

Illinois Public Retirement Systems



January 2018

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

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Executive Summary

This report examines the financial status of various public employee retirement systems in Chicago and Cook County, along with the Illinois Municipal Retirement Fund, as of Fiscal Year (FY) 2016. The fiscal year ends December 31 for all systems, but Public School Teachers' Pension and Retirement Fund of Chicago ends its fiscal year on June 30. 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 2016 there were 8,129 active employees and 8,065 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$1.752 billion and Total Actuarial Liabilities were \$3.339 billion.
- The Cook County Employees' Pension Fund covers all persons employed and paid by the County. At the end of 2016 there were 20,969 active employees and 15,222 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$9.488 billion and Total Actuarial Liabilities were \$16.726 billion.
- The Cook County Forest Preserve Employees' Retirement Fund covers all persons employed and paid by the Forest Preserve. At the end of 2016 there were 572 active employees and 378 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$198.2 million and Total Actuarial Liabilities were \$330.2 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 2016 there were 4,760 active employees and 3,130 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$1.075 billion and Total Actuarial Liabilities were \$5.046 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 2016 there were 175,019 active employees and 109,750 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$36.773 billion and Total Actuarial Liabilities were \$41.359 billion.
- The Laborers' Annuity and Benefit Fund of Chicago covers persons employed by the City of Chicago in a position classified as labor service by the employer; anyone employed by the Board, or anyone employed by the Retirement Board of any other Annuity and Benefit Fund. At the end of 2016 there were 2,822 active

employees and 2,633 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$1.264 billion and Total Actuarial Liabilities were \$2.509 billion.

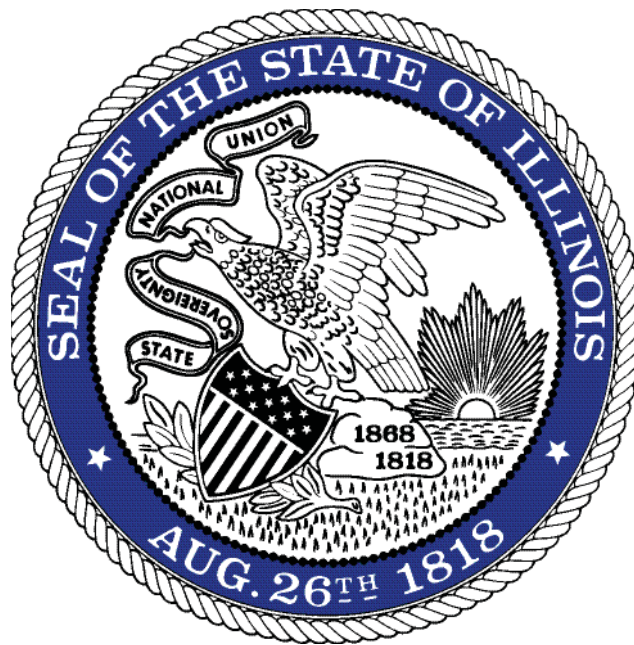
- The Metropolitan Water Reclamation District Retirement Fund covers any person employed by the District whose duties include service during a calendar year for a minimum of 120 days. At the end of 2016 there were 1,843 active employees and 1,779 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$1.372 billion and Total Actuarial Liabilities were \$2.443 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 2016 there were 30,296 active employees and 20,919 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$4.590 billion and Total Actuarial Liabilities were \$15.055 billion.
- The Park Employees' Annuity and Benefit Fund of Chicago covers all persons employed by the Chicago Park District. At the end of 2016 there were 3,114 active employees and 2,113 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$393.6 million and Total Actuarial Liabilities were \$1.005 billion.
- 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 2016 there were 12,177 active employees and 9,603 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$3.052 billion and Total Actuarial Liabilities were \$12.857 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 2016 (June 30, 2016) there were 29,543 active employees and 24,732 employee annuitants. Total Actuarial Assets of the system on that date were \$10.611 billion and Total Actuarial Liabilities were \$20.246 billion.
- 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 2016 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.

- A table below shows a summary of the financial condition of the Chicago Retirement Systems. Based upon the actuarial value of assets, the total unfunded liabilities for the city of Chicago’s retirement systems are \$38.391 billion. Please note that this amount does not include IMRF, Cook County Employees’ Pension Fund, or Cook County Forest Preserve Pension Fund.

Summary of Financial Condition					
Chicago Retirement Systems Combined (Excludes IMRF and Cook County Funds)					
FY 2016					
(\$ in Millions)					
System	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
Chicago Transit Authority	575.4	3,338.6	1,752.5	1,586.2	52.5%
Firemen's Annuity & Benefit Fund	478.5	5,045.9	1,074.9	3,971.0	21.3%
Laborers' Annuity and Benefit Fund	208.2	2,509.3	1,263.7	1,245.6	50.4%
Metropolitan Water Fund	182.6	2,443.3	1,372.4	1,070.9	56.2%
Municipal Employees' Annuity and Benefit Fund	1,646.9	15,055.3	4,590.4	10,465.0	30.5%
Park Employees' Annuity and Benefit Fund	121.1	1,005.5	393.6	611.9	39.1%
Policemen's Annuity and Benefit Fund	1,119.5	12,856.6	3,052.1	9,804.5	23.7%
Public School Teachers' Pension Fund	2,281.3	20,246.1	10,610.7	9,635.4	52.4%
TOTAL	6,613.6	62,500.6	24,110.1	38,390.5	38.6%

I. Recent Pension Legislation



Public Act 96-0889

Senate Bill 1946 – Cullerton (Madigan)

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

Effective Date

- January 1, 2011

Systems Impacted

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

Retirement Eligibility – Except State Policemen, Firefighters, and Correctional Guards

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

Retirement Eligibility – State Policemen, Firefighters, and Correctional Guards

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

Annual Increases in Annuity

- Increases begin at the latter 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 – 2016
- New Goal: CTPF must reach 90% by 2059

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.

Public Act 98-0622

Senate Bill 1523 – Cullerton (Madigan)

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

Effective Date

- January 1, 2015

Systems Impacted

- Park Employees' Annuity and Benefit Fund of Chicago

Funding Schedule

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

Retirement Eligibility

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

Annual Increases in Annuity

- Increases equal to the lesser of 3% 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.
- Increases not compounded
- Payment of annual increase suspended in FY 2015, 2017, and 2019

Employee Contributions

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

- For any duration of time that the funded ratio is over 90%, employee contribution rates will fall to 10.5%, but will increase back to 12% if the funded ratio falls below 90%.

Public Act 99-0506

Senate Bill 0777 – Cullerton (Currie)

I. Overview of Key Provisions of Public Act 99-0506 (SB 0777)

Effective Date

- May 30, 2016

Systems Impacted

- Chicago Police and Chicago Fire

Annuity Payment

- Adjusted from \$1,050 to an amount calculated by the poverty guidelines of the United States Department of Health and Human Services

City Contribution

- Fixed contribution schedule for Chicago Police:
 - 2016: \$420,000,000
 - 2017: \$464,000,000
 - 2018: \$500,000,000
 - 2019: \$557,000,000
 - 2020: \$579,000,000
- Fixed contribution schedule for Chicago Fire:
 - 2016: \$199,000,000
 - 2017: \$208,000,000
 - 2018: \$227,000,000
 - 2019: \$235,000,000
 - 2020: \$245,000,000

Tax Levy

- Beginning in tax levy year 2020, the city shall levy a tax annually in a manner that will increase the funding ratio to 90% by 2055

Minimum Employer Contribution

- Shall be determined using the entry age normal actuarial cost method

Video Gaming

- Proceeds collected from a Chicago casino shall be contributed to Police and Fire Funds

Delinquent Payments

- The Funds may take legal action if the city does not make the required contributions by December 31st of that year.

Public Act 99-0905

Senate Bill 0440 – Mulroe (Burke)

I. Overview of Key Provisions of Public Act 99-0905 (SB 0440)

Effective Date

- November 29, 2016

Systems Impacted

- Chicago Police and Chicago Fire

Retirement Eligibility

- Tier 2 retirees are included when determining death benefit eligibility
- Tier 2 members that withdraw before age 50 (or 57 with less than 10 service years) are eligible for a refund equal to the amount deducted from their salary

Salary Deductions

- Salary deductions for present employees and future entrants will contribute to the Funds for Tier 2 monthly retirement annuity, in addition to age and service annuity and widow's annuity.

Annual Increases in Annuity

- Increases equal to 1½% begin at the latter of the first anniversary of retirement or at age 55 for members who retire with at least 20 years of service and born before 1966.
- Subsequent increases will occur on January 1st of each year
- Maximum total increase of 30%
- For members born between 1955 and 1966, the increase shall be equal to 3% non-compounded with no maximum
- Starting in 2017, members who would have qualified for these increases prior to the effective date shall receive all increases retroactively
- Starting in 2017, the minimum widow's annuity shall be no less than 125% of the Federal Poverty Level

Tier 2 Surviving Spouses

- Qualified to receive a Tier 2 surviving spouse annuity in lieu of the standard widow's annuity
- If the deceased member was receiving a Tier 2 monthly retirement annuity at the date of his/her death, the Tier 2 surviving spouse's annuity shall be in the amount of 66 2/3% of the member's monthly annuity at the date of death.
- If the deceased member was not receiving a Tier 2 monthly retirement annuity at the time of death, the Tier 2 surviving spouse's annuity shall be the greater of:

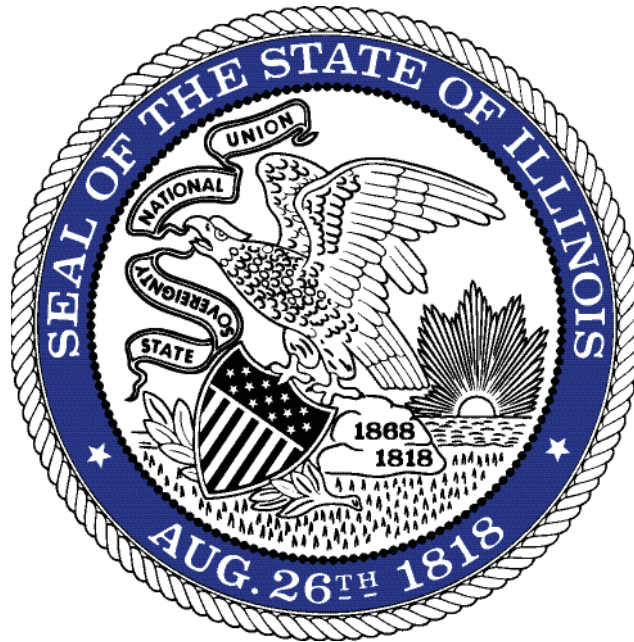
- 30% of the annual maximum salary attached to the rank of a first class police officer or firefighter at the time of death.
 - 66 2/3% of the Tier 2 monthly retirement annuity that the deceased member would have been eligible to receive
- If the deceased member was in active service with at least 1½ but less than 10 years of service at the time of death, the Tier 2 surviving spouse's annuity shall be 30% of the annual maximum salary attached to the rank of a first class police officer or firefighter at the time of death.
 - If a member's death resulted from an act of duty or prevented him/her from resuming active service, then in addition to the Tier 2 surviving spouse's annuity, the spouse shall be qualified to receive compensation annuity or supplemental annuity, in order to bring the total benefit up to the applicable 75% salary limitation, but subject to the existing Tier 2 salary cap.
 - Tier 2 surviving spouse's annuities shall not be less than the amount of the minimum widow's annuity.

Tier 2 Surviving Children and Parents

- Tier 2 surviving children and parents are qualified to receive a Tier 2 annuity. The Tier 2 annuity is in lieu of, but equal to, the standard annuity.
- Any salary used for computing a Tier 2 annuity shall be subject to the existing Tier 2 salary cap.

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**
- **Systems Experience**
- **Changes in Net Assets**
- **Asset Allocation**



Note: All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of December 31, 2016.

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 at any age. (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

- 12.010% of salary (FY 2018-2040)

Employer Contributions

- 18.019% of salary (FY 2018-2040)

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

CHART 1

**CHICAGO TRANSIT AUTHORITY PENSION FUND
Active Employees**

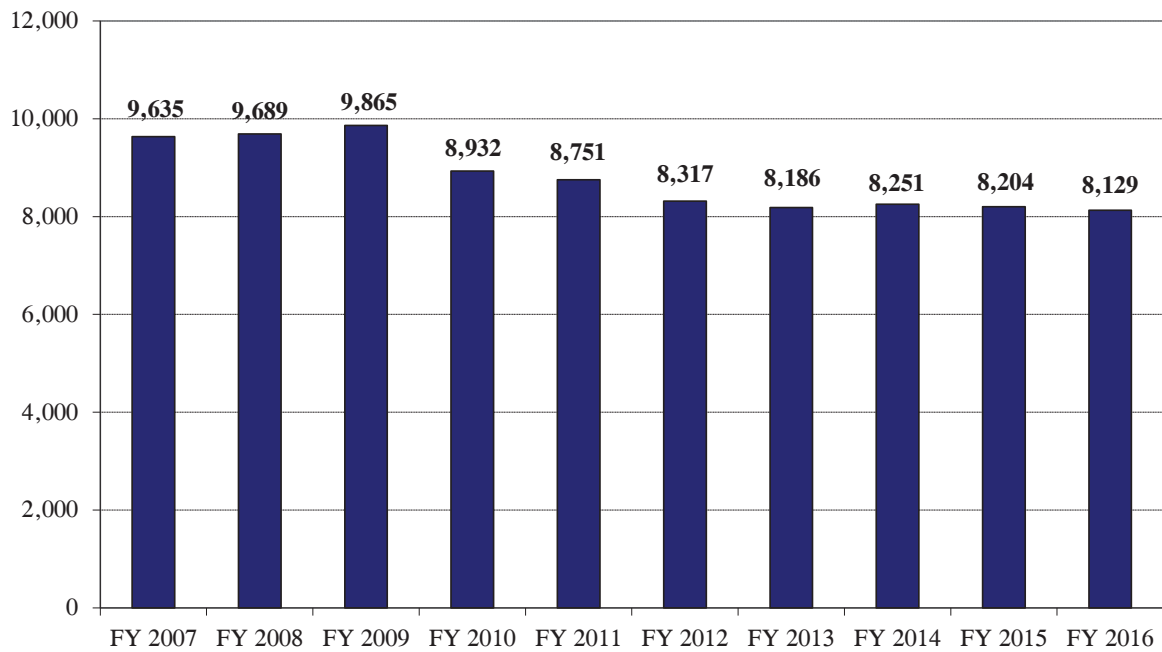


CHART 2

**CHICAGO TRANSIT AUTHORITY PENSION FUND
Employee Annuitants**

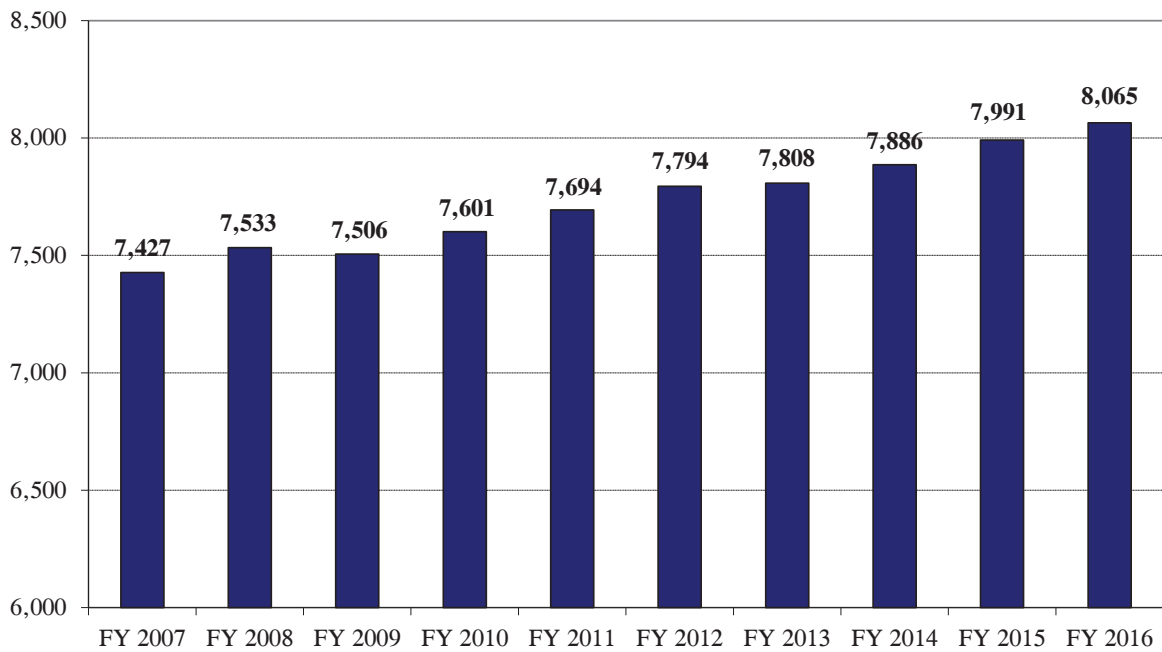
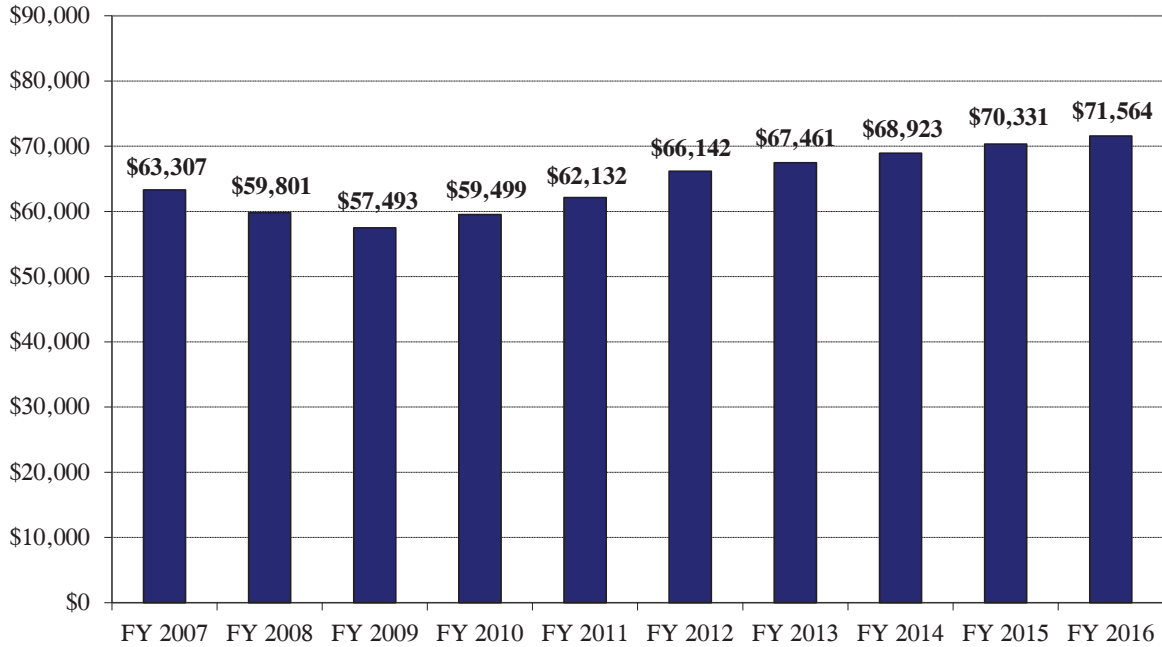


CHART 3

CHICAGO TRANSIT AUTHORITY PENSION FUND Average Employee Salaries



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

CHART 4

CHICAGO TRANSIT AUTHORITY PENSION FUND Average Retirement Annuities

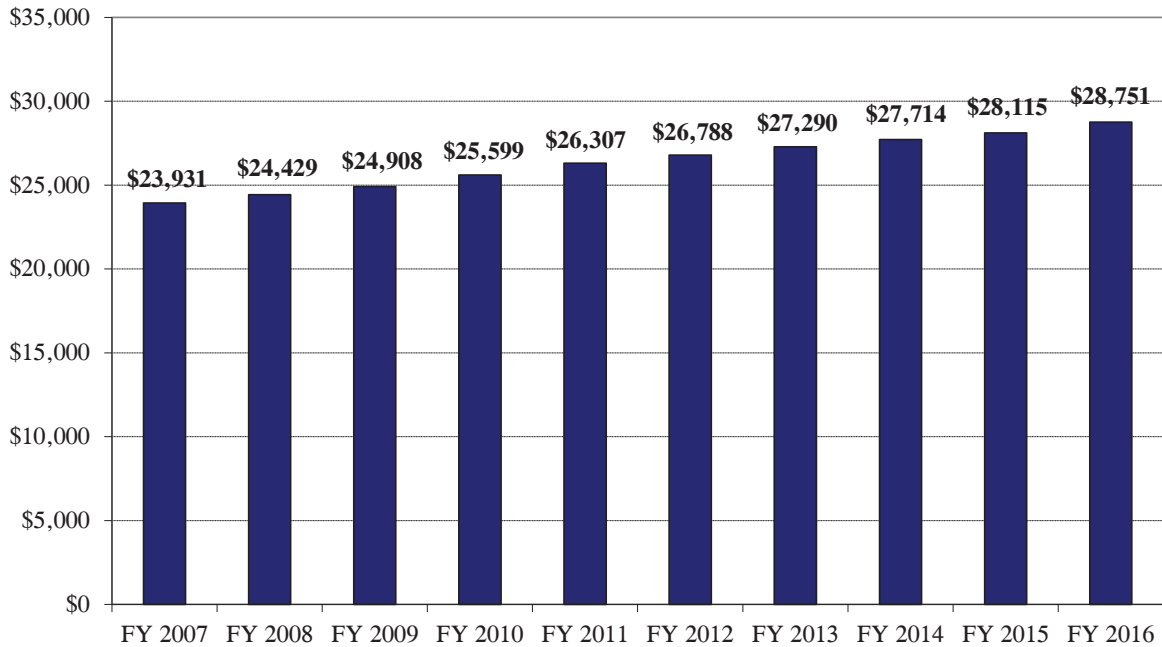


CHART 5

CHICAGO TRANSIT AUTHORITY PENSION FUND
Funded Ratio
FY 2007 - FY 2016

All figures based upon the actuarial value of assets.

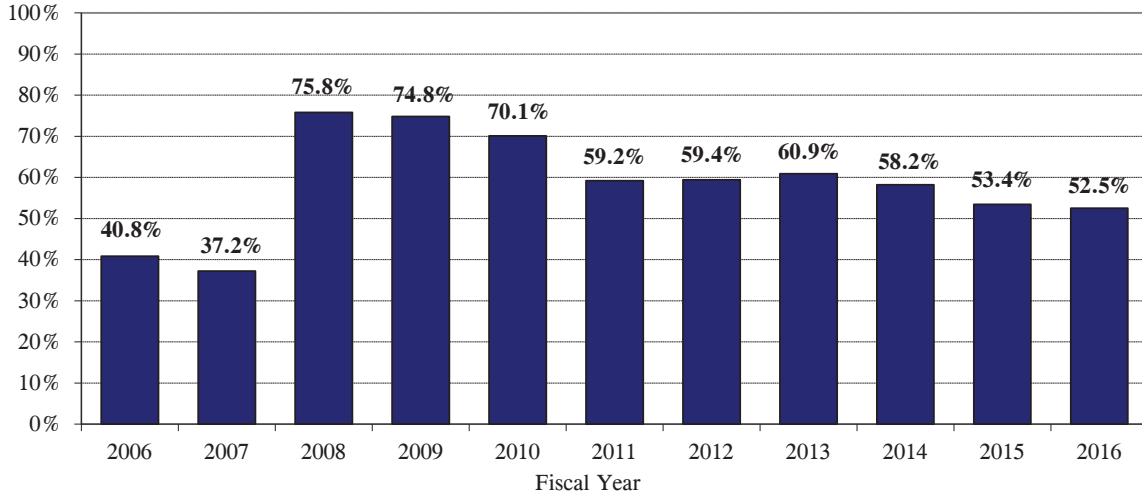
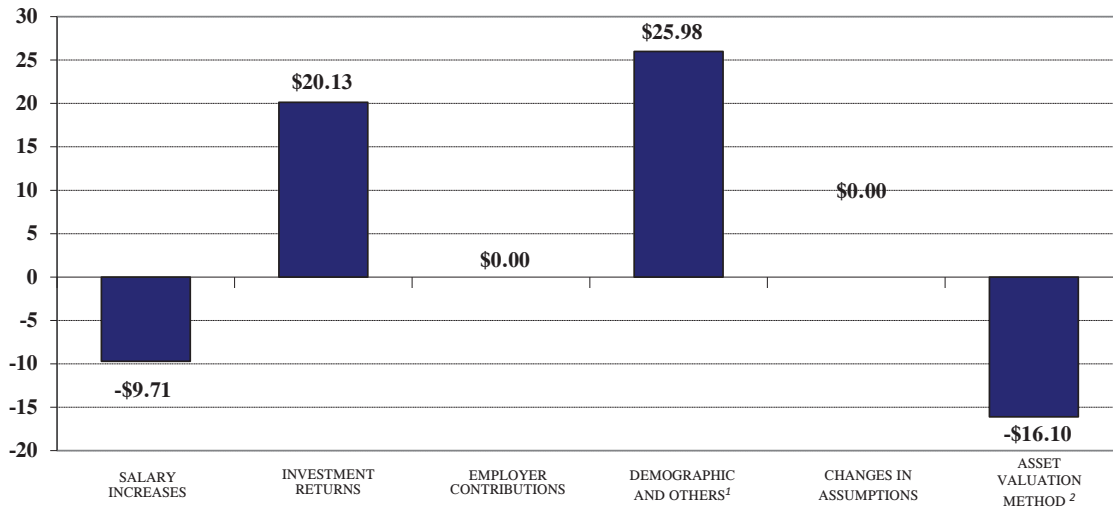


CHART 6

CHICAGO TRANSIT AUTHORITY PENSION FUND
Analysis of Actuarial (Gains) and Losses
Year ended December 31, 2016
(\$ in Millions)

TOTAL ACTUARIAL LOSSES
 EQUALS \$20.30 MIL



¹ Unexpected participant pick-up, unexpected data change for decrementing actives, and miscellaneous factors caused most actuarial losses among demographic and other factors.

² The fund's asset valuation method is changed to actuarial value of assets to smooth gains or losses during a 5-year period. Prior to the change, the Fund used an asset valuation method using market value of assets.

CHART 7

CHICAGO TRANSIT AUTHORITY PENSION FUND
Investment Income FY 2007 - FY 2016
Actuarially Assumed Rate of Return : 8.25%
(\$ in Millions)

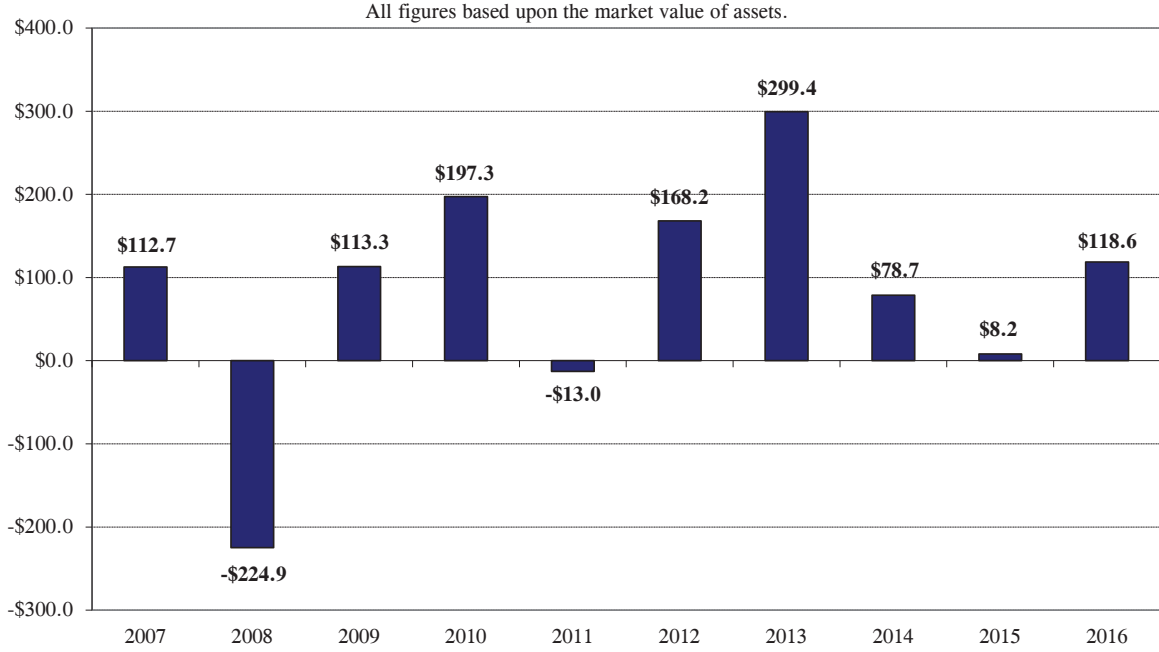


CHART 8

CHICAGO TRANSIT AUTHORITY PENSION FUND
Rate of Return FY 2007 - FY 2016
Actuarially Assumed Rate of Return : 8.25%
All figures based upon the market value of assets.

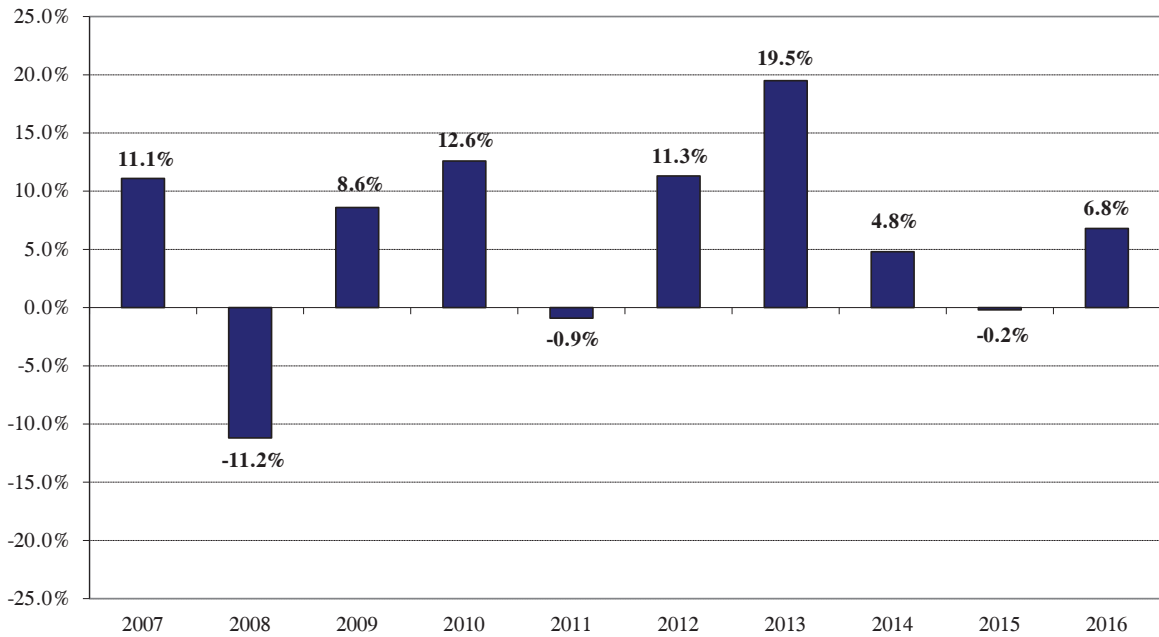


TABLE 1

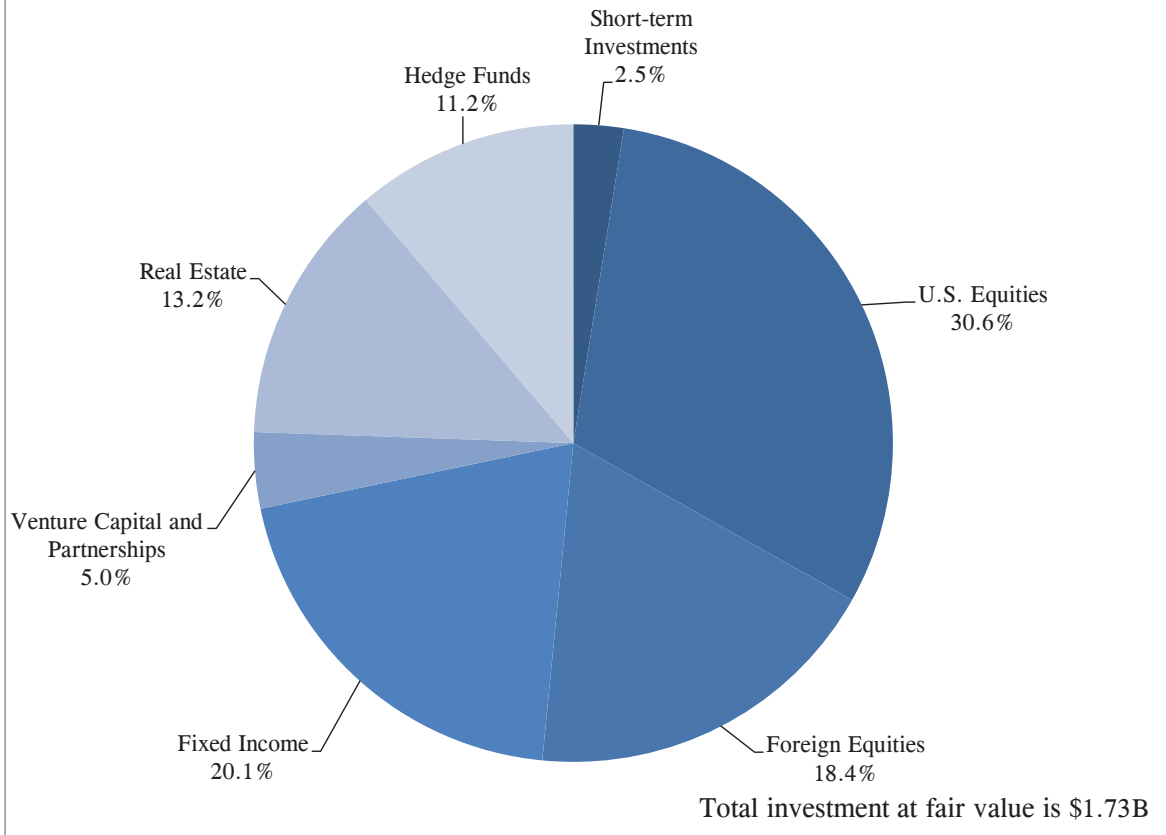
CHICAGO TRANSIT AUTHORITY PENSION FUND					
System Experience, FY 2003 - FY 2016					
(\$ in Millions)					
Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2016	575.4	3,338.6	1,752.5	1,586.2	52.5%
2015	573.5	3,267.1	1,743.2	1,523.9	53.4%
2014	564.8	3,186.2	1,855.9	1,330.3	58.2%
2013	550.6	3,105.6	1,892.7	1,212.9	60.9%
2012	548.5	2,867.3	1,702.8	1,164.5	59.4%
2011	541.4	2,808.2	1,662.2	1,146.0	59.2%
2010	528.3	2,724.2	1,910.0	814.2	70.1%
2009	567.2	2,588.4	1,936.8	651.6	74.8%
2008	594.1	2,632.4	1,996.0	636.4	75.8%
2007	571.3	2,531.4	941.9	1,589.5	37.2%
2006	562.5	2,466.1	1,007.3	1,458.8	40.8%
2005	547.5	2,354.1	810.3	1,543.8	34.4%
2004	544.4	2,291.2	902.1	1,389.1	39.4%
2003	486.6	2,189.7	1,062.4	1,127.3	48.5%

TABLE 2

CHICAGO TRANSIT AUTHORITY PENSION FUND										
Changes in Net Assets										
(\$ in Millions)										
Fiscal Years	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Additions to Assets										
Employer	\$83.9	\$82.8	\$82.3	\$79.5	\$62.8	\$60.3	\$56.3	\$41.4	\$68.5	\$33.8
Employees	\$59.6	\$59.0	\$58.6	\$56.8	\$48.4	\$47.2	\$45.3	\$35.0	\$34.3	\$16.9
Net Investment Income	\$118.6	\$8.2	\$78.7	\$299.4	\$168.2	-\$13.0	\$197.2	\$113.3	-\$224.9	\$112.7
Other	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,110.5	\$0.0
Total Asset Additions (A)	\$262.0	\$150.0	\$219.5	\$435.7	\$279.4	\$94.5	\$298.8	\$189.7	\$988.4	\$163.4
Deductions from Assets										
Benefits	\$261.7	\$253.8	\$246.0	\$238.7	\$232.7	\$222.2	\$216.2	\$212.6	\$263.5	\$256.9
Refunds	\$4.8	\$6.4	\$7.1	\$4.9	\$4.0	\$2.9	\$2.2	\$2.1	\$1.8	\$1.4
Rebates	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Administrative Expenses	\$2.3	\$2.6	\$3.1	\$2.1	\$2.1	\$2.0	\$2.0	\$2.2	\$2.4	\$2.3
Other	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total Asset Deductions (B)	\$268.9	\$262.7	\$256.3	\$245.7	\$238.8	\$227.1	\$220.4	\$216.9	\$267.7	\$260.6
Change in Net Assets (A-B=C)	-\$6.8	-\$112.7	-\$36.8	\$190.0	\$40.6	-\$132.6	\$78.4	-\$27.2	\$720.7	-\$97.2

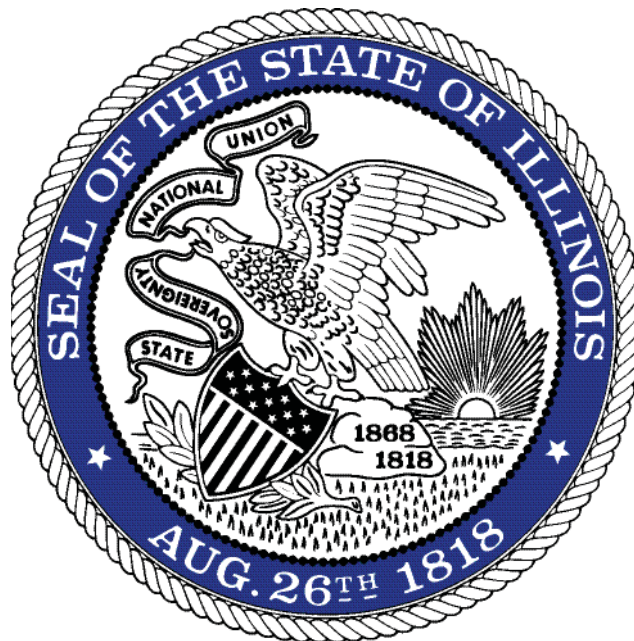
CHART 9

**CHICAGO TRANSIT AUTHORITY RETIREMENT FUND
ASSET ALLOCATION AS OF DECEMBER 2016**



III. Cook County Employees' Pension Fund

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



Note: All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of December 31, 2016.

Cook County Employees' Pension Fund

Tier 1 Plan Summary

Retirement Age

- Age 50 with 10 years of service

Retirement Formula

- 2.4% of final average salary for each year of service

Maximum Annuity

- 80% of final average salary

Salary Used to Calculate Pension

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

Annual COLA

- 3% compounded

Employee Contributions

- 8.5% of salary

Employer Contributions

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

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

CHART 10

**COOK COUNTY EMPLOYEES' PENSION FUND
Active Employees**

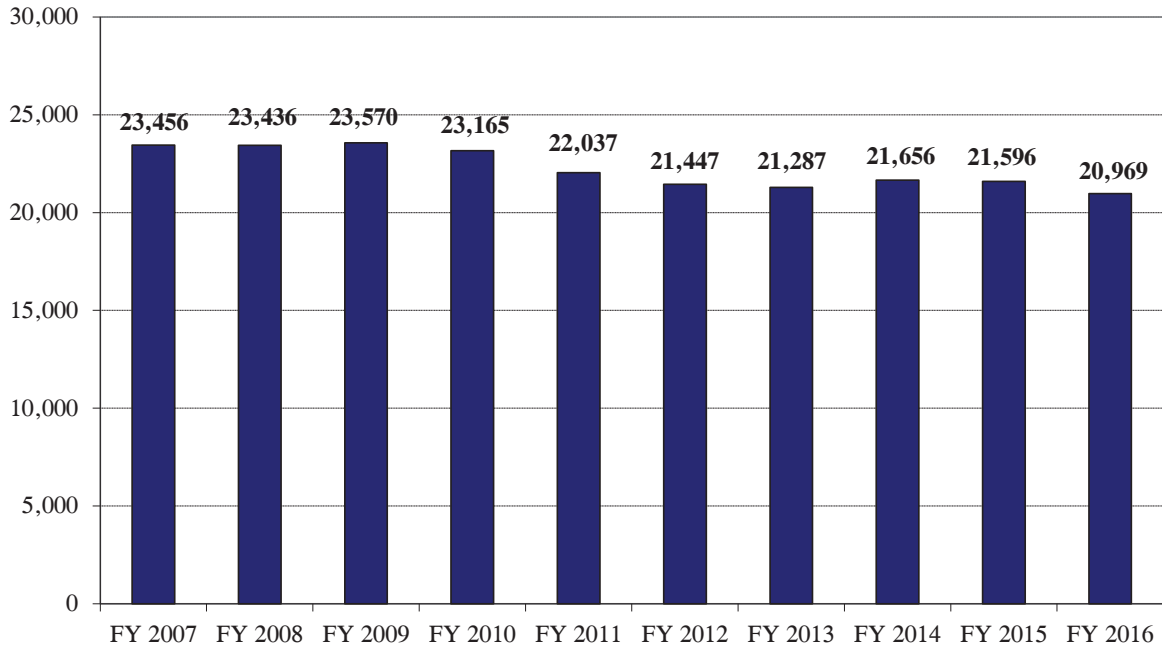


CHART 11

**COOK COUNTY EMPLOYEES' PENSION FUND
Employee Annuitants**

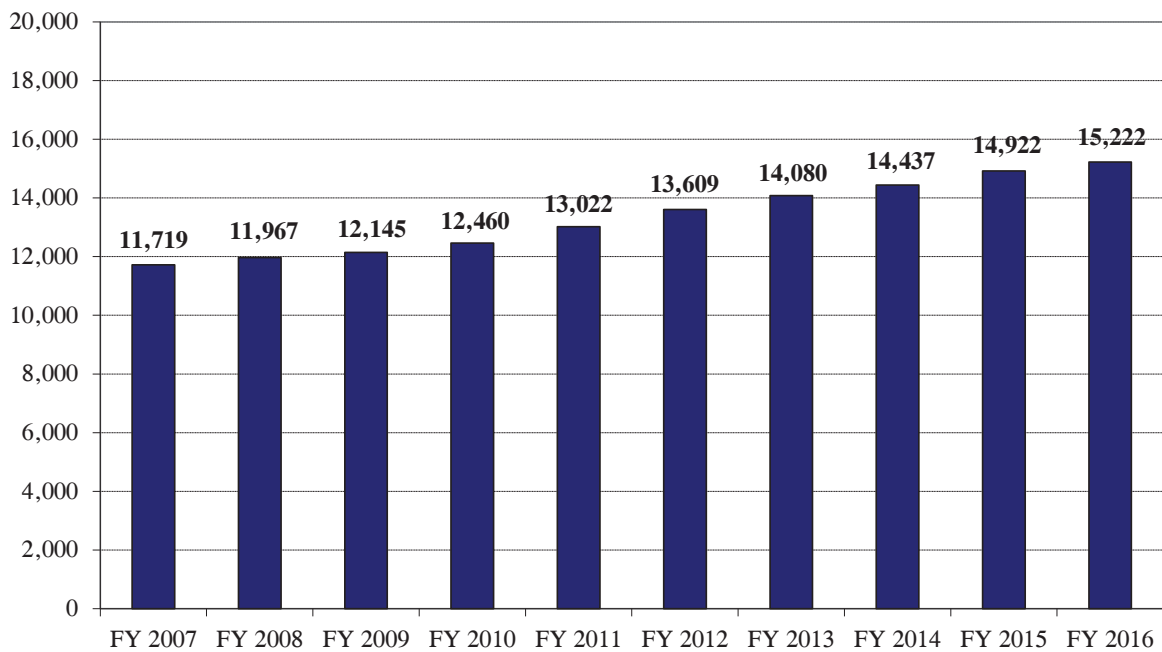


CHART 12

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

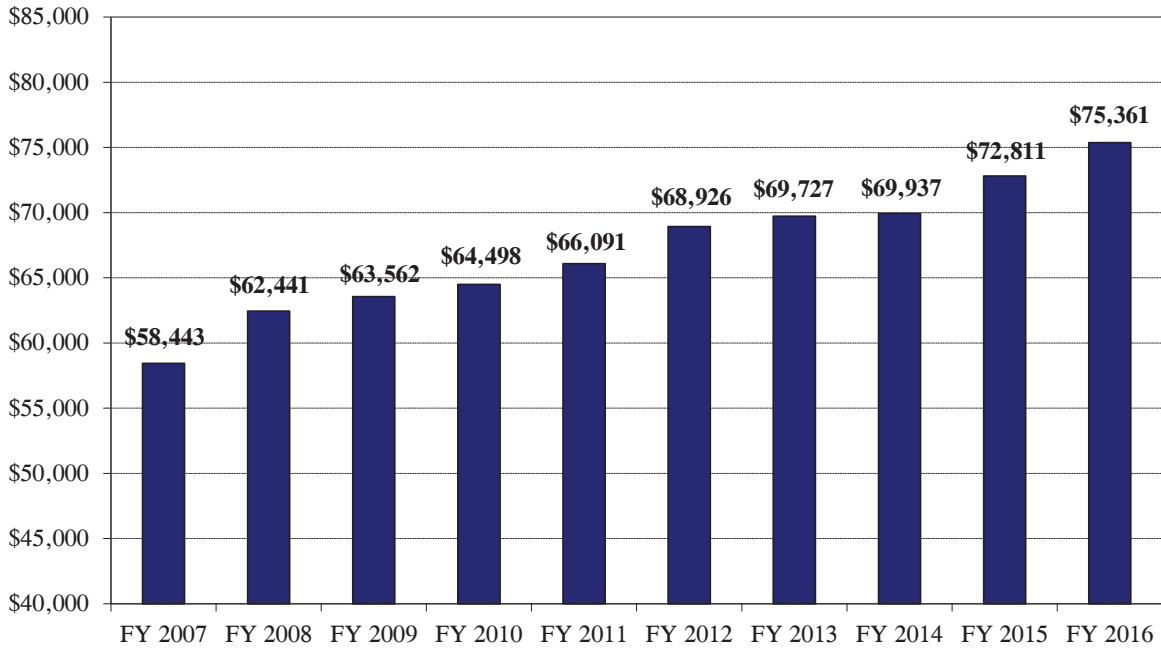


CHART 13

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

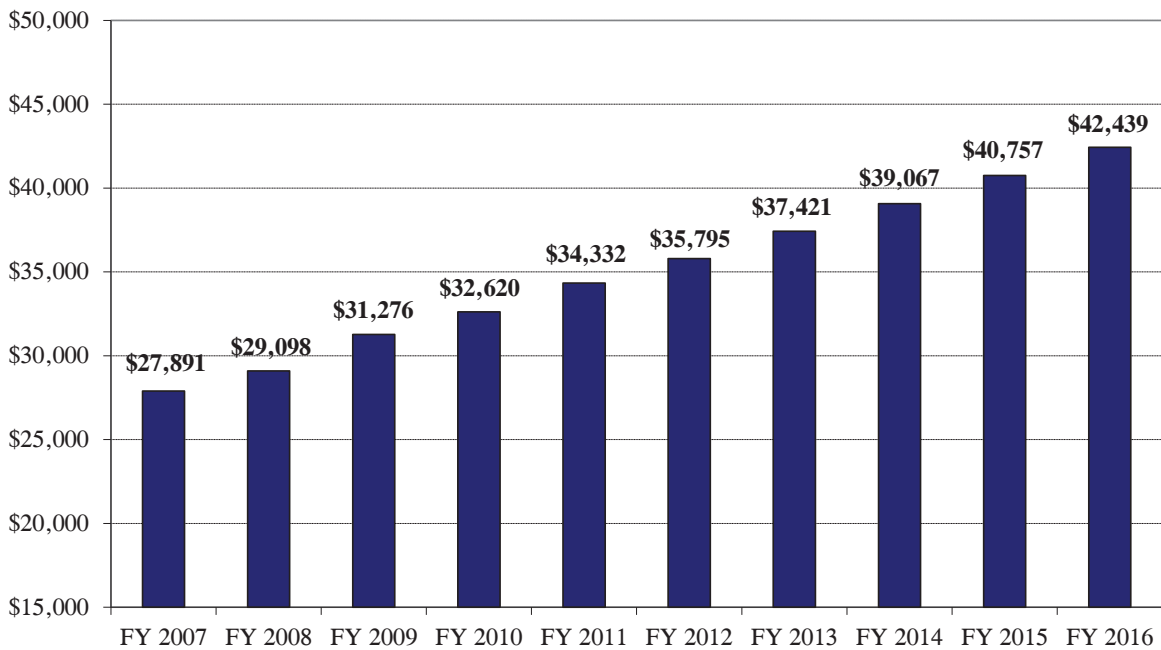


CHART 14

COOK COUNTY EMPLOYEES' PENSION FUND
Funded Ratio
FY 2007 - FY 2016

All figures based upon the actuarial value of assets.

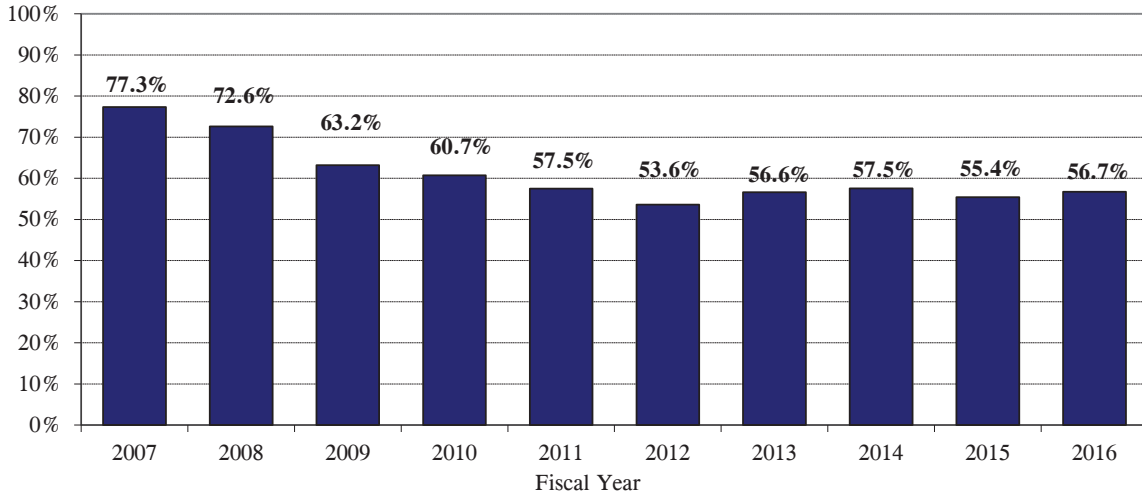
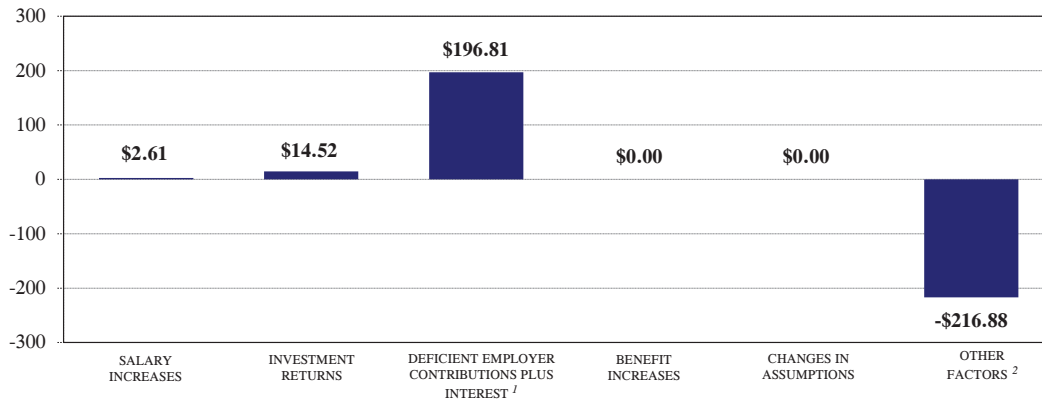


CHART 15

COOK COUNTY EMPLOYEES' PENSION FUND
Change in Unfunded Liabilities
Year ended December 31, 2016
(\$ in Millions)

All figures based upon the actuarial value of assets.

TOTAL DECREASE EQUALS
\$2.93 MIL



¹ Unfunded liability increases due to employer contribution plus interest being less than normal cost plus interest. An additional supplemental employer contribution of \$270.5 million is included in the employer contribution.

² Includes an actuarial gain of \$204.7 million from demographic factors. Of \$204.7 million, a gain of \$81 million came from the Cook County's implementation of the Employee Group Waiver Plan (EGWP) for the retiree health insurance, effective January 1, 2017.

CHART 16

COOK COUNTY EMPLOYEES' PENSION FUND
Investment Income FY 2007 - FY 2016
Actuarially Assumed Rate of Return: 7.5%
(\$ in Millions)

All figures based upon the market value of assets.

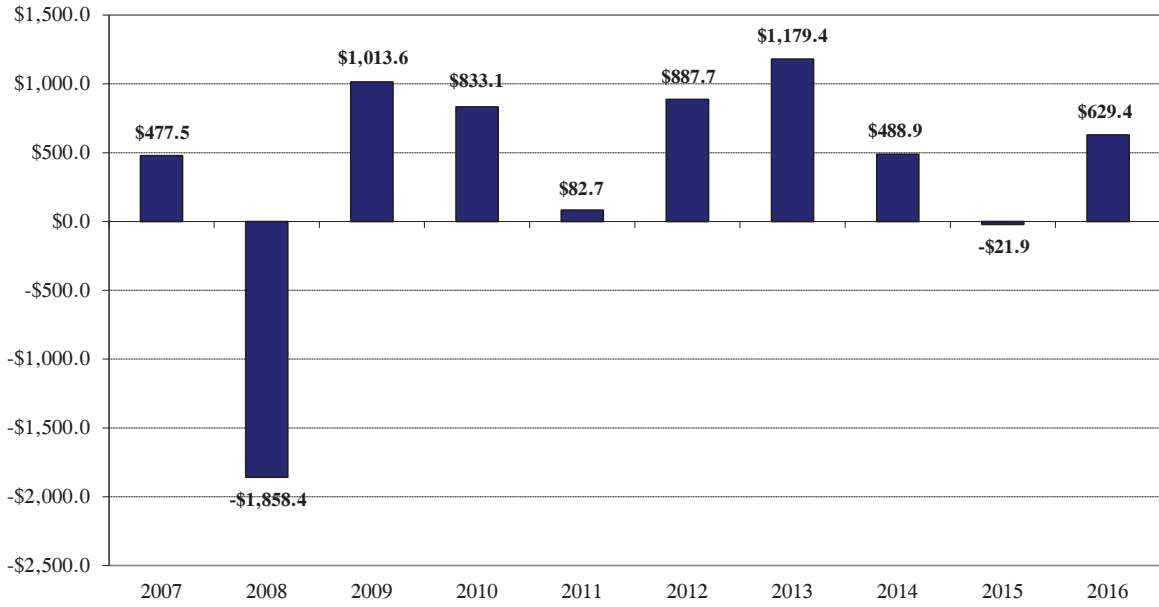


CHART 17

COOK COUNTY EMPLOYEES' PENSION FUND
Rate of Return FY 2007 - FY 2016
Actuarially Assumed Rate of Return: 7.5%

All figures based upon the market value of assets.

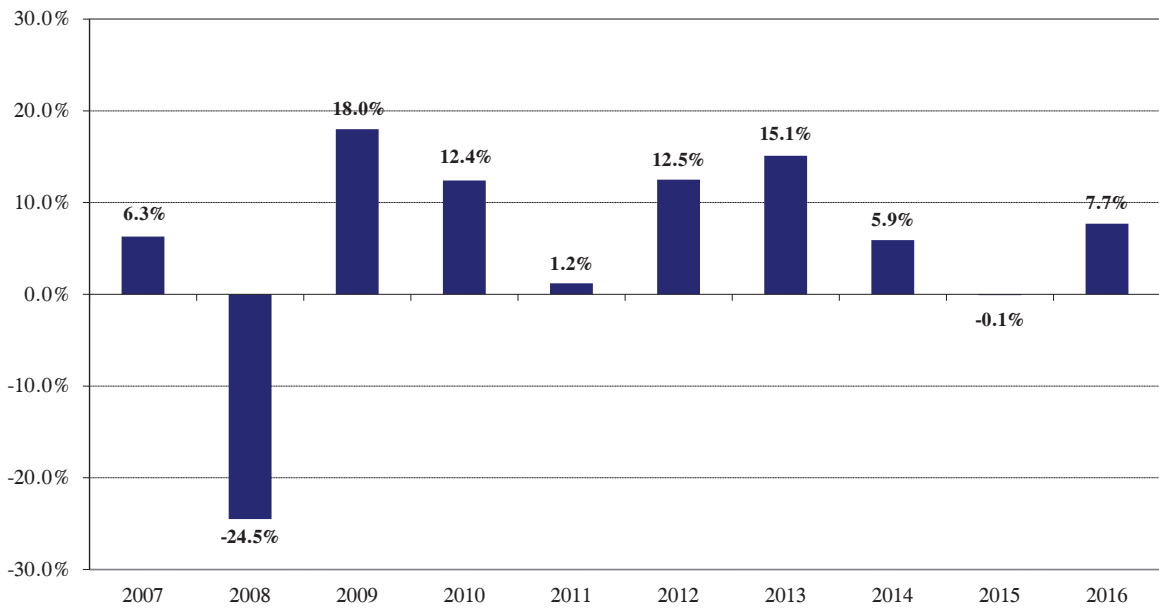


TABLE 3

COOK COUNTY EMPLOYEES' PENSION FUND					
System Experience, FY 2004 - FY 2016					
(\$ in Millions)					
Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2016	1,580.3	16,726.5	9,488.2	7,238.2	56.7%
2015	1,572.4	16,232.2	8,991.0	7,241.2	55.4%
2014	1,514.6	15,318.8	8,810.5	6,508.3	57.5%
2013	1,484.3	14,812.1	8,381.4	6,430.6	56.6%
2012	1,478.3	14,630.3	7,833.9	6,796.4	53.6%
2011	1,456.4	13,724.0	7,897.1	5,826.9	57.5%
2010	1,494.1	13,142.1	7,982.3	5,159.8	60.7%
2009	1,498.2	12,575.5	7,945.6	4,629.9	63.2%
2008	1,463.4	11,073.2	8,036.1	3,037.1	72.6%
2007	1,370.8	10,423.7	8,059.9	2,363.8	77.3%
2006	1,412.9	9,904.6	7,462.7	2,441.9	75.4%
2005	1,387.5	9,269.9	7,027.5	2,242.4	75.8%
2004	1,371.5	9,450.8	6,700.8	2,750.0	70.9%

TABLE 4

COOK COUNTY EMPLOYEES' PENSION FUND										
Changes in Net Assets										
(\$ in Millions)										
Fiscal Years	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Additions to Assets										
Employer	\$464.3	\$186.8	\$190.0	\$187.8	\$190.7	\$195.3	\$181.5	\$183.7	\$183.9	\$258.1
Employees	\$139.4	\$137.7	\$129.3	\$127.6	\$130.6	\$127.6	\$129.4	\$127.8	\$123.8	\$123.1
Net Investment Income	\$629.4	-\$21.9	\$488.9	\$1,179.4	\$887.7	\$82.9	\$833.1	\$1,013.6	-\$1,858.4	\$477.5
Other	\$13.9	\$11.5	\$9.7	\$8.5	\$10.2	\$17.4	\$12.8	\$11.8	\$7.1	\$10.0
Total Asset Additions (A)	\$1,247.0	\$314.1	\$818.0	\$1,503.4	\$1,219.2	\$423.2	\$1,156.8	\$1,336.9	-\$1,543.7	\$868.7
Deductions from Assets										
Benefits	\$742.4	\$701.0	\$645.6	\$601.8	\$563.1	\$523.4	\$482.5	\$452.0	\$427.5	\$398.7
Refunds	\$26.7	\$33.3	\$26.3	\$29.9	\$33.1	\$29.1	\$25.0	\$20.4	\$24.7	\$66.6
Rebates	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Administrative Expenses	\$5.4	\$5.2	\$5.0	\$4.3	\$4.3	\$4.1	\$4.1	\$4.3	\$4.6	\$4.5
Other	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total Asset Deductions (B)	\$774.5	\$739.5	\$677.0	\$636.0	\$600.5	\$556.6	\$511.6	\$476.7	\$456.8	\$469.8
Change in Net Assets (A-B=C)	\$472.6	-\$425.4	\$141.0	\$867.4	\$618.7	-\$133.4	\$645.2	\$860.2	-\$2,000.4	\$398.9

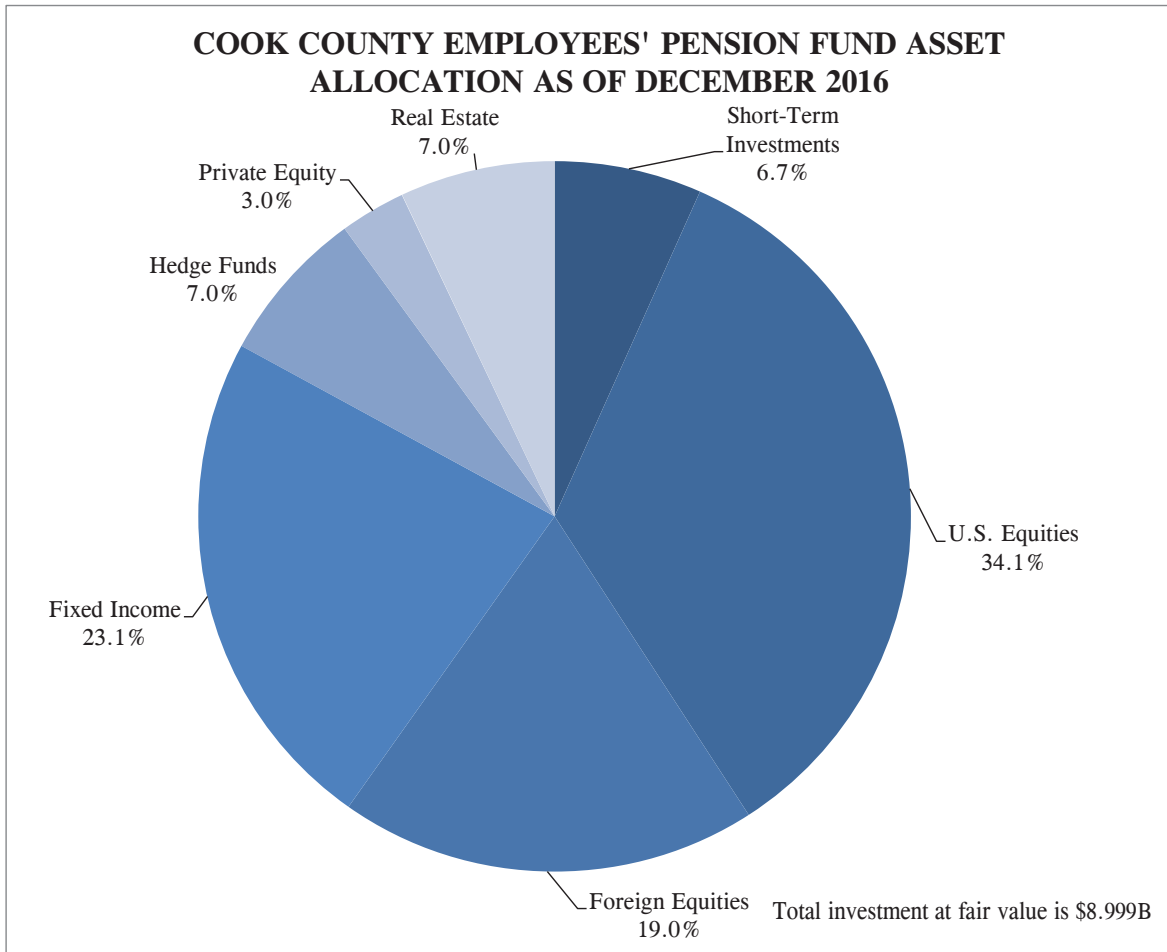
Table 5 below contains funding projections provided to CGFA by the Cook County Employees' Pension Fund based upon the December 31, 2016 actuarial valuation. As shown in the table below, under the current funding policy the Cook County Employees' Pension Fund is projected to run out of assets by 2038 if all future assumptions are met, and no additional contributions are made.

TABLE 5

Cook County Employees' Pension Fund Actuarial Valuation Projection Results as of December 31, 2016 (\$ in Millions)								
Calendar Year	Capped Payroll	Total County Contribution	County Contribution As % of Payroll	Total Employee Contribution	Accrued Liability	Actuarial Value of Assets	Unfunded Liabilities	Funded Ratio
2017	1,587.0	547.0 *	34.5%	139.9	16,726.0	9,488.0	7,238.0	56.7%
2018	1,639.0	205.7	12.6%	144.4	17,400.0	9,971.0	7,429.0	57.3%
2019	1,683.0	208.2	12.4%	148.3	18,082.0	9,977.0	8,105.0	55.2%
2020	1,728.0	208.9	12.1%	152.3	18,758.0	9,975.0	8,783.0	53.2%
2021	1,773.0	215.7	12.2%	156.2	19,424.0	10,060.0	9,364.0	51.8%
2022	1,822.0	221.6	12.2%	160.6	20,077.0	10,094.0	9,983.0	50.3%
2023	1,874.0	227.5	12.1%	165.1	20,723.0	10,073.0	10,650.0	48.6%
2024	1,926.0	233.4	12.1%	169.8	21,361.0	9,993.0	11,368.0	46.8%
2025	1,977.0	239.9	12.1%	174.3	21,982.0	9,850.0	12,132.0	44.8%
2026	2,033.0	246.6	12.1%	179.2	22,584.0	9,636.0	12,948.0	42.7%
2027	2,092.0	253.6	12.1%	184.4	23,171.0	9,345.0	13,826.0	40.3%
2028	2,155.0	260.3	12.1%	189.9	23,751.0	8,978.0	14,773.0	37.8%
2029	2,217.0	267.6	12.1%	195.3	24,324.0	8,534.0	15,790.0	35.1%
2030	2,281.0	275.4	12.1%	201.1	24,877.0	8,000.0	16,877.0	32.2%
2031	2,349.0	283.6	12.1%	207.0	25,406.0	7,367.0	18,039.0	29.0%
2032	2,421.0	291.8	12.1%	213.4	25,920.0	6,633.0	19,287.0	25.6%
2033	2,497.0	300.3	12.0%	220.1	26,425.0	5,799.0	20,626.0	21.9%
2034	2,573.0	309.2	12.0%	226.8	26,919.0	4,856.0	22,063.0	18.0%
2035	2,651.0	318.7	12.0%	233.7	27,391.0	3,792.0	23,599.0	13.8%
2036	2,735.0	328.8	12.0%	241.0	27,842.0	2,598.0	25,244.0	9.3%
2037	2,819.0	338.7	12.0%	248.5	28,276.0	1,269.0	27,007.0	4.5%
2038	2,909.0	349.0	12.0%	256.4	28,699.0	-197.0	28,896.0	-0.7%
2039	3,000.0	360.1	12.0%	264.4	29,110.0	-1,812.0	30,922.0	-6.2%
2040	3,097.0	371.2	12.0%	272.9	29,497.0	-3,593.0	33,090.0	-12.2%
2041	3,195.0	383.0	12.0%	281.6	29,864.0	-5,549.0	35,413.0	-18.6%
2042	3,298.0	394.9	12.0%	290.7	30,219.0	-7,682.0	37,901.0	-25.4%
2043	3,406.0	407.6	12.0%	300.1	30,567.0	-10,002.0	40,569.0	-32.7%
2044	3,514.0	420.7	12.0%	309.7	30,902.0	-12,524.0	43,426.0	-40.5%
2045	3,629.0	434.2	12.0%	319.9	31,227.0	-15,262.0	46,489.0	-48.9%
2046	3,748.0	448.3	12.0%	330.3	31,545.0	-18,226.0	49,771.0	-57.8%
2047	3,869.0	462.6	12.0%	341.0	31,854.0	-21,434.0	53,288.0	-67.3%
2048	3,995.0	477.8	12.0%	352.1	32,159.0	-24,899.0	57,058.0	-77.4%
2049	4,123.0	493.4	12.0%	363.3	32,449.0	-28,649.0	61,098.0	-88.3%
2050	4,256.0	509.4	12.0%	375.1	32,729.0	-32,702.0	65,431.0	-99.9%
2051	4,394.0	525.9	12.0%	387.3	32,999.0	-37,079.0	70,078.0	-112.4%

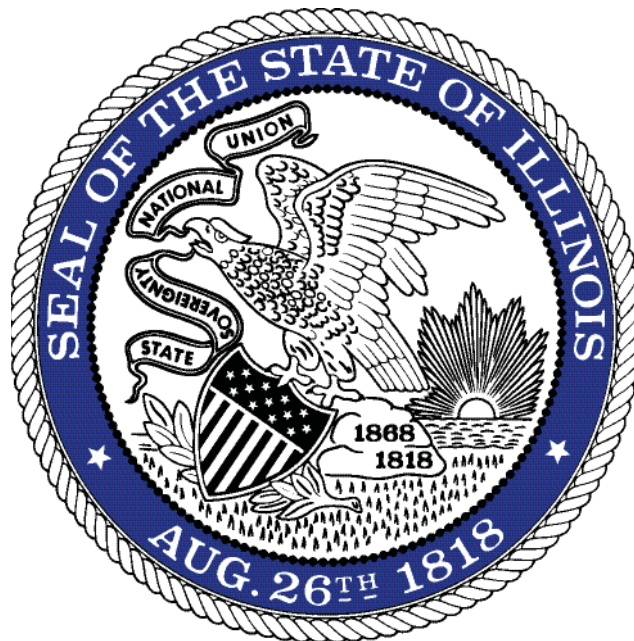
* County contribution for 2017 includes a supplemental contribution of \$353.8 million.

CHART 18



IV. Cook County Forest Preserve Employees' Pension Fund

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



Note: All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of December 31, 2016.

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

Retirement Age

- Age 50 with 10 years of service

Retirement Formula

- 2.4% of final average salary for each year of service

Maximum Annuity

- 80% of final average salary

Salary Used to Calculate Pension

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

Annual COLA

- 3% compounded

Employee Contributions

- 8.5% of salary

Employer Contributions

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

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

CHART 19

**COOK COUNTY FOREST PRESERVE PENSION FUND
Active Employees**

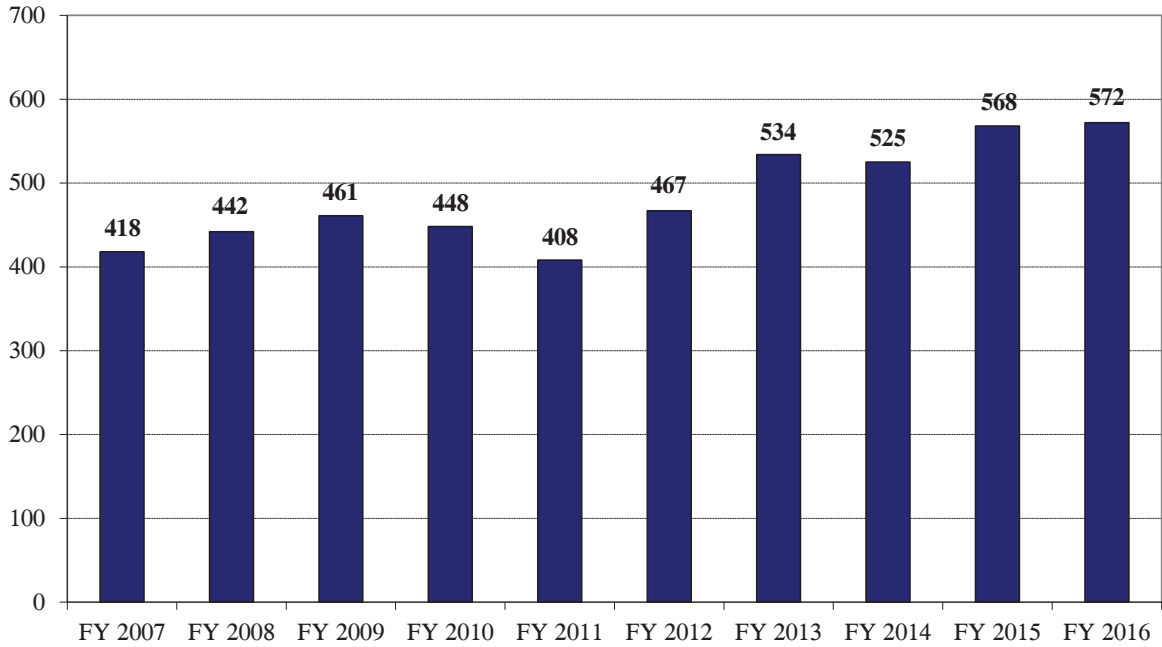


CHART 20

**COOK COUNTY FOREST PRESERVE PENSION FUND
Employee Annuitants**

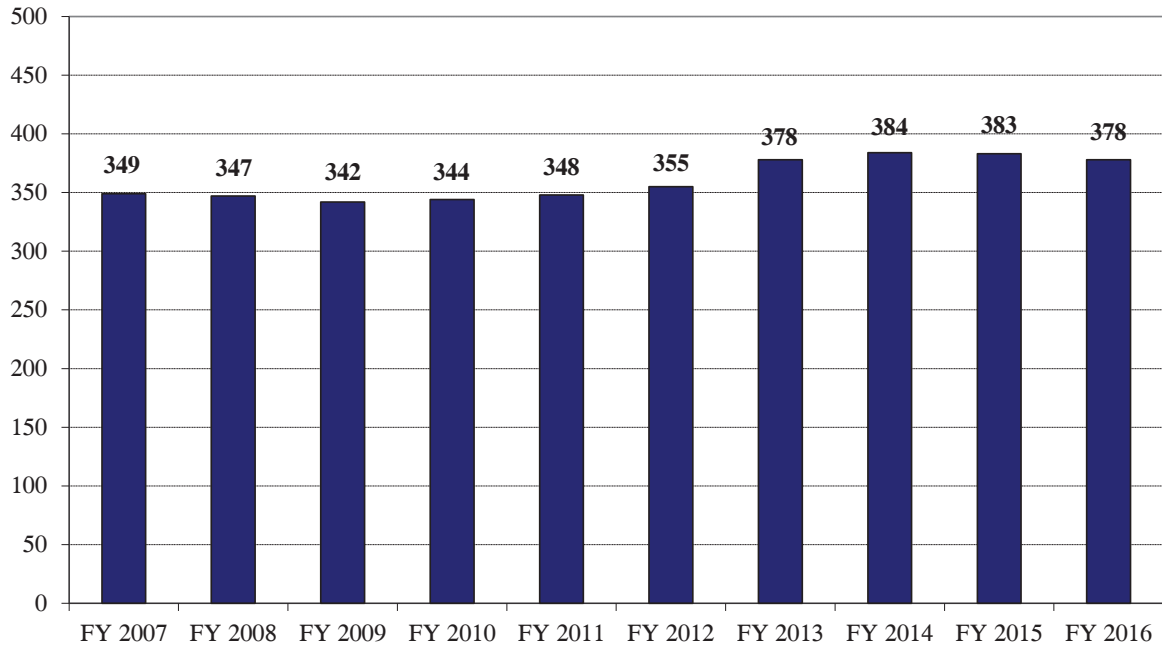


CHART 21

**COOK COUNTY FOREST PRESERVE PENSION FUND
Average Employee Salaries**

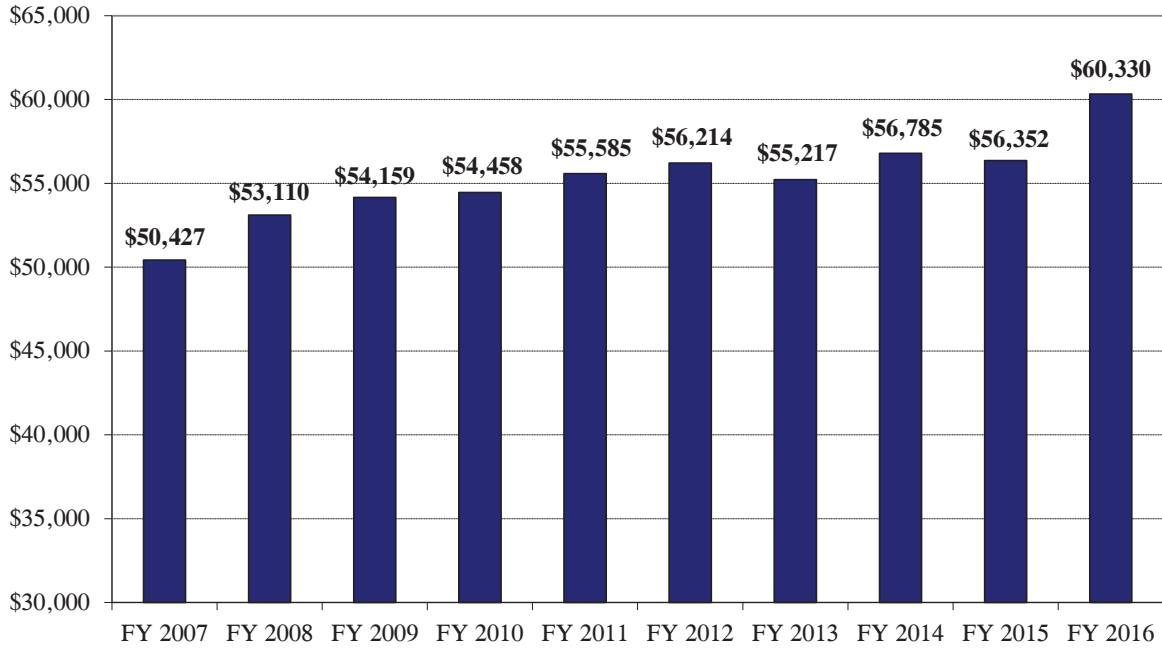


CHART 22

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

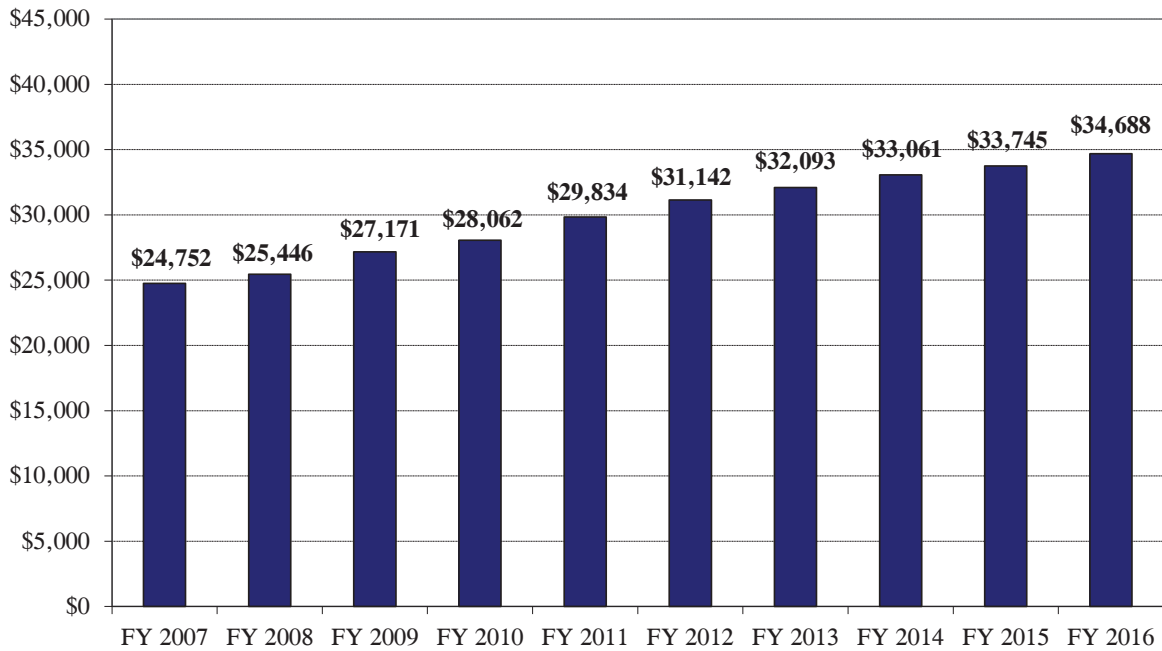


CHART 23

COOK COUNTY FOREST PRESERVE PENSION FUND
Funded Ratio
FY 2007 - FY 2016

All figures based upon the actuarial value of assets.

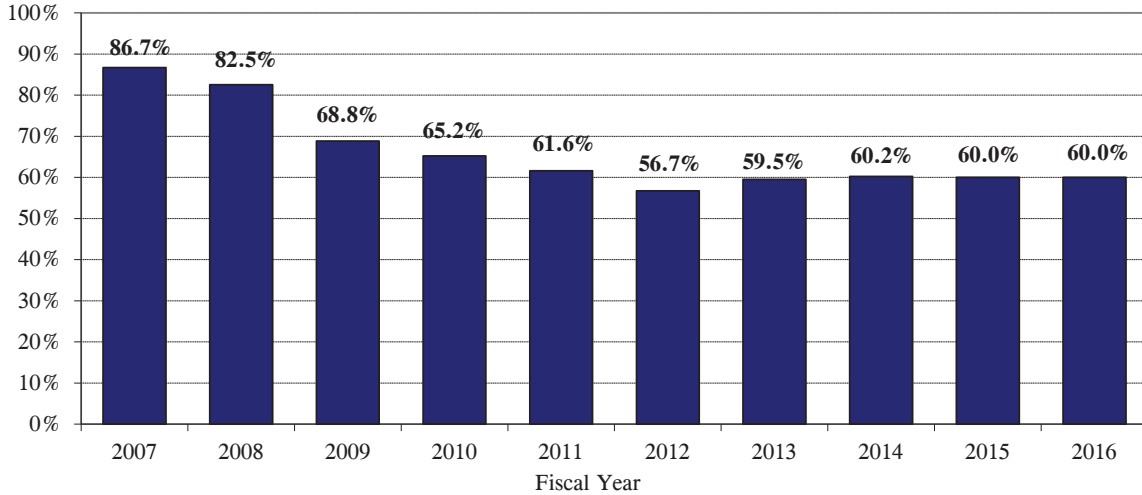
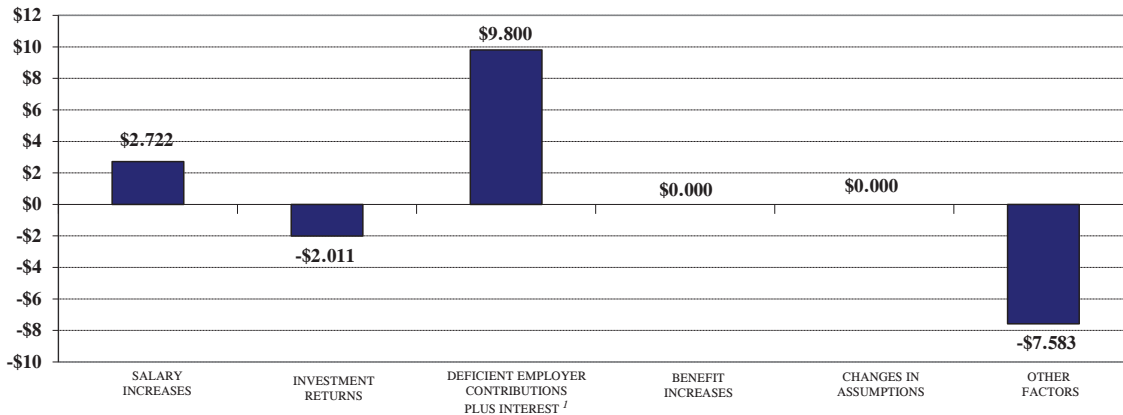


CHART 24

COOK COUNTY FOREST PRESERVE PENSION FUND
Change in Unfunded Liabilities
Year ended December 31, 2016
(\$ in Millions)

All figures based upon the actuarial value of assets.

TOTAL INCREASE EQUALS
\$2.928 MIL



¹ Unfunded liability increases due to employer contributions plus interest being less than normal cost plus interest.

² Includes an actuarial gain of \$4.9 million from demographic factors. Of \$4.9 million, a gain of \$2 million came from the Forest Preserves' implementation of the Employee Group Waiver Plan (EGWP) for the retiree health insurance, effective January 1, 2017.

CHART 25

COOK COUNTY FOREST PRESERVE PENSION FUND
Investment Income FY 2007 - FY 2016
Actuarially Assumed Rate of Return: 7.5%
(\$ in Millions)

All figures based upon the market value of assets.

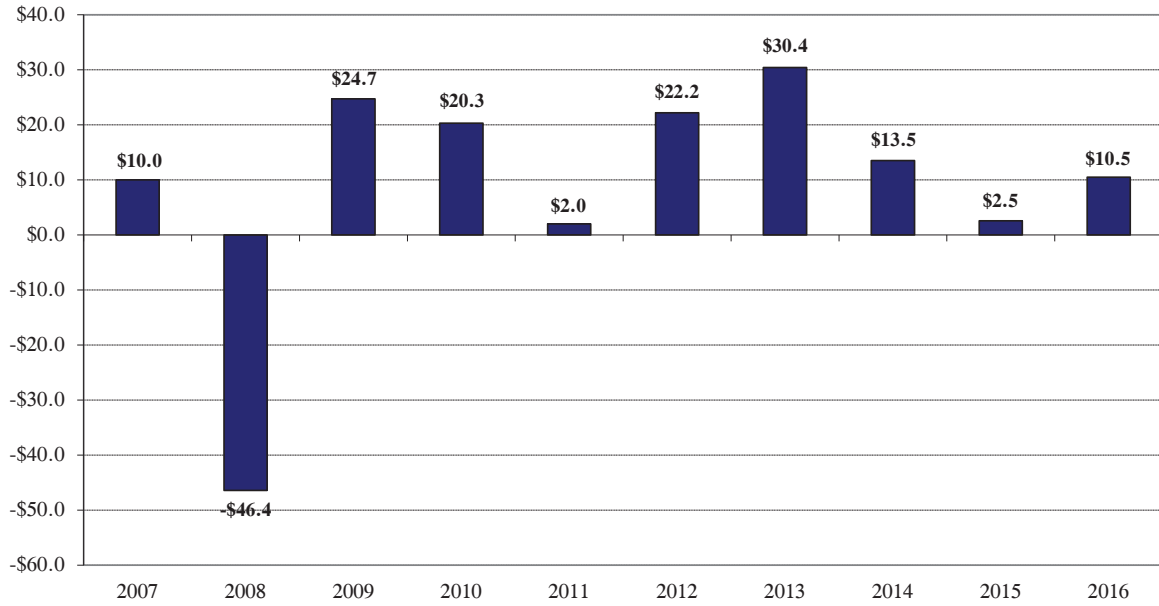


CHART 26

COOK COUNTY FOREST PRESERVE PENSION FUND
Rate of Return FY 2007 - FY 2016
Actuarially Assumed Rate of Return: 7.5%

All figures based upon the market value of assets.

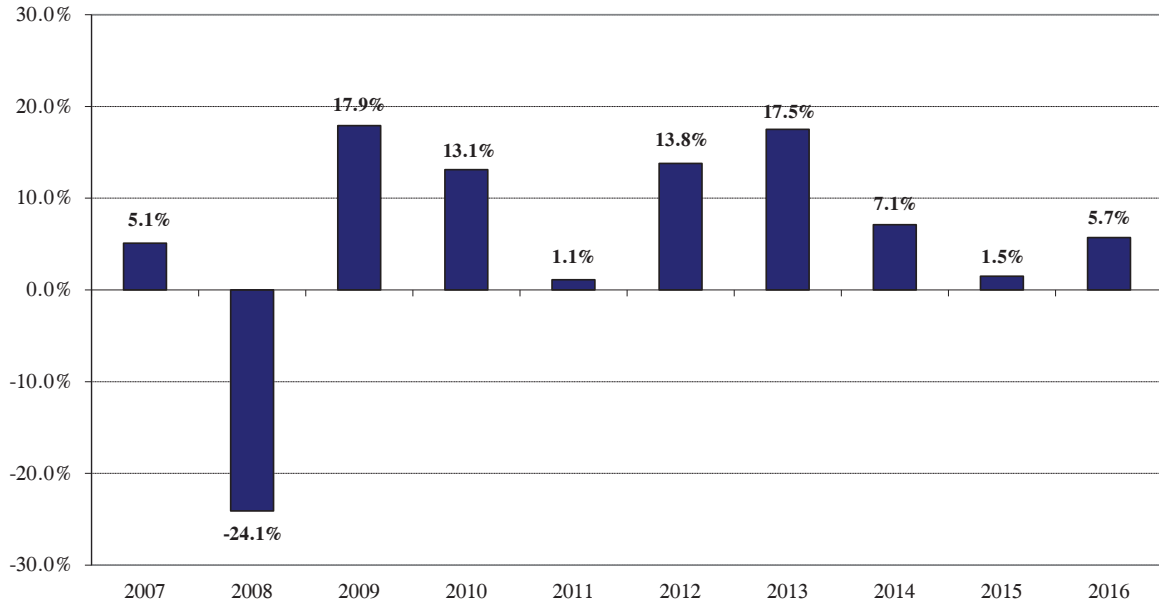


TABLE 6

COOK COUNTY FOREST PRESERVE PENSION FUND					
System Experience, FY 2004 - FY 2016					
(\$ in Millions)					
Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2016	34.5	330.2	198.2	132.0	60.0%
2015	32.0	322.8	193.7	129.0	60.0%
2014	29.7	315.2	189.9	125.3	60.2%
2013	26.3	306.9	182.6	124.4	59.5%
2012	26.3	304.5	172.6	131.9	56.7%
2011	22.7	289.3	178.1	111.2	61.6%
2010	24.4	282.4	184.1	98.3	65.2%
2009	25.0	274.0	188.4	85.6	68.8%
2008	23.5	237.9	196.3	41.6	82.5%
2007	21.1	234.1	203.0	31.1	86.7%
2006	19.2	226.6	193.5	33.1	85.4%
2005	18.1	217.6	189.1	28.5	86.9%
2004	16.6	245.3	186.6	58.7	76.1%

TABLE 7

COOK COUNTY FOREST PRESERVE PENSION FUND										
Changes in Net Assets										
(\$ in Millions)										
Fiscal Years	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Additions to Assets										
Employer	\$3.4	\$3.5	\$3.1	\$2.9	\$3.1	\$3.3	\$2.7	\$2.6	\$2.0	\$3.3
Employees	\$3.2	\$2.8	\$2.6	\$2.7	\$2.5	\$2.3	\$2.4	\$2.4	\$2.1	\$2.0
Net Investment Income	\$10.5	\$2.5	\$13.5	\$30.4	\$22.2	\$2.0	\$20.3	\$24.7	-\$46.4	\$10.0
Other	\$0.3	\$0.2	\$0.2	\$0.2	\$0.2	\$0.5	\$0.2	\$0.2	\$0.1	\$0.2
Total Asset Additions (A)	\$17.4	\$9.0	\$19.5	\$36.1	\$28.0	\$8.1	\$25.6	\$29.9	-\$42.1	\$15.5
Deductions from Assets										
Benefits	\$17.5	\$17.2	\$16.7	\$15.7	\$14.2	\$13.6	\$13.0	\$12.4	\$12.2	\$11.9
Refunds	\$0.7	\$0.6	\$1.0	\$1.0	\$1.2	\$0.6	\$0.4	\$0.5	\$0.5	\$0.5
Rebates	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Administrative Expenses	\$0.2	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1
Other	\$0.1	\$0.0	\$0.2	-\$0.1	\$0.2	-\$0.3	\$0.3	\$0.1	-\$0.1	\$0.1
Total Asset Deductions (B)	\$18.5	\$18.0	\$17.9	\$16.6	\$15.7	\$14.0	\$13.8	\$13.1	\$12.7	\$12.6
Change in Net Assets (A-B=C)	-\$1.1	-\$9.0	\$1.6	\$19.5	\$12.3	-\$5.9	\$11.8	\$16.8	-\$54.8	\$2.9

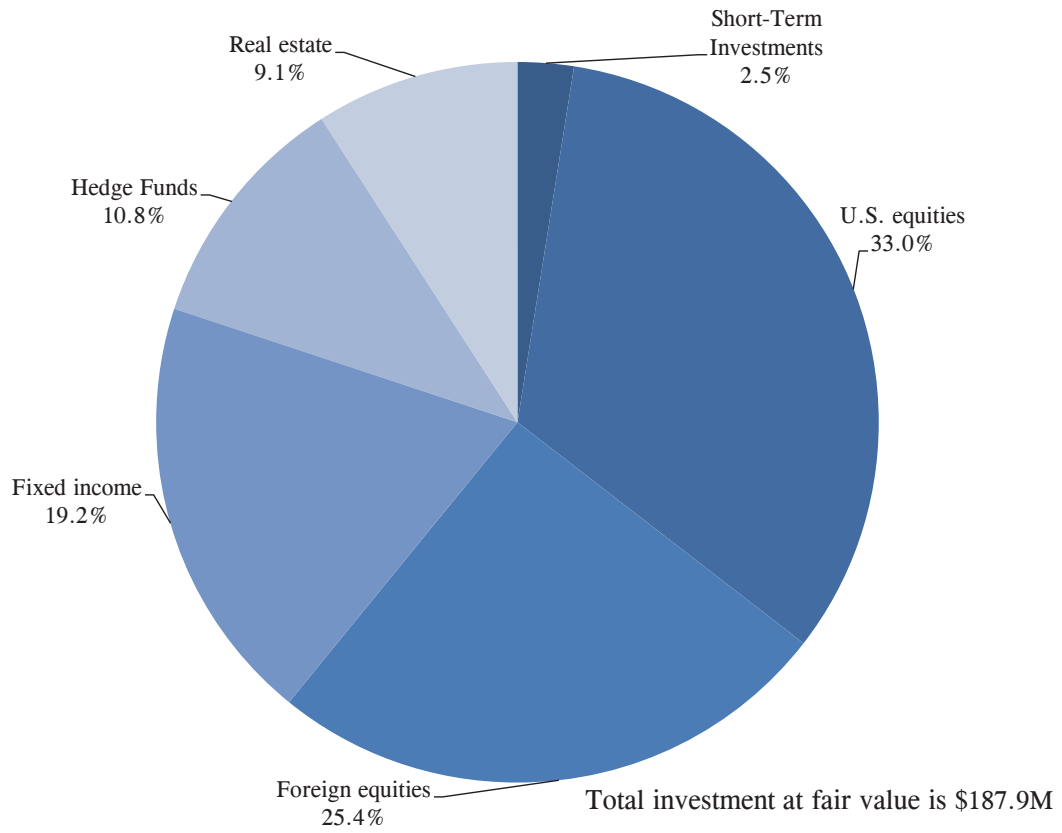
Table 8 below contains funding projections provided to CGFA by the Cook County Forest Preserve Pension Fund based upon the December 31, 2016 actuarial valuation. As shown in the table below, under the current funding policy the Cook County Forest Preserve Pension Fund is projected to run out of assets by 2043 if all future assumptions are met, and no additional contributions are made.

TABLE 8

Cook County Forest Preserve Pension Fund Actuarial Valuation Projection Results as of December 31, 2016 (\$ in Millions)								
Fiscal Year	Capped Payroll	Total County Contribution	County Contribution As % of Payroll	Total Employee Contribution	Accrued Liability	Actuarial Value of Assets	Unfunded Liabilities	Funded Ratio
2017	34.5	3.5	10.1%	3.0	330.2	198.2	132.0	60.0%
2018	35.7	4.0	11.2%	3.1	341.5	200.6	140.9	58.7%
2019	37.0	3.8	10.4%	3.3	353.0	199.6	153.4	56.5%
2020	38.3	4.0	10.4%	3.4	364.7	198.1	166.6	54.3%
2021	39.5	4.1	10.4%	3.5	376.4	198.5	178.0	52.7%
2022	40.8	4.3	10.4%	3.6	387.9	198.6	189.3	51.2%
2023	42.1	4.4	10.4%	3.7	399.7	198.2	201.5	49.6%
2024	43.4	4.5	10.4%	3.8	411.3	196.9	214.4	47.9%
2025	44.7	4.7	10.5%	3.9	423.1	194.9	228.1	46.1%
2026	46.1	4.8	10.5%	4.1	434.9	192.2	242.6	44.2%
2027	47.7	5.0	10.4%	4.2	446.9	188.8	258.1	42.2%
2028	49.3	5.1	10.4%	4.3	459.1	184.5	274.6	40.2%
2029	50.8	5.3	10.4%	4.5	471.8	179.5	292.3	38.0%
2030	52.5	5.5	10.4%	4.6	484.6	173.5	311.1	35.8%
2031	54.1	5.6	10.4%	4.8	497.8	166.6	331.2	33.5%
2032	55.8	5.8	10.4%	4.9	511.2	158.6	352.6	31.0%
2033	57.6	6.0	10.5%	5.1	525.0	149.5	375.4	28.5%
2034	59.4	6.2	10.5%	5.2	539.3	139.4	399.9	25.8%
2035	61.3	6.4	10.4%	5.4	554.1	128.0	426.1	23.1%
2036	63.2	6.6	10.4%	5.6	569.3	115.3	454.0	20.3%
2037	65.2	6.8	10.5%	5.7	584.9	101.1	483.9	17.3%
2038	67.3	7.0	10.4%	5.9	601.2	85.3	515.9	14.2%
2039	69.4	7.2	10.4%	6.1	617.9	67.9	550.0	11.0%
2040	71.6	7.5	10.5%	6.3	635.1	48.6	586.5	7.7%
2041	73.8	7.7	10.5%	6.5	652.6	27.3	625.3	4.2%
2042	76.2	8.0	10.4%	6.7	670.7	3.8	666.9	0.6%
2043	78.6	8.2	10.4%	6.9	689.2	-22.0	711.2	-3.2%
2044	81.2	8.5	10.4%	7.2	708.4	-50.2	758.5	-7.1%
2045	83.8	8.7	10.4%	7.4	728.0	-81.0	809.0	-11.1%
2046	86.5	9.0	10.4%	7.6	748.3	-114.6	862.9	-15.3%
2047	89.3	9.3	10.4%	7.9	769.3	-151.2	920.5	-19.7%
2048	92.2	9.6	10.4%	8.1	790.9	-191.2	982.1	-24.2%
2049	95.2	9.9	10.4%	8.4	813.3	-234.7	1,048.0	-28.9%
2050	98.3	10.2	10.4%	8.7	836.6	-281.8	1,118.4	-33.7%
2051	101.4	10.6	10.4%	8.9	860.5	-333.1	1,193.7	-38.7%

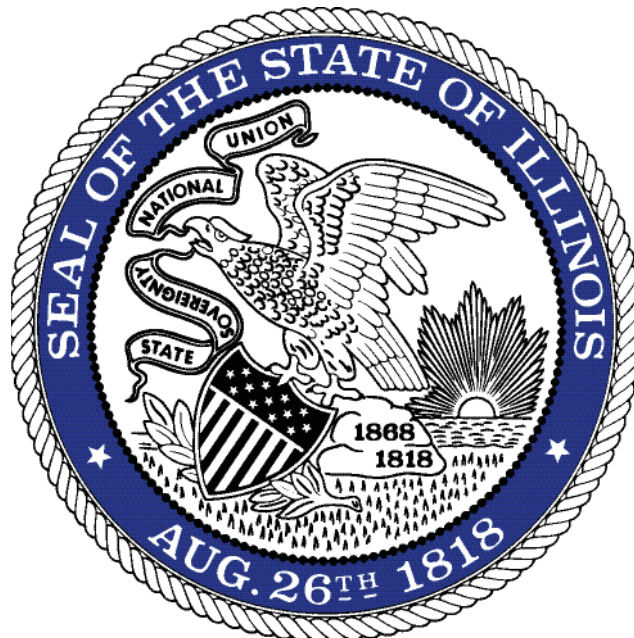
CHART 27

**COOK COUNTY FOREST PRESERVE EMPLOYEES' PENSION
FUND ASSET ALLOCATION AS OF DECEMBER 2016**



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
- Asset Allocation



Note: All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of December 31, 2016.

Firemen's Annuity and Benefit Fund of Chicago

Tier 1 Plan Summary

Retirement Age

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

Retirement Formula

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

Maximum Annuity

- 75% of final average salary

Salary Used to Calculate Pension

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

Annual COLA

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

Employee Contributions

- 9.125% of salary

Required Employer Contributions

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

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

CHART 28

FIREMEN'S ANNUITY & BENEFIT FUND OF CHICAGO
Active Employees

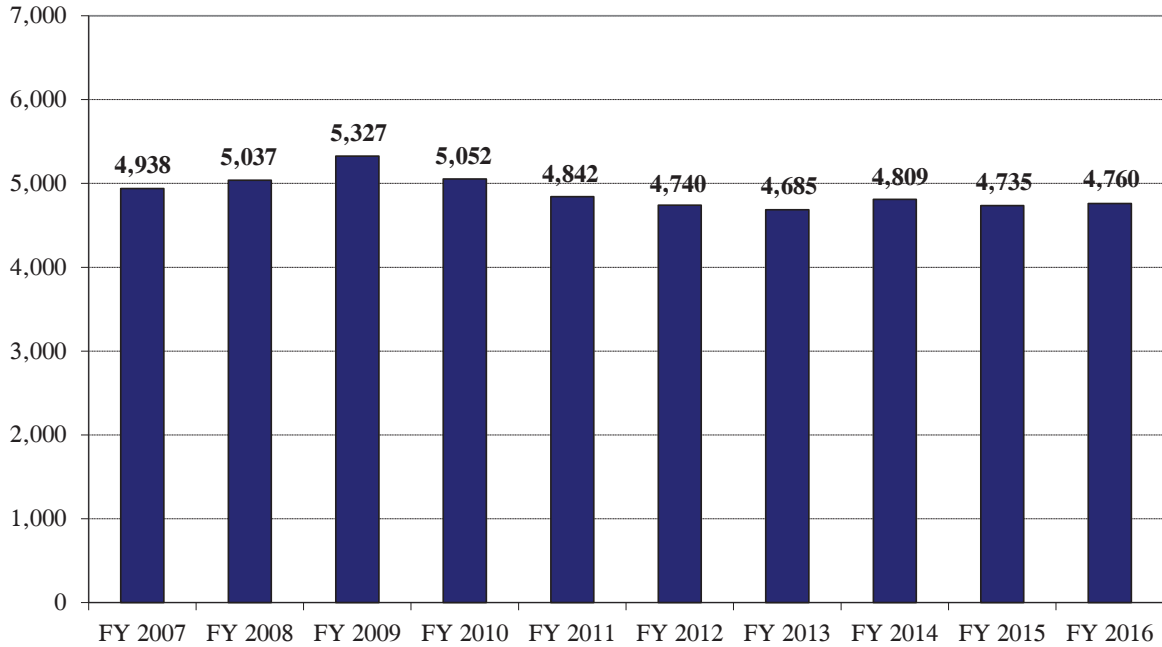


CHART 29

FIREMEN'S ANNUITY & BENEFIT FUND OF CHICAGO
Employee Annuitants

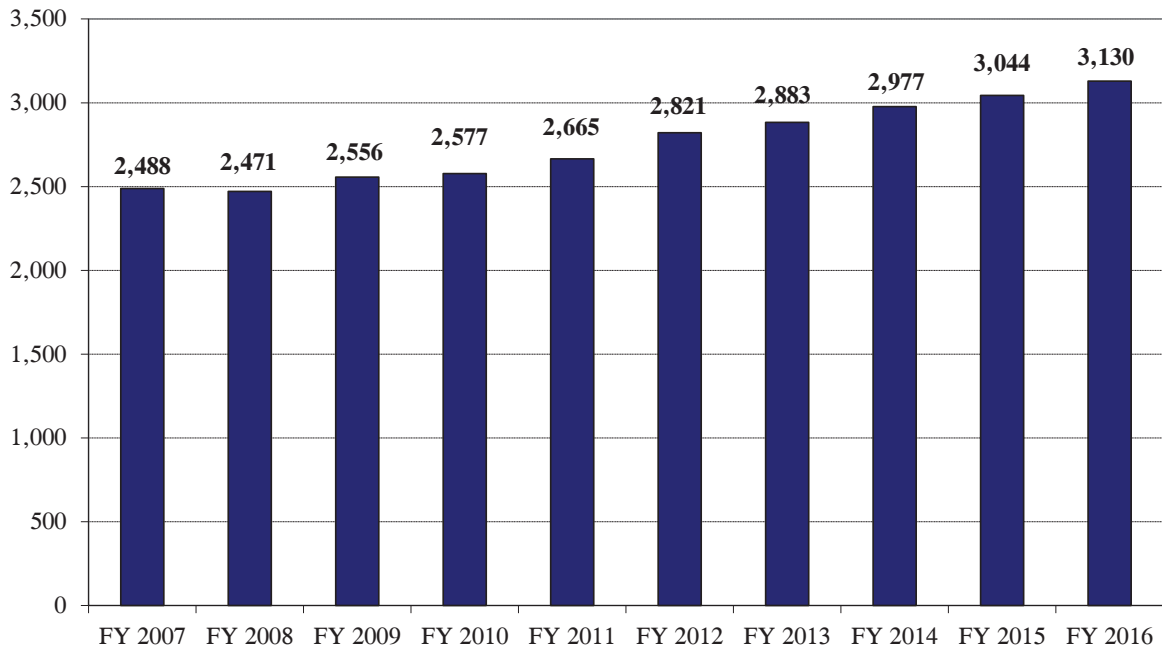


CHART 30

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

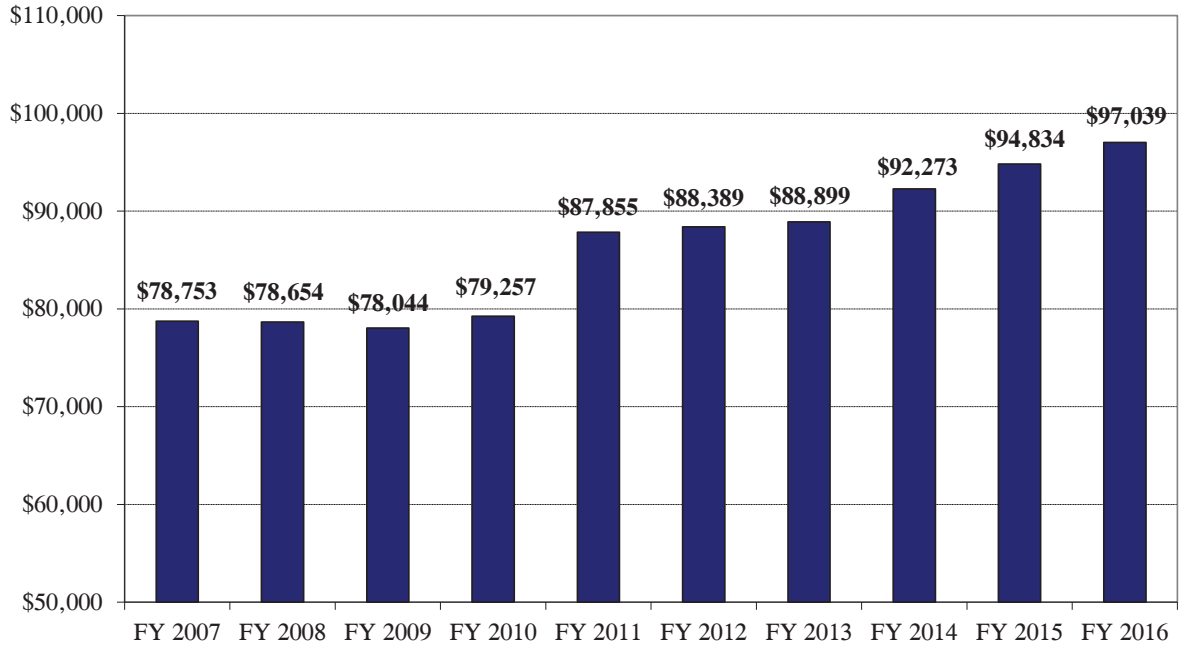


CHART 31

FIREMEN'S ANNUITY & BENEFIT FUND OF CHICAGO
Average Retirement Annuity

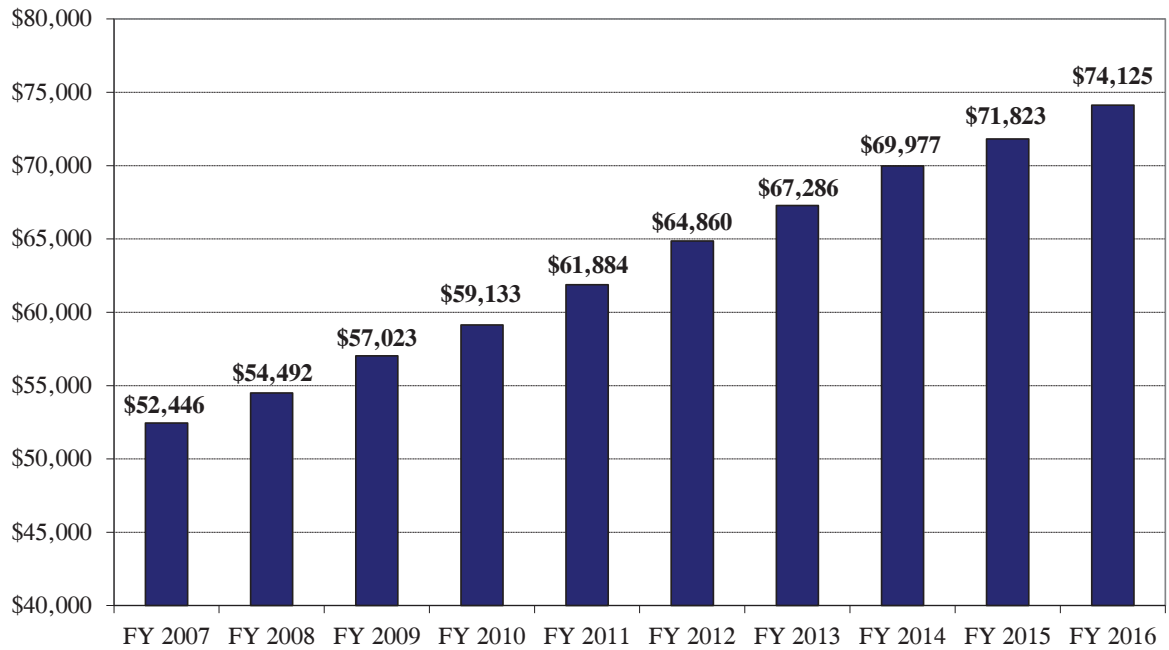


CHART 32

**FIREMEN'S ANNUITY & BENEFIT FUND OF CHICAGO
Funded Ratio
FY 2007 - FY 2016**

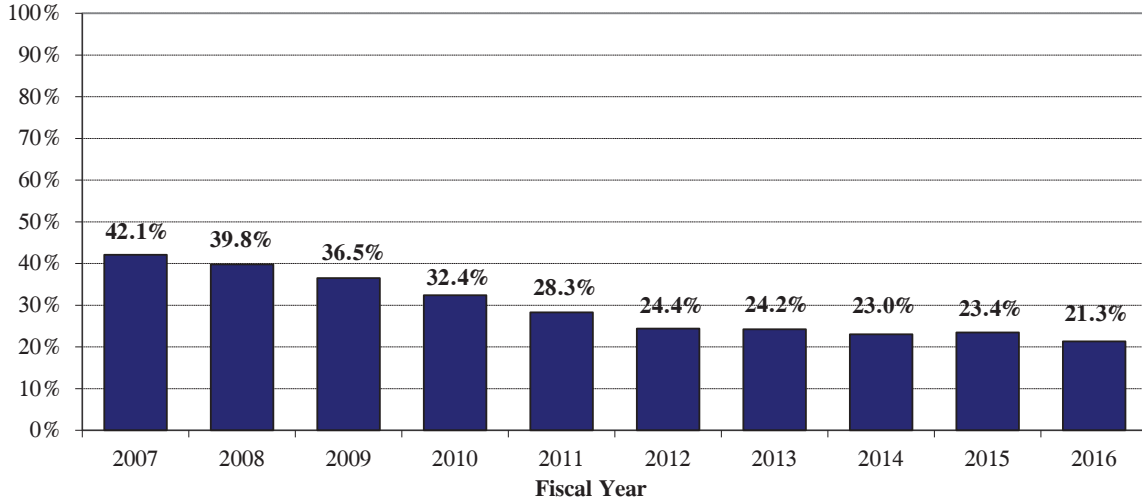
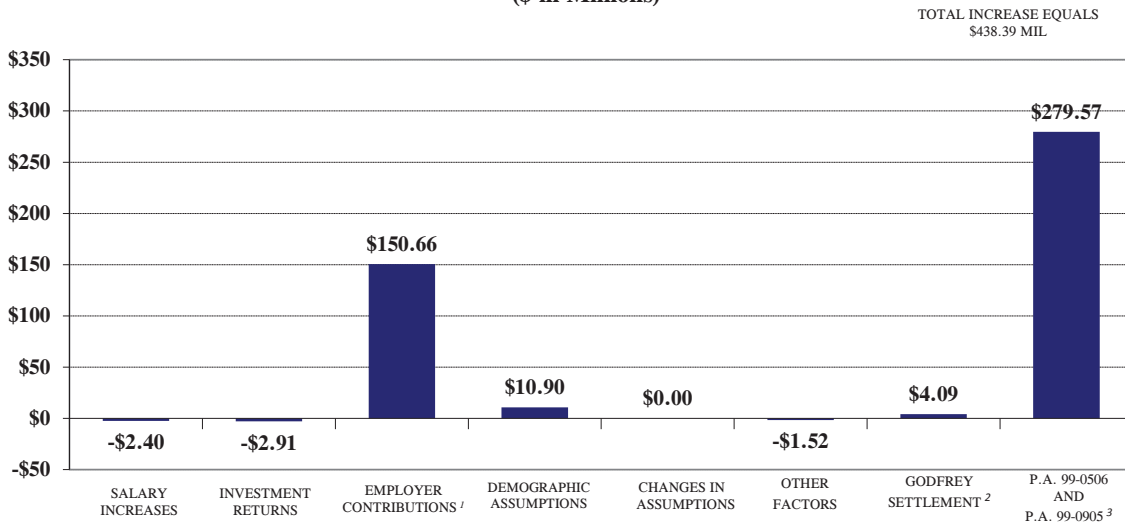


CHART 33

**FIREMEN'S ANNUITY & BENEFIT FUND OF CHICAGO
Change in Unfunded Liabilities
Year ended December 31, 2016
(\$ in Millions)**



¹ Unfunded liability increases due to employer contributions plus interest being less than normal cost plus interest.

² An actuarial loss was generated by additional services credited to 12 members as a part of the Godfrey Settlement.

³ Includes an actuarial loss of \$52.8 million from actuarial cost method change and an actuarial loss of \$226.8 million from provision changes.

CHART 34

FIREMEN'S ANNUITY & BENEFIT FUND OF CHICAGO
Investment Income FY 2007 - FY 2016
 Actuarially Assumed Rate of Return: 7.50%
 (\$ in Millions)

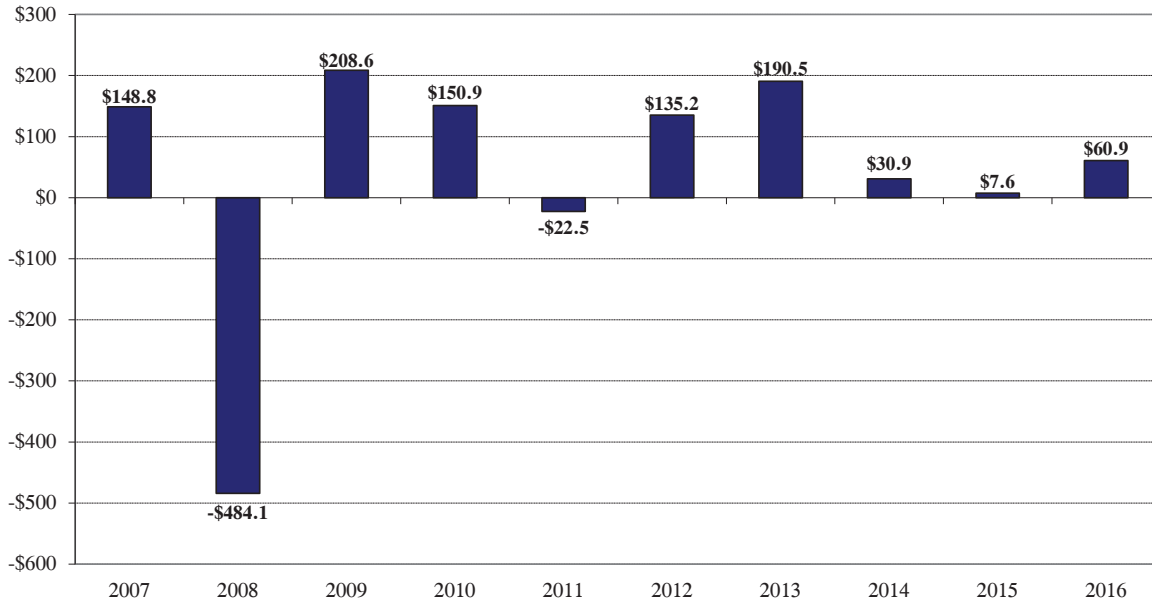


CHART 35

FIREMEN'S ANNUITY & BENEFIT FUND OF CHICAGO
Rate of Return Earned FY 2007 - FY 2016
 Actuarially Assumed Rate of Return: 7.50%

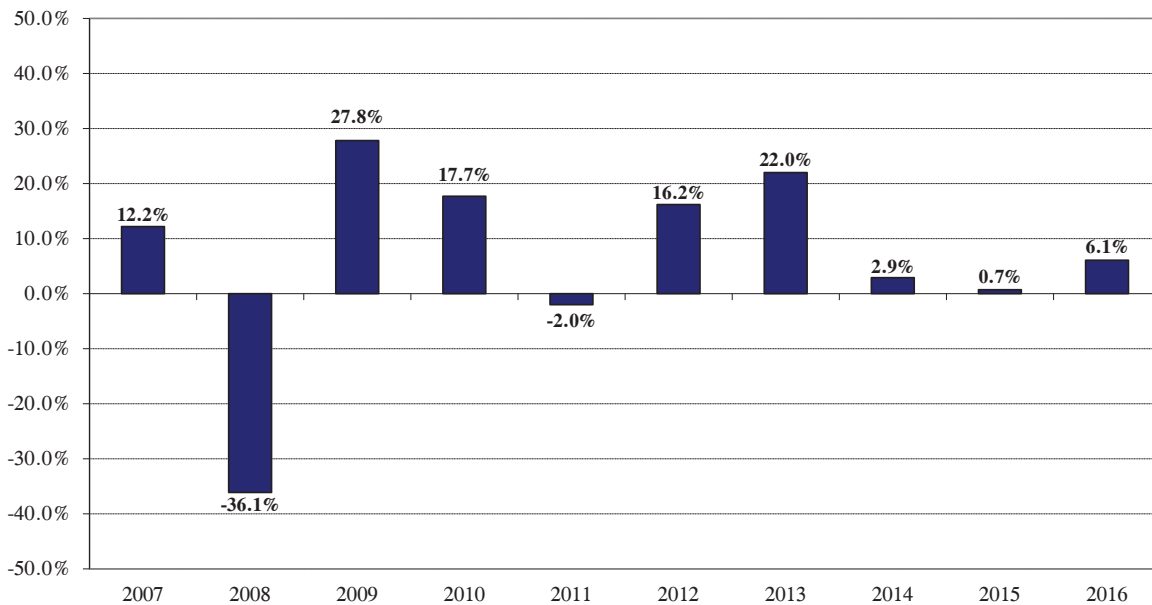


TABLE 9

FIREMEN'S ANNUITY & BENEFIT FUND OF CHICAGO					
System Experience, FY 2007 - FY 2016					
(\$ in Millions)					
Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2016	478.5	5,045.9	1,074.9	3,971.0	21.3%
2015	465.2	4,666.8	1,081.0	3,585.8	23.2%
2014	460.2	4,343.6	988.1	3,355.5	22.7%
2013	416.5	4,136.4	991.2	3,145.2	24.0%
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	40.0%
2007	389.1	3,263.0	1,375.0	1,888.0	42.1%

NOTE: The above FY 2007 - FY 2016 figures include healthcare assets/liabilities.

TABLE 10

FIREMEN'S ANNUITY & BENEFIT FUND OF CHICAGO										
Changes in Net Assets										
(\$ in Millions)										
Fiscal Years	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Additions to Assets										
Employer	\$156.2	\$238.5	\$109.8	\$106.2	\$84.1	\$85.5	\$83.6	\$91.8	\$83.7	\$74.3
Employees	\$49.0	\$46.6	\$48.1	\$42.5	\$53.3	\$51.9	\$41.7	\$41.6	\$40.5	\$41.1
Net Investment Income	\$60.9	\$7.6	\$30.9	\$190.5	\$135.2	-\$22.4	\$150.9	\$208.6	-\$484.1	\$148.8
Other	\$0.0	\$0.0	\$0.0	-\$0.1	\$3.5	\$0.0	\$0.0	\$0.0	\$0.1	\$0.2
Total Asset Additions (A)	\$266.0	\$292.6	\$188.7	\$339.2	\$276.1	\$115.0	\$276.2	\$342.0	-\$359.8	\$264.4
Deductions from Assets										
Benefits	\$285.2	\$276.8	\$264.0	\$249.6	\$231.2	\$221.5	\$215.8	\$199.0	\$190.0	\$181.6
Refunds	\$3.7	\$3.6	\$2.3	\$2.2	\$2.6	\$2.1	\$1.8	\$2.1	\$2.7	\$1.7
Rebates	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Administrative Expenses	\$3.2	\$3.1	\$3.1	\$3.1	\$2.5	\$2.5	\$3.1	\$3.0	\$2.9	\$3.1
Other	\$0.0	\$0.0	\$0.0	\$0.0	\$1.1	\$1.2	\$1.1	\$0.4	\$0.0	\$0.0
Total Asset Deductions (B)	\$292.1	\$283.5	\$269.4	\$254.9	\$237.4	\$227.3	\$221.8	\$204.5	\$195.6	\$186.4
Change in Net Assets (A-B=C)	-\$26.1	\$9.1	-\$80.7	\$84.3	\$38.7	-\$112.3	\$54.4	\$137.5	-\$555.4	\$78.0

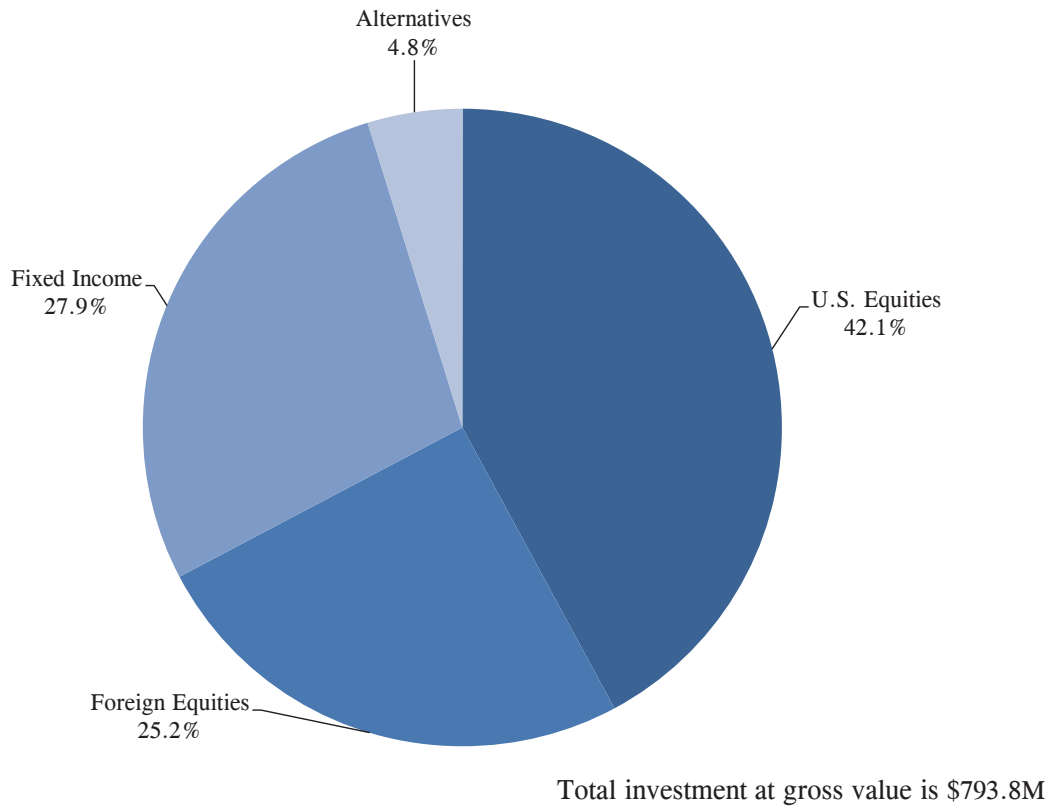
Table 11 below contains funding projections provided to CGFA by the Firemen's Annuity and Benefit Fund of Chicago based upon the December 31, 2016 actuarial valuation.

TABLE 11

Firemen's Annuity and Benefit Fund of Chicago Actuarial Valuation Projection Results as of December 31, 2016 (\$ in Millions)								
Fiscal Year	Capped Payroll	Total City Contribution	Total City Contribution As % of Payroll	Total Employee Contribution	Accrued Liability	Actuarial Value of Assets	Unfunded Liabilities	Funded Ratio
2016	478.5	156.2	32.6%	49.0	5,045.9	1,074.9	3,971.0	21.3%
2017	488.6	227.0	46.5%	44.6	5,200.5	1,091.1	4,109.4	21.0%
2018	500.6	235.0	46.9%	47.6	5,354.3	1,083.4	4,270.9	20.2%
2019	513.1	245.0	47.8%	48.8	5,505.0	1,083.1	4,422.0	19.7%
2020	525.9	339.7	64.6%	50.0	5,652.1	1,178.4	4,473.6	20.8%
2021	538.4	347.8	64.6%	51.2	5,795.2	1,275.1	4,520.1	22.0%
2022	551.8	356.4	64.6%	52.4	5,933.6	1,371.9	4,561.8	23.1%
2023	566.9	366.2	64.6%	53.8	6,067.2	1,470.0	4,597.2	24.2%
2024	581.2	375.4	64.6%	55.2	6,194.7	1,568.2	4,626.5	25.3%
2025	595.6	384.7	64.6%	56.6	6,315.1	1,665.8	4,649.3	26.4%
2026	609.4	393.7	64.6%	57.9	6,428.1	1,762.9	4,665.1	27.4%
2027	625.4	404.0	64.6%	59.3	6,534.9	1,862.5	4,672.4	28.5%
2028	642.4	414.9	64.6%	60.8	6,637.3	1,967.3	4,670.0	29.6%
2029	655.9	423.7	64.6%	62.2	6,736.1	2,076.6	4,659.5	30.8%
2030	668.0	431.5	64.6%	63.4	6,831.7	2,190.8	4,641.0	32.1%
2031	676.5	437.0	64.6%	64.4	6,922.7	2,306.6	4,616.1	33.3%
2032	684.5	442.2	64.6%	65.2	7,008.7	2,424.2	4,584.5	34.6%
2033	692.0	447.0	64.6%	65.9	7,089.7	2,543.8	4,545.9	35.9%
2034	698.2	451.0	64.6%	66.5	7,165.6	2,664.8	4,500.9	37.2%
2035	703.7	454.5	64.6%	67.0	7,237.3	2,788.2	4,449.1	38.5%
2036	708.5	457.7	64.6%	67.5	7,305.3	2,914.7	4,390.6	39.9%
2037	713.8	461.1	64.6%	67.9	7,371.3	3,046.6	4,324.6	41.3%
2038	719.5	464.8	64.6%	68.4	7,436.3	3,185.8	4,250.5	42.8%
2039	725.5	468.7	64.6%	68.9	7,501.4	3,334.0	4,167.4	44.4%
2040	732.2	472.9	64.6%	69.4	7,568.4	3,493.9	4,074.4	46.2%
2041	738.6	477.1	64.6%	70.0	7,636.8	3,665.8	3,971.0	48.0%
2042	745.2	481.3	64.6%	70.6	7,706.6	3,850.2	3,856.4	50.0%
2043	751.8	485.6	64.6%	71.2	7,777.7	4,047.7	3,730.0	52.0%
2044	758.1	489.7	64.6%	71.8	7,849.3	4,258.3	3,591.0	54.3%
2045	764.7	493.9	64.6%	72.3	7,921.5	4,482.8	3,438.7	56.6%
2046	771.7	498.5	64.6%	73.0	7,994.1	4,722.3	3,271.7	59.1%
2047	779.2	503.3	64.6%	73.6	8,067.4	4,978.3	3,089.1	61.7%
2048	787.5	508.7	64.6%	74.3	8,142.4	5,253.1	2,889.3	64.5%
2049	796.5	514.5	64.6%	75.1	8,219.7	5,548.9	2,670.8	67.5%
2050	806.2	520.8	64.6%	76.0	8,300.2	5,868.3	2,431.9	70.7%
2051	816.3	527.3	64.6%	76.9	8,384.2	6,213.0	2,171.2	74.1%
2052	826.5	533.9	64.6%	77.9	8,471.9	6,585.0	1,886.9	77.7%
2053	836.8	540.5	64.6%	78.8	8,563.9	6,986.3	1,577.6	81.6%
2054	847.3	547.3	64.6%	79.8	8,660.6	7,419.4	1,241.3	85.7%
2055	857.9	554.1	64.6%	80.8	8,762.9	7,886.9	876.1	90.0%

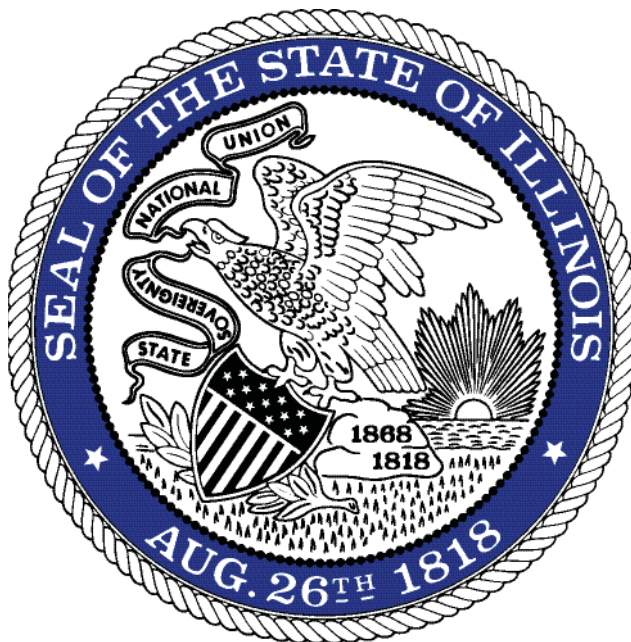
CHART 36

**FIREMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO
ASSET ALLOCATION AS OF DECEMBER 2016**



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**
- **Asset Allocation**



Note: All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of December 31, 2016.

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.

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

Illinois Municipal Retirement Fund

Elected County Officers Plan (ECO)

Tier 1 Plan Summary

*The ECO Plan has been closed to new participants since August 8, 2011, the effective date of P.A. 97-0272.

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.

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.

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

CHART 37

**ILLINOIS MUNICIPAL RETIREMENT FUND
Active Employees**

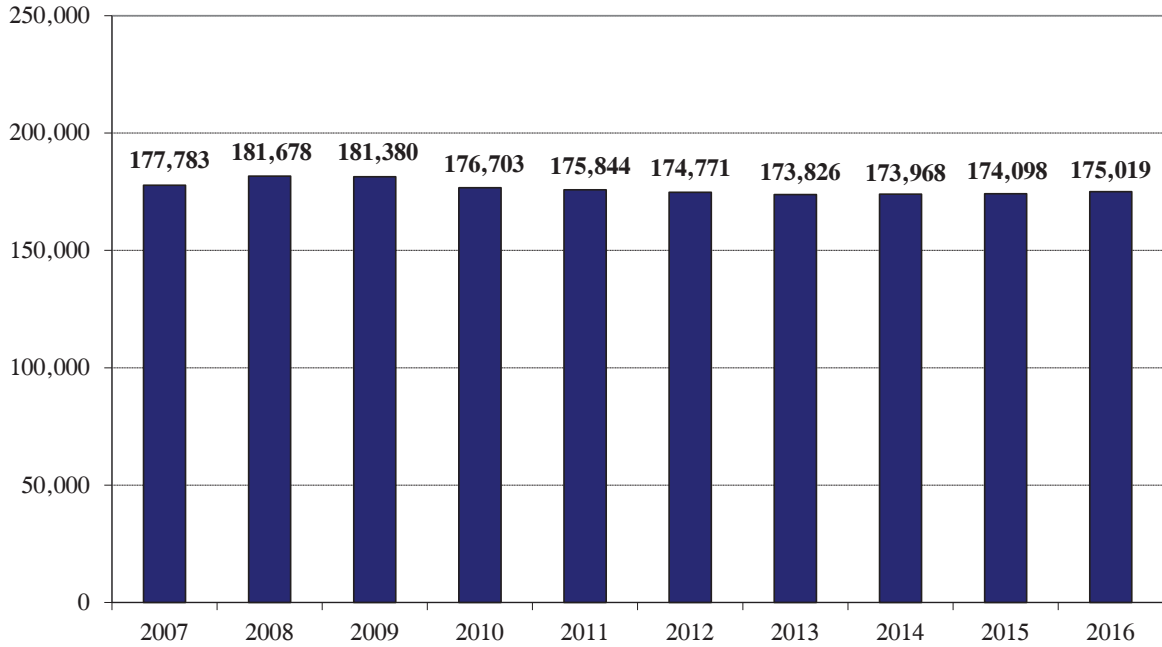


CHART 38

**ILLINOIS MUNICIPAL RETIREMENT FUND
Employee Annuitants**

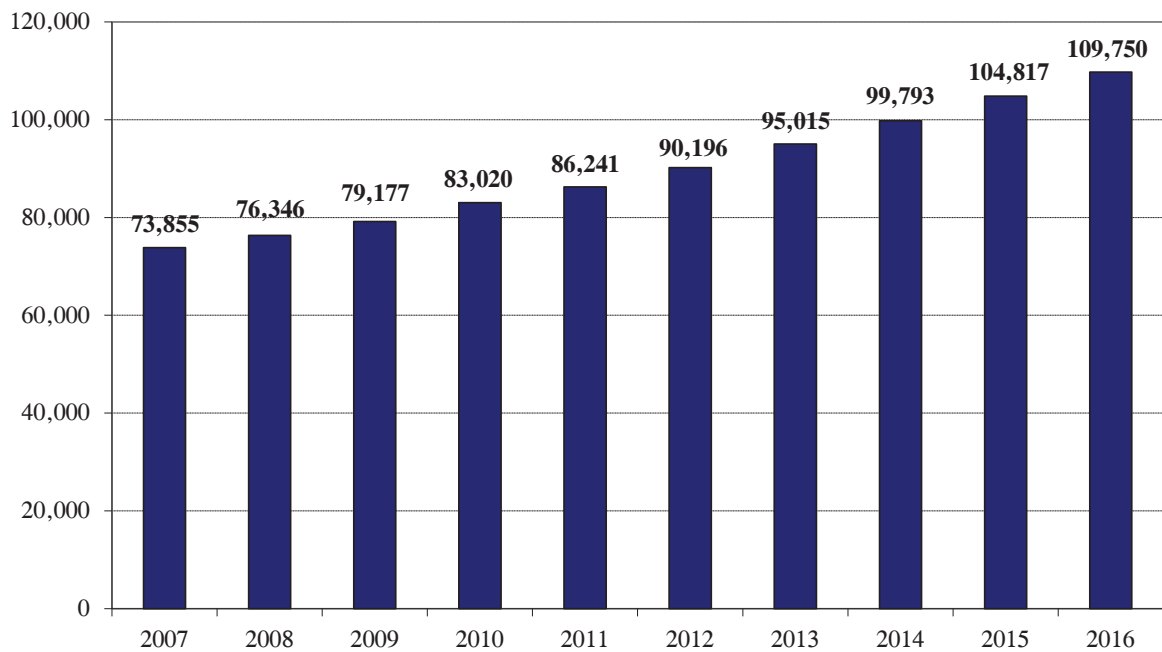


CHART 39

**ILLINOIS MUNICIPAL RETIREMENT FUND
Average Employee Salaries**

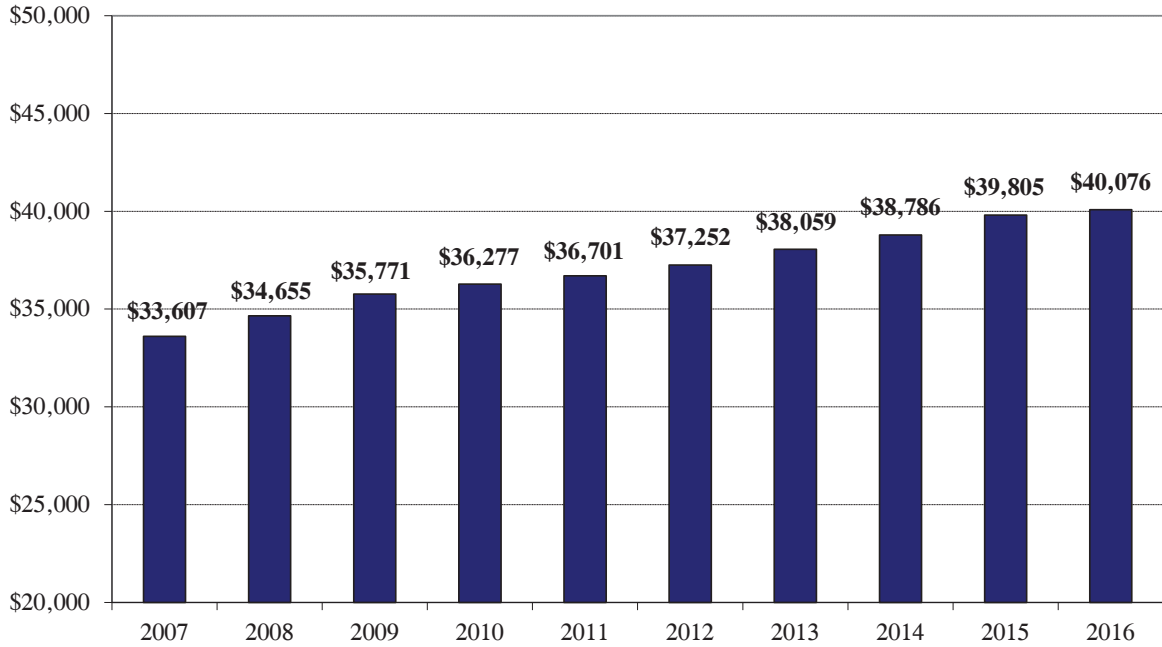


CHART 40

**ILLINOIS MUNICIPAL RETIREMENT FUND
Average Retirement Annuity**

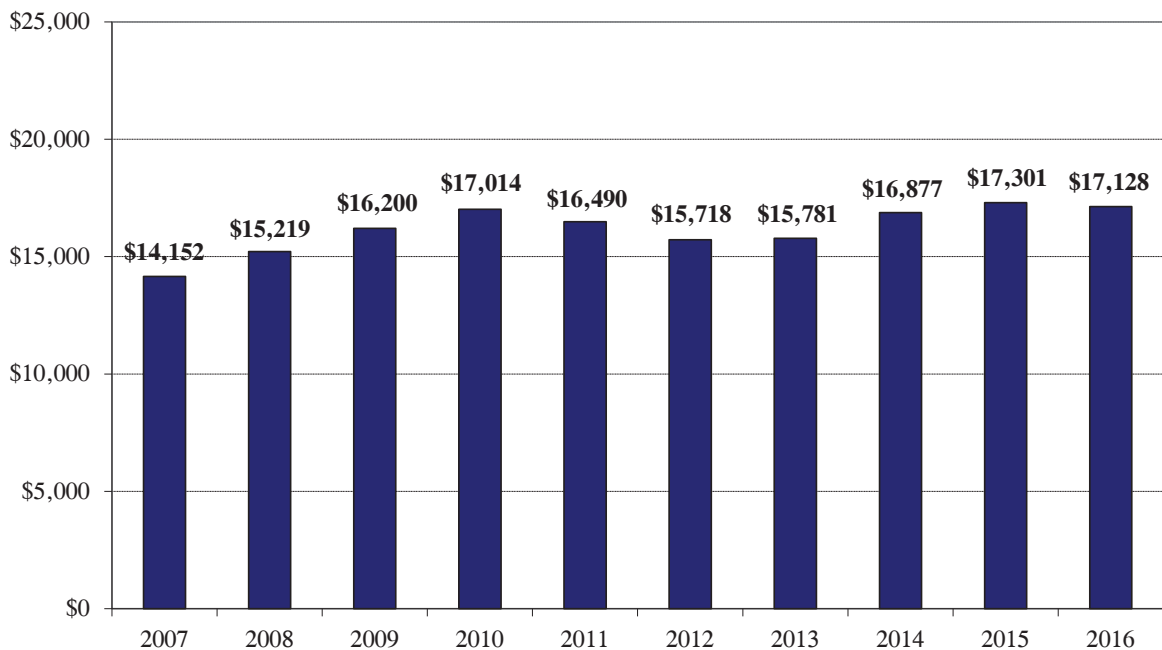


CHART 41

ILLINOIS MUNICIPAL RETIREMENT FUND
Funded Ratio
FY 2007 - FY 2016

All figures based upon the actuarial value of assets.

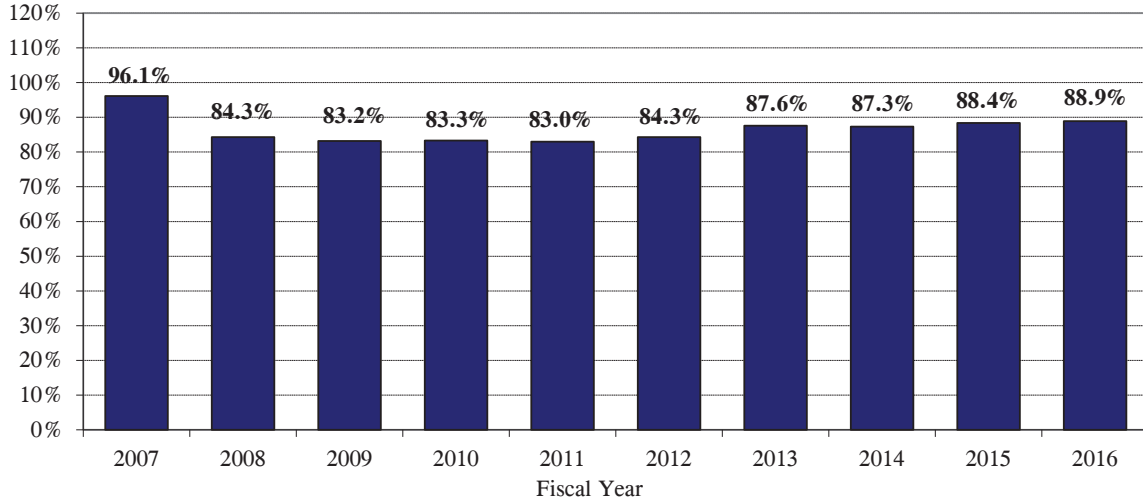
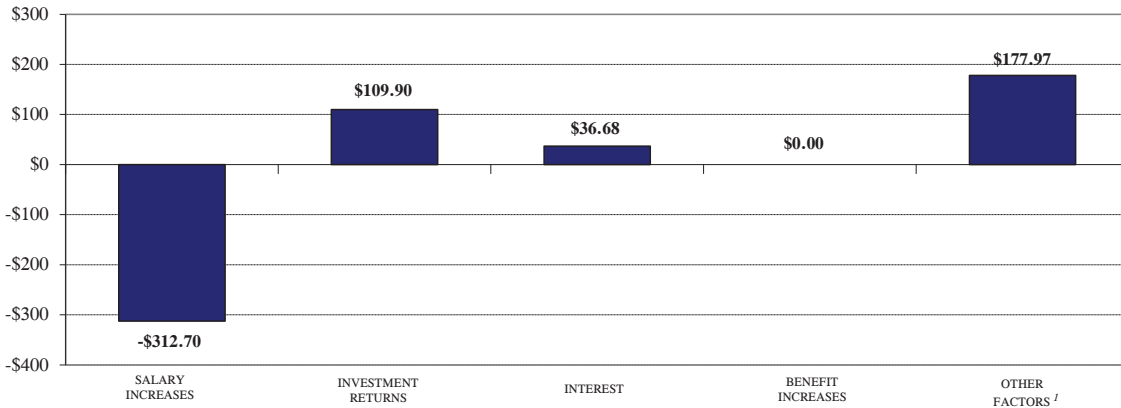


CHART 42

ILLINOIS MUNICIPAL RETIREMENT FUND
Change in Unfunded Liabilities
Year ended December 31, 2016
(\$ in Millions)

TOTAL INCREASE EQUALS
\$11.86 MIL

All figures based upon the actuarial value of assets.



¹ Actuarial losses occur primarily due to an actuarial loss from rehiring former employees and actual reserve transfers for retirees exceeding the projected reserve transfers.

CHART 43

ILLINOIS MUNICIPAL RETIREMENT FUND

Investment Income 2007 - 2016

Actuarially Assumed Rate of Return: 7.50%

(\$ in Millions)

All figures based upon the market value of assets.

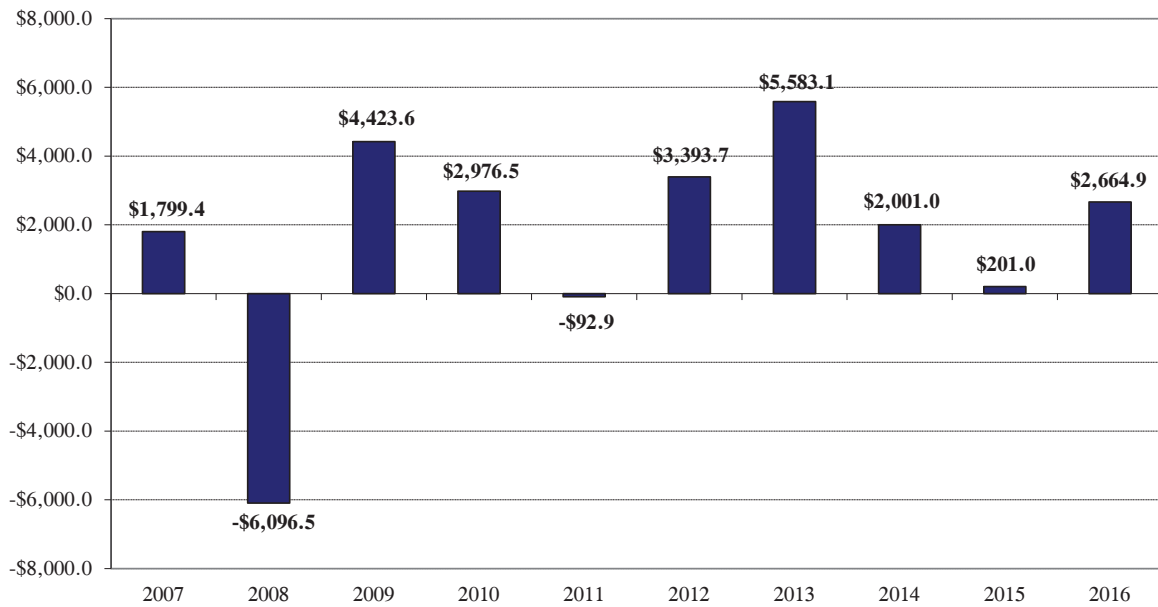


CHART 44

ILLINOIS MUNICIPAL RETIREMENT FUND

Rate of Return 2007 - 2016

Actuarially Assumed Rate of Return: 7.50%

All figures based upon the market value of assets.

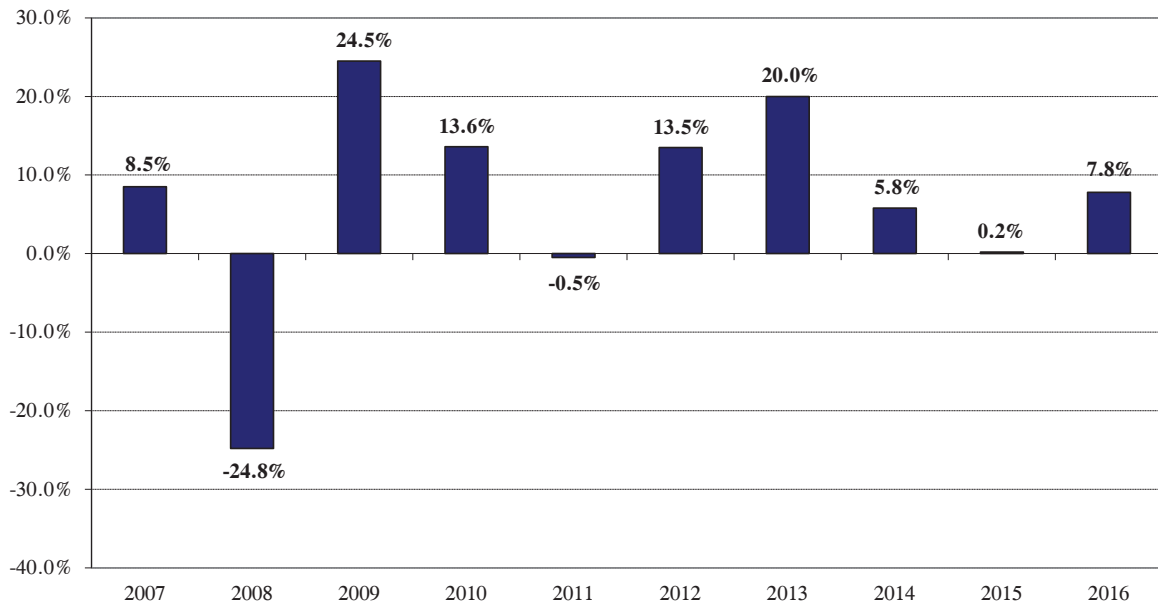


TABLE 12

ILLINOIS MUNICIPAL RETIREMENT FUND					
System Experience, FY 2004 - FY 2016					
(\$ in Millions)					
Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2016	7,006.7	41,358.7	36,773.4	4,585.3	88.9%
2015	6,919.3	39,486.6	34,913.1	4,573.4	88.4%
2014	6,732.5	37,465.1	32,700.2	4,764.9	87.3%
2013	6,602.5	34,356.6	30,083.0	4,273.5	87.6%
2012	6,496.1	32,603.2	27,491.8	5,111.4	84.3%
2011	6,431.3	30,962.8	25,711.3	5,251.5	83.0%
2010	6,391.2	29,129.2	24,251.1	4,878.1	83.3%
2009	6,461.7	27,345.1	22,754.8	4,590.3	83.2%
2008	6,259.3	25,611.2	21,601.1	4,010.1	84.3%
2007	5,931.4	24,221.5	23,274.4	947.1	96.1%
2006	5,630.7	22,488.2	21,427.1	1,061.1	95.3%
2005	5,374.6	20,815.1	19,698.4	1,108.7	94.6%
2004	5,161.1	19,424.7	18,316.0	1,108.7	94.3%

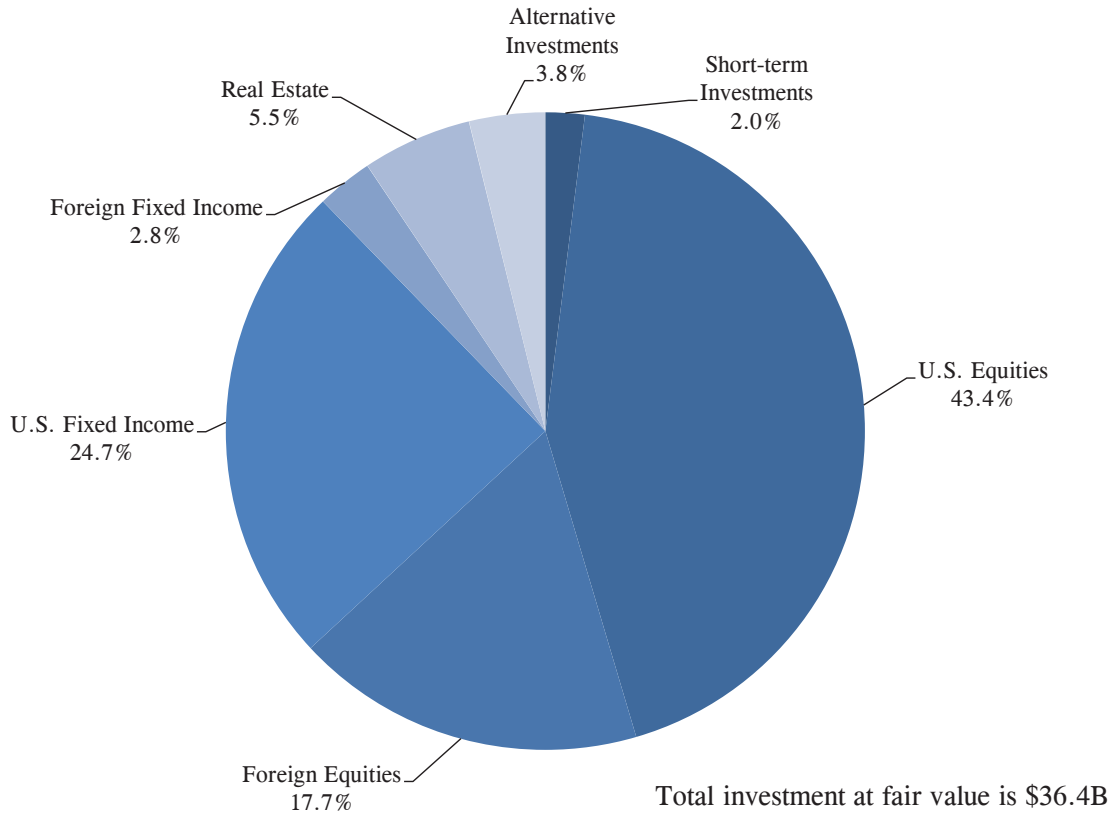
TABLE 13

ILLINOIS MUNICIPAL RETIREMENT FUND										
Changes in Net Assets										
(\$ in Millions)										
Fiscal Years	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Additions to Assets										
Employer	\$933.9	\$900.5	\$923.4	\$931.0	\$883.2	\$800.8	\$770.2	\$660.4	\$631.1	\$600.8
Employees	\$380.4	\$368.0	\$351.1	\$338.9	\$330.8	\$327.7	\$324.9	\$324.1	\$314.0	\$296.7
Total Investment Income ¹	\$2,664.9	\$200.7	\$2,001.4	\$5,583.1	\$3,393.7	-\$92.9	\$2,976.5	\$4,423.6	-\$6,096.5	\$1,799.4
Other	\$0.0	\$0.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total Asset Additions (A)	\$3,979.2	\$1,469.7	\$3,275.9	\$6,853.0	\$4,607.7	\$1,035.6	\$4,071.6	\$5,408.0	-\$5,151.4	\$2,696.9
Deductions from Assets										
Benefits	\$1,902.1	\$1,758.2	\$1,626.8	\$1,503.4	\$1,389.8	\$1,284.4	\$1,178.0	\$1,077.8	\$997.5	\$924.0
Refunds	\$37.7	\$36.7	\$39.2	\$36.9	\$34.1	\$32.9	\$32.2	\$27.4	\$31.9	\$36.2
Rebates	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Administrative Expenses	\$37.6	\$28.7	\$26.4	\$25.5	\$24.5	\$23.1	\$22.3	\$22.0	\$20.7	\$20.8
Other	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total Asset Deductions (B)	\$1,977.4	\$1,823.6	\$1,692.4	\$1,565.8	\$1,448.4	\$1,340.4	\$1,232.5	\$1,127.2	\$1,050.1	\$981.0
Change in Net Assets (A-B=C)	\$2,001.8	-\$354.0	\$1,583.5	\$5,287.2	\$3,159.3	-\$304.8	\$2,839.1	\$4,280.8	-\$6,201.4	\$1,715.9

¹ Total investment income consists of gains from investment activity and security lending activity after taking off related expenses.

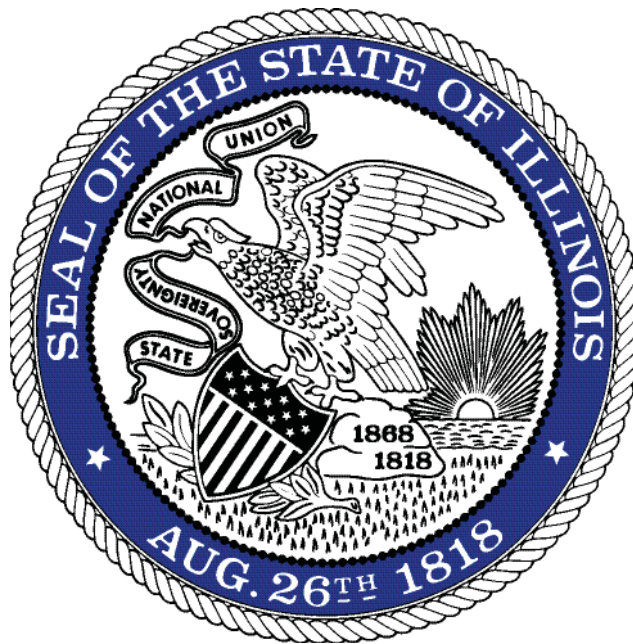
CHART 45

**ILLINOIS MUNICIPAL RETIREMENT FUND
ASSET ALLOCATION AS OF DECEMBER 2016**



VII. Laborers' Annuity and Benefit Fund of Chicago

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



Note: All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of December 31, 2016.

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

- Currently 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 P.A. 96-0899 in Section I for a summary of benefits for employees hired after January 1, 2011 (Tier 2 employees).

CHART 46

**LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO
Active Employees**

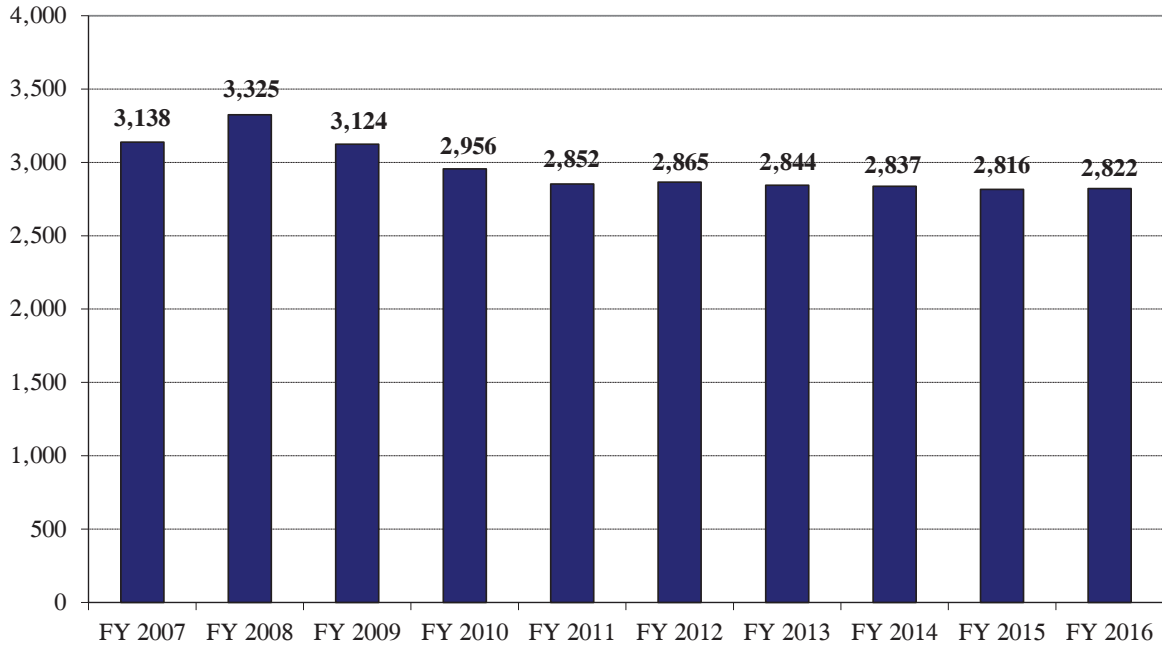


CHART 47

**LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO
Employee Annuitants**

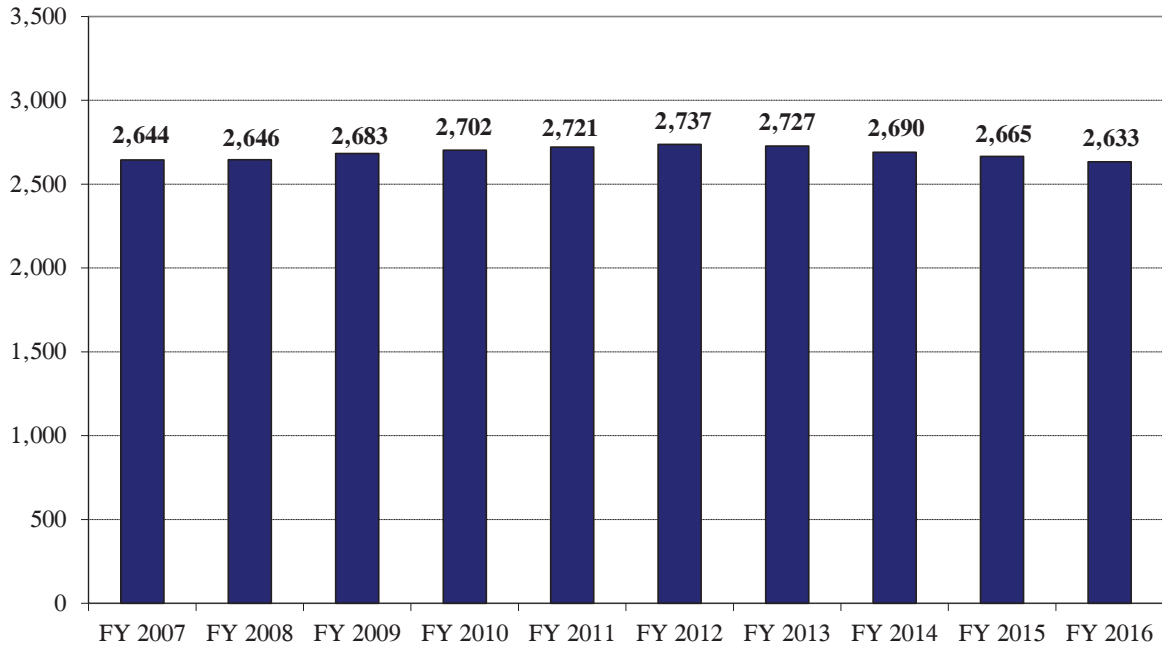


CHART 48

**LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO
Average Employee Salaries**

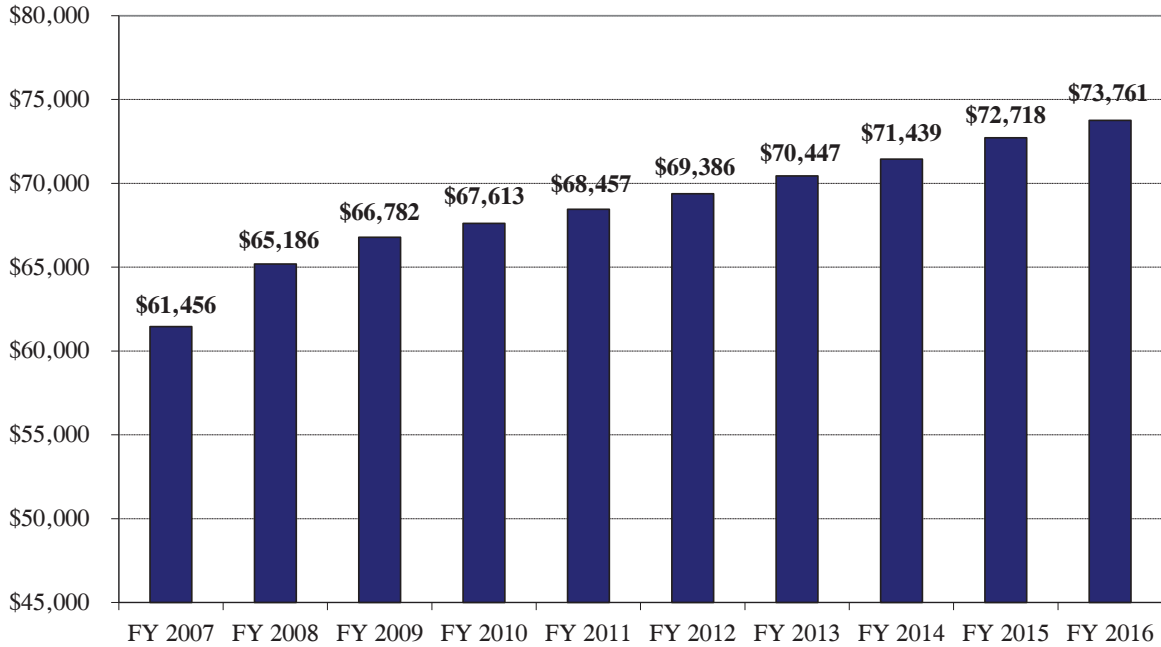


CHART 49

**LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO
Average Retirement Annuities**

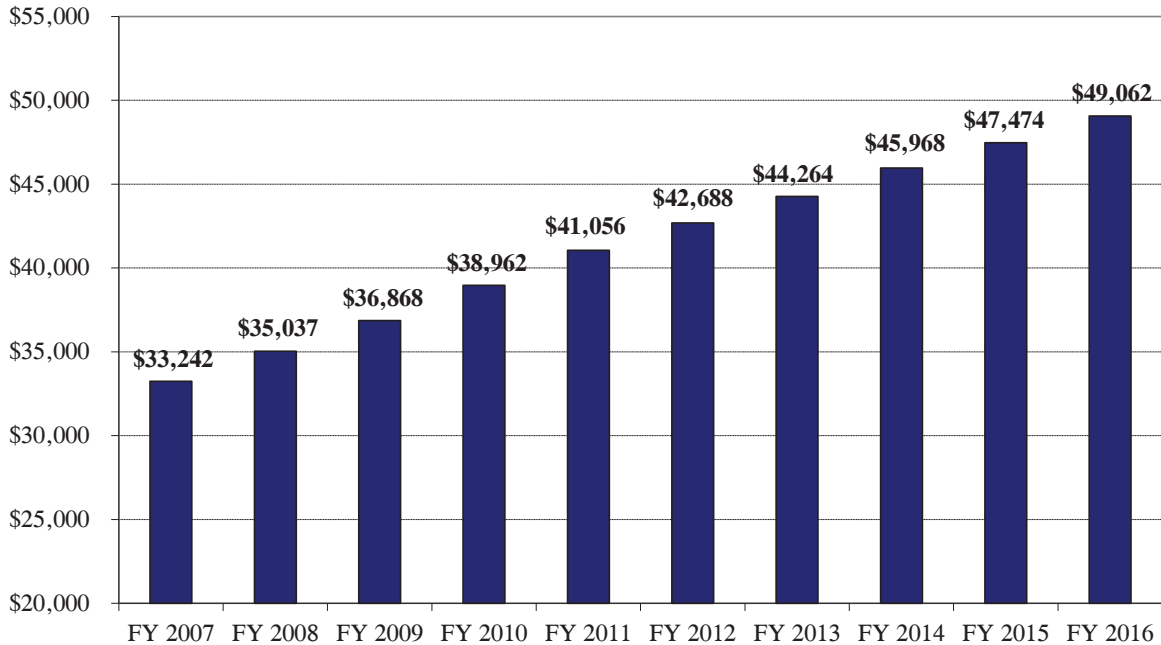


CHART 50

LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO
Funded Ratio
FY 2007 - FY 2016

All figures based upon the actuarial value of assets.

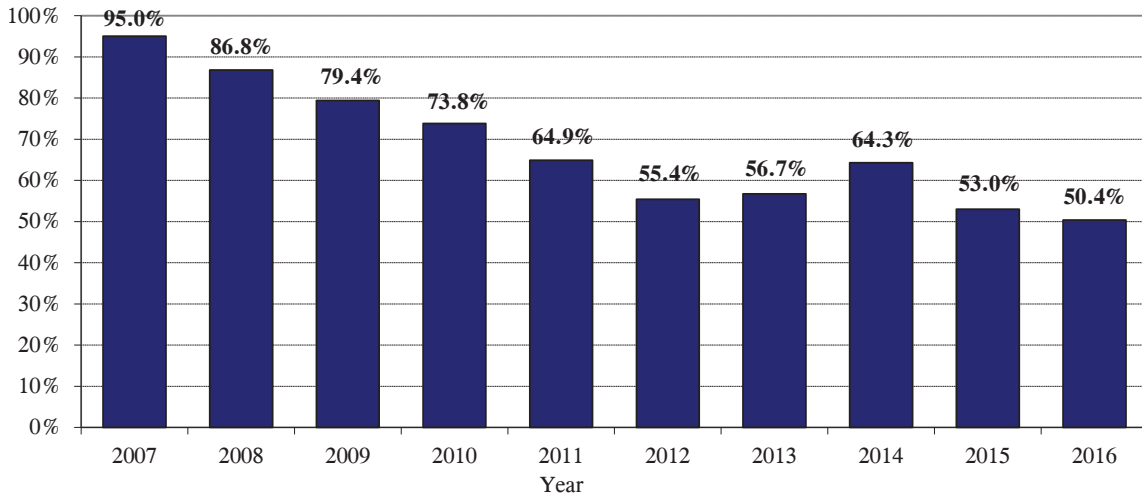
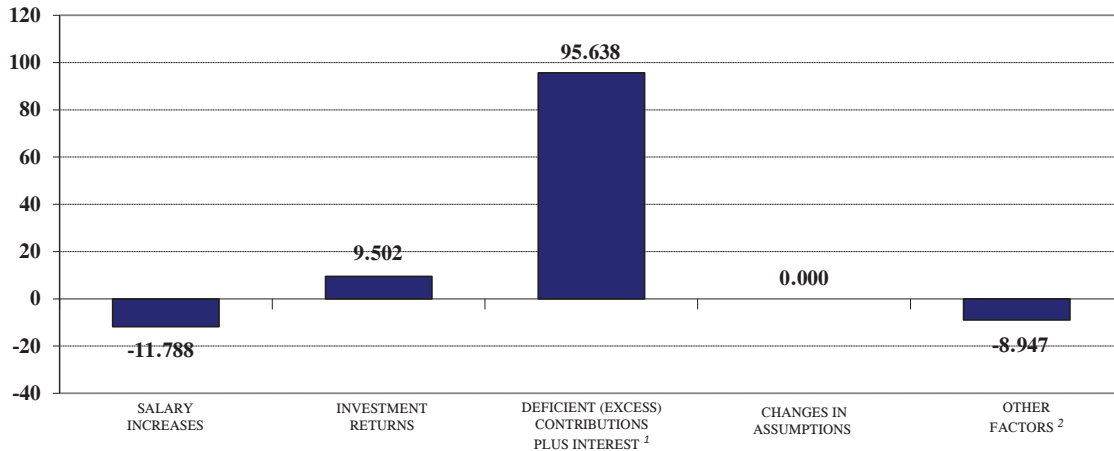


CHART 51

LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO
Change in Unfunded Liabilities
Year ended December 31, 2016
(\$ in Millions)

All figures based upon the actuarial value of assets.

TOTAL INCREASE EQUALS
\$84.40 MIL



¹ Unfunded liability increases due to employer contributions plus interest being less than normal cost plus interest.

² Includes an actuarial gain from retirement, termination, and mortality.

CHART 52

LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO
Investment Income, 2007 - 2016
 Actuarially Assumed Rate of Return: 7.50%
 (\$ in Millions)

All figures based upon the market value of assets.

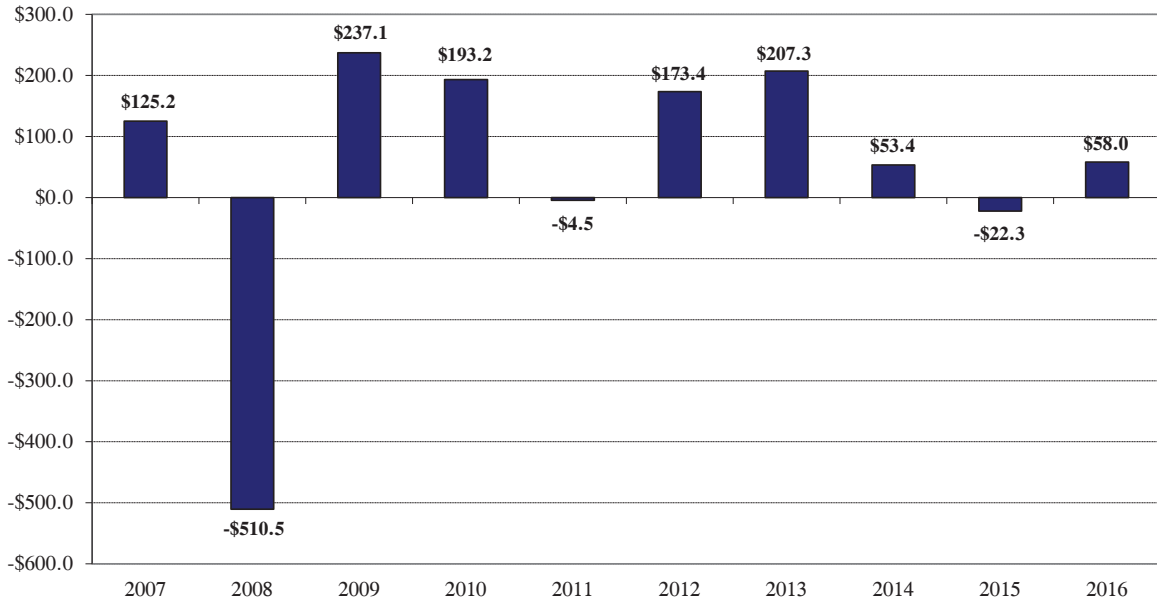


CHART 53

LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO
Rate of Return, 2007 - 2016
 Actuarially Assumed Rate of Return: 7.50%
 All figures based upon the market value of assets.

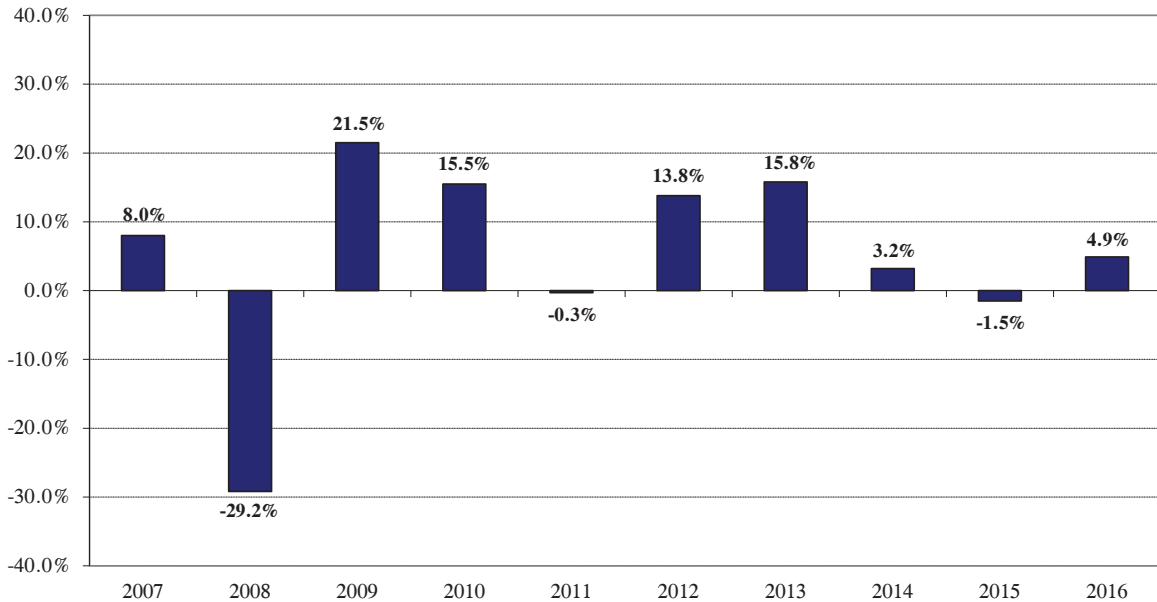


TABLE 14

LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO					
System Experience, 2004 - 2016					
(\$ in Millions)					
Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2016	208.2	2,509.3	1,263.7	1,245.6	50.4%
2015	204.8	2,469.9	1,308.7	1,161.2	53.0%
2014	202.7	2,111.7	1,357.5	754.3	64.3%
2013	200.4	2,390.6	1,354.3	1,036.3	56.7%
2012	198.8	2,374.8	1,315.9	1,058.9	55.4%
2011	195.2	2,191.2	1,422.4	768.8	64.9%
2010	199.9	2,071.4	1,529.4	542.0	73.8%
2009	208.6	2,017.5	1,601.4	416.1	79.4%
2008	216.7	1,957.4	1,698.4	259.0	86.8%
2007	192.8	1,849.7	1,757.7	92.0	95.0%
2006	193.2	1,809.3	1,664.1	145.2	92.0%
2005	182.8	1,742.3	1,635.6	106.7	93.9%
2004	171.5	1,674.6	1,650.0	24.6	98.5%

TABLE 15

LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO										
Changes in Net Assets										
(\$ in Millions)										
Year	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Additions to Assets										
Employer	\$14.4	\$14.6	\$14.5	\$14.1	\$14.4	\$15.3	\$18.0	\$17.2	\$17.6	\$15.5
Employees	\$17.2	\$16.8	\$16.4	\$16.4	\$16.6	\$16.1	\$16.3	\$17.5	\$19.4	\$18.4
Net Investment Income	\$57.7	-\$22.8	\$52.9	\$206.7	\$172.6	-\$5.1	\$193.2	\$237.1	-\$510.5	\$125.2
Other	\$0.3	\$0.4	\$0.5	\$0.6	\$0.8	\$0.6	\$0.0	\$0.0	\$0.0	\$0.0
Total Asset Additions (A)	\$89.7	\$9.1	\$84.3	\$237.8	\$204.4	\$26.9	\$227.5	\$271.8	-\$473.5	\$159.1
Deductions from Assets										
Benefits	\$153.8	\$152.2	\$147.9	\$144.3	\$139.7	\$133.5	\$127.0	\$121.0	\$113.7	\$108.8
Refunds	\$2.8	\$2.5	\$2.1	\$2.9	\$2.6	\$3.0	\$2.3	\$2.8	\$3.5	\$3.7
Rebates	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Administrative Expenses	\$4.1	\$3.8	\$3.8	\$4.1	\$4.7	\$4.0	\$3.9	\$3.7	\$3.6	\$3.4
Other	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total Asset Deductions (B)	\$160.6	\$158.5	\$153.9	\$151.3	\$147.0	\$140.5	\$133.2	\$127.5	\$120.8	\$115.9
Change in Net Assets (A-B=C)	-\$70.9	-\$149.4	-\$69.6	\$86.5	\$57.4	-\$113.6	\$94.3	\$144.3	-\$594.3	\$43.2

Table 16 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, 2016 actuarial valuation. As shown in the table below, under the current funding policy the Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago is projected to run out of assets by 2027 if all future assumptions are met, and no additional contributions are made.

TABLE 16

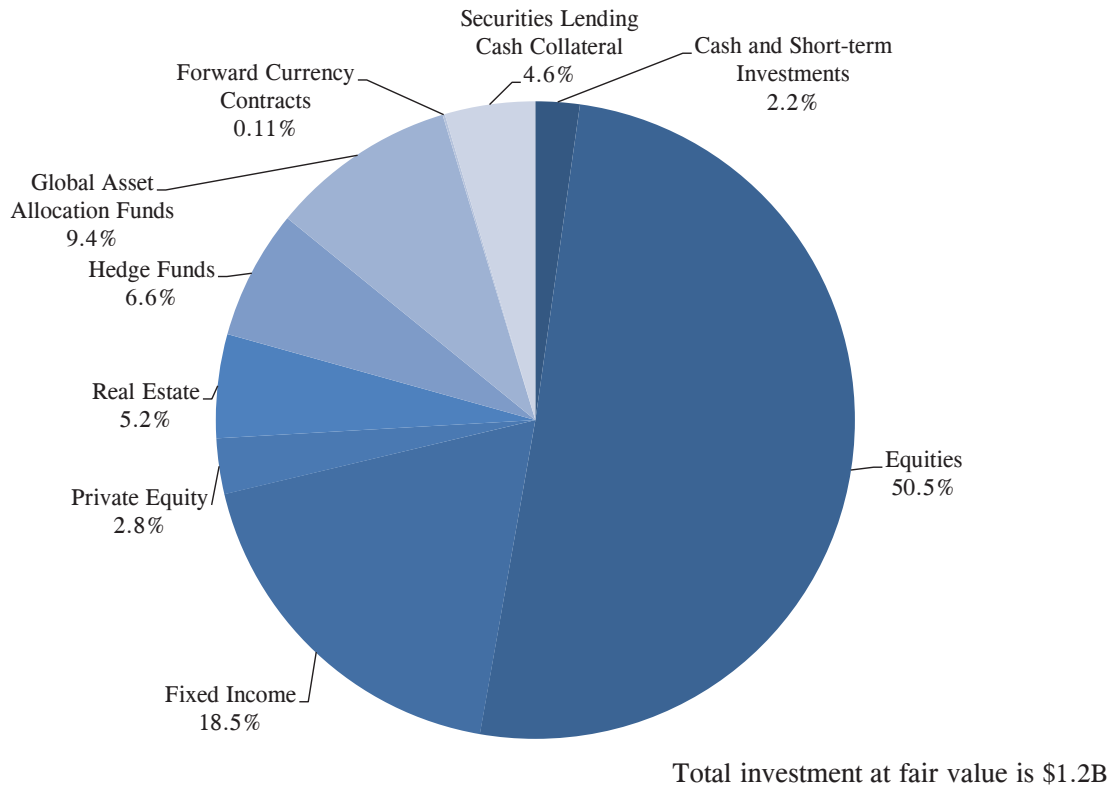
Laborers' Annuity and Benefit Fund of Chicago Actuarial Valuation Projection Results as of December 31, 2016 (\$ in Millions)								
Fiscal Year	Capped Payroll	Total Employer Contribution	Employer Contribution As % of Payroll	Employee Contribution	Total Actuarial Liability	Actuarial Value of Assets	Unfunded Actuarial Liability	Funded Ratio
2016	208.2	14.4	6.9%	15.6	2,509.3	1,263.7	1,245.6	50.4%
2017	211.7	14.4	6.8%	16.7	2,568.4	1,195.2	1,373.3	46.5%
2018	216.7	14.6	6.8%	16.9	2,623.4	1,093.3	1,530.2	41.7%
2019	222.4	15.0	6.7%	17.3	2,675.1	990.2	1,684.9	37.0%
2020	228.4	16.0	7.0%	17.8	2,722.9	899.7	1,823.2	33.0%
2021	235.2	16.3	6.9%	18.3	2,767.0	802.2	1,964.8	29.0%
2022	242.7	16.6	6.9%	18.8	2,807.6	691.2	2,116.4	24.6%
2023	250.3	17.1	6.8%	19.4	2,844.2	565.6	2,278.7	19.9%
2024	258.4	17.5	6.8%	20.0	2,876.6	424.3	2,452.3	14.7%
2025	267.0	18.1	6.8%	20.7	2,904.3	266.1	2,638.2	9.2%
2026	275.7	18.6	6.8%	21.4	2,926.8	89.7	2,837.2	3.1%
2027	284.7	120.6	42.4%	22.1	2,945.1	-	-	-
2028	293.9	219.6	74.7%	22.8	2,958.2	-	-	-
2029	302.9	225.3	74.4%	23.5	2,966.1	-	-	-
2030	311.9	230.7	74.0%	24.2	2,968.8	-	-	-
2031	321.0	235.1	73.3%	25.0	2,966.8	-	-	-
2032	330.1	238.9	72.4%	25.7	2,960.7	-	-	-
2033	339.4	241.9	71.3%	26.4	2,950.9	-	-	-
2034	348.9	243.7	69.9%	27.2	2,938.3	-	-	-
2035	358.0	244.8	68.4%	27.9	2,923.7	-	-	-
2036	366.6	245.1	66.9%	28.6	2,907.6	-	-	-
2037	375.0	244.7	65.2%	29.3	2,890.7	-	-	-
2038	383.4	243.8	63.6%	30.0	2,873.5	-	-	-
2039	391.9	242.5	61.9%	30.7	2,856.5	-	-	-
2040	400.5	240.3	60.0%	31.3	2,840.6	-	-	-
2041	409.3	237.5	58.0%	32.0	2,826.6	-	-	-
2042	418.1	234.2	56.0%	32.7	2,815.1	-	-	-
2043	427.1	230.5	54.0%	33.4	2,806.9	-	-	-
2044	436.3	226.5	51.9%	34.2	2,802.4	-	-	-
2045	445.5	222.5	49.9%	34.9	2,802.0	-	-	-
2046	455.0	218.4	48.0%	35.6	2,806.0	-	-	-
2047	464.6	214.5	46.2%	36.4	2,814.8	-	-	-
2048	474.5	210.7	44.4%	37.2	2,828.4	-	-	-
2049	484.5	207.1	42.7%	38.0	2,847.2	-	-	-
2050	494.8	204.0	41.2%	38.8	2,870.9	-	-	-
2051	505.3	201.8	39.9%	39.6	2,899.1	-	-	-
2052	516.0	200.4	38.8%	40.4	2,931.3	-	-	-
2053	526.8	199.5	37.9%	41.3	2,967.4	-	-	-
2054	537.8	199.1	37.0%	42.1	3,007.0	-	-	-
2055	548.9	199.1	36.3%	43.0	3,050.0	-	-	-
2056	559.1	199.4	35.7%	43.9	3,096.5	-	-	-
2057	568.8	200.2	35.2%	44.7	3,146.0	-	-	-
2058	578.4	202.2	35.0%	45.5	3,197.6	-	-	-
2059	587.9	204.6	34.8%	46.3	3,251.1	-	-	-
2060	597.4	207.5	34.7%	47.0	3,306.2	-	-	-
2061	607.1	210.9	34.7%	47.8	3,362.5	-	-	-
2062	616.7	214.5	34.8%	48.6	3,419.8	-	-	-
2063	626.5	218.4	34.9%	49.3	3,477.9	-	-	-
2064	636.2	222.6	35.0%	50.1	3,536.7	-	-	-
2065	646.1	227.0	35.1%	50.9	3,595.9	-	-	-

TABLE 17

Laborers' Annuity and Benefit Fund of Chicago Projected Normal Cost as of December 31, 2016 (\$ in Millions)						
Fiscal Year	Employer's Normal Cost	Employer's Normal Cost as a % of Payroll	Employee Contributions	Employee Contributions as a % of Payroll	Total Normal Cost	Total Normal Cost as a % of Payroll
2016	22.9	11.0%	15.6	7.5%	38.5	18.5%
2017	22.3	10.5%	16.7	7.9%	38.9	18.4%
2018	21.8	10.1%	16.9	7.8%	38.8	17.9%
2019	21.6	9.7%	17.3	7.8%	38.9	17.5%
2020	21.3	9.3%	17.8	7.8%	39.1	17.1%
2021	21.0	8.9%	18.3	7.8%	39.3	16.7%
2022	20.8	8.6%	18.8	7.8%	39.6	16.3%
2023	20.6	8.2%	19.4	7.8%	40.0	16.0%
2024	20.4	7.9%	20.0	7.7%	40.4	15.6%
2025	20.1	7.5%	20.7	7.7%	40.8	15.3%
2026	19.9	7.2%	21.4	7.7%	41.3	15.0%
2027	19.7	6.9%	22.1	7.7%	41.8	14.7%
2028	19.5	6.6%	22.8	7.7%	42.3	14.4%
2029	19.3	6.4%	23.5	7.8%	42.8	14.1%
2030	19.1	6.1%	24.2	7.8%	43.3	13.9%
2031	18.9	5.9%	25.0	7.8%	43.9	13.7%
2032	18.8	5.7%	25.7	7.8%	44.5	13.5%
2033	18.7	5.5%	26.4	7.8%	45.1	13.3%
2034	18.7	5.4%	27.2	7.8%	45.8	13.1%
2035	18.7	5.2%	27.9	7.8%	46.6	13.0%
2036	18.7	5.1%	28.6	7.8%	47.3	12.9%
2037	18.7	5.0%	29.3	7.8%	48.1	12.8%
2038	18.8	4.9%	30.0	7.8%	48.8	12.7%
2039	18.9	4.8%	30.7	7.8%	49.6	12.7%
2040	19.0	4.8%	31.3	7.8%	50.4	12.6%
2041	19.2	4.7%	32.0	7.8%	51.3	12.5%
2042	19.4	4.6%	32.7	7.8%	52.2	12.5%
2043	19.7	4.6%	33.4	7.8%	53.1	12.4%
2044	19.9	4.6%	34.2	7.8%	54.1	12.4%
2045	20.2	4.5%	34.9	7.8%	55.1	12.4%
2046	20.5	4.5%	35.6	7.8%	56.1	12.3%
2047	20.8	4.5%	36.4	7.8%	57.2	12.3%
2048	21.2	4.5%	37.2	7.8%	58.3	12.3%
2049	21.5	4.4%	38.0	7.8%	59.5	12.3%
2050	21.9	4.4%	38.8	7.8%	60.7	12.3%
2051	22.3	4.4%	39.6	7.8%	61.9	12.3%
2052	22.8	4.4%	40.4	7.8%	63.2	12.2%
2053	23.2	4.4%	41.3	7.8%	64.5	12.2%
2054	23.7	4.4%	42.1	7.8%	65.8	12.2%
2055	24.2	4.4%	43.0	7.8%	67.2	12.2%
2056	24.6	4.4%	43.9	7.9%	68.5	12.3%
2057	25.1	4.4%	44.7	7.9%	69.8	12.3%
2058	25.6	4.4%	45.5	7.9%	71.1	12.3%
2059	26.1	4.4%	46.3	7.9%	72.4	12.3%
2060	26.6	4.5%	47.0	7.9%	73.6	12.3%
2061	27.2	4.5%	47.8	7.9%	75.0	12.3%
2062	27.7	4.5%	48.6	7.9%	76.3	12.4%
2063	28.3	4.5%	49.3	7.9%	77.6	12.4%
2064	28.9	4.5%	50.1	7.9%	79.0	12.4%
2065	29.5	4.6%	50.9	7.9%	80.4	12.4%

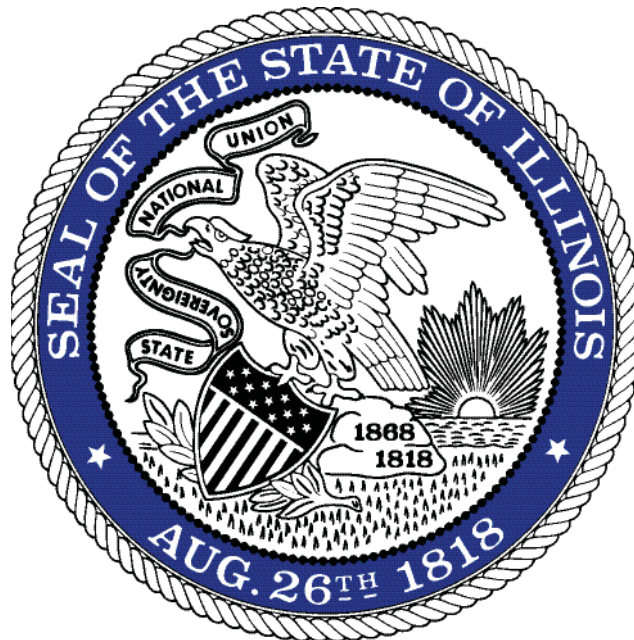
CHART 54

**LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO
ASSET ALLOCATION AS OF DECEMBER 2016**



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
- Asset Allocation



Note: All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of December 31, 2016.

Metropolitan Water Reclamation District Retirement Fund - Tier 1 Plan Summary

Retirement Age

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

Retirement Formula

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

Maximum Annuity

- 80% of final average salary

Salary Used to Calculate Pension

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

Annual COLA

- 3% compounded

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

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

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

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

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

CHART 55

**METROPOLITAN WATER PENSION FUND
Active Employees**

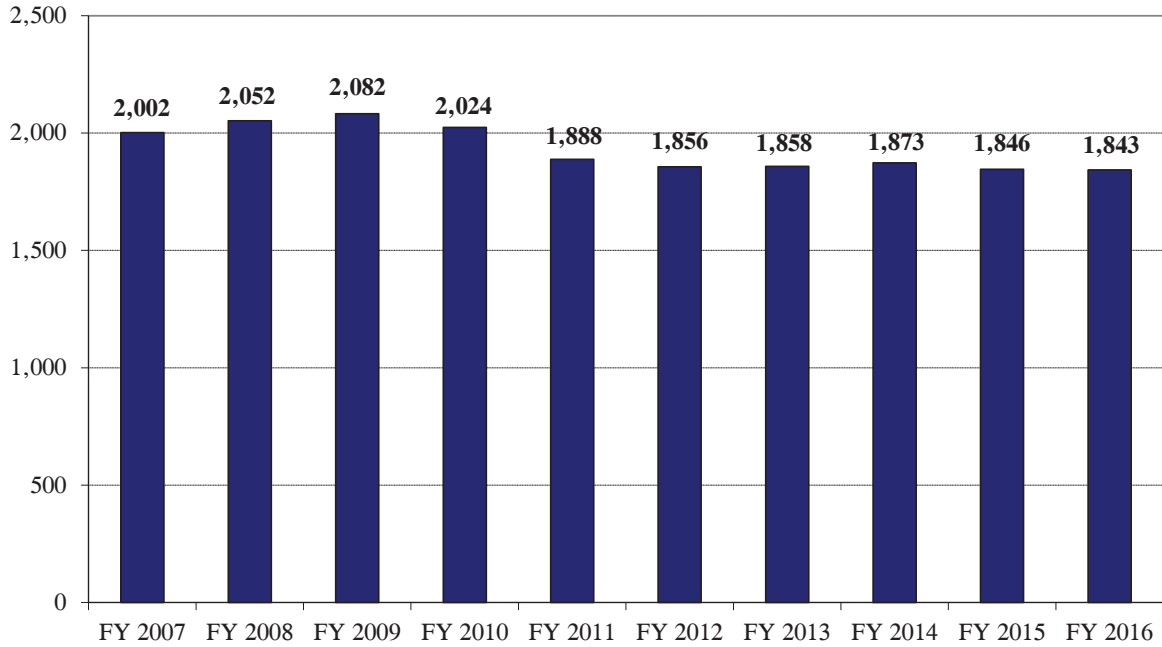


CHART 56

**METROPOLITAN WATER PENSION FUND
Employee Annuitants**

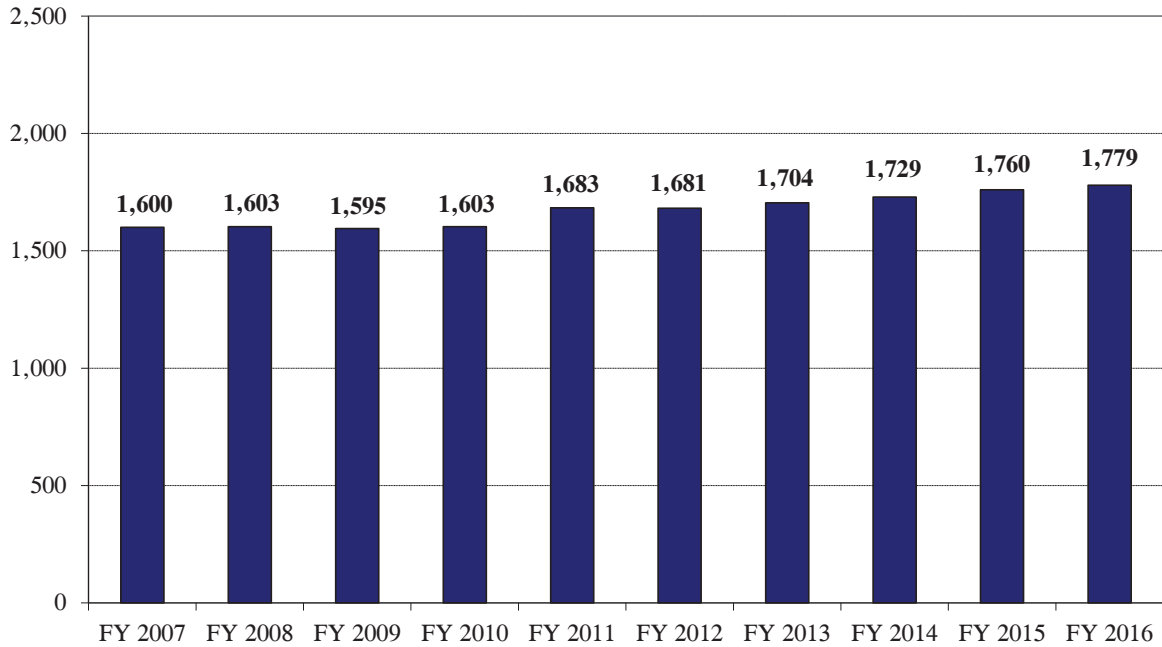


CHART 57

**METROPOLITAN WATER PENSION FUND
Average Employee Salaries**

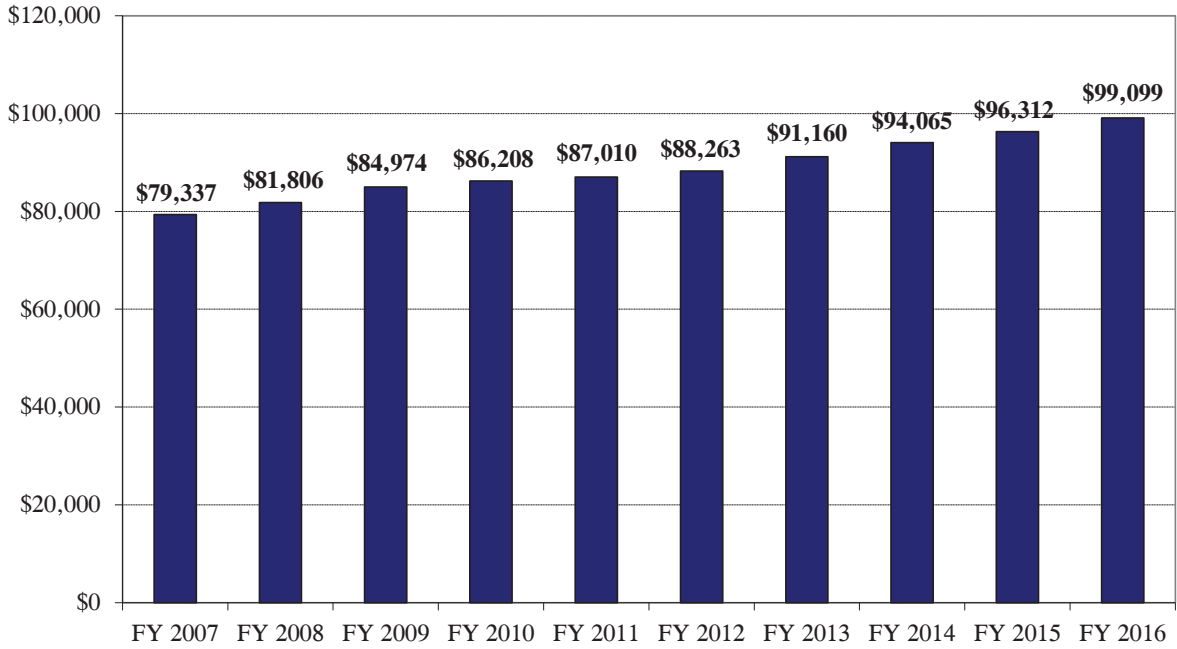


CHART 58

**METROPOLITAN WATER PENSION FUND
Average Retirement Annuity**

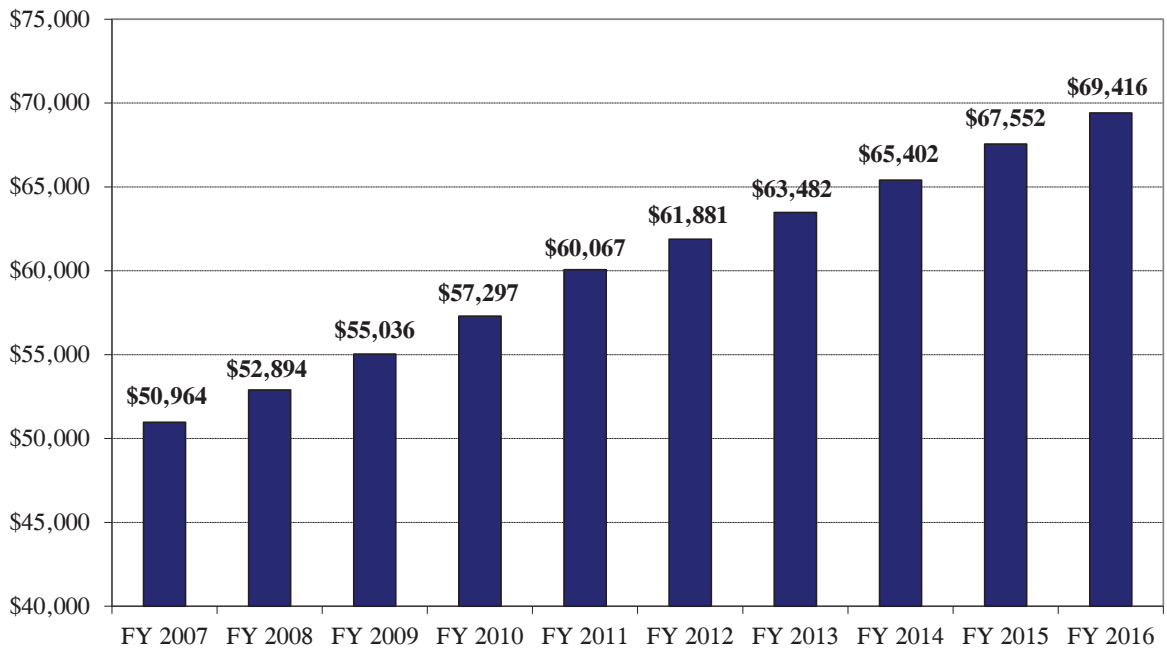


CHART 59

METROPOLITAN WATER PENSION FUND
Funded Ratio
FY 2007 - FY 2016

All figures based upon the actuarial value of assets.

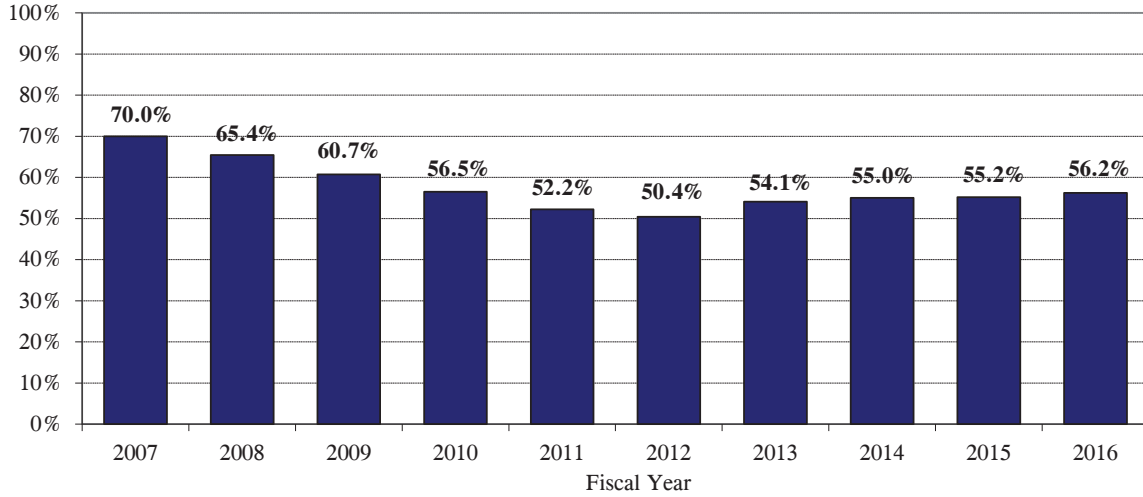
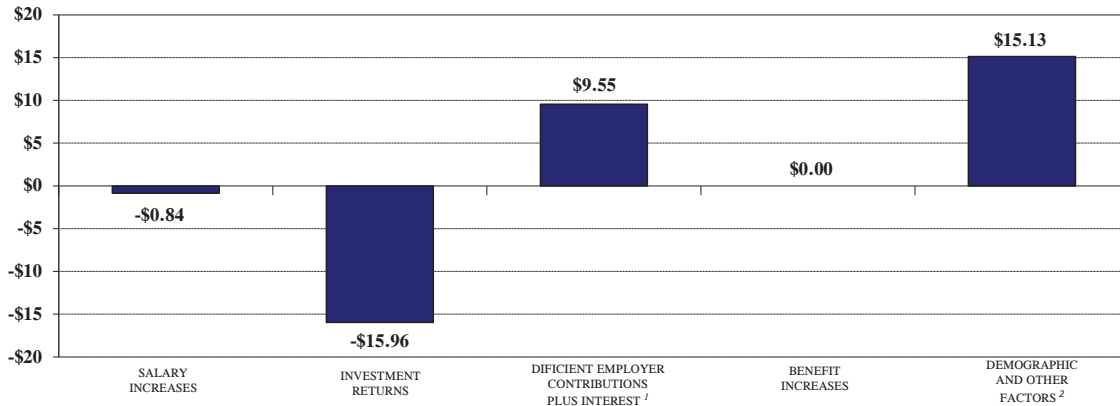


CHART 60

METROPOLITAN WATER PENSION FUND
Change in Unfunded Liabilities
Year ended December 31, 2016
(\$ in Millions)

All figures based upon the actuarial value of assets.

TOTAL INCREASE EQUALS
\$7.88 MIL



¹ Unfunded liabilities increase due to employer contributions less than normal cost plus interest.

² Includes an actuarial loss from decrement experience. Employee turnover, mortality, and retirement rates are examples of decrement assumptions.

CHART 61

METROPOLITAN WATER PENSION FUND
Investment Income 2007 - 2016
 Actuarially Assumed Rate of Return: 7.5%
 (\$ in Millions)

All figures based upon the market value of assets.

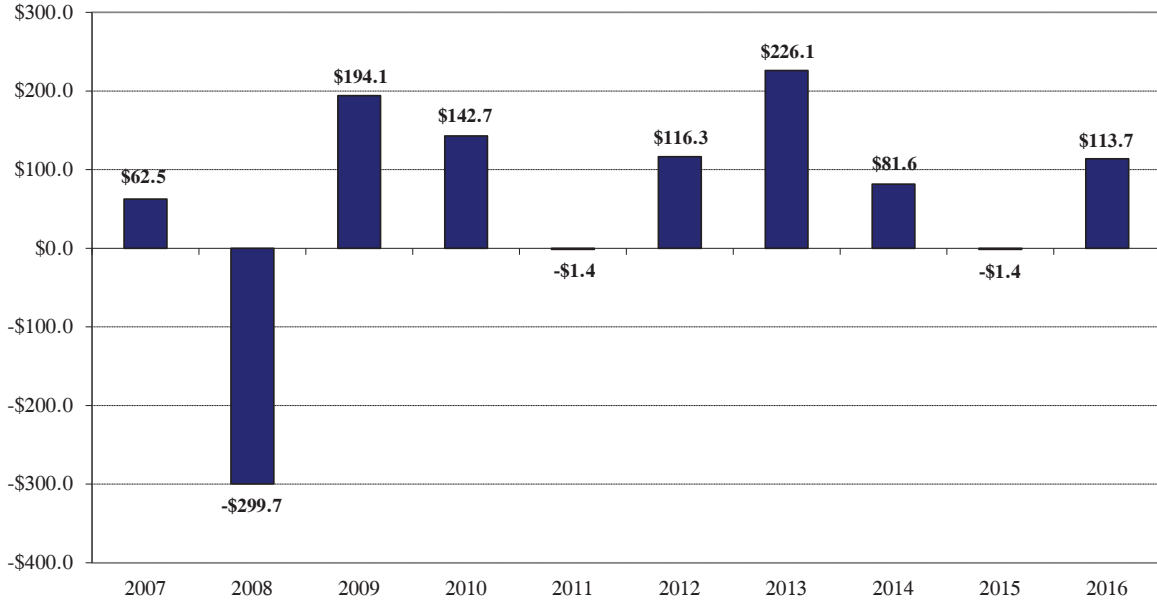


CHART 62

METROPOLITAN WATER PENSION FUND
Rate of Return FY 2007 - FY 2016
 Actuarially Assumed Rate of Return: 7.5%

All figures based upon the market value of assets.

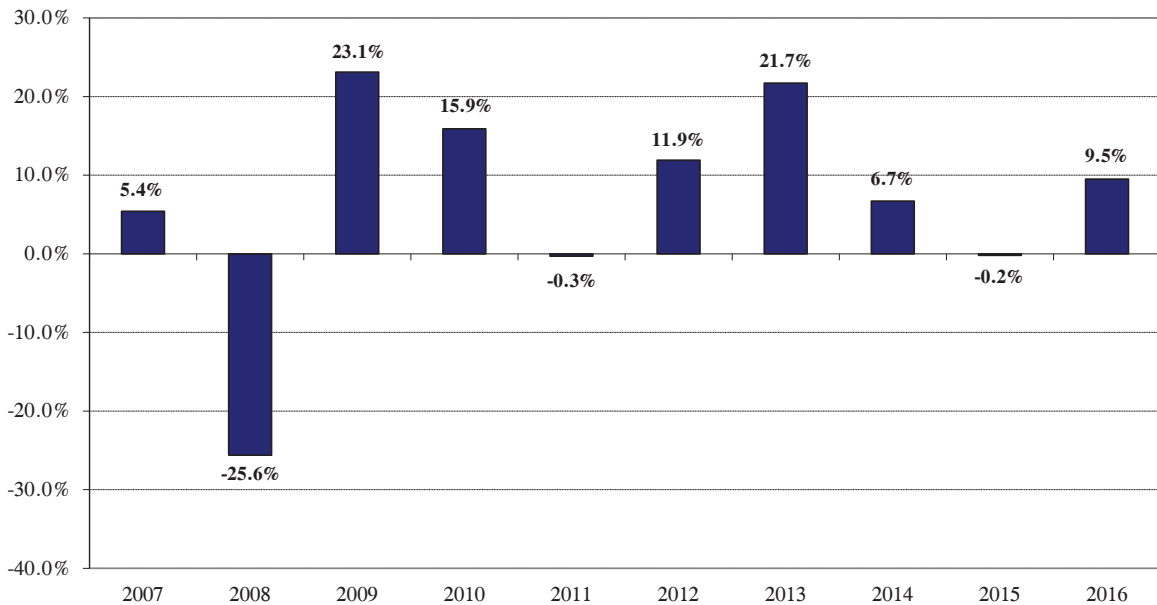


TABLE 18

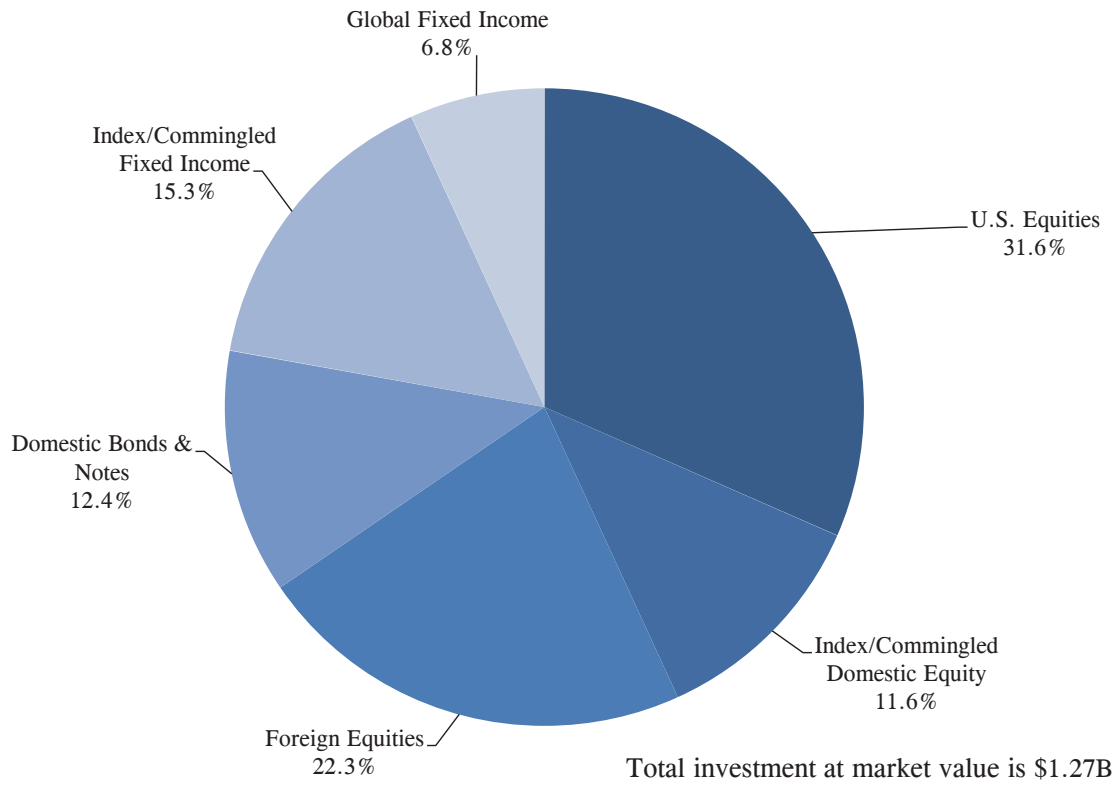
METROPOLITAN WATER PENSION FUND					
System Experience, 2004 - 2016					
(\$ in Millions)					
Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2016	182.6	2,443.3	1,372.4	1,070.9	56.2%
2015	177.8	2,371.0	1,308.0	1,063.0	55.2%
2014	176.2	2,296.4	1,263.3	1,033.1	55.0%
2013	169.4	2,194.9	1,188.5	1,006.4	54.1%
2012	163.8	2,136.5	1,076.7	1,059.8	50.4%
2011	164.3	2,101.3	1,097.4	1,003.9	52.2%
2010	174.5	2,036.7	1,151.6	885.1	56.5%
2009	176.9	1,939.2	1,177.8	761.4	60.7%
2008	167.9	1,852.3	1,211.8	640.5	65.4%
2007	158.8	1,795.2	1,256.9	538.3	70.0%
2006	152.8	1,724.7	1,209.6	515.1	70.1%
2005	149.2	1,654.2	1,171.8	482.4	70.8%
2004	146.4	1,578.4	1,161.8	416.6	73.6%

TABLE 19

METROPOLITAN WATER PENSION FUND										
Changes in Net Assets										
(\$ in Millions)										
Years	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Additions to Assets										
Employer	\$80.3	\$71.0	\$73.9	\$92.9	\$65.1	\$37.4	\$29.9	\$32.1	\$33.4	\$28.0
Employees	\$20.8	\$21.4	\$19.0	\$16.9	\$14.7	\$15.0	\$15.9	\$15.7	\$14.8	\$15.6
Net Investment Income	\$113.6	-\$1.4	\$81.6	\$226.1	\$116.3	-\$1.4	\$142.7	\$194.1	-\$299.7	\$62.5
Other	\$0.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.2	\$0.0	\$0.6	\$0.2
Total Asset Additions (A)	\$214.8	\$91.0	\$174.5	\$335.9	\$196.1	\$51.0	\$188.7	\$241.9	-\$251.0	\$106.3
Deductions from Assets										
Benefits	\$145.3	\$139.2	\$132.9	\$127.2	\$122.7	\$118.1	\$108.2	\$103.4	\$100.1	\$94.8
Refunds	\$2.0	\$1.3	\$1.0	\$1.1	\$1.2	\$2.7	\$1.4	\$1.2	\$1.0	\$1.2
Rebates	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Administrative Expenses	\$1.5	\$1.7	\$1.4	\$1.4	\$1.3	\$1.4	\$1.3	\$1.3	\$1.3	\$1.5
Other	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total Asset Deductions (B)	\$148.8	\$142.2	\$135.3	\$129.7	\$125.2	\$122.2	\$110.9	\$105.9	\$102.4	\$97.5
Change in Net Assets (A-B=C)	\$65.9	-\$51.1	\$39.2	\$206.2	\$70.9	-\$71.2	\$77.8	\$136.0	-\$353.3	\$8.8

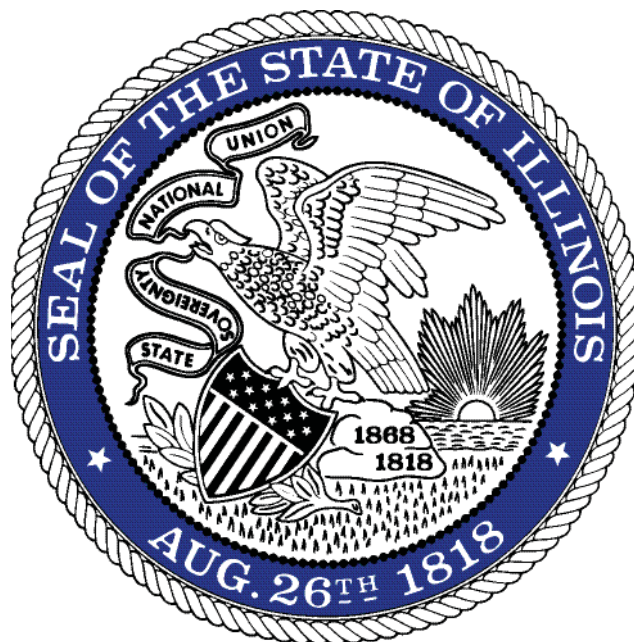
CHART 63

**METROPOLITAN WATER RECLAMATION DISTRICT RETIREMENT FUND
ASSET ALLOCATION AS OF DECEMBER 2016**



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**
- **Systems Projections**
- **Asset Allocation**



Note: All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of December 31, 2016.

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 P.A. 96-0889 in Section I for a summary of benefits for employees hired after January 1, 2011 (Tier 2 employees).

CHART 64

MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO
Active Employees

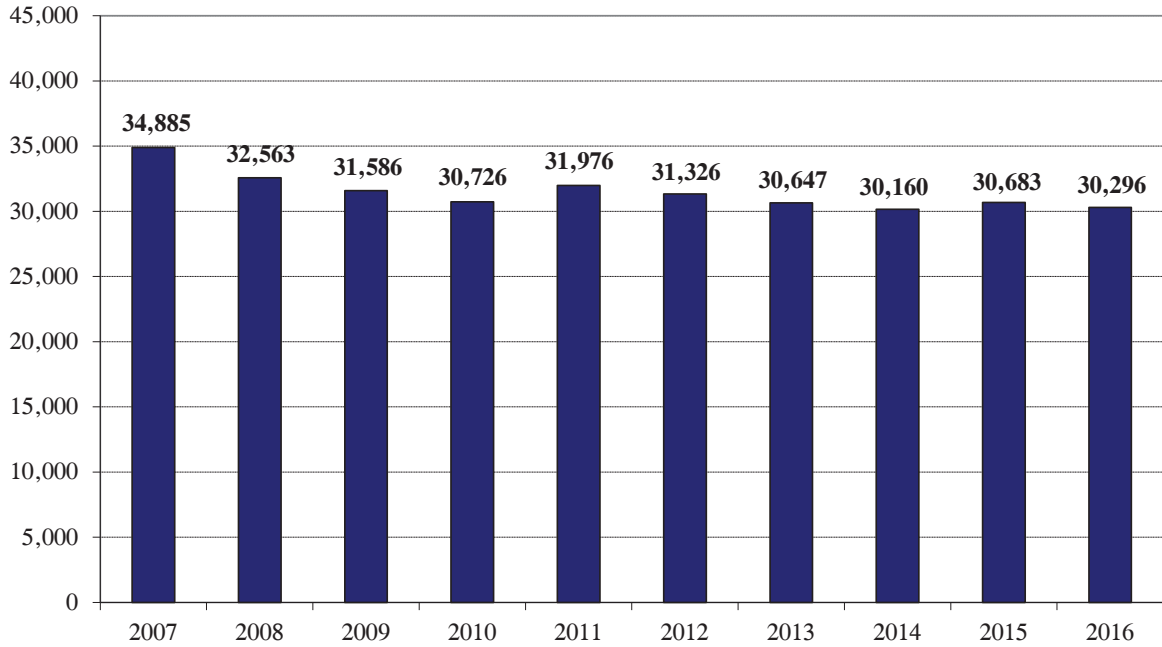


CHART 65

MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO
Employee Annuitants

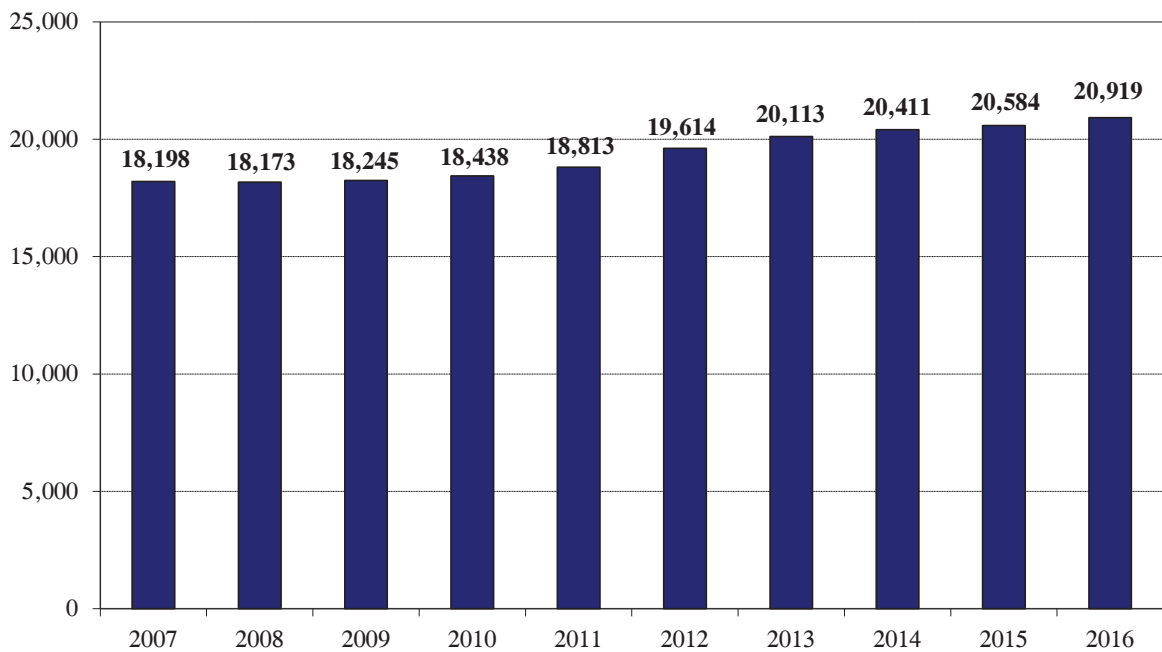


CHART 66

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

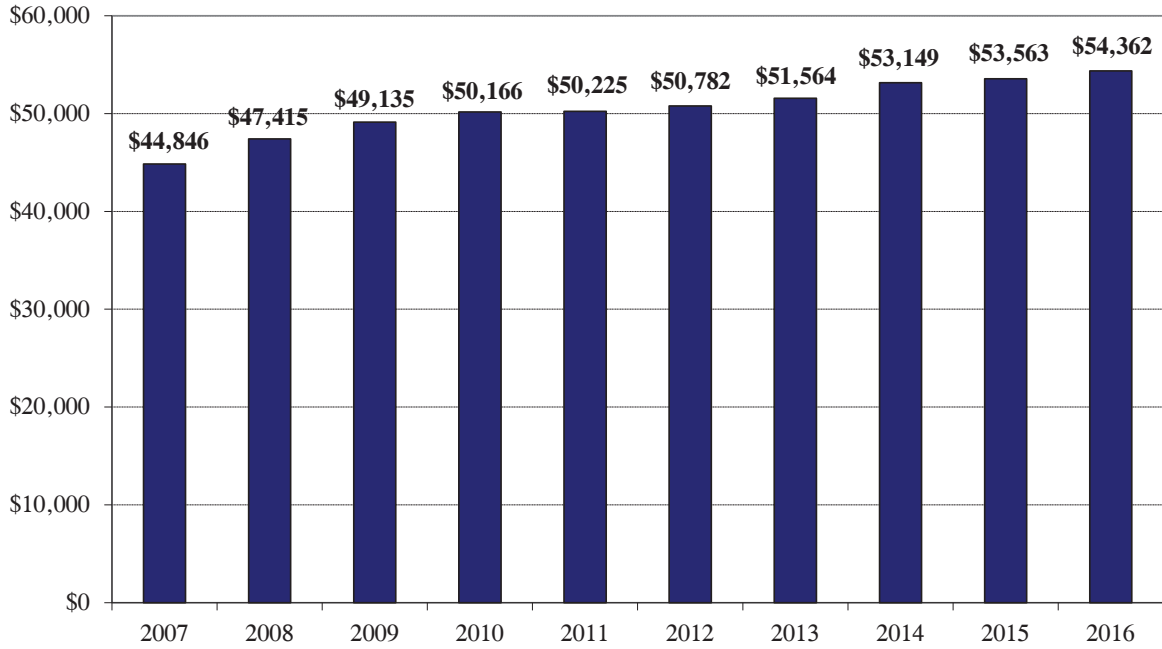


CHART 67

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

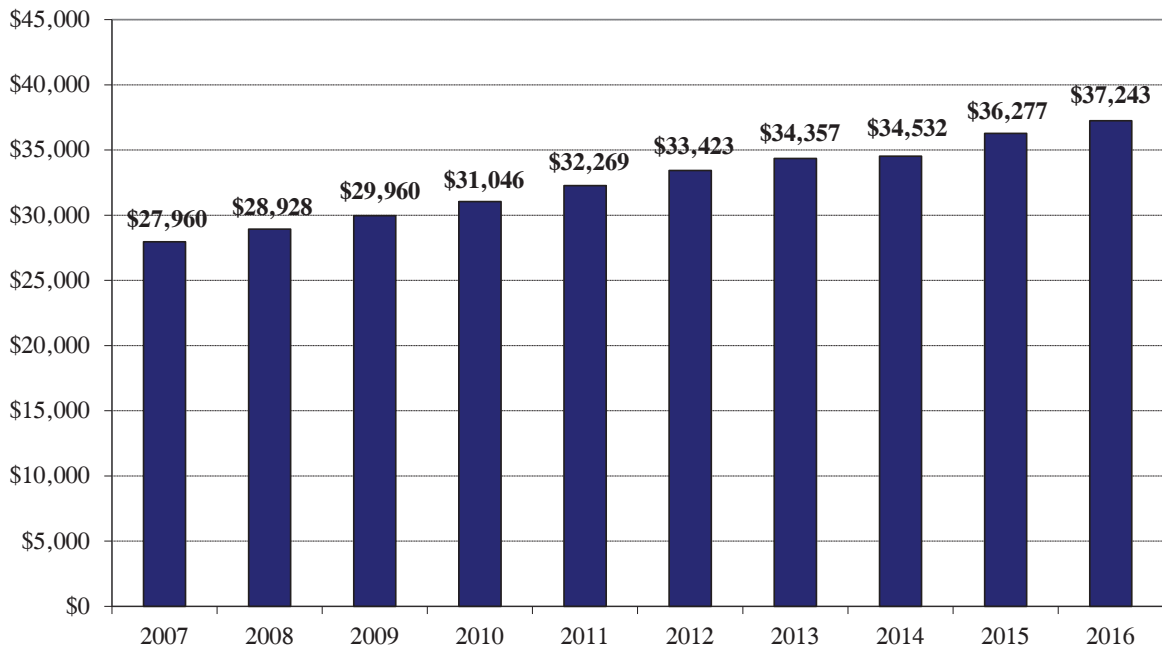
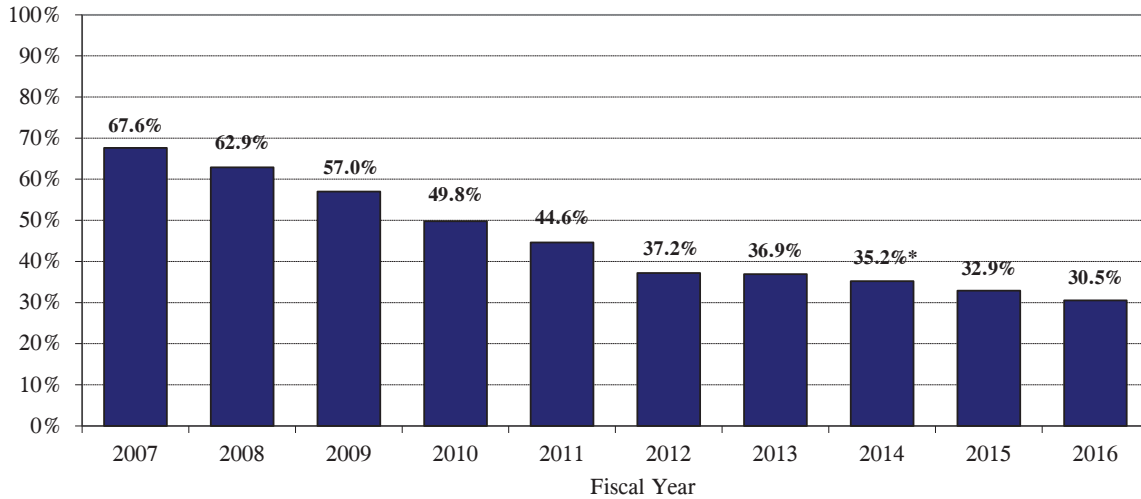


CHART 68

MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO Funded Ratio FY 2007 - FY 2016

All figures based upon the actuarial value of assets.



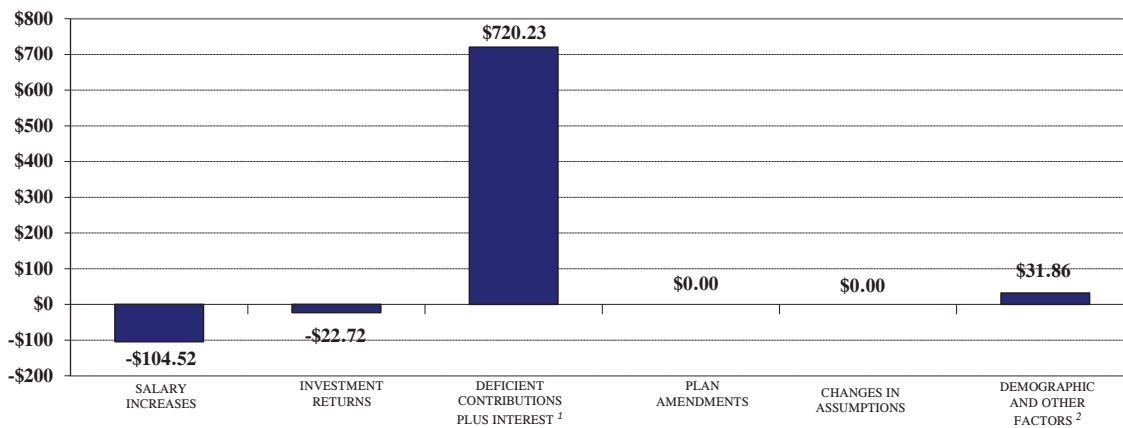
* The funded ratio was 40.9% on the 2014 actuarial valuation report which reflected the benefit provision changes by P.A. 98-0641. However, P.A. 98-0641 was ruled unconstitutional and the 2015 actuarial valuation report does not reflect the provisions of P.A. 98-0641. Prior to reflecting the provisions of P.A. 98-0641, the funded ratio as of December 31, 2014 is 35.2%.

CHART 69

MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO Change in Unfunded Liabilities Year ended December 31, 2016 (\$ in Millions)

All figures based upon the actuarial value of assets.

TOTAL INCREASE EQUALS
\$624.85 MIL.



¹ Unfunded liability increases due to contributions being less than normal cost plus interest cost.

² Includes actuarial gains from turnover and miscellaneous and actuarial losses from retirement, new entrants, and deaths among retirees and beneficiaries.

CHART 70

MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

Investment Income, 2007 - 2016

Actuarially Assumed Rate of Return: 7.50%

(\$ in Millions)

All figures based upon the market value of assets.

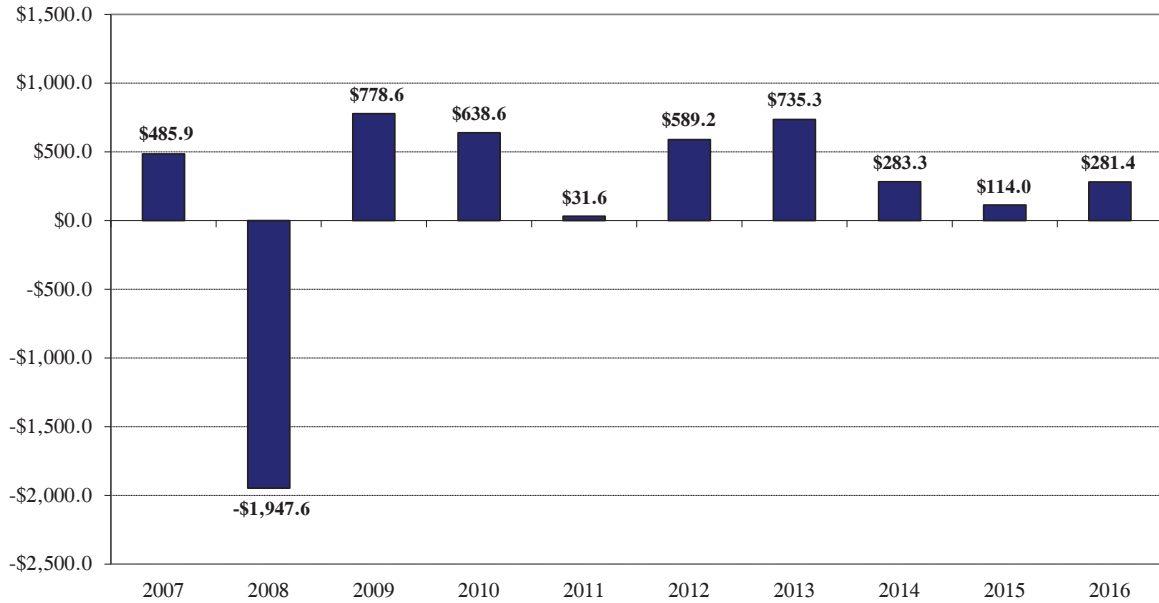


CHART 71

MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

Rate of Return, 2007 - 2016

Actuarially Assumed Rate of Return: 7.50%

All figures based upon the market value of assets.

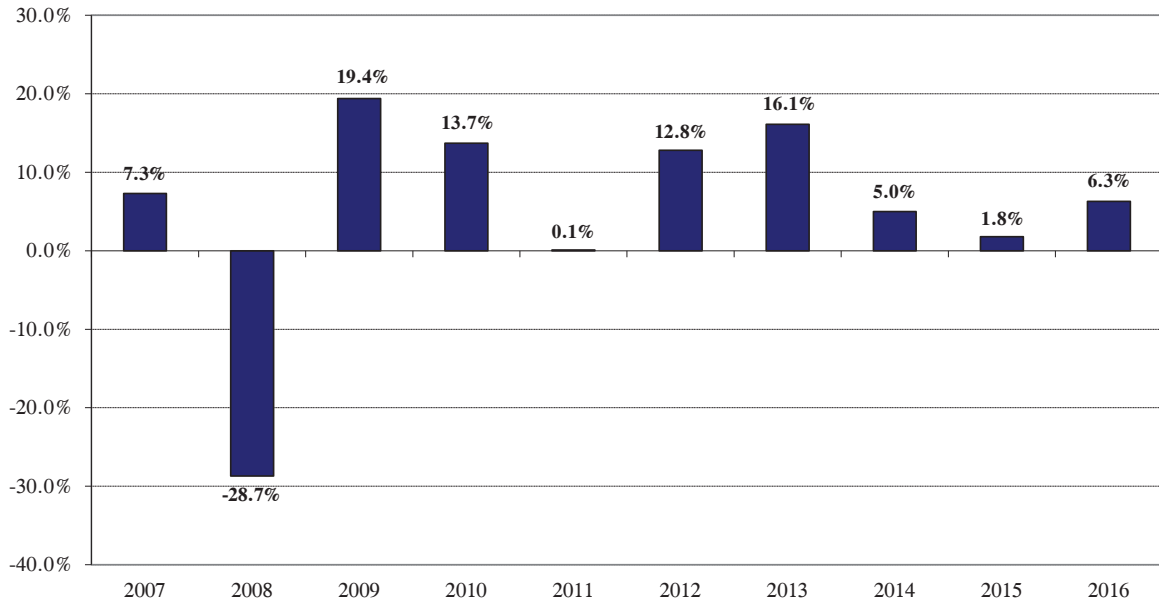


TABLE 20

MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO					
System Experience, FY 2004 - FY 2016					
(\$ in Millions)					
End of Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2016	1,646.9	15,055.3	4,590.4	10,465.0	30.5%
2015	1,643.5	14,655.3	4,815.1	9,840.1	32.9%
2014	1,603.0	14,315.3	5,039.3	7,285.3	35.2% *
2013	1,580.3	13,856.5	5,114.2	8,742.3	36.9%
2012	1,590.8	13,637.5	5,073.3	8,564.2	37.2%
2011	1,606.0	12,456.2	5,552.3	6,903.9	44.6%
2010	1,541.4	12,052.2	6,003.4	6,048.8	49.8%
2009	1,552.0	11,054.3	6,295.8	4,758.5	57.0%
2008	1,544.0	10,605.8	6,669.5	3,936.3	62.9%
2007	1,564.5	10,186.6	6,890.5	3,296.1	67.6%
2006	1,475.9	9,692.0	6,509.1	3,182.9	67.2%
2005	1,407.3	9,250.2	6,332.4	2,917.8	68.5%
2004	1,303.1	8,808.5	6,343.1	2,465.4	72.0%

* The funded ratio was 40.9% on the 2014 actuarial valuation report which reflected the benefit provision changes by P.A. 98-0641. However, P.A. 98-0641 was ruled unconstitutional and the 2015 actuarial valuation report does not reflect the provisions of P.A. 98-0641. Prior to reflecting the provisions of P.A. 98-0641, the funded ratio as of December 31, 2014 is 35.2%.

TABLE 21

MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO										
Changes in Net Assets										
(\$ in Millions)										
Fiscal Years	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Additions to Assets										
Employer	\$157.4	\$157.7	\$158.8	\$157.7	\$158.4	\$156.5	\$164.3	\$157.7	\$155.8	\$148.1
Employees	\$130.4	\$131.4	\$130.0	\$131.5	\$130.2	\$132.6	\$133.3	\$131.0	\$137.7	\$132.5
Net Investment Income	\$281.4	\$114.0	\$283.3	\$735.3	\$589.2	\$31.6	\$638.6	\$778.6	-\$1,947.6	\$485.9
Other	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total Asset Additions (A)	\$569.3	\$403.2	\$572.1	\$1,024.5	\$877.8	\$320.7	\$936.2	\$1,067.3	-\$1,654.1	\$766.5
Deductions from Assets										
Benefits	\$832.8	\$802.8	\$775.4	\$745.5	\$704.7	\$663.5	\$630.1	\$604.8	\$582.7	\$562.5
Refunds	\$34.6	\$31.7	\$32.3	\$33.5	\$36.9	\$32.1	\$29.9	\$28.1	\$25.5	\$28.0
Rebates	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Administrative Expenses	\$7.1	\$6.7	\$6.6	\$6.5	\$6.8	\$7.4	\$6.8	\$7.8	\$7.7	\$7.5
Other	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1
Total Asset Deductions (B)	\$874.5	\$841.2	\$814.3	\$785.5	\$748.4	\$703.0	\$666.8	\$640.7	\$615.9	\$598.1
Change in Net Assets (A-B=C)	-\$305.2	-\$438.1	-\$242.2	\$239.0	\$129.4	-\$382.3	\$269.4	\$426.6	-\$2,270.0	\$168.4

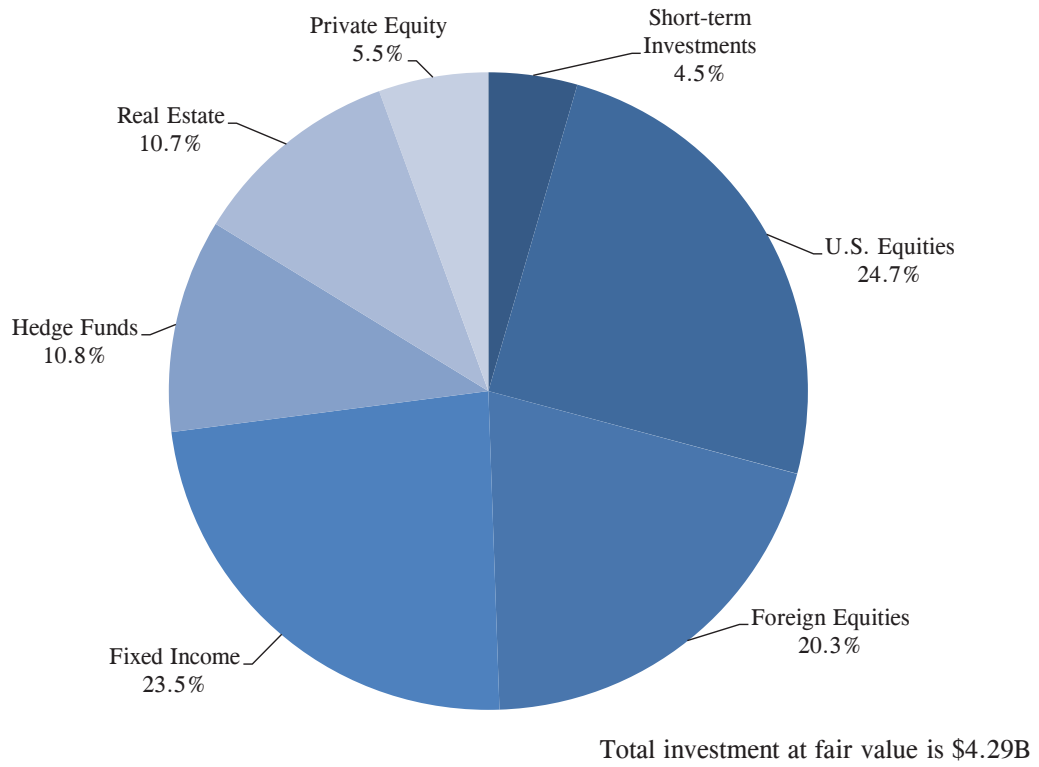
Table 22 below contains funding projections provided to CGFA by the Municipal Employees' Annuity and Benefit Fund of Chicago based upon the December 31, 2016 actuarial valuation. As shown in the table below, under the current funding policy the Municipal Employees' Annuity and Benefit Fund of Chicago is projected to run out of assets by 2025 if all future assumptions are met, and no additional contributions are made.

TABLE 22

Municipal Employees' Annuity and Benefit Fund of Chicago Actuarial Valuation Projection Results as of December 31, 2016 (\$ in Millions)								
Fiscal Year	Capped Payroll	Total Employer Contribution*	Employer Contribution As % of Payroll	Employee Contribution	Total Actuarial Liability	Actuarial Value of Assets	Unfunded Actuarial Liability	Funded Ratio
2016	1,646.94	163.99	10.0%	130.39	15,055.35	4,590.37	10,464.98	30.5%
2017	1,742.59	161.46	9.3%	140.71	15,502.62	4,279.46	11,223.16	27.6%
2018	1,792.03	163.56	9.1%	144.71	15,948.11	3,836.75	12,111.36	24.1%
2019	1,843.83	161.94	8.8%	148.89	16,389.92	3,362.76	13,027.16	20.5%
2020	1,896.49	173.25	9.1%	153.14	16,826.09	2,874.43	13,951.67	17.1%
2021	1,950.17	178.17	9.1%	157.48	17,254.18	2,325.07	14,929.11	13.5%
2022	2,004.20	183.32	9.1%	161.84	17,671.66	1,698.62	15,973.04	9.6%
2023	2,059.93	188.56	9.2%	166.34	18,077.64	989.33	17,088.31	5.5%
2024	2,117.47	193.89	9.2%	170.99	18,469.95	189.78	18,280.17	1.0%
2025	2,175.16	1,086.50	50.0%	175.64	18,845.35	-	-	-
2026	2,233.36	1,120.26	50.2%	180.34	19,201.81	-	-	-
2027	2,292.93	1,165.18	50.8%	185.15	19,536.07	-	-	-
2028	2,354.41	1,207.68	51.3%	190.12	19,848.87	-	-	-
2029	2,418.95	1,249.68	51.7%	195.33	20,139.20	-	-	-
2030	2,485.52	1,291.98	52.0%	200.71	20,404.95	-	-	-
2031	2,552.92	1,333.01	52.2%	206.15	20,645.30	-	-	-
2032	2,623.55	1,371.80	52.3%	211.85	20,860.68	-	-	-
2033	2,698.18	1,407.37	52.2%	217.88	21,052.64	-	-	-
2034	2,777.06	1,439.85	51.8%	224.25	21,222.72	-	-	-
2035	2,859.79	1,458.26	51.0%	230.93	21,383.94	-	-	-
2036	2,944.81	1,484.22	50.4%	237.79	21,527.77	-	-	-
2037	3,033.49	1,506.76	49.7%	244.95	21,656.53	-	-	-
2038	3,125.67	1,525.15	48.8%	252.40	21,773.47	-	-	-
2039	3,220.54	1,539.17	47.8%	260.06	21,882.31	-	-	-
2040	3,319.35	1,551.35	46.7%	268.04	21,984.52	-	-	-
2041	3,419.04	1,560.09	45.6%	276.09	22,083.08	-	-	-
2042	3,522.41	1,564.78	44.4%	284.44	22,182.09	-	-	-
2043	3,630.04	1,564.92	43.1%	293.13	22,286.58	-	-	-
2044	3,741.42	1,560.97	41.7%	302.12	22,401.40	-	-	-
2045	3,855.67	1,557.15	40.4%	311.35	22,527.34	-	-	-
2046	3,968.95	1,551.86	39.1%	320.49	22,666.82	-	-	-
2047	4,083.37	1,545.68	37.9%	329.73	22,821.90	-	-	-
2048	4,198.94	1,539.00	36.7%	339.06	22,994.38	-	-	-
2049	4,315.51	1,531.85	35.5%	348.48	23,186.08	-	-	-
2050	4,433.19	1,530.34	34.5%	357.98	23,392.65	-	-	-
2051	4,548.15	1,530.68	33.7%	367.26	23,613.27	-	-	-
2052	4,663.81	1,531.85	32.8%	376.60	23,848.17	-	-	-
2053	4,781.25	1,535.05	32.1%	386.09	24,096.31	-	-	-
2054	4,899.42	1,539.21	31.4%	395.63	24,357.68	-	-	-
2055	5,019.47	1,550.13	30.9%	405.32	24,626.24	-	-	-
2056	5,138.19	1,562.88	30.4%	414.91	24,900.60	-	-	-
2057	5,258.62	1,577.09	30.0%	424.63	25,179.68	-	-	-
2058	5,381.08	1,593.56	29.6%	434.52	25,461.45	-	-	-
2059	5,504.65	1,612.14	29.3%	444.50	25,743.86	-	-	-
2060	5,630.04	1,634.41	29.0%	454.63	26,023.13	-	-	-
2061	5,756.45	1,658.72	28.8%	464.83	26,296.89	-	-	-
2062	5,884.44	1,685.25	28.6%	475.17	26,562.44	-	-	-
2063	6,014.03	1,714.48	28.5%	485.63	26,816.35	-	-	-
2064	6,145.38	1,746.07	28.4%	496.24	27,055.31	-	-	-
2065	6,278.27	1,779.66	28.3%	506.97	27,276.05	-	-	-

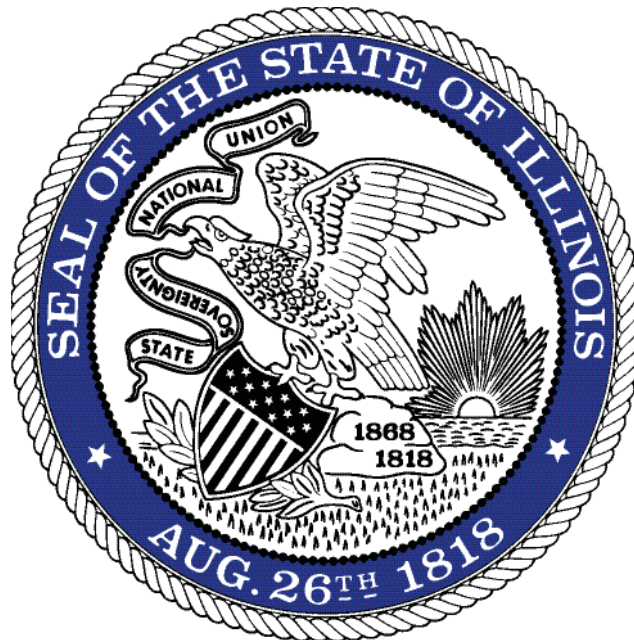
CHART 72

**MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO
ASSET ALLOCATION AS OF DECEMBER 2016**



X. Park Employees' Annuity and Benefit Fund of Chicago

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



Note: All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of December 31, 2016.

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

*P.A. 98-0622 became effective January 1, 2015, but the provisions of P.A. 98-0622 were partially amended by judicial order on October 19, 2016. The modifications are briefly discussed below.

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

- Under P.A. 98-0622
 - Lesser of 3% or ½ the CPI-U. COLA will be suspended in FY 2015, FY 2017, and FY 2019
- Under Judicial Order
 - The COLA of 3% was reinstated and provided to eligible annuitants.

Employee Contributions

- Under P.A. 98-0622
 - 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%.
- Under Judicial Order
 - For FY 2017(1/1/17-12/31/17): 10% of salary
 - For FY 2018(1/1/18-12/31/18): 11% of salary
 - Beginning FY 2019 (1/1/19): 12% of salary

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. (Once the funded ratio reaches 90%, the employer contributions will be the lesser of an amount calculated using the tax multiple or an amount needed to maintain its funded ratio to 90%.)

- Under P.A. 98-0622
 - 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.
 - The additional employer contributions for FY 2015 and 2016 were made.
- Under Judicial Order
 - For FY 2017(1/1/17-12/31/17): multiplied by 1.70.
 - For FY 2018(1/1/18-12/31/18): multiplied by 2.30.
 - Beginning FY 2019 (1/1/19): multiplied by 2.90.
 - The additional employer contributions of \$50 million will still be made in FY 2019.

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

CHART 73

PARK EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO
Active Employees

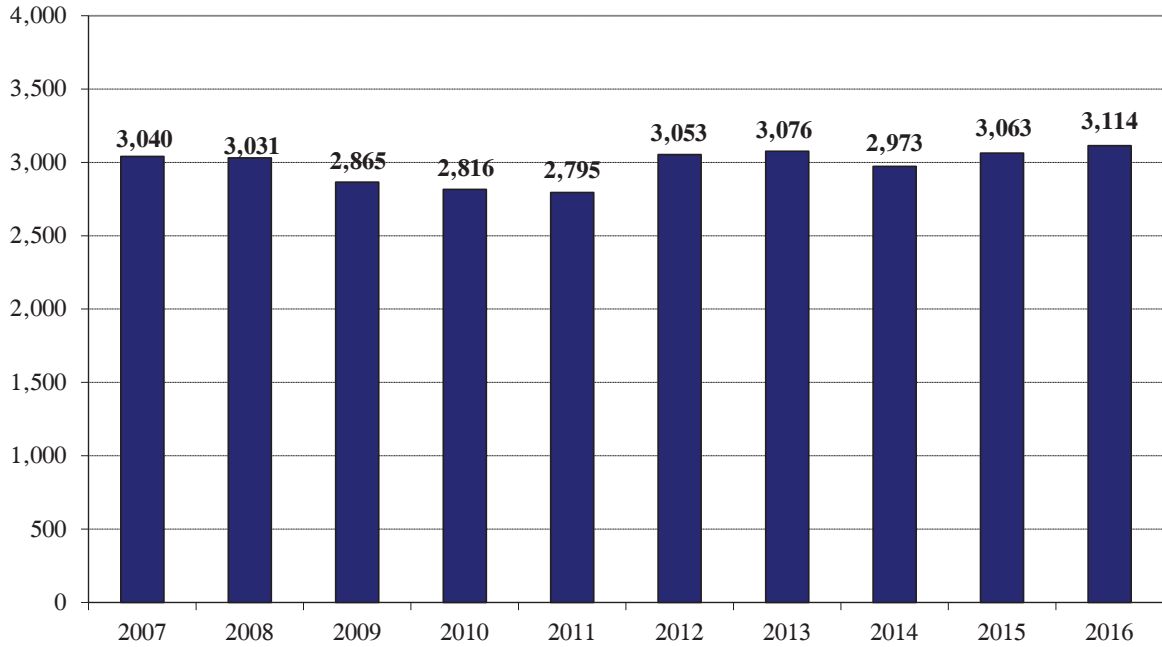


CHART 74

PARK EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO
Employee Annuitants

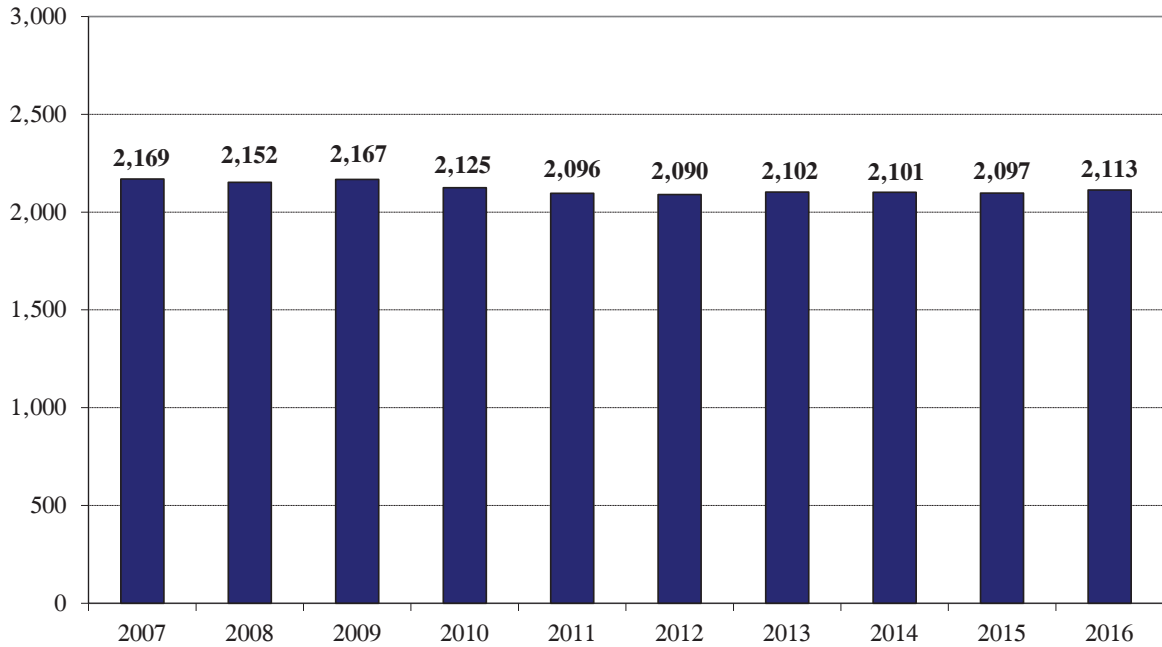


CHART 75

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

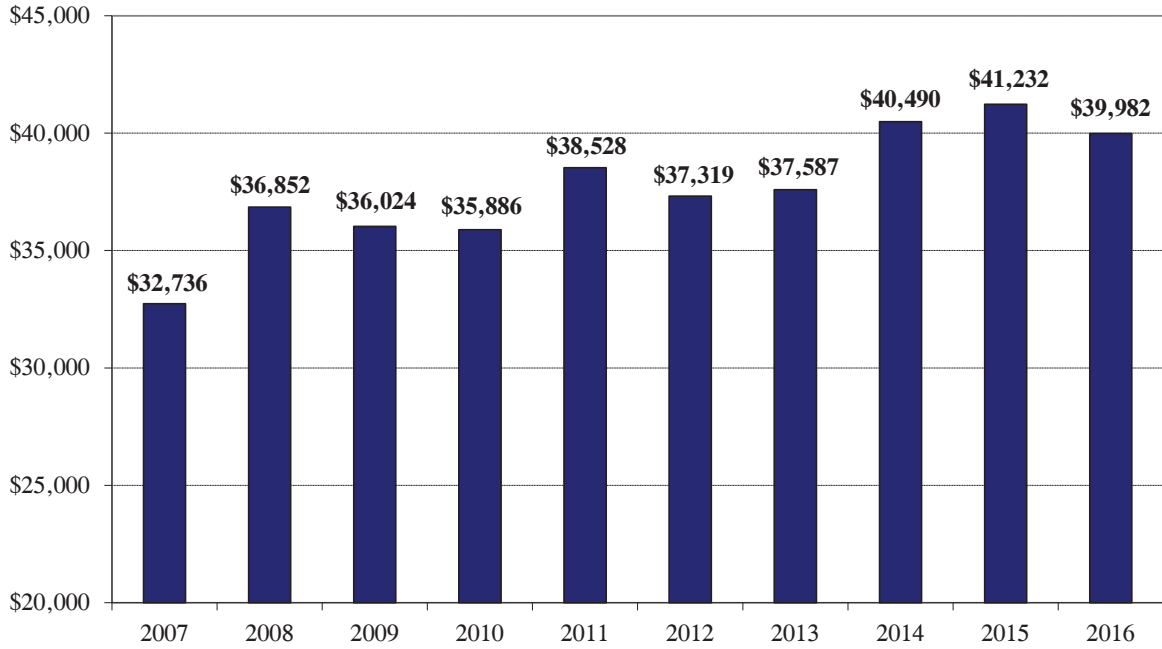


CHART 76

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

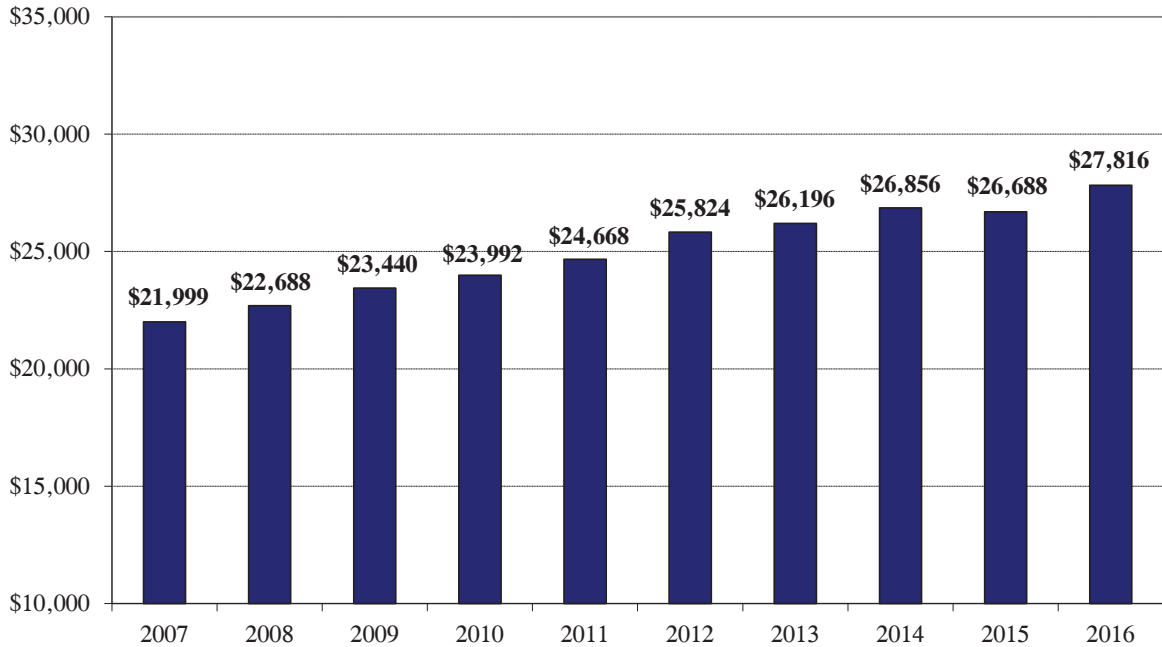
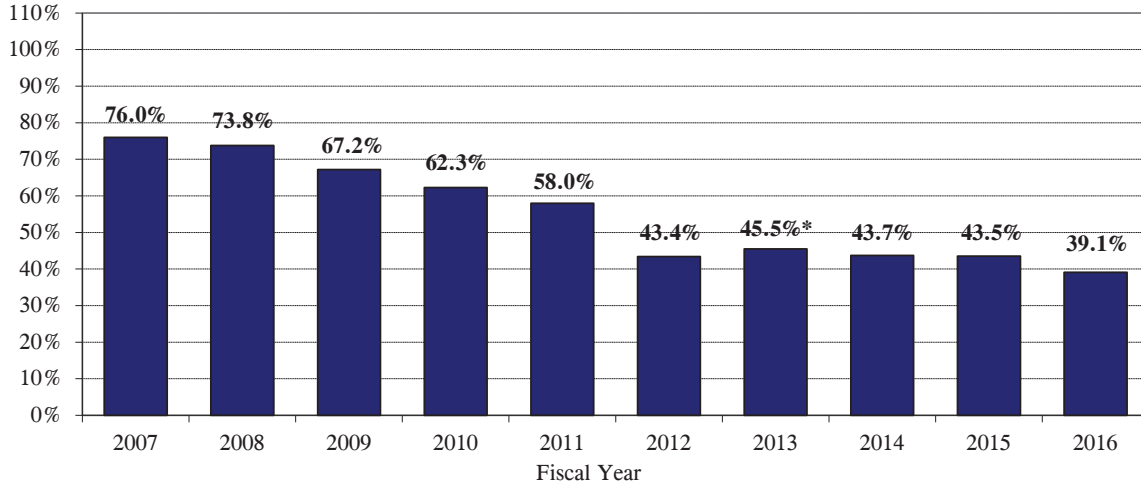


CHART 77

PARK EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO Funded Ratio FY 2007 - FY 2016

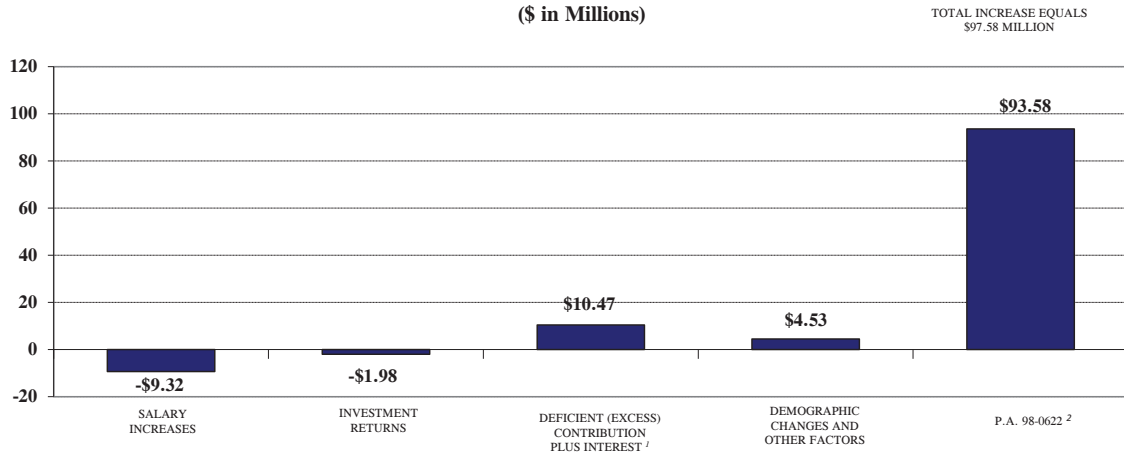
All figures based upon the actuarial value of assets.



* Public Act 97-0973, effective August 16, 2012, changed the Fund's year end to December 31 from June 30. As a result, from January 1, 2013, the Fund's fiscal year commences January 1 and ends December 31.

CHART 78

PARK EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO Change in Unfunded Liabilities Year ended December 31, 2016 (\$ in Millions)



¹ Unfunded liability increases due to total contributions being less than normal cost plus interest cost.

² As a result of judicial order to modify portions of provisions of P.A. 98-0622, the original COLA of 3% was reinstated and provided to eligible annuitants.

CHART 79

PARK EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

Investment Income, FY 2007 - FY 2016
Actuarially Assumed Rate of Return: 7.50%
(\$ in Millions)

All figures based upon the market value of assets.

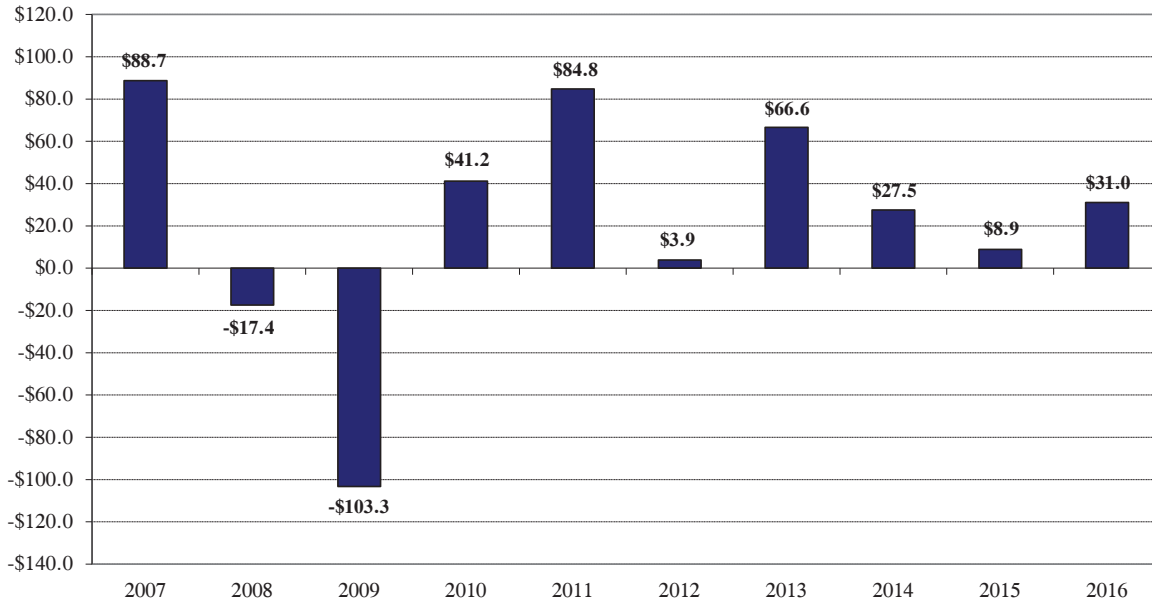


CHART 80

PARK EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

Rate of Return 2007 - 2016
Actuarially Assumed Rate of Return: 7.50%
 All figures based upon the market value of assets.

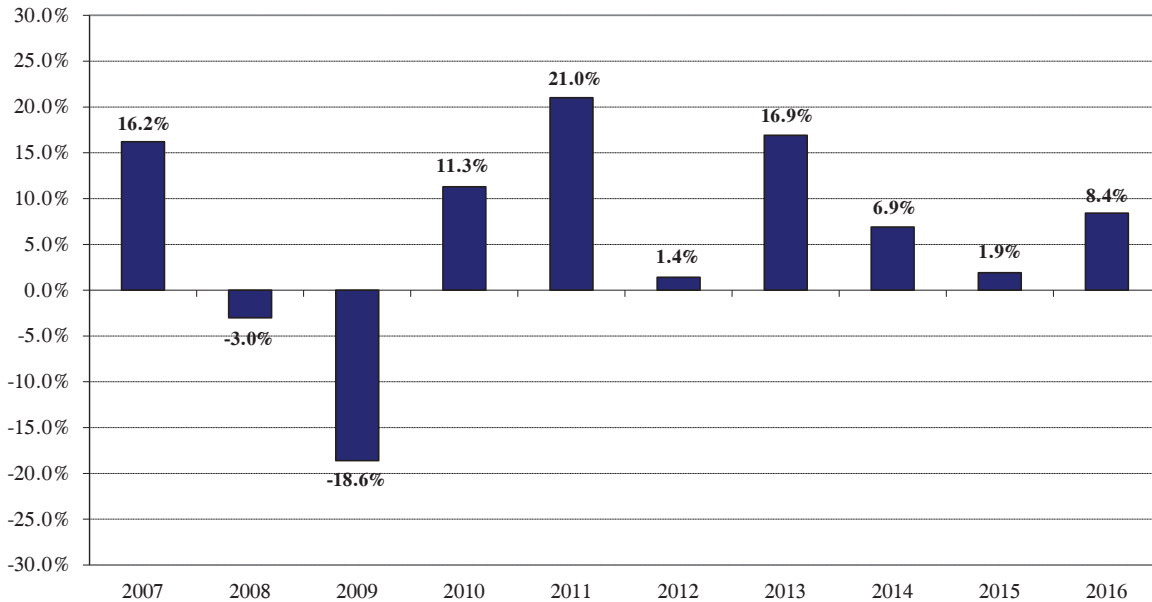


TABLE 23

PARK EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO					
System Experience, FY 2004 - FY 2016					
(\$ in Millions)					
Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2016	121.1	1,005.5	393.6	611.9	39.1%
2015	122.4	910.3	395.7	514.6	43.5%
2014	119.0	900.8	393.8	507.0	43.7%
2013*	117.8	888.0	404.3	483.7	45.5%
2012	114.2	866.4	440.7	425.7	50.9%
2011	107.7	843.9	489.4	354.5	58.0%
2010	107.4	833.0	518.6	314.4	62.3%
2009	108.9	823.9	553.8	270.1	67.2%
2008	111.7	795.4	586.7	208.7	73.8%
2007	106.6	767.9	583.3	184.6	76.0%
2006	101.1	745.3	572.7	172.6	76.8%
2005	95.7	734.4	587.8	146.6	80.0%
2004	87.8	738.6	610.3	128.3	82.6%

* Public Act 97-0973, effective August 16, 2012, changed the Fund's year end to December 31 from June 30. As a result, from January 1, 2013, the Fund's fiscal year commences January 1 and ends December 31.

TABLE 24

PARK EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO										
Changes in Net Assets										
(\$ in Millions)										
Fiscal Years	2016	2015	2014	2013*	2012	2011	2010	2009	2008	2007
Additions to Assets										
Employer	\$30.9	\$30.6	\$11.2	\$15.8	\$10.8	\$11.0	\$10.8	\$9.7	\$9.0	\$9.6
Employees	\$12.2	\$12.4	\$10.8	\$10.7	\$10.4	\$9.8	\$9.8	\$10.1	\$10.3	\$9.7
Net Investment Income	\$31.0	\$8.9	\$27.6	\$66.6	\$3.8	\$84.8	\$41.5	-\$103.5	-\$17.4	\$88.7
Other	\$0.0	\$0.0	\$0.0	\$0.1	\$0.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total Asset Additions (A)	\$74.2	\$51.9	\$49.6	\$93.2	\$25.1	\$105.6	\$62.1	-\$83.7	\$1.9	\$108.0
Deductions from Assets										
Benefits	\$71.6	\$68.6	\$67.8	\$66.2	\$63.5	\$62.0	\$61.2	\$60.3	\$58.0	\$56.8
Refunds	\$2.5	\$2.0	\$2.7	\$2.1	\$2.0	\$1.7	\$1.4	\$2.7	\$2.0	\$1.8
Rebates	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Administrative Expenses	\$1.5	\$1.5	\$1.5	\$1.5	\$1.6	\$1.5	\$1.4	\$1.3	\$1.3	\$1.2
Other	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total Asset Deductions (B)	\$75.6	\$72.1	\$72.0	\$69.8	\$67.1	\$65.2	\$64.0	\$64.3	\$61.2	\$59.8
Change in Net Assets (A-B=C)	-\$1.5	-\$20.3	-\$22.3	\$23.4	-\$42.0	\$40.4	-\$1.9	-\$148.0	-\$59.4	\$48.2

* Public Act 97-0973, effective August 16, 2012, changed the Fund's year end to December 31 from June 30. As a result, from January 1, 2013, the Fund's fiscal year commences January 1 and ends December 31.

Table 25 below contains funding projections provided to CGFA by the Park Employees' Annuity and Benefit Fund of Chicago based upon the December 31, 2016 actuarial valuation. As shown in the table below, under the current funding policy the Park Employees' Annuity and Benefit Fund of Chicago is projected that the funded ratio will steadily decline and eventually reach 5.7% in FY 2055 if all future assumptions are met, and no additional contributions are made.

TABLE 25

Park Employees' Annuity and Benefit Fund of Chicago									
Funding Policy under P.A. 98-0622									
Actuarial Valuation Projection Results as of December 31, 2016 ¹									
(\$ in Millions)									
Fiscal Year	Capped Payroll	Total City Contribution	Total City Contribution As % of Payroll	Total Employee Contribution	Accrued Liability	Actuarial Value of Assets	Unfunded Liabilities	Funded Ratio	
2017	129.9	20.2	15.5%	13.1	1,017.4	381.7	635.8	37.5%	
2018	127.3	27.3	21.5%	14.1	1,028.9	367.9	661.0	35.8%	
2019	125.5	86.9 ²	69.3%	15.2	1,040.2	415.1	625.1	39.9%	
2020	124.2	39.8	32.0%	15.0	1,051.2	419.5	631.7	39.9%	
2021	123.2	42.8	34.7%	14.9	1,062.1	425.6	636.5	40.1%	
2022	122.5	42.3	34.6%	14.8	1,073.0	430.8	642.2	40.2%	
2023	122.0	42.0	34.4%	14.8	1,083.9	435.2	648.7	40.2%	
2024	121.6	41.8	34.3%	14.7	1,094.8	438.8	656.1	40.1%	
2025	121.4	41.6	34.3%	14.7	1,105.6	441.4	664.3	39.9%	
2026	121.1	41.5	34.2%	14.7	1,116.4	443.1	673.3	39.7%	
2027	120.7	41.4	34.3%	14.6	1,127.0	443.9	683.2	39.4%	
2028	120.6	41.3	34.2%	14.6	1,137.8	443.8	693.9	39.0%	
2029	120.7	41.2	34.1%	14.6	1,148.2	442.5	705.8	38.5%	
2030	120.9	41.1	34.0%	14.6	1,158.3	439.7	718.6	38.0%	
2031	121.1	41.2	34.0%	14.7	1,167.9	435.5	732.4	37.3%	
2032	121.4	41.2	34.0%	14.7	1,177.2	429.9	747.3	36.5%	
2033	121.8	41.3	33.9%	14.7	1,186.3	422.9	763.4	35.6%	
2034	122.3	41.4	33.8%	14.8	1,195.2	414.6	780.7	34.7%	
2035	122.9	41.5	33.8%	14.9	1,204.0	404.9	799.2	33.6%	
2036	123.6	41.7	33.8%	15.0	1,212.7	393.7	819.0	32.5%	
2037	124.2	41.9	33.7%	15.0	1,223.6	383.5	840.1	31.3%	
2038	125.0	42.1	33.7%	15.1	1,234.9	372.1	862.8	30.1%	
2039	126.0	42.3	33.6%	15.3	1,246.6	359.5	887.0	28.8%	
2040	127.0	42.6	33.5%	15.4	1,258.8	345.8	913.0	27.5%	
2041	128.2	42.9	33.5%	15.5	1,271.7	331.0	940.6	26.0%	
2042	129.5	43.3	33.4%	15.7	1,285.3	315.2	970.1	24.5%	
2043	130.9	43.7	33.4%	15.8	1,300.4	298.7	1,001.6	23.0%	
2044	132.6	44.1	33.3%	16.0	1,316.8	281.6	1,035.2	21.4%	
2045	134.4	44.6	33.2%	16.3	1,335.0	263.9	1,071.0	19.8%	
2046	136.3	45.2	33.1%	16.5	1,355.0	246.0	1,109.1	18.2%	
2047	138.4	45.8	33.1%	16.7	1,377.3	227.7	1,149.6	16.5%	
2048	140.6	46.4	33.0%	17.0	1,402.2	209.5	1,192.7	14.9%	
2049	143.0	47.1	33.0%	17.3	1,429.8	191.2	1,238.6	13.4%	
2050	145.5	49.4	33.9%	17.6	1,460.4	174.6	1,285.8	12.0%	
2051	148.3	53.7	36.2%	17.9	1,494.3	161.9	1,332.4	10.8%	
2052	151.2	51.5	34.1%	18.3	1,531.4	146.4	1,385.0	9.6%	
2053	154.2	50.5	32.7%	18.6	1,572.1	129.2	1,442.9	8.2%	
2054	157.4	51.4	32.7%	19.0	1,616.7	112.1	1,504.6	6.9%	
2055	160.8	52.5	32.6%	19.4	1,665.5	95.4	1,570.1	5.7%	

¹ On October 19, 2016, provisions of P.A. 98-0622 were partially amended by judicial orders. The COLA of 3% was reinstated and provided to eligible annuitants, and the increase in employer and employee contributions for 2017 was suspended.

² Supplemental contributions of \$50 million are included.

TABLE 26

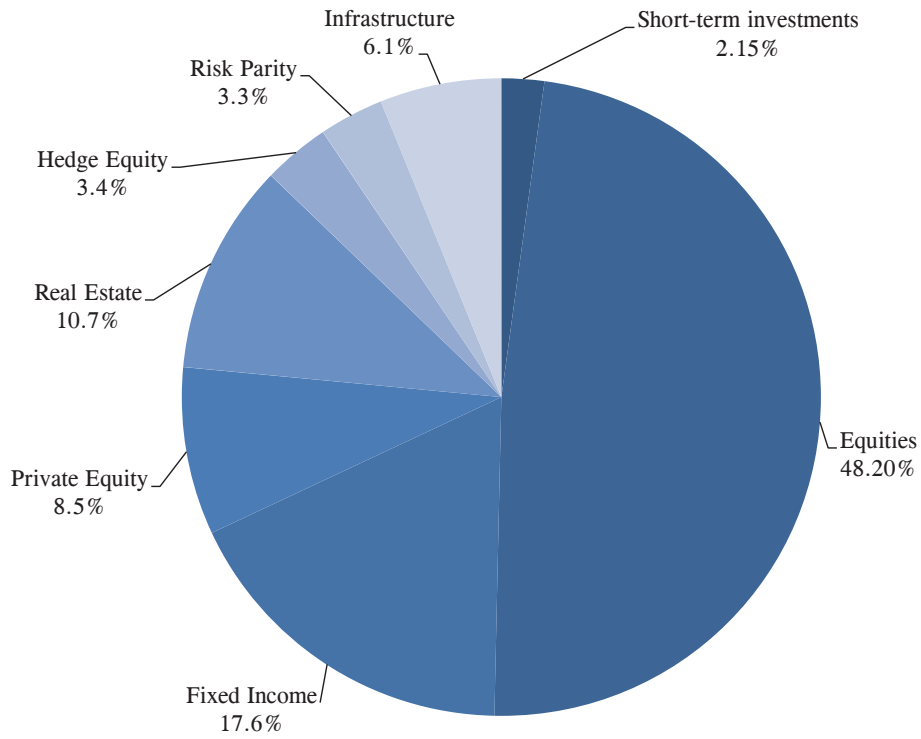
Park Employees' Annuity and Benefit Fund of Chicago Funding Policy under P.A. 98-0622 Projected Normal Cost Reflecting P.A. 98-0622 as of December 31, 2016 ¹ (\$ in Millions)							
Fiscal Year	Employer Normal Cost ²	Employer's Normal Cost as a % of Payroll	Employee Contributions	Employee Contributions as a % of Payroll	Total Normal Cost ²	Total Normal Cost as a % of Payroll	
2017	2.8	2.1%	13.1	10.1%	15.9	12.2%	
2018	1.7	1.3%	14.1	11.1%	15.8	12.4%	
2019	0.6	0.5%	15.2	12.1%	15.8	12.6%	
2020	0.8	0.6%	15.0	12.1%	15.8	12.8%	
2021	1.0	0.8%	14.9	12.1%	15.9	12.9%	
2022	1.2	1.0%	14.8	12.1%	16.0	13.1%	
2023	1.3	1.1%	14.8	12.1%	16.1	13.2%	
2024	1.4	1.2%	14.7	12.1%	16.2	13.3%	
2025	1.6	1.3%	14.7	12.1%	16.3	13.4%	
2026	1.7	1.4%	14.7	12.1%	16.3	13.5%	
2027	1.7	1.4%	14.6	12.1%	16.3	13.5%	
2028	1.8	1.5%	14.6	12.1%	16.4	13.6%	
2029	1.9	1.6%	14.6	12.1%	16.5	13.7%	
2030	2.0	1.6%	14.6	12.1%	16.6	13.8%	
2031	2.1	1.7%	14.7	12.1%	16.7	13.8%	
2032	2.2	1.8%	14.7	12.1%	16.9	13.9%	
2033	2.3	1.9%	14.7	12.1%	17.0	14.0%	
2034	2.3	1.9%	14.8	12.1%	17.2	14.0%	
2035	2.4	2.0%	14.9	12.1%	17.3	14.1%	
2036	2.5	2.0%	15.0	12.1%	17.5	14.2%	
2037	2.6	2.1%	15.0	12.1%	17.7	14.2%	
2038	2.7	2.2%	15.1	12.1%	17.9	14.3%	
2039	2.9	2.3%	15.3	12.1%	18.1	14.4%	
2040	3.0	2.4%	15.4	12.1%	18.4	14.5%	
2041	3.1	2.4%	15.5	12.1%	18.6	14.5%	
2042	3.3	2.5%	15.7	12.1%	18.9	14.6%	
2043	3.4	2.6%	15.8	12.1%	19.3	14.7%	
2044	3.6	2.7%	16.0	12.1%	19.6	14.8%	
2045	3.8	2.8%	16.3	12.1%	20.0	14.9%	
2046	4.0	2.9%	16.5	12.1%	20.4	15.0%	
2047	4.2	3.0%	16.7	12.1%	20.9	15.1%	
2048	4.4	3.1%	17.0	12.1%	21.4	15.2%	
2049	4.6	3.2%	17.3	12.1%	21.9	15.3%	
2050	4.9	3.3%	17.6	12.1%	22.5	15.4%	
2051	5.1	3.4%	17.9	12.1%	23.0	15.5%	
2052	5.4	3.6%	18.3	12.1%	23.7	15.7%	
2053	5.7	3.7%	18.6	12.1%	24.3	15.8%	
2054	6.0	3.8%	19.0	12.1%	25.0	15.9%	
2055	6.1	3.8%	19.4	12.1%	25.5	15.9%	

¹ On October 19, 2016, provisions of P.A. 98-0622 were partially amended by judicial orders. The COLA of 3% was reinstated and provided to eligible annuitants, and the increase in employer and employee contributions for 2017 was suspended.

² Includes estimated expenses.

CHART 81

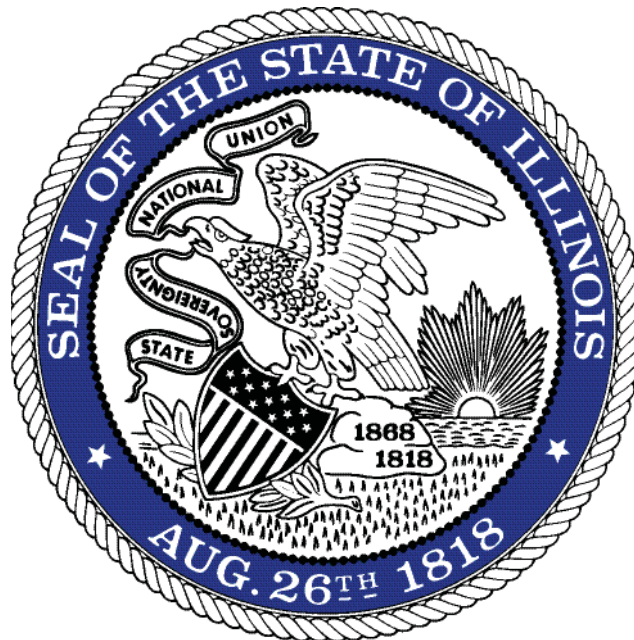
**PARK EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO
ASSET ALLOCATION AS OF DECEMBER 2016**



Total investment at fair value is \$358.46M

XI. Policemen's Annuity and Benefit Fund of Chicago

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



Note: All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of December 31, 2016.

Policemen's Annuity and Benefit Fund of Chicago

Tier 1 Plan Summary

Retirement Age

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

Retirement Formula

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

Maximum Annuity

- 75% of final average salary

Salary Used to Calculate Pension

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

Annual COLA

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

Employee Contributions

- 9.0% of salary

Employer Contributions

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

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

CHART 82

**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO
Active Employees**

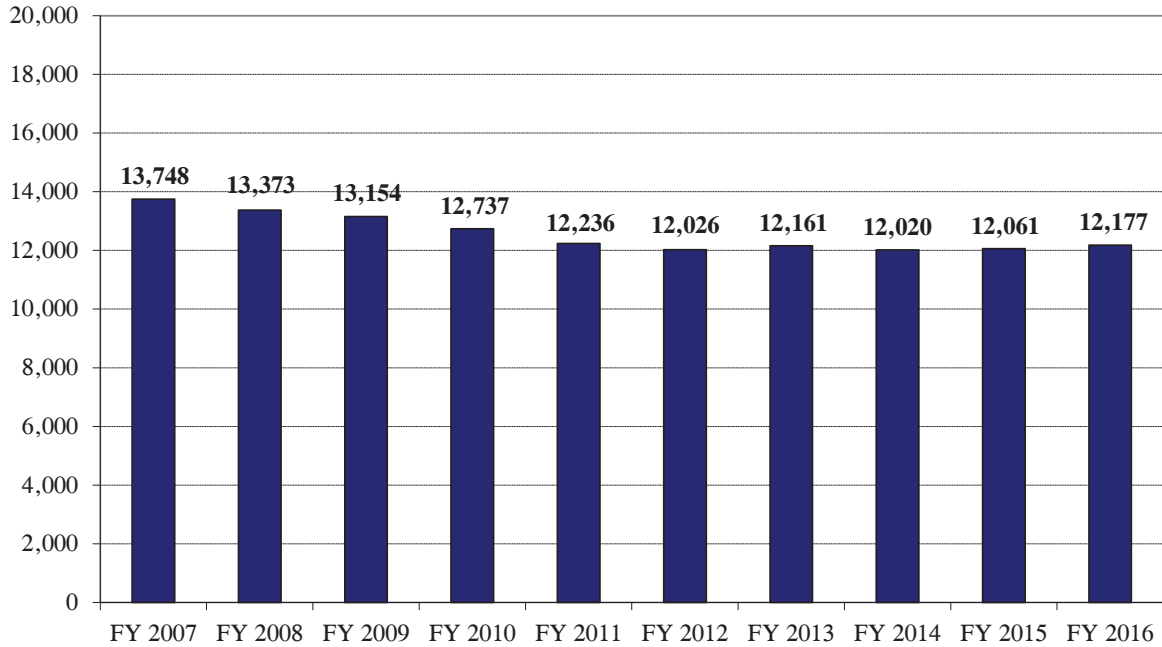


CHART 83

**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO
Employee Annuitants**

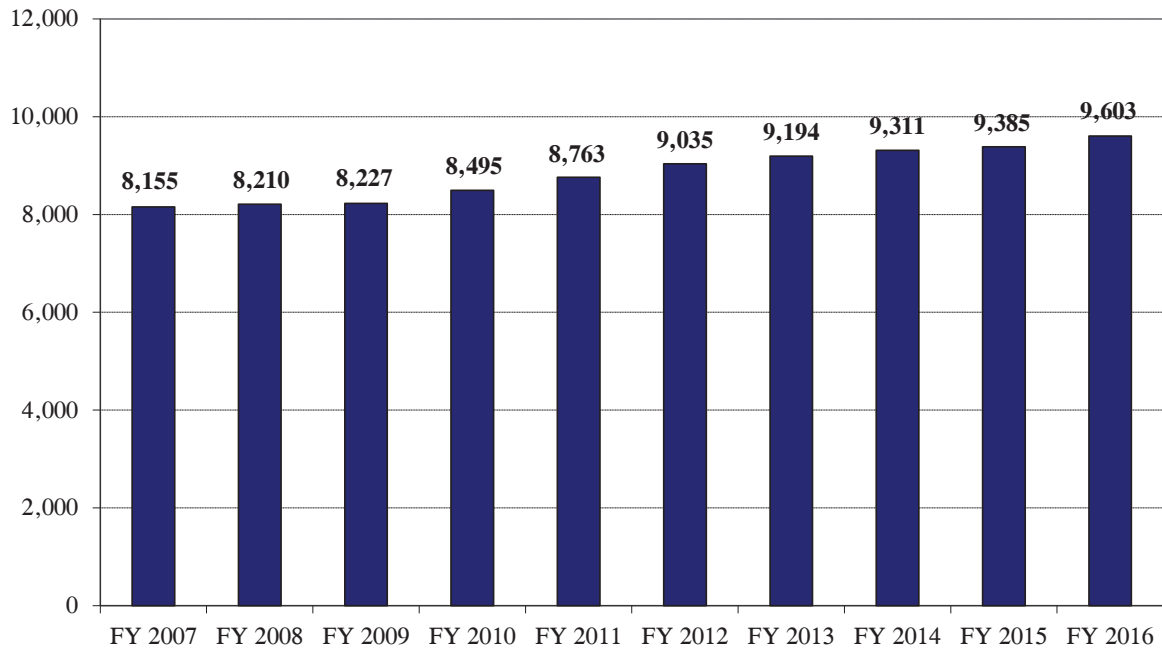


CHART 84

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

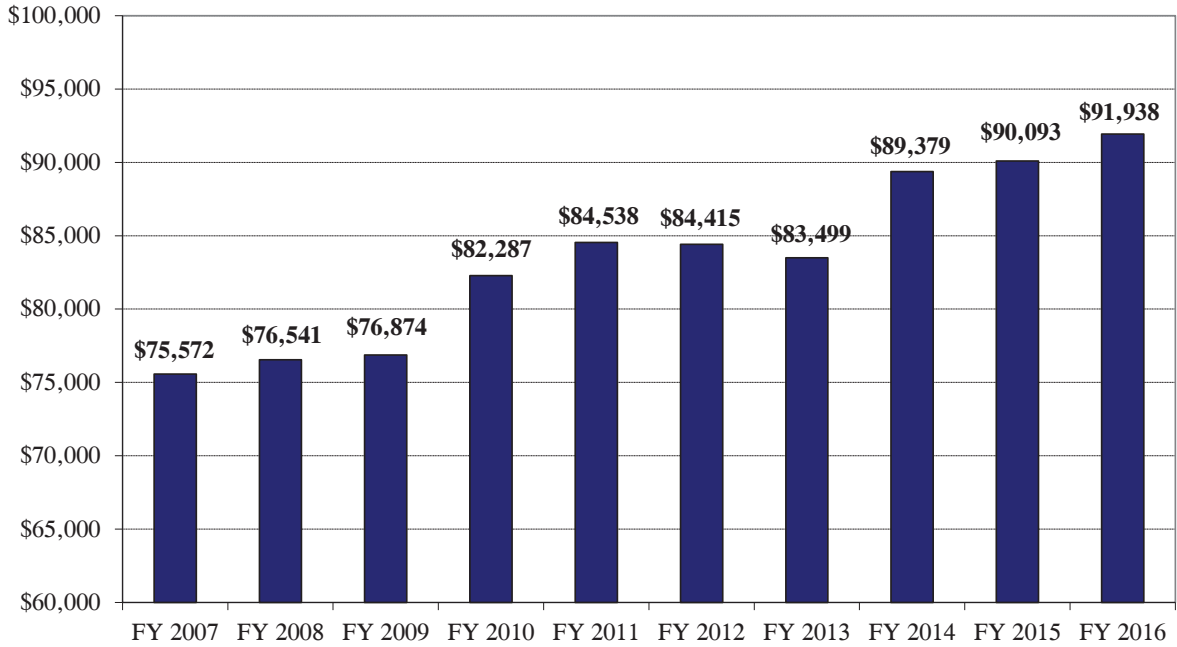


CHART 85

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

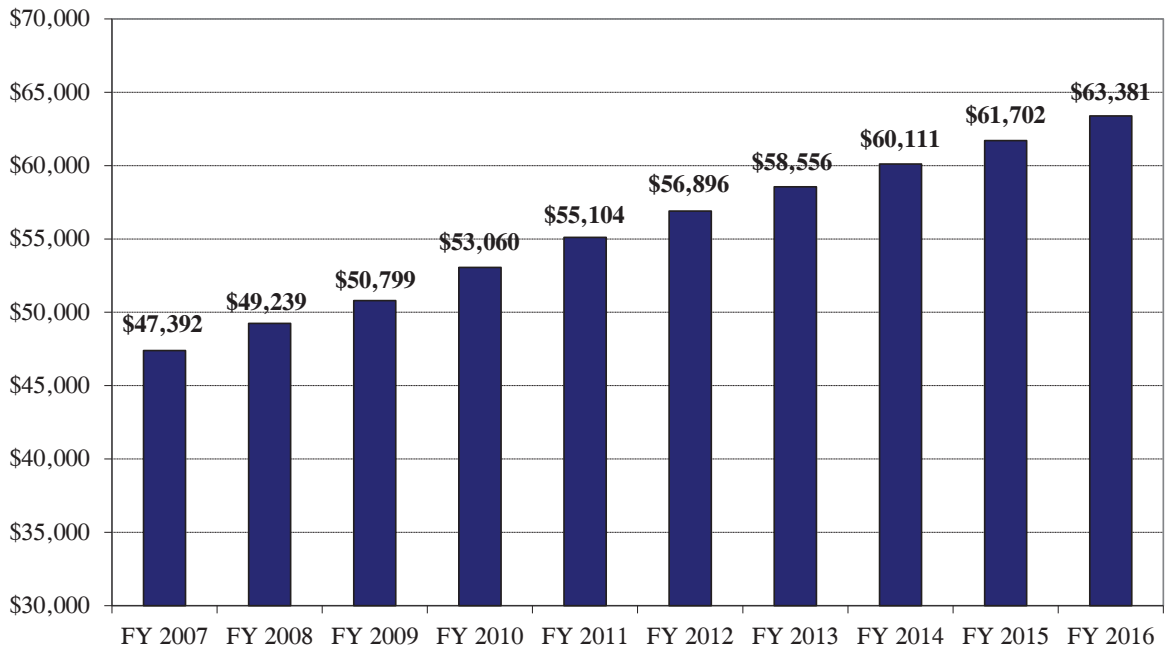


CHART 86

POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO
Funded Ratio
FY 2007 - FY 2016

All figures based upon the actuarial value of assets.

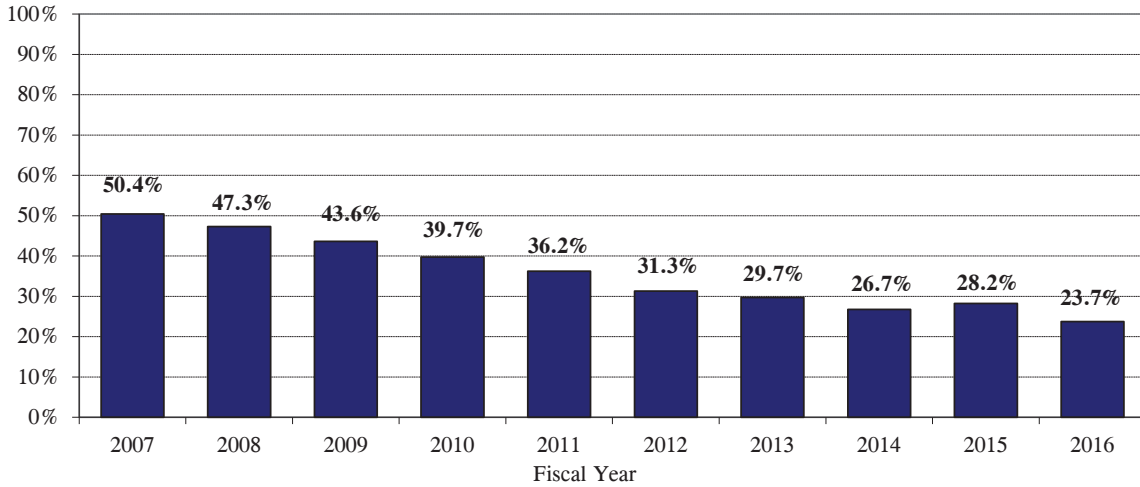
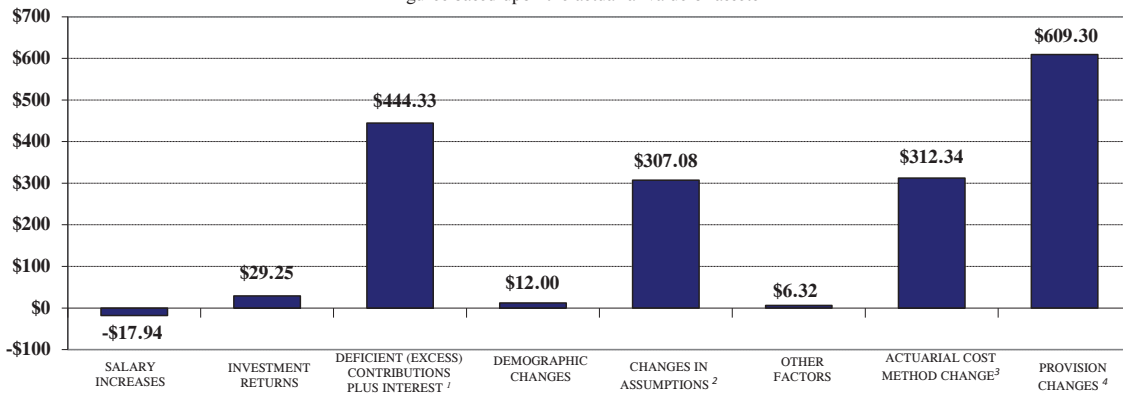


CHART 87

POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO
Change in Unfunded Liabilities
Year ended December 31, 2016
(\$ in Millions)

All figures based upon the actuarial value of assets.

TOTAL INCREASE EQUALS
\$1,702.68 MIL



¹ Unfunded liability increases due to total contributions being less than normal cost plus interest cost.

² Two actuarial assumption changes were made as of December 31, 2016; assumed rate of return decreased to 7.25% from 7.5% and the inflation assumption rate decreased to 2.75% from 3.00%.

³ The Fund's actuarial cost method was changed to the Entry Age Normal cost method from the Projected Unit Credit cost method, pursuant to P.A. 99-0506.

⁴ An improvement on benefits for certain annuitants/widows was made by setting a level of the minimum benefit at 125% of the Federal poverty level, pursuant to P.A. 99-0506 and P.A. 99-0905.

CHART 88

POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO

Investment Income FY 2007 - FY 2016
Actuarially Assumed Rate of Return :7.25%
(\$ in Millions)

All figures based upon the market value of assets.

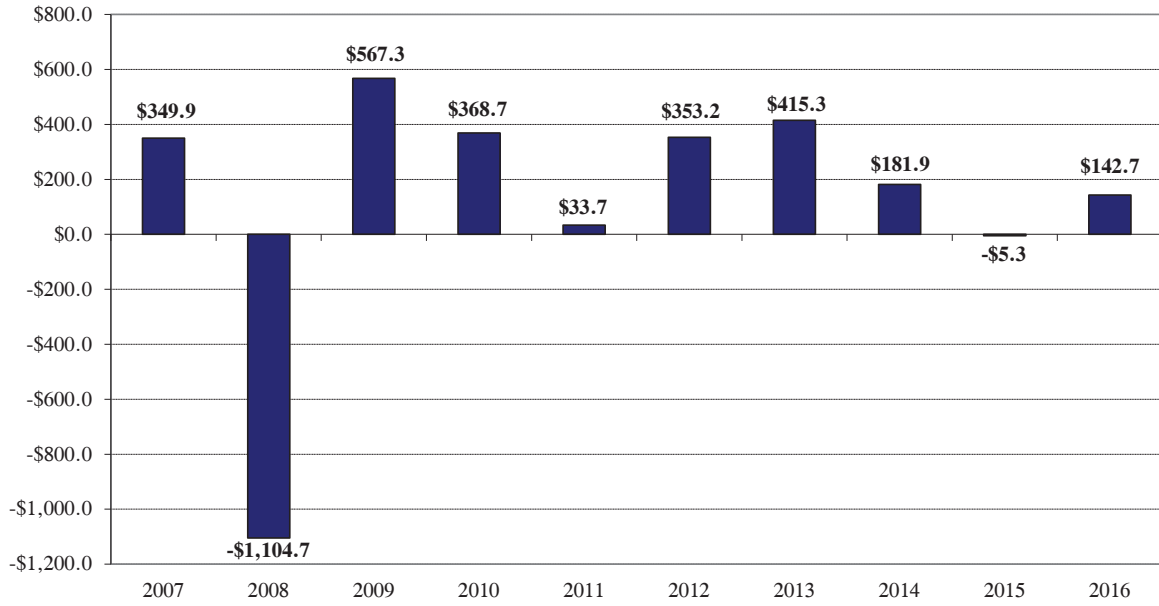


CHART 89

POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO

Rate of Return FY 2007 - FY 2016
Actuarially Assumed Rate of Return :7.25%
All figures based upon the market value of assets.

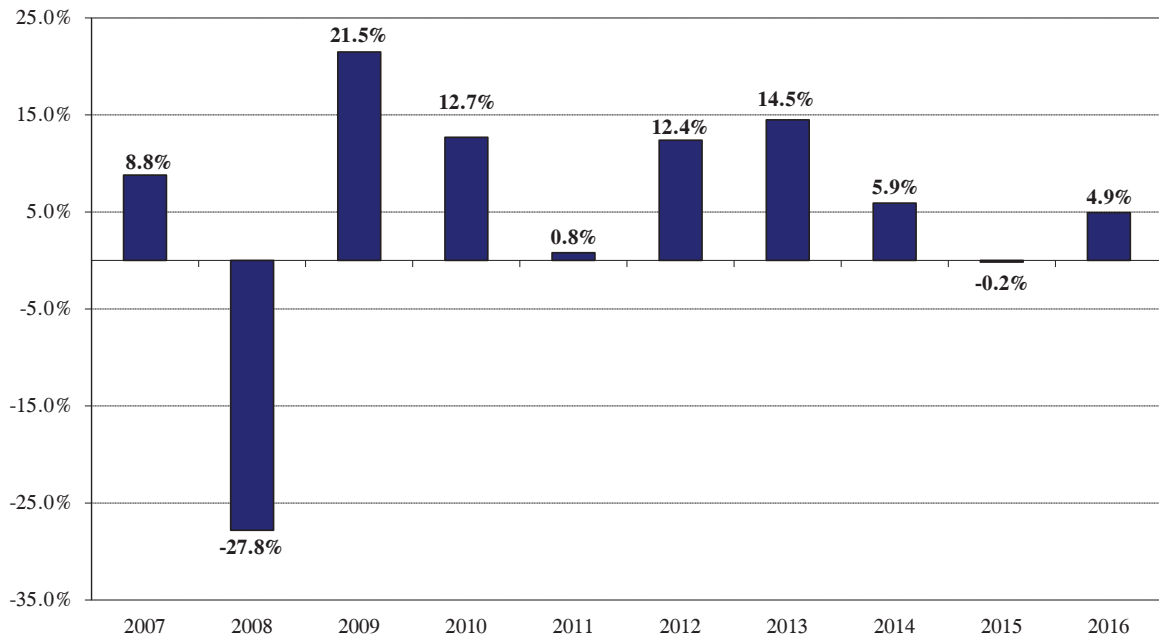


TABLE 27

POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO					
System Experience, FY 2007 - FY 2016					
(\$ in Millions)					
Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2016	1,119.5	12,856.6	3,052.1	9,804.5	23.7%
2015	1,086.6	11,288.2	3,186.4	8,101.8	28.2%
2014	1,074.3	11,048.2	2,954.3	8,093.9	26.7%
2013	1,015.4	10,282.3	3,053.9	7,228.5	29.7%
2012	1,015.2	10,051.8	3,148.9	6,902.9	31.3%
2011	1,034.4	9,522.4	3,444.7	6,077.7	36.2%
2010	1,048.1	9,374.9	3,719.0	5,655.9	39.7%
2009	1,011.2	8,900.9	3,885.0	5,015.9	43.6%
2008	1,023.6	8,652.6	4,093.7	4,558.9	47.3%
2007	1,039.0	8,399.4	4,231.7	4,167.7	50.4%

TABLE 28

POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO										
Changes in Net Assets										
(\$ in Millions)										
Fiscal Years	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Additions to Assets										
Employer	\$281.6	\$582.3	\$187.1	\$188.9	\$207.2	\$183.5	\$183.8	\$180.5	\$181.5	\$178.7
Employees	\$101.5	\$107.6	\$95.7	\$93.3	\$95.9	\$98.2	\$108.4	\$95.6	\$93.2	\$93.3
Net Investment Income	\$142.7	-\$5.3	\$181.9	\$415.3	\$353.2	\$33.7	\$368.7	\$567.3	-\$1,104.9	\$349.9
Other	\$1.4	\$3.1	\$0.7	\$0.5	\$0.4	\$0.1	\$0.9	\$0.8	\$0.2	\$0.0
Total Asset Additions (A)	\$527.2	\$687.7	\$465.4	\$698.0	\$656.7	\$315.5	\$661.8	\$844.2	-\$830.0	\$621.9
Deductions from Assets										
Benefits	\$705.6	\$678.4	\$655.3	\$633.8	\$602.7	\$568.0	\$536.3	\$508.5	\$491.6	\$471.5
Refunds	\$10.7	\$7.8	\$9.0	\$8.1	\$11.2	\$7.3	\$8.0	\$6.4	\$6.4	\$6.2
Rebates	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Administrative Expenses	\$4.7	\$4.5	\$4.2	\$4.3	\$4.9	\$4.4	\$3.9	\$4.3	\$4.2	\$3.1
Other	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total Asset Deductions (B)	\$721.1	\$690.7	\$668.5	\$646.2	\$618.8	\$579.7	\$548.2	\$519.2	\$502.2	\$480.8
Change in Net Assets (A-B=C)	-\$193.9	-\$3.1	-\$203.1	\$51.8	\$37.9	-\$264.2	\$113.6	\$325.0	-\$1,332.2	\$141.1

Table 29 below contains funding projections provided to CGFA by the Policemen's Annuity and Benefit Fund of Chicago based upon the December 31, 2016 actuarial valuation.

TABLE 29

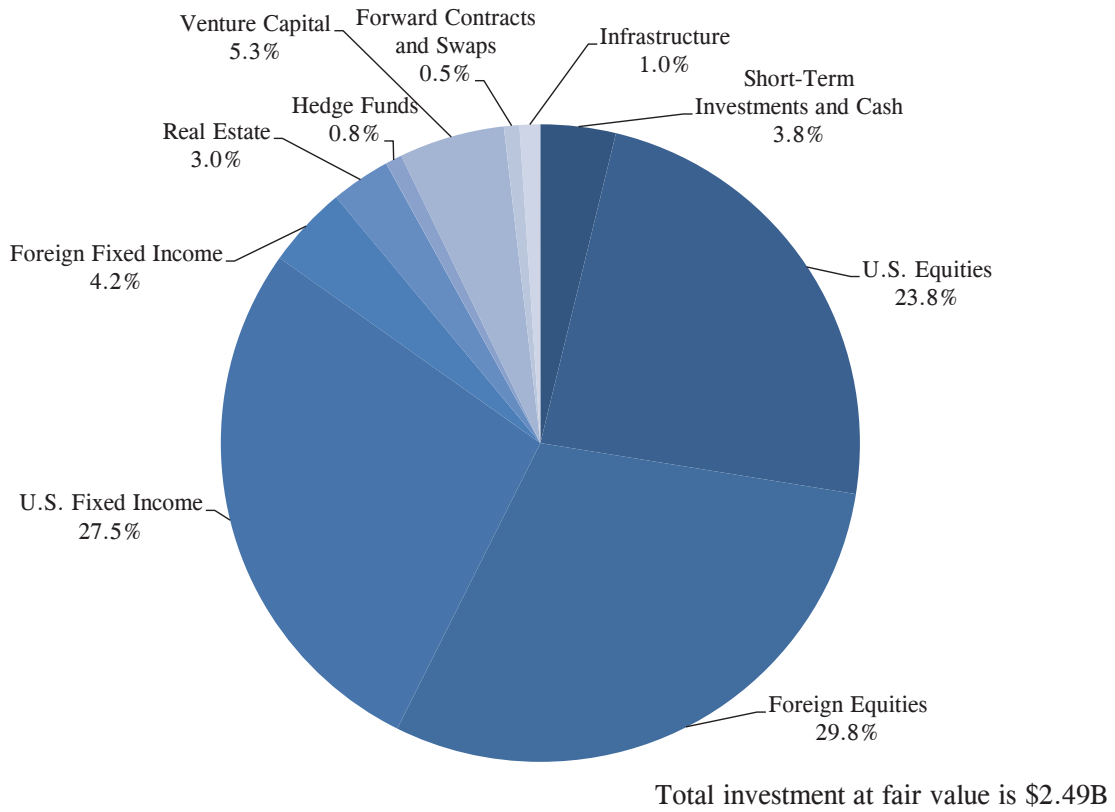
Policemen's Annuity and Benefit Fund of Chicago Actuarial Valuation Projection Results as of December 31, 2016 (\$ in Millions)								
Fiscal Year	Capped Payroll	Total City Contribution	Total City Contribution As % of Payroll	Total Employee Contribution	Accrued Liability	Actuarial Value of Assets	Unfunded Liabilities	Funded Ratio
2016	1,119.5	283.0	25.3%	101.5	12,856.6	3,052.1	9,804.5	23.7%
2017	1,149.5	500.0	43.5%	103.0	13,278.0	3,066.6	10,211.4	23.1%
2018	1,182.3	557.0	47.1%	113.6	13,699.8	3,081.6	10,618.1	22.5%
2019	1,212.7	579.0	47.7%	116.6	14,117.9	3,101.3	11,016.6	22.0%
2020	1,244.4	781.6	62.8%	119.7	14,530.4	3,340.5	11,189.9	23.0%
2021	1,276.0	801.5	62.8%	122.7	14,936.0	3,592.7	11,343.4	24.1%
2022	1,309.0	822.2	62.8%	125.9	15,334.0	3,846.7	11,487.3	25.1%
2023	1,341.6	842.7	62.8%	129.1	15,723.2	4,101.8	11,621.4	26.1%
2024	1,374.3	863.2	62.8%	132.3	16,101.3	4,356.7	11,744.6	27.1%
2025	1,407.2	883.9	62.8%	135.6	16,466.0	4,609.8	11,856.2	28.0%
2026	1,440.3	904.7	62.8%	138.8	16,814.4	4,859.9	11,954.5	28.9%
2027	1,474.3	926.0	62.8%	142.1	17,145.1	5,107.0	12,038.1	29.8%
2028	1,508.3	847.4	56.2%	145.2	17,457.7	5,351.8	12,105.9	30.7%
2029	1,544.4	870.1	56.3%	148.5	17,752.9	5,597.4	12,155.5	31.5%
2030	1,583.0	994.3	62.8%	152.0	18,031.7	5,847.3	12,184.3	32.4%
2031	1,625.0	1,020.7	62.8%	155.8	18,295.4	6,106.4	12,189.0	33.4%
2032	1,668.2	1,047.9	62.8%	159.9	18,545.2	6,377.9	12,167.2	34.4%
2033	1,710.7	1,074.5	62.8%	163.7	18,781.5	6,664.1	12,117.4	35.5%
2034	1,745.8	1,096.6	62.8%	166.9	19,004.8	6,963.1	12,041.7	36.6%
2035	1,771.5	1,112.7	62.8%	169.1	19,216.2	7,272.7	11,943.6	37.8%
2036	1,794.4	1,127.1	62.8%	171.1	19,417.6	7,594.6	11,823.0	39.1%
2037	1,816.0	1,140.7	62.8%	172.9	19,611.2	7,932.0	11,679.2	40.4%
2038	1,836.5	1,153.5	62.8%	174.7	19,798.7	8,287.4	11,511.3	41.9%
2039	1,857.4	1,166.7	62.8%	176.4	19,981.5	8,664.4	11,317.1	43.4%
2040	1,878.2	1,179.7	62.8%	178.2	20,160.7	9,065.7	11,095.0	45.0%
2041	1,899.9	1,193.4	62.8%	179.9	20,338.0	9,495.3	10,842.7	46.7%
2042	1,921.3	1,206.8	62.8%	181.7	20,514.8	9,956.6	10,558.2	48.5%
2043	1,944.4	1,221.3	62.8%	183.6	20,692.5	10,454.0	10,238.5	50.5%
2044	1,968.9	1,236.7	62.8%	185.7	20,872.1	10,991.6	9,880.5	52.7%
2045	1,994.4	1,252.7	62.8%	187.9	21,054.0	11,573.0	9,481.0	55.0%
2046	2,021.6	1,269.8	62.8%	190.2	21,238.5	12,202.5	9,036.0	57.5%
2047	2,049.7	1,287.5	62.8%	192.7	21,426.0	12,883.9	8,542.2	60.1%
2048	2,079.1	1,305.9	62.8%	195.2	21,616.4	13,621.1	7,995.3	63.0%
2049	2,109.4	1,324.9	62.8%	197.9	21,809.7	14,418.5	7,391.2	66.1%
2050	2,140.2	1,344.3	62.8%	200.6	22,005.8	15,280.1	6,725.7	69.4%
2051	2,171.7	1,364.1	62.8%	203.3	22,204.8	16,210.7	5,994.1	73.0%
2052	2,203.7	1,384.2	62.8%	206.1	22,406.9	17,215.4	5,191.5	76.8%
2053	2,236.3	1,404.7	62.8%	209.0	22,612.6	18,300.1	4,312.4	80.9%
2054	2,268.7	1,425.0	62.8%	211.8	22,822.4	19,470.5	3,351.8	85.3%
2055	2,299.9	1,444.6	62.8%	214.7	23,037.0	20,732.2	2,304.7	90.0%

TABLE 30

Policemen's Annuity and Benefit Fund of Chicago Projected Normal Cost as of December 31, 2016 (\$ in Millions)						
Fiscal Year	Employer's Normal Cost	Employer's Normal Cost as a % of Payroll	Employee Contributions	Employee Contributions as a % of Payroll	Total Normal Cost	Total Normal Cost as a % of Payroll
2016	116.3	10.4%	101.5	9.1%	217.8	19.5%
2017	119.6	10.4%	103.0	9.0%	222.6	19.4%
2018	112.5	9.5%	113.6	9.6%	226.1	19.1%
2019	112.1	9.2%	116.6	9.6%	228.7	18.9%
2020	111.5	9.0%	119.7	9.6%	231.2	18.6%
2021	111.0	8.7%	122.7	9.6%	233.7	18.3%
2022	110.4	8.4%	125.9	9.6%	236.3	18.1%
2023	109.9	8.2%	129.1	9.6%	239.0	17.8%
2024	109.3	8.0%	132.3	9.6%	241.6	17.6%
2025	108.7	7.7%	135.6	9.6%	244.4	17.4%
2026	107.6	7.5%	138.8	9.6%	246.4	17.1%
2027	106.5	7.2%	142.1	9.6%	248.6	16.9%
2028	105.4	7.0%	145.2	9.6%	250.6	16.6%
2029	104.3	6.8%	148.5	9.6%	252.8	16.4%
2030	103.6	6.5%	152.0	9.6%	255.6	16.1%
2031	102.9	6.3%	155.8	9.6%	258.7	15.9%
2032	102.5	6.1%	159.9	9.6%	262.3	15.7%
2033	101.9	6.0%	163.7	9.6%	265.6	15.5%
2034	100.9	5.8%	166.9	9.6%	267.7	15.3%
2035	99.5	5.6%	169.1	9.5%	268.5	15.2%
2036	98.1	5.5%	171.1	9.5%	269.2	15.0%
2037	96.7	5.3%	172.9	9.5%	269.6	14.8%
2038	95.3	5.2%	174.7	9.5%	270.0	14.7%
2039	94.0	5.1%	176.4	9.5%	270.4	14.6%
2040	92.8	4.9%	178.2	9.5%	271.0	14.4%
2041	91.7	4.8%	179.9	9.5%	271.6	14.3%
2042	90.8	4.7%	181.7	9.5%	272.5	14.2%
2043	90.2	4.6%	183.6	9.4%	273.8	14.1%
2044	89.8	4.6%	185.7	9.4%	275.4	14.0%
2045	89.6	4.5%	187.9	9.4%	277.5	13.9%
2046	89.6	4.4%	190.2	9.4%	279.8	13.8%
2047	89.8	4.4%	192.7	9.4%	282.5	13.8%
2048	90.3	4.3%	195.2	9.4%	285.5	13.7%
2049	91.0	4.3%	197.9	9.4%	288.9	13.7%
2050	91.9	4.3%	200.6	9.4%	292.5	13.7%
2051	92.9	4.3%	203.3	9.4%	296.2	13.6%
2052	94.1	4.3%	206.1	9.4%	300.2	13.6%
2053	95.5	4.3%	209.0	9.3%	304.4	13.6%
2054	97.0	4.3%	211.8	9.3%	308.8	13.6%
2055	98.7	4.3%	214.7	9.3%	313.5	13.6%

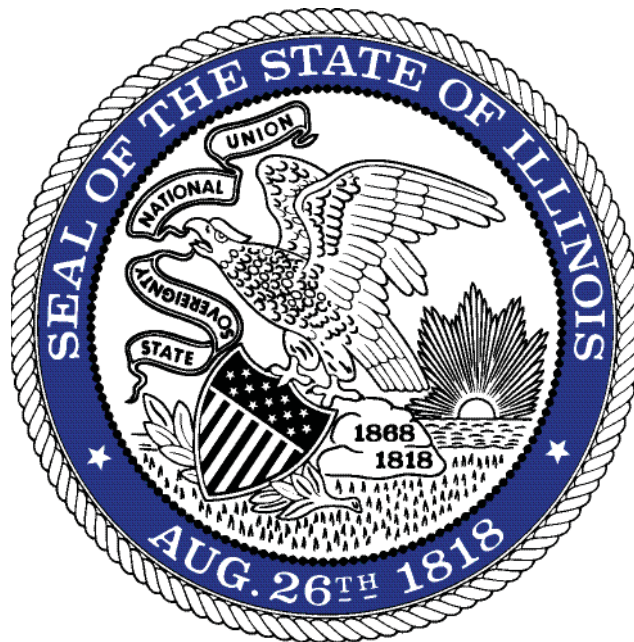
CHART 90

**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO
ASSET ALLOCATION AS OF DECEMBER 2016**



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

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



Note: All data shown in this section is based upon the system's Actuarial Valuation and CAFR as of June 30, 2016.

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

Retirement Age

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

Retirement Formula

- 2.2% of final average salary for each year of service

Maximum Annuity

- 75% of final average salary

Salary Used to Calculate Pension

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

Annual COLA

- 3% compounded

Employee Contributions

- 9.0% of salary

Employer Contributions

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

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

CHART 91

CHICAGO TEACHERS' PENSION FUND
Active Employees

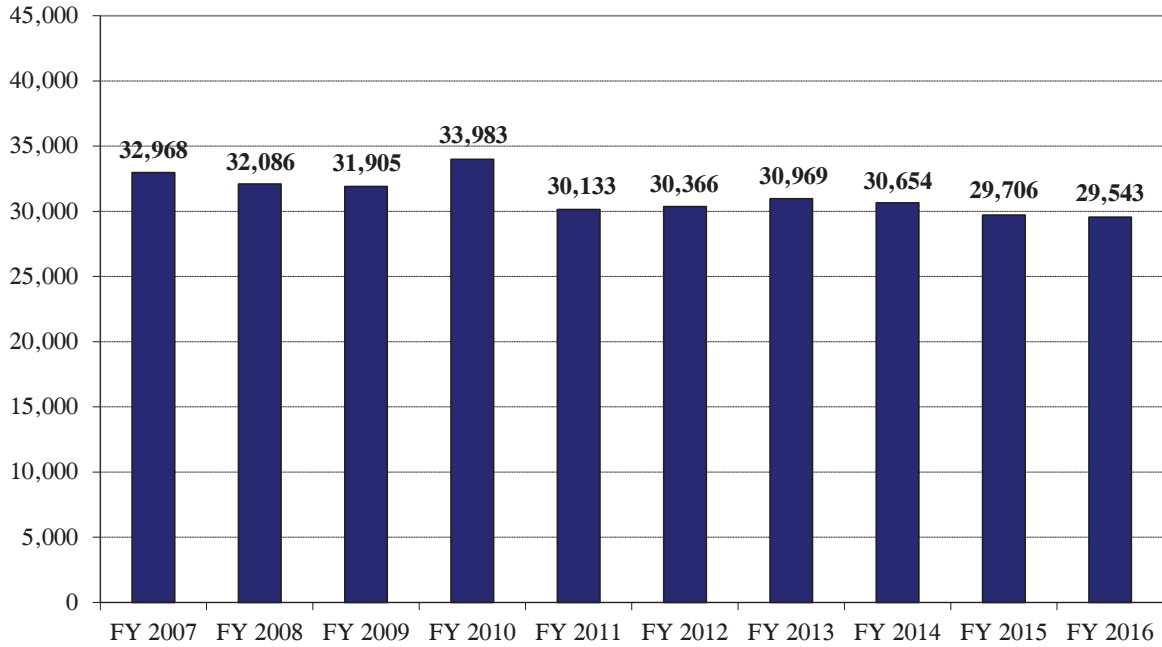


CHART 92

CHICAGO TEACHERS' PENSION FUND
Employee Annuitants

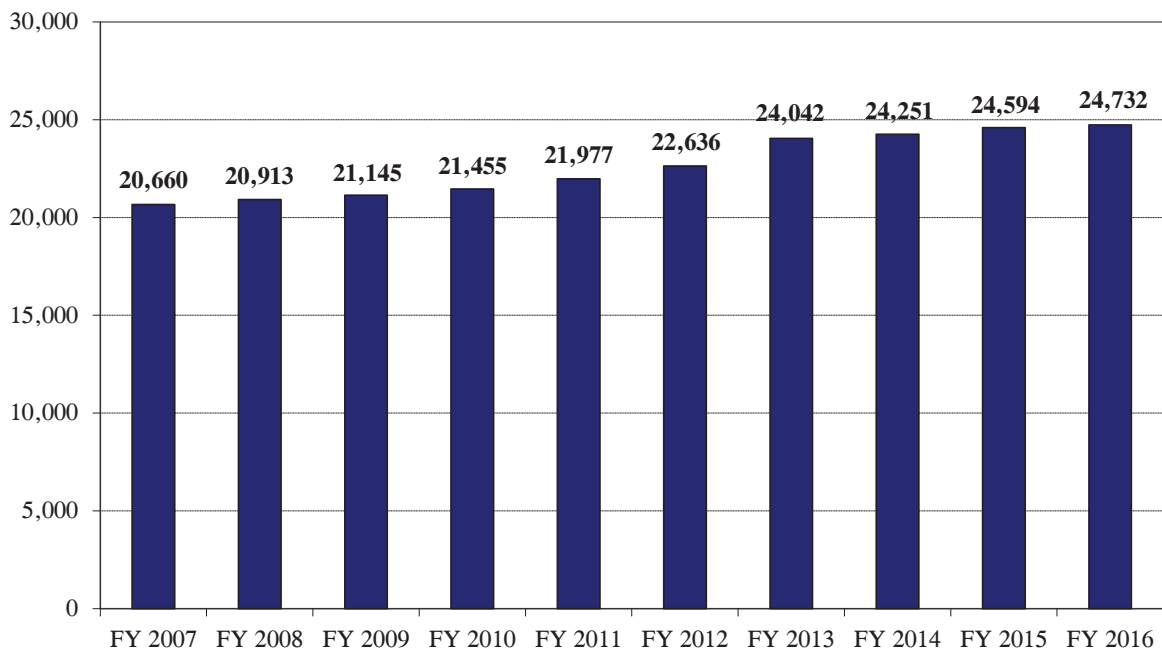


CHART 93

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

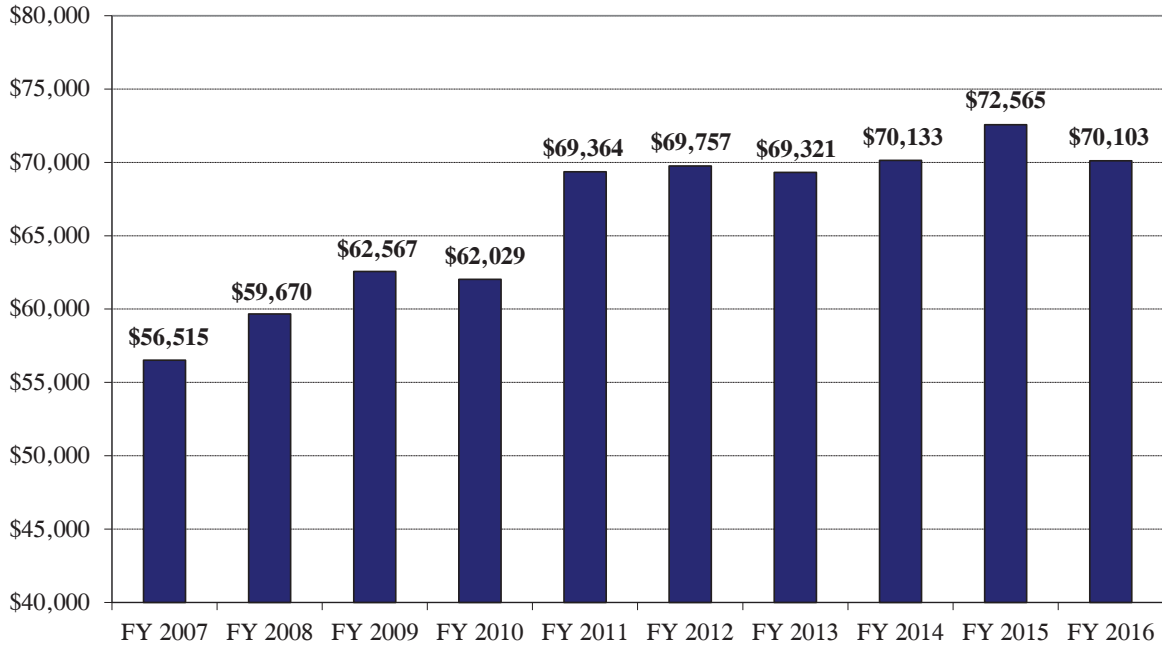


CHART 94

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

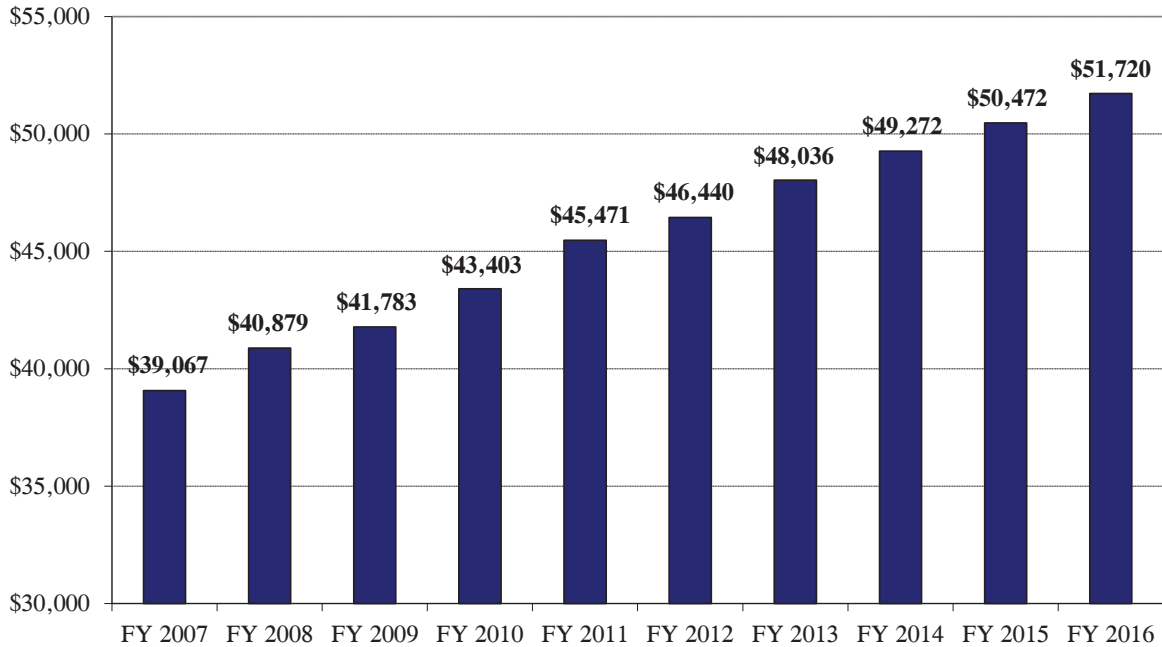


CHART 95

**CHICAGO TEACHERS' PENSION FUND
Funded Ratio
FY 2007 - FY 2016**

All figures based upon the actuarial value of assets.

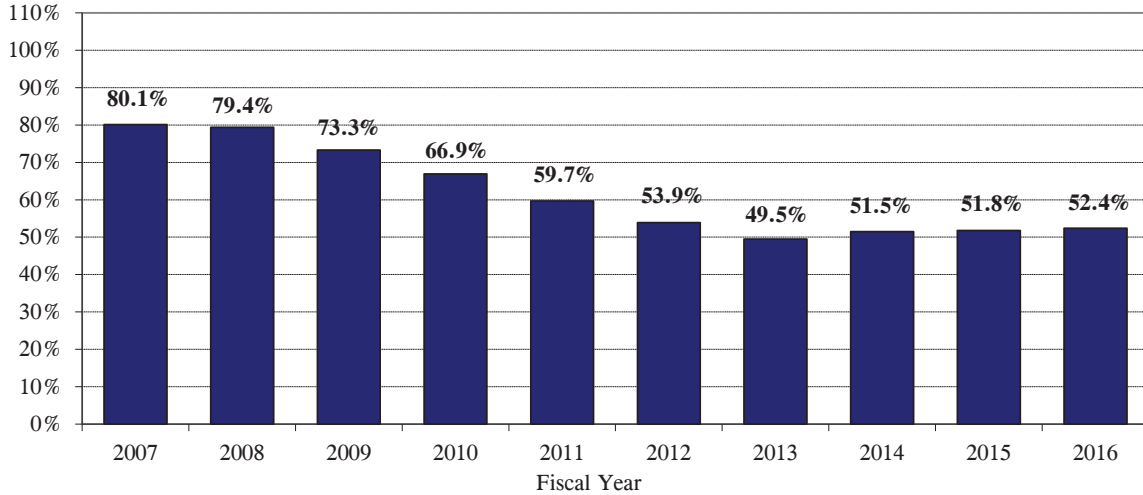
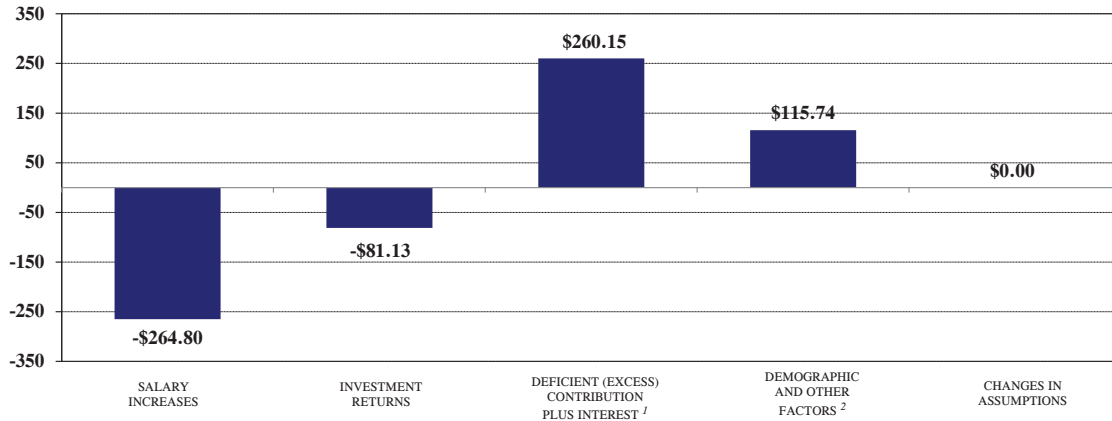


CHART 96

**CHICAGO TEACHERS PENSION FUND
Change in Unfunded Liabilities
Year ended June 30, 2016
(\$ Millions)**

TOTAL INCREASE EQUALS
\$ 29.96 MIL

All figures based upon the actuarial value of assets.



¹ Unfunded liability increased due to contributions being less than normal cost plus interest cost.

² Includes actuarial losses from retirement, deaths among retired participants/beneficiaries, and miscellaneous and an actuarial gain from termination. Unfunded liability increased due to the actuarial losses exceeding gains.

CHART 97

CHICAGO TEACHERS' PENSION FUND
Investment Income FY 2007 - FY 2016
Actuarially Assumed Rate of Return : 7.75%
(\$ in Millions)

All figures based upon the market value of assets.

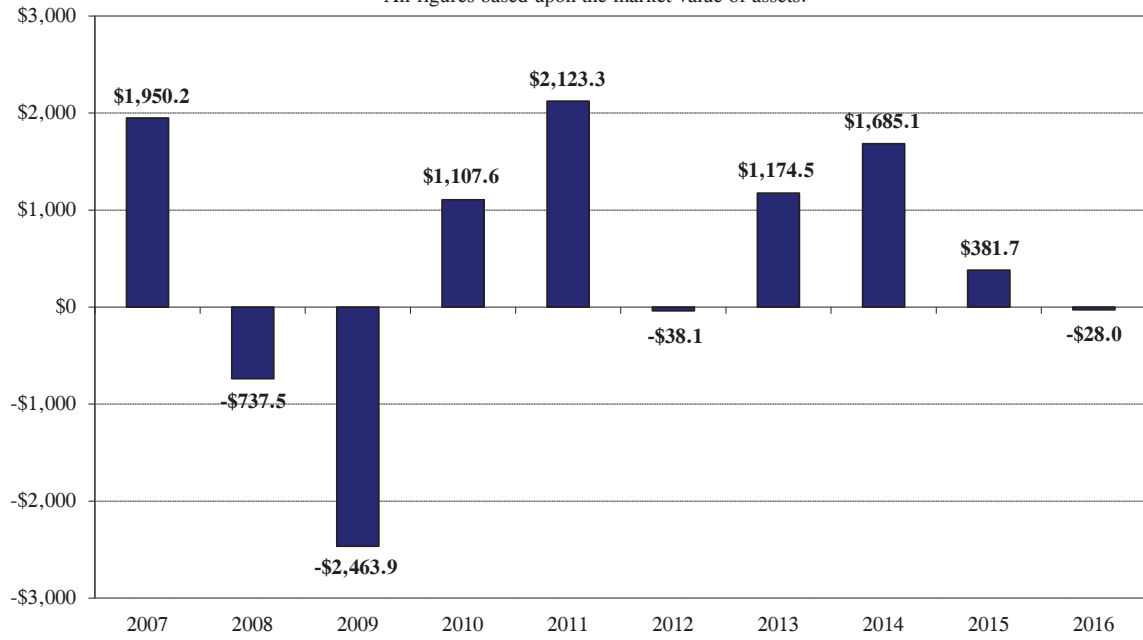


CHART 98

CHICAGO TEACHERS' PENSION FUND
Rate of Return FY 2007 - FY 2016
Actuarially Assumed Rate of Return : 7.75%

All figures based upon the market value of assets.

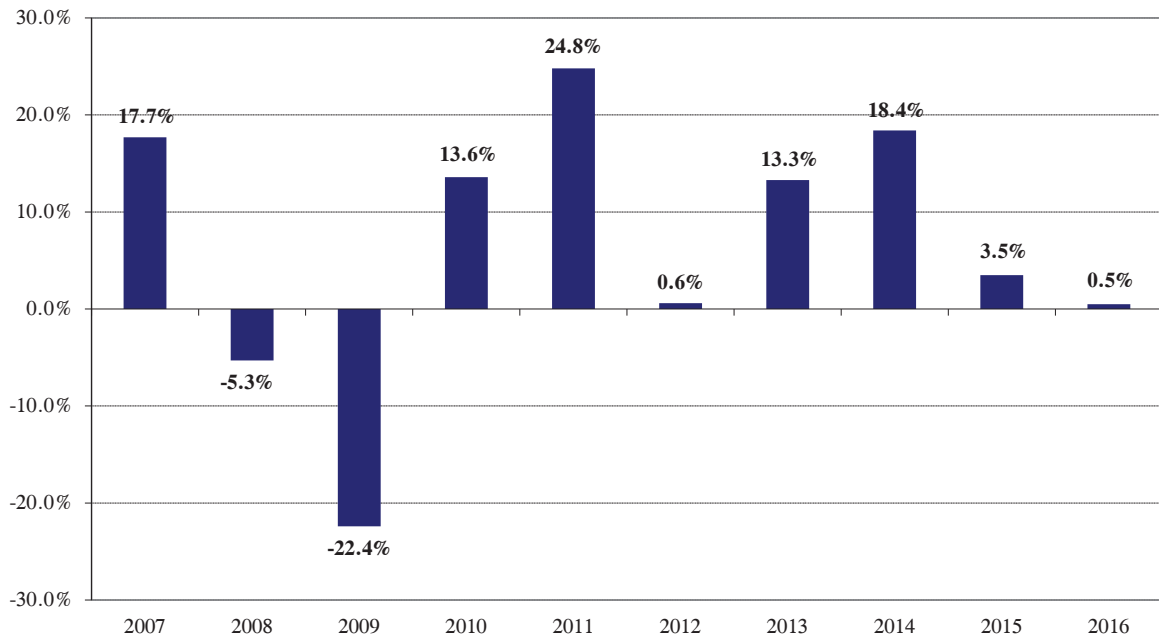


TABLE 31

CHICAGO TEACHERS PENSION FUND					
System Experience, FY 2007 - FY 2016					
(\$ in Millions)					
Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2016	2,281.3	20,246.1	10,610.7	9,635.4	52.4%
2015	2,273.6	19,951.3	10,344.4	9,606.9	51.8%
2014	2,233.3	19,503.9	10,045.5	9,458.4	51.5%
2013	2,239.3	19,044.5	9,422.5	9,622.0	49.5%
2012	2,224.9	17,375.7	9,364.1	8,011.6	53.9%
2011	2,090.1	16,940.3	10,109.3	6,831.0	59.7%
2010	2,107.9	16,319.7	10,917.4	5,402.3	66.9%
2009	1,996.2	15,683.2	11,493.3	4,189.9	73.3%
2008	1,914.6	15,203.7	12,069.4	3,134.3	79.4%
2007	1,863.2	14,677.2	11,759.7	2,917.5	80.1%

TABLE 32

CHICAGO TEACHERS PENSION FUND										
Changes in Net Assets										
(\$ in Millions)										
Fiscal Years	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Additions to Assets										
Employer	\$635.1	\$643.7	\$585.4	\$142.6	\$138.8	\$208.6	\$355.8	\$263.0	\$229.3	\$168.8
Employees	\$191.9	\$191.2	\$187.8	\$188.4	\$187.1	\$185.9	\$194.6	\$176.2	\$172.4	\$179.0
Net Investment Income	-\$28.2	\$381.7	\$1,685.1	\$1,174.5	-\$38.1	\$2,123.3	\$1,107.6	-\$2,463.9	-\$737.5	\$1,950.2
Other	\$1.5	\$0.9	\$0.0	\$0.0	\$0.4	\$10.4	\$0.0	\$15.0	\$0.0	\$0.0
Total Asset Additions (A)	\$800.2	\$1,217.5	\$2,458.3	\$1,505.5	\$288.2	\$2,528.2	\$1,658.0	-\$2,009.7	-\$335.8	\$2,298.0
Deductions from Assets										
Benefits	\$1,351.3	\$1,307.7	\$1,273.5	\$1,232.3	\$1,117.2	\$1,050.9	\$991.4	\$944.5	\$907.6	\$800.7
Refunds	\$33.6	\$23.9	\$32.8	\$24.8	\$36.3	\$27.1	\$21.1	\$19.0	\$16.7	\$36.4
Rebates	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$75.8	\$68.7	\$61.0
Administrative Expenses	\$12.3	\$11.7	\$10.5	\$11.5	\$10.1	\$9.5	\$8.8	\$8.8	\$7.8	\$8.4
Other	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$78.9	\$80.0	\$0.0	\$0.0	\$0.0
Total Asset Deductions (B)	\$1,397.1	\$1,343.3	\$1,316.8	\$1,268.6	\$1,163.6	\$1,166.4	\$1,101.3	\$1,048.1	\$1,000.8	\$906.5
Change in Net Assets (A-B=C)	-\$596.9	-\$125.7	\$1,141.5	\$236.9	-\$875.4	\$1,361.8	\$556.7	-\$3,057.8	-\$1,336.6	\$1,391.5

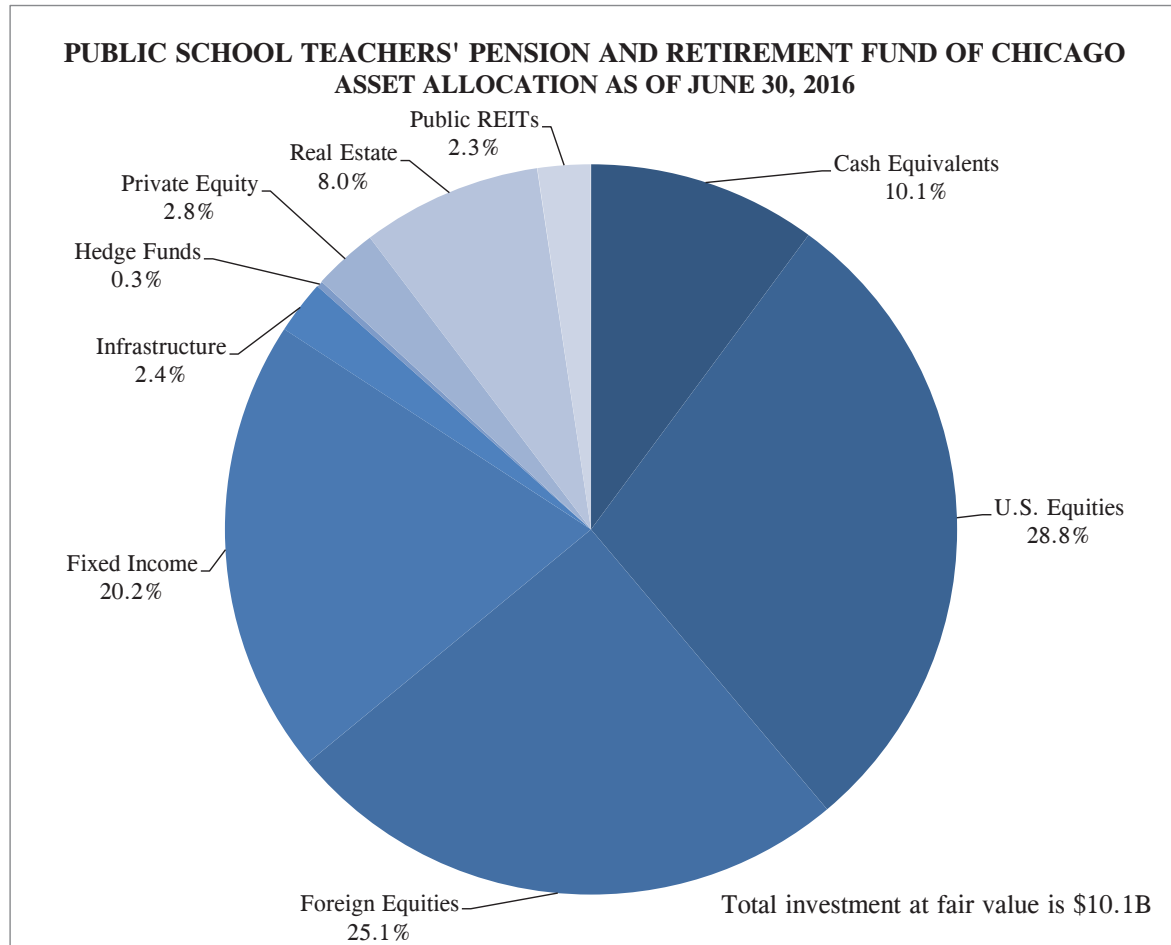
Table 33 below contains funding projections provided to CGFA by the Chicago Teachers' Pension Fund based upon the June 30, 2016 actuarial valuation.

TABLE 33

Chicago Teachers' Pension Fund Actuarial Valuation Projection Results as of June 30, 2016 Projections Based on P.A. 96-0889 (\$ in Millions)								
Fiscal Year	Capped Payroll	Total Employer Contributions ¹	Employer Contribution As % of Payroll	Total Employee Contribution	Total Actuarial Liability	Actuarial Value of Assets	Unfunded Actuarial Liability	Funded Ratio
2017	2,227.2	745.4	33.5%	187.3	20,680.4	10,812.6	9,867.8	52.3%
2018	2,299.7	784.4	34.1%	193.4	21,128.4	10,769.5	10,358.9	51.0%
2019	2,374.2	809.8	34.1%	199.7	21,593.2	10,808.3	10,784.9	50.1%
2020	2,449.5	835.5	34.1%	206.0	22,075.9	11,047.3	11,028.6	50.0%
2021	2,526.6	861.8	34.1%	212.5	22,577.2	11,317.1	11,260.1	50.1%
2022	2,605.1	888.6	34.1%	219.1	23,098.6	11,620.7	11,477.9	50.3%
2023	2,685.0	915.8	34.1%	225.8	23,641.4	11,956.2	11,685.2	50.6%
2024	2,765.8	943.4	34.1%	232.6	24,206.5	12,321.8	11,884.7	50.9%
2025	2,846.5	970.9	34.1%	239.4	24,793.8	12,718.2	12,075.6	51.3%
2026	2,925.5	997.8	34.1%	246.1	25,403.5	13,145.6	12,257.9	51.7%
2027	3,001.9	1,023.9	34.1%	252.5	26,033.4	13,602.4	12,431.0	52.2%
2028	3,073.6	1,048.4	34.1%	258.5	26,683.6	14,087.9	12,595.7	52.8%
2029	3,141.9	1,071.6	34.1%	264.3	27,352.0	14,600.4	12,751.6	53.4%
2030	3,207.0	1,093.9	34.1%	269.7	28,037.0	15,138.8	12,898.2	54.0%
2031	3,269.9	1,115.3	34.1%	275.0	28,736.4	15,701.7	13,034.7	54.6%
2032	3,331.5	1,136.3	34.1%	280.2	29,449.3	16,289.2	13,160.1	55.3%
2033	3,392.9	1,157.3	34.1%	285.4	30,172.7	16,900.3	13,272.4	56.0%
2034	3,452.8	1,177.7	34.1%	290.4	30,904.8	17,534.6	13,370.2	56.7%
2035	3,510.8	1,197.5	34.1%	295.3	31,642.1	18,190.5	13,451.6	57.5%
2036	3,566.2	1,216.4	34.1%	300.0	32,379.5	18,864.6	13,514.9	58.3%
2037	3,619.0	1,234.4	34.1%	304.4	33,122.5	19,564.0	13,558.5	59.1%
2038	3,669.9	1,251.7	34.1%	308.7	33,855.6	20,275.8	13,579.8	59.9%
2039	3,718.0	1,268.1	34.1%	312.7	34,571.9	20,995.3	13,576.6	60.7%
2040	3,763.2	1,283.6	34.1%	316.5	35,265.7	21,718.2	13,547.5	61.6%
2041	3,806.2	1,298.2	34.1%	320.1	35,930.7	22,440.7	13,490.0	62.5%
2042	3,847.4	1,312.3	34.1%	323.6	36,559.0	23,157.5	13,401.5	63.3%
2043	3,885.7	1,325.3	34.1%	326.8	37,144.7	23,864.7	13,280.0	64.2%
2044	3,922.4	1,337.9	34.1%	329.9	37,686.9	24,562.6	13,124.3	65.2%
2045	3,961.6	1,351.3	34.1%	333.2	38,181.7	25,250.6	12,931.1	66.1%
2046	4,002.1	1,365.0	34.1%	336.6	38,632.4	25,933.0	12,699.4	67.1%
2047	4,049.0	1,381.1	34.1%	340.6	39,042.9	26,616.8	12,426.1	68.2%
2048	4,102.9	1,399.4	34.1%	345.1	39,417.0	27,310.1	12,106.9	69.3%
2049	4,161.5	1,419.4	34.1%	350.0	39,759.9	28,021.0	11,738.9	70.5%
2050	4,226.7	1,441.7	34.1%	355.5	40,076.2	28,758.7	11,317.5	71.8%
2051	4,297.8	1,465.9	34.1%	361.5	40,367.0	29,529.3	10,837.7	73.2%
2052	4,373.4	1,491.7	34.1%	367.9	40,637.0	30,342.3	10,294.7	74.7%
2053	4,453.9	1,519.1	34.1%	374.6	40,879.7	31,198.4	9,681.3	76.3%
2054	4,534.7	1,546.7	34.1%	381.4	41,095.4	32,102.4	8,993.0	78.1%
2055	4,620.0	1,575.8	34.1%	388.6	41,286.3	33,062.8	8,223.5	80.1%
2056	4,709.6	1,606.4	34.1%	396.1	41,452.9	34,086.7	7,366.2	82.2%
2057	4,804.4	1,638.7	34.1%	404.1	41,603.5	35,189.9	6,413.6	84.6%
2058	4,903.5	1,672.5	34.1%	412.4	41,740.2	36,383.7	5,356.5	87.2%
2059	5,003.1	1,706.5	34.1%	420.8	41,870.4	37,683.3	4,187.1	90.0%

¹ Total employer contributions include required board of education contributions and additional board of education contributions as well as additional state contributions.

CHART 99



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://cgfa.ilga.gov>