# Illinois Public Retirement Systems



## A Report on the Financial Condition of the Illinois Municipal, Chicago and Cook County Pension Funds of Illinois

Cook County Employees' Pension Fund
Cook County Forest Preserve Employees' Pension Fund
Firemen's Annuity and Benefit Fund of Chicago
Illinois Municipal Retirement Fund
Laborers' Annuity and Benefit Fund of Chicago
Metropolitan Water Reclamation District Retirement Fund
Municipal Employees' Annuity and Benefit Fund of Chicago
Park Employees' Annuity and Benefit Fund of Chicago
Policemen's Annuity and Benefit Fund of Chicago
Public School Teachers' Pension and Retirement Fund of Chicago

Commission on Government Forecasting & Accountability

# Commission on Government Forecasting and Accountability

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### OCTOBER 2014

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### **Executive Summary**

This report examines the financial status of various public employee retirement systems in Chicago and Cook County, along with the Illinois Municipal Retirement Fund, as of Fiscal Year 2013. The following is a summary of the findings:

- The Chicago Transit Authority Retirement Fund covers all employees of the Chicago Transit Authority. At the end of 2013 there were 8,186 active employees and 7,808 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$1.893 Billion and Total Actuarial Liabilities were \$3.106 Billion.
- The Chicago Transit Authority Retirement Fund lowered its actuarial assumption on the future investment rate of return from 8.50% to 8.25% annually as of the most recent valuation, i.e., FY 2013.
- The Cook County Employees' Retirement Fund covers all persons employed and paid by the County. At the end of 2013 there were 21,287 active employees and 14,080 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$8.381 Billion and Total Actuarial Liabilities were \$14.812 Billion.
- The Cook County Employees' Retirement Fund active member headcount has dropped by approximately 4,270 employees since 2006. This is due mainly to positions not being filled by attrition and an Alternative Retirement Cancellation Payment Option that was offered to Cook County employees in 2007 (P.A. 95-0369).
- The Cook County Forest Preserve Employees' Retirement Fund covers all persons employed and paid by the Forest Preserve. At the end of 2013 there were 534 active employees and 378 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$182.6 Million and Total Actuarial Liabilities were \$306.9 Million.
- The Firemen's Annuity and Benefit Fund of Chicago covers anyone employed by the City of Chicago in its fire services whose duty it is to in any way participate in the work of controlling and extinguishing fires. At the end of 2013 there were 4,685 active employees and 2,883 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$991 Million and Total Actuarial Liabilities were \$4.136 Billion.
- The Illinois Municipal Retirement Fund covers employees hired by the following units of government: (1) All counties except Cook and all school districts except Chicago, (2) Other units of government with general taxing powers, such as cities, villages, townships and special districts, (3) Units of government without general taxing powers, associations or cooperatives authorized to participate by State statute. At the end of 2013 there were 173,826 active employees and 95,015

employee annuitants. Total Actuarial Assets of the system at the end of that year were \$30.083 Billion and Total Actuarial Liabilities were \$34.357 Billion.

- The Laborers' Annuity and Benefit Fund of Chicago covers persons employed by the City of Chicago in a position classified as labor service by the employer; anyone employed by the Board, or anyone employed by the Retirement Board of any other Annuity and Benefit Fund. At the end of 2013 there were 2,844 active employees and 2,727 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$1.354 Billion and Total Actuarial Liabilities were \$2.391 Billion.
- The Metropolitan Water Reclamation District Retirement Fund covers any person employed by the District whose duties include service during a calendar year for a minimum of 120 days. At the end of 2013 there were 1,858 active employees and 1,704 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$1.189 Billion and Total Actuarial Liabilities were \$2.195 Billion.
- The Municipal Employees' Annuity and Benefit Fund of Chicago covers persons appointed under civil service rules who are employed by the City of Chicago and Board of Education of Chicago (except teachers); temporary and non-career service employees; aldermen and other officials of the City and the Board that make written application. At the end of 2013 there were 30,647 active employees and 20,113 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$5.114 Billion and Total Actuarial Liabilities were \$13.857 Billion.
- The Park Employees' Annuity and Benefit Fund of Chicago covers all persons employed by the Chicago Park District. At the end of 2013 there were 3,076 active employees and 2,102 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$404.3 Million and Total Actuarial Liabilities were \$888.0 Million.
- The Policemen's Annuity and Benefit Fund of Chicago covers any employee in the Police Department of the City of Chicago sworn and designated by law as a police officer. At the end of 2013 there were 12,161 active employees and 9,194 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$3.054 Billion and Total Actuarial Liabilities were \$10.282 Billion.
- The Public School Teachers' Pension and Retirement Fund of Chicago covers certified teachers and employees of the Chicago public schools. At the end of FY 2013 there were 30,969 active employees and 24,042 employee annuitants. Total Actuarial Assets of the system on that date were \$9.423 Billion and Total Actuarial Liabilities were \$19.045 Billion.

- The Public School Teachers' Pension and Retirement Fund of Chicago headcount
  has dropped by approximately 3,700 employees since FY 2006, This is due to early
  retirements and teachers opting to retire under the Pension Enhancement Program
  (PEP), which allows teachers to sell a portion of unused sick days back to the
  employer.
- The Public School Teachers' Pension and Retirement Fund of Chicago lowered its actuarial assumption on the future investment rate of return from 8.00% to 7.75% annually as of the most recent valuation, i.e., FY 2013.
- Most of the retirement systems profiled in this report have provided CGFA staff with multi-year funding projections performed by the systems' actuaries. Unless otherwise noted, all long-term funding projections are based upon the retirement system's Fiscal Year or Calendar Year 2013 actuarial valuation. The statutory funding requirements differ for each system and are outlined at the beginning of each system's chapter under the heading "Required Employer Contributions". In cases where a recent legislative enactment has changed a particular system's funding requirement, the Public Act number is displayed in the tables showing multi-year funding projections.
- Pension Reform Legislation was passed in the most recent legislative session that made changes to funding provisions, contribution levels, and made various other changes to the Park Employees' Annuity and Benefit Fund of Chicago, the Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago, and the Municipal Employees' Annuity and Benefit Fund of Chicago. A summary of changes made can be found in Section I of this report.
- The following page contains a summary of the financial condition of the Chicago Retirement Systems. Based upon the actuarial value of assets, the total unfunded liabilities for the city of Chicago's retirement systems are \$32.477 Billion. Please note that this amount does not include IMRF, Cook County Employees', or Cook County Forest Preserve Pension Funds.

# Summary of Financial Condition Chicago Retirement Systems Combined (Excludes IMRF and Cook County Funds) FY 2013 (\$ in Millions)

System	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
Chicago Transit Authority	550.6	3,105.6	1,892.7	1,212.9	60.9%
Firemen's Annuity & Benefit Fund	416.5	4,136.4	991.2	3,145.2	24.2%
Laborers' Annuity and Benefit Fund	200.4	2,390.6	1,354.3	1,036.3	56.7%
Metropolitan Water Fund	169.4	2,194.9	1,188.5	1,006.4	54.1%
Municipal Employees' Annuity and Benefit Fund	1,580.3	13,856.5	5,114.2	8,742.3	36.9%
Park Employees' Annuity and Benefit Fund	117.8	888.0	404.3	483.7	45.5%
Policemen's Annuity and Benefit Fund	1,015.4	10,282.3	3,053.9	7,228.5	29.7%
Public School Teachers' Pension Fund	2,239.3	19,044.5	9,422.5	9,622.0	49.5%
TOTAL	6,289.7	55,898.8	23,421.6	32,477.3	41.9%

## I. Recent Pension Legislation



## Public Act 96-0889 Senate Bill 1946 – Cullerton (Madigan)

#### I. Overview of Key Provisions of Public Act 96-0889 (SB 1946)

#### **Effective Date**

• January 1, 2011

#### **Systems Impacted**

• IMRF, Chicago Municipal, Cook County, Cook County Forest Preserve, Chicago Laborers, Chicago Park District, Metropolitan Water, SERS, SURS, TRS, Chicago Teachers (Judges and GA separate; CTA, Police, and Fire excluded)

## Retirement Eligibility - Except State Policemen, Firefighters, and Correctional Guards

- Normal Retirement: 67 years old with 10 years of service
- Early Retirement: 62 years old with 10 years of service with a 6% per year reduction in benefits for each year age is under 67
- Annuity based on highest 8 years out of last 10 years of service
- Annual Final Average Salary may not exceed \$106,800, as automatically increased by the lesser of 3% or one-half of the annual increase in the CPI-U during the preceding 12-month calendar year

#### Retirement Eligibility - State Policemen, Firefighters, and Correctional Guards

- Normal Retirement: 60 years old with 20 years of service
- State Policemen, Firefighters, DOC Guards are still eligible for Alternative Formula

#### **Annual Increases in Annuity**

- Increases begin at the later of the first anniversary of retirement or at age 67
- Increases equal to the lesser of 3% of one-half the annual increase in the CPI-U during the preceding 12-month calendar year; if increase in CPI is zero or if there is a decrease in CPI, then no COLA is payable
- Increase not compounded

#### **Survivor Benefits**

- 66.7% of the earned retirement benefit at death
- Increased by the lesser of 3% or one-half of the annual increase in the CPI-U during the preceding 12-month calendar year
- Increases not compounded

#### "Double Dipping" Prohibited

• Prohibition on simultaneously collecting a pension and a salary with public employer.

#### Chicago Teachers' Extension of Funding Plan

- Contributions specified in Fiscal Years 2011 2014
- New Goal: CTPF must reach 90% by 2059 (currently 2045)

#### Retirement Eligibility - Judges and General Assembly

- Normal Retirement: 67 years old with 8 years of service
- Early Retirement: 62 years old with 8 years of service

#### Change in Benefit Formula – Judges and General Assembly

- 3% of Final Average Salary for each year of service
- Maximum annuity 60% of Final Average Salary
- Retirement annuity based on highest 8 out of final 10 years of service

#### Annual Increase in Annuity - Judges and General Assembly

- Increases begin after attainment of age 67
- Increases equal to the lesser of 3% or one-half of the annual increase in the CPI-U during the preceding 12-month calendar year
- Increases compounded

#### Annual Increase in Survivor's Annuity – Judges and General Assembly

- 66.7% of the earned retirement benefit at death
- Increased by the lesser of 3% or one-half of the annual increase in the CPI-U during the preceding 12-month calendar year
- Increases compounded

## Public Act 96-1495 Senate Bill 3538 – Link (McCarthy)

#### I. Overview of Key Provisions of Public Act 96-1495 (SB 3538)

#### **Effective Date**

• New employees beginning service after January 1, 2011

#### **Systems Impacted**

• IMRF (Sheriff's Law Enforcement Employees), Chicago Police, Chicago Firefighters, Downstate Police, Downstate Firefighters

#### **Retirement Eligibility**

- Normal Retirement: 55 years old with 10 years of service
- Early Retirement: 50 years old with 10 years of service with a 0.5% per month reduction in benefits for each month age is under 55
- Annuity based on highest 8 years out of last 10 years of service
- Annual Final Average Salary may not exceed \$106,800, as automatically increased by the lesser of 3% or one-half of the annual increase in the CPI-U during the preceding 12-month calendar year

#### **Annual Increases in Annuity**

- Increases begin at the later of the first anniversary of retirement or at age 60
- Increases equal to the lesser of 3% of one-half the annual increase in the CPI-U during the preceding 12-month calendar year; if increase in CPI is zero or if there is a decrease in CPI, then no COLA is payable
- Increase not compounded

#### **Survivor Benefits**

- 66.7% of the earned retirement benefit at death
- Increased by the lesser of 3% or one-half of the annual increase in the CPI-U during the preceding 12-month calendar year
- Increases not compounded

#### **Funding Requirements**

- Downstate and Chicago municipal contributions must be sufficient to achieve a 90% funded ratio by FY 2040 using a level percentage of payroll contribution rate
- Whenever city contributions are not sufficient to achieve this funding goal, the retirement system will notify the Illinois State Comptroller
- Upon receiving this notification, the Comptroller will divert funds owed by the State to the City in a sufficient amount to eliminate the shortfall in contributions

• The State may divert all of the funds owed to the city beginning in FY2018. The diversion limit in FY 2016 is 33.3% and is 66.7% in FY 2017

#### **Calculation of the Funded Ratio**

- Asset Market Values equal Asset Actuarial Values on March 30, 2011
- Thereafter, Asset Actuarial Values will be used for all funded ratios
- Income smoothing will be used after March 30, 2011 to calculate Asset Actuarial Values. A 5 year period (20% per year rate) will be used to recognize all investment revenues and losses

#### **Pension Calculations**

- Retirement annuities are calculated to equal 2.5% of final average salary times the total years of service
- Total retirement annuities are limited to 75% of final average salary

## Public Act 98-0622 Senate Bill 1523 – Cullerton (Madigan)

#### I. Overview of Key Provisions of Public Act 98-0622 (SB 1523)

#### **Effective Date**

• January 1, 2015

#### **Systems Impacted**

Park Employees' Annuity and Benefit Fund of Chicago

#### **Funding Schedule**

- Employer contributions will be made according to a 30-year Actuarial Required Contribution (ARC) funding plan with a goal of achieving 90% funded status by the end of FY 2050.
- The employer contribution multiplier is increased on a graduated scale to 1.7 in FY 2015, 2.3 in FY 2017, and 2.9 in FY 2019. Once the Fund is 90% funded, the multiplier is the lesser of 2.9, or the amount needed maintain a 90% funded ratio.
- Additionally, there will be supplemental contributions of \$12.5 Million in FY 2015 and 2017, and \$50 Million in FY 2019. These supplemental contributions will not decrease the employer's Actuarially Required Contribution in the respective fiscal year.

#### **Retirement Eligibility**

- Tier 1 employees For employees age 45 or younger on January 1, 2015, the minimum retirement age is increased from 50 to 58.
- Tier 2 employees The age for normal retirement decreased from 67 to 65; and the age for early retirement decreased from 62 to 60.

#### **Annual Increases in Annuity**

- Increases equal to the lesser of 3% of one-half the annual increase in the CPI-U during the preceding 12-month calendar year; if increase in CPI is zero or if there is a decrease in CPI, then no COLA is payable.
- Increase not compounded.
- Payment of annual increase suspended in FY 2015, 2017, and 2019.

#### **Employee Contributions**

- Currently, employee contributions are set at 9%.
- Beginning January 1, 2015: employee contributions will increase to 10%.
- Beginning January 1, 2017: employee contributions will increase to 11%.
- Beginning January 1, 2019: employee contributions will increase to 12%.



## Public Act 98-0641 Senate Bill 1922 – Raoul (Madigan)

#### I. Overview of Key Provisions of Public Act 98-0641 (SB 1922)

#### **Effective Date**

• January 1, 2015

#### **Systems Impacted**

 Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago, Municipal Employees' Annuity and Benefit Fund of Chicago

#### **Funding Schedule**

- Employer contributions will be made according to a 40-year Actuarial Required Contribution (ARC) funding plan with a goal of achieving 90% funded status by the end of FY 2055.
- The City contribution multiplier is increased for both systems beginning in FY 2016 through 2020 as follows:
  - LABF: 1.60, 1.90, 2.20, 2.50, and 2.80.
  - MEABF: 1.85, 2.15, 2.45, 2.75, and 3.05.
- Beginning in FY 2021 and all years thereafter, City contributions will be made based on an actuarial funding schedule to reach 90% funded status by FY 2055.

#### **Retirement Eligibility**

- Tier 1 employees For employees age 45 or younger on January 1, 2015, the minimum retirement age is increased from 50 to 58.
- Tier 2 employees The age for normal retirement decreased from 67 to 65; and the age for early retirement decreased from 62 to 60.

#### **Annual Increases in Annuity**

- Increases equal to the lesser of 3% of one-half the annual increase in the CPI-U during the preceding 12-month calendar year; if increase in CPI is zero or if there is a decrease in CPI, then no COLA is payable.
- Increase not compounded.
- Payment of annual increase suspended in FY 2017, 2019, and 2025.

#### **Employee Contributions**

- Currently, employee contribution rates are set at 8.5% of salary for both systems.
- Beginning January 1, 2015: employee contributions will increase to 9% and will increase by .5% per year, settling at 11% in 2019.
- For any duration of time that the funded ratio is over 90%, employee contributions will decrease to 9.75%, but will increase back to 11% if the funded ratio falls below 90%.

## II. Chicago Transit Authority Retirement Fund

- Plan Summary
- Active Employees
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- Funded Ratios
- Change in Unfunded Liabilities
- Investment Income
- Investment Rates of Return
- System Projections
- Systems Experience
- Changes in Net Assets



Note: All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of December 31, 2013.

### **Chicago Transit Authority Pension Fund Plan Summary**

#### Retirement Age

- Normal Retirement Age for CTA employees is 65.
- Employees hired before January 18, 2008 may retire early at age 55 with 3 years of continuous service, or after completion of 25 years of continuous service. (Employees who have at least 25 years of service do not have their annuities reduced by 5% for each year younger than 65, regardless of age). Employees hired after September 5, 2001 may retire with unreduced benefits after attaining age 55 and completing 25 years of service.
- For employees hired after January 18, 2008, an employee may retire with unreduced benefits upon attainment of age 64 with 25 years of service. An employee may retire with a reduced benefit upon attainment of age 55 with 10 years of service (reduction of 5% for each year or fraction younger than age 65).

#### Retirement Formula

■ 2.15% of final average salary for each year of service for employees retiring on or after January 1, 2001.

#### Maximum Annuity

• 70% of final average salary.

#### Salary Used to Calculate Pension

 Highest average compensation over any four calendar years out of the final 10 years of service prior to normal retirement.

#### Annual COLA

 Made on an ad-hoc basis; most recent increase of \$40 per month for members who retired after 1/1/91 but before 1/1/00

#### **Employee Contributions**

■ 10.125% of salary (FY 2014-2040)

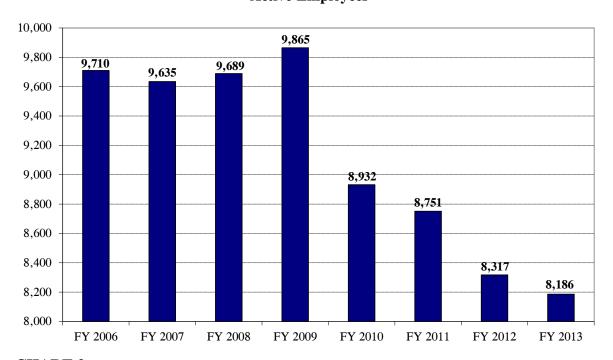
#### **Employer Contributions**

• 14.250% of salary (FY 2014-2040)

Pursuant to P.A. 95-0708, the CTA Article of the Pension Code provides for a minimum contribution by the CTA, determined either by the CTA Pension Board of Trustees or the Auditor General, to bring the funded ratio of the Plan up to or no less than 90% by Dec.31,2059.

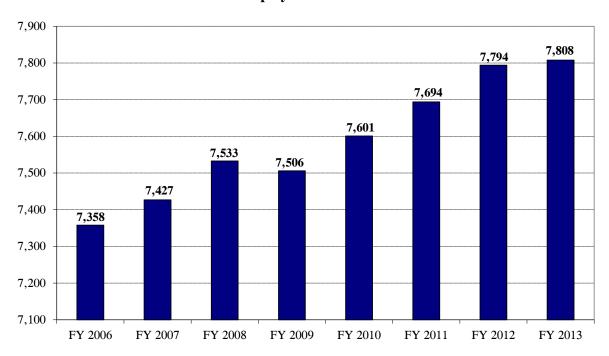
**CHART 1** 

## CHICAGO TRANSIT AUTHORITY PENSION FUND Active Employees



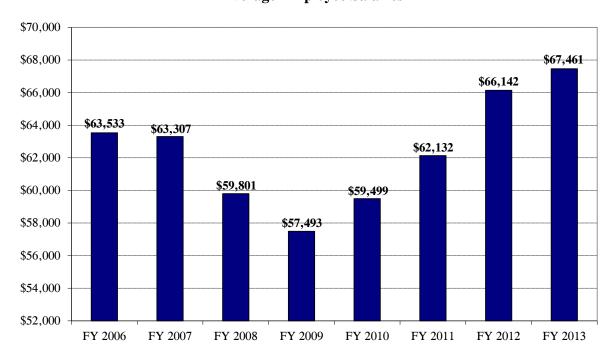
**CHART 2** 

#### CHICAGO TRANSIT AUTHORITY PENSION FUND Employee Annuitants



**CHART 3** 

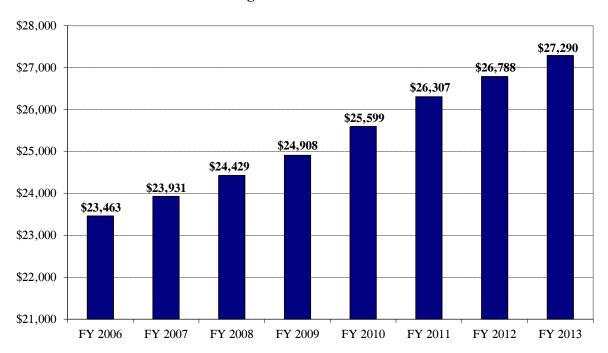
#### CHICAGO TRANSIT AUTHORITY PENSION FUND Average Employee Salaries



Note: Average Employee Salaries dropped in FY 2008 and FY 2009 following the financial crisis due to wage reductions and furlough days.

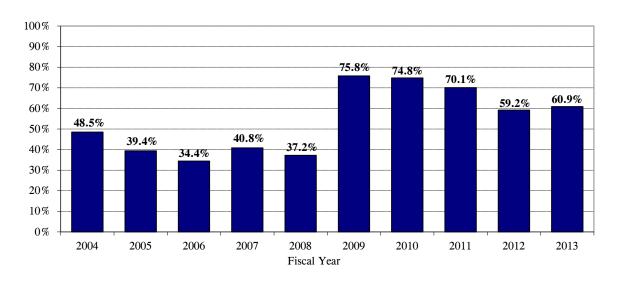
**CHART 4** 

#### CHICAGO TRANSIT AUTHORITY PENSION FUND Average Retirement Annuities



#### **CHART 5**

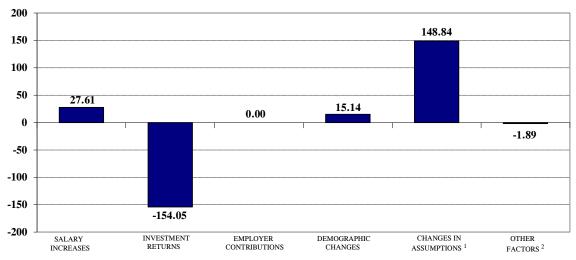
#### CHICAGO TRANSIT AUTHORITY PENSION FUND Funded Ratio FY 2004 - FY 2013



#### **CHART 6**

# CHICAGO TRANSIT AUTHORITY PENSION FUND Analysis of Actuarial Gains and Losses FY 2013 (\$ in Millions)

TOTAL INCREASE EQUALS \$35.65 MIL

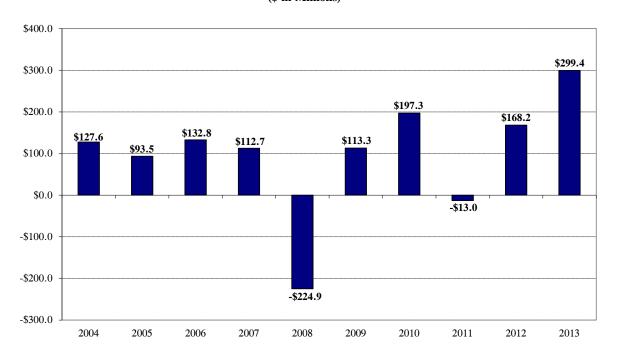


 $<sup>^1</sup>$  Rate of Return Assumption was changed from 8.50% to 8.25%

<sup>&</sup>lt;sup>2</sup> Other Factors consists of gains from retirements, terminations, and rates of mortality.

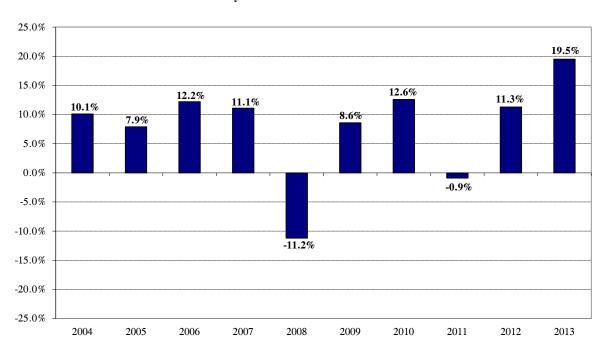
#### **CHART 7**

#### CHICAGO TRANSIT AUTHORITY PENSION FUND Investment Income FY 2004 - FY 2013 (\$ in Millions)



#### **CHART 8**

#### CHICAGO TRANSIT AUTHORITY PENSION FUND Rate of Return FY 2004 - FY 2013 Actuarially Assumed Rate of Return : 8.25%



CHICAGO TRANSIT AUTHORITY PENSION FUND

System Experience, FY 2004 - FY 2013 (\$ in Millions)

Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2013	550.6	3,105.6	1,892.7	1,212.9	60.9%
2012	548.5	2,867.3	1,702.8	1,164.5	59.4%
2011	541.4	2,808.2	1,662.2	1,146.0	59.2%
2010	528.3	2,724.2	1,910.0	814.2	70.1%
2009	567.2	2,588.4	1,936.8	651.6	74.8%
2008	594.1	2,632.4	1,996.0	636.4	75.8%
2007	571.3	2,531.4	941.9	1,589.5	37.2%
2006	562.5	2,466.1	1,007.3	1,458.8	40.8%
2005	547.5	2,354.1	810.3	1,543.8	34.4%
2004	544.4	2,291.2	902.1	1,389.1	39.4%

Note: The above figures do not include healthcare liabilities.

TABLE 1

TABLE 2

CHICAGO TRANSIT AUTHORITY PENSION FUND Changes in Net Assets (\$ in Millions)								
Fiscal Years	2013	2012	2011	2010	2009	2008	2007	2006
Additions to Assets								
Employer	79.5	62.8	60.3	56.3	41.4	68.5	33.8	35.7
Employees	56.8	48.4	47.2	45.3	35.0	34.3	16.9	17.8
Net Investment Income	299.4	168.2	-13.0	197.2	113.3	-224.9	112.7	132.8
Other - Bonds	0.0	0.0	0.0	0.0	0.0	1,110.5	0.0	0.0
Total Asset Additions (A)	435.7	279.4	94.5	298.8	189.7	988.4	163.4	186.3
Deductions from Assets								
Benefits	238.7	232.7	222.2	216.2	212.6	263.5	256.9	246.2
Refunds	4.9	4.0	2.9	2.2	2.1	1.8	1.4	1.4
Rebates	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Administrative Expenses	2.1	2.1	2.0	2.0	2.2	2.4	2.3	2.8
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Asset Deductions (B)	245.7	238.8	227.1	220.4	216.9	267.7	260.6	250.4
Change in Net Assets (A-B=C)	190.0	40.6	-132.6	78.4	-27.2	720.7	-97.2	-64.1

## III. Cook County Employees' Pension Fund

- Plan Summary
- Active Employees
- Employee Annuitants
- Average Salaries
- Average Retirement Annuity
- Funded Ratios
- Change in Unfunded Liabilities
- Investment Income
- Investment Rates of Return
- Systems Experience
- Changes in Net Assets
- System Projections



Note: All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of December 31, 2013.

## Cook County Employees' Pension Fund Tier 1 Plan Summary

#### Retirement Age

• Age 50 with 10 years of service.

#### Retirement Formula

• 2.4% of final average salary for each year of service.

#### Maximum Annuity

■ 80% of final average salary.

#### Salary Used to Calculate Pension

• Highest average monthly salary for any 48 consecutive months within the final 10 years of service.

#### Annual COLA

• 3% compounded.

#### **Employee Contributions**

■ 8.5% of salary.

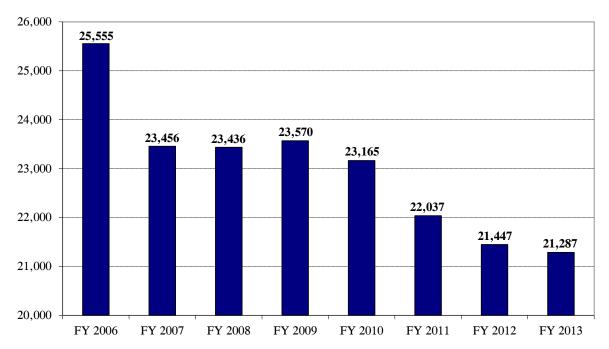
#### **Employer Contributions**

The County levies a tax annually equal to the total amount of contributions made by employees in the calendar year two years prior to the year of the levy, multiplied by 1.54.

Note: Benefits shown are for employees hired prior to January 1, 2011 (Tier 1 employees), the effective date of P.A. 96-0889. See P.A. 96-0889 in Section I for a summary of benefits for employees hired after January 1, 2011 (Tier 2 employees).

**CHART 9** 

## COOK COUNTY EMPLOYEES' PENSION FUND Active Employees



NOTE: The reduction of active employees from FY 2006 to FY 2007 can be attributed to the Alternative Retirement Cancellation Payment Option offered to Cook County Employees in 2007, pursuant to P.A. 95-0369.

**CHART 10** 

# COOK COUNTY EMPLOYEES' PENSION FUND Employee Annuitants

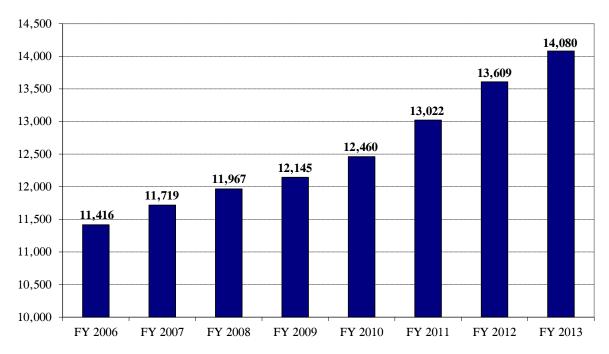
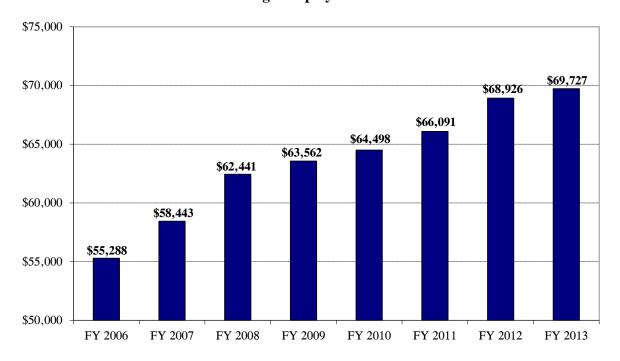


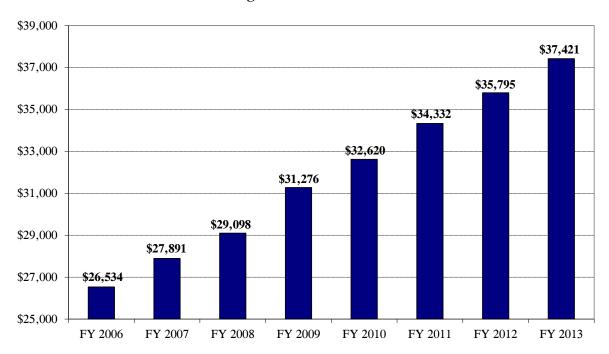
CHART 11

#### COOK COUNTY EMPLOYEES' PENSION FUND Average Employee Salaries

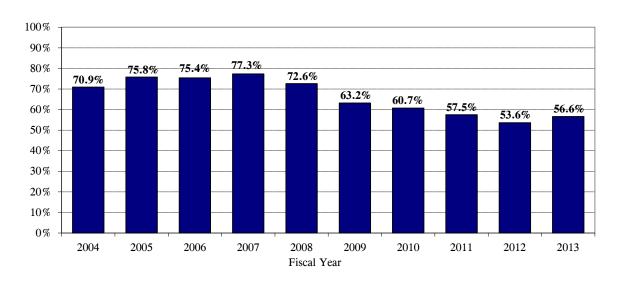


#### **CHART 12**

#### COOK COUNTY EMPLOYEES' PENSION FUND Average Retirement Annuities



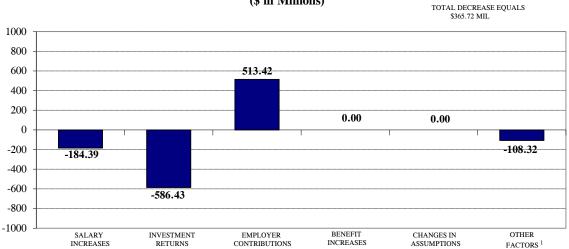
#### COOK COUNTY EMPLOYEES' PENSION FUND Funded Ratio FY 2004 - FY 2013



#### **CHART 14**

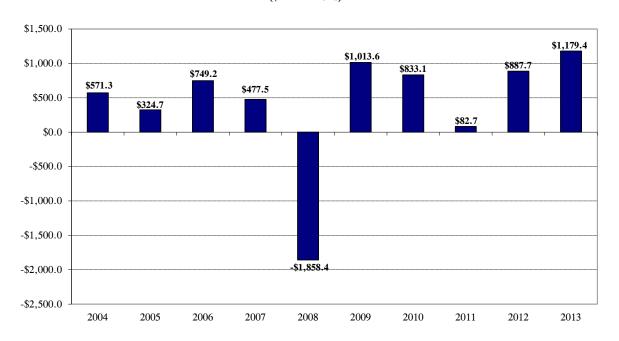
#### COOK COUNTY EMPLOYEES' PENSION FUND Change in Unfunded Liabilities

FY 2013
(\$ in Millions)



<sup>&</sup>lt;sup>1</sup> Other Factors include gains resulting from retirements, terminations, and rates of mortality.

#### COOK COUNTY EMPLOYEES' PENSION FUND Investment Income FY 2004 - FY 2013 Actuarially Assumed Rate of Return: 7.5% (\$ in Millions)



#### **CHART 16**

#### COOK COUNTY EMPLOYEES' PENSION FUND Rate of Return FY 2004 - FY 2013 Actuarially Assumed Rate of Return: 7.5%

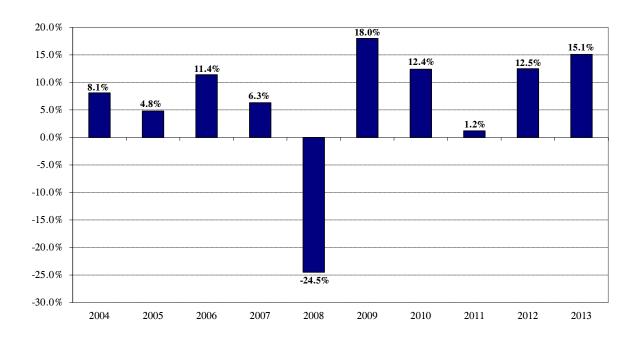


TABLE 3

#### **COOK COUNTY EMPLOYEES' PENSION FUND**

System Experience, FY 2004 - FY 2013 (\$ in Millions)

Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2013	1,484.3	14,812.1	8,381.4	6,430.6	56.6%
2012	1,478.3	14,630.3	7,833.9	6,796.4	53.6%
2011	1,456.4	13,724.0	7,897.1	5,826.9	57.5%
2010	1,494.1	13,142.1	7,982.3	5,159.8	60.7%
2009	1,498.2	12,575.5	7,945.6	4,629.9	63.2%
2008	1,463.4	11,073.2	8,036.1	3,037.1	72.6%
2007	1,370.8	10,423.7	8,059.9	2,363.8	77.3%
2006	1,412.9	9,904.6	7,462.7	2,441.9	75.4%
2005	1,387.5	9,269.9	7,027.5	2,242.4	75.8%
2004	1,371.5	9,450.8	6,700.8	2,750.0	70.9%

NOTE: The above FY 2006 - FY 2013 figures include healthcare assets/liabilities.

TABLE 4

COOK COUNTY EMPLOYEES' PENSION FUND Changes in Net Assets (\$ in Millions)										
Fiscal Years	2013	2012	2011	2010	2009	2008	2007	2006		
Additions to Assets										
Employer	187.8	190.7	195.3	181.5	183.7	183.9	258.1	221.2		
Employees	127.6	130.6	127.6	129.4	127.8	123.8	123.1	121.7		
Net Investment Income	1,179.4	887.7	82.9	833.1	1,013.6	-1,858.4	477.5	749.2		
Other	8.5	10.2	17.4	12.8	11.8	7.1	10.0	9.3		
Total Asset Additions (A)	1,503.4	1,219.2	423.2	1,156.8	1,336.9	-1,543.7	868.7	1,101.4		
Deductions from Assets										
Benefits	601.8	563.1	523.4	482.5	452.0	427.5	398.7	365.6		
Refunds	29.873	33.1	29.1	25.0	20.4	24.7	66.6	24.9		
Rebates	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Administrative Expenses	4.3	4.3	4.1	4.1	4.3	4.6	4.5	4.0		
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total Asset Deductions (B)	636.0	600.5	556.6	511.6	476.7	456.8	469.8	394.5		
Change in Net Assets (A-B=C)	867.4	618.7	-133.4	645.2	860.2	-2,000.4	398.9	706.9		

Table 5 below contains funding projections provided to CGFA by the Cook County Employees' Pension Fund based upon the December 31, 2013 actuarial valuation. As shown in the table below, under the current funding laws the Cook County Employees' Pension Fund is projected to run out of assets by 2038.

TABLE 5

	Cook County Employees' Pension Fund Actuarial Valuation Projection Results as of December 31, 2013 (\$ in Millions)										
Fiscal Year	Capped Payroll	Total County Contribution	County Contribution As % of Payroll	Total Employee Contribution	Accrued Liability	Actuarial Value of Assets	Unfunded Liabilities	Funded Ratio			
2014	1,484.3	193.0	13.0%	125.7	14,812.1	8,381.4	6,430.7	56.6%			
2015	1,526.6	194.7	12.8%	129.9	15,337.1	8,784.3	6,552.8	57.3%			
2016	1,570.6	190.6	12.1%	133.7	16,005.4	9,089.9	6,915.5	56.8%			
2017	1,615.8	187.9	11.6%	137.5	16,679.4	9,454.6	7,224.8	56.7%			
2018	1,661.7	199.7	12.0%	141.4	17,358.5	9,724.1	7,634.4	56.0%			
2019	1,709.4	205.4	12.0%	145.5	18,040.6	9,839.8	8,200.8	54.5%			
2020	1,758.4	211.2	12.0%	149.6	18,724.3	9,913.0	8,811.3	52.9%			
2020	1,808.5	217.3	12.0%	153.9	19,407.6	9,940.1	9,467.5	51.2%			
2022	1,860.3	223.5	12.0%	158.3	20,089.6	9,914.9	10,174.7	49.4%			
2023	1,913.6	229.9	12.0%	162.8	20,768.1	9,835.9	10,932.2	47.4%			
2023	1,968.5	236.5	12.0%	167.5	21,444.7	9,700.8	11,743.9	45.2%			
2024	2,024.9	243.3	12.0%	172.3	22,119.4	9,503.7	12,615.7	43.0%			
2025	2,083.7	250.2	12.0%	172.3	22,791.9	9,239.9	13,552.0	40.5%			
2020	2,145.0	257.4	12.0%	182.5	23,461.4	8,906.1	14,555.3	38.0%			
2027	2,143.0	264.9	12.0%	188.0	24,129.0	8,497.4	15,631.6	35.2%			
2028	2,274.2	272.7	12.0%	193.5	24,794.2	8,006.8					
	,						16,787.4	32.3%			
2030	2,341.7	280.8	12.0%	199.3	25,454.9	7,428.9	18,026.0	29.2%			
2031	2,411.7	289.1	12.0%	205.2	26,110.9	6,757.1	19,353.8	25.9%			
2032	2,484.1	297.7	12.0%	211.4	26,761.5	5,985.7	20,775.8	22.4%			
2033	2,559.9	306.6	12.0%	217.8	27,407.5	5,108.5	22,299.0	18.6%			
2034	2,637.8	315.8	12.0%	224.5	28,049.2	4,119.1	23,930.1	14.7%			
2035	2,718.5	325.4	12.0%	231.3	28,687.1	3,009.5	25,677.6	10.5%			
2036	2,802.0	335.3	12.0%	238.4	29,321.2	1,771.9	27,549.3	6.0%			
2037	2,889.0	345.6	12.0%	245.9	29,952.0	400.1	29,551.9	1.3%			
2038	2,979.9	356.2	12.0%	253.6	30,582.1	-1,113.5	31,695.6	-3.6%			
2039	3,073.9	367.3	11.9%	261.6	31,213.7	-2,777.9	33,991.6	-8.9%			
2040	3,171.6	378.8	11.9%	269.9	31,847.2	-4,601.5	36,448.7	-14.4%			
2041	3,273.0	390.8	11.9%	278.5	32,485.7	-6,594.3	39,080.0	-20.3%			
2042	3,378.6	403.2	11.9%	287.5	33,131.0	-8,764.3	41,895.3	-26.5%			
2043	3,488.5	416.1	11.9%	296.9	33,787.8	-11,123.7	44,911.5	-32.9%			
2044	3,601.4	429.5	11.9%	306.5	34,457.6	-13,684.5	48,142.1	-39.7%			
2045	3,718.2	443.5	11.9%	316.4	35,142.8	-16,460.1	51,602.9	-46.8%			
2046	3,839.2	457.8	11.9%	326.7	35,846.1	-19,464.8	55,310.9	-54.3%			
2047	3,964.4	472.7	11.9%	337.4	36,570.3	-22,714.1	59,284.4	-62.1%			
2048	4,093.5	488.1	11.9%	348.4	37,318.4	-26,230.7	63,549.1	-70.3%			
2049	4,226.1	504.0	11.9%	359.6	38,087.5	-30,036.9	68,124.4	-78.9%			
2050	4,362.9	520.4	11.9%	371.3	38,876.6	-34,154.8	73,031.4	-87.9%			
2051	4,504.1	537.2	11.9%	383.3	39,686.6	-38,609.0	78,295.6	-97.3%			
2052	4,650.1	554.6	11.9%	395.7	40,518.0	-43,425.9	83,943.9	-107.2%			
2053	4,800.9	572.6	11.9%	408.6	41,371.1	-48,637.5	90,008.6	-117.6%			

# IV. Cook County Forest Preserve Employees' Pension Fund

- Plan Summary
- Active Employees
- Employee Annuitants
- Average Salaries
- Average Retirement Annuity
- Funded Ratios
- Change in Unfunded Liabilities
- Investment Income
- Investment Rates of Return
- Systems Experience
- Changes in Net Assets
- System Projections



Note: All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of December 31, 2013.

# **Cook County Forest Preserve Employees' Pension Fund Tier 1 Plan Summary**

#### Retirement Age

• Age 50 with 10 years of service.

#### Retirement Formula

• 2.4% of final average salary for each year of service.

#### Maximum Annuity

■ 80% of final average salary.

#### Salary Used to Calculate Pension

• Highest average monthly salary for any 48 consecutive months within the final 10 years of service.

#### Annual COLA

• 3% compounded.

#### **Employee Contributions**

■ 8.5% of salary.

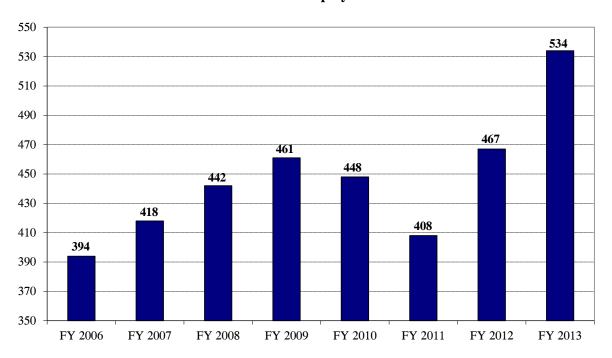
#### **Employer Contributions**

The Forest Preserve District levies a tax annually equal to the total amount of contributions made by employees in the calendar year two years prior to the year of the levy, multiplied by 1.30.

Note: Benefits shown are for employees hired prior to January 1, 2011 (Tier 1 employees), the effective date of P.A. 96-0889. See P.A. 96-0889 in Section I for a summary of benefits for employees hired after January 1, 2011 (Tier 2 employees).

**CHART 17** 

# COOK COUNTY FOREST PRESERVE PENSION FUND Active Employees



**CHART 18** 

## COOK COUNTY FOREST PRESERVE PENSION FUND Employee Annuitants

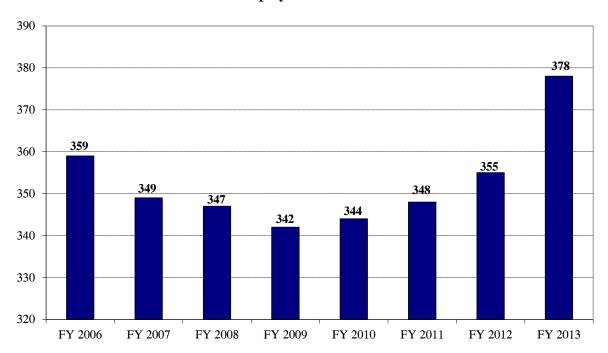
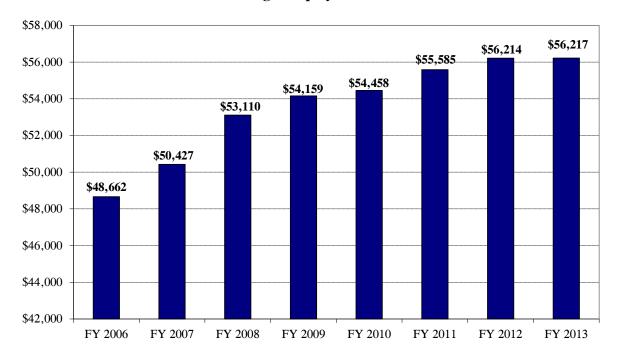


CHART 19

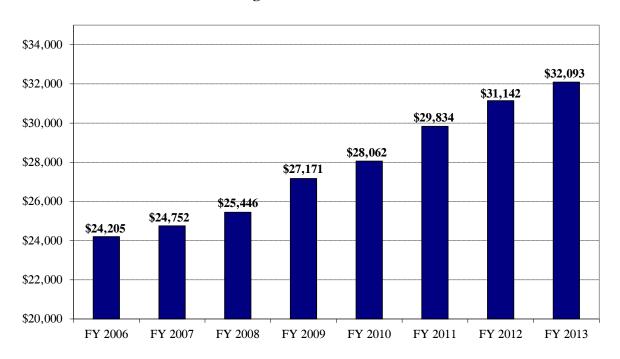
COOK COUNTY FOREST PRESERVE PENSION FUND

### Average Employee Salaries

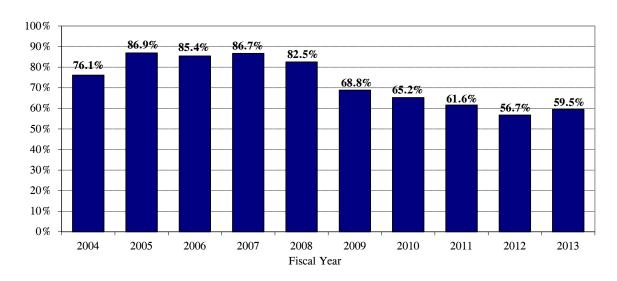


#### **CHART 20**

#### COOK COUNTY FOREST PRESERVE PENSION FUND Average Retirement Annuities



#### COOK COUNTY FOREST PRESERVE PENSION FUND Funded Ratio FY 2004 - FY 2013

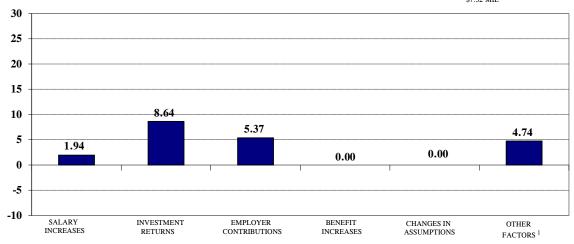


#### **CHART 22**

#### COOK COUNTY FOREST PRESERVE PENSION FUND

Change in Unfunded Liabilities FY 2013 (\$ in Millions)

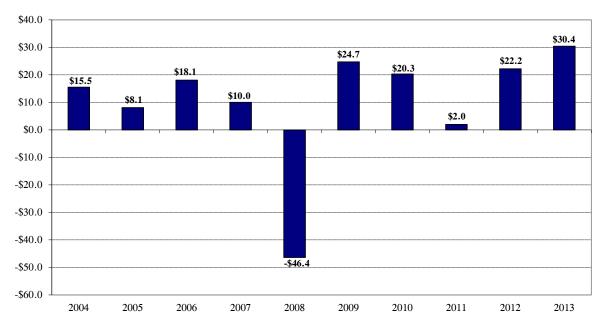
TOTAL DECREASE EQUALS



<sup>&</sup>lt;sup>1</sup> Other Factors include losses resulting from retirements, terminations, and rates of mortality.

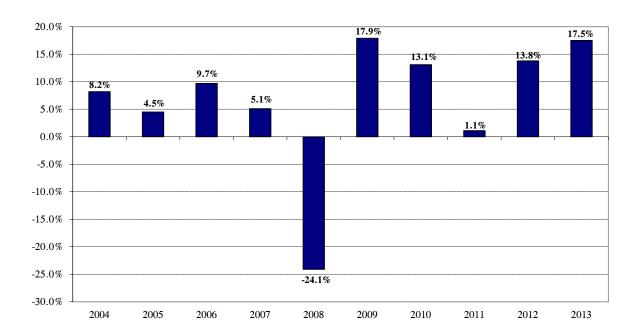
#### COOK COUNTY FOREST PRESERVE PENSION FUND Investment Income FY 2004 - FY 2013 Actuarially Assumed Rate of Return: 7.5%

(\$ in Millions)



#### **CHART 24**

#### COOK COUNTY FOREST PRESERVE PENSION FUND Rate of Return FY 2004 - FY 2013 Actuarially Assumed Rate of Return: 7.5%



COOK COUNTY FOREST PRESERVE PENSION FUND

TABLE 6

System Experience, FY 2004 - FY 2013 (\$ in Millions)

Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2013	29.2	306.9	182.6	124.4	59.5%
2012	26.3	304.5	172.6	131.9	56.7%
2011	22.7	289.3	178.1	111.2	61.6%
2010	24.4	282.4	184.1	98.3	65.2%
2009	25.0	274.0	188.4	85.6	68.8%
2008	23.5	237.9	196.3	41.6	82.5%
2007	21.1	234.1	203.0	31.1	86.7%
2006	19.2	226.6	193.5	33.1	85.4%
2005	18.1	217.6	189.1	28.5	86.9%
2004	16.6	245.3	186.6	58.7	76.1%

NOTE: The above FY 2004 - FY 2012 figures include healthcare assets/liabilities.

TABLE 7

COOK COUNTY FOREST PRESERVE PENSION FUND Changes in Net Assets (\$ in Millions)											
Fiscal Years	2013	2012	2011	2010	2009	2008	2007	2006			
Additions to Assets	Additions to Assets										
Employer	2.9	3.1	3.3	2.7	2.6	2.0	3.3	2.7			
Employees	2.7	2.5	2.3	2.4	2.4	2.1	2.0	1.7			
Net Investment Income	30.4	22.2	2.0	20.3	24.7	-46.4	10.0	18.1			
Other	0.2	0.2	0.5	0.2	0.2	0.1	0.2	0.2			
Total Asset Additions (A)	36.1	28.0	8.1	25.6	29.9	-42.1	15.5	22.7			
Deductions from Assets											
Benefits	15.7	14.2	13.6	13.0	12.4	12.2	11.9	11.5			
Refunds	1.0	1.2	0.6	0.4	0.5	0.5	0.5	0.4			
Rebates	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Administrative Expenses	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1			
Other	-0.1	0.2	-0.3	0.3	0.1	-0.1	0.1	0.3			
Total Asset Deductions (B)	16.6	15.7	14.0	13.8	13.1	12.7	12.6	12.3			
Change in Net Assets (A-B=C)	19.5	12.3	-5.9	11.8	16.8	-54.8	2.9	10.4			

Table 7 below contains funding projections provided to CGFA by the Cook County Forest Preserve Pension Fund based upon the December 31, 2013 actuarial valuation. As shown in the table below, under the current funding laws the Cook County Forest Preserve Pension Fund is projected to run out of assets by 2038.

TABLE 8

	Cook County Forest Preserve Pension Fund Actuarial Valuation Projection Results as of December 31, 2013 (\$ in Millions)										
Fiscal Year	Capped Payroll	Total County Contribution	County Contribution As % of Payroll	Total Employee Contribution	Accrued Liability	Actuarial Value of Assets	Unfunded Liabilities	Funded Ratio			
2014	29.5	3.0	10.2%	2.5	306.9	182.6	124.3	59.5%			
2015	31.2	3.2	10.3%	2.7	311.3	189.8	121.5	61.0%			
2016	32.7	3.5	10.7%	2.8	322.1	194.9	127.2	60.5%			
2017	34.3	2.8	8.2%	2.9	333.1	200.9	132.2	60.3%			
2018	35.8	3.5	9.8%	3.1	344.2	204.7	139.5	59.5%			
2019	37.4	3.7	9.9%	3.2	355.4	204.5	150.9	57.5%			
2020	39.0	3.8	9.7%	3.3	366.8	203.6	163.2	55.5%			
2021	40.7	4.0	9.8%	3.5	378.4	201.8	176.6	53.3%			
2022	42.2	4.2	10.0%	3.6	390.0	199.2	190.8	51.1%			
2023	43.8	4.4	10.0%	3.7	401.8	195.6	206.2	48.7%			
2024	45.4	4.5	9.9%	3.9	413.5	191.1	222.4	46.2%			
2025	47.1	4.7	10.0%	4.0	425.4	185.5	239.9	43.6%			
2026	48.8	4.9	10.0%	4.2	437.4	178.9	258.5	40.9%			
2027	50.5	5.1	10.1%	4.3	449.6	171.2	278.4	38.1%			
2028	52.4	5.2	9.9%	4.5	461.9	162.2	299.7	35.1%			
2029	54.2	5.4	10.0%	4.6	474.6	152.0	322.6	32.0%			
2030	56.2	5.6	10.0%	4.8	487.6	140.6	347.0	28.8%			
2031	58.1	5.8	10.0%	4.9	500.8	127.7	373.1	25.5%			
2032	60.1	6.0	10.0%	5.1	514.5	113.4	401.1	22.0%			
2033	62.2	6.2	10.0%	5.3	528.5	97.5	431.0	18.4%			
2034	64.3	6.5	10.1%	5.5	543.0	80.2	462.8	14.8%			
2035	66.5	6.7	10.1%	5.7	558.1	61.2	496.9	11.0%			
2036	68.8	6.9	10.0%	5.9	573.6	40.0	533.6	7.0%			
2037	71.1	7.1	10.0%	6.1	589.6	16.8	572.8	2.8%			
2038	73.5	7.4	10.1%	6.3	606.1	-8.8	614.9	-1.5%			
2039	76.0	7.6	10.0%	6.5	623.0	-37.0	660.0	-5.9%			
2040	78.5	7.9	10.1%	6.7	640.4	-68.0	708.4	-10.6%			
2041	81.2	8.2	10.1%	6.9	658.3	-101.9	760.2	-15.5%			
2042	83.9	8.4	10.0%	7.1	676.6	-139.2	815.8	-20.6%			
2043	86.8	8.7	10.0%	7.4	695.5	-179.9	875.4	-25.9%			

# V. Firemen's Annuity and Benefit Fund of Chicago

- Plan Summary
- Active Employees
- Employee Annuitants
- Average Salaries
- Average Retirement Annuity
- Funded Ratios
- Change in Unfunded Liabilities
- Investment Income
- Investment Rates of Return
- Systems Experience
- Changes in Net Assets
- System Projections
- Normal Cost Projections



Note: All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of December 31, 2013.

### Firemen's Annuity and Benefit Fund of Chicago Tier 1 Plan Summary

#### Retirement Age

- Age 50 with 20 years of service.
- Age 50 with 10 years of service (accumulated annuity).

#### Retirement Formula

• For employees with 20 or more years of service, 50% of final average salary plus 2.5% of final average salary for each year in excess of 20.

#### **Maximum Annuity**

75% of final average salary.

#### Salary Used to Calculate Pension

Average of 4 highest consecutive years within final 10 years of service.

#### Annual COLA

- 3% non-compounded with no limit at age 60, or age 55 if born before 1/1/55.
- 1.5% non-compounded if born after 1/1/55 with 30% maximum.

#### **Employee Contributions**

• 9.125% of salary.

#### Required Employer Contributions

Pursuant to P.A. 96-1495, annual actuarially determined employer contributions will be calculated and required. Such actuarially determined contributions will be established with a funding goal of 90% by the end of FY 2040, based upon the actuarial value of fund assets and application of required actuarial assumptions and methodologies. Failure of the employer to remit the required contributions can result in withholding of certain grants owed by the State of Illinois.

Note: Benefits shown are for employees hired prior to January 1, 2011 (Tier 1 employees), the effective date for P.A. 96-1495. See P.A. 96-1495 in Section I for a summary of benefits for employees hired after January 1, 2011 (Tier 2 employees).

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CHART 25
FIREMEN'S ANNUITY & BENEFIT FUND OF CHICAGO
Active Employees

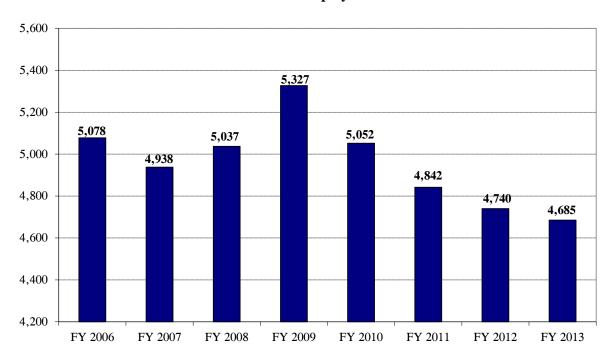


CHART 26
FIREMEN'S ANNUITY & BENEFIT FUND OF CHICAGO
Employee Annuitants

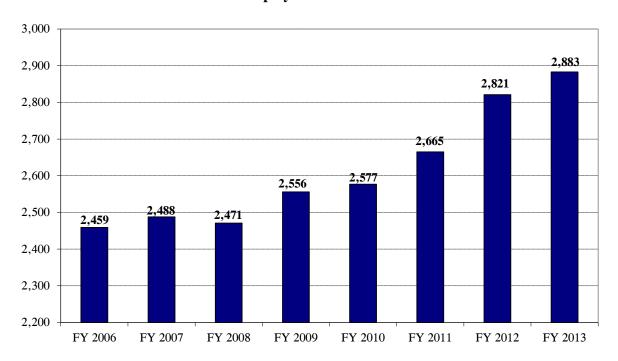


CHART 27

FIREMEN'S ANNUITY & BENEFIT FUND OF CHICAGO
Average Employee Salaries

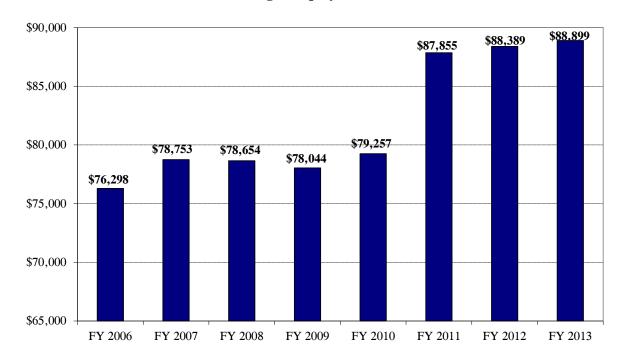
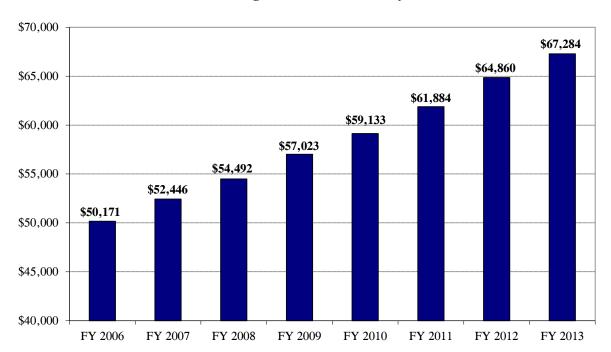


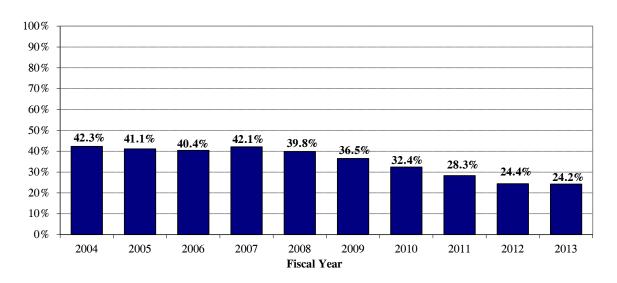
CHART 28

FIREMEN'S ANNUITY & BENEFIT FUND OF CHICAGO

Average Retirement Annuity



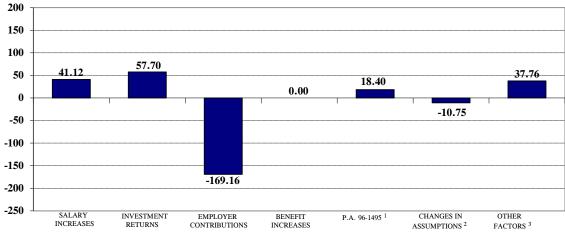
#### FIREMEN'S ANNUITY & BENEFIT FUND OF CHICAGO **Funded Ratio** FY 2004 - FY 2013



#### **CHART 30**

#### FIREMEN'S ANNUITY & BENEFIT FUND OF CHICAGO **Change in Unfunded Liabilities** FY 2013 (\$ in Millions)

TOTAL DECREASE EQUALS \$24.93 MIL

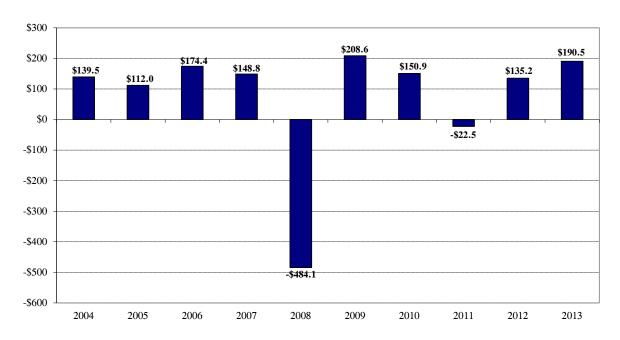


<sup>&</sup>lt;sup>1</sup> P.A. 96-1495 was the Two Tier Police/Fire Act of 2010, and the bill required the Firemen's Annuity and Benefit Fund of Chicago to reach a 90% funded ratio by FY 2040 and made various other changes that can be found in Section I. This column reflects the effect of the Funding Method Change and the Asset Change (Smoothing).

<sup>&</sup>lt;sup>2</sup> Changes in Assumptions are based on an actuarial experience study that covered the period 2003-2010, in which the pension fund adopted new assumptions which included mortality tables, rates of retirement, and other Demographic Assumptions.

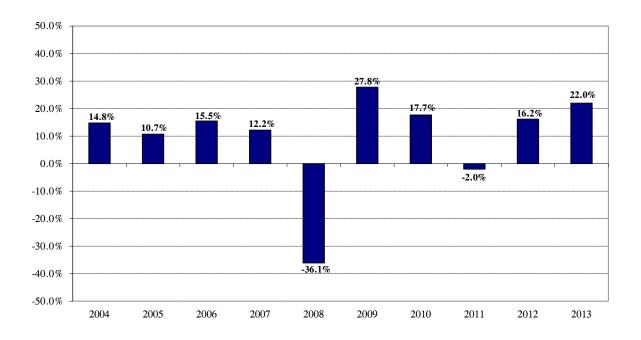
<sup>&</sup>lt;sup>3</sup> Other Factors include \$37.42 Million in gains from Plan Provision Changes due to the elimination of healthcare supplements after December 31, 2016, due to the expiration of the Korshak Consent Decree.

#### FIREMEN'S ANNUITY & BENEFIT FUND OF CHICAGO Investment Income FY 2004 - FY 2013 Actuarially Assumed Rate of Return: 8.00% (\$ in Millions)



#### **CHART 32**

#### FIREMEN'S ANNUITY & BENEFIT FUND OF CHICAGO Rate of Return Earned FY 2004 - FY 2013 Actuarially Assumed Rate of Return: 8.00%



FIREMEN'S ANNUITY & BENEFIT FUND OF CHICAGO

TABLE 9

System Experience, FY 2004 - FY 2013 (\$ in Millions)

Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2013	416.5	4,136.4	991.2	3,145.2	24.2%
2012	419.0	4,066.3	993.3	3,073.0	24.4%
2011	425.4	3,898.9	1,101.7	2,797.2	28.3%
2010	400.4	3,703.2	1,198.1	2,505.1	32.4%
2009	400.9	3,476.8	1,269.2	2,207.6	36.5%
2008	396.2	3,338.6	1,335.7	2,002.9	39.8%
2007	389.1	3,263.0	1,375.0	1,888.0	42.1%
2006	387.4	3,133.1	1,264.5	1,868.6	40.4%
2005	341.3	2,927.2	1,203.7	1,723.5	41.1%
2004	334.4	2,793.5	1,182.6	1,610.9	42.3%

NOTE: The above FY 2004 - FY 2013 figures include healthcare assets/liabilities.

TABLE 10

FIREMEN'S ANNUITY & BENEFIT FUND OF CHICAGO Changes in Net Assets (\$ in Millions)										
Fiscal Years	2013	2012	2011	2010	2009	2008	2007	2006		
Additions to Assets										
Employer	106.2	84.1	85.5	83.6	91.8	83.7	74.3	79.0		
Employees	42.5	53.3	51.9	41.7	41.6	40.5	41.1	44.2		
Net Investment Income	190.5	135.2	-22.4	150.9	208.6	-484.1	148.8	174.4		
Other	-0.1	3.5	0.0	0.0	0.0	0.1	0.2	0.1		
Total Asset Additions (A)	339.2	276.1	115.0	276.2	342.0	-359.8	264.4	297.7		
Deductions from Assets										
Benefits	249.6	231.2	221.5	215.8	199.0	190.0	181.6	176.6		
Refunds	2.2	2.6	2.1	1.8	2.1	2.7	1.7	1.6		
Rebates	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Administrative Expenses	3.1	2.5	2.5	3.1	3.0	2.9	3.1	2.7		
Other	0.0	1.1	1.2	1.1	0.4	0.0	0.0	0.0		
Total Asset Deductions (B)	254.9	237.4	227.3	221.8	204.5	195.6	186.4	180.9		
Change in Net Assets (A-B=C)	84.3	38.7	-112.3	54.4	137.5	-555.4	78.0	116.8		

Table 11 below contains funding projections provided to CGFA by the Fireman's Annuity and Benefit Fund of Chicago based upon the December 31, 2013 actuarial valuation.

**TABLE 11** 

	Firemen's Annuity and Benefit Fund of Chicago Actuarial Valuation Projection Results as of December 31, 2013 (\$ in Millions)											
Fiscal Year	Capped Payroll	Total City Contribution	Total City Contribution As % of Payroll	Total Employee Contribution	Accrued Liability	Actuarial Value of Assets	Unfunded Liabilities	Funded Ratio				
2013	416.5	106.2	25.5%	42.5	4,089.2	991.2	3,098.0	24.2%				
2014	428.8	112.2	26.2%	38.9	4,225.1	984.8	3,240.3	23.3%				
2015	441.5	246.1	55.7%	41.2	4,360.5	1,094.5	3,266.0	25.1%				
2016	454.2	253.2	55.7%	42.4	4,494.0	1,205.6	3,288.4	26.8%				
2017	467.2	260.4	55.7%	43.7	4,627.4	1,308.9	3,318.5	28.3%				
2018	481.3	268.3	55.7%	45.0	4,756.6	1,390.9	3,365.7	29.2%				
2019	496.4	276.7	55.7%	46.4	4,880.7	1,474.7	3,406.1	30.2%				
2020	512.0	285.4	55.7%	47.8	4,999.5	1,560.7	3,438.8	31.2%				
2021	527.6	294.1	55.7%	49.3	5,113.5	1,650.1	3,463.4	32.3%				
2022	544.2	303.4	55.7%	50.8	5,222.8	1,744.2	3,478.6	33.4%				
2023	563.0	313.9	55.7%	52.4	5,327.6	1,845.0	3,482.6	34.6%				
2024	582.7	324.8	55.7%	54.2	5,427.3	1,953.8	3,473.5	36.0%				
2025	602.9	336.1	55.7%	56.1	5,522.2	2,072.1	3,450.0	37.5%				
2026	623.7	347.7	55.7%	58.0	5,612.7	2,201.7	3,411.0	39.2%				
2027	644.7	359.4	55.7%	60.0	5,698.4	2,345.8	3,352.6	41.2%				
2028	664.3	370.3	55.7%	62.0	5,778.1	2,506.4	3,271.8	43.4%				
2029	680.4	379.3	55.7%	63.8	5,852.8	2,683.0	3,169.7	45.8%				
2030	694.9	387.4	55.7%	65.3	5,924.0	2,875.4	3,048.5	48.5%				
2031	706.5	393.8	55.7%	66.6	5,990.9	3,082.7	2,908.2	51.5%				
2032	717.1	399.8	55.7%	67.7	6,053.7	3,305.5	2,748.2	54.6%				
2033	727.8	405.7	55.7%	68.7	6,112.7	3,545.3	2,567.4	58.0%				
2034	736.6	410.6	55.7%	69.6	6,169.7	3,804.3	2,365.4	61.7%				
2035	744.8	415.2	55.7%	70.4	6,226.1	4,084.3	2,141.8	65.6%				
2036	751.9	419.2	55.7%	71.2	6,282.3	4,386.7	1,895.6	69.8%				
2037	759.8	423.5	55.7%	71.8	6,340.8	4,715.3	1,625.5	74.4%				
2038	768.1	428.2	55.7%	72.5	6,403.3	5,073.5	1,329.9	79.2%				
2039	776.7	433.0	55.7%	73.2	6,471.9	5,464.9	1,007.0	84.4%				
2040	785.8	438.1	55.7%	74.0	6,546.0	5,891.4	654.6	90.0%				
2041	794.9	34.3	4.3%	74.9	6,625.2	5,962.7	662.5	90.0%				

TABLE 12

#### Firemen's Annuity and Benefit Fund of Chicago Projected Normal Cost as of December 31, 2013 (\$ in Millions)

Fiscal Year	Employer's Normal Cost	Employer's Normal Cost as a % of Payroll	Employee Contributions	Employee Contributions as a % of Payroll	Total Normal Cost	Total Normal Cost as a % of Payroll
2014	31.1	7.5%	42.5	10.2%	73.6	17.7%
2015	39.7	9.2%	38.9	9.1%	78.6	18.3%
2016	39.1	8.9%	41.2	9.3%	80.3	18.2%
2017	39.5	8.7%	42.4	9.3%	82.0	18.0%
2018	39.9	8.5%	43.7	9.3%	83.5	17.9%
2019	40.0	8.3%	45.0	9.3%	85.0	17.7%
2020	40.0	8.1%	46.4	9.3%	86.4	17.4%
2021	39.9	7.8%	47.8	9.3%	87.8	17.1%
2022	39.9	7.6%	49.3	9.3%	89.2	16.9%
2023	39.9	7.3%	50.8	9.3%	90.7	16.7%
2024	39.9	7.1%	52.4	9.3%	92.3	16.4%
2025	39.6	6.8%	54.2	9.3%	93.8	16.1%
2026	39.3	6.5%	56.1	9.3%	95.4	15.8%
2027	39.1	6.3%	58.0	9.3%	97.1	15.6%
2028	39.1	6.1%	60.0	9.3%	99.1	15.4%
2029	39.2	5.9%	62.0	9.3%	101.2	15.2%
2030	39.3	5.8%	63.8	9.4%	103.1	15.1%
2031	39.2	5.6%	65.3	9.4%	104.5	15.0%
2032	38.9	5.5%	66.6	9.4%	105.5	14.9%
2033	38.9	5.4%	67.7	9.4%	106.6	14.9%
2034	38.9	5.3%	68.7	9.4%	107.6	14.8%
2035	39.0	5.3%	69.6	9.5%	108.7	14.8%
2036	39.6	5.3%	70.4	9.5%	110.0	14.8%
2037	40.2	5.3%	71.2	9.5%	111.3	14.8%
2038	41.2	5.4%	71.8	9.4%	113.0	14.9%
2039	42.3	5.5%	72.5	9.4%	114.8	14.9%
2040	43.5	5.6%	73.2	9.4%	116.8	15.0%
2041	45.0	5.7%	74.0	9.4%	119.1	15.1%

## VI. Illinois Municipal Retirement Fund

- Plan Summary
- Active Employees
- Employee Annuitants
- Average Salaries
- Average Retirement Annuity
- Funded Ratios
- Change in Unfunded Liabilities
- Investment Income
- Investment Rates of Return
- Systems Experience
- Changes in Net Assets



Note: All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of December 31, 2013.

### Illinois Municipal Retirement Fund – Regular Formula Tier 1 Plan Summary

#### Retirement Age

- Age 60 with 8 or more years of service.
- Age 55 with 35 or more years of service.

#### Retirement Formula

- 1.67% of final average salary for each of the first 15 years of service, plus
- 2.0% of final average salary for each year of service in excess of 15.

#### **Maximum Annuity**

• 75% of final average salary.

#### Salary Used to Calculate Pension

Average of the 4 highest consecutive years within the final 10 years.

#### Annual COLA

■ 3% non-compounded.

#### **Employee Contributions**

• 4.5% of salary. In addition, IMRF members contribute to Social Security.

#### **Employer Contributions**

Each IMRF employer makes contributions to individual accounts which, when combined with member contributions and investment income, will be sufficient to provide future benefits for its own employees. In 2009, IMRF employers contributed, on average, 9.27% of payroll to fund regular IMRF benefits. In addition, they contribute to Social Security.

Note: Benefits shown are for employees hired prior to January 1, 2011 (Tier 1 employees), the effective date of P. A. 96-0889. See P. A. 96-0889 in Section I for a summary of benefits for employees hired after January 1, 2011 (Tier 2 employees).

## Illinois Municipal Retirement Fund Elected County Officers Plan (ECO) Tier 1 Plan Summary

#### Retirement Age

• Age 55 with 8 or more years of service.

#### Retirement Formula

- 3% of final earnings for the first 8 years of service, plus
- 4% of final earnings for each of the next 4 years of service, plus
- 5% of final earnings for each year over 12 years of service.

#### Maximum Annuity

■ 80% of final average salary.

#### Salary Used to Calculate Pension

• Annual salary rate at the date of termination or retirement.

#### Annual COLA

■ 3% non-compounded.

#### **Employee Contributions**

■ 7.5% of salary.

#### **Employer Contributions**

Each IMRF employer makes contributions to individual accounts which, when combined with member contributions and investment income, will be sufficient to provide future benefits for its own employees. In 2009, IMRF employers contributed, on average, 42.77% of payroll to fund ECO benefits.

## Illinois Municipal Retirement Fund Sheriff's Law Enforcement Personnel Plan (SLEP) Plan Summary

#### Retirement Age

Age 50 with 20 or more years of service.

#### Retirement Formula

• 2.5% of final rate of earnings for each year of service.

#### Maximum Annuity

■ 80% of final average salary.

#### Salary Used to Calculate Pension

• Average of the 4 highest consecutive years within the final 10 years.

#### Annual COLA

■ 3% non-compounded.

#### **Employee Contributions**

■ 7.5% of salary.

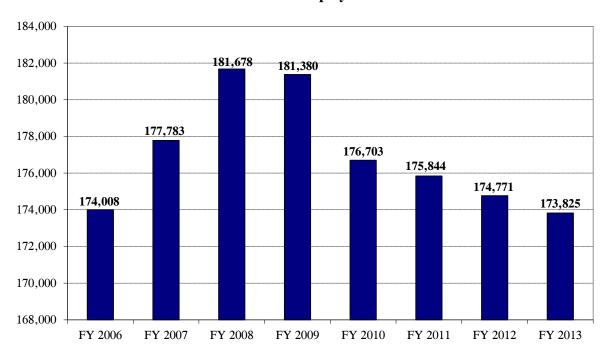
#### **Employer Contributions**

Each IMRF employer makes contributions to individual accounts which, when combined with member contributions and investment income, will be sufficient to provide future benefits for its own employees. In 2009, IMRF employers contributed, on average, 18.65% of payroll to fund SLEP benefits.

Note: Benefits shown are for employees hired prior to January 1, 2011, the effective date of P.A. 96-0889 and P.A. 06-1495. See P.A. 96-0889 & P.A. 96-1495 in Section I for a summary of benefits for employees hired after January 1, 2011 (Tier 2 employees).

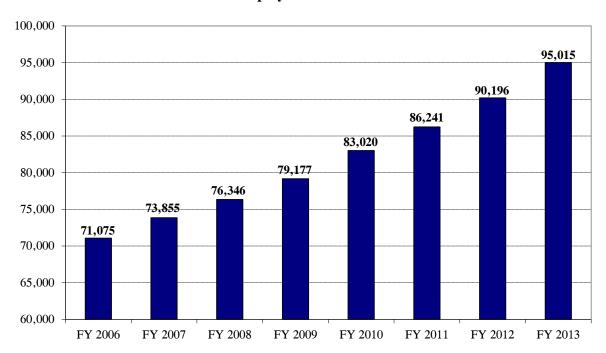
**CHART 33** 

## ILLINOIS MUNICIPAL RETIREMENT FUND Active Employees



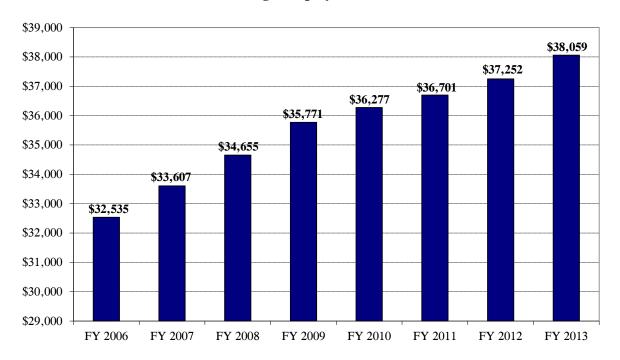
**CHART 34** 

## ILLINOIS MUNICIPAL RETIREMENT FUND Employee Annuitants



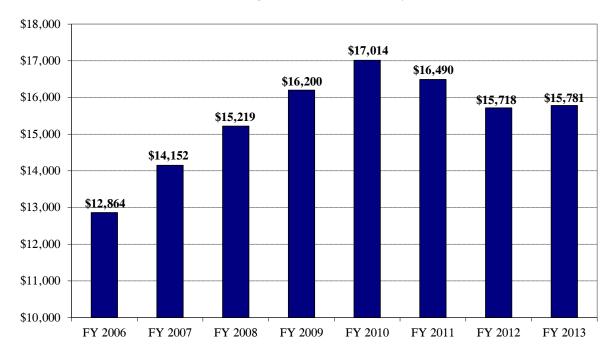
**CHART 35** 

#### ILLINOIS MUNICIPAL RETIREMENT FUND Average Employee Salaries

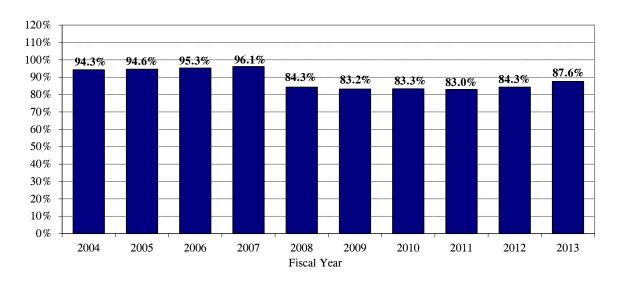


**CHART 36** 

# ILLINOIS MUNICIPAL RETIREMENT FUND Average Retirement Annuity



#### ILLINOIS MUNICIPAL RETIREMENT FUND Funded Ratio FY 2004 - FY 2013

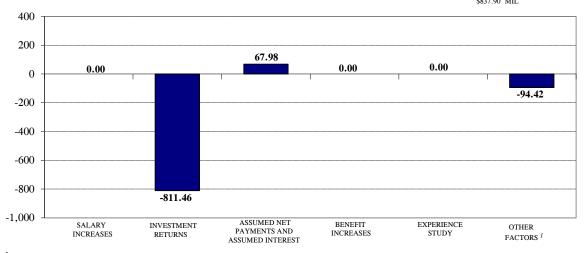


#### **CHART 38**

#### ILLINOIS MUNICIPAL RETIREMENT FUND Change in Unfunded Liabilities FY 2013

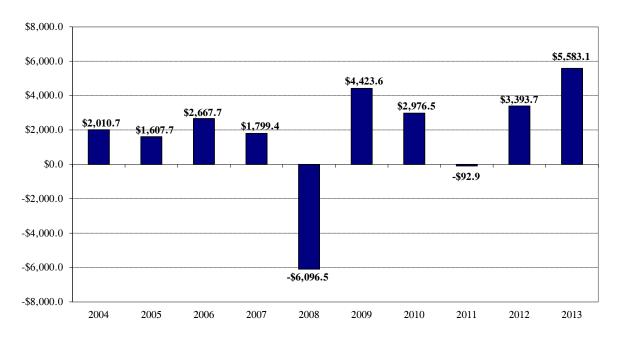
(\$ in Millions)

TOTAL DECREASE EQUALS
\$837.90 MIL



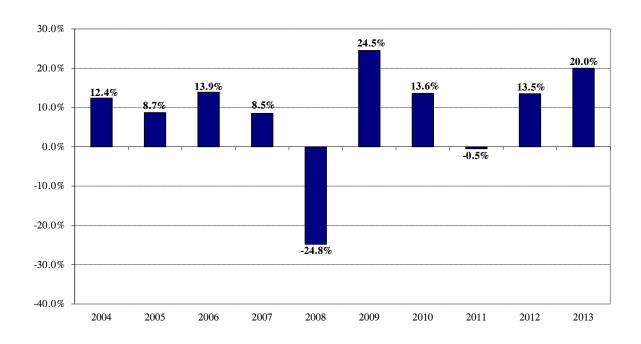
<sup>&</sup>lt;sup>1</sup> Other Factors include gains resulting from retirements, terminations, and rates of mortality.

#### ILLINOIS MUNICIPAL RETIREMENT FUND Investment Income FY 2004 - FY 2013 Actuarially Assumed Rate of Return: 7.50% (\$ in Millions)



#### **CHART 40**

#### ILLINOIS MUNICIPAL RETIREMENT FUND Rate of Return FY 2004 - FY 2013 Actuarially Assumed Rate of Return: 7.50%



**TABLE 13** 

#### ILLINOIS MUNICIPAL RETIREMENT FUND

System Experience, FY 2004 - FY 2013 (\$ in Millions)

Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2013	6,602.5	34,356.6	30,083.0	4,273.5	87.6%
2012	6,496.1	32,603.2	27,491.8	5,111.4	84.3%
2011	6,431.3	30,962.8	25,711.3	5,251.5	83.0%
2010	6,391.2	29,129.2	24,251.1	4,878.1	83.3%
2009	6,461.7	27,345.1	22,754.8	4,590.3	83.2%
2008	6,259.3	25,611.2	21,601.1	4,010.1	84.3%
2007	5,931.4	24,221.5	23,274.4	947.1	96.1%
2006	5,630.7	22,488.2	21,427.1	1,061.1	95.3%
2005	5,374.6	20,815.1	19,698.4	1,108.7	94.6%
2004	5,161.1	19,424.7	18,316.0	1,108.7	94.3%

TABLE 14

IL	ILLINOIS MUNICIPAL RETIREMENT FUND  Changes in Net Assets (\$ in Millions)										
Fiscal Years	2013	2012	2011	2010	2009	2008	2007	2006			
Additions to Assets											
Employer	931.0	883.2	800.8	770.2	660.4	631.1	600.8	602.8			
Employees	338.9	330.8	327.7	324.9	324.1	314.0	296.7	281.0			
Net Investment Income	5,583.1	3,393.7	-92.9	2,976.5	4,423.6	-6,096.5	1,799.4	2,667.7			
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Total Asset Additions (A)	6,853.0	4,607.7	1,035.6	4,071.6	5,408.0	-5,151.4	2,696.9	3,551.5			
Deductions from Assets											
Benefits	1,503.4	1,389.8	1,284.4	1,178.0	1,077.8	997.5	924.0	856.2			
Refunds	36.9	34.1	32.9	32.2	27.4	31.9	36.2	40.1			
Rebates	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Administrative Expenses	25.5	24.5	23.1	22.3	22.0	20.7	20.8	20.3			
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Total Asset Deductions (B)	1,565.8	1,448.4	1,340.4	1,232.5	1,127.2	1,050.1	981.0	916.6			
Change in Net Assets (A-B=C)	5,287.2	3,159.3	-304.8	2,839.1	4,280.8	-6,201.4	1,715.9	2,634.9			

# VII. Laborers' Annuity and Benefit Fund of Chicago

- Plan Summary
- Active Employees
- Employee Annuitants
- Average Salaries
- Average Retirement Annuity
- Funded Ratios
- Change in Unfunded Liabilities
- Investment Income
- Investment Rates of Return
- Systems Experience
- Changes in Net Assets
- System Projections
- Normal Cost Projections



Note: All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of December 31, 2013.

### Laborers' Annuity and Benefit Fund of Chicago Tier 1 Plan Summary (as modified by P.A. 98-0641)

#### Retirement Age

- Age 60 with 10 years of service.
- Age 55 with 20 years of service.
- Age 50 with at least 30 years of service.
- Age 55 with 10 years of service (money purchase).

#### Retirement Formula

• 2.4% of final average salary for each year of service.

#### Maximum Annuity

• 80% of final average salary.

#### Salary Used to Calculate Pension

• Average of 4 highest consecutive years within final 10 years of service.

#### Annual COLA

■ The lesser of 3% simple or ½ the CPI-U.

#### **Employee Contributions**

- Currently 8.5% of salary.
- Pursuant to P.A. 98-0461: Beginning January 1, 2015: employee contributions will increase to 9% and will increase by .5% per year, settling at 11% in 2019. This applies to all active employees.

#### **Required Employer Contributions**

Currently, the City of Chicago is required to contribute an amount equal to the employee contributions to the fund two years prior to the year in which the tax is levied, multiplied by 1.00. Beginning in 2016, this multiplier will increase to 1.6 and will increase by .3 per year, settling at 2.8 in 2020.

Note: Benefits shown are for employees hired prior to January 1, 2011 (Tier 1 employees), the effective date of P.A. 96-0889. See P.A. 95-0899 in Section I for a summary of benefits for employees hired after January 1, 2011 (Tier 2 employees).

CHART 41

LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO
Active Employees

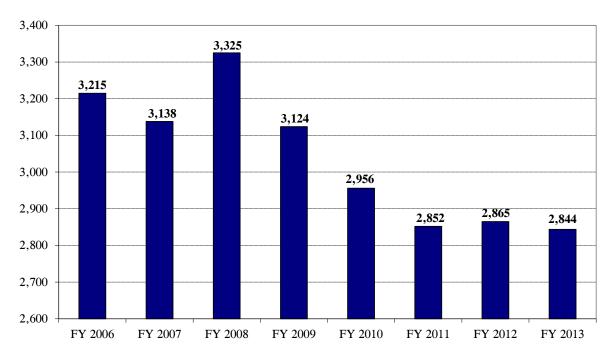


CHART 42

LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO
Employee Annuitants

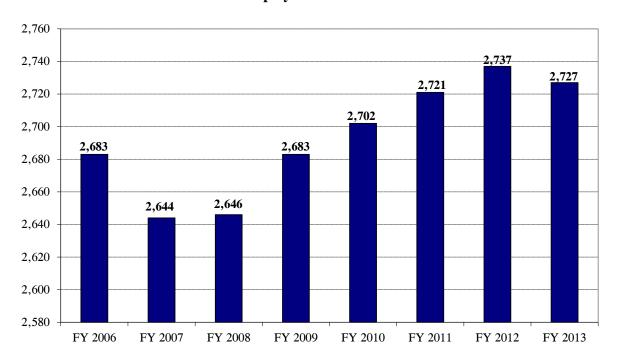


CHART 43

LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO
Average Employee Salaries

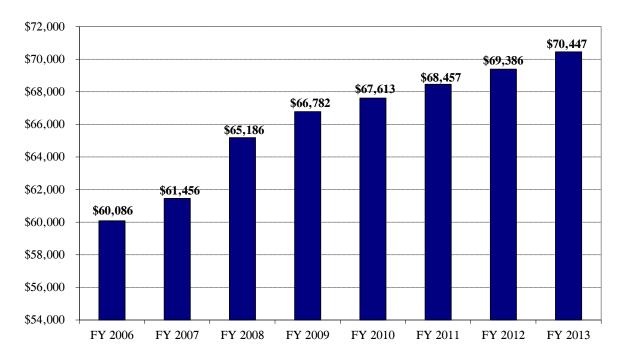
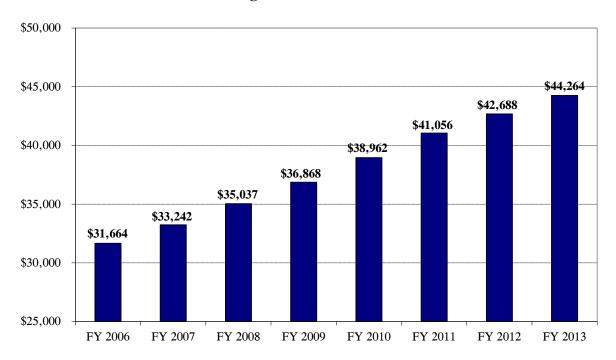
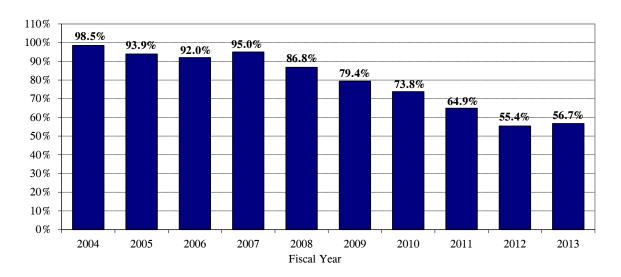


CHART 44

LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO
Average Retirement Annuities



#### LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO Funded Ratio FY 2004 - FY 2013



#### **CHART 46**

#### LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO Change in Unfunded Liabilities

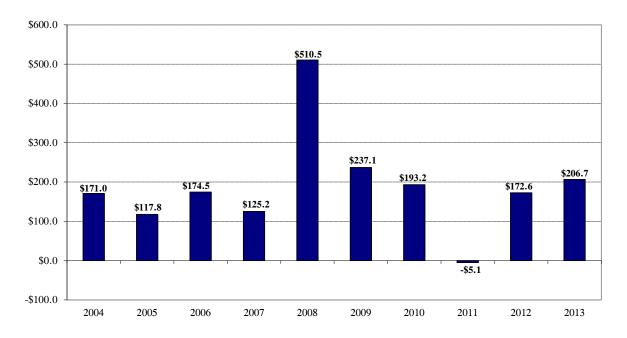
in Unfunded Liabilities FY 2013 (\$ in Millions)

TOTAL DECREASE EQUALS \$22.62 MIL 200 150 90.01 100 50 0 0 -4.57 -12.86 -30.35 -50 -64.85 -100 INVESTMENT RETURNS OTHER SALARY INCREASES EMPLOYER CONTRIBUTIONS P.A. 98-0043 <sup>1</sup> CHANGES IN ASSUMPTIONS FACTORS 2

<sup>&</sup>lt;sup>1</sup> P.A. 98-0043 assumes that payment of the health insurance supplement terminates as of December 31, 2016. This change in the Fund provisions decreased actuarial liabilities by \$30.35 Million.

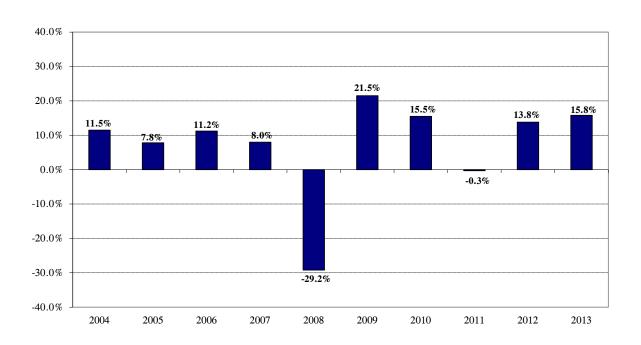
<sup>&</sup>lt;sup>2</sup> Other Factors include gains resulting from retirements, terminations, and rates of mortality.

#### LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO Investment Income FY 2004 - FY 2013 Actuarially Assumed Rate of Return:7.50% (\$ in Millions)



#### **CHART 48**

#### LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO Rate of Return FY 2004 - FY 2013 Actuarially Assumed Rate of Return:7.50%



LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO

**TABLE 15** 

System Experience, FY 2004 - FY 2013 (\$ in Millions)

Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2013	200.4	2,390.6	1,354.3	1,036.3	56.7%
2012	198.8	2,374.8	1,315.9	1,058.9	55.4%
2011	195.2	2,191.2	1,422.4	768.8	64.9%
2010	199.9	2,071.4	1,529.4	542.0	73.8%
2009	208.6	2,017.5	1,601.4	416.1	79.4%
2008	216.7	1,957.4	1,698.4	259.0	86.8%
2007	192.8	1,849.7	1,757.7	92.0	95.0%
2006	193.2	1,809.3	1,664.1	145.2	92.0%
2005	182.8	1,742.3	1,635.6	106.7	93.9%
2004	171.5	1,674.6	1,650.0	24.6	98.5%

NOTE: The above FY 2004 - FY 2013 figures include healthcare assets/liabilities.

TABLE 16

LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO Changes in Net Assets (\$ in Millions)										
Fiscal Years	2013	2012	2011	2010	2009	2008	2007	2006		
Additions to Assets										
Employer	14.1	14.4	15.3	18.0	17.2	17.6	15.5	0.1		
Employees	16.4	16.6	16.1	16.3	17.5	19.4	18.4	18.8		
Net Investment Income	207.3	172.6	-5.1	193.2	237.1	-510.5	125.2	174.5		
Other	0.0	0.8	0.6	0.0	0.0	0.0	0.0	0.0		
Total Asset Additions (A)	237.8	204.4	26.9	227.5	271.8	-473.5	159.1	193.4		
Deductions from Assets										
Benefits	144.3	139.7	133.5	127.0	121.0	113.7	108.8	106.9		
Refunds	0.0	2.6	3.0	2.3	2.8	3.5	3.7	3.1		
Rebates	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Administrative Expenses	4.1	4.7	4.0	3.9	3.7	3.6	3.4	2.8		
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total Asset Deductions (B)	151.3	147.0	140.5	133.2	127.5	120.8	115.9	112.8		
Change in Net Assets (A-B=C)	86.5	57.4	-113.6	94.3	144.3	-594.3	43.2	80.6		

Table 17 below contains funding projections provided to CGFA by the Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago based upon the December 31, 2013 actuarial valuation. This table reflects projections based on P.A. 98-0641.

**TABLE 17** 

	Laborers' Annuity and Benefit Fund of Chicago Actuarial Valuation Projection Results as of December 31, 2013 Projections based on P.A. 98-0641 (\$ in Millions)										
Fiscal Year	Capped Payroll	Total Employer Contribution	Employer Contribution As % of Payroll	Total Employee Contribution	Total Actuarial Liability	Actuarial Value of Assets	Unfunded Actuarial Liability	Funded Ratio			
2013	200.4	14.1	7.0%	16.4	2,100.4	1,457.7	642.7	69.4%			
2014	204.7	14.0	6.9%	17.3	2,134.4	1,436.9	697.5	67.3%			
2015	210.5	14.5	6.9%	18.8	2,166.1	1,411.0	755.0	65.1%			
2016	217.1	24.0	11.1%	20.4	2,196.0	1,390.2	805.8	63.3%			
2017	224.3	30.5	13.6%	22.1	2,229.4	1,376.5	853.0	61.7%			
2018	231.9	38.2	16.4%	24.0	2,262.0	1,367.4	894.6	60.5%			
2019	240.0	47.1	19.6%	26.0	2,295.4	1,366.4	929.0	59.5%			
2020	248.4	57.2	23.0%	26.9	2,327.3	1,371.8	955.4	58.9%			
2021	257.2	67.7	26.3%	27.8	2,357.5	1,384.5	973.0	58.7%			
2022	266.4	69.6	26.1%	28.8	2,386.0	1,396.1	990.0	58.5%			
2023	275.8	71.5	25.9%	29.8	2,412.3	1,406.1	1,006.2	58.3%			
2024	285.6	73.5	25.7%	30.9	2,437.0	1,415.4	1,021.6	58.1%			
2025	295.8	75.6	25.6%	32.0	2,461.2	1,425.3	1,035.9	57.9%			
2026	306.1	77.7	25.4%	33.1	2,483.3	1,434.2	1,049.1	57.8%			
2027	316.7	79.8	25.2%	34.3	2,502.7	1,441.7	1,061.1	57.6%			
2028	327.7	82.0	25.0%	35.5	2,519.4	1,447.8	1,071.6	57.5%			
2029	338.6	84.1	24.8%	36.7	2,533.3	1,452.7	1,080.6	57.3%			
2029	349.3	86.2	24.7%	37.9	2,533.3	1,456.3	1,088.0	57.3%			
2030	360.3	88.4	24.7%	39.1	2,553.1	1,459.6	1,088.0	57.2%			
2031		90.6	24.3%	40.4	2,560.3		1,093.0				
	371.4					1,463.1	,	57.1%			
2033	382.5	92.8	24.3%	41.6	2,566.5	1,467.7	1,098.8	57.2%			
2034	392.8	94.9	24.2%	42.9	2,572.5	1,474.2	1,098.3	57.3%			
2035	402.3	96.8	24.1%	44.0	2,578.9	1,483.1	1,095.8	57.5%			
2036	411.4	98.6	24.0%	45.1	2,586.2	1,495.1	1,091.1	57.8%			
2037	420.3	100.4	23.9%	46.1	2,595.0	1,510.9	1,084.2	58.2%			
2038	428.8	102.1	23.8%	47.1	2,605.6	1,530.7	1,074.9	58.7%			
2039	437.0	103.8	23.7%	48.0	2,618.1	1,554.9	1,063.2	59.4%			
2040	445.2	105.5	23.7%	49.0	2,633.4	1,584.5	1,048.9	60.2%			
2041	453.4	107.2	23.6%	49.9	2,651.9	1,620.1	1,031.8	61.1%			
2042	461.6	109.0	23.6%	50.8	2,674.1	1,662.5	1,011.6	62.2%			
2043	470.0	110.8	23.6%	51.7	2,700.4	1,712.2	988.2	63.4%			
2044	478.3	112.6	23.5%	52.7	2,731.0	1,769.8	961.2	64.8%			
2045	486.6	114.4	23.5%	53.6	2,766.1	1,835.7	930.4	66.4%			
2046	495.1	116.3	23.5%	54.5	2,805.7	1,910.1	895.6	68.1%			
2047	503.6	118.3	23.5%	55.5	2,849.9	1,993.6	856.3	70.0%			
2048	512.3	120.2	23.5%	56.4	2,898.6	2,086.4	812.2	72.0%			
2049	521.1	122.3	23.5%	57.4	2,951.7	2,188.7	763.0	74.2%			
2050	530.0	124.3	23.5%	58.4	3,009.0	2,300.8	708.1	76.5%			
2051	539.0	126.5	23.5%	59.4	3,069.7	2,422.4	647.3	78.9%			
2052	548.2	128.7	23.5%	60.4	3,133.4	2,553.4	580.0	81.5%			
2053	557.5	130.9	23.5%	61.4	3,199.6	2,694.0	505.6	84.2%			
2054	566.6	133.1	23.5%	62.5	3,268.2	2,844.4	423.8	87.0%			
2055	575.7	135.3	23.5%	63.5	3,338.5	3,004.7	333.9	90.0%			
2056	584.8	42.9	7.3%	57.2	3,410.3	3,069.3	341.0	90.0%			
2057	594.0	43.8	7.4%	58.1	3,483.3	3,135.0	348.3	90.0%			
2058	603.3	44.7	7.4%	59.0	3,557.4	3,201.6	355.7	90.0%			
2059	612.7	45.7	7.5%	59.9	3,632.2	3,269.0	363.2	90.0%			
2060	622.1	46.7	7.5%	60.8	3,707.5	3,336.8	370.8	90.0%			

**TABLE 18** 

#### Laborers' Annuity and Benefit Fund of Chicago Projected Normal Cost as of December 31, 2013 (\$ in Millions)

		Employer's		Employee		Total Normal
Fiscal	Employer's	Normal Cost	Employee	Contributions	Total Normal	Cost as a % of
Year	Normal Cost	as a % of	Contributions	as a % of	Cost	Payroll
2012	22.0	Payroll	16.4	Payroll	20.2	10.6%
2013	22.9	11.4%	16.4	8.2%	39.3	19.6%
2014	19.2	9.4%	17.3	8.5%	36.5	17.8%
2015	18.1	8.6%	18.8	8.9%	36.9	17.5%
2016	17.1	7.9%	20.4	9.4%	37.5	17.3%
2017	16.1	7.2%	22.1	9.9%	38.3	17.1%
2018	15.1	6.5%	24.0	10.3%	39.1	16.9%
2019	14.0	5.8%	26.0	10.8%	40.0	16.6%
2020	14.0	5.6%	26.9	10.8%	40.9	16.5%
2021	14.0	5.4%	27.8	10.8%	41.8	16.2%
2022	13.9	5.2%	28.8	10.8%	42.7	16.0%
2023	13.9	5.0%	29.8	10.8%	43.8	15.9%
2024	13.9	4.9%	30.9	10.8%	44.8	15.7%
2025	13.8	4.7%	32.0	10.8%	45.8	15.5%
2026	13.7	4.5%	33.1	10.8%	46.9	15.3%
2027	13.6	4.3%	34.3	10.8%	47.9	15.1%
2028	13.5	4.1%	35.5	10.8%	49.0	15.0%
2029	13.4	4.0%	36.7	10.8%	50.1	14.8%
2029	13.4	3.8%	37.9	10.8 %	51.2	14.6%
2031	13.1	3.6%	39.1	10.9%	52.3	14.5%
2032	13.0	3.5%	40.4	10.9%	53.4	14.4%
2033	12.9	3.4%	41.6	10.9%	54.5	14.3%
2034	12.8	3.3%	42.9	10.9%	55.6	14.2%
2035	12.7	3.2%	44.0	10.9%	56.7	14.1%
2036	12.6	3.1%	45.1	11.0%	57.7	14.0%
2037	12.6	3.0%	46.1	11.0%	58.7	14.0%
2038	12.5	2.9%	47.1	11.0%	59.6	13.9%
2039	12.5	2.9%	48.0	11.0%	60.5	13.8%
2040	12.5	2.8%	49.0	11.0%	61.4	13.8%
2041	12.5	2.7%	49.9	11.0%	62.3	13.8%
2042	12.5	2.7%	50.8	11.0%	63.3	13.7%
2043	12.6	2.7%	51.7	11.0%	64.3	13.7%
2044	12.6	2.6%	52.7	11.0%	65.3	13.7%
2045	12.7	2.6%	53.6	11.0%	66.3	13.6%
2046	12.9	2.6%	54.5	11.0%	67.4	13.6%
2047	13.0	2.6%	55.5	11.0%	68.5	13.6%
2048	13.2	2.6%	56.4	11.0%	69.6	13.6%
2049	13.4	2.6%	57.4	11.0%	70.8	13.6%
2050	13.6	2.6%	58.4	11.0%	72.0	13.6%
2051	13.8	2.6%	59.4	11.0%	73.2	13.6%
2052	14.1	2.6%	60.4	11.0%	74.5	13.6%
2053	14.4	2.6%	61.4	11.0%	75.8	13.6%
2054	14.7	2.6%	62.5	11.0%	77.1	13.6%
2055 2056	15.0 22.6	2.6% 3.9%	63.5 57.2	11.0% 9.8%	78.4 79.8	13.6% 13.6%
2057	23.0	3.9%	58.1	9.8%	81.1	13.7%
2058	23.5	3.9%	59.0	9.8%	82.5	13.7%
2059	23.9	3.9%	59.9	9.8%	83.9	13.7%
2060	24.4	3.9%	60.8	9.8%	85.3	13.7%

### VIII. Metropolitan Water Reclamation District Retirement Fund

- Plan Summary
- Active Employees
- Employee Annuitants
- Average Salaries
- Average Retirement Annuity
- Funded Ratios
- Change in Unfunded Liabilities
- Investment Income
- Investment Rates of Return
- Systems Experience
- Changes in Net Assets



Note: All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of December 31, 2013.

## **Metropolitan Water Reclamation District Retirement Fund - Tier 1 Plan Summary**

#### Retirement Age

- Age 60 with 5 years of service.
- Age 50 with 10 years of service (Age 55 if hired after 6/13/97).

#### Retirement Formula

- 2.2% of final average salary for the first 20 years of service, plus
- 2.4% of final average salary for each year in excess of 20.

#### Maximum Annuity

• 80% of final average salary.

#### Salary Used to Calculate Pension

• Any 52 consecutive pay periods within the final 10 years of service.

#### Annual COLA

■ 3% compounded.

#### Employee Contributions (as modified by P.A. 97-0894)

Tier 1 employees currently contribute 11% of their salary toward pension benefits. Beginning on January 1, 2015, the employee contribution rate will increase to 12% of salary, where it will remain until the MWRD pension fund reaches a 90% funded ratio. Upon attainment of a 90% funding ratio, the member contribution rate will revert back to 9%. These changes to the Tier 1 employee contribution rate were made by HB 4513 (P.A. 97-0894), which became effective on August 3rd, 2012. Tier 2 employees contribute 9.0% of salary (unchanged by P.A. 97-0894).

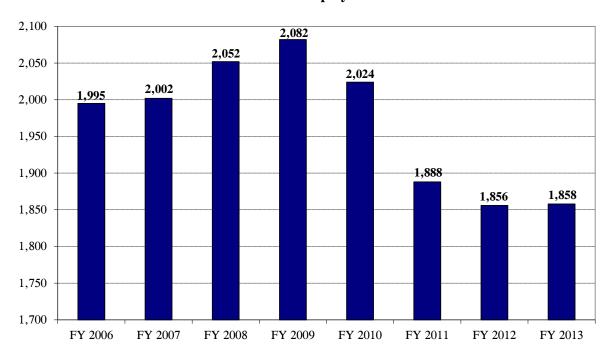
#### Employer Contributions (as modified by P.A. 97-0894)

The District levies a tax annually that is the level percentage of payroll necessary to reach a 90% funding level by FY2050. However, no annual levy shall exceed the total amount of contributions made by employees in the calendar year 2 years prior to the year of the levy, multiplied by 4.19.

Note: Benefits shown on this page are for employees hired prior to January 1, 2011 (Tier 1 employees). Tier 1 and Tier 2 employee contribution rates are shown here so as to distinguish the changes made to Tier 1 contribution rates as a result of P.A. 97-0894. For a summary of benefits for employees hired after January 1, 2011 (Tier 2 employees), see P.A. 96-0889 in Section I.

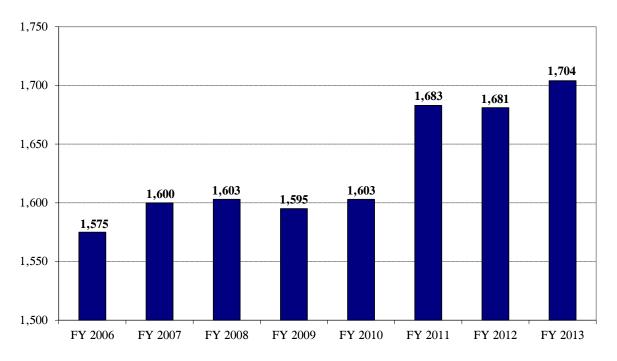
**CHART 49** 

## METROPOLITAN WATER PENSION FUND Active Employees



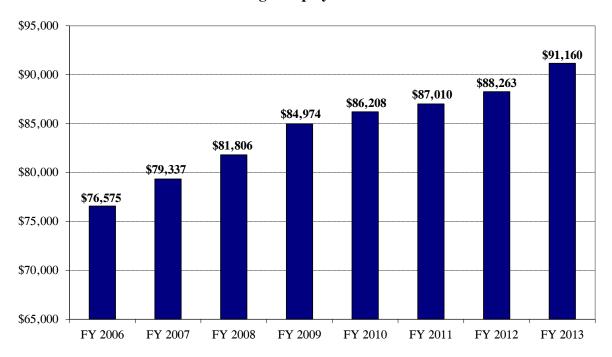
**CHART 50** 

## METROPOLITAN WATER PENSION FUND Employee Annuitants



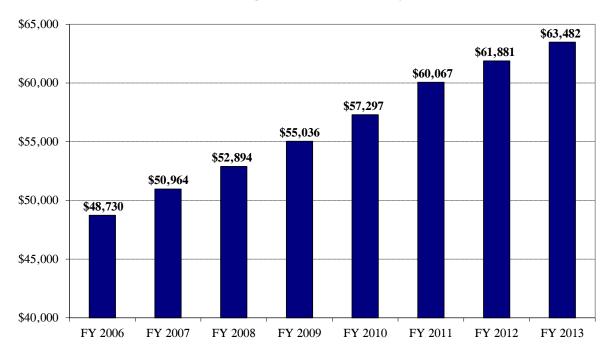
**CHART 51** 

#### METROPOLITAN WATER PENSION FUND Average Employee Salaries

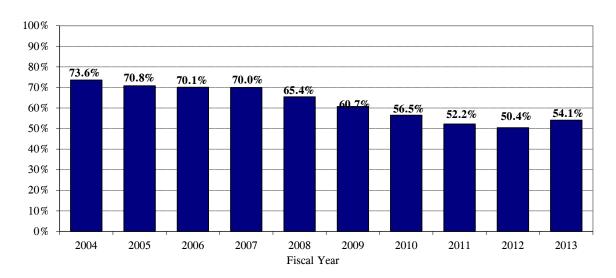


**CHART 52** 

#### METROPOLITAN WATER PENSION FUND Average Retirement Annuity



#### METROPOLITAN WATER PENSION FUND Funded Ratio FY 2004 - FY 2013



#### **CHART 54**

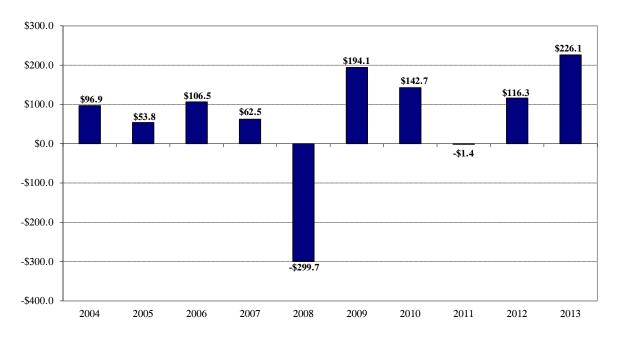
#### METROPOLITAN WATER PENSION FUND

Change in Unfunded Liabilities FY 2013 (\$ in Millions)

TOTAL DECREASE EQUALS

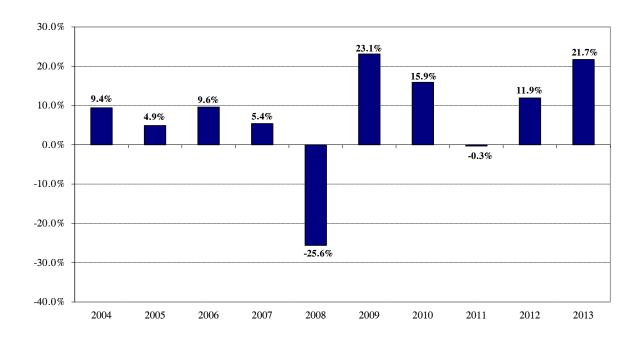
\$53.36 MIL 40 20 3.40 0.00 0.00 0 -1.42 -6.37 -20 -40 -48.96 -60 -80 EMPLOYER CONTRIBUTIONS CHANGES IN ASSUMPTIONS OTHER INVESTMENT SALARY INCREASES BENEFIT FACTORS RETURNS

#### METROPOLITAN WATER PENSION FUND Investment Income FY 2004 - FY 2013 Actuarially Assumed Rate of Return: 7.75% (\$ in Millions)



#### **CHART 56**

#### METROPOLITAN WATER PENSION FUND Rate of Return FY 2004 - FY 2013 Actuarially Assumed Rate of Return: 7.75%



**TABLE 19** 

#### METROPOLITAN WATER PENSION FUND

System Experience, FY 2004 - FY 2013 (\$ in Millions)

Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2013	169.4	2,194.9	1,188.5	1,006.4	54.1%
2012	163.8	2,136.5	1,076.7	1,059.8	50.4%
2011	164.3	2,101.3	1,097.4	1,003.9	52.2%
2010	174.5	2,036.7	1,151.6	885.1	56.5%
2009	176.9	1,939.2	1,177.8	761.4	60.7%
2008	167.9	1,852.3	1,211.8	640.5	65.4%
2007	158.8	1,795.2	1,256.9	538.3	70.0%
2006	152.8	1,724.7	1,209.6	515.1	70.1%
2005	149.2	1,654.2	1,171.8	482.4	70.8%
2004	146.4	1,578.4	1,161.8	416.6	73.6%

TABLE 20

METROPOLITAN WATER PENSION FUND Changes in Net Assets (\$ in Millions)											
Fiscal Years	2013	2012	2011	2010	2009	2008	2007	2006			
Additions to Assets											
Employer	92.9	65.1	37.4	29.9	32.1	33.4	28.0	34.5			
Employees	16.9	14.7	15.0	15.9	15.7	14.8	15.6	15.0			
Net Investment Income	226.1	116.3	-1.4	142.7	194.1	-299.7	62.5	106.5			
Other	0.0	0.0	0.0	0.2	0.0	0.6	0.2	0.0			
Total Asset Additions (A)	335.9	196.1	51.0	188.7	241.9	-251	106.3	156.0			
Deductions from Assets											
Benefits	127.2	122.7	118.1	108.2	103.4	100.1	94.8	89.1			
Refunds	1.1	1.2	2.7	1.4	1.2	1.0	1.2	1.4			
Rebates	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Administrative Expenses	1.4	1.3	1.4	1.3	1.3	1.3	1.5	1.5			
Other	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0			
Total Asset Deductions (B)	129.7	125.2	122.2	110.9	105.9	102.4	97.5	92.0			
Change in Net Assets (A-B=C)	206.2	70.9	-71.2	77.8	136.0	-353.3	8.8	64.0			

# IX. Municipal Employees' Annuity and Benefit Fund of Chicago

- Plan Summary
- Active Employees
- Employee Annuitants
- Average Salaries
- Average Retirement Annuity
- Funded Ratios
- Change in Unfunded Liabilities
- Investment Income
- Investment Rates of Return
- Systems Experience
- Changes in Net Assets



Note: All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of December 31, 2013, but does not reflect the provisions of P.A. 98-0641.

## Municipal Employees' Annuity and Benefit Fund of Chicago - Tier 1 Plan Summary

#### Retirement Age

- Age 60 with 10 years of service.
- Age 55 with 20 years of service.
- Age 50 with at least 30 years of service.
- Age 55 with 10 years of service (money purchase).

#### Retirement Formula

• 2.4% of final average salary for each year of service.

#### Maximum Annuity

80% of final average salary.

#### Salary Used to Calculate Pension

Average of 4 highest consecutive years within final 10 years of service.

#### Annual COLA

■ The lesser of 3% simple or ½ the CPI-U.

#### **Employee Contributions**

- Currently 8.5% of salary.
- Pursuant to P.A. 98-0461: Beginning January 1, 2015: employee contributions will increase to 9% and will increase by .5% per year, settling at 11% in 2019. This applies to all active employees.

#### Required Employer Contributions

The City of Chicago is required to contribute an amount equal to the employee contributions to the fund two years prior to the year in which the tax is levied, multiplied by 1.25. Beginning in 2016, this multiplier will increase to 1.85 and will increase by .3 per year, settling at 3.05 in 2020.

Note: Benefits shown are for employees hired prior to January 1, 2011 (Tier 1 employees), the effective date of P.A. 96-0889. See P.A. 96-0889 in Section I for a summary of benefits for employees hired after January 1, 2011 (Tier 2 employees).

CHART 57

MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO
Active Employees

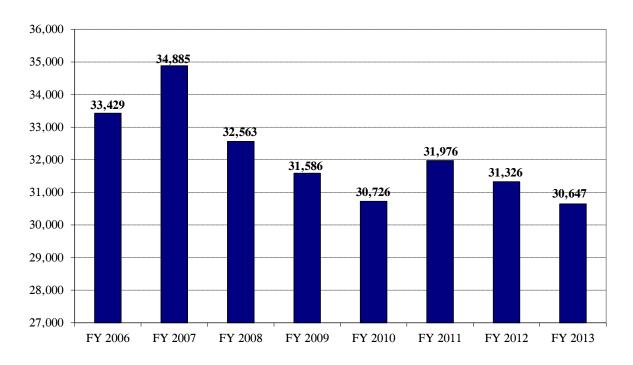


CHART 58

MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO Employee Annuitants

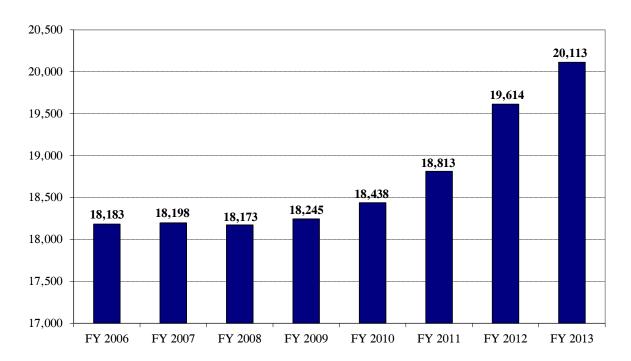
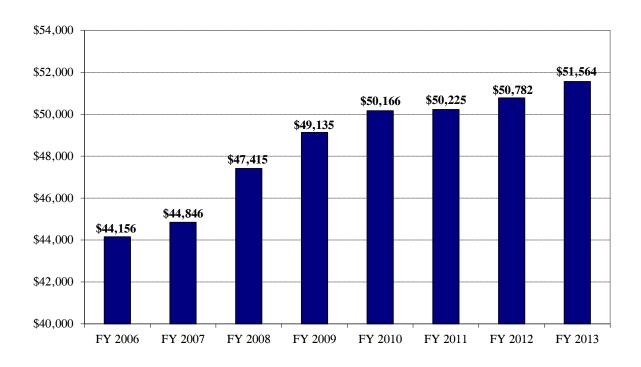
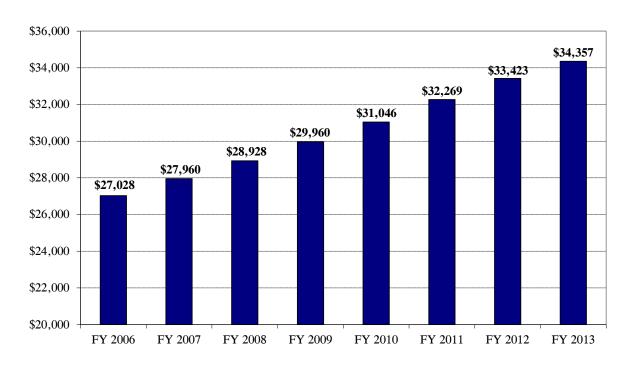


CHART 59

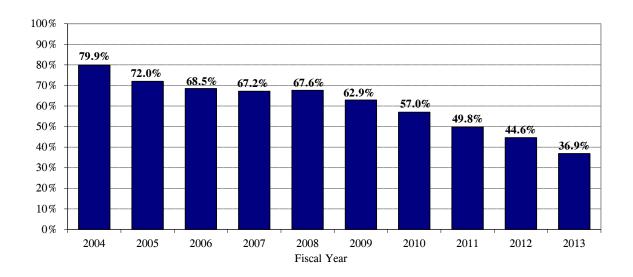
MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO
Average Employee Salaries



## MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO Average Retirement Annuities

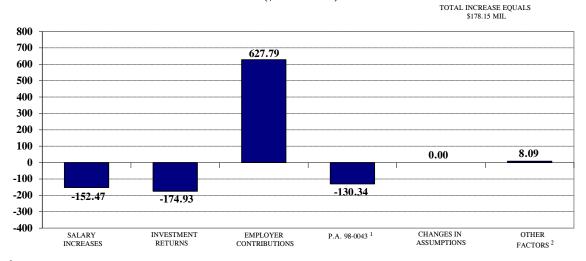


#### MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO **Funded Ratio** FY 2004 - FY 2013



#### **CHART 62**

#### MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO **Change in Unfunded Liabilities** FY 2013 (\$ in Millions)

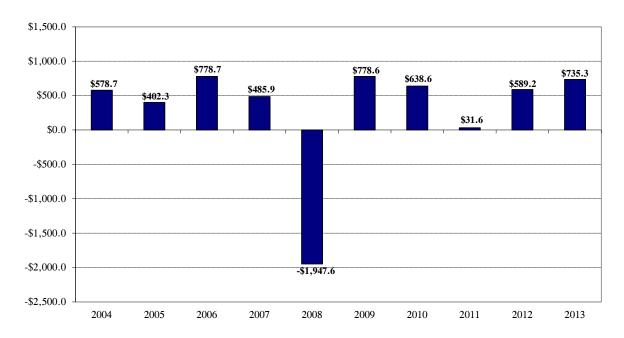


<sup>&</sup>lt;sup>1</sup> P.A. 98-0043 assumes that payment of the health insurance supplement terminates as of December 31, 2016. This change in the Fund provisions decreased actuarial liabilities by \$130.3 Million.

Other Factors consists of losses from retirements, terminations, and rates of mortality, as well a loss from Non-ERI Service Credit

Changes and Purchases.

#### MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO Investment Income FY 2004 - FY 2013 Actuarially Assumed Rate of Return: 7.50% (\$ in Millions)



#### **CHART 64**

#### MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO Rate of Return FY 2004 - FY 2013 Actuarially Assumed Rate of Return: 7.50%

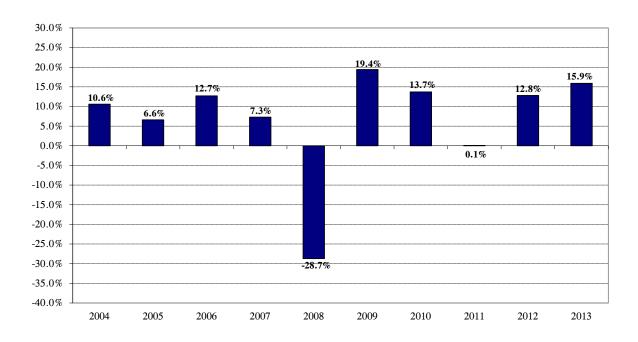


TABLE 21

MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO
System Experience, FY 2004 - FY 2013
(\$ in Millions)

Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2013	1,580.3	13,856.5	5,114.2	8,742.3	36.9%
2012	1,590.8	13,637.5	5,073.3	8,564.2	37.2%
2011	1,606.0	12,456.2	5,552.3	6,903.9	44.6%
2010	1,541.4	12,052.2	6,003.4	6,048.8	49.8%
2009	1,552.0	11,054.3	6,295.8	4,758.5	57.0%
2008	1,544.0	10,605.8	6,669.5	3,936.3	62.9%
2007	1,564.5	10,186.6	6,890.5	3,296.1	67.6%
2006	1,475.9	9,692.0	6,509.1	3,182.9	67.2%
2005	1,407.3	9,250.2	6,332.4	2,917.8	68.5%
2004	1,303.1	8,808.5	6,343.1	2,465.4	72.0%

NOTE: The above FY 2004 - FY 2013 figures include healthcare assets/liabilities.

**TABLE 22** 

MUNICIPAL EMP	Change	ITY AND es in Net A in Millions	ssets	EFIT FU	ND OF (	CHICAC	<b>GO</b>	
Fiscal Years	2013	2012	2011	2010	2009	2008	2007	2006
Additions to Assets								
Employer	157.7	158.4	156.5	164.3	157.7	155.8	148.1	157.1
Employees	131.5	130.2	132.6	133.3	131.0	137.7	132.5	129.5
Net Investment Income	735.3	589.2	31.6	638.6	778.6	-1,947.6	485.9	778.7
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Asset Additions (A)	1,024.5	877.8	320.7	936.2	1,067.3	-1,654.1	766.5	1,065.3
Deductions from Assets								
Benefits	745.5	704.7	663.5	630.1	604.8	582.7	562.5	547.4
Refunds	33.5	36.9	32.1	29.9	28.1	25.5	28.0	27.2
Rebates	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Administrative Expenses	6.5	6.8	7.4	6.8	7.8	7.7	7.5	6.4
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Total Asset Deductions (B)	785.5	748.4	703.0	666.8	640.7	615.9	598.1	581.0
Change in Net Assets (A-B=C)	239.0	129.4	-382.3	269.4	426.6	-2,270.0	168.4	484.3

# X. Park Employees' Annuity and Benefit Fund of Chicago

- Plan Summary
- Active Employees
- Employee Annuitants
- Average Salaries
- Average Retirement Annuity
- Funded Ratios
- Change in Unfunded Liabilities
- Investment Income
- Investment Rates of Return
- Systems Experience
- Changes in Net Assets
- System Projections
- Normal Cost Projections



Note: All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of December 31, 2013.

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## Park Employees' Annuity and Benefit Fund of Chicago Tier 1 Plan Summary (as modified by P.A. 98-0622)

#### Retirement Age

- Age 50 with 10 years of service. (If 45 years of age or older as of 1/1/15)
- Age 58 with 10 years of service. (If under 45 years of age as of 1/1/15)

#### Retirement Formula

• 2.4% of final average salary.

#### Maximum Annuity

• 80% of final average salary.

#### Salary Used to Calculate Pension

Average of 4 highest consecutive years within final 10 years of service.

#### Annual COLA

■ Lesser of 3% or ½ the CPI-U. COLA will be suspended in FY 2015, FY 2017, and FY 2019.

#### **Employee Contributions**

- Beginning 1/1/15: 10% of salary.
- Beginning 1/1/17: 11% of salary.
- Beginning 1/1/19: 12% of salary.
- For any duration of time that the funded ratio is over 90%, employees will pay 10.5% of salary as contributions. If under 90% funded, contributions will be 12%.

#### **Employer Contributions**

The Board of Park Commissioners is required to contribute an amount equal to the employee contributions during the fiscal year two years prior to the year the tax is levied, multiplied by 1.10.

- Beginning 1/1/15: multiplied by 1.70.
- Beginning 1/1/17: multiplied by 2.30.
- Beginning 1/1/19: multiplied by 2.90.
- Additionally, there will be supplemental contributions of \$12.5 million in FY 2015 & 2016, and \$50 million in FY 2019.

Note: Benefits shown are for employees hired prior to January 1, 2011 (Tier 1 employees), the effective date of P.A. 96-0889. See P.A. 96-0889 in Section I for a summary of benefits for employees hired after January 1, 2011.

CHART 65

PARK EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO Active Employees

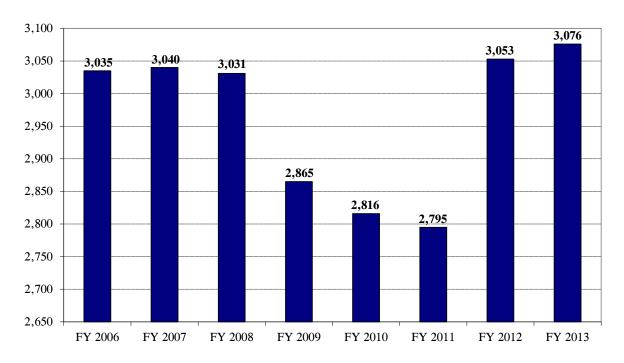


CHART 66

PARK EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO Employee Annuitants

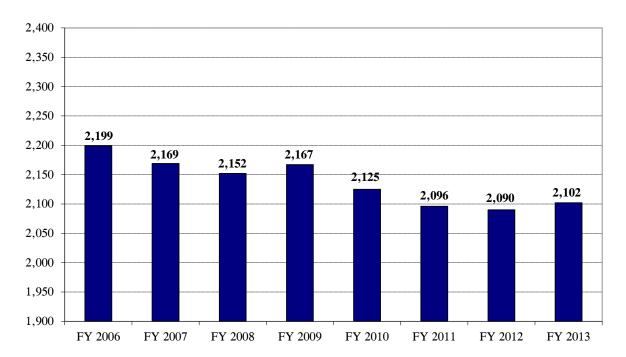


CHART 67

PARK EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO Average Employee Salaries

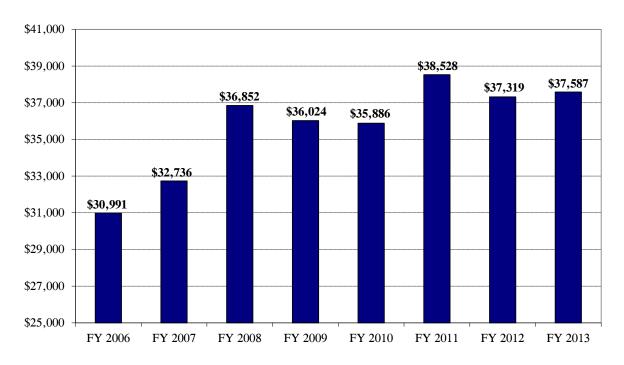
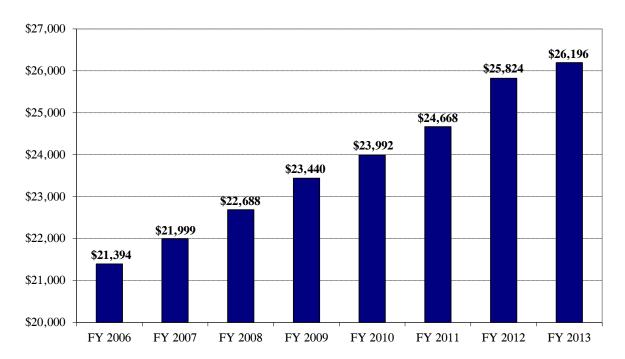
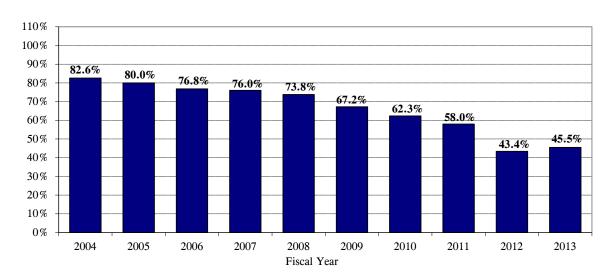


CHART 68

PARK EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO
Average Retirement Annuities



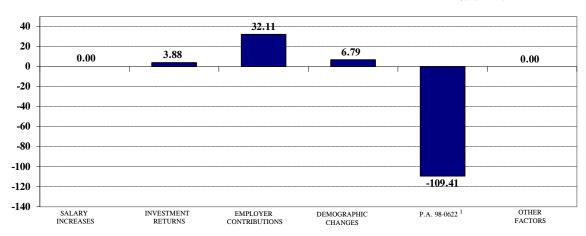
#### PARK EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO Funded Ratio FY 2004 - FY 2013



#### **CHART 70**

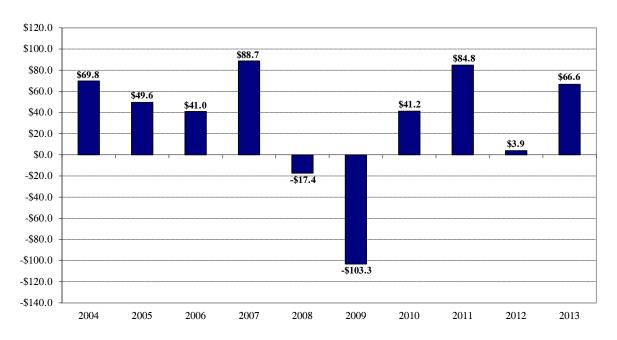
# PARK EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO Change in Unfunded Liabilities FY 2013 (\$ in Millions)

TOTAL DECREASE EQUALS \$66.63 MILLION



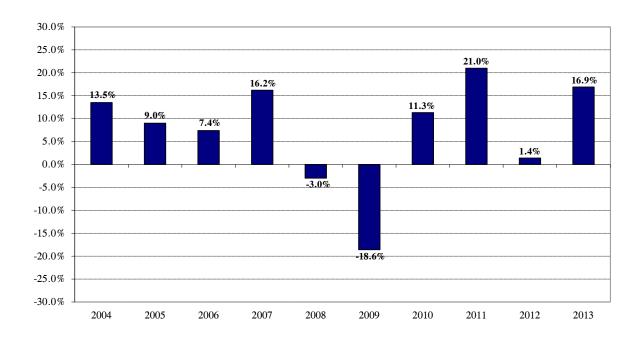
<sup>&</sup>lt;sup>1</sup> P.A. 98-0622 required the Park Employees' Annuity and Benefit Fund of Chicago to reach a 90% funded ratio by FY 2050 and made various other changes that be found in the beginning of this section.

#### PARK EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO Investment Income FY 2004 - FY 2013 Actuarially Assumed Rate of Return: 7.50% (\$ in Millions)



#### **CHART 72**

#### PARK EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO Rate of Return FY 2004 - FY 2013 Actuarially Assumed Rate of Return: 7.50%



PARK EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO System Experience, FY 2004 - FY 2013

**TABLE 23** 

(\$ in Millions)

Fiscal Year	Annual Payroll	nnual Payroll Actuarial Actu Liabilities As		Unfunded Liabilities	Funded Ratio
2013	117.8	888.0	404.3	483.7	45.5%
2012	114.2	866.4	440.7	425.7	50.9%
2011	107.7	843.9	489.4	354.5	58.0%
2010	107.4	833.0	518.6	314.4	62.3%
2009	108.9	823.9	553.8	270.1	67.2%
2008	111.7	795.4	586.7	208.7	73.8%
2007	106.6	767.9	583.3	184.6	76.0%
2006	101.1	745.3	572.7	172.6	76.8%
2005	95.7	734.4	587.8	146.6	80.0%
2004	87.8	738.6	610.3	128.3	82.6%

TABLE 24

PARK EMPLOYE	ES' AN	Changes	AND B	ssets	Γ FUND	OF CI	HICAG(	)
Fiscal Years	2013	2012	2011	2010	2009	2008	2007	2006
Additions to Assets								
Employer	15.8	10.8	11.0	10.8	9.7	9.0	9.6	5.2
Employees	10.7	10.4	9.8	9.8	10.1	10.3	9.7	9.1
Net Investment Income	66.6	3.8	84.8	41.5	-103.5	-17.4	88.7	41.0
Other	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Asset Additions (A)	93.2	25.1	105.6	62.1	-83.7	1.9	108.0	55.3
Deductions from Assets								
Benefits	66.2	63.5	62.0	61.2	60.3	58.0	56.8	56.3
Refunds	2.1	2.0	1.7	1.4	2.7	2.0	1.8	2.1
Rebates	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Administrative Expenses	1.5	1.6	1.5	1.4	1.3	1.3	1.2	1.2
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Asset Deductions (B)	69.8	67.1	65.2	64.0	64.3	61.2	59.8	59.6
Change in Net Assets (A-B=C)	23.4	-42.0	40.4	-1.9	-148.0	-59.4	48.2	-4.3

Table 25 below contains funding projections provided to CGFA by the Park Employees' Annuity and Benefit Fund of Chicago based upon the December 31, 2013 actuarial valuation.

**TABLE 25** 

#### Park Employees' Annuity and Benefit Fund of Chicago Actuarial Valuation Projection Results as of December 31, 2013 Funding Impact of P.A. 98-0622 (\$ in Millions)

Fiscal Year	Capped Payroll	Total City Contribution <sup>1</sup>	Total City Contribution As % of Payroll	Total Employee Contribution	Accrued Liability	Actuarial Value of Assets	Unfunded Liabilities	Funded Ratio
2014	120.4	10.8	9.0%	11.0	888.0	404.3	483.7	45.5%
2015	118.7	17.7	14.9%	12.0	894.4	393.1	501.3	44.0%
2016	117.5	18.1	15.4%	11.9	900.2	397.3	502.9	44.1%
2017	116.5	26.8	23.0%	13.0	906.5	401.4	505.1	44.3%
2018	115.8	26.5	22.9%	12.9	912.9	405.2	507.7	44.4%
2019	115.1	36.5	31.7%	13.9	919.7	400.8	518.9	43.6%
2020	114.8	36.2	31.6%	13.9	926.5	458.5	468.0	49.5%
2021	114.6	39.3	34.3%	13.9	933.8	467.9	465.9	50.1%
2022	114.6	39.2	34.2%	13.9	941.3	480.4	460.8	51.0%
2023	114.6	39.1	34.1%	13.9	948.9	493.1	455.8	52.0%
2024	114.6	39.1	34.1%	13.9	956.6	506.1	450.5	52.9%
2025	114.7	39.1	34.1%	13.9	964.4	519.5	444.9	53.9%
2026	114.9	39.1	34.0%	13.9	972.4	533.3	439.0	54.9%
2027	115.1	39.1	34.0%	13.9	980.2	547.5	432.7	55.9%
2028	115.5	39.2	34.0%	14.0	988.2	562.3	425.9	56.9%
2029	116.1	39.3	33.8%	14.1	996.4	577.8	418.6	58.0%
2030	116.7	39.4	33.8%	14.1	1,004.6	593.8	410.8	59.1%
2031	117.3	39.6	33.8%	14.2	1,012.6	610.3	402.4	60.3%
2032	118.1	39.8	33.7%	14.3	1,020.6	627.5	393.1	61.5%
2033	119.0	40.0	33.6%	14.4	1,028.6	645.5	383.1	62.8%
2034	120.0	40.3	33.6%	14.5	1,036.7	664.5	372.2	64.1%
2035	121.0	40.6	33.5%	14.7	1,047.1	686.9	360.2	65.6%
2036	122.1	40.9	33.5%	14.8	1,057.8	710.6	347.2	67.2%
2037	123.3	41.3	33.5%	14.9	1,069.0	736.1	332.9	68.9%
2038	124.6	41.6	33.4%	15.1	1,080.7	763.3	317.3	70.6%
2039	126.1	42.0	33.3%	15.3	1,106.6	824.8	281.7	74.5%
2040	127.7	42.5	33.2%	15.5	1,120.9	859.5	261.5	76.7%
2041	129.4	43.0	33.2%	15.7	1,136.4	897.1	239.3	78.9%
2042	83.9	43.5	51.9%	7.1	1,153.2	938.2	215.0	81.4%
2043	86.8	44.1	50.8%	7.4	1,171.7	983.2	188.6	83.9%
2044	3,601.4	44.7	1.2%	306.5	1,192.1	1,032.4	159.7	86.6%
2045	3,718.2	45.4	1.2%	316.4	1,214.5	1,086.4	128.1	89.5%
2046	3,839.2	46.2	1.2%	326.7	1,239.3	1,145.7	93.6	92.4%
2047	3,964.4	0.0	0.0%	337.4	1,266.7	1,159.9	106.8	91.6%
2048	4,093.5	0.0	0.0%	348.4	1,297.1	1,175.7	121.4	90.6%
2049	4,226.1	4.8	0.1%	359.6	1,330.7	1,198.3	132.4	90.1%
2050	4,362.9	12.3	0.3%	371.3	1,367.7	1,230.9	136.8	90.0%

<sup>&</sup>lt;sup>1</sup> Employer Contributions do not include supplemental contributions of \$12.5 Million in Fiscal Years 2015 and 2017 or \$50 Million in Fiscal Year 2019.

Park Employees' Annuity and Benefit Fund of Chicago
Projected Normal Cost Reflecting P.A. 98-0622 as of December 31, 2013
(\$ in Millions)

**TABLE 26** 

Fiscal Year	Employer's Normal Cost	Employer's Normal Cost as a % of Payroll	Employee Contributions	Employee Contributions as a % of Payroll	Total Normal Cost	Total Normal Cost as a % of Payroll
2014	2.0	1.7%	11.0	9.1%	13.0	10.8%
2015	0.8	0.7%	12.0	10.1%	12.8	10.8%
2016	0.8	0.7%	11.9	10.1%	12.7	10.8%
2017	-0.4	-0.3%	13.0	11.1%	12.6	10.8%
2018	-0.4	-0.3%	12.9	11.1%	12.5	10.8%
2019	-1.6	-1.3%	13.9	12.1%	12.4	10.8%
2020	-1.5	-1.3%	13.9	12.1%	12.4	10.8%
2021	-1.5	-1.3%	13.9	12.1%	12.3	10.8%
2022	-1.5	-1.4%	13.9	12.1%	12.3	10.8%
2023	-1.6	-1.4%	13.9	12.1%	12.3	10.7%
2024	-1.6	-1.4%	13.9	12.1%	12.3	10.7%
2025	-1.7	-1.4%	13.9	12.1%	12.2	10.7%
2026	-1.7	-1.5%	13.9	12.1%	12.2	10.6%
2027	-1.8	-1.6%	13.9	12.1%	12.1	10.5%
2028	-1.9	-1.6%	14.0	12.1%	12.1	10.5%
2029	-2.0	-1.7%	14.1	12.1%	12.1	10.4%
2030	-2.0	-1.7%	14.1	12.1%	12.1	10.4%
2031	-2.1	-1.8%	14.2	12.1%	12.1	10.3%
2032	-2.2	-1.9%	14.3	12.1%	12.1	10.3%
2033	-2.3	-1.9%	14.4	12.1%	12.1	10.2%
2034	-2.4	-2.0%	14.5	12.1%	12.1	10.1%
2035	-2.5	-2.1%	14.7	12.1%	12.2	10.1%
2036	-2.6	-2.1%	14.8	12.1%	12.2	10.0%
2037	-2.7	-2.2%	14.9	12.1%	12.2	9.9%
2038	-2.8	-2.2%	15.1	12.1%	12.3	9.9%
2039	-2.9	-2.3%	15.3	12.1%	12.4	9.8%
2040	-3.0	-2.3%	15.5	12.1%	12.5	9.8%
2041	-3.1	-2.4%	15.7	12.1%	12.6	9.7%
2042	-3.2	-3.8%	15.9	18.9%	12.7	15.1%
2043	-3.3	-3.8%	16.1	18.6%	12.8	14.7%
2044	-3.5	-0.1%	16.4	0.5%	12.9	0.4%
2045	-3.6	-0.1%	16.7	0.4%	13.1	0.4%
2046	-3.7	-0.1%	17.0	0.4%	13.3	0.3%
2047	-1.7	0.0%	15.1	0.4%	13.5	0.3%
2048	-1.7	0.0%	15.4	0.4%	13.7	0.3%
2049 2050	-1.8 -1.9	$0.0\% \\ 0.0\%$	15.8 16.1	$0.4\% \\ 0.4\%$	14.0 14.2	0.3 % 0.3 %

# XI. Policemen's Annuity and Benefit Fund of Chicago

- Plan Summary
- Active Employees
- Employee Annuitants
- Average Salaries
- Average Retirement Annuity
- Funded Ratios
- Change in Unfunded Liabilities
- Investment Income
- Investment Rates of Return
- Systems Experience
- Changes in Net Assets
- System Projections
- Normal Cost Projections



Note: All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of December 31, 2013.

## Policemen's Annuity and Benefit Fund of Chicago Tier 1 Plan Summary

#### Retirement Age

- Age 50 with 20 years of service.
- Age 50 with 10 years of service (accumulated annuity).
- Mandatory retirement at age 63.

#### Retirement Formula

• For employees with 20 or more years of service, 50% of final average salary plus 2.5% of final average salary for each year in excess of 20.

#### **Maximum Annuity**

■ 75% of final average salary.

#### Salary Used to Calculate Pension

Average of 4 highest consecutive years within final 10 years of service.

#### Annual COLA

- 3% non-compounded with no limit if born before 1/1/55.
- 1.5% non-compounded if born after 1/1/55, subject to 30% maximum.

#### **Employee Contributions**

• 9.0% of salary.

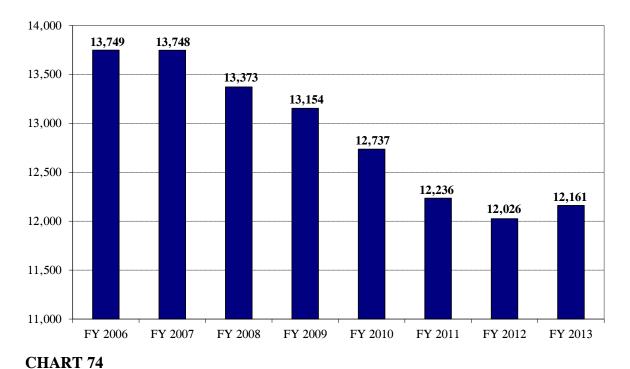
#### **Employer Contributions**

Pursuant to P.A. 96-1495, annual actuarially determined employer contributions will be calculated and required. Such actuarially determined contributions will be established with a funding goal of 90% by the end of FY 2040, based upon the actuarial value of fund assets and application of required actuarial assumptions and methodologies. Failure of the employer to remit the required contributions can result in withholding of certain grants owed by the State of Illinois.

Note: Benefits shown are for employees hired prior to January 1, 2011 (Tier 1 employees), the effective date of P.A. 96-1495. See P.A. 96-1495 in Section I for a summary of benefits for employees hired after January 1, 2011 (Tier 2 employees).

CHART 73

POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO
Active Employees



POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO
Employee Annuitants

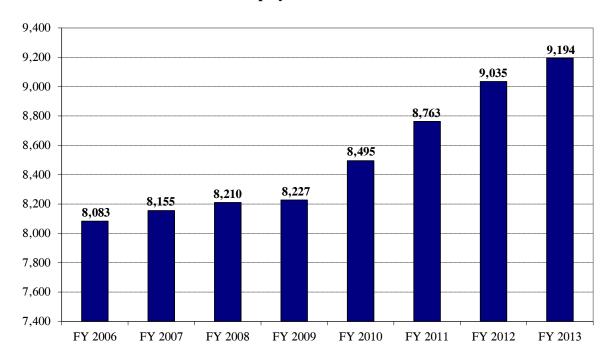


CHART 75

POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO
Average Employee Salaries

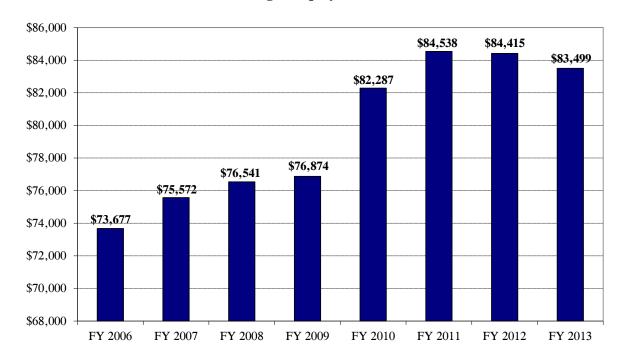
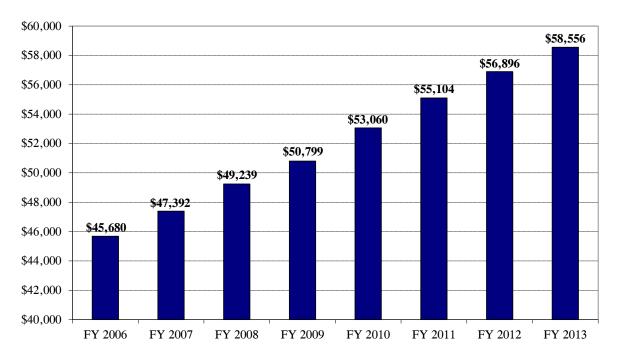
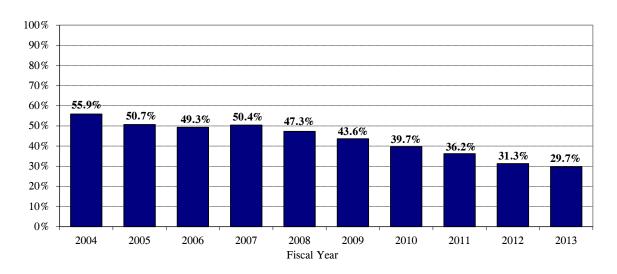


CHART 76

POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO
Average Retirement Annuity



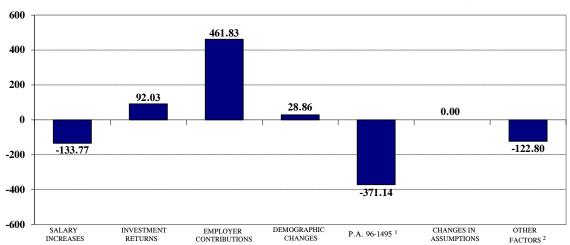
#### POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO Funded Ratio FY 2004 - FY 2013



#### **CHART 78**

#### POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO Change in Unfunded Liabilities FY 2013 (\$ in Millions)

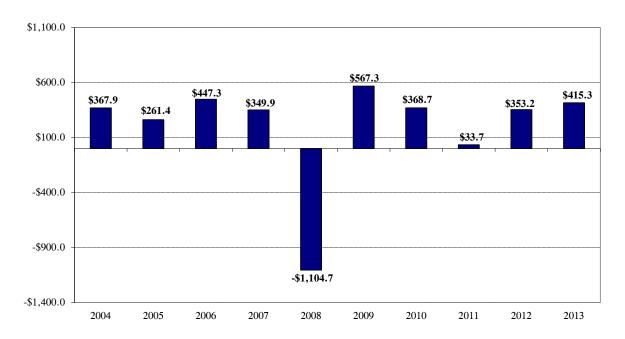
TOTAL DECREASE EQUALS \$44.99 MIL



<sup>&</sup>lt;sup>1</sup> P.A. 96-1495 was the Two Tier Police/Fire Act of 2010, and the bill required the Policemen's Annuity and Benefit Fund of Chicago to reach a 90% funded ratio by FY 2040 and made various other changes that can be found in Section I. This column reflects the effect of the Funding Method Change and the Asset Change (Smoothing).

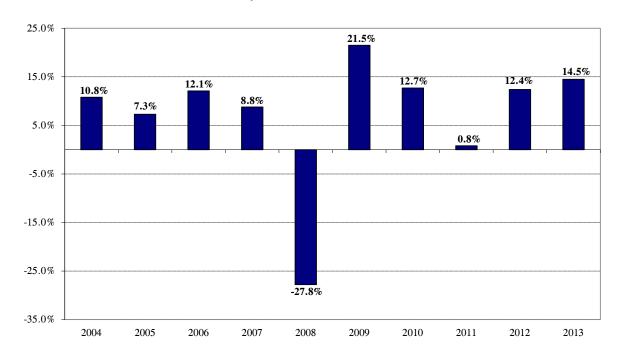
<sup>&</sup>lt;sup>2</sup> Other Factors include \$149 Million in gains from Plan Provision Changes due to the elimination of healthcare supplements after December 31, 2016, due to the expiration of the Korshak Consent Decree.

#### POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO Investment Income FY 2004 - FY 2013 Actuarially Assumed Rate of Return :7.75% (\$ in Millions)



#### **CHART 80**

#### POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO Rate of Return FY 2004 - FY 2013 Actuarially Assumed Rate of Return :7.75%



POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO

**TABLE 27** 

## System Experience, FY 2004 - FY 2013 (\$ in Millions)

Fiscal Year	Annual Payroll	nnual Payroll Actuarial Actuaria Liabilities Assets		Unfunded Liabilities	Funded Ratio
2013	1,015.4	10,282.3	3,053.9	7,228.5	29.7%
2012	1,015.2	10,051.8	3,148.9	6,902.9	31.3%
2011	1,034.4	9,522.4	3,444.7	6,077.7	36.2%
2010	1,048.1	9,374.9	3,719.0	5,655.9	39.7%
2009	1,011.2	8,900.9	3,885.0	5,015.9	43.6%
2008	1,023.6	8,652.6	4,093.7	4,558.9	47.3%
2007	1,039.0	8,399.4	4,231.7	4,167.7	50.4%
2006	1,013.0	7,939.6	3,998.0	3,941.6	49.3%
2005	949.0	7,722.7	3,914.4	3,808.3	50.7%
2004	874.3	7,034.3	3,933.0	3,101.3	55.9%

**TABLE 28** 

POLICEME	N'S ANN	Change	ND BENes in Net A	ssets	J <b>ND OF</b>	CHICA	GO	
Fiscal Years	2013	2012	2011	2010	2009	2008	2007	2006
Additions to Assets								
Employer	188.9	207.2	183.5	183.8	180.5	181.5	178.7	158.7
Employees	93.3	95.9	98.2	108.4	95.6	93.2	93.3	92.0
Net Investment Income	415.3	353.2	33.7	368.7	567.3	-1,104.9	349.9	447.3
Other	0.5	0.4	0.1	0.9	0.8	0.2	0.0	0.0
Total Asset Additions (A)	698.0	656.7	315.5	661.8	844.2	-830.0	621.9	698.0
Deductions from Assets								
Benefits	633.8	602.7	568.0	536.3	508.5	491.6	471.5	452.8
Refunds	8.1	11.2	7.3	8.0	6.4	6.4	6.2	5.3
Rebates	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Administrative Expenses	4.3	4.9	4.4	3.9	4.3	4.2	3.1	2.7
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Asset Deductions (B)	646.2	618.8	579.7	548.2	519.2	502.2	480.8	460.8
Change in Net Assets (A-B=C)	51.8	37.9	-264.2	113.6	325.0	-1,332.2	141.1	237.2

Table 29 below contains funding projections provided to CGFA by the Policemen's Annuity and Benefit Fund of Chicago based upon the December 31, 2013 actuarial valuation.

TABLE 29

			Valuation Proj	•	it Fund of Chic as of Decembo	U		
Fiscal Year	Capped Payroll	Total City Contribution	Total City Contribution As % of Payroll	Total Employee Contribution	Accrued Liability	Actuarial Value of Assets	Unfunded Liabilities	Funded Ratio
2013	1,015.4	188.9	18.6%	93.3	10,080.6	3,053.9	7,026.7	30.3 %
2014	1,048.3	188.4	18.0%	93.6	10,401.8	2,963.5	7,438.3	28.5%
2015	1,086.0	592.9	54.6%	104.0	10,729.9	3,236.7	7,493.2	30.2%
2016	1,123.1	613.1	54.6%	107.6	11,062.9	3,522.9	7,539.9	31.8%
2017	1,162.9	634.8	54.6%	111.4	11,409.7	3,811.0	7,598.7	33.4%
2018	1,201.5	655.9	54.6%	115.2	11,760.1	4,077.4	7,682.7	34.7%
2019	1,240.7	677.3	54.6%	119.1	12,111.1	4,357.1	7,754.0	36.0%
2020	1,280.6	699.1	54.6%	123.0	12,460.8	4,650.1	7,810.7	37.3%
2021	1,321.0	721.1	54.6%	126.9	12,807.5	4,956.2	7,851.3	38.7%
2022	1,362.9	744.0	54.6%	130.9	13,150.5	5,277.2	7,873.2	40.1%
2023	1,405.4	767.2	54.6%	135.0	13,488.4	5,613.8	7,874.6	41.6%
2024	1,450.9	792.1	54.6%	139.3	13,820.2	5,968.3	7,851.8	43.2%
2025	1,498.5	818.1	54.6%	143.9	14,144.8	6,343.1	7,801.6	44.8%
2026	1,547.6	844.9	54.6%	148.5	14,461.4	6,740.6	7,720.8	46.6%
2027	1,598.1	872.4	54.6%	153.3	14,768.9	7,162.8	7,606.1	48.5%
2028	1,652.0	901.8	54.6%	158.3	15,068.1	7,614.9	7,453.1	50.5%
2029	1,700.8	928.5	54.6%	163.5	15,346.1	8,097.9	7,248.1	52.8%
2030	1,742.9	951.5	54.6%	168.2	15,602.9	8,610.2	6,992.6	55.2%
2031	1,777.8	970.5	54.6%	172.3	15,838.7	9,150.4	6,688.3	57.8%
2032	1,809.1	987.6	54.6%	175.5	16,058.9	9,719.3	6,339.6	60.5%
2033	1,838.2	1,003.5	54.6%	178.4	16,264.2	10,318.9	5,945.4	63.4%
2034	1,863.8	1,017.5	54.6%	180.9	16,456.9	10,952.4	5,504.5	66.6%
2035	1,889.3	1,031.4	54.6%	183.2	16,641.4	11,626.3	5,015.1	69.9%
2036	1,912.3	1,043.9	54.6%	185.5	16,821.0	12,345.7	4,475.2	73.4%
2037	1,935.5	1,056.6	54.6%	187.6	16,999.6	13,117.0	3,882.6	77.2%
2038	1,957.5	1,068.6	54.6%	189.7	17,179.9	13,945.6	3,234.2	81.2%
2039	1,979.8	1,080.8	54.6%	191.7	17,363.6	14,837.0	2,526.6	85.4%
2040	2,002.6	1,093.2	54.6%	193.7	17,551.6	15,796.4	1,755.2	90.0%
2041	2,026.9	211.5	10.4%	195.9	17,744.4	15,969.6	1,774.7	90.0%

TABLE 30

#### Policemen's Annuity and Benefit Fund of Chicago Projected Normal Cost as of December 31, 2013 (\$ in Millions)

Fiscal Year	Employer's Normal Cost	Employer's Normal Cost as a % of Payroll	Employee Contributions	Employee Contributions as a % of Payroll	Total Normal Cost	Total Normal Cost as a % of Payroll
2014	89.8	8.8%	93.3	9.2%	183.1	18.0%
2015	104.9	10.0%	93.6	8.9%	198.5	18.9%
2016	99.9	9.2%	104.0	9.6%	203.9	18.8%
2017	101.7	9.1%	107.6	9.6%	209.3	18.6%
2018	103.3	8.9%	111.4	9.6%	214.7	18.5%
2019	104.6	8.7%	115.2	9.6%	219.9	18.3%
2020	105.5	8.5%	119.1	9.6%	224.6	18.1%
2021	105.8	8.3%	123.0	9.6%	228.8	17.9%
2022	105.9	8.0%	126.9	9.6%	232.8	17.6%
2023	105.7	7.8%	130.9	9.6%	236.6	17.4%
2024	105.3	7.5%	135.0	9.6%	240.3	17.1%
2025	104.4	7.2%	139.3	9.6%	243.8	16.8%
2026	103.3	6.9%	143.9	9.6%	247.2	16.5%
2027	101.9	6.6%	148.5	9.6%	250.5	16.2%
2028	100.4	6.3%	153.3	9.6%	253.7	15.9%
2029	99.0	6.0%	158.3	9.6%	257.3	15.6%
2030	97.6	5.7%	163.5	9.6%	261.1	15.4%
2031	95.9	5.5%	168.2	9.7%	264.2	15.2%
2032	94.3	5.3%	172.3	9.7%	266.6	15.0%
2033	92.8	5.1%	175.5	9.7%	268.3	14.8%
2034	91.7	5.0%	178.4	9.7%	270.0	14.7%
2035	91.3	4.9%	180.9	9.7%	272.2	14.6%
2036	91.5	4.8%	183.2	9.7%	274.7	14.5%
2037	92.2	4.8%	185.5	9.7%	277.7	14.5%
2038	93.6	4.8%	187.6	9.7%	281.2	14.5%
2039	95.4	4.9%	189.7	9.7%	285.0	14.6%
2040	97.6	4.9%	191.7	9.7%	289.2	14.6%
2041	99.9	5.0%	193.7	9.7%	293.6	14.7%

## XII. Public School Teachers' Pension and Retirement Fund of Chicago

- Plan Summary
- Active Employees
- Employee Annuitants
- Average Salaries
- Average Retirement Annuity
- Funded Ratios
- Change in Unfunded Liabilities
- Investment Income
- Investment Rates of Return
- Systems Experience
- Changes in Net Assets
- System Projections



Note: All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of June 30, 2013.

## **Public School Teachers' Pension and Retirement Fund** of Chicago - Tier 1 Plan Summary

#### Retirement Age

- Age 62 with 5 years of service.
- Age 55 with 20 years of service.

#### Retirement Formula

• 2.2% of final average salary for each year of service.

#### Maximum Annuity

■ 75% of final average salary.

#### Salary Used to Calculate Pension

• Average of 4 highest consecutive years within final 10 years of service.

#### Annual COLA

■ 3% compounded.

#### **Employee Contributions**

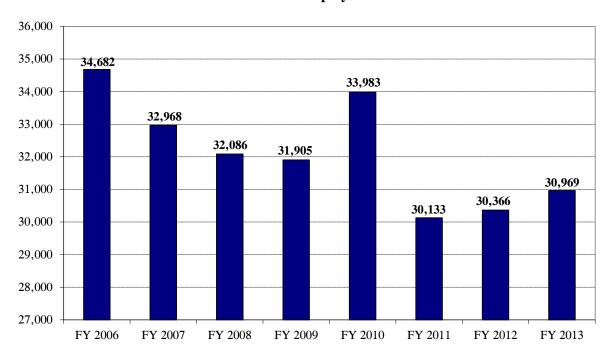
• 9.0% of salary.

#### **Employer Contributions**

For fiscal years 2014 through 2059 the employer is required to make contributions calculated as a level percentage of payroll sufficient to bring the fund's total assets up to 90% of the fund's total liabilities by the end of FY2059.

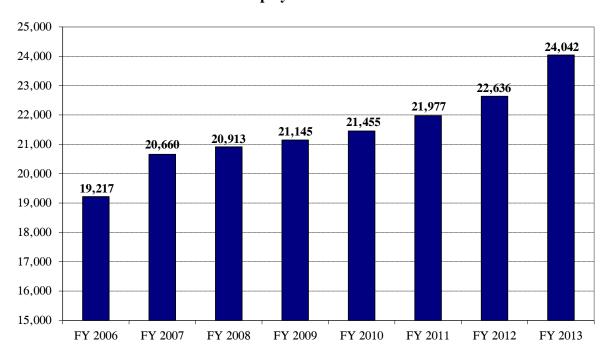
Note: Benefits shown are for employees hired prior to January 1, 2011 (Tier 1 employees), the effective date of P.A. 96-0889. See P.A. 96-0889 in Section I for a summary of benefits for employees hired after January 1, 2011 (Tier 2 employees).

#### CHICAGO TEACHERS' PENSION FUND Active Employees



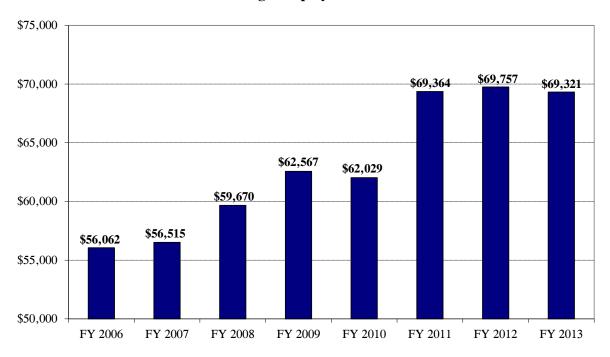
#### **CHART 82**

#### CHICAGO TEACHERS' PENSION FUND Employee Annuitants



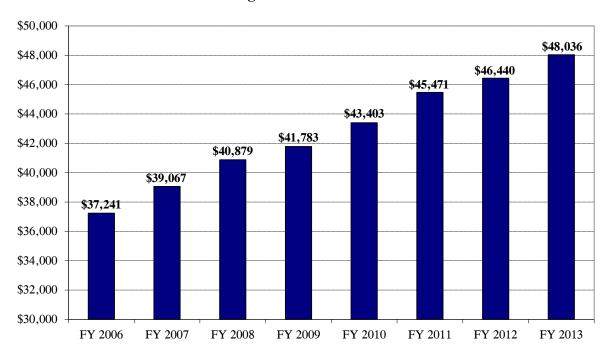
**CHART 83** 

#### CHICAGO TEACHERS' PENSION FUND Average Employee Salaries

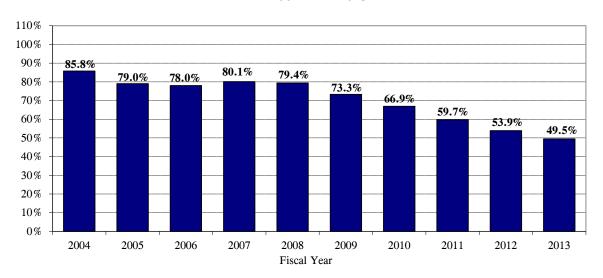


**CHART 84** 

#### CHICAGO TEACHERS' PENSION FUND Average Retirement Annuities

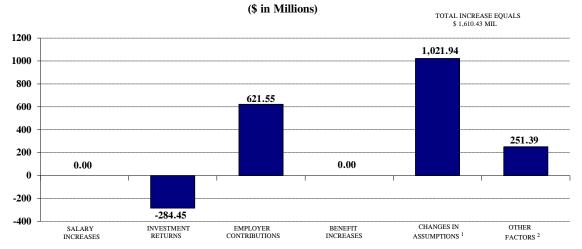


#### CHICAGO TEACHERS' PENSION FUND Funded Ratio FY 2004 - FY 2013



#### **CHART 86**

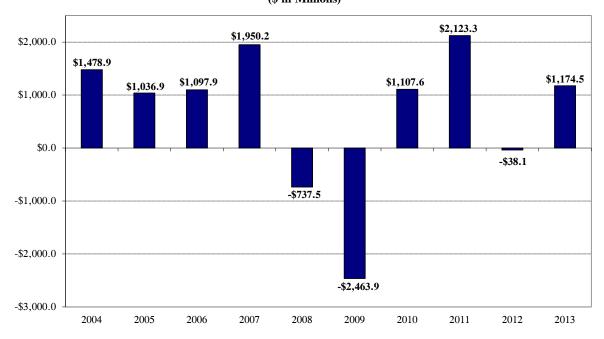
#### CHICAGO TEACHERS PENSION FUND Change in Unfunded Liabilities FY 2013



<sup>&</sup>lt;sup>1</sup> Rate of Return Assumption was changed from 8.0% to 7.75%

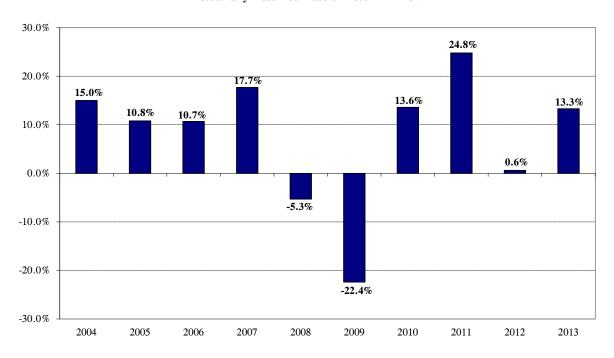
<sup>&</sup>lt;sup>2</sup> Other Factors consists of losses from retirements, terminations, and rates of mortality.

#### CHICAGO TEACHERS' PENSION FUND Investment Income FY 2004 - FY 2013 Actuarially Assumed Rate of Return : 7.75% (\$ in Millions)



#### **CHART 88**

#### CHICAGO TEACHERS' PENSION FUND Rate of Return FY 2004 - FY 2013 Actuarially Assumed Rate of Return : 7.75%



**TABLE 31** 

### CHICAGO TEACHERS PENSION FUND

System Experience, FY 2004 - FY 2013 (\$ in Millions)

Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2013	2,239.3	19,044.5	9,422.5	9,622.0	49.5%
2012	2,224.9	17,375.7	9,364.1	8,011.6	53.9%
2011	2,090.1	16,940.3	10,109.3	6,831.0	59.7%
2010	2,107.9	16,319.7	10,917.4	5,402.3	66.9%
2009	1,996.2	15,683.2	11,493.3	4,189.9	73.3%
2008	1,914.6	15,203.7	12,069.4	3,134.3	79.4%
2007	1,863.2	14,677.2	11,759.7	2,917.5	80.1%
2006	1,944.4	14,035.6	10,948.0	3,087.6	78.0%
2005	1,968.6	13,295.9	10,506.5	2,789.4	79.0%
2004	1,767.6	12,105.7	10,392.2	1,713.5	85.8%

**TABLE 32** 

	CHICAGO TEACHERS PENSION FUND Changes in Net Assets (\$ in Millions)										
Fiscal Years	2013	2012	2011	2010	2009	2008	2007	2006			
Additions to Assets											
Employer	142.7	138.8	208.6	355.8	263.0	229.3	168.8	117.8			
Employees	188.4	187.1	185.9	194.6	176.2	172.4	179.0	163.5			
Net Investment Income	1,174.6	-38.1	2,123.3	1,107.6	-2,463.9	-737.5	1,950.2	1,097.9			
Other	0.0	0.4	10.4	0.0	15.0	0.0	0.0	0.1			
Total Asset Additions (A)	1,505.7	288.2	2,528.2	1,658.0	-2,009.7	-335.8	2,298.0	1,379.3			
Deductions from Assets											
Benefits	1232.3	1,117.2	1,050.9	991.4	944.5	907.6	800.7	721.1			
Refunds	24.8	36.3	27.1	21.1	19.0	16.7	36.4	30.7			
Rebates	0.0	0.0	0.0	0.0	75.8	68.7	61.0	58.3			
Administrative Expenses	11.5	10.1	9.5	8.8	8.8	7.8	8.4	8.3			
Other	0.0	0.0	78.9	80.0	0.0	0.0	0.0	0.0			
Total Asset Deductions (B)	1,268.6	1,163.6	1,166.4	1,101.3	1,048.1	1,000.8	906.5	818.4			
Change in Net Assets (A-B=C)	237.1	-875.4	1,361.8	556.7	-3,057.8	-1,336.6	1,391.5	560.9			

Table 33 below contains funding projections provided to CGFA by the Fireman's Annuity and Benefit Fund of Chicago based upon the December 31, 2013 actuarial valuation.

**TABLE 33** 

		Actuarial V	aluation Proje Funding I	eachers' Pensection Results mpact of P.A \$ in Millions)	as of Decemb	per 31, 2013		
Fiscal Year	Capped Payroll	Total Board of Ed. Contributions	Employer Contribution As % of Payroll	Total Employee Contribution	Total Actuarial Liability	Actuarial Value of Assets	Unfunded Actuarial Liability	Funded Ratio
2014	2,327.8	612.7	26.3%	195.8	19,546.0	9,881.5	9,664.5	50.6%
2015	2,388.5	696.5	29.2%	200.9	20,065.9	10,085.1	9,980.8	50.3%
2016	2,456.0	716.2	29.2%	206.6	20,605.7	10,506.5	10,099.2	51.0%
2017	2,526.1	736.7	29.2%	212.5	21,165.1	10,838.7	10,326.4	51.2%
2018	2,598.0	757.7	29.2%	218.5	21,745.0	11,185.4	10,559.6	51.4%
2019	2,672.1	779.4	29.2%	224.8	22,345.4	11,551.4	10,794.0	51.7%
2020	2,748.0	801.7	29.2%	231.1	22,966.7	11,936.0	11,030.7	52.0%
2021	2,824.3	824.3	29.2%	237.6	23,610.2	12,342.7	11,267.5	52.3%
2022	2,901.1	847.5	29.2%	244.0	24,277.3	12,773.5	11,503.8	52.6%
2023	2,977.8	870.9	29.2%	250.5	24,970.7	13,231.3	11,739.4	53.0%
2024	3,055.1	895.0	29.3%	257.0	25,689.1	13,715.9	11,973.2	53.4%
2025	3,130.9	919.1	29.4%	263.3	26,432.6	14,227.9	12,204.7	53.8%
2026	3,205.1	943.0	29.4%	269.6	27,201.2	14,767.8	12,433.4	54.3%
2027	3,278.2	966.9	29.5%	275.7	27,994.9	15,335.8	12,659.1	54.8%
2028	3,350.5	990.7	29.6%	281.8	28,813.0	15,932.2	12,880.8	55.3%
2029	3,422.3	1,014.4	29.6%	287.9	29,653.7	16,556.8	13,096.9	55.8%
2030	3,492.5	1,037.6	29.7%	293.8	30,515.5	17,208.1	13,307.4	56.4%
2030	3,561.4	1,060.5	29.8%	299.6	31,396.2	17,886.0	13,510.2	57.0%
2031			29.8%	305.3	32,294.0	18,589.4	13,704.6	
	3,629.5	1,083.1						57.6%
2033	3,697.2	1,105.7	29.9%	311.0	33,204.9	19,316.1	13,888.8	58.2%
2034	3,763.6	1,127.9	30.0%	316.6	34,125.8	20,064.7	14,061.1	58.8%
2035	3,829.2	1,149.8	30.0%	322.1	35,050.9	20,831.6	14,219.3	59.4%
2036	3,892.3	1,171.0	30.1%	327.4	35,974.7	21,613.0	14,361.7	60.1%
2037	3,953.6	1,191.7	30.1%	332.5	36,891.5	22,405.8	14,485.7	60.7%
2038	4,013.1	1,211.6	30.2%	337.5	37,793.4	23,204.7	14,588.7	61.4%
2039	4,070.7	1,231.1	30.2%	342.4	38,672.3	24,004.2	14,668.1	62.1%
2040	4,127.1	1,250.0	30.3%	347.1	39,518.8	24,797.8	14,721.0	62.7%
2041	4,183.0	1,268.7	30.3%	351.8	40,328.9	25,581.5	14,747.4	63.4%
2042	4,239.4	1,287.6	30.4%	356.6	41,083.0	26,349.0	14,734.0	64.1%
2043	4,292.8	1,306.5	30.4%	361.1	41,783.1	27,096.2	14,686.9	64.8%
2044	4,346.7	1,314.4	30.2%	365.6	42,431.0	27,830.4	14,600.6	65.6%
2045	4,402.8	1,347.9	30.6%	370.3	43,021.7	28,549.4	14,472.3	66.4%
2046	4,463.0	1,371.7	30.7%	375.4	43,562.0	29,263.4	14,298.6	67.2%
2047	4,529.2	1,398.4	30.9%	381.0	44,058.9	29,983.9	14,075.0	68.1%
2048	4,602.7	1,428.6	31.0%	387.1	44,523.9	30,727.1	13,796.8	69.0%
2049	4,685.6	1,462.6	31.2%	394.1	44,967.7	31,509.7	13,458.0	70.1%
2050	4,778.4	1,500.6	31.4%	401.9	45,387.4	32,335.5	13,051.9	71.2%
2051	4,880.8	1,542.7	31.6%	410.5	45,787.1	33,216.3	12,570.8	72.5%
2052	4,992.4	1,588.7	31.8%	419.9	46,171.5	34,165.0	12,006.5	74.0%
2053	5,112.0	1,638.6	32.1%	430.0	46,543.6	35,193.5	11,350.1	75.6%
2054	5,241.1	1,691.8	32.3%	440.8	46,910.1	36,318.8	10,591.3	77.4%
2055	5,378.5	1,748.3	32.5%	452.4	47,266.3	37,546.0	9,720.3	79.4%
2056	5,523.3	1,807.7	32.7%	464.6	47,616.7	38,891.9	8,724.8	81.7%
2057	5,674.6	1,870.0	33.0%	477.3	47,967.2	40,374.1	7,593.1	84.2%
2058	5,831.7	1,934.8	33.2%	490.5	48,317.7	42,005.6	6,312.1	86.9%
2059	5,994.2	2,002.1	33.4%	504.2	48,674.2	43,806.7	4,867.5	90.0%

#### **BACKGROUND**

The Commission on Government Forecasting and Accountability (CGFA), a bipartisan, joint legislative commission, provides the General Assembly with information relevant to the Illinois economy, taxes and other sources of revenue and debt obligations of the State. The Commission's specific responsibilities include:

- 1) Preparation of annual revenue estimates with periodic updates;
- 2) Analysis of the fiscal impact of revenue bills;
- 3) Preparation of "State Debt Impact Notes" on legislation which would appropriate bond funds or increase bond authorization;
- 4) Periodic assessment of capital facility plans;
- 5) Annual estimates of public pension funding requirements and preparation of pension impact notes;
- 6) Annual estimates of the liabilities of the State's group health insurance program and approval of contract renewals promulgated by the Department of Central Management Services;
- 7) Administration of the State Facility Closure Act.

The Commission also has a mandate to report to the General Assembly ". . . on economic trends in relation to long-range planning and budgeting; and to study and make such recommendations as it deems appropriate on local and regional economic and fiscal policies and on federal fiscal policy as it may affect Illinois. . . . " This results in several reports on various economic issues throughout the year.

The Commission publishes several reports each year. In addition to a Monthly Briefing, the Commission publishes the "Revenue Estimate and Economic Outlook" which describes and projects economic conditions and their impact on State revenues. The "Illinois Bond Watcher" report examines the State's debt position as well as other issues directly related to conditions in the financial markets. The "Financial Conditions of the Illinois Public Retirement Systems" provides an overview of the funding condition of the State's retirement systems. Also published are an Annual Fiscal Year Budget Summary; Report on the Liabilities of the State Employees' Group Insurance Program; and Report of the Cost and Savings of the State Employees' Early Retirement Incentive Program. The Commission also publishes each year special topic reports that have or could have an impact on the economic well-being of Illinois. All reports are available on the Commission's website.

These reports are available from:

Commission on Government Forecasting and Accountability 703 Stratton Office Building Springfield, Illinois 62706 (217) 782-5320 (217) 782-3513 (FAX)