

Illinois Public Retirement Systems

September 2024



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

Chicago Transit Authority Retirement Fund

Cook County Employees' Pension Fund

Cook County Forest Preserve Employees' Pension Fund

Firemen's Annuity and Benefit Fund of Chicago

Illinois Municipal Retirement Fund

Laborers' Annuity and Benefit Fund of Chicago

Metropolitan Water Reclamation District Retirement Fund

Municipal Employees' Annuity and Benefit Fund of Chicago

Park Employees' Annuity and Benefit Fund of Chicago

Policemen's Annuity and Benefit Fund of Chicago

Public School Teachers' Pension and Retirement Fund of Chicago

Commission on Government Forecasting & Accountability

*Commission on Government
Forecasting and Accountability*

COMMISSION CO-CHAIRMEN

Senator David Koehler
Representative C.D. Davidsmeyer

SENATE

Omar Aquino
Donald DeWitte
Elgie Sims
Win Stoller
Dave Syverson

HOUSE

Sonya Harper
Elizabeth Hernandez
Martin McLaughlin
Anna Moeller
Joe Sosnowski

EXECUTIVE DIRECTOR

Clayton Klenke

DEPUTY DIRECTOR

Laurie Eby

PENSION MANAGER

Dan Hankiewicz

AUTHORS OF REPORT

Zach Hollinshead

EXECUTIVE SECRETARY

Briana Stafford

TABLE OF CONTENTS

September 2024

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

	<u>Page</u>
Executive Summary	i
I. Recent Pension Legislation	5
II. Chicago Transit Authority Retirement Fund	21
III. Cook County Employees' Pension Fund	31
IV. Cook County Forest Preserve Employees' Pension Fund	43
V. Firemen's Annuity and Benefit Fund of Chicago	55
VI. Illinois Municipal Retirement Fund	69
VII. Laborers' Annuity and Benefit Fund of Chicago	83
VIII. Metropolitan Water Reclamation District Retirement Fund	97
IX. Municipal Employees' Annuity and Benefit Fund of Chicago	109
X. Park Employees' Annuity and Benefit Fund of Chicago	123
XI. Policemen's Annuity and Benefit Fund of Chicago	137
XII. Public School Teachers' Pension and Retirement Fund of Chicago	151

INDEX TO CHARTS AND TABLES

Chart 1	Chicago Transit Authority Active Employees	24
Chart 2	Chicago Transit Authority Employee Annuitants	24
Chart 3	Chicago Transit Authority Average Salaries	25
Chart 4	Chicago Transit Authority Average Retirement Annuities	25

Chart 5	Chicago Transit Authority Funded Ratios	26
Chart 6	Chicago Transit Authority Analysis of Actuarial (Gains) and Losses	26
Chart 7	Chicago Transit Authority Investment Income	27
Chart 8	Chicago Transit Authority Rates of Return	27
Chart 9	Chicago Transit Authority Asset Allocation	30
Chart 10	Cook County Employees' Pension Fund Active Employees	35
Chart 11	Cook County Employees' Pension Fund Employee Annuitants	35
Chart 12	Cook County Employees' Pension Fund Average Salaries	36
Chart 13	Cook County Employees' Pension Fund Average Retirement Annuities	36
Chart 14	Cook County Employees' Pension Fund Funded Ratios	37
Chart 15	Cook County Employees' Pension Fund Change in Unfunded Liabilities	37
Chart 16	Cook County Employees' Pension Fund Investment Income	38
Chart 17	Cook County Employees' Pension Fund Rates of Return	38
Chart 18	Cook County Employees' Pension Fund Asset Allocation	42
Chart 19	Cook County FP Employees' Pension Fund Active Employees	47
Chart 20	Cook County FP Employees' Pension Fund Employee Annuitants	47
Chart 21	Cook County FP Employees' Pension Fund Average Salaries	48
Chart 22	Cook County FP Employees' Pension Fund Average Retirement Annuities	48
Chart 23	Cook County FP Employees' Pension Fund Funded Ratios	49
Chart 24	Cook County FP Employees' Pension Fund Change in Unfunded Liabilities	49
Chart 25	Cook County FP Employees' Pension Fund Investment Income	50
Chart 26	Cook County FP Employees' Pension Fund Rates of Return	50
Chart 27	Cook County FP Employees' Pension Fund Asset Allocation	54
Chart 28	Firemen's Annuity & Benefit Fund of Chicago Active Employees	59
Chart 29	Firemen's Annuity & Benefit Fund of Chicago Employee Annuitants	59
Chart 30	Firemen's Annuity & Benefit Fund of Chicago Average Salaries	60
Chart 31	Firemen's Annuity & Benefit Fund of Chicago Average Retirement Annuities	60
Chart 32	Firemen's Annuity & Benefit Fund of Chicago Funded Ratios	61
Chart 33	Firemen's Annuity & Benefit Fund of Chicago Change in Unfunded Liabilities	61
Chart 34	Firemen's Annuity & Benefit Fund of Chicago Investment Income	62
Chart 35	Firemen's Annuity & Benefit Fund of Chicago Rates of Return	62
Chart 36	Firemen's Annuity & Benefit Fund of Chicago Asset Allocation	67
Chart 37	Illinois Municipal Retirement Fund Active Employees	75
Chart 38	Illinois Municipal Retirement Fund Employee Annuitants	75
Chart 39	Illinois Municipal Retirement Fund Average Salaries	76
Chart 40	Illinois Municipal Retirement Fund Average Retirement Annuities	76
Chart 41	Illinois Municipal Retirement Fund Funded Ratios	77
Chart 42	Illinois Municipal Retirement Fund Change in Unfunded Liabilities	77
Chart 43	Illinois Municipal Retirement Fund Investment Income	78
Chart 44	Illinois Municipal Retirement Fund Rates of Return	78
Chart 45	Illinois Municipal Retirement Fund Asset Allocation	81
Chart 46	Laborers' Annuity & Benefit Fund of Chicago Active Employees	88
Chart 47	Laborers' Annuity & Benefit Fund of Chicago Employee Annuitants	88
Chart 48	Laborers' Annuity & Benefit Fund of Chicago Average Salaries	89
Chart 49	Laborers' Annuity & Benefit Fund of Chicago Average Retirement Annuities	89
Chart 50	Laborers' Annuity & Benefit Fund of Chicago Funded Ratios	90

Chart 51	Laborers' Annuity & Benefit Fund of Chicago Change in Unfunded Liabilities	90
Chart 52	Laborers' Annuity & Benefit Fund Investment Income	91
Chart 53	Laborers' Annuity & Benefit Fund Rates of Return	91
Chart 54	Laborers' Annuity & Benefit Fund Asset Allocation	96
Chart 55	Metropolitan Water Reclamation District Ret. Fund Active Employees	101
Chart 56	Metropolitan Water Reclamation District Ret. Fund Employee Annuitants	101
Chart 57	Metropolitan Water Reclamation District Ret. Fund Average Salaries	102
Chart 58	Metropolitan Water Reclamation District Ret. Fund Avg. Ret. Annuities	102
Chart 59	Metropolitan Water Reclamation District Ret. Fund Funded Ratios	103
Chart 60	Metropolitan Water Reclamation District Ret. Fund Change in Unfunded Liabilities	103
Chart 61	Metropolitan Water Reclamation District Ret. Fund Investment Income	104
Chart 62	Metropolitan Water Reclamation District Ret. Fund Rates of Return	104
Chart 63	Metropolitan Water Reclamation District Ret. Fund Asset Allocation	107
Chart 64	Municipal Employees' Annuity & Benefit Fund of Chi. Active Employees	114
Chart 65	Municipal Employees' Annuity & Benefit Fund of Chi. Annuitants	114
Chart 66	Municipal Employees' Annuity & Benefit Fund of Chi. Average Salaries	115
Chart 67	Municipal Employees' Annuity & Benefit Fund of Chi. Avg. Ret. Annuities	115
Chart 68	Municipal Employees' Annuity & Benefit Fund of Chi. Funded Ratios	116
Chart 69	Municipal Employees' Annuity & Benefit Fund of Chi. Chg. In Unfunded Liabilities	116
Chart 70	Municipal Employees' Annuity & Benefit Fund of Chi. Investment Income	117
Chart 71	Municipal Employees' Annuity & Benefit Fund of Chi. Rates of Return	117
Chart 72	Municipal Employees' Annuity & Benefit Fund of Chi. Asset Allocation	121
Chart 73	Park Employees' Annuity & Benefit Fund of Chicago Active Employees	127
Chart 74	Park Employees' Annuity & Benefit Fund of Chicago Annuitants	127
Chart 75	Park Employees' Annuity & Benefit Fund of Chicago Average Salaries	128
Chart 76	Park Employees' Annuity & Benefit Fund of Chicago Avg. Ret. Annuities	128
Chart 77	Park Employees' Annuity & Benefit Fund of Chicago Funded Ratios	129
Chart 78	Park Employees' Annuity & Benefit Fund of Chicago Chg. In Unfunded Liabilities	129
Chart 79	Park Employees' Annuity & Benefit Fund of Chicago Investment Income	130
Chart 80	Park Employees' Annuity & Benefit Fund of Chicago Rates of Return	130
Chart 81	Park Employees' Annuity & Benefit Fund of Chicago Asset Allocation	135
Chart 82	Policemen's Annuity & Benefit Fund of Chicago Active Employees	141
Chart 83	Policemen's Annuity & Benefit Fund of Chicago Employee Annuitants	141
Chart 84	Policemen's Annuity & Benefit Fund of Chicago Average Salaries	142
Chart 85	Policemen's Annuity & Benefit Fund of Chicago Avg. Ret. Annuities	142
Chart 86	Policemen's Annuity & Benefit Fund of Chicago Funded Ratios	143
Chart 87	Policemen's Annuity & Benefit Fund of Chicago Changes in Unfunded Liabilities	143
Chart 88	Policemen's Annuity & Benefit Fund of Chicago Investment Income	144
Chart 89	Policemen's Annuity & Benefit Fund of Chicago Rates of Return	144
Chart 90	Policemen's Annuity & Benefit Fund of Chicago Asset Allocation	149
Chart 91	PS Teachers' Pension & Retirement Fund of Chi. Active Employees	155
Chart 92	PS Teachers' Pension & Retirement Fund of Chi. Employee Annuitants	155
Chart 93	PS Teachers' Pension & Retirement Fund of Chi. Average Salaries	156
Chart 94	PS Teachers' Pension & Retirement Fund of Chi. Avg. Ret. Annuities	156
Chart 95	PS Teachers' Pension & Retirement Fund of Chi. Funded Ratios	157
Chart 96	PS Teachers' Pension & Retirement Fund of Chi. Changes in Unfunded Liabilities	157

Chart 97	PS Teachers' Pension & Retirement Fund of Chi. Investment Income	158
Chart 98	PS Teachers' Pension & Retirement Fund of Chi. Rates of Return	158
Chart 99	PS Teachers' Pension & Retirement Fund of Chi. Asset Allocation	163
Chart 100	Chicago Teachers' Pension Fund State Contributions	164
Table 1	Chicago Transit Authority Systems Experience	28
Table 2	Chicago Transit Authority Changes in Net Assets	29
Table 3	Cook County Employees' Pension Fund Systems Experience	39
Table 4	Cook County Employees' Pension Fund Changes in Net Assets	40
Table 5	Cook County Employees' Pension Fund System Projections	41
Table 6	Cook County FP Employees' Pension Fund Systems Experience	51
Table 7	Cook County FP Employees' Pension Fund Changes in Net Assets	52
Table 8	Cook County FP Employees' Pension Fund System Projections	53
Table 9	Firemen's Annuity & Benefit Fund of Chicago Systems Experience	63
Table 10	Firemen's Annuity & Benefit Fund of Chicago Changes in Net Assets	64
Table 11	Firemen's Annuity & Benefit Fund of Chicago System Projections	65
Table 12	Firemen's Annuity & Benefit Fund of Chicago System Normal Cost Projections	66
Table 13	Illinois Municipal Retirement Fund Systems Experience	79
Table 14	Illinois Municipal Retirement Fund Changes in Net Assets	80
Table 15	Laborers' Annuity & Benefit Fund of Chicago Systems Experience	92
Table 16	Laborers' Annuity & Benefit Fund of Chicago Changes in Net Assets	93
Table 17	Laborers' Annuity & Benefit Fund of Chicago System Projections	94
Table 18	Laborers' Annuity & Benefit Fund of Chicago Normal Cost Projections	95
Table 19	Metropolitan Water Reclamation District Ret. Fund Systems Experience	105
Table 20	Metropolitan Water Reclamation District Ret. Fund Changes in Net Assets	106
Table 21	Municipal Employees' Annuity & Benefit Fund of Chi. Systems Experience	118
Table 22	Municipal Employees' Annuity & Benefit Fund of Chi. Changes in Net Assets	119
Table 23	Municipal Employees' Annuity & Benefit Fund of Chicago System Projections	120
Table 24	Park Employees' Annuity & Benefit Fund of Chicago Systems Experience	131
Table 25	Park Employees' Annuity & Benefit Fund of Chicago Changes in Net Assets	132
Table 26	Park Employees' Annuity & Benefit Fund of Chicago System Projections	133
Table 27	Park Employees' Annuity & Benefit Fund of Chi. Normal Cost Projections	134
Table 28	Policemen's Annuity & Benefit Fund of Chicago Systems Experience	145
Table 29	Policemen's Annuity & Benefit Fund of Chicago Changes in Net Assets	146
Table 30	Policemen's Annuity & Benefit Fund of Chicago System Projections	147
Table 31	Policemen's Annuity & Benefit Fund of Chicago Normal Cost Projections	148
Table 32	PS Teachers' Pension & Retirement Fund of Chi. Systems Experience	159
Table 33	PS Teachers' Pension & Retirement Fund of Chi. Changes in Net Assets	160
Table 34	PS Teachers' Pension & Retirement Fund of Chi. System Projections	161
Table 35	PS Teachers' Pension & Retirement Fund of Chi. System Normal Cost Projections	162

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) 2022. The fiscal year ends December 31 for most systems, except for two systems, the Chicago Transit Authority Pension Fund and Public School Teachers' Pension and Retirement Fund of Chicago. The Chicago Transit Authority Pension Fund ends its fiscal year on January 1, and the 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 FY 2022 (January 1, 2023) there were 7,409 active employees and 8,128 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$2.076 billion and Total Actuarial Liabilities were \$3.830 billion.
- The Cook County Employees' Pension Fund covers all persons employed and paid by the County. At the end of 2022 there were 18,107 active employees and 17,163 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$13.179 billion and Total Actuarial Liabilities were \$19.829 billion.
- The Cook County Forest Preserve Employees' Retirement Fund covers all persons employed and paid by the Forest Preserve. At the end of 2022 there were 503 active employees and 393 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$213.8 million and Total Actuarial Liabilities were \$378.1 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 2022 there were 4,767 active employees and 3,761 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$1.499 billion and Total Actuarial Liabilities were \$7.216 billion.
- The Illinois Municipal Retirement Fund covers employees hired by the following units of government: (1) All counties except Cook and (for non-teachers) 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 2022 there were 175,224 active employees and 135,985 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$52.143 billion and Total Actuarial Liabilities were \$53.113 billion.

- The Laborers' Annuity and Benefit Fund of Chicago (LABF) covers persons employed by the City of Chicago in a position classified as labor service by the employer, persons employed by the Board of Education under the labor service classification, or anyone employed by a retirement board of any other annuity and benefit fund in the city. At the end of 2022 there were 2,624 active employees and 2,524 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$1.239 billion and Total Actuarial Liabilities were \$2.786 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 2022 there were 1,747 active employees and 1,915 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$1.624 billion and Total Actuarial Liabilities were \$2.812 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 2022 there were 35,369 active employees and 21,820 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$4.275 billion and Total Actuarial Liabilities were \$18.760 billion.
- The Park Employees' Annuity and Benefit Fund of Chicago covers all persons employed by the Chicago Park District. At the end of 2022 there were 2,818 active employees and 2,106 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$400.0 million and Total Actuarial Liabilities were \$1.269 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 2022 there were 11,868 active employees and 10,952 employee annuitants. Total Actuarial Assets of the system at the end of that year were \$3.815 billion and Total Actuarial Liabilities were \$16.021 billion.
- The Public School Teachers' Pension and Retirement Fund of Chicago (CTPF) covers certified teachers and employees of the Chicago public schools. At the end of FY 2023 (June 30, 2023) there were 31,824 active employees and 23,672 employee annuitants. Total Actuarial Assets of the system on that date were \$12.364 billion and Total Actuarial Liabilities were \$26.171 billion.
- For most of the retirement systems, this report contains multi-year funding projections performed by the systems' actuaries. Unless otherwise noted, all long-term funding projections are based upon the retirement systems' Fiscal Year or Calendar Year 2022 actuarial valuation (CTPF projections are based on their FY 2023 actuarial valuation).

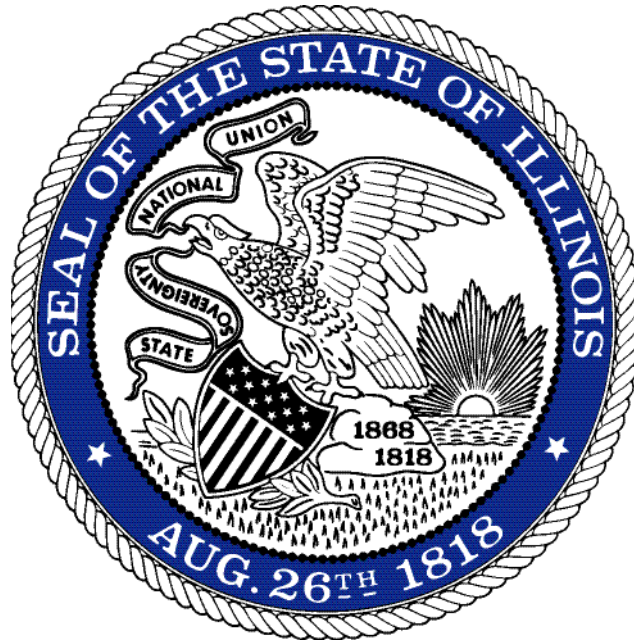
The statutory funding requirements differ for each system and are outlined at the beginning of each system’s chapter under the heading “Required Employer Contributions”. In cases where a recent legislative enactment has changed a particular system’s funding requirement, the Public Act number is displayed in the tables showing multi-year funding projections.

- The 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 \$51,573.0 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 2022					
(\$ in Millions)					
System	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
Chicago Transit Authority	\$659.6	\$3,830.2	\$2,076.0	\$1,754.2	54.2%
Firemen's Annuity & Benefit Fund	\$525.5	\$7,216.4	\$1,498.8	\$5,717.6	20.8%
Laborers' Annuity and Benefit Fund	\$214.1	\$2,785.9	\$1,239.4	\$1,546.5	44.5%
Metropolitan Water Fund	\$195.7	\$2,811.6	\$1,624.1	\$1,187.5	57.8%
Municipal Employees' Annuity and Benefit Fund	\$2,166.2	\$18,759.6	\$4,275.0	\$14,484.7	22.8%
Park Employees' Annuity and Benefit Fund	\$136.9	\$1,269.0	\$399.6	\$869.5	31.5%
Policemen's Annuity and Benefit Fund	\$1,274.0	\$16,020.8	\$3,815.0	\$12,205.8	23.8%
Public School Teachers' Pension Fund*	\$2,649.7	\$26,171.0	\$12,363.8	\$13,807.2	47.2%
Totals	\$7,821.7	\$78,864.5	\$27,291.6	\$51,573.0	34.6%

*CTPF Amounts from FY 23 Actuarial Valuation

I. Recent Pension Legislation



Public Act 96-0889 (Creation of Tier II)

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 under age 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 (Creation of Tier II)

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 Personnel), 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 latter 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 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 1.5% 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.

Public Act 100-0023

Senate Bill 0042 – Trotter (Harris)

* As of writing, the Tier 3 plan is implemented by two pension funds, the Municipal Employees' Annuity and Benefit Fund of Chicago (MEABF) and Laborers' Annuity and Benefit Fund of Chicago (LABF).

I. Overview of Key Provisions of Public Act 100-0023 (SB 0042)

Effective Date

- July 6, 2017

Systems Impacted

- The General Assembly Retirement System (GARS), Firemen's Annuity and Benefit Fund of Chicago, MEABF, Cook County Employees' Pension Fund, Cook County Forest Preserve Employees' Pension Fund, LABF, Park Employees' Annuity and Benefit Fund of Chicago, State Employees' Retirement System (SERS), State Universities Retirement System (SURS), Teachers' Retirement System (TRS), Public School Teachers' Pension and Retirement Fund of Chicago (CTPF), and Judges' Retirement System (JRS)

Optional Tier 3 Hybrid Plan

Tier 3 Availability

- SERS, SURS, and TRS:
 - Tier 3 benefits are available as soon as the board of that respective system authorizes members to begin participation.
 - Each of these systems shall endeavor to make participation available as soon as possible. This requirement is referred to as the "implementation date."
 - Newly hired and existing Tier 2 members must make the election to participate in Tier 3 within 30 days of becoming a member or participant in the pertinent system.
- MEABF, Cook County Employees, Cook County Forest Preserve Employees, LABF, Park Employees, and CTPF:
 - Tier 3 benefits are available beginning 6 months after the governing body of the unit of local government approves participation in the plan via adoption of a resolution or ordinance.
 - No later than 5 months after the resolution or ordinance approving participation in Tier 3, the affected system shall prepare and implement the defined contribution component of the Tier 3 hybrid plan.
 - Newly hired members must make the election to participate in the Tier 3 hybrid system within 30 days of becoming a member or participant in the pertinent system.

Tier 3 Benefits Summary

(Tier 3 benefits and eligibility may be different for MEABF and LABF, as shown below.)

- Retirement Annuity: 1.25% for each year of service credit multiplied by final average salary
- Normal Retirement: determined by Social Security Administration, but no earlier than 67 years of age with at least 10 years of service
- COLA: Beginning 1 year after annuity start date and equal to 50% of the CPI-W
- Survivor's/Widow's Annuity: 66 2/3% of participant's retirement annuity
- Employee Contribution for the DB component: 6.2% of salary (cannot exceed normal cost)
- Employee Contribution for the DC component: 4% minimum
- Employer Contributions for the DC component: between 2% and 6% of salary
 - Employer contributions vest when they are paid into a participant's account.
 - Employee and employer contributions are transferrable into other qualified plans.
- For SURS and TRS
 - Employer Contribution is the DB Normal Cost less the Employee Contribution, plus 2%. (expressed as a % of payroll)

MEABF and LABF Retirement Eligibility (New Tier 3 DB Schedule of Benefits)

- Between October 1, 2017 and November 15, 2017, existing Tier 2 members who began service prior to the effective date of this Act (July 6, 2017) shall make an irrevocable decision to be eligible for the new Tier 3 retirement options described below:
 - Those who elect to gain eligibility for the new Tier 3 schedule of benefits will be subject to the Tier 3 employee contribution rates.
- Tier 3 Employee Contribution Rates
 - After the effective date of this Act, but prior to January 1, 2018: 7.5%
 - January 1, 2018 and prior to January 1, 2019: 8.5%
 - January 1, 2019 and thereafter: the lesser of:
 - Normal Cost using the Entry Age Normal (EAN) actuarial method (no less than 6.5%)
 - 9.5%
 - This rate (the lesser of the normal cost or 9.5%) shall resume until the systems have reached a 90% funding ratio, at which point the employee contribution shall be reduced to 5.5% of salary.
 - If the funding ratio falls below 75%, then the employee contribution shall revert to the previous amount.
- Tier 3 Benefits
 - New hires that are at least 65 years of age with at least 10 years of service credit are entitled to a retirement annuity upon written application.
 - New hires who retire between the age of 60 and 65, with at least 10 years of service credit, shall have their annuity reduced by 0.5% for each month that he or she is under age 65.

Changes in State Contributions

- For SURS and TRS, in fiscal years 2018 through 2020, the State shall contribute an additional 2% of payroll of each Tier 3 employee.
- For SURS and TRS, if the amount of a participant's salary exceeds the amount of the Governor's salary, the employer shall pay to the System an amount equal to the employer normal cost multiplied by the excess amount of salary.
- State contribution-altering changes in actuarial or investment assumptions shall be implemented and smoothed over a 5-year period beginning in FY 18.
- State contribution-altering changes in actuarial or investment assumptions that first applied in fiscal year 2014, 2015, 2016, or 2017 shall be retroactively smoothed over a 5-year period, beginning with and including the year in which the actuarial change first applied.
 - By November 1, 2017, the amount of the State Contribution shall be recertified to include retroactive smoothing.

Chicago Fire COLA

- Firefighters born after December 31, 1954 but before January 1, 1966 and retired after September 1, 1967 are entitled to a 3% noncompounded annuity increase upon:
 - The 1st of the month following the 1-year anniversary of retirement, and every 1st of January thereafter.
 - Or following the attainment of age 55 if they were not 55 after 1 year of retirement
- Firefighters that meet the aforementioned criteria prior to this Act will receive an increase to their annuity as if they had received a 3% increase each year rather than 1.5%.

Chicago Municipal and Laborers Tax Levy

- Beginning in 2017, the property tax levy cannot exceed the amount of the city's total required contribution for the following year.

Public Act 101-0673

House Bill 2451 – Martwick (Martwick)

I. Overview of Key Provisions of Public Act 101-0673 (HB 2451)

Effective Date

- April 5, 2021

Systems Impacted

- Firemen’s Annuity and Benefit Fund of Chicago

Elimination of birthdate requirement for Tier One 3% non-compounded COLA

Prior to the enactment of P.A. 101-0673 (HB 2451), Tier 1 firefighters born before January 1, 1966 with at least 20 years of service received an annual non-compounded increase of 3% on or after the age of 55, not subject to a 30% increase maximum. Those Tier 1 firefighters born after January 1, 1966 received 1.5% increases on or after the age of 60 with at least 20 years of service, subject to a maximum of 30% (hence, after 15 years of retirement, no annual increases were payable).

The Act removed the birthdate restriction and sets the annual Tier 1 increase to 3% non-compounded for all retirees at least 55 years of age with 20 years of service. The Act further stipulates that firefighters who were not eligible for the 3% increase prior to the effective date of the bill (April 5th, 2021) will receive a 3% increase for each year the firefighter would have otherwise been eligible had the firefighter not received any increase.

Public Act 102-0263

House Bill 417 – Burke (Martwick)

I. Overview of Key Provisions of Public Act 102-0263 (HB 417)

Effective Date

- August 6, 2021

Systems Impacted

- Chicago Park District Article

Creation of Tier 3 Benefits

Prior to P.A. 102-0263, the Tier 2 retirement eligibility under the Chicago Park District Article was age 67 with 10 years of service for regular benefits and age 62 with 10 years of service for reduced benefits, respectively. The total employee contribution rate was 9% of salary, comprised of 7% for the retirement pension, 1% for the spouse's pension, and 1% for the annual increase in retirement benefit.

P.A. 102-0263 creates a Tier 2a benefit structure for employees who first became members on or after January 1, 2022. The Tier 2a plan provides, compared to the Tier 2 benefits structure, a higher employee contribution rate, in exchange for having a lower age retirement eligibility. The age eligibility will be reduced by 2 years (age 65 for regular benefits and age 60 for reduced benefits), and the employee contribution rate for the retirement pension will be increased to 9% from 7%, resulting in the total employee contribution rate of 11%.

Under this Act, two options will be offered to Tier 2 members who first became members prior to January 1, 2022. Tier 2 members who choose Option 1 could irrevocably elect to opt-in for the Tier 2a plan.

- Option 1: To agree with the Tier 2a benefits structure, which is to have an increased total employee contribution rate of 11% in exchange for the reduced age eligibility by 2 years (age 65 for regular benefits and age 60 for reduced benefits);
or
- Option 2: To not agree to Option 1. In this case, the current age retirement eligibility and employee contribution rate will remain the same.

This election shall be made between January 1, 2022, and April 1, 2022. P.A. 102-0263 stipulates that Option 2 is the default decision for those who fail to make an irrevocable election by April 1, 2022.

Chicago Park District Required Annual Pension Contributions and Tax Levy

Prior to P.A. 102-0263, a tax levied by the Chicago Park District (employer) to make the required employer contributions to the pension fund shall be equal to the employee

contributions in the fiscal year two years prior to the year for which the tax is levied, multiplied by 1.1.

Under this Act, beginning in levy year 2020, the levy shall not exceed the amount of the Park District's total required contribution for the next payment year ("Payment year" means the year immediately following the levy year). For payment years 2021 to 2023, the required employer contributions, determined by the pension fund's actuary, shall ramp up as follows:

1. For payment year 2021: 25% of the amount, equal to the sum of employer normal cost, plus an amount, using a 35-year period starting on December 31, 2020, using the entry age normal actuarial cost method, that is sufficient to attain a funded ratio of 100% by the end of 2055;
2. For payment year 2022: 50% of the amount, equal to the sum of employer normal cost, plus an amount, using a 35-year period starting on December 31, 2021, using the entry age normal actuarial cost method, that is sufficient to attain a funded ratio of 100% by the end of 2056; and
3. For payment year 2023: 75% of the amount, equal to the sum of employer normal cost, plus an amount, using a 35-year period starting on December 31, 2022, using the entry age normal actuarial cost method, that is sufficient to attain a funded ratio of 100% by the end of 2057;

For payment years 2024 through 2058, the Park District's required annual contribution shall be 100% of the amount, equal to the sum of employer normal cost, plus an amount, using a 35-year period starting on December 31, 2023, using the entry age normal actuarial cost method, that is sufficient to bring the funded ratio up to 100% by the end of 2058.

For payment year 2059 and each year thereafter, the required contribution shall be the amount required to reach a 100% funding ratio, if needed, using the entry age normal actuarial cost method as of the end of the year.

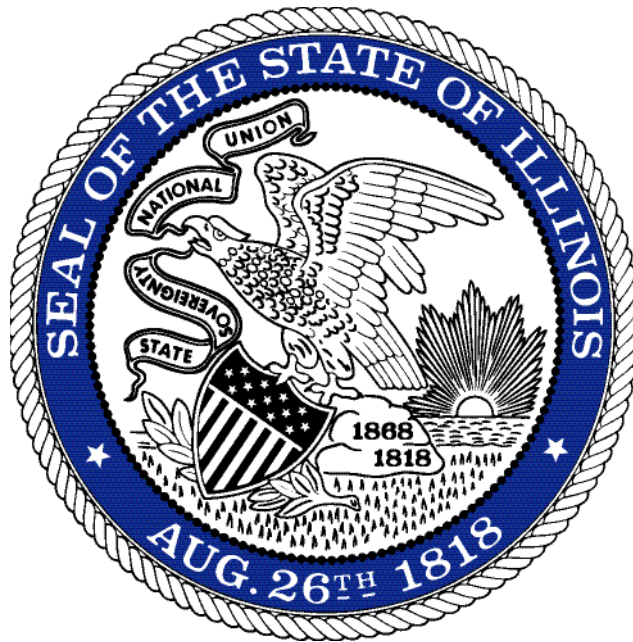
In determining the required employer contributions, any actuarial losses or gains from investment returns that differ from the expected investment returns shall be recognized in equal annual amounts over the 5-year period following the then-current fiscal year. This technique is known as "asset smoothing."

Authorization of the Issuance of Bonds

P.A. 102-0263 allows the Chicago Park District to issue pension obligation bonds from time to time in the principal amount of \$250 million for making supplementary employer contributions to the pension fund to reduce the unfunded liability. However, the Chicago Park District may not issue bonds in excess of \$75 million in any one year. The proceeds of the bonds should not be used to reduce the amount of the required employer contributions. Also, an additional employer contribution of \$40 million shall be made no later than November 1, 2021, to reduce the pension fund's unfunded liability.

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 January 1, 2023.

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
- As part of the Arbitration Award ruling of November 13, 2003, ad-hoc increases were provided to retirees as follows:
 - \$75 per month for members who retired before 1/1/1980;
 - \$50 per month for members who retired on or after 1/1/1980 but before 1/1/1991;
 - \$40 per month for members who retired on or after 1/1/1991 but before 1/1/2000;
- Another ad-hoc increase was made for members as part of an Arbitration Award ruling of June 26, 2007. Effective July 1, 2008, a one-time ad hoc pension adjustment of not more than \$2.5 million was made effective and allocated as determined by the Board.

Employee Contributions

- 13.795% of salary (FY 2022-2040)

Employer Contributions

- 21.590% of salary (FY 2022-2040)

Pursuant to P.A. 95-0708, the CTA shall make contributions so that the funded ratio does not decline below 60% in any year before FY 2040. If the funded ratio drops below 60%, the contributions shall be increased to reach 60% within 10 years. Beginning in FY 2040, the CTA Article of the Pension Code provides for a minimum contribution by the CTA, determined either by the CTA Pension Board of Trustees or the Auditor General, to bring the funded ratio of the Plan up to or no less than 90% by Dec. 31, 2059.

CHART 1

**CHICAGO TRANSIT AUTHORITY PENSION FUND
Active Employees**

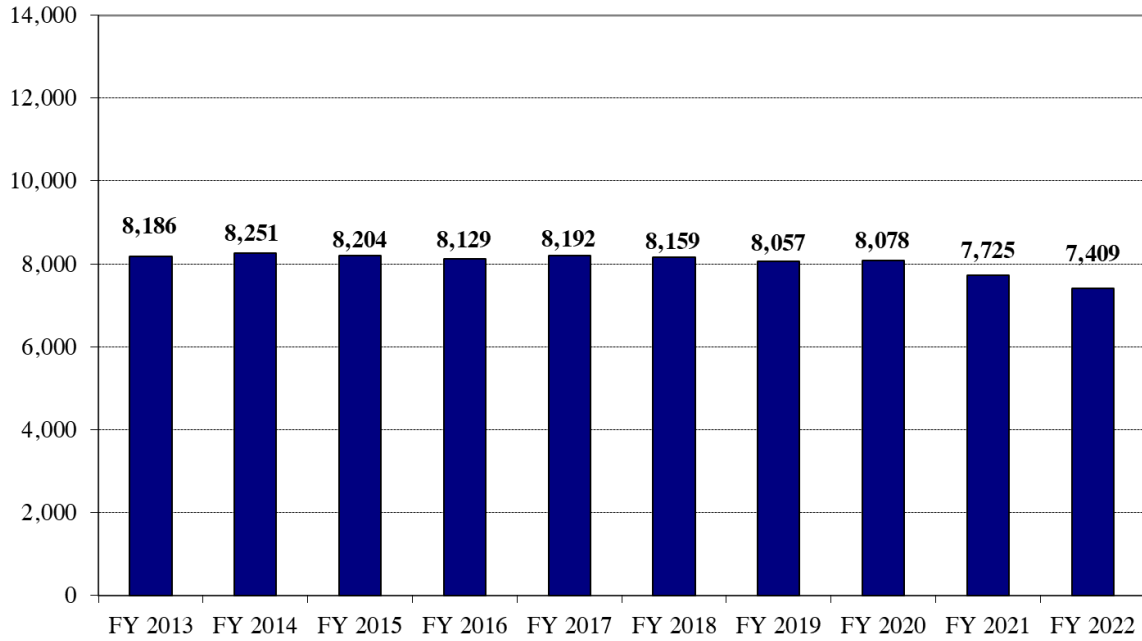


CHART 2

**CHICAGO TRANSIT AUTHORITY PENSION FUND
Employee Annuitants**

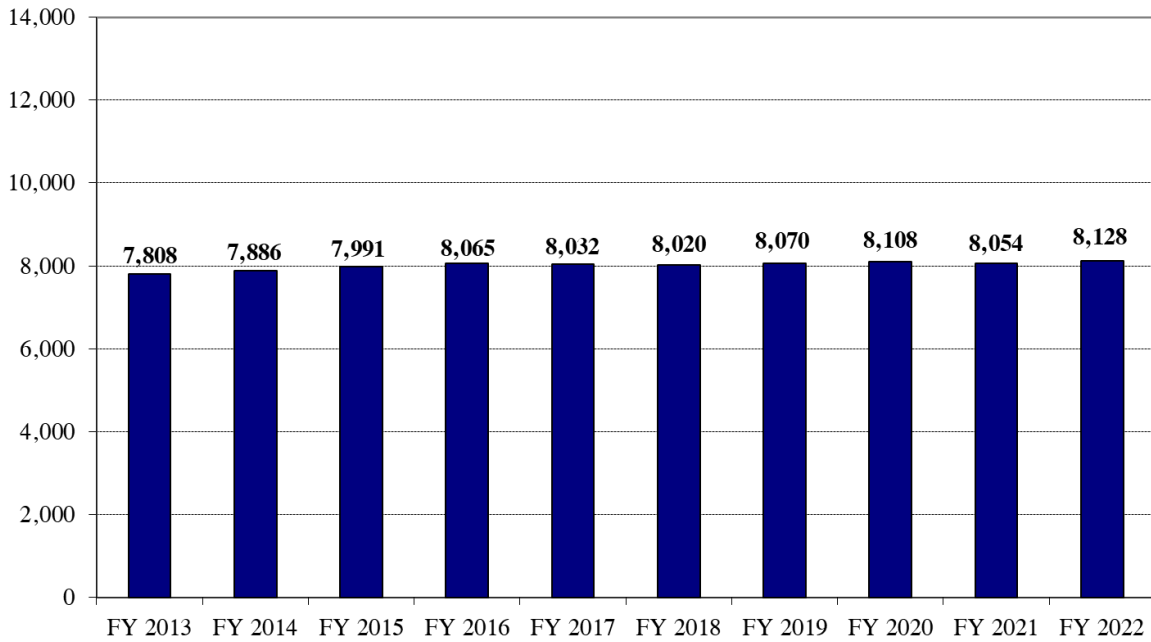


CHART 3

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

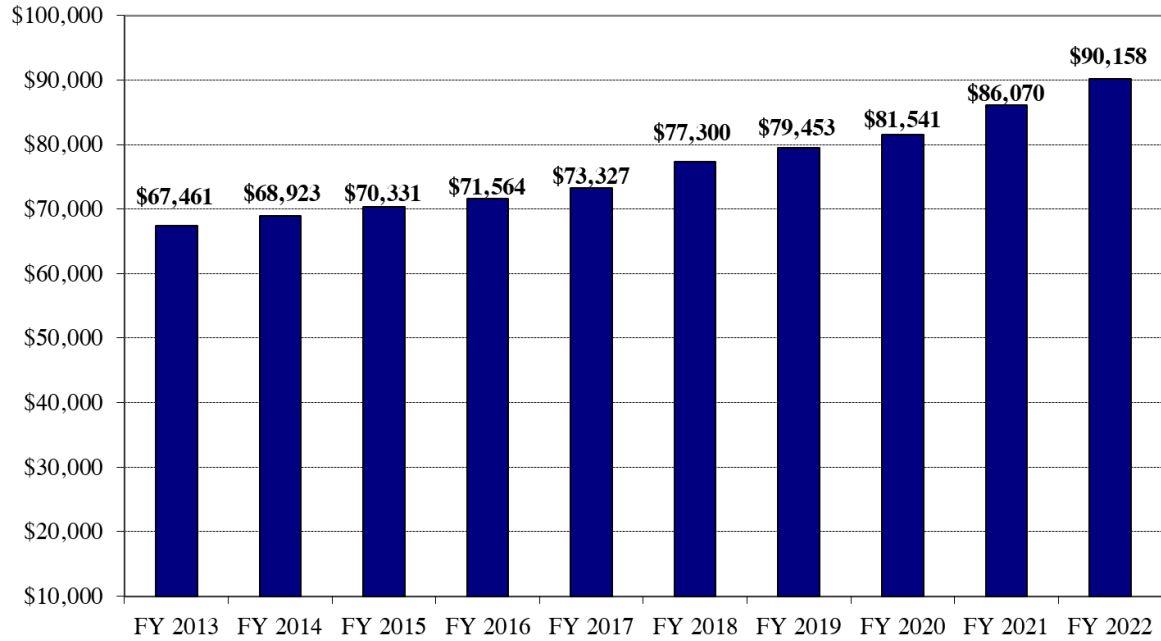


CHART 4

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

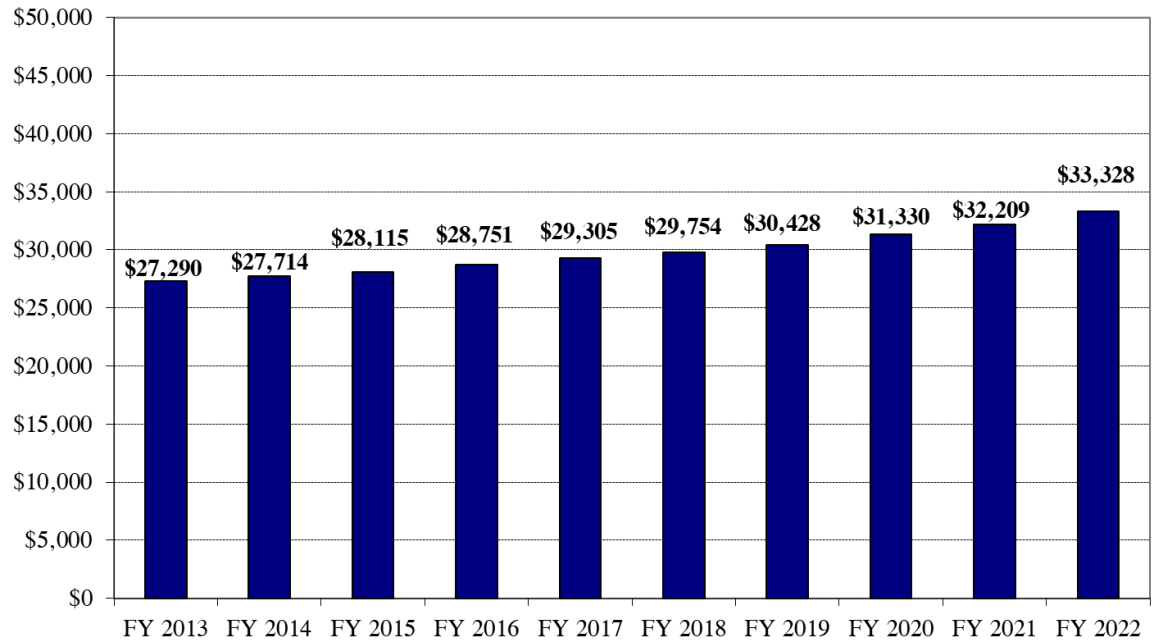


CHART 5

CHICAGO TRANSIT AUTHORITY PENSION FUND
Funded Ratio
FY 2013 - FY 2022

All figures based upon the actuarial value of assets.

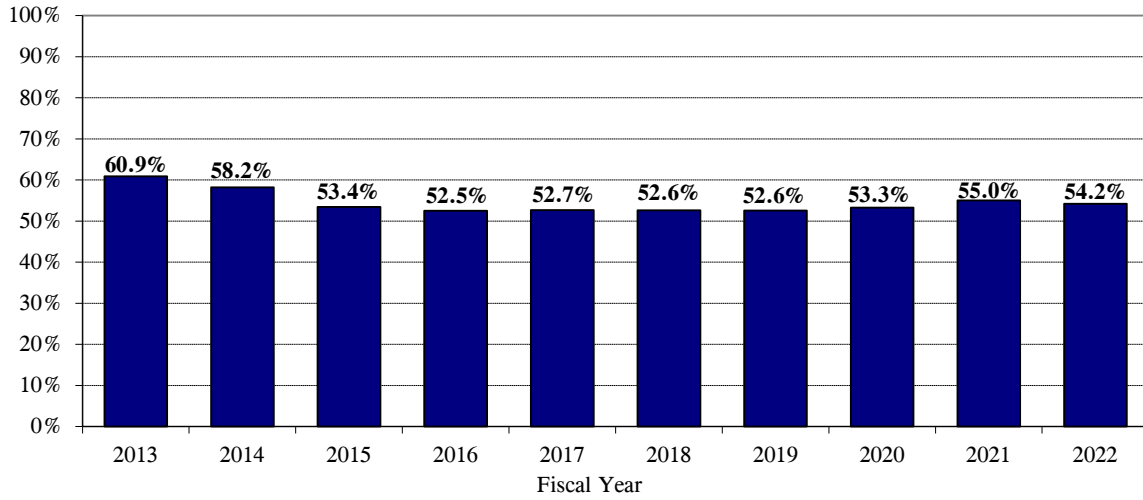


CHART 6

CHICAGO TRANSIT AUTHORITY PENSION FUND
Analysis of Actuarial (Gains) and Losses
Year ended January 1, 2023
(\$ in Millions)

TOTAL ACTUARIAL LOSS
 EQUALS \$99.8 M

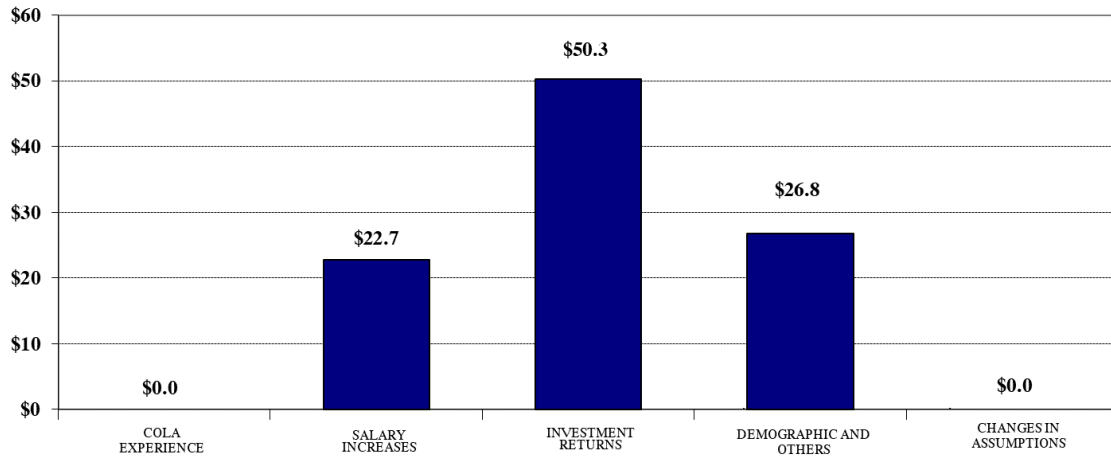


CHART 7

CHICAGO TRANSIT AUTHORITY PENSION FUND
Investment Income FY 2013 - FY 2022
Actuarially Assumed Rate of Return : 8.25%
(\$ in Millions)

All figures based upon the market value of assets.

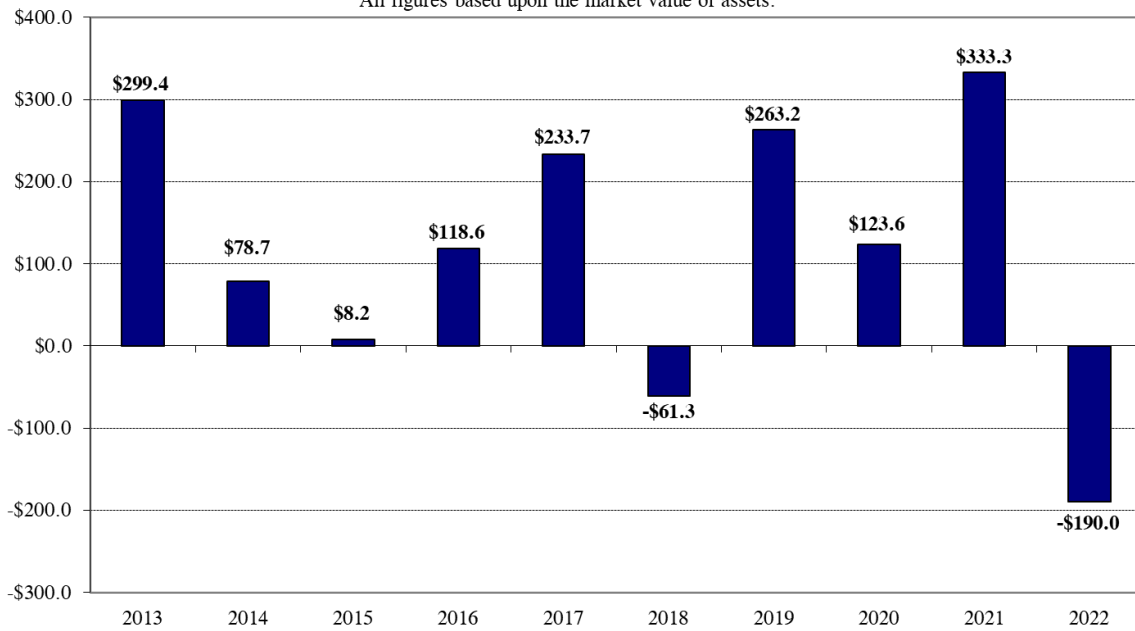


CHART 8

CHICAGO TRANSIT AUTHORITY PENSION FUND
Rate of Return FY 2013 - FY 2022
Actuarially Assumed Rate of Return : 8.25%

All figures based upon the market value of assets.

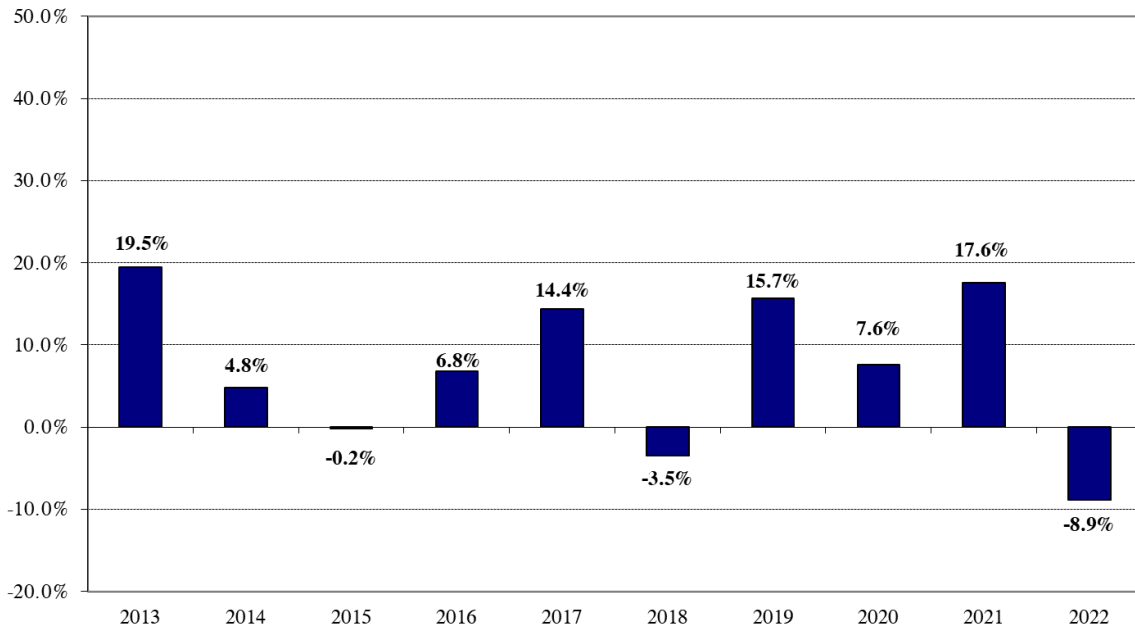


TABLE 1

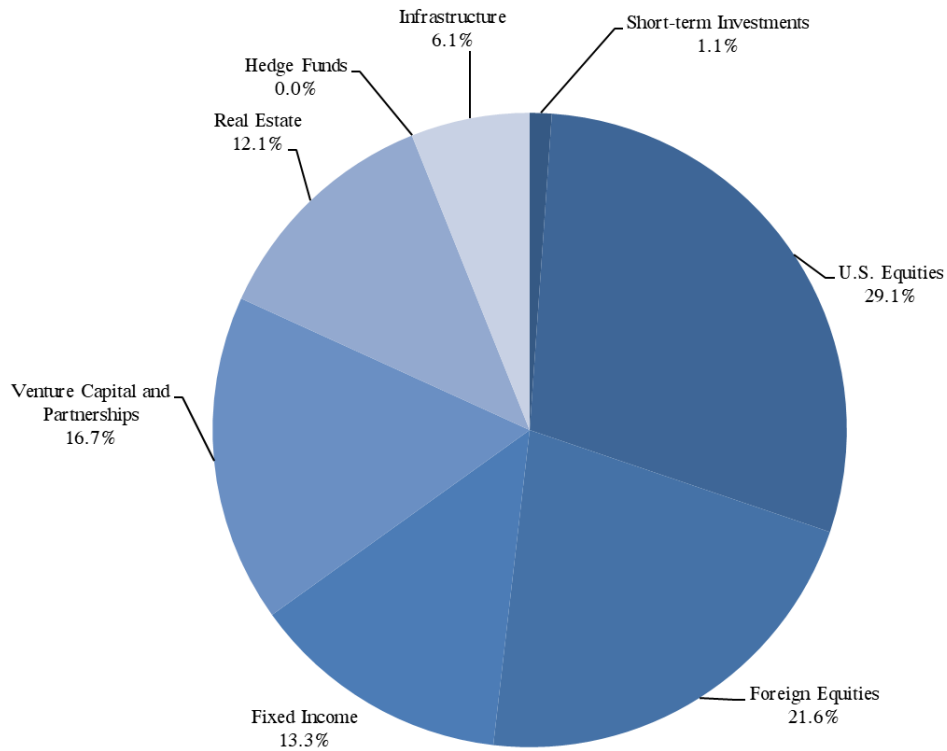
CHICAGO TRANSIT AUTHORITY PENSION FUND					
System Experience, FY 2013 - FY 2022					
(\$ in Millions)					
Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2022	659.6	3,830.2	2,076.0	1,754.2	54.2%
2021	657.4	3,740.7	2,057.1	1,683.6	55.0%
2020	650.0	3,670.7	1,955.3	1,715.4	53.3%
2019	631.4	3,583.9	1,883.4	1,700.4	52.6%
2018	623.0	3,489.0	1,835.8	1,653.2	52.6%
2017	595.0	3,423.2	1,802.2	1,621.0	52.6%
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%

TABLE 2

CHICAGO TRANSIT AUTHORITY PENSION FUND										
Changes in Net Assets										
(\$ in Millions)										
Fiscal Years	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Additions to Assets										
Employer	\$142.5	\$136.9	\$135.8	\$121.7	\$117.1	\$104.5	\$83.9	\$82.8	\$82.3	\$79.5
Employees	\$92.1	\$87.9	\$87.9	\$81.3	\$78.3	\$70.3	\$59.6	\$59.0	\$58.6	\$56.8
Net Investment Income	-\$190.0	\$333.3	\$123.6	\$263.2	-\$61.3	\$233.7	\$118.6	\$8.2	\$78.7	\$299.4
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)	\$44.6	\$558.1	\$347.4	\$466.2	\$134.1	\$408.5	\$262.0	\$150.0	\$219.5	\$435.7
Deductions from Assets										
Benefits	\$310.5	\$299.6	\$289.2	\$281.0	\$274.5	\$269.1	\$261.7	\$253.8	\$246.0	\$238.7
Refunds	\$18.2	\$8.9	\$5.2	\$7.1	\$7.4	\$7.3	\$4.8	\$6.4	\$7.1	\$4.9
Rebates	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Administrative Expenses	\$2.5	\$2.3	\$2.3	\$2.8	\$2.9	\$2.5	\$2.3	\$2.6	\$3.1	\$2.1
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)	\$331.2	\$310.8	\$296.7	\$290.9	\$284.8	\$279.0	\$268.9	\$262.7	\$256.3	\$245.7
Change in Net Assets (A-B=C)	-\$286.6	\$247.3	\$50.7	\$175.2	-\$150.7	\$129.5	-\$6.8	-\$112.7	-\$36.8	\$190.0

CHART 9

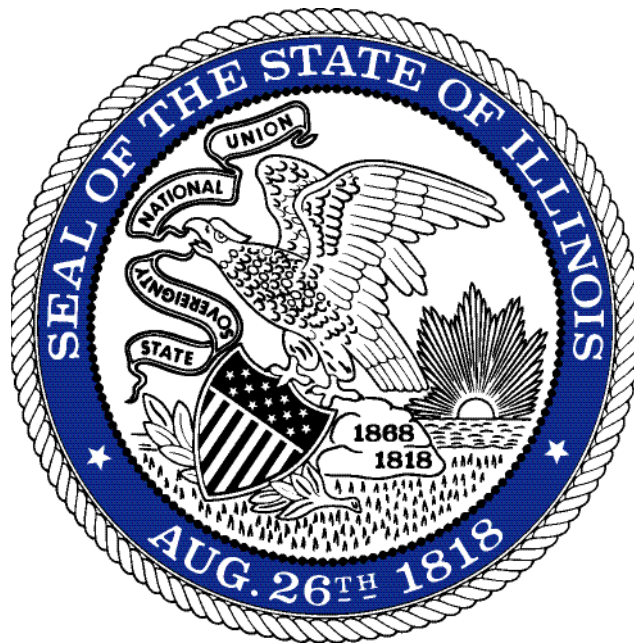
**CHICAGO TRANSIT AUTHORITY RETIREMENT FUND
ASSET ALLOCATION AS OF JANUARY 2023**



Total investment at fair value is \$1.9B.

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, 2022.

Cook County Employees' Pension Fund

Tier 1 Plan Summary

Retirement Age

- Age 60 with 10 years of service
- Age 50 with 30 years of service
- Age 50 with 10 years of service (reduced annuity)

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.

Effective August 11, 2023, prior to the reporting of FY 22 data, P.A. 103-0529 adjusts the formula for the tax levied by the County starting with the FY 2024 contribution and will be reflected in future reports. The annual tax is based on a 5-year smoothed actuarial value of assets plus a 30-year layered amortization of unfunded liabilities, with the amortization component increasing at 2% per year.

Cook County Employees' Pension Fund

Tier 2 Plan Summary (P.A. 96-0889)

Retirement Age

- Age 67 with 10 years of service
- Age 62 with 10 years of service (reduced annuity)

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 96 consecutive months of service within the last 120 months of service
- Pensionable Salary is limited by an amount tied to the 2011 Social Security Wage Base of \$106,800. This amount increases annually by 3% or ½ of the increase in the Consumer Price Index-U, whichever is less. The salary limits for calendar years 2020, 2021, and 2022 are \$115,929, \$116,740, and \$119,892, respectively.

Annual COLA

- Simple 3% or ½ of the increase in the Consumer Price Index-U, whichever is less

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.

Effective August 11, 2023, prior to the reporting of FY 22 data, P.A. 103-0529 adjusts the formula for the tax levied by the County starting with the FY 2024 contribution and will be reflected in future reports. The annual tax is based on a 5-year smoothed actuarial value of assets plus a 30-year layered amortization of unfunded liabilities, with the amortization component increasing at 2% per year.

CHART 10

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

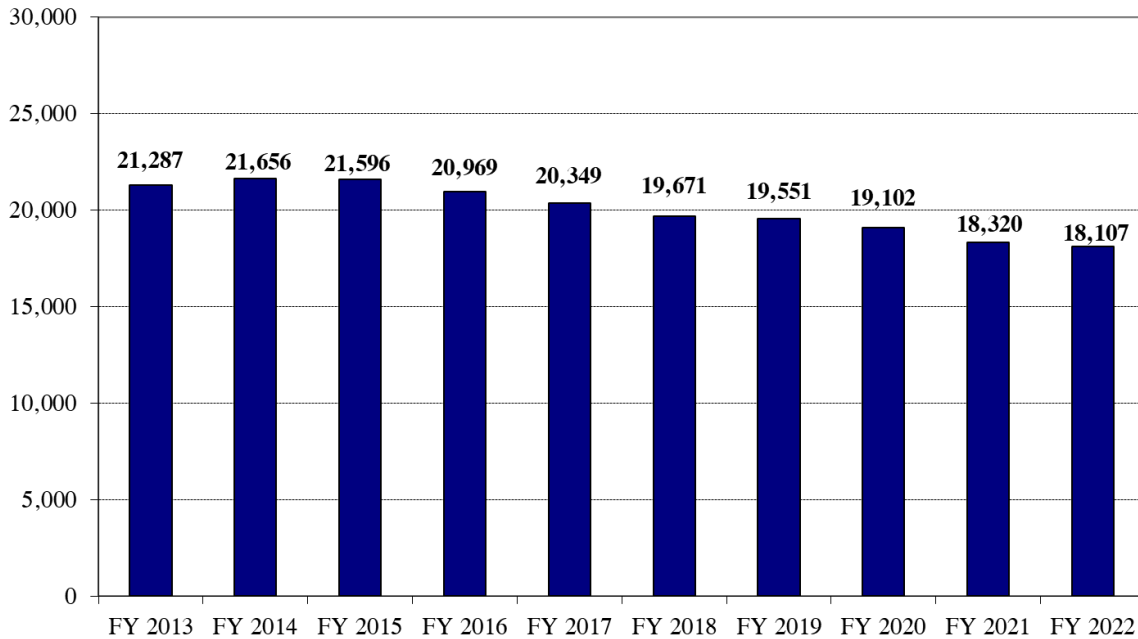


CHART 11

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

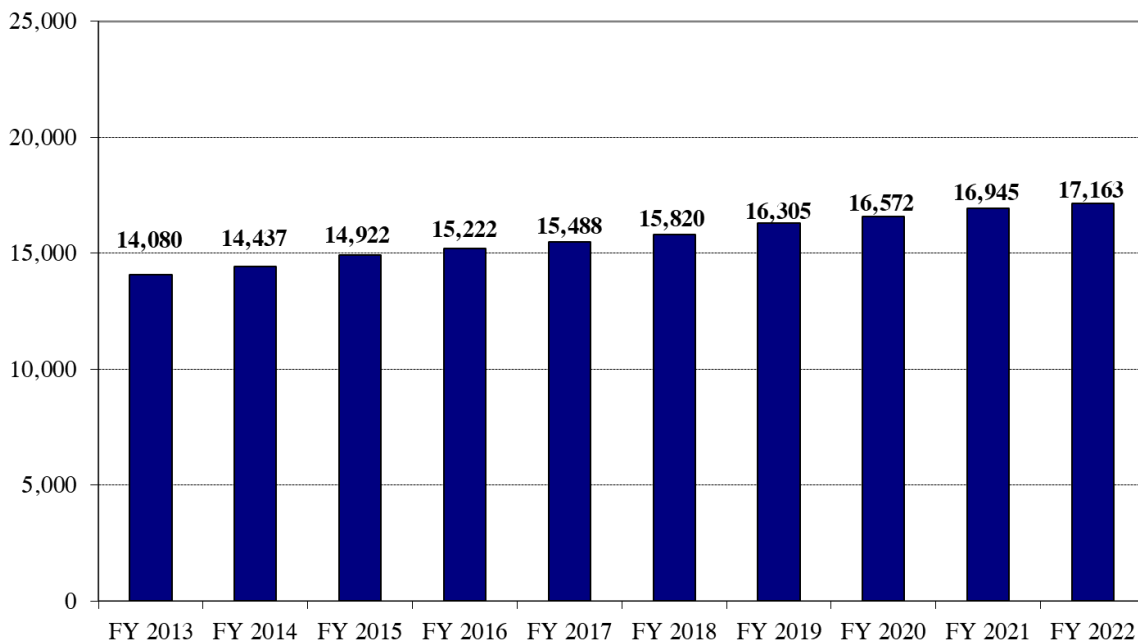


CHART 12

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

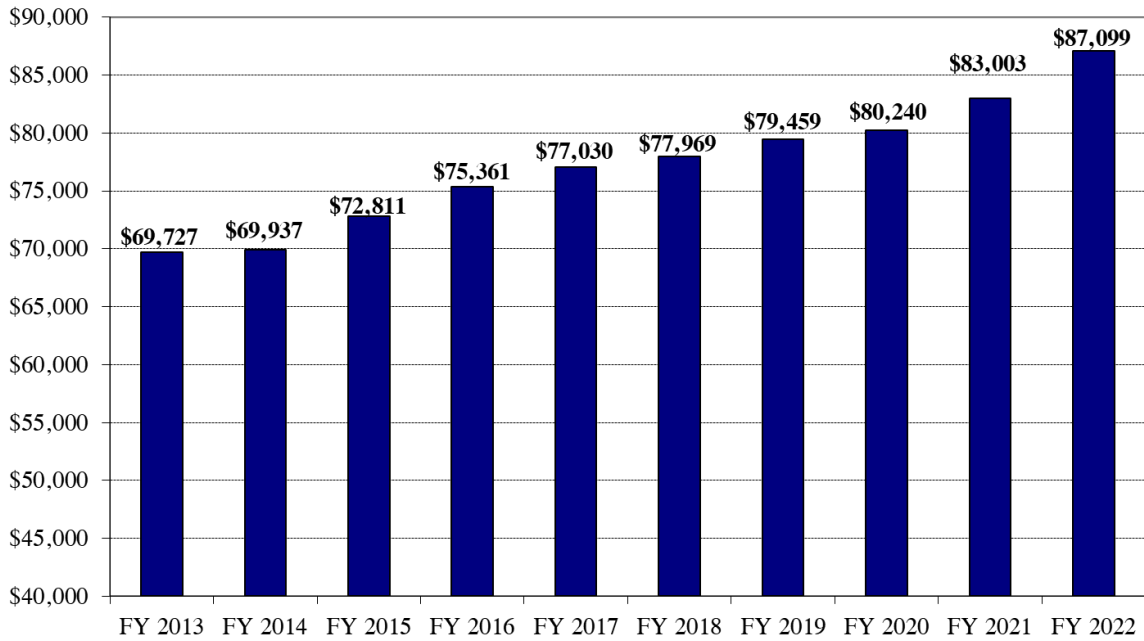


CHART 13

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

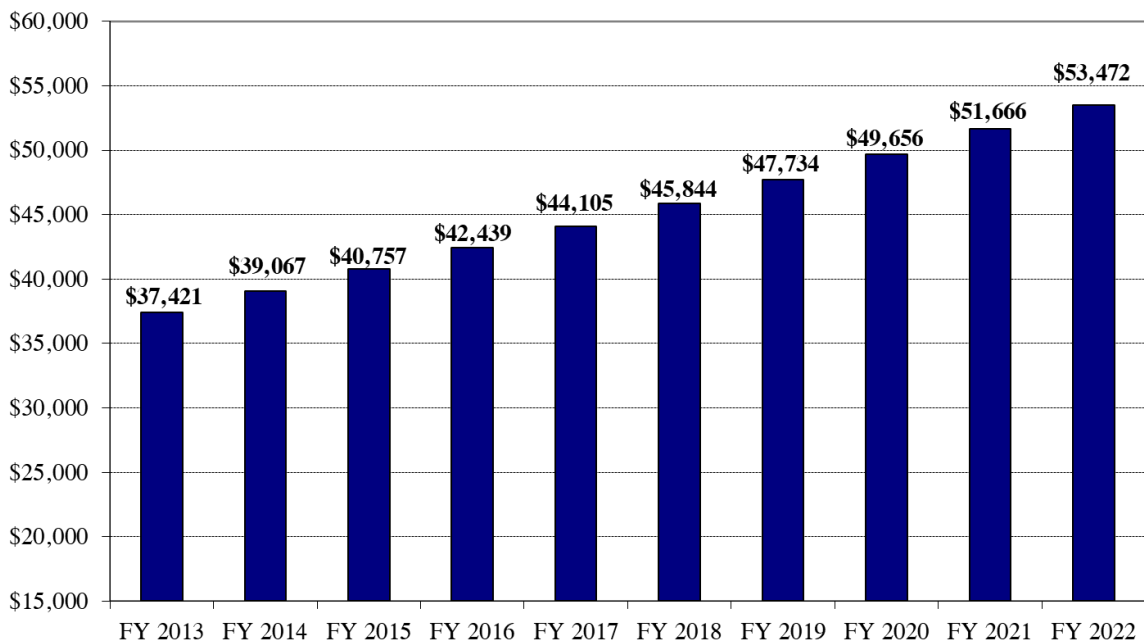


CHART 14

COOK COUNTY EMPLOYEES' PENSION FUND
Funded Ratio
FY 2013 - FY 2022

All figures based upon the actuarial value of assets.

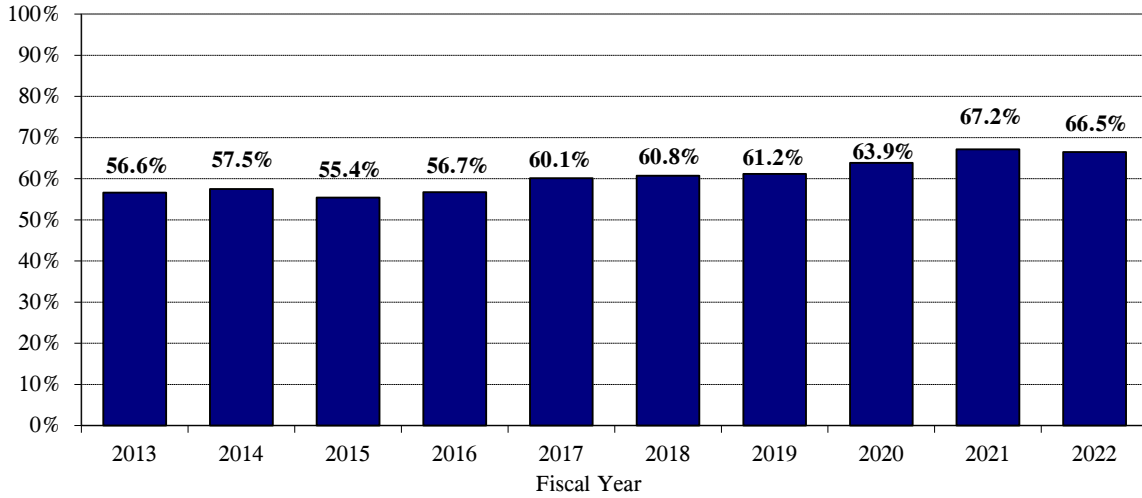
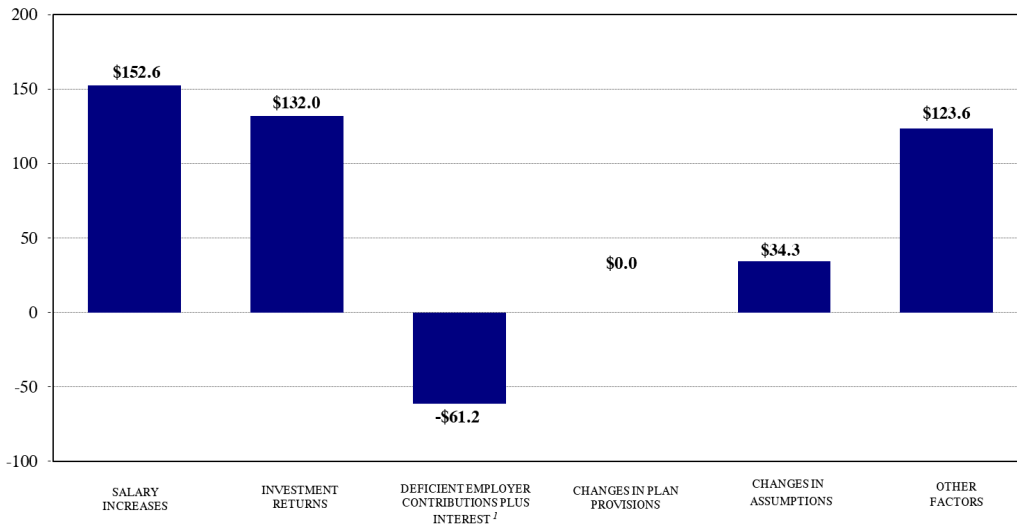


CHART 15

COOK COUNTY EMPLOYEES' PENSION FUND
Change in Unfunded Liabilities
Year ended December 31, 2022
(\$ in Millions)

All figures based upon the actuarial value of assets.

TOTAL INCREASE EQUALS
\$381.4 MIL.



¹ The unfunded liability decreased due to employer contribution plus interest being greater than normal cost plus interest. A supplemental employer contribution of \$340.0 million is included in the employer contribution.

CHART 16

COOK COUNTY EMPLOYEES' PENSION FUND

Investment Income FY 2013 - FY 2022
Actuarially Assumed Rate of Return: 7.00%
(\$ in Millions)

All figures based upon the market value of assets.

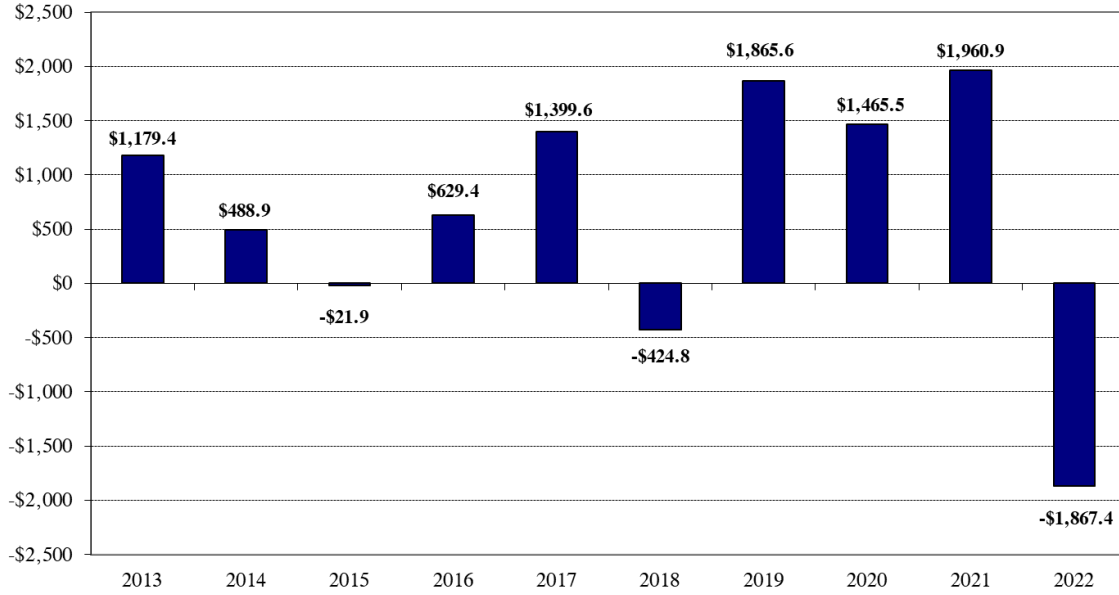


CHART 17

COOK COUNTY EMPLOYEES' PENSION FUND

Rate of Return FY 2013 - FY 2022
Actuarially Assumed Rate of Return: 7.00%
All figures based upon the market value of assets.

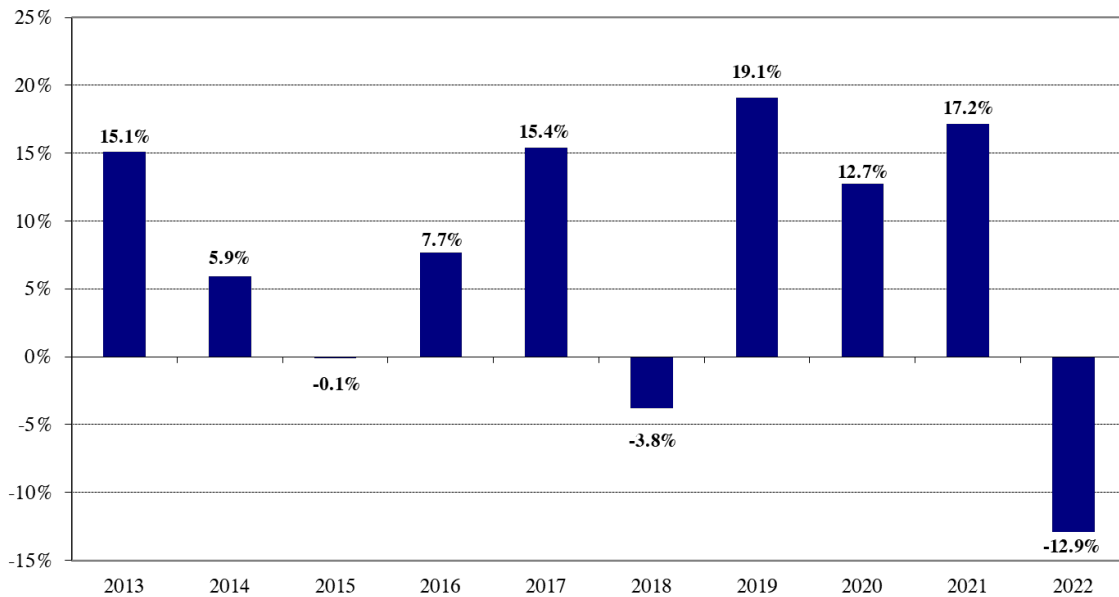


TABLE 3

COOK COUNTY EMPLOYEES' PENSION FUND					
System Experience, FY 2013 - FY 2022					
(\$ in Millions)					
Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2022	1,577.1	19,829.3	13,179.0	6,650.2	66.5%
2021	1,520.6	19,091.4	12,822.5	6,268.9	67.2%
2020	1,532.7	18,421.0	11,765.6	6,655.5	63.9%
2019	1,553.5	17,949.7	10,983.4	6,966.3	61.2%
2018	1,533.7	17,303.8	10,512.8	6,791.0	60.8%
2017	1,567.5	16,889.5	10,148.2	6,741.3	60.1%
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%

TABLE 4

COOK COUNTY EMPLOYEES' PENSION FUND										
Changes in Net Assets										
(\$ in Millions)										
Fiscal Years	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Additions to Assets										
Employer	\$525.2	\$541.3	\$509.2	\$526.2	\$587.7	\$559.21	\$464.3	\$186.8	\$190.0	\$187.8
Employees	\$136.3	\$133.4	\$134.2	\$134.8	\$134.2	\$138.83	\$139.4	\$137.7	\$129.3	\$127.6
Net Investment Income	-\$1,867.4	\$1,960.9	\$1,465.5	\$1,865.6	-\$424.8	\$1,399.63	\$629.4	-\$21.9	\$488.9	\$1,179.4
Other	\$42.9	\$39.6	\$36.0	\$35.2	\$27.5	\$23.27	\$13.9	\$11.5	\$9.7	\$8.5
Total Asset Additions (A)	-\$1,162.9	\$2,675.2	\$2,144.8	\$2,561.9	\$324.6	\$2,120.98	\$1,247.0	\$314.1	\$818.0	\$1,503.4
Deductions from Assets										
Benefits	\$1,061.6	\$1,001.1	\$950.1	\$890.1	\$831.7	\$790.35	\$742.4	\$701.0	\$645.6	\$601.8
Refunds	\$33.6	\$37.0	\$31.0	\$37.7	\$33.7	\$33.00	\$26.7	\$33.3	\$26.3	\$29.9
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	\$5.1	\$5.0	\$5.1	\$5.1	\$5.41	\$5.4	\$5.2	\$5.0	\$4.3
Other	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.00	\$0.0	\$0.0	\$0.0	\$0.0
Total Asset Deductions (B)	\$1,099.9	\$1,043.2	\$986.1	\$932.9	\$870.5	\$828.75	\$774.5	\$739.5	\$677.0	\$636.0
Change in Net Assets (A-B=C)	-\$2,262.8	\$1,632.0	\$1,158.7	\$1,628.9	-\$545.9	\$1,292.23	\$472.6	-\$425.4	\$141.0	\$867.4

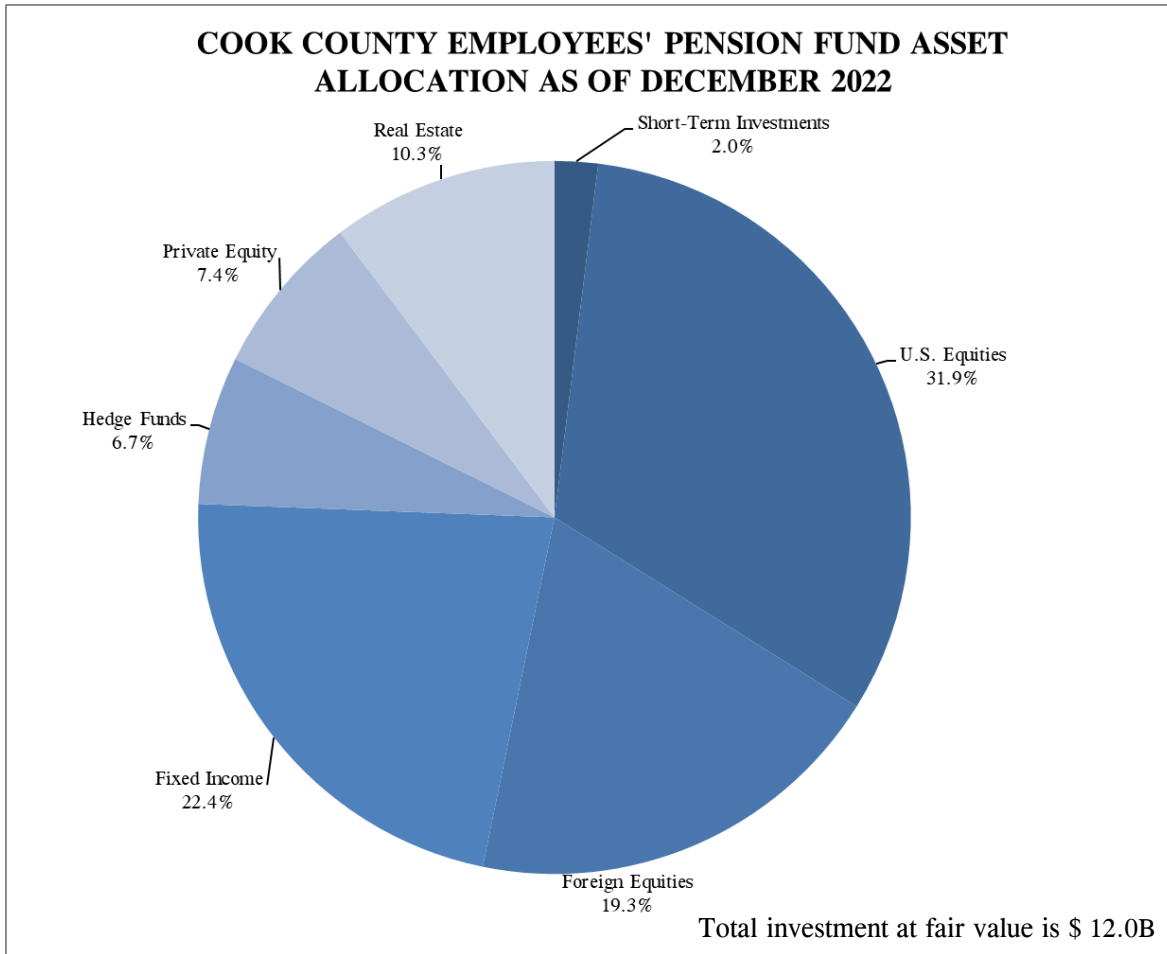
Table 5 below contains funding projections based on the December 31, 2022 actuarial valuation of the Cook County Employees' Pension Fund. As shown in the table below, under the current funding policy, the Cook County Employees' Pension Fund is projected to run out of assets by 2044 if all future assumptions are met and no additional contributions are made.

TABLE 5

Cook County Employees' Pension Fund Actuarial Valuation Projection Results as of December 31, 2022 (\$ 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
2023	1,610.9	492.1 *	30.5%	137.2	19,829.0	13,179.0	6,650.0	66.5%
2024	1,634.4	199.2	12.2%	138.9	20,294.0	13,498.0	6,796.0	66.5%
2025	1,658.5	203.6	12.3%	141.0	20,743.0	13,270.0	7,473.0	64.0%
2026	1,682.9	205.0	12.2%	143.0	21,171.0	12,865.0	8,306.0	60.8%
2027	1,709.1	207.5	12.1%	145.3	21,574.0	12,190.0	9,384.0	56.5%
2028	1,736.8	210.6	12.1%	147.6	21,949.0	12,023.0	9,926.0	54.8%
2029	1,765.5	213.7	12.1%	150.1	22,295.0	11,792.0	10,503.0	52.9%
2030	1,795.3	217.0	12.1%	152.6	22,612.0	11,492.0	11,120.0	50.8%
2031	1,826.8	220.5	12.1%	155.3	22,898.0	11,119.0	11,779.0	48.6%
2032	1,859.9	224.2	12.1%	158.1	23,151.0	10,670.0	12,481.0	46.1%
2033	1,895.2	228.0	12.0%	161.1	23,374.0	10,142.0	13,232.0	43.4%
2034	1,931.3	232.0	12.0%	164.2	23,566.0	9,532.0	14,034.0	40.4%
2035	1,968.5	236.2	12.0%	167.3	23,730.0	8,841.0	14,889.0	37.3%
2036	2,007.0	240.6	12.0%	170.6	23,867.0	8,064.0	15,803.0	33.8%
2037	2,046.6	245.2	12.0%	174.0	23,978.0	7,199.0	16,779.0	30.0%
2038	2,087.9	249.9	12.0%	177.5	24,065.0	6,244.0	17,821.0	25.9%
2039	2,130.7	254.8	12.0%	181.1	24,131.0	5,198.0	18,933.0	21.5%
2040	2,174.9	259.9	11.9%	184.9	24,179.0	4,057.0	20,122.0	16.8%
2041	2,220.3	265.1	11.9%	188.7	24,212.0	2,821.0	21,391.0	11.7%
2042	2,267.4	270.5	11.9%	192.7	24,233.0	1,486.0	22,747.0	6.1%
2043	2,316.0	276.2	11.9%	196.9	24,247.0	52.0	24,195.0	0.2%
2044	2,366.1	281.9	11.9%	201.1	24,258.0	-1,484.0	25,742.0	-6.1%
2045	2,417.2	287.9	11.9%	205.5	24,272.0	-3,124.0	27,396.0	-12.9%
2046	2,469.0	294.1	11.9%	209.9	24,292.0	-4,870.0	29,162.0	-20.0%
2047	2,521.1	300.4	11.9%	214.3	24,324.0	-6,727.0	31,051.0	-27.7%
2048	2,573.8	306.9	11.9%	218.8	24,369.0	-8,701.0	33,070.0	-35.7%
2049	2,627.4	313.5	11.9%	223.3	24,432.0	-10,795.0	35,227.0	-44.2%
2050	2,681.9	320.1	11.9%	228.0	24,515.0	-13,019.0	37,534.0	-53.1%
2051	2,736.4	326.8	11.9%	232.6	24,622.0	-15,379.0	40,001.0	-62.5%
2052	2,791.5	333.6	12.0%	237.3	24,754.0	-17,884.0	42,638.0	-72.2%
2053	2,846.7	340.5	12.0%	242.0	24,913.0	-20,546.0	45,459.0	-82.5%
2054	2,903.1	347.5	12.0%	246.8	25,102.0	-23,374.0	48,476.0	-93.1%
2055	2,959.9	354.4	12.0%	251.6	25,323.0	-26,381.0	51,704.0	-104.2%
2056	3,016.4	361.5	12.0%	256.4	25,576.0	-29,581.0	55,157.0	-115.7%
2057	3,073.1	368.6	12.0%	261.2	25,865.0	-32,986.0	58,851.0	-127.5%
2058	3,130.5	375.8	12.0%	266.1	26,190.0	-36,613.0	62,803.0	-139.8%

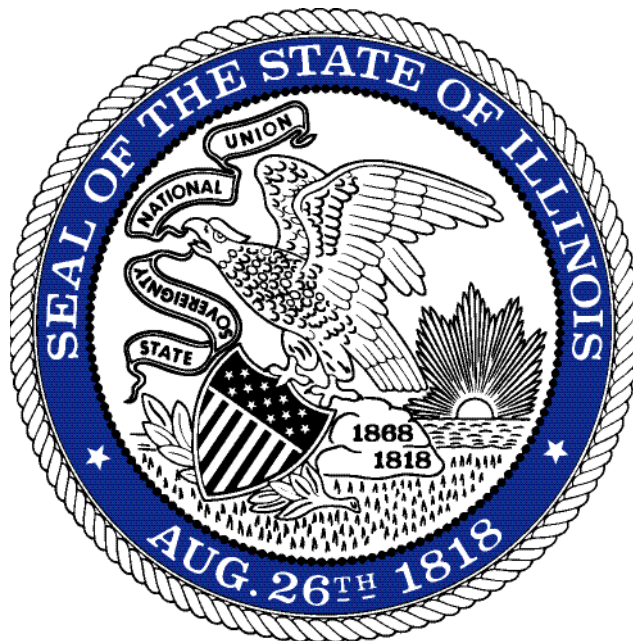
NOTE: County contribution for 2023 includes a supplemental employer contribution of \$291.7 million.

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, 2022.

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

Retirement Age

- Age 60 with 10 years of service
- Age 50 with 30 years of service
- Age 50 with 10 years of service (reduced annuity)

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 based on a 5-year smoothed actuarial value of assets plus a 30-year layered amortization of unfunded liabilities, with the amortization component increasing at 2% per year.

Cook County Forest Preserve Employees' Pension Fund Tier 2 Plan Summary (P.A. 96-0889)

Retirement Age

- Age 67 with 10 years of service
- Age 62 with 10 years of service (reduced annuity)

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 96 consecutive months of service within the last 120 months of service
- Pensionable Salary is limited by an amount tied to the 2010 Social Security Wage Base of \$106,800. This amount increases annually by 3% or ½ of the increase in the Consumer Price Index-U, whichever is less. The salary limits for calendar years 2020, 2021, and 2022 are \$115,929, \$116,740, and \$119,892, respectively.

Annual COLA

- Simple 3% or ½ of the increase in the Consumer Price Index-U, whichever is less

Employee Contributions

- 8.5% of salary

Employer Contributions

The Forest Preserve District levies a tax annually based on a 5-year smoothed actuarial value of assets plus a 30-year layered amortization of unfunded liabilities, with the amortization component increasing at 2% per year.

CHART 19

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

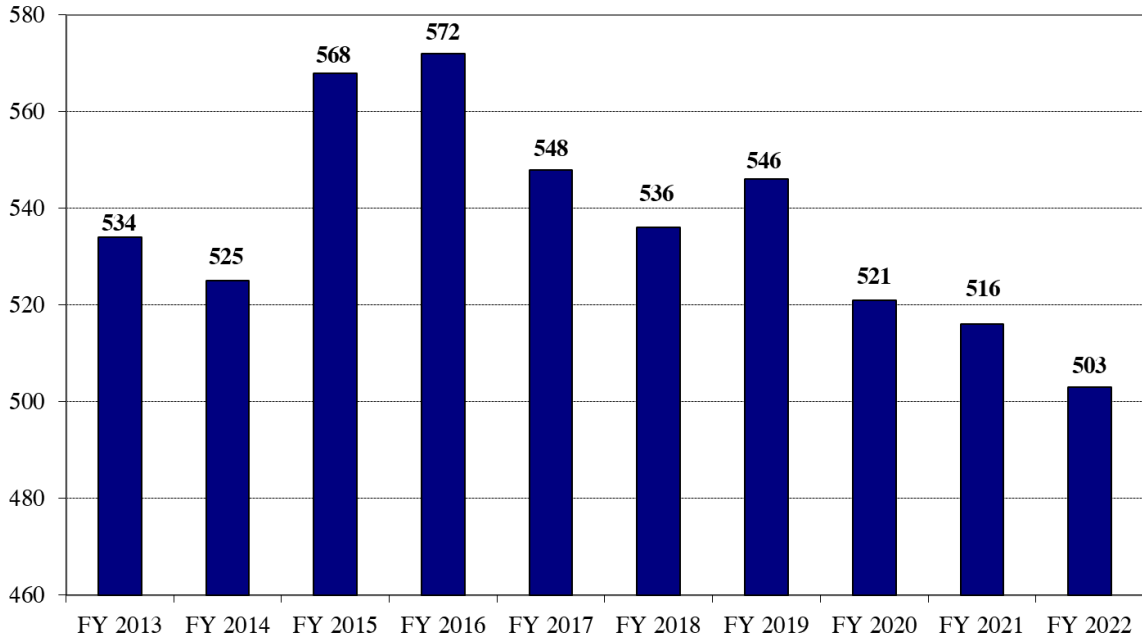


CHART 20

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

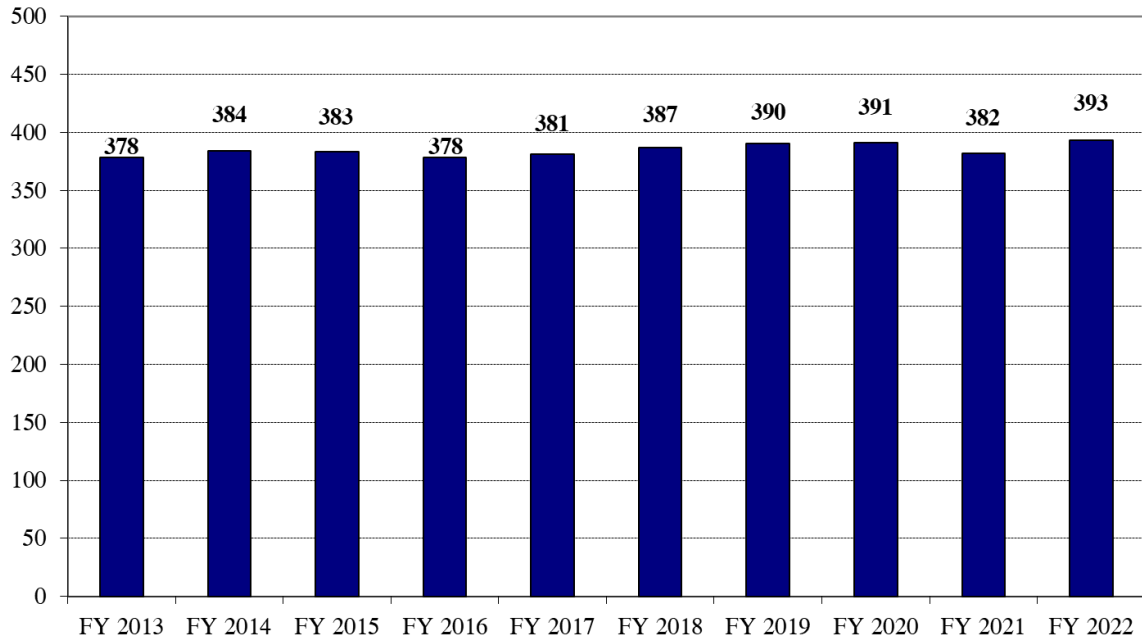


CHART 21

COOK COUNTY FOREST PRESERVE PENSION FUND
Average Employee Salaries

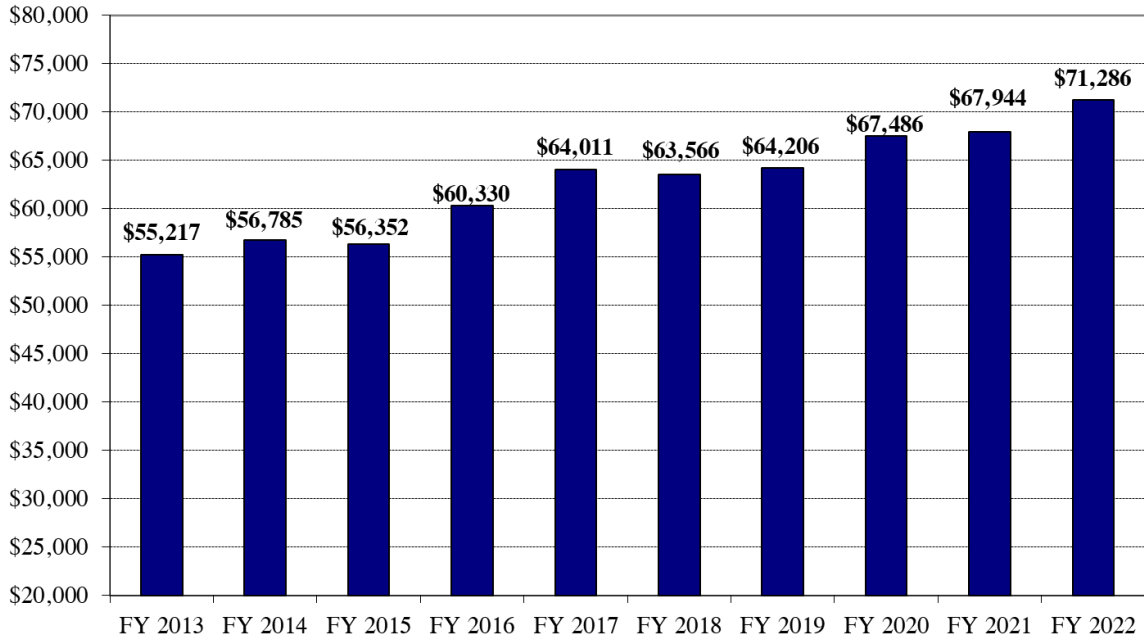


CHART 22

COOK COUNTY FOREST PRESERVE PENSION FUND
Average Retirement Annuities

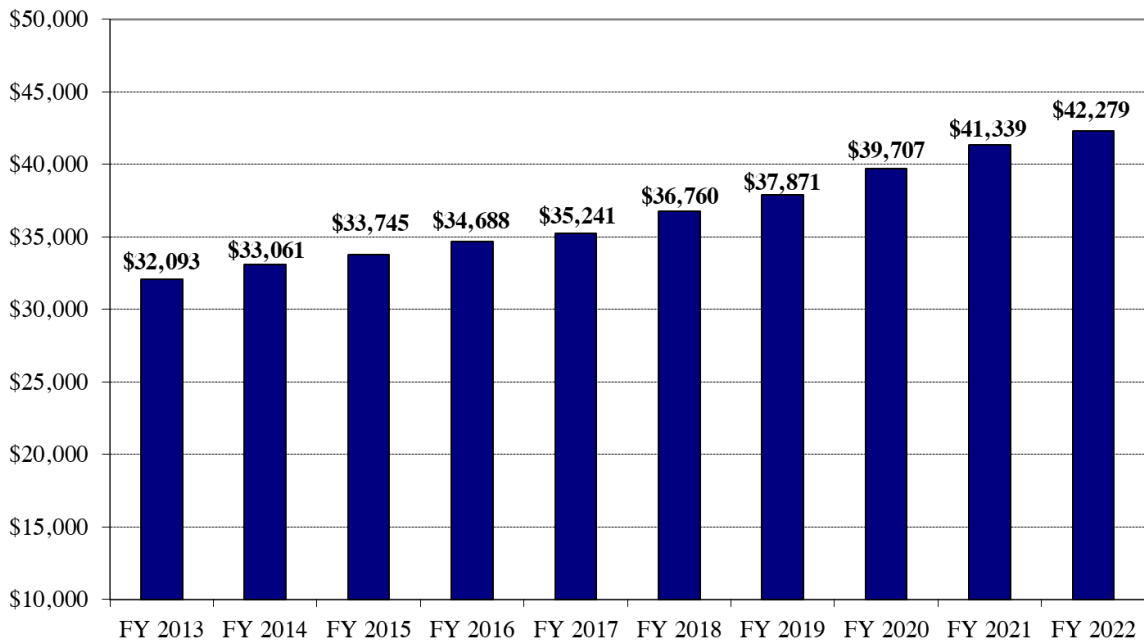


CHART 23

COOK COUNTY FOREST PRESERVE PENSION FUND
Funded Ratio
FY 2013 - FY 2022

All figures based upon the actuarial value of assets.

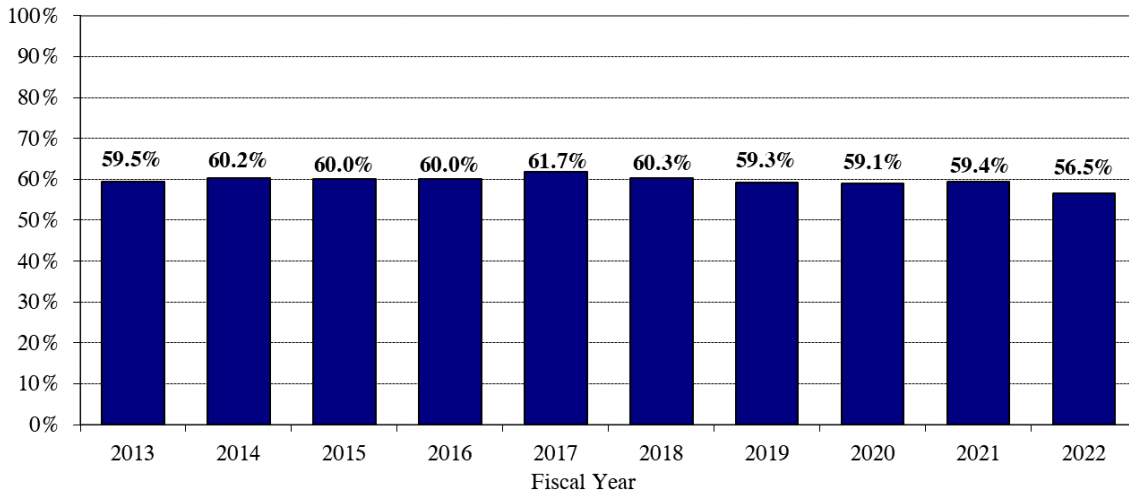
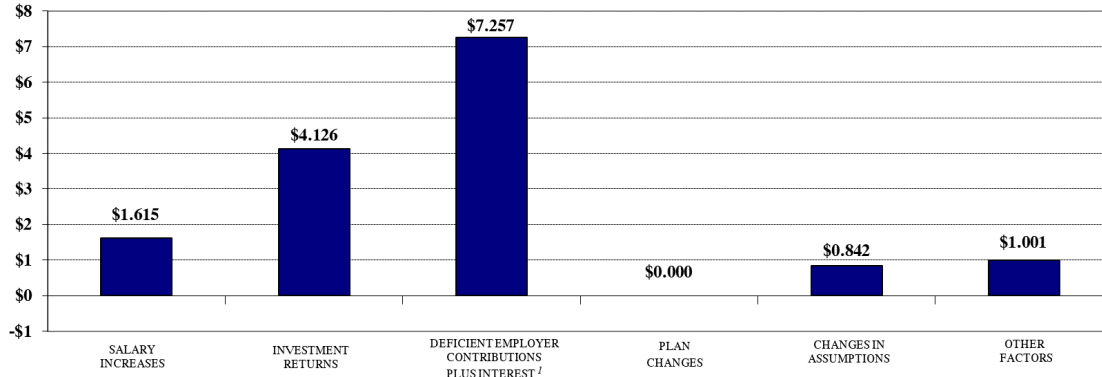


CHART 24

COOK COUNTY FOREST PRESERVE PENSION FUND
Change in Unfunded Liabilities
Year ended December 31, 2022
(\$ in Millions)

All figures based upon the actuarial value of assets.

TOTAL INCREASE EQUALS
\$14.840 MIL



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

CHART 25

COOK COUNTY FOREST PRESERVE PENSION FUND
Investment Income FY 2013 - FY 2022
Actuarially Assumed Rate of Return: 7.00%
(\$ in Millions)

All figures based upon the market value of assets.

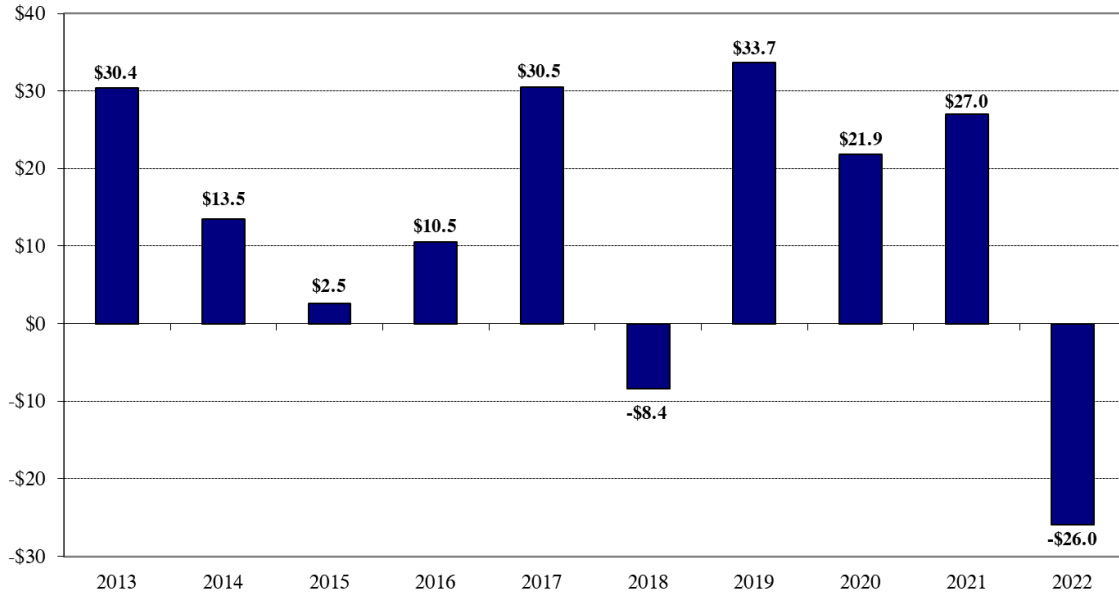


CHART 26

COOK COUNTY FOREST PRESERVE PENSION FUND
Rate of Return FY 2013 - FY 2022
Actuarially Assumed Rate of Return: 7.00%
 All figures based upon the market value of assets.

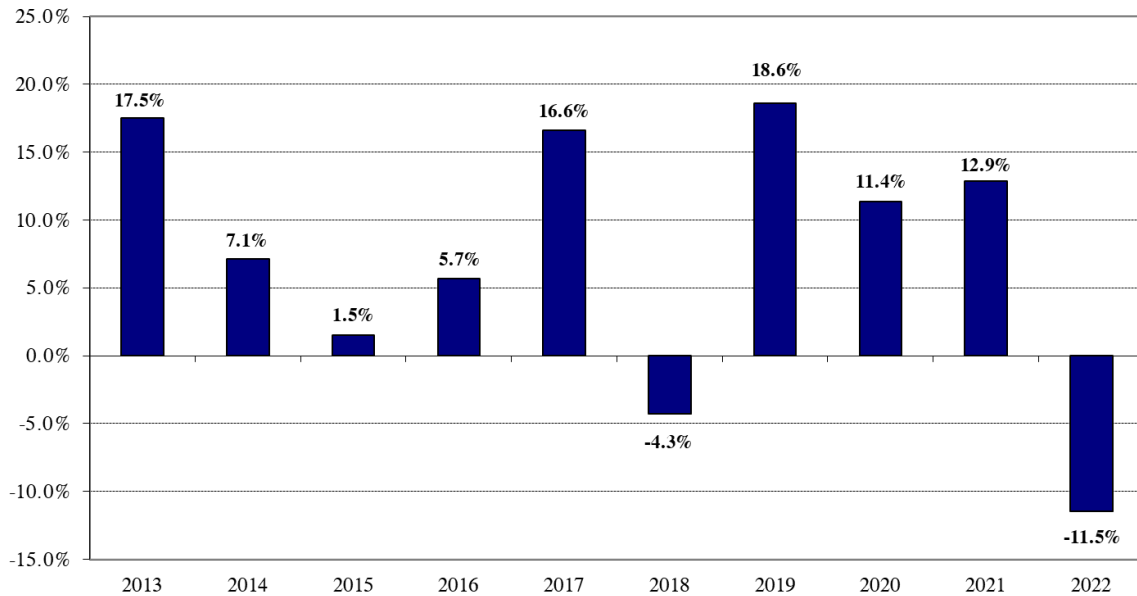


TABLE 6

COOK COUNTY FOREST PRESERVE PENSION FUND					
System Experience, FY 2013 - FY 2022					
(\$ in Millions)					
Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2022	35.9	378.1	213.8	164.3	56.5%
2021	35.1	367.9	218.4	149.5	59.4%
2020	35.2	355.1	209.7	145.4	59.1%
2019	35.1	343.4	203.5	139.9	59.3%
2018	34.1	336.7	202.9	133.8	60.3%
2017	35.1	330.9	204.3	126.6	61.7%
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%

TABLE 7

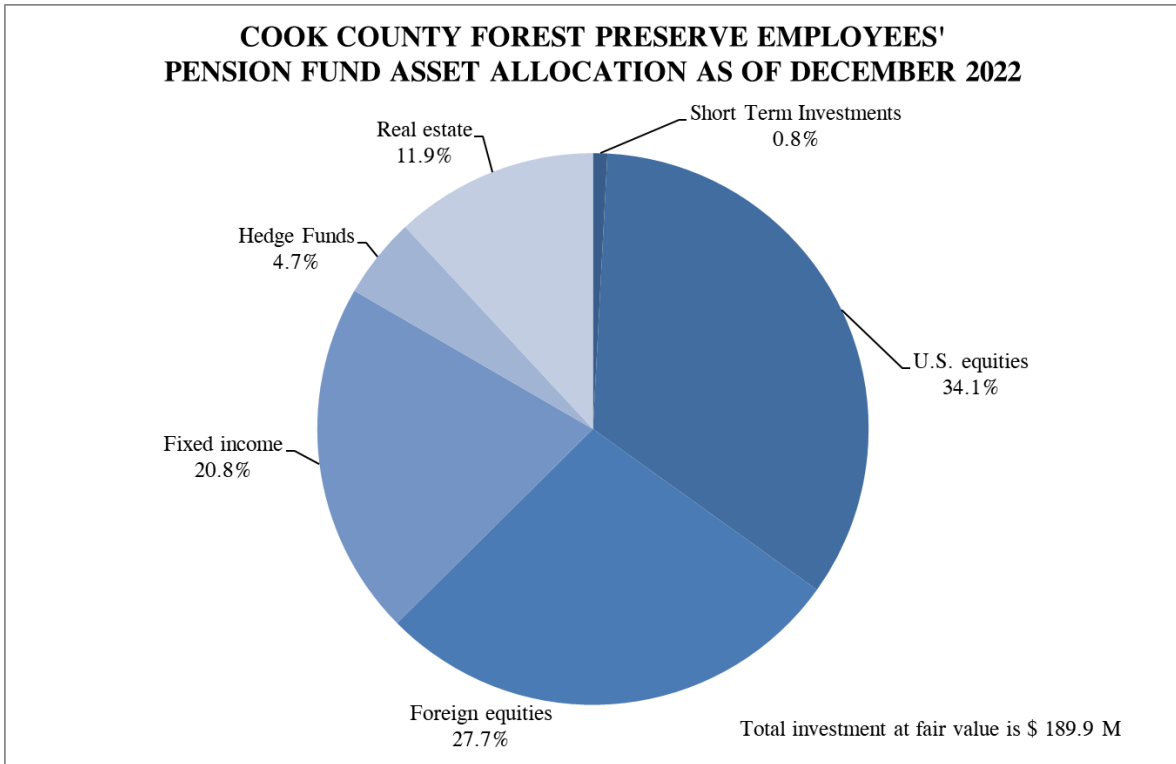
COOK COUNTY FOREST PRESERVE PENSION FUND										
Changes in Net Assets										
(\$ in Millions)										
Fiscal Years	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Additions to Assets										
Employer	\$4.1	\$3.9	\$4.0	\$4.3	\$4.1	\$3.5	\$3.4	\$3.5	\$3.1	\$2.9
Employees	\$3.1	\$3.1	\$3.2	\$3.0	\$3.1	\$3.3	\$3.2	\$2.8	\$2.6	\$2.7
Net Investment Income	-\$26.0	\$27.0	\$21.9	\$33.7	-\$8.4	\$30.5	\$10.5	\$2.5	\$13.5	\$30.4
Other	\$1.3	\$1.1	\$1.1	\$0.8	\$0.9	\$0.6	\$0.3	\$0.2	\$0.2	\$0.2
Total Asset Additions (A)	-\$17.5	\$35.2	\$30.1	\$41.8	-\$0.3	\$37.9	\$17.4	\$9.0	\$19.5	\$36.1
Deductions from Assets										
Benefits	\$22.7	\$20.9	\$20.0	\$19.3	\$18.3	\$18.0	\$17.5	\$17.2	\$16.7	\$15.7
Refunds	\$0.8	\$0.5	\$0.9	\$0.8	\$1.1	\$0.6	\$0.7	\$0.6	\$1.0	\$1.0
Rebates	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Administrative Expenses	\$0.1	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.1	\$0.1	\$0.1
Other	\$0.0	\$0.0	-\$0.7	\$0.3	\$0.2	\$0.1	\$0.1	\$0.0	\$0.2	-\$0.1
Total Asset Deductions (B)	\$23.7	\$21.4	\$20.3	\$20.5	\$19.7	\$18.8	\$18.5	\$18.0	\$17.9	\$16.6
Change in Net Assets (A-B=C)	-\$41.2	\$13.8	\$9.8	\$21.3	-\$20.0	\$19.2	-\$1.1	-\$9.0	\$1.6	\$19.5

Table 8 below contains funding projections based on the December 31, 2022 actuarial valuation of the Cook County Forest Preserve Pension Fund.

TABLE 8

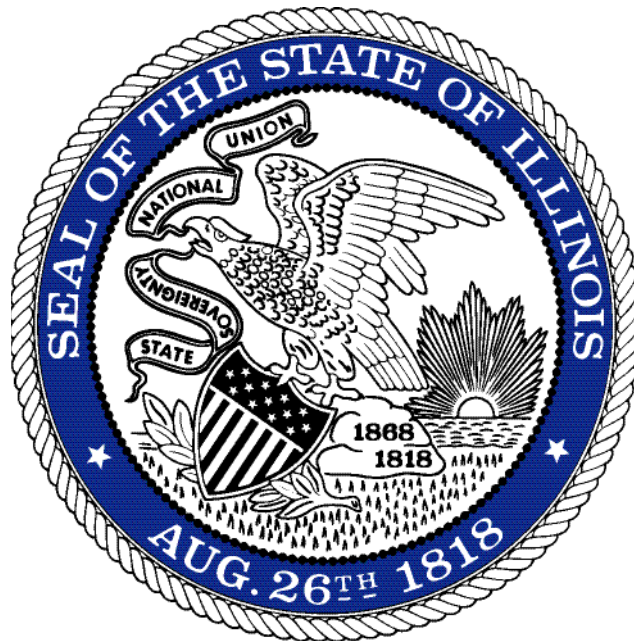
Cook County Forest Preserve Pension Fund Actuarial Valuation Projection Results as of December 31, 2022 (\$ in Millions)								
Fiscal Year	Capped Payroll	Total County Contribution	County Contribution As % of Payroll	Total Employee Contribution	Accrued Liability	Actuarial Value of Assets	Unfunded Liabilities	Funded Ratio
2023	37.1	4.0	10.8%	3.1	352.0	214.0	138.0	60.8%
2024	38.2	10.9	28.5%	3.1	359.0	211.0	147.0	58.8%
2025	39.3	11.1	28.2%	3.2	365.0	211.0	154.0	57.8%
2026	40.5	11.7	28.9%	3.3	371.0	209.0	162.0	56.3%
2027	41.7	12.4	29.7%	3.4	377.0	205.0	172.0	54.4%
2028	42.9	13.3	31.0%	3.5	383.0	210.0	173.0	54.8%
2029	44.1	13.5	30.6%	3.6	389.0	216.0	173.0	55.5%
2030	45.3	13.8	30.5%	3.7	394.0	221.0	173.0	56.1%
2031	46.5	14.1	30.3%	3.9	399.0	226.0	172.0	56.6%
2032	47.8	14.3	29.9%	4.0	403.0	232.0	171.0	57.6%
2033	49.1	14.6	29.7%	4.1	407.0	237.0	170.0	58.2%
2034	50.4	14.9	29.6%	4.2	411.0	242.0	169.0	58.9%
2035	51.7	15.1	29.2%	4.3	415.0	248.0	167.0	59.8%
2036	53.0	15.4	29.1%	4.4	419.0	253.0	165.0	60.4%
2037	54.3	15.7	28.9%	4.5	422.0	260.0	163.0	61.6%
2038	55.6	16.0	28.8%	4.6	426.0	266.0	160.0	62.4%
2039	57.0	16.3	28.6%	4.7	429.0	273.0	156.0	63.6%
2040	58.4	16.6	28.4%	4.8	432.0	280.0	152.0	64.8%
2041	59.8	16.9	28.3%	5.0	435.0	288.0	147.0	66.2%
2042	61.3	17.2	28.1%	5.1	439.0	296.0	142.0	67.4%
2043	62.8	17.6	28.0%	5.2	442.0	306.0	136.0	69.2%
2044	64.3	17.9	27.8%	5.3	445.0	316.0	130.0	71.0%
2045	65.8	18.2	27.7%	5.5	449.0	327.0	122.0	72.8%
2046	67.4	18.6	27.6%	5.6	453.0	339.0	114.0	74.8%
2047	68.9	18.9	27.4%	5.7	457.0	352.0	105.0	77.0%
2048	70.5	19.3	27.4%	5.9	461.0	367.0	94.0	79.6%
2049	72.0	19.7	27.4%	6.0	466.0	383.0	83.0	82.2%
2050	73.6	20.0	27.2%	6.1	472.0	401.0	71.0	85.0%
2051	75.2	20.4	27.1%	6.3	478.0	421.0	57.0	88.1%
2052	76.8	20.8	27.1%	6.4	484.0	442.0	42.0	91.3%
2053	78.4	21.2	27.0%	6.5	491.0	466.0	25.0	94.9%
2054	80.0	4.8	6.0%	6.7	499.0	492.0	7.0	98.6%
2055	81.7	4.8	5.9%	6.8	507.0	502.0	5.0	99.0%
2056	83.3	4.1	4.9%	6.9	516.0	514.0	3.0	99.6%
2057	84.9	3.3	3.9%	7.1	526.0	525.0	1.0	99.8%
2058	86.5	2.2	2.5%	7.2	536.0	536.0	0.0	100.0%

CHART 27



V. Fireman'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, 2022.

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)
- Mandatory retirement at age 63, except for emergency medical technicians

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

Prior to P.A. 101-0673, effective April 5, 2021, Tier 1 firefighters born before January 1, 1966, received 3% non-compounded COLA. Those born after January 1, 1966, received 1.5% non-compounded at age 60 or the first anniversary of retirement with 30% maximum. However, P.A. 101-0673 removed the birthdate restriction, such that all firefighters who meet the age and service requirements will receive a 3% non-compounded annual COLA.

Employee Contributions

- 9.125% of salary

Required Employer Contributions

Pursuant to P.A. 99-0506, the City of Chicago is required to make an annual actuarially determined contribution as a level percentage of pay, with a funding goal of 90% by the end of 2055, based upon the actuarial value of fund assets and application of required actuarial assumptions and methodologies.

Firemen's Annuity and Benefit Fund of Chicago

Tier 2 Plan Summary (P.A. 96-1495)

Retirement Age

- Age 55 with 10 years of service

- Age 50 with 10 years of service (reduced by 0.5% for each month the participant's is under 55)

Retirement Formula

- 2.5% of final average salary

Maximum Annuity

- 75% of final average salary

Salary Used to Calculate Pension

- Highest 96 consecutive months of service within the last 120 months of service
- Pensionable Salary is limited by an amount tied to the 2010 Social Security Wage Base of \$106,800. This amount increases annually by 3% or ½ of the increase in the Consumer Price Index-U, whichever is less. The salary limits for calendar years 2020, 2021, and 2022 are \$115,929, \$116,740, and \$119,892, respectively.

Annual COLA

- Simple 3% or ½ of the increase in the Consumer Price Index-U, whichever is less
- Begins in January of the year of the first payment date following the later of:
 - Age 60, or
 - The first anniversary of the annuity start date

Employee Contributions

- 9.125% of salary

Required Employer Contributions

Pursuant to P.A. 99-0506, the City of Chicago is required to make an annual actuarially determined contribution as a level percentage of pay, with a funding goal of 90% by the end of 2055, based upon the actuarial value of fund assets and application of required actuarial assumptions and methodologies.

CHART 28

FIREMEN'S ANNUITY & BENEFIT FUND OF CHICAGO
Active Employees

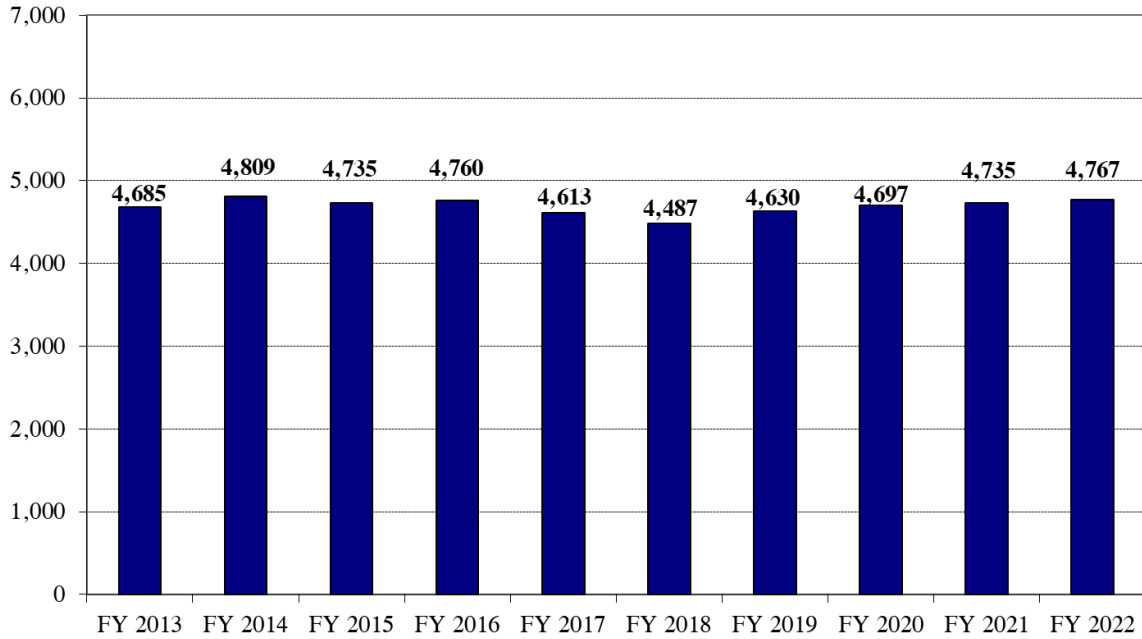


CHART 29

FIREMEN'S ANNUITY & BENEFIT FUND OF CHICAGO
Employee Annuitants

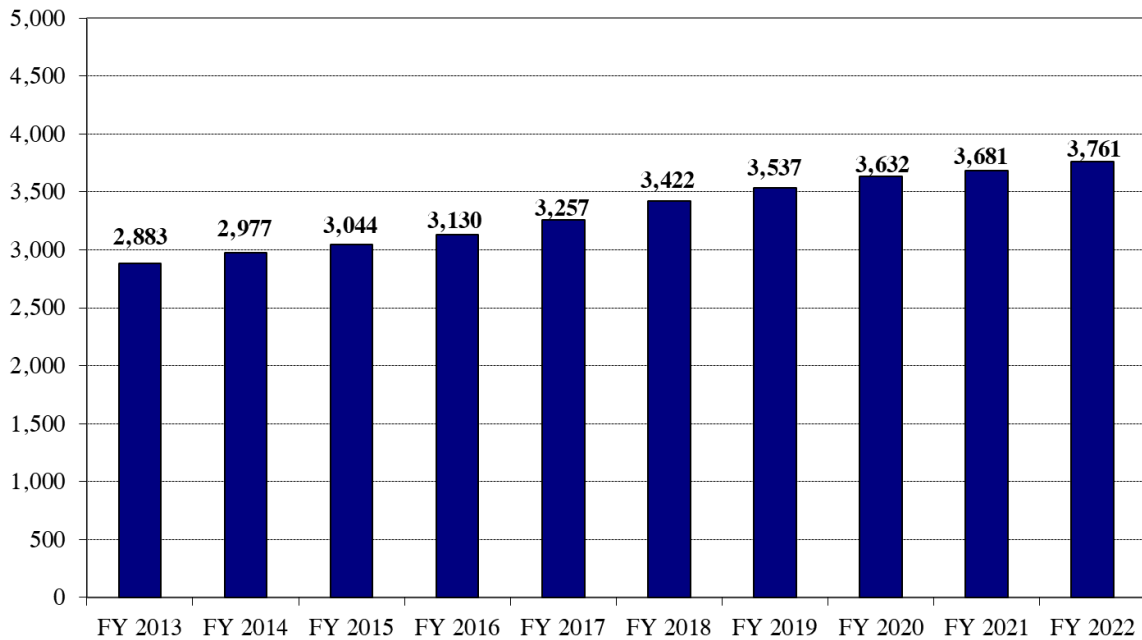


CHART 30

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

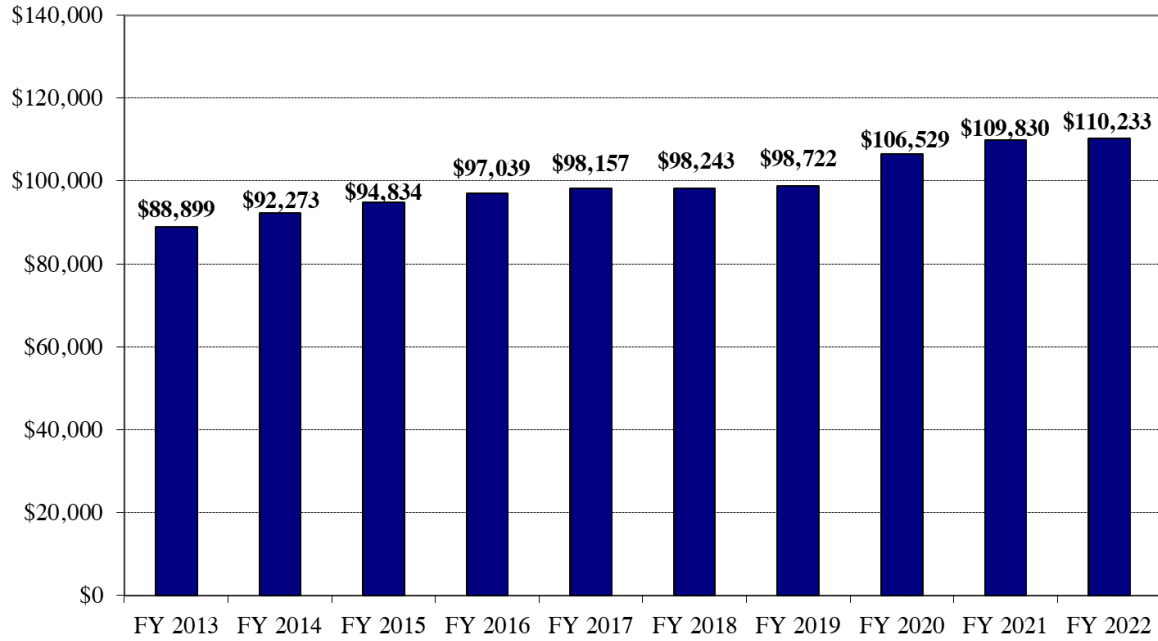


CHART 31

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

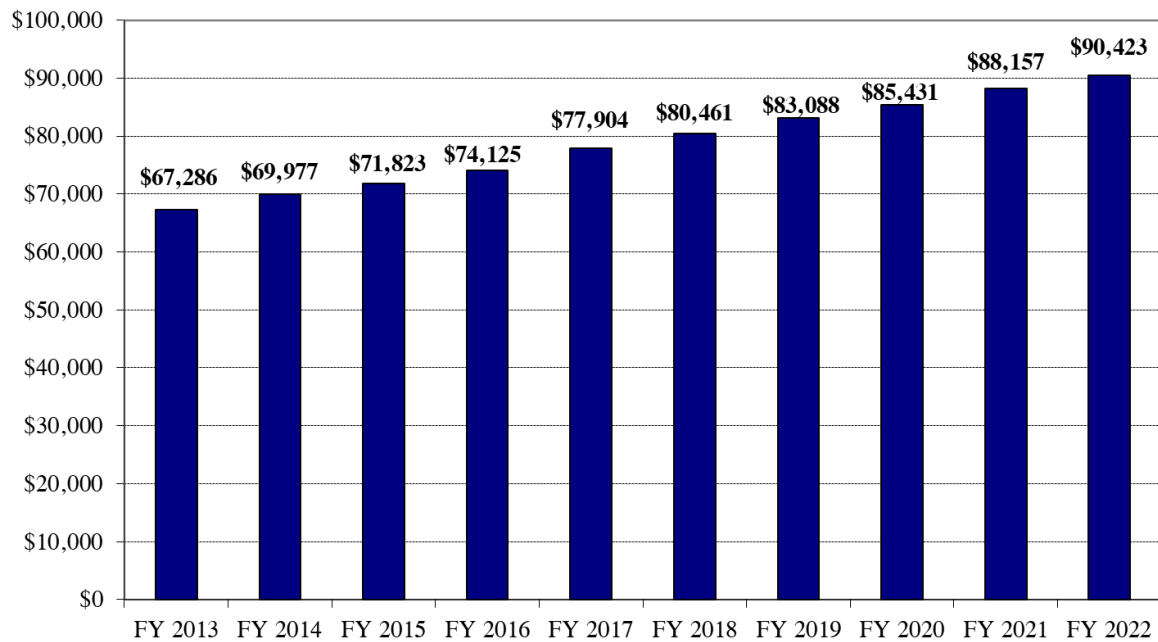


CHART 32

FIREMEN'S ANNUITY & BENEFIT FUND OF CHICAGO
Funded Ratio
FY 2013 - FY 2022

All figures based upon the actuarial value of assets.

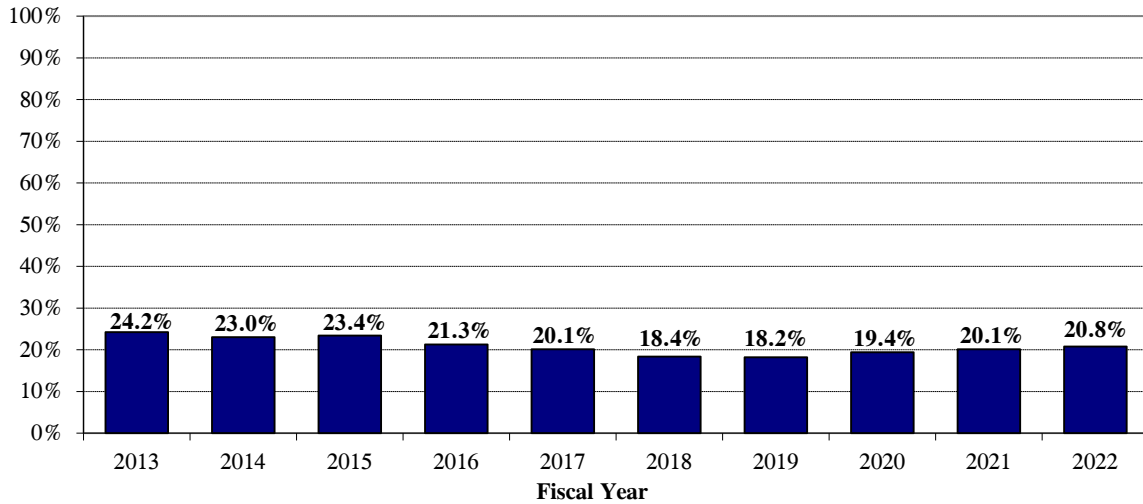
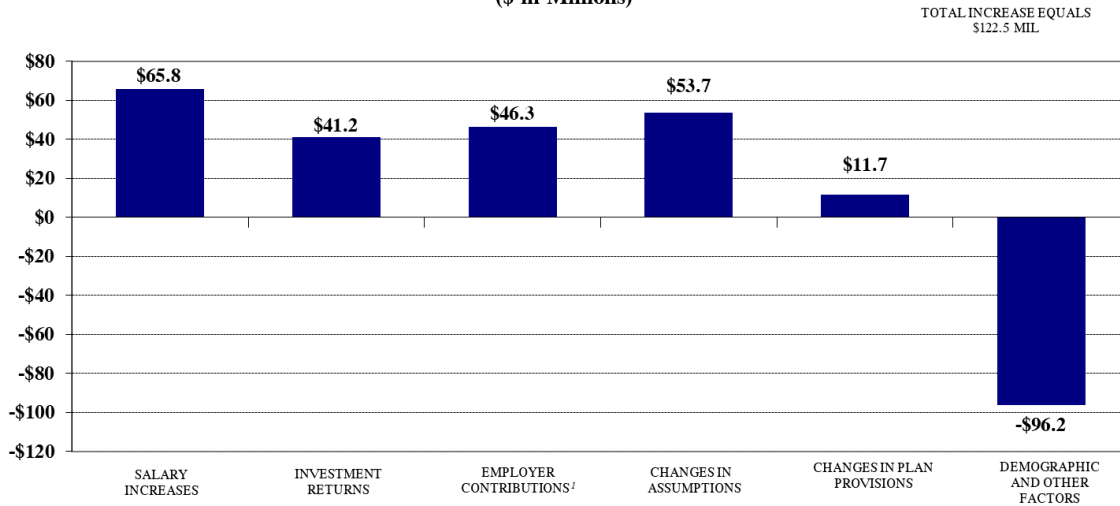


CHART 33

FIREMEN'S ANNUITY & BENEFIT FUND OF CHICAGO
Change in Unfunded Liabilities
Year ended December 31, 2022
(\$ in Millions)



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

CHART 34

FIREMEN'S ANNUITY & BENEFIT FUND OF CHICAGO
Investment Income FY 2013 - FY 2022
Actuarially Assumed Rate of Return: 6.75%
(\$ in Millions)

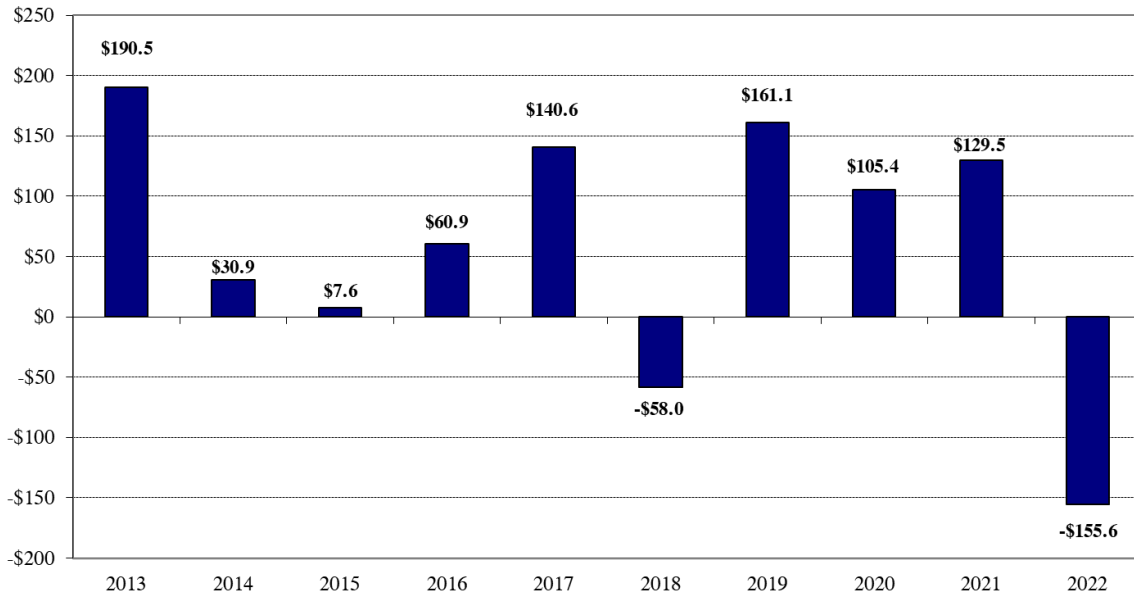


CHART 35

FIREMEN'S ANNUITY & BENEFIT FUND OF CHICAGO
Rate of Return Earned FY 2013 - FY 2022
Actuarially Assumed Rate of Return: 6.75%

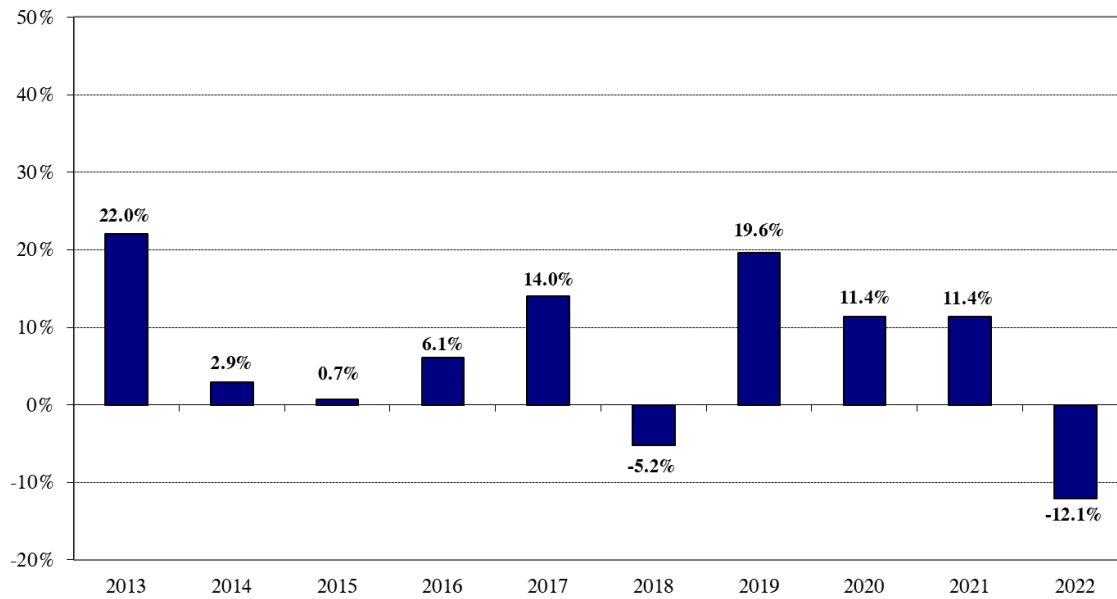


TABLE 9

FIREMEN'S ANNUITY & BENEFIT FUND OF CHICAGO					
System Experience, FY 2013 - FY 2022					
(\$ in Millions)					
Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2022	525.5	7,216.4	1,498.8	5,717.6	20.8%
2021	520.0	7,004.9	1,409.8	5,595.1	20.1%
2020	500.4	6,570.5	1,275.9	5,294.6	19.4%
2019	457.1	6,256.1	1,137.1	5,119.0	18.2%
2018	457.0	6,155.9	1,130.4	5,025.5	18.4%
2017	469.4	5,582.4	1,123.4	4,459.0	20.1%
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%

TABLE 10

FIREMEN'S ANNUITY & BENEFIT FUND OF CHICAGO										
Changes in Net Assets										
(\$ in Millions)										
Fiscal Years	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Additions to Assets										
Employer	\$399.2	\$367.5	\$368.4	\$255.9	\$249.7	\$228.5	\$156.2	\$238.5	\$109.8	\$106.2
Employees	\$53.0	\$52.3	\$54.4	\$46.6	\$45.9	\$47.4	\$49.0	\$46.6	\$48.1	\$42.5
Net Investment Income	-\$155.9	\$129.5	\$105.3	\$161.0	-\$58.0	\$140.6	\$60.9	\$7.6	\$30.9	\$190.5
Other	\$0.0	\$0.0	\$0.0	\$0.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	-\$0.1
Total Asset Additions (A)	\$296.4	\$549.3	\$528.2	\$464.2	\$237.6	\$416.4	\$266.0	\$292.6	\$188.7	\$339.2
Deductions from Assets										
Benefits	\$398.0	\$385.1	\$362.8	\$342.9	\$320.6	\$302.5	\$285.2	\$276.8	\$264.0	\$249.6
Refunds	\$3.9	\$3.6	\$3.3	\$3.5	\$4.1	\$3.6	\$3.7	\$3.6	\$2.3	\$2.2
Rebates	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Administrative Expenses	\$3.4	\$3.1	\$3.0	\$3.2	\$3.3	\$3.2	\$3.2	\$3.1	\$3.1	\$3.1
Other	\$0.0	\$0.0	\$1.1	\$0.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total Asset Deductions (B)	\$405.4	\$391.8	\$370.3	\$350.1	\$327.9	\$309.3	\$292.1	\$283.5	\$269.4	\$254.9
Change in Net Assets (A-B=C)	-\$109.0	\$157.5	\$157.9	\$114.0	-\$90.4	\$107.1	-\$26.1	\$9.1	-\$80.7	\$84.3

Table 11 below contains funding projections based on the December 31, 2022 actuarial valuation of the Firemen’s Annuity and Benefit Fund of Chicago.

TABLE 11

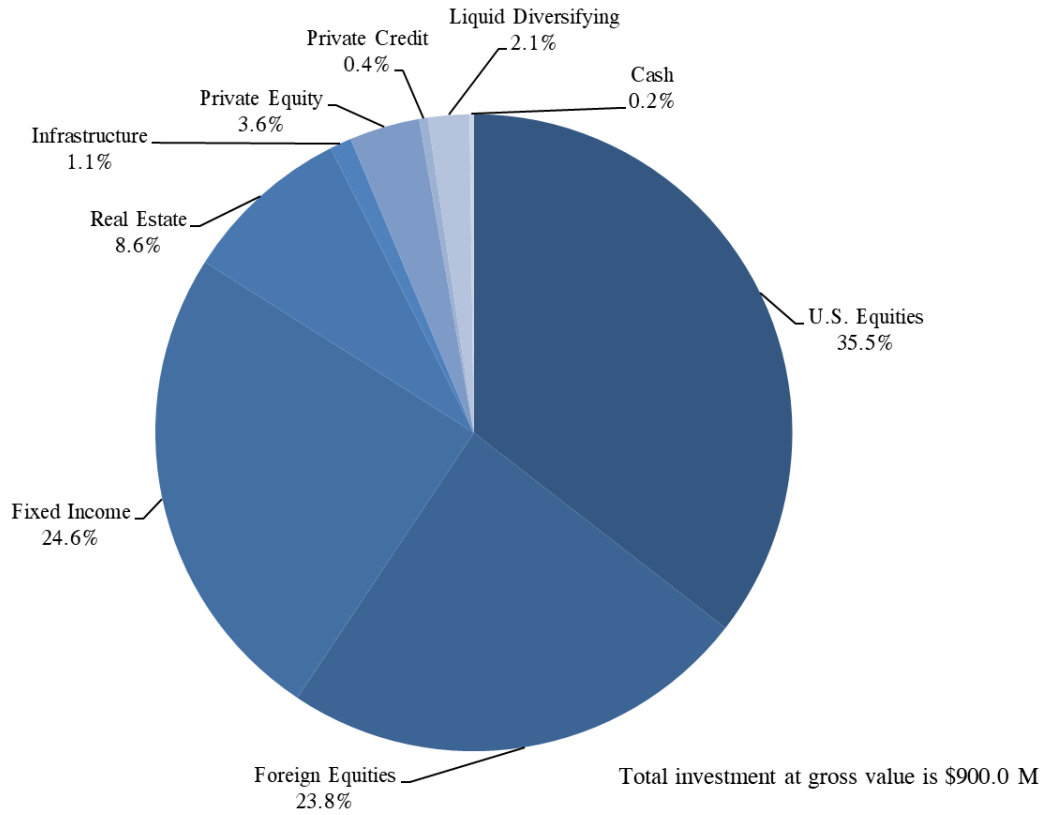
Firemen's Annuity and Benefit Fund of Chicago Actuarial Valuation Projection Results as of December 31, 2022 (\$ in Millions)								
Fiscal Year	Capped Payroll	Total City Contribution	Total City Contribution As % of Payroll	Total Employee Contribution	Accrued Liability	Actuarial Value of Assets	Unfunded Liabilities	Funded Ratio
2022	525.5	399.2	76.0%	53.0	7,216.4	1,498.8	5,717.6	20.8%
2023	554.6	427.7	77.1%	50.8	7,398.1	1,650.9	5,747.2	22.3%
2024	565.5	443.1	78.3%	51.7	7,572.1	1,750.9	5,821.2	23.1%
2025	580.6	454.9	78.3%	53.1	7,739.5	1,848.4	5,891.1	23.9%
2026	593.9	465.3	78.3%	54.3	7,899.2	1,938.9	5,960.3	24.5%
2027	606.2	475.0	78.3%	55.5	8,050.2	2,078.0	5,972.2	25.8%
2028	616.6	483.1	78.3%	56.4	8,191.9	2,215.5	5,976.4	27.0%
2029	628.3	492.3	78.3%	57.5	8,325.7	2,354.2	5,971.6	28.3%
2030	640.9	502.1	78.3%	58.6	8,451.9	2,495.0	5,956.9	29.5%
2031	651.3	510.2	78.3%	59.6	8,569.3	2,636.3	5,933.0	30.8%
2032	661.2	518.0	78.3%	60.5	8,678.3	2,778.6	5,899.7	32.0%
2033	672.2	526.7	78.3%	61.5	8,778.9	2,923.8	5,855.1	33.3%
2034	684.4	536.2	78.3%	62.6	8,871.7	3,073.8	5,797.8	34.6%
2035	693.8	543.6	78.3%	63.5	8,957.8	3,227.6	5,730.2	36.0%
2036	701.9	549.9	78.3%	64.2	9,037.4	3,385.2	5,652.2	37.5%
2037	709.3	555.7	78.3%	64.9	9,111.2	3,547.1	5,564.1	38.9%
2038	716.5	561.4	78.3%	65.5	9,179.1	3,714.1	5,464.9	40.5%
2039	723.5	566.9	78.3%	66.2	9,241.6	3,887.5	5,354.2	42.1%
2040	731.2	572.9	78.3%	66.9	9,300.0	4,069.0	5,231.0	43.8%
2041	738.9	578.9	78.3%	67.6	9,353.4	4,259.0	5,094.4	45.5%
2042	745.6	584.2	78.3%	68.2	9,401.5	4,457.5	4,943.9	47.4%
2043	753.1	590.0	78.3%	68.9	9,444.2	4,666.6	4,777.6	49.4%
2044	761.1	596.3	78.3%	69.6	9,481.8	4,887.7	4,594.1	51.5%
2045	769.1	602.6	78.3%	70.3	9,514.1	5,122.0	4,392.1	53.8%
2046	777.0	608.8	78.3%	71.0	9,540.5	5,370.1	4,170.4	56.3%
2047	785.3	615.3	78.3%	71.8	9,561.3	5,634.1	3,927.2	58.9%
2048	794.3	622.4	78.3%	72.6	9,576.9	5,916.5	3,660.4	61.8%
2049	803.8	629.8	78.3%	73.5	9,588.3	6,220.2	3,368.0	64.9%
2050	814.1	637.8	78.3%	74.4	9,597.3	6,549.2	3,048.1	68.2%
2051	824.8	646.3	78.3%	75.4	9,604.5	6,905.8	2,698.7	71.9%
2052	835.8	654.8	78.3%	76.4	9,610.6	7,293.0	2,317.6	75.9%
2053	847.0	663.6	78.3%	77.4	9,616.5	7,714.0	1,902.6	80.2%
2054	857.9	672.1	78.3%	78.4	9,623.4	8,171.6	1,451.8	84.9%
2055	868.5	680.5	78.3%	79.4	9,632.8	8,669.5	963.3	90.0%
2056	879.3	159.1	18.1%	80.4	9,645.9	8,681.3	964.6	90.0%
2057	890.2	151.2	17.0%	81.4	9,663.8	8,697.5	966.4	90.0%
2058	901.3	152.3	16.9%	82.4	9,687.5	8,718.7	968.7	90.0%
2059	912.6	153.5	16.8%	83.4	9,717.4	8,745.6	971.7	90.0%

TABLE 12

Firemen's Annuity and Benefit Fund of Chicago Projected Normal Cost as of December 31, 2022 (\$ 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
2022	65.9	12.5%	53.0	10.1%	118.9	22.6%
2023	72.8	13.1%	50.8	9.2%	123.5	22.3%
2024	71.5	12.6%	51.7	9.2%	123.2	21.8%
2025	71.0	12.2%	53.1	9.1%	124.2	21.4%
2026	70.5	11.9%	54.3	9.1%	124.9	21.0%
2027	69.8	11.5%	55.5	9.1%	125.3	20.7%
2028	69.2	11.2%	56.4	9.1%	125.7	20.4%
2029	69.0	11.0%	57.5	9.1%	126.5	20.1%
2030	69.1	10.8%	58.6	9.1%	127.7	19.9%
2031	68.8	10.6%	59.6	9.1%	128.4	19.7%
2032	68.6	10.4%	60.5	9.1%	129.1	19.5%
2033	68.1	10.1%	61.5	9.1%	129.6	19.3%
2034	67.9	9.9%	62.6	9.1%	130.5	19.1%
2035	68.5	9.9%	63.5	9.1%	131.9	19.0%
2036	68.8	9.8%	64.2	9.1%	133.0	19.0%
2037	69.6	9.8%	64.9	9.1%	134.4	19.0%
2038	69.9	9.8%	65.5	9.1%	135.4	18.9%
2039	70.4	9.7%	66.2	9.1%	136.6	18.9%
2040	71.3	9.8%	66.9	9.1%	138.2	18.9%
2041	72.0	9.7%	67.6	9.1%	139.5	18.9%
2042	72.5	9.7%	68.2	9.1%	140.7	18.9%
2043	72.5	9.6%	68.9	9.1%	141.4	18.8%
2044	72.7	9.5%	69.6	9.1%	142.3	18.7%
2045	72.8	9.5%	70.3	9.1%	143.1	18.6%
2046	72.7	9.4%	71.0	9.1%	143.8	18.5%
2047	72.6	9.2%	71.8	9.1%	144.4	18.4%
2048	72.3	9.1%	72.6	9.1%	144.9	18.2%
2049	72.1	9.0%	73.5	9.1%	145.6	18.1%
2050	72.1	8.9%	74.4	9.1%	146.6	18.0%
2051	72.5	8.8%	75.4	9.1%	147.9	17.9%
2052	72.7	8.7%	76.4	9.1%	149.1	17.8%
2053	73.1	8.6%	77.4	9.1%	150.5	17.8%
2054	73.7	8.6%	78.4	9.1%	152.1	17.7%
2055	74.5	8.6%	79.4	9.1%	153.9	17.7%
2056	75.6	8.6%	80.4	9.1%	156.0	17.7%
2057	76.9	8.6%	81.4	9.1%	158.3	17.8%
2058	78.4	8.7%	82.4	9.1%	160.7	17.8%
2059	79.9	8.8%	83.4	9.1%	163.3	17.9%

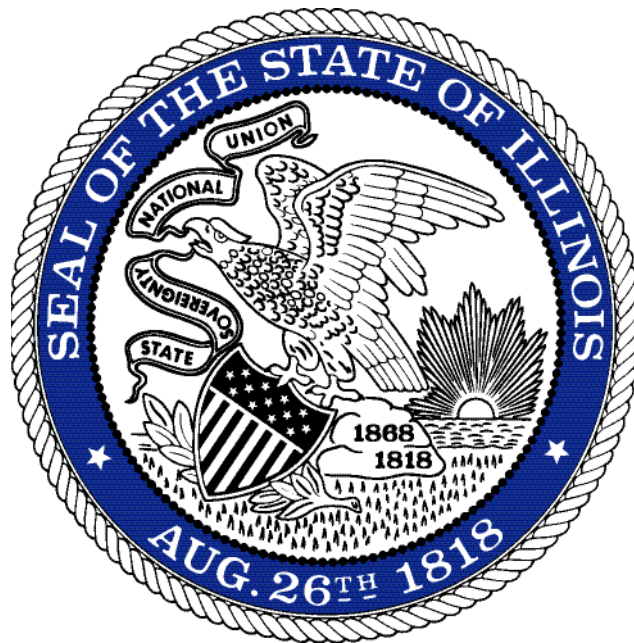
CHART 36

**FIREMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO
ASSET ALLOCATION AS OF DECEMBER 31, 2022**



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, 2022.

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
- Age 55 with 8 or more years of service (reduced annuity)

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.

Illinois Municipal Retirement Fund Sheriff's Law Enforcement Personnel Plan (SLEP) Tier 1 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.

Illinois Municipal Retirement Fund – Regular Formula Tier 2 Plan Summary (P.A. 96-0889)

Retirement Age

- Age 67 with 10 or more years of service
- Age 62 with 35 or more years of service
- Age 62 with 10 or more years of service (reduced annuity)

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

- Highest 96 consecutive months of service within the last 120 months of service
- Pensionable Salary is limited by an amount tied to the 2010 Social Security Wage Base of \$106,800. This amount increases annually by 3% or ½ of the increase in the Consumer Price Index-U, whichever is less. The salary limits for calendar years 2020, 2021, and 2022 are \$115,929, \$116,740, and \$119,892, respectively.

Annual COLA

- Simple 3% or ½ of the increase in the Consumer Price Index-U, whichever is less

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.

Illinois Municipal Retirement Fund

Sheriff's Law Enforcement Personnel Plan (SLEP)

Tier 2 Plan Summary (P.A. 96-1495)

Retirement Age

- Age 55 with 10 or more years of service
- Age 50 with 10 or more years of service (reduced annuity)

Retirement Formula

- 2.5% of final rate of earnings for each year of service

Maximum Annuity

- 75% of final average salary

Salary Used to Calculate Pension

- Highest 96 consecutive months of service within the last 120 months of service
- Pensionable Salary is limited by an amount tied to the 2010 Social Security Wage Base of \$106,800. This amount increases annually by 3% or ½ of the increase in the Consumer Price Index-U, whichever is less. The salary limits for calendar years 2020, 2021, and 2022 are \$115,929, \$116,740, and \$119,892, respectively.

Annual COLA

- Simple 3% or ½ of the increase in the Consumer Price Index-U, whichever is less

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.

CHART 37

**ILLINOIS MUNICIPAL RETIREMENT FUND
Active Employees**

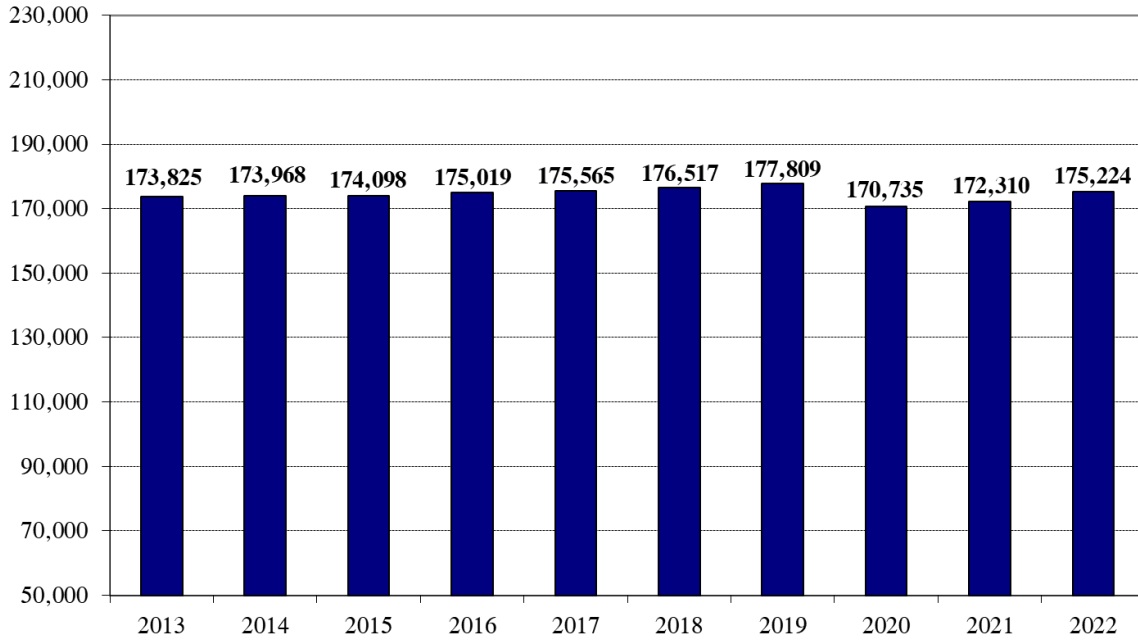


CHART 38

**ILLINOIS MUNICIPAL RETIREMENT FUND
Employee Annuitants**

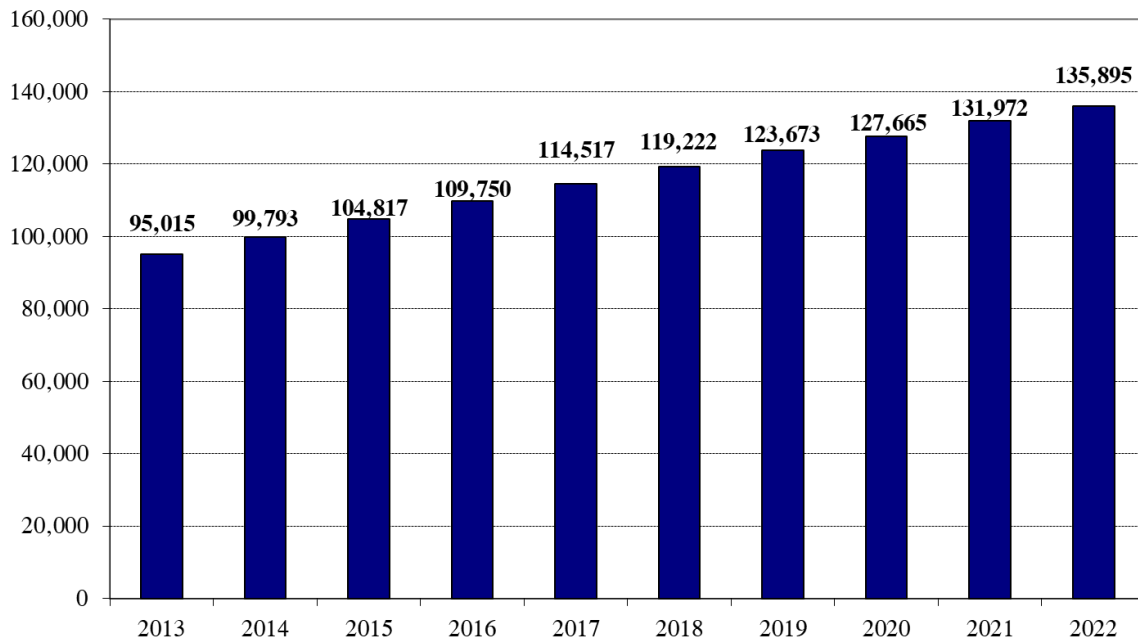


CHART 39

**ILLINOIS MUNICIPAL RETIREMENT FUND
Average Employee Salaries**

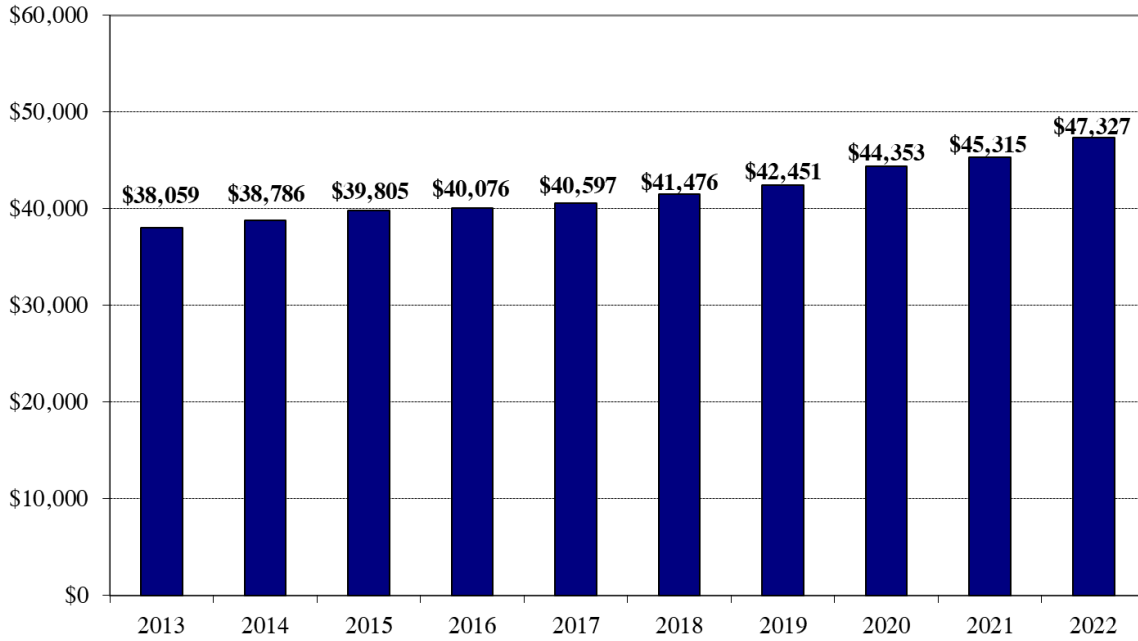


CHART 40

**ILLINOIS MUNICIPAL RETIREMENT FUND
Average Retirement Annuities**

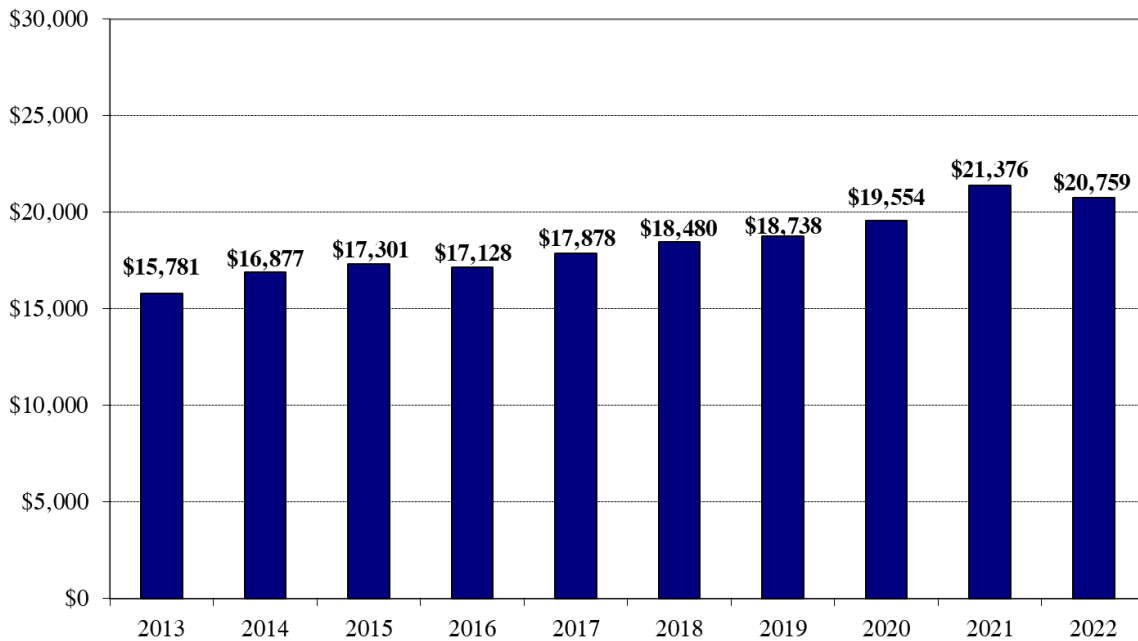


CHART 41

ILLINOIS MUNICIPAL RETIREMENT FUND
Funded Ratio
FY 2013 - FY 2022

All figures based upon the actuarial value of assets.

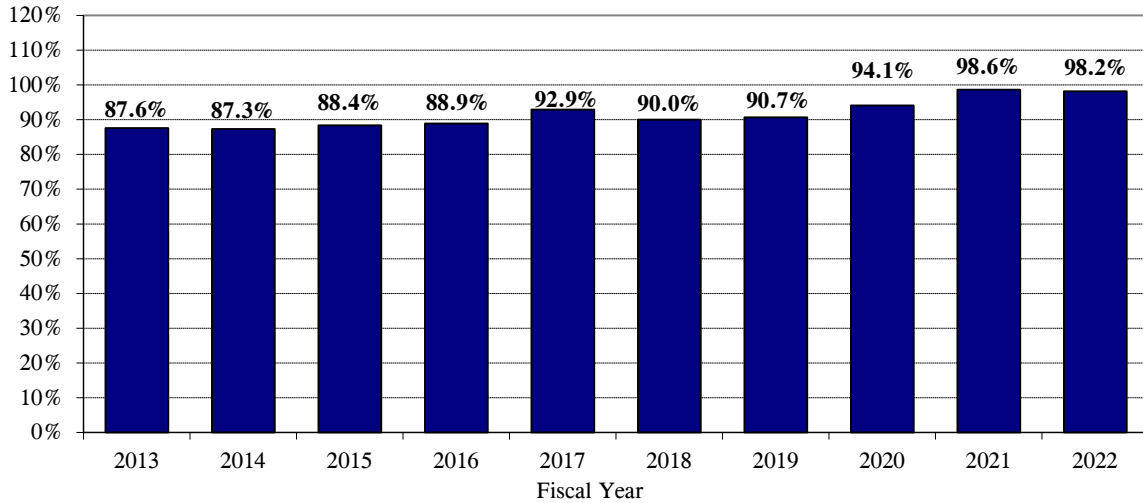


CHART 42

ILLINOIS MUNICIPAL RETIREMENT FUND
Change in Unfunded Liabilities
Year ended December 31, 2022
(\$ in Millions)

All figures based upon the actuarial value of assets.

TOTAL INCREASE EQUALS
\$234.2 MIL

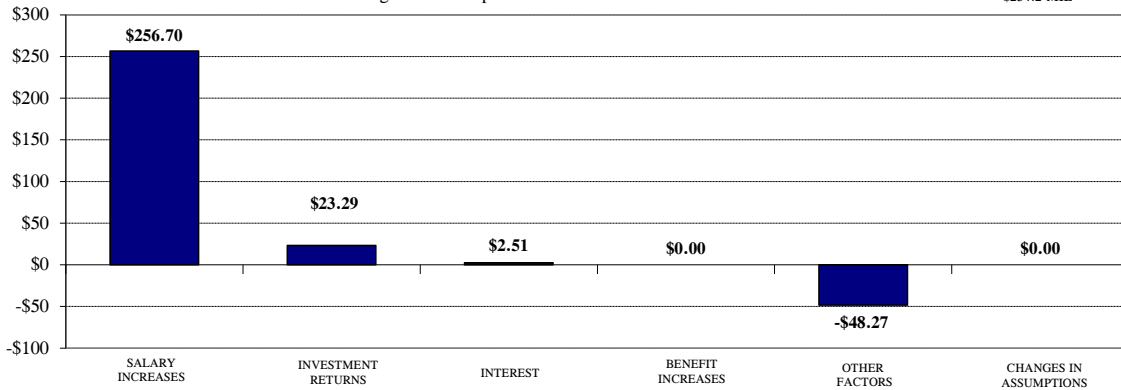


CHART 43

ILLINOIS MUNICIPAL RETIREMENT FUND

Investment Income 2013 - 2022

Actuarially Assumed Rate of Return: 7.25%

(\$ in Millions)

All figures based upon the market value of assets.

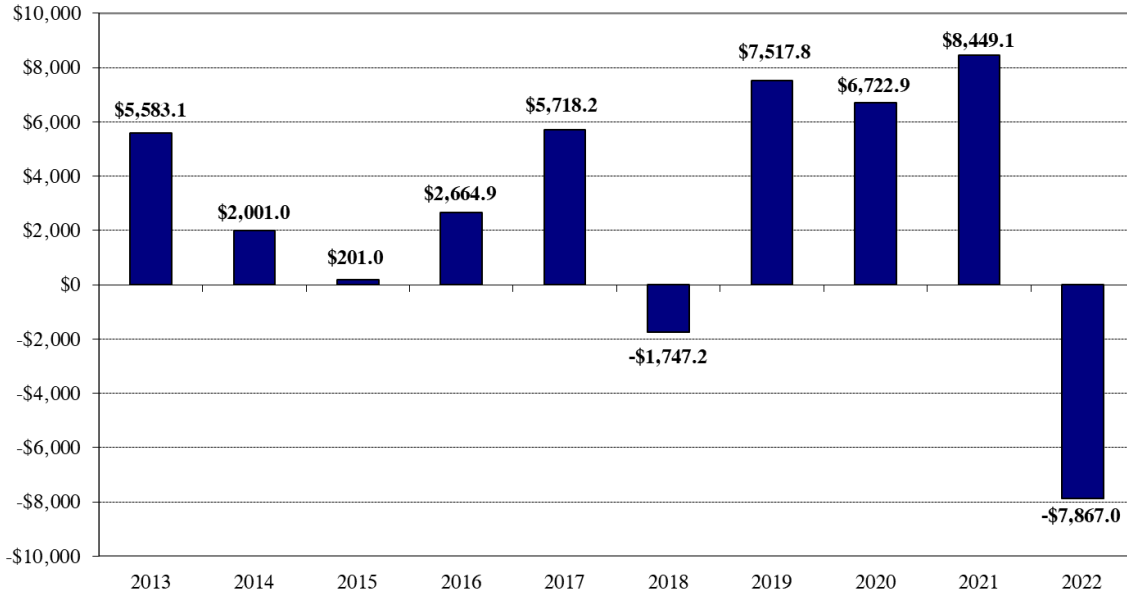


CHART 44

ILLINOIS MUNICIPAL RETIREMENT FUND

Rate of Return 2013 - 2022

Actuarially Assumed Rate of Return: 7.25%

All figures based upon the market value of assets.

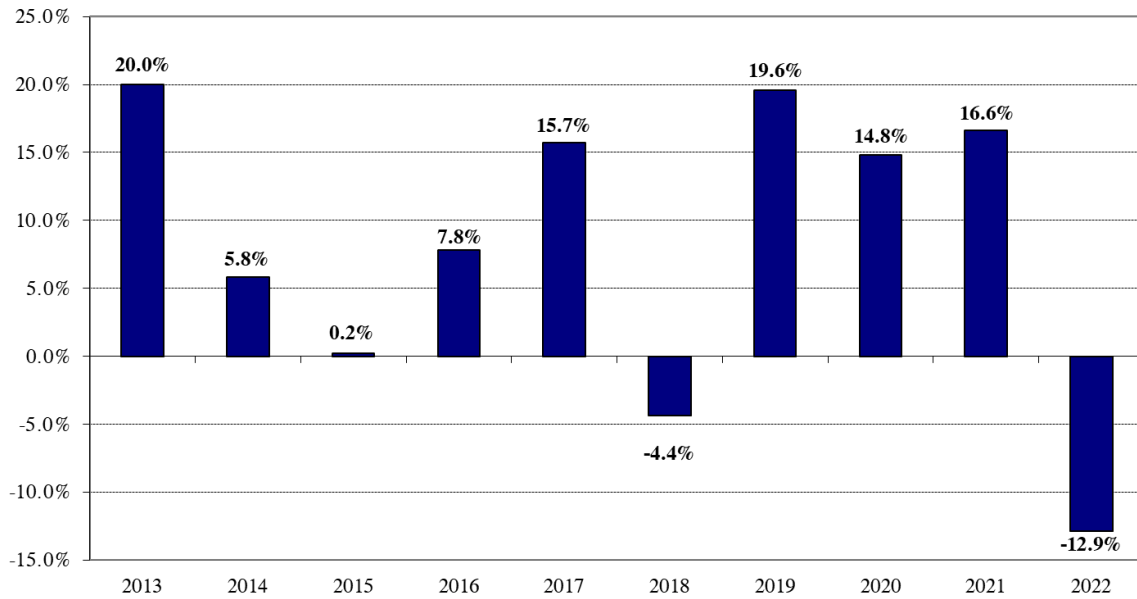


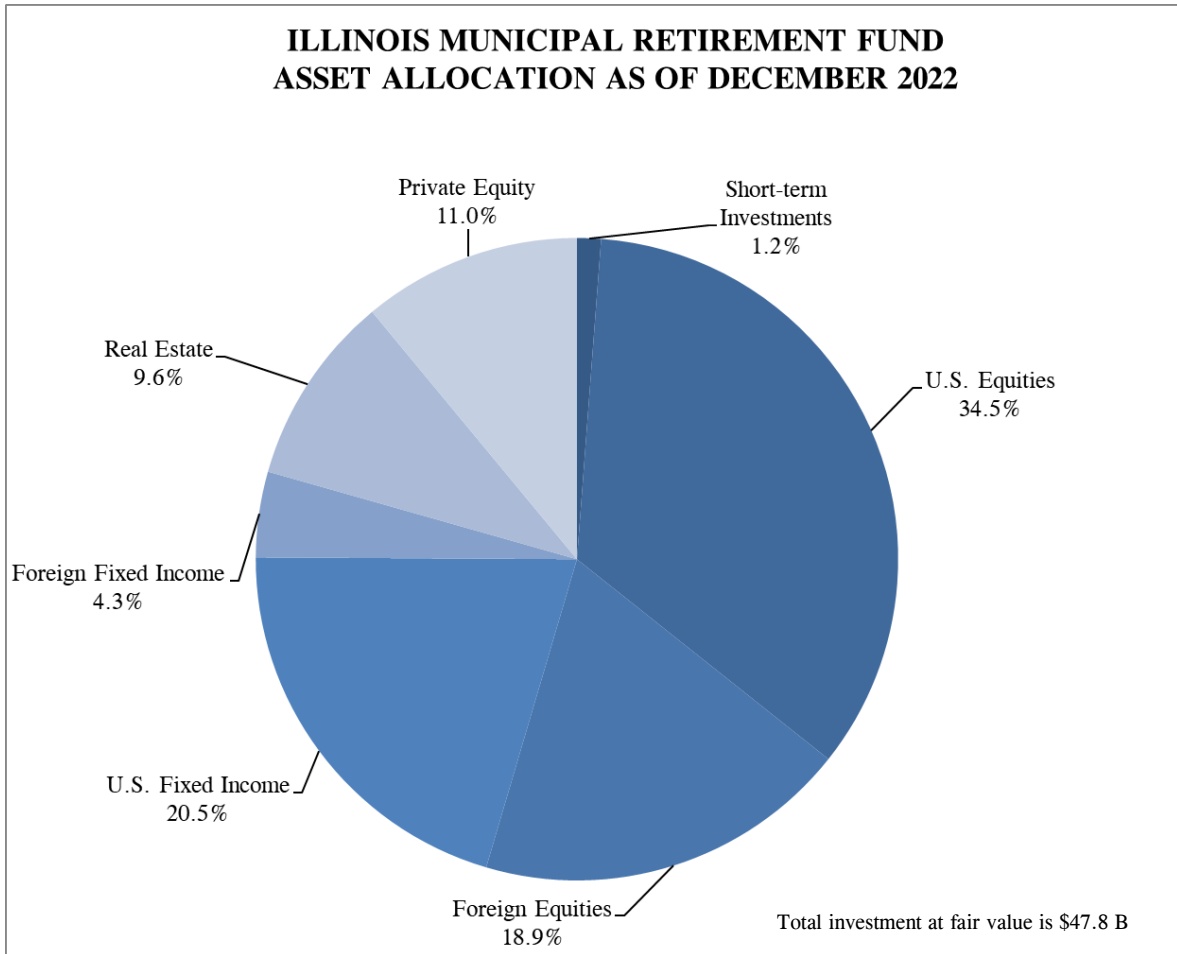
TABLE 13

ILLINOIS MUNICIPAL RETIREMENT FUND					
System Experience, FY 2013 - FY 2022					
(\$ in Millions)					
Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2022	8,303.3	53,112.9	52,142.7	970.2	98.2%
2021	7,811.1	50,927.6	50,191.5	736.0	98.6%
2020	7,568.2	48,922.9	46,017.4	2,905.5	94.1%
2019	7,547.5	47,357.9	42,936.2	4,421.7	90.7%
2018	7,321.5	45,354.1	40,830.0	4,524.1	90.0%
2017	7,127.5	42,179.5	39,187.8	2,991.7	92.9%
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%

TABLE 14

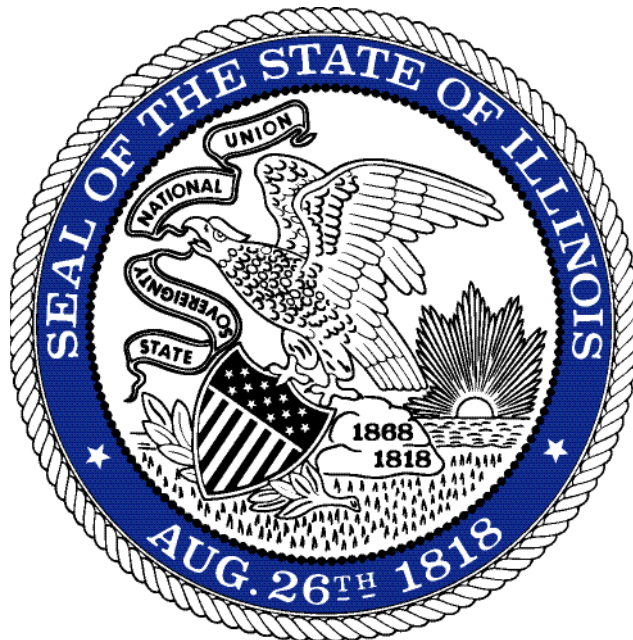
ILLINOIS MUNICIPAL RETIREMENT FUND										
Changes in Net Assets										
(\$ in Millions)										
Fiscal Years	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Additions to Assets										
Employer	808.1	969.4	927.6	780.1	947.6	\$903.5	\$933.9	\$900.5	\$923.4	\$931.0
Employees	501.8	471.4	449.7	437.9	413.9	\$393.7	\$380.4	\$368.0	\$351.1	\$338.9
Total Investment Income	-\$7,867.0	\$8,449.1	\$6,722.9	\$7,517.8	-\$1,747.2	\$5,718.2	\$2,664.9	\$200.7	\$2,001.4	\$5,583.1
Other	\$0.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.5	\$0.0	\$0.0
Total Asset Additions (A)	-\$6,557.0	\$9,890.0	\$8,100.2	\$8,735.9	-\$385.7	\$7,015.5	\$3,979.2	\$1,469.7	\$3,275.9	\$6,853.0
Deductions from Assets										
Benefits	\$2,842.8	\$2,673.4	\$2,494.3	\$2,347.2	\$2,195.0	\$2,043.6	\$1,902.1	\$1,758.2	\$1,626.8	\$1,503.4
Refunds	\$73.2	\$60.1	\$52.2	\$51.4	\$48.0	\$42.6	\$37.7	\$36.7	\$39.2	\$36.9
Rebates	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Administrative Expenses	\$36.2	\$28.3	\$31.8	\$38.4	\$32.2	\$31.0	\$37.6	\$28.7	\$26.4	\$25.5
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)	\$2,952.2	\$2,761.8	\$2,578.3	\$2,437.0	\$2,275.2	\$2,117.2	\$1,977.4	\$1,823.6	\$1,692.4	\$1,565.8
Change in Net Assets (A-B=C)	-\$9,509.2	\$7,128.1	\$5,521.9	\$6,298.9	-\$2,660.9	\$4,898.3	\$2,001.8	-\$354.0	\$1,583.5	\$5,287.2

CHART 45



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, 2022.

Laborers' Annuity and Benefit Fund of Chicago Tier 1 Plan Summary

Retirement Age

- Age 60 with 10 years of service
- Age 55 with 25 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

Pursuant to P.A. 100-0023, the City of Chicago is required to contribute an amount equal to the sum of the net employer normal cost and an amortization of the unfunded liability as a level percent of payroll so that the funded ratio reaches 90% by 2058.

Laborers' Annuity and Benefit Fund of Chicago Tier 2 Plan Summary (P.A. 96-0889)

Retirement Age

- Age 67 with 10 years of service
- Age 62 with 10 years of service (reduced annuity)

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 96 consecutive months of service within the last 120 months of service
- Pensionable Salary is limited by an amount tied to the 2010 Social Security Wage Base of \$106,800. This amount increases annually by 3% or ½ of the increase in the Consumer Price Index-U, whichever is less. The salary limits for calendar years 2020, 2021, and 2022 are \$115,929, \$116,740, and \$119,892, respectively.

Annual COLA

- Simple 3% or ½ of the increase in the Consumer Price Index-U, whichever is less

Employee Contributions

- 8.5% of salary

Required Employer Contributions

Pursuant to P.A. 100-0023, the required employer contributions for payment year 2018 through 2022 are specified as follows: \$36 million in 2018, \$48 million in 2019, \$60 million in 2020, \$72 million in 2021, and \$84 million in 2022. After the payment year 2022, the City of Chicago is required to contribute an amount equal to the sum of the net employer normal cost and an amortization of the unfunded liability as a level percent of payroll so that the funded ratio reaches 90% by 2058.

Laborers' Annuity and Benefit Fund of Chicago

Tier 3 Plan Summary (P.A. 100-0023)

* Tier 3 members are those who are hired on or after July 6, 2017 or Tier 2 members who made an irrevocable election to participate in the Tier 3 plan. Please see P.A. 100-0023 in Section I for more information.

Retirement Age

- Age 65 with 10 years of service
- Age 60 with 10 years of service (reduced annuity)

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 96 consecutive months of service within the last 120 months of service
Pensionable Salary is limited by an amount tied to the 2010 Social Security Wage Base of \$106,800. This amount increases annually by 3% or ½ of the increase in the Consumer Price Index-U, whichever is less. The salary limits for calendar years 2020, 2021, and 2022 are \$115,929, \$116,740, and \$119,892, respectively.

Annual COLA

- Simple 3% or ½ of the increase in the Consumer Price Index-U, whichever is less

Employee Contributions

- Lesser of 11.5% or normal cost (subject to minimum rate of 8.5%)
- When the funding ratio becomes 90%, employee contributions will decrease to 7.5% and stay at 7.5%, unless the funding ratio falls below 75%.

Required Employer Contributions

Pursuant to P.A. 100-0023, the City of Chicago is required to contribute an amount equal to the sum of the net employer normal cost and an amortization of the unfunded liability as a level percent of payroll so that the funded ratio reaches 90% by 2058.

CHART 46

LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO
Active Employees

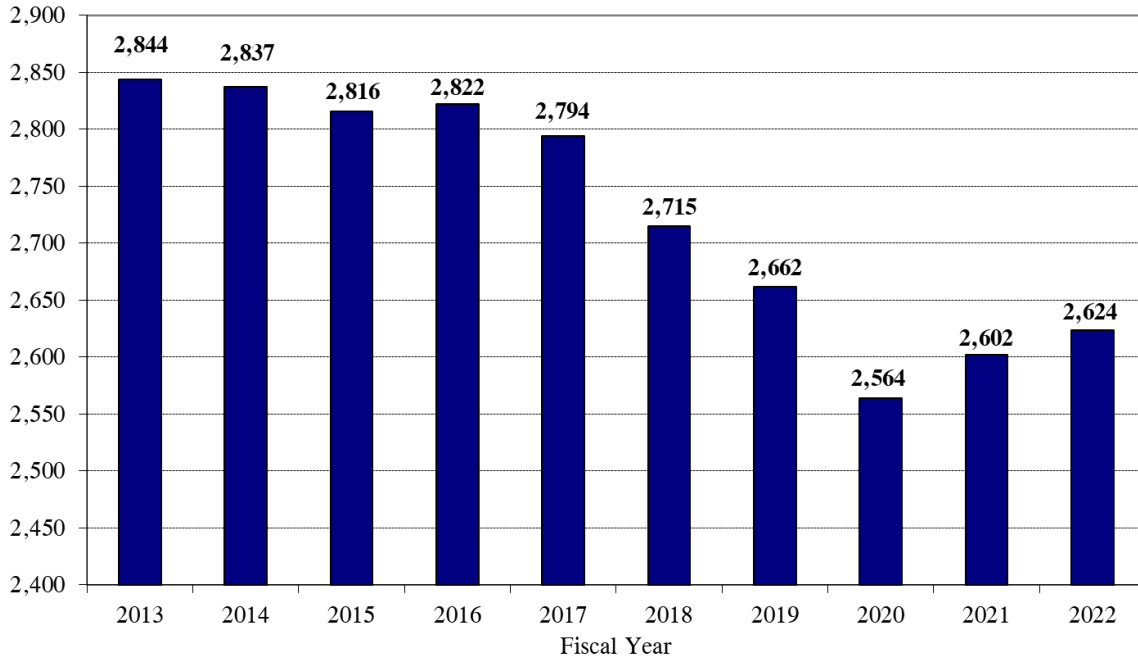


CHART 47

LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO
Employee Annuitants

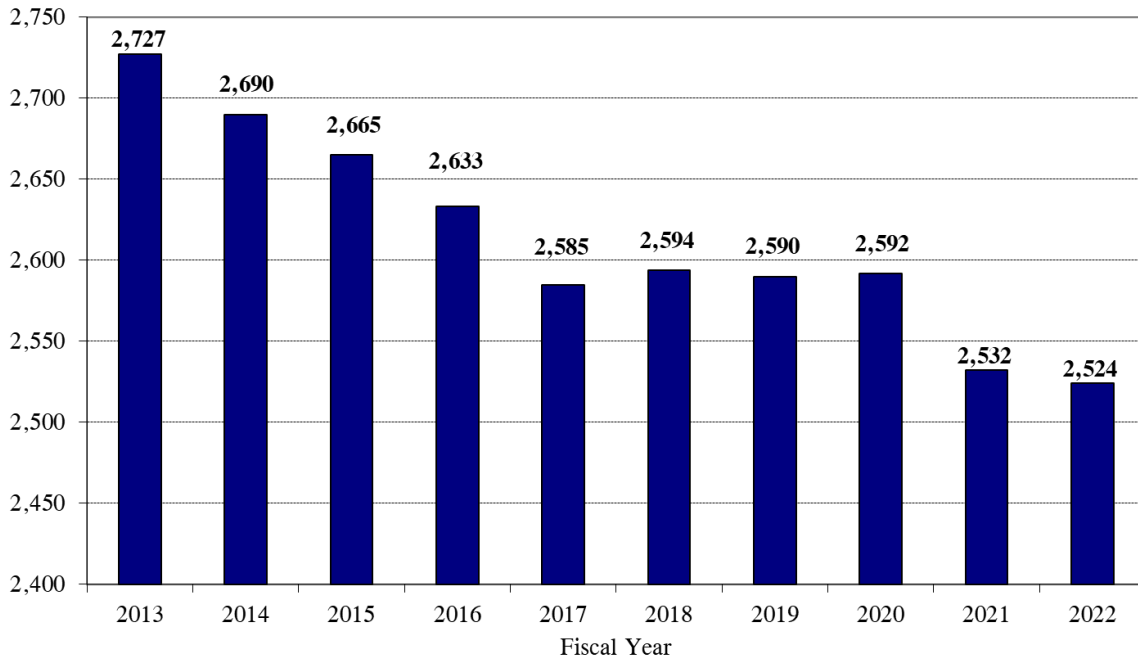


CHART 48

LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO
Average Employee Salaries

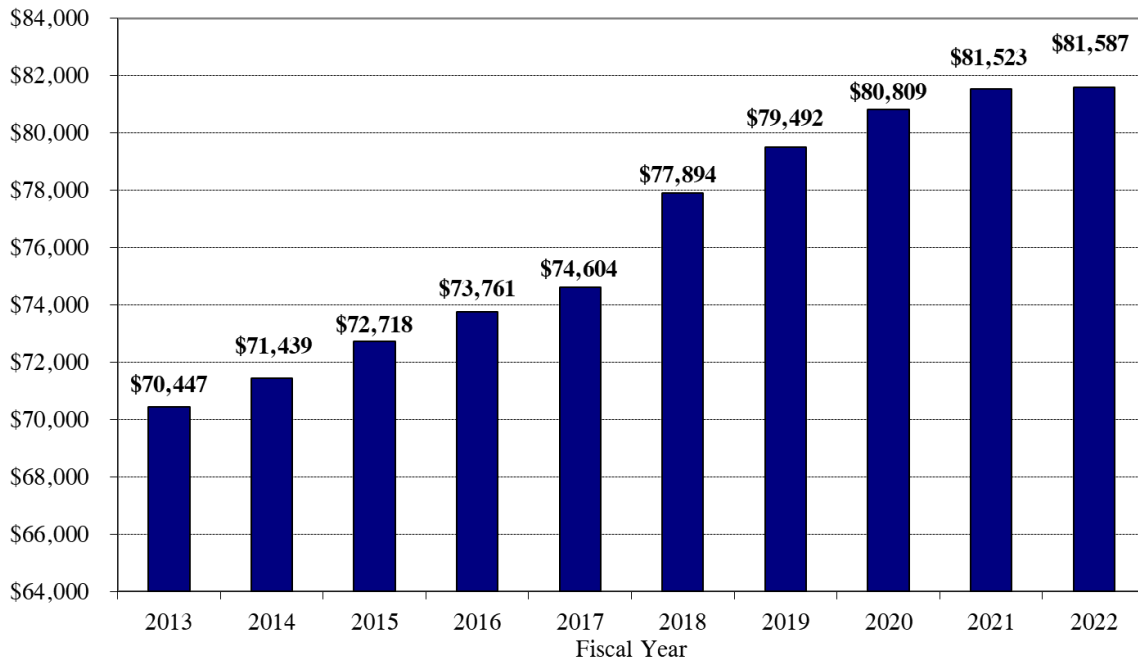


CHART 49

LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO
Average Retirement Annuities

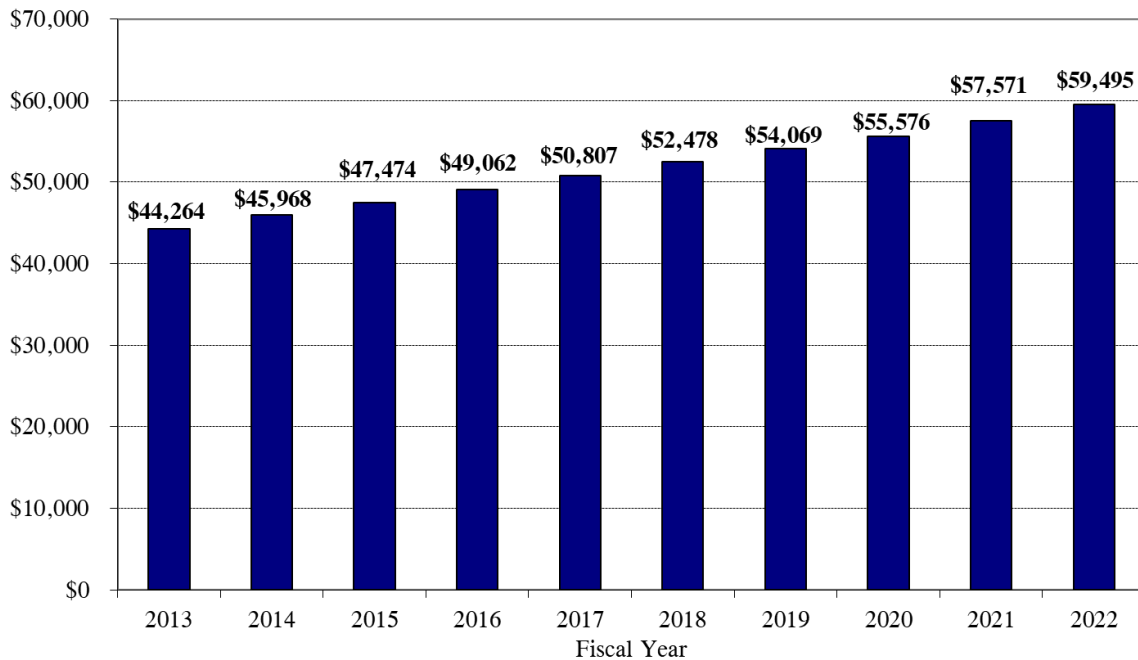


CHART 50

**LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO
Funded Ratio
FY 2013 - FY 2022**

All figures based upon the actuarial value of assets.

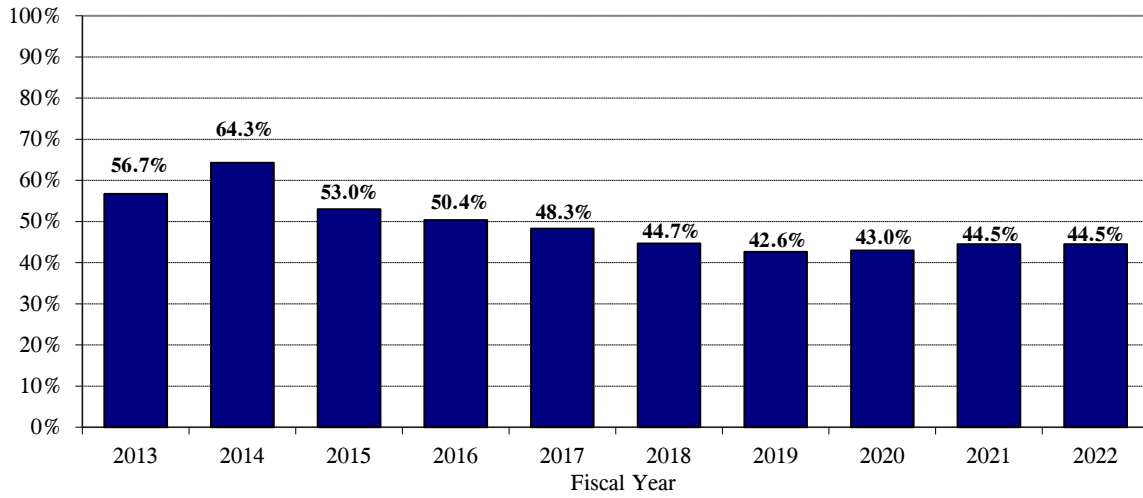


CHART 51

**LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO
Change in Unfunded Liabilities
Year ended December 31, 2022
(\$ in Millions)**

All figures based upon the actuarial value of assets.

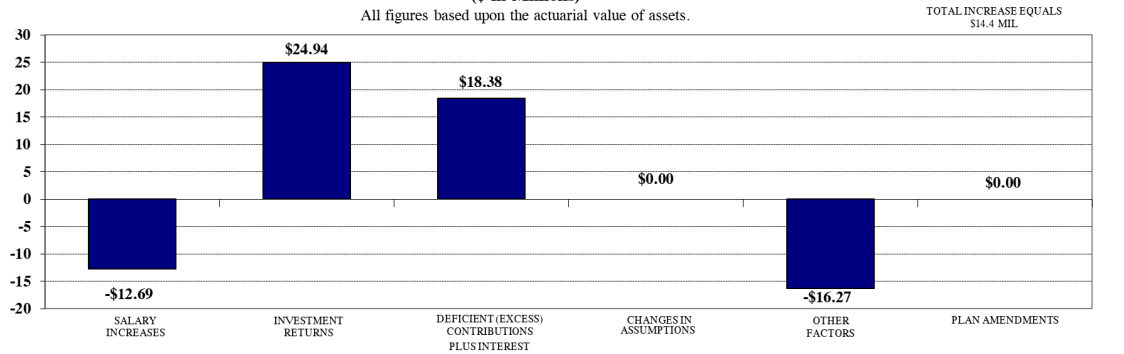


CHART 52

LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO
Investment Income, FY 2013 - FY 2022
Actuarially Assumed Rate of Return: 7.25%
(\$ in Millions)

All figures based upon the market value of assets.

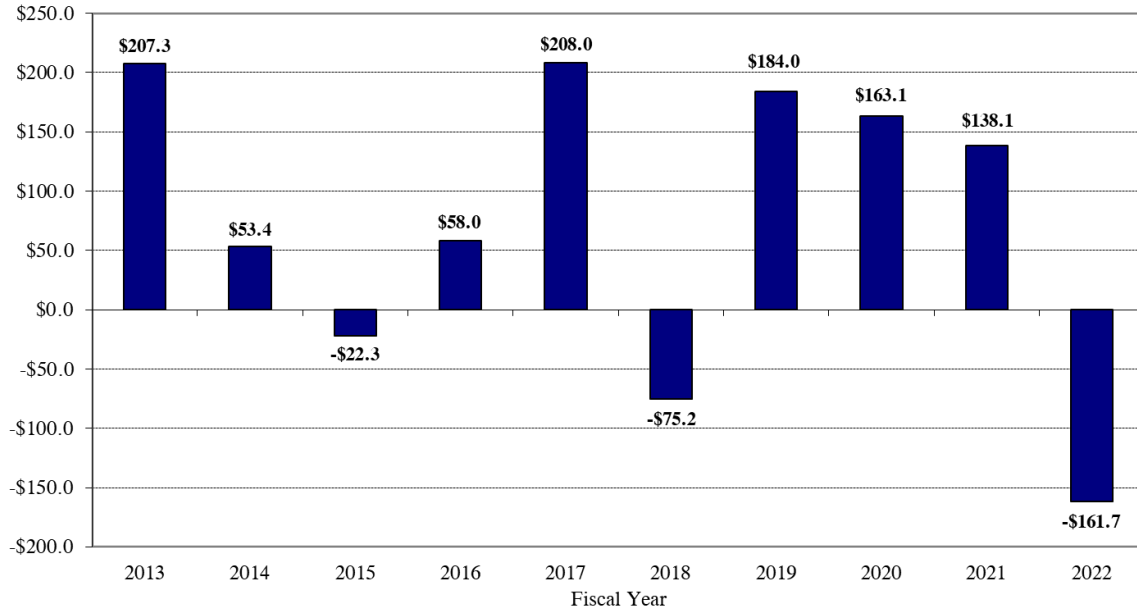


CHART 53

LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO
Rate of Return, FY 2013 - FY 2022

Actuarially Assumed Rate of Return: 7.25%

All figures based upon the market value of assets.

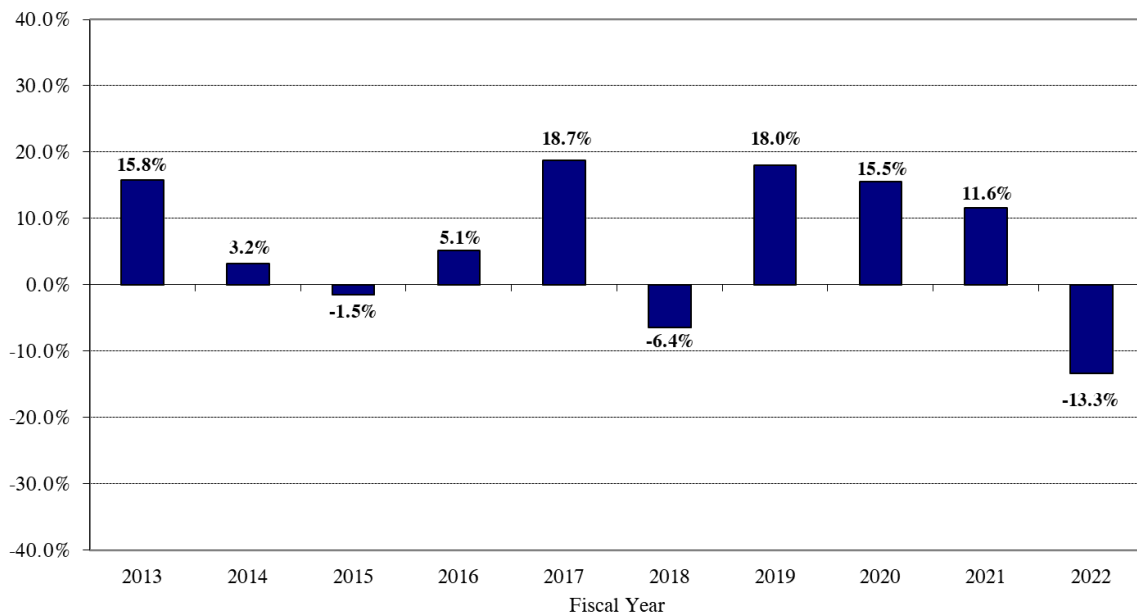


TABLE 15

LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO					
System Experience, 2013 - 2022					
(\$ in Millions)					
Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2022	214.1	2,785.9	1,239.4	1,546.5	44.5%
2021	212.1	2,760.8	1,228.6	1,532.1	44.5%
2020	207.2	2,735.5	1,175.4	1,560.0	43.0%
2019	211.6	2,701.9	1,151.5	1,550.4	42.6%
2018	211.5	2,652.9	1,185.3	1,467.6	44.7%
2017	208.4	2,578.7	1,245.1	1,333.6	48.3%
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%

TABLE 16

LABORERS' ANNUITY AND BENEFIT FUND OF CHICAGO										
Changes in Net Assets										
(\$ in Millions)										
Fiscal Year	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Additions to Assets										
Employer	\$116.2	\$85.0	\$73.7	\$59.3	\$48.5	\$35.5	\$14.4	\$14.6	\$14.5	\$14.1
Employees	\$19.1	\$17.6	\$18.1	\$18.1	\$17.8	\$17.4	\$17.2	\$16.8	\$16.4	\$16.4
Net Investment Income	-\$161.9	\$138.1	\$162.9	\$183.7	-\$75.4	\$207.7	\$57.7	-\$22.8	\$52.9	\$206.7
Other	\$0.2	\$0.0	\$0.1	\$0.3	\$0.2	\$0.2	\$0.3	\$0.4	\$0.5	\$0.6
Total Asset Additions (A)	-\$26.4	\$240.7	\$254.9	\$261.5	-\$8.9	\$260.8	\$89.7	\$9.1	\$84.3	\$237.8
Deductions from Assets										
Benefits	\$172.6	\$168.9	\$165.4	\$162.1	\$157.3	\$154.8	\$153.8	\$152.2	\$147.9	\$144.3
Refunds	\$4.5	\$3.6	\$3.6	\$2.8	\$2.7	\$2.3	\$2.8	\$2.5	\$2.1	\$2.9
Rebates	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Administrative Expenses	\$3.6	\$3.8	\$3.6	\$3.7	\$3.9	\$4.0	\$4.1	\$3.8	\$3.8	\$4.1
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)	\$180.8	\$176.4	\$172.7	\$168.7	\$163.9	\$161.0	\$160.6	\$158.5	\$153.9	\$151.3
Change in Net Assets (A-B=C)	-\$207.2	\$64.4	\$82.2	\$92.9	-\$172.9	\$99.8	-\$70.9	-\$149.4	-\$69.6	\$86.5

Table 17 below contains funding projections based on the December 31, 2022 actuarial valuation of the Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago.

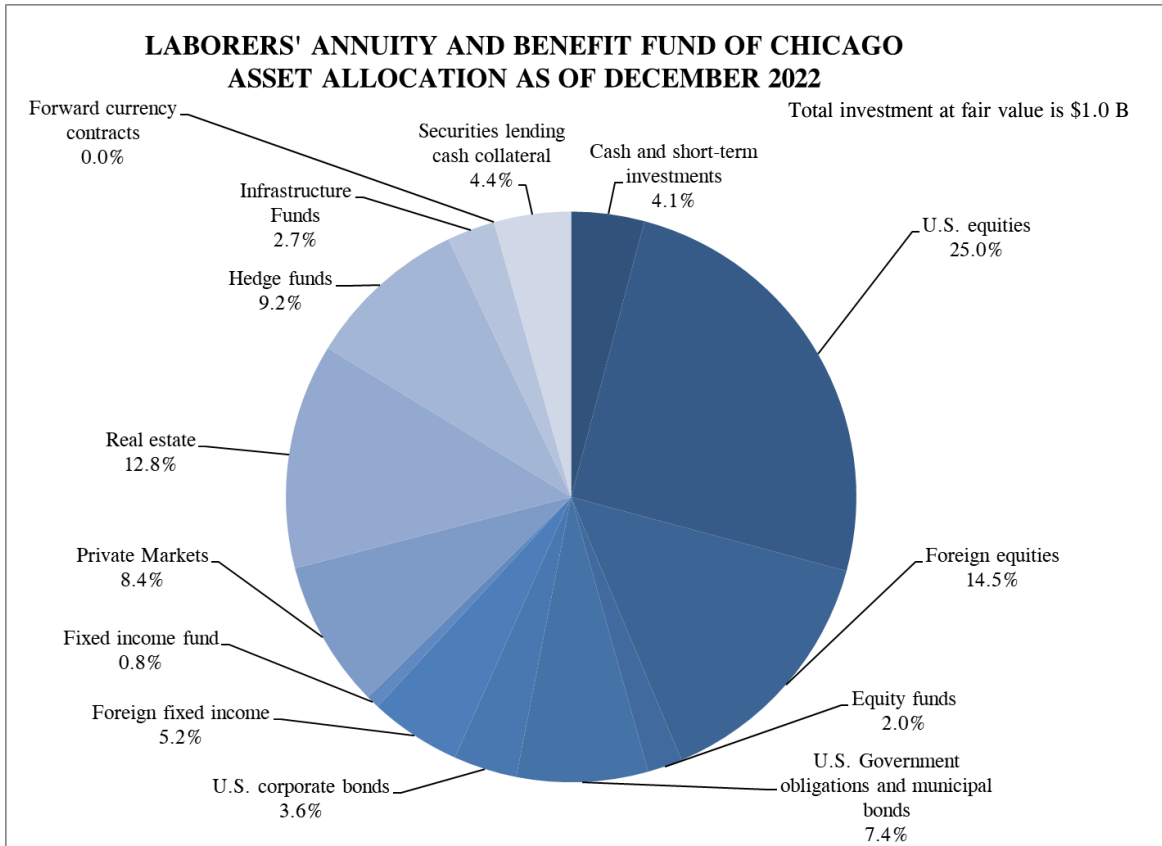
TABLE 17

Laborers' Annuity and Benefit Fund of Chicago Actuarial Valuation Projection Results as of December 31, 2022 (\$ 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
2022	214.1	116.2	54.3%	19.1	2,785.9	1,239.4	1,546.5	44.5%
2023	217.0	112.0	51.6%	18.1	2,833.3	1,251.0	1,582.3	44.2%
2024	221.6	127.4	57.5%	18.7	2,877.3	1,252.1	1,625.2	43.5%
2025	226.5	129.5	57.2%	19.4	2,918.9	1,234.9	1,684.0	42.3%
2026	231.4	131.8	56.9%	20.1	2,957.7	1,205.1	1,752.6	40.7%
2027	236.6	134.0	56.6%	20.8	2,993.1	1,223.1	1,770.0	40.9%
2028	242.0	136.3	56.3%	21.6	3,024.7	1,238.6	1,786.1	40.9%
2029	247.2	138.5	56.0%	22.4	3,051.7	1,250.8	1,800.9	41.0%
2030	252.9	140.9	55.7%	23.2	3,073.8	1,259.6	1,814.2	41.0%
2031	259.1	143.5	55.4%	24.1	3,091.2	1,265.8	1,825.4	40.9%
2032	265.4	146.2	55.1%	25.0	3,103.9	1,269.4	1,834.5	40.9%
2033	271.8	149.0	54.8%	25.9	3,112.4	1,271.1	1,841.2	40.8%
2034	278.6	152.0	54.5%	26.8	3,116.2	1,270.9	1,845.2	40.8%
2035	286.0	155.2	54.3%	27.8	3,116.0	1,270.0	1,846.1	40.8%
2036	292.9	158.3	54.1%	28.8	3,112.6	1,268.9	1,843.7	40.8%
2037	299.6	161.3	53.9%	29.7	3,106.4	1,268.4	1,838.0	40.8%
2038	306.0	164.2	53.7%	30.6	3,097.7	1,268.7	1,828.9	41.0%
2039	312.4	167.1	53.5%	31.5	3,086.5	1,270.4	1,816.1	41.2%
2040	319.1	170.1	53.3%	32.4	3,074.0	1,274.7	1,799.3	41.5%
2041	326.1	173.4	53.2%	333.2	3,061.2	1,283.3	1,777.9	41.9%
2042	332.7	176.5	53.1%	34.1	3,049.1	1,297.2	1,751.9	42.5%
2043	339.4	179.7	52.9%	34.9	3,038.1	1,317.3	1,720.8	43.4%
2044	346.1	182.9	52.8%	35.7	3,029.1	1,344.6	1,684.4	44.4%
2045	352.3	185.8	52.7%	36.5	3,021.8	1,379.4	1,642.4	45.6%
2046	359.1	189.1	52.6%	37.3	3,017.0	1,422.7	1,594.2	47.2%
2047	365.8	192.3	52.6%	38.1	3,015.1	1,475.7	1,539.4	48.9%
2048	372.6	195.6	52.5%	38.9	3,016.6	1,539.2	1,477.4	51.0%
2049	379.5	199.0	52.4%	39.7	3,021.9	1,614.3	1,407.6	53.4%
2050	386.4	202.3	52.4%	40.4	3,031.1	1,701.5	1,329.6	56.1%
2051	393.0	205.6	52.3%	41.2	3,043.5	1,800.6	1,242.9	59.2%
2052	400.0	209.0	52.3%	42.0	3,058.7	1,912.1	1,146.6	62.5%
2053	407.0	212.5	52.2%	42.8	3,076.7	2,036.7	1,040.0	66.2%
2054	414.3	216.2	52.2%	43.7	3,097.6	2,175.2	922.3	70.2%
2055	421.8	220.0	52.1%	44.6	3,121.3	2,328.7	792.6	74.6%
2056	429.5	223.8	52.1%	45.5	3,148.2	2,498.3	649.8	79.4%
2057	437.3	227.7	52.1%	46.4	3,178.6	2,685.5	493.1	84.5%
2058	445.1	231.6	52.0%	47.3	3,212.5	2,891.1	321.4	90.0%
2059	453.1	57.4	12.7%	31.4	3,249.8	2,924.8	325.0	90.0%
2060	461.0	57.8	12.5%	31.9	3,290.4	2,961.4	329.0	90.0%
2061	468.9	58.4	12.5%	32.4	3,333.2	2,999.9	333.3	90.0%
2062	477.1	59.2	12.4%	33.0	3,378.3	3,040.5	337.8	90.0%
2063	485.3	60.0	12.4%	33.5	3,425.5	3,083.0	342.6	90.0%
2064	493.7	60.8	12.3%	34.0	3,474.7	3,127.3	347.5	90.0%
2065	502.2	61.6	12.3%	34.6	3,525.9	3,173.4	352.6	90.0%
2066	510.6	62.4	12.2%	35.2	3,579.0	3,221.1	357.9	90.0%
2067	518.6	63.3	12.2%	35.8	3,633.7	3,270.3	363.4	90.0%
2068	526.4	64.2	12.2%	36.3	3,689.7	3,320.8	369.0	90.0%
2069	533.8	65.1	12.2%	36.9	3,747.0	3,372.3	374.7	90.0%
2070	541.0	65.9	12.2%	37.4	3,805.2	3,424.7	380.5	90.0%
2071	548.0	66.8	12.2%	37.9	3,864.4	3,477.9	386.4	90.0%

TABLE 18

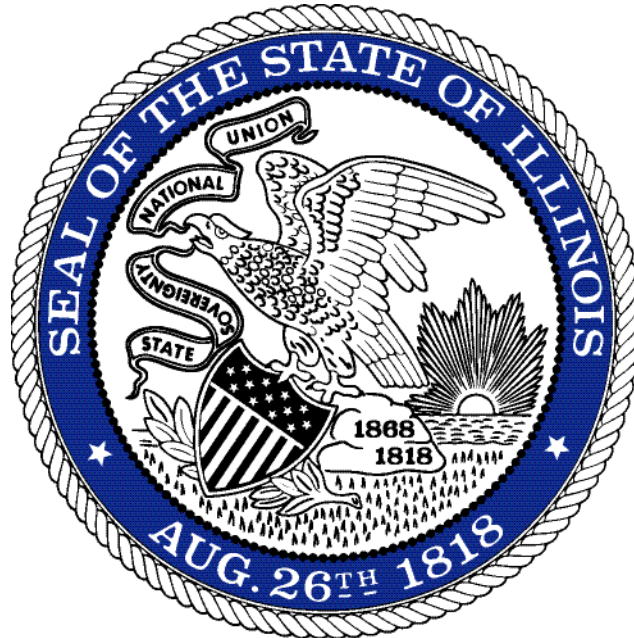
Laborers' Annuity and Benefit Fund of Chicago Projected Normal Cost as of December 31, 2022 (\$ in Millions)						
Fiscal Year	Employer's Normal Cost	Employer's Normal Cost as a % of Payroll	Employee Contributions	Employee Contributions as a % of Payroll	Total Normal Cost	Total Normal Cost as a % of Payroll
2022	20.6	9.6%	19.1	8.9%	39.7	18.5%
2023	21.3	9.8%	18.1	8.3%	39.4	18.2%
2024	21.1	9.5%	18.7	8.4%	39.8	18.0%
2025	20.9	9.2%	19.4	8.6%	40.3	17.8%
2026	20.7	9.0%	20.1	8.7%	40.8	17.6%
2027	20.5	8.7%	20.8	8.8%	41.3	17.5%
2028	20.3	8.4%	21.6	8.9%	41.8	17.3%
2029	19.9	8.1%	22.4	9.0%	42.3	17.1%
2030	19.6	7.7%	23.2	9.2%	42.8	16.9%
2031	19.3	7.4%	24.1	9.3%	43.3	16.7%
2032	18.9	7.1%	25.0	9.4%	43.9	16.6%
2033	18.6	6.8%	25.9	9.5%	44.5	16.4%
2034	18.3	6.6%	26.8	9.6%	45.1	16.2%
2035	18.0	6.3%	27.8	9.7%	45.9	16.0%
2036	17.8	6.1%	28.8	9.8%	46.6	15.9%
2037	17.6	5.9%	29.7	9.9%	47.4	15.8%
2038	17.4	5.7%	30.6	10.0%	48.0	15.7%
2039	17.2	5.5%	31.5	10.1%	48.7	15.6%
2040	17.1	5.3%	32.4	10.1%	49.4	15.5%
2041	17.0	5.2%	33.2	10.2%	50.2	15.4%
2042	16.9	5.1%	34.1	10.2%	51.0	15.3%
2043	16.9	5.0%	34.9	10.3%	51.8	15.3%
2044	16.9	4.9%	35.7	10.3%	52.6	15.2%
2045	16.8	4.8%	36.5	10.4%	53.3	15.1%
2046	16.8	4.7%	37.3	10.4%	54.1	15.1%
2047	16.8	4.6%	38.1	10.4%	54.9	15.0%
2048	16.9	4.5%	38.9	10.4%	55.7	15.0%
2049	16.9	4.5%	39.7	10.5%	56.6	14.9%
2050	17.0	4.4%	40.4	10.5%	57.4	14.9%
2051	17.1	4.3%	41.2	10.5%	58.3	14.8%
2052	17.2	4.3%	42.0	10.5%	59.2	14.8%
2053	17.3	4.3%	42.8	10.5%	60.1	14.8%
2054	17.5	4.2%	43.7	10.5%	61.2	14.8%
2055	17.6	4.2%	44.6	10.6%	62.2	14.7%
2056	17.8	4.1%	45.5	10.6%	63.3	14.7%
2057	18.0	4.1%	46.4	10.6%	64.4	14.7%
2058	18.2	4.1%	47.3	10.6%	65.4	14.7%
2059	35.2	7.8%	31.4	6.9%	66.5	14.7%
2060	35.7	7.7%	31.9	6.9%	67.6	14.7%
2061	36.2	7.7%	32.4	6.9%	68.7	14.6%
2062	36.9	7.7%	33.0	6.9%	69.8	14.6%
2063	37.5	7.7%	33.5	6.9%	71.0	14.6%
2064	38.1	7.7%	34.0	6.9%	72.2	14.6%
2065	38.7	7.7%	34.6	6.9%	73.3	14.6%
2066	39.3	7.7%	35.2	6.9%	74.5	14.6%
2067	39.9	7.7%	35.8	6.9%	75.7	14.6%
2068	40.5	7.7%	36.3	6.9%	76.8	14.6%
2069	41.1	7.7%	36.9	6.9%	77.9	14.6%
2070	41.6	7.7%	37.4	6.9%	79.0	14.6%
2071	42.1	7.7%	37.9	6.9%	80.0	14.6%

CHART 54



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, 2022.

Metropolitan Water Reclamation District Retirement Fund - Tier 1 Plan Summary

Retirement Age

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

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)

- Beginning on January 1, 2015, the Tier 1 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 FY 2050. 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.

Metropolitan Water Reclamation District Retirement Fund - Tier 2 Plan Summary (P.A. 96-0889)

Retirement Age

- Age 67 with 10 years of service
- Age 62 with 10 years of service (reduced annuity)

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

- 80% of final average salary

Salary Used to Calculate Pension

- Highest 96 consecutive months of service within the last 120 months of service
- Pensionable Salary is limited by an amount tied to the 2010 Social Security Wage Base of \$106,800. This amount increases annually by 3% or ½ of the increase in the Consumer Price Index-U, whichever is less. The salary limits for calendar years 2020, 2021, and 2022 are \$115,929, \$116,740, and \$119,892, respectively.

Annual COLA

- Simple 3% or ½ of the increase in the Consumer Price Index-U, whichever is less

Employee Contributions

- 9% of salary

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 FY 2050. 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.

CHART 55

**METROPOLITAN WATER PENSION FUND
Active Employees**

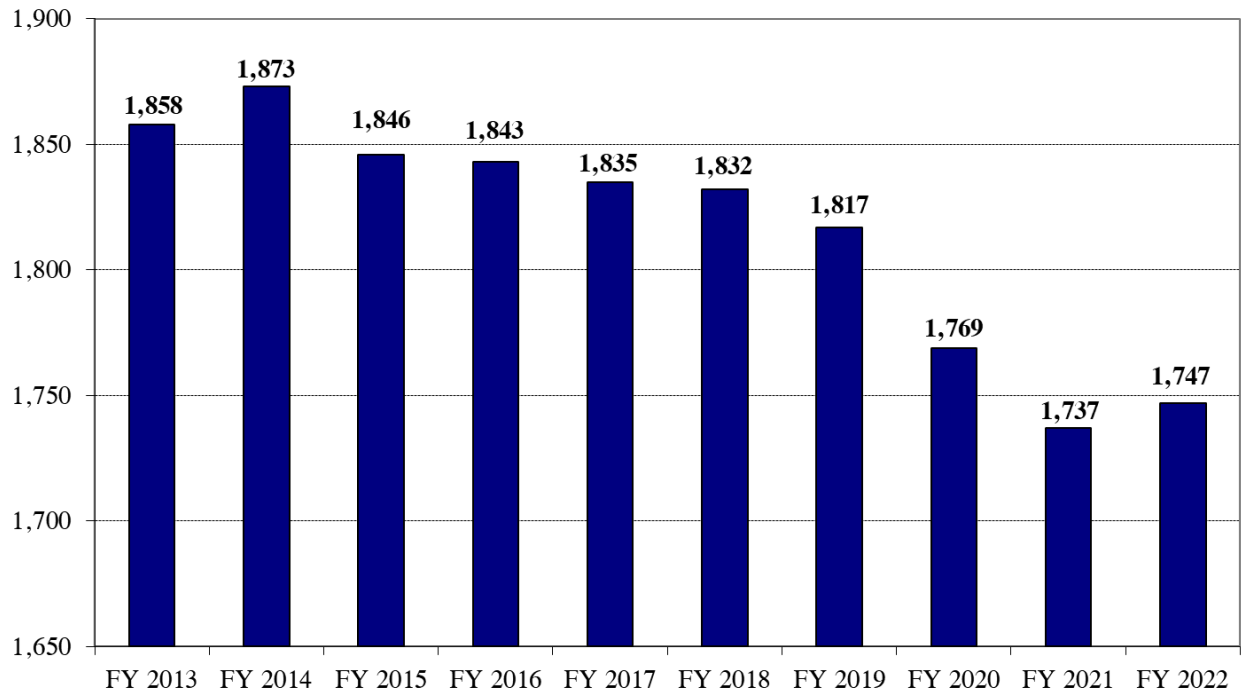


CHART 56

**METROPOLITAN WATER PENSION FUND
Employee Annuitants**

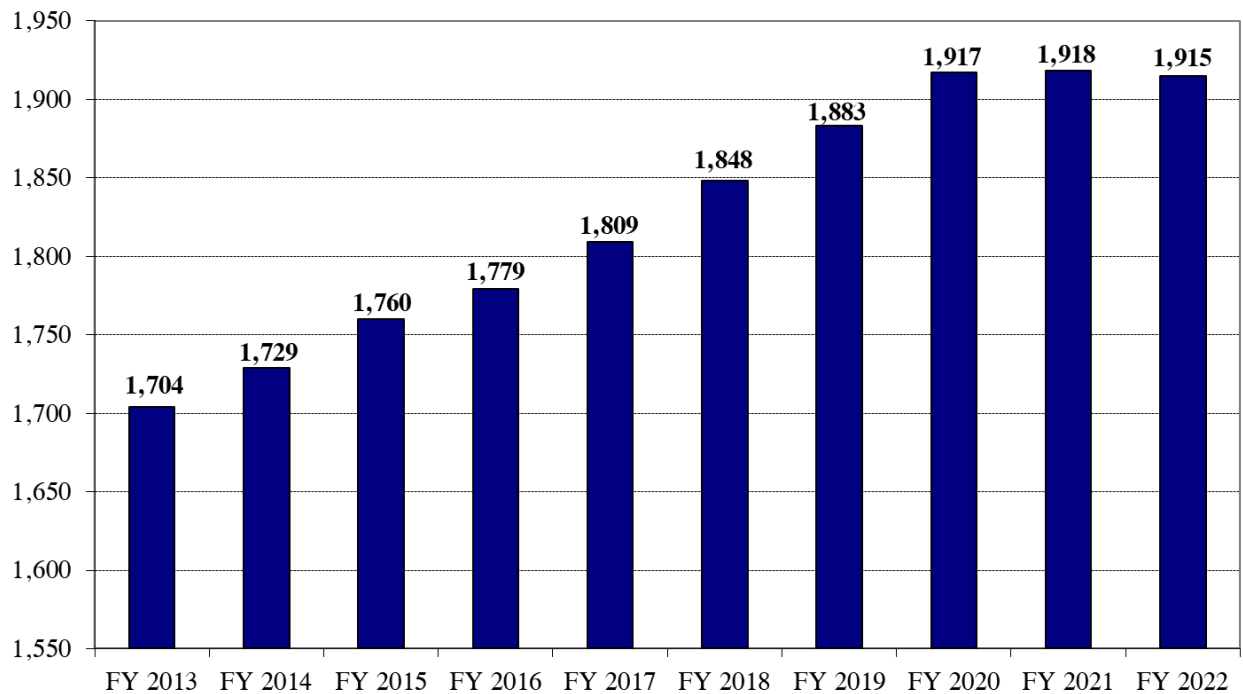


CHART 57

**METROPOLITAN WATER PENSION FUND
Average Employee Salaries**

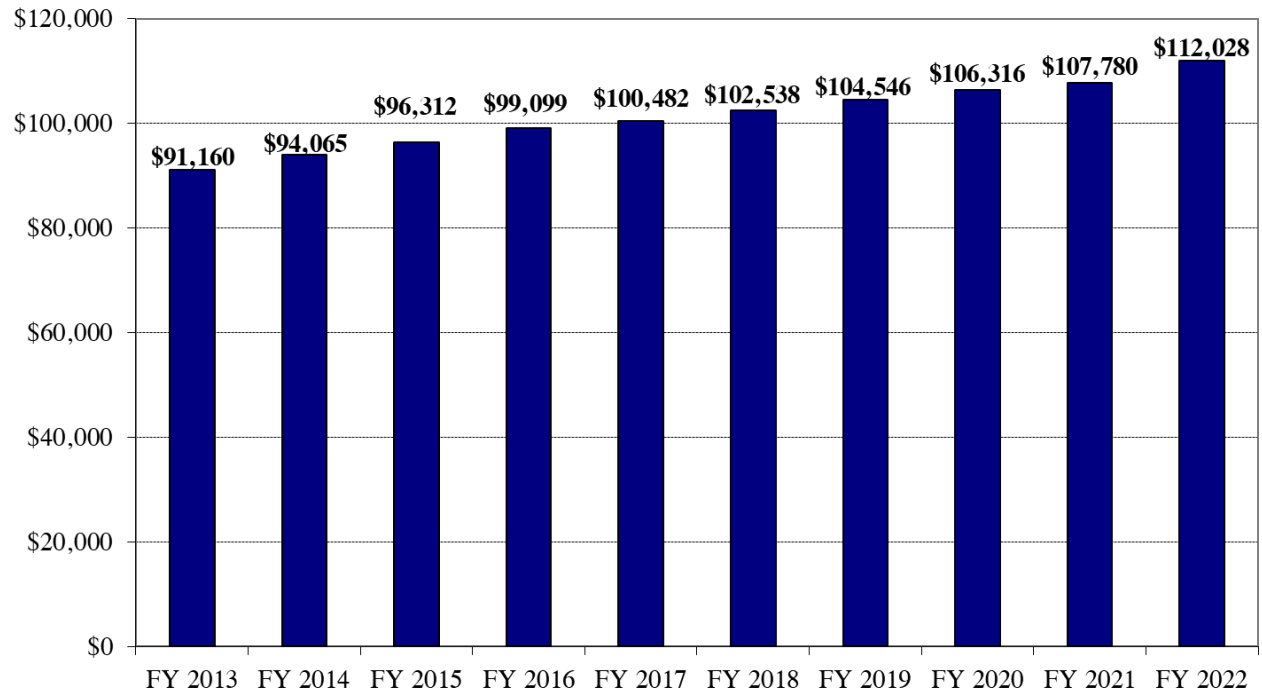


CHART 58

**METROPOLITAN WATER PENSION FUND
Average Retirement Annuities**

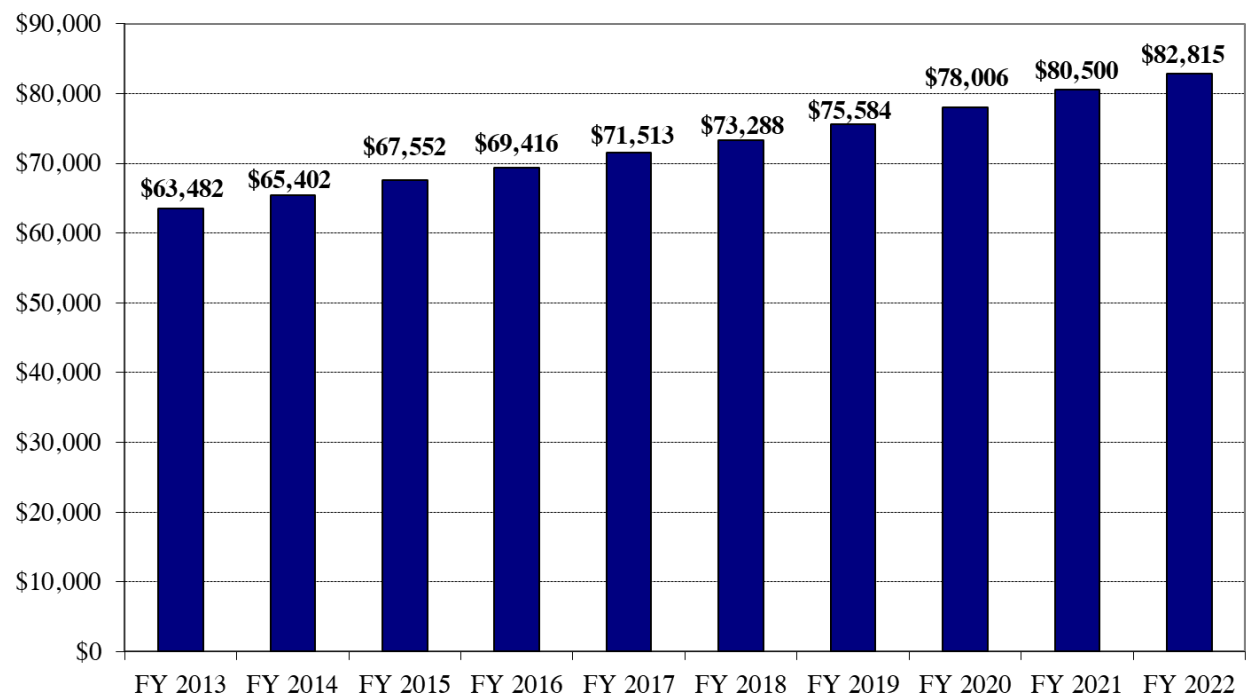


CHART 59

**METROPOLITAN WATER PENSION FUND
Funded Ratio
FY 2013 - FY 2022**

All figures based upon the actuarial value of assets.

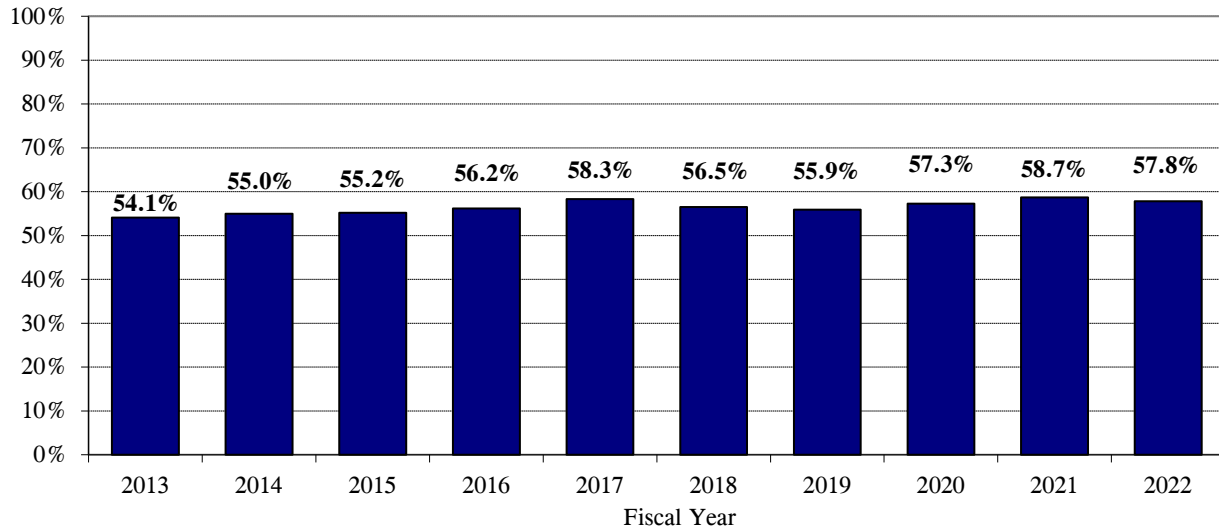


CHART 60

**METROPOLITAN WATER PENSION FUND
Change in Unfunded Liabilities
Year ended December 31, 2022
(\$ in Millions)**

All figures based upon the actuarial value of assets.

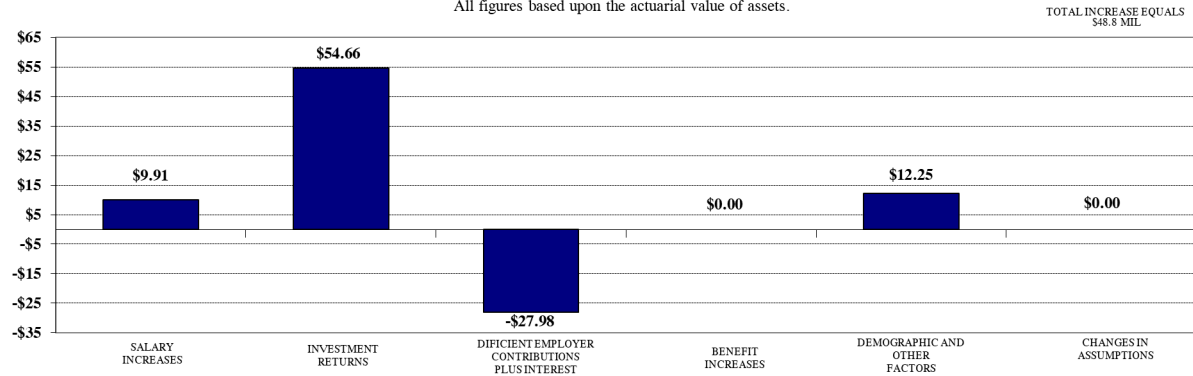


CHART 61

METROPOLITAN WATER PENSION FUND
Investment Income 2013 - 2022
Actuarially Assumed Rate of Return: 7.25%
(\$ in Millions)

All figures based upon the market value of assets.

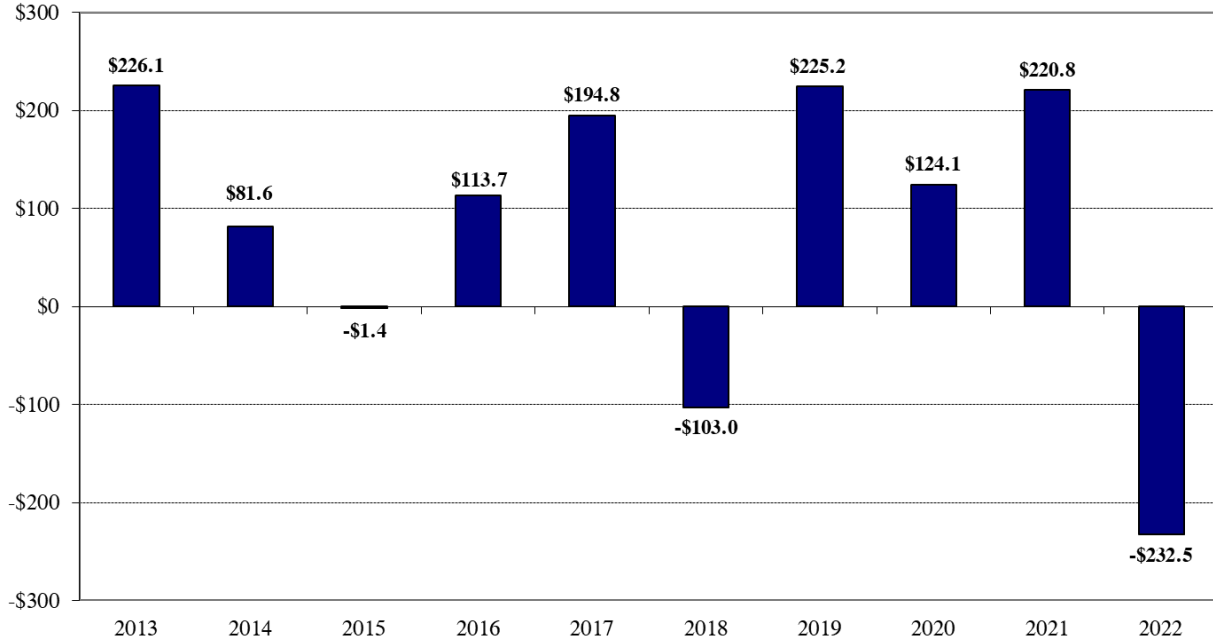


CHART 62

METROPOLITAN WATER PENSION FUND
Rate of Return FY 2013 - FY 2022
Actuarially Assumed Rate of Return: 7.25%
 All figures based upon the market value of assets.

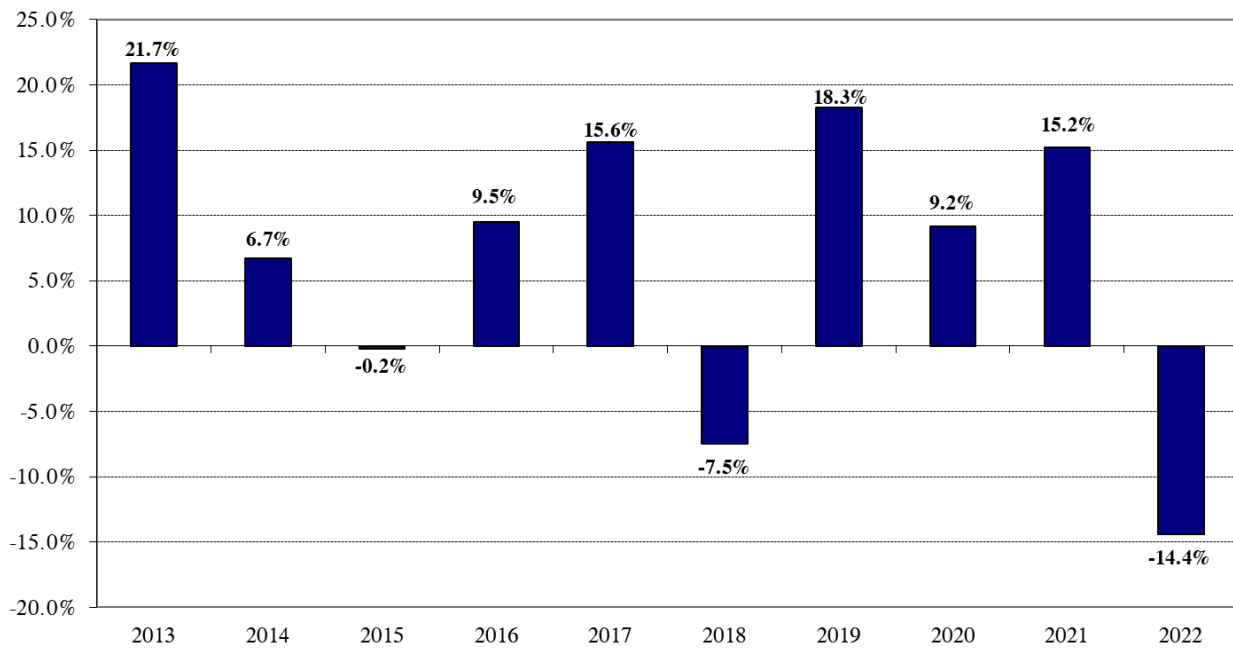


TABLE 19

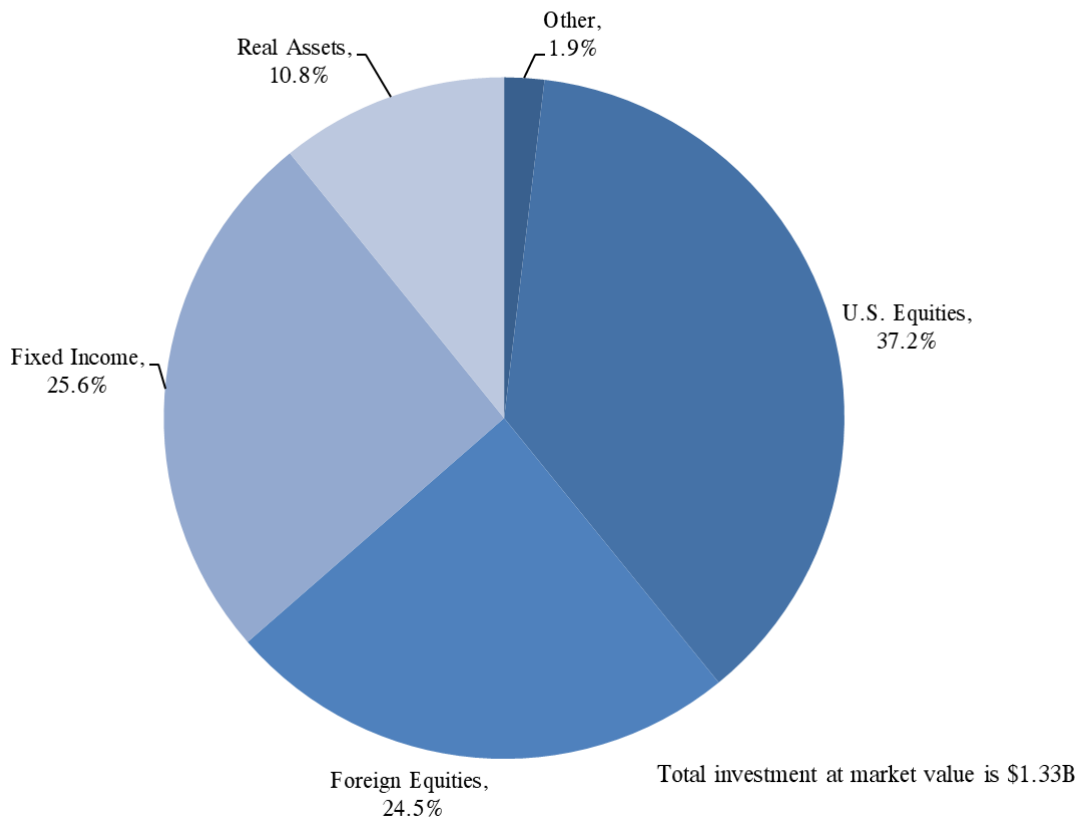
METROPOLITAN WATER PENSION FUND					
System Experience, 2013 - 2022					
(\$ in Millions)					
Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2022	195.7	2,811.6	1,624.1	1,187.5	57.8%
2021	187.2	2,756.5	1,617.8	1,138.7	58.7%
2020	188.1	2,714.2	1,556.1	1,158.1	57.3%
2019	190.0	2,666.2	1,489.3	1,177.0	55.9%
2018	187.8	2,601.2	1,470.3	1,130.9	56.5%
2017	184.4	2,497.9	1,456.2	1,041.7	58.3%
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%

TABLE 20

METROPOLITAN WATER PENSION FUND										
Changes in Net Assets										
(\$ in Millions)										
Years	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Additions to Assets										
Employer	\$118.5	\$88.8	\$107.9	\$87.4	\$87.2	\$89.9	\$80.3	\$71.0	\$73.9	\$92.9
Employees	\$21.2	\$20.6	\$21.0	\$21.2	\$21.0	\$20.8	\$20.8	\$21.4	\$19.0	\$16.9
Net Investment Income	-\$232.5	\$220.8	\$124.1	\$225.2	-\$103.0	\$194.8	\$113.6	-\$1.4	\$81.6	\$226.1
Other	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1	\$0.0	\$0.0	\$0.0
Total Asset Additions (A)	-\$92.8	\$330.2	\$252.9	\$333.8	\$5.2	\$305.5	\$214.8	\$91.0	\$174.5	\$335.9
Deductions from Assets										
Benefits	\$189.3	\$182.9	\$175.0	\$167.5	\$159.6	\$152.2	\$145.3	\$139.2	\$132.9	\$127.2
Refunds	\$2.2	\$2.3	\$2.3	\$1.8	\$1.8	\$2.6	\$2.0	\$1.3	\$1.0	\$1.1
Rebates	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Administrative Expenses	\$2.1	\$1.8	\$1.6	\$1.6	\$1.7	\$1.6	\$1.5	\$1.7	\$1.4	\$1.4
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)	\$193.7	\$186.9	\$178.9	\$171.0	\$163.0	\$156.3	\$148.8	\$142.2	\$135.3	\$129.7
Change in Net Assets (A-B=C)	-\$286.5	\$143.3	\$74.1	\$162.8	-\$157.8	\$149.2	\$65.9	-\$51.1	\$39.2	\$206.2

CHART 63

**METROPOLITAN WATER RECLAMATION DISTRICT RETIREMENT FUND
ASSET ALLOCATION AS OF DECEMBER 2022**



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, 2022.

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

Pursuant to P.A. 100-0023, the required employer contributions for payment years 2018 through 2022 are specified as follows: \$266 million in 2018, \$344 million in 2019, \$421 million in 2020, \$499 million in 2021, and \$576 million in 2022. After the payment year 2022, the required employer contributions are calculated as a level percent of payroll sufficient to bring the funded ratio up to 90% by 2058.

Municipal Employees' Annuity and Benefit Fund of Chicago – Tier 2 Plan Summary (P.A. 96-0889)

Retirement Age

- Age 67 with 10 years of service
- Age 62 with 10 years of service (reduced annuity)

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 96 consecutive months of service within the last 120 months of service
- Pensionable Salary is limited by an amount tied to the 2010 Social Security Wage Base of \$106,800. This amount increases annually by 3% or ½ of the increase in the Consumer Price Index-U, whichever is less. The salary limits for calendar years 2020, 2021, and 2022 are \$115,929, \$116,740, and \$119,892, respectively.

Annual COLA

- Simple 3% or ½ of the increase in the Consumer Price Index-U, whichever is less

Employee Contributions

- 8.5% of salary

Required Employer Contributions

Pursuant to P.A. 100-0023, the required employer contributions are calculated as a level percent of payroll sufficient to bring the funded ratio up to 90% by 2058.

Municipal Employees' Annuity and Benefit Fund of Chicago – Tier 3 Plan Summary

*Tier 3 members are those who are hired on or after July 6, 2017 or Tier 2 members who made an irrevocable election to participate in the Tier 3 plan. Please see P.A. 100-0023 in Section I for more information.

Retirement Age

- Age 65 with 10 years of service
- Age 60 with 10 years of service (reduced annuity)

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 96 consecutive months of service within the last 120 months of service
Pensionable Salary is limited by an amount tied to the 2010 Social Security Wage Base of \$106,800. This amount increases annually by 3% or ½ of the increase in the Consumer Price Index-U, whichever is less. The salary limits for calendar years 2020, 2021, and 2022 are \$115,929, \$116,740, and \$119,892, respectively.

Annual COLA

- Simple 3% or ½ of the increase in the Consumer Price Index-U, whichever is less

Employee Contributions

- Lesser of 11.5% or normal cost (subject to minimum rate of 8.5%)
- When the funding ratio becomes 90%, employee contributions will decrease to 7.5% and stay at 7.5%, unless the funding ratio falls below 75%.

Required Employer Contributions

Pursuant to P.A. 100-0023, the required employer contributions are calculated as a level percent of payroll sufficient to bring the funded ratio up to 90% by 2058.

CHART 64

MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO
Active Employees

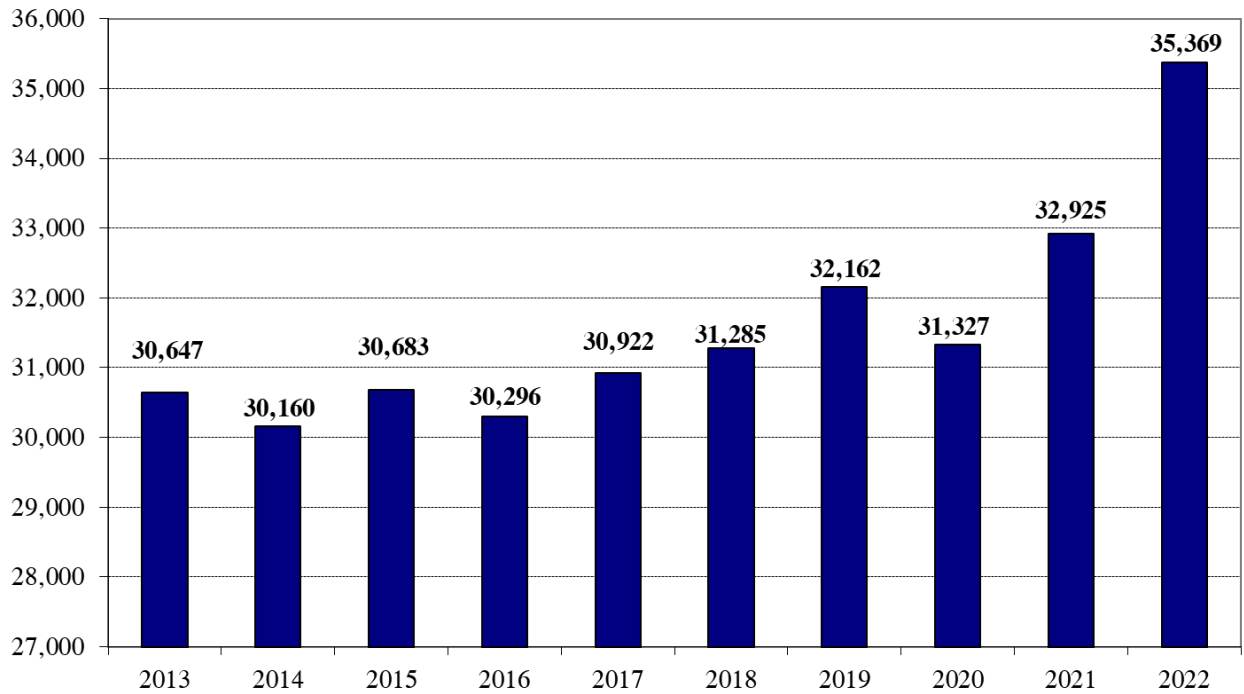


CHART 65

MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO
Employee Annuitants

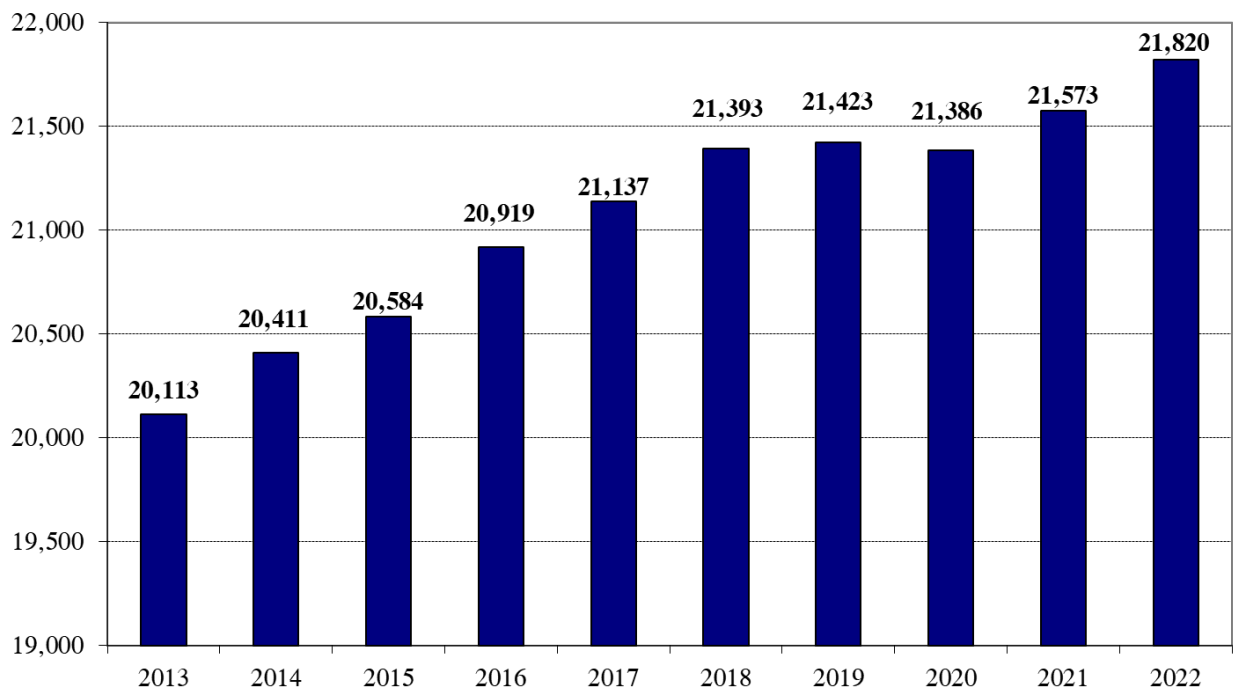


CHART 66

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

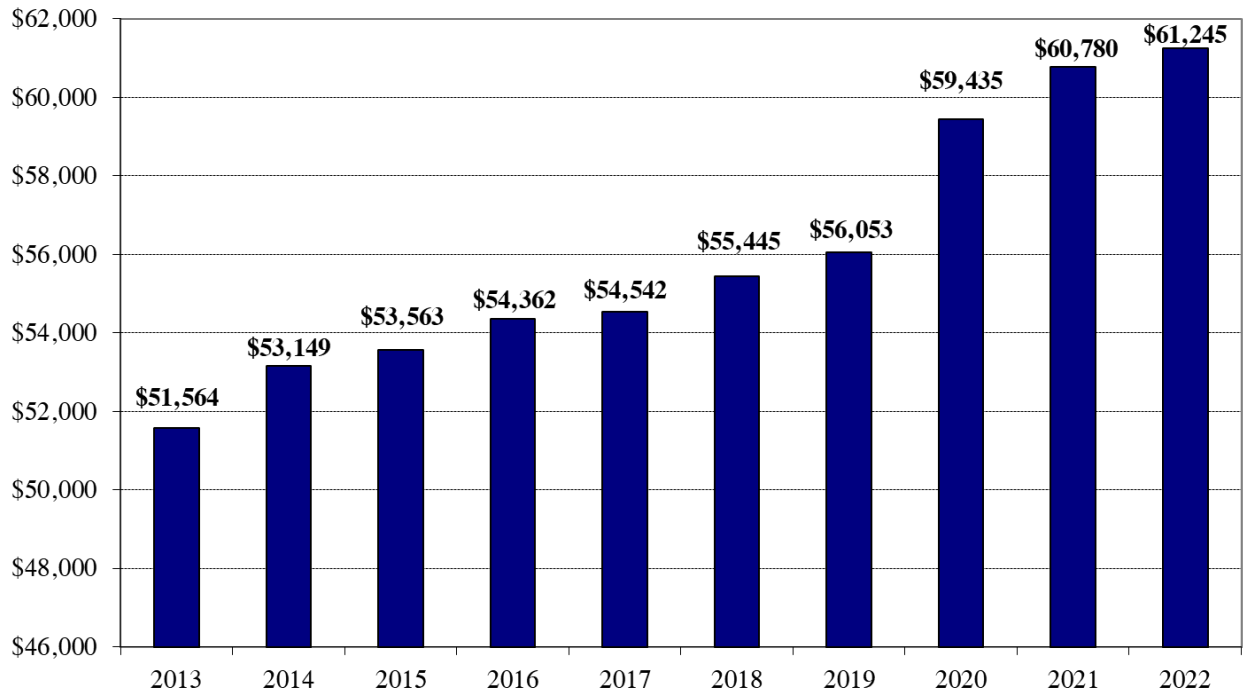


CHART 67

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

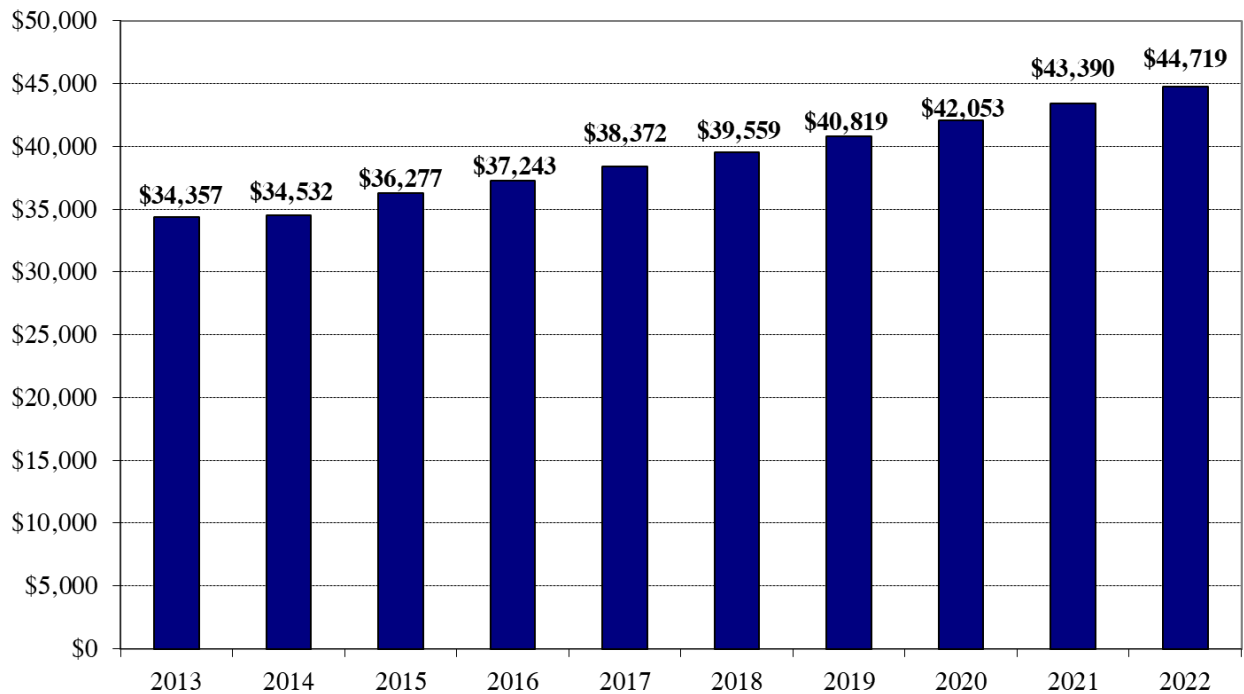


CHART 68

**MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO
Funded Ratio
FY 2013 - FY 2022**

All figures based upon the actuarial value of assets.

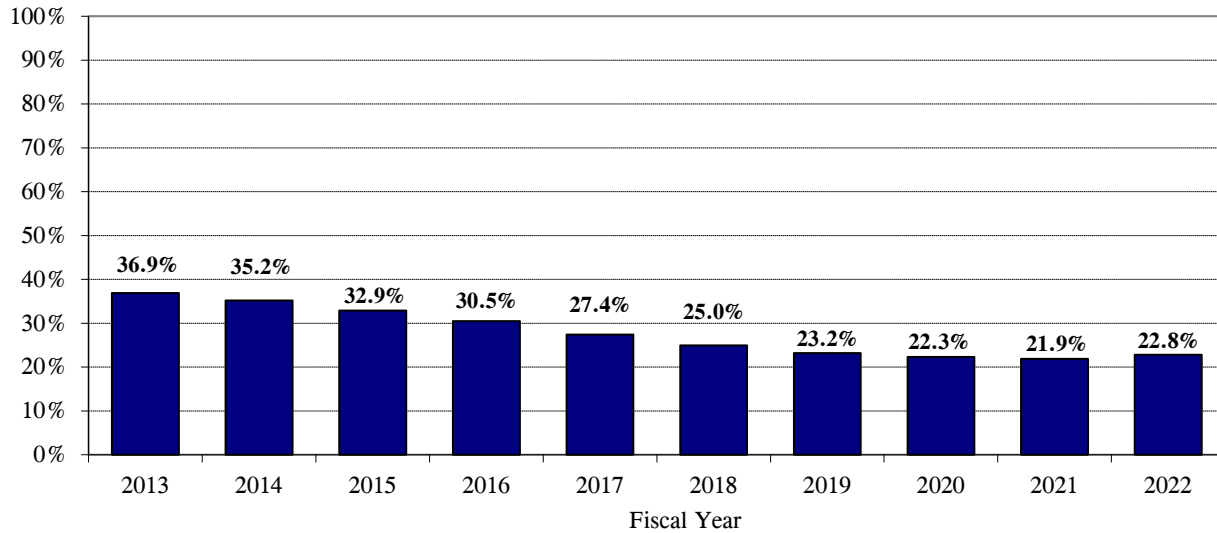


CHART 69

**MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO
Change in Unfunded Liabilities
Year ended December 31, 2022
(\$ in Millions)**

All figures based upon the actuarial value of assets.

TOTAL INCREASE EQUALS
\$108.57 MIL



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

CHART 70

MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

Investment Income, 2013 - 2022

Actuarially Assumed Rate of Return: 7.00%

(\$ in Millions)

All figures based upon the market value of assets.

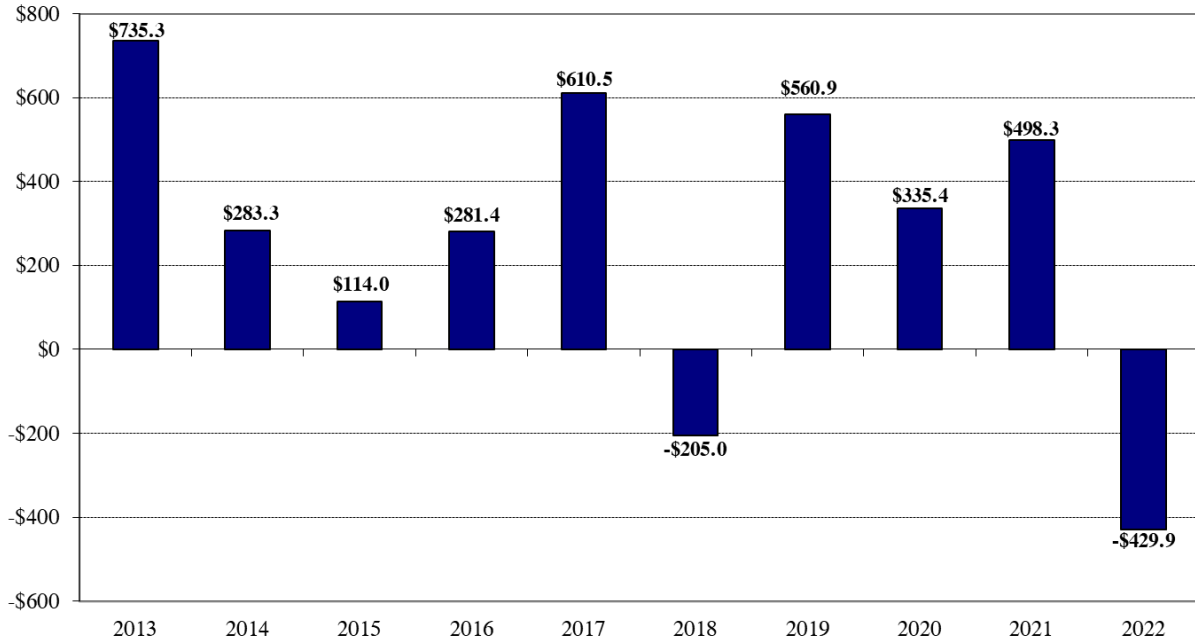


CHART 71

MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

Rate of Return, 2013 - 2022

Actuarially Assumed Rate of Return: 7.00%

All figures based upon the market value of assets.

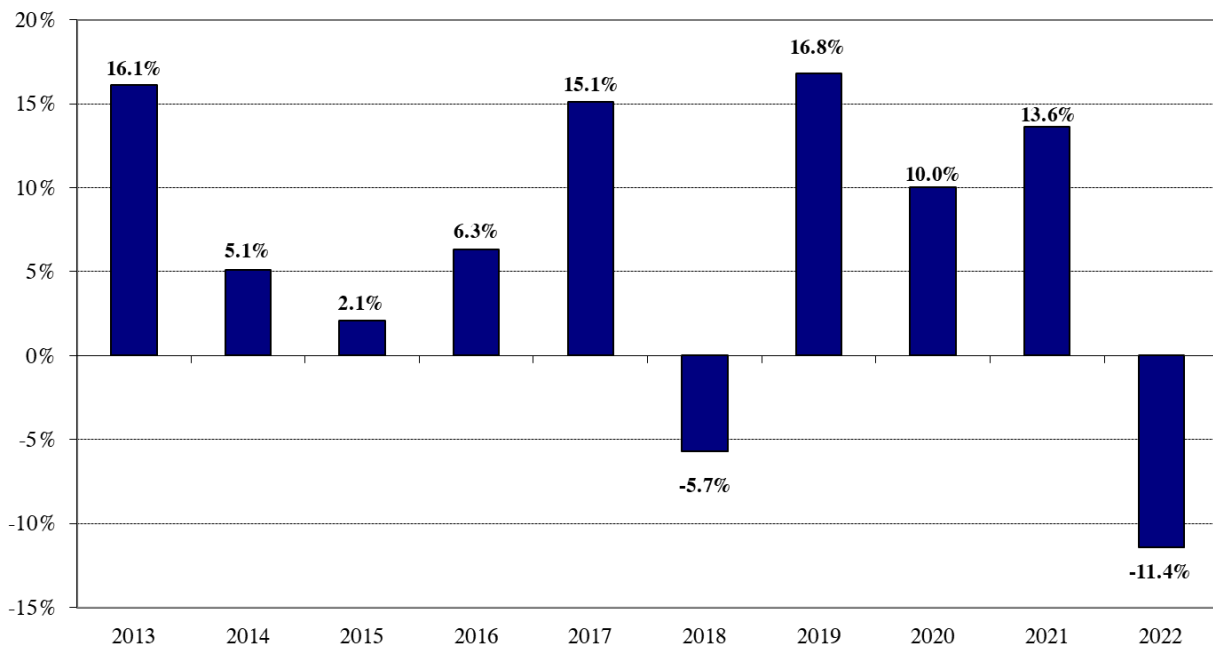


TABLE 21

MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO					
System Experience, FY 2013 - FY 2022					
(\$ in Millions)					
End of Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2022	2,166.2	18,759.6	4,275.0	14,484.7	22.8%
2021	2,001.2	18,401.6	4,041.9	14,359.7	22.0%
2020	1,861.9	17,847.2	3,977.0	13,870.2	22.3%
2019	1,802.8	17,296.3	4,012.9	13,283.4	23.2%
2018	1,734.6	16,808.6	4,195.6	12,613.0	25.0%
2017	1,686.5	16,282.4	4,456.8	11,825.6	27.4%
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%

¹ The actuarial liabilities include pension and OPEB liabilities. The FY 2019 liabilities of \$17,260.4M previously reported excluded OPEB liabilities.

TABLE 22

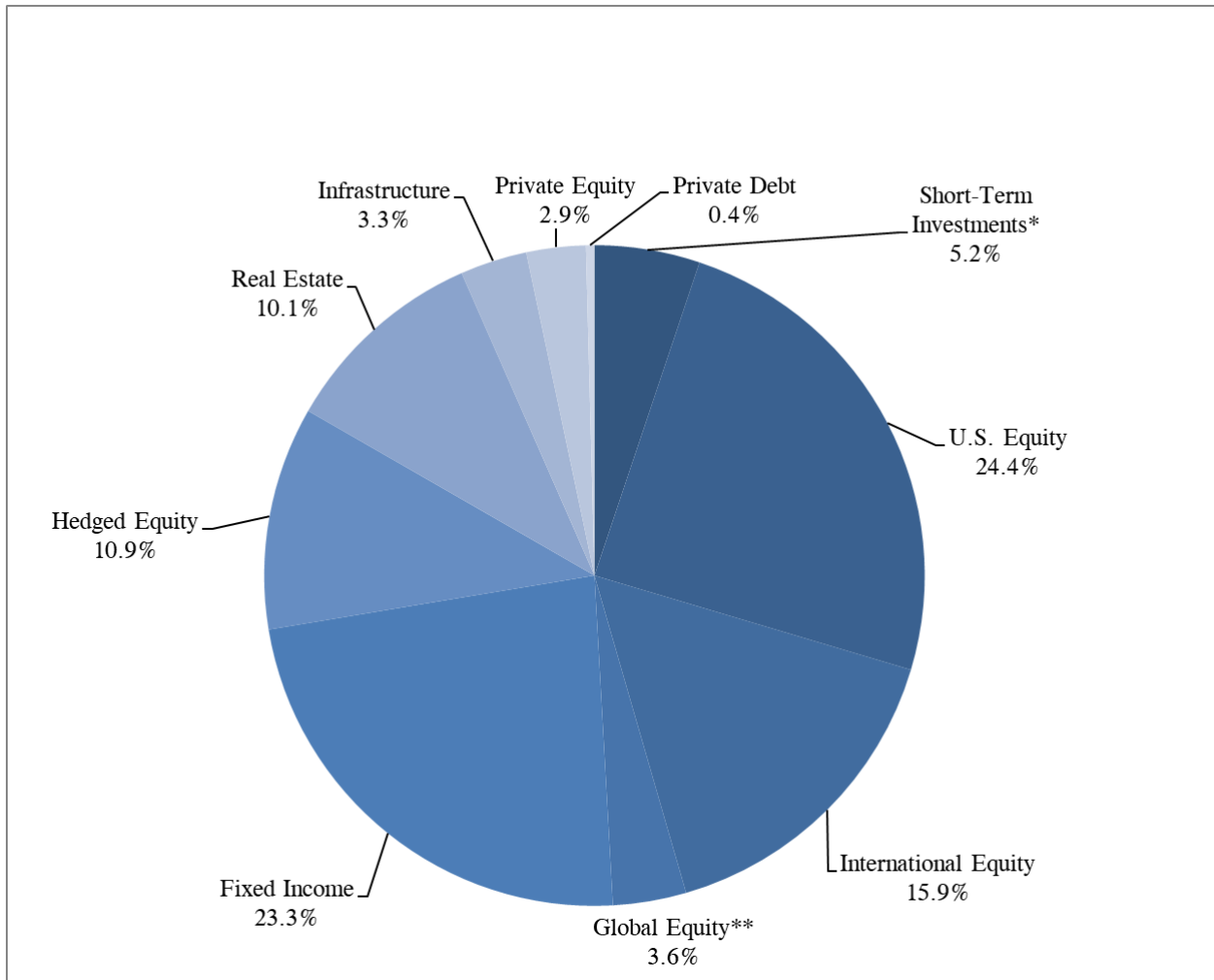
MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO										
Changes in Net Assets										
(\$ in Millions)										
Fiscal Years	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Additions to Assets										
Employer	\$960.0	\$573.7	\$498.6	\$421.0	\$349.6	\$261.8	\$157.4	\$157.7	\$158.8	\$157.7
Employees	\$176.3	\$163.4	\$157.8	\$146.6	\$138.4	\$134.8	\$130.4	\$131.4	\$130.0	\$131.5
Net Investment Income	-\$429.9	\$498.3	\$335.4	\$560.9	-\$205.0	\$610.5	\$281.4	\$114.0	\$283.3	\$735.3
Other	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$5.4	\$0.0	\$0.0	\$0.0	\$0.0
Total Asset Additions (A)	\$706.4	\$1,235.4	\$991.8	\$1,128.6	\$283.0	\$1,012.4	\$569.3	\$403.2	\$572.1	\$1,024.5
Deductions from Assets										
Benefits	\$1,024.2	\$982.8	\$950.0	\$925.0	\$889.2	\$854.3	\$832.8	\$802.8	\$775.4	\$745.5
Refunds	\$31.4	27.9	\$23.4	\$27.7	27.0	\$33.8	\$34.6	\$31.7	\$32.3	\$33.5
Rebates	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Administrative Expenses	\$6.9	\$6.7	\$7.1	\$6.7	\$6.6	\$6.5	\$7.1	\$6.7	\$6.6	\$6.5
Other	\$0.4	\$0.0	\$1.6	\$2.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total Asset Deductions (B)	\$1,062.9	\$1,017.4	\$982.2	\$962.1	\$922.8	\$894.6	\$874.5	\$841.2	\$814.3	\$785.5
Change in Net Assets (A-B=C)	-\$356.5	\$218.0	\$9.6	\$166.5	-\$639.8	\$117.8	-\$305.2	-\$438.1	-\$242.2	\$239.0

Table 23 below contains funding projections based on the FY 2022 actuarial valuation of the Municipal Employees' Annuity and Benefit Fund of Chicago.

TABLE 23

Municipal Employees' Annuity and Benefit Fund of Chicago Actuarial Valuation Projection Results as of December 31, 2022 (\$ 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
2022	2,060.7	\$ 573.7	27.8%	176.3	18,759.6	4,275.0	14,484.7	22.8%
2023	2,284.8	\$ 1,061.6	46.5%	202.2	19,181.1	4,628.9	14,552.2	24.1%
2024	2,341.6	\$ 976.0	41.7%	205.9	19,567.2	4,746.1	14,821.2	24.3%
2025	2,401.4	\$ 941.0	39.2%	213.9	19,935.1	4,837.4	15,097.7	24.3%
2026	2,464.2	\$ 958.9	38.9%	222.2	20,283.6	4,870.3	15,413.3	24.0%
2027	2,529.1	\$ 977.8	38.7%	230.7	20,611.5	5,033.8	15,577.8	24.4%
2028	2,596.3	\$ 997.3	38.4%	239.4	20,919.4	5,189.4	15,730.0	24.8%
2029	2,665.5	\$ 1,017.6	38.2%	248.3	21,207.7	5,339.0	15,868.6	25.2%
2030	2,737.0	\$ 1,038.6	37.9%	257.5	21,473.8	5,482.0	15,991.8	25.5%
2031	2,809.5	\$ 1,060.3	37.7%	266.7	21,715.7	5,617.6	16,098.2	25.9%
2032	2,883.5	\$ 1,082.2	37.5%	276.1	21,937.8	5,751.7	16,186.1	26.2%
2033	2,959.8	\$ 1,104.6	37.3%	285.7	22,138.0	5,884.5	16,253.5	26.6%
2034	3,038.1	\$ 1,127.8	37.1%	295.4	22,315.7	6,017.3	16,298.3	27.0%
2035	3,116.8	\$ 1,151.7	36.9%	305.1	22,470.8	6,151.8	16,318.9	27.4%
2036	3,197.5	\$ 1,175.6	36.8%	314.9	22,604.8	6,291.8	16,313.0	27.8%
2037	3,280.9	\$ 1,200.3	36.6%	325.0	22,718.4	6,440.6	16,277.8	28.3%
2038	3,366.1	\$ 1,226.0	36.4%	335.2	22,813.7	6,603.1	16,210.6	28.9%
2039	3,454.1	\$ 1,252.4	36.3%	345.7	22,892.4	6,783.9	16,108.5	29.6%
2040	3,542.9	\$ 1,279.9	36.1%	356.2	22,955.4	6,986.7	15,968.7	30.4%
2041	3,633.2	\$ 1,307.6	36.0%	366.8	23,004.9	7,216.7	15,788.2	31.4%
2042	3,726.7	\$ 1,335.9	35.8%	377.7	23,043.8	7,480.7	15,563.1	32.5%
2043	3,822.4	\$ 1,365.5	35.7%	388.7	23,093.8	7,804.1	15,289.7	33.8%
2044	3,920.4	\$ 1,396.1	35.6%	399.9	23,138.9	8,175.0	14,963.9	35.3%
2045	4,017.7	\$ 1,427.8	35.5%	411.1	23,180.7	8,598.3	14,582.4	37.1%
2046	4,115.8	\$ 1,459.2	35.5%	422.2	23,220.1	9,078.9	14,141.2	39.1%
2047	4,214.5	\$ 1,490.9	35.4%	433.4	23,259.3	9,623.4	13,636.0	41.4%
2048	4,314.2	\$ 1,523.0	35.3%	444.7	23,299.8	10,237.6	13,062.1	43.9%
2049	4,415.2	\$ 1,555.6	35.2%	456.0	23,338.5	10,923.9	12,414.6	46.8%
2050	4,513.8	\$ 1,588.9	35.2%	467.1	23,374.9	11,685.7	11,689.2	50.0%
2051	4,612.4	\$ 1,621.3	35.2%	478.2	23,409.3	12,528.7	10,880.7	53.5%
2052	4,711.8	\$ 1,653.8	35.1%	489.2	23,443.0	13,459.9	9,983.1	57.4%
2053	4,812.1	\$ 1,686.7	35.1%	500.4	23,477.4	14,487.1	8,990.3	61.7%
2054	4,913.7	\$ 1,720.1	35.0%	511.5	23,504.4	15,609.2	7,895.2	66.4%
2055	5,012.2	\$ 1,754.3	35.0%	522.4	23,524.5	16,832.4	6,692.1	71.6%
2056	5,111.8	\$ 1,787.3	35.0%	533.3	23,538.0	18,164.7	5,373.3	77.2%
2057	5,212.6	\$ 1,820.8	34.9%	544.2	23,546.3	19,615.7	3,930.6	83.3%
2058	5,315.2	\$ 1,854.7	34.9%	555.2	23,549.4	21,194.5	2,354.9	90.0%
2059	5,419.5	\$ 1,889.3	34.9%	566.4	23,537.9	21,184.1	2,353.8	90.0%
2060	5,522.0	\$ 207.6	3.8%	377.1	23,512.9	21,161.6	2,351.3	90.0%
2061	5,626.0	\$ 415.1	7.4%	384.1	23,474.7	21,127.2	2,347.5	90.0%
2062	5,732.1	\$ 419.6	7.3%	391.3	23,422.7	21,080.4	2,342.3	90.0%
2063	5,839.9	\$ 424.0	7.3%	398.6	23,357.0	21,021.3	2,335.7	90.0%
2064	5,949.6	\$ 428.4	7.2%	406.1	23,268.2	20,941.4	2,326.8	90.0%
2065	6,058.8	\$ 433.7	7.2%	413.5	23,155.8	20,840.2	2,315.6	90.0%
2066	6,169.7	\$ 439.0	7.1%	421.1	23,017.4	20,715.7	2,301.7	90.0%
2067	6,281.9	\$ 444.3	7.1%	428.7	22,850.2	20,656.2	2,194.0	90.4%
2068	6,395.6	\$ 449.7	7.0%	436.5	22,652.2	20,387.0	2,265.2	90.0%
2069	6,510.9	\$ 455.2	7.0%	444.4	22,419.0	20,177.1	2,241.9	90.0%
2070	6,627.3	\$ 461.0	7.0%	452.3	22,146.6	19,932.0	2,214.7	90.0%
2071	6,745.4	\$ 467.0	6.9%	460.4	21,831.4	19,648.3	2,183.1	90.0%
2072	6,864.9	\$ 473.1	6.9%	468.5	21,469.6	19,322.7	2,147.0	90.0%

CHART 72

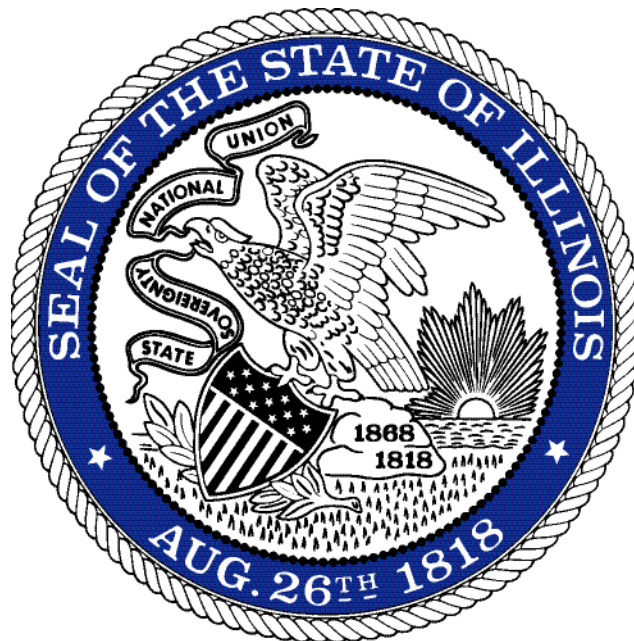


**Short-Term Investments include cash necessary to pay following month's benefits and residual cash balance of active investment managers*

***Global Equity is comprised of both domestic and international securities*

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, 2022.

Park Employees' Annuity and Benefit Fund of Chicago

Tier 1 Plan Summary

Retirement Age

- Age 60 with 4 years of service
- Age 50 with at least 10 years of service (reduced annuity)

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

- 3% non-compounded

Employee Contributions

- 9.0% of salary

Employer Contributions (as amended by P.A. 102-0263)

For payment years 2024 through 2058, the Park District's required annual contribution shall be 100% of the amount, equal to the sum of employer normal cost, plus an amount, using a 35-year period starting on December 31, 2023, that is sufficient to bring the funded ratio up to 100% by the end of 2058.

For payment year 2059 and each year thereafter, the required contribution shall be the amount so that the pension fund's funded ratio would reach 100%, if needed, as of the end of that year.

Park Employees' Annuity and Benefit Fund of Chicago

Tier 2 Plan Summary (P.A. 96-0889)

Retirement Age

- Age 67 with 10 years of service
- Age 62 with 10 years of service (reduced annuity)

Retirement Formula

- 2.4% of final average salary

Maximum Annuity

- 80% of final average salary

Salary Used to Calculate Pension

- Highest 96 consecutive months of service within the last 120 months of service
- Pensionable Salary is limited by an amount tied to the 2010 Social Security Wage Base of \$106,800. This amount increases annually by 3% or ½ of the increase in the Consumer Price Index-U, whichever is less.

The salary limits for calendar years 2020, 2021, and 2022 are \$115,929, \$116,740, and \$119,892, respectively.

Annual COLA

- Simple 3% or ½ of the increase in the Consumer Price Index-U, whichever is less

Employee Contributions

- 9.0% of salary

Employer Contributions (as amended by P.A. 102-0263)

For payment years 2024 through 2058, the Park District's required annual contribution shall be 100% of the amount, equal to the sum of employer normal cost, plus an amount, using a 35-year period starting on December 31, 2023, that is sufficient to bring the funded ratio up to 100% by the end of 2058.

For payment year 2059 and each year thereafter, the required contribution shall be the amount so that the pension fund's funded ratio would reach 100%, if needed, using the entry age normal actuarial cost method as of the end of that year.

Park Employees' Annuity and Benefit Fund of Chicago Tier 2a Plan Summary

***Tier 2a members are those who are hired on or after January 1, 2022 or Tier 2 members who made an irrevocable election to participate in the Tier 2a plan. Please see P.A. 102-0263 in Section I for more information.**

Retirement Age

- Age 65 with 10 years of service
- Age 60 with 10 years of service (reduced annuity)

Retirement Formula

- 2.4% of final average salary

Maximum Annuity

- 80% of final average salary

Salary Used to Calculate Pension

- Highest 96 consecutive months of service within the last 120 months of service
- Pensionable Salary is limited by an amount tied to the 2010 Social Security Wage Base of \$106,800. This amount increases annually by 3% or ½ of the increase in the Consumer Price Index-U, whichever is less. The salary limits for calendar years 2020, 2021, and 2022 are \$115,929, \$116,740, and \$119,892, respectively.

Annual COLA

- Simple 3% or ½ of the increase in the Consumer Price Index-U, whichever is less

Employee Contributions

- 11.0% of salary

Employer Contributions (as amended by P.A. 102-0263)

For payment years 2024 through 2058, the Park District's required annual contribution shall be 100% of the amount, equal to the sum of employer normal cost, plus an amount, using a 35-year period starting on December 31, 2023, that is sufficient to bring the funded ratio up to 100% by the end of 2058.

For payment year 2059 and each year thereafter, the required contribution shall be the amount so that the pension fund's funded ratio would reach 100%, if needed, using the entry age normal actuarial cost method as of the end of that year.

CHART 73

PARK EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO
Active Employees

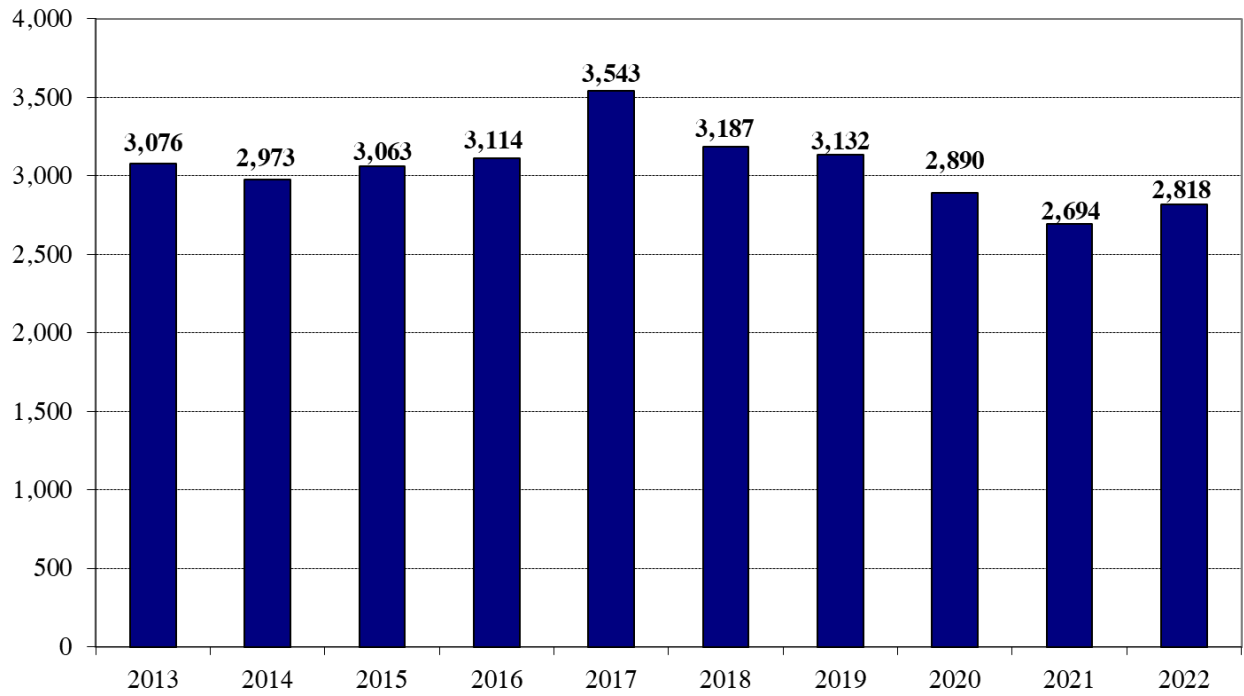


CHART 74

PARK EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO
Employee Annuitants

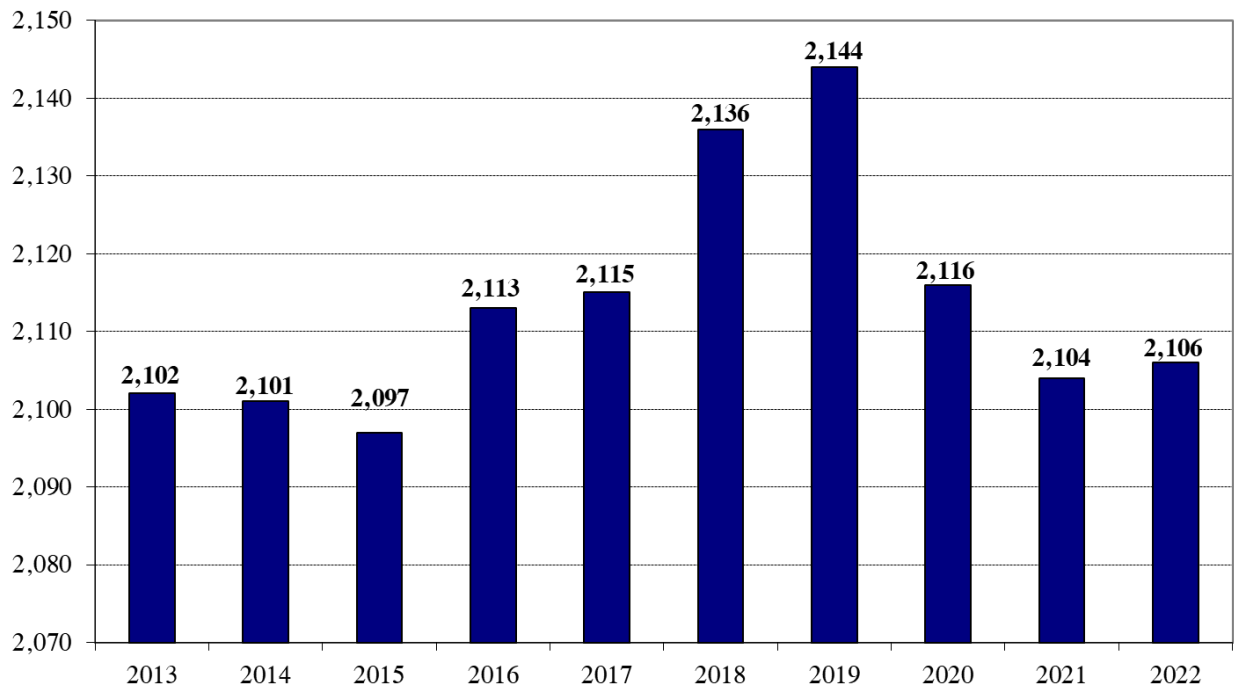


CHART 75

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

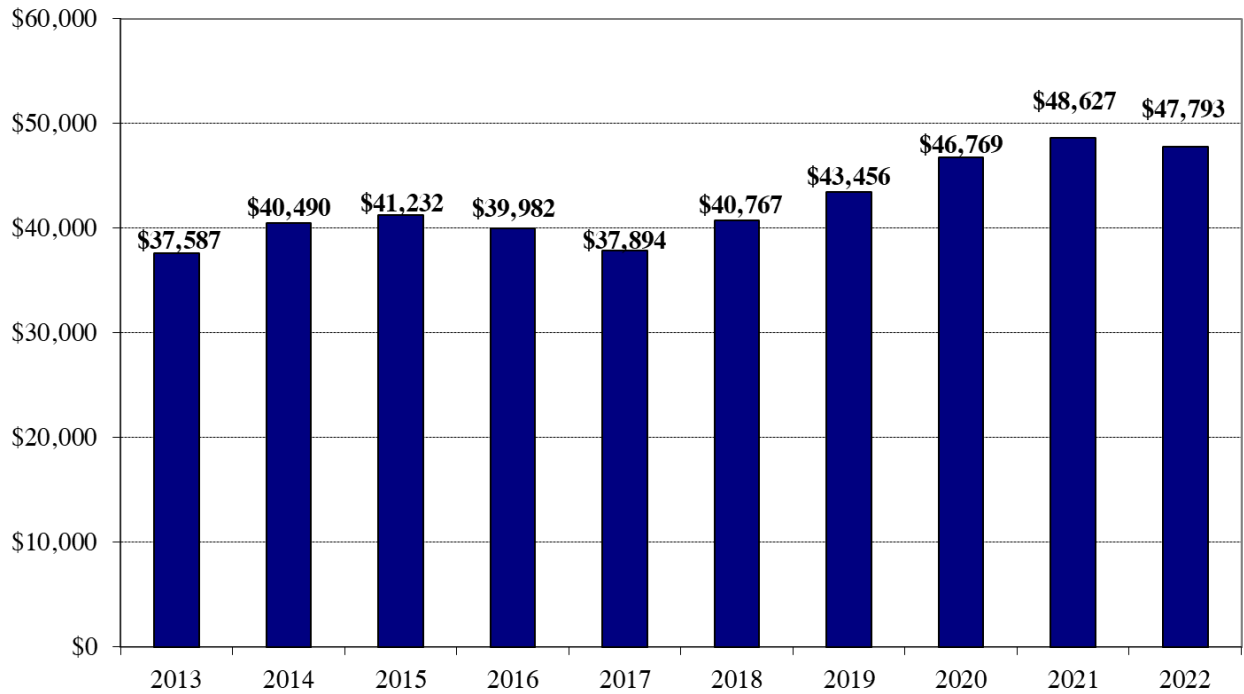


CHART 76

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

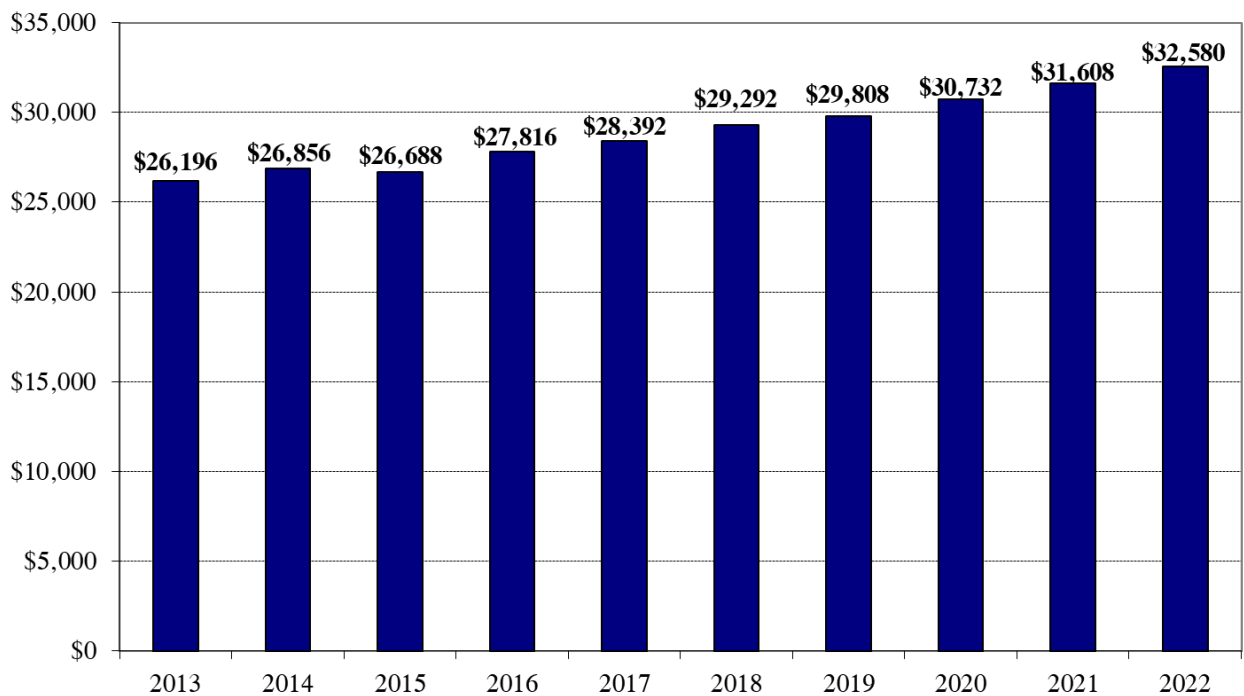
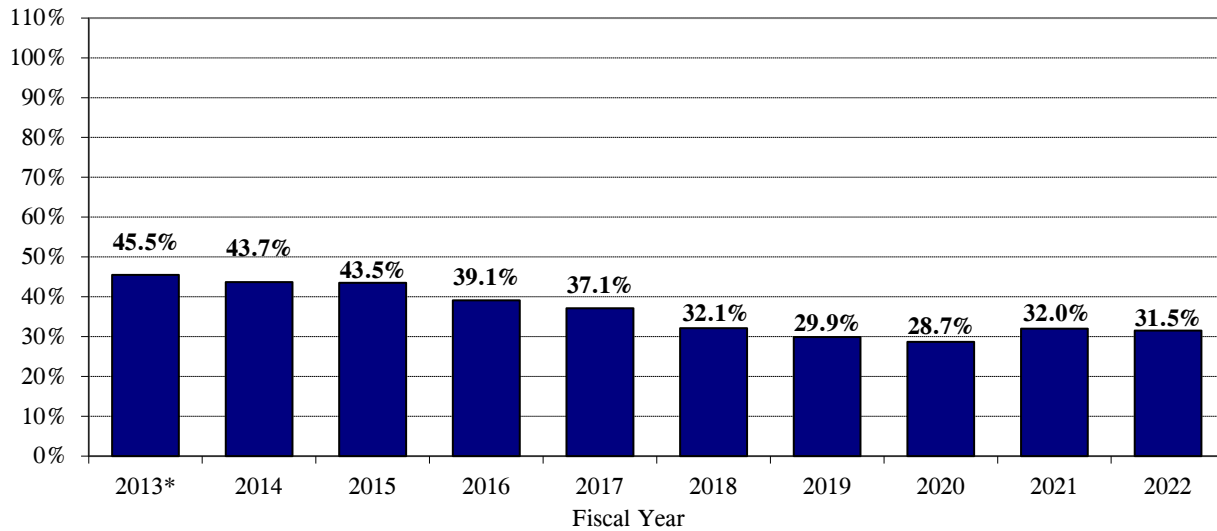


CHART 77

PARK EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO
Funded Ratio
FY 2013 - FY 2022

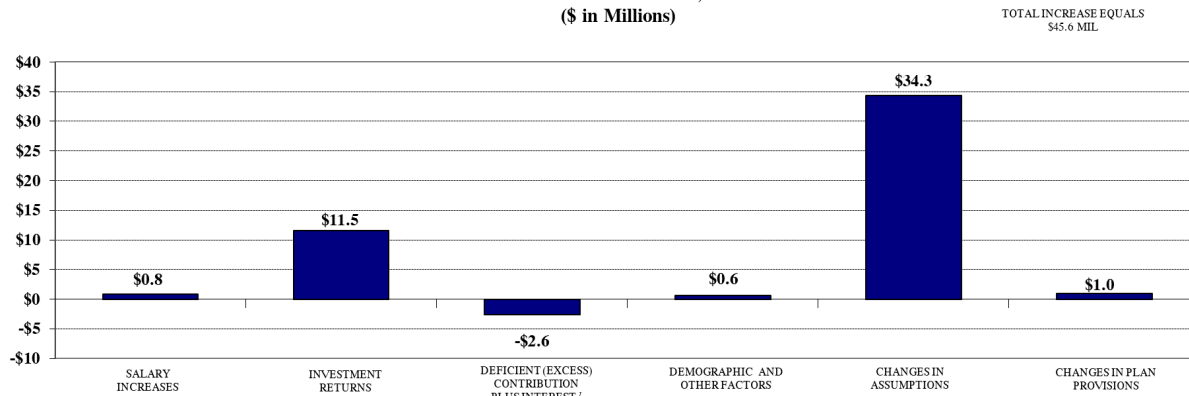
All figures based upon the actuarial value of assets.



* 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, 2022
(\$ in Millions)



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

CHART 79

PARK EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

Investment Income, FY 2013 - FY 2022
Actuarially Assumed Rate of Return: 7.25%
(\$ in Millions)

All figures based upon the market value of assets.

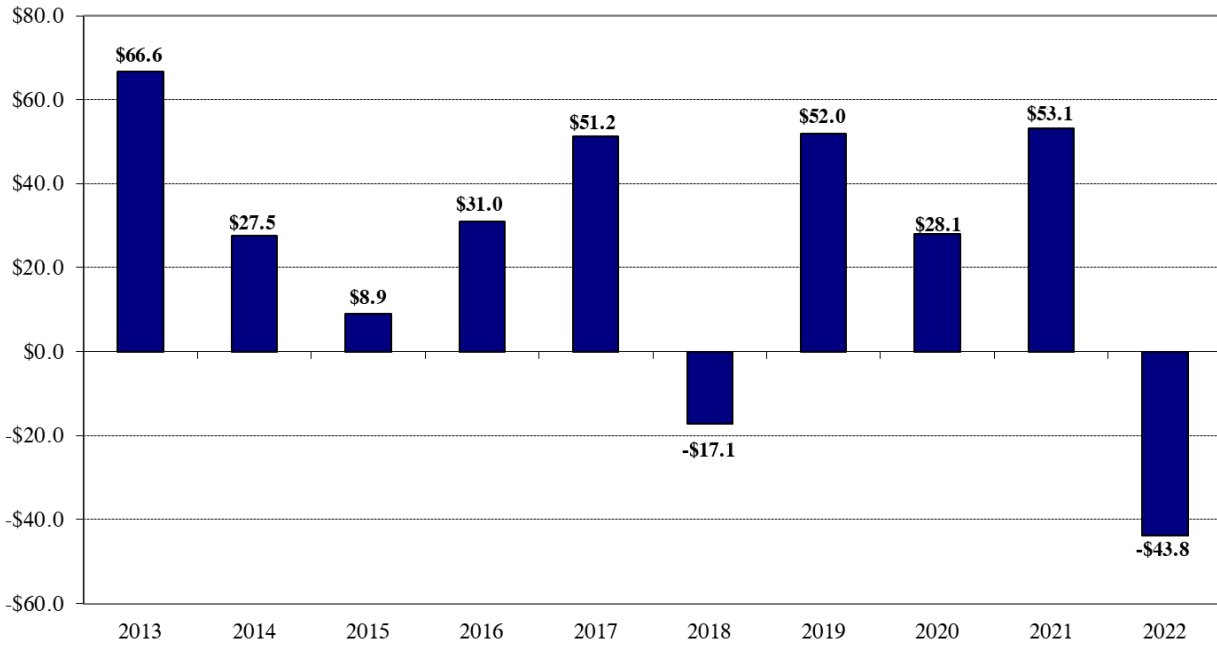


CHART 80

PARK EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

Rate of Return 2013 - 2022
Actuarially Assumed Rate of Return: 7.25%
All figures based upon the market value of assets.

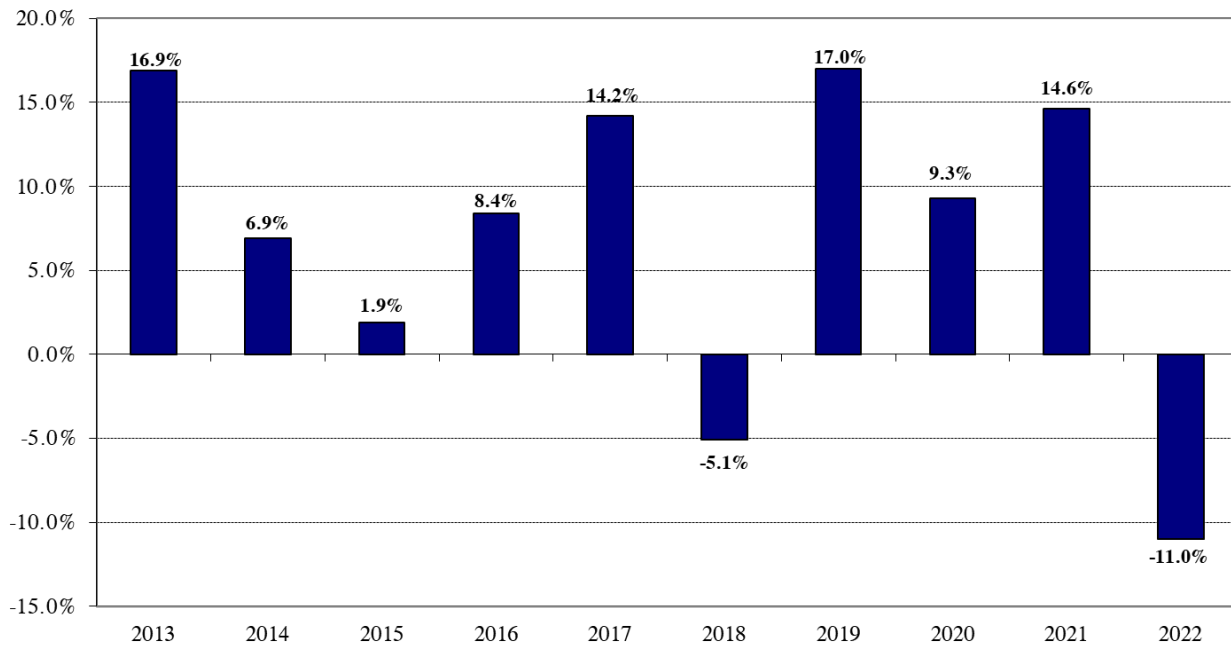


TABLE 24

PARK EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO					
System Experience, FY 2013 - FY 2022					
(\$ in Millions)					
Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2022	136.9	1,269.0	399.6	869.5	31.5%
2021	134.5	1,212.0	388.2	823.8	32.0%
2020	138.9	1,190.4	342.1	848.2	28.7%
2019	139.2	1,170.6	350.0	820.6	29.9%
2018	133.1	1,142.3	366.8	775.5	32.1%
2017	135.3	1,039.3	385.4	653.9	37.1%
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%

* 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

PARK EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO										
Changes in Net Assets										
(\$ in Millions)										
Fiscal Years	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013*
Additions to Assets										
Employer	\$67.1	\$83.3	\$33.9	\$27.7	\$27.6	\$20.9	\$30.9	\$30.6	\$11.2	\$15.8
Employees	\$12.7	\$12.2	\$12.6	\$12.7	\$12.1	\$13.7	\$12.2	\$12.4	\$10.8	\$10.7
Net Investment Income	-\$43.8	\$53.1	\$28.1	\$52.0	-\$17.1	\$51.2	\$31.0	\$8.9	\$27.6	\$66.6
Other	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1
Total Asset Additions (A)	\$36.0	\$148.7	\$74.7	\$92.4	\$22.6	\$85.8	\$74.2	\$51.9	\$49.6	\$93.2
Deductions from Assets										
Benefits	\$80.5	\$78.5	\$77.8	\$76.5	\$73.8	\$72.3	\$71.6	\$68.6	\$67.8	\$66.2
Refunds	\$2.3	\$2.1	\$1.6	\$2.1	\$2.7	\$5.9	\$2.5	\$2.0	\$2.7	\$2.1
Rebates	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Administrative Expenses	\$2.0	\$1.7	\$1.6	\$1.5	\$1.5	\$1.7	\$1.5	\$1.5	\$1.5	\$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)	\$84.8	\$82.3	\$81.0	\$80.1	\$78.0	\$79.8	\$75.6	\$72.1	\$72.0	\$69.8
Change in Net Assets (A-B=C)	-\$48.8	\$66.4	-\$6.3	\$12.3	-\$55.4	\$5.9	-\$1.5	-\$20.3	-\$22.3	\$23.4

* 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 26 below contains funding projections based on the December 31, 2022 actuarial valuation of the Park Employees' Annuity and Benefit Fund of Chicago.

TABLE 26

Park Employees' Annuity and Benefit Fund of Chicago Funding Policy under P.A. 98-0622 Actuarial Valuation Projection Results as of December 31, 2022 (\$ 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
2022	136.9	67.1	49.0%	12.7	1,269.0	399.6	869.5	31.5%
2023	140.6	56.9	40.5%	13.1	1,287.9	405.0	882.9	31.4%
2024	139.1	59.6	42.8%	13.1	1,306.2	406.1	900.1	31.1%
2025	138.2	61.1	44.2%	13.1	1,324.0	406.2	917.8	30.7%
2026	137.5	62.8	45.7%	13.1	1,341.2	400.6	940.6	29.9%
2027	137.0	64.8	47.3%	13.2	1,357.7	409.3	948.5	30.1%
2028	136.6	66.1	48.4%	13.2	1,373.2	418.2	955.0	30.5%
2029	136.1	67.3	49.4%	13.3	1,387.3	427.3	960.0	30.8%
2030	135.8	68.5	50.5%	13.3	1,400.3	436.8	963.5	31.2%
2031	135.5	69.8	51.5%	13.4	1,411.8	446.2	965.6	31.6%
2032	135.4	71.0	52.5%	13.5	1,421.9	455.6	966.3	32.0%
2033	135.3	72.3	53.5%	13.6	1,430.6	465.2	965.4	32.5%
2034	135.5	73.7	54.4%	13.7	1,437.8	474.9	963.0	33.0%
2035	135.6	75.0	55.3%	13.7	1,443.7	484.9	958.8	33.6%
2036	135.9	76.4	56.2%	13.9	1,447.9	495.2	952.7	34.2%
2037	135.9	77.8	57.3%	14.0	1,453.5	509.0	944.5	35.0%
2038	136.4	79.3	58.1%	14.1	1,457.9	523.7	934.1	35.9%
2039	136.8	80.7	59.0%	14.2	1,461.3	539.9	921.3	36.9%
2040	137.5	82.3	59.8%	14.4	1,463.8	557.9	905.9	38.1%
2041	138.3	83.8	60.6%	14.5	1,465.9	578.2	887.7	39.4%
2042	139.4	85.4	61.3%	14.7	1,467.8	601.4	866.4	41.0%
2043	140.7	87.1	61.9%	14.9	1,470.0	628.1	841.9	42.7%
2044	142.3	88.8	62.4%	15.1	1,472.5	658.7	813.8	44.7%
2045	144.0	90.5	62.9%	15.4	1,476.1	694.1	781.9	47.0%
2046	146.1	92.3	63.2%	15.6	1,480.5	734.5	746.0	49.6%
2047	148.1	94.1	63.5%	15.9	1,486.1	780.5	705.7	52.5%
2048	150.4	95.9	63.8%	16.2	1,493.3	832.6	660.7	55.8%
2049	152.8	97.8	64.0%	16.5	1,502.0	891.3	610.7	59.3%
2050	155.3	99.7	64.2%	16.8	1,512.6	957.2	555.3	63.3%
2051	158.0	101.5	64.2%	17.1	1,525.1	1,030.7	494.3	67.6%
2052	160.7	103.3	64.3%	17.5	1,539.5	1,112.2	427.3	72.2%
2053	163.5	105.0	64.2%	17.8	1,556.3	1,202.4	353.9	77.3%
2054	166.6	106.5	63.9%	18.2	1,575.5	1,301.5	274.0	82.6%
2055	169.7	107.8	63.5%	18.6	1,597.4	1,410.1	187.3	88.3%
2056	173.1	108.3	62.6%	19.0	1,622.3	1,528.1	94.2	94.2%
2057	176.6	103.2	58.4%	19.4	1,650.4	1,650.4	0.0	100.0%
2058	180.4	6.0	3.3%	19.8	1,681.9	1,681.9	0.0	100.0%
2059	184.3	6.2	3.4%	20.3	1,717.2	1,717.2	0.0	100.0%
2060	188.4	6.4	3.4%	20.8	1,756.6	1,756.6	0.0	100.0%
2061	192.8	6.7	3.5%	21.3	1,800.4	1,800.4	0.0	100.0%
2062	197.3	6.9	3.5%	21.8	1,848.4	1,848.4	0.0	100.0%

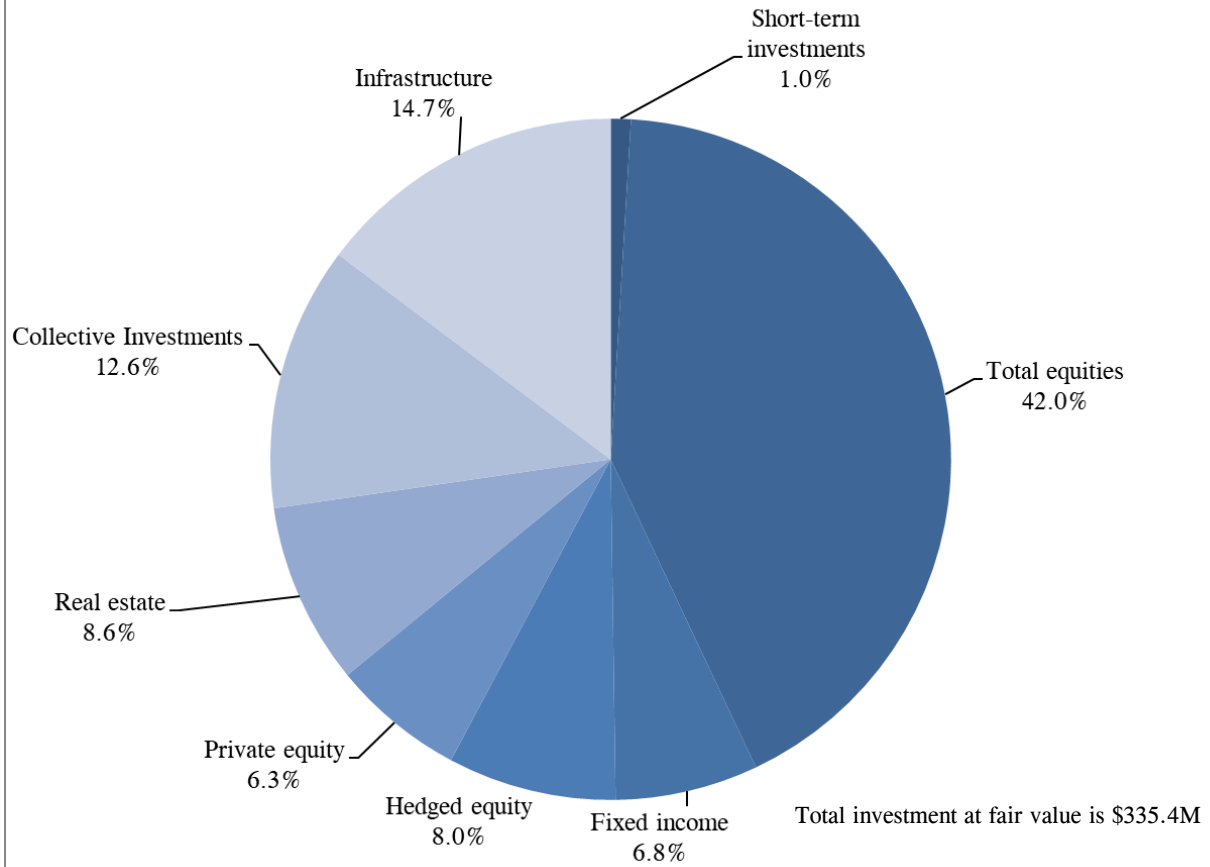
TABLE 27

Park Employees' Annuity and Benefit Fund of Chicago Projected Normal Cost as of December 31, 2022 (\$ in Millions)						
Fiscal Year	Employer Normal Cost ¹	Employer's Normal Cost as a % of Payroll	Employee Contributions	Employee Contributions as a % of Payroll	Total Normal Cost ¹	Total Normal Cost as a % of Payroll
2022	7.4	5.4%	12.7	9.3%	20.1	14.7%
2023	7.5	5.3%	13.1	9.3%	20.6	14.6%
2024	7.2	5.2%	13.1	9.4%	20.3	14.6%
2025	7.0	5.1%	13.1	9.5%	20.1	14.6%
2026	6.9	5.0%	13.1	9.6%	20.0	14.6%
2027	6.7	4.9%	13.2	9.6%	19.9	14.5%
2028	6.5	4.7%	13.2	9.7%	19.7	14.4%
2029	6.3	4.6%	13.3	9.8%	19.6	14.4%
2030	6.1	4.5%	13.3	9.8%	19.4	14.3%
2031	5.9	4.4%	13.4	9.9%	19.3	14.3%
2032	5.8	4.3%	13.5	10.0%	19.2	14.2%
2033	5.6	4.1%	13.6	10.0%	19.2	14.2%
2034	5.5	4.0%	13.7	10.1%	19.1	14.1%
2035	5.3	3.9%	13.7	10.1%	19.0	14.0%
2036	5.1	3.8%	13.9	10.2%	19.0	14.0%
2037	5.0	3.7%	14.0	10.3%	18.9	13.9%
2038	4.8	3.5%	14.1	10.3%	18.9	13.9%
2039	4.7	3.4%	14.2	10.4%	18.9	13.8%
2040	4.5	3.3%	14.4	10.4%	18.9	13.7%
2041	4.4	3.2%	14.5	10.5%	18.9	13.7%
2042	4.3	3.1%	14.7	10.5%	19.0	13.7%
2043	4.2	3.0%	14.9	10.6%	19.1	13.6%
2044	4.2	3.0%	15.1	10.6%	19.3	13.6%
2045	4.2	2.9%	15.4	10.7%	19.5	13.6%
2046	4.2	2.8%	15.6	10.7%	19.8	13.6%
2047	4.2	2.8%	15.9	10.7%	20.1	13.6%
2048	4.2	2.8%	16.2	10.8%	20.4	13.6%
2049	4.3	2.8%	16.5	10.8%	20.8	13.6%
2050	4.3	2.8%	16.8	10.8%	21.2	13.6%
2051	4.4	2.8%	17.1	10.8%	21.6	13.7%
2052	4.5	2.8%	17.5	10.9%	22.0	13.7%
2053	4.6	2.8%	17.8	10.9%	22.5	13.7%
2054	4.8	2.9%	18.2	10.9%	23.0	13.8%
2055	4.9	2.9%	18.6	10.9%	23.5	13.8%
2056	5.1	2.9%	19.0	11.0%	24.0	13.9%
2057	5.2	3.0%	19.4	11.0%	24.6	13.9%
2058	5.4	3.0%	19.8	11.0%	25.2	14.0%
2059	5.6	3.0%	20.3	11.0%	25.9	14.0%
2060	5.8	3.1%	20.8	11.0%	26.6	14.1%
2061	6.0	3.1%	21.3	11.0%	27.3	14.1%
2062	6.2	3.2%	21.8	11.0%	28.0	14.2%

¹ Includes estimated expenses.

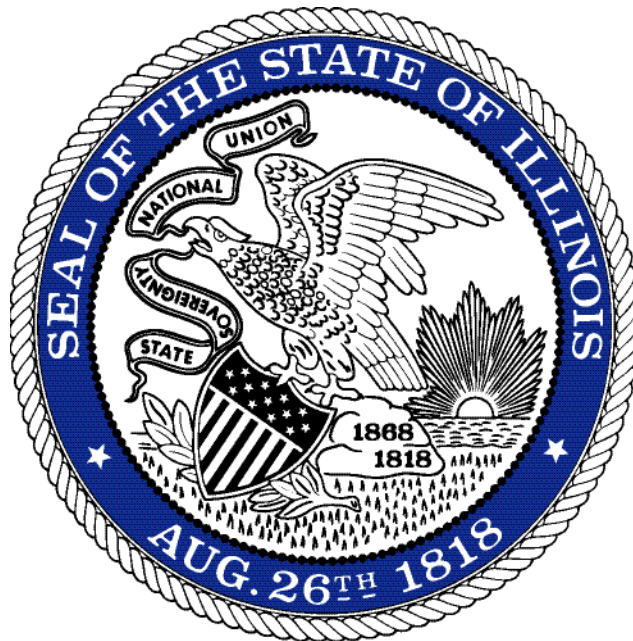
CHART 81

**PARK EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO
ASSET ALLOCATION AS OF DECEMBER 2022**



XI. Policemen's Annuity and Benefit 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, 2022.

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 at least 55 years of age with 20 years of service

Employee Contributions

- 9.0% of salary

Employer Contributions

Pursuant to P.A. 99-0506, the City of Chicago is required to make an annual actuarially determined contribution as a level percentage of pay, with a funding goal of 90% by the end of 2055.

Policemen's Annuity and Benefit Fund of Chicago Tier 2 Plan Summary (P.A. 96-1495)

Retirement Age

- Age 55 with 10 years of service
- Age 50 with 10 years of service (reduced annuity)
- Mandatory retirement at age 63

Retirement Formula

- 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

- Highest 96 consecutive months of service within the last 120 months of service
- Pensionable Salary is limited by an amount tied to the 2010 Social Security Wage Base of \$106,800. This amount increases annually by 3% or ½ of the increase in the Consumer Price Index-U, whichever is less. The salary limits for calendar years 2020, 2021, and 2022 are \$115,929, \$116,740, and \$119,892, respectively.

Annual COLA

- Simple 3% or ½ of the increase in the Consumer Price Index-U, whichever is less, commencing at age 60

Employee Contributions

- 9.0% of salary

Employer Contributions

Pursuant to P.A. 99-0506, the City of Chicago (employer) is required to make an annual actuarially determined contribution as a level percentage of pay, with a funding goal of 90% by the end of 2055.

CHART 82

POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO
Active Employees

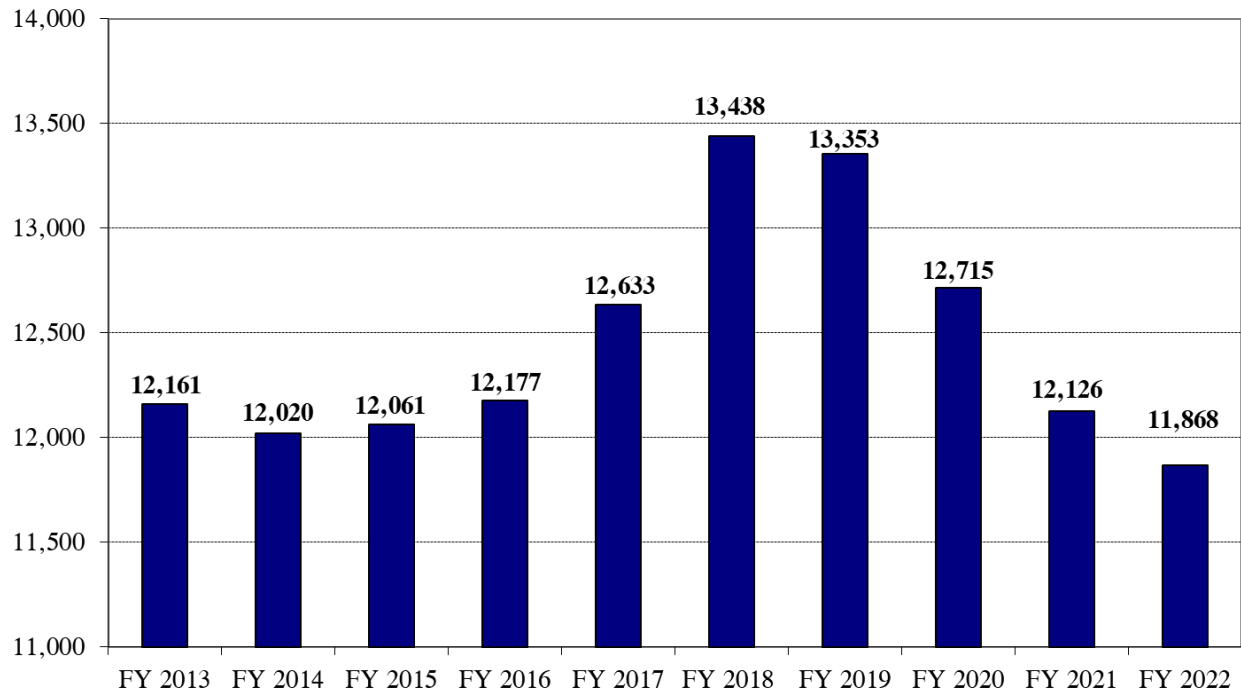


CHART 83

POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO
Employee Annuitants

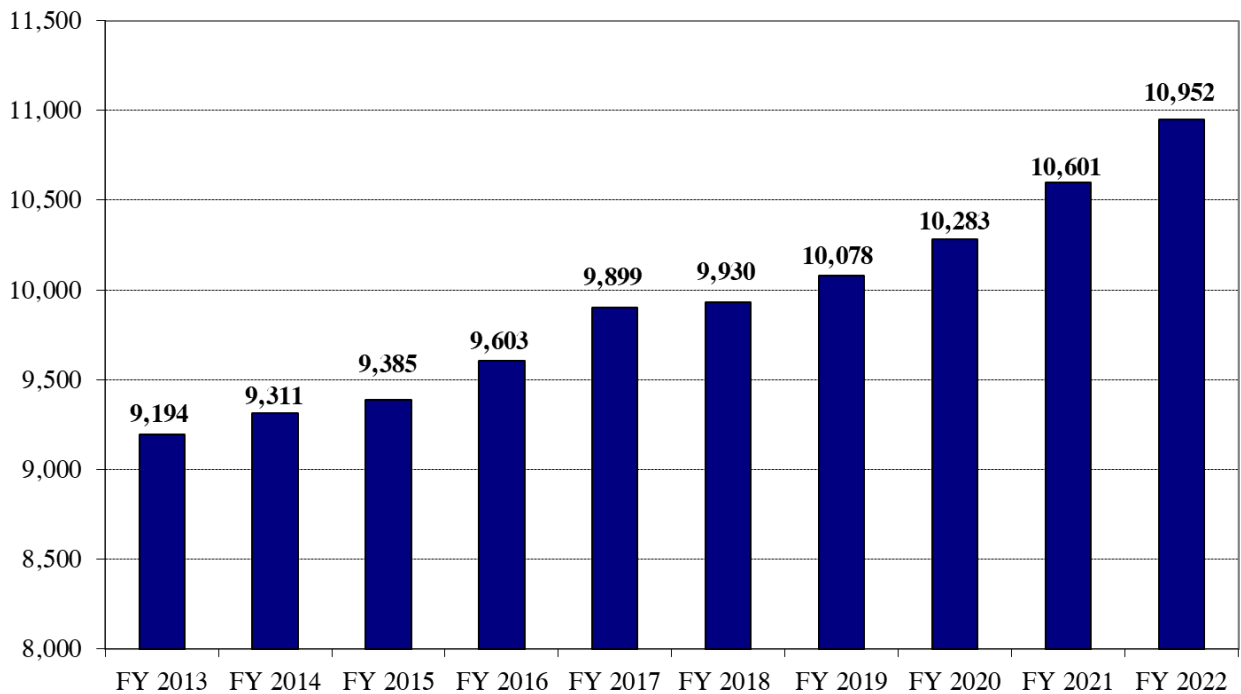


CHART 84

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

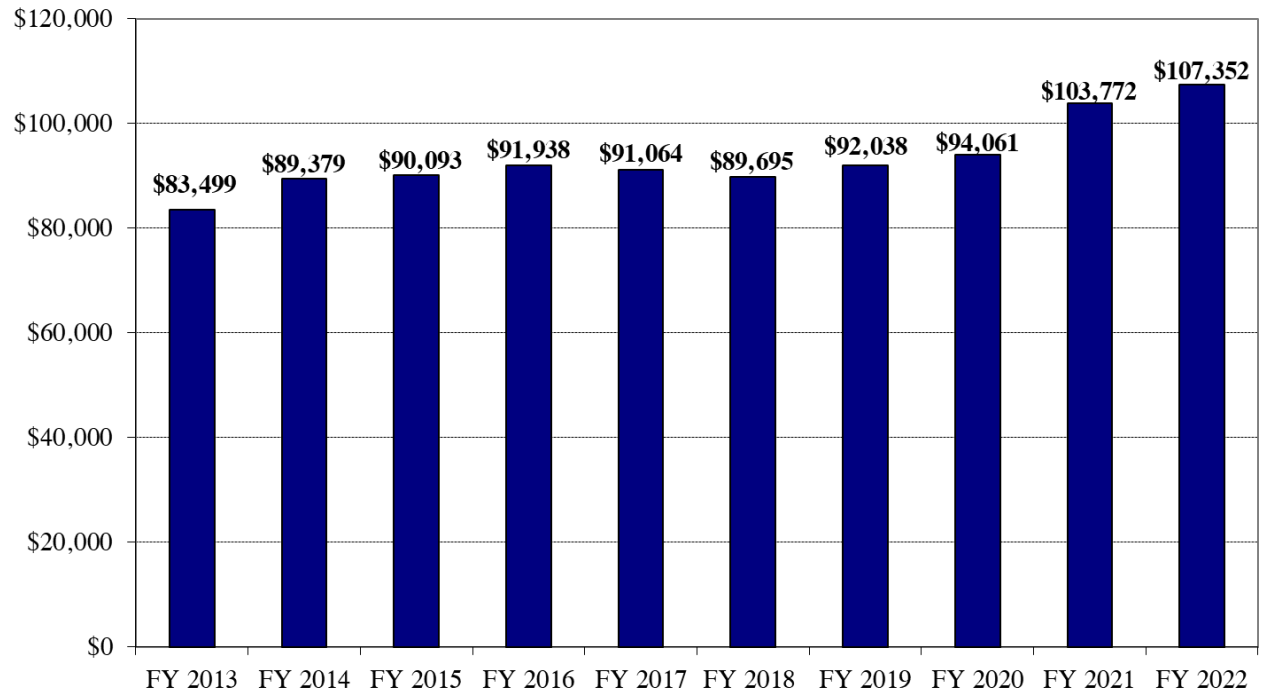


CHART 85

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

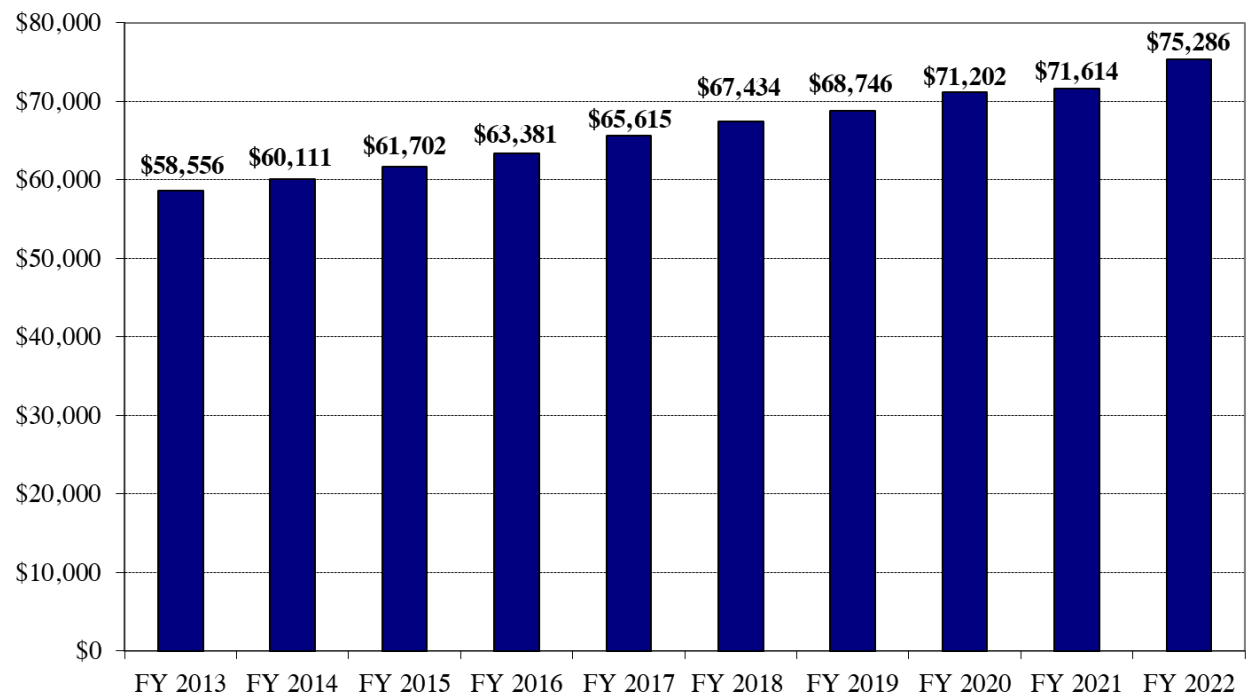


CHART 86

POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO
Funded Ratio
FY 2013 - FY 2022

All figures based upon the actuarial value of assets.

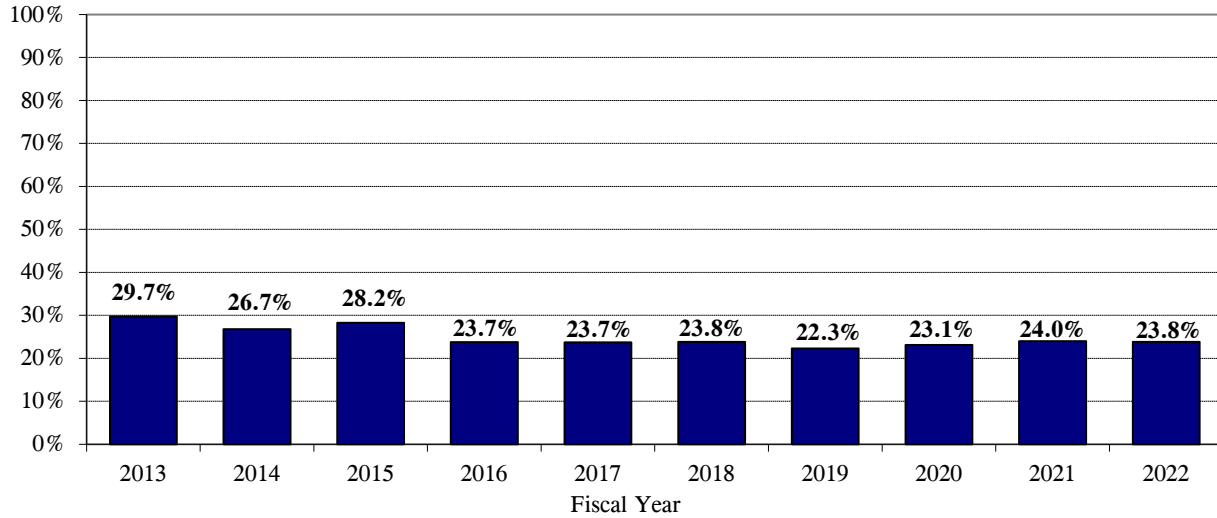
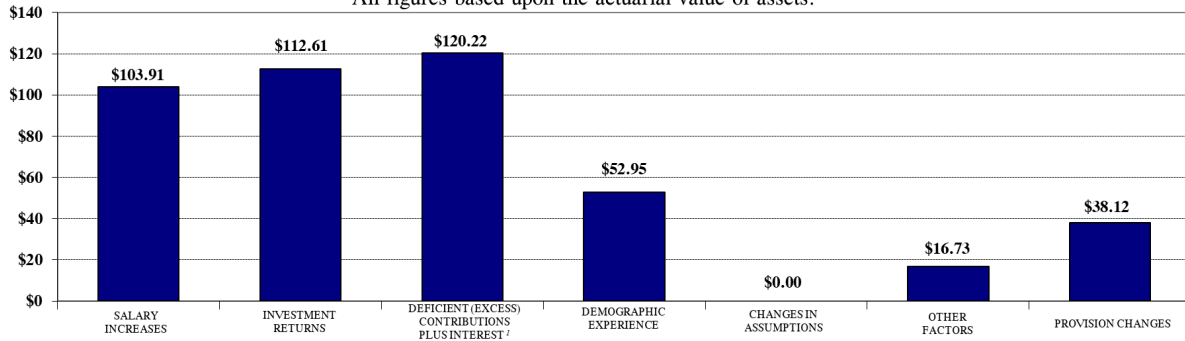


CHART 87

POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO
Change in Unfunded Liabilities
Year ended December 31, 2022
(\$ in Millions)

All figures based upon the actuarial value of assets.

TOTAL INCREASE EQUALS
\$444.5 M



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

CHART 88

POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO

Investment Income FY 2013 - FY 2022
Actuarially Assumed Rate of Return: 6.75%
(\$ in Millions)

All figures based upon the market value of assets.

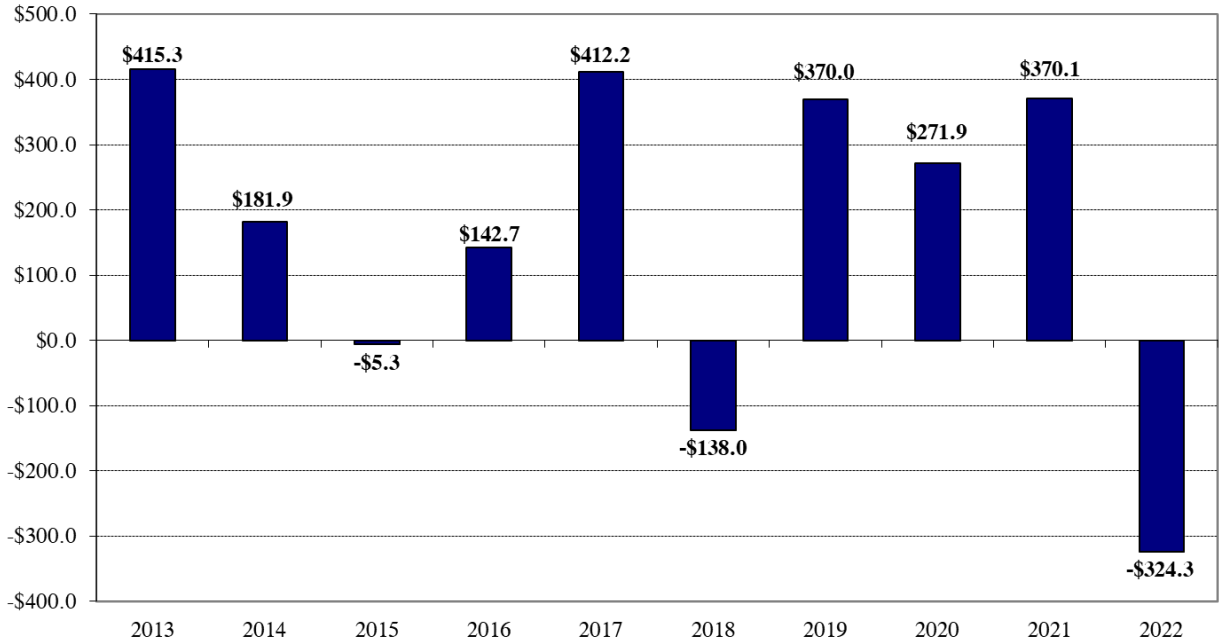


CHART 89

POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO

Rate of Return FY 2013 - FY 2022
Actuarially Assumed Rate of Return: 6.75%
All figures based upon the market value of assets.

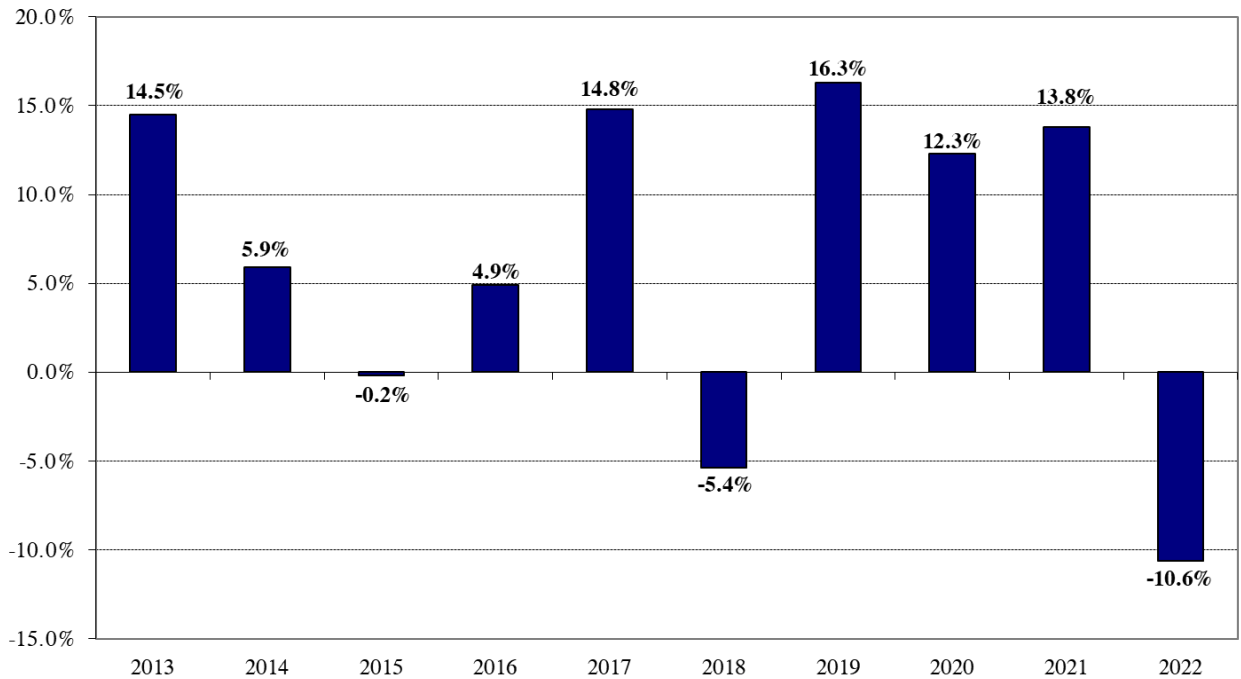


TABLE 28

POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO					
System Experience, FY 2013 - FY 2022					
(\$ in Millions)					
Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2022	1,274.0	16,020.8	3,815.0	12,205.8	23.8%
2021	1,258.3	15,470.6	3,709.4	11,761.3	24.0%
2020	1,196.0	14,703.1	3,400.0	11,303.1	23.1%
2019	1,229.0	14,269.8	3,179.5	11,090.3	22.3%
2018	1,205.3	13,214.7	3,145.1	10,069.5	23.8%
2017	1,150.4	13,093.9	3,104.0	9,989.9	23.7%
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%

TABLE 29

POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO										
Changes in Net Assets										
(\$ in Millions)										
Fiscal Years	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Additions to Assets										
Employer	\$801.7	\$788.8	\$739.4	\$582.0	\$588.0	\$494.5	\$281.6	\$582.3	\$187.1	\$188.9
Employees	\$114.4	\$136.2	\$113.6	\$110.8	\$107.2	\$103.0	\$101.5	\$107.6	\$95.7	\$93.3
Net Investment Income	-\$324.3	\$370.1	\$271.9	\$369.9	-\$138.0	\$412.2	\$142.7	-\$5.3	\$181.9	\$415.3
Other	\$0.4	\$0.1	\$0.5	\$0.0	\$1.6	\$0.1	\$1.4	\$3.1	\$0.7	\$0.5
Total Asset Additions (A)	\$592.2	\$1,295.2	\$1,125.4	\$1,062.7	\$558.8	\$1,009.8	\$527.2	\$687.7	\$465.4	\$698.0
Deductions from Assets										
Benefits	\$926.5	\$869.3	\$828.9	\$791.9	\$764.4	\$737.9	\$705.6	\$678.4	\$655.3	\$633.8
Refunds	\$21.1	\$17.8	\$12.7	\$8.8	\$6.7	\$10.0	\$10.7	\$7.8	\$9.0	\$8.1
Rebates	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Administrative Expenses	\$4.4	\$3.4	\$4.3	\$4.7	\$4.1	\$4.8	\$4.7	\$4.5	\$4.2	\$4.3
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)	\$952.0	\$890.5	\$845.9	\$805.4	\$775.2	\$752.7	\$721.1	\$690.7	\$668.5	\$646.2
Change in Net Assets (A-B=C)	-\$359.8	\$404.8	\$279.5	\$257.3	-\$216.3	\$257.0	-\$193.9	-\$3.1	-\$203.1	\$51.8

Table 30 below contains funding projections based on the December 31, 2022 actuarial valuation of the Policemen's Annuity and Benefit Fund of Chicago.

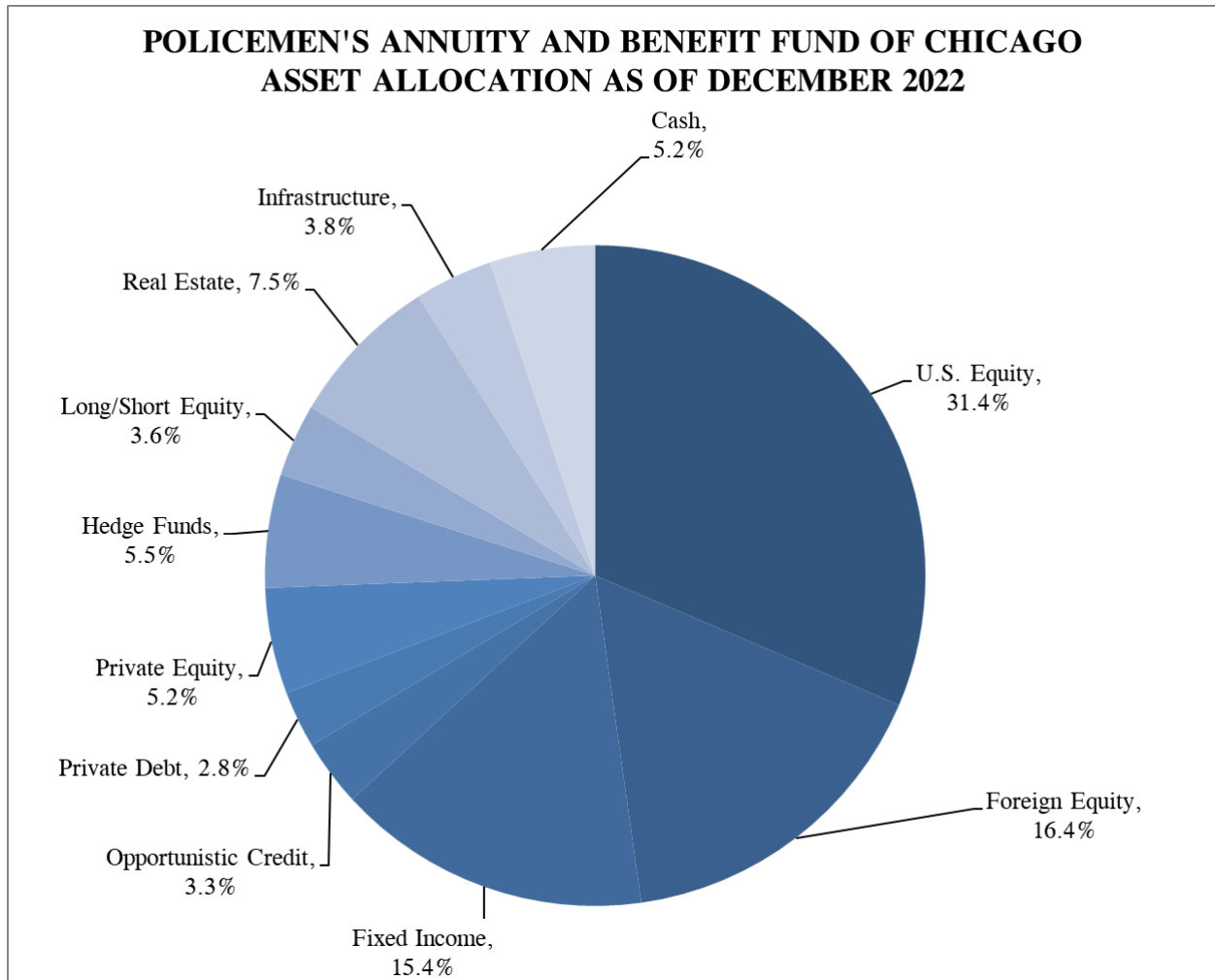
TABLE 30

Policemen's Annuity and Benefit Fund of Chicago Actuarial Valuation Projection Results as of December 31, 2022 (\$ 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
2022	1,274.0	802.1	63.0%	114.4	16,020.8	3,815.0	12,205.8	23.8%
2023	1,311.7	851.1	64.9%	115.0	16,356.6	3,938.7	12,417.9	24.1%
2024	1,357.9	928.8	68.4%	122.9	16,709.1	4,114.1	12,595.0	24.6%
2025	1,391.0	951.5	68.4%	125.9	17,055.2	4,286.4	12,768.8	25.1%
2026	1,424.4	974.3	68.4%	128.9	17,392.0	4,439.5	12,952.5	25.5%
2027	1,461.1	999.4	68.4%	132.2	17,718.4	4,719.5	12,998.8	26.6%
2028	1,495.9	1,023.2	68.4%	135.4	18,034.1	5,010.2	13,023.9	27.8%
2029	1,522.9	1,041.7	68.4%	137.8	18,337.6	5,306.7	13,030.9	28.9%
2030	1,547.8	1,058.8	68.4%	140.0	18,627.3	5,607.5	13,019.8	30.1%
2031	1,573.0	1,076.0	68.4%	142.3	18,902.9	5,913.9	12,989.0	31.3%
2032	1,599.9	1,094.4	68.4%	144.7	19,164.7	6,228.5	12,936.2	32.5%
2033	1,629.7	1,114.8	68.4%	147.3	19,412.6	6,554.6	12,857.9	33.8%
2034	1,657.0	1,133.5	68.4%	149.7	19,646.4	6,892.5	12,753.9	35.1%
2035	1,684.8	1,152.4	68.4%	152.1	19,868.0	7,245.7	12,622.3	36.5%
2036	1,708.9	1,169.0	68.4%	154.2	20,078.0	7,614.5	12,463.5	37.9%
2037	1,727.3	1,181.5	68.4%	155.8	20,277.6	7,998.2	12,279.3	39.4%
2038	1,742.9	1,192.2	68.4%	157.0	20,467.4	8,397.7	12,069.8	41.0%
2039	1,758.2	1,202.7	68.4%	158.3	20,649.2	8,815.7	11,833.4	42.7%
2040	1,773.2	1,213.0	68.4%	159.5	20,824.0	9,255.1	11,569.0	44.4%
2041	1,788.8	1,223.6	68.4%	160.7	20,993.6	9,719.2	11,274.3	46.3%
2042	1,805.2	1,234.8	68.4%	162.0	21,159.3	10,212.0	10,947.3	48.3%
2043	1,823.4	1,247.2	68.4%	163.4	21,322.9	10,738.0	10,584.9	50.4%
2044	1,841.6	1,259.7	68.4%	164.9	21,485.0	11,300.1	10,184.9	52.6%
2045	1,860.4	1,272.6	68.4%	166.4	21,646.5	11,901.8	9,744.7	55.0%
2046	1,880.4	1,286.2	68.4%	167.9	21,808.0	12,547.0	9,261.0	57.5%
2047	1,901.7	1,300.9	68.4%	169.7	21,971.1	13,240.7	8,730.4	60.3%
2048	1,923.9	1,316.0	68.4%	171.4	22,136.6	13,987.3	8,149.3	63.2%
2049	1,946.6	1,331.6	68.4%	173.2	22,304.6	14,790.3	7,514.3	66.3%
2050	1,970.0	1,347.5	68.4%	175.1	22,476.0	15,654.4	6,821.6	69.6%
2051	1,993.7	1,363.7	68.4%	177.0	22,651.2	16,584.1	6,067.1	73.2%
2052	2,017.8	1,380.3	68.4%	179.0	22,831.4	17,584.7	5,246.7	77.0%
2053	2,042.3	1,397.0	68.4%	181.0	23,017.7	18,662.1	4,355.5	81.1%
2054	2,067.1	1,414.0	68.4%	183.0	23,210.6	19,821.7	3,388.9	85.4%
2055	2,092.4	1,431.2	68.4%	185.1	23,411.0	21,069.5	2,341.6	90.0%

TABLE 31

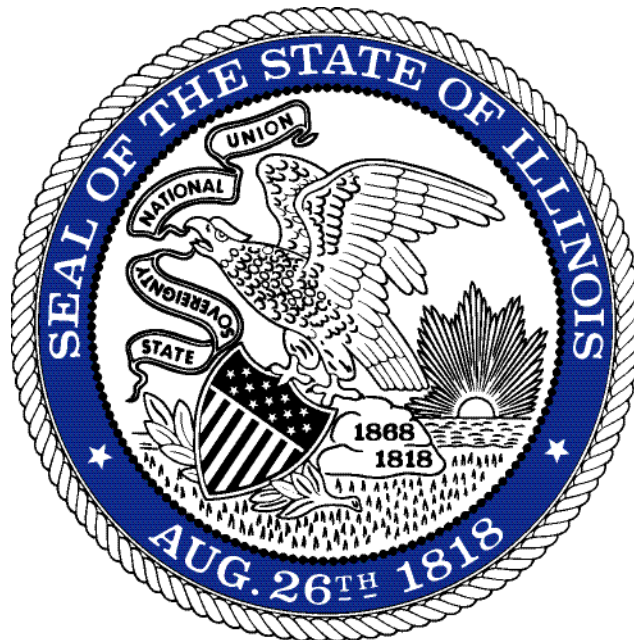
Policemen's Annuity and Benefit Fund of Chicago Projected Normal Cost as of December 31, 2022 (\$ in Millions)						
Fiscal Year	Employer's Normal Cost	Employer's Normal Cost as a % of Payroll	Employee Contributions	Employee Contributions as a % of Payroll	Total Normal Cost	Total Normal Cost as a % of Payroll
2022	150.1	11.8%	114.4	9.0%	264.5	20.8%
2023	149.4	11.4%	115.0	8.8%	264.5	20.2%
2024	146.7	10.8%	122.9	9.0%	269.6	19.9%
2025	146.3	10.5%	125.9	9.1%	272.2	19.6%
2026	145.5	10.2%	128.9	9.1%	274.5	19.3%
2027	144.7	9.9%	132.2	9.0%	276.9	19.0%
2028	143.7	9.6%	135.4	9.0%	279.0	18.7%
2029	141.9	9.3%	137.8	9.0%	279.7	18.4%
2030	140.0	9.0%	140.0	9.0%	280.0	18.1%
2031	138.0	8.8%	142.3	9.0%	280.3	17.8%
2032	136.0	8.5%	144.7	9.0%	280.7	17.5%
2033	134.1	8.2%	147.3	9.0%	281.4	17.3%
2034	132.0	8.0%	149.7	9.0%	281.7	17.0%
2035	130.0	7.7%	152.1	9.0%	282.1	16.7%
2036	127.8	7.5%	154.2	9.0%	282.0	16.5%
2037	125.3	7.3%	155.8	9.0%	281.1	16.3%
2038	122.8	7.0%	157.0	9.0%	279.9	16.1%
2039	120.4	6.8%	158.3	9.0%	278.7	15.9%
2040	118.2	6.7%	159.5	9.0%	277.7	15.7%
2041	116.3	6.5%	160.7	9.0%	277.0	15.5%
2042	114.7	6.4%	162.0	9.0%	276.7	15.3%
2043	113.5	6.2%	163.4	9.0%	276.9	15.2%
2044	112.5	6.1%	164.9	9.0%	277.4	15.1%
2045	111.8	6.0%	166.4	8.9%	278.2	15.0%
2046	111.3	5.9%	167.9	8.9%	279.3	14.9%
2047	111.2	5.8%	169.7	8.9%	280.9	14.8%
2048	111.4	5.8%	171.4	8.9%	282.8	14.7%
2049	111.8	5.7%	173.2	8.9%	285.0	14.6%
2050	112.4	5.7%	175.1	8.9%	287.5	14.6%
2051	113.1	5.7%	177.0	8.9%	290.2	14.6%
2052	114.0	5.7%	179.0	8.9%	293.0	14.5%
2053	115.0	5.6%	181.0	8.9%	296.1	14.5%
2054	116.1	5.6%	183.0	8.9%	299.1	14.5%
2055	117.3	5.6%	185.1	8.8%	302.4	14.5%

CHART 90



XII. Public School Teacher's 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, 2022.

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

Retirement Age

- Age 60 with 20 years of service
- Age 55 with 20 years of service (reduced annuity)
- Age 62 with 5 years of service

Retirement Formula

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

Maximum Annuity

- 75% of final average salary or \$1,500 per month, whichever is greater

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

Pursuant to P.A. 96-0889, for fiscal years 2014 through 2059 the employer (the Board of Education) 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 FY 2059. In years where the funded ratio is above 90%, the employer is not required to make contributions.

P.A. 99-0521, effective June 1, 2017, allows the Board of Education to levy annually a property tax capped at 0.383% for purposes of making employer contributions.

P.A. 100-0465, effective August 31, 2017, increases the property tax cap from 0.383% to 0.567% beginning FY 2018. Also, the Act requires the State to pay an amount equal to the employer normal cost portion of the required Board of Education contributions beginning FY 2019.

Public School Teachers' Pension and Retirement Fund of Chicago - Tier 2 Plan Summary (P.A. 96-0889)

Retirement Age

- Age 67 with 10 years of service
- Age 62 with 10 years of service (reduced annuity)

Retirement Formula

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

Maximum Annuity

- 75% of final average salary or \$1,500 per month, whichever is greater

Salary Used to Calculate Pension

- Highest 96 consecutive months of service within the last 120 months of service
- Pensionable Salary is limited by an amount tied to the 2010 Social Security Wage Base of \$106,800. This amount increases annually by 3% or ½ of the increase in the Consumer Price Index-U, whichever is less. The salary limits for calendar years 2020, 2021, and 2022 are \$115,929, \$116,740, and \$119,892, respectively.

Annual COLA

- Simple 3% or ½ of the increase in the Consumer Price Index-U, whichever is less

Employee Contributions

- 9.0% of salary

Employer Contributions

Pursuant to P.A. 96-0889, for fiscal years 2014 through 2059 the employer (the Board of Education) 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 FY 2059. In years where the funded ratio is above 90%, the employer is not required to make contributions.

P.A. 99-0521, effective June 1, 2017, allows the Board of Education to levy annually a property tax capped at 0.383% for purposes of making employer contributions.

P.A. 100-0465, effective August 31, 2017, increases the property tax cap from 0.383% to 0.567% beginning FY 2018. Also, the Act requires the State to pay an amount equal to the employer normal cost portion of the required Board of Education contributions beginning FY 2019.

CHART 91

**CHICAGO TEACHERS' PENSION FUND
Active Employees**

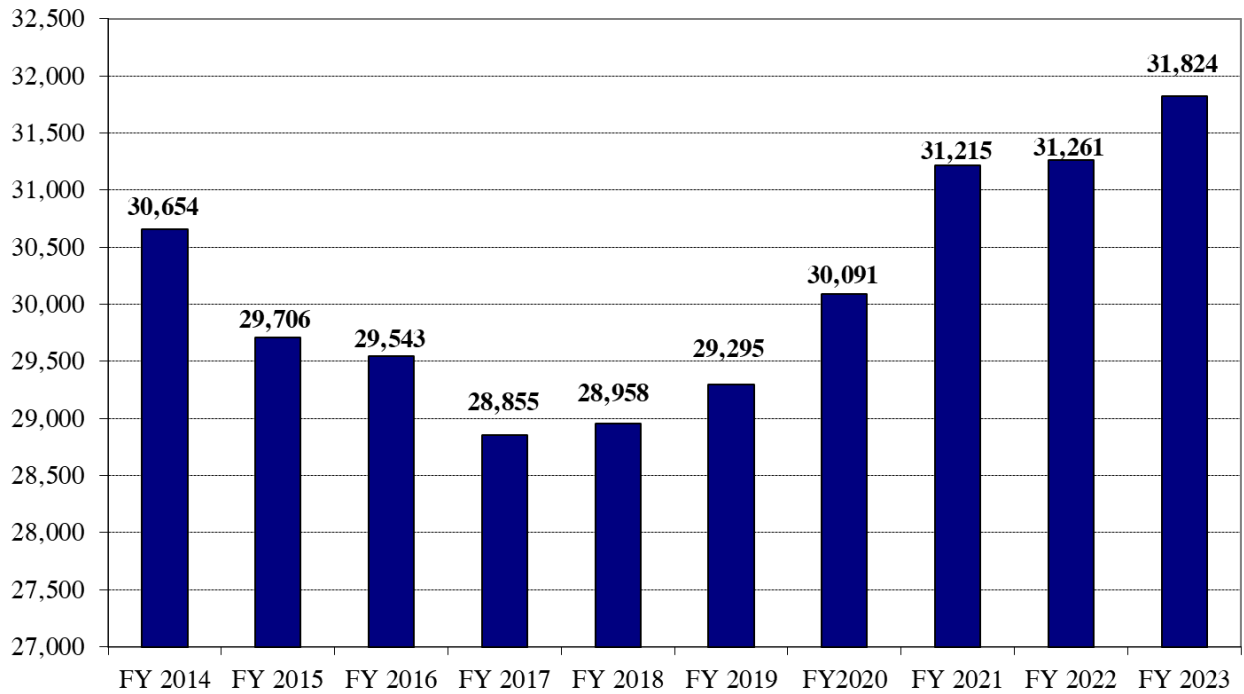


CHART 92

**CHICAGO TEACHERS' PENSION FUND
Employee Annuitants**

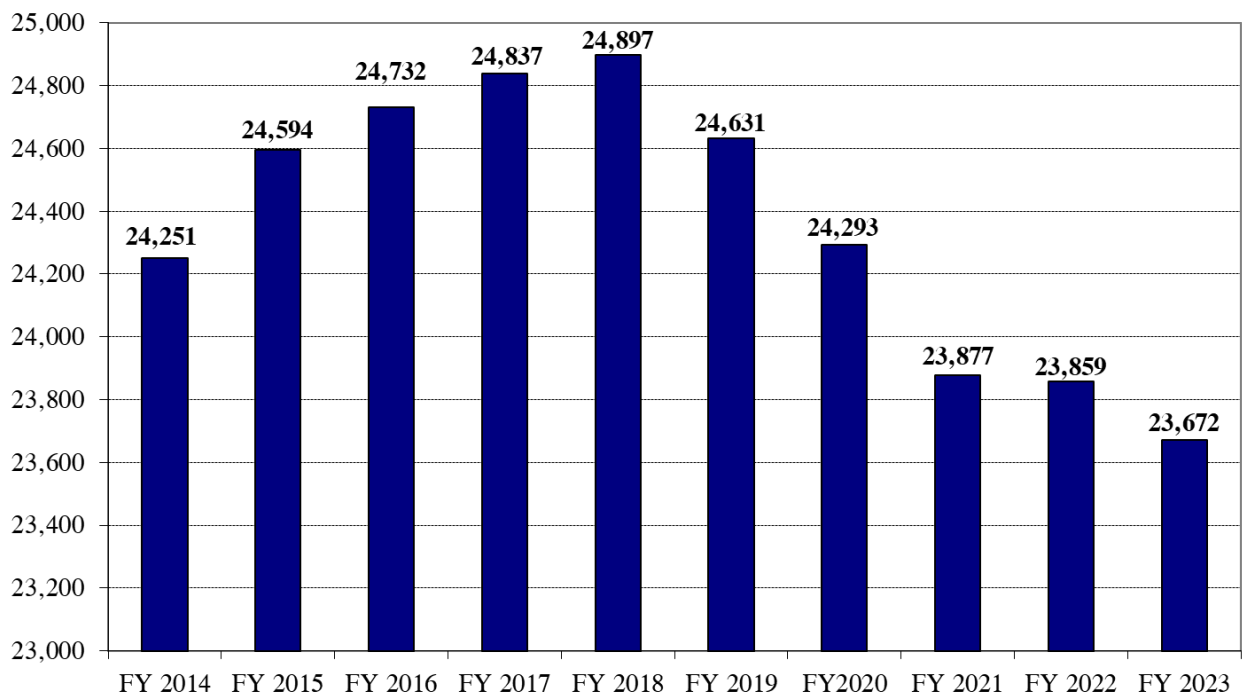


CHART 93

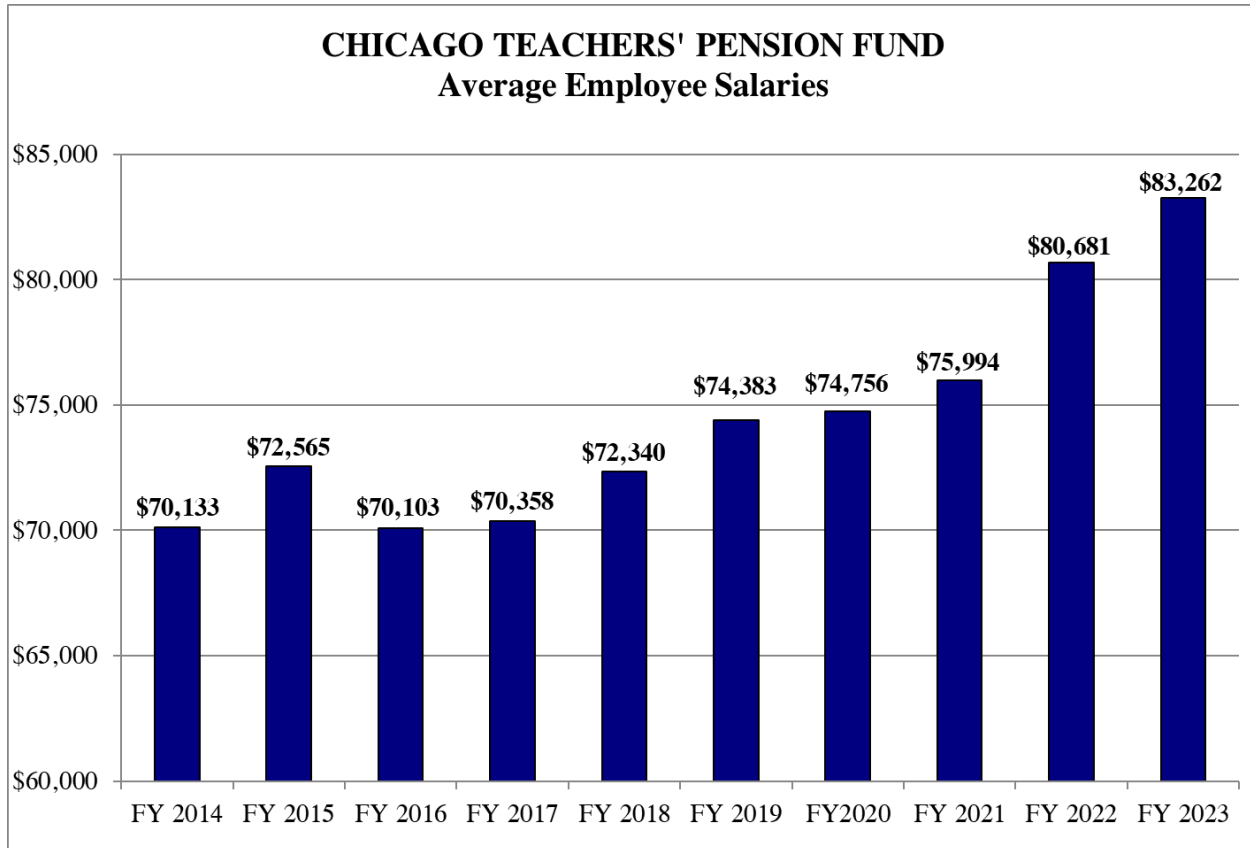


CHART 94

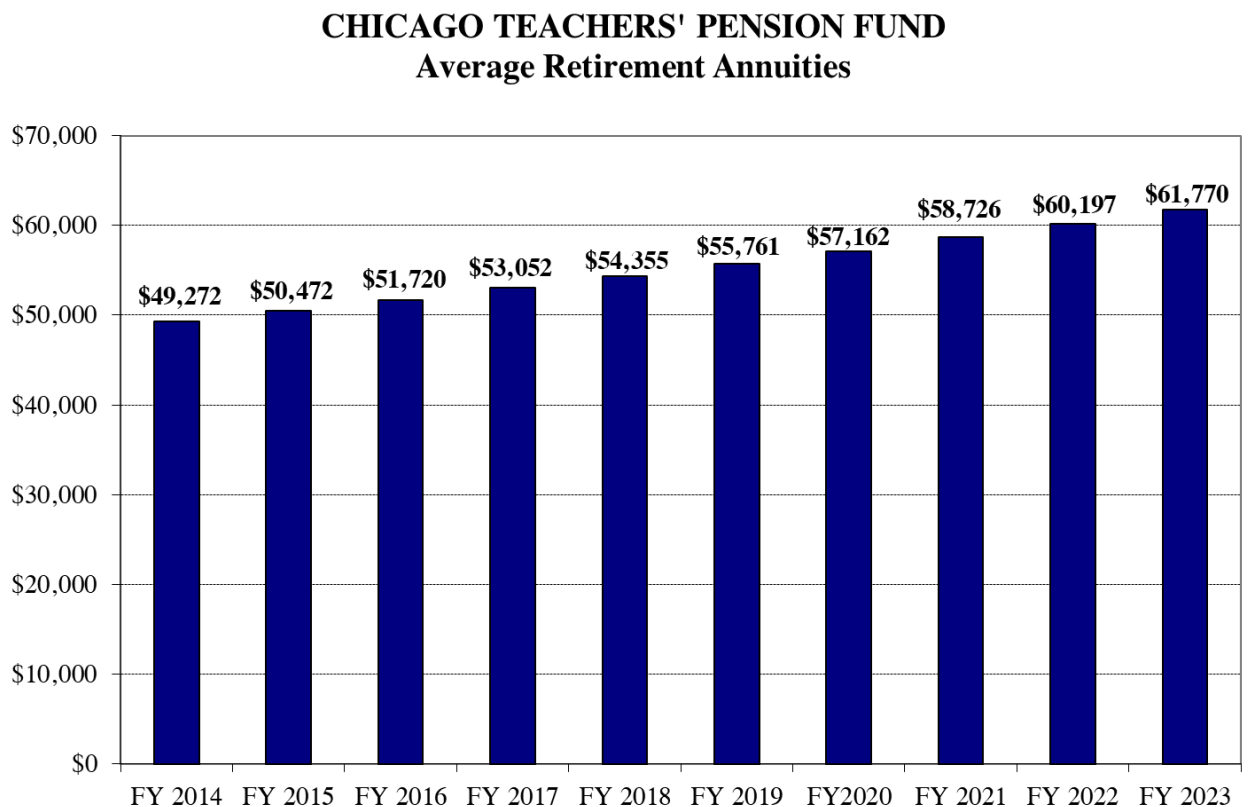


CHART 95

CHICAGO TEACHERS' PENSION FUND
Funded Ratio
FY 2014 - FY 2023

All figures based upon the actuarial value of assets.

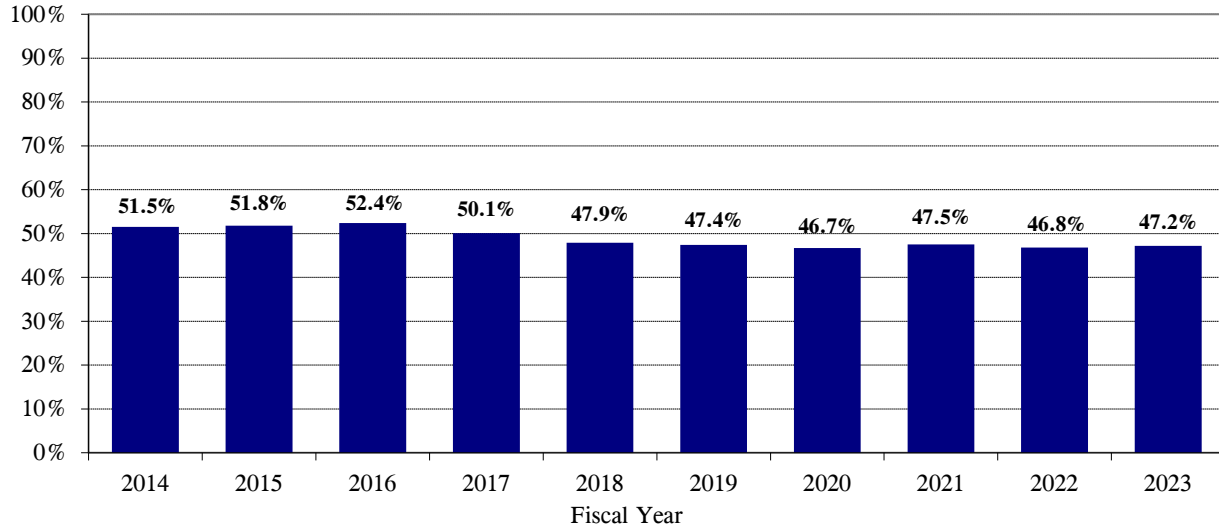
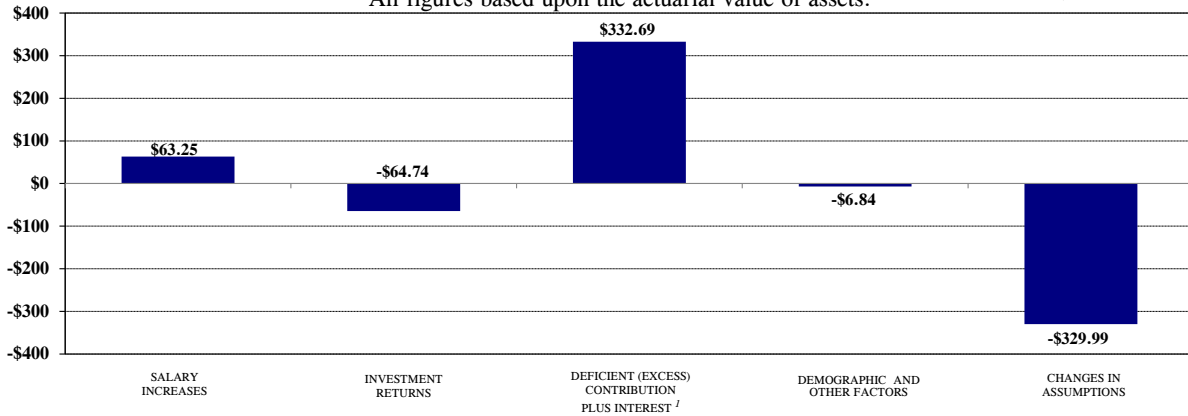


CHART 96

CHICAGO TEACHERS PENSION FUND
Change in Unfunded Liabilities
Year ended June 30, 2023
(\$ Millions)

All figures based upon the actuarial value of assets.

TOTAL DECREASE EQUALS
\$5.6 MIL



¹ Unfunded liability decreased due to contributions being more than normal cost, plus interest cost.

CHART 97

CHICAGO TEACHERS' PENSION FUND
Investment Income FY 2014 - FY 2023
Actuarially Assumed Rate of Return: 6.50%
(\$ in Millions)

All figures based upon the market value of assets.

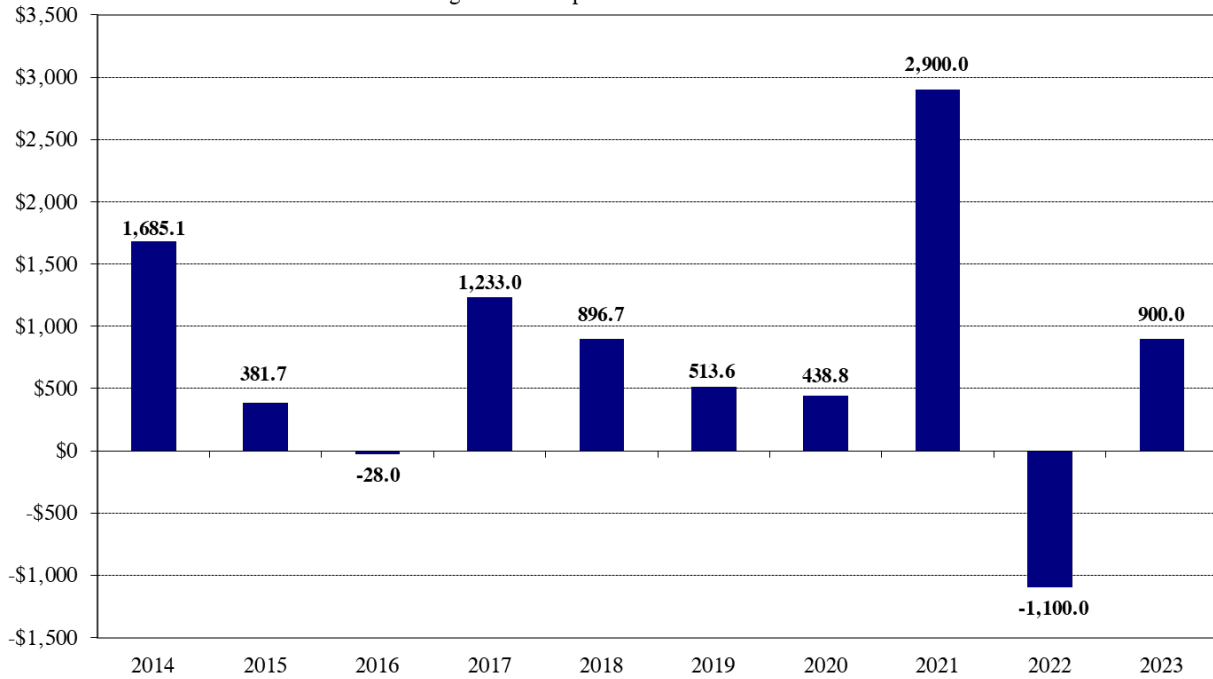


CHART 98

CHICAGO TEACHERS' PENSION FUND
Rate of Return FY 2014 - FY 2023
Actuarially Assumed Rate of Return: 6.50%

All figures based upon the market value of assets.

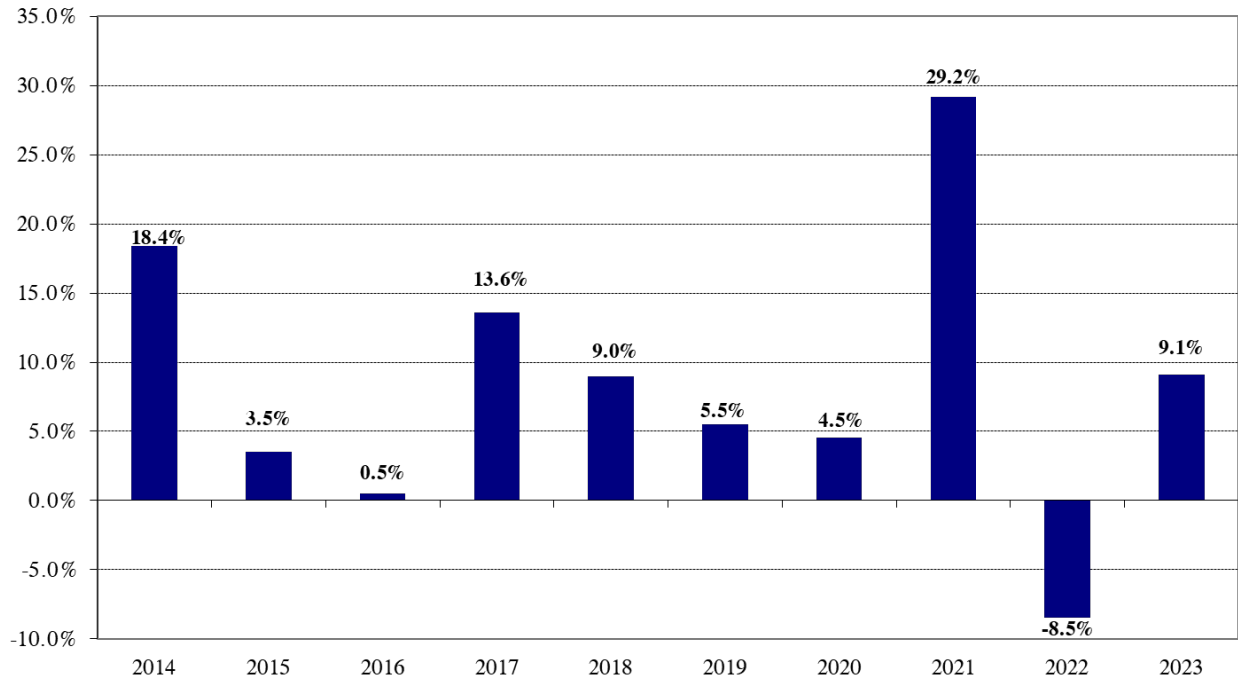


TABLE 32

CHICAGO TEACHERS PENSION FUND					
System Experience, FY 2014 - FY 2023					
(\$ in Millions)					
Fiscal Year	Annual Payroll	Actuarial Liabilities	Actuarial Assets	Unfunded Liabilities	Funded Ratio
2023	2,649.7	26,171.0	12,363.8	13,807.2	47.2%
2022	2,522.2	25,955.1	12,142.2	13,812.9	46.8%
2021	2,372.2	25,118.0	11,925.5	13,192.5	47.5%
2020	2,249.5	24,073.5	11,240.2	12,833.3	46.7%
2019	2,179.1	23,252.2	11,021.8	12,230.4	47.4%
2018	2,094.8	22,922.9	10,969.1	11,953.8	47.9%
2017	2,030.2	21,822.0	10,933.0	10,889.0	50.1%
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%

TABLE 33

CHICAGO TEACHERS PENSION FUND										
Changes in Net Assets										
(\$ in Millions)										
Fiscal Years	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Additions to Assets										
Employer	\$791.7	\$882.7	\$834.5	\$802.5	\$749.5	\$717.5	\$697.8	\$635.1	\$643.7	\$585.4
Employees	\$240.1	\$221.6	\$215.1	\$196.1	\$190.6	\$183.7	\$187.5	\$191.9	\$191.2	\$187.8
Net Investment Income	\$942.7	-\$1,125.3	\$2,935.8	\$438.8	\$513.6	\$896.7	\$1,233.0	-\$28.2	\$381.7	\$1,685.1
Other	\$9.0	\$4.4	\$1.8	\$1.5	\$1.7	\$1.5	\$0.2	\$1.5	\$0.9	\$0.0
Total Asset Additions (A)	\$1,983.6	-\$16.6	\$3,987.3	\$1,438.9	\$1,455.3	\$1,799.4	\$2,118.5	\$800.2	\$1,217.5	\$2,458.3
Deductions from Assets										
Benefits	\$1,580.3	\$1,548.1	\$1,516.0	\$1,502.7	\$1,471.1	\$1,441.2	\$1,392.7	\$1,351.3	\$1,307.7	\$1,273.5
Refunds	\$24.7	\$21.9	\$18.2	\$20.2	\$24.5	\$25.1	\$32.2	\$33.6	\$23.9	\$32.8
Rebates	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Administrative Expenses	\$25.0	\$21.6	\$17.0	\$17.8	\$25.6	\$21.5	\$13.8	\$12.3	\$11.7	\$10.5
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)	\$1,630.0	\$1,591.5	\$1,551.3	\$1,540.7	\$1,521.2	\$1,487.8	\$1,438.7	\$1,397.1	\$1,343.3	\$1,316.8
Change in Net Assets (A-B=C)	\$353.6	-\$1,608.1	\$2,436.0	-\$101.8	-\$65.9	\$311.6	\$679.8	-\$596.9	-\$125.7	\$1,141.5

Table 34 below contains funding projections based on the June 30, 2023 actuarial valuation of the Chicago Teachers' Pension Fund.

TABLE 34

Chicago Teachers' Pension Fund								
Actuarial Valuation Projection Results as of June 30, 2023								
Projections Based on P.A. 90-0655, P.A. 91-0357, P.A. 96-0889, P.A. 100-0465								
(\$ 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
2024	2,703.8	1,022.5	37.8%	243.3	26,659.3	12,772.3	13,887.0	47.9%
2025	2,793.2	1,015.5	36.4%	251.4	27,157.8	12,616.3	14,541.5	46.5%
2026	2,873.7	1,044.8	36.4%	258.6	27,666.7	12,921.7	14,745.0	46.7%
2027	2,953.5	1,073.8	36.4%	265.8	28,185.8	13,203.2	14,982.6	46.8%
2028	3,032.6	1,102.5	36.4%	272.9	28,712.2	13,509.1	15,203.1	47.1%
2029	3,110.4	1,130.8	36.4%	279.9	29,245.1	13,841.5	15,403.6	47.3%
2030	3,187.9	1,159.0	36.4%	286.9	29,782.9	14,193.8	15,589.1	47.7%
2031	3,264.9	1,187.0	36.4%	293.8	30,324.7	14,567.2	15,757.5	48.0%
2032	3,340.8	1,214.6	36.4%	300.7	30,870.4	14,962.8	15,907.6	48.5%
2033	3,416.0	1,242.0	36.4%	307.4	31,414.3	15,376.3	16,038.0	48.9%
2034	3,490.3	1,269.0	36.4%	314.1	31,980.7	15,833.6	16,147.1	49.5%
2035	3,561.2	1,294.7	36.4%	320.5	32,543.7	16,309.8	16,233.9	50.1%
2036	3,630.0	1,319.7	36.4%	326.7	33,100.8	16,803.5	16,297.3	50.8%
2037	3,695.8	1,343.7	36.4%	332.6	33,648.9	17,312.7	16,336.2	51.5%
2038	3,760.5	1,367.2	36.4%	338.4	34,185.2	17,836.4	16,348.8	52.2%
2039	3,824.4	1,390.4	36.4%	344.2	34,706.5	18,377.2	16,329.3	53.0%
2040	3,888.8	1,413.8	36.4%	350.0	35,210.1	18,935.0	16,275.1	53.8%
2041	3,954.3	1,437.7	36.4%	355.9	35,691.3	19,508.9	16,182.4	54.7%
2042	4,019.1	1,461.2	36.4%	361.7	36,146.5	20,097.7	16,048.8	55.6%
2043	4,086.3	1,485.7	36.4%	367.8	36,575.7	20,704.4	15,871.3	56.6%
2044	4,157.7	1,511.6	36.4%	374.2	36,978.9	21,332.4	15,646.5	57.7%
2045	4,232.7	1,538.9	36.4%	380.9	37,359.0	21,987.1	15,371.9	58.9%
2046	4,313.9	1,568.4	36.4%	388.3	37,720.2	22,676.1	15,044.1	60.1%
2047	4,399.6	1,599.6	36.4%	396.0	38,066.5	23,406.2	14,660.3	61.5%
2048	4,491.1	1,632.8	36.4%	404.2	38,403.3	24,186.5	14,216.8	63.0%
2049	4,586.7	1,667.6	36.4%	412.8	38,734.0	25,024.0	13,710.0	64.6%
2050	4,685.0	1,703.3	36.4%	421.7	39,060.2	25,924.5	13,135.7	66.4%
2051	4,784.0	1,739.3	36.4%	430.6	39,381.0	26,891.1	12,489.9	68.3%
2052	4,883.1	1,775.3	36.4%	439.5	39,695.2	27,926.9	11,768.3	70.4%
2053	4,982.4	1,811.4	36.4%	448.4	40,000.5	29,034.2	10,966.3	72.6%
2054	5,081.9	1,847.6	36.4%	457.4	40,295.6	30,216.6	10,079.0	75.0%
2055	5,182.9	1,884.3	36.4%	466.5	40,577.2	31,476.4	9,100.8	77.6%
2056	5,285.1	1,921.5	36.4%	475.7	40,842.1	32,816.4	8,025.7	80.3%
2057	5,388.0	1,958.9	36.4%	484.9	41,088.8	34,241.4	6,847.4	83.3%
2058	5,491.5	1,996.5	36.4%	494.2	41,317.6	35,758.3	5,559.3	86.5%
2059	5,595.6	2,034.4	36.4%	503.6	41,531.4	37,377.1	4,154.3	90.0%

¹ Total employer contributions consist of the required Board of Education contributions, additional Board of Education contributions, required State contributions, and additional State contributions.

TABLE 35

Chicago Teachers' Pension Fund Projected Normal Cost as of June 30, 2023 (\$ 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
2024	334.9	12.4%	243.3	9.0%	578.2	21.4%
2025	338.7	12.1%	251.4	9.0%	590.1	21.1%
2026	342.2	11.9%	258.6	9.0%	600.8	20.9%
2027	344.8	11.7%	265.8	9.0%	610.6	20.7%
2028	346.3	11.4%	272.9	9.0%	619.2	20.4%
2029	346.8	11.1%	279.9	9.0%	626.7	20.1%
2030	346.6	10.9%	286.9	9.0%	633.5	19.9%
2031	345.8	10.6%	293.8	9.0%	639.6	19.6%
2032	344.4	10.3%	300.7	9.0%	645.1	19.3%
2033	342.5	10.0%	307.4	9.0%	649.9	19.0%
2034	339.7	9.7%	314.1	9.0%	653.8	18.7%
2035	336.4	9.4%	320.5	9.0%	656.9	18.4%
2036	332.4	9.2%	326.7	9.0%	659.1	18.2%
2037	327.8	8.9%	332.6	9.0%	660.4	17.9%
2038	322.6	8.6%	338.4	9.0%	661.0	17.6%
2039	313.1	8.2%	344.2	9.0%	657.3	17.2%
2040	303.2	7.8%	350.0	9.0%	653.2	16.8%
2041	292.3	7.4%	355.9	9.0%	648.2	16.4%
2042	281.0	7.0%	361.7	9.0%	642.7	16.0%
2043	270.4	6.6%	367.8	9.0%	638.2	15.6%
2044	260.8	6.3%	374.2	9.0%	635.0	15.3%
2045	252.9	6.0%	380.9	9.0%	633.8	15.0%
2046	247.2	5.7%	388.3	9.0%	635.5	14.7%
2047	243.9	5.5%	396.0	9.0%	639.9	14.5%
2048	242.7	5.4%	404.2	9.0%	646.9	14.4%
2049	243.1	5.3%	412.8	9.0%	655.9	14.3%
2050	244.5	5.2%	421.7	9.0%	666.2	14.2%
2051	246.5	5.2%	430.6	9.0%	677.1	14.2%
2052	248.9	5.1%	439.5	9.0%	688.4	14.1%
2053	251.6	5.0%	448.4	9.0%	700.0	14.0%
2054	254.9	5.0%	457.4	9.0%	712.3	14.0%
2055	258.6	5.0%	466.5	9.0%	725.1	14.0%
2056	262.6	5.0%	475.7	9.0%	738.3	14.0%
2057	267.0	5.0%	484.9	9.0%	751.9	14.0%
2058	271.6	4.9%	494.2	9.0%	765.8	13.9%
2059	276.5	4.9%	503.6	9.0%	780.1	13.9%

CHART 99

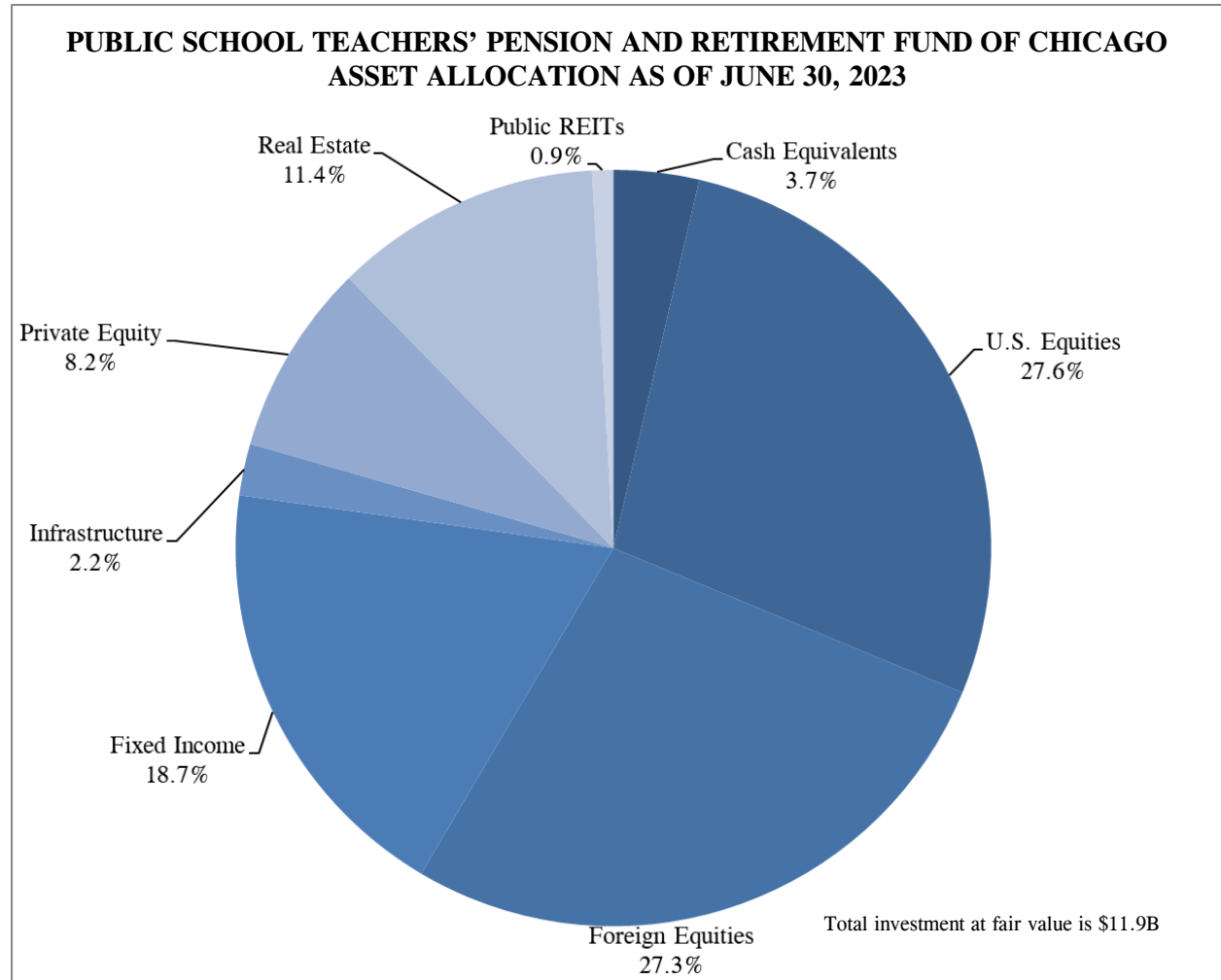
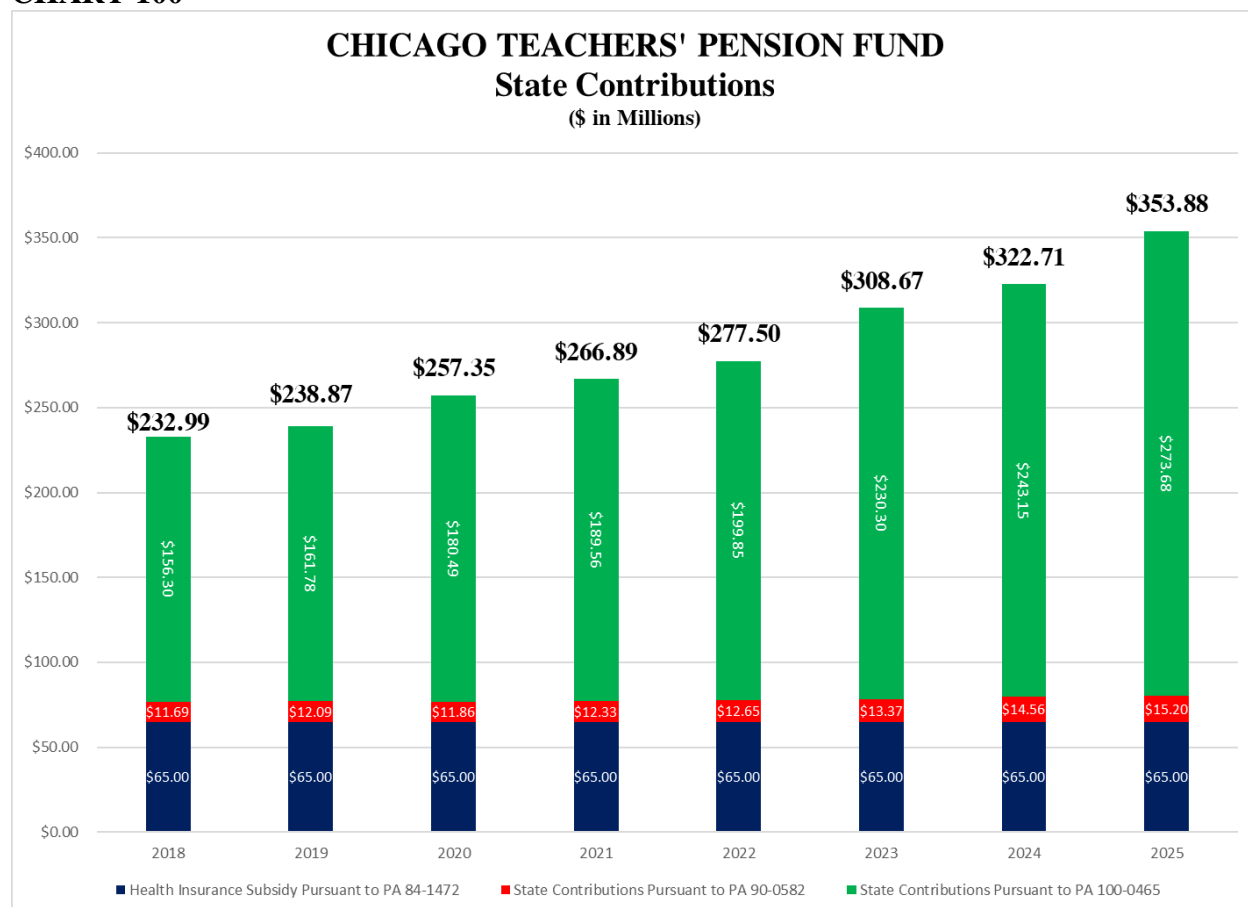


Chart 100 below displays a recent history of State contributions made to CTPF from FY 18 through FY 25 and the relevant legislative history pertaining thereto:

- **Public Act 84-1472**, effective January 1, 1987, granted the Fund authority to provide reimbursement of up to 50% of the cost of premium payments for group health insurance for retirees, not exceeding a total of \$3 million per year. **Public Act 93-0677**, effective June 28, 2004, set the current cap on allowable reimbursement at \$65 million per year, in which the total amount may not exceed 75% of the total cost of health insurance coverage for all recipients.
- **Public Act 89-0015**, effective May 30, 1995, established a 90% by FY 2045 funding goal. No State contributions were required under P.A. 89-0015.
- **Public Act 90-0582**, effective May 27, 1998, requires the state to contribute 0.544% of the fund’s total teacher payroll when the funded ratio drops below 90%.
- **Public Act 96-0889**, effective January 1, 2011, extended the 90% funding deadline from FY 2045 to FY 2059.
- **Public Act 100-0465**, effective August 31, 2017, requires the State to contribute an amount to be equal to the employer’s normal cost plus the amount allowed for the health insurance subsidy authority granted under Public Act 84-1472.

CHART 100



Appropriation amounts for FY 24 & FY 25 were taken from P.A. 103-0006 and P.A. 103-0589, respectively.

COMMISSION OVERVIEW

The Commission on Government Forecasting & Accountability is a bipartisan legislative support service agency responsible for advising the Illinois General Assembly on economic and fiscal policy issues and for providing objective policy research for legislators and legislative staff. The Commission's board is comprised of twelve legislators—split evenly between the House and Senate and between Democrats and Republicans.

The Commission has three internal units—Revenue, Pensions, and Research, each of which has a staff of analysts who analyze policy proposals, legislation, state revenues & expenditures, and benefit programs, and who provide research services to members and staff of the General Assembly. The Commission's staff fulfills the statutory obligations set forth in the Commission on Government Forecasting and Accountability Act (25 ILCS 155/), the State Debt Impact Note Act (25 ILCS 65/), the Illinois Pension Code (40 ILCS 5/), the Pension Impact Note Act (25 ILCS 55/), the State Facilities Closure Act (30 ILCS 608/), the State Employees Group Insurance Act of 1971 (5 ILCS 375/), the Public Safety Employee Benefits Act (820 ILCS 320/), the Legislative Commission Reorganization Act of 1984 (25 ILCS 130/), and the Reports to the Commission on Government Forecasting and Accountability Act (25 ILCS 110/).

- The **Revenue Unit** issues an annual revenue estimate, reports monthly on the state's financial and economic condition, and prepares bill analyses and debt impact notes on proposed legislation having a financial impact on the State. The Unit publishes a number of statutorily mandated reports, as well as on-demand reports, including the *Monthly Briefing* newsletter and annually, the *Budget Summary*, *Capital Plan Analysis*, *Illinois Economic Forecast Report*, *Wagering in Illinois Update*, and *Liabilities of the State Employees' Group Insurance Program*, among others. The Unit's staff also fulfills the agency's obligations set forth in the State Facilities Closure Act.
- The **Pension Unit** prepares pension impact notes on proposed pension legislation and publishes several statutorily mandated reports including the *Financial Condition of the Illinois State Retirement Systems*, the *Financial Condition of Illinois Public Pension Systems* and the *Fiscal Analysis of the Downstate Police & Fire Pension Funds in Illinois*. The Unit's staff also fulfills the statutory responsibilities set forth in the Public Safety Employee Benefits Act.
- The **Research Unit** primarily performs research and provides information as may be requested by members of the General Assembly or legislative staffs. Additionally, the Unit maintains a research library and, per statute, collects information concerning state government and the general welfare of the state, examines the effects of constitutional provisions and previously enacted statutes, and considers public policy issues and questions of state-wide interest. Additionally, the Unit publishes a monthly Abstracts Report of annual reports or special studies from other state agencies, the *Illinois Tax Handbook for Legislators*, *Federal Funds to State Agencies*, *Preface to Lawmaking*, various reports detailing appointments to State Boards and Commissions, the *1970 Illinois Constitution Annotated for Legislators*, the *Roster of Illinois Legislators*, and numerous special topic publications.

Commission on Government Forecasting & Accountability

802 Stratton Office Building

Springfield, Illinois 62706

Phone: 217.782.5322

Fax: 217.782.3513

<http://cgfa.ilga.gov>