

# Illinois Public Retirement Systems

January 2014

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

Chicago Transit Authority Retirement Fund

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***

***COMMISSION CO-CHAIRMEN***

Senator Michael Frerichs  
Representative Jil Tracy

***SENATE***

David Koehler  
Matt Murphy  
Chapin Rose  
David Syverson  
Donne Trotter

***HOUSE***

Kelly Burke  
Elaine Nekritz  
Raymond Poe  
Al Riley  
Michael Tryon

---

**EXECUTIVE DIRECTOR**  
Dan R. Long

**DEPUTY DIRECTOR**  
Laurie L. Eby

**PENSION MANAGER**  
Dan Hankiewicz

**AUTHORS OF REPORT**  
Gregg Scott  
Richard S. Rockwood

**OFFICE ASSISTANT**  
Briana Jackson

---

## **TABLE OF CONTENTS**

### **JANUARY 2014**

### ***Illinois Public Retirement Systems: A Report on the Financial Condition of the Illinois Municipal, Chicago and Cook County Pension Funds in Illinois***

	<u>Page</u>
Executive Summary	i
I. Public Act 96-0889 (SB 1946) and Public Act 96-1495 (SB 3538)	1
II. Chicago Transit Authority Retirement Fund	7
III. Cook County Employees' Pension Fund	17
IV. Cook County Forest Preserve Employees' Pension Fund	27
V. Firemen's Annuity and Benefit Fund of Chicago	37
VI. Illinois Municipal Retirement Fund	47
VII. Laborers' Annuity and Benefit Fund of Chicago	59
VIII. Metropolitan Water Reclamation District Retirement Fund	69
IX. Municipal Employees' Annuity and Benefit Fund of Chicago	79
X. Park Employees' Annuity and Benefit Fund of Chicago	89
XI. Policemen's Annuity and Benefit Fund of Chicago	99
XII. Public School Teachers' Pension and Retirement Fund of Chicago	109

### **INDEX TO CHARTS AND TABLES**

Chart 1	Chicago Transit Authority Active Employees	10
Chart 2	Chicago Transit Authority Employee Annuitants	10
Chart 3	Chicago Transit Authority Average Salaries	11
Chart 4	Chicago Transit Authority Average Retirement Annuity	11

Chart 5	Chicago Transit Authority Funded Ratios	12
Chart 6	Chicago Transit Authority Change in Unfunded	12
Chart 7	Chicago Transit Authority Investment Income	13
Chart 8	Chicago Transit Authority Rates of Return	13
Chart 9	Cook County Employees' Pension Fund Active Employees	20
Chart 10	Cook County Employees' Pension Fund Employee Annuitants	20
Chart 11	Cook County Employees' Pension Fund Average Salaries	21
Chart 12	Cook County Employees' Pension Fund Average Retirement Annuity	21
Chart 13	Cook County Employees' Pension Fund Funded Ratios	22
Chart 14	Cook County Employees' Pension Fund Change in Unfunded	22
Chart 15	Cook County Employees' Pension Fund Investment Income	23
Chart 16	Cook County Employees' Pension Fund Rates of Return	23
Chart 17	Cook County FP Employees' Pension Fund Active Employees	30
Chart 18	Cook County FP Employees' Pension Fund Employee Annuitants	30
Chart 19	Cook County FP Employees' Pension Fund Average Salaries	31
Chart 20	Cook County FP Employees' Pension Fund Average Retirement Annuity	31
Chart 21	Cook County FP Employees' Pension Fund Funded Ratios	32
Chart 22	Cook County FP Employees' Pension Fund Change in Unfunded	32
Chart 23	Cook County FP Employees' Pension Fund Investment Income	33
Chart 24	Cook County FP Employees' Pension Fund Rates of Return	33
Chart 25	Firemen's Annuity & Benefit Fund of Chicago Active Employees	40
Chart 26	Firemen's Annuity & Benefit Fund of Chicago Employee Annuitants	40
Chart 27	Firemen's Annuity & Benefit Fund of Chicago Average Salaries	41
Chart 28	Firemen's Annuity & Benefit Fund of Chicago Average Retirement Annuity	41
Chart 29	Firemen's Annuity & Benefit Fund of Chicago Funded Ratios	42
Chart 30	Firemen's Annuity & Benefit Fund of Chicago Change in Unfunded	42
Chart 31	Firemen's Annuity & Benefit Fund of Chicago Investment Income	43
Chart 32	Firemen's Annuity & Benefit Fund of Chicago Rates of Return	43
Chart 33	Illinois Municipal Retirement Fund Active Employees	52
Chart 34	Illinois Municipal Retirement Fund Employee Annuitants	52
Chart 35	Illinois Municipal Retirement Fund Average Salaries	53
Chart 36	Illinois Municipal Retirement Fund Average Retirement Annuity	53
Chart 37	Illinois Municipal Retirement Fund Funded Ratios	54
Chart 38	Illinois Municipal Retirement Fund Change in Unfunded	54
Chart 39	Illinois Municipal Retirement Fund Investment Income	55
Chart 40	Illinois Municipal Retirement Fund Rates of Return	55
Chart 41	Laborers' Annuity & Benefit Fund of Chicago Active Employees	62
Chart 42	Laborers' Annuity & Benefit Fund of Chicago Employee Annuitants	62
Chart 43	Laborers' Annuity & Benefit Fund of Chicago Average Salaries	63
Chart 44	Laborers' Annuity & Benefit Fund of Chicago Average Retirement Annuity	63
Chart 45	Laborers' Annuity & Benefit Fund of Chicago Funded Ratios	64
Chart 46	Laborers' Annuity & Benefit Fund of Chicago Change in Unfunded	64
Chart 47	Laborers' Annuity & Benefit Fund Investment Income	65
Chart 48	Laborers' Annuity & Benefit Fund Rates of Return	65
Chart 49	Metropolitan Water Reclamation District Ret. Fund Active Employees	72
Chart 50	Metropolitan Water Reclamation District Ret. Fund Employee Annuitants	72

Chart 51	Metropolitan Water Reclamation District Ret. Fund Average Salaries	73
Chart 52	Metropolitan Water Reclamation District Ret. Fund Avg. Ret. Annuity	73
Chart 53	Metropolitan Water Reclamation District Ret. Fund Funded Ratios	74
Chart 54	Metropolitan Water Reclamation District Ret. Fund Change in Unfunded	74
Chart 55	Metropolitan Water Reclamation District Ret. Fund Investment Income	75
Chart 56	Metropolitan Water Reclamation District Ret. Fund Rates of Return	75
Chart 57	Municipal Employees' Annuity & Benefit Fund of Chi. Active Employees	82
Chart 58	Municipal Employees' Annuity & Benefit Fund of Chi. Annuitants	82
Chart 59	Municipal Employees' Annuity & Benefit Fund of Chi. Average Salaries	83
Chart 60	Municipal Employees' Annuity & Benefit Fund of Chi. Avg. Ret. Annuity	83
Chart 61	Municipal Employees' Annuity & Benefit Fund of Chi. Funded Ratios	84
Chart 62	Municipal Employees' Annuity & Benefit Fund of Chi. Chg. In Unfunded	84
Chart 63	Municipal Employees' Annuity & Benefit Fund of Chi. Investment Income	85
Chart 64	Municipal Employees' Annuity & Benefit Fund of Chi. Rates of Return	85
Chart 65	Park Employees' Annuity & Benefit Fund of Chicago Active Employees	93
Chart 66	Park Employees' Annuity & Benefit Fund of Chicago Annuitants	93
Chart 67	Park Employees' Annuity & Benefit Fund of Chicago Average Salaries	94
Chart 68	Park Employees' Annuity & Benefit Fund of Chicago Avg. Ret. Annuity	94
Chart 69	Park Employees' Annuity & Benefit Fund of Chicago Funded Ratios	95
Chart 70	Park Employees' Annuity & Benefit Fund of Chicago Chg. In Unfunded	95
Chart 71	Park Employees' Annuity & Benefit Fund of Chicago Investment Income	96
Chart 72	Park Employees' Annuity & Benefit Fund of Chicago Rates of Return	96
Chart 73	Policemen's Annuity & Benefit Fund of Chicago Active Employees	102
Chart 74	Policemen's Annuity & Benefit Fund of Chicago Employee Annuitants	102
Chart 75	Policemen's Annuity & Benefit Fund of Chicago Average Salaries	103
Chart 76	Policemen's Annuity & Benefit Fund of Chicago Avg. Ret. Annuity	103
Chart 77	Policemen's Annuity & Benefit Fund of Chicago Funded Ratios	104
Chart 78	Policemen's Annuity & Benefit Fund of Chicago Changes In Unfunded	104
Chart 79	Policemen's Annuity & Benefit Fund of Chicago Investment Income	105
Chart 80	Policemen's Annuity & Benefit Fund of Chicago Rates of Return	105
Chart 81	PS Teachers' Pension & Retirement Fund of Chi. Active Employees	112
Chart 82	PS Teachers' Pension & Retirement Fund of Chi. Employee Annuitants	112
Chart 83	PS Teachers' Pension & Retirement Fund of Chi. Average Salaries	113
Chart 84	PS Teachers' Pension & Retirement Fund of Chi. Avg. Ret. Annuity	113
Chart 85	PS Teachers' Pension & Retirement Fund of Chi. Funded Ratios	114
Chart 86	PS Teachers' Pension & Retirement Fund of Chi. Changes in Unfunded	114
Chart 87	PS Teachers' Pension & Retirement Fund of Chi. Investment Income	115
Chart 88	PS Teachers' Pension & Retirement Fund of Chi. Rates of Return	115
Table 1	Chicago Transit Authority Systems Experience	15
Table 2	Chicago Transit Authority Changes in Net Assets	16
Table 3	Cook County Employees' Pension Fund Systems Experience	24
Table 4	Cook County Employees' Pension Fund Changes in Net Assets	25
Table 5	Cook County FP Employees' Pension Fund Systems Experience	34
Table 6	Cook County FP Employees' Pension Fund Changes in Net Assets	35
Table 7	Firemen's Annuity & Benefit Fund of Chicago Systems Experience	44

Table 8	Firemen's Annuity & Benefit Fund of Chicago Changes in Net Assets	45
Table 9	Firemen's Annuity & Benefit Fund of Chicago System Projections	46
Table 10	Illinois Municipal Retirement Fund Systems Experience	56
Table 11	Illinois Municipal Retirement Fund Changes in Net Assets	57
Table 12	Laborers' Annuity & Benefit Fund of Chicago Systems Experience	66
Table 13	Laborers' Annuity & Benefit Fund of Chicago Changes in Net Assets	67
Table 14	Laborers' Annuity & Benefit Fund of Chicago System Projections	68
Table 15	Metropolitan Water Reclamation District Ret. Fund Systems Experience	76
Table 16	Metropolitan Water Reclamation District Ret. Fund Changes in Net Assets	77
Table 17	Metropolitan Water Reclamation District System Projections	78
Table 18	Municipal Employees' Annuity & Benefit Fund of Chi. Systems Experience	86
Table 19	Municipal Employees' Annuity & Benefit Fund of Chi. Changes in Net Assets	87
Table 20	Municipal Employees' Annuity & Benefit Fund of Chicago Projections	88
Table 21	Park Employees' Annuity & Benefit Fund of Chicago Systems Experience	97
Table 22	Park Employees' Annuity & Benefit Fund of Chicago Changes in Net Assets	98
Table 23	Policemen's Annuity & Benefit Fund of Chicago Systems Experience	106
Table 24	Policemen's Annuity & Benefit Fund of Chicago Changes in Net Assets	107
Table 25	Policemen's Annuity & Benefit Fund of Chicago System Projections	108
Table 26	PS Teachers' Pension & Retirement Fund of Chi. Systems Experience	116
Table 27	PS Teachers' Pension & Retirement Fund of Chi. Changes in Net Assets	117
Table 28	PS Teachers' Pension & Retirement Fund of Chi. System Projections	119

## Executive Summary

This report examines the financial status of various public employee retirement systems in Chicago, Cook County and the Illinois Municipal Retirement Fund, as of Fiscal Year 2012. 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 2012 there were 8,317 active employees and 7,794 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$1.703 Billion and Total Actuarial Liabilities were \$2.867 Billion.
- The Cook County Employees' Retirement Fund covers all persons employed and paid by the County. At the end of 2012 there were 21,447 active employees and 13,609 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$7.834 Billion and Total Actuarial Liabilities were \$14.630 Billion.
- The Cook County Employees' Retirement Fund active member headcount has dropped by approximately 4,100 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 2012 there were 467 active employees and 355 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$172.6 Million and Total Actuarial Liabilities were \$304.5 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 2012 there were 4,740 active employees and 2,821 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$0.993 Billion and Total Actuarial Liabilities were \$4.066 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 2012 there were 174,771 active employees and 90,196 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$27.492 Billion and Total Actuarial Liabilities were \$32.603 Billion.

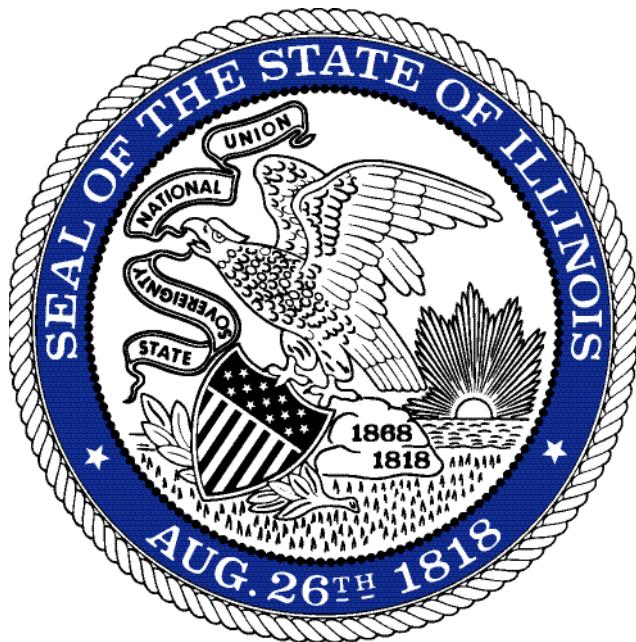
- The Laborers' Annuity and Benefit Fund of Chicago covers persons employed by the City of Chicago in a position classified as labor service by the employer; anyone employed by the Board, anyone employed by the Retirement Board of any other Annuity and Benefit Fund. At the end of 2012 there were 2,865 active employees and 2,737 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$1.316 Billion and Total Actuarial Liabilities were \$2.375 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 2012 there were 1,856 active employees and 1,681 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$1.077 Billion and Total Actuarial Liabilities were \$2.136 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 2012 there were 31,326 active employees and 19,614 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$5.073 Billion and Total Actuarial Liabilities were \$13.638 Billion.
- The Park Employees' Annuity and Benefit Fund of Chicago covers all persons employed by the Chicago Park District. At the end of 2012 there were 2,977 active employees and 2,104 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$440.7 Million and Total Actuarial Liabilities were \$866.4 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 2012 there were 12,026 active employees and 9,035 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$3.149 Billion and Total Actuarial Liabilities were \$10.052 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 2012 there were 30,366 active employees and 22,636 employee annuitants. Total Actuarial Assets of the system on that date were \$9.364 Billion and Total Actuarial Liabilities were \$17.376 Billion.
- The Public School Teachers' Pension and Retirement Fund of Chicago headcount has dropped by approximately 4,300 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.

- Almost all of the systems included in this report have seen headcount reductions during 2010, 2011 and 2012.
- The Chicago Laborers' Pension Fund lowered its actuarial assumption on the future investment rate of return from 8.00% to 7.50% annually as of the most recent valuation, i.e., FY 2012.
- 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 2012 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.
- Please note that the following systems are projected to completely run out of assets in the following years, i. e., their total assets will reach zero: Chicago Laborers (2027), Chicago Municipal (2025).



## I. Public Act 96-0889 (SB 1946) and Public Act 1495 (SB 3538)





# **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% or 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% or 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

## II. Chicago Transit Authority 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
- 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, 2012.



# 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

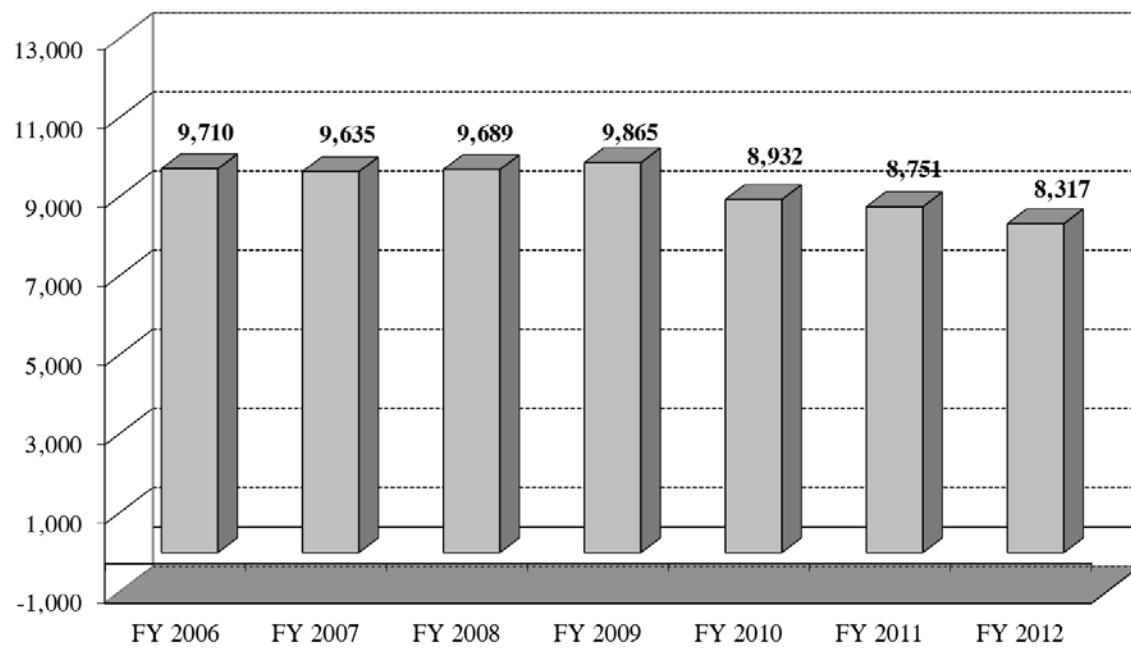
---

- 14.250% of salary (FY 2014-2040)

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.

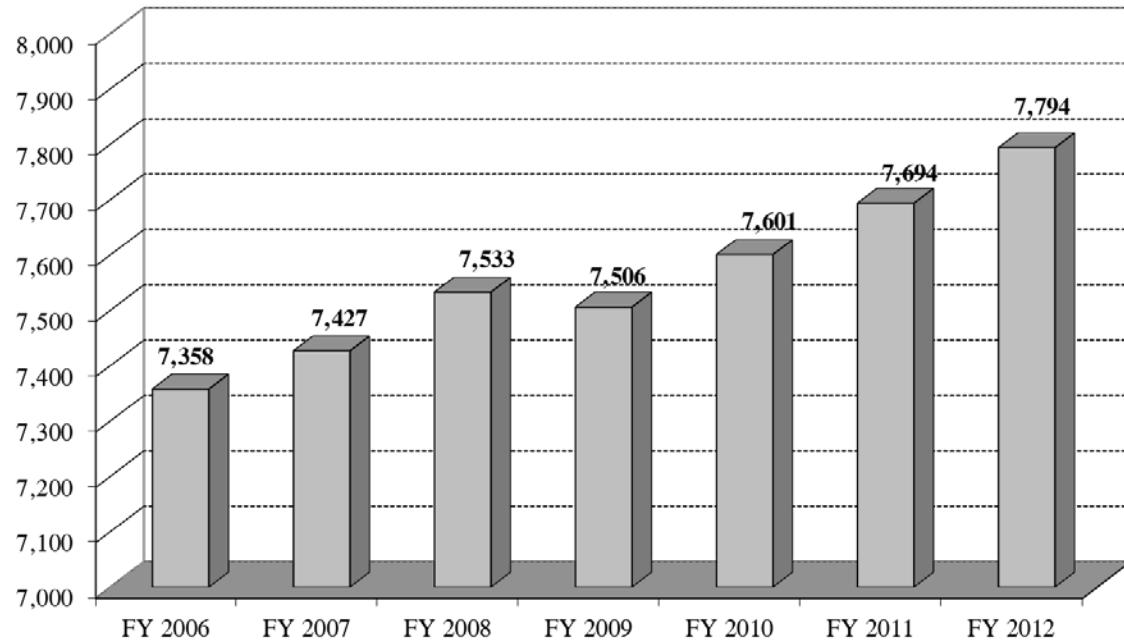
## CHART 1

### CHICAGO TRANSIT AUTHORITY PENSION FUND Active Employees



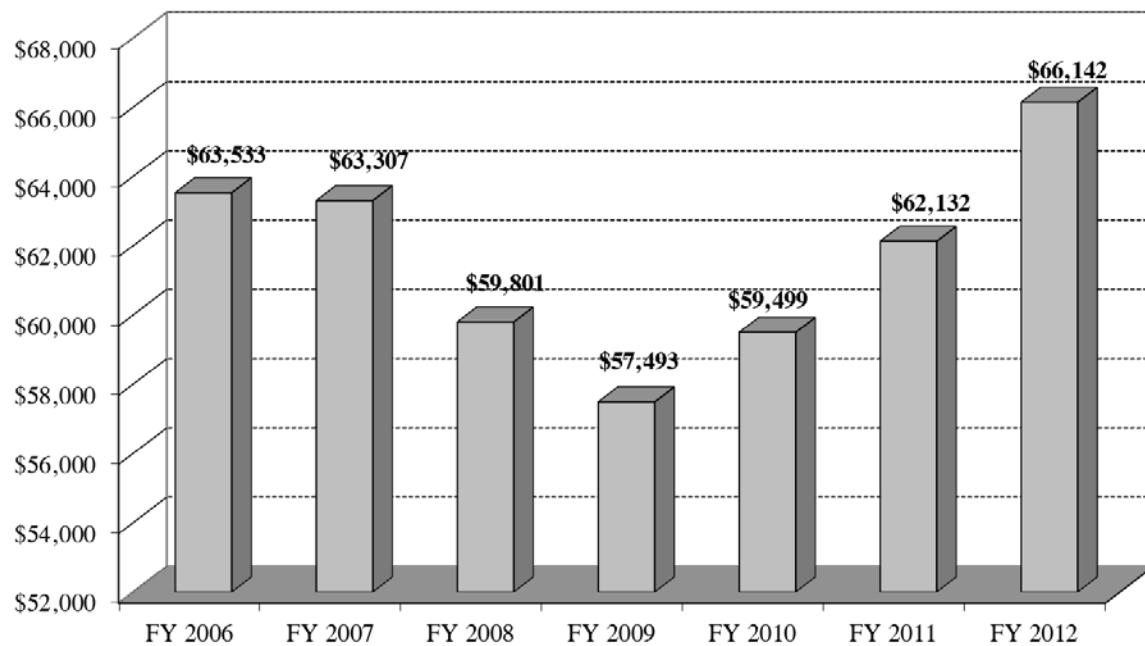
## CHART 2

### CHICAGO TRANSIT AUTHORITY PENSION FUND Employee Annuitants



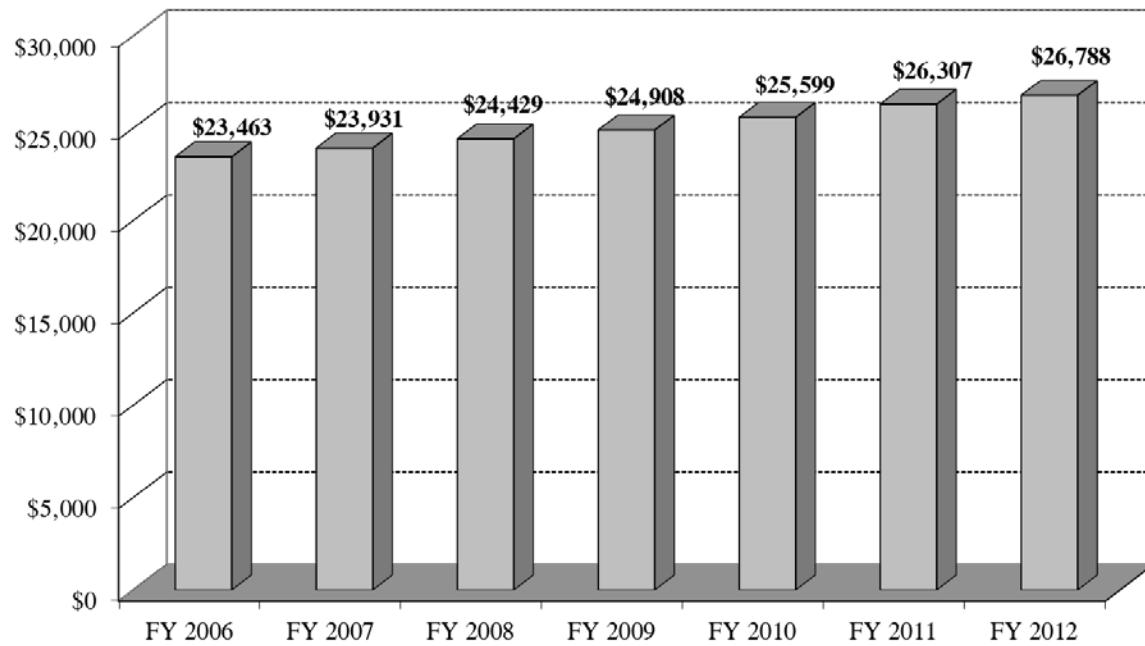
### CHART 3

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



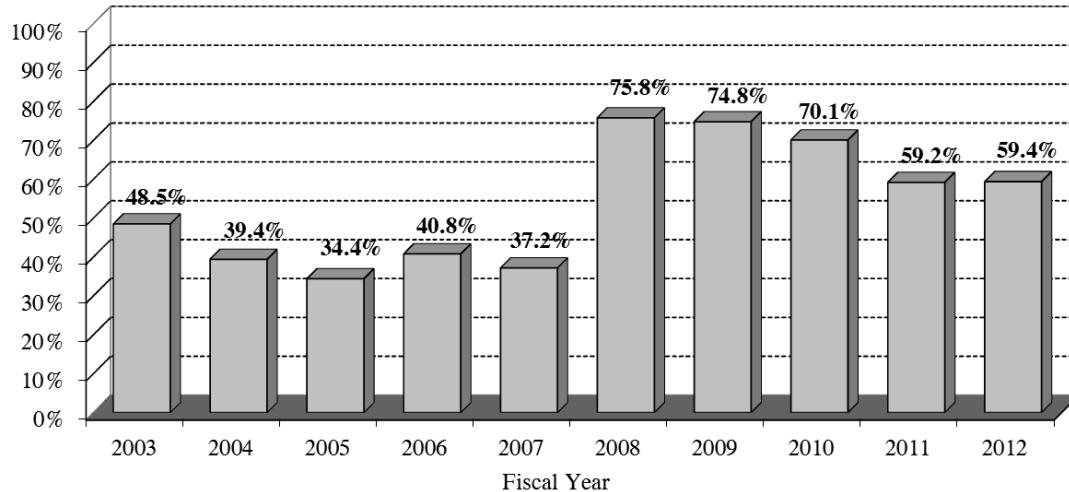
### CHART 4

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



## CHART 5

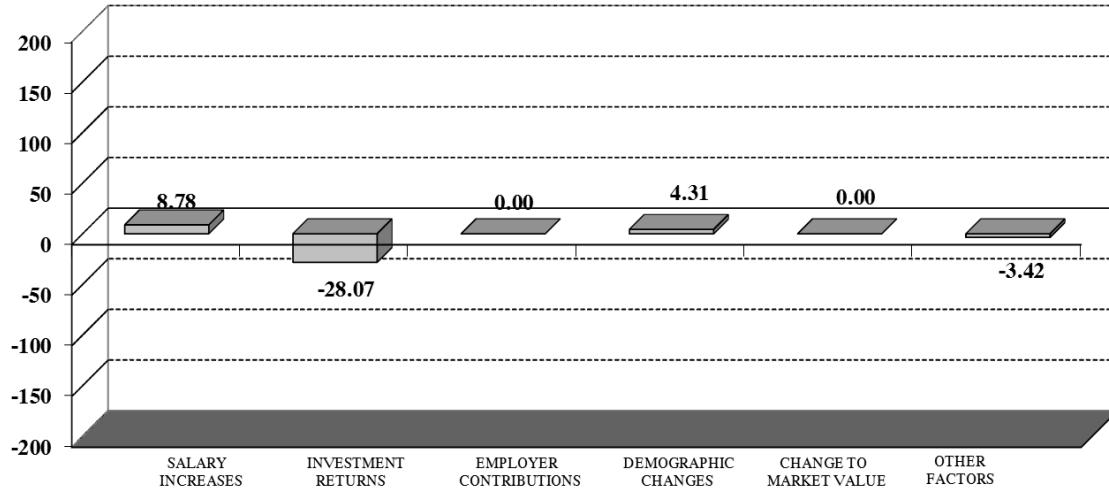
### CHICAGO TRANSIT AUTHORITY PENSION FUND Funded Ratio FY 2003 - FY 2012



## CHART 6

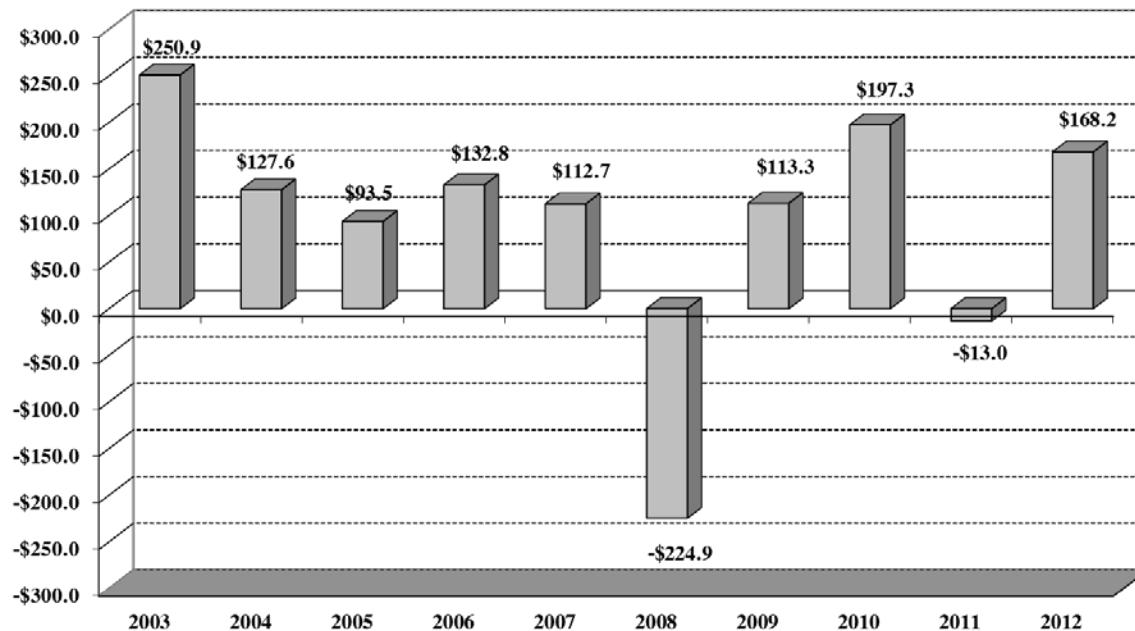
### CHICAGO TRANSIT AUTHORITY PENSION FUND Change in Unfunded Liabilities FY 2012 \$ Millions

TOTAL INCREASE EQUALS  
\$18.4 MIL



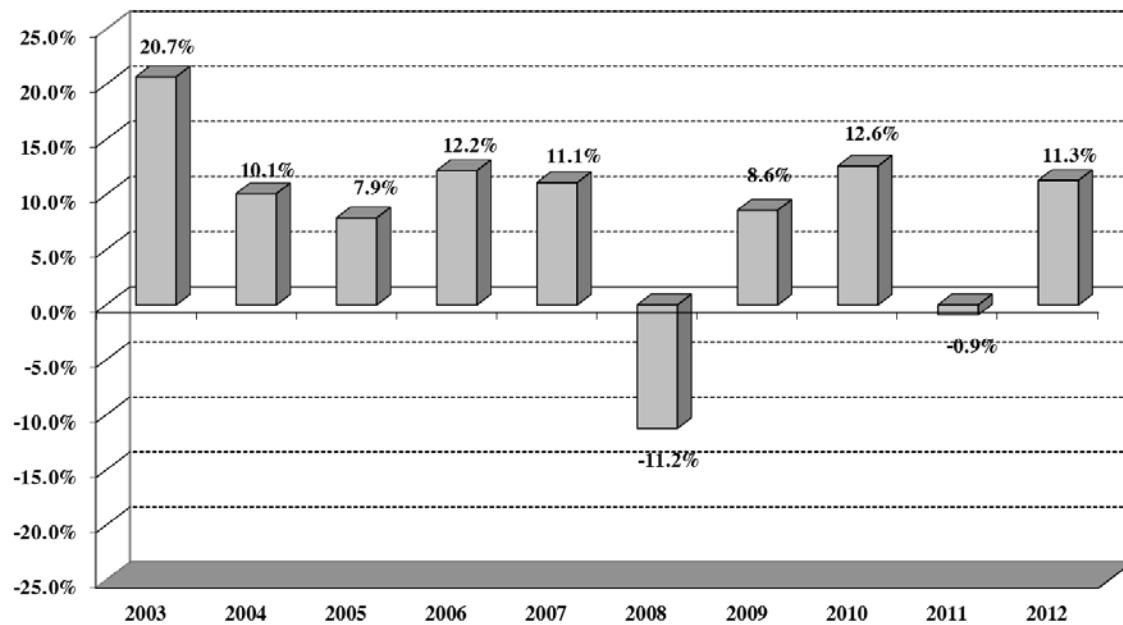
## CHART 7

CHICAGO TRANSIT AUTHORITY PENSION FUND  
Investment Income FY 2003 - FY 2012  
Actuarially Assumed Rate of Return : 8.50%  
(\$ in millions)



## CHART 8

CHICAGO TRANSIT AUTHORITY PENSION FUND  
Rate of Return FY 2003 - FY 2012  
Actuarially Assumed Rate of Return : 8.50%



**TABLE 1**

<b>CHICAGO TRANSIT AUTHORITY PENSION FUND</b>					
<b>System Experience, FY 2003 - FY 2012</b>					
<b>(\$ in millions)</b>					
<b>Fiscal Year</b>	<b>Annual Payroll</b>	<b>Actuarial Liabilities</b>	<b>Actuarial Assets</b>	<b>Unfunded Liabilities</b>	<b>Funded Ratio</b>
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%
2003	486.6	2,189.7	1,062.4	1,127.3	48.5%

*Note: The above figures do not include healthcare liabilities.*

**TABLE 2**

<b>CHICAGO TRANSIT AUTHORITY PENSION FUND</b>								
<b>Changes in Net Assets</b>								
<b>(\$ in millions)</b>								
Fiscal Years	2012	2011	2010	2009	2008	2007	2006	2005
<b>Additions to Assets</b>								
Employer	62.8	60.3	56.3	41.4	68.5	33.8	35.7	30.6
Employees	48.4	47.2	45.3	35.0	34.3	16.9	17.8	15.1
Net Investment Income	168.2	-13.0	197.2	113.3	-224.9	112.7	132.8	93.5
Other - Bonds	0.0	0.0	0.0	0.0	1,110.5	0.0	0.0	0.0
<b>Total Asset Additions (A)</b>	<b>279.4</b>	<b>94.5</b>	<b>298.8</b>	<b>189.7</b>	<b>988.4</b>	<b>163.4</b>	<b>186.3</b>	<b>139.2</b>
<b>Deductions from Assets</b>								
Benefits	232.7	222.2	216.2	212.6	263.5	256.9	246.2	DNA
Refunds	4.0	2.9	2.2	2.1	1.8	1.4	1.4	DNA
Rebates	0.0	0.0	0.0	0.0	0.0	0.0	0.0	DNA
Administrative Expenses	2.1	2.0	2.0	2.2	2.4	2.3	2.8	DNA
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	DNA
<b>Total Asset Deductions (B)</b>	<b>238.8</b>	<b>227.1</b>	<b>220.4</b>	<b>216.9</b>	<b>267.7</b>	<b>260.6</b>	<b>250.4</b>	<b>DNA</b>
<b>Change in Net Assets (A-B=C)</b>	<b>40.6</b>	<b>-132.6</b>	<b>78.4</b>	<b>-27.2</b>	<b>720.7</b>	<b>-97.2</b>	<b>-64.1</b>	<b>DNA</b>

*NOTE : DNA = Data Not Available From Retirement System*



### 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



**Note:** All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of December 31, 2012.



# 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

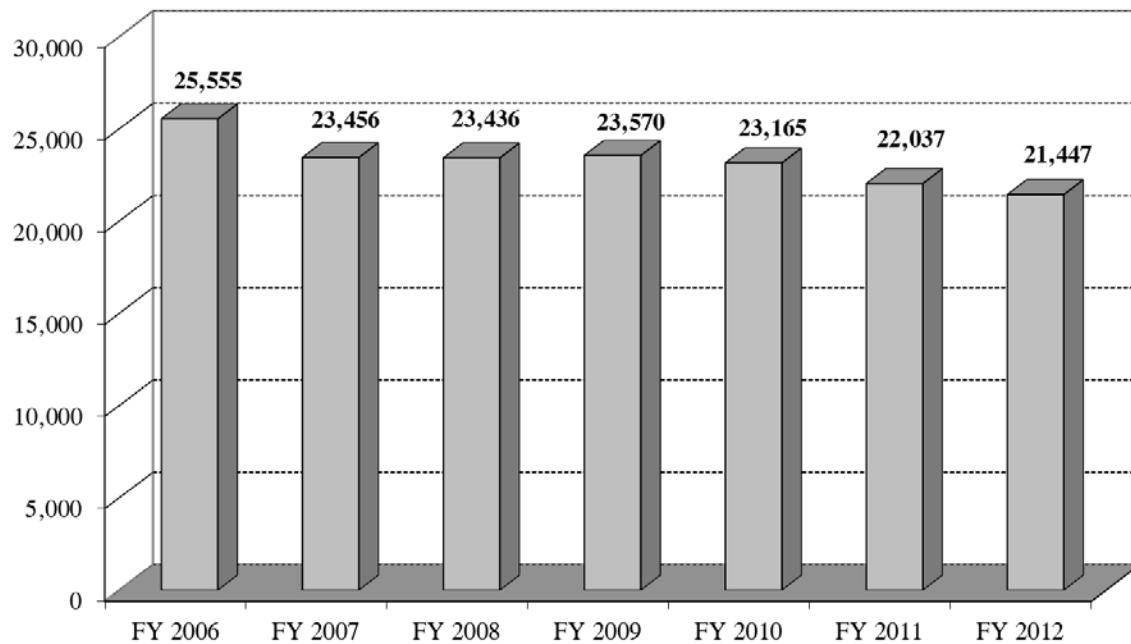
---

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 the P.A. 96-0889 Section on page 3 for a summary of benefits for employees hired after January 1, 2011.**

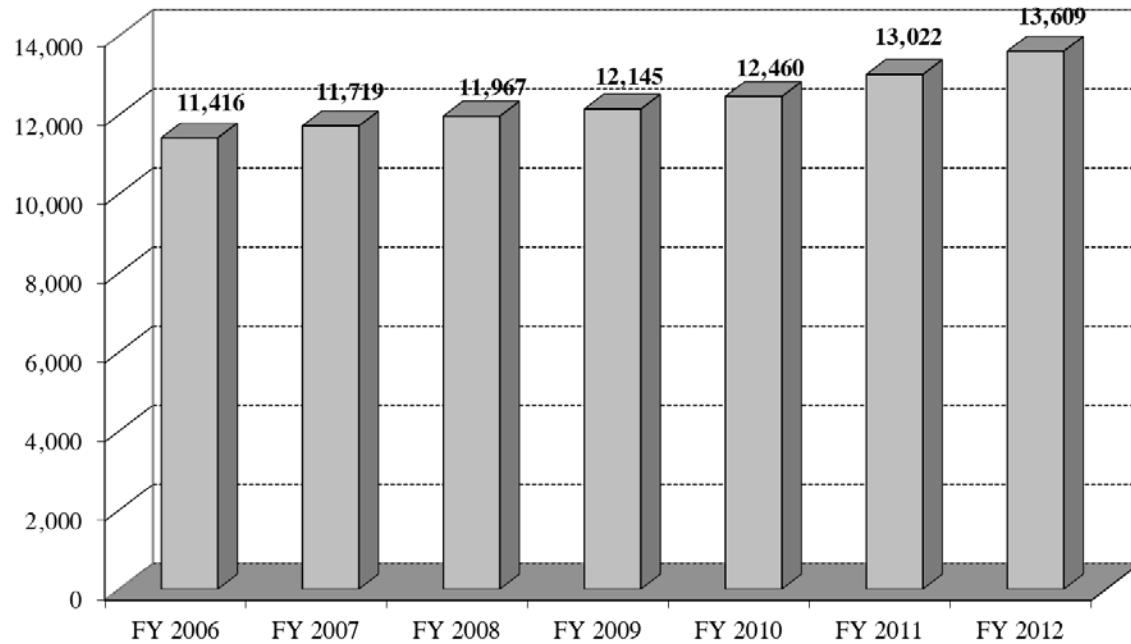
## CHART 9

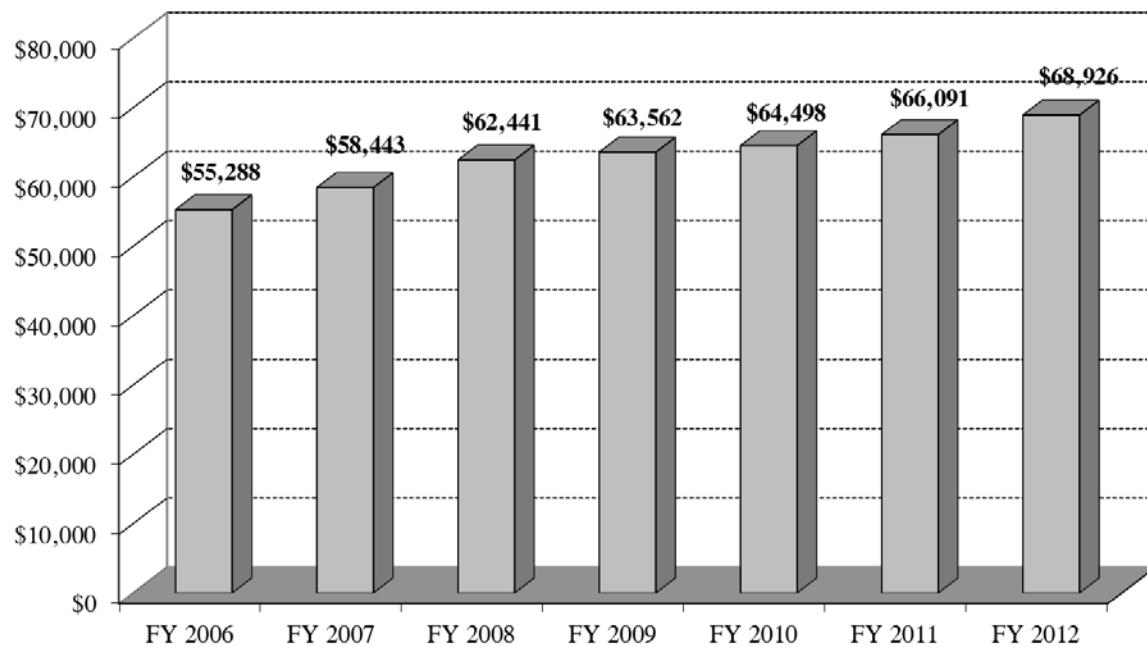
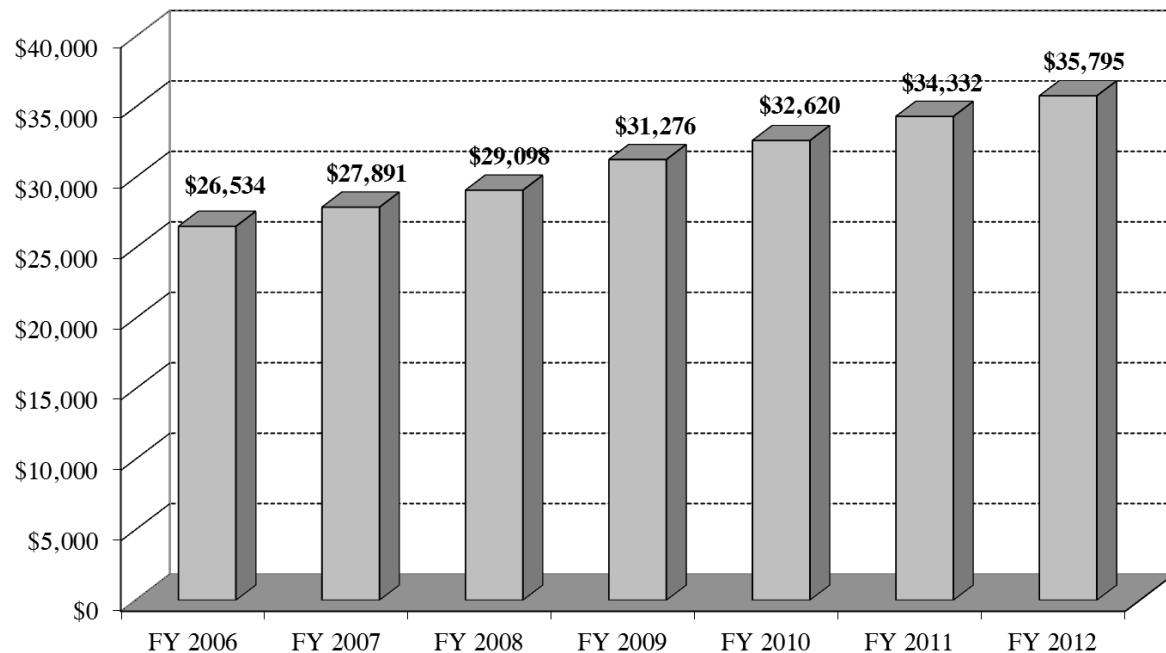
### COOK COUNTY EMPLOYEES' PENSION FUND Active Employees



## CHART 10

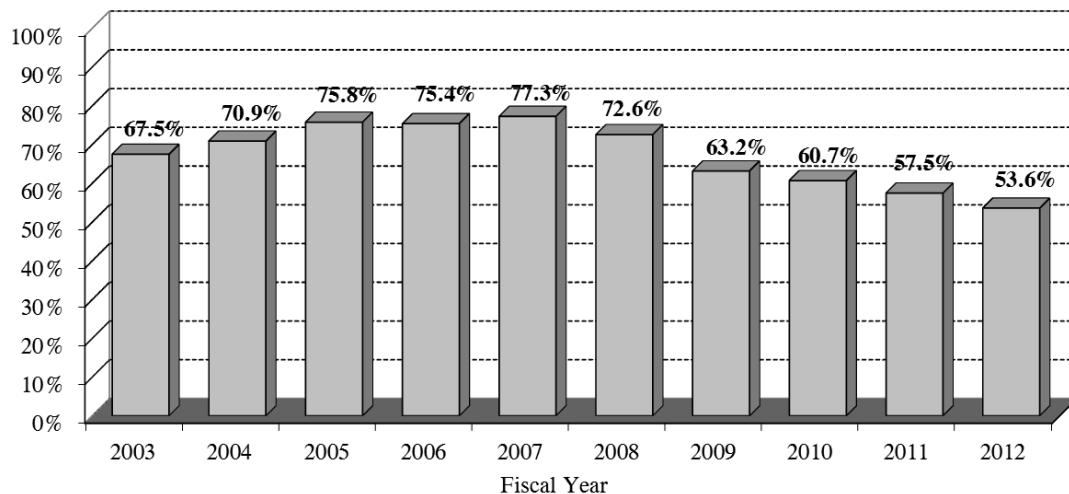
### COOK COUNTY EMPLOYEES' PENSION FUND Employee Annuitants



**CHART 11****COOK COUNTY EMPLOYEES' PENSION FUND**  
**Average Employee Salaries****CHART 12****COOK COUNTY EMPLOYEES' PENSION FUND**  
**Average Retirement Annuities**

## CHART 13

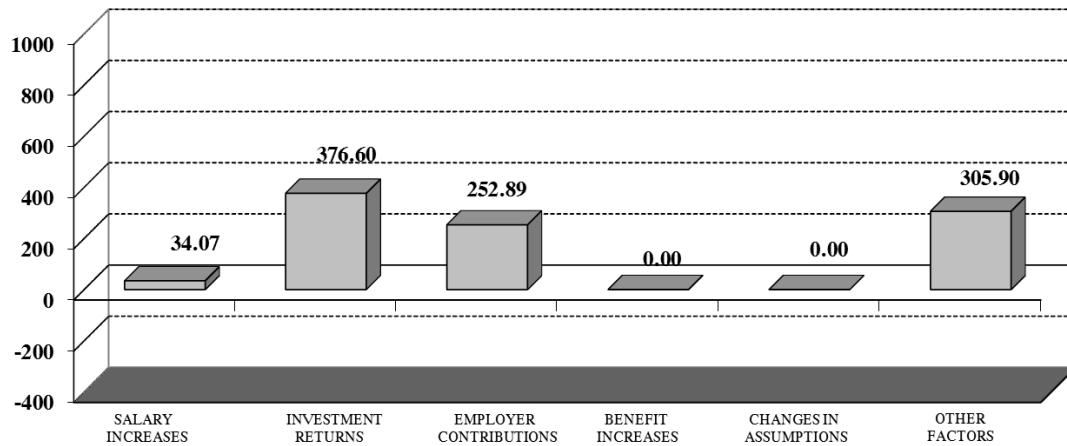
### COOK COUNTY EMPLOYEES' PENSION FUND Funded Ratio FY 2003 - FY 2012



## CHART 14

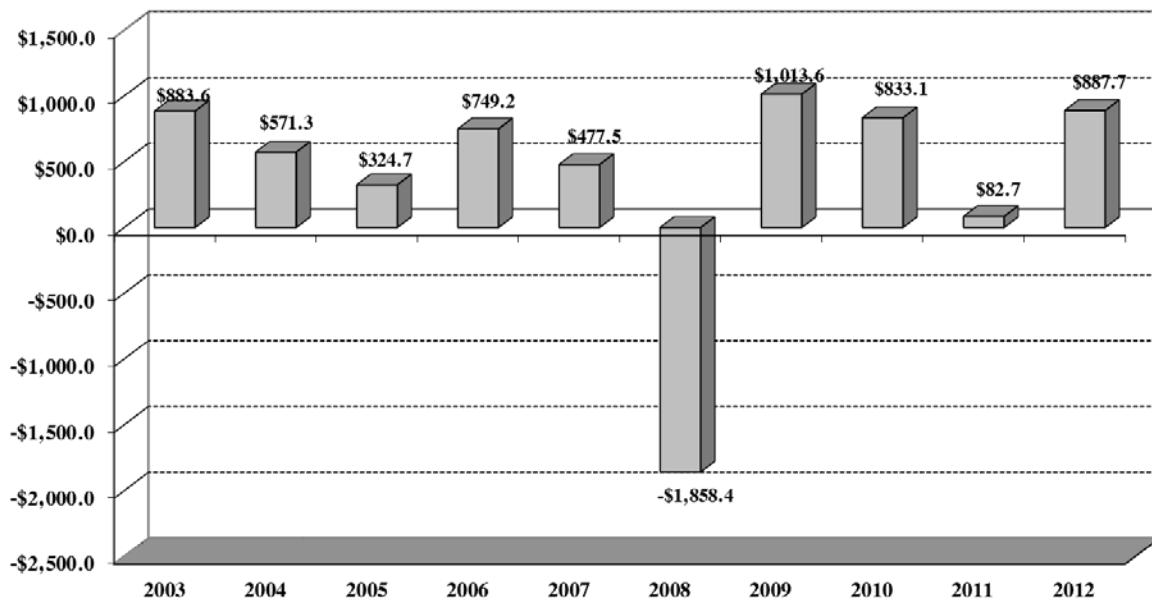
### COOK COUNTY EMPLOYEES PENSION FUND Change in Unfunded Liabilities FY 2011 \$ Millions

TOTAL INCREASE EQUALS  
\$969.46 MIL



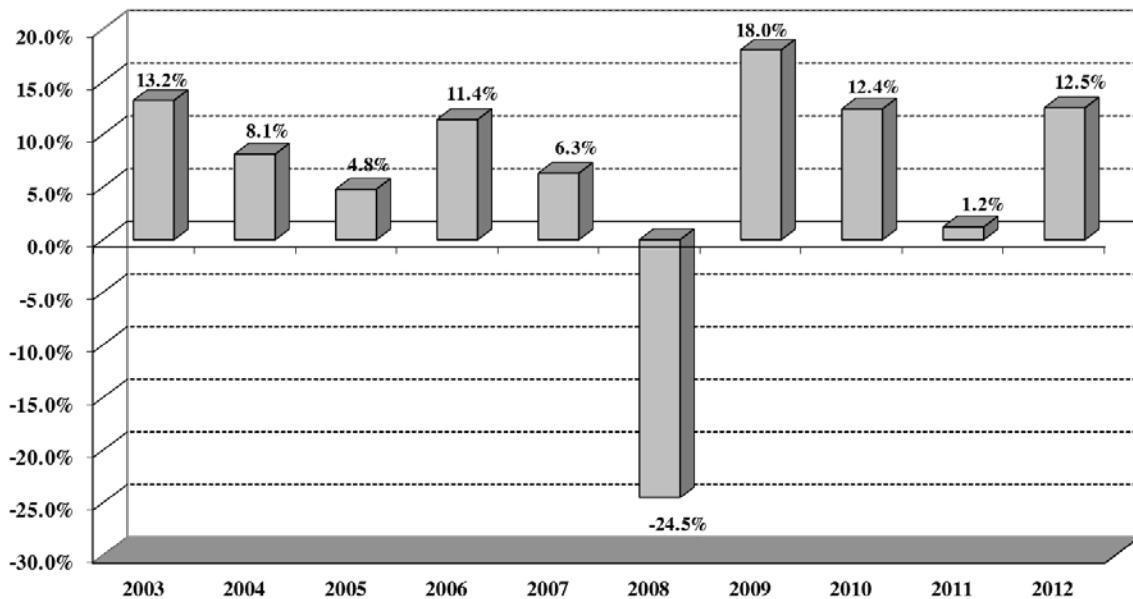
## CHART 15

COOK COUNTY EMPLOYEES' PENSION FUND  
Investment Income FY 2003 - FY 2012  
Actuarially Assumed Rate of Return: 7.5%  
(Millions)



## CHART 16

COOK COUNTY EMPLOYEES' PENSION FUND  
Rate of Return FY 2003 - FY 2012  
Actuarially Assumed Rate of Return: 7.5%  
(\$ in millions)



**TABLE 3**

<b>COOK COUNTY EMPLOYEES PENSION FUND</b>					
<b>System Experience, FY 2003 - FY 2012</b>					
<b>(\$ in millions)</b>					
<b>Fiscal Year</b>	<b>Annual Payroll</b>	<b>Actuarial Liabilities</b>	<b>Actuarial Assets</b>	<b>Unfunded Liabilities</b>	<b>Funded Ratio</b>
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%
2003	1,307.1	8,781.0	5,929.2	2,851.8	67.5%

*NOTE: The above FY 2006 - FY 2012 figures include healthcare assets/liabilities.*

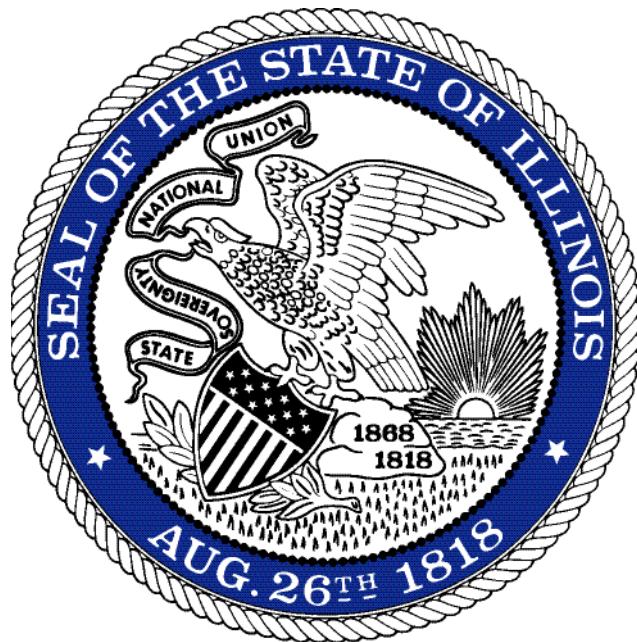
**TABLE 4**

Fiscal Years	Changes in Net Assets (\$ in millions)							
	2012	2011	2010	2009	2008	2007	2006	2005
<b>Additions to Assets</b>								
Employer	190.7	195.3	181.5	183.7	183.9	258.1	221.2	214.9
Employees	130.6	127.6	129.4	127.8	123.8	123.1	121.7	174.2
Net Investment Income	887.7	82.9	833.1	1,013.6	-1,858.4	477.5	749.2	324.7
Other	10.2	17.4	12.8	11.8	7.1	10.0	9.3	7.0
<b>Total Asset Additions (A)</b>	<b>1,219.2</b>	<b>423.2</b>	<b>1,156.8</b>	<b>1,336.9</b>	<b>-1,543.7</b>	<b>868.7</b>	<b>1,101.4</b>	<b>720.8</b>
<b>Deductions from Assets</b>								
Benefits	563.1	523.4	482.5	452.0	427.5	398.7	365.6	348.3
Refunds	33.1	29.1	25.0	20.4	24.7	66.6	24.9	23.1
Rebates	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Administrative Expenses	4.3	4.1	4.1	4.3	4.6	4.5	4.0	4.4
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Asset Deductions (B)</b>	<b>600.5</b>	<b>556.6</b>	<b>511.6</b>	<b>476.7</b>	<b>456.8</b>	<b>469.8</b>	<b>394.5</b>	<b>375.8</b>
<b>Change in Net Assets (A-B=C)</b>	<b>618.7</b>	<b>-133.4</b>	<b>645.2</b>	<b>860.2</b>	<b>-2,000.4</b>	<b>398.9</b>	<b>706.9</b>	<b>345.0</b>



## 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



Note: All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of December 31, 2012.



# 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

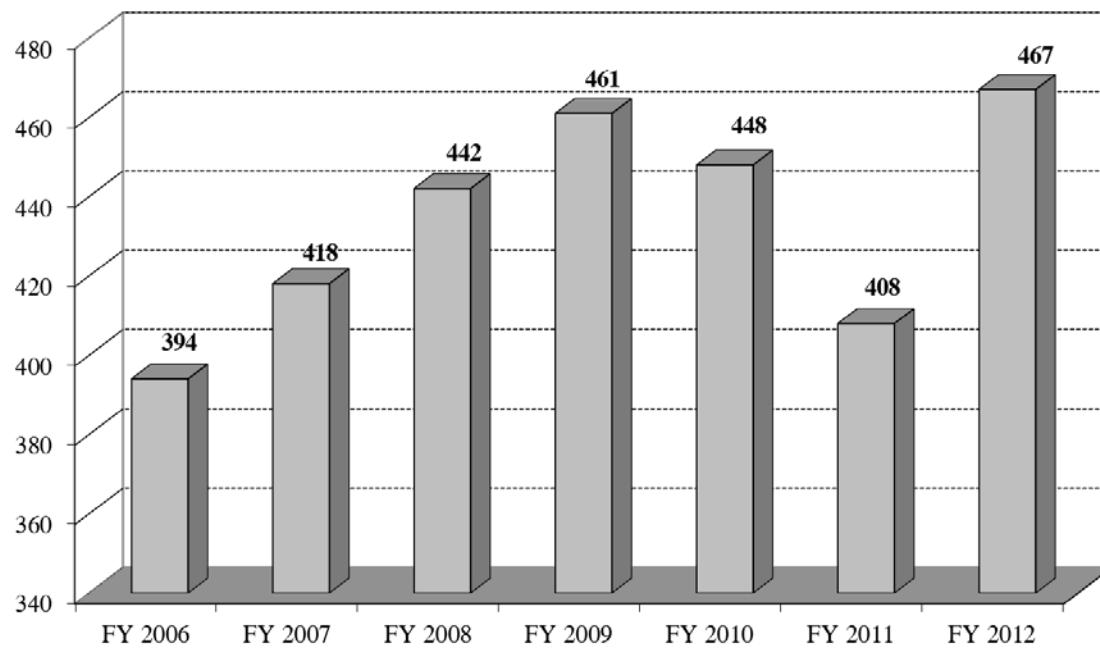
---

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 the P.A. 96-0889 Section on page 3 for a summary of benefits for employees hired after January 1, 2011.**

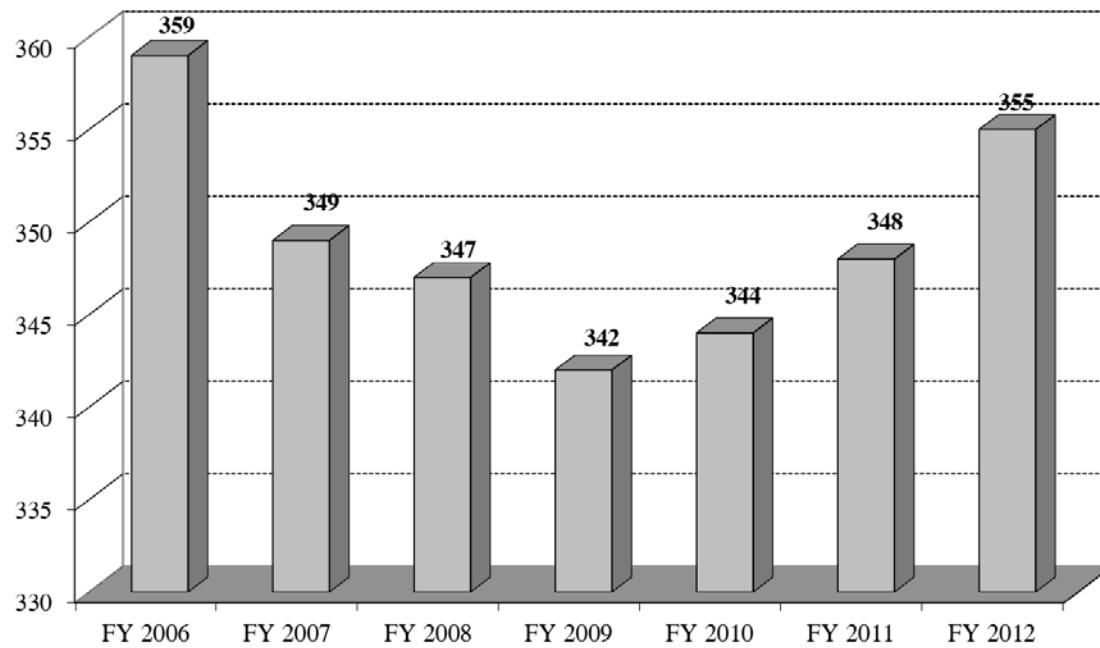
## CHART 17

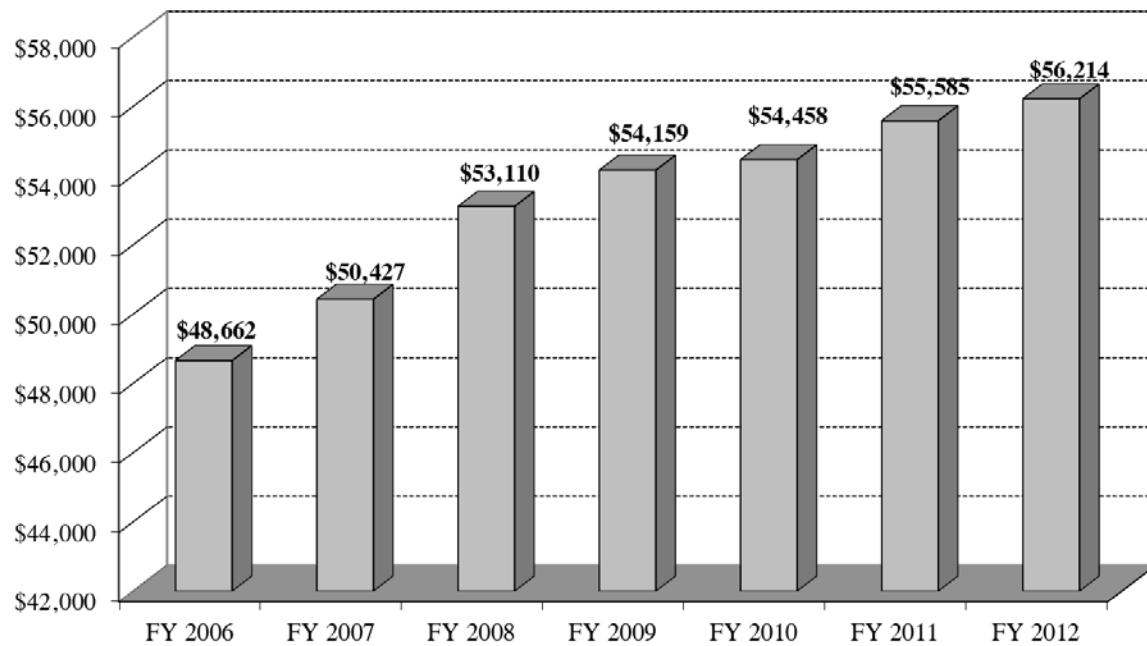
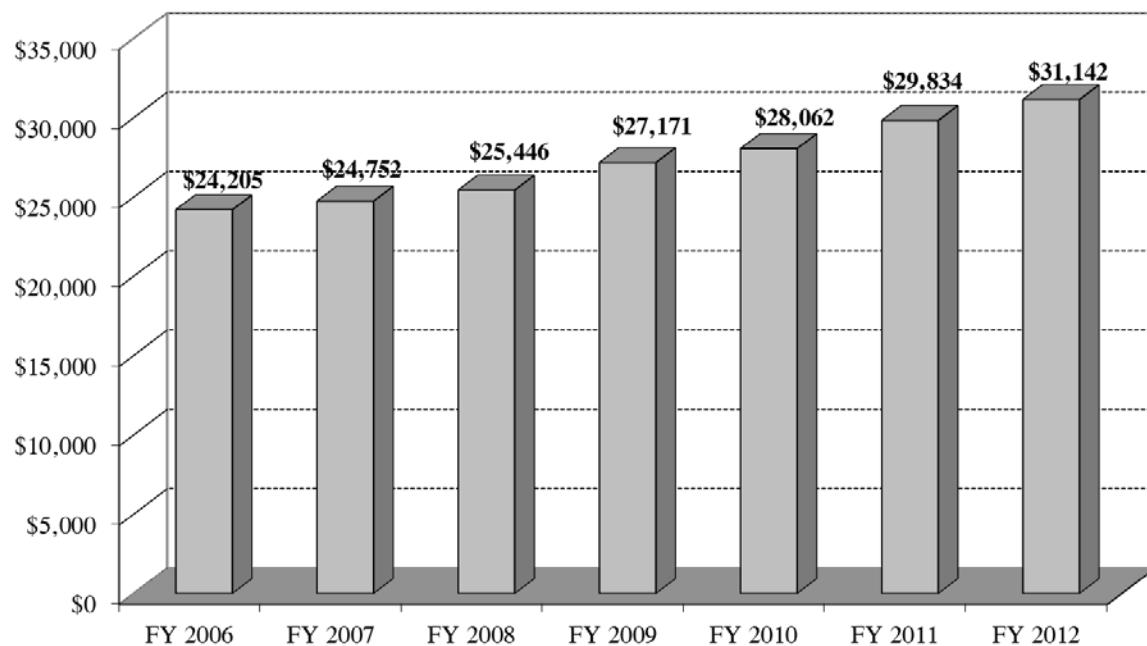
### COOK COUNTY FOREST PRESERVE PENSION FUND Active Employees



## CHART 18

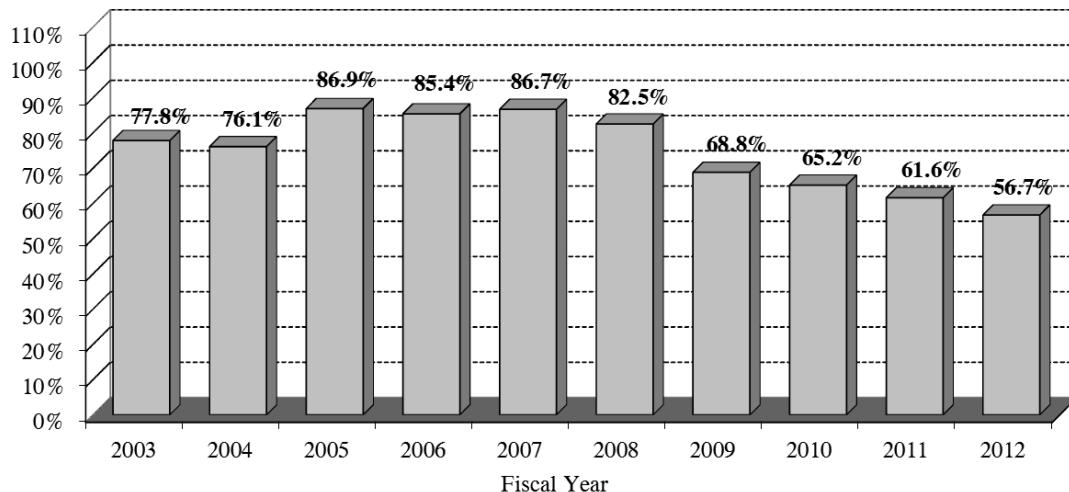
### COOK COUNTY FOREST PRESERVE PENSION FUND Employee Annuitants



**CHART 19****COOK COUNTY FOREST PRESERVE PENSION FUND**  
**Average Employee Salaries****CHART 20****COOK COUNTY FOREST PRESERVE PENSION FUND**  
**Average Retirement Annuities**

## CHART 21

### COOK COUNTY FOREST PRESERVE PENSION FUND Funded Ratio FY 2003 - FY 2012

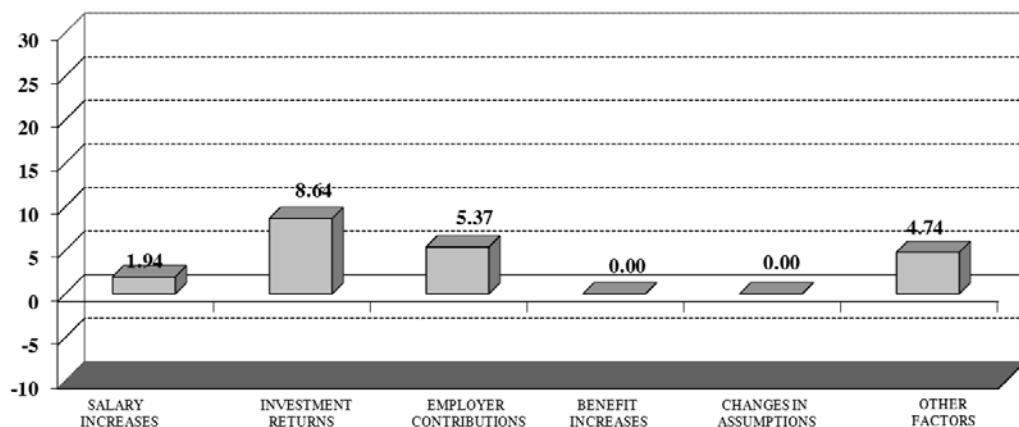


## CHART 22

### COOK COUNTY FOREST PRESERVE PENSION FUND Change in Unfunded Liabilities FY 2012

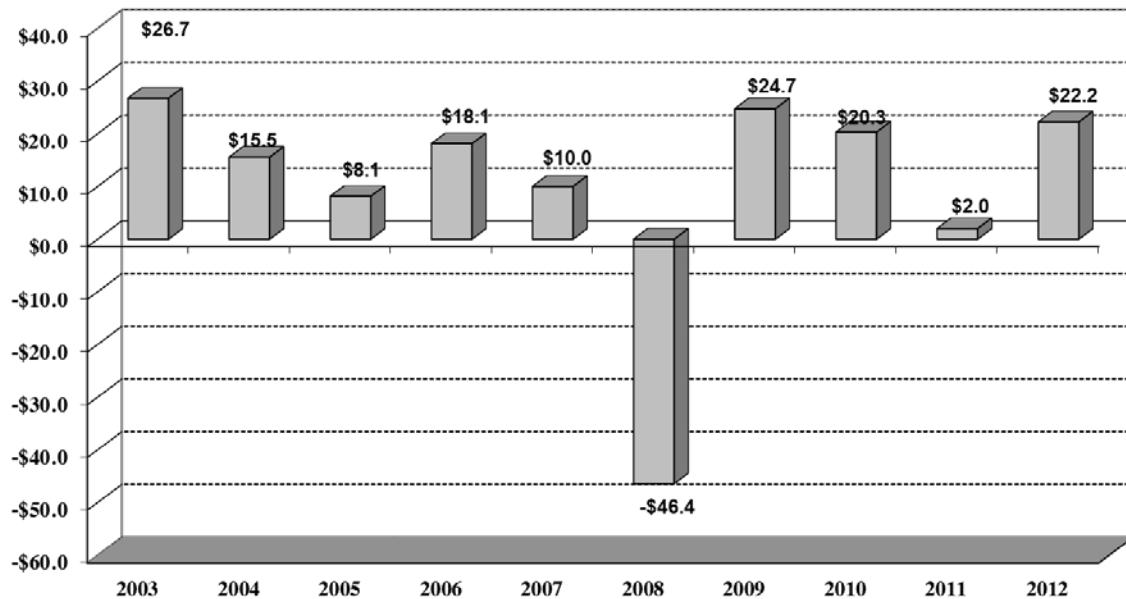
\$ Millions

TOTAL INCREASE EQUALS  
\$20.69 MIL



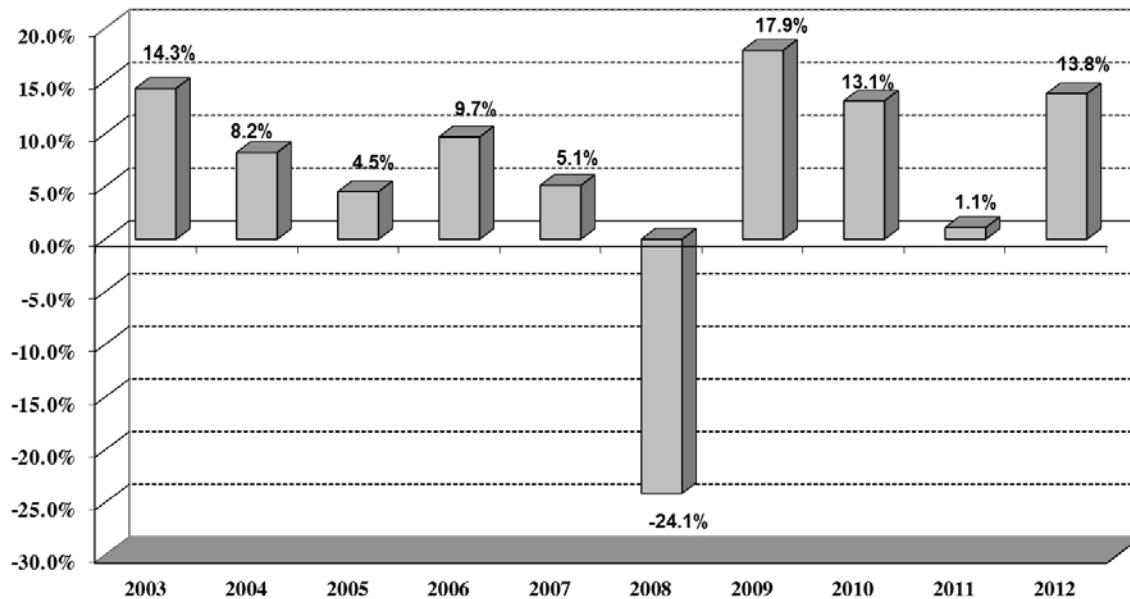
## CHART 23

COOK COUNTY FOREST PRESERVE PENSION FUND  
Investment Income FY 2003 - FY 2012  
Actuarially Assumed Rate of Return: 7.5%  
(Millions)



## CHART 24

COOK COUNTY FOREST PRESERVE PENSION FUND  
Rate of Return FY 2003 - FY 2012  
Actuarially Assumed Rate of Return: 7.5%  
(\$ in millions)



**TABLE 5**

**COOK COUNTY FOREST PRESERVE PENSION FUND**  
**System Experience, FY 2003 - FY 2012**  
**(\$ in millions)**

Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
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%
2003	17.3	218.7	170.1	48.6	77.8%

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

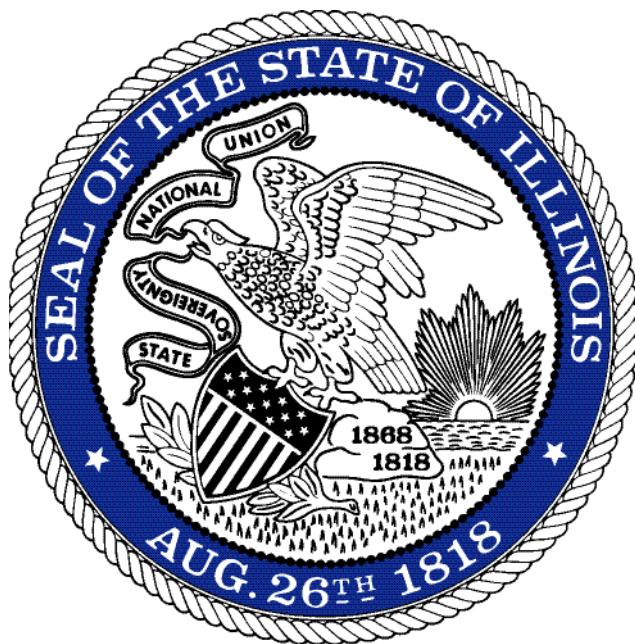
**TABLE 6**

<b>COOK COUNTY FOREST PRESERVE PENSION FUND</b>								
<b>Changes in Net Assets</b>								
<b>(\$ in millions)</b>								
Fiscal Years	2012	2011	2010	2009	2008	2007	2006	2005
<b>Additions to Assets</b>								
Employer	3.1	3.3	2.7	2.6	2.0	3.3	2.7	3.3
Employees	2.5	2.3	2.4	2.4	2.1	2.0	1.7	2.6
Net Investment Income	22.2	2.0	20.3	24.7	-46.4	10.0	18.1	8.1
Other	0.2	0.5	0.2	0.2	0.1	0.2	0.2	0.0
<b>Total Asset Additions (A)</b>	<b>28.0</b>	<b>8.1</b>	<b>25.6</b>	<b>29.9</b>	<b>-42.1</b>	<b>15.5</b>	<b>22.7</b>	<b>14.0</b>
<b>Deductions from Assets</b>								
Benefits	14.2	13.6	13.0	12.4	12.2	11.9	11.5	11.1
Refunds	1.2	0.6	0.4	0.5	0.5	0.5	0.4	0.7
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	0.2	-0.3	0.3	0.1	-0.1	0.1	0.3	0.2
<b>Total Asset Deductions (B)</b>	<b>15.7</b>	<b>14.0</b>	<b>13.8</b>	<b>13.1</b>	<b>12.7</b>	<b>12.6</b>	<b>12.3</b>	<b>12.1</b>
<b>Change in Net Assets (A-B=C)</b>	<b>12.3</b>	<b>-5.9</b>	<b>11.8</b>	<b>16.8</b>	<b>-54.8</b>	<b>2.9</b>	<b>10.4</b>	<b>1.9</b>



## 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



**Note:** All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of December 31, 2012.



# 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

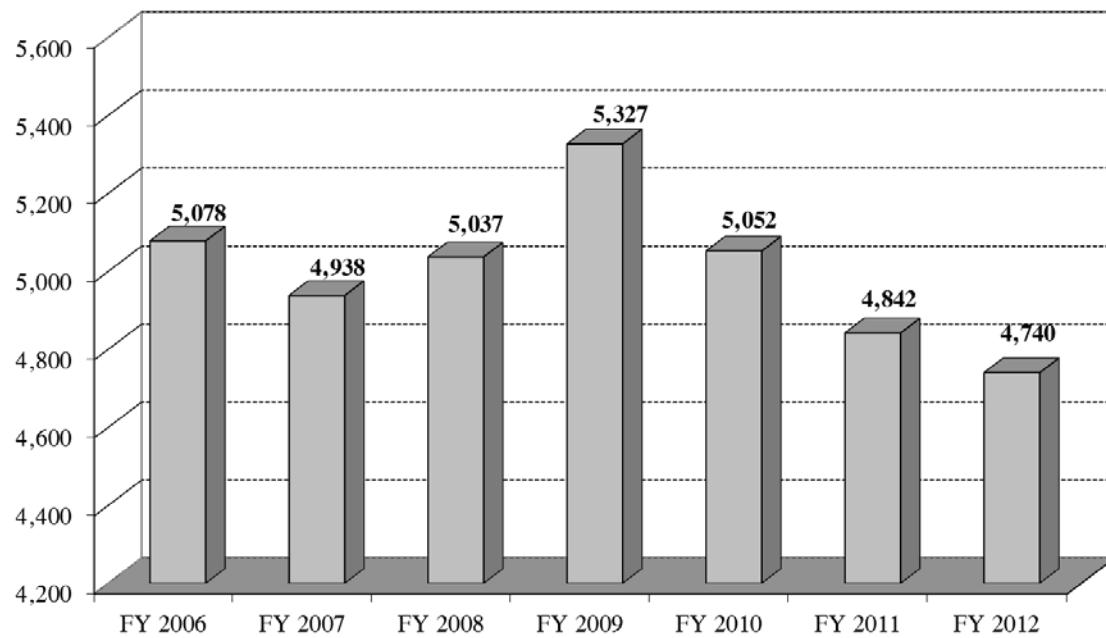
---

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 the P.A. 96-1495 Section on page 5 for a summary of benefits for employees hired after January 1, 2011.**

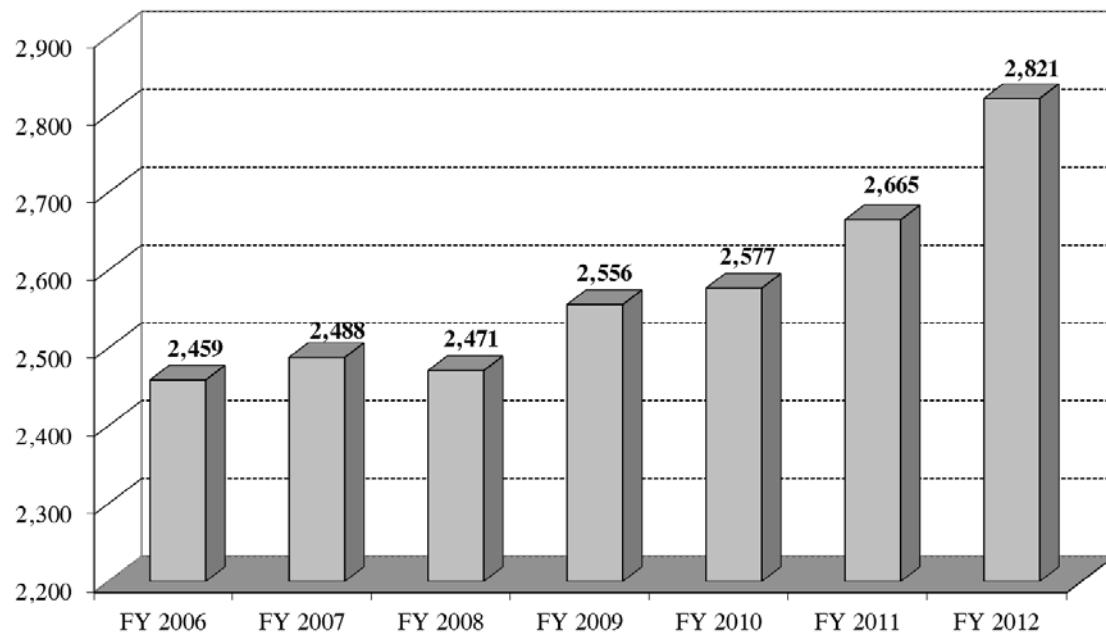
## CHART 25

### CHICAGO FIREMEN'S PENSION FUND Active Employees



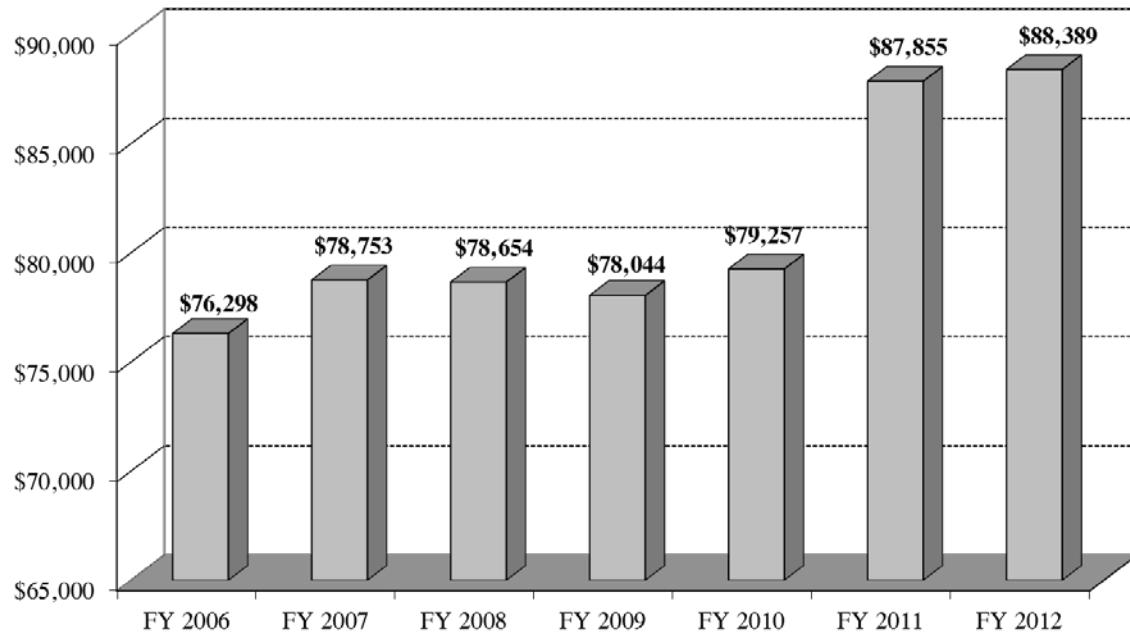
## CHART 26

### CHICAGO FIREMEN'S PENSION FUND Employee Annuitants



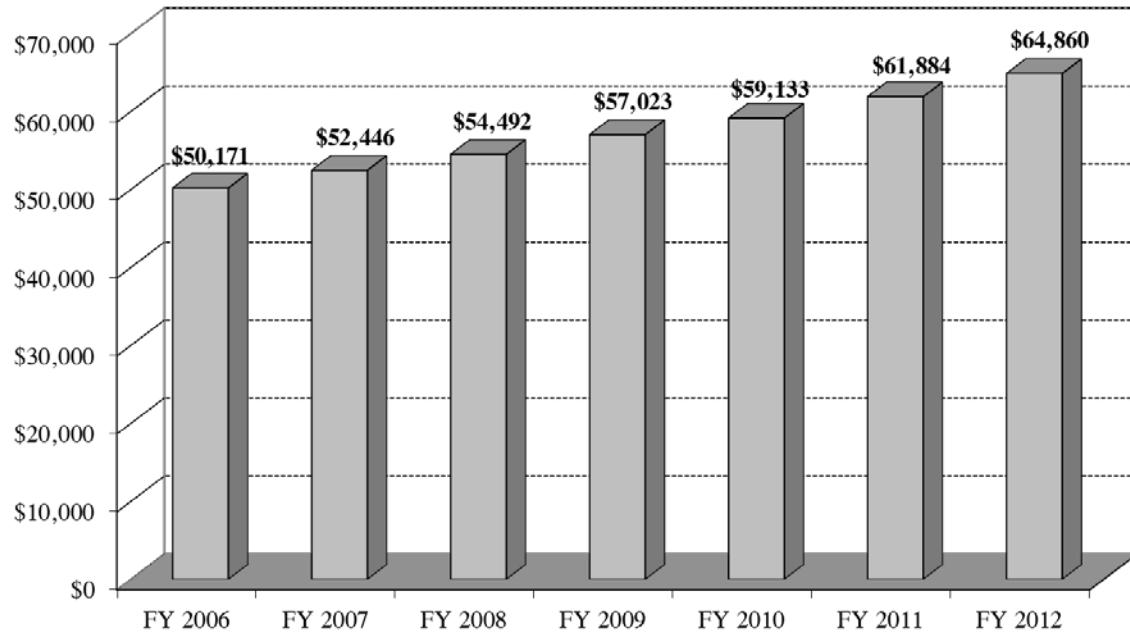
## CHART 27

### CHICAGO FIREMEN'S PENSION FUND Average Employee Salaries



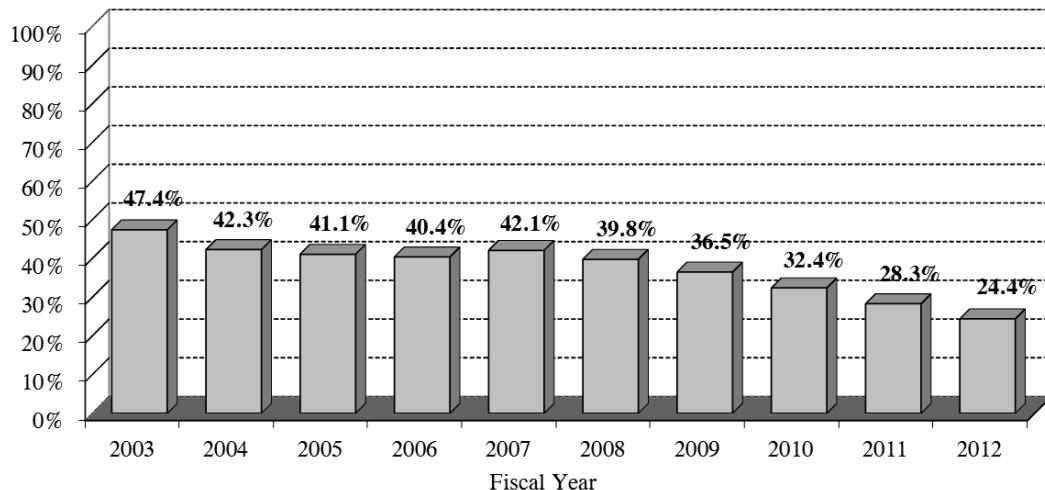
## CHART 28

### CHICAGO FIREMEN'S PENSION FUND Average Retirement Annuity



## CHART 29

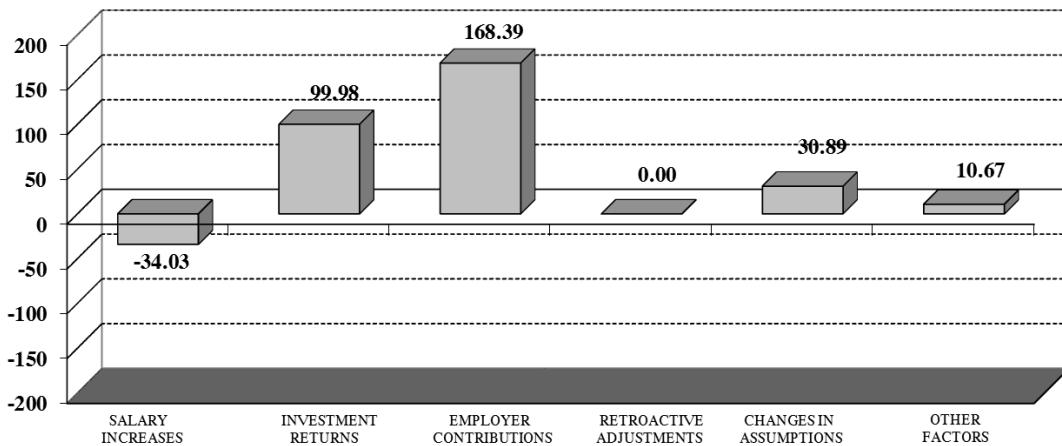
### CHICAGO FIREMEN'S PENSION FUND Funded Ratio FY 2003 - FY 2012



## CHART 30

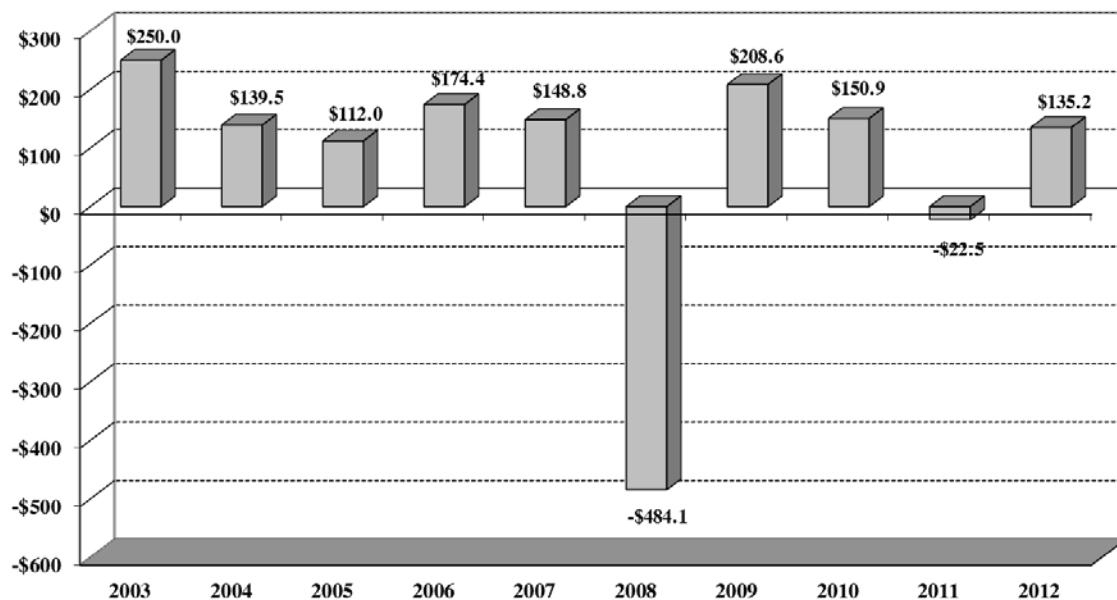
### FIREMEN'S ANNUITY & BENEFIT FUND OF CHICAGO Change in Unfunded Liabilities FY 2012 \$ Millions

TOTAL INCREASE EQUALS  
\$275.90 MIL



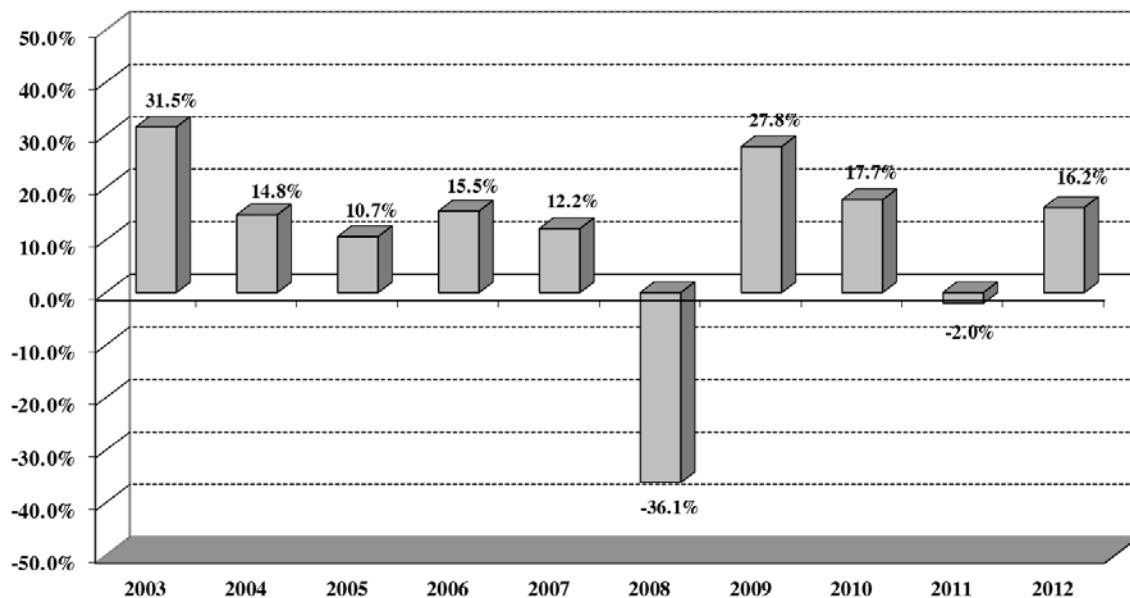
## CHART 31

CHICAGO FIREMENS' PENSION FUND  
Investment Income FY 2003 - FY 2012  
Actuarially Assumed Rate of Return: 8.00%  
(Millions)



## CHART 32

CHICAGO FIREMENS' PENSION FUND  
Rate of Return Earned FY 2003 - FY 2012  
Actuarially Assumed Rate of Return: 8.00%  
(\$ in millions)



**TABLE 7**

<b>FIREMEN'S ANNUITY &amp; BENEFIT FUND OF CHICAGO</b>					
System Experience, FY 2003 - FY 2012					
(\$ in millions)					
Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
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%
2003	335.2	2,517.3	1,194.0	1,323.3	47.4%

*NOTE: The above FY 2004 - FY 2011 figures include healthcare assets/liabilities.*

**TABLE 8**

<b>FIREMEN'S ANNUITY &amp; BENEFIT FUND OF CHICAGO</b>								
<b>Changes in Net Assets</b>								
<b>(\$ in millions)</b>								
Fiscal Years	2012	2011	2010	2009	2008	2007	2006	2005
<b>Additions to Assets</b>								
Employer	84.1	85.5	83.6	91.8	83.7	74.3	79.0	90.1
Employees	53.3	51.9	41.7	41.6	40.5	41.1	44.2	35.7
Net Investment Income	135.2	-22.4	150.9	208.6	-484.1	148.8	174.4	112.0
Other	3.5	0.0	0.0	0.0	0.1	0.2	0.1	0.5
<b>Total Asset Additions (A)</b>	<b>276.1</b>	<b>115.0</b>	<b>276.2</b>	<b>342.0</b>	<b>-359.8</b>	<b>264.4</b>	<b>297.7</b>	<b>238.3</b>
<b>Deductions from Assets</b>								
Benefits	231.2	221.5	215.8	199.0	190.0	181.6	176.6	166.1
Refunds	2.6	2.1	1.8	2.1	2.7	1.7	1.6	1.5
Rebates	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Administrative Expenses	2.5	2.5	3.1	3.0	2.9	3.1	2.7	2.2
Other	1.1	1.2	1.1	0.4	0.0	0.0	0.0	0.0
<b>Total Asset Deductions (B)</b>	<b>237.4</b>	<b>227.3</b>	<b>221.8</b>	<b>204.5</b>	<b>195.6</b>	<b>186.4</b>	<b>180.9</b>	<b>169.8</b>
<b>Change in Net Assets (A-B=C)</b>	<b>38.7</b>	<b>-112.3</b>	<b>54.4</b>	<b>137.5</b>	<b>-555.4</b>	<b>78.0</b>	<b>116.8</b>	<b>68.5</b>

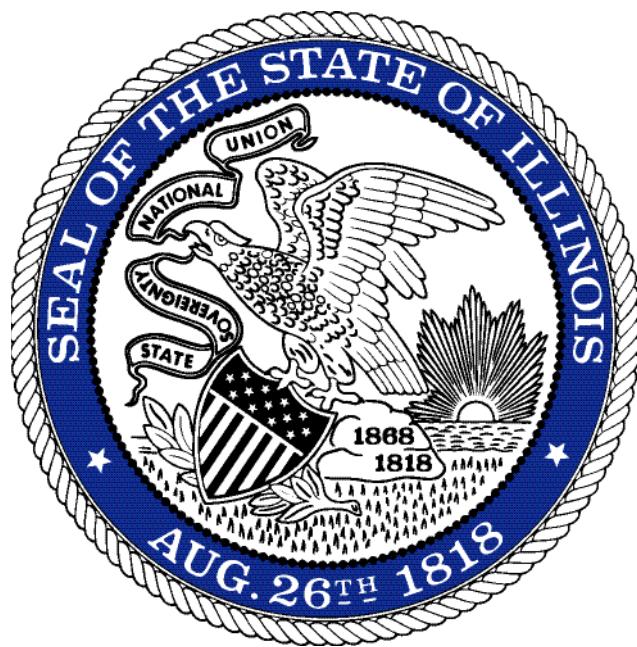
Table 10 below contains funding projections provided to CGFA by the Fireman's Annuity and Benefit Fund of Chicago based upon the December 31, 2012 actuarial valuation.

**TABLE 9**

<b>FIREMEN'S ANNUITY &amp; BENEFIT FUND OF CHICAGO</b> <b>Actuarial Valuation Projection Results as of December 31, 2012</b> <b>Funding Impact of P. A. 96-1495 (Tier 2 Act of 2010)</b> <b>(\$ in millions)</b>								
Fiscal Year	Capped Payroll	City Statutory Contribution	City Contribution As % of Payroll	Total Employee Contribution	Total Actuarial Liability	Actuarial Value of Assets	Unfunded Actuarial Liability	Funded Ratio
2013	431.8	88.5	20.5%	39.3	4,164.6	945.7	3,218.9	22.7%
2014	445.3	109.5	24.6%	42.9	4,308.9	917.4	3,391.5	21.3%
2015	458.9	113.9	24.8%	44.3	4,452.5	879.4	3,573.1	19.8%
2016	472.3	255.0	54.0%	45.6	4,594.3	972.6	3,621.7	21.2%
2017	485.9	262.4	54.0%	47.0	4,732.6	1,055.3	3,677.3	22.3%
2018	501.0	270.5	54.0%	48.4	4,866.0	1,139.8	3,726.2	23.4%
2019	516.8	279.0	54.0%	50.0	4,993.7	1,226.3	3,767.4	24.6%
2020	533.3	287.9	54.0%	51.5	5,116.0	1,316.1	3,799.9	25.7%
2021	549.9	296.9	54.0%	53.1	5,233.6	1,410.7	3,822.9	27.0%
2022	567.8	306.5	54.0%	54.9	5,346.9	1,512.0	3,834.9	28.3%
2023	588.4	317.6	54.0%	56.9	5,456.0	1,622.5	3,833.5	29.7%
2024	609.4	329.0	54.0%	58.9	5,560.2	1,743.1	3,817.1	31.3%
2025	631.3	340.8	54.0%	60.9	5,659.7	1,875.6	3,784.1	33.1%
2026	651.8	351.9	54.0%	62.9	5,752.1	2,020.8	3,731.3	35.1%
2027	670.5	362.0	54.0%	64.7	5,837.3	2,180.8	3,656.5	37.4%
2028	687.6	371.2	54.0%	66.3	5,917.0	2,356.9	3,560.1	39.8%
2029	703.4	379.7	54.0%	67.7	5,993.8	2,550.0	3,443.8	42.5%
2030	717.7	387.4	54.0%	69.0	6,067.1	2,759.8	3,307.3	45.5%
2031	728.7	393.4	54.0%	70.0	6,135.8	2,985.3	3,150.5	48.7%
2032	739.4	399.1	54.0%	71.0	6,200.1	3,227.5	2,972.6	52.1%
2033	749.4	404.6	54.0%	71.9	6,260.3	3,487.8	2,772.5	55.7%
2034	758.2	409.4	54.0%	72.7	6,318.4	3,768.7	2,549.7	59.6%
2035	766.0	413.5	54.0%	73.4	6,375.5	4,071.9	2,303.6	63.9%
2036	773.2	417.4	54.0%	74.1	6,432.3	4,399.4	2,032.9	68.4%
2037	781.0	421.7	54.0%	74.8	6,491.3	4,755.1	1,736.2	73.3%
2038	789.4	426.2	54.0%	75.5	6,554.1	5,142.7	1,411.4	78.5%
2039	798.1	430.9	54.0%	76.3	6,623.0	5,566.3	1,056.7	84.0%
2040	807.4	435.9	54.0%	77.2	6,697.5	6,027.7	669.8	90.0%

## 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, 2012.



# 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 the P. A. 96-0889 Section on page 3 for a summary of benefits for employees hired after January 1, 2011.**

# **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**

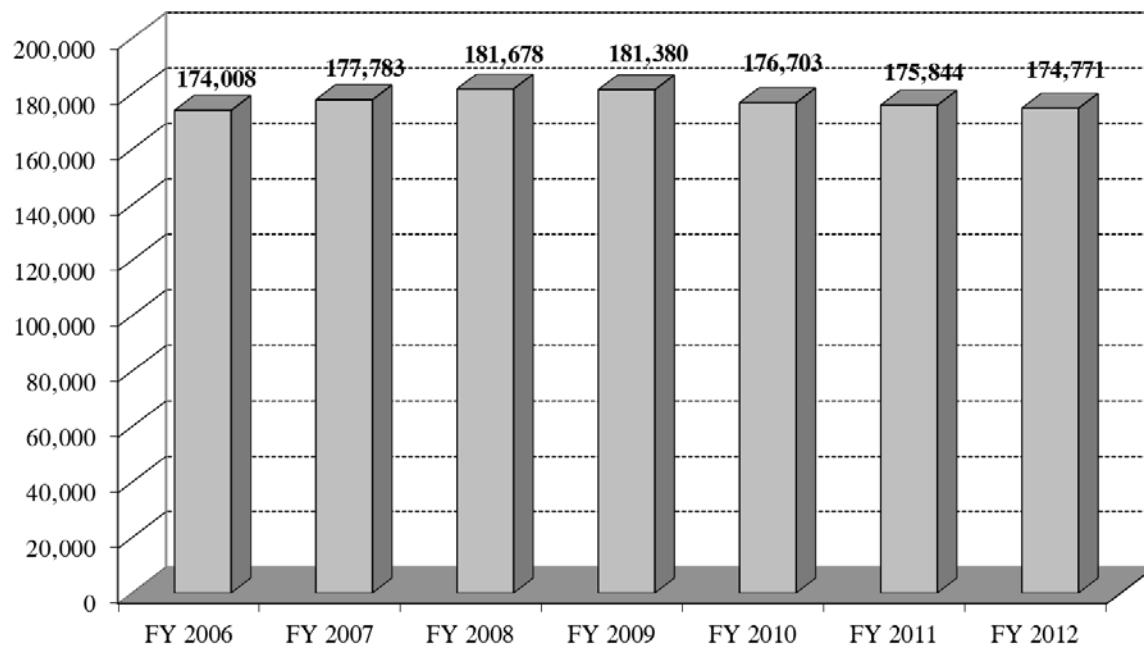
---

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 the P.A. 96-0889 & P.A. 96-1495 Section on pages 3-6 for a summary of benefits for employees hired after January 1, 2011.**

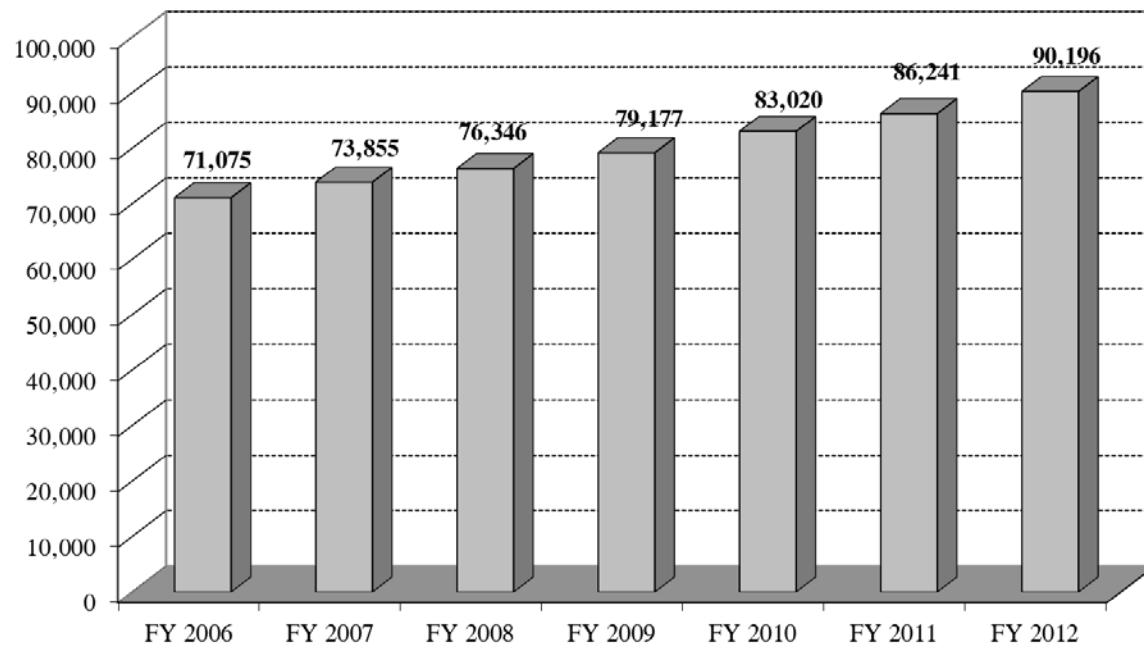
### CHART 33

#### ILLINOIS MUNICIPAL RETIREMENT FUND Active Employees



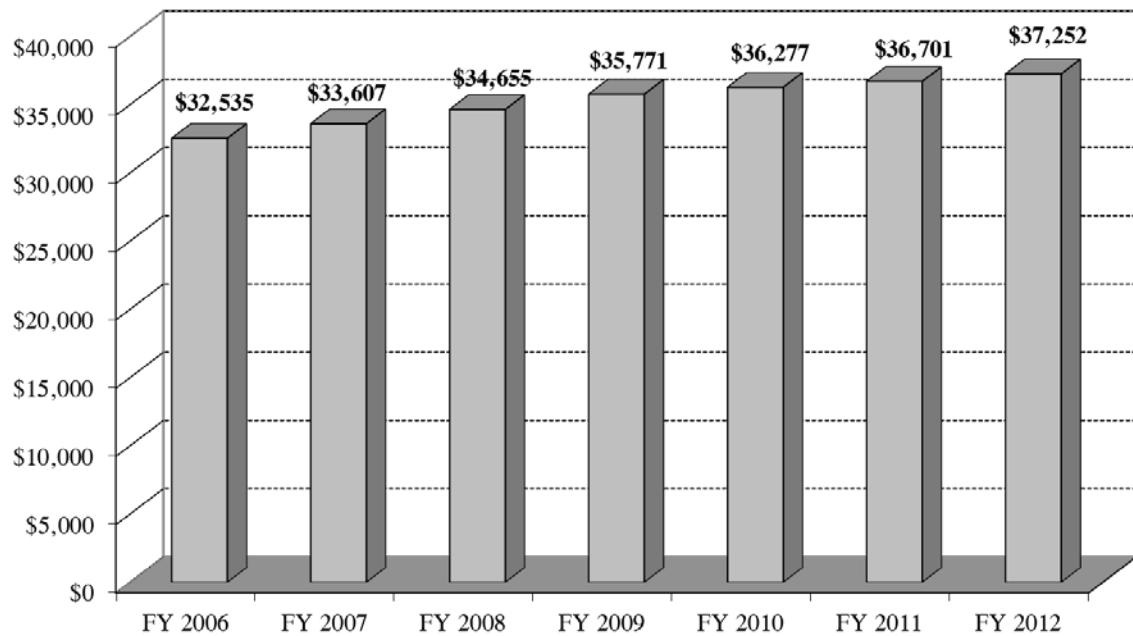
### CHART 34

#### ILLINOIS MUNICIPAL RETIREMENT FUND Employee Annuitants



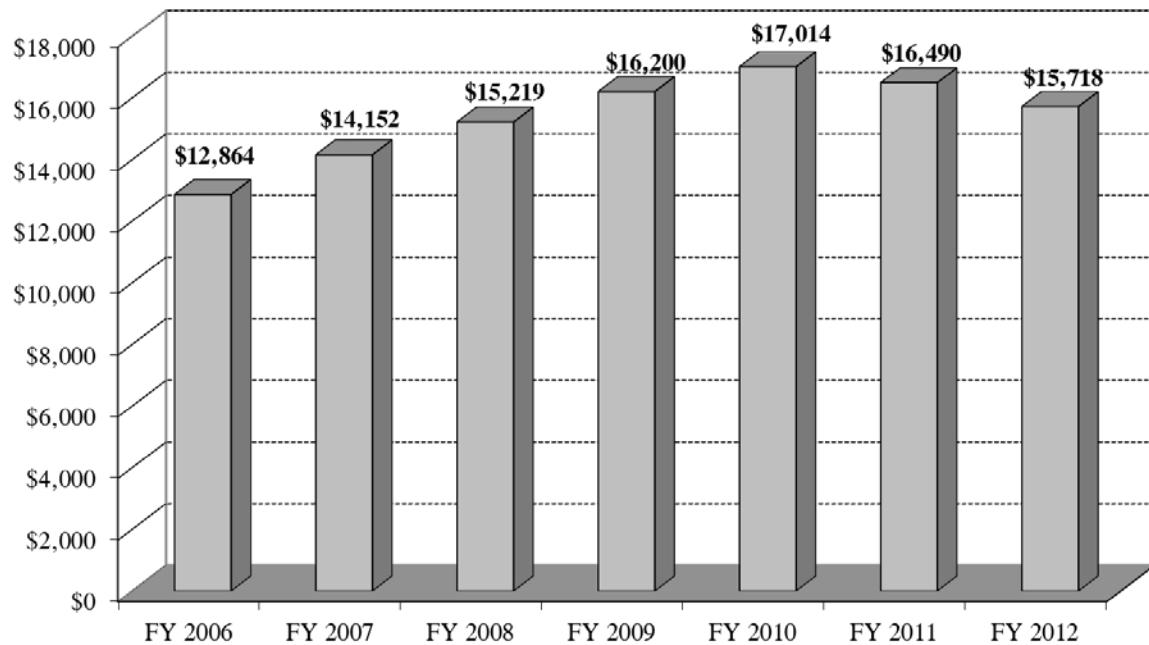
### CHART 35

#### ILLINOIS MUNICIPAL RETIREMENT FUND Average Employee Salaries



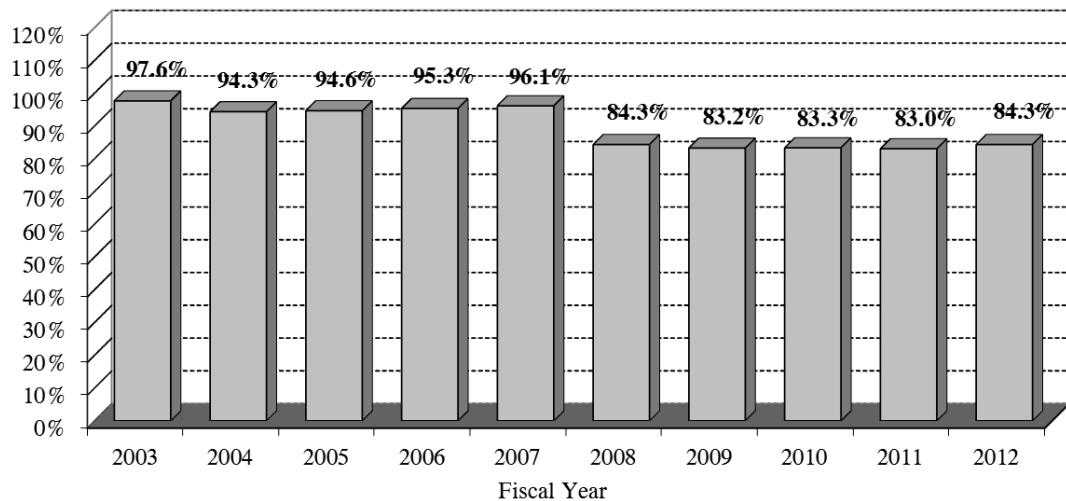
### CHART 36

#### ILLINOIS MUNICIPAL RETIREMENT FUND Average Retirement Annuity



## CHART 37

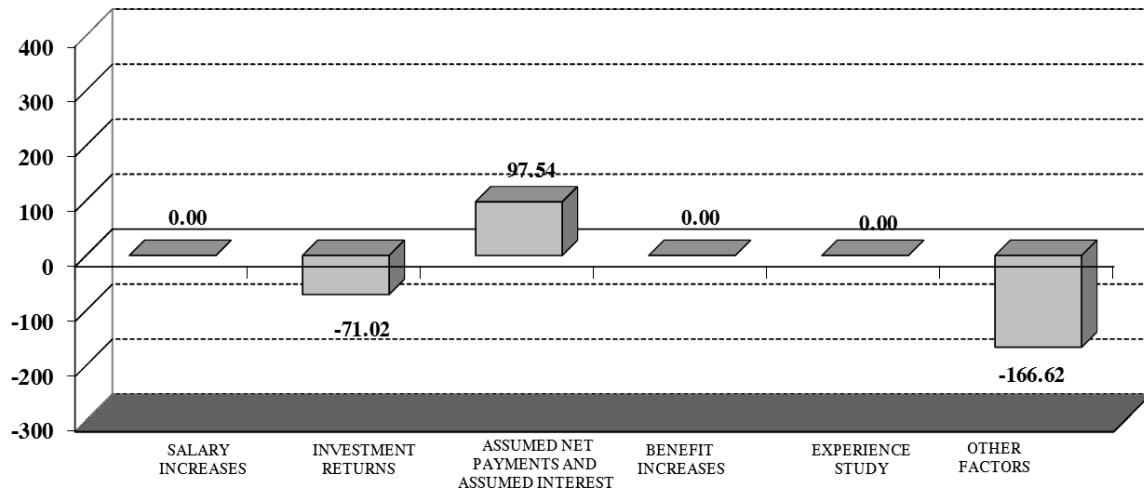
### ILLINOIS MUNICIPAL RETIREMENT FUND Funded Ratio FY 2003 - FY 2012



## CHART 38

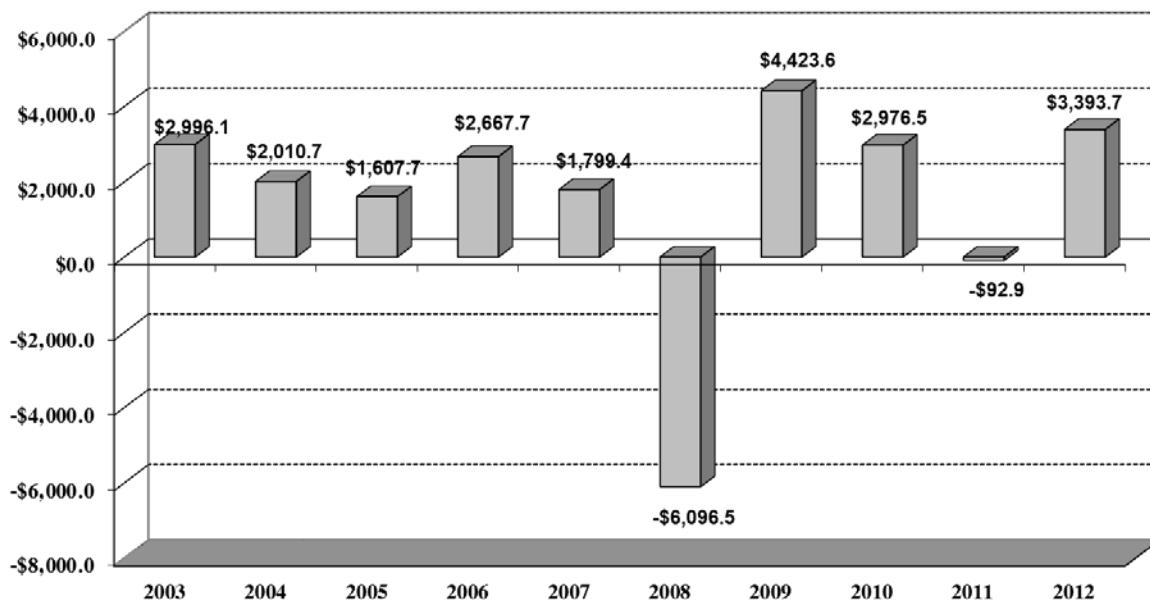
### ILLINOIS MUNICIPAL RETIREMENT FUND Change in Unfunded Liabilities FY 2012 \$ Millions

TOTAL DECREASE EQUALS  
\$140.10 MIL



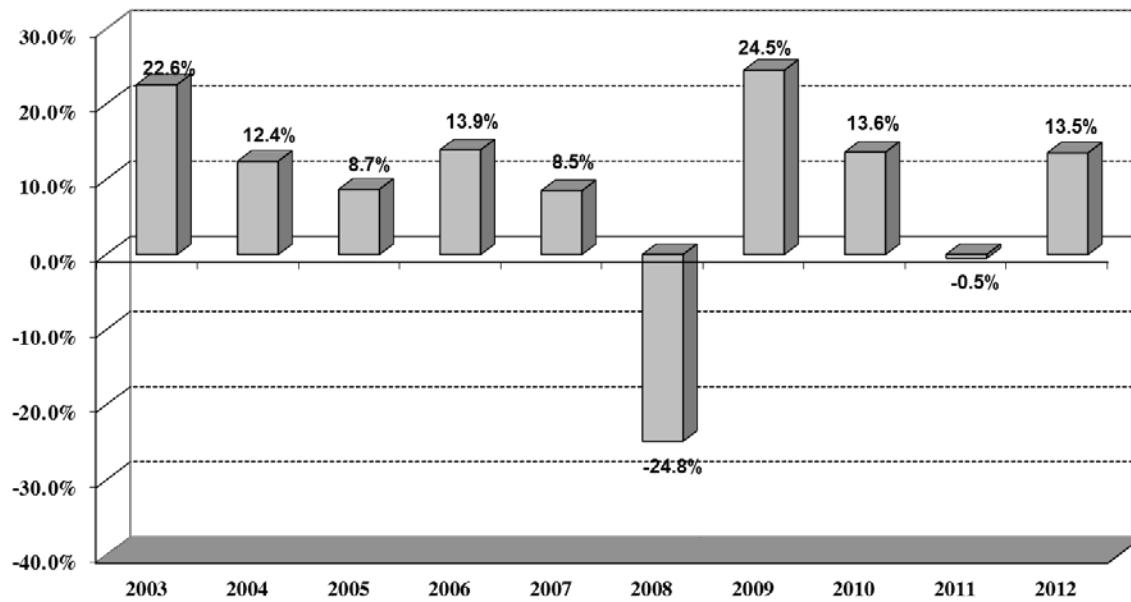
## CHART 39

ILLINOIS MUNICIPAL RETIREMENT FUND  
Investment Income FY 2003 - FY 2012  
Actuarially Assumed Rate of Return: 7.50%  
(Millions)



## CHART 40

ILLINOIS MUNICIPAL RETIREMENT FUND  
Rate of Return FY 2003 - FY 2012  
Actuarially Assumed Rate of Return: 7.50%  
(\$ in millions)



**TABLE 10**

<b>ILLINOIS MUNICIPAL RETIREMENT FUND</b>					
<b>System Experience, FY 2003 - FY 2012</b>					
<b>(\$ in millions)</b>					
<b>Fiscal Year</b>	<b>Annual Payroll</b>	<b>Actuarial Liabilities</b>	<b>Actuarial Assets</b>	<b>Unfunded Liabilities</b>	<b>Funded Ratio</b>
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 %
2003	4,944.8	17,966.1	17,529.9	436.2	97.6 %

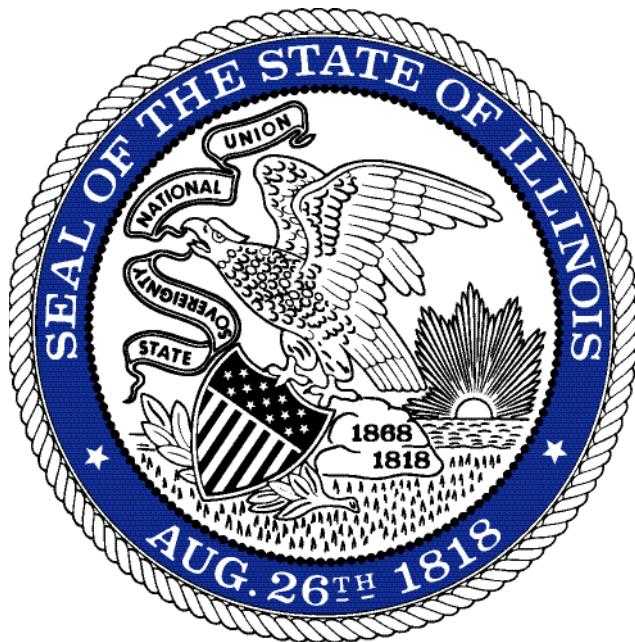
**TABLE 11**

<b>ILLINOIS MUNICIPAL RETIREMENT FUND</b> <b>Changes in Net Assets</b> <b>(\\$ in millions)</b>								
Fiscal Years	2012	2011	2010	2009	2008	2007	2006	2005
<b>Additions to Assets</b>								
Employer	883.2	800.8	770.2	660.4	631.1	600.8	602.8	543.3
Employees	330.8	327.7	324.9	324.1	314.0	296.7	281.0	265.6
Net Investment Income	3,393.7	-92.9	2,976.5	4,423.6	-6,096.5	1,799.4	2,667.7	1,607.7
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Asset Additions (A)</b>	<b>4,607.7</b>	<b>1,035.6</b>	<b>4,071.6</b>	<b>5,408.0</b>	<b>-5,151.4</b>	<b>2,696.9</b>	<b>3,551.5</b>	<b>2,416.6</b>
<b>Deductions from Assets</b>								
Benefits	1,389.8	1,284.4	1,178.0	1,077.8	997.5	924.0	856.2	791.3
Refunds	34.1	32.9	32.2	27.4	31.9	36.2	40.1	32.1
Rebates	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Administrative Expenses	24.5	23.1	22.3	22.0	20.7	20.8	20.3	19.7
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Asset Deductions (B)</b>	<b>1,448.4</b>	<b>1,340.4</b>	<b>1,232.5</b>	<b>1,127.2</b>	<b>1,050.1</b>	<b>981.0</b>	<b>916.6</b>	<b>843.1</b>
<b>Change in Net Assets (A-B=C)</b>	<b>3,159.3</b>	<b>-304.8</b>	<b>2,839.1</b>	<b>4,280.8</b>	<b>-6,201.4</b>	<b>1,715.9</b>	<b>2,634.9</b>	<b>1,573.5</b>



## 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



**Note:** All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of December 31, 2012.



# **Laborers' 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**

---

- 3% compounded.

### **Employee Contributions**

---

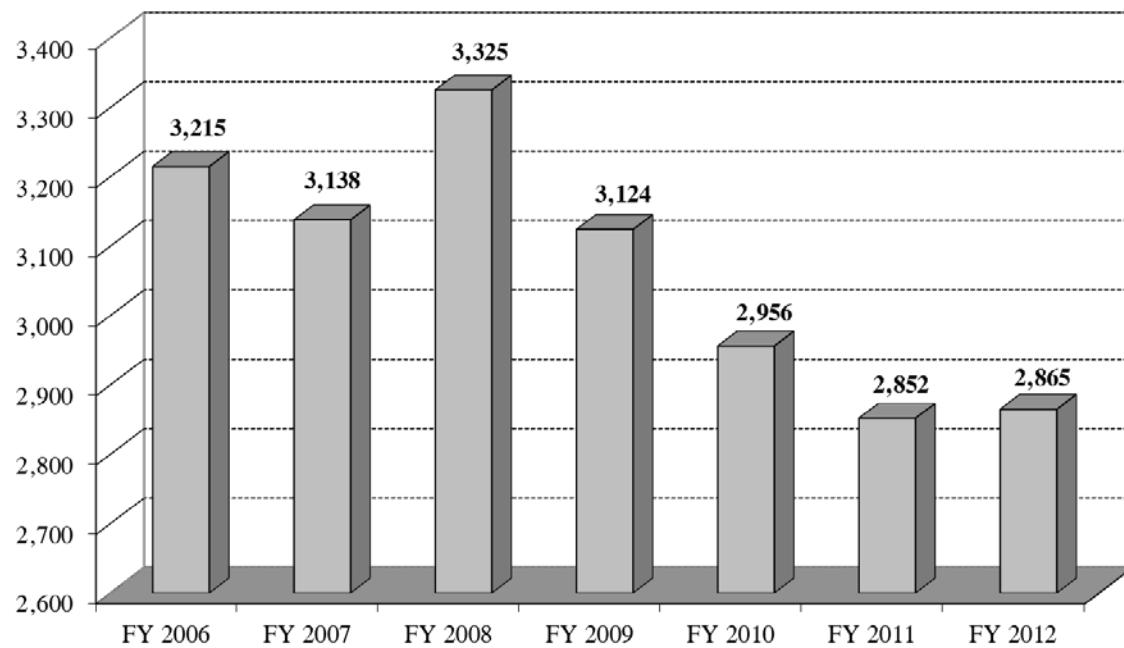
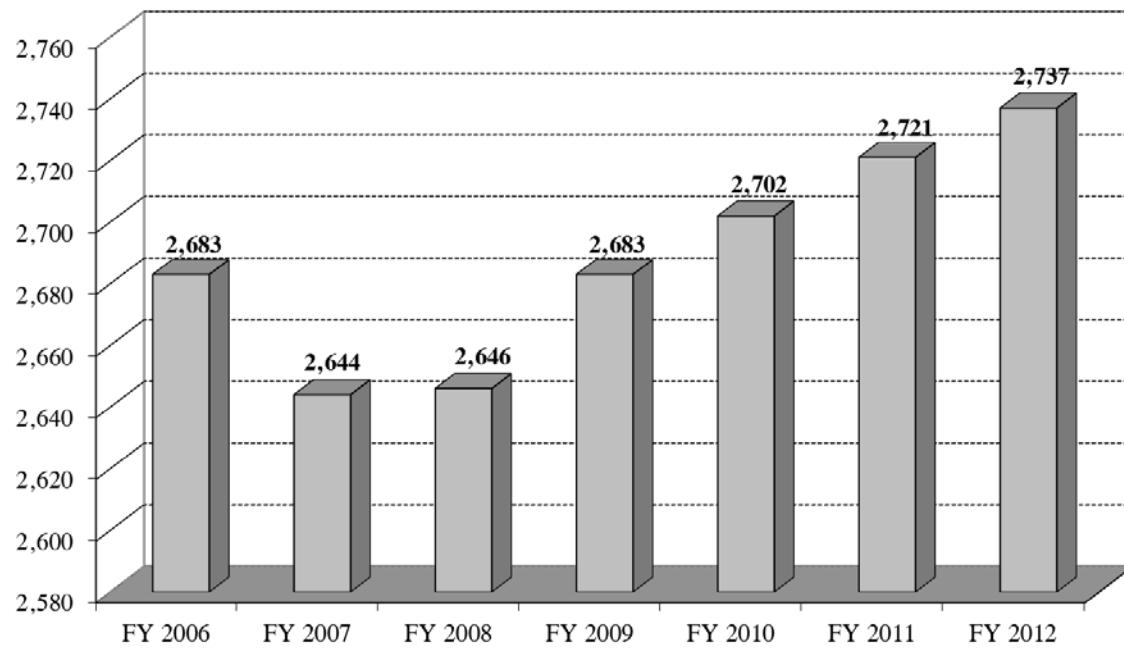
- 8.5% of salary.

### **Required Employer Contributions**

---

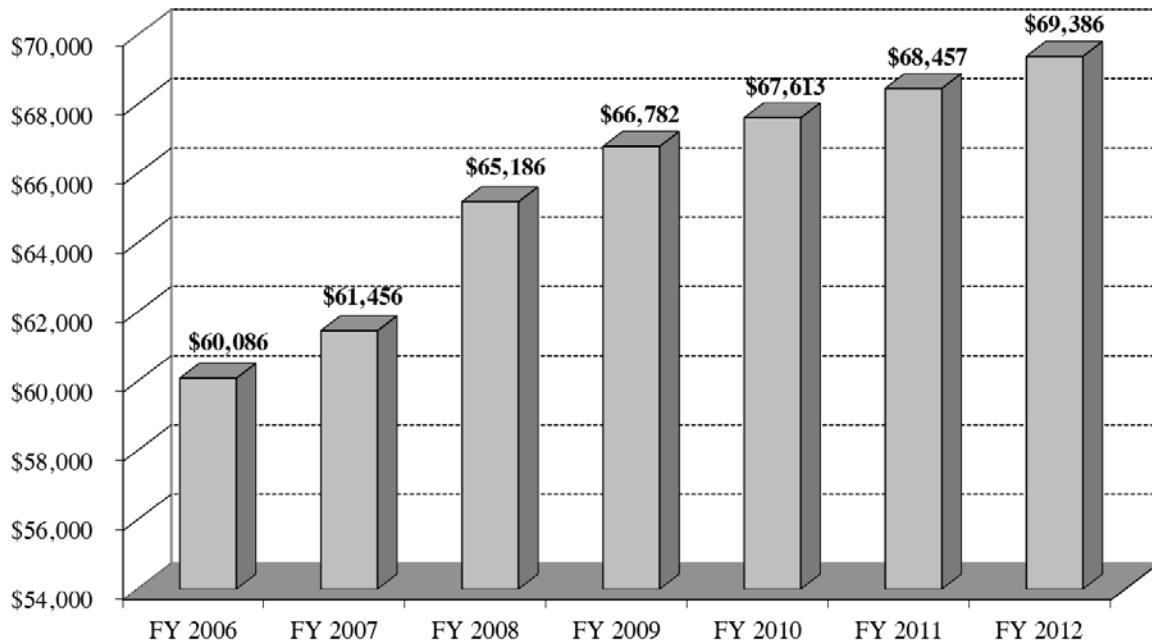
The City of Chicago is required to contribute an amount equal to the employee contributions to the fund two years prior to the year in which the tax is levied, multiplied by 1.00.

**Note: Benefits shown are for employees hired prior to January 1, 2011 (Tier 1 employees), the effective date of P.A. 96-0889. See the P.A. 96-0889 Section on page 3 for a summary of benefits for employees hired after January 1, 2011.**

**CHART 41****CHICAGO LABORERS' PENSION FUND**  
**Active Employees****CHART 42****CHICAGO LABORERS' PENSION FUND**  
**Employee Annuitants**

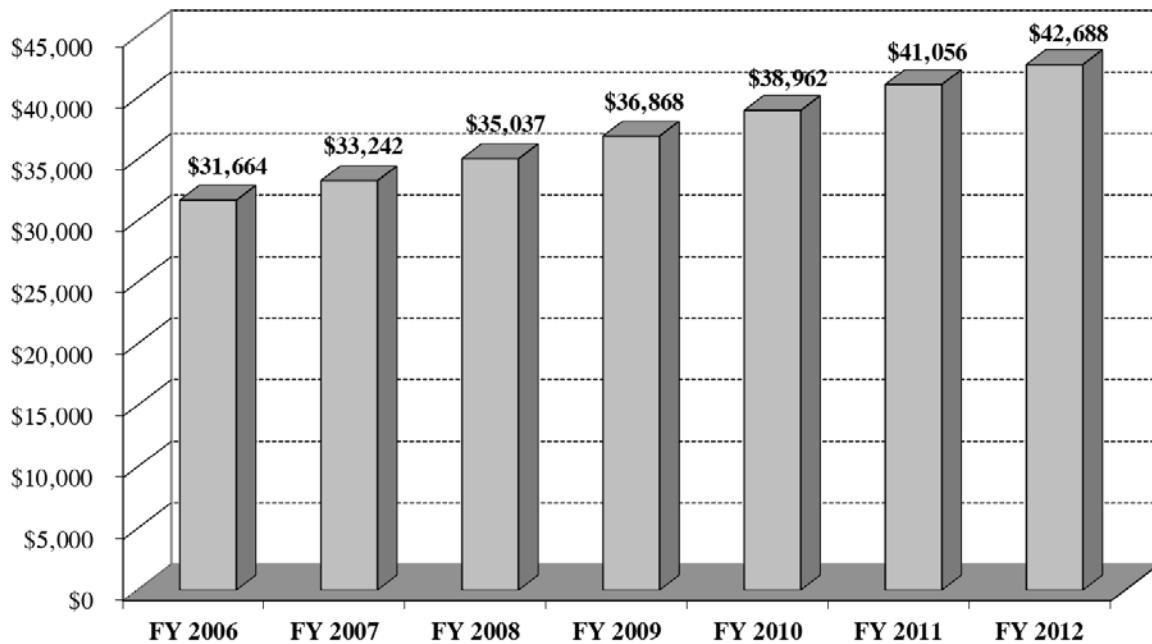
**CHART 43**

**CHICAGO LABORERS' PENSION FUND**  
**Average Employee Salaries**



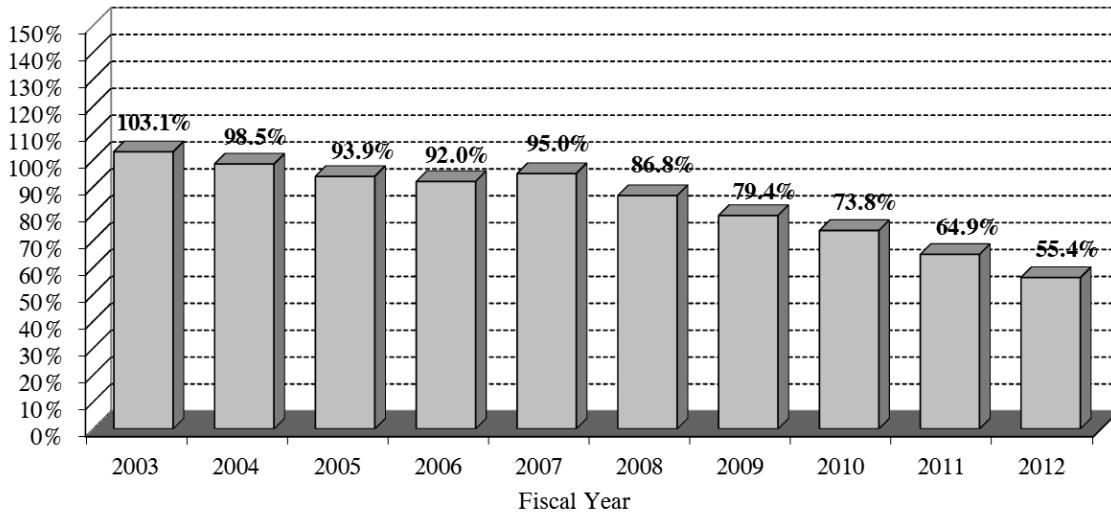
**CHART 44**

**CHICAGO LABORERS' PENSION FUND**  
**Average Retirement Annuities**



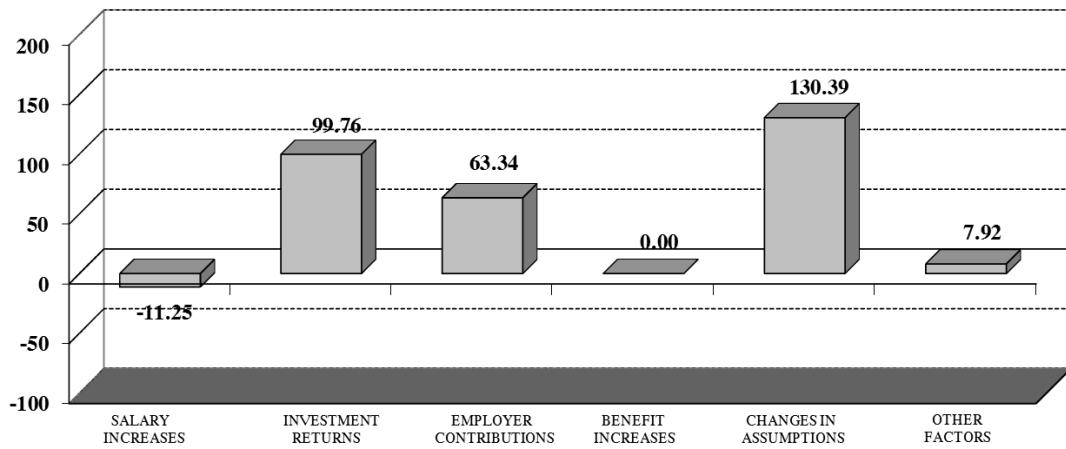
**CHART 45**

**CHICAGO LABORERS' PENSION FUND**  
**Funded Ratio**  
**FY 2003 - FY 2012**

**CHART 46**

**CHICAGO LABORERS' PENSION FUND**  
**Change in Unfunded Liabilities**  
**FY 2012**  
**\$ Millions**

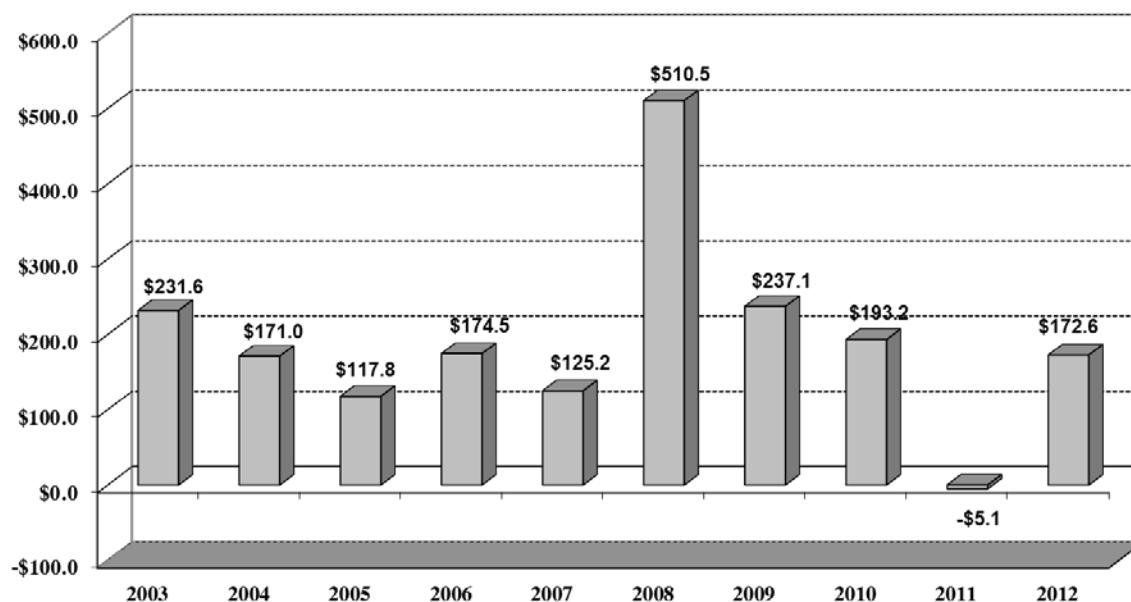
TOTAL INCREASE EQUALS  
\$290.16 MIL



Based upon an actuarial experience study that covered the period 2004-2011, the pension fund adopted several new actuarial assumptions; among these assumption changes were a lower investment return assumption of 7.5% compared to the previous 8.0% investment rate. Other changes include a higher payroll growth assumption, increased disability rates and a service-based inflation schedule.

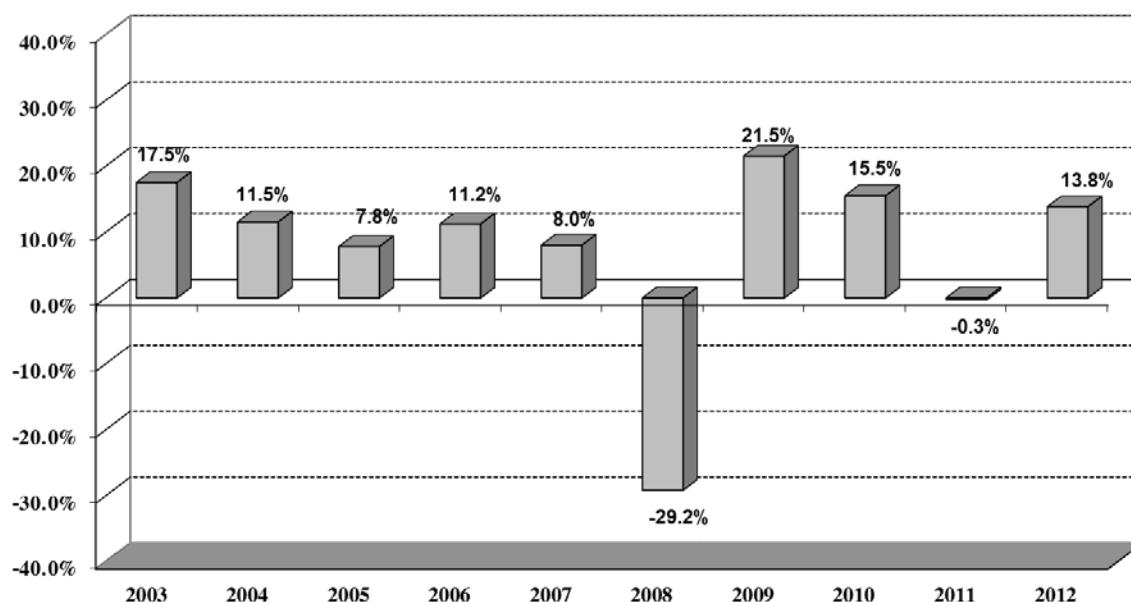
## CHART 47

CHICAGO LABORERS' PENSION FUND  
Investment Income FY 2003 - FY 2012  
Actuarially Assumed Rate of Return: 7.50%  
(Millions)



## CHART 48

CHICAGO LABORERS' PENSION FUND  
Rate of Return FY 2003 - FY 2012  
Actuarially Assumed Rate of Return: 7.50%  
(\$ in millions)



**TABLE 12**

<b>CHICAGO LABORERS' PENSION FUND</b>					
<b>System Experience, FY 2003 - FY 2012</b>					
<b>(\$ in millions)</b>					
<b>Fiscal Year</b>	<b>Annual Payroll</b>	<b>Actuarial Liabilities</b>	<b>Actuarial Assets</b>	<b>Unfunded Liabilities</b>	<b>Funded Ratio</b>
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%
2003	205.7	1,628.6	1,679.8	(51.2)	103.1%

**TABLE 13**

<b>CHICAGO LABORERS' PENSION FUND</b>								
<b>Changes in Net Assets</b>								
<b>(\$ in millions)</b>								
Fiscal Years	2012	2011	2010	2009	2008	2007	2006	2005
<b>Additions to Assets</b>								
Employer	14.4	15.3	18.0	17.2	17.6	15.5	0.1	0.0
Employees	16.6	16.1	16.3	17.5	19.4	18.4	18.8	16.3
Net Investment Income	172.6	-5.1	193.2	237.1	-510.5	125.2	174.5	117.8
Other	0.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Asset Additions (A)</b>	<b>204.4</b>	<b>26.9</b>	<b>227.5</b>	<b>271.8</b>	<b>-473.5</b>	<b>159.1</b>	<b>193.4</b>	<b>134.1</b>
<b>Deductions from Assets</b>								
Benefits	139.7	133.5	127.0	121.0	113.7	108.8	106.9	105.2
Refunds	2.6	3.0	2.3	2.8	3.5	3.7	3.1	4.2
Rebates	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Administrative Expenses	4.7	4.0	3.9	3.7	3.6	3.4	2.8	3.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Asset Deductions (B)</b>	<b>147.0</b>	<b>140.5</b>	<b>133.2</b>	<b>127.5</b>	<b>120.8</b>	<b>115.9</b>	<b>112.8</b>	<b>112.4</b>
<b>Change in Net Assets (A-B=C)</b>	<b>57.4</b>	<b>-113.6</b>	<b>94.3</b>	<b>144.3</b>	<b>-594.3</b>	<b>43.2</b>	<b>80.6</b>	<b>21.7</b>

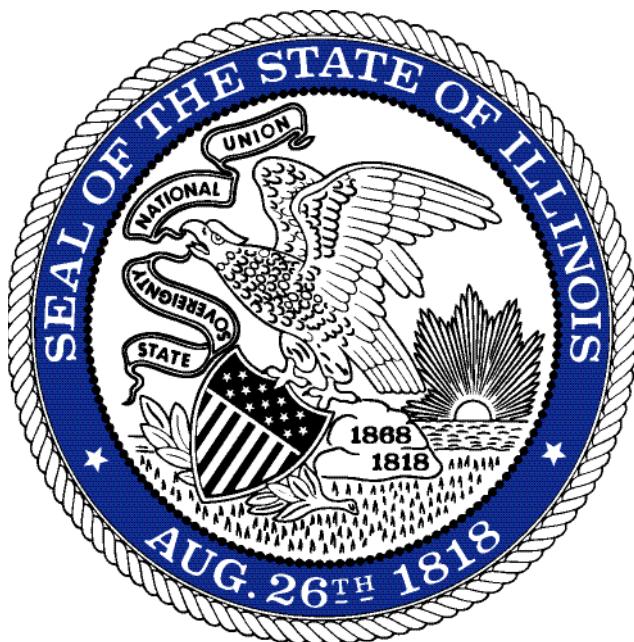
Table 15 below contains funding projections provided to CGFA by the Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago based upon the December 31, 2012 actuarial valuation. As shown in the table below, under the current funding laws the Laborers' and Retirement Board Employees' Annuity and Benefit of Chicago is projected to run out of assets by 2027.

**TABLE 14**

<b>Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago</b> <b>Actuarial Valuation Projection Results as of December 31, 2012</b> <b>Actuarial Valuation Projection Results</b> <b>(\$ in millions)</b>								
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
2012	198.8	14.4	7.3%	16.6	2,345.5	1,315.9	1,029.6	56.1%
2013	202.9	14.0	6.9%	17.2	2,405.6	1,332.4	1,073.2	55.4%
2014	208.0	14.5	7.0%	17.6	2,463.3	1,311.8	1,151.5	53.3%
2015	213.9	15.3	7.1%	18.0	2,519.2	1,265.6	1,253.5	50.2%
2016	220.5	15.6	7.1%	18.5	2,573.4	1,234.1	1,339.3	48.0%
2017	227.6	16.0	7.0%	19.1	2,628.9	1,182.0	1,446.8	45.0%
2018	235.1	16.4	7.0%	19.7	2,682.6	1,120.8	1,561.8	41.8%
2019	243.0	16.9	7.0%	20.4	2,734.5	1,049.7	1,684.7	38.4%
2020	251.0	17.5	7.0%	21.0	2,783.7	967.5	1,816.2	34.8%
2021	259.6	18.1	7.0%	21.7	2,830.1	873.4	1,956.7	30.9%
2022	268.5	18.7	7.0%	22.5	2,873.2	766.3	2,107.0	26.7%
2023	277.5	19.3	6.9%	23.2	2,913.0	645.3	2,267.7	22.2%
2024	287.0	19.9	6.9%	24.0	2,948.9	509.4	2,439.5	17.3%
2025	296.8	20.6	6.9%	24.8	2,980.5	357.3	2,623.3	12.0%
2026	306.9	21.3	6.9%	25.7	3,007.7	187.8	2,819.9	6.2%
2027	317.4	22.2	7.0%	26.6	3,030.0	0.0	3,030.0	0.0%
2028	328.2	223.0	67.9%	27.5	3,047.3	0.0	3,047.3	0.0%
2029	338.7	229.0	67.6%	28.4	3,059.4	0.0	3,059.4	0.0%
2030	349.5	234.6	67.1%	29.3	3,066.3	0.0	3,066.3	0.0%
2031	360.4	239.4	66.4%	30.3	3,068.5	0.0	3,068.5	0.0%
2032	371.6	243.4	65.5%	31.2	3,066.6	0.0	3,066.6	0.0%
2033	382.6	246.5	64.4%	32.2	3,061.1	0.0	3,061.1	0.0%
2034	392.8	248.6	63.3%	33.1	3,053.0	0.0	3,053.0	0.0%
2035	402.7	249.9	62.1%	34.0	3,042.8	0.0	3,042.8	0.0%
2036	412.4	250.5	60.7%	34.9	3,031.3	0.0	3,031.3	0.0%
2037	422.1	250.4	59.3%	35.7	3,019.0	0.0	3,019.0	0.0%
2038	431.4	249.8	57.9%	36.5	3,006.5	0.0	3,006.5	0.0%
2039	440.4	248.9	56.5%	37.4	2,994.0	0.0	2,994.0	0.0%
2040	449.6	247.3	55.0%	38.1	2,982.4	0.0	2,982.4	0.0%
2041	458.8	244.9	53.4%	38.9	2,972.4	0.0	2,972.4	0.0%
2042	468.0	242.2	51.8%	39.7	2,964.8	0.0	2,964.8	0.0%
2043	477.0	239.2	50.1%	40.5	2,959.8	0.0	2,959.8	0.0%
2044	485.9	236.1	48.6%	41.3	2,957.9	0.0	2,957.9	0.0%
2045	494.9	232.9	47.1%	42.1	2,959.5	0.0	2,959.5	0.0%
2046	503.9	229.7	45.6%	42.8	2,964.7	0.0	2,964.7	0.0%
2047	513.1	226.7	44.2%	43.6	2,973.8	0.0	2,973.8	0.0%
2048	522.4	223.9	42.9%	44.4	2,986.8	0.0	2,986.8	0.0%
2049	531.8	221.3	41.6%	45.2	3,003.7	0.0	3,003.7	0.0%
2050	541.0	219.1	40.5%	46.0	3,024.6	0.0	3,024.6	0.0%

## **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
- System Projections



**Note: All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of December 31, 2012.**



# 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.

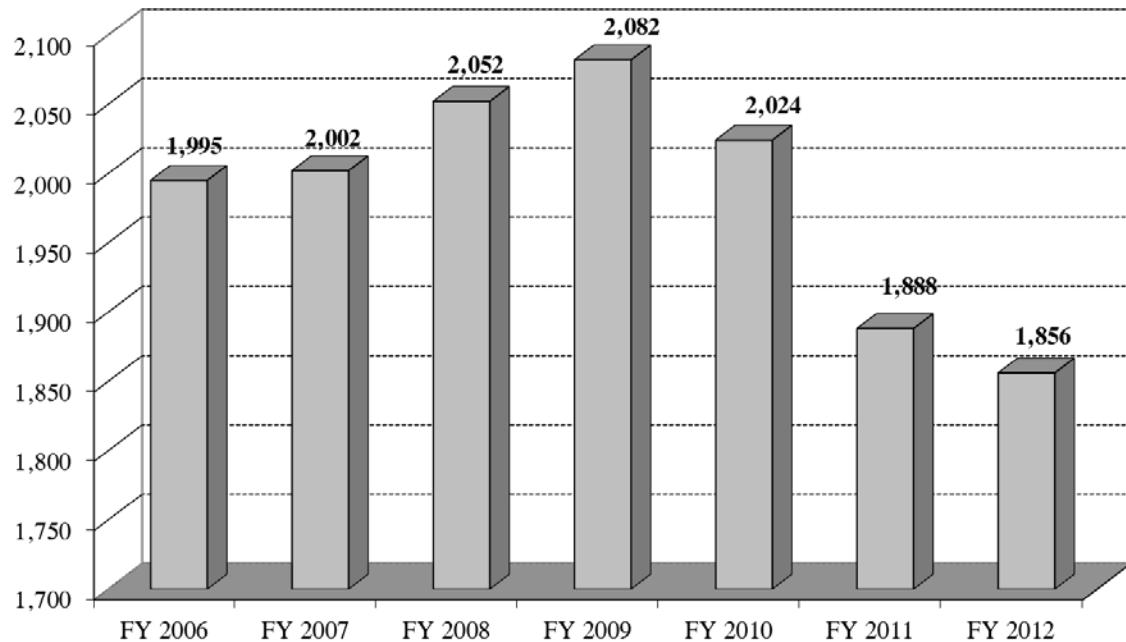
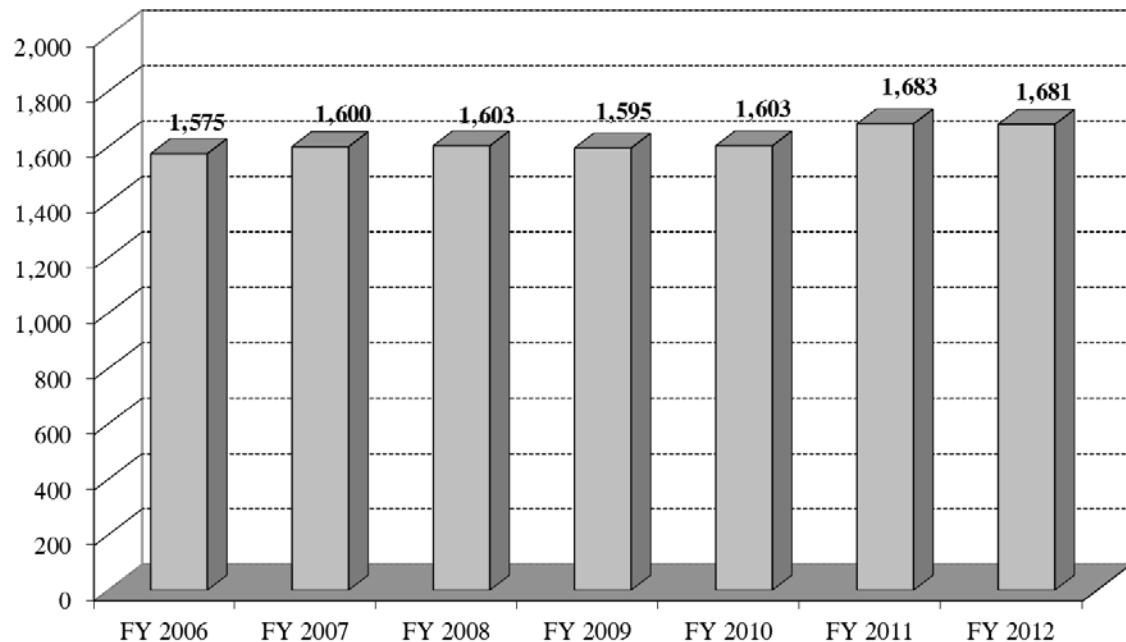
## Employee Contributions (as modified by P.A. 97-0894)

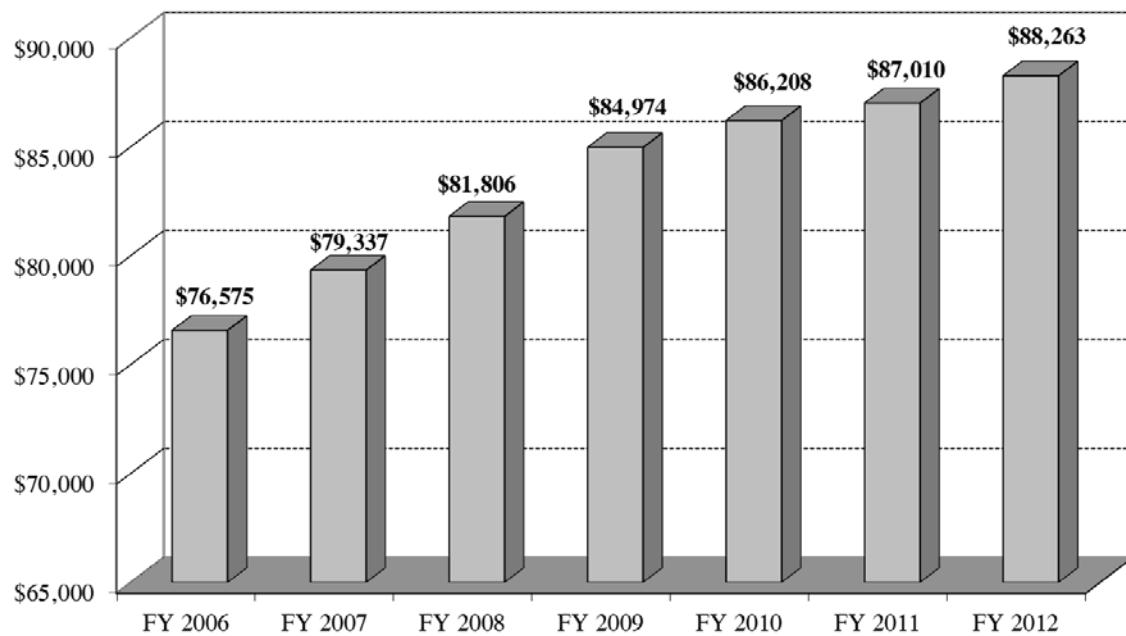
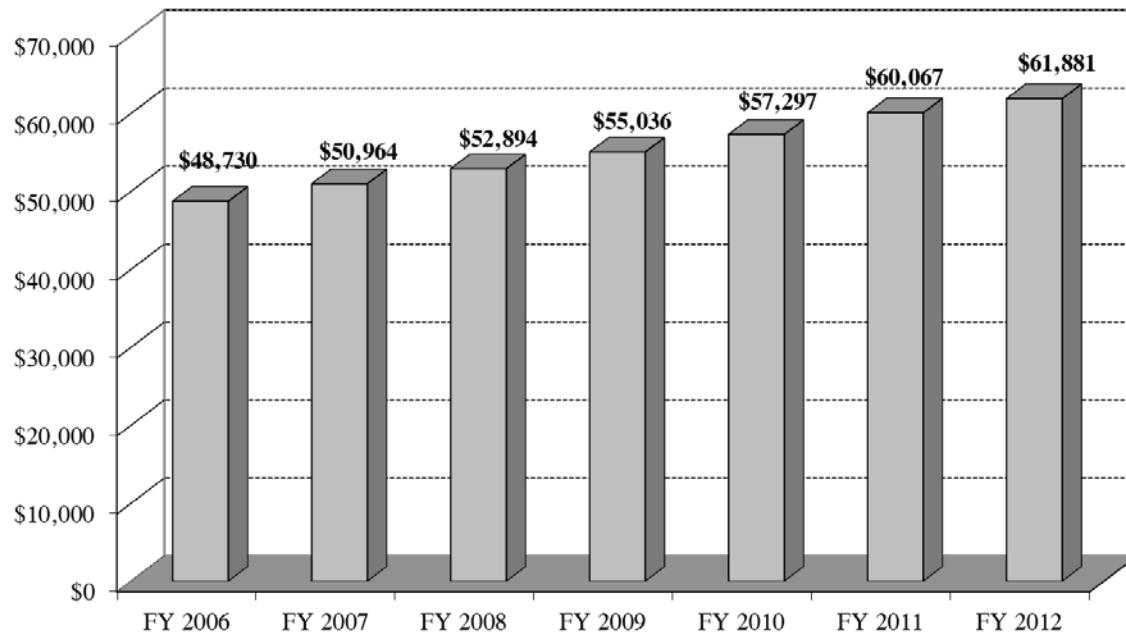
- Tier 1 employees currently contribute 9% of salary towards their pension benefits. During calendar year 2013, MWRD employees shall contribute 10% of salary for their pension annuities and survivor benefits. During calendar year 2014, this contribution rate will increase to 11% of salary. Beginning 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.

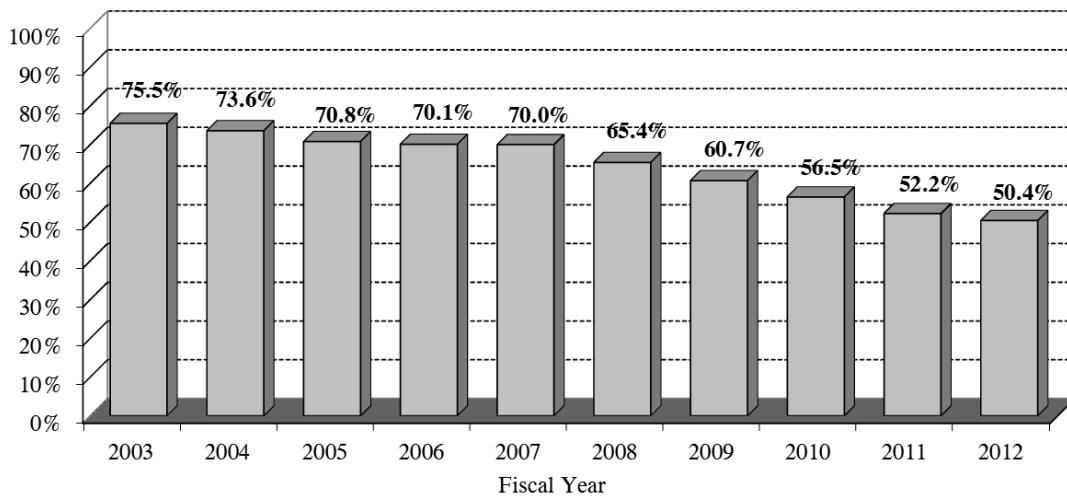
**Note:** Benefits shown on this page are for employees hired prior to January 1, 2011 (Tier 1 employees). Tier 1 and Tier 2 employee contribution rates are shown here so as to distinguish the changes made to Tier 1 contribution rates as a result of P.A. 97-0894. For a summary of benefits for employees hired after January 1, 2011, see the P.A. 96-0889 Section on Page 3.

**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**

## CHART 53

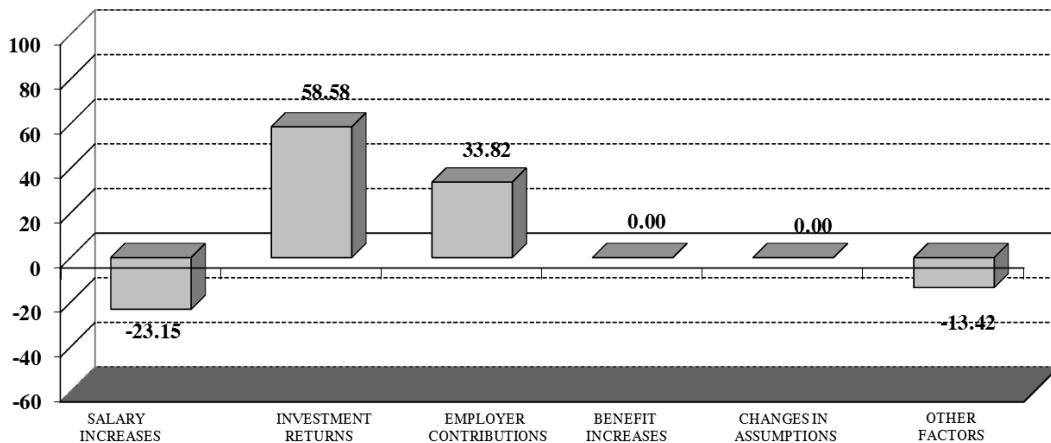
### METROPOLITAN WATER PENSION FUND Funded Ratio FY 2003 - FY 2012



## CHART 54

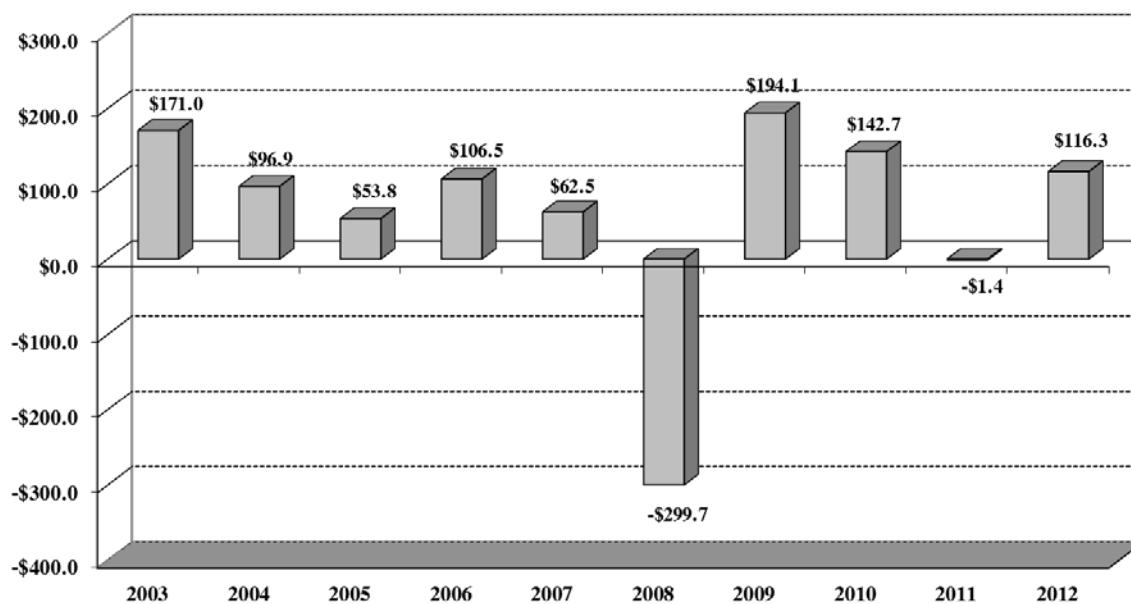
### METROPOLITAN WATER PENSION FUND Change in Unfunded Liabilities FY 2012 \$ Millions

TOTAL INCREASE EQUALS  
\$55.83 MIL



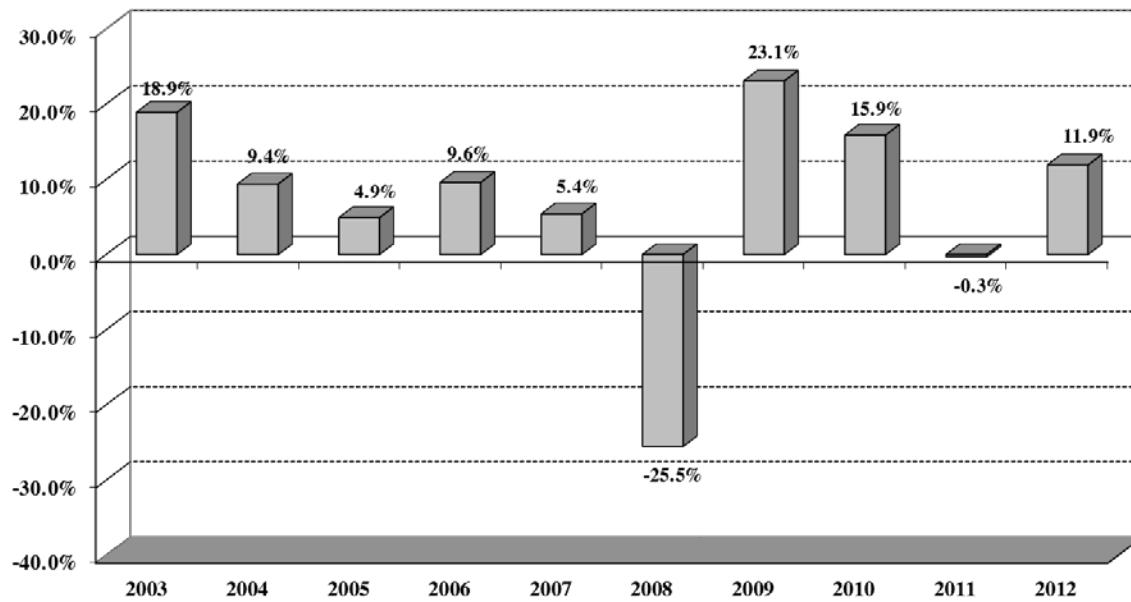
## CHART 55

METROPOLITAN WATER PENSION FUND  
Investment Income FY 2003 - FY 2012  
Actuarially Assumed Rate of Return: 7.75%  
(Millions)



## CHART 56

METROPOLITAN WATER PENSION FUND  
Rate of Return FY 2003 - FY 2012  
Actuarially Assumed Rate of Return: 7.75%  
(\$ in millions)



**TABLE 15**

<b>METROPOLITAN WATER PENSION FUND</b>					
<b>System Experience, FY 2003 - FY 2012</b>					
<b>(\$ in millions)</b>					
<b>Fiscal Year</b>	<b>Annual Payroll</b>	<b>Actuarial Liabilities</b>	<b>Actuarial Assets</b>	<b>Unfunded Liabilities</b>	<b>Funded Ratio</b>
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%
2003	142.6	1,517.9	1,146.5	371.4	75.5%

**TABLE 16**

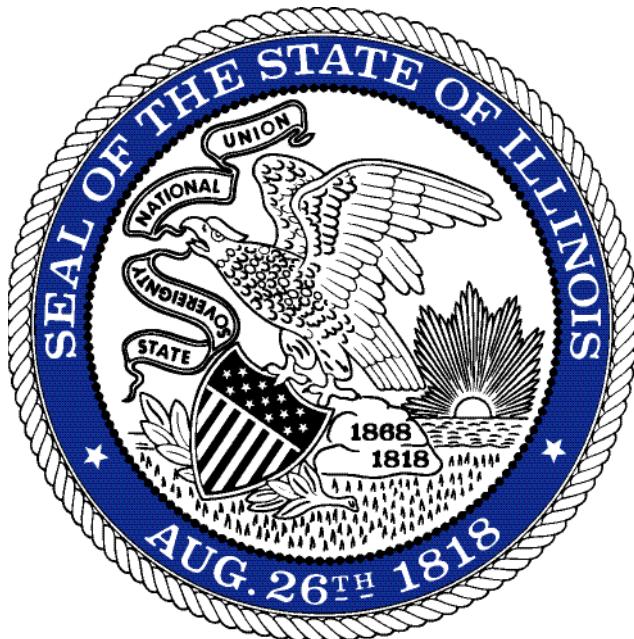
<b>METROPOLITAN WATER PENSION FUND</b> <b>Changes in Net Assets</b> <b>(\$ in millions)</b>								
Fiscal Years	2012	2011	2010	2009	2008	2007	2006	2005
<b>Additions to Assets</b>								
Employer	65.1	37.4	29.9	32.1	33.4	28.0	34.5	26.2
Employees	14.7	15.0	15.9	15.7	14.8	15.6	15.0	14.4
Net Investment Income	116.3	-1.4	142.7	194.1	-299.7	62.5	106.5	53.8
Other	0.0	0.0	0.2	0.0	0.6	0.2	0.0	0.0
<b>Total Asset Additions (A)</b>	<b>196.1</b>	<b>51.0</b>	<b>188.7</b>	<b>241.9</b>	<b>-251</b>	<b>106.3</b>	<b>156.0</b>	<b>94.4</b>
<b>Deductions from Assets</b>								
Benefits	122.7	118.1	108.2	103.4	100.1	94.8	89.1	83.3
Refunds	1.2	2.7	1.4	1.2	1.0	1.2	1.4	1.3
Rebates	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Administrative Expenses	1.3	1.4	1.3	1.3	1.3	1.5	1.5	1.3
Other	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0
<b>Total Asset Deductions (B)</b>	<b>125.2</b>	<b>122.2</b>	<b>110.9</b>	<b>105.9</b>	<b>102.4</b>	<b>97.5</b>	<b>92.0</b>	<b>85.9</b>
<b>Change in Net Assets (A-B=C)</b>	<b>70.9</b>	<b>-71.2</b>	<b>77.8</b>	<b>136.0</b>	<b>-353.3</b>	<b>8.8</b>	<b>64.0</b>	<b>8.5</b>

**TABLE 17**

<b>Metropolitan Water Reclamation District Retirement Fund</b> <b>Reduced Benefits for Members Starting Participation on/after January 1, 2011</b> <b>Retirement System Projections Based on Public Act 96-0889 (SB 1946)</b> <b>(\$ in millions)</b>								
Fiscal Year	Annual Payroll	Total Employer Contribution	Employer Contribution As % of Payroll	Total Employee Contribution	Total Actuarial Liability	Actuarial Value of Assets	Unfunded Actuarial Liability	Funded Ratio
2012	179.0	66.5	37.2%	17.8	2,180.9	1,119.4	1,061.5	51.3%
2013	184.7	65.8	35.6%	20.0	2,252.7	1,195.7	1,057.0	53.1%
2014	191.2	66.7	34.9%	22.2	2,324.6	1,255.3	1,069.3	54.0%
2015	196.9	67.4	34.2%	22.6	2,395.8	1,304.1	1,091.7	54.4%
2016	203.7	68.7	33.7%	23.1	2,466.4	1,352.7	1,113.7	54.8%
2017	210.1	70.1	33.4%	23.6	2,536.0	1,400.8	1,135.2	55.2%
2018	217.1	71.5	32.9%	24.0	2,604.4	1,448.3	1,156.1	55.6%
2019	223.3	72.8	32.6%	24.4	2,670.5	1,494.3	1,176.2	56.0%
2020	231.0	74.4	32.2%	24.8	2,734.8	1,539.4	1,195.4	56.3%
2021	238.6	76.0	31.9%	25.2	2,797.0	1,583.6	1,213.4	56.6%
2022	246.2	77.7	31.6%	25.6	2,856.9	1,626.6	1,230.3	56.9%
2023	254.3	79.5	31.3%	26.0	2,914.4	1,668.5	1,245.9	57.3%
2024	262.1	81.4	31.1%	26.3	2,969.0	1,709.1	1,259.9	57.6%
2025	270.6	83.5	30.9%	26.7	3,020.7	1,748.6	1,272.1	57.9%
2026	279.8	85.7	30.6%	27.0	3,069.6	1,787.3	1,282.3	58.2%
2027	289.1	88.0	30.4%	27.3	3,115.5	1,825.1	1,290.4	58.6%
2028	299.4	90.5	30.2%	27.7	3,158.8	1,862.9	1,295.9	59.0%
2029	309.3	93.0	30.1%	28.0	3,199.0	1,900.2	1,298.8	59.4%
2030	319.4	95.6	29.9%	28.2	3,236.0	1,937.4	1,298.6	59.9%
2031	330.5	98.4	29.8%	28.5	3,269.9	1,974.9	1,295.0	60.4%
2032	342.0	101.2	29.6%	28.8	3,300.7	2,013.1	1,287.6	61.0%
2033	353.7	104.2	29.5%	29.0	3,328.3	2,052.0	1,276.3	61.7%
2034	366.6	107.3	29.3%	29.3	3,353.2	2,092.7	1,260.5	62.4%
2035	379.6	110.5	29.1%	29.5	3,375.7	2,135.9	1,239.8	63.3%
2036	393.7	113.8	28.9%	29.8	3,396.0	2,182.1	1,213.9	64.3%
2037	408.5	117.2	28.7%	30.1	3,414.3	2,232.2	1,182.1	65.4%
2038	423.3	120.7	28.5%	30.3	3,430.7	2,286.6	1,144.1	66.7%
2039	438.8	124.3	28.3%	30.5	3,445.3	2,346.1	1,099.2	68.1%
2040	455.4	126.9	27.9%	30.7	3,459.0	2,410.9	1,048.1	69.7%
2041	472.0	127.7	27.1%	30.9	3,471.5	2,479.5	992.0	71.4%
2042	489.8	128.8	26.3%	31.2	3,483.5	2,553.0	930.5	73.3%
2043	508.6	129.6	25.5%	31.4	3,495.9	2,632.2	863.7	75.3%
2044	528.0	130.5	24.7%	31.7	3,509.1	2,718.0	791.1	77.5%
2045	548.3	131.6	24.0%	32.0	3,523.7	2,811.9	711.8	79.8%
2046	569.1	132.7	23.3%	32.3	3,540.0	2,914.4	625.6	82.3%
2047	591.0	134.2	22.7%	32.6	3,558.4	3,026.9	531.5	85.1%
2048	614.6	135.4	22.0%	33.1	3,580.1	3,150.9	429.2	88.0%
2049	638.2	136.7	21.4%	33.4	3,604.9	3,287.0	317.9	91.2%
2050	662.5	138.5	20.9%	33.8	3,633.4	3,436.8	196.6	94.6%

## 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
- System Projections



**Note:** All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of December 31, 2012.



# **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**

---

- 3% compounded.

## **Employee Contributions**

---

- 8.5% of salary.

## **Required Employer Contributions**

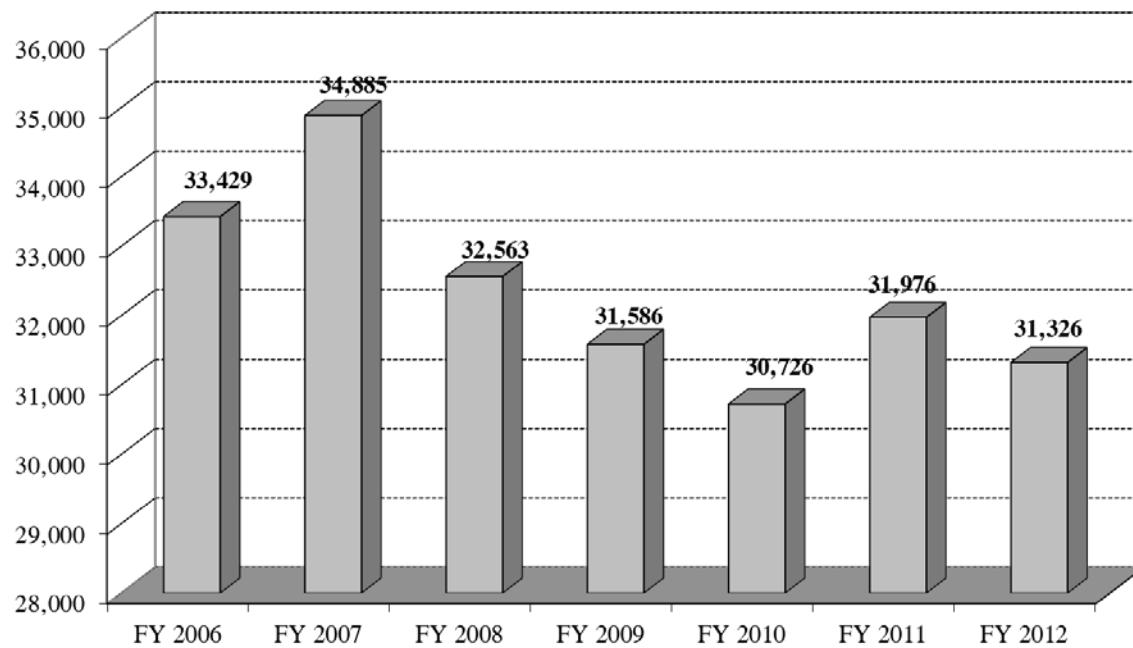
---

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.

**Note: Benefits shown are for employees hired prior to January 1, 2011 (Tier 1 employees), the effective date of P.A. 96-0889. See the P.A. 96-0889 Section on page 3 for a summary of benefits for employees hired after January 1, 2011.**

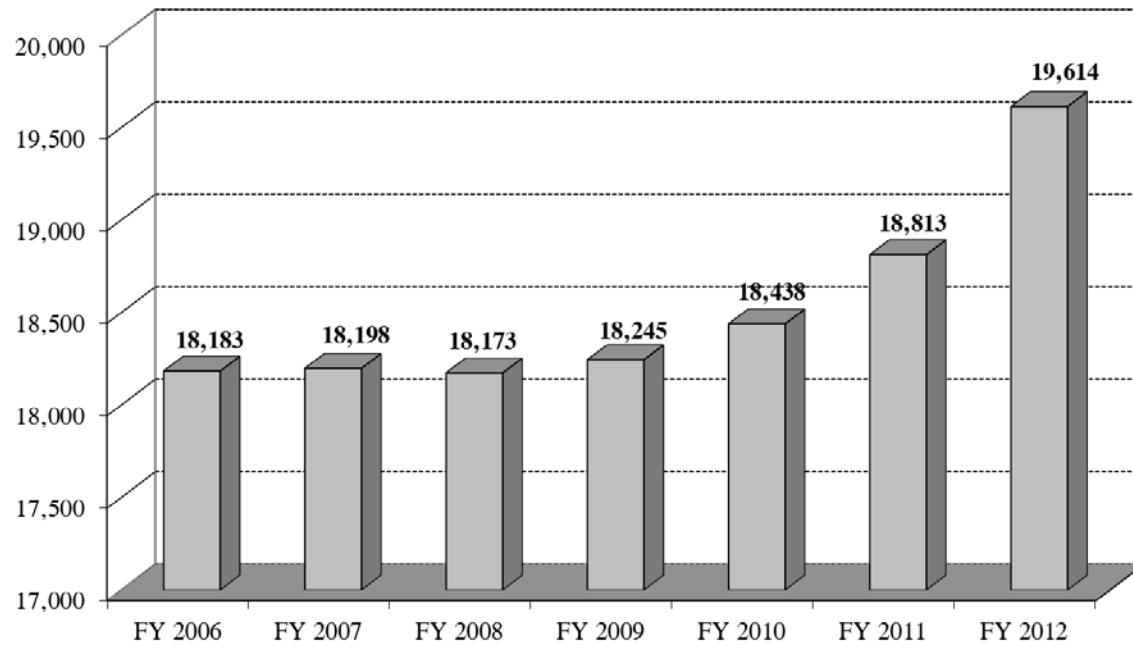
## CHART 57

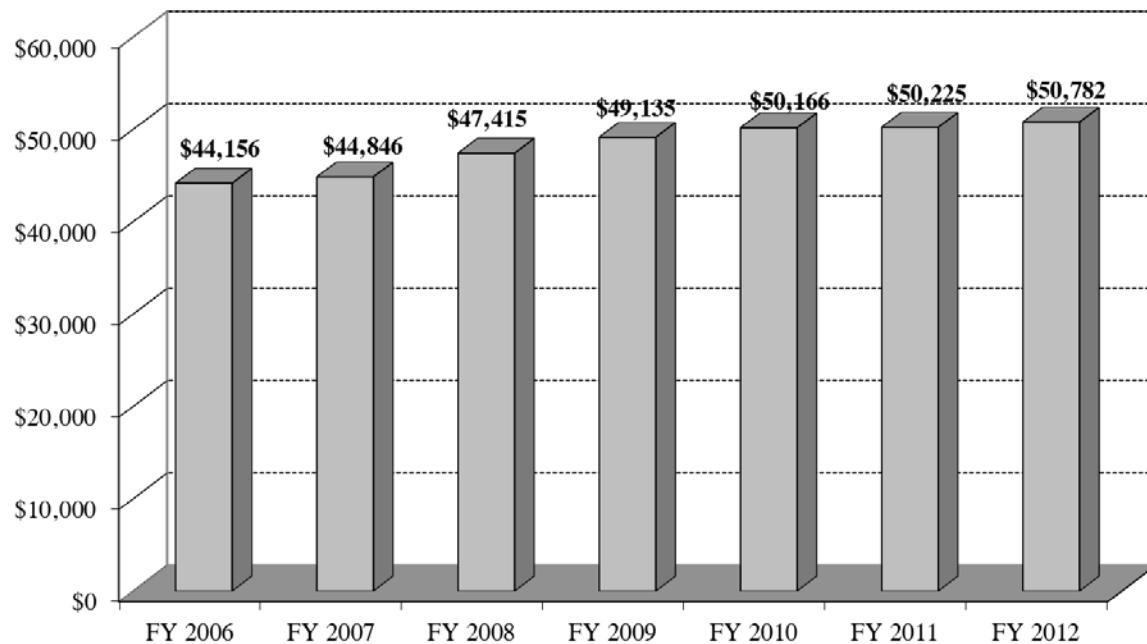
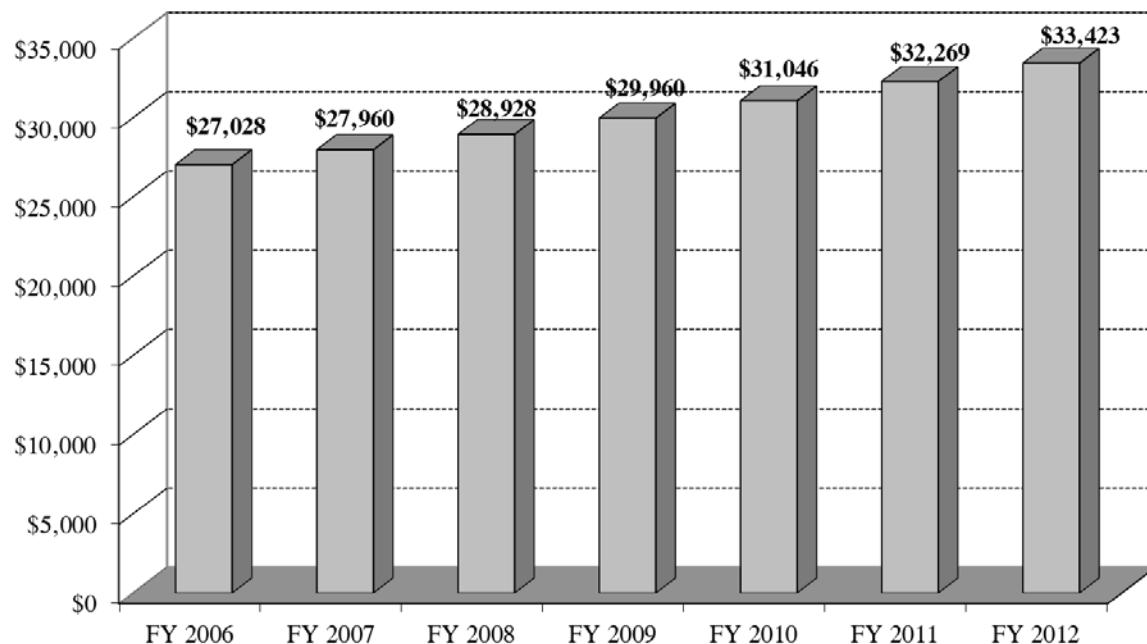
### CHICAGO MUNICIPAL EMPLOYEES' PENSION FUND Active Employees



## CHART 58

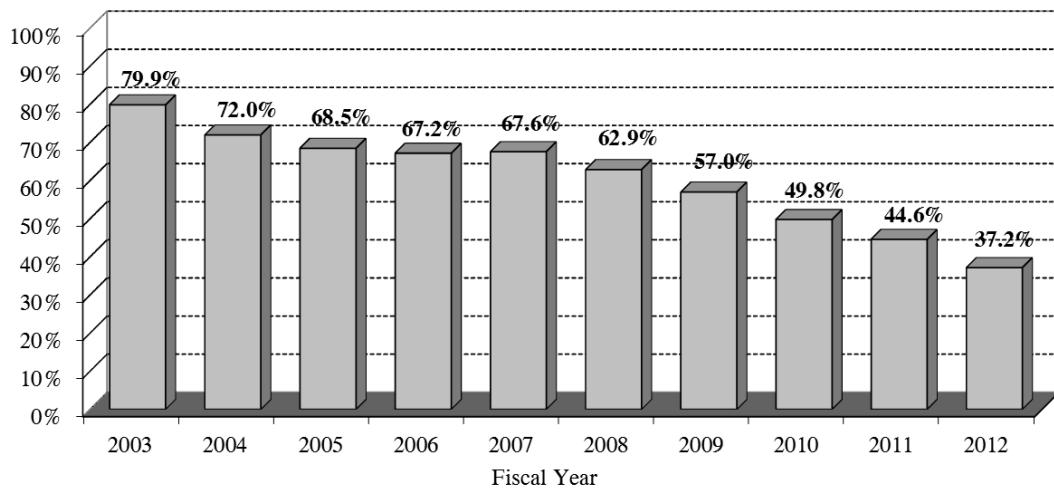
### CHICAGO MUNICIPAL EMPLOYEES' PENSION FUND Employee Annuitants



**CHART 59****CHICAGO MUNICIPAL EMPLOYEES' PENSION FUND**  
**Average Employee Salaries****CHART 60****CHICAGO MUNICIPAL EMPLOYEES' PENSION FUND**  
**Average Retirement Annuities**

## CHART 61

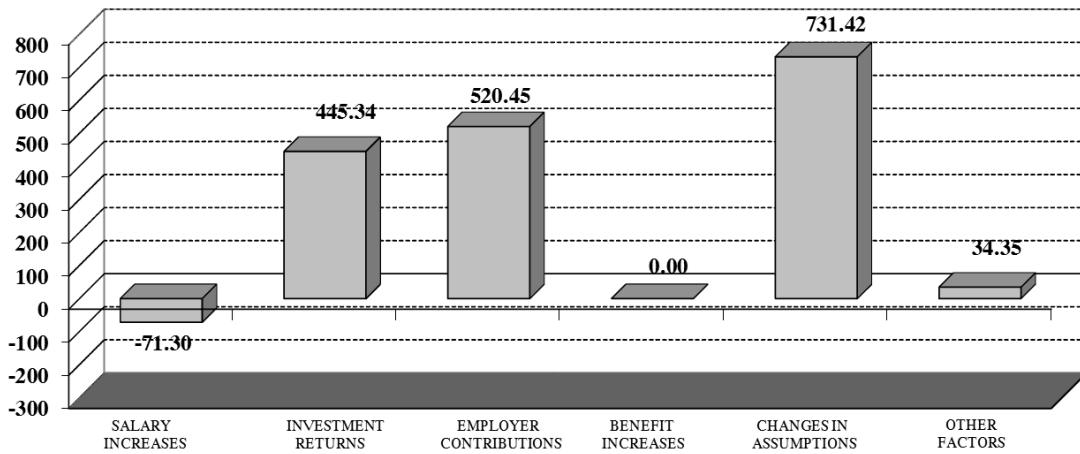
### CHICAGO MUNICIPAL EMPLOYEES' PENSION FUND Funded Ratio FY 2003 - FY 2012



## CHART 62

### CHICAGO MUNICIPAL EMPLOYEES PENSION FUND Change in Unfunded Liabilities FY 2012 \$ Millions

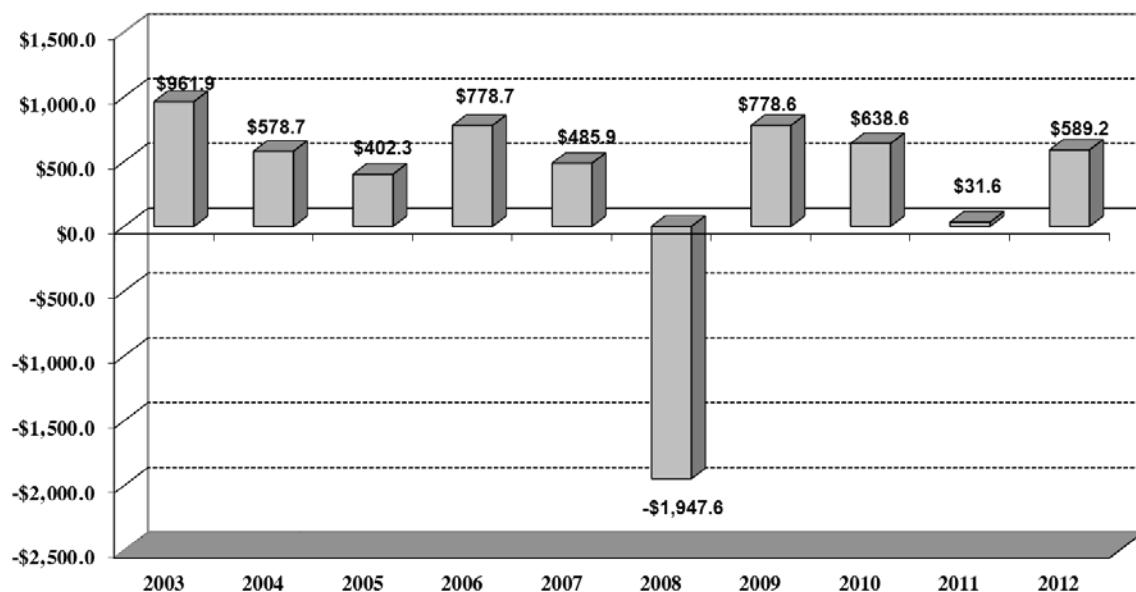
TOTAL INCREASE EQUALS  
\$1,660.26 MIL



The investment return assumption was lowered from 8.00 to 7.50 percent. This new assumption resulted in an increase in UAAL by \$731.42 million.

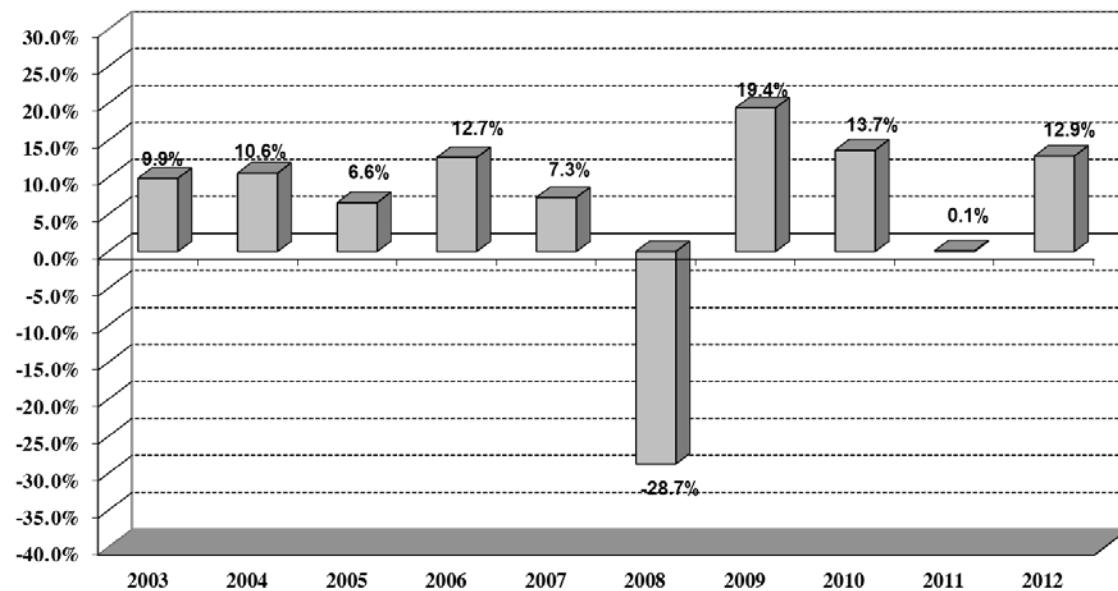
## CHART 63

CHICAGO MUNICIPAL EMPLOYEES' PENSION FUND  
Investment Income FY 2003 - FY 2012  
Actuarially Assumed Rate of Return: 7.50%  
(Millions)



## CHART 64

CHICAGO MUNICIPAL EMPLOYEES' PENSION FUND  
Rate of Return FY 2003 - FY 2012  
Actuarially Assumed Rate of Return: 7.50%  
(\$ in millions)



**TABLE 18**

<b>CHICAGO MUNICIPAL EMPLOYEES PENSION FUND</b>					
<b>System Experience, FY 2003 - FY 2012</b>					
<b>(\$ in millions)</b>					
<b>Fiscal Year</b>	<b>Annual Payroll</b>	<b>Actuarial Liabilities</b>	<b>Actuarial Assets</b>	<b>Unfunded Liabilities</b>	<b>Funded Ratio</b>
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%
2003	1,395.5	7,988.6	6,384.1	1,604.5	79.9%

**TABLE 19**

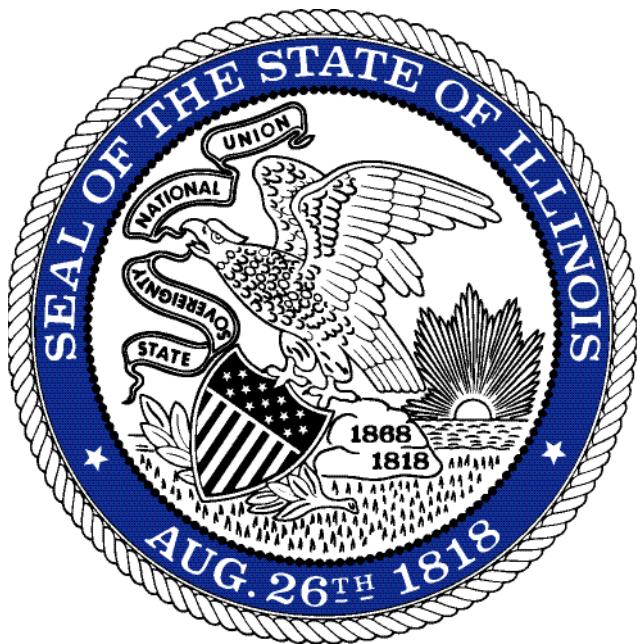
Fiscal Years	CHICAGO MUNICIPAL EMPLOYEES PENSION FUND									
	Changes in Net Assets (\$ in millions)									
	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
<b>Additions to Assets</b>										
Employer	158.4	156.5	164.3	157.7	155.8	148.1	157.1	155.1	153.9	141.9
Employees	130.2	132.6	133.3	131.0	137.7	132.5	129.5	122.5	155.9	129.6
Net Investment Income	589.2	31.6	638.6	778.6	-1,947.6	485.9	778.7	402.3	578.7	961.9
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Asset Additions (A)</b>	<b>877.8</b>	<b>320.7</b>	<b>936.2</b>	<b>1,067.3</b>	<b>-1,654.1</b>	<b>766.5</b>	<b>1,065.3</b>	<b>679.9</b>	<b>888.5</b>	<b>1,233.4</b>
<b>Deductions from Assets</b>										
Benefits	704.7	663.5	630.1	604.8	582.7	562.5	547.4	533.5	498.8	408.6
Refunds	36.9	32.1	29.9	28.1	25.5	28.0	27.2	26.7	64.3	25.5
Rebates	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Administrative Expenses	6.8	7.4	6.8	7.8	7.7	7.5	6.4	5.6	5.5	4.7
Other	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
<b>Total Asset Deductions (B)</b>	<b>748.4</b>	<b>703.0</b>	<b>666.8</b>	<b>640.7</b>	<b>615.9</b>	<b>598.1</b>	<b>581.0</b>	<b>565.8</b>	<b>568.6</b>	<b>438.8</b>
<b>Change in Net Assets (A-B=C)</b>	<b>129.4</b>	<b>-382.3</b>	<b>269.4</b>	<b>426.6</b>	<b>-2,270.0</b>	<b>168.4</b>	<b>484.3</b>	<b>114.1</b>	<b>319.9</b>	<b>794.6</b>

**TABLE 20**

<b>Municipal Employees' Annuity and Benefit Fund of Chicago</b> <b>Actuarial Valuation Projection Results as of December 31, 2012</b> <b>Actuarial Valuation Projection Results</b> <b>(<i>\$ in millions</i>)</b>								
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
2012	1,590.8	158.4	10.0%	130.3	13,511.7	5,073.3	8,438.4	37.5%
2013	1,643.5	156.2	9.5%	137.9	14,024.7	5,045.5	8,979.2	36.0%
2014	1,699.1	156.0	9.2%	142.5	14,536.4	4,887.5	9,648.9	33.6%
2015	1,756.1	163.0	9.3%	147.3	15,048.2	4,638.2	10,410.0	30.8%
2016	1,814.2	168.4	9.3%	152.2	15,560.5	4,418.5	11,141.9	28.4%
2017	1,873.4	174.1	9.3%	157.3	16,082.6	4,116.8	11,965.8	25.6%
2018	1,933.5	179.8	9.3%	162.4	16,601.7	3,757.4	12,844.3	22.6%
2019	1,994.6	185.9	9.3%	167.6	17,114.1	3,333.2	13,780.9	19.5%
2020	2,055.9	191.9	9.3%	172.9	17,616.1	2,836.5	14,779.6	16.1%
2021	2,119.1	198.1	9.3%	178.2	18,104.3	2,260.0	15,844.3	12.5%
2022	2,184.2	204.4	9.4%	183.7	18,576.4	1,596.8	16,979.6	8.6%
2023	2,249.9	210.6	9.4%	189.3	19,044.2	853.4	18,190.8	4.5%
2024	2,317.2	217.1	9.4%	195.0	19,493.7	10.5	19,483.2	0.1%
2025	2,385.6	1,129.1	47.3%	200.9	19,923.0	0.0	19,923.0	0.0%
2026	2,455.1	1,188.6	48.4%	206.8	20,330.5	0.0	20,330.5	0.0%
2027	2,525.8	1,236.8	49.0%	212.8	20,714.9	0.0	20,714.9	0.0%
2028	2,597.9	1,284.3	49.4%	218.9	21,075.2	0.0	21,075.2	0.0%
2029	2,669.9	1,331.9	49.9%	225.2	21,409.4	0.0	21,409.4	0.0%
2030	2,743.4	1,379.3	50.3%	231.4	21,715.4	0.0	21,715.4	0.0%
2031	2,819.1	1,424.7	50.5%	237.8	21,993.0	0.0	21,993.0	0.0%
2032	2,896.9	1,467.4	50.7%	244.4	22,243.1	0.0	22,243.1	0.0%
2033	2,976.7	1,506.6	50.6%	251.1	22,467.1	0.0	22,467.1	0.0%
2034	3,058.9	1,541.7	50.4%	258.0	22,667.6	0.0	22,667.6	0.0%
2035	3,143.8	1,573.2	50.0%	265.2	22,846.6	0.0	22,846.6	0.0%
2036	3,231.2	1,600.9	49.5%	272.5	23,006.7	0.0	23,006.7	0.0%
2037	3,321.1	1,624.9	48.9%	280.1	23,150.6	0.0	23,150.6	0.0%
2038	3,414.2	1,645.4	48.2%	287.9	23,280.8	0.0	23,280.8	0.0%
2039	3,509.7	1,662.1	47.4%	296.0	23,400.4	0.0	23,400.4	0.0%
2040	3,608.2	1,675.1	46.4%	304.2	23,512.6	0.0	23,512.6	0.0%
2041	3,710.7	1,683.2	45.4%	312.8	23,622.1	0.0	23,622.1	0.0%
2042	3,816.6	1,685.8	44.2%	321.7	23,734.8	0.0	23,734.8	0.0%
2043	3,925.4	1,684.2	42.9%	330.8	23,855.9	0.0	23,855.9	0.0%
2044	4,037.7	1,678.5	41.6%	340.3	23,990.4	0.0	23,990.4	0.0%
2045	4,152.9	1,669.5	40.2%	350.0	24,143.2	0.0	24,143.2	0.0%
2046	4,270.6	1,658.3	38.8%	360.0	24,318.3	0.0	24,318.3	0.0%
2047	4,390.2	1,646.0	37.5%	370.2	24,518.7	0.0	24,518.7	0.0%
2048	4,511.2	1,633.6	36.2%	380.6	24,746.5	0.0	24,746.5	0.0%
2049	4,633.2	1,622.2	35.0%	391.0	25,002.8	0.0	25,002.8	0.0%
2050	4,756.0	1,612.9	33.9%	401.6	25,287.9	0.0	25,287.9	0.0%

## 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



**Note:** All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of December 31, 2012.



# **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  $\frac{1}{2}$  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**

---

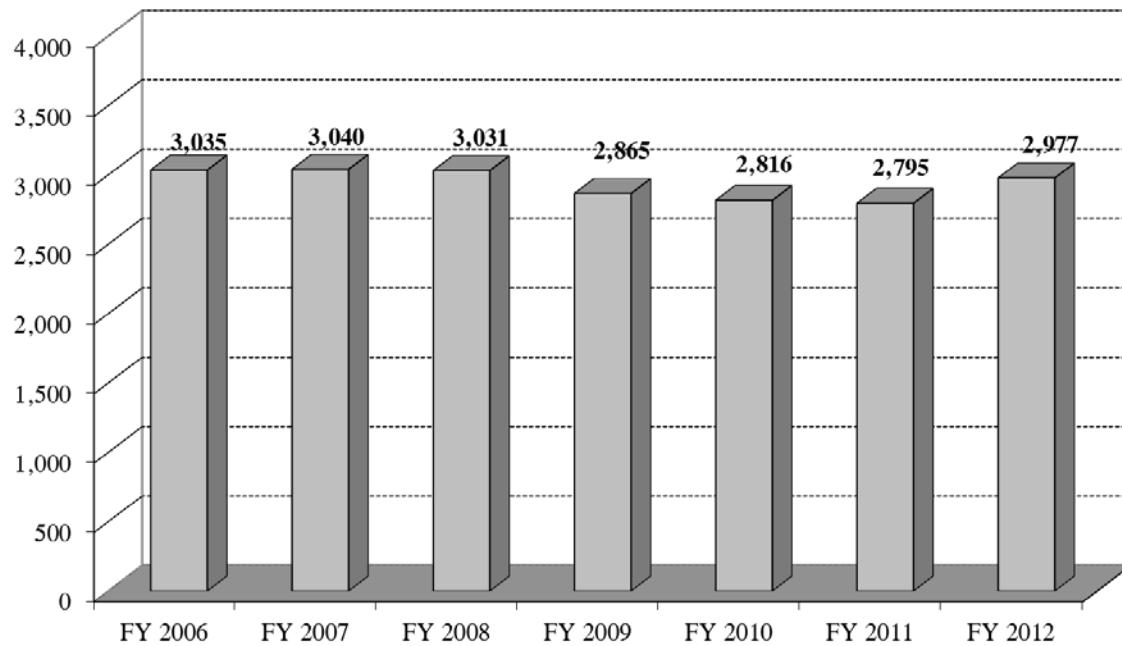
The Board of Park Commissioners is required to contribute an amount equal to the employee contributions during the fiscal year two years prior to the year the tax is levied, multiplied by 1.10.

- 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 the P.A. 96-0889 Section on page 3 for a summary of benefits for employees hired after January 1, 2011.**

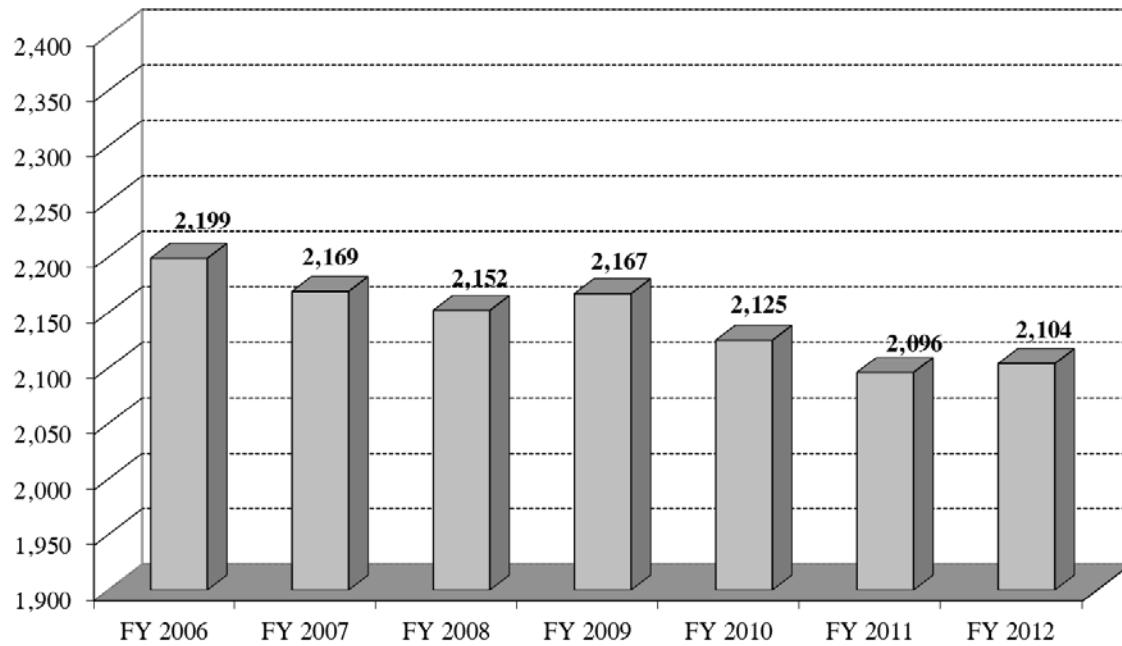
## CHART 65

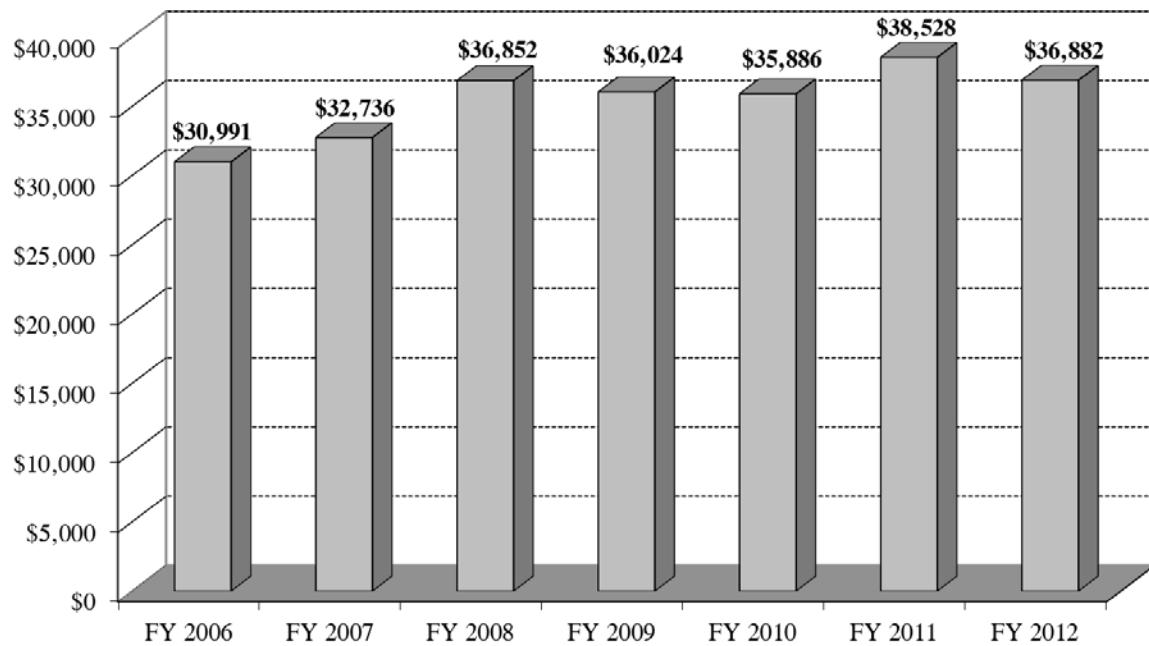
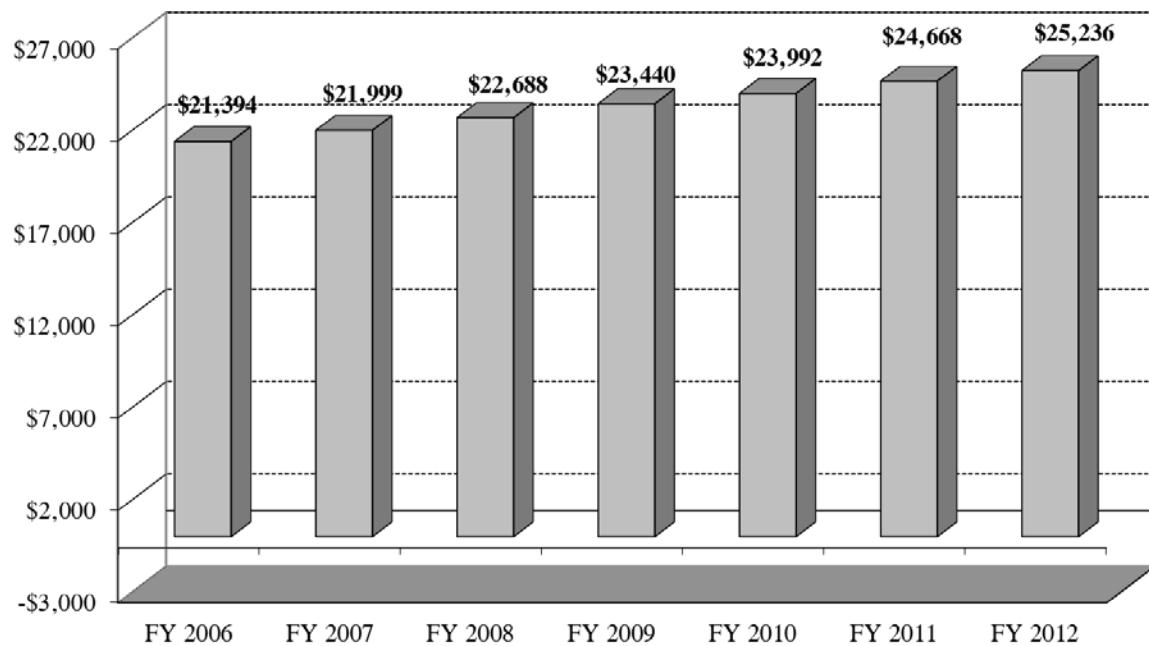
### CHICAGO PARK DISTRICT PENSION FUND Active Employees



## CHART 66

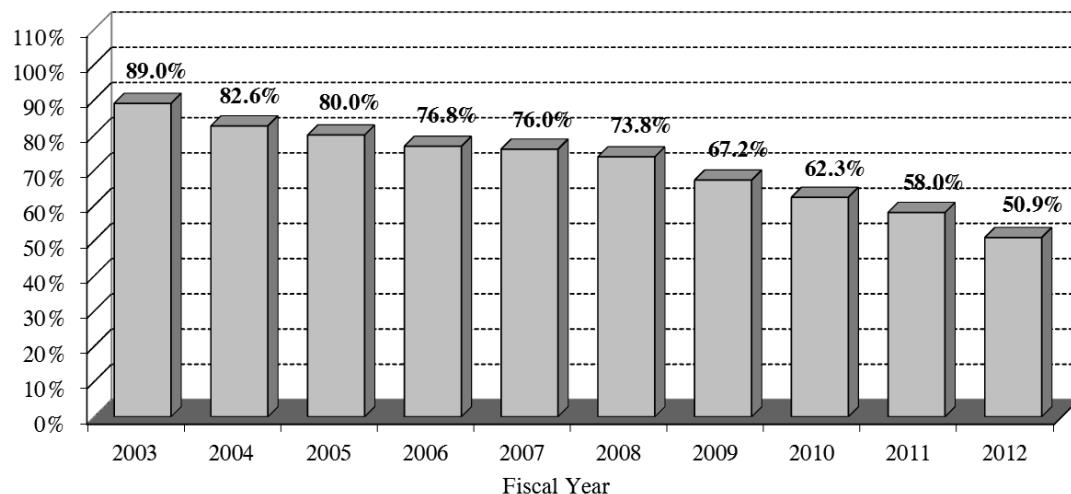
### CHICAGO PARK DISTRICT PENSION FUND Employee Annuitants



**CHART 67****CHICAGO PARK DISTRICT PENSION FUND**  
**Average Employee Salaries****CHART 68****CHICAGO PARK DISTRICT PENSION FUND**  
**Average Retirement Annuities**

## CHART 69

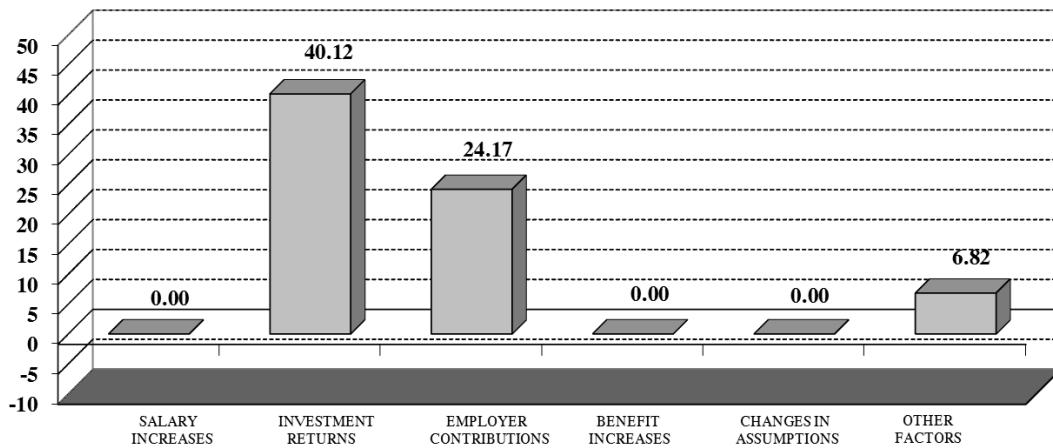
### CHICAGO PARK DISTRICT PENSION FUND Funded Ratio FY 2003 - FY 2012



## CHART 70

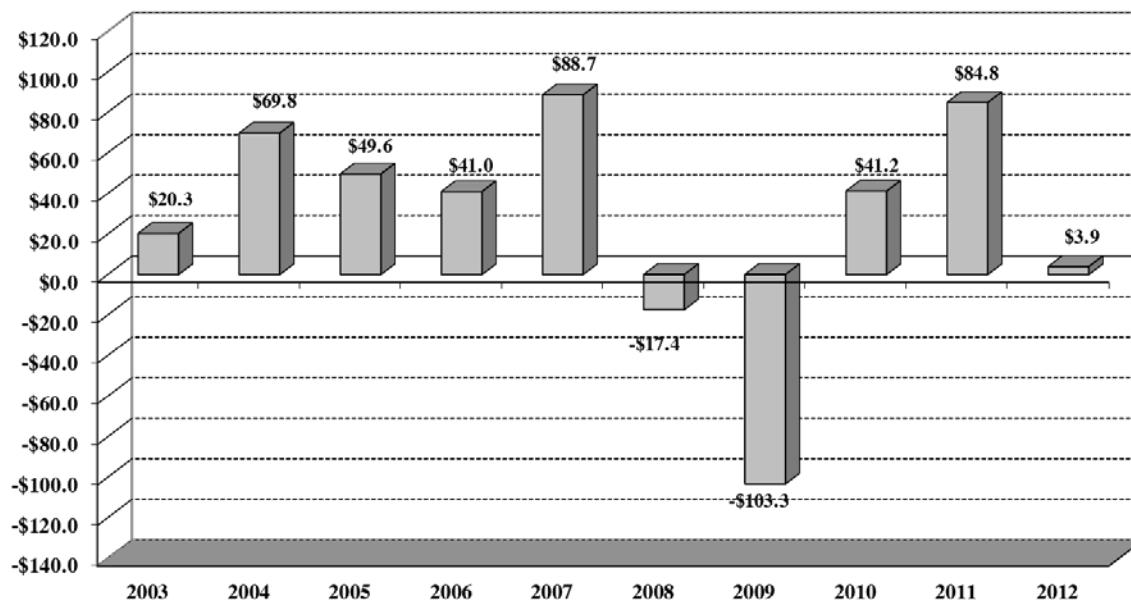
### CHICAGO PARK DISTRICT PENSION FUND Change in Unfunded Liabilities FY 2012 \$ Millions

TOTAL INCREASE EQUALS  
\$71.11 MILLION



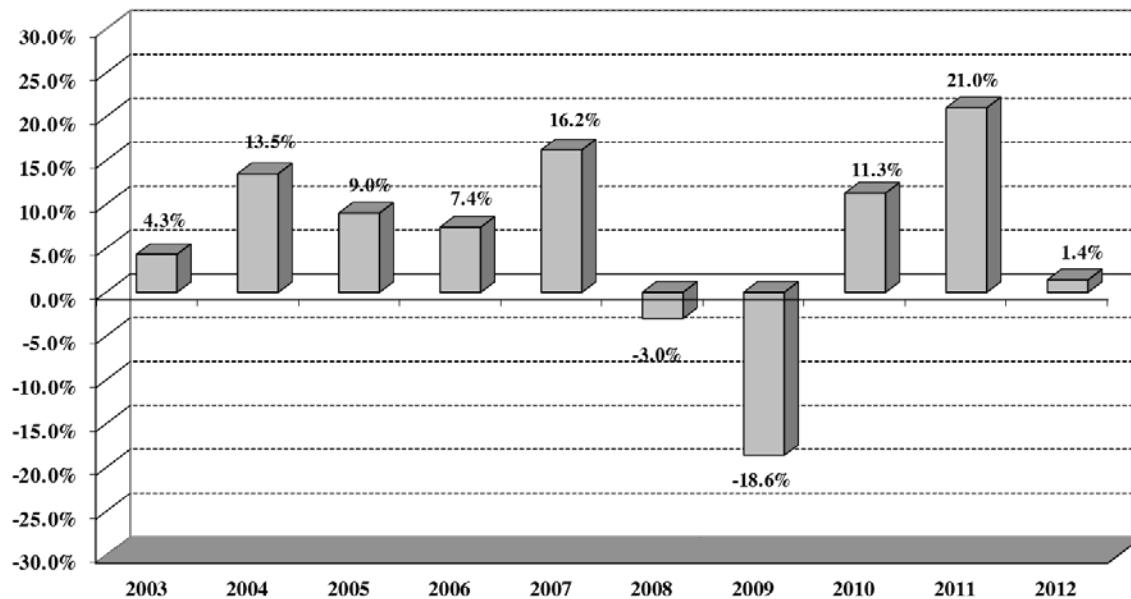
## CHART 71

CHICAGO PARK DISTRICT PENSION FUND  
Investment Income FY 2003 - FY 2012  
Actuarially Assumed Rate of Return: 8.00%  
(Millions)



## CHART 72

CHICAGO PARK DISTRICT PENSION FUND  
Rate of Return FY 2003 - FY 2012  
Actuarially Assumed Rate of Return: 8.00%  
(\$ in millions)



**TABLE 21**

<b>CHICAGO PARK DISTRICT PENSION FUND</b>					
<b>System Experience, FY 2003 - FY 2012</b>					
<b>(\$ in millions)</b>					
<b>Fiscal Year</b>	<b>Annual Payroll</b>	<b>Actuarial Liabilities</b>	<b>Actuarial Assets</b>	<b>Unfunded Liabilities</b>	<b>Funded Ratio</b>
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%
2003	102.3	701.2	624.2	77.0	89.0%

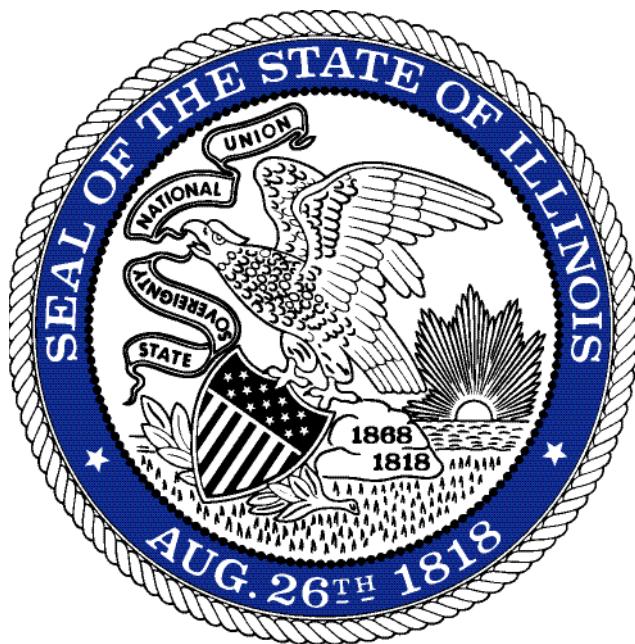
**TABLE 22**

<b>CHICAGO PARK DISTRICT PENSION FUND</b> <b>Changes in Net Assets</b> <b>(\$ in millions)</b>								
Fiscal Years	2011	2011	2010	2009	2008	2007	2006	2005
<b>Additions to Assets</b>								
Employer	10.8	11.0	10.8	9.7	9.0	9.6	5.2	4.8
Employees	10.4	9.8	9.8	10.1	10.3	9.7	9.1	8.5
Net Investment Income	3.8	84.8	41.5	-103.5	-17.4	88.7	41.0	49.6
Other	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Asset Additions (A)</b>	<b>25.1</b>	<b>105.6</b>	<b>62.1</b>	<b>-83.7</b>	<b>1.9</b>	<b>108.0</b>	<b>55.3</b>	<b>62.9</b>
<b>Deductions from Assets</b>								
Benefits	63.5	62.0	61.2	60.3	58.0	56.8	56.3	55.9
Refunds	2.0	1.7	1.4	2.7	2.0	1.8	2.1	1.9
Rebates	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Administrative Expenses	1.6	1.5	1.4	1.3	1.3	1.2	1.2	1.2
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Asset Deductions (B)</b>	<b>67.1</b>	<b>65.2</b>	<b>64.0</b>	<b>64.3</b>	<b>61.2</b>	<b>59.8</b>	<b>59.6</b>	<b>59.0</b>
<b>Change in Net Assets (A-B=C)</b>	<b>-42.0</b>	<b>40.4</b>	<b>-1.9</b>	<b>-148.0</b>	<b>-59.4</b>	<b>48.2</b>	<b>-4.3</b>	<b>3.9</b>



## 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



**Note:** All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of December 31, 2012.



# **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**

---

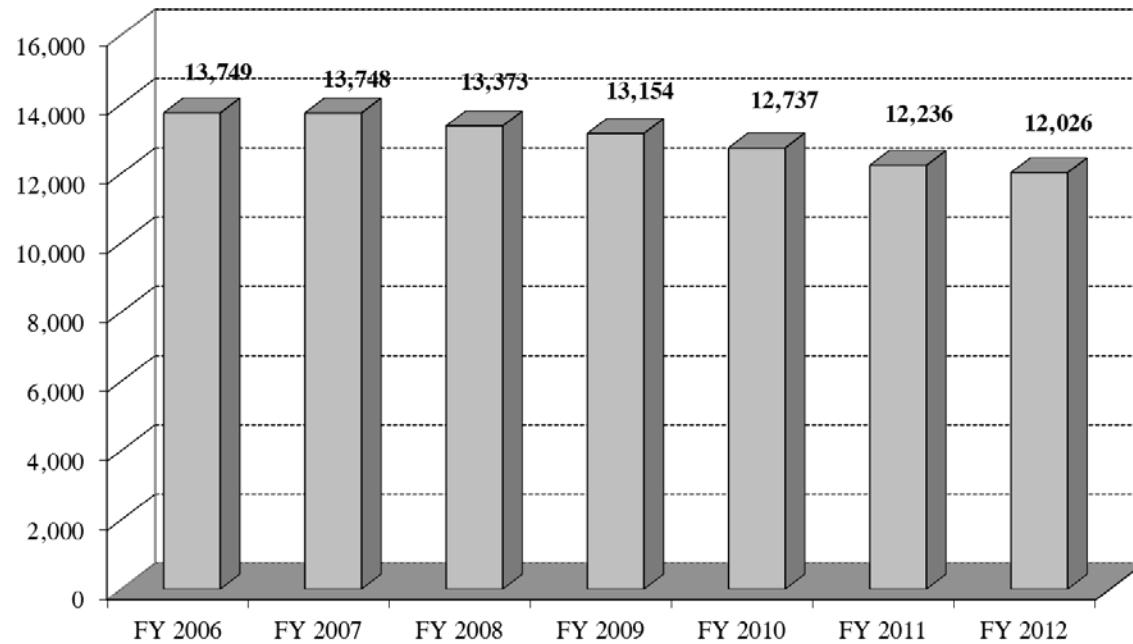
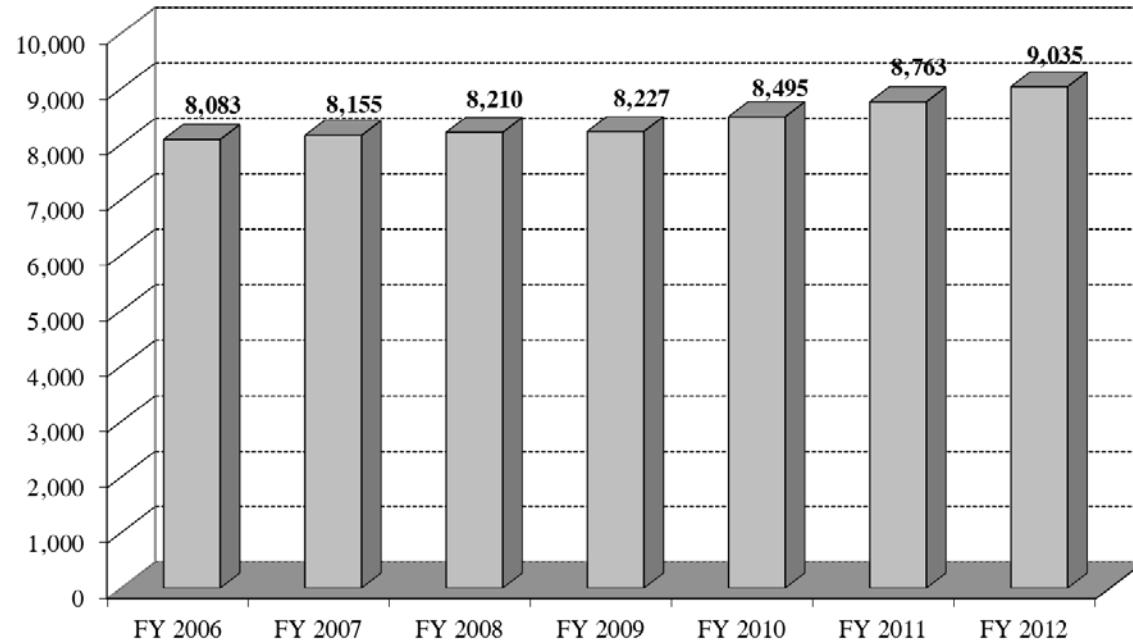
- 9.0% of salary.

### **Employer Contributions**

---

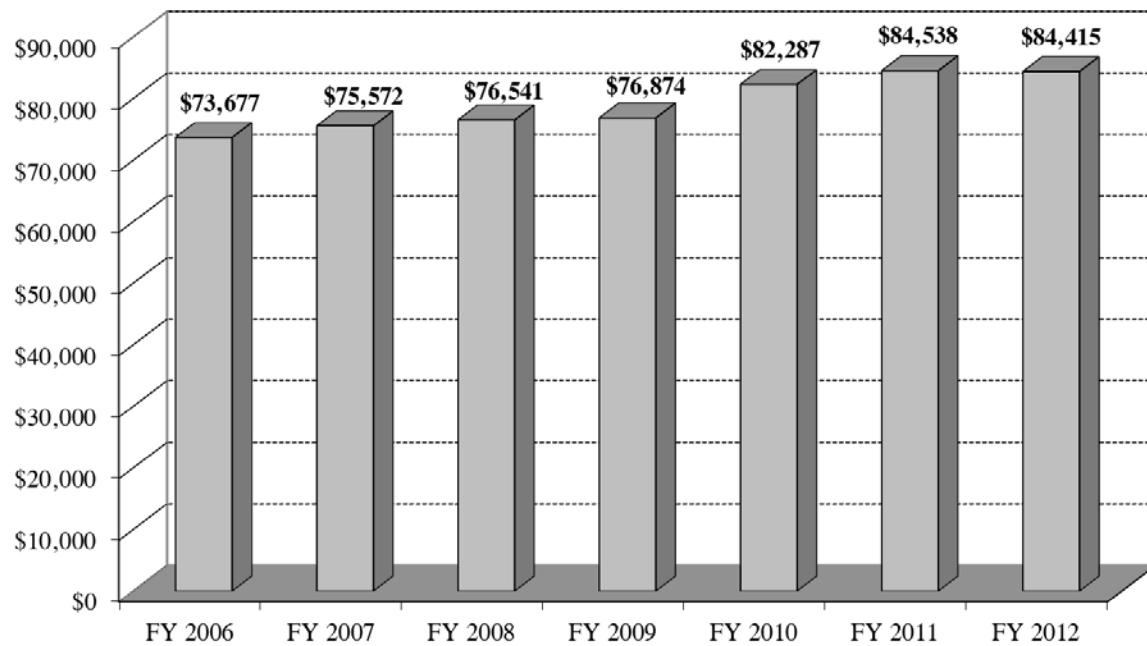
Pursuant to P.A. 96-1495, annual actuarially determined employer contributions will be calculated and required. Such actuarially determined contributions will be established with a funding goal of 90% by the end of FY 2040, based upon the actuarial value of fund assets and application of required actuarial 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 the P.A. 96-1495 section on page 5 for a summary of benefits for employees hired after January 1, 2011.**

**CHART 73****CHICAGO POLICE PENSION FUND**  
**Active Employees****CHART 74****CHICAGO POLICE PENSION FUND**  
**Employee Annuitants**

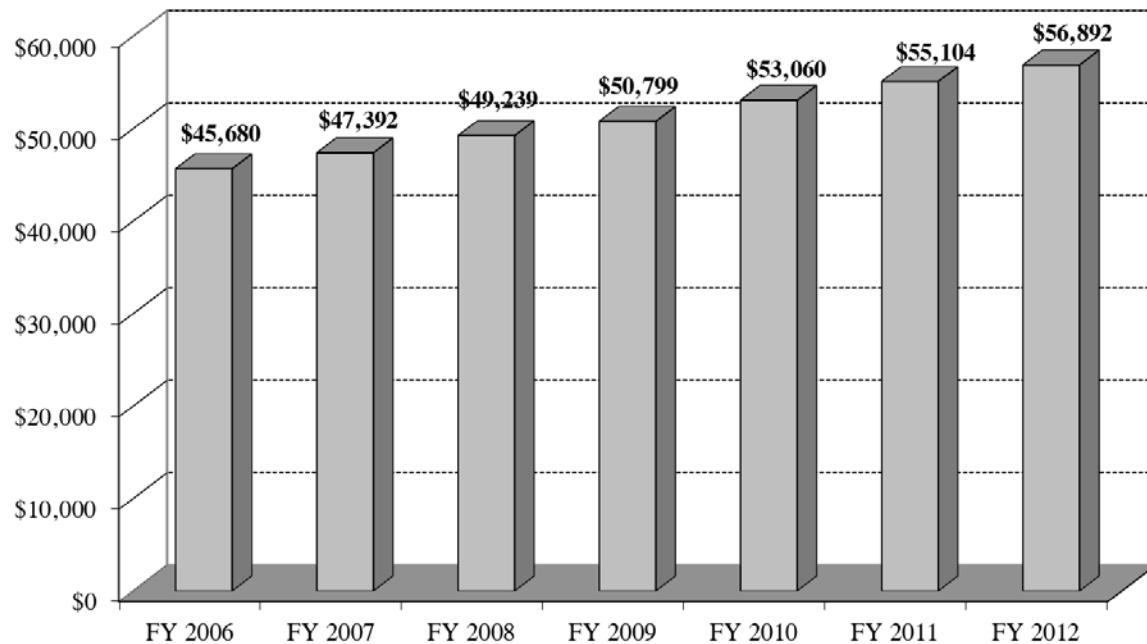
**CHART 75**

**CHICAGO POLICE PENSION FUND**  
**Average Employee Salaries**



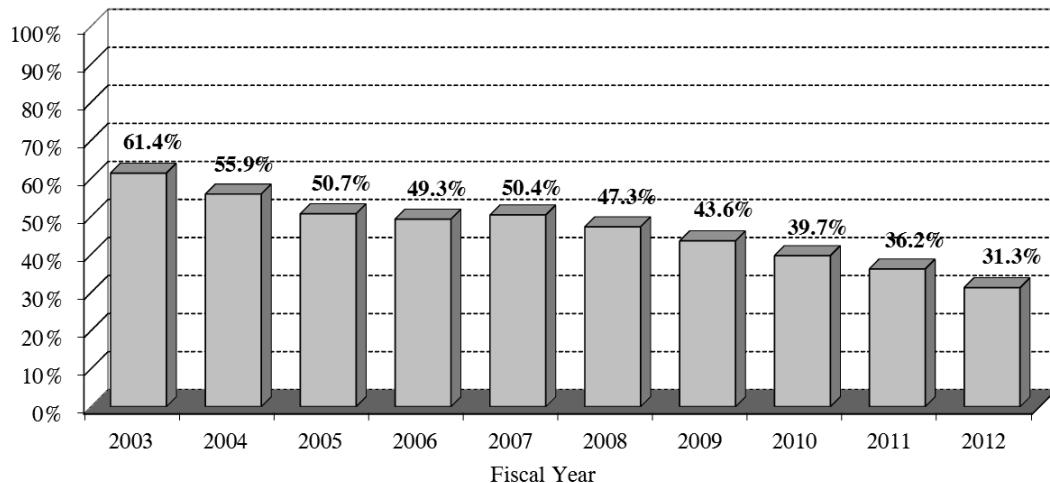
**CHART 76**

**CHICAGO POLICE PENSION FUND**  
**Average Retirement Annuity**



## CHART 77

### CHICAGO POLICE PENSION FUND Funded Ratio FY 2003 - FY 2012

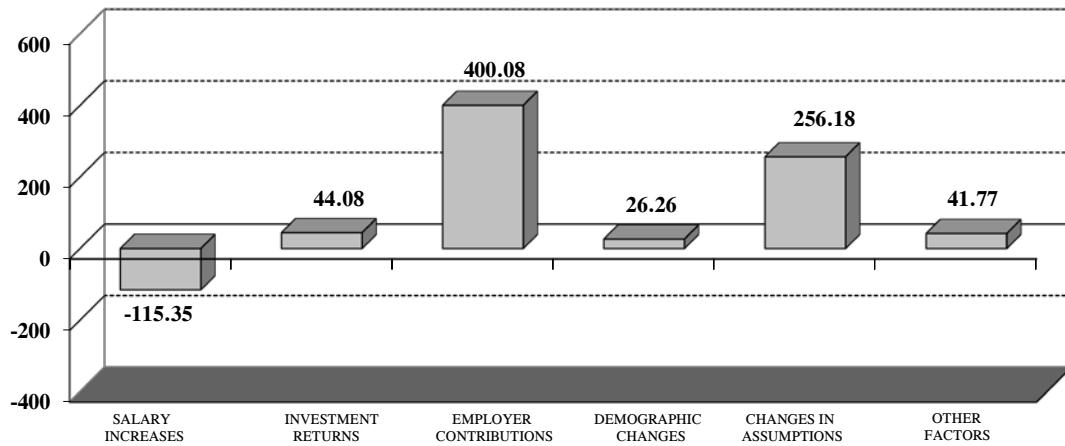


## CHART 78

### CHICAGO POLICE PENSION FUND Change in Unfunded Liabilities (Actuarial Values)

FY 2012  
\$ Millions

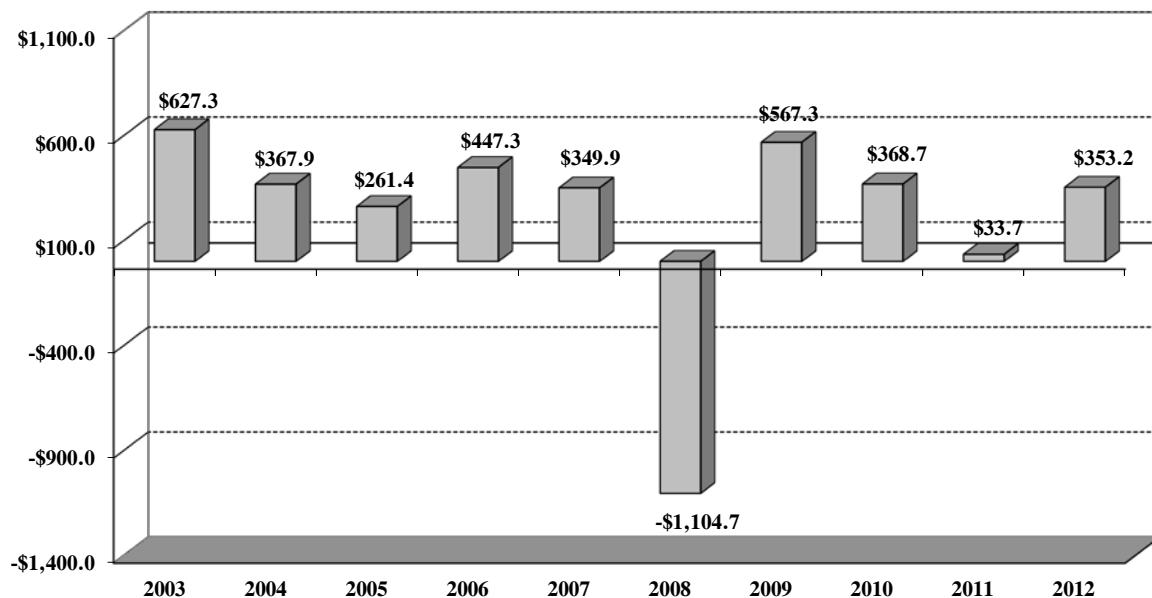
TOTAL INCREASE EQUALS  
\$653.02 MIL



On February 26, 2013, the Board of Trustees approved a change in the investment return assumption from 8.00% to 7.75%.

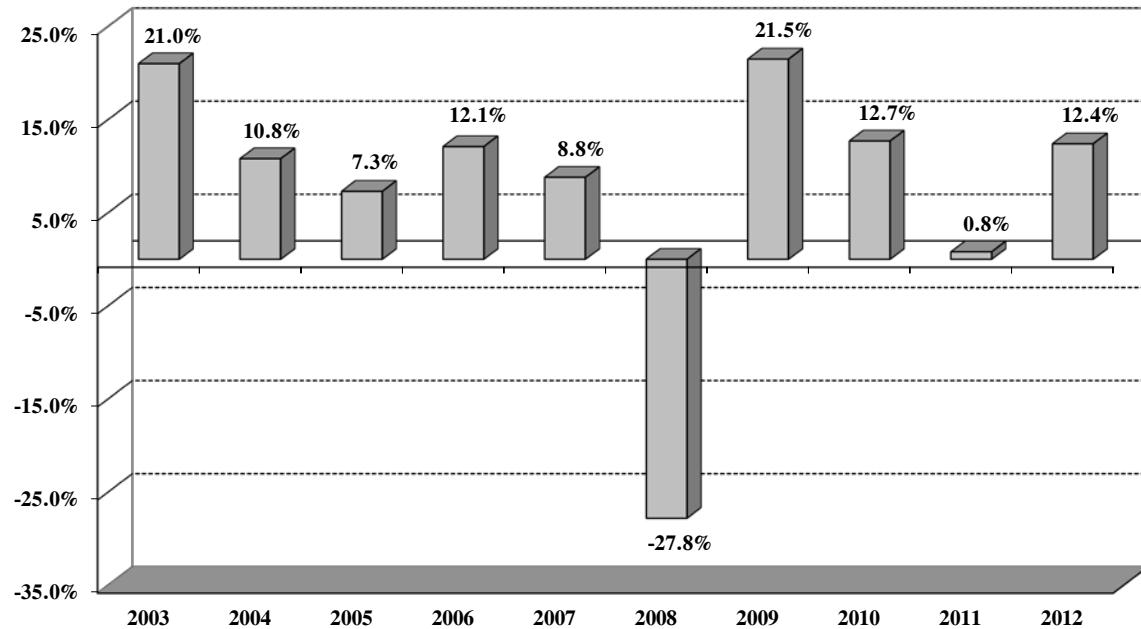
## CHART 79

CHICAGO POLICE PENSION FUND  
Investment Income FY 2003 - FY 2012  
Actuarially Assumed Rate of Return :7.75%  
(Millions)



## CHART 80

CHICAGO POLICE PENSION FUND  
Rate of Return FY 2003 - FY 2012  
Actuarially Assumed Rate of Return :7.75%



**TABLE 23**

<b>CHICAGO POLICE PENSION FUND</b>					
<b>System Experience, FY 2003 - FY 2012</b>					
<b>(\$ in millions)</b>					
<b>Fiscal Year</b>	<b>Annual Payroll</b>	<b>Actuarial Liabilities</b>	<b>Actuarial Assets</b>	<b>Unfunded Liabilities</b>	<b>Funded Ratio</b>
2012	1,012.2	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%
2003	887.6	6,581.4	4,039.7	2,541.7	61.4%

*NOTE: The above FY 2007 - FY 2012 figures include healthcare assets/liabilities.*

**TABLE 24**

<b>CHICAGO POLICE PENSION FUND</b> <b>Changes in Net Assets</b> <b>(\$ in millions)</b>								
Fiscal Years	2012	2011	2010	2009	2008	2007	2006	2005
<b>Additions to Assets</b>								
Employer	207.2	183.5	183.8	180.5	181.5	178.7	158.7	178.3
Employees	95.9	98.2	108.4	95.6	93.2	93.3	92.0	89.1
Net Investment Income	353.2	33.7	368.7	567.3	-1,104.9	349.9	447.3	261.4
Other	0.4	0.1	0.9	0.8	0.2	0.0	0.0	0.0
<b>Total Asset Additions (A)</b>	<b>656.7</b>	<b>315.5</b>	<b>661.8</b>	<b>844.2</b>	<b>-830.0</b>	<b>621.9</b>	<b>698.0</b>	<b>528.8</b>
<b>Deductions from Assets</b>								
Benefits	602.7	568.0	536.3	508.5	491.6	471.5	452.8	431.4
Refunds	11.2	7.3	8.0	6.4	6.4	6.2	5.3	5.6
Rebates	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Administrative Expenses	0.5	4.4	3.9	4.3	4.2	3.1	2.7	2.7
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Asset Deductions (B)</b>	<b>618.8</b>	<b>579.7</b>	<b>548.2</b>	<b>519.2</b>	<b>502.2</b>	<b>480.8</b>	<b>460.8</b>	<b>439.7</b>
<b>Change in Net Assets (A-B=C)</b>	<b>37.9</b>	<b>-264.2</b>	<b>113.6</b>	<b>325.0</b>	<b>-1,332.2</b>	<b>141.1</b>	<b>237.2</b>	<b>89.1</b>

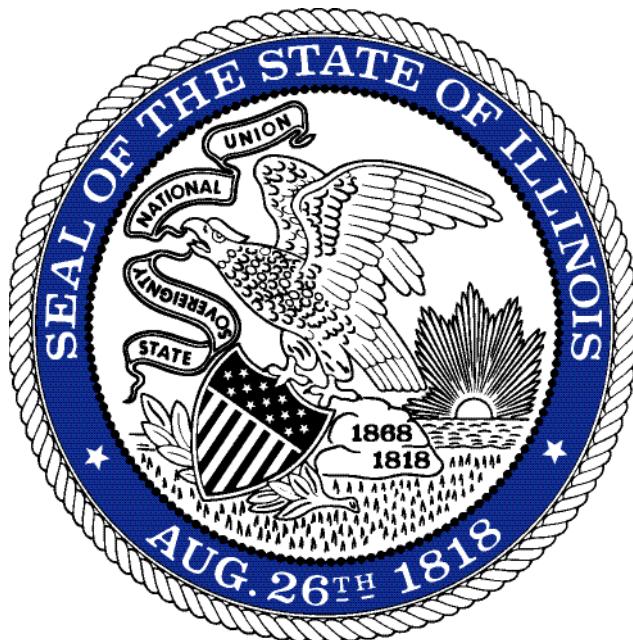
Table 25 below contains funding projections provided to CGFA by the Policemen's Annuity and Benefit Fund of Chicago based upon the December 31, 2012 actuarial valuation.

**TABLE 25**

<b>Policemen's Annuity and Benefit Fund of Chicago</b> <b>Actuarial Valuation Projection Results as of December 31, 2012</b> <b>Funding Impact of P.A. 096-1495 (Tier 2 Act of 2010)</b> <b>Discount Rate of 7.75%</b> <b>(\$ in millions)</b>								
Fiscal Year	Capped Payroll	City Statutory Contribution	City Contribution As % of Payroll	Total Employee Contribution	Total Actuarial Liability	Actuarial Value of Assets	Unfunded Actuarial Liability	Funded Ratio
2012	1,015.2	207.2	20.4%	98.9	10,220.6	3,148.9	7,071.7	30.81%
2013	1,041.7	192.6	18.5%	93.5	10,330.7	3,035.3	7,295.4	29.38%
2014	1,075.1	191.8	17.8%	103.0	10,679.8	2,926.3	7,753.5	27.40%
2015	1,110.0	187.1	16.9%	106.4	11,035.0	2,778.5	8,256.5	25.18%
2016	1,145.7	630.6	55.0%	109.9	11,395.9	3,053.9	8,342.0	26.80%
2017	1,183.9	651.6	55.0%	113.6	11,767.7	3,323.0	8,444.7	28.24%
2018	1,220.8	671.9	55.0%	117.2	12,130.3	3,606.4	8,523.9	29.73%
2019	1,257.8	692.3	55.0%	120.9	12,499.8	3,903.8	8,596.0	31.23%
2020	1,297.0	713.8	55.0%	124.7	12,847.6	4,215.4	8,632.2	32.81%
2025	1,510.8	831.5	55.0%	145.3	14,633.6	6,021.0	8,612.6	41.15%
2030	1,756.5	966.7	55.0%	169.6	16,153.1	8,450.7	7,702.4	52.32%
2035	1,899.2	1,045.3	55.0%	184.5	17,182.9	11,707.1	5,475.8	68.13%
2040	2,010.0	1,106.3	55.0%	194.7	18,036.4	16,232.8	1,803.6	90.00%
2041	2,033.7	189.9	9.3%	196.8	18,216.3	16,394.7	1,821.6	90.00%
2042	2,058.3	193.3	9.4%	199.1	18,401.5	16,561.4	1,840.1	90.00%
2043	2,084.8	197.1	9.5%	201.5	18,592.4	16,733.2	1,859.2	90.00%
2044	2,113.0	200.6	9.5%	204.1	18,789.2	16,910.2	1,879.0	90.00%
2045	2,142.9	204.0	9.5%	206.9	18,991.4	17,092.3	1,899.1	90.00%
2050	2,305.6	219.6	9.5%	222.7	20,089.5	18,080.6	2,008.9	90.00%
2055	2,483.8	228.3	9.2%	240.4	21,263.8	19,137.4	2,126.4	90.00%
2060	2,675.8	234.2	8.8%	259.2	22,465.0	20,218.5	2,246.5	90.00%
2065	2,882.6	245.5	8.5%	278.9	23,789.8	21,410.8	2,379.0	90.00%
2066	2,925.8	249.0	8.5%	283.0	24,083.0	21,674.7	2,408.3	90.00%

## 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
- PA 96-0889 Projections
- System Projections



**Note:** All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of June 30, 2012.



# **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**

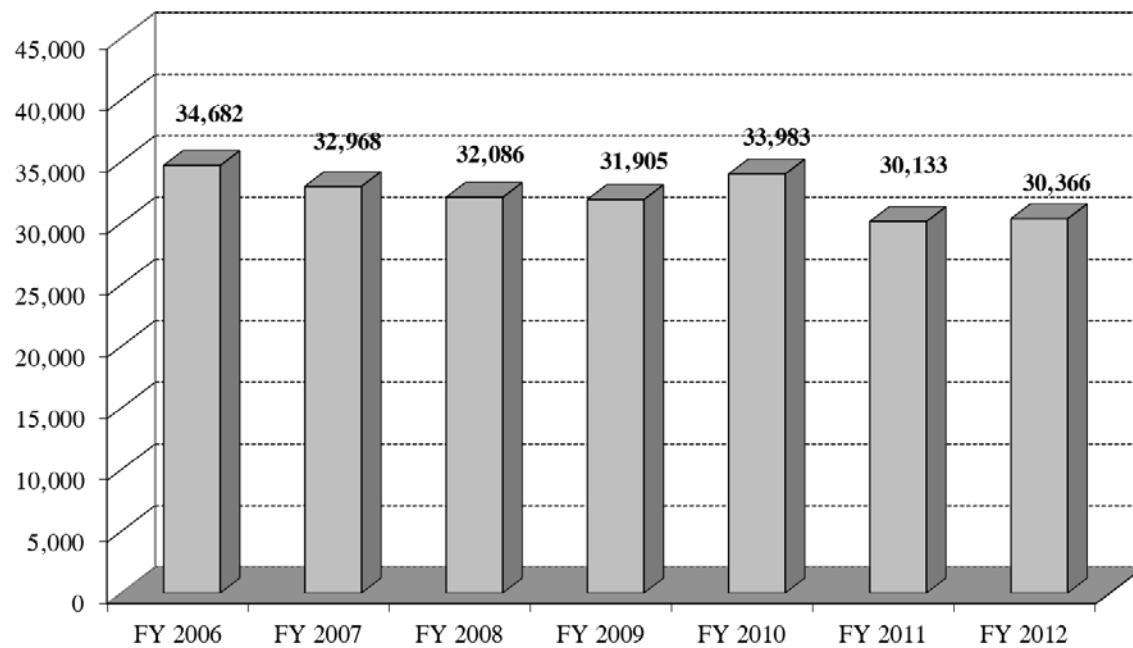
---

The employer is required to contribute a fixed dollar amount for FY2011, FY2012 and FY2013. The amount specified for FY2012 is \$192,000,000. 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 the P.A. 96-0889 Section on page 3 for a summary of benefits for employees hired after January 1, 2011.**

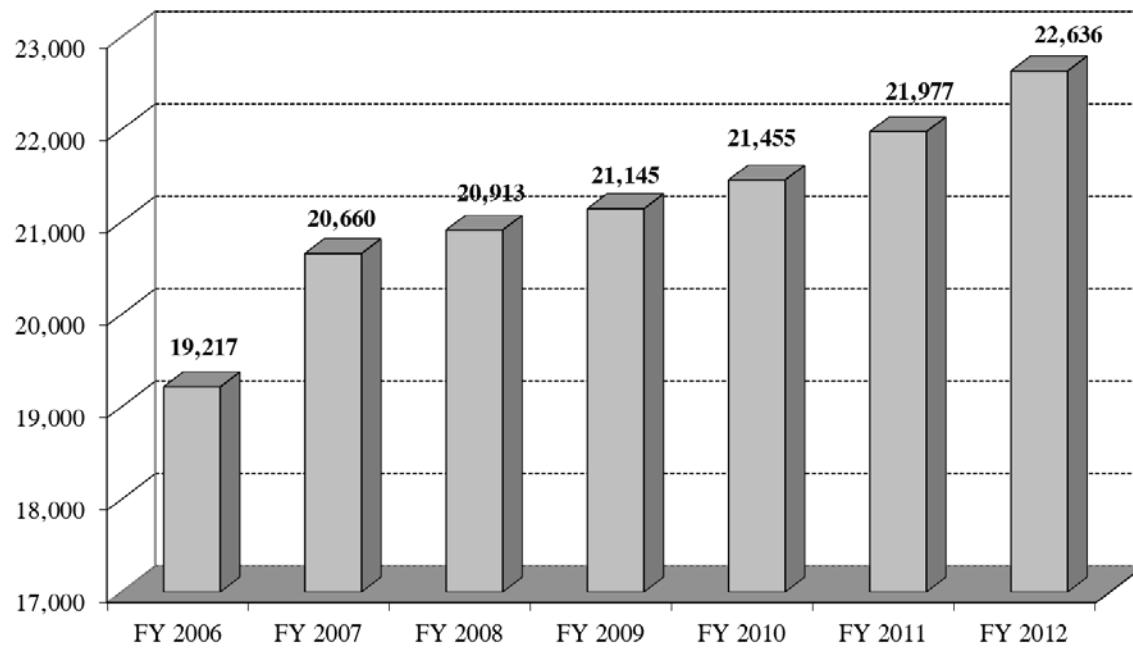
## CHART 81

### CHICAGO TEACHERS' PENSION FUND Active Employees



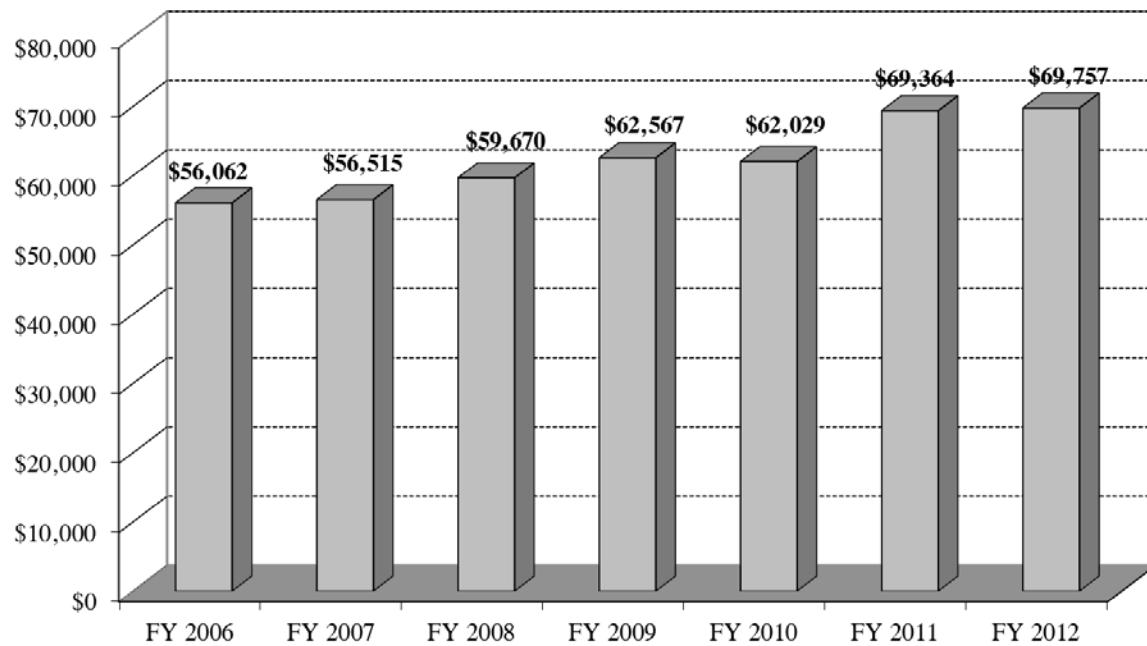
## CHART 82

### CHICAGO TEACHERS' PENSION FUND Employee Annuitants



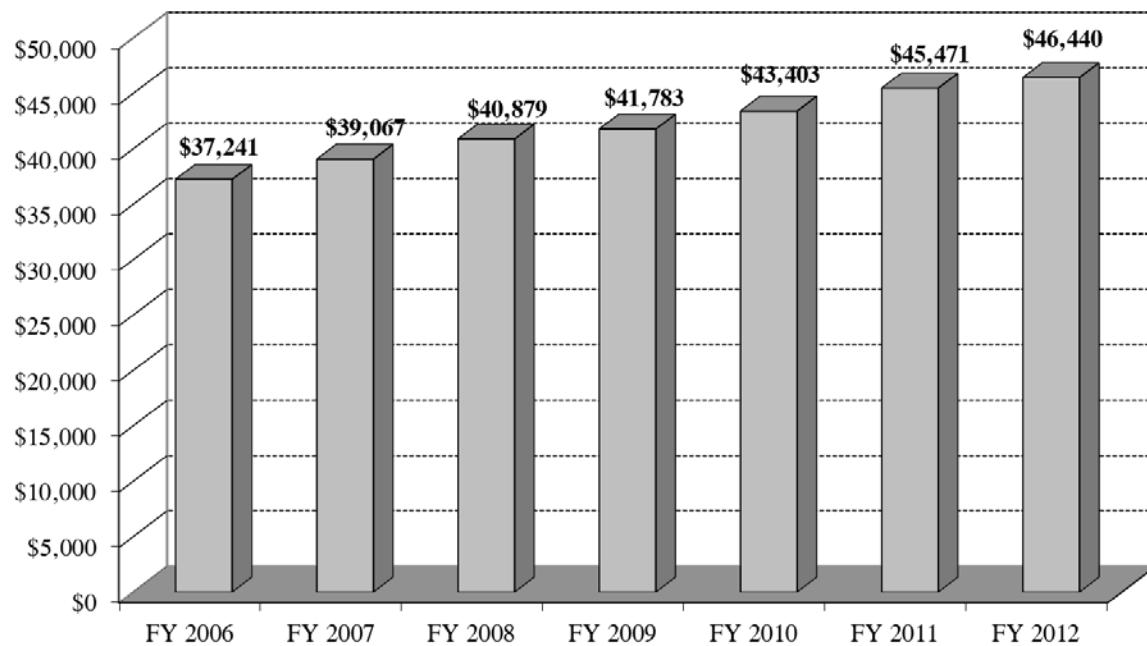
**CHART 83**

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



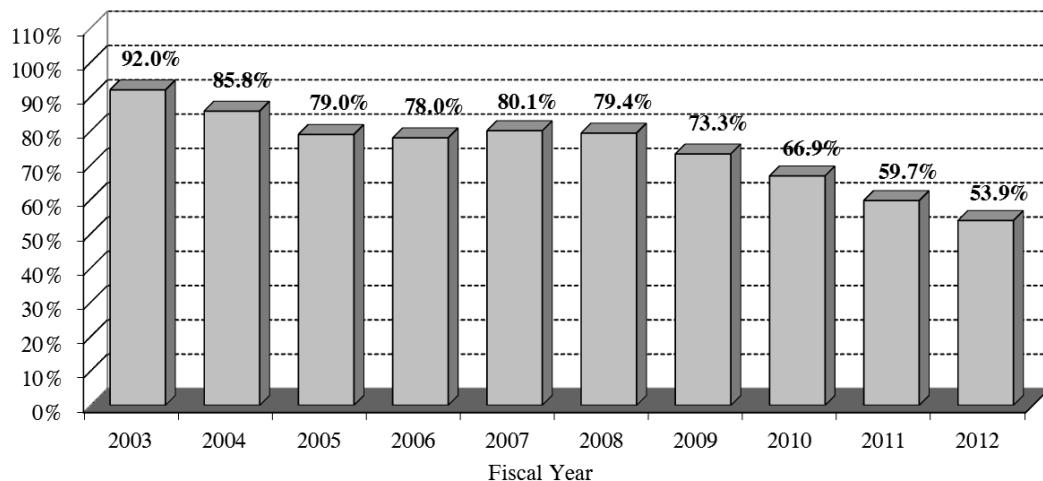
**CHART 84**

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



## CHART 85

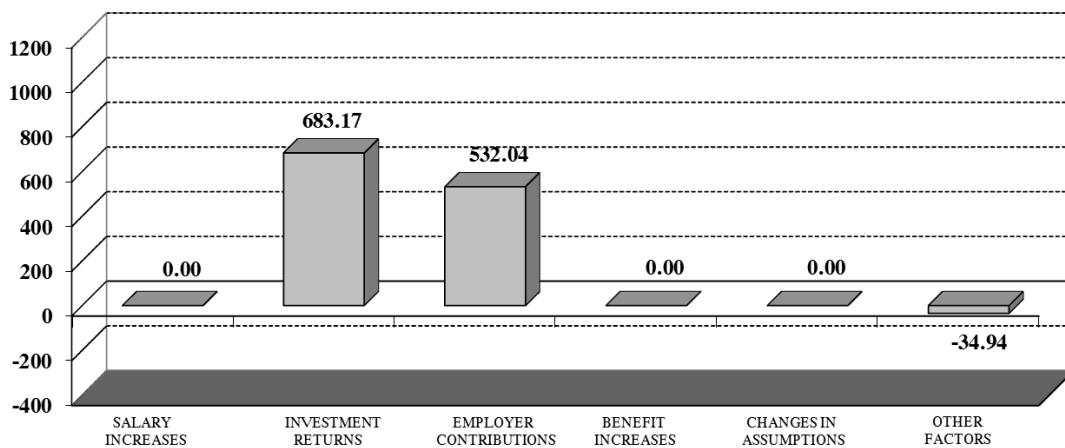
### CHICAGO TEACHERS' PENSION FUND Funded Ratio FY 2003 - FY 2012



## CHART 86

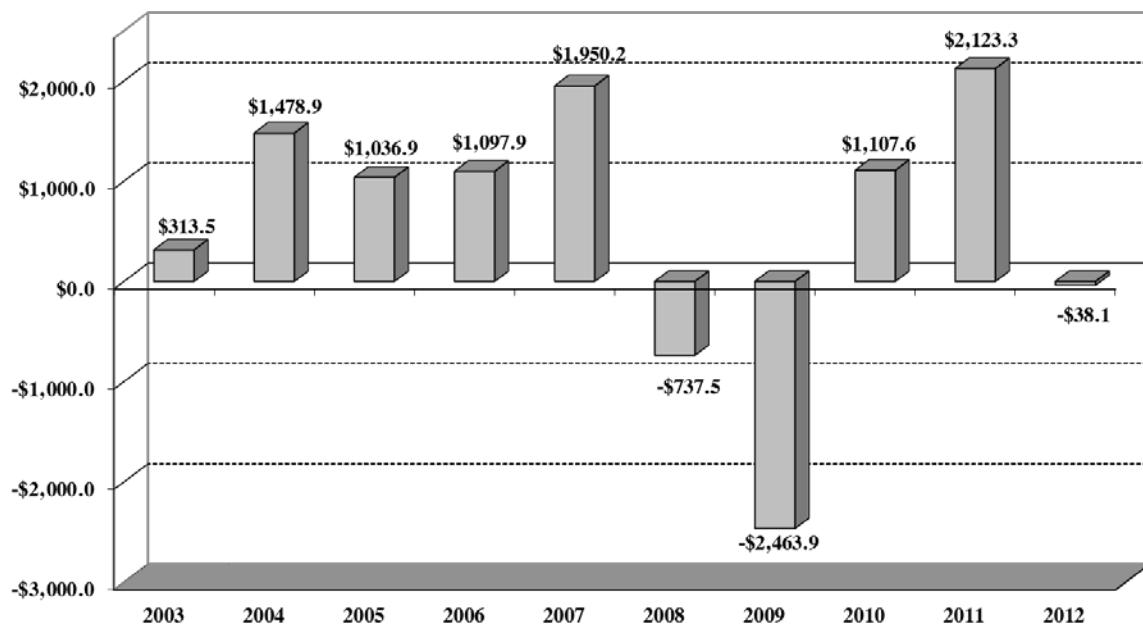
### CHICAGO TEACHERS PENSION FUND Change in Unfunded Liabilities FY 2012 \$ Millions

TOTAL INCREASE EQUALS  
\$ 1180.27 MIL



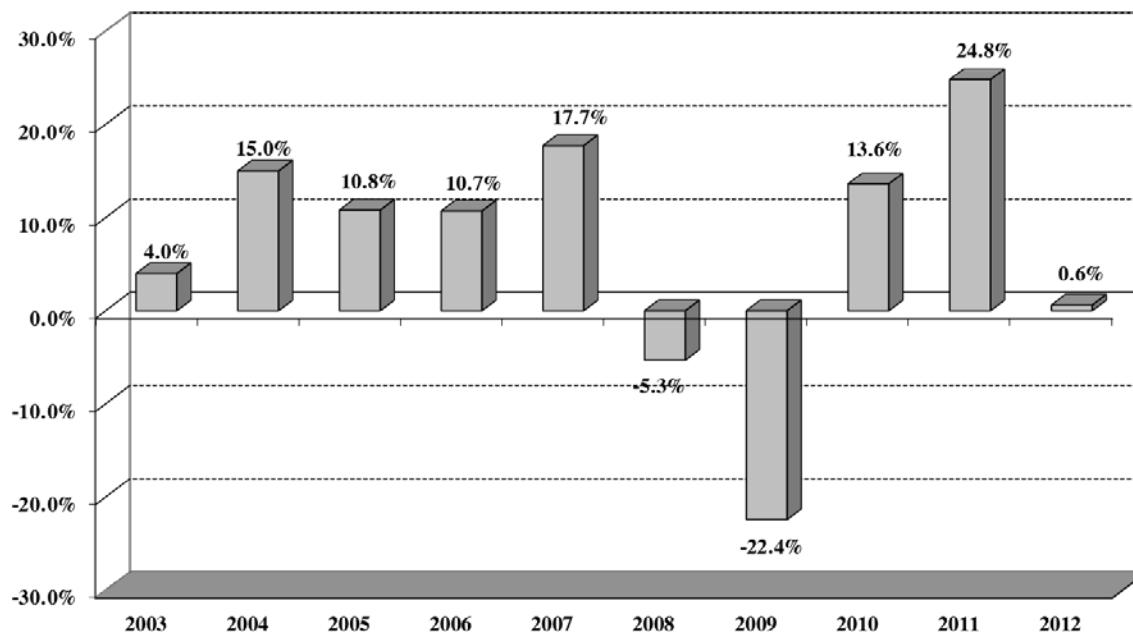
## CHART 87

CHICAGO TEACHERS' PENSION FUND  
Investment Income FY 2003 - FY 2012  
Actuarially Assumed Rate of Return : 8.0%  
(Millions)



## CHART 88

CHICAGO TEACHERS' PENSION FUND  
Rate of Return FY 2003 - FY 2012  
Actuarially Assumed Rate of Return : 8.0%



**TABLE 26**

<b>CHICAGO TEACHERS PENSION FUND</b>					
<b>System Experience, FY 2003 - FY 2012</b>					
<b>(\$ in millions)</b>					
<b>Fiscal Year</b>	<b>Annual Payroll</b>	<b>Actuarial Liabilities</b>	<b>Actuarial Assets</b>	<b>Unfunded Liabilities</b>	<b>Funded Ratio</b>
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%
2003	1,706.2	11,411.5	10,494.8	916.7	92.0%

**TABLE 27**

<b>CHICAGO TEACHERS PENSION FUND</b>								
<b>Changes in Net Assets</b>								
<b>(\$ in millions)</b>								
Fiscal Years	2012	2011	2010	2009	2008	2007	2006	2005
<b>Additions to Assets</b>								
Employer	138.8	208.6	355.8	263.0	229.3	168.8	117.8	73.9
Employees	187.1	185.9	194.6	176.2	172.4	179.0	163.5	175.7
Net Investment Income	-38.1	2,123.3	1,107.6	-2,463.9	-737.5	1,950.2	1,097.9	1,036.9
Other	0.4	10.4	0.0	15.0	0.0	0.0	0.1	0.6
<b>Total Asset Additions (A)</b>	<b>288.2</b>	<b>2,528.2</b>	<b>1,658.0</b>	<b>-2,009.7</b>	<b>-335.8</b>	<b>2,298.0</b>	<b>1,379.3</b>	<b>1,287.1</b>
<b>Deductions from Assets</b>								
Benefits	1,117.2	1,050.9	991.4	944.5	907.6	800.7	721.1	654.3
Refunds	36.3	27.1	21.1	19.0	16.7	36.4	30.7	24.9
Rebates	0.0	0.0	0.0	75.8	68.7	61.0	58.3	54.3
Administrative Expenses	10.1	9.5	8.8	8.8	7.8	8.4	8.3	7.5
Other	0.0	78.9	80.0	0.0	0.0	0.0	0.0	0.0
<b>Total Asset Deductions (B)</b>	<b>1,163.6</b>	<b>1,166.4</b>	<b>1,101.3</b>	<b>1,048.1</b>	<b>1,000.8</b>	<b>906.5</b>	<b>818.4</b>	<b>741.0</b>
<b>Change in Net Assets (A-B=C)</b>	<b>-875.4</b>	<b>1,361.8</b>	<b>556.7</b>	<b>-3,057.8</b>	<b>-1,336.6</b>	<b>1,391.5</b>	<b>560.9</b>	<b>546.1</b>

## **Funding Projections for the Public School Teachers' Pension & Retirement Fund of Chicago Based on P.A. 96-0889 (SB 1946)**

The following projections are based on Public Act 96-0889 (SB 1946), which made the following changes for new employees hired after January 1, 2011:

- 8-Year Final Average Salary
- Unreduced Pension at Age 67 with 10 Years of Service
- Reduced Pension at Age 62 with 10 Years of Service
- Maximum Salary for Pension Purposes Limited to \$106,800, Increased by the Lesser of  $\frac{1}{2}$  of Inflation Rate or 3% of CPI
- Contributions After FY 2013 are Level Percent of Payroll Necessary to Reach 90% Funded Ratio in 2059

The results of this cost analysis can be seen on in the table shown on the following page:

**TABLE 28**

<b>Chicago Teachers' Pension Fund</b> <b>Actuarial Valuation Projection Results as of December 31, 2012</b> <b>Actuarial Valuation Projection Results</b> <b>(\$ in millions)</b>								
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
2013	2,268.7	207.7	9.2%	190.8	17,873.4	9,456.2	8,417.2	52.9%
2014	2,340.9	612.7	26.2%	196.9	18,386.3	9,864.9	8,521.4	53.7%
2015	2,412.5	631.5	26.2%	202.9	18,913.3	9,971.4	8,941.9	52.7%
2016	2,486.6	650.9	26.2%	209.2	19,453.2	10,277.2	9,176.0	52.8%
2017	2,562.0	670.7	26.2%	215.5	20,006.3	10,592.5	9,413.8	52.9%
2018	2,638.4	690.8	26.2%	221.9	20,573.1	10,921.2	9,651.9	53.1%
2019	2,716.1	711.2	26.2%	228.5	21,154.6	11,267.1	9,887.5	53.3%
2020	2,795.1	732.1	26.2%	235.1	21,752.0	11,627.9	10,124.1	53.5%
2021	2,875.9	753.4	26.2%	241.9	22,368.3	12,006.5	10,361.8	53.7%
2022	2,958.8	775.4	26.2%	248.9	23,004.5	12,404.7	10,599.8	53.9%
2023	3,042.1	797.7	26.2%	255.9	23,660.2	12,822.2	10,838.0	54.2%
2024	3,125.5	820.3	26.2%	262.9	24,336.2	13,260.3	11,075.9	54.5%
2025	3,209.2	843.1	26.3%	269.9	25,032.3	13,719.5	11,312.8	54.8%
2026	3,292.0	865.7	26.3%	276.9	25,747.9	14,199.6	11,548.3	55.1%
2027	3,373.8	888.3	26.3%	283.8	26,484.2	14,702.0	11,782.2	55.5%
2028	3,456.8	911.3	26.4%	290.8	27,239.6	15,226.5	12,013.1	55.9%
2029	3,538.4	933.8	26.4%	297.6	28,012.8	15,772.7	12,240.1	56.3%
2030	3,619.5	956.4	26.4%	304.4	28,803.5	16,341.2	12,462.3	56.7%
2031	3,700.5	979.0	26.5%	311.3	29,610.9	16,932.2	12,678.7	57.2%
2032	3,780.6	1,001.6	26.5%	318.0	30,432.8	17,545.0	12,887.8	57.7%
2033	3,858.9	1,024.1	26.5%	324.6	31,265.7	18,177.6	13,088.1	58.1%
2034	3,935.0	1,046.4	26.6%	331.0	32,104.4	18,827.0	13,277.4	58.6%
2035	4,006.8	1,068.0	26.7%	337.0	32,944.2	19,489.8	13,454.4	59.2%
2036	4,075.5	1,089.2	26.7%	342.8	33,778.3	20,131.6	13,646.7	59.6%
2037	4,140.4	1,109.7	26.8%	348.3	34,600.2	20,838.1	13,762.1	60.2%
2038	4,200.2	1,129.8	26.9%	353.3	35,402.9	21,514.5	13,888.4	60.8%
2039	4,255.1	1,149.5	27.0%	357.9	36,178.1	22,185.3	13,992.8	61.3%
2040	4,305.1	1,169.0	27.2%	362.1	36,915.9	22,843.5	14,072.4	61.9%
2041	4,350.5	1,188.2	27.3%	365.9	37,306.0	23,482.4	13,823.6	62.9%
2042	4,391.6	1,207.3	27.5%	369.4	38,241.0	24,097.5	14,143.5	63.0%
2043	4,435.6	1,228.8	27.7%	373.1	38,820.0	24,692.0	14,128.0	63.6%
2044	4,478.9	1,251.5	27.9%	376.7	39,335.8	25,261.8	14,074.0	64.2%
2045	4,523.3	1,276.2	28.2%	380.5	39,793.2	25,815.2	13,978.0	64.9%
2046	4,570.7	1,303.4	28.5%	384.4	40,200.1	26,364.2	13,835.9	65.6%
2047	4,622.9	1,333.7	28.8%	388.8	40,564.0	26,921.1	13,642.9	66.4%
2048	4,682.8	1,367.7	29.2%	393.9	40,894.5	27,501.2	13,393.3	67.2%
2049	4,751.5	1,405.7	29.6%	399.1	41,190.8	28,110.5	13,080.3	68.2%
2050	4,830.0	1,448.0	30.0%	406.3	41,459.3	28,762.9	12,696.4	69.4%
2051	4,861.0	1,494.6	30.7%	413.7	41,705.4	29,472.2	12,233.2	70.7%
2052	4,957.3	1,545.6	31.2%	421.9	41,933.8	30,252.6	11,681.2	72.1%
2053	5,065.4	1,600.9	31.6%	431.1	42,151.4	31,121.3	11,030.1	73.8%
2054	5,184.6	1,660.2	32.0%	441.2	42,358.4	32,089.9	10,268.5	75.8%
5055	5,311.0	1,723.4	32.4%	452.0	42,559.5	33,175.2	9,384.3	78.0%
5056	5,446.1	1,790.2	32.9%	463.5	42,761.2	34,396.9	8,364.3	80.4%
5057	5,587.1	1,860.5	33.3%	475.5	42,968.0	35,773.7	7,194.3	83.3%
2058	5,735.2	1,934.2	33.7%	488.1	43,187.1	37,327.8	5,859.3	86.4%
2059	5,889.1	2,011.1	34.1%	501.2	43,425.8	39,083.2	4,342.6	90.0%

Note: The above projection is based upon the system's FY 2012 actuarial valuations.



## **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)

[http://www.ilga.gov/commission/cgfa/cgfa\\_home.html](http://www.ilga.gov/commission/cgfa/cgfa_home.html)