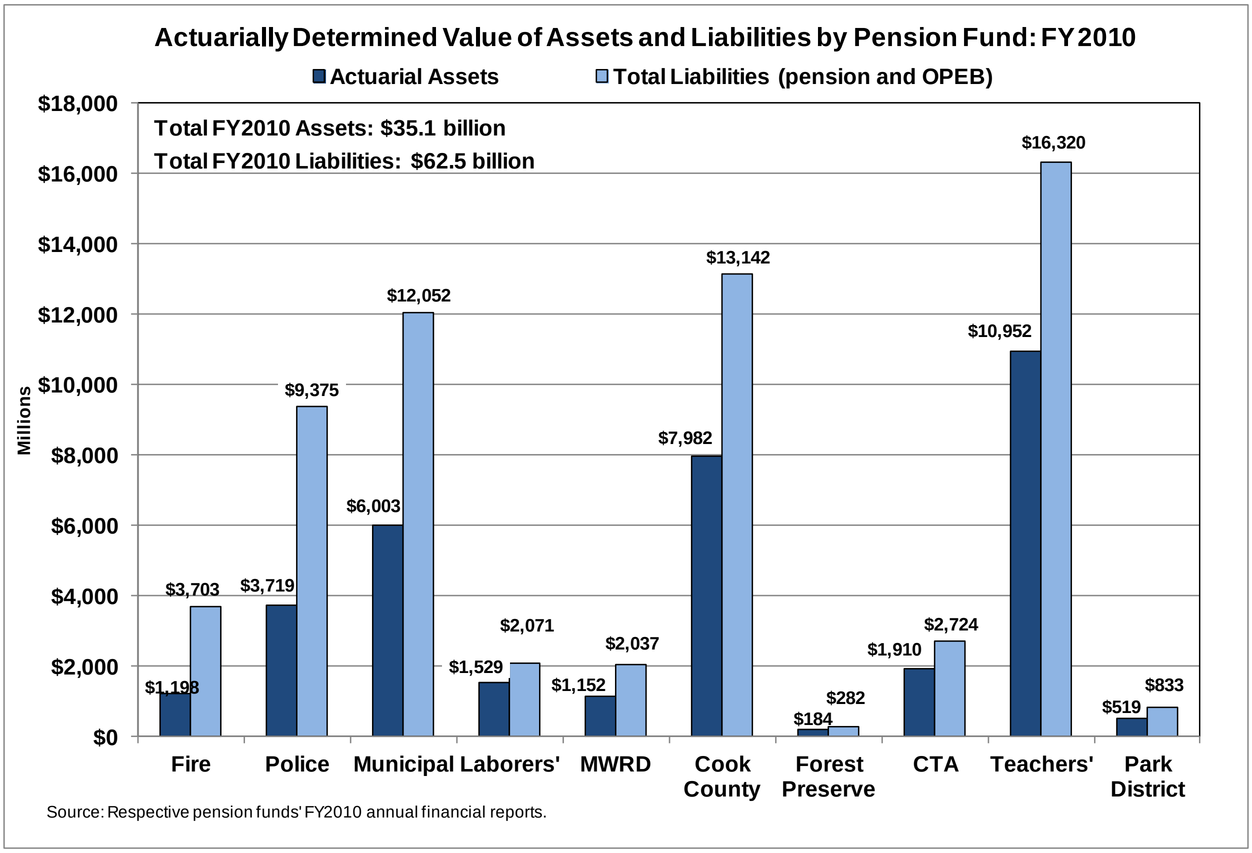
Liabilities are calculated using actuarial assumptions about the value of all future pension payments for both current and retired employees, as well as any other beneficiaries. Under GASB Statement No. 25, assets of public pension plans are reported based on the actuarial value, or smoothed market value, 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 10).[69] 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

[68] The Laborers' Fund instituted a new definition of active members in FY2008. In previous reports only members who were active at the end of the year were counted as active members but starting in FY2008 all members who earned any service credit in a given year are valued as actives. Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago, *Actuarial Valuation Report for the year ending December 31, 2008*, p. 7.

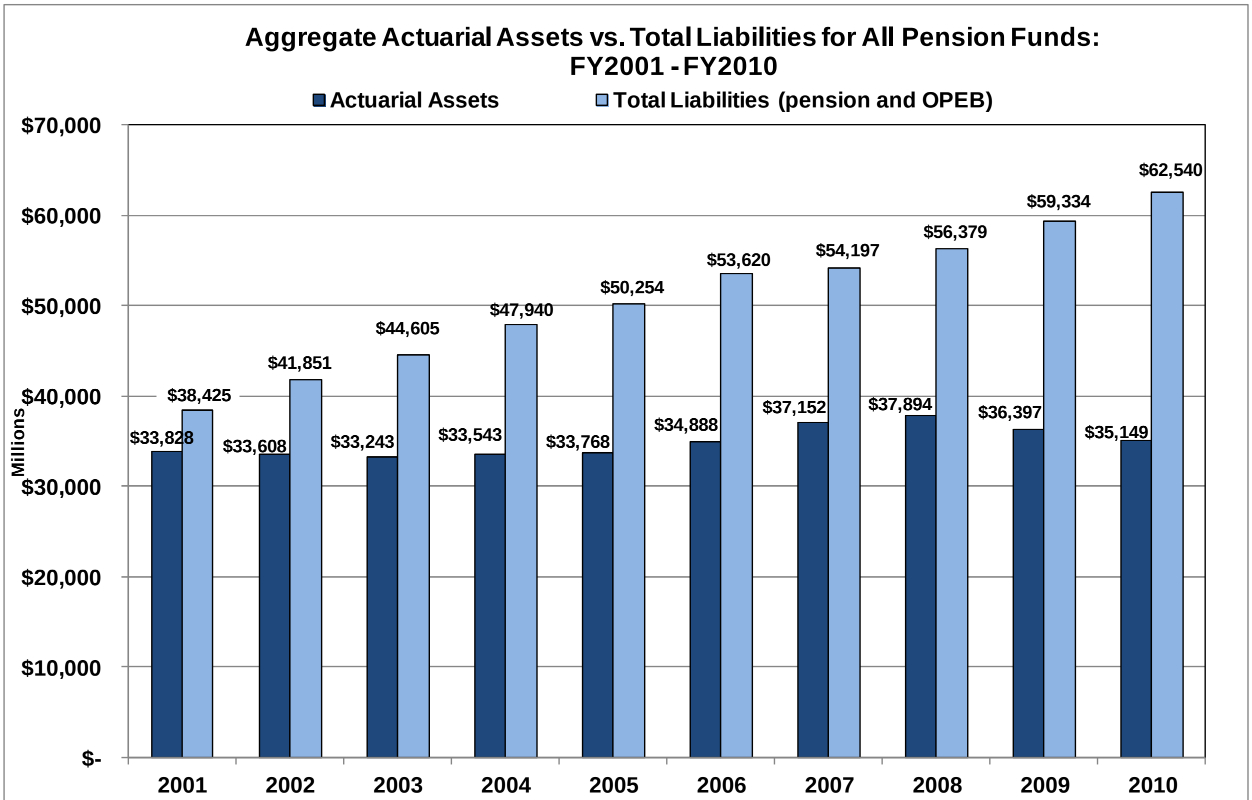
[69] In November 1994 the Government Accounting Standards Board (GASB) issued Statement No. 25 that established new standards for the reporting of a pension fund's assets. The requirement became effective June 15, 1996. Up until that statement, most pension funds used two measurements for determining 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 three to five years. GASB is currently considering revising its standards such that pension assets would be valued at market for reporting purposes. http://www.gasb.org/

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

At the close of FY2010, the ten pension funds combined had approximately $62.5 billion in actuarial accrued liabilities. Combined assets had an actuarial smoothed value of $35.1 billion and a market value of $31.4 billion. As shown in the following figure, in FY2010 the Teachers' Fund had the greatest assets and liabilities, followed by the Cook County and Municipal Funds.



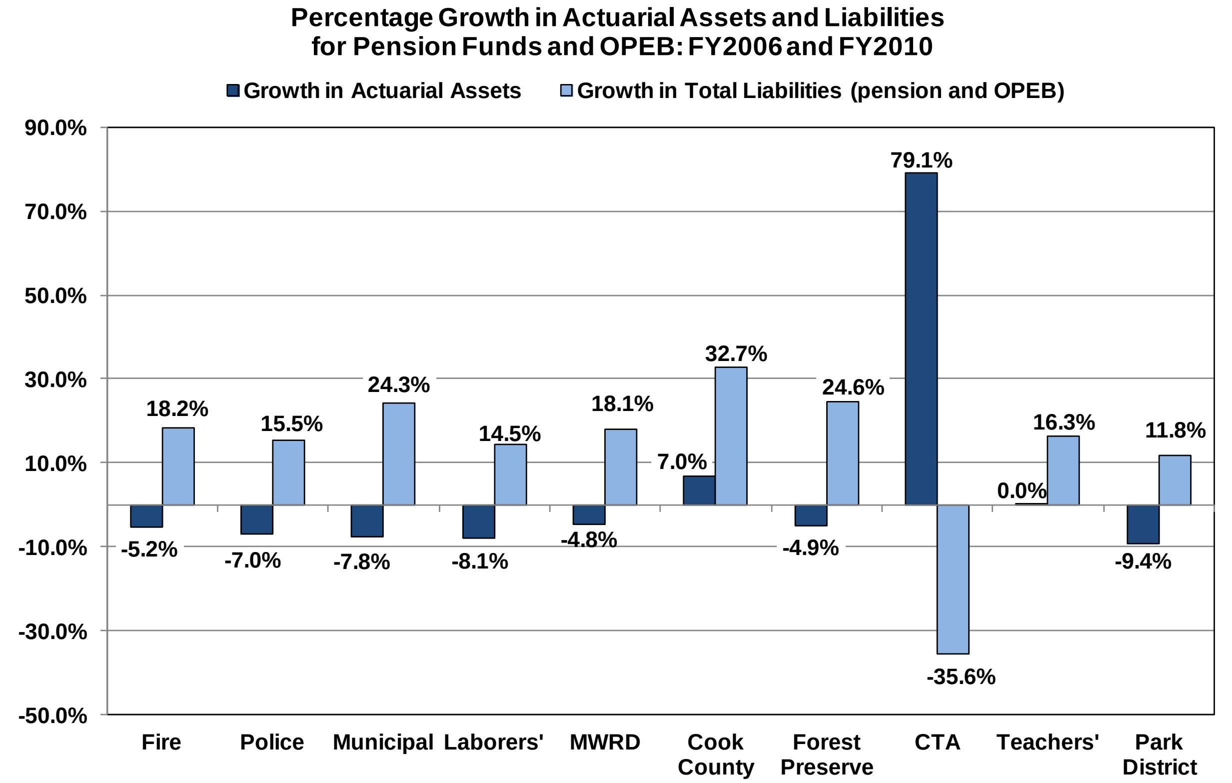
The following figure shows the growth of aggregate actuarial assets and liabilities for all funds combined, from FY2001 to FY2010. Aggregate liabilities increased by $24.1 billion, or 62.8%, over the ten-year period, while actuarial assets increased by $1.3 billion, or 3.9%. Between FY2009 and FY2010 total actuarial liabilities rose from $59.3 billion to $62.5 billion.



Source: Respective pension funds' annual financial reports, FY2001-FY2010.

Of the ten pension funds, the Cook County Fund experienced the fastest growth in liabilities over the past five years, with a growth rate of 32.7%. The CTA Fund experienced a dramatic drop in liabilities because its OPEB liabilities were shifted to a separate healthcare trust (see page 8). The CTA Fund also experienced significant growth in actuarial assets due primarily to the infusion of $1.1 billion in pension obligation bond proceeds from the CTA.

Between FY2006 and FY2010, liability growth significantly exceeded asset growth for all funds except the CTA Fund, and all but two other funds, the Cook County and Teachers' Funds, experienced a loss in actuarial assets over the five-year period.



Source: Respective pension funds' annual financial reports, FY2006 and FY2010.

The following figure shows the difference between the actuarial value of assets and the current market value of assets. Under actuarial value reporting, unexpected investment gains or losses are smoothed over a period of three to five years.[70] In FY2010 the aggregate current market value for all funds was $3.7 billion less than actuarial value, indicating that asset values for 2010 were lower than the values smoothed over the past few years.

Comparison of Actuarial Value v. Current Market Value of Pension Fund Assets at the Close of FY2010				
Fund	**Actuarial Value**	**Current Market Value**	**$ Difference**	**% Difference**
Fire	$ 1,198,113,789	$ 1,106,078,177	$ (92,035,612)	-7.7%
Police	$ 3,718,954,539	$ 3,439,668,697	$ (279,285,842)	-7.5%
Municipal	$ 6,003,389,605	$ 5,435,593,422	$ (567,796,183)	-9.5%
Laborers'	$ 1,529,403,512	$ 1,427,214,175	$ (102,189,337)	-6.7%
MWRD	$ 1,151,595,245	$ 1,092,648,055	$ (58,947,190)	-5.1%
Cook County	$ 7,982,368,659	$ 7,574,653,612	$ (407,715,047)	-5.1%
Forest Preserve	$ 184,077,516	$ 173,898,700	$ (10,178,816)	-5.5%
CTA	$ 1,909,967,120	$ 1,794,741,765	$ (115,225,355)	-6.0%
Teachers'	$ 10,952,274,725	$ 8,982,328,064	$ (1,969,946,661)	-18.0%
Park District	$ 518,582,601	$ 412,373,355	$ (106,209,246)	-20.5%
Total	**$ 35,148,727,311**	**$ 31,439,198,022**	**$ (3,709,529,289)**	**-10.6%**

Source: Respective pension funds' FY2010 annual financial reports.

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

FY2010 was the fourth year that all the local governments included in this report were 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.[71]

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.[72] 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 fiscal

[70] The Teachers' pension fund uses a four-year smoothing period. The nine other funds reviewed here use a five-year smoothing period. "Unexpected" gains or losses are those that deviate from the assumed rate of return.
[71] Non-pension benefits provided to employees after employment ends are referred to as Other Post Employment Benefits, or OPEB. OPEB includes health insurance coverage for retirees and their families, dental insurance, life insurance and term care coverage. It does not include termination benefits such as accrued sick leave and vacation.
[72] 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.

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

The MWRD and Park District Funds 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 GASB Statements 43 and 45 require a **lower discount rate assumption for retiree healthcare benefits that are funded on a pay-as-you-go basis** rather than prefunded through a designated trust fund. The 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 discount rates for the pension benefits and Other Post Employment Benefits (primarily retiree healthcare) reported by the ten pension funds for GASB purposes.[73] As noted in the "Data Sources and Comparability" section of this report, the Cook County, Forest Preserve, and Teachers' Funds do not use the lower GASB discount rate to value their combined pension and OPEB liabilities.

FY2010 Assumed Pension Fund and OPEB 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	8.50%	n/a
Teachers'	8.00%	4.50%
Park District	8.00%	n/a

Note: These are the rates of return used for GASB reporting purposes. As described in the "Data Sources and Comparability Issues" section of this report, the Cook County, Forest Preserve, and Teachers' Funds do not use the lower OPEB discount rates to calculate total liabilities in their "Combined" actuarial valuations.

Source: Respective pension funds' FY2010 annual financial reports.

The next table shows the pension and OPEB accrued actuarial liabilities of the ten pension funds for FY2010. Pension liabilities total $60.9 billion, and OPEB liabilities total $1.6 billion.[74] Overall, OPEB liabilities represent 2.6% of total liabilities for all funds combined. Public Act

[73] The MWRD has set up an irrevocable trust to pre-fund 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.

[74] As noted in the table and in the "Data Sources and Comparability Issues" section of this report, the OPEB liabilities for the Cook County, Forest Preserve, and Teachers' Funds shown here are not calculated according to GASB Statement 43.

95-708 created a separate Retiree Health Care Trust for CTA retirees, which began operations on July 1, 2009. The CTA pension fund no longer has any OPEB liability.

It is important to note that for the City of Chicago funds there are also additional OPEB liabilities borne by the employer, described on page 41.

There are four different models for subsidizing OPEB among the ten pension funds reviewed here: employer only subsidy, pension fund only subsidy, combination of employer and pension fund subsidies or creation of an independent trust fund.[75]

Pension and OPEB Accrued Actuarial Liabilities by Fund: FY2010			
Fund	**Pension Liabilities**	**OPEB Liabilities**	**Total Liabilities**
Fire	$ 3,655,025,957	$ 48,221,878	$ 3,703,247,835
Police	$ 9,210,056,428	$ 164,796,449	$ 9,374,852,877
Municipal	$ 11,828,665,658	$ 223,564,218	$ 12,052,229,876
Laborers'	$ 2,030,024,556	$ 41,361,276	$ 2,071,385,832
MWRD*	$ 2,036,679,763	$ -	$ 2,036,679,763
Cook County**	$ 12,023,222,885	$ 1,118,914,290	$ 13,142,137,175
Forest Preserve**	$ 252,877,596	$ 29,513,557	$ 282,391,153
CTA	$ 2,724,190,616	$ -	$ 2,724,190,616
Teachers'***	$ 16,319,743,665	see note***	$ 16,319,743,665
Park District*	$ 833,025,948	$ -	$ 833,025,948
Total	**$ 60,913,513,072**	**$ 1,626,371,668**	**$ 62,539,884,740**

Note: Figures represent OPEB liabilities of the pension funds only. The City of Chicago has additional OPEB liabilities for the portion of retiree healthcare benefits subsidized by the City.

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

**Cook County and Forest Preserve Fund OPEB Liabilities shown here are calculated using a 7.5% discount rate. Their FY2010 OPEB liabilities calculated with a 4.5% discount rate per GASB 43 are $1,724,622,462 for the Cook County Fund and $43,102,510 for the Forest Preserve Fund. See discussion of "Data Sources and Comparability Issues" earlier in this report.

***Historically, the 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.

Source: Respective pension funds' annual financial reports, FY2009 and FY2010.

Government Only Subsidy	Pension Fund Only Subsidy	Government and Pension Fund Subsidy	Independent Retiree Health Care Trust
• MWRD • Park District	• Cook County • Forest Preserve • Teachers' • Municipal (including Board of Education Employees)	• Fire • Police • Municipal (City employees) • Laborers'	• CTA

Note: The Laborers' Fund includes Board of Education retirees and beneficiaries.

[75] As noted on page 37, 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.[76] The MWRD created a dedicated trust fund in 2007 to begin pre-funding its retiree healthcare obligations.[77] The MWRD Retiree Health Care Trust FY2010 Comprehensive Annual Financial Report showed a $478.6 million unfunded OPEB liability as of the December 31, 2009 actuarial valuation.[78]
- The Park District subsidized approximately 63% of total retiree premium costs in FY2010.[79] The Park District does not have a separate trust fund for OPEB. The Park District FY2009 Comprehensive Annual Financial Report showed a $45.8 million unfunded OPEB liability as of the January 1, 2009 actuarial valuation.[80]

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

The governments of Cook County, Cook County Forest Preserve District and Chicago Public Schools do not contribute directly to retiree health insurance, but their respective pension funds do subsidize it.

- The Cook County and Forest Preserve District pension funds allow annuitants to participate in their retiree health insurance programs, but the Cook County and Forest Preserve District governments do not contribute to the premium costs. The respective pension funds subsidize annuitant premiums at a rate of 55% for retiree annuitants and 70% for survivor annuitants.[81]
- The Chicago Teachers' pension fund reimbursed annuitants for 70% of their health insurance single premiums in FY2009 and FY2010, with a total payment not to exceed $65 million annually.[82] Chicago Public Schools (CPS) does not contribute to retiree health insurance.
- CPS employees who are not certified teachers are enrolled in the Municipal Fund (see footnote 12). The Municipal Fund provides $95 per month for non-Medicare eligible

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[76] Metropolitan Water Reclamation District of Greater Chicago, *Comprehensive Annual Financial Report for the year ended December 31, 2010*, p. 82.

[77] 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.

[78] Actuarial valuations are only required to be completed every two years. Metropolitan Water Reclamation District Retiree Health Care Trust, *Comprehensive Annual Financial Report for the year ended December 31, 2010*, p. 11.

[79] Chicago Park District, *Comprehensive Annual Financial Report for the year ending December 31, 2010*, pp. 75-76.

[80] Actuarial valuations are only required to be completed every two years. Chicago Park District, *Comprehensive Annual Financial Report for the year ending December 31, 2010*, p. 78.

[81] County Employees' Annuity and Benefit Fund of Cook County, *Actuarial Valuation as of December 31, 2010*, p. 28 and Forest Preserve District Employees' Annuity and Benefit Fund of Cook County, *Actuarial Valuation as of December 31, 2010*, p. 27.

[82] Chicago Teachers' Pension Fund, *115th Comprehensive Annual Financial Report for the year ended June 30, 2010*, p. 29. The rebate percentage varies each year. State law currently requires that total rebates not exceed $65 million annually, in addition to any carryover amounts from the previous year. The rebate percentage dropped from 70% to 60% effective January 1, 2011. Chicago Teachers' Pension Fund, Retiree Pension Newsletter Winter 2010/2011, p. 2, http://www.ctpf.org/Newsletters/Pension_News_Retiree_Winter_2010.pdf.

annuitants and $65 per month for Medicare eligible annuitants who choose to participate in the CPS retiree healthcare plan.[83] However, CPS does not subsidize the plan.[84]

Government and Pension Fund Subsidy: City of Chicago Pension Funds

The City of Chicago government directly subsidizes a portion of retiree health insurance, and its four pension funds also subsidize a portion of retiree health insurance.

- The City of Chicago is party to a written legal settlement agreement that requires the City to pay a percentage of the cost of healthcare for eligible retirees and dependents through June 30, 2013 when the agreement expires. State statutes also authorize the four City of Chicago pension funds (Fire, Police, Municipal and Laborers') to subsidize the participant portion of retiree health insurance premiums for those annuitants participating in the City's retiree health insurance program until June 30, 2013. In FY2010 the City's contribution was roughly 55% of the premium cost, with the remainder to be paid by the annuitant. The Fire, Police, Municipal and Laborers' pension funds each contributed roughly 32% of the annuitant contribution, effectively subsidizing 13% of the total premium cost.[85] The pension funds provide $95 per month for non-Medicare eligible annuitants and $65 per month for Medicare eligible annuitants.[86] The City of Chicago's financial statements reported a FY2010 unfunded OPEB liability of $477.9 million for the portion subsidized by the pension funds and a FY2010 unfunded OPEB liability of $533.4 million for the portion subsidized by the City.[87] The total combined unfunded OPEB liability for the City portion and the pension fund portion is approximately $1.0 billion.

Independent Retiree Health Care Trust

Neither the CTA government nor its pension fund contributes to retiree health insurance any longer.

- Since the creation of a separate retiree healthcare trust fund, the CTA and the CTA pension fund have no further obligations regarding retiree health insurance. The CTA seeded a Retiree Health Care Trust with $528.8 million in bond proceeds in 2008.[88] Public Act 95-708 requires employees to contribute 3% of pay to the CTA Retiree Health Care Trust; this amount will increase to 3.50% in 2014.[89] Retiree, survivor and dependent premiums cannot exceed 45% of premium cost.[90] The Trust reported total present value of projected benefits at $693.5 million for FY2010 and total income and assets at $737.9 million, for a 106.4% coverage ratio.[91]

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[83] Municipal Employees' Annuity and Benefit Fund of Chicago, *Actuarial Valuation Report as of December 31, 2010*, p. 66.

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

[85] Cost allocation estimates provided to the Civic Federation by Sulan Tong, City of Chicago Department of Finance, April 6, 2012.

[86] City of Chicago, *Comprehensive Annual Financial Report for the year ended December 31, 2010*, p. 87.

[87] City of Chicago, *Comprehensive Annual Financial Report for the year ended December 31, 2010*, pp. 87 and 89. 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.

[88] Chicago Transit Authority, *Financial Statements and Supplementary Information December 31, 2008 and 2009*, p. 14.

[89] Chicago Transit Authority, *Financial Statements and Supplementary Information December 31, 2008 and 2009*, p. 14 and Chicago Transit Authority Retiree Health Care Trust, *Funding Valuation as of January 1, 2011*, p. 14.

[90] State of Illinois, Office of the Auditor General, *Information Submitted by the Chicago Transit Authority's Retiree Health Care Trust, December 2010*, p. 7.

[91] Chicago Transit Authority Retiree Health Care Trust, *Funding Valuation as of January 1, 2011*, p. 3.

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

Approximate Retiree Health Insurance Premium Subsidies			
Fund	**Employer Contribution**	**Pension Plan Contribution**	**Retiree Contribution**
Fire	55%	13%	32%
Police	55%	13%	32%
Municipal*	55%	13%	32%
Laborers'	55%	13%	32%
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%	0%	no more than 45%
Teachers'	0%	70%	30%
Park District	37% (aggregate)	0%	63% (aggregate)

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

Note: Percentages are approximations for FY2010 and may vary by plan type or other factors. Cost allocation estimates provided to the Civic Federation by Sulan Tong, City of Chicago Department of Finance, April 6, 2012.

Sources: Chicago Park District, *Comprehensive Annual Financial Report for the year ended December 31, 2010* , p. 76; Metropolitan Water Reclamation District of Greater Chicago, *Comprehensive Annual Financial Report for the year ended December 31, 2010* , p. 82; County Employees' Annuity and Benefit Fund of Cook County, *Actuarial Valuation as of December 31, 2010* , p. 28; Forest Preserve District, *Employees' Annuity and Benefit Fund of Cook County Actuarial Valuation as of December 31, 2010* , p. 27; State of Illinois, *Office of the Auditor General, Information Submitted by the Chicago Transit Authority's Retiree Health Care Trust, December 2010* , p. 7; Chicago Teachers' Pension Fund, *115th Comprehensive Annual Financial Report for the year ended June 30, 2010* , p. 29.

As described above, there are four different ways of subsidizing OPEB among the ten pension funds reviewed here. The table on page 39 shows the pension and OPEB liabilities as reported by the pension funds, but there are also large additional OPEB liabilities for some of the sponsoring governments. The following table presents the sum of pension and OPEB liabilities for the seven governments covered in this report. All liabilities are presented below according to GASB financial reporting standards for the governments' annual financial statements.[92] The total OPEB liabilities of the seven governments as reported for GASB purposes were $6.2 billion in FY2010. Combined pension and OPEB liabilities were $67.1 billion.

[92] As described on page 5, the OPEB liabilities for the Cook County, Forest Preserve and Teachers' Funds shown elsewhere in this report use "combined" actuarial valuations. The GASB 43 calculation of OPEB liabilities for these funds is significantly larger.

Pension and OPEB Accrued Actuarial Liabilities by Government: FY2010 *(Calculated according to Governmental Accounting Standards Board Statements 25 and 43)*			
Government	**Pension Liabilities**	**OPEB Liabilities**	**Total Liabilities**
City of Chicago	$ 26,723,772,599	$ 1,011,330,821	$ 27,735,103,420
Metropolitan Water Reclamation District	$ 2,036,679,763	$ 526,476,000	$ 2,563,155,763
Cook County	$ 12,023,222,885	$ 1,724,622,462	$ 13,747,845,347
Cook County Forest Preserve District	$ 252,877,596	$ 43,102,510	$ 295,980,106
Chicago Transit Authority	$ 2,724,190,616	$ -	$ 2,724,190,616
Chicago Public Schools	$ 16,319,743,665	$ 2,864,877,305	$ 19,184,620,970
Chicago Park District	$ 833,025,948	$ 45,800,000	$ 878,825,948
Total	**$ 60,913,513,072**	**$ 6,216,209,098**	**$ 67,129,722,170**

Source: Respective pension funds' annual financial reports, FY2009 and FY2010.

The table below presents the sum of the unfunded liabilities of the seven governments as reported according to GASB standards. The unfunded OPEB liabilities of the MWRD and Chicago Public Schools are slightly less than their OPEB liabilities shown above because these governments report some assets set aside for OPEB. The other governments shown below do not set aside assets for OPEB obligations so their unfunded accrued actuarial liabilities for OPEB are equal to their accrued actuarial liabilities. As reported according to GASB standards, the total unfunded pension and OPEB liabilities for the seven governments were nearly $31.9 billion in FY2010.

Pension and OPEB Unfunded Accrued Actuarial Liabilities (UAAL) by Government: FY2010 *(Calculated according to Governmental Accounting Standards Board Statements 25 and 43)*			
Government	**Pension UAAL (GASB 25)**	**OPEB UAAL (GASB 43)**	**Total**
City of Chicago	$ 14,273,911,154	$ 1,011,330,821	$ 15,285,241,975
Metropolitan Water Reclamation District	$ 885,085,000	$ 478,585,000	$ 1,363,670,000
Cook County	$ 4,040,854,226	$ 1,724,622,462	$ 5,765,476,688
Cook County Forest Preserve District	$ 68,800,080	$ 43,102,510	$ 111,902,590
Chicago Transit Authority	$ 814,224,000	$ -	$ 814,224,000
Chicago Public Schools	$ 5,367,468,940	$ 2,830,019,573	$ 8,197,488,513
Chicago Park District	$ 314,443,347	$ 45,800,000	$ 360,243,347
Total	**$ 25,764,786,747**	**$ 6,133,460,366**	**$ 31,898,247,113**

Source: Respective pension funds' annual financial reports, FY2009 and FY2010.

Revenues

There are three main revenue sources for the pension plans studied here: investment income, employer contributions and employee contributions. Investment income is the most volatile source of income. When investment returns are positive, investments typically provide the majority of fund revenue. 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.[93] Employee contributions are made through payroll deductions.

Total income for all funds in FY2010 was $5.6 billion. All ten funds experienced gains in investment income in FY2010.[94] Employer contributions totaled approximately $1.1 billion, and employee contributions totaled $697.2 million for all ten funds. The $13.1 million in "Other Income" includes transfers from other governments with reciprocal agreements, health insurance rebates from vendors 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.

Pension Fund Revenues by Source: FY2010

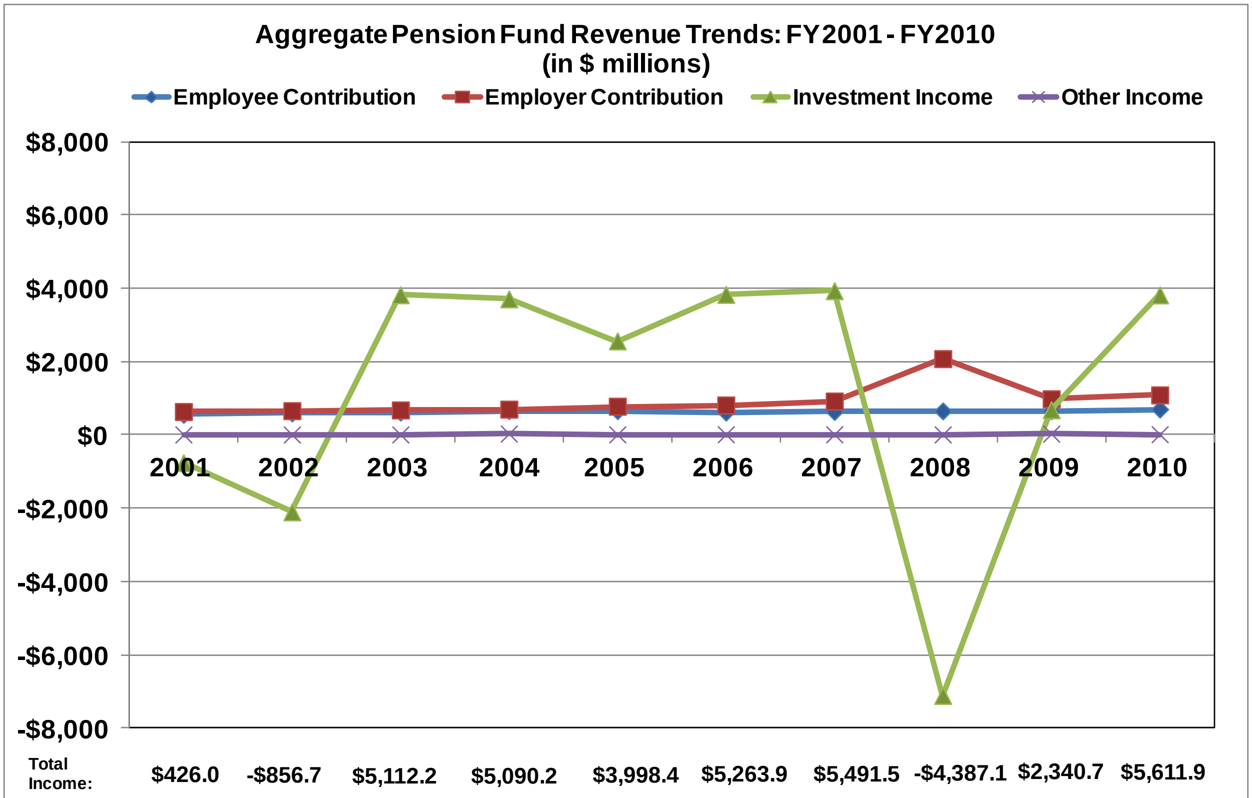
Fund Name	Employee Contribution	Employer Contribution	Investment Income	Other Income	Total Income
Fire	$ 41,730,194	$ 83,591,601	$ 156,506,574	$ 30,282	$ 281,858,651
Police	$ 108,402,353	$ 183,834,639	$ 379,624,280	$ 20,031	$ 671,881,303
Municipal	$ 133,299,542	$ 164,302,005	$ 664,342,563	$ 24,435	$ 961,968,545
Laborers'	$ 16,319,992	$ 17,938,810	$ 201,208,599	$ -	$ 235,467,401
MWRD	$ 15,872,560	$ 29,917,793	$ 146,541,206	$ 34,214	$ 192,365,773
Cook County	$ 129,449,866	$ 181,509,323	$ 848,219,132	$ 12,795,846	$ 1,171,974,167
Forest Preserve	$ 2,452,696	$ 2,660,034	$ 20,485,928	$ 227,553	$ 25,826,211
CTA	$ 45,265,159	$ 56,215,939	$ 206,304,225	$ -	$ 307,785,323
Teachers'	$ 194,621,551	$ 355,759,950	$ 1,147,312,533	$ -	$ 1,697,694,034
Park District	$ 9,829,998	$ 10,829,339	$ 44,412,936	$ -	$ 65,072,273
Total	**$ 697,243,911**	**$ 1,086,559,433**	**$ 3,814,957,976**	**$ 13,132,361**	**$ 5,611,893,681**

Source: Respective pension funds' FY2010 annual financial reports.

[93] In FY2008 the CTA Fund also received $1.1 billion in bond proceeds.

[94] 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 $522.7 million in FY2001 to $697.2 million in FY2010. Employer contributions rose from $632.3 million in FY2001 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, and then declined again to approximately $1.1 billion in FY2010. Excluding the pension obligation bond proceeds, routine employer contributions for FY2008 were $975.3 million for all ten funds combined. The highest total aggregate income level was reached in FY2010 at $5.6 billion. Previously the highest total aggregate income level was reached in FY2007 at nearly $5.5 billion, followed by the lowest total aggregate income level of approximately -$4.4 billion in FY2008.



Source: Respective pension funds' annual financial reports, FY2001-FY2010.

The aggregate revenues of the ten pension funds of $5.6 billion in FY2010 were approximately $2.6 billion above the ten-year average of $3.0 billion.

Employee Contributions

Employee contributions to pension funds are generally established 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 automatic annual increases on annuities.[95]

[95] The automatic annual annuity increase for most funds is 3% compounded. 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.

In FY2010 the total employee contribution for most funds was 8.5% or 9.0%, with a high of 9.125% for firefighters and a low of 8.35% for CTA employees. The CTA employee contribution rate was increased from 3.0% to 6.0% as of January 18, 2008. The CTA pension board now annually adopts employee and employer contribution rates sufficient to meet the provisions of Public Act 95-0708. For FY2010 and FY2011, those rates are 8.35% of payroll for employees and 10.69% for the employer.[96] 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.[97]

Of the total 9.0% employee contribution rate for the Teachers' Fund, 7.0% has been paid by the employer since 1981.[98] 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 12).[99]

Pension Fund Employee Contribution Rates: FY2010 (% of salary)

Fund	Employee	Survivor	Disability	Automatic Annuity Increase	Total
Fire	7.125%	1.50%	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**	8.35%	--	--	--	8.35%
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.

*Cook County Sheriff's employees contribute 7.0% for the employee contribution, for a total of 9.0%.

**Effective January 18, 2008, this rate increased from 3% to 6%. The FY2010 and FY2011 rate set by the CTA Pension board is 8.345%. PricewaterhouseCoopers LLC, *Retirement Plan for CTA Employees: January 1, 2010 Actuarial Valuation* , (Revised October 2010), p. 1.

Sources: Respective pension funds' FY2010 annual financial reports and Illinois statutes.

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[96] The FY2011 rates are slightly higher than the actuarially calculated requirement but the CTA pension board opted to maintain the FY2010 rates rather than lower them in order to improve plan funding and reduce contribution fluctuation. PricewaterhouseCoopers LLP, *Retirement Plan for CTA Employees: January 1, 2010 Actuarial Valuation*, (Revised October 2010), p. 1.

[97] The majority of government employers and those employees hired after March 31, 1986 each pay Medicare payroll taxes of 1.45%. See Internal Revenue Service Public 963 for further information.

[98] Chicago Teachers' Pension Fund, *115th Comprehensive Annual Financial Report for the year ended June 30, 2010*, p. 96.

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

Employer Contributions and Annual Required Contribution (ARC)

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.[100] As discussed beginning on page 16, these multiples are not automatically adjusted to meet the funding needs of the pension plans. Public Act 96-1495 will move the Police and Fire Funds off the multiple beginning in 2015 and onto a funding schedule to reach 90% funded by the end of 2040.[101]

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, 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 54.

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. Beginning January 18, 2008, employer contributions were 12% of payroll, less credit for debt service payments on pension obligation bonds, and the contribution rate is 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 the end of 2059. The CTA pension board now annually adopts employee and employer contribution rates sufficient to meet the provisions of Public Act 95-0708. The employer rate for FY2012 is 11.30% of payroll.[102] This amount is in addition to the debt service payment estimated to equal 16.7% of payroll for 2011(and 2012) and the 6.2% employer contribution to Social Security.[103]

[100] 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 pursuant to the 1970 Illinois Constitution. 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.

[101] See page 6 and Appendix E of this report.

[102] PricewaterhouseCoopers LLP, *Retirement Plan for CTA Employees: January 1, 2011 Actuarial Valuation*, p. 1.

[103] PricewaterhouseCoopers LLP, *Retirement Plan for CTA Employees: January 1, 2011 Actuarial Valuation*, p. 5.

The following table lists the basic fund multiples and other employer contribution levels for FY2010, not including special additions or subtractions specified in statute.

Pension Fund Employer Contribution Rates: FY2010			
Fund	**Statute**	**Statutory Rate***	**Actual employer contribution as % of payroll**
Fire	40 ILCS 5/6-165	2.26 multiple	20.9%
Police	40 ILCS 5/5-168	2.00 multiple	17.5%
Municipal	40 ILCS 5/8-173	1.25 multiple	10.7%
Laborers'	40 ILCS 5/11-169	1.00 multiple	9.0%
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	17.1%
Cook County	40 ILCS 5/9-169	1.54 multiple	12.1%
Forest Preserve	40 ILCS 5/10-107	1.30 multiple	10.9%
CTA	40 ILCS 5/22/101	12% of payroll, including credit for pension obligation bond debt service payments**	10.6%
Teachers'	40 ILCS 5/17-127 and 40 ILCS 5/17-129	State intends to pay amount equal to 20-30% of the contribution it makes to TRS.*** State pays an additional amount equal to 0.544% of total teacher payroll, unless Fund was 90% or more funded (actuarial value) 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. Public Act 96-0889 reduces the required contribution significantly for FY2011, FY2012, and FY2013.	16.9%
Park District	40 ILCS 5/12-149	1.10 multiple	10.1%

*"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. 95-0709. The actual employer contribution as a percent of payroll is less than 12% in FY2010 due to the credit for pension obligation bond debt service payments. The FY2010 and FY2011 rate set by the CTA Pension Board is 10.69%. PricewaterhouseCoopers LLP, *Retirement Plan for CTA Employees: January 1, 2011 Actuarial Valuation* , p. 1.

*** The State contribution has not kept pace with this 20-30% of TRS contribution guideline, but remained flat at roughly $65 million until FY2010. See section below on Chicago Teachers' Retirement Fund Employer Contribution Requirements.

Sources: Respective pension funds' FY2010 annual financial reports and Illinois statutes.

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%.[104] 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. This is referred to as a partial pension holiday.

[104] 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.

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

GASB Statements 25 and 27 require that the plans calculate an annual required 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.[105] 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 the 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.[106]

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**.[107] 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 if the unfunded liability is amortized on an open, rolling basis. It is not an acceptable amortization method for private sector companies governed by the federal Employee Retirement Income Security Act (ERISA), but is a very common method for public pension plans.

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, as 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 on an open amortization basis.

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

Method	Required 2011 Tax Levy	Required Multiple	Unfunded Liability Will…	Amount Applicable to Unfunded Liability
Normal Cost Plus 30-Year Level Dollar Amortization	n/a	4.92	Decrease	$492,249,038
Normal Cost Plus Interest on Unfunded Liability	n/a	4.51	Remain Constant	$441,129,097
Normal Cost Plus 30-Year Level % of Payroll Amortization	n/a	3.48	Increase	$326,349,077
Current Law	$161,296,200	1.25		

Source: Municipal Employees' Annuity and Benefit Fund of Chicago, *Actuarial Valuation for the year ending December 31, 2010* , p. 56.

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[105] See 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.
[106] GASB sets accounting standards and has no authority over funding levels.
[107] See Governmental Accounting Standards Board Statement No. 25, paragraph 36(f).

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 FY2010 is 6.94, as compared to the statutory 2.26.[108] The prior year's gap between the Fire Fund's ARC multiple and the statutory multiple resulted in a $120.2 million increase in the plan's unfunded liability for FY2010.[109] 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 by 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.

FY2010 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	**6.94**	2.26
Police*	level % of payroll, open	**4.85**	2.00
Municipal	level dollar, open	**4.92**	1.25
Laborers'	level dollar, open	**3.89**	1.00
MWRD	level % of payroll, open	**4.42**	2.19
Cook County	level dollar, open	**4.95**	1.54
Forest Preserve	level dollar, open	**4.95**	1.30
Park District	level % of payroll, open	**2.70**	1.10

*The Police Fund also computes that the FY2010 annual required multiple using a level dollar amortization would be 6.78. See Police Fund FY2010 Actuarial Valuation, p. 17.

Source: Respective pension funds' FY2010 annual financial reports.

[108] The 6.94 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 FY2010 actuarial valuation provides the FY2011 actuarial multiple. Firemen's Annuity and Benefit Fund of Chicago, *Actuarial Valuation Report for the year ending December 31, 2010,* p. 14.

[109] Firemen's Annuity and Benefit Fund of Chicago, *Actuarial Valuation Report for the year ending December 31, 2010,* p. 14.

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 FY2010 pension ARC for each of the ten funds examined in this report, as reported in the financial statements per GASB Statement 25. The aggregate employer ARC for the ten funds was $2.1 billion, while actual employer contributions were only $959.1 million, resulting in a shortfall of approximately $1.2 billion for FY2010. None of the employers contributed 100% of the employer ARC, and only two funds, the Teachers' Fund and the CTA Fund, contributed more than 50% of the ARC.

The table below also presents ARC as a percent of payroll in order to provide 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 54.5% of payroll. In other words, the City should have contributed an amount equal to 54.5% of current firefighters' pay to the Fire Fund in FY2010 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 27.8% of payroll. Actual employer contributions were 12.6% of payroll, or less than half of the aggregate ARC.

Ten Local Government Pension Funds
Schedule of Employer Contributions for Pension Benefits: FY2010
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	$ 218,388,037	$ 80,947,311	$ 137,440,726	37.1%	$ 400,404,320	54.5%	20.2%
Police	$ 363,624,570	$ 174,500,507	$ 189,124,063	48.0%	$ 1,048,084,301	34.7%	16.6%
Municipal*	$ 483,948,339	$ 154,752,320	$ 329,196,019	32.0%	$ 1,541,388,065	31.4%	10.0%
Laborers'	$ 46,664,704	$ 15,351,944	$ 31,312,760	32.9%	$ 199,863,410	23.3%	7.7%
MWRD*	$ 61,872,925	$ 29,917,793	$ 31,955,132	48.4%	$ 174,485,734	35.5%	17.1%
Cook County	$ 454,327,461	$ 144,539,577	$ 309,787,884	31.8%	$ 1,494,093,569	30.4%	9.7%
Forest Preserve	$ 7,626,778	$ 1,333,140	$ 6,293,638	17.5%	$ 24,397,376	31.3%	5.5%
CTA**	$ 108,478,000	$ 56,216,000	$ 52,262,000	51.8%	$ 528,288,000	20.5%	10.6%
Teachers'	$ 355,846,125	$ 290,759,950	$ 65,086,175	81.7%	$ 2,107,934,080	16.9%	13.8%
Park District	$ 22,399,740	$ 10,829,339	$ 11,570,401	48.3%	$ 107,361,021	20.9%	10.1%
Total	**$ 2,123,176,679**	**$ 959,147,881**	**$ 1,164,028,798**	**45.2%**	**$ 7,626,299,876**	**27.8%**	**12.6%**

*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.
Note: The Civic Federation calculates ARC as a percentage of payroll using the following formula: Employer Annual Required Contribution/ Payroll.

Source: Respective pension funds' FY2010 annual financial reports. ARC and % of ARC are taken from the GASB 25 Schedule of Employer Contributions provided in the financial statements and actuarial valuations.

The table below shows the OPEB ARC for seven of the ten funds analyzed in this report as reported for GASB Statement 43. The MWRD, Park District, and CTA 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 healthcare 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 FY2010 totaled $395.6 million, while the total actual employer contribution for FY2010 was only $98.2 million.

Ten Local Government Pension Funds
Schedule of Employer Contributions for OPEB: FY2010
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	$ 4,427,729	$ 2,644,290	$ 1,783,439	59.7%	$ 400,404,320	1.1%	0.7%
Police	$ 10,659,006	$ 9,354,163	$ 1,304,843	87.8%	$ 1,048,084,301	1.0%	0.9%
Municipal*	$ 22,954,501	$ 9,549,685	$ 13,404,816	41.6%	$ 1,541,388,065	1.5%	0.6%
Laborers'*	$ 3,609,337	$ 2,586,866	$ 1,022,471	71.7%	$ 199,863,410	1.8%	1.3%
MWRD	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Cook County	$ 163,823,488	$ 40,183,057	$ 123,640,431	24.5%	$ 1,494,093,569	11.0%	2.7%
Forest Preserve	$ 3,876,537	$ 1,326,894	$ 2,549,643	34.2%	$ 24,397,376	15.9%	5.4%
CTA	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Teachers'	$ 186,231,574	$ 32,522,400	$ 153,709,174	17.5%	$ 2,107,934,080	8.8%	1.5%
Park District	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total	**$ 395,582,172**	**$ 98,167,355**	**$ 297,414,817**	**24.8%**	**$ 6,816,165,121**	**5.8%**	**1.4%**

*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.
Source: Respective pension funds' annual financial reports and actuarial valuations. 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 41, 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 approximately $231.0 million for FY2010, of which $131.6 million, or 57.0%, was actually contributed.

City of Chicago Total OPEB Schedule of Employer Contributions: FY2010

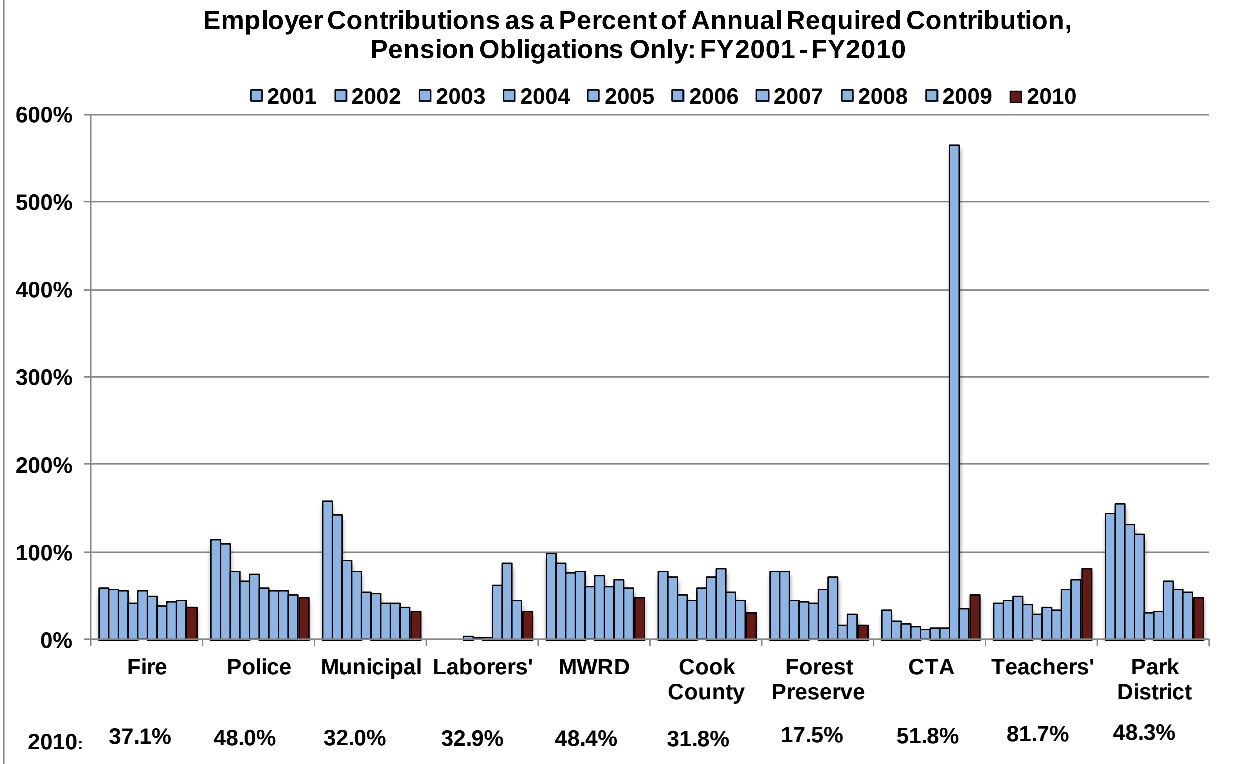
	Employer Annual Required Contribution (1)	Actual Employer Contribution (2)	Shortfall (1-2)	% of ARC contributed	Payroll	ARC as % of payroll	Actual Employer Contribution as % of payroll
Pension Fund Obligations	$ 41,650,573	$ 24,135,004	$ 17,515,569	57.9%	$ 3,189,740,096	1.3%	0.8%
City Obligations	$ 189,328,000	$ 107,431,000	$ 81,897,000	56.7%	$ 3,189,740,096	5.9%	3.4%
Total	**$ 230,978,573**	**$ 131,566,004**	**$ 99,412,569**	**57.0%**	**$ 3,189,740,096**	**7.2%**	**4.1%**

Source: Financial reports and actuarial valuations of the pension funds (GASB 43 Schedule of Employer Contributions) and City of Chicago FY2010 Comprehensive Annual Financial Report, pp. 84-86.

The FY2010 combined ARC for the four City of Chicago funds including all pension and OPEB is $1.3 billion, or 42.1% of covered payroll.

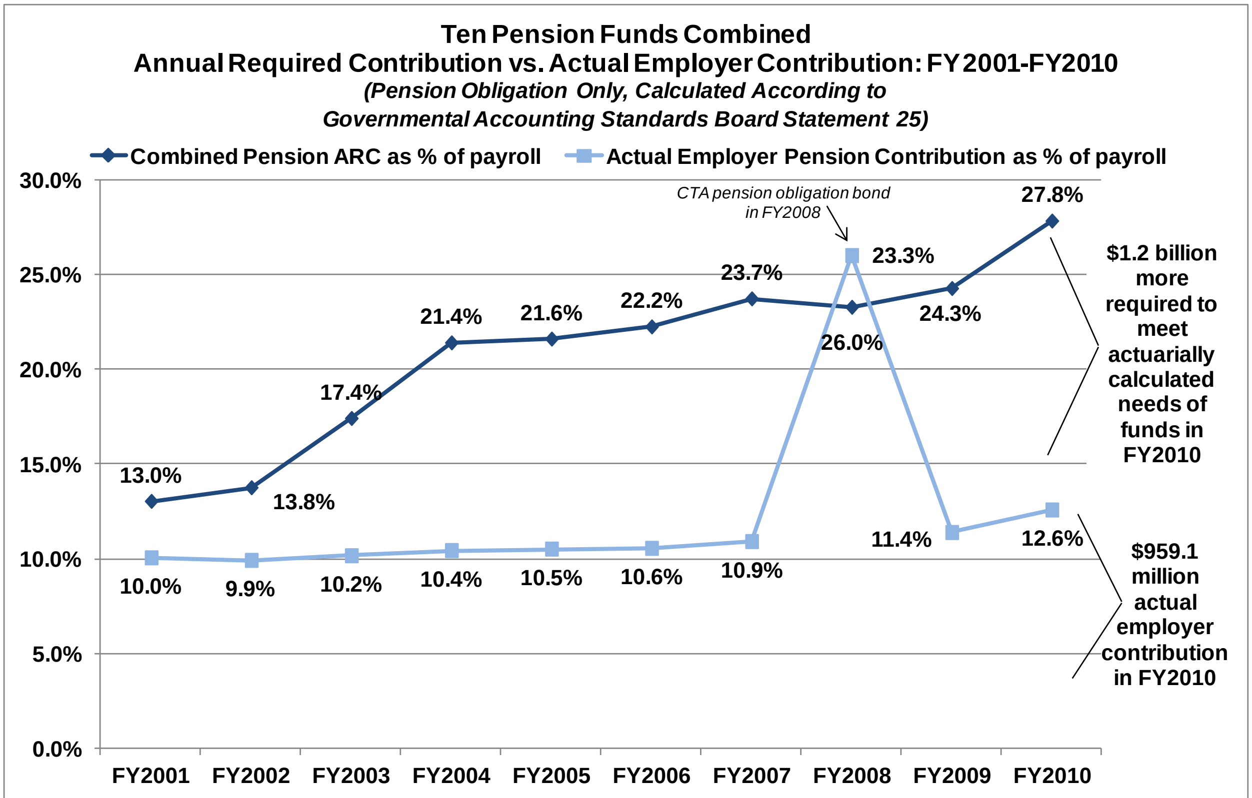
The following graph illustrates the employer contribution as a percent of the actuarially calculated ARC for each fund's pension obligations (not including OPEB) from FY2001 to FY2010. The Fire, MWRD, Cook County, Forest Preserve and Teachers' Funds did not receive the full actuarially calculated ARC during any of the last ten years (the Laborers' Fund did not have an ARC for several years while it was over 100% funded). The CTA received less than one-third of the employer ARC during most of this period. However, due to 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 16).

The total cumulative employer shortfall for pension liabilities alone from FY2001 to FY2010 was $6.1 billion.



Note: These figures do not include OPEB obligations. The Laborers Fund had no pension ARC for several years when it was over 100% funded.
Source: Schedule of Employer Contributions as computed for GASB Statement 25 for each fund, reported in fund Actuarial Valuations and Financial Statements.

The following graph illustrates the gap between the combined pension ARC of the ten funds as a percent of payroll and the actual employer contribution as a percent of payroll from FY2001-FY2010. The aggregate pension ARC has exceeded the aggregate employer contribution for nine of the last ten years, with the exception of FY2008 when the CTA pension fund received an exceptional infusion of $1.1 billion in pension obligation bond proceeds. The spread between the two amounts has grown from a 3.0% of payroll gap in FY2001 to a 15.2% of payroll gap in FY2010. In other words, to fund the pension plans at a level that would both cover the normal cost and amortize the unfunded liabilities over 30 years, the employers would have needed to contribute an additional 15.2% of payroll, or $1.2 billion, in FY2010.



Note: Beginning in FY2005 and FY2006 for some funds, the ARC for the portion of OPEB paid for by the pension funds was calculated separately from the pension ARC. This graph shows only the pension ARC after FY2005 (FY2006 for some funds). The OPEB ARC for the pension funds would add an average of 5.8% of payroll and the actual employer contribution averaged at 1.4% of payroll.
Source: Respective pension funds' annual financial reports, FY2001-FY2010.

Chicago Teachers' Retirement Fund Employer Contribution Requirements

The structure of employer contributions for the Public School Teachers' Pension and Retirement Fund of Chicago is much more complex than those of the other funds in this report. The state statutes governing the Teachers' Fund require employer contributions when the fund falls below a 90% funded ratio. As described on the following pages, relatively small amounts are required from the State and from Chicago Public Schools (CPS) pursuant to benefit enhancements enacted in Public Act 90-0582. Much larger contributions are required by CPS pursuant to Public Act 89-0015 and Public Act 96-0889 in order to bring the fund up to a 90% funded ratio over a 50-year period. However, Public Act 96-0889 also granted a three-year partial pension contribution holiday to CPS and changed the funding schedule as described below.

State Employer Contribution: The State of Illinois has traditionally contributed roughly $65 million each year to the Teachers' Fund pursuant 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.[110] However, the $65 million contribution is actually much less than the 20% or 30% intention stated in the statute. The State's enacted FY2010 budget reduced the usual $65 million appropriation by 50% to $32.5 million.[111] For FY2011 the State appropriated $32.5 million for the Teachers' Fund, but designated it specifically for retiree healthcare costs paid out of the fund, so the amount is not considered as part of the employer contribution in the calculation shown below.[112] The FY2012 recommended appropriation for the Teachers' Fund is $0.[113]

Additional State Contribution: The State must make additional contributions in FY2010 of 0.544% of teacher payroll to the Teachers' Fund to offset a portion of the cost of benefit increases enacted under Public Act 90-0582. The FY2009 additional contribution was also 0.544%. No additional contributions are required if the funded ratio is at least 90%. The required additional State contribution for FY2012 is $11.0 million.[113]

Additional CPS Contribution: CPS must make additional contributions of 0.58% of teacher payroll to offset a portion of the cost of benefit increases enacted under Public Act 90-0582. No additional contributions are required if the funded ratio is at least 90%. The required additional CPS contribution for FY2012 is $11.7 million.

CPS Required Contribution: Under the funding plan established by Public Act 89-0015, the minimum contribution to the Teachers' Fund was an amount needed 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 was calculated as a level percentage of payroll over the years through FY2045. The calculation for determining the CPS required contribution was the total amount of the employer contribution less additional state appropriations, additional CPS appropriations and other employer appropriations.[114] The funding schedule established in Public Act 89-0015 was changed by Public Act 96-0889, enacted in April 2010. The new law reduces CPS' required employer pension contribution for FY2011, FY2012 and FY2013 to an amount estimated to be equivalent to the employer's normal cost.[115] It also delays the year that the pension fund must reach a 90% funded ratio from 2045 to 2060.

Prior to the passage of Public Act 96-0889, the CPS Required Contribution for FY2011 was calculated to be $586.9 million, or almost double the FY2010 amount. Public Act 96-0889 reduced the District's required FY2011 contribution to approximately $187.0 million, which is approximately $400 million, or 214%, less than the prior year contribution.[116] The table below

[110] The downstate Teachers' Retirement System covers all public school teachers in Illinois except those in the Chicago Public Schools.
[111] State of Illinois Budget, FY2011, pp. 5-8.
[112] Information provided by the CPS budget office, August 17, 2010.
[113] State of Illinois, Fiscal Year 2013 Enacted Budget, p. 376, or Chapter 5-246.
[114] This annual required contribution must be calculated by February 28 each year, per 40 ILCS 5/17-129.
[115] "Normal cost" is an actuarially-calculated amount representing that portion of the present value of pension plan benefits and administrative expenses which is allocated to a given valuation year.
[116] Actuarial projection by Goldstein & Associates for Kevin Huber, Executive Director of the Public School Teachers' Pension and Retirement Fund of Chicago, March 31, 2010. See also Illinois Commission on Government Forecasting and Accountability, *Illinois Public Retirement Systems: A Report on the Financial Condition of the Chicago, Cook County and Illinois Municipal Retirement Fund Systems of Illinois*, November 2010, p.119.

shows the required employer contributions for FY2008-FY2012. The CPS Required Contribution for FY2012 is $192.0 million.

	Calculation of Required Employer Contributions to Teachers' Pension Fund FY2008-FY2012						
		FY2008	FY2009	FY2010	FY2011 before P.A. 96-0889	FY2011 after P.A. 96-0889	FY2012
1	**Total Required Employer Contribution**	**$ 227,319,000**	**$ 263,002,000**	**$ 393,266,000**	**$ 608,492,000**	**$ 208,600,000**	**$ 214,700,000**
2	State Employer Contribution*	$ 65,000,000	$ 65,000,000	$ 32,522,400	$ -	$ -	$ -
3	Additional State Contribution (P.A. 90-582)*	$ 10,218,000	$ 9,778,000	$ 5,029,000	$ 10,449,000	$ 10,449,000	$ 11,001,000
4	Additional CPS Contribution (P.A. 90-582)	$ 10,894,000	$ 10,426,000	$ 10,723,000	$ 11,140,000	$ 11,140,000	$ 11,729,000
5	Other Employer Contributions**	$ 20,646,000	$ -	$ -	$ -	$ -	$ -
	CPS Required Contribution (1-2-3-4-5) Per 40 ILCS 5/17-129	**$ 120,561,000**	**$ 177,798,000**	**$ 344,991,600**	**$ 586,903,000**	**$ 187,011,000**	**$ 191,970,000**

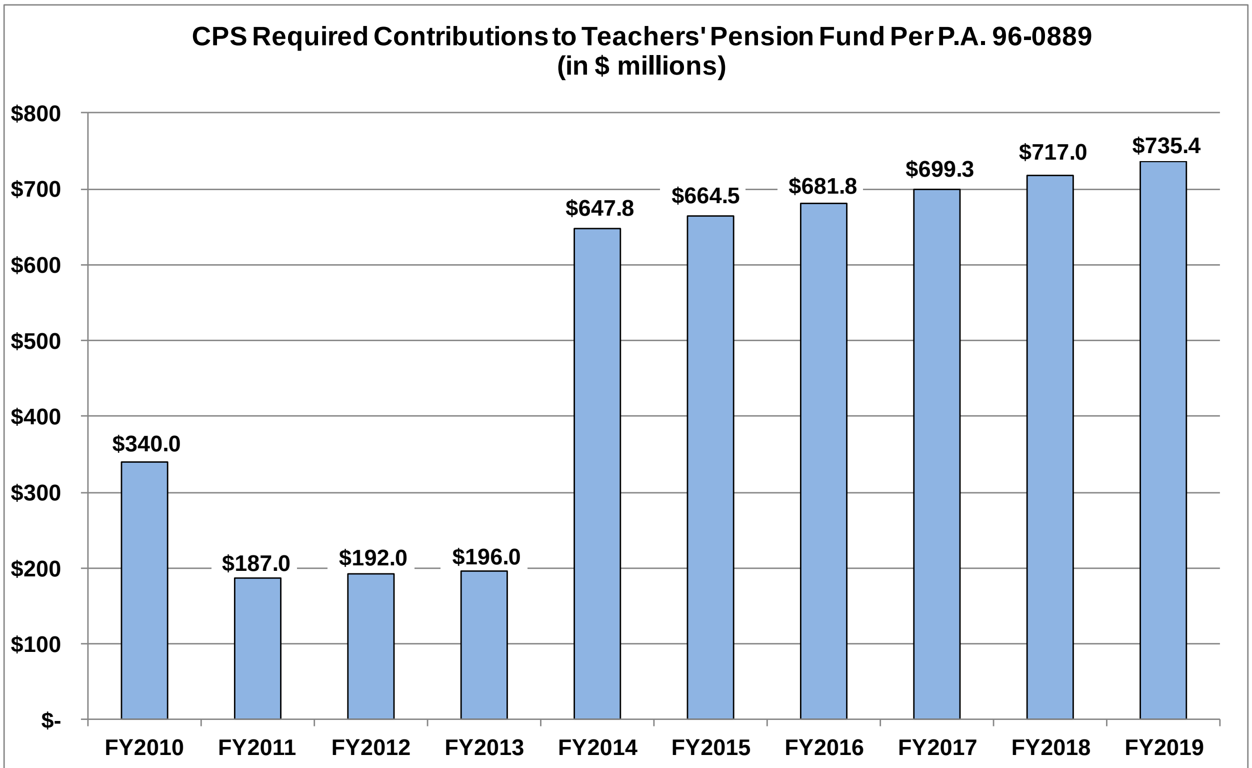
*At the time that the FY2010 required contribution was calculated, the State employer contribution was expected to be $65 million, and the Additional State Contribution was expected to be $10.1 million so these were the amounts used by the actuary to calculate the final CPS Required Contribution. The FY2010 enacted State Budget ultimately appopriated only $32,522,400 for the State Employer Contribution and $5,029,000 for the Additional State Contribution. State of Illinois Budget, FY2011, p. 5-8.

**Until FY2009, the Other category included pension contributions made to the pension funds from federal funds. These monies were applied to the CPS required contribution in FY2009 and FY2010.

Note: Per P.A. 96-0889, CPS Required Contributions for FY2011 and FY2012 are $187,000,000 and $192,000,000.

Sources: Chicago Teachers' Pension Annual Financial Reports (for FY2010, pp. 80-81), State of Illinois, State Budgets, Fiscal Year 2012, Chapter 6-8 and Fiscal Year 2013 Enacted Budget, Chapter 5-246 and actuarial projection by Goldstein & Associates for Kevin Huber, Executive Director of the Public School Teachers' Pension and Retirement Fund of Chicago, March 31, 2010.

Public Act 96-0889 is projected to keep the FY2011, FY2012 and FY2013 required CPS contributions under $200 million as illustrated in the following graph. In FY2014, the year when the reduced payment provision sunsets, the CPS pension payment is expected to rise to $647.8 million, an increase of $451.8 million over the projected FY2013 pension contribution.

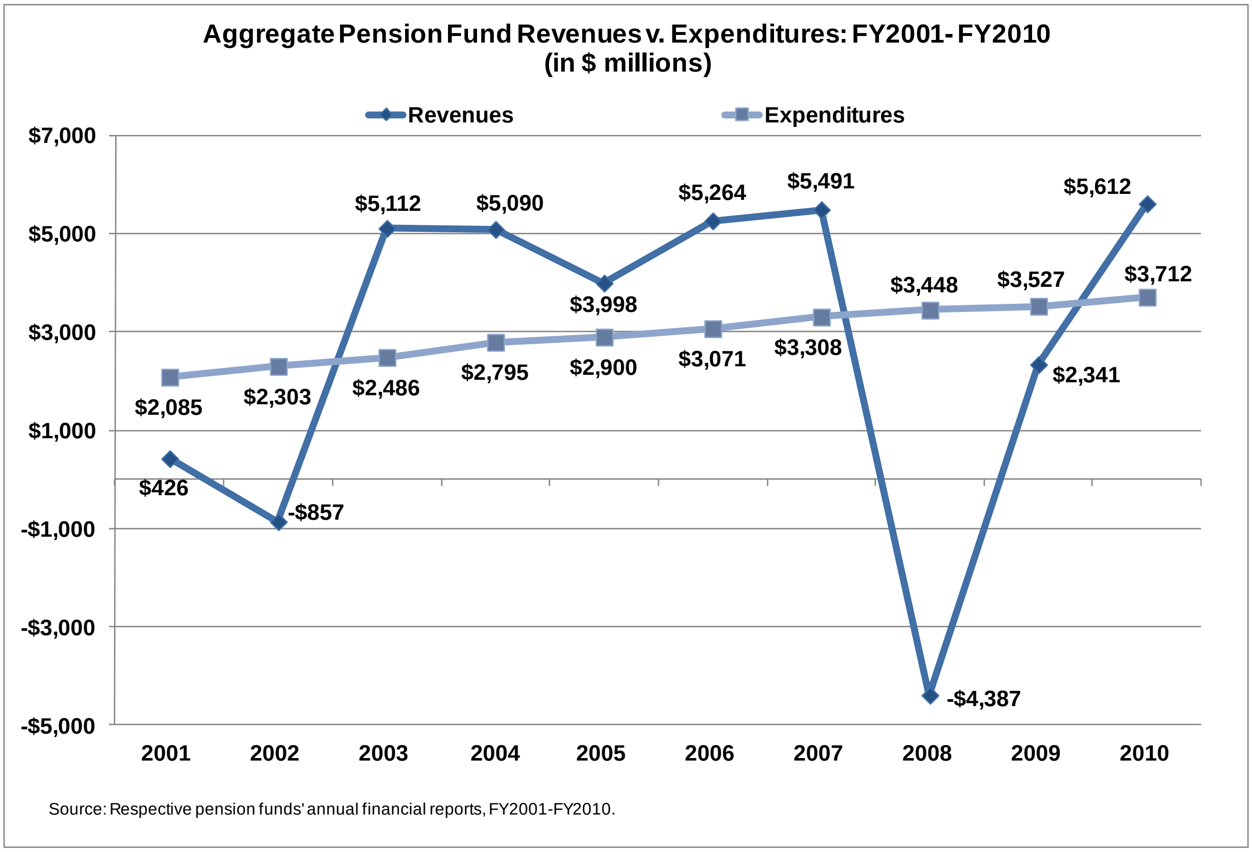


Source: Chicago Teachers' Pension Fund, *115th Comprehensive Annual Financial Report for the year ended June 30, 2010*, p. 16.
See also Illinois Commission on Government Foreceasting and Accountability, *Illinois Public Retirement Systems: A Report on the Financial Condition of the Chicago, Cook County and Illinois Municipal Retirement Fund Systems of Illnois,* February 2012, p. 121.

The additional CPS contributions for Public Act 90-0582 are projected to increase from $11.1 million in FY2011 to $20.7 million in FY2035, and the required CPS contributions under Public Act 96-0889 will rise from $208.6 million to $1.1 billion over the same period.[117]

Expenditures

In contrast to fluctuating revenues, aggregate pension fund expenditures have grown steadily by an average of 6.6% annually between FY2001 and FY2010. The following graph illustrates the ten-year trend of aggregate revenues and expenditures. As described on page 37, seven 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 funds' primary expenditures are for pension benefit payments, which constituted on average 85.1% of the ten funds' aggregate expenditures between FY2001 and FY2010. Pension benefit expenditures increased by 78.1% since 2001, from approximately $2.0 billion to $3.7 billion in FY2010.

The following two tables show fund expenditures by type and as a percent of total expenditures in FY2010. Total expenditures for all funds were nearly $3.7 billion, of which 89.2% was for pension benefit payments and 4.1% was for retiree health insurance. The CTA pension fund's responsibility for retiree health insurance ended in FY2009, but there were some residual

[117] See also Illinois Commission on Government Forecasting and Accountability, *Illinois Public Retirement Systems: A Report on the Financial Condition of the Chicago, Cook County and Illinois Municipal Retirement Fund Systems of Illinois*, January 2012, p.111.

healthcare payments made during that fiscal year. The ten funds paid a total of approximately $3.5 billion in annuities and health insurance subsidies to retirees and their dependents in FY2010.

Expenditures by Type: FY2010							
Fund Name	Pension Benefit Payments	Health Insurance Payments	Refund Payments*	Other Expenses	Administrative Expenses	Investment Costs	Total Expenditures
Fire	$ 213,159,055	$ 2,644,290	$ 1,762,277	$ 1,139,710	$ 3,047,179	$ 5,672,090	$ 227,424,601
Police	$ 526,890,557	$ 9,354,163	$ 7,587,436	$ -	$ 4,364,979	$ 10,066,225	$ 558,263,360
Municipal	$ 620,581,710	$ 9,549,685	$ 29,949,703	$ -	$ 6,744,947	$ 25,773,572	$ 692,599,617
Laborers'	$ 124,442,131	$ 2,586,866	$ 2,267,769	$ -	$ 3,864,287	$ 8,021,585	$ 141,182,638
MWRD	$ 108,219,186	$ -	$ 1,380,310	$ -	$ 1,276,511	$ 3,660,959	$ 114,536,966
Cook County	$ 437,622,607	$ 44,900,801	$ 25,041,818	$ -	$ 4,074,955	$ 15,166,288	$ 526,806,469
Forest Preserve	$ 11,541,696	$ 1,501,711	$ 343,863	$ 257,975	$ 104,765	$ 235,289	$ 13,985,299
CTA	$ 216,164,000	$ 53,000	$ 2,128,000	$ -	$ 2,028,205	$ 8,986,466	$ 229,359,671
Teachers'	$ 991,449,617	$ 79,953,873	$ 21,084,294	$ -	$ 8,800,848	$ 39,738,780	$ 1,141,027,412
Park District	$ 61,191,339	$ -	$ 1,368,903	$ -	$ 1,465,562	$ 2,993,445	$ 67,019,249
Total	**$ 3,311,261,898**	**$ 150,544,389**	**$ 92,914,373**	**$ 1,397,685**	**$ 35,772,238**	**$ 120,314,699**	**$ 3,712,205,282**

*Generally speaking, upon separation of service, an employee is entitled to receive a refund of his or her contributions and contributions made on his or her behalf. Terms vary based on government.

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

Source: Respective pension funds' FY2010 annual financial reports.

Expenditures by Type As Percent of Total: FY2010							
Fund Name	Pension Benefit Payments	Health Insurance Payments	Refund Payments*	Other Expenses	Administrative Expenses	Investment Costs	Total Expenditures
Fire	93.7%	1.2%	0.8%	0.5%	1.3%	2.5%	100.0%
Police	94.4%	1.7%	1.4%	0.0%	0.8%	1.8%	100.0%
Municipal	89.6%	1.4%	4.3%	0.0%	1.0%	3.7%	100.0%
Laborers'	88.1%	1.8%	1.6%	0.0%	2.7%	5.7%	100.0%
MWRD	94.5%	0.0%	1.2%	0.0%	1.1%	3.2%	100.0%
Cook County	83.1%	8.5%	4.8%	0.0%	0.8%	2.9%	100.0%
Forest Preserve	82.5%	10.7%	2.5%	1.8%	0.7%	1.7%	100.0%
CTA	94.2%	0.0%	0.9%	0.0%	0.9%	3.9%	100.0%
Teachers'	86.9%	7.0%	1.8%	0.0%	0.8%	3.5%	100.0%
Park District	91.3%	0.0%	2.0%	0.0%	2.2%	4.5%	100.0%
Total	**89.2%**	**4.1%**	**2.5%**	**0.0%**	**1.0%**	**3.2%**	**100.0%**

*Generally speaking, upon separation of service, an employee is entitled to receive a refund of his or her contributions and contributions made on his or her behalf. Terms vary based on government.

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

Source: Respective pension funds' FY2010 annual financial reports.

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, 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.[118] 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.

Annual Required 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. ARC is a concept created and defined by the Governmental Accounting Standards Board.

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 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

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[118] 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.

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 Nos. 25 & 27: 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 25 and 27, issued in November 1994, made a number of changes to reporting requirements for public pension fund assets and liabilities in the pension fund and sponsoring government financial statements. Statement 25 applied to pension fund financial statements and was effective for periods beginning after June 15, 1996. Statement 27 applied to sponsoring government financial statements and was effective for periods beginning after June 15, 1997.

GASB Statement 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 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 were 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.

Multiple (Employer Contribution 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.

Other Post Employment Benefits (OPEB): Non-pension benefits provided to employees after employment ends. OPEB includes health insurance coverage for retirees and their families, dental insurance, life insurance and term care coverage. It does not include termination benefits such as accrued sick leave and vacation.

Unfunded Liabilities: The current liabilities not covered by actuarial assets. It is calculated by subtracting the actuarial value of assets from the actuarial accrued liability of a fund.

APPENDIX B: REVENUE AND EXPENDITURE DATA SOURCES

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 presents investment fees as an expenditure rather than a deduction from gross investment income.

FY2010 Revenues By Source					
Fund Name	**Source Document**	**Employee Contribution**	**Employer Contribution**	**Investment Income**	**Other Income**
Fire	Comprehensive Annual Financial Report, 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; miscellaneous income; tax levy interest
Police	Comprehensive Annual Financial Report, pp. 25 and 105	Plan member salary deductions	Employer contributions	Total investment income; net securities lending income (+ bank fees)	Miscellaneous income
Municipal	Comprehensive Annual Financial Report, p. 21	Member contributions	Employer contributions	Total investment income; net securities lending income (+ bank fees)	none
Laborers'	Comprehensive Annual Financial Report, p. 17	Plan member contributions	Employer contributions	Investment income; net securities lending income (+ management fees)	none
MWRD	Comprehensive Annual Financial Report, p. 30	Employee contributions	Employer contributions	Total investment income; net securities lending income (+ bank fees)	Other
Cook County	Financial Statements, p. 5	Total employee contributions	Employer contributions	Total investment income; securities lending (income)	Employer federal subsidized programs; Medicare Part D subsidy; prescription plan rebates; employee transfers from Forest Preserve; employer interest from 2007 levy; miscellaneous
Forest Preserve	Financial Statements, p. 5	Total employee contributions	Employer contributions	Total investment income; securities lending (income)	Medicare Part D subsidy; prescription plan rebates; miscellaneous
CTA	Actuarial Valuation, p. 9	Member contributions	CTA contributions	Gross investment return (includes securities lending net of fees, see Financial Statements, p. 19)	none
Teachers'	Comprehensive Annual Financial Report, p. 27	Employee contributions	Intergovernmental net (total); minimum funding requirement	Total investment income, net; + investment advisory and custodial fees	Health insurance premium refund (see CAFR, p. 24)
Park District	Comprehensive Annual Financial Report, p. 24	Employee contributions	Employer contributions	Total investment income; net securities lending income (+ bank fees)	none

FY2010 Expenditure By Type							
Fund Source	**Source Document**	**Benefit Payments**	**Health Insurance Payments**	**Refund Payments**	**Other Expenses**	**Administrative Expenses**	**Investment Costs**
Fire	Comprehensive Annual Financial Report, pp. 5-6	Total benefits	Annuitant healthcare	Refunds of contributions	Litigation settlement	Administrative expenses	Investment expenses; net securities lending income (+ management fees)
Police	Comprehensive Annual Financial Report, pp. 25 and 105-106	Pension; disability; death benefits (minus Hospitalization)	Hospitalization	Refunds of employee deductions	none	Administrative and OPEB expenses	Total investment activity expenses; net securities lending income (+ bank fees)
Municipal	Comprehensive Annual Financial Report, p. 21	Total benefits	Contribution of insurance premiums	Refunds of member contributions	none	Administrative and OPEB expenses	Investment expenses; net securities lending income (+ bank fees)
Laborers'	Comprehensive Annual Financial Report, p.17 and Actuarial Valuation, p. 27	Benefit payments - Pension	Benefit payments - Health Insurance Supplement	Refunds	none	Administrative and OPEB expenses	Investment expenses; net securities lending income (+ management fees)
MWRD	Comprehensive Annual Financial Report, p. 30	Total annuities and benefits	none	Refunds of employee contributions	none	Administrative expense	Investment expenses; net securities lending income (+ bank fees)
Cook County	Financial Statements, pp. 5-6	Pension benefits	Postemployment healthcare	Refunds	none	Net administrative expenses	Investment expenses; securities lending (+ expenses)
Forest Preserve	Financial Statements, p. 5	Pension benefits	Postemployment healthcare	Refunds	Employee transfers to (from) Cook County	Administrative expenses	Investment expenses; securities lending (+ expenses)
CTA	Financial Statements, p. 10 and Actuarial Valuation, p. 9.	Benefit payments - Pension Plan	Benefit payments - Retiree Healthcare	Contribution refunds, including interest	none	Administrative expenses	Investment expenses (+)
Teachers'	Comprehensive Annual Financial Report, p. 27	Pension benefits; death benefits	Refund of insurance premiums	Refunds; 2.2 legislative refunds*	none	Administrative and miscellaneous expenses	Investment expense (+ investment advisory and custodial fees)
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)

* 2.2 legislative refunds are refunds due to employees who made additional contributions to upgrade past service to the 2.2% formula. See the Teachers' pension CAFR for more information.

APPENDIX C: SOURCES FOR FY2010

Fire

- Firemen's Annuity and Benefit Fund of Chicago, *Actuarial Valuation Report for the year ending December 31, 2010*. Gabriel Roeder Smith & Company. April 21, 2011.
- Firemen's Annuity and Benefit Fund of Chicago, *Comprehensive Annual Financial Report, December 31, 2010.* June 22, 2011.

Police

- Policemen's Annuity and Benefit Fund of Chicago, *Actuarial Valuation Report for the year ending December 31, 2010*. Gabriel Roeder Smith & Company. April 21, 2011.
- Policemen's Annuity and Benefit Fund of Chicago, *Comprehensive Annual Financial Report for the year ended December 31, 2010.* June 22, 2011.

Municipal

- Municipal Employees' Annuity and Benefit Fund of Chicago, *Actuarial Valuation Report for the year ending December 31, 2010.* Gabriel Roeder Smith & Company. April 12, 2011.
- Municipal Employees' Annuity and Benefit Fund of Chicago, *Comprehensive Annual Financial Report for the year ended December 31, 2010.* June 6, 2011.

Laborers'

- Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago, *Actuarial Valuation Report for the year ending December 31, 2010*. Gabriel Roeder Smith & Company. April 11, 2011.
- Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago, *Comprehensive Annual Financial Report for the fiscal year ended December 31, 2010.* April 19, 2011.

MWRD

- Metropolitan Water Reclamation District Retirement Fund, *Actuarial Valuation as of December 31, 2010*. Goldstein & Associates. March 25, 2011.
- Metropolitan Water Reclamation District Retirement Fund, *Comprehensive Annual Financial Report for the year ending December 31, 2010.* June 20, 2011.

Cook County

- County Employees' Annuity and Benefit Fund of Cook County, *Actuarial Valuation as of December 31, 2010*. Goldstein & Associates. April 18, 2011.
- County Employees' and Officers' Annuity and Benefit Fund of Cook County, *Financial Statements: December 31, 2010*. April 29, 2011.

Forest Preserve

- Forest Preserve District Employees' Annuity and Benefit Fund of Cook County, *Actuarial Valuation as of December 31, 2010*. Goldstein & Associates. April 14, 2011.
- Forest Preserve District Employees' Annuity and Benefit Fund of Cook County, *Financial Statements: December 31, 2010*. April 22, 2011.

CTA

- Retirement Plan for CTA Employees, *January 1, 2011 Actuarial Valuation (September 2011),* PricewaterhouseCoopers. September 22, 2011.
- Retirement Plan for Chicago Transit Authority Employees, *Financial Statements and Supplementary Information for the year ended December 31, 2010*. September 30, 2011.
- Chicago Transit Authority Retiree Health Care Plan, *Financial Statements and Supplementary Information, for the years ended December 31, 2010 and 2009.* Mitchell & Titus. October 31, 2011.

Teachers'

- Public School Teachers' Pension and Retirement Fund of Chicago, *Actuarial Valuation as of June 30, 2010*. Goldstein & Associates. January 13, 2011.
- Chicago Teachers' Pension Fund, *115th Comprehensive Annual Financial Report, for the year ended June 30, 2010*. July 21, 2011.

Park District

- Park Employees' & Retirement Board Employees' Annuity and Benefit Fund, *Comprehensive Annual Financial Report, for fiscal year ended June 30, 2010*. December 31, 2010.

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 healthcare 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 healthcare 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 Healthcare Reform

- An independent healthcare 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 healthcare 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 healthcare 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); seven- 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.

APPENDIX E: PENSION REFORM IN PUBLIC ACTS 96-0889 AND 96-1495

Public Acts 96-0889 and 96-1495 create a new tier of benefits for most Illinois public employees hired on or after January 1, 2011.[119] A "trailer bill" to correct technical problems in Public Act 96-0889 was enacted in December 2010 as Public Act 96-1490.

Public Act 96-0889 was enacted in April 2010 and applies to new members of the following pension funds:

- Illinois Municipal Retirement Fund (except sheriff's law enforcement members)
- Chicago Municipal Fund
- Chicago Laborers' Fund
- Cook County Fund
- Cook County Forest Preserve District Fund
- Chicago Park District Fund
- Metropolitan Water Reclamation District Fund
- Chicago Public Schools Fund
- State Employees Retirement System
- State Universities Retirement System
- Teachers' Retirement System
- Judges Retirement System
- General Assembly Retirement System

Public Act 96-0889 creates a new tier of benefits for public employees who become members of these public pension plans on or after January 1, 2011.[120] Previous benefit provisions differ among the funds. In general, for many funds the major benefit changes are an increase in full retirement age from 60 to 67 and early retirement age from 55 to 62, reduction of final average salary from the highest 4 year average to the highest 8 year average, a $106,800 cap on pensionable earnings (increased annually by the lesser of 3% or one half of the increase in Consumer Price Index), and the reduction of the automatic cost of living adjustment from 3% compounded to the lesser of 3% or one half of the increase in Consumer Price Index not compounded. The Act also eliminates "double-dipping" by suspending the pension of any retiree who goes to work for a government that participates in another pension system until that employment ends.

There are notable differences in the second tier benefits of the Judges and General Assembly Retirement Systems. For those two systems, the cap on pensionable earnings is increased annually by the lesser of 3% or the increase in the Consumer Price Index (not one half of the increase in the Consumer Price Index as for other funds). Likewise the automatic cost of living adjustment on the second tier Judges' and General Assembly annuity is lesser of 3% or the full increase in the Consumer Price Index compounded, rather than simple interest. However, the maximum annuity for new members of these funds will be 60% of final average salary, reduced from 85% for first tier members. There is no change to maximum percent of final average salary

[119] The legislation did not change benefits for new Chicago Transit Authority employees because major reforms to the CTA retirement benefits had been enacted in 2008.
[120] A "trailer bill" to correct technical problems with Public Act 96-0889 was enacted in December 2010 as Public Act 96-1490.

for the other funds affected by Public Act 96-0889. Finally, the "double-dipping" prohibition does not apply to the Judges or General Assembly plans.

Public Act 96-0889 does not change employer or employee contributions, with the significant exception of a partial employer contribution holiday granted to the Chicago Public Schools. The Act reduces CPS' required employer pension contribution for FY2011, FY2012 and FY2013 to an amount estimated to be equivalent to the employer's normal cost, thereby revising the funding standards set in Public Act 89-0015.[121] It also delays the year that the Chicago Teachers' pension fund must reach a 90% funded ratio from 2045 to 2060. Prior to the passage of Public Act 96-0889, the CPS required contribution for FY2011 was calculated to be $586.9 million, or almost double the FY2010 amount. Public Act 96-0889 reduces the District's required FY2011 contribution to $187.0 million, which is $120.5 million, or 39.2%, less than the prior year contribution.[122] In FY2014, the year when the reduced payment provision sunsets, the District's pension payment is projected to rise to $599.6 million, an increase of $403.6 million over the currently projected FY2013 pension contribution.

Over time the benefit changes introduced by Public Act 96-0889 will slowly reduce liabilities from what they would have been as new employees are hired and fewer members remain in the old benefit tier. However, Public Act 96-0889 does not guarantee the future solvency of the affected funds. Even with reduced benefits for new employees, the Laborers', Municipal, Park and County Funds are projected to run out of assets during the years 2035, 2030, 2025 and 2038, respectively.[123]

Public Act 96-1495 was enacted in December 2010 and applies to new members of the following pension funds:

- Illinois Municipal Retirement Fund sheriff's law enforcement members
- Chicago Police Fund
- Chicago Fire Fund
- Downstate Police funds
- Downstate Fire funds

Public Act 96-1495 creates a new tier of benefits for public employees who become members of these public safety pension funds on or after January 1, 2011. Previous benefit provisions differ among the funds. In general, the major benefit changes are an increase in full retirement age from 50 to 55, reduction of final average salary from the highest 4 year average to the highest 8 year average, a $106,800 cap on pensionable earnings (increased annually by the lesser of 3% or one half of the increase in Consumer Price Index), and change in the automatic cost of living

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[121] "Normal cost" is an actuarially-calculated amount representing that portion of the present value of pension plan benefits and administrative expenses which is allocated to a given valuation year.

[122] Actuarial projection by Goldstein & Associates for Kevin Huber, Executive Director of the Public School Teachers' Pension and Retirement Fund of Chicago, March 31, 2010. See also Illinois Commission on Government Forecasting and Accountability, *Illinois Public Retirement Systems: A Report on the Financial Condition of the Chicago, Cook County and Illinois Municipal Retirement Fund Systems of Illinois*, November 2010, p.119.

[123] Illinois Commission on Government Forecasting and Accountability, *Illinois Public Retirement Systems: A Report on the Financial Condition of the Chicago, Cook County and Illinois Municipal Retirement Fund Systems of Illinois*, January 2012, p. iii.

adjustment from 1.5% not compounded to the lesser of 3% or one half of the increase in Consumer Price Index not compounded.[124]

Public Act 96-1495 does not change employee contributions but it does change employer contributions for the Downstate and Chicago police and fire funds (not for the IMRF sheriff's plan). Employers that sponsor Downstate and Chicago Police and Fire Funds will be required to make contributions sufficient to bring the funded ratio of each fund to 90% in 30 years (by the end of 2040), using a level percentage of payroll and projected unit credit actuarial valuation method.[125] This represents a slight reprieve for Downstate Police and Fire funds employers, who were previously required to contribute amounts sufficient to reach 100% funded ratios by the year 2033. For the City of Chicago the new funding schedule creates a significant contribution increase beginning in 2015. City officials have estimated that it will represent roughly a 60% contribution increase in 2015.[126] If any employer sponsoring a police or fire pension fund fails to make its required contributions within 90 days of due date, the Illinois Comptroller must deduct and deposit into the pension fund the certified amounts or a portion of these amounts from the following proportions of grants of State funds to the municipality (not to exceed total amount of delinquency): one-third of total State grants to municipality in 2016, two-thirds of total State grants to municipality in 2017 and 100% of State grants to municipality in 2018 and thereafter.

Prior to the enactment of Public Act 96-1495, the Fire Fund was projected to run out of assets during 2021 and the Police Fund was projected to run out of assets during 2025.[127]

Public Act 96-1495 also makes the following changes:

- Each police and fire fund's actuarial value of assets will be reset at market value on March 30, 2011, and will be calculated thenceforth using five-year smoothing.
- Larger downstate police and fire funds (over $10 million in assets) are given greater flexibility to invest in corporate bonds and equities.
- Three new studies are required to be conducted by the state's Commission on Government Forecasting and Accountability:
    - A study of all Downstate Police and Fire pension fund historical employer contribution rates, fund balances, actuarial formulas used for employer contributions, available contribution sources, impact of revenue limitations caused by tax caps and non-home rule status and existing statutory funding compliance procedures. Due January 1, 2013.
    - A study of cost or cost savings associated with creation of an investment pool for Downstate Police and Fire funds. Due December 31, 2011.
    - A study of the feasibility of Downstate Police and Fire fund employer/employee cost sharing of normal cost contributions where each would contribute 50% of the normal cost. Due December 31, 2011.

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[124] This is the change for Chicago Police and Fire Funds. Most other public safety funds' first tier benefits provide a 3% compounded automatic cost of living adjustment.
[125] This funding schedule requirement begins in the year 2015 for Chicago.
[126] Letter of December 8, 2010 from the Chicago City Council to Governor Pat Quinn. Last accessed on January 4, 2011 at http://www.wttw.com/res/pdf/quinn_letter.pdf.
[127] Illinois Commission on Government Forecasting and Accountability, *Illinois Public Retirement Systems: A Report on the Financial Condition of the Chicago, Cook County and Illinois Municipal Retirement Fund Systems of Illinois*, November 2010, pp. 46, 108.

Although Public Act 96-1495 is commonly considered the public safety pension reform bill, many new public safety employees' pension will be determined instead by Public Act 96-0889 because they are members of pension funds affected by that act. These include:

- Cook County sheriff's employees, who are members of the Cook County Fund;
- Cook County Forest Preserve police officers, who are members of the Cook County Forest Preserve District Fund; and
- State university and community college police and firefighters, who are members of SURS.

One result is that new public safety employees affected by Public Act 96-1495 will be eligible for full retirement at age 55 with 10 years of service while the public safety employees affected by Public Act 96-0889 will be eligible for full retirement at age 67 with 10 years of service.[128]

[128] New state police, firefighters, correctional officers and others eligible for the SERS "alternative formula" are affected by Public Act 96-0889 but their full retirement age was raised from age 50 with 25 years of service to age 60 with 20 years of service rather than to age 67 with 10 years of service like other SERS members.