Municipal Employees' Annuity and Benefit Fund of Chicago

Actuarial Valuation and Review as of December 31, 2022

May 11, 2023

This report has been prepared at the request of the Board of Trustees to assist in administering the Fund. This valuation report may not be copied or reproduced in any form without the consent of the Board of Trustees and may only be provided to other parties in its entirety, unless expressly authorized by Segal. The measurements shown in this actuarial valuation may not be applicable for other purposes.

Segal

Segal

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May 11, 2023

The Retirement Board of the
Municipal Employees' Annuity and Benefit Fund of Chicago
321 North Clark Street, Suite 700
Chicago, Illinois 60654-4767

Dear Board Members:

We are pleased to submit this annual Actuarial Valuation and Review as of December 31, 2022. It summarizes the actuarial data used in the valuation; establishes the statutorily required contribution for 2024 (payable in 2025), the actuarially determined contribution for the year ending December 31, 2023 under the Board's funding policy, the net pension liability under Governmental Accounting Standards Board (GASB) Statement No. 67 as of December 31, 2022, the pension expense for the fiscal year ending December 31, 2022, under GASB Statement No. 68, the net OPEB liability as of December 31, 2022, under GASB Statement No. 74, and the OPEB expense for the fiscal year ending December 31, 2022, under GASB Statement No. 75; and analyzes the preceding year's experience.

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist in administering the Municipal Employees' Annuity and Benefit Fund of Chicago (MEABF or Fund or Plan).

Asset and Membership Data

The census information and financial information on which our calculations were based was prepared by the Fund staff. That assistance is gratefully acknowledged. We have not subjected the census data to any auditing procedures but have examined the data for reasonableness and consistency with the prior year's data.

Actuarial Assumptions and Methods

The actuarial assumptions and methods are set by the Board of Trustees, based upon recommendations made by the Fund's actuary. The assumptions and methods used for the December 31, 2022, actuarial valuation are based on an experience analysis covering the five-year period ending December 31, 2021, and were adopted by the Board, effective December 31, 2022. These actuarial assumptions and methods comply with the parameters set by the Actuarial Standards of Practice for funding purposes and the parameters for disclosure of GASB 67, 68, 74 and 75. Further, in our opinion, the assumptions as approved by the Board appear to be reasonably related to the experience of the Fund. The investment return assumption is based on the Fund being invested according to the target asset allocation in the Investment Policy Statement. **To the extent that the liquidation of assets to pay benefit payments and expenses requires a shift in investment allocation to more liquid, lower return asset classes, a lower discount rate may be required in the future.**

Funding Adequacy

MEABF is funded by employer and member contributions in accordance with the funding policy specified under the Illinois Pension Code (40 ILCS 5/8), which was revised on July 6, 2017 by Public Act 100-0023. Starting in payment year 2023, employer contributions are calculated as the sum of the employer normal cost for that fiscal year plus an amount determined as a level percent of payroll sufficient to bring the total assets of the Fund up to 90% of the actuarial accrued liability by the end of 2058. **Given the low funded ratio and the expected timing of employer contributions, the Fund is still at risk of potential insolvency if an economic recession or investment market downturn were to occur in the near term. We strongly recommend an actuarial funding method that targets 100% funding where payments at least cover interest on the unfunded actuarial liability and a portion of the principal balance.** If the Fund becomes insolvent, the employer will be required to make contributions on a “pay-as-you-go” basis, which means the employer would have to pay all benefits as they become due.

Financial Results and Membership Data

This report includes the following schedules for the Actuarial and Financial sections of the Comprehensive Annual Financial Report which were prepared by Segal:

- Actuarial
  - Active Member Valuation Data
  - Retirees and Beneficiaries Added to and Removed from Rolls
  - Solvency Test
  - Analysis of Financial Experience
- Financial
  - Schedule of Funding Progress
  - Schedule of Employer Contributions

Limitation of Actuarial Measurements

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and changes in plan provisions or applicable law.

Qualifications

The actuarial calculations were directed under my supervision. I am a member of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of my knowledge, the information supplied in the actuarial valuation is complete and accurate. Further, in my opinion, the assumptions as approved by the Board are reasonably related to the experience of and the expectations for the Plan.

Sincerely,

Matthew A. Strom, FSA, MAAA, EA
Senior Vice President and Actuary

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Section 1: Actuarial Valuation Summary

Purpose

This report has been prepared by Segal to present a valuation of the Municipal Employees' Annuity and Benefit Fund of Chicago (MEABF or Fund or Plan) as of December 31, 2022. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- The benefit provisions of the Fund, as outlined in 40 ILCS 5/8 and administered by the Retirement Board;
- The characteristics of covered active members, inactive vested members, and retirees and beneficiaries as of December 31, 2022, provided by MEABF staff;
- The assets of the Plan as of December 31, 2022, provided by MEABF staff;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

Valuation Highlights

The following key findings were the result of this actuarial valuation:

1. **MEABF remains at risk of having to liquidate invested assets at inopportune times to pay monthly benefits due to the current low funding level and expected timing of employer contributions. Future unfavorable investment performance could lead to the Fund not meeting its financial objectives.**

2. An experience review was performed after the last valuation. As a result of this study, the following assumption changes have been adopted for this valuation:

   i. Investment return assumption was lowered from 7.00% to 6.75%.

   ii. Salary scale rates were generally increased. Separate salary scales for Board of Education (BoE) members and Non-Board of Education members were developed.

   iii. Post-retirement mortality was changed from RP-2014 Healthy Annuitant Mortality Table, set forward two years for males and one year for females to PubG-2010 Retiree Amount-weighted Below Median mortality Tables (sex-specific), using 117% of the rates for females and 111% of the rates for males.

   iv. Beneficiary mortality was changed from RP-2014 Healthy Annuitant Mortality Table, set forward two years for males and one year for females to PubG-2010 Contingent Survivor Table Amount-weighted Below Median Mortality table (sex-specific), using 111% of the rates for females and 113% of the rates for males.

   v. Pre-retirement mortality was changed from 120% of the RP-2014 Employee Tables (sex-specific) to PubG-2010 Employee Amount-weighted Below Median mortality table (sex-specific), using 92% of the rates for females and 90% of the rates for males.

   vi. Mortality improvement scale was changed from generational projection using Scale MP-2016 to generational projection using Scale MP-2021.

   vii. Retirement rates for Tier 1 members were adjusted based on plan experience.

   viii. Termination rates were adjusted based on plan expereince. Separate termination rates for BoE members and Non-Boe members were developed.

   ix. Normal cost load for ordinary and duty disability was lowered from 0.75% of payroll to 0.60% of payroll.

These changes decreased the actuarial accrued liability by $210.9 million, or 1.1% and the actuarially determined contribution requirement by 1.8%, and increased the funded ratio based on the actuarial value of assets by 0.26% from 22.54% to 22.80%.

3. For the year ended December 31, 2022, Segal has estimated the asset return on a fair value basis to be -11.0%. After gradual recognition of investment gains and losses under the actuarial smoothing method, the actuarial rate of return was 4.4%. This represents an experience loss when compared to the assumed rate of 7.0% (which was the assumed rate of return for the year ended December 31, 2022). As of December 31, 2022, the actuarial value of assets ($4.27 billion) represents 108% of the fair value ($3.95 billion).

4. The fair value of assets, as of December 31, 2022, is $3.95 billion, which includes $3.17 billion of investments and $765 million of employer contributions receivable. As the employer contributions increase in the future, the receivable employer contributions will become a larger percentage of the reported fair value of assets in the near-term.

5. The funded ratio based on the actuarial value of assets over the actuarial accrued liability as of December 31, 2022, is 22.8%, compared to 22.0% as of December 31, 2021. Using the fair value of assets, the funded ratio as of December 31, 2022, is 21.1%, compared to 23.4% as of December 31, 2021.

6. As shown in Chart 13, for the fiscal year beginning January 1, 2023, the actuarially determined contribution (ADC) for pension benefits based on the Board's funding policy is $1,273,344,843. By statute, the expected employer contribution for 2023 (payable in 2024) is $976,027,541. **Compared to the actuarially determined contribution of $1,273,344,843, the contribution deficiency is $297,317,302. Each year there is a contribution deficiency leads to an increased deficiency in all future years.**

7. As part of the City's Pension Management Policy, the City of Chicago agreed to make a supplemental contribution of $101,640,000 during 2023. Since this is a supplemental contribution, it will not count toward the required statutory contribution. This supplemental contribution was not included in the fair value of assets as of December 31, 2022, but is included in the contributions for 2023 for projection purposes.

8. The total statutorily required contribution for 2022 (payable in 2023) was $959,998,227. The City of Chicago prepaid $234 million of the total statutorily required contribution during 2022. The remaining amount will be paid in 2023.

9. When measuring pension liability for GASB purposes, the Entry Age actuarial cost method is used, which is the same method that is used for funding purposes. However, as of December 31, 2022, the GASB blended discount rate calculation results in a lower discount rate (6.57%) then is used for funding purposes. This means that the total pension liability (TPL) measure for financial reporting shown in this report will be different then the actuarial accrued liability (AAL) measure for funding. We note that the same is true for the normal cost component of the annual plan cost for funding and financial reporting.

10. The net pension liability (NPL) is equal to the difference between the TPL and the Plan's fiduciary net position. The Plan's fiduciary net position is equal to the fair value of assets. The NPL increased from $14,093,310,948 as of December 31, 2021, to $15,156,099,444 as of December 31, 2022. The increase in the NPL is primarily due to assets returning less than the assumed 7.0% and a blended interest rate being utilized to calculate the Total Pension Liability.

11. City of Chicago employee annuitants that were hired prior to July 1, 2003, (both current and future employee annuitants, but not spouse or child annuitants) are entitled to receive a health care insurance premium subsidy of $25 per month if the annuitant participates in a group health care plan for which the Fund offers to deduct health insurance premiums from monthly annuities. As directed by Fund staff, we have treated the health care insurance premium subsidy as being paid from plan assets. For purposes of developing employer contributions, expected future subsidies are included in projected benefit payments and the cost is included in the statutorily required contributions based on the 90% funding target in 2058. The City may wish to consider a separate funding source for the health insurance subsidy. At a minimum, the additional contribution would be equal to expected amount of subsidy payments each year; in effect, funding the health care insurance premium subsidy on a pay-as-you-go basis. The total liability for this benefit decreased from $16.4 million as of December 31, 2021, to $6.6 million as of December 31, 2022, due to an assumption change regarding the assumed election percentage among those eligible for the subsidy (prior assumption was that 50% of eligible members participated in the Plan-sponsored health care and was updated to 25% of members participate based on recent experience) in addition to the assumption changes made associated with the experience analysis covering the five-year period ending December 31, 2021. This is reported as an OPEB liability under GASB 74/75.

12. As indicated in Section 2, Subsection B of this report, the total unrecognized investment loss as of December 31, 2022, is $323,181,365. This investment loss will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years, to the extent it is not offset by recognition of investment gains derived from future experience. This implies that earning the assumed rate of investment return of 6.75% per year (net of expenses) on a fair value basis will result in investment losses on the actuarial value of assets in the next few years.

13. The current method used to determine the actuarial value of assets yields an amount that is 108.2% of the fair value of assets as of December 31, 2022. Guidelines in Actuarial Standards of Practice No. 44 (Selection and Use of Asset Valuation Methods for Pension Valuations) recommend that asset values fall within a reasonable range around the corresponding fair value. We believe the actuarial asset method currently complies with these guidelines.

14. This actuarial valuation report as of December 31, 2022, is based on financial data as of that date. Changes in the value of assets subsequent to that date are not reflected.

Summary of Key Valuation Results		
	2022	**2021**
Funding ratios as of December 31:		
Actuarial accrued liability*	$18,759,634,094	$18,418,022,892
Fair value of assets	3,951,788,039	4,308,269,024
Unfunded actuarial accrued liability on a fair value basis	14,807,846,055	14,109,753,868
Funded ratio on a fair value basis	21.07%	23.39%
Actuarial value of assets	$4,274,969,404	$4,041,929,111
Unfunded actuarial accrued liability on an actuarial value basis	14,484,664,690	14,376,093,781
Funded ratio on an actuarial value basis	22.79%	21.95%
Book value of assets	$3,541,795,167	$3,430,633,202
Unfunded actuarial accrued liability on a book value basis	15,217,838,927	14,987,389,690
Funded ratio on a book value basis	18.88%	18.63%
Demographic data as of December 31:		
Number of retirees and beneficiaries	25,894	25,683
Number of inactive members	22,586	21,304
Number of active members	35,369	32,925
Total pensionable salary supplied by the Fund	$2,166,181,666	$2,001,180,743
Average pensionable salary	$61,245	$60,780

Contribution requirement for Fiscal Year:	2024	2023	2022
Statutory City contribution**	$941,017,242	$976,027,541	$959,998,227
Actuarially determined contribution requirement***	N/A	1,273,344,843	1,262,413,314

** Includes pension and OPEB. OPEB liabilities are calculated at the Municipal Bond-Index Rate (2.06% for 2021 and 3.72% for 2022)*
***As established by Public Act 100-0023. City contributions are shown in the year that they will be booked. The contributions will be paid in the following year and do not include any Advance Pension Payments.*
**** Based on the Board's funding policy.*

Summary of Key Valuation Results: Pension	2023	2022
Contributions for plan year beginning January 1:		
Actuarially determined contribution requirement	$1,273,344,843	$1,262,413,314
Expected employer contributions	976,027,541	959,998,227
Actual employer contributions*	--	959,999,000
Funding elements for plan year beginning January 1:		
Employer normal cost, including administrative expenses, adjusted for timing	135,775,060	$105,220,696
Fair value of assets	3,951,788,039	4,308,269,024
Actuarial value of assets	4,274,969,404	4,041,929,111
Actuarial accrued liability	18,752,996,441	18,401,579,972
Unfunded actuarial accrued liability on an actuarial value basis	14,478,027,037	14,359,650,861
Funded ratio on an actuarial value basis	22.80%	21.97%
GASB information as of December 31 of the prior year:		
Long-term expected rate of return	6.75%	7.00%
Municipal bond index	3.72%	2.06%
Single equivalent discount rate	6.57%	7.00%
Total pension liability	$19,107,887,483	$18,401,579,972
Plan fiduciary net position	3,951,788,039	4,308,269,024
Net pension liability	15,156,099,444	14,093,310,948
Plan fiduciary net position as a percentage of total pension liability	20.68%	23.41%

**Receivable amount to be paid the following year. Includes $234 million for 2023 that was prepaid during 2022.*

Summary of Key Valuation Results: OPEB		
	2023	**2022**
Contributions for plan year beginning January 1:		
Actuarially determined contribution requirement	N/A	N/A
Expected employer contributions	0	0
Actual employer contributions	--	--
Funding elements for plan year beginning January 1:		
Employer normal cost, including administrative expenses, adjusted for timing	$21,445	$79,139
Fair value of assets	0	0
Actuarial value of assets	0	0
Actuarial accrued liability	6,637,653	16,442,920
Unfunded actuarial accrued liability on an actuarial value basis	6,637,653	16,442,920
Funded ratio on an actuarial value basis	0.0%	0.0%
GASB information as of December 31 of the prior year:		
Discount rate	3.72%	2.06%
Total OPEB liability	$6,637,653	$16,442,920

Important Information About Actuarial Valuations

An actuarial valuation is a budgeting tool with respect to the financing of future projected obligations of a pension plan. It is an estimated forecast – the actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.

In order to prepare a valuation, Segal relies on a number of input items. These include:

Plan provisions	Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. It is important to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our report to confirm that Segal has correctly interpreted the plan of benefits.
Participant information	An actuarial valuation for a plan is based on data provided to the actuary by the fund staff. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
Financial information	Part of the cost of a plan will be paid from existing assets — the balance will need to come from future contributions and investment income. The valuation is based on the asset values as of the valuation date, typically reported by the fund staff. A snapshot as of a single date may not be an appropriate value for determining a single year's contribution requirement, especially in volatile markets. Plan sponsors often use an "actuarial value of assets" that differs from market value to gradually reflect year-to-year changes in the market value of assets in determining the contribution requirements.
Actuarial assumptions	In preparing an actuarial valuation, Segal starts by developing a forecast of the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of participants in each year, as well as forecasts of the plan's benefits for each of those events. In addition, the benefits forecasted for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments. The forecasted benefits are then discounted to a present value, typically based on an estimate of the rate of return that will be achieved on the plan's assets. All of these factors are uncertain and unknowable. Thus, there will be a range of reasonable assumptions, and the results may vary materially based on which assumptions are selected within that range. That is, there is no right answer (except with hindsight). It is important for any user of an actuarial valuation to understand and accept this constraint. The actuarial model may use approximations and estimates that will have an immaterial impact on our results. In addition, the actuarial assumptions may change over time, and while this can have a significant impact on the reported results, it does not mean that the previous assumptions or results were unreasonable or wrong.

The user of Segal's actuarial valuation (or other actuarial calculations) should keep the following in mind:

The actuarial valuation is prepared at the request of the Board. Segal is not responsible for the use or misuse of its report, particularly by any other party.
An actuarial valuation is a measurement at a specific date — it is not a prediction of a plan's future financial condition. Accordingly, Segal did not perform an analysis of the potential range of financial measurements, except where otherwise noted.
If the Board is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.
Segal does not provide investment, legal, accounting, or tax advice. Segal's valuation is based on our understanding of applicable guidance in these areas and of the plan provisions, but they may be subject to alternative interpretations. The Board should look to their other advisors for expertise in these areas.
While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex computer models and numerous inputs. In the event that an inaccuracy is discovered after presentation of Segal's valuation, Segal may revise that valuation or make an appropriate adjustment in the next valuation.
Segal's report shall be deemed to be final and accepted by the Board upon delivery and review. Trustees should notify Segal immediately of any questions or concerns about the final content.

As Segal has no discretionary authority with respect to the management or assets of the MEABF, it is not a fiduciary in its capacity as actuaries and consultants with respect to the MEABF.

Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. Deterministic cost projections are based on a proprietary forecasting model. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.

Section 2: Actuarial Valuation Results

A. Membership Data

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, inactive members, retirees and beneficiaries.

This section presents a summary of significant statistical data on these member groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A - D.

Chart 1
Member Population: 2013 – 2022

Year Ended December 31	Active Members	Inactive Members	Retired Members and Beneficiaries	Ratio of Non-Actives to Actives
2013	30,647	14,254	24,602	1.27
2014	30,160	15,495	24,855	1.34
2015	30,683	16,268	24,964	1.34
2016	30,296	16,876	25,236	1.39
2017	30,922	17,549	25,383	1.39
2018	31,285	17,575	25,577	1.38
2019	32,162	18,734	25,544	1.38
2020	31,327	20,139	25,471	1.46
2021	32,925	21,304	25,683	1.43
2022	35,369	22,586	25,894	1.37

Active Members

Plan costs are affected by the age, years of service, and salary of active members. In this year's valuation, there were 35,369 active members with an average age of 45.2, average years of service of 9.8, and average salary of $61,245. The 32,925 active members in the prior valuation had an average age of 45.8, average years of service of 10.5, and average salary of $60,780.

The active members included 114 members receiving ordinary disability benefits and 118 members receiving duty disability benefits. This compares to 147 and 126 members receiving ordinary and duty disability benefits, respectively, in the prior valuation.

Distribution of Active Members as of December 31, 2022

Chart 2
Actives by Age

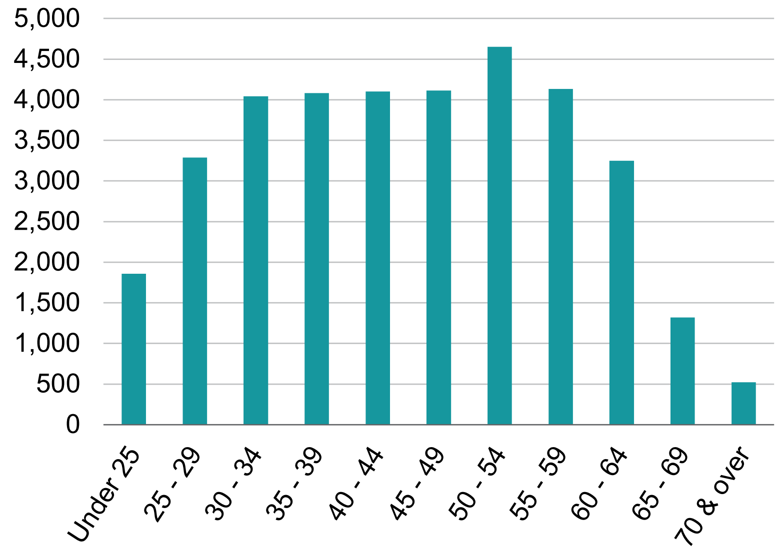
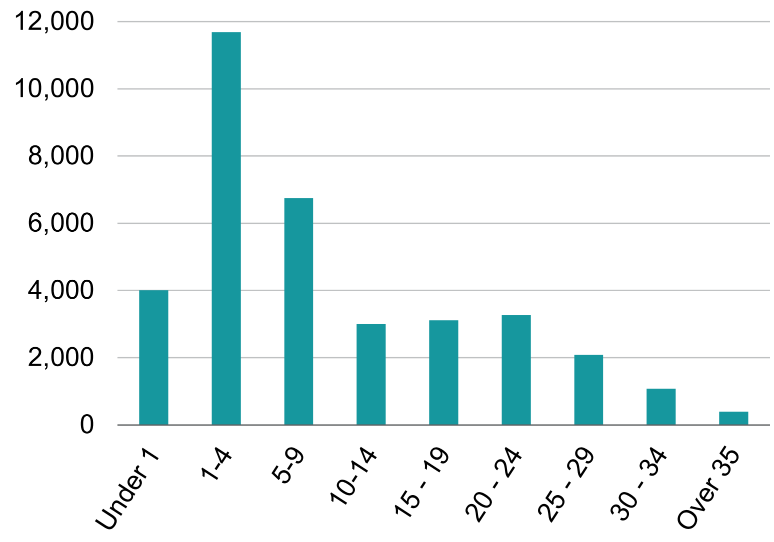


Chart 3
Actives by Years of Service



Inactive Members

In this year's valuation, there were 2,182 members with a vested right to a deferred or immediate vested benefit. In addition, there were 20,404 members entitled to a return of their account balance.

Retirees and Beneficiaries

As of December 31, 2022, 21,820 retired members and 4,074 beneficiaries were receiving total monthly benefits of $87,123,988. For comparison, in the previous valuation, there were 21,573 retired members and 4,110 beneficiaries were receiving total monthly benefits of $83,646,344.

Distribution of Pensioners as of December 31, 2022

Chart 4
Pensioners and Beneficiaries by Monthly Amount

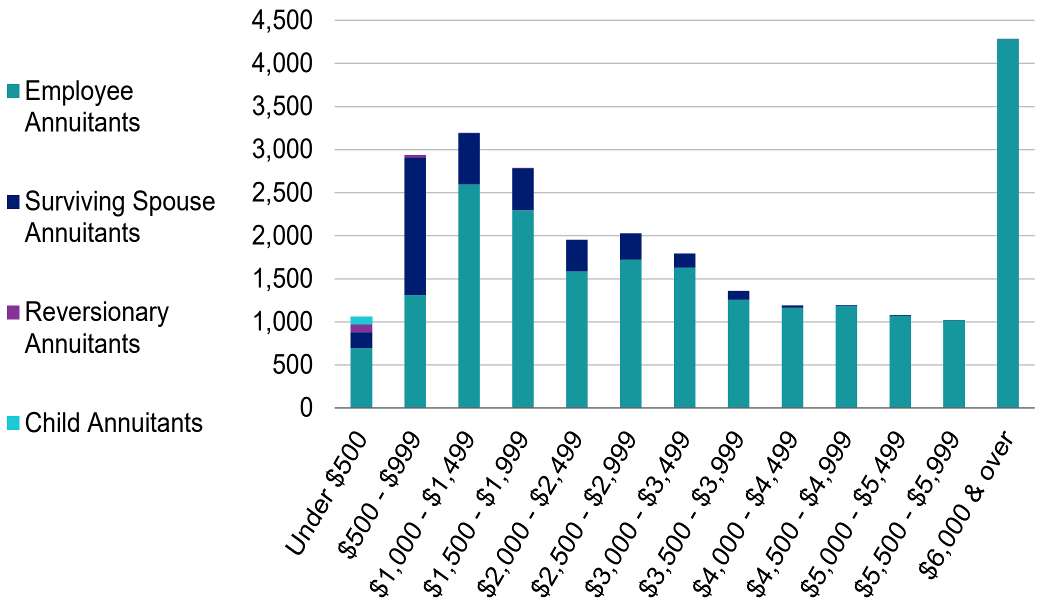
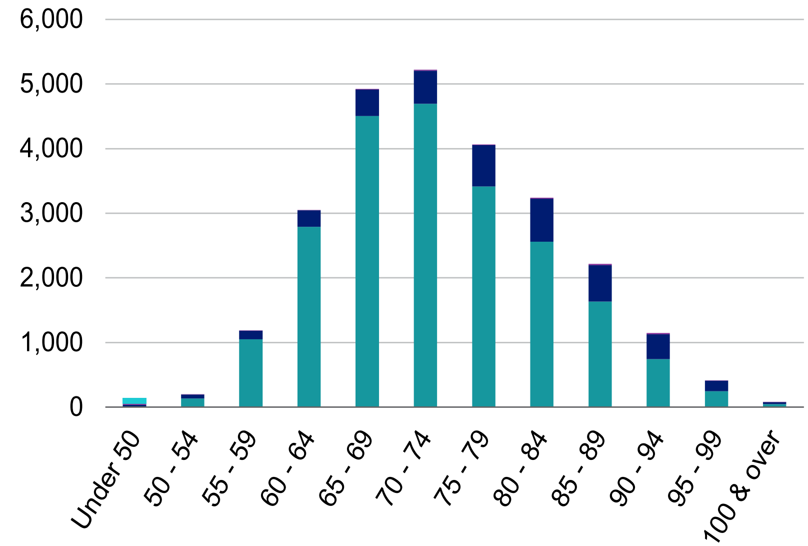


Chart 5
Pensioners and Beneficiaries by Age



B. Financial Information

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board has approved an asset valuation method that gradually adjusts to fair value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

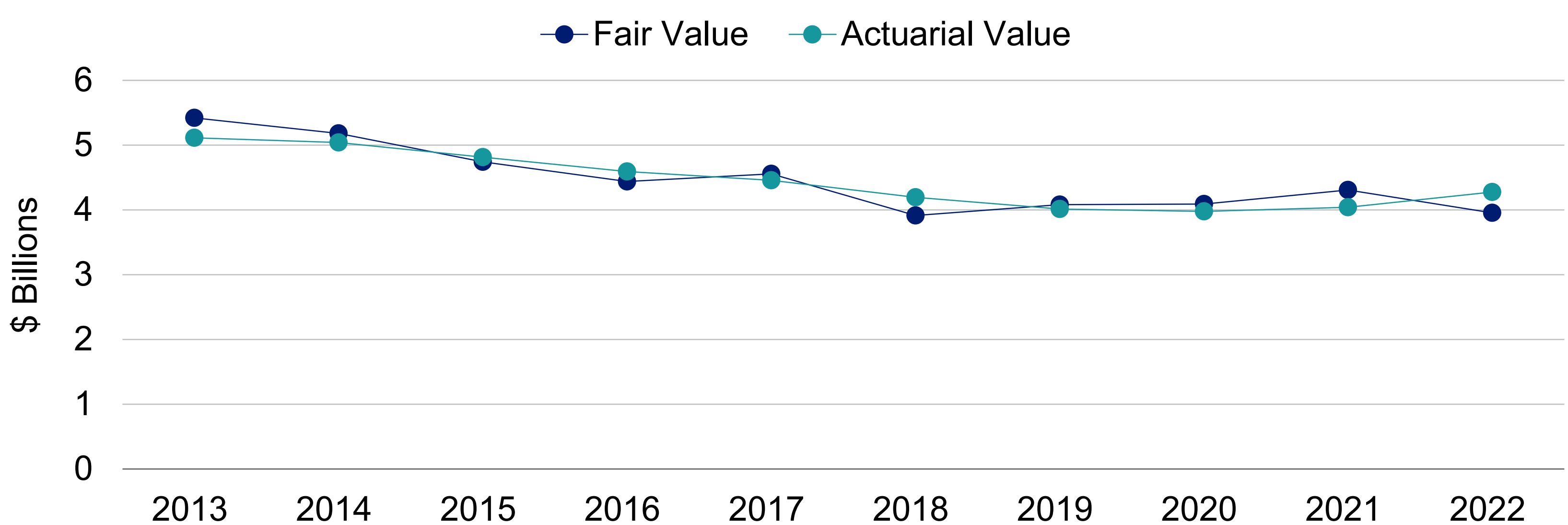
The amount of the adjustment to recognize fair value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

Chart 6
Determination of Actuarial Value of Assets
for Year Ended December 31, 2022 and December 31, 2021

				2022		2021
1.	Fair value of assets as of prior December 31			$4,308,269,024		$4,090,239,084
2.	Employer and employee contributions and other income			1,136,337,741		737,111,898
3.	Benefits and expenses			1,062,906,578		1,017,381,118
4.	Expected investment income			272,596,457		256,427,777
5.	Total investment income, including income for securities lending			(429,912,148)		498,299,160
6.	Investment gain/(loss) for the year ended December 31: (5) – (4)			(702,508,605)		241,871,383
7.	Fair value of assets as of December 31			3,951,788,039		4,308,269,024
8.	Calculation of unrecognized return	Original Amount	% Not Recognized		% Not Recognized	
	(a) Year ended December 31, 2022	($702,508,605)	80%	($562,006,884)		--
	(b) Year ended December 31, 2021	241,871,383	60%	145,122,831	80%	$193,497,106
	(c) Year ended December 31, 2020	76,512,169	40%	30,604,868	60%	45,907,302
	(d) Year ended December 31, 2019	315,489,098	20%	63,097,820	40%	126,195,640
	(e) Year ended December 31, 2018	(496,300,674)		0	20%	(99,260,135)
	(f) Total unrecognized return			(323,181,365)		266,339,913
9.	Total actuarial value of assets as of December 31: (7) – (8f)			$4,274,969,404		$4,041,929,111

Both the actuarial value and fair value of assets are representations of the Fund's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the fair value of assets. The actuarial asset value is significant because the Fund's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.

Chart 7
Actuarial Value of Assets vs. Fair Value of Assets as of December 31, 2013 – 2022



C. Actuarial Experience

To calculate the actuarially determined contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. Overall favorable experience relative to the assumptions (an actuarial gain) causes a decrease in the contribution requirement. On the other hand, overall less favorable experince relative to the assumptions (an actuarial loss) causes an increase in the contribution requirement.

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

The total loss is $177,919,931; $94,343,533 from investment losses and $83,576,398 in losses from all other sources. The net experience variation from individual sources other than investments was approximately 0.5% of the actuarial accrued liability. A discussion of the major components of the actuarial experience is on the following pages.

Chart 8
Actuarial Experience for Year Ended December 31, 2022

1.	Net gain/(loss) from investments*	($94,343,533)
2.	Net gain/(loss) from administrative expenses	(186,190)
3.	Net gain/(loss) from other experience**	(83,390,208)
4.	Net experience gain/(loss): (1) + (2) + (3)	($177,919,931)

* *Details in Chart 9*
** *Details in Chart 12*

Investment Experience

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the MEABF's investment policy. For valuation purposes, the assumed rate of return on the actuarial value of assets for the 2022 Plan Year was 7.0%. The assumed rate of return on the actuarial value of assets for 2023 and thereafter was changed to 6.75% in this year's valuation. The actual rate of return on an actuarial basis for the 2022 plan year was 4.40%.

Since the actual return for the year was less than the assumed return, the Fund experienced an actuarial loss during the year ended December 31, 2022, with regard to its investments.

Chart 9
Investment Experience

1.	Actual return	$159,609,130
2.	Average value of assets	3,627,895,193
3.	Actual rate of return: (1) ÷ (2)	4.40%
4.	Assumed rate of return	7.00%
5.	Expected return: (2) x (4)	253,952,663
6.	Actuarial gain/(loss): (1) – (5)	($94,343,533)

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. The chart below shows the rate of return on an actuarial basis compared to the fair value investment return for the last ten years, including five-year and ten-year averages.

Chart 10
Investment Return

Year Ended December 31	Actuarial Value*	Fair Value**
2013	11.1%	16.1%
2014	9.3%	5.1%
2015	6.9%	2.1%
2016	8.0%	6.6%
2017	8.3%	15.2%
2018	4.3%	(5.7%)
2019	5.6%	16.8%
2020	8.0%	10.4%
2021	9.7%	13.6%
2022	4.4%	(11.4%)
Average Returns		
Last 5 years	6.4%	4.2%
Last 10 years	7.5%	6.5%

* *As determined by Segal*

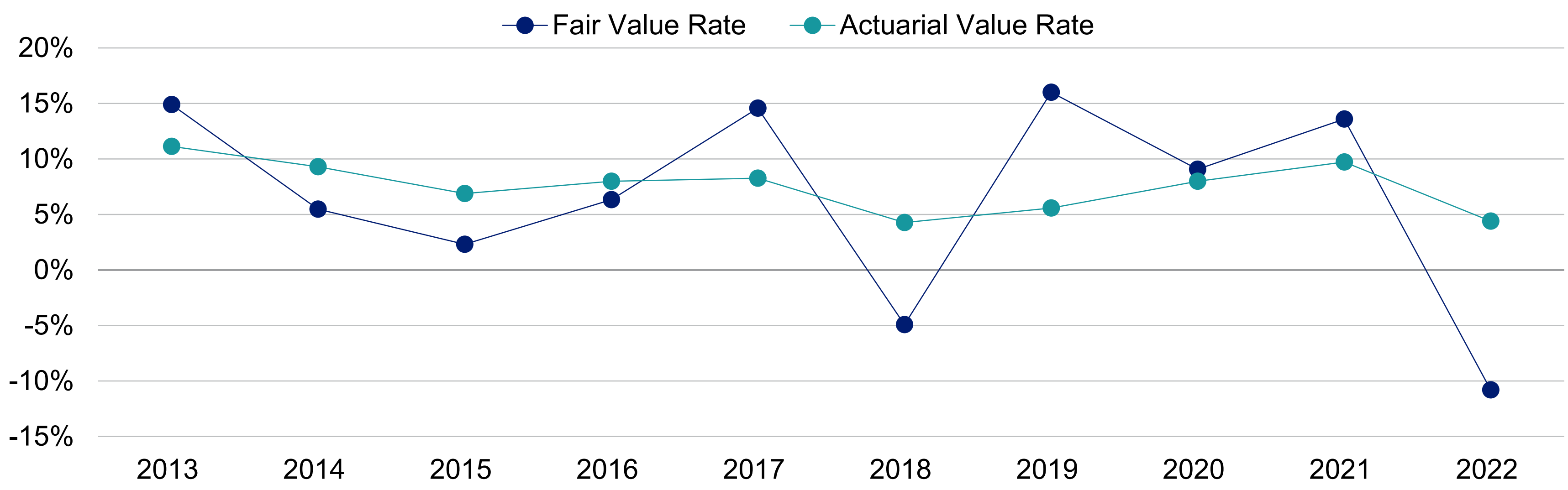
** *As determined by Investment Consultant, which may reflect updates from time to time*

Subsection B described the actuarial asset valuation method that gradually takes into account fluctuations in the fair value rate of return. The effect of this is to stabilize the actuarial rate of return, which contributes to leveling pension plan costs. Chart 11 illustrates that the asset returns on a fair value basis tend to be more volatile than asset returns on an actuarial basis.

Administrative Expenses

Administrative expenses for the year ended December 31, 2022, totaled $6,873,529 compared to the assumption of $6,687,339. This resulted in a loss of $186,190 for the year.

Chart 11
Fair Value and Actuarial Rates of Return for Years Ended December 31, 2013 – 2022



Other Experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- the extent of turnover among participants,
- retirement experience (earlier or later than projected),
- mortality (more or fewer deaths than projected),
- the number of disability retirements (more or fewer than projected), and
- salary increases (greater or smaller than projected).

The net loss from this other experience for the year ended December 31, 2022, amounted to $83,390,208, which is approximately 0.5% of the actuarial accrued liability.

A brief summary of the demographic gain/(loss) experience of the Fund for the year ended December 31, 2022, is shown in the chart below. These items are related to assumptions that were in effect for the December 31, 2021 actuarial valuation (prior to adoption of updated assumptions for December 31, 2022).

Chart 12
Experience Gain/(Loss) Due to Demographics For Year Ended December 31, 2022

1.	Less turnover than expected	($788,719)
2.	More or earlier retirement than expected	(58,861,306)
3.	More deaths than expected among retirees and beneficiaries	40,591,666
4.	Greater salary/service increases than expected for continuing actives	(58,034,441)
5.	New entrants	(23,441,804)
6.	Demographic loss associated with OPEB liability	(30,922)
7.	Miscellaneous	17,175,318
8.	Total	($83,390,208)

D. Development of Employer Costs

In order to evaluate the sufficiency of the statutorily required employer contribution, the Board has established an actuarially determined contribution funding policy. The amount of actuarially determined contribution is comprised of an employer normal cost payment and a payment on the unfunded actuarial accrued liability. This total amount is then divided by the projected payroll for active members to determine the actuarially determined contribution of 55.73% of payroll.

The actuarially determined contribution is based on a 30-year, level dollar amortization of the unfunded actuarial accrued liability. A 30-year "rolling" amortization will never fully fund the unfunded actuarial accrued liability. Segal and the Board are beginning the process of reviewing the funding policy in light of current model practice with respect to actuarial funding policies for public sector retirement plans.

Chart 13
Actuarially Determined Contribution: Pension

		Year Beginning January 1, 2023	
		Amount	**% of Payroll**
1.	Total normal cost*	$326,746,244	14.30%
2.	Administrative expenses	6,873,529	0.30%
3.	Expected employee contributions**	(202,207,460)	(8.85%)
4.	Employer normal cost: (1) + (2) + (3)	131,412,313	5.75%
5.	Employer normal cost, adjusted for timing***	135,775,060	5.94%
6.	Actuarial accrued liability****	18,752,996,441	
7.	Actuarial value of assets	4,274,969,404	
8.	Unfunded/(overfunded) actuarial accrued liability: (6) – (7)	14,478,027,037	
9.	Payment on unfunded actuarial accrued liability, adjusted for timing***	1,137,569,783	49.79%
10.	Actuarially determined contribution: (5) + (9)	1,273,344,843	55.73%
11.	Projected payroll	$2,284,830,059	

* *Reflects timing adjustment to the middle of the year. Excludes OPEB Liabilities*
** *Based on payroll, adjusted to the middle of the year*
*** *Employer contributions are assumed to be paid at the end of the year*
**** *Excludes OPEB liabilities*

The contribution requirements as of December 31, 2022, are based on all the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses, and changes in the actuarial assumptions.

Reconciliation of Actuarially Determined Contribution

The chart below details the changes in the actuarially determined contribution from the prior valuation to the current year's valuation.

Chart 14
Reconciliation of Actuarially Determined Contribution from December 31, 2021, to December 31, 2022

Actuarially Determined Contribution as of December 31, 2021	$1,262,413,314
Effect of plan amendment	0
Effect of change in asset method	0
Effect of expected change in amortization payment due to payroll growth	0
Effect of rolling amortization period	(12,665,498)
Effect of change in administrative expense assumption	192,371
Effect of change in other actuarial assumptions	(23,152,597)
Effect of contributions (more)/less than actuarially determined contribution	25,419,109
Effect of investment (gain)/loss	7,684,154
Effect of other (gains)/losses on accrued liability	6,908,047
Effect of net other changes: (gain)/loss	6,545,943
Total change	10,931,529
Actuarially Determined Contribution as of December 31, 2022	$1,273,344,843

E. Risk

Since the actuarial valuation results are dependent on a given set of assumptions and data as of a specific date, there is a risk that emerging results may differ significantly as actual experience differs from the assumptions.

This report does not contain a detailed analysis of the potential range of future measurements, but does include a brief discussion of some risks that may affect the Plan. Segal periodically provides the Board and MEABF staff with deterministic and stress-testing projections to show the impact of varying future investment returns.

We also strongly recommend that a stochastic analysis be prepared for MEABF in the context of a full risk assessment. A stochastic analysis would involve the projection of thousands of investment return trials over the full projection period. The stochastic projections would show the most likely range of outcomes as well as the best and worst case scenarios for MEABF. The stochastic analysis would also provide the range of employer contributions and the probability of employer contributions exceeding certain thresholds.

Investment Risk (the risk that returns will be different than expected)

If the actual return on the fair value of assets for the next Plan Year were 1% different from the assumed (either higher or lower), the projected unfunded actuarial liability would change by 0.2%, or about $35.3 million.

Since the Plan's assets are much larger than contributions, investment performance may create significant volatility in contribution requirements. For example, for each 1% difference in return from the assumed return, the projected employer contributions for the 2025 Fiscal Year would change by approximately $2.0 million.

The fair value rate of return over the last ten years has ranged from a low of -11.4% to a high of 16.8%, with an average of 6.5%.

Longevity Risk (the risk that mortality experience will be different than expected)

The actuarial valuation includes an expectation of future improvement in life expectancy. Emerging plan experience that does not match these expectations will result in either an increase or decrease in the MEABF funding policy and statutorily required contribution amounts.

Contribution Risk

The MEABF funding policy contribution requires payment of the normal cost and an amortization payment according to a schedule sufficient to become 90% funded by 2058. The statutorily required amount systematically underfunds MEABF. Among other things, it: a) is based on a funding target of 90% of the actuarial accrued liability (as opposed to 100%); and b) amortizes unfunded liability over a period of 36 years from the valuation date, which exceeds model practice related to actuarial funding policies for public sector retirement plans.

In 2022, the City of Chicago adopted a Debt Management and Pension Management Policy. According to the City's Pension Management Policy, "*…[s]tarting in fiscal year 2023, the City will annually budget for an advance pension contribution which, in addition to the statutorily required contribution, and in the determination of the CFO, will not increase the total net pension liability of the City's four pension funds based on best efforts projections and information available at the time of budget.*" We estimate that the City's advance pension payment of $101,640,000 for 2023 will reduce total required contributions through 2058 by approximately $220,000,000 compared to had the advance pension payment not been made.

If contributions beginning 2023 fall short of the statutory schedule included in Public Act 100-0023, the risk of insolvency increases substantially. If contributions fall significantly short of that schedule, insolvency is almost inevitable.

Even if contributions follow this schedule and future experience matches the current assumptions, we project the unfunded actuarial accrued liability will not be paid off. In addtion, because of the expected timing of employer contributions, the fair value of assets could drop to low levels between valuation dates in the short-term.

Demographic Risk (the risk that participant experience will be different than assumed)

Examples of this risk include:

- Actual retirements occurring earlier or later than assumed. The value of retirement plan benefits is sensitive to the rate of benefit accruals and any early retirement subsidies that apply.
- More or less active participant turnover than assumed.
- Individual salary increases higher or lower than assumed.

Actual Experience Over the Last 5 years and Implications for the Future

Past experience can help demonstrate the sensitivity of key results to the Plan's actual experience. Over the past five years:

- The investment gain/(loss) for a year has ranged from a gain of $96.7 million to a loss of $110.8 million.
- The non-investment gain/(loss) for a year has ranged from a loss of $19.4 million to a loss of $120.4 million.
- The funded percentage on the actuarial value of assets has ranged from a low of 21.97% to a high of 24.96%.

Maturity Measures

As pension plans mature, the cash need to fulfill benefit obligations will increase over time. Therefore, cash flow projections and analysis should be performed to assure that the Plan's asset allocation is aligned to meet emerging pension liabilities.

Currently the Plan has a non-active to active ratio of 1.37 compared to 1.43 in the prior year. For 2022, contributions recognized were $73.4 million **more** than benefits paid and administrative expenses compared to 280.3 million **less** in the prior year. As the Plan is now receiving significnatly more in contributions than it has in prior years, the plan is less reliant on investment income to meet benefit payments. As the Plan continues to mature, more cash will be needed from the investment portfolio to meet benefit payments.

Section 3: Supplemental Information

Exhibit A

Table of Plan Coverage

	Year Ended December 31		
Category	**2022**	**2021**	**Change From Prior Year**
Active members in valuation:			
Number*	35,369	32,925	7.4%
Average age	45.2	45.8	N/A
Average years of service	9.8	10.5	N/A
Total pensionable salary supplied by the Fund	$2,166,181,666	$2,001,180,743	8.2%
Average pensionable salary	$61,245	$60,780	0.8%
Total active vested members	12,929	13,198	-2.0%
Male members	13,020	12,495	4.2%
Female members	22,349	20,430	9.4%
Tier 1 members	14,376	15,238	-5.7%
Tier 2 members	6,462	6,785	-4.8%
Tier 3 members	14,531	10,902	33.3%
Inactive members	22,586	21,304	6.0%
Retirees:			
Number in pay status	21,820	21,573	1.1%
Average age	73.4	73.3	N/A
Average monthly benefit	$3,727	$3,616	3.1%
Surviving spouses:			
Number in pay status	3,856	3,880	-0.6%
Average age	78.3	78.3	N/A
Average monthly benefit	$1,488	$1,435	3.7%
Reversionary annuitants:			
Number in pay status	130	131	-0.8%
Average age	73.4	71.5	N/A
Average monthly benefit	$406	$396	2.5%
Children	88	99	-11.1%
Total number of members	83,849	79,912	4.9%

**Includes 273 and 232 members receiving disability benefits for 2021 and 2022, respectively.*

Exhibit B.1

All Members in Active Service as of December 31, 2022, By Age, Years of Service, and Total Salary

		Years of Service									
Age	**Total**	**Under 1**	**1 – 4**	**5 – 9**	**10 – 14**	**15 – 19**	**20 – 24**	**25 – 29**	**30 – 34**	**35 – 39**	**40 & Over**
Under 20	147	98	49	-	-	-	-	-	-	-	-
	$5,055,421	$3,503,988	$1,551,433	-	-	-	-	-	-	-	-
20 – 24	1,711	677	1,017	17	-	-	-	-	-	-	-
	$67,431,987	$26,859,090	$39,890,798	$682,099	-	-	-	-	-	-	-
25 – 29	3,290	835	2,083	366	6	-	-	-	-	-	-
	$155,711,563	$37,387,645	$100,493,557	$17,555,959	$274,402	-	-	-	-	-	-
30 – 34	4,039	617	2,125	1,076	211	10	-	-	-	-	-
	$219,428,268	$28,986,441	$114,644,161	$63,850,322	$11,338,619	$608,726	-	-	-	-	-
35 – 39	4,087	476	1,706	1,183	500	186	36	-	-	-	-
	$243,605,874	$23,685,626	$97,401,214	$75,965,077	$32,378,781	$11,763,928	$2,411,248	-	-	-	-
40 – 44	4,102	388	1,391	1,095	488	470	229	41	-	-	-
	$259,178,581	$18,847,549	$78,756,646	$72,160,801	$34,338,056	$34,863,259	$16,536,081	$3,676,187	-	-	-
45 – 49	4,112	292	1,154	896	462	516	528	245	19	-	-
	$274,668,538	$13,937,267	$63,680,374	$59,106,762	$31,962,191	$39,505,082	$42,932,016	$21,922,865	$1,621,981	-	-
50 – 54	4,650	287	944	826	459	598	771	563	196	6	-
	$322,538,468	$14,234,443	$52,923,320	$53,085,216	$30,327,386	$44,442,587	$59,552,005	$50,920,848	$16,625,103	$427,559	-
55 – 59	4,136	176	670	637	411	560	760	515	343	63	1
	$281,743,589	$8,210,052	$36,853,393	$39,406,040	$26,528,609	$37,036,884	$54,793,547	$43,984,504	$29,448,111	$5,361,081	$121,368
60 – 64	3,251	96	364	439	290	495	623	460	321	131	32
	$216,745,329	$4,179,974	$18,644,041	$27,011,948	$17,419,958	$31,835,848	$42,192,326	$35,010,630	$25,998,587	$11,534,720	$2,917,298
65 – 69	1,319	49	129	167	122	202	230	186	135	61	38
	$87,734,708	$2,071,613	$6,298,321	$10,118,731	$7,297,621	$12,038,836	$16,654,483	$13,644,341	$10,934,223	$5,217,398	$3,459,141
70 & Over	525	17	49	49	48	70	90	75	66	26	35
	$32,339,341	$477,424	$1,950,809	$2,274,550	$2,499,023	$4,094,941	$5,797,707	$5,395,348	$4,681,637	$2,279,770	$2,888,132
Total	35,369	4,008	11,681	6,751	2,997	3,107	3,267	2,085	1,080	287	106
	$2,166,181,666	$182,381,111	$613,088,066	$421,217,505	$194,364,647	$216,190,091	$240,869,412	$174,554,724	$89,309,643	$24,820,528	$9,385,939

Exhibit B.2

Male in Active Service as of December 31, 2022, By Age, Years of Service, and Total Salary

		Years of Service									
Age	**Total**	**Under 1**	**1 – 4**	**5 – 9**	**10 – 14**	**15 – 19**	**20 – 24**	**25 – 29**	**30 – 34**	**35 – 39**	**40 & Over**
Under 20	53	37	16	-	-	-	-	-	-	-	-
	$1,694,010	$1,251,766	$442,244	-	-	-	-	-	-	-	-
20 – 24	497	178	313	6	-	-	-	-	-	-	-
	$20,435,116	$7,307,585	$12,868,600	$258,931	-	-	-	-	-	-	-
25 – 29	1,080	250	700	129	1	-	-	-	-	-	-
	$56,260,043	$12,284,141	$36,957,717	$6,969,745	$48,440	-	-	-	-	-	-
30 – 34	1,482	196	741	454	85	6	-	-	-	-	-
	$93,513,068	$11,174,834	$46,334,619	$30,660,769	$4,928,384	$414,462	-	-	-	-	-
35 – 39	1,482	147	564	456	219	85	11	-	-	-	-
	$103,565,370	$8,540,480	$39,132,176	$34,042,327	$15,155,504	$5,853,675	$841,207	-	-	-	-
40 – 44	1,482	120	427	420	227	192	84	12	-	-	-
	$112,479,843	$7,467,138	$30,462,028	$33,894,017	$17,627,273	$15,324,436	$6,562,251	$1,142,700	-	-	-
45 – 49	1,568	88	344	363	210	215	225	113	10	-	-
	$125,087,022	$5,175,497	$23,881,277	$29,204,772	$16,656,301	$18,592,985	$19,806,468	$10,990,818	$778,905	-	-
50 – 54	1,831	84	312	338	207	283	300	234	70	3	-
	$153,303,669	$5,527,522	$22,180,823	$27,036,097	$15,986,822	$25,328,155	$27,198,840	$22,894,488	$6,882,971	$267,953	-
55 – 59	1,618	54	220	247	165	234	290	228	153	26	1
	$135,558,867	$3,047,439	$14,974,721	$19,769,214	$13,283,597	$18,806,794	$26,502,979	$22,202,811	$14,643,293	$2,206,651	$121,368
60 – 64	1,195	33	120	162	116	183	211	171	118	66	15
	$98,476,507	$1,616,951	$7,732,449	$12,526,193	$8,278,437	$14,414,208	$18,356,189	$16,160,606	$11,490,095	$6,398,853	$1,502,527
65 – 69	527	14	37	79	53	83	86	69	59	25	22
	$43,486,000	$655,605	$2,389,882	$5,708,746	$3,653,287	$6,243,354	$8,007,870	$6,182,382	$5,766,603	$2,658,149	$2,220,123
70 & Over	205	6	19	22	22	30	30	25	20	16	15
	$15,704,977	$131,161	$848,882	$1,458,829	$1,429,839	$2,303,673	$2,564,629	$2,299,583	$1,796,048	$1,440,709	$1,431,624
Total	13,020	1,207	3,813	2,676	1,305	1,311	1,237	852	430	136	53
	$959,564,494	$64,180,119	$238,205,418	$201,529,640	$97,047,883	$107,281,742	$109,840,433	$81,873,388	$41,357,914	$12,972,315	$5,275,642

Exhibit B.3

Female in Active Service as of December 31, 2022, By Age, Years of Service, and Total Salary

		Years of Service									
Age	Total	Under 1	1 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30 – 34	35 – 39	40 & Over
Under 20	94	61	33	-	-	-	-	-	-	-	-
	$3,361,411	$2,252,222	$1,109,188	-	-	-	-	-	-	-	-
20 – 24	1,214	499	704	11	-	-	-	-	-	-	-
	$46,996,871	$19,551,504	$27,022,198	$423,169	-	-	-	-	-	-	-
25 – 29	2,210	585	1,383	237	5	-	-	-	-	-	-
	$99,451,520	$25,103,504	$63,535,840	$10,586,214	$225,962	-	-	-	-	-	-
30 – 34	2,557	421	1,384	622	126	4	-	-	-	-	-
	$125,915,200	$17,811,607	$68,309,542	$33,189,553	$6,410,235	$194,264	-	-	-	-	-
35 – 39	2,605	329	1,142	727	281	101	25	-	-	-	-
	$140,040,504	$15,145,146	$58,269,037	$41,922,750	$17,223,277	$5,910,253	$1,570,040	-	-	-	-
40 – 44	2,620	268	964	675	261	278	145	29	-	-	-
	$146,698,738	$11,380,411	$48,294,619	$38,266,784	$16,710,783	$19,538,824	$9,973,830	$2,533,487	-	-	-
45 – 49	2,544	204	810	533	252	301	303	132	9	-	-
	$149,581,516	$8,761,770	$39,799,097	$29,901,990	$15,305,890	$20,912,097	$23,125,549	$10,932,047	$843,076	-	-
50 – 54	2,819	203	632	488	252	315	471	329	126	3	-
	$169,234,798	$8,706,921	$30,742,498	$26,049,119	$14,340,564	$19,114,432	$32,353,165	$28,026,361	$9,742,133	$159,607	-
55 – 59	2,518	122	450	390	246	326	470	287	190	37	-
	$146,184,722	$5,162,613	$21,878,672	$19,636,826	$13,245,013	$18,230,089	$28,290,568	$21,781,693	$14,804,819	$3,154,429	-
60 – 64	2,056	63	244	277	174	312	412	289	203	65	17
	$118,268,822	$2,563,022	$10,911,592	$14,485,755	$9,141,521	$17,421,640	$23,836,137	$18,850,024	$14,508,493	$5,135,867	$1,414,771
65 – 69	792	35	92	88	69	119	144	117	76	36	16
	$44,248,707	$1,416,008	$3,908,439	$4,409,985	$3,644,335	$5,795,481	$8,646,613	$7,461,959	$5,167,620	$2,559,249	$1,239,018
70 & Over	320	11	30	27	26	40	60	50	46	10	20
	$16,634,364	$346,264	$1,101,927	$815,721	$1,069,184	$1,791,268	$3,233,078	$3,095,765	$2,885,589	$839,061	$1,456,509
Total	22,349	2,801	7,868	4,075	1,692	1,796	2,030	1,233	650	151	53
	$1,206,617,172	$118,200,992	$374,882,648	$219,687,865	$97,316,764	$108,908,348	$131,028,979	$92,681,335	$47,951,729	$11,848,213	$4,110,298

Exhibit B.4

Board of Education Plan Members in Active Service as of December 31, 2022, By Age, Years of Service, and Total Salary

		Years of Service									
Age	**Total**	**Under 1**	**1 – 4**	**5 – 9**	**10 – 14**	**15 – 19**	**20 – 24**	**25 – 29**	**30 – 34**	**35 – 39**	**40 & Over**
Under 20	131	96	35	-	-	-	-	-	-	-	-
	$4,792,260	$3,471,956	$1,320,303	-	-	-	-	-	-	-	-
20 – 24	1,516	609	896	11	-	-	-	-	-	-	-
	$58,607,294	$23,546,377	$34,630,777	$430,140	-	-	-	-	-	-	-
25 – 29	2,567	638	1,631	292	6	-	-	-	-	-	-
	$111,339,282	$26,046,849	$72,023,049	$12,994,982	$274,402	-	-	-	-	-	-
30 – 34	2,810	421	1,475	725	186	3	-	-	-	-	-
	$130,474,869	$16,821,646	$67,302,791	$36,436,628	$9,717,922	$195,883	-	-	-	-	-
35 – 39	2,715	325	1,150	744	381	112	3	-	-	-	-
	$134,310,686	$13,347,404	$53,817,267	$39,129,632	$22,095,750	$5,744,346	$176,286	-	-	-	-
40 – 44	2,559	281	930	654	314	269	111	-	-	-	-
	$127,685,687	$11,428,253	$41,666,661	$33,494,337	$18,370,108	$16,373,546	$6,352,781	-	-	-	-
45 – 49	2,296	203	793	509	301	227	209	52	2	-	-
	$113,594,731	$8,183,970	$34,907,083	$25,288,442	$16,858,056	$12,379,154	$12,443,286	$3,374,484	$160,257	-	-
50 – 54	2,511	194	647	494	289	291	356	166	70	4	-
	$125,484,557	$8,336,482	$28,750,475	$23,962,527	$15,113,715	$15,205,305	$19,143,562	$10,475,839	$4,270,542	$226,111	-
55 – 59	2,239	128	451	363	273	321	392	180	110	21	-
	$109,476,122	$5,101,025	$20,277,031	$16,491,637	$14,156,541	$15,165,838	$19,236,589	$10,650,721	$7,021,952	$1,374,788	-
60 – 64	1,777	68	244	246	192	286	335	215	139	45	7
	$83,269,387	$2,665,191	$9,650,931	$10,571,230	$9,011,458	$13,386,192	$15,574,174	$11,424,408	$7,862,816	$2,685,524	$437,463
65 – 69	701	41	97	97	77	111	110	94	52	19	3
	$31,886,828	$1,449,392	$3,801,160	$4,319,570	$3,608,071	$4,862,365	$5,063,862	$4,911,182	$2,768,156	$957,091	$145,979
70 & Over	256	13	36	25	30	37	48	27	25	5	10
	$10,232,276	$406,455	$1,459,517	$851,267	$1,204,046	$1,405,300	$1,911,330	$1,275,661	$1,013,071	$313,509	$392,120
Total	22,078	3,017	8,385	4,160	2,049	1,657	1,564	734	398	94	20
	$1,041,153,979	$120,805,000	$369,607,046	$203,970,392	$110,410,070	$84,717,928	$79,901,870	$42,112,294	$23,096,794	$5,557,023	$975,563

Exhibit B.5

City Plan Members in Active Service as of December 31, 2022, By Age, Years of Service, and Total Salary

		Years of Service									
Age	**Total**	**Under 1**	**1 – 4**	**5 – 9**	**10 – 14**	**15 – 19**	**20 – 24**	**25 – 29**	**30 – 34**	**35 – 39**	**40 & Over**
Under 20	16	2	14	-	-	-	-	-	-	-	-
	$263,162	$32,032	$231,130	-	-	-	-	-	-	-	-
20 – 24	195	68	121	6	-	-	-	-	-	-	-
	$8,824,692	$3,312,713	$5,260,020	$251,959	-	-	-	-	-	-	-
25 – 29	719	197	448	74	-	-	-	-	-	-	-
	$44,163,836	$11,340,797	$28,262,062	$4,560,977	-	-	-	-	-	-	-
30 – 34	1,224	196	648	348	25	7	-	-	-	-	-
	$88,560,382	$12,164,795	$47,141,870	$27,220,177	$1,620,697	$412,843	-	-	-	-	-
35 – 39	1,370	151	555	439	119	73	33	-	-	-	-
	$109,180,227	$10,338,222	$43,526,447	$36,835,445	$10,283,031	$5,962,121	$2,234,962	-	-	-	-
40 – 44	1,530	107	455	441	169	200	118	40	-	-	-
	$130,361,162	$7,419,295	$36,564,179	$38,666,464	$15,521,988	$18,391,863	$10,183,300	$3,614,072	-	-	-
45 – 49	1,804	89	360	385	159	288	316	190	17	-	-
	$159,723,832	$5,753,297	$28,653,399	$33,630,746	$14,814,131	$26,952,986	$30,135,644	$18,321,906	$1,461,724	-	-
50 – 54	2,132	93	297	331	170	306	414	393	126	2	-
	$196,172,631	$5,897,961	$24,172,845	$29,031,189	$15,213,671	$29,084,042	$40,294,396	$39,922,517	$12,354,562	$201,448	-
55 – 59	1,884	48	217	272	138	235	366	334	232	41	1
	$170,820,223	$3,109,027	$16,300,711	$22,679,410	$12,372,068	$21,448,386	$35,368,567	$33,183,093	$22,325,266	$3,912,326	$121,368
60 – 64	1,464	28	120	192	98	206	285	243	182	85	25
	$132,308,112	$1,514,782	$8,993,110	$16,330,518	$8,408,500	$18,146,545	$26,308,127	$23,228,433	$18,135,772	$8,762,490	$2,479,834
65 – 69	616	8	32	68	45	91	120	92	83	42	35
	$55,683,601	$622,221	$2,497,161	$5,634,882	$3,689,550	$7,176,471	$11,590,621	$8,733,158	$8,166,067	$4,260,307	$3,313,162
70 & Over	266	4	13	23	18	32	42	48	40	21	25
	$21,919,104	$70,970	$491,292	$1,373,662	$1,294,977	$2,639,000	$3,886,377	$4,119,687	$3,580,866	$1,966,261	$2,496,012
Total	13,220	991	3,280	2,579	941	1,438	1,694	1,340	680	191	86
	$1,117,980,965	$61,576,111	$242,094,227	$216,215,431	$83,218,613	$130,214,256	$160,001,993	$131,122,867	$66,024,256	$19,102,833	$8,410,377

Exhibit C

Inactive Members as of December 31, 2022, By Age and Years of Service

		Years of Service								
Age	**Total**	**Under 1**	**1 – 4**	**5 – 9**	**10 – 14**	**15 – 19**	**20 – 24**	**25 – 29**	**30 – 34**	**35 & Over**
Under 20	5	5	0	0	0	0	0	0	0	0
20 – 24	343	209	133	1	0	0	0	0	0	0
25 – 29	1,466	475	949	42	0	0	0	0	0	0
30 – 34	2,754	705	1,793	246	10	0	0	0	0	0
35 – 39	3,187	716	2,025	355	79	12	0	0	0	0
40 – 44	3,119	585	1,922	397	147	54	14	0	0	0
45 – 49	2,660	424	1,513	438	184	60	35	6	0	0
50 – 54	2,739	442	1,421	404	248	120	79	24	1	0
55 – 59	2,230	353	1,079	345	233	154	49	12	5	0
60 – 64	1,706	292	837	278	160	87	35	13	4	0
65 – 69	1,084	165	577	183	66	44	30	13	4	2
70 & Over	1,293	191	689	215	91	40	31	18	11	7
Total	**22,586**	**4,562**	**12,938**	**2,904**	**1,218**	**571**	**273**	**86**	**25**	**9**

Average Age	47.40
Average Service	3.65

Exhibit D.1

Employee Annuitants as of December 31, 2022, By Age and Annual Benefit

	Male		Female	
Age	**Number**	**Annual Payments**	**Number**	**Annual Payments**
Under 55	67	$4,589,721	68	$4,327,771
55 – 59	476	29,850,637	576	27,116,908
60 – 64	1,239	73,093,878	1,552	59,751,618
65 – 69	1,871	112,882,814	2,632	93,877,435
70 – 74	1,820	107,017,844	2,875	102,049,087
75 – 79	1,218	69,679,425	2,197	79,839,849
80 – 84	837	46,667,433	1,721	59,862,368
85 – 89	498	26,595,651	1,138	38,261,568
90 – 94	233	13,184,482	509	16,451,924
95 – 99	62	3,488,969	185	5,804,641
100 & over	6	217,842	40	1,158,494
Totals	**8,327**	**$487,268,696**	**13,493**	**$488,501,663**

Exhibit D.2

Surviving Spouse Annuitants as of December 31, 2022, By Age and Annual Benefit

	Male		Female	
Age	**Number**	**Annual Payments**	**Number**	**Annual Payments**
Under 40	1	9,888	4	35,323
40 – 44	3	28,800	5	51,374
45 – 49	6	82,557	17	228,978
50 – 54	8	90,037	52	845,640
55 – 59	27	347,784	103	1,950,653
60 – 64	45	642,703	211	4,407,731
65 – 69	94	1,389,642	316	6,833,477
70 – 74	107	1,496,104	405	8,158,136
75 – 79	153	2,056,359	486	9,576,906
80 – 84	139	2,076,046	527	9,818,437
85 – 89	102	1,401,116	461	8,514,421
90 – 94	64	802,642	324	5,358,997
95 – 99	30	386,644	135	1,907,011
100 & over	7	79,862	24	264,263
Totals	**786**	**$10,890,184**	**3,070**	**$57,951,347**

Exhibit D.3

Reversionary Annuitants as of December 31, 2022, By Age and Annual Benefit

	Male		Female	
Age	**Number**	**Annual Payments**	**Number**	**Annual Payments**
Under 30	2	$3,924	--	--
30 – 34	2	4,170	1	$2,616
35 – 39	--	--	3	8,748
40 – 44	--	--	5	9,204
45 – 49	1	822	2	1,470
50 – 54	2	2,292	6	7,662
55 – 59	2	1,272	2	4,440
60 – 64	1	750	5	13,608
65 – 69	1	18,864	11	94,574
70 – 74	1	3,216	13	71,705
75 – 79	--	--	9	46,337
80 – 84	1	4,440	18	89,202
85 – 89	--	--	19	132,791
90 – 94	--	--	19	100,215
95 – 99	--	--	3	9,282
100 & over	--	--	1	1,374
Totals	**13**	**$39,750**	**117**	**$593,228**

Exhibit D.4

Retirees and Beneficiaries as of December 31, 2022, By Monthly Benefit Amount and Type

Amount of Monthly Benefit	Number of Employee Annuitants	Number of Spouse Annuitants	Number of Reversionary Annuitants	Number of Child Annuitants	Total Number of Annuitants
Under $500	698	184	90	88	1,060
$500 - $999	1,312	1,596	32	0	2,940
$1,000 - $1,499	2,595	597	4	0	3,196
$1,500 - $1,999	2,299	487	3	0	2,789
$2,000 - $2,499	1,588	362	1	0	1,951
$2,500 - $2,999	1,720	309	0	0	2,029
$3,000 - $3,499	1,630	166	0	0	1,796
$3,500 - $3,999	1,256	106	0	0	1,362
$4,000 - $4,499	1,163	27	0	0	1,190
$4,500 - $4,999	1,188	9	0	0	1,197
$5,000 - $5,499	1,072	9	0	0	1,081
$5,500 - $5,999	1,018	2	0	0	1,020
$6,000 - $6,499	899	1	0	0	900
$6,500 - $6,999	785	1	0	0	786
$7,000 & over	2,597	0	0	0	2,597
Totals	**21,820**	**3,856**	**130**	**88**	**25,894**

Exhibit E

Reconciliation of Member Data

	Active Members*	Inactive Members	Retirees	Beneficiaries	Total
Number as of December 31, 2021	32,925	21,304	21,573	4,110	79,912
New members	5,646	N/A	N/A	N/A	5,646
Terminations	-2,075	2,075	0	0	0
Retirements	-866	-248	1,114	N/A	0
Died with beneficiary	-35	-7	-198	240	0
Died without beneficiary	-24	-11	-676	-303	-1,014
Refunds	-619	-201	0	0	-820
Rehire	417	-417	0	N/A	0
Net transfers	0	92	0	0	92
Temporary annuity expired	N/A	N/A	-3	-16	-19
Data adjustment	0	-1	10	43	52
Number as of December 31, 2022	35,369	22,586	21,820	4,074	83,849

** Includes members receiving disability benefits*

Exhibit F.1

Summary Statement of Income and Expenses on a Fair Value Basis

	Year Ended December 31, 2022		Year Ended December 31, 2021	
Net assets at fair value at the beginning of the year		$4,308,269,024		$4,090,239,084
Contribution income:				
Employer contributions	$959,999,000		$573,701,021	
Employee contributions	176,338,741		163,410,877	
Administrative expenses	(6,873,529)		(6,687,339)	
Net contribution income		1,129,464,212		730,424,559
Investment income:				
Interest, dividends and other income	$73,272,880		$64,096,738	
Asset appreciation	(487,766,656)		450,551,681	
Less investment fees	(15,418,372)		(16,349,259)	
Net investment income		(429,912,148)		498,299,160
Total income available for benefits		$699,552,064		$1,228,723,719
Less benefit payments:				
Annuity payments	($1,014,031,467)		($971,820,479)	
Refund of contributions	(31,402,425)		(27,943,549)	
Disability payments	(10,150,649)		(10,427,376)	
Post-employment healthcare subsidies	(448,508)		(502,375)	
Net benefit payments		($1,056,033,049)		($1,010,693,779)
Change in reserve for future benefits		($356,480,985)		$218,029,940
Net assets at fair value at the end of the year		$3,951,788,039		$4,308,269,024

Exhibit F.2

Summary Statement of Income and Expenses on a Book Value Basis

	Year Ended December 31, 2022		Year Ended December 31, 2021	
Net assets at book value at the beginning of the year		$3,430,633,202		$3,377,121,009
Contribution income:				
Employer contributions	$959,999,000		$573,701,021	
Employee contributions	176,338,741		163,410,877	
Administrative expenses	(6,873,529)		(6,687,339)	
Net contribution income		1,129,464,212		730,424,559
Investment income:				
Interest, dividends and other income	$73,272,880		$64,096,738	
Realized investment gain/(loss)	(20,123,706)		286,033,934	
Less investment fees	(15,418,372)		(16,349,259)	
Net investment income		37,730,802		333,781,413
Total income available for benefits		$1,167,195,014		$1,064,205,972
Less benefit payments:				
Annuity payments	($1,014,031,467)		($971,820,479)	
Refund of contributions	(31,402,425)		(27,943,549)	
Disability payments	(10,150,649)		(10,427,376)	
Post-employment healthcare subsidies	(448,508)		(502,375)	
Net benefit payments		($1,056,033,049)		($1,010,693,779)
Change in reserve for future benefits		$111,161,965		$53,512,193
Net assets at book value at the end of the year		$3,541,795,167		$3,430,633,202

Exhibit G

Summary Statement of Plan Assets

	Year Ended December 31, 2022		Year Ended December 31, 2021	
Cash equivalents		$400		$400
Accounts receivable:				
Employer contributions	$764,778,889		$581,145,813	
Member contributions	14,528,847		10,336,396	
Interest and dividends	10,028,223		9,847,429	
Investments sold	6,405,565		14,571,449	
Miscellaneous	1,918,745		1,619,939	
Total accounts receivable		797,660,269		617,521,026
Investments, at fair value:				
Equities	$1,739,815,994		$2,221,289,902	
Fixed income	737,917,253		792,421,371	
Real estate	320,367,589		337,610,569	
Private debt	13,111,779		0	
Private equity	92,117,931		108,765,054	
Infrastructure	103,702,869		74,303,752	
Short-term investments	163,635,342		183,400,584	
Total investments at fair value		3,170,668,757		3,717,791,232
Invested securities lending collateral		226,402,857		250,946,224
Capital assets		1,255,296		462,304
Total assets		4,195,987,579		4,586,721,186
Less accounts payable:				
Securities lending collateral	($226,402,857)		($250,946,224)	
Investments purchased	(6,023,439)		(17,521,036)	
Lease liability	(1,162,603)			
Accounts payable	(10,610,641)		(9,984,902)	
Total accounts payable		($244,199,540)		($278,452,162)
Net assets at fair value		$3,951,788,039		$4,308,269,024
Net assets at actuarial value		$4,274,969,404		$4,041,929,111

Exhibit H

Development of the Fund Through December 31, 2022

Year Ended December 31	Employer Contributions*	Employee Contributions	Net Investment Return**	Administrative Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
2013	$157,704,971	$131,532,173	$537,153,324	$6,498,913	$779,004,027	$5,114,207,803
2014	158,797,631	129,971,981	450,561,553	6,567,842	807,673,694	5,039,297,432
2015	157,716,475	131,428,103	327,913,441	6,701,000	834,527,607	4,815,126,844
2016	157,444,029	130,390,848	361,858,504	7,056,784	867,397,200	4,590,366,241
2017	267,157,216***	134,764,920	359,129,908	6,473,006	888,173,535	4,456,771,744
2018	349,574,257	138,399,727	173,735,537	6,638,608	916,198,485	4,195,644,172
2019	421,000,000	146,645,216	211,686,012	6,740,268	955,382,936	4,012,852,196
2020	498,598,904****	157,797,710	289,992,062	7,117,942	975,085,037	3,977,037,893
2021	573,701,021	163,410,877	345,160,438	6,687,339	1,010,693,779	4,041,929,111
2022	959,999,000	176,338,741	159,609,130	6,873,529	1,056,033,049	4,274,969,404

* *Receivable amount to be paid the following year*

** *Actuarial investment return, net of investment fees*

*** *Includes other OPEB income of $5,393,581*

**** *Includes $60,000,000 of contributions received in July 2020, which resulted in a charge of $401,096 to receive this portion of contributions early.*

Exhibit I

Development of Unfunded Actuarial Accrued Liability

		Year Ending December 31				
		2022	**2021**	**2020**	**2019**	**2018**
1.	Unfunded actuarial accrued liability at beginning of year*	$14,376,093,781	$13,870,189,046	$13,283,443,186	$12,612,970,144	$11,825,624,451
2.	Normal cost at beginning of year*	270,536,594	253,120,123	243,081,392	234,883,135	229,786,056
3.	Total contributions	(1,136,337,741)	(737,111,898)	(656,396,614)	(567,645,216)	(487,973,984)
4.	Interest					
	(a) Unfunded actuarial accrued liability and normal cost	$1,025,264,126	$988,631,642	$946,856,721	$899,349,730	$843,878,736
	(b) Total contributions	(8,115,034)	(5,622,649)	(7,330,997)	(5,045,776)	(4,762,064)
	(c) Total interest: (4a) + (4b)	1,017,149,092	983,008,993	939,525,724	894,303,954	839,116,672
5.	Expected unfunded actuarial accrued liability: (1) + (2) + (3) + (4c)	14,527,441,726	14,369,206,264	$13,809,653,688	$13,174,512,017	$12,406,553,195
6.	Changes due to (gain)/loss from:					
	(a) Investments	$94,343,533	($96,656,744)	($35,846,593)	$53,467,350	$110,783,177
	(b) Demographics and other	83,576,398	119,987,181	96,381,951	19,524,907	95,633,772
	(c) Total changes due to (gain)/loss: (6a) + (6b)	177,919,931	23,330,437	60,535,358	72,992,257	206,416,949
7.	Change due to plan provisions	0	0	0	35,938,912	0
8.	Change in actuarial assumptions	(220,696,967)	(16,442,920)	0	0	0
9.	Unfunded actuarial accrued liability at end of year*: (5) + (6c) + (7) + (8)	$14,484,664,690	$14,376,093,781	$13,870,189,046	$13,283,443,186	$12,612,970,144

** Includes pension and OPEB liabilities for years ended December 31, 2019, and each year thereafter.*

Exhibit J
Definition of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Actuarial Accrued Liability for Actives:	The equivalent of the accumulated normal costs allocated to the years before the valuation date.
Actuarial Accrued Liability for Pensioners:	The single-sum value of lifetime benefits to existing pensioners. This sum takes into account life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.
Actuarial Cost Method:	A procedure allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Actuarial Accrued Liability that are used to determine the actuarially determined contribution.
Actuarial Gain or Loss:	A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. Through the actuarial assumptions, rates of decrement, rates of salary increase, and rates of fund earnings have been forecasted. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which may be the same as forecasted, or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., MEABF's assets earn more than projected, salary increases are less than assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results yield in actuarial liabilities that are larger than projected. Actuarial gains will shorten the time required for funding of the actuarial balance sheet deficiency while actuarial losses will lengthen the funding period.
Actuarially Equivalent:	Of equal actuarial present value, determined as of a given date and based on a given set of Actuarial Assumptions.
Actuarial Present Value (APV):	The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. Each such amount or series of amounts is: a. Adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.) b. Multiplied by the probability of the occurrence of an event (such as survival, death, disability, withdrawal, etc.) on which the payment is conditioned, and c. Discounted according to an assumed rate (or rates) of return to reflect the time value of money.

Actuarial Present Value of Future Plan Benefits:	The Actuarial Present Value of benefit amounts expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age, anticipated future compensation, and future service credits. The Actuarial Present Value of Future Plan Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive members entitled to either a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.
Actuarial Valuation:	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial Valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB, such as the Actuarially Determined Contribution (ADC) and the Net Pension Liability (NPL).
Actuarial Value of Assets (AVA):	The value of the Fund's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly plans use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the ADC.
Actuarially Determined:	Values that have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the law.
Actuarially Determined Contribution (ADC):	The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under the Plan's funding policy. The ADC consists of the Employer Normal Cost and the Amortization Payment.
Amortization Method:	A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization Payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.
Amortization Payment:	The portion of the pension plan contribution, or ADC, that is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.
Assumptions or Actuarial Assumptions:	The estimates upon which the cost of the Fund is calculated, including: a. <u>Investment return</u> - the rate of investment yield that the Fund will earn over the long-term future; b. <u>Mortality rates</u> - the death rates of employees and pensioners; life expectancy is based on these rates; c. <u>Retirement rates</u> - the rate or probability of retirement at a given age; d. <u>Withdrawal rates</u> - the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.

Defined Benefit Plan:	A retirement plan in which benefits are defined by a formula applied to the member's compensation and/or years of service.
Defined Contribution Plan:	A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance.
Employer Normal Cost:	The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.
Experience Study:	A periodic review and analysis of the actual experience of the Fund that may lead to a revision of one or more Actuarial Assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified as deemed appropriate by the Actuary.
Funded Ratio:	The ratio of the Actuarial Value of Assets (AVA) to the Actuarial Accrued Liability (AAL). Plans sometimes calculate a fair value funded ratio, using the fair value of assets, rather than the AVA, as another measure of the Plan's health.
GASB:	Governmental Accounting Standards Board.
GASB 67 and GASB 68:	Governmental Accounting Standards Board Statements No. 67 and No. 68. These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 68 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 67 sets the rules for the systems themselves. Governmental Accounting Standards Board Statements No. 67 and No. 68 are the successor statements to GASB Statements No. 25 and No. 27.
GASB 74 and GASB 75:	The Governmental Accounting Standards Board (GASB) issued Statement Number 74 Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, and Statement Number 75 – Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions. Under these statements, all state and local government entities that provide other post-employment benefits are required to report the cost of these benefits on their financial statements. The accounting standards supplement cash accounting, under which the expense for postemployment benefits is equal to benefit and administrative costs paid on behalf of retirees and their dependents (i.e., a pay-as-you-go basis).
Investment Return:	The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.
Net Pension Liability (NPL):	The Net Pension Liability is equal to the Total Pension Liability minus the Plan Fiduciary Net Position
Normal Cost:	That portion of the Actuarial Present Value of pension plan benefits and expenses allocated to a valuation year by the Actuarial Cost Method. Any payment in respect of an Unfunded Actuarial Accrued Liability is not part of Normal Cost (see Amortization Payment). For pension plan benefits that are provided in part by employee contributions, Normal Cost refers to the total of employee contributions and employer Normal Cost unless otherwise specifically stated.

Open Amortization Period:	An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. If the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount, or in relation to covered payroll, if the actuarial assumptions are realized.
Plan Fiduciary Net Position:	Fair value of assets.
Total Pension Liability (TPL):	The actuarially accrued liability under the entry age normal cost method and based on the blended discount rate as described in GASB 67 and 68.
Unfunded Actuarial Accrued Liability:	The extent to which the actuarial accrued liability of the Plan exceeds the assets of the Plan. There is a wide range of approaches to paying off the unfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.
Valuation Date or Actuarial Valuation Date:	The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Plan Benefits is determined. The expected benefits to be paid in the future are discounted to this date.

Section 4: Reporting Information

Exhibit I – Summary of Actuarial Valuation Results

The valuation was made with respect to the following data supplied to us:			
1. Pensioners as of the valuation date (including 4,074 beneficiaries)			25,894
2. Members inactive during year ended December 31, 2022, with vested rights			2,182
3. Members active during the year ended December 31, 2022			35,369
Fully vested		12,929	
Not vested		22,440	
4. Other non-vested inactive members as of the valuation date			20,404

Determination of Actuarial Accrued Liability*:

	Actuarial Present Value of Projected Benefits	Actuarial Present Value of Future Normal Costs	Actuarial Accrued Liability
1. Active members			
a. Retirement benefits	$8,089,631,008	$1,833,352,188	$6,256,278,820
b. Death benefits	103,321,798	39,673,536	63,648,262
c. Withdrawal benefits	996,411,698	757,730,264	238,681,434
d. Total	$9,189,364,504	$2,630,755,988	$6,558,608,516
2. Inactive vested members	$527,156,412	--	$527,156,412
3. Inactive non-vested members	198,473,488	--	198,473,488
4. Retirees and beneficiaries	11,468,758,025	--	11,468,758,025
5. Total	$21,383,752,429	$2,630,755,988	$18,752,996,441

Determination of Unfunded Actuarial Accrued Liability:	
1. Actuarial accrued liability	$18,752,996,441
2. Actuarial value of assets ($3,951,788,039 at fair value)	$4,274,969,404
3. Unfunded actuarial accrued liability	$14,478,027,037

Excludes OPEB liabilities

Exhibit I – Summary of Actuarial Valuation Results *(continued)*

Components of normal cost:		Tier 1		Tier 2		Tier 3		Total	
		% of Payroll	Amount	% of Payroll	Amount	% of Payroll	Amount	% of Payroll	Amount
1.	Retirement	12.03%	$130,321,856	6.76%	$28,375,001	7.29%	$56,952,422	9.44%	$215,649,279
2.	Turnover	3.61%	39,122,140	3.23%	13,564,511	3.79%	29,637,650	3.60%	$82,324,301
3.	Mortality	0.19%	2,109,985	0.22%	935,318	0.20%	1,519,318	0.20%	$4,564,621
4.	Disability	0.60%	6,500,680	0.60%	2,520,662	0.60%	4,687,638	0.60%	13,708,980
5.	Total normal cost: (1) + (2) + (3) + (4)	16.43%	$178,054,661	10.81%	$45,395,492	11.88%	$92,797,028	13.84%	$316,247,181
6.	Total normal cost, adjusted for timing*	16.98%	183,965,883	11.16%	46,902,573	12.27%	95,877,788	14.30%	326,746,244
7.	Administrative expenses	0.30%	3,259,368	0.30%	1,263,832	0.30%	2,350,329	0.30%	6,873,529
8.	Total normal cost, including administrative expenses: (6) + (7)	17.28%	$187,225,251	11.47%	$48,166,405	12.57%	$98,228,117	14.60%	$333,619,773
9.	Expected employee contributions**							-8.85%	-202,207,460
10.	Employer normal cost: (8) + (9)							5.75%	$131,412,313
11.	Employer normal cost, adjusted for timing***							5.94%	135,775,060

* *Reflects timing adjustment to the middle of the year. Excludes OPEB.*
** *Based on payroll, adjusted to the middle of the year*
*** *Reflects timing adjustment to the end of the year*

Exhibit II – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL)* (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)] / (c)
12/31/2013	$5,114,207,803	$13,828,920,032	$8,714,712,229	36.98%	$1,580,288,709	551.46%
12/31/2014	5,039,297,432	12,307,094,062	7,267,796,630	40.94%	1,602,977,593	453.39%
12/31/2015	4,815,126,844	14,647,114,971	9,831,988,127	32.87%	1,643,480,973	598.24%
12/31/2016	4,590,366,241	15,055,348,696	10,464,982,455	30.49%	1,646,939,238	635.42%
12/31/2017	4,456,771,744	16,282,396,195	11,825,624,451	27.37%	1,686,532,720	701.18%
12/31/2018	4,195,644,172	16,808,614,316	12,612,970,144	24.96%	1,734,595,691	727.25%
12/31/2019	4,012,852,196	17,260,356,470	13,247,504,274	23.25%	1,802,790,156	734.83%
12/31/2020	3,977,037,893	17,814,812,242	13,837,774,349	22.32%	1,861,905,323	743.21%
12/31/2021	4,041,929,111	18,401,579,972	14,359,650,861	21.97%	2,001,180,743	717.56%
12/31/2022	4,274,969,404	18,752,996,441	14,478,027,037	22.80%	2,166,181,666	668.37%

**Excludes OPEB*

Exhibit III – Solvency Test

Actuarial Valuation Date	(1) Active and Inactive Member Contribution	(2) Retirees and Beneficiaries	(3) Active and Inactive Members (ER Financed Portion)	Actuarial Value of Assets	Portion (%) of Present Value Covered By Assets (1)	(2)	(3)
12/31/2013	$1,763,193,047	$7,938,850,949	$4,154,449,370	$5,114,207,803	100.00%	42.21%	0.00%
12/31/2014	1,816,477,893	7,029,523,772	3,478,587,338	5,039,297,432	100.00%	45.85%	0.00%
12/31/2015	1,874,982,804	8,427,968,220	4,352,310,693	4,815,126,844	100.00%	34.89%	0.00%
12/31/2016	1,918,150,355	8,725,032,932	4,412,165,409	4,590,366,241	100.00%	30.63%	0.00%
12/31/2017	1,952,652,300	9,905,000,389	4,424,743,506	4,456,771,744	100.00%	25.28%	0.00%
12/31/2018	1,992,398,627	10,308,704,123	4,507,511,566	4,195,644,172	100.00%	21.37%	0.00%
12/31/2019*	2,049,285,500	10,648,208,601	4,598,801,281	4,012,852,196	100.00%	18.44%	0.00%
12/31/2020*	2,127,044,611	10,919,860,748	4,800,321,580	3,977,037,893	100.00%	16.94%	0.00%
12/31/2021*	2,176,979,366	11,325,872,685	4,915,170,841	4,041,929,111	100.00%	16.47%	0.00%
12/31/2022*	2,227,955,939	11,474,011,008	5,057,667,147	4,274,969,404	100.00%	17.84%	0.00%

** Includes pension and OPEB*

Exhibit IV – Funded Ratio

A critical piece of information regarding the Plan's financial status is the funded ratio. This ratio compares the actuarial value of assets to the actuarial accrued liabilities of the Plan as calculated. High ratios indicate a well-funded plan with assets sufficient to cover the plan's actuarial accrued liabilities. Lower ratios may indicate recent changes to benefit structures, funding of the plan below actuarial requirements, poor asset performance, or a variety of other factors.

The chart below depicts a history of the funded ratios for this plan using the actuarial value of assets, the fair value of assets and the book value of assets.

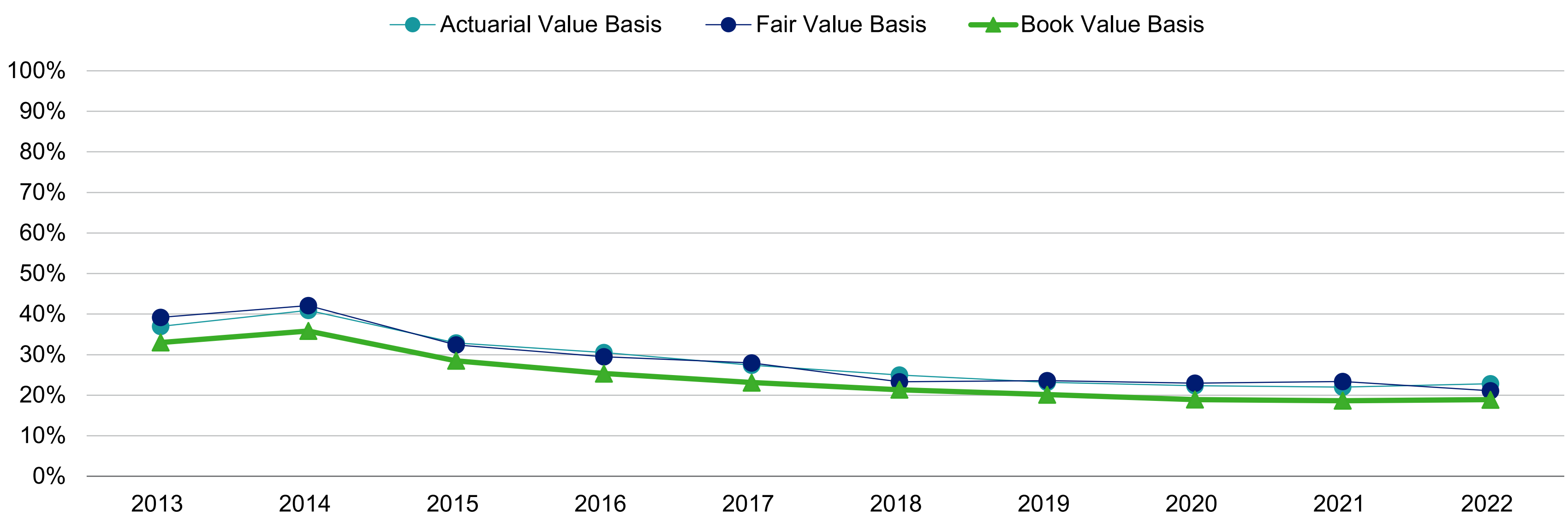


Exhibit V – Statutory Reserves as of December 31, 2022

The table below shows the statutory reserves as of December 31, 2022, as required by State statutes. The “New in 2022” columns on the left show the Reserves for members who started receiving a pension benefit during the year and the middle columns “Continuing from 2021” show the Reserves for members who were included in this exhibit last year that continued to receive a pension benefit during 2022.

	New in 2022			Continuing from 2021			Total		
	Annuity Payment Fund	Prior Service Fund	Total	Annuity Payment Fund	Prior Service Fund	Total	Annuity Payment Fund	Prior Service Fund	Total
Statutory Reserve*									
Retirees	$227,950,147	$462,830,738	$690,780,885	$1,891,454,374	$6,504,822,685	$8,396,277,059	$2,119,404,521	$6,967,653,423	$9,087,057,944
Future Surviving Spouses	42,652,133	19,807,782	62,459,915	441,580,119	490,922,852	932,502,971	484,232,252	510,730,634	994,962,886
Spouses**	29,959,512	20,340,200	50,299,712	213,610,930	172,010,578	385,621,508	243,570,442	192,350,778	435,921,220
Annual Benefits									
Retirees	$21,452,162	$27,335,048	$48,787,210	$239,965,779	$687,017,369	$926,983,148	$261,417,941	$714,352,417	$975,770,358
Future Surviving Spouses	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Spouses**	$3,638,567	$3,099,669	$6,738,236	$32,921,299	$29,814,974	$62,736,273	$36,559,866	$32,914,643	$69,474,509

** As required by State statutes, Statutory Reserves are calculated using the Combined Annuity Mortality Table with interest at 3.00 percent per annum, except for employees and spouses of employees who were participants on or before January 1, 1952, for whom the American Experience Table of Mortality with interest at 4.00 percent per annum is used.*

*** Surviving spouses also include reversionary annuitants.*

Exhibit VI – State Reporting Disclosure (40 ILCS 5/1A-110 (b)(5)(Iv))

	2022	2021
Projected Unit Credit Accrued Liability (PUCAL)*		
Payable to Retirees and Beneficiaries	$11,474,011,008	$11,325,872,685
Current Active and Inactive Employees:		
Accumulated Active and Inactive Employee Contributions	2,227,955,939	2,176,979,366
Payable to Vested and Non-Vested Employees	3,205,015,627	3,118,029,149
Total PUCAL	$16,906,982,574	$16,620,881,200
Net Assets Available for Benefits, Actuarial Value	$4,274,969,404	$4,041,929,111
Unfunded PUCAL (PUCAL in excess of assets)	$12,632,013,170	$12,578,952,089
Percent Funded	25.29%	24.32%
Unfunded PUCAL as Percent of Payroll	583.15%	628.58%
Payroll	$2,166,181,666	$2,001,180,743

** Includes pension and OPEB*

Exhibit VII – Actuarial Reserve Liabilities as of December 31, 2022

	2022	2021
Accrued Liability for Active and Inactive Participants*	$7,284,238,417	$7,088,076,410
Reserves for:		
Service Retirement Pension	$10,187,923,002	$10,070,291,515
Future Spouses of Current Retirees	780,164,178	739,164,013
Surviving Spouse Pension	499,893,842	503,131,075
Child Annuitants	777,002	916,959
OPEB Benefits	6,637,653	16,442,920
Total Accrued Liability**	18,759,634,094	18,418,022,892
Actuarial Net Assets	4,274,969,404	4,041,929,111
Unfunded Actuarial Liabilities	14,484,664,690	14,376,093,781

** Accrued liability for active participants includes retirement liability for members in ordinary or duty disability status. Liability for disability benefits is recognized as a one-year term cost of 0.60 percent of pay added to the normal cost for 2022 and 0.75 percent of pay for 2021.*

*** Includes pension and OPEB*

Exhibit VIII – 50-Year Projection of Contributions, Liabilities, and Assets

Based on the results of the December 31, 2022, actuarial valuation, we have projected valuation results for a 50-year period.

For purposes of the projections, all assets, contributions, and benefit payments have been included. Our projections of contributions, liabilities, and assets are based on the actuarial assumptions, membership data and benefit provisions that were used for the regular actuarial valuation.

In order to determine projected contributions, liabilities, and assets, certain calculations need to be made that are not normally required in a regular actuarial valuation. Benefit payout requirements, actuarial liabilities, and payroll were estimated over the 50-year period from 2023 through 2072 by projecting the membership of the Fund over the 50-year period, taking into account the impact of new entrants into the Fund over the 50-year period.

To make the required projections, assumptions needed to be made regarding the age and salary distribution of new entrants as well as the size of the active membership of the Fund. The assumptions regarding the profile of new entrants to the Fund were based on the recent experience of the Fund with regard to new entrants. The size of the active membership of the Fund was assumed to remain constant over the 50-year projection period. The results of our projections are shown on the following pages.

According to the City's Pension Management Policy, "*…[s]tarting in fiscal year 2023, the City will annually budget for an advance pension contribution which, in addition to the statutorily required contribution, and in the determination of the CFO, will not increase the total net pension liability of the City's four pension funds based on best efforts projections and information available at the time of budget.*" For 2023 the City's advance pension payment of $101,640,000 is reflected in the Employer Contributions (Cash Basis) for that Fiscal Year. No future additional advanced pension payments are reflected in the schedule.

In response to a 2013 lawsuit, it was ruled that all eligible City of Chicago employee annuitants hired before July 1, 2003 (both current and future employee annuitants, but not spouse or child annuitants) are entitled to receive a health care insurance premium subsidy of $25 per month if the annuitant participates in a group health care plan for which the Fund offers to deduct health insurance premiums from monthly annuities. These future payments were included in the projected benefit payments.

Exhibit VIII – 50-Year Projection of Contributions, Liabilities, and Assets *(continued)*

Based on the December 31, 2022 actuarial valuation.
(All dollar amounts are in thousands. Employer Contributions are shown on a cash basis in the fiscal year they are actually paid, not receivable. Actuarial Liability and asset figures as of end of year.)

Fiscal Year	Employee Contributions	Employer Contributions (Cash Basis)	Pensionable Payroll	Normal Cost	Benefit Payouts	Estimated Expenses	Total Actuarial Liability	Market Value of Assets	Actuarial Value of Assets	Unfunded Actuarial Liability	Funded Ratio
2022	$176,339	$573,701	$2,060,689	$264,072	$1,056,033	$6,874	$18,759,634	$3,951,788	$4,274,969	$14,484,665	22.8%
2023	202,207	1,061,639	2,284,830	316,268	1,143,377	7,045	19,181,096	4,319,414	4,628,868	14,552,228	24.1%
2024	205,874	976,028	2,341,631	314,590	1,203,311	7,222	19,567,249	4,513,427	4,746,056	14,821,193	24.3%
2025	213,865	941,017	2,401,382	319,516	1,251,302	7,402	19,935,101	4,696,866	4,837,368	15,097,733	24.3%
2026	222,157	958,885	2,464,242	324,698	1,299,376	7,587	20,283,606	4,870,283	4,870,283	15,413,323	24.0%
2027	230,656	977,798	2,529,116	330,002	1,347,518	7,777	20,611,517	5,033,759	5,033,759	15,577,758	24.4%
2028	239,402	997,327	2,596,253	335,487	1,393,910	7,971	20,919,446	5,189,409	5,189,409	15,730,037	24.8%
2029	248,330	1,017,583	2,665,477	341,150	1,438,929	8,170	21,207,654	5,339,036	5,339,036	15,868,618	25.2%
2030	257,473	1,038,570	2,737,021	346,984	1,485,118	8,375	21,473,781	5,482,009	5,482,009	15,991,772	25.5%
2031	266,724	1,060,324	2,809,450	352,754	1,531,828	8,584	21,715,731	5,617,580	5,617,580	16,098,151	25.9%
2032	276,110	1,082,209	2,883,454	358,619	1,572,896	8,799	21,937,803	5,751,725	5,751,725	16,186,077	26.2%
2033	285,679	1,104,607	2,959,808	364,611	1,614,736	9,019	22,137,994	5,884,503	5,884,503	16,253,492	26.6%
2034	295,374	1,127,771	3,038,078	370,782	1,655,936	9,244	22,315,679	6,017,333	6,017,333	16,298,346	27.0%
2035	305,084	1,151,664	3,116,849	376,877	1,695,681	9,475	22,470,762	6,151,819	6,151,819	16,318,943	27.4%
2036	314,933	1,175,640	3,197,504	383,106	1,732,571	9,712	22,604,811	6,291,817	6,291,817	16,312,994	27.8%
2037	324,996	1,200,274	3,280,899	389,664	1,767,896	9,955	22,718,375	6,440,617	6,440,617	16,277,758	28.3%
2038	335,217	1,225,991	3,366,099	396,393	1,799,852	10,204	22,813,737	6,603,104	6,603,104	16,210,632	28.9%
2039	345,682	1,252,361	3,454,149	403,541	1,829,594	10,459	22,892,402	6,783,924	6,783,924	16,108,478	29.6%
2040	356,162	1,279,915	3,542,852	410,627	1,857,210	10,720	22,955,375	6,986,671	6,986,671	15,968,704	30.4%
2041	366,785	1,307,623	3,633,244	417,865	1,881,777	10,988	23,004,911	7,216,725	7,216,725	15,788,186	31.4%
2042	377,651	1,335,936	3,726,658	425,559	1,903,230	11,263	23,043,807	7,480,680	7,480,680	15,563,127	32.5%
2043	388,717	1,365,537	3,822,406	433,594	1,903,337	11,545	23,093,778	7,804,065	7,804,065	15,289,713	33.8%
2044	399,946	1,396,111	3,920,416	442,080	1,920,020	11,833	23,138,913	8,175,017	8,175,017	14,963,896	35.3%

Exhibit VIII – 50-Year Projection of Contributions, Liabilities, and Assets *(continued)*

Based on the December 31, 2022 actuarial valuation.
(All dollar amounts are in thousands. Employer Contributions are shown on a cash basis in the fiscal year they are actually paid, not receivable.
Actuarial Liability and asset figures as of end of year.)

Fiscal Year	Employee Contributions	Employer Contributions (Cash Basis)	Pensionable Payroll	Normal Cost	Benefit Payouts	Estimated Expenses	Total Actuarial Liability	Market Value of Assets	Actuarial Value of Assets	Unfunded Actuarial Liability	Funded Ratio
2045	$411,063	$1,427,787	$4,017,742	$450,412	$1,934,834	$12,129	$23,180,656	$8,598,280	$8,598,280	$14,582,376	37.1%
2046	422,209	1,459,187	4,115,762	458,860	1,948,491	12,432	23,220,098	9,078,945	9,078,945	14,141,153	39.1%
2047	433,408	1,490,927	4,214,452	467,447	1,960,102	12,743	23,259,346	9,623,381	9,623,381	13,635,965	41.4%
2048	444,678	1,523,000	4,314,244	476,254	1,970,616	13,062	23,299,754	10,237,642	10,237,642	13,062,112	43.9%
2049	456,043	1,555,624	4,415,152	485,406	1,984,277	13,388	23,338,518	10,923,944	10,923,944	12,414,574	46.8%
2050	467,125	1,588,912	4,513,760	494,213	1,998,172	13,723	23,374,916	11,685,742	11,685,742	11,689,173	50.0%
2051	478,166	1,621,338	4,612,355	503,014	2,011,519	14,066	23,409,348	12,528,688	12,528,688	10,880,660	53.5%
2052	489,249	1,653,803	4,711,827	512,009	2,023,783	14,418	23,443,009	13,459,889	13,459,889	9,983,119	57.4%
2053	500,363	1,686,743	4,812,128	521,180	2,034,760	14,778	23,477,364	14,487,108	14,487,108	8,990,256	61.7%
2054	511,549	1,720,136	4,913,660	530,699	2,053,898	15,148	23,504,395	15,609,187	15,609,187	7,895,208	66.4%
2055	522,375	1,754,261	5,012,151	539,814	2,071,763	15,526	23,524,493	16,832,359	16,832,359	6,692,134	71.6%
2056	533,252	1,787,283	5,111,848	549,032	2,088,936	15,914	23,538,015	18,164,693	18,164,693	5,373,323	77.2%
2057	544,174	1,820,789	5,212,630	558,313	2,104,482	16,312	23,546,267	19,615,680	19,615,680	3,930,587	83.3%
2058	555,214	1,854,702	5,315,200	567,749	2,119,673	16,720	23,549,424	21,194,481	21,194,481	2,354,942	90.0%
2059	566,371	1,889,286	5,419,466	577,420	2,144,012	17,138	23,537,936	21,184,142	21,184,142	2,353,794	90.0%
2060	377,067	207,636	5,521,974	586,847	2,166,058	17,567	23,512,926	21,161,633	21,161,633	2,351,293	90.0%
2061	384,112	415,089	5,625,953	596,374	2,187,060	18,006	23,474,665	21,127,198	21,127,198	2,347,466	90.0%
2062	391,319	419,566	5,732,131	606,083	2,207,815	18,456	23,422,709	21,080,438	21,080,438	2,342,271	90.0%
2063	398,645	424,035	5,839,930	615,919	2,227,891	18,917	23,356,971	21,021,274	21,021,274	2,335,697	90.0%
2064	406,103	428,445	5,949,557	625,921	2,256,218	19,390	23,268,168	20,941,351	20,941,351	2,326,817	90.0%
2065	413,545	433,741	6,058,831	635,914	2,283,534	19,875	23,155,777	20,840,199	20,840,199	2,315,578	90.0%
2066	421,103	438,954	6,169,736	646,038	2,311,722	20,372	23,017,445	20,715,701	20,715,701	2,301,745	90.0%
2067	428,748	444,276	6,281,865	656,256	2,341,161	20,881	22,850,229	20,565,206	20,565,206	2,285,023	90.0%
2068	436,507	449,738	6,395,612	666,620	2,370,704	21,403	22,652,226	20,387,003	20,387,003	2,265,223	90.0%
2069	444,374	455,248	6,510,929	677,109	2,402,665	21,938	22,418,991	20,177,092	20,177,092	2,241,899	90.0%
2070	452,315	461,028	6,627,303	687,702	2,436,197	22,487	22,146,633	19,931,970	19,931,970	2,214,663	90.0%
2071	460,373	467,008	6,745,376	698,426	2,470,903	23,049	21,831,439	19,648,295	19,648,295	2,183,144	90.0%
2072	468,528	473,129	6,864,876	709,262	2,506,579	23,625	21,469,632	19,322,669	19,322,669	2,146,963	90.0%

Exhibit IX – Development of City Contribution Requirements

	Fiscal Year 2023	Projected Fiscal Year 2024	Projected Fiscal Year 2025	Projected Fiscal Year 2026	Projected Fiscal Year 2027	Projected Fiscal Year 2028
Preliminary Determination of City Contribution						
Projected Payroll	$2,284,830,059	$2,341,631,057	$2,401,382,031	$2,464,242,048	$2,529,116,309	$2,596,253,169
Statutory Contribution Rate	42.72%	40.19%	39.93%	39.68%	39.43%	39.19%
Statutory City Contribution*	$976,027,541	$941,017,242	$958,885,380	$977,797,531	$997,327,393	$1,017,583,288
Actuarially Determined Contribution	$1,273,344,843	$1,273,795,178	$1,292,111,974	$1,310,991,726	$1,332,860,052	$1,342,794,629
Actuarial Accrued Liability at the Beginning of the Year	$18,759,634,094	$19,181,096,466	$19,567,248,963	$19,935,101,215	$20,283,606,054	$20,611,516,782
Actuarial Value of Assets at the Beginning of the Year	$4,274,969,404	$4,628,868,344	$4,746,055,934	$4,837,367,751	$4,870,283,313	$5,033,759,075
Funded Ratio	22.79%	24.13%	24.26%	24.27%	24.01%	24.42%

** Per Public Act 100-0023, city contributions are the sum of employer normal cost and an amount determined as a level percent of payroll sufficient to bring the total assets of the Fund up to 90% of the actuarial accrued liability by the end of 2058. The city contributions are shown in the year that they will be booked. The contributions will be paid to the Fund in the following year. No Annual Advance Pension Payments are included in this exhibit.*

Exhibit X.1 – Comparison of Employer Contribution to Actuarially Determined Contribution

Plan Year Ended December 31	Actuarially Determined Contributions (ADC)*	Actual Contributions**	Percentage Contributed
2013	$834,398,482	$157,704,971	18.9%
2014	848,864,496	158,797,631	18.7%
2015	686,373,727	157,716,475	23.0%
2016	970,112,414	157,444,029	16.2%
2017	1,005,456,621	261,763,635	26.0%
2018	1,049,915,647	349,574,257	33.3%
2019	1,117,387,759	421,000,000	37.7%
2020	1,167,153,830	498,598,904	42.7%
2021	1,218,360,892	573,701,021	47.1%
2022	1,262,413,314	959,999,000	76.0%
2023	1,273,344,843	--	--

** Prior to 2015, this amount was the Annual Required Contribution (ARC) and included both pension and OPEB.*

***Receivable amount to be paid the following year. A portion of the 2020 payment was made during calendar year 2020 and a portion of the 2022 payment was made during calendar year 2022.*

Exhibit X.2 – History of Active Member Valuation Data

Actuarial Valuation Date	Active Members	Percent Increase	Annual Salaries	Percent Increase	Average Salary	Percent Increase	CPI Chicago*
12/31/2013	30,647	(2.17)%	$1,580,288,709	(0.66)%	$51,564	1.54%	0.51%
12/31/2014	30,160	(1.59)%	1,602,977,593	1.44%	53,149	3.07%	1.48%
12/31/2015	30,683	1.73%	1,643,480,973	2.53%	53,563	0.78%	0.00%
12/31/2016	30,296	(1.26)%	1,646,939,238	0.21%	54,362	1.49%	1.86%
12/31/2017	30,922	2.07%	1,686,532,720	2.40%	54,542	0.33%	1.66%
12/31/2018	31,285	1.17%	1,734,595,691	2.85%	55,445	1.66%	1.07%
12/31/2019	32,162	2.80%	1,802,790,156	3.93%	56,053	1.10%	2.23%
12/31/2020	31,327	(2.60%)	1,861,905,323	3.28%	59,435	6.03%	0.89%
12/31/2021	32,925	5.10%	2,001,180,743	7.48%	60,780	2.26%	6.61%
12/31/2022	35,369	7.42%	2,166,181,666	8.25%	61,245	0.77%	5.50%
Average Increase/ (Decrease) Last 5 years		2.72%		5.13%		2.35%	3.23%

* *CPI-Chicago as of the valuation date*

Exhibit X.3 – History of Average Pension Benefit Payments to New Retirees[1]

		Years of Service					
Retirement Effective Date		**10 – 14**	**15 – 19**	**20 – 24**	**25 – 29**	**30 & Over**	**Total**
2013	Average Monthly Benefit at Retirement	$1,304	$1,998	$2,348	$3,259	$4,446	$3,065
	Average Final Average Salary	$4,456	$4,890	$4,314	$4,953	$5,668	$5,030
	Number of Active Recipients	104	106	204	216	290	920
2014	Average Monthly Benefit at Retirement	$1,169	$1,760	$2,290	$3,137	$4,350	$2,891
	Average Final Average Salary	$4,161	$4,528	$4,597	$4,877	$5,644	$4,921
	Number of Active Recipients	93	92	185	203	223	796
2015	Average Monthly Benefit at Retirement	$1,275	$1,959	$2,279	$3,405	$4,446	$3,048
	Average Final Average Salary	$4,439	$4,685	$4,387	$5,174	$5,724	$5,031
	Number of Active Recipients	68	119	171	180	227	765
2016	Average Monthly Benefit at Retirement	$1,347	$1,909	$2,350	$3,383	$4,795	$3,126
	Average Final Average Salary	$5,096	$4,836	$4,604	$5,199	$6,276	$5,306
	Number of Active Recipients	83	113	208	199	237	840
2017	Average Monthly Benefit at Retirement	$1,306	$1,938	$2,480	$3,687	$4,889	$3,273
	Average Final Average Salary	$4,734	$4,860	$4,841	$5,526	$6,293	$5,434
	Number of Active Recipients	91	122	197	247	245	902
2018	Average Monthly Benefit at Retirement	$1,551	$2,030	$2,741	$3,973	$5,285	$3,628
	Average Final Average Salary	$5,590	$4,998	$5,247	$6,017	$6,854	$5,961
	Number of Active Recipients	82	126	167	201	272	848
2019	Average Monthly Benefit at Retirement	$1,336	$1,961	$2,713	$4,002	$5,175	$3,598
	Average Final Average Salary	$4,624	$4,985	$5,305	$6,141	$6,716	$5,953
	Number of Active Recipients	74	94	158	177	247	750
2020	Average Monthly Benefit at Retirement	$1,262	$2,048	$2,606	$4,249	$5,272	$3,710
	Average Final Average Salary	$4,790	$5,032	$5,126	$6,488	$6,863	$6,044
	Number of Active Recipients	72	90	143	161	254	720
2021	Average Monthly Benefit at Retirement	$1,608	$1,987	$2,686	$4,012	$5,309	$3,898
	Average Final Average Salary	$5,795	$4,920	$5,228	$6,167	$6,832	$6,091
	Number of Active Recipients	48	81	200	208	343	880
2022	Average Monthly Benefit at Retirement	$1,351	$2,069	$2,804	$4,271	$5,490	$3,914
	Average Final Average Salary	$4,978	$5,149	$5,416	$6,539	$7,097	$6,251
	Number of Active Recipients	88	92	199	208	344	931

[1] *This schedule excludes reciprocal annuities, money purchase annuities and minimum annuities.*

Exhibit X.4 – History of Retirees and Beneficiaries by Type of Benefit

	Annuitants				Disability		Compensation	Reciprocal	
Valuation Date	Employee	Spouse	Child	Reversionary	Ordinary	Duty	Annuitants*	Employee	Spouse
12/31/2013	17,320	3,844	141	138	227	213	2	2,793	363
12/31/2014	17,553	3,798	141	139	195	225	2	2,858	363
12/31/2015	17,697	3,757	118	134	187	213	2	2,887	369
12/31/2016	17,954	3,706	102	128	178	216	2	2,965	379
12/31/2017	18,113	3,633	114	124	162	211	2	3,024	374
12/31/2018	18,304	3,597	102	119	158	164	2	3,089	366
12/31/2019	18,273	3,540	100	122	165	133	2	3,150	359
12/31/2020	18,220	3,519	97	117	146	130	2	3,166	352
12/31/2021	18,355	3,525	99	131	147	126	2	3,218	355
12/31/2022	18,592	3,482	88	130	114	118	2	3,228	374

* *Compensation annuitants also included with spouse annuitants.*

Exhibit X.5 – History of Average Employee Retirement Benefits Payable

Valuation Date	Average Annual Benefit	Average Current Age of Retirees	Average Benefit at Retirement Current Year	Average Age at Retirement Current Year	Average Service Years at Retirement Current Year
12/31/2013	$34,357	72.6	$31,177	63.0	23.55
12/31/2014	34,532	72.7	29,775	62.5	23.35
12/31/2015	36,277	72.8	31,686	62.6	23.48
12/31/2016	37,243	72.9	32,000	62.0	23.50
12/31/2017	38,372	72.9	34,413	62.0	24.16
12/31/2018	39,559	73.0	37,678	62.2	24.45
12/31/2019	40,819	73.1	37,670	62.2	24.49
12/31/2020	42,053	73.2	39,526	62.7	24.88
12/31/2021	43,390	73.3	41,394	63.2	25.97
12/31/2022	44,719	73.4	42,388	62.4	25.83

Exhibit X.6 – History of Annuities 2013 – 2022

Employee Annuitants			
Valuation Date	**Number of Annuitants**	**Total Annuities**	**Average Annuities**
12/31/2013	20,113	691,021,680	$34,357
12/31/2014	20,411	704,832,876	34,532
12/31/2015	20,584	746,717,052	36,277
12/31/2016	20,919	779,089,612	37,243
12/31/2017	21,137	811,061,417	38,372
12/31/2018	21,393	846,280,201	39,559
12/31/2019	21,423	874,463,090	40,819
12/31/2020	21,386	899,349,814	42,053
12/31/2021	21,573	936,060,156	43,390
12/31/2022	21,820	975,770,358	44,719
Surviving Spouse and Reversionary Annuities			
Valuation Date	**Number of Annuitants**	**Total Annuities**	**Average Annuities**
12/31/2013	4,345	$57,041,916	$13,128
12/31/2014	4,300	57,976,668	13,483
12/31/2015	4,260	58,481,052	13,728
12/31/2016	4,213	59,799,086	14,194
12/31/2017	4,131	60,199,042	14,573
12/31/2018	4,082	61,694,214	15,114
12/31/2019	4,021	63,060,030	15,683
12/31/2020	3,988	64,882,281	16,269
12/31/2021	4,011	67,426,138	16,810
12/31/2022	3,986	69,474,509	17,430

Exhibit X.7 – History of Retirees and Beneficiaries Added to Payrolls 2013 – 2022

	Added to Payroll		Removed from Payroll		Payroll End of Year			
Valuation Date	Number	Annual Benefits*	Number	Annual Benefits	Number	Annual Benefits	Average Annual Benefit	Increase in Average Benefit
Employee Annuitants								
12/31/2013	1,242	$57,147,576	743	$21,682,632	20,113	$691,021,680	$34,357	2.79%
12/31/2014	1,054	37,110,852	756	23,299,656	20,411	704,832,876	34,532	0.51%
12/31/2015	990	65,756,124	817	23,871,948	20,584	746,717,052	36,277	5.05%
12/31/2016	1,107	58,094,440	772	25,721,880	20,919	779,089,612	37,243	2.66%
12/31/2017	1,148	62,453,527	930	30,481,722	21,137	811,061,417	38,372	3.03%
12/31/2018	1,086	64,883,087	830	29,664,303	21,393	846,280,201	39,559	3.09%
12/31/2019	981	62,186,925	951	34,004,036	21,423	874,463,090	40,819	3.19%
12/31/2020	905	61,399,969	942	36,513,245	21,386	899,349,814	42,053	3.02%
12/31/2021	1,102	72,434,290	915	35,723,948	21,573	936,060,156	43,390	3.18%
12/31/2022	1,127	75,541,539	880	35,831,337	21,820	975,770,358	44,719	3.06%
Surviving Spouse and Reversionary Annuitants								
12/31/2013	270	$4,593,708	279	$3,096,132	4,345	$57,041,916	$13,128	2.91%
12/31/2014	265	4,648,596	310	3,713,844	4,300	57,976,668	13,483	2.70%
12/31/2015	251	4,185,900	291	3,681,516	4,260	58,481,052	13,728	1.82%
12/31/2016	235	4,862,474	282	3,544,440	4,213	59,799,086	14,194	3.39%
12/31/2017	261	5,053,290	343	4,653,334	4,131	60,199,042	14,573	2.67%
12/31/2018	255	5,539,163	304	4,043,991	4,082	61,694,214	15,114	3.71%
12/31/2019	268	5,701,160	329	4,335,344	4,021	63,060,030	15,683	3.76%
12/31/2020	284	6,322,659	317	4,500,408	3,988	64,882,281	16,269	3.74%
12/31/2021	300	6,521,864	277	3,978,007	4,011	67,426,138	16,810	3.33%
12/31/2022	278	6,743,257	303	4,694,886	3,986	69,474,509	17,430	3.69%

* *Annual benefits added to payroll include post-retirement increase amounts.*

Exhibit XI – Actuarial Assumptions and Actuarial Cost Method

Rationale for Assumptions

The information and analysis used in supporting each assumption that has a significant effect on this actuarial valuation is shown in the Experience Review dated March 16, 2023. Current data is reviewed in conjunction with each annual valuation.

Mortality Rates:

Post-retirement

The PubG-2010 Retiree Amount-weighted Below Median mortality Tables (sex-specific), using 117% of the rates for females and 111% of the rates for males, projected generationally using scale MP-2021 (effective December 31, 2022).

Beneficiary

PubG-2010 Contingent Survivor Table Amount-weighted Below Median Mortality table (sex-specific), using 111% of the rates for females and 113% of the rates for males, projected generationally using scale MP-2021 (effective December 31, 2022).

Pre-retirement:

PubG-2010 Employee Amount-weighted Below Median mortality table (sex-specific), using 92% of the rates for females and 90% of the rates for males, projected generationally using scale MP-2021 (effective December 31, 2022).

The mortality tables specified above were determined to reasonably reflect the mortality experience of the Plan as of the valuation date. The mortality table was then adjusted to future years using generational projection under scale MP-2021 to reflect future mortality improvements.

Termination Rates:

These rates are based on recent experience of the Fund (effective December 31, 2022).

Service	BoE Rate (%)	Non-BoE Rate (%)	Service	BoE Rate (%)	Non-BoE Rate (%)
0 – 0.99	18.25	16.00	11 – 11.99	4.75	4.50
1 – 1.99	16.00	13.75	12 – 12.99	4.50	3.50
2 – 2.99	13.25	12.75	13 – 13.99	4.50	3.50
3 – 3.99	11.50	10.00	14 – 14.99	4.00	2.75
4 – 4.99	9.75	8.50	15 – 15.99	4.00	2.75
5 – 5.99	8.00	8.00	16 – 16.99	3.50	2.75
6 – 6.99	7.50	6.75	17 – 17.99	3.25	2.75
7 – 7.99	6.25	5.75	18 – 18.99	3.00	2.75
8 – 8.99	5.50	5.25	19 – 19.99	2.75	2.25
9 – 9.99	5.50	4.75	20 – 20.99	2.00	2.00
10 – 10.99	4.75	4.75	21+	2.00	2.00

Retirement Rates:

For employees first hired prior to January 1, 2011, rates of retirement are based on the recent experience of the Fund (effective December 31, 2022).

Tier 1:

Age and Service-Based Retirement Rates									
Service	**50 - 54**	**55 - 59**	**60 - 64**	**65**	**66**	**67**	**68 - 69**	**70 - 79**	**80+**
10 - 11		0%	10%	32.5%	25%	27.5%	25%	35%	100%
12 - 19		0%	10%	25%	15%	17.5%	20%	20%	100%
20 - 24		7%	10%	27.5%	15%	20%	20%	20%	100%
25 - 29		10%	10%	30%	25%	22.5%	20%	20%	100%
30	15%	12.5%	15%	40%	25%	30%	20%	22.5%	100%
31 - 32	15%	12.5%	15%	37.5%	25%	22.5%	20%	25%	100%
33 - 34	27.5%	15%	15%	37.5%	25%	20%	20%	25%	100%
35 - 39	27.5%	15%	15%	35%	25%	20%	20%	25%	100%
40+	50%	50%	50%	50%	50%	50%	50%	50%	100%

Tier 2:

For employees first hired on or after January 1, 2011, and before July 6, 2017, rates of retirement for each age from 62 to 80 were used (effective December 31, 2011).

Age	Rate
62	40%
63 - 69	20%
70 - 79	45%
80 +	100%

Retirement Rates (continued)

Tier 3: For employees first hired on or after July 6, 2017, rates of retirement for each age from 60 to 80 were used (effective December 31, 2018).

Age	Rate
60	40%
61 - 69	20%
70 - 79	45%
80 +	100%

Disability Benefit Valuation: Disability benefits are valued in normal cost as 0.60% of projected payroll (effective December 31, 2022).

Valuation of Inactive Participants: Inactive members with less than 10 years of service are assumed to take an immediate refund of his or her account balance. For inactive members with 10 or more years of service, the money purchase benefit is estimated by projecting the account balance (including employer contributions, when applicable) to the earliest retirement age. This estimated money purchase benefit is increased by 15% to account for the possibility that the minimum annuity formula is more valuable. For inactive members with 10 or more service and salary information available, the minimum annuity benefit is valued, if it is more valuable than the money purchase benefit.

Unknown Data for Participants: Same as those exhibited by participants with similar known characteristics. If not specified, participants are assumed to be male.

Spouse: 85% of members are assumed to be married, female spouses are assumed to be four years younger than male spouses, and 100% of spouses are assumed to be opposite gender (effective December 31, 1999).

Member Contributions: Based on payroll, adjusted to the middle of the year.

Net Investment Return: 6.75% per year, net of investment expense (effective December 31, 2022)

Inflation: 2.50% per year (effective December 31, 2017)

Salary Increases:

Service	BoE Rate (%)	Non-BoE Rate (%)
0 – 0.99	6.25	14.00
1 – 1.99	6.25	11.00
2 – 2.99	6.25	6.00
3 – 3.99	6.25	5.00
4 – 4.99	6.25	5.00
5 – 5.99	6.25	5.00
6 – 6.99	6.25	4.00
7 – 7.99	6.25	4.00
8 – 10.99	6.25	3.50
11 – 22.99	5.25	3.50
23 – 25.99	5.00	3.50
26 – 26.99	5.00	2.75
27 – 31.99	4.00	2.75
32+	4.00	2.50

Administrative Expenses:	Equal to actual expenses for the prior year. For purposes of the 50-year projection, future administrative expenses are assumed to increase by 2.5% each year.
Actuarial Value of Assets:	Fair value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual fair value return and the expected return on the fair value and is recognized over a five-year period (effective December 31, 1999).
Actuarial Cost Method:	Entry Age Normal. Under this method, a normal cost is calculated for each employee that is the level annual contribution as a percent of pay required to be made from the employee's date of hire for as long as he/she remains active so that sufficient assets will be accumulated to provide his/her benefit. The accrued liability is the difference between the present value of all future benefits and the present value of all future normal costs.
OPEB Healthcare Subsidy:	25% of eligible City of Chicago employee annuitants are assumed to elect to participate is a group health care plan for which the Fund offers to deduct health insurance premiums from monthly annuities, and thus receive the health care insurance premium subsidy.

Exhibit XII – Summary of Plan Provisions

This exhibit summarizes the major provisions of the Plan included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Membership:	Any employee of the City of Chicago or the Board of Education employed under the provisions of the municipal personnel ordinance or any person employed by the Municipal Employees' Annuity and Benefit Fund of Chicago who is not participating in any other pension fund or retirement system is covered by the Fund. Current and former employees of the Chicago Housing Authority and the Public Building Commission who have service in this Plan or who reinstate service in this Plan, may elect to participate in this Plan with respect to their employment with the Chicago Housing Authority or the Public Building Commission under certain circumstances.
Tiers:	Tier 1: First hired before January 1, 2011 Tier 2: First hired from non-reciprocal Fund on or after January 1, 2011, and before July 6, 2017 Tier 3: First hired on or after July 6, 2017, or former Tier 2 members that elected to make a one-time irrevocable election to switch to Tier 3 ("elective" Tier 3)
Employee Contributions:	Tier 1 and Tier 2 members of the Fund are required to contribute 8.5% of pensionable salary to the Fund as follows: 6.5% for the employee's retirement annuity, 1.5% for the spouse's annuity, and 0.5% for the automatic increases in the retirement annuity. Tier 3 members of the Fund are required to contribute 11.5% of pensionable pay. However, member contribution rate will be the normal cost rate, if less than 11.5%, but not lower than 8.5%. Once the Fund reaches 90% funded, the member contribution rate will be lowered to 7.5% and remain at 7.5% unless the funded ratio drops below 75%.
Final Average Salary:	For Tier 1 members, the final average salary is the average salary of the highest four consecutive years within the last 10 years of service prior to retirement. For Tier 2 and Tier 3 members, the final average salary is the average pensionable salary of the highest eight consecutive years within the last 10 years of service prior to retirement. Pensionable salary is limited to $106,800 in 2011, increased by the lesser of 3% or ½ of the change in CPI-U, not less than zero. For 2022, the salary limit was $119,892.

Employee Retirement Annuity:

Money Purchase Formula

Eligibility

Tier 1, the earlier of:
- Age 60 and in active employment
- Age 55 and 10 years of service

Tier 2: Age 62 and 10 years of service

Tier 3: Age 60 and 10 years of service

Amount

The annuity is based on all employee and City contributions. However, for Tier 1 members who retire before age 60 with less than 20 years of service, the annuity is based on employee contributions plus 1/10th of the City contributions for each year of service over 10.

Maximum is 60% of highest salary.

Minimum Annuity Formula

Eligibility

Tier 1, the earlier of:

- Age 60 and 10 years of service
- Age 55 and 20 years of service
- Age 50 and 30 years of service

Tier 2: Age 62 and 10 years of service

Tier 3: Age 60 and 10 years of service

Amount

The annuity is equal to 2.4% for each year of service times final average salary.

For Tier 1 members under age 60 with less than 25 years of service, the annuity is reduced by 0.25% for each month that the member is under age 60.

For Tier 2 members under age 67, the annuity is reduced by 0.50% for each month that the member is under age 67.

For Tier 3 members under age 65, the annuity is reduced by 0.50% for each month that the member is under age 65.

Maximum is 80% of final average salary.

Post-Retirement Increase:	Tier 1: An employee annuitant is eligible to receive an annual increase of 3% of the current payable annuity (compound). This increase begins in January of the year of the first payment date following the earlier of: 1) the later of the third anniversary of retirement or age 53, or 2) the later of the first anniversary of retirement or age 60 Tier 2 and Tier 3: An employee annuitant or surviving spouse who is eligible to receive an increase in annuity benefit, shall receive an annual increase equal to the lesser of 3% or ½ of the annual unadjusted percentage increase in the Consumer Price Index-U. The increase is based on the amount of the originally granted benefit (simple). This increase begins in January of the year of the first payment date following the later of: 1) the attainment of age 67 for Tier 2 members or age 65 for Tier 3 members, or 2) the first anniversary of the annuity start date
Reversionary Annuity:	An employee may elect to reduce his or her annuity by an amount less than or equal to $400 to provide a reversionary annuity for a spouse, parent, child, brother, or sister, to begin upon the employee's death. The election must be made before retirement and have been in effect one year prior to death. The one-year requirement is waived if the beneficiary is the employee's spouse. The death of the employee before retirement voids this election. The reversionary annuity for a spouse when added to the spouse's annuity cannot exceed 100% of the employee's reduced annuity. The amount of the monthly reversionary annuity is determined by multiplying the amount of the monthly reduction in the employee's annuity by a factor based on the age of the employee and the difference between the ages of the employee and the reversionary annuitant at the start date of the employee's annuity.
Elected City Officer's Optional Plan:	An alternative plan for elected officials of 3% of final salary for the first eight years, 4% for the next four years, and 5% thereafter, subject to an 80% maximum, is available. The elected official must contribute an additional 3% of salary to receive these benefits. This plan also includes alternative widow and disability benefit formulas. This plan became effective upon approval from the IRS on September 17, 1991. Public Act 100-0023 closed this Plan to officers elected after July 6, 2017.

Spouse Annuity:	The surviving spouse annuity is the greater of the annuity under the money purchase formula or the minimum annuity formula. Surviving spouses who remarry on or after September 4, 2000, will not have their annuities terminated.
Money Purchase Formula	When an employee retires, the spouse's annuity is fixed, based on employee and City contributions for the spouse's annuity and a joint life age factor. If the employee dies in service, the spouse's annuity is based on all contributions. For 3% annuities fixed on or after August 1, 1983, the "Combined Annuity Mortality Table" shall continue to be used; however, surviving spouse's single life annuities and reversionary annuities shall be computed using the best factor (the factor producing the highest annuity), without regard to gender.
Minimum Annuity Formula	If the employee retires or dies in service and is at least age 55 with 20 or more years of service or is at least age 50 with 30 or more years of service, the spouse's annuity is equal to half the amount of the annuity the employee was entitled to receive at the time of retirement or death in service. This annuity must be reduced by 0.25% for each month the spouse is under age 55 (or age 50 if the employee had at least 25 years of service) at the time the employee retires or dies in service. If the employee dies while receiving a retirement annuity, the spouse is eligible for an annuity of one half of the employee's annuity at death. This annuity is reduced by 0.25% for each month the spouse is under age 55 (or age 50 if the employee had at least 25 years of service) at the time of the employee's death. If the employee dies in service with at least 10 years of service, the spouse is entitled to an annuity of half of the minimum formula annuity earned and accrued to the credit of the employee at the date of death. This annuity is not reduced due to the age of the employee or spouse. The spouse is eligible for this annuity only if the marriage was in effect for at least 10 years. The spouse will receive a minimum annuity of $800 per month if the employee retires with at least 10 years of service or dies in service with at least five years of service. For Tier 2 and Tier 3 members, the annuity payable to the surviving spouse is equal to 66 2/3% of the participant's accrued retirement annuity without a reduction due to age.

Child Annuity:	A child's annuity is provided for an unmarried child of a deceased employee who is under the age of 18, if the child was born before the withdrawal from service. The annuity is $220 per month while the spouse of the deceased employee is alive and $250 per month if the spouse is deceased.
Ordinary Disability:	This benefit is granted for disabilities incurred other than in performance of an act of duty and is 50% of salary as of the last day worked. The first payment shall be made one month after the disablement occurs provided the employee is not then in receipt of salary. Length of time on disability is limited to a maximum of 25% of the employee's total service or five years, whichever occurs first. The Fund contributes salary deductions for annuity purposes for the ordinary disability benefit. Such amounts contributed by the Fund after December 31, 2000, while the employee is receiving ordinary disability benefits, are not refundable to the employee and will be used for annuity purposes only.
Duty Disability Benefit:	Any employee who becomes disabled as the result of an injury incurred in the performance of any act of duty has a right to receive a duty disability benefit in the amount of 75% of salary at date of injury, plus $10 a month for each unmarried child less than age 18. Child's duty disability benefit is limited to 15% of the employee's salary as of the date of injury. Duty disability benefits begin one day after the later of the last day worked or the last day paid. If the disability has resulted from any mental disorder, physical defect or disease which existed at the time such injury was sustained, the duty disability benefit shall be 50% of salary at date of injury. Disablement because of heart attacks, strokes, or any disablement due to heart disease shall not be considered the result of an accident suffered in the performance of duty. However, the employee will receive service credit and the City will contribute salary deductions for annuity purposes if the employee is receiving Workers' Compensation. A duty disability benefit is payable to age 65 if the disability benefits begin before age 60. For an employee who begins disability on or after age 60, disability benefits will continue for five years. A duty disability benefit which continues for more than five years and which starts before the employee's age 60, will be increased by 10% on January 1st of the sixth year. The City contributes salary deductions for annuity purposes for the duty disability benefit. Such amounts contributed by the City after December 31, 1981, while the employee is receiving duty disability benefits, are not refundable to the employee and will be used for annuity purposes only.

Refunds:	Tier 1: An employee who resigns before age 55, or before age 60 with less than 10 years of service, is entitled to all salary deductions accumulated with interest to date of resignation, plus the 0.50% deducted for annuity increase purposes without interest. Tier 2 and Tier 3: An employee who resigns before age 62 (or age 60 for Tier 3) without regard to length of service, or who resigns with less than 10 years of service regardless of age, is entitled to all salary deductions accumulated with interest to date of resignation, plus the 0.50% deducted for annuity increase purposes without interest. All Tiers: Amounts contributed by the employee, excluding the 0.50% deductions for annuity increase, that have not been paid out as annuity are refundable to the employee's estate with interest to the date of retirement or death, if the employee died in service. If the annuity of an employee or spouse is less than $800 a month, the employee or spouse may elect to receive a refund in lieu of an annuity. If unmarried at the time of retirement, the employee is entitled to a refund, with interest, of contributions made for the spouse's annuity.
Plan Year:	January 1 through December 31
OPEB Healthcare Subsidy	All eligible City of Chicago employee annuitants (both current and future employee annuitants, but not spouse or child annuitants) are entitled to elect to receive a health care insurance premium subsidy of $25 per month. Eligibility Requirements: • Retired on or after August 23, 1989 • Hired before July 1, 2003 • 15 years of service • Participate in a group health care plan for which the Fund offers to deduct health insurance premiums from monthly annuities

Exhibit XIII – Legislative Changes in Plan Provisions

1979 Session

SB 964

- Disability benefit for chronic alcoholism, pregnancy, or childbirth.

HB 1023

- Reciprocal Act: changes proportionate pension credits under the "alternative formula."

HB 2012

- Under IRS Code Section 414(h), employer may pick up the employee contributions for all compensation earned after December 31, 1980, by a reduction in the cash salary or an offset to a future salary increase or by a combination of both.

1980 Session

HB 3635

- Reversed all changes made by HB 2012 and put the pick-up section as a new paragraph; they are treated as employee contributions for all purposes, including refunds and determination of the tax levy.

Spring 1981 Session

SB 21

- Actuarial Reporting Standards.

SB 851

- Authorizes investments in conventional mortgage pass-through securities.

SB 879

- Financial statement required by Department of Insurance within 6 months and actuarial statement within 9 months; $100 penalty per day if late.

HB 212

- Eliminates refund of City contributions made while an employee is receiving duty disability benefits.

HB 213

- $200 refund in lieu of annuity.

HB 215

- Authorizes securities lending.

Spring 1982 Session

SB 1147

- Minimum reporting and actuarial information for 1984.

SB 1180

- Board of Education may incur an obligation to "pick up" employee contributions. These contributions may be paid by a special Pension Contribution Liability Tax. If levied, no payment is required until actual collection of the tax.

SB 1452

- Provides that an active member of the General Assembly who was employed by the City of Chicago by temporary appointment or in an exempt position, and could have elected to participate in the Fund but did not so elect, may establish credit for such service by making the required contribution.

SB 1579

- Expanded fiduciary standards, prohibited transactions, civil action may be brought by Attorney General or by a participant; list of permitted investments moved to general section of the statute.

HB 740

- Pension credit may be established for services rendered for a transportation system operated by a public utility prior to the establishment of the CTA.

HB 2286

- Allows persons who withdrew from service or became eligible for survivors' benefits in 1981 and who receive a monthly annuity between $100 and $200 to elect a refund in lieu of annuity.

Spring 1983 Session

SB22

- Delegation of investment authority restrictions.

HB 380

- Maximum survivor annuity from $400 to $500; 10% increase in duty disability benefit January 1 of the sixth year.

HB 514

- 10% prudent person investment category.

HB 637

- Allows an active member of the General Assembly to establish credit in this fund for time for which he or she could have elected to participate with interest at 6% and to transfer credits to the Park Fund.

HB 1144

- Revises provision allowing a person who withdrew from service or began receiving a widow's annuity in 1981 to elect to receive a refund in lieu of annuity by extending the deadline for election by one year to March 1, 1984, and by raising the amount subject to refund to $250 per month.
- 3% post-retirement annuity increase for those who qualify.
- Mandatory coverage for all employees in temporary positions.
- Reversionary annuity revisions - table of factors.
- Credit for Executive Director of Chicago Land Clearance Commission or Chicago Dwellings Association or for service as administrator of Illinois--Indiana Bi-State Commission--if certain contributions are made before April 1, 1984.

Federal Law and Regulation or Supreme Court Decision

- For an employee under the age of 70 who commences disability on or after attainment of age 60 in service, the ordinary disability benefit payments shall not exceed in the aggregate throughout the employee's service a period equal to 1/4 of the total service rendered prior to the date of the disability but no more than five years or age 70, whichever is earlier. The duty disability payments shall be payable for a period of five years or age 70, whichever occurs first.
- For 3% annuities fixed on or after August 1, 1983, the "Combined Annuity Mortality Table" shall continue to be used; however, widows' single life annuities and reversionary annuities shall be computed using the best factor (the factor producing the highest annuity, not depending upon sex).

1984 Session

- Illinois Public Employees' Pension Laws Commission abolished.

1985 Session

HB 561

- 1.80, 2.00, 2.20, 2.40% benefit accrual rate for those born before January 1, 1936, and retiring after July 18, 1985.
- Reduction in age discount factor (employee and widow) from 0.5% to 0.25% for employees born before January 1, 1936, and retiring after July 18, 1985.
- Health insurance supplement up to $25 per month if the employee is age 65 or older with at least 15 years of service (for each employee annuitant in receipt of annuity and for each employee who retires on annuity in the future).
- Disability provisions extended to age 70 in certain cases.
- Unisex money purchase factors for widows/widowers.
- Membership provisions extended to age 70.
- Board of Education employee contribution "pick up" included in the definition of salary for contribution and benefit purposes (retroactive).

1986 Session

HB 2630

- Beginning for retirement or death in service on or after January 23, 1987, the spouse dollar cap is eliminated.
- Beginning for retirement on or after January 1, 1987, the first annuity increase will begin on the first annuity payment date following the first anniversary of retirement or age 60 if later.

1987 Session

HB 2715

- 1.80, 2.00, 2.20, 2.40% benefit accrual rates for those born on or after January 1, 1936, and retiring on or after January 1, 1988.
- Reduction in an age discount factor (employee and widow) from .5% to .25% for employees born on or after January 1, 1936, and retiring or dying in service on or after January 1, 1988. No discount for employee age less than 60 if employee has at least 35 years of service.

- Minimum employee annuity of $250 and minimum spouse of $200 under certain conditions.
- Elimination of cap on maximum widow's annuity for spouses of certain retired employees with repayment of any "excess spouse" refund.
- Change amount of children's benefits to $120 or $150, effective January 1, 1988.
- Provides for certain "Good Government" initiatives.

1988 Session

- No legislative changes.

1989 Session

SB 95

- Signed August 23, 1989. Changed the amount of fund paid health insurance "supplement" from January 1, 1988 until December 31, 1992 to $65 per month for each annuitant not qualified to receive Medicare benefits (and $35 if qualified) and from January 1, 1993 until December 31, 1997 the amounts are $75 and $45, respectively. Widows will now be supplemented and employee annuitants will no longer be required to meet the age 65 and 15 years of service requirements. The City will be required to pay 50% of the aggregated cost of health care claims for the retired group under all health care plans offered by the City. A procedure was established for the City to determine, with the help of an independent actuary, the aggregate cost of claims and premiums for each calendar year from 1989 through 1997 for the retired group.

HB 332

- Signed August 23, 1989. Eliminated age-related discriminatory provisions as required by Federal law or regulation. Provided for Age Discrimination changes effective January 1, 1988 to eliminate age 65 requirements for marriage in service and children's benefits, provided contributions after age 65 for spouse benefits, provided employee accumulation annuities be computed after age 70, provided employee and spouse accumulation annuities not be "fixed" at age 65, provided no age 70 restriction on disability benefits, provided for active members over age 65 that their accounts be "unfixed" and accumulate interest until the date of withdrawal, and provided that there be no age 70 membership limitation and removed the permitted "no spouse" refund at age 65.
- Allow for local labor officials on a leave of absence from the Fund to contribute for their service as a local labor official.

1990 Session

SB 136

- Amends Chapter 120, Paragraph 671 of the Revenue Act to provide for a separate listing on the tax bill of the dollar amount of tax due from the person assessed which is allocable to a tax levied under the Illinois Pension Code, or any other tax levied by a municipality or township for public pension or retirement purposes. Effective January 1, 1990.

SB 1951

- Signed January 14, 1991. Beginning for withdrawals on or after January 1, 1991, annuity payments will be made as of the first day of the calendar month during the annuity payment period.
- 2.2% benefit accrual rate for employees retiring on or after July 1, 1990.
- No discount for employee age less than 60 if employee has at least 30 years of service and retires on or after July 1, 1990.
- Minimum employee annuity of $350 and minimum spouse of $300 under certain conditions.
- Spouses and widows of employees retiring or dying in service on or after July 1, 1990 with 20 or more years of service at age 55 or over will be eligible for half of the employee's annuity discounted .25% for each month the spouse or widow is less than 55.
- Retroactive eligibility for 35 years no discount and spouse and widow annuities computed as half of employee annuity.
- Refund in lieu of $300 annuity.
- Disability benefit retroactive one year from application; duty disability deductions in lieu for heart attack or stroke.
- An alternative plan for elected officials of 3% of salary for the first 8 years, 4% for the next 4 years and 5% thereafter, subject to a maximum of 80%, is available. The elected official must contribute an additional 3% of salary to receive these benefits. This plan also includes alternative widow and disability benefit formulas. This plan will become effective upon approval from the IRS.
- Collateral for securities lending expanded.
- Fractional payment for refund repayment and temporary service authorized. Credit established by fractional payment shall be earliest service for which credit may be established.

1991 Session

HB 971

- Signed November 19, 1991. Eligibility for the alternative plan for elected officials was extended to persons who hold office as a City officer on April 30, 1991 until 30 days after the date the plan takes effect, notwithstanding the ending of his term of office prior to that effective date.

1992 Session

SB 1650

- Signed January 25, 1993.
- Transfer provisions for County elected officers and judges.
- Early Retirement Incentive was created for withdrawals from December 31, 1992 to June 30, 1993.
- Requires a total of 20 years of service (with at least 10 in this fund, 5 in a Reciprocal fund and up to 5 purchased under ERI).
- Requires age 55 or older.
- Requires an election form to be filed before June 1, 1993.
- Retired under this Article.
- Provides for elimination of the age discount for employees 55-60.
- Provides for 80% maximum final average salary compared to the present 75%.
- Provides for an optional purchase of up to five years of service credit for 4.25% of the November 1, 1992 salary.
- Provides for a 24-month option to pay for ERI service.
- Provides for a tax levy derived from ERI contributions.

1993 Session

- No legislative changes.

1994 Session

- No legislative changes.

1995 Session

SB 114

- Approved July 14, 1995.
- The amount of earnings that may be taken into account by any retirement system is limited to the maximum dollar limitation specified in Section 401(a)(17) of the Internal Revenue Code, except for persons who became Members before 1996.
- The Plan is authorized to make certain involuntary distributions required by Section 401(a)(9) of the Internal Revenue Code.

SB 424

- Approved July 7, 1995
- The Pension Laws Comission was created as a legislative suport service agency.

1996 Session

SBJPA

- On August 20, 1996, the Small Business Job Protection Act was signed by President Clinton.
- Treatment of governmental plans under Code Section 415:
- Rule limiting annual benefit to 100 percent of the average of the highest three-year compensation no longer applies.
- Excess benefit plans are permitted to provide Members with benefits in excess of the Code Section 415 limits.
- Early retirement reduction does not apply to certain survivor and disability benefits.
- The definition of compensation now includes elective deferrals.
- Taxation of distributions:
  - $5,000 death benefit exclusion was repealed for deaths after August 20, 1996.
  - Five-year averaging for lump sum distributions was repealed effective January 1, 2000.
  - Annuity payments will be taxed according to a simplified general rule, which uses investment and age as of annuity starting date for annuities, which start on or after November 19, 1996.

1997 Session

HB 15

- Approved June 27, 1997.
- For withdrawals from service occurring on or after July 1, 1990, an alternate method of calculating salary using the annual equivalent of average salary instead of the salary rate applicable for the greatest part of the year is allowed.
- Annuities effective on or after January 1, 1998, will be payable on the first day of the calendar month.
- The prudent person rule for investing is allowed.
- An eligible employee is allowed to contribute for all periods of temporary service while still in City service, for up to 90 days after withdrawal from City service, or while in reciprocal service.

- The Board is allowed to adopt rules prescribing the manner of repaying refunds and purchasing any optional credit including accepting rollovers for payments.
- The City is allowed to use deposits from any legal source (including borrowing) in lieu of all or part of the tax levy on or after June 27, 1997.

HB 313

- Approved June 27, 1997. For withdrawals from service occurring on or after June 27, 1997, an employee (or surviving spouse) age 50 or over with at least 30 years of service is eligible to receive an annuity based on the minimum annuity formula.
- For withdrawals from service occurring on or after June 27, 1997, an employee under age 60, with at least 25 years of service, is not subject to an age discount.
- The surviving spouse of a retiree dying on or after June 27, 1997, while receiving an annuity is eligible for one-half of the employee's annuity at death, discounted for spouse's age under 55 at the time of employee's death.
- Beginning June 27, 1997, employees already receiving annuity will receive a minimum annuity of $550 for life (reciprocal annuitants must have at least five years of Municipal service). Any future employee annuitant withdrawing from service after attainment of age 60 with 10 or more years of service would qualify for this minimum.
- Beginning June 27, 1997, widow(er)s already receiving annuity will receive a minimum annuity of $500 for life (reciprocal annuitants must have at least five years of Municipal service). For future spouses of retirees, 10 years of service is required. For spouses of employees dying in service in the future, five years of service is required.
- Beginning June 27, 1997, the child's annuity will be increased to $220 per month if the spouse of the deceased employee parent survives or $250 per month if no such spouse survives.
- Coverage in the City group health insurance is extended through June 30, 2002, with some modification in the plans offered. Pension plan supplement remains $45 and $75 for Medicare eligible and non-Medicare eligible annuitants respectively.
- Spouses of employees dying in service after age 50 on or after June 27, 1997, will be eligible to receive 50 percent of the annuity that the employee would have received. This annuity will be reduced by 0.25 percent per month for each month that the spouse is below the age of 55.
- Spouses of employees dying after retirement on or after June 27, 1997, will be eligible to receive 50 percent of the employee's annuity at death. This annuity will be reduced by 0.25 percent per month for each month that the spouse is below the age of 55.

HB 1641

- Approved August 22, 1997.

- Beginning August 22, 1997, for surviving spouses of employees who retired or died in service before January 23, 1987, the previous $300, $400, or $500 maximum spouse annuity limitation is removed. If an excess spouse refund was paid, it must be repaid with interest.
- Service paid under Section 8-230 can be counted for ordinary disability purposes for periods of disability on or after August 22, 1997.
- Early Retirement Incentive was created for withdrawals from December 31, 1997, to June 30, 1998.
  - Requires an election form to be filed before June 1, 1998.
  - Requires a member to be a current contributor on November 1, 1997, and have not previously retired under this Article.
  - Provides for elimination of the age discount for employees age 55 to 60.
  - Provides for 80 percent maximum final average salary compared to the present 75 percent.
  - Provides for an optional purchase of up to five years of service credit for 4.25 percent of the November 1, 1997, salary.
  - Provides for a 24-month option to pay for ERI service.
  - Provides for a tax levy derived from ERI contributions.

1998 Session

HB 3515

- Approved August 14, 1998.
- Beginning January 1, 1999, the automatic increase for employee annuitants changed to 3.00 percent compounded for all past, current, and future annuitants regardless of the effective date of the annuity. Term annuities are not eligible for the increase.
- Employees withdrawing after January 1, 1999, will be eligible for the minimum formula upon attainment of age 60 if they have at least 10 years of service.
- Beginning January 1, 1999, employees already receiving an annuity as of August 14, 1998, will receive a minimum annuity of $850 for life (reciprocal annuitants must have at least five years of Municipal service). Any future employee annuitant withdrawing from service after August 14, 1998, after attainment of age 60 with 10 or more years of service would qualify for this minimum.
- Beginning January 1, 1999, widow(er)s already receiving annuity as of August 14, 1998, will receive a minimum of $800 for life (reciprocal annuitants must have at least five years of Municipal service). For future spouses of retirees dying after August 14, 1998, 10 years of service is required. For spouses of employees dying in service after August 14, 1998, five years of service is required.
- The conditions of the reversionary option were changed as follows:
  - The nullification of reversionary payment due to employee dying was reduced to 365 days after written designation was filed with the board and now applies only to parents, children, and siblings (not spouses).

- Employees may reduce their monthly annuity by as much as $400.
- The increased annuity for spouse may now be as much as 100 percent of the reduced employee annuity.

- Spouses and widows that are eligible for the "50 percent employee amount" will no longer have this amount reduced for under age 55 if the employee dies on or after January 1, 1998, and withdrew from service on or after June 27, 1997, and the employee retired after age 55 with at least 25 years of service or after age 50 with at least 30 years of service. The age discount will only apply if the spouse is under age 50.
- The child of an annuitant who withdraws after January 1, 1998, having attained age 50 with at least 30 years of service is eligible for a child annuity upon the death of the annuitant.
- The required employer multiple has been set at 1.25 for 1999 and beyond.
- Money deposited under 5/8-173(f) may be used by the plan for any of the purposes for which the proceeds of the tax levied by the city under this section may be used.
- An employee or former employee may pay and receive credit for all periods of full-time employment by the Public Building Commission as long as they are not receiving credit for the same service from another retirement system. Employee must pay employee and employer contributions based on the salary received from the Public Building Commission for employment. Repayment must be made before annuity begins.
- Annuitants may authorize a portion of their annuity to be withheld for payment of dues to the labor organization by which they were represented. A minimum of 25 annuitants must choose an organization for it to be included in this plan.

HB 1612

- Effective July 1, 1999, Qualified Illinois Domestic Relations Orders were recognized.

1999 Session

- No Changes.

2000 Session

HB 1583

- Approved July 6, 2000.
- An employee or widow whose annuity would amount to less than $800 per month may elect to receive a refund in lieu of annuity. Formerly, only employees and widows whose annuity would be less than $300 per month could choose a refund.
- The reversionary annuity tables have been extended down to age 50 from age 55 to comply with the change in the law allowing retirement at age 50 with 30 years of service.

- The Board is allowed to pay an annuity (if the person qualifies) directly to a Medicare approved, State certified nursing home or to a publicly owned and operated nursing home, hospital, or mental institution. Each person must qualify under the provisions of this amendment.
- Annuities of widows who remarry on or after the date 60 days after the effective date of this amendment would not be terminated upon remarriage.
- For annuities effective before January 1, 1998, all annuity payments will be made on the first day of the calendar month, for the entire month without proration.

2001 Session

EGTRRA

- On June 7, 2001, the Economic Growth and Tax Relief Reconciliation Act of 2001 was signed by President Bush.
- Beginning January 1, 2002, payments for eligible optional service credits may be made with funds rolled over from a 457 deferred compensation plan or a 403(b) tax deferred annuity plan (if allowed by the 457 or 403(b) plan).

2002 Session

SB 314

- Effective July 1, 2002.
- The accrual rate for the minimum formula annuity is changed from 2.20 percent to 2.40 percent of final average salary and the maximum annuity is changed from 75 percent to 80 percent of final average salary for employees withdrawing from service on or after January 1, 2002.
- The 3.00 percent post-retirement automatic increase will now begin no later than three years after retirement for an eligible retiree (An eligible retiree is an employee annuitant, not a widow or widower annuitant, originally granted a lifetime annuity). For eligible retirees less than age 60 on the first anniversary of retirement, the 3.00 percent increase will begin at the earlier of age 60, and the latest of the following dates:
  - The third anniversary of retirement
  - The attainment of age 53; or
  - January 1, 2002

For eligible retirees age 60 or older on the first anniversary of retirement, the 3.00 percent increase will begin on the first anniversary of retirement.

HB 5168

- Effective June 28, 2002.
- For the eligible spouse of an employee who dies in service on or after August 28, 2002, with at least 10 years of service, the annuity is no less than 50 percent of the minimum formula annuity the employee would have been entitled to based on service and salary to the date of death without regard to age eligibility requirements. This is equal to 2.40 percent of final average salary for each year of service. The employee and the spouse must have been married for ten years.
- For children of employees who die in service on or after June 28, 2002, there is no service requirement for eligibility for children's annuity.
- The definition of "child" now includes any child adopted before employee withdraws from service and at least one year prior to the date any benefit for the child accrues. Previously the adoption also had to take place before the employee attained age 55.
- For ordinary disability benefits paid on or after January 1, 2001, the ordinary disability benefit is 50 percent of the employee's salary at the date of disability with the amounts ordinarily contributed by the employee for annuity purposes contributed by the Plan. These contributions are not refundable.
- The pension plan subsidy for retiree health insurance was extended through June 30, 2003. For annuitants (older than child annuitants) taking the employer-provided plan, the subsidy is $75 per month if the annuitant is not eligible for Medicare, and $45 per month if the annuitant is eligible for Medicare.
- Current and former Chicago Housing Authority employees who have service in this Plan or who reinstate service in this Plan may elect to participate in this Plan with respect to their employment with the Chicago Housing Authority under certain conditions. Contributions can be made for past service as well as current service.
- Current and former Public Building Commission employees who have service in this Plan or who reinstate service in this Plan may elect to participate in this Plan with respect to their employment with the Public Building Commission under certain conditions. Contributions can be made for past service as well as current service.
- An employee with 10 years of service in this Plan may establish service credit for up to seven years of full-time employment by the Illinois Housing Development Authority.
- The City Clerk and City Treasurer may elect to establish alternative credits in the Aldermanic Plan.
- Chicago aldermen may receive an annuity at age 55 with 10 years of service or age 60 with eight years of service.
- An alderman in service on June 1, 1995, can make payments for prior service up to 30 days after the effective date, even though he might be out of service or retired.
- A member of the Plan who has service in Police Fund may apply to Police to transfer his credits and service to Municipal under certain conditions. This must be done within 90 days of the effective date. Employee and employer contributions will be transferred.

2003 Session

SB 1701

- Effective July 1, 2003.
- The healthcare benefits were extended and increased to $85 per month for non-Medicare eligible participants and $55 per month for Medicare eligible participants for the period from July 1, 2003, through June 30, 2008. Thereafter, the benefits are extended and increased from $85 to $95 and $55 to $65 for the period July 1, 2008, to June 30, 2013.
- The healthcare benefits referred to above are not and shall not be construed to be pension or retirement benefits for the purposes of Section 5 of Article XIII of the Illinois Constitution of 1970.

2004 Session

HB 600

- Effective January 16, 2004.
- Early Retirement Incentive was created for withdrawals from January 31, 2004, to February 29, 2004 (or to May 31, 2004, for those deemed critical employees).
  - Requires an election form to be filed before January 31, 2004.
  - Requires a member to be a current contributor who has not previously retired under this Article and satisfy one of the following:
    - Active as of October 15, 2003
    - Returned to active from approved leave of absence prior to December 15, 2003
    - Receiving ordinary or duty disability benefits as of October 15, 2003
    - Restored to service by January 31, 2004, after having been involuntarily laid off
- Requires that employees that re-enter service forfeit their right to receive benefits and will have their benefits recalculated at the time of retirement excluding the benefits provided under the ERI.
- Requires that the participant is age 50 with ten years of creditable service in this Fund and have 70 combined years of age and service, with service in one or more systems under the Reciprocal Act (excluding service purchased under the ERI).
- Provides for elimination of the age discount for employees younger than age 60.
- Provides for an optional purchase of up to five years of service credit for 4.25 percent of the monthly salary rate in effect October 15, 2003.

- Provides for a 24-month option to pay for ERI service.
- Provides for the exclusion of ERI contributions from the base from which the tax levy is derived.
  - Allows Board members to continue until the end of their terms without forfeiting the benefits provided by the early retirement incentive.
  - Provides for a lump sum benefit option of 100 percent of salary at retirement and an actuarially reduced monthly annuity for those employees who were eligible for the maximum benefit (excluding purchased service under the ERI).
- Automatic increases in annuities will now take effect in the January of each year in which they are to be provided.
- An employee who previously withdrew contributions from the Fund, may have his rights under the Fund restored after repaying the withdrawn contributions with interest after completing the required amount of service after the date of refund. The required service is:
  - 90 days of service under this Fund or
  - Two years of service under any participating Fund under the Reciprocal Act.
- Municipality credits earned in this Fund shall be transferred to the Firemen's Annuity and Benefit Fund of Chicago with 11.00 percent interest compounded annually to the date of the transfer for former paramedics who are now covered under the Firemen's Annuity and Benefit Fund.
- Employees may elect to have their optional contributions "picked-up" by the employer, to be treated as employer contributions for tax purposes. The employee election is irrevocable.
- For the eligible spouse of an employee who died in service on or after January 1, 2002, and before August 28, 2002, with at least 10 years of service, the annuity is no less than 50 percent of the minimum formula annuity the employee would have been entitled to based on service and salary to date of death without regard to age eligibility requirements. This minimum formula annuity is equal to 2.40 percent of final average salary for each year of service. The employee and spouse must have been married for ten years.

2005 Session

SB 23

- Approved June 27, 2005.
- Prohibits the investment or deposit from the retirement system or pension fund to certain entities doing business in or with the government of the Republic of the Sudan. Fund managing companies must certify that under Section 1-110.5 of the pension code that they have not loaned to, invested in, or otherwise transferred any of the pension fund assets to a forbidden entity.

SB 253

- Approved August 4, 2005.
- Provides, that to qualify as an "emerging investment manager", the maximum value of an investment portfolio that a manager manages is $2,000,000,000 (was $400,000,000).

SB 1446

- Approved August 22, 2005.
- Provides for various changes in provisions and procedures concerning Qualified Illinois Domestic Relations Orders. Allows for alternate payee's benefit to be based on a percentage of employee's benefit. Effective July 1, 2006.

HB 227

- Approved August 22, 2005.
- Provides a benefit to a spouse married to the employee after retirement under certain conditions.

2006 Session

- No Changes.

2007 Session

HB 49

- Approved August 17, 2007.
- Provides that, beginning on the effective date, legally adopted children shall be entitled to the same benefits as other children, and no child's or survivor's benefit shall be disallowed because the child is an adopted child.

SB 1169

- Approved August 28, 2007.
- Provides that, in order for an Illinois finance entity to be eligible for investment or deposit of retirement system or pension fund assets, the Illinois finance entity must annually certify that it complies with the requirements of the High Risk Home Loan Act and the rules adopted pursuant to that Act that are applicable to that Illinois finance entity. Requires the retirement system or pension fund to divest its assets with the Illinois finance entity if the certification is not made. Provides that these certification requirements are severable. Makes changes in the severability provisions applicable to the amendatory Act.

SB 1380

- Approved August 28, 2007.
- Amends the Illinois Municipal Retirement Fund (IMRF) and Chicago Municipal Articles of the Illinois Pension Code. Allows a sheriff's law enforcement employee under the IMRF Article to transfer service credit under the Chicago Municipal Article to the IMRF.

2008 Session

- No Changes.

2009 Session

SB 2520

- Approved February 17, 2009.
- Provides that, before any action is taken by the Board on an application for a duty disability benefit or a widow's compensation or supplemental benefit, the employee or widow shall file a claim with the employer to establish that the disability or death occurred while the employee was acting within the scope of and in the course of his or her duties. Provides an offset of disability benefits for any amounts provided to the employee or surviving spouse as temporary total disability payments, permanent disability payments, a lump sum settlement award, or other payment under the Workers' Compensation Act or the Workers' Occupational Diseases Act. Makes other changes concerning disability benefits.

HB 2557

- Approved August 25, 2009.
- Provides that it is the public policy of the State to encourage pension funds to promote the economy of Illinois through the use of economic opportunity investments within the bounds of financial and fiduciary prudence. Provides that the pension funds submit a report to the Governor and General Assembly by September 1 of each year identifying the economic opportunity investments made by the Fund, the primary location of the business or project, the percentage of the Fund's assets in economic opportunity investments, and the actions the Fund has taken to increase the use of economic opportunity investments.
- Requires the Fund to instruct the investment advisors to utilize investment strategies designed to ensure that all securities transactions are executed in such a manner that the total explicit and implicit costs and the total proceeds in every transaction are the most favorable under the circumstances.

SB 364

- Approved April 3, 2009.
- Requires Board members to file a verified written statement of economic interest annually with the office of the Clerk of Cook County.
- Requires the Board to adopt a policy that sets quantifiable utilization goals for the management of assets in specific asset classes for emerging investment managers. Goals shall be separated by minority ownership, female ownership, and person with a disability ownership.
- Requires that if at least one emerging firm(s) meet criteria of search process, at least one shall be invited to present to the Board for final consideration.
- Requires the Board to adopt a policy that sets forth goals for increasing the racial, ethnic and gender diversity of its fiduciaries, including its consultants and senior staff.
- Requires the Board to adopt a policy that sets forth goals for utilization of WMDBE firms for all contracts and services, based on the percentage of total dollar amount of all contracts let.
- Requires the Board to adopt a policy that sets forth goals for increasing the utilization of minority broker-dealers.
- Requires an annual report to the Governor and General Assembly on the utilization of “emerging firms” as defined by Article 1 of the Pension Code.
- Requires the Board to award all contracts for investment services using a competitive process that is substantially similar to the process required for the procurement of professional services under Article 35 of the Illinois Procurement Code. Requires the Board to adopt a procurement policy which will be posted on the Fund’s website and filed with the Illinois Procurement Policy Board.
- Provides that a person may not act as a consultant or investment adviser unless that person is registered as an investment adviser or bank under the federal Investment Advisers Act of 1940.
- Requires investment contracts between the Retirement Board and investment service providers to include certain required information.
- Provides consultant contracts cannot exceed five years in duration; however, incumbent consultant may compete for new contract.
- Requires investment consultants and advisers to disclose all direct and indirect fees, commissions, penalties, and other compensation paid by or on behalf of the investment consultant or adviser in connection with the services provided.
- Requires that a description of every contract let for investment services be posted on the website, including name of entity awarded the contract, amount of contract, total fees paid, and disclosure describing the factors that contributed to the selection.

- Requires the Fund to maintain a website that shall include standard investment reporting, a copy of relevant Board policies, a listing of investment consultants and managers, a notification of any requests for investment services, and the names and e-mail addresses of Board members, Fund directors, and senior staff.
- Requires Board members to attend at least eight hours of ethics training per year and requires each Board to annually certify its member's compliance and submit an annual certification to the Division of Insurance of the Department of Financial and Professional Regulation.
- Prohibits any Fund trustee or employee or their spouses or immediate family living with them to intentionally solicit or accept any gift from any prohibited source as prescribed in Article 10 of the State Officials and Employees Ethics Act, including educational materials and missions and travel expenses for discussing Fund business.
- Provides that any person who knowingly makes any false statement or falsifies or permits falsifying any record of the pension fund in an attempt to defraud is guilty of a Class 3 felony.
- Provides that no person or entity shall retain a person or entity to influence the outcome of an investment decision or the procurement of investment advice to a pension fund for compensation, contingent upon the decision of the Board.
- Requires approval for travel or education mission expense of a Trustee by a majority of the Board prior to mission.

SB 1440

- Approved August 18, 2009.
- Provides that the Fund may, and to the extent required by federal law shall, allow an employee to roll over a refund, lump-sum benefit, or other non-periodic distribution (including the non-taxable portion) directly to any entity that is designated in writing by the person, is qualified under federal law to accept the distribution, and has agreed to accept the distribution.

SB 1705

- Approved August 25, 2009.
- Provides the Municipal fund will send city contributions to the Fire fund for a fireman who was employed by the Chicago Fire Department and participated in the Municipal fund, terminated that service, and received a refund, if the employee establishes the service under the Fire fund.

2010 Session

Public Act 96-0889 (SB 1946)

- Approved April 14, 2010.
- Establishes a new tier of benefits for participants that first become members on or after the effective date of January 1, 2011.
  - Final average compensation is based on the average of the highest consecutive eight years within the last ten years of service.
  - Establishes a cap on final average salary of $106,800, as automatically increased by the lesser of 3 percent or one-half of the annual increase in the Consumer Price Index-U during the preceding 12-months.
  - Increases eligibility for a retirement annuity:
    - Age 67 with 10 years of service for an unreduced benefit.
    - Age 62 with 10 years of service for a reduced benefit. Reduction is one-half percent for each full month that retirement precedes age 67.
  - Changes provisions for automatic increases in annuity:
    - Increases begin in the year following the later of the first anniversary of the annuity start date and attainment of age 67.
    - Increases are equal to the lesser of 3 percent or one-half of the annual increase in the Consumer Price Index-U during the preceding 12-months.
    - Increases are based on the amount of the originally granted benefit (not compounded).
  - Changes benefits provided to surviving spouses:
    - Surviving spouse annuity is equal to 66 2/3 percent of the participant's earned retirement annuity at the date of death.
    - Provides an automatic increase in annuity:
      - Increases begin on January 1 in the year following the commencement of the survivor's annuity if the deceased member died while receiving a retirement annuity and January 1 following the first anniversary of commencement otherwise.
      - Increases are equal to the lesser of 3 percent or one-half of the annual increase in the Consumer Price Index-U during the preceding 12-months.
      - Increases are based on the amount of the originally granted benefit (not compounded)
- Establishes that members that are receiving a retirement annuity and accept a full-time position under the same Article or another Article established under the Illinois Compiled Statutes would have their benefits suspended during employment. Their benefits would be recalculated, if applicable, upon termination of employment.

Public Act 96-1490 (SB 550)

- Approved December 30, 2010.
- Amends certain provisions established in SB1946 that apply to participants that first become members on or after January 1, 2011:
  - Establishes the period for calculating the annual unadjusted percentage increase in the Consumer Price Index-U as the 12-month period ending with September for purposes of capping salary and calculating the automatic increase in annuity percentage.
  - Establishes that the salary cap of $106,800 applies for all purposes under the Code, including the calculation of benefits and employee contributions.
  - Establishes that the survivor’s annuity is calculated with no reduction due to age.
  - Establishes that members who withdraw before age 62, or with less than 10 years of service, regardless of age, are entitled to all salary deductions for retirement annuity and spouse annuity accumulated with interest to date of resignation, plus the 0.50 percent deducted for annuity increase purposes without interest.
  - Establishes that increases in annuity for employee annuitants commence on January 1.

2011 Session

Public Act 97-0530 (SB 1672)

- Approved August 23, 2011.
- Requires all pension funds and retirement systems subject to the Code to comply with the federal Heroes Earnings Assistance and Relief Tax Act of 2008.

Public Act 97-0609 (SB 1831)

- Approved August 26, 2011.
- Applies to those members hired on or after January 1, 2012.
- Provides that if a new hire is receiving a retirement annuity or pension and accepts a contractual position to provide services to a governmental entity from which he or she has retired, then that person's annuity or pension will be suspended during that contractual service.
- Makes it a Class A misdemeanor for a pensioner who is seeking contractual employment to fail to notify certain persons about his or her retirement status before accepting an employment contract.

Public Act 97-0504 (HB 1670)

- Approved August 23, 2011.
- Amends the Open Meetings Act.
  - Requires each elected or appointed member of a public body subject to this Act who is such a member on the effective date of the amendatory Act to successfully complete the electronic training curriculum developed and administered by the Public Access Counselor.
  - Requires those members to complete the training not later than one year after the effective date of the amendatory Act.
  - Requires each elected or appointed member of a public body subject to the Act who becomes such a member after the effective date of the amendatory Act to successfully complete the electronic training curriculum developed and administered by the Public Access Counselor.
  - Requires those members to complete the training not later than the 90th day after the date the member either (i) takes the oath of office, if the member is required to take an oath of office to assume the person's duties as a member of the public body or (ii) otherwise assumes responsibilities as a member of the public body, if the member is not required to take an oath of office to assume the person's duties as a member of the governmental body.
  - Requires each member who successfully completes the curriculum to file a copy of the certificate of completion with the public body.
  - Provides that the failure of one or more members of a public body to complete the training required by this Section does not affect the validity of an action taken by the public body.
  - Provides that an elected or appointed member of a public body subject to this Act who has successfully completed the required training and filed a copy of the certificate of completion with the public body is not required to subsequently complete that training.

2012 Session

Public Act 97-0651 (HB 3813)

- Approved and effective January 5, 2012.
- Requires any reasonable suspicion of fraud against the Fund to be reported to the State's Attorney for investigation.
- Changes provisions for Union Leaves of Absence as follows:
- Service credit can be accrued only for union leaves that begin before the effective date of this amendatory Act.
- "Any pension plan established by the local labor organization" is defined as any pension plan in which the member can receive credit as a result of his membership in the local labor organization. This is a declaration of existing law.

- Salary used for calculation of final average salary must be a salary paid by an employer, not by the union. This is a declaration of existing law.
- Minimum annuity section 11-134 is changed to add to the final average salary the product of (1) final average salary, (2) the average percentage increase in the CPI during the leave of absence, and (3) the number of years of leave of absence. This does not seem to deal with a situation where the employee may have been on leave within the last 10 years but is last with Municipal. It also only amends paragraph (f-1) which applies to those members who go on annuity on or after the attainment of age 60.
- Does not change that contributions are based on current salary with the union.

Public Act 97-0967 (HB 3969)

- Approved and effective August 16, 2012.
- Applies if the member retired after the effective date with less than 2 years of service in a participating system under the Reciprocal Act after General Assembly service.
- Requires that if the final average salary in a participating system is used to calculate the annuity, the employer must pay the General Assembly Retirement System for any increased cost of the General Assembly annuity that is attributable to the higher salary under the participating system.

2013 Session

Public Act 98-0043 (HB 1584)

- Approved and effective June 28, 2013
- Changes the duration of health insurance supplement payments to eligible employee annuitants to “Beginning July 1,2008, and until such time as the city no longer provides a health care plan for such annuitants or December 31, 2016, whichever comes first.”

Public Act 98-0433 (HB 2620)

- Approved and effective August 16, 2013
- Allows for an additional exception to the RFP process for obtaining investment services for “contracts for follow-on funds with the same fund sponsor through close-end funds”

2014 Session

Public Act 98-0641 (SB 1922) (Ruled unconstitutional by Illinois Supreme Court on March 24, 2016. See next page)

- Approved and effective June 9, 2014
- Implements a funding policy designed to achieve 90% funded ratio by 2055
- Provides for incrementally increased employer contribution multiple, which eventually converts to actuarial-based funding.
- Caps the current pension levy at the full required city contribution amount.
- Creates payment obligation to the fund; provides enforcement.
- Provides for incrementally increased employee contributions.
- Tier 1: Ties annual increase in retirement annuity to inflation, subject to 3% cap, delays initial annual increase by one year, and eliminates annual increases in 2017, 2019 and 2025 for most annuitants.
- Tier 2: Reduces minimum retirement age by 2 years, delays the initial annual increase by one year for some retirees, and eliminates the annual increases in 2025.

Public Act 98-1022 (SB 452)

- Approved and effective August 22, 2014
- Requires investment managers and consultants entering into a contract to disclose information on use of vendors owned by minorities, females, and persons with disabilities.
- Requires minority consideration to be "within the bounds of financial and fiduciary prudence."
- Defines "minority investment managers" and requires funds to adopt a policy to increase goals for utilization. Requires annual review.
- Declares it is the public policy of the State to encourage use of minority investment managers.

2015 Session

Public Act 99-0462 (SB 1334)

- Approved August 25, 2015
- Sets aspirational goals that, beginning January 1, 2016, at least 20% of the total funds under management be managed by emerging investment managers and that at least 20% of the investment advisors be minorities, females, and persons with disabilities.

- Sets the aspirational goal that, beginning January 1, 2016, at least 20% of contracts for "information technology services", "accounting services", "insurance brokers", "architectural and engineering services", and "legal services" be awarded to businesses owned by minorities, females, and persons with disabilities.

Jones et al. v. Municipal Employees' Annuity and Benefit Fund of Chicago, et al.
Johnson et al. v. Municipal Employees' Annuity and Benefit Fund of Chicago, et al.

- Public Act 98-0641 was ruled unconstitutional by the circuit court on July 24, 2015. On March 24, 2016, the Illinois Supreme Court affirmed the circuit court's decision.
- Restores full automatic annual increase, the date of initial increase and eliminates increase holidays
- For Tier 2, changes retirement age for unreduced benefits back to age 67 and for reduced benefits to age 62
- Eliminates new funding policy

2016 Session

Public Act 99-0683 (HB 6030)

- Approved July 29, 2016
- Requires every pension fund or retirement system under the Code to develop and implement, by no later than June 30, 2017, a process to identify annuitants who are deceased. The process shall require the pension fund or retirement system to check for any deceased annuitants at least once per month and shall include the use of commonly accepted methods to identify persons who are deceased, which include but are not limited to, the use of a third party entity that specializes in the identification of deceased persons, the use of data provided by the Social Security Administration, the use of data provided by the Department of Public Health's Office of Vital Records, or the use of any other method that is commonly used by other states to identify deceased persons.

2017 Session

Public Act 100-0023 (SB 0042)

- Approved July 6, 2017 (effective date)
- Creates a new tier of benefit eligibility and contribution requirements for members (Tier 3) who first become members on or after the effective date of the Act. Benefit structure would be consistent with a Tier 2 member, except as reflected below:
  - Members would contribute 11.5%
  - Beginning January 1, 2018, members would contribute the lesser of 11.5% or the normal cost of the accrued benefit calculated on an annual basis; not less than 8.5%

- Qualified members would be able to retire at 65 years of age undiscounted and 60 to 64 years of age discounted

- A Tier 2 member would have from October 1 to November 15, 2017 to make an irrevocable election to become a Tier 3 member
- Creates an optional benefits structure for certain Tier 2 members. Must be passed by resolution or ordinance by the governing body of the local government.
- Requires law department employees first hired after the effective date of the Act to be members of the Fund.
- The City of Chicago will increase contributions to the Fund from 2018 to 2022 (ramp period) and then begin paying a required contribution to achieve 90% funding in 40 years (2058).
- The Fund's ability to subrogate a disability injury of a member that was caused by a third party
- Closes the Alternative Annuity for City Officers Plan to officers who first become an elected officer after the effective date of the Act.
- Felony conviction. Any refund to a person who was convicted of a felony that was in relation to their service as a municipal employee, shall be reduced by any benefit received by the person prior to the calculation of the refund. This relates to persons who first became members after the effective date of the Act.

Public Act 100-0334 (HB0350)

- Approved and effective August 25, 2017
- Provides for the forfeiture of benefits for any person who otherwise would receive a survivor benefit who is convicted of any felony relating to or arising out of or in connection with the service of the member from whom the benefit results
- Provides that this legislation will not affect any right to survivor benefits prior to the effective date of this Act.

Public Act 100-0542 (SB1714)

- Approved and effective November 8, 2017
- Amends the General Provisions Article 1 of the Illinois Pension Code

- Requires an investment consultant to annually disclose to the Board (of a retirement system, pension fund, or investment board) the following:
  - Total searches conducted for investment services in the prior year
  - Total searches conducted for investment services in the prior year that include minority owned, female owned, or businesses owned by persons with a disability (MWDBE), number of MWDBE recommendations made, and amounts awarded to the MWDBE
  - Requires a consultant to disclose any compensation or economic opportunity received in the last 24 months from any investment advisors recommended to or retained by the Board (of a retirement system, pension fund, or investment board).
  - Requires consideration of these disclosures before awarding any contract for consulting services.

2018 Session

Public Act 100-1166 (HB0166)

- Approved and effective 1/4/19
- Trailer bill to SB0042 (Public Act 100-0023)
- Clarifies what qualifies a participant as a Tier 3 member
- Clarifies the member contribution rate once the MEABF achieves 90% funding

2019 Session

Public Act 101-0069 (HB2824)

- Approved and effective 7/12/19
- Changes the date by which members receive retroactive annuity payments to be 1 year prior to the date the application for annuity is received by the Board
- Provides that the Board can extend the frequency at which a member receiving disability payments from the Fund must be examined by a Board appointed physician
- Provides that the Board will not be liable if a member experiences financial loss due to depositing their annuity payment with a financial institution that is possibly not federally insured

Public Act 101-0473 (HB2460)

- Approved in August 2019 and effective January 1, 2020
- Sustainable Investing Principles was approved by the Board and adopted by MEABF's Investment Policy Statement in December 2019
- Requires the Board and other fiduciaries to regularly consider material, relevant, and decision-useful sustainability factors in evaluating investment decisions

Public Act 101-0233 (HB814)

- Approved August 9, 2019 and effective January 1, 2020
- Amends the Open Meetings Act
- Provides that an elected or appointed member of a municipality may satisfy training requirements by taking a course sponsored or conducted by an organization as designated under the Illinois Municipal Code
- Provides content requirements for training
- Provides a certificate of completion must be issued to each elected or appointed member who successfully completes that training

Public Act 101-0177 (HB 834)

- Effective July 31, 2019
- Amends the Equal Pay Act of 2003
- Provides that exceptions to the equal pay requirement based on sex also applies to the equal pay requirement for African American employees
- Provides that an employer may not disclose salary or wage information without written authorization from the employee whose information is being requested
- Provides that specified provisions shall not be construed to prevent an employer from providing benefit information in relation to a position or engage in discussions with an applicant about their expectations regarding benefits
- Provides that an employer is not in violation of specified provisions when an applicant volunteers salary and benefit history on the condition that the employer does not consider or rely on the information given voluntarily as a factor in determining whether to offer a job or determine future salary, benefits, or other compensation

Public Act 101-0459 (HB 2124)

- Approved and effective August 26, 2019
- Also amends the Open Meetings Act
- Provides that a public body may hold a closed meeting to discuss the appointment, employment, compensation, discipline, performance, or dismissal of specific employees, independent contractors in a park, recreational, or educational setting, or specific volunteers of the public body or legal counsel for the public body

Public Act 101-0005 (SB 196)

- Approved and effective May 15, 2019
- Provides that appointments made to the State Board of Elections occurring in 2019 shall be made and submitted by the Governor no later than May 15

Public Act 101-0546 (SB 1264)

- Approved August 23, 2019 and effective January 1, 2020
- Amends the Revised Uniform Unclaimed Property Act
- Provides that the Act does not apply to any annuity, pension, or benefit funds held in a fiduciary capacity by a retirement system
- Provides that property assumed as abandoned in an annuity, pension, or benefit fund held in a fiduciary capacity shall be reported to the administrator
- Provides that no retirement system shall pay any benefit funds held in a fiduciary capacity to the administrator

Public Act 101-0343 (SB 1624)

- Approved August 9, 2019 and effective January 1, 2020
- Amends the Personal Information Protection Act
- Provides that an information breach to more than 500 Illinois residents as a result of a single breach must be reported to the Attorney General no later than when notice is provided to the consumer
- Provides that the Attorney General may publish information concerning the breach

Public Act 101-0434 (SB 1713)

- Approved August 20, 2019 and effective January 1, 2020
- Amends the Freedom Information Act
- Provides exemptions from disclosure a public body's confidential bank and credit card account information where the disclosure of this information could result in public loss

2020 Session

Public Act 101-0640 (SB 2135)

- Approved and effective June 12, 2020
- Provides the following provisions that may be enacted by the government due to the COVID-19 pandemic:
  - Meetings subject to the Open Meetings Act can be conducted by audio or video conference without a quorum of the members physically present under certain conditions.
  - No public entity will be considered in violation of this Act for failure to respond to a request between March 10, 2020 and June 1, 2020 as long as the entity responds within 30 days of the effective date of this Act.
  - The deadlines for filing statements of economic interest on or after March 17, 2020 are suspended until August 1, 2020.
  - Allows for notaries and witnesses to perform their duties using two-way audio-video communication technology that allows video and audio interaction between the individual signing the document, the witness, and the notary public.

Public Act 101-0642 (SB 1863)

- Approved and effective June 16, 2020
- Creates the Conduct of the 2020 General Election Article in the Code
- Establishes November 3, 2020 as a State holiday to be known as General Election Day to be observed throughout the State.
- Provides that all government offices shall be closed unless said office is being used for election day services or as a polling place.
- Also provides for changes to the following: vote by mail, first time voters, the public dissemination of information, early voting, election judges, additional duties of election authorities, and 2020 county party conventions.

2021 Session

Public Act 102-0342 (HB275)

- Approved and effective August 13, 2021
- Amends the Illinois Pension Code
- Provides that a compensation or supplemental annuity shall not be paid unless the performance of an act of duty results solely in the death of the employee.
- Provides that the death of any employee as a result of exposure and contraction of COVID-19 while in the performance of acts of duty with rebuttable presumption is considered to be a death in active service from March 9, 2020, to June 30, 2021. This does not apply if the employee was on a leave of absence from their employer or working remotely for 2 weeks prior to contracting COVID-19.
- For school years on or after July 1, 2021, an annuity shall not be cancelled if an employee of CPS is re-employed as a SECA on a temporary/hourly/non-annual basis if said employee does not work more than 120 days in a school year or earn more than $30,000 a school year. Re-employment does not require contributions, result in service credit being earned, or for said employee be considered an active participant in this Fund.
- Allows an officer under the Downstate Police Article to establish up to 5 years of optional credit as a participant under the Chicago Police Article under certain circumstances.

Public Act 102-0601 (HB 2766)

- Approved August 27, 2021 and effective January 1, 2022
- Provides that an annuitant formerly employed by the City of Chicago may have a portion of their pension withheld for payment of dues to a labor organization. Also, the City of Chicago shall coordinate mailings no more than twice in a 12-month period to such annuitants.

Public Act 102-0603 (HB 3004)

- Approved on August 27, 2021, and effective January 1, 2022
- Prohibits an individual who is a board member of a pension fund, investment board, or retirement system from being employed by that retirement system at any time during their service or for 12 months after they are no longer a board member. If a senior administrative staff position becomes vacant and no other member of the staff is willing to accept the position, a board member may service as an interim member of senior staff of the Fund under certain circumstances.

Public Act 102-0014 (HB 3922)

- Approved on June 16, 2021 and effective January 1, 2022
- Provides that Juneteenth shall be observed on June 19 of each year as a holiday throughout the State. When June 19 falls on a Saturday or Sunday, neither the previous Friday or following Monday shall be considered a paid holiday.

2022 session

Public Act 102-1108 (HB 1293)

- Approved and effective December 21, 2022
- Amends the Illinois Pension Code. Provides that the State-funded retirement systems shall not invest in any investment instrument issued by entity that resides in or has its principal place of business in Russia or Belarus
- Provides that no retirement system shall invest or deposit State monies in any bank that is domiciled or has its principal place of business in Russia or Belarus.
- Provides that each State-funded retirement system shall instruct its investment advisors to sell, redeem, or withdraw all direct holdings of Russian or Belarusian sovereign debt or government backed securities from the retirement system's assets in an orderly and fiduciarily responsible manner.

Public Act 102-0709 (HB 5472)

- Approved and effective April 22, 2022
- Amends the Downstate Teacher Article of the Illinois Pension Code
- Provides that from July 1, 2021 to June 30, 2022, an additional 20 paid days or 100 paid hours shall be added to a provision that allows an annuitant to accept employment for a certain number of paid days or hours as a teacher without affecting one's pension.

Public Act 102-0285 (SB 273)

- Approved and effective August 6, 2021
- Amends the Public Funds Investment Act
- Provides that no more than one-third of a public agency's funds may be invested in short term obligations that mature no later than 270 days from the date of purchase, or in investments that mature more than 270 days but less than 3 years from the date of purchase.

Public Act 102-0097 (SB 460)

- Approved July 9, 2021 and effective January 1, 2022
- Amends the Illinois Pension Code.
- Provides that all contracts for investment services shall be awarded using a process that is like the process required for the procurement of professional and artistic services under the Illinois Procurement Code.
- Provides that an exception may be allowed for contracts for investment services with an emerging investment manager provided through a qualified manager of emerging investment manager services.
- Provides that a board may select or appointment an emerging investment manager if that manager has been providing investment services in the multimanager portfolio for at least 24 months.
- Provides that all exceptions must be published on the Fund's website, which shall name the person authorizing the procurement and a brief explanation of the reason for the exception.

Public Act 102-0219 (SB 1675)

- Approved and effective July 30, 2021
- Amends the Deferred Compensation Article of the Illinois Pension Code.
- Provides that any agency with employees subject to automatic enrollment must systematically provide the employee data necessary for enrollment to the Department of Central Management Services or its designee.
- Provides that the Board shall establish annual, automatic increases to employee contribution rates for employees that are automatically enrolled in the deferred compensation plan.
- Provides that the amount of automatic annual increases to employee contribution rates in any 12-month period shall not exceed 1% of compensation.

Public Act 102-0653 (SB 2356)

- Approved August 27, 2021 and effective January 1, 2022
- Amends the Open Meetings Act
- Provides that each public body shall periodically meet to review minutes of all closed meetings.
- Provides that meetings to review minutes shall occur every 6 months, or as soon thereafter as is practicable, considering the nature and meeting schedule of the public body.
- Provides that when a public body is dissolved or consolidated by executive action and its functions and responsibilities are assumed by a unit of local government which assumes the functions of the prior public body shall review the closed session minutes of that public body.

Section 5: GASB 67 and 68 Information

Exhibit 1 – Net Pension Liability

The components of the net pension liability at December 31, 2022, were as follows:	
Total pension liability	$19,107,887,483
Plan fiduciary net position	3,951,788,039
Net pension liability	15,156,099,444
Plan fiduciary net position as a percentage of the total pension liability	20.68%

Actuarial assumptions. The total pension liability was determined by an actuarial valuation as of December 31, 2022, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.50%	
Salary increases	2.50% to 14.00%, varying by years of service and employer	
Investment rate of return	6.75%, net of investment expense	
Municipal bond index	3.72%, based on the Bond Buyer 20-Bond Index of general obligation municipal bonds as of December 31, 2022	
Single equivalent discount rate	6.57%, net of investment expense	
Cost of living adjustments	Tier 1:	3% compound
	Tier 2 & 3	the lesser of 3% or one-half of the change in CPI, simple

Post-retirement mortality rates were based on the PubG-2010 Retiree Amount-weighted Below Median mortality Tables (sex-specific), using 117% of the rates for females and 111% of the rates for males, projected generationally using scale MP-2021. Beneficiary mortality rates were based on the PubG-2010 Contingent Survivor Table Amount-weighted Below Median Mortality table (sex-specific), using 111% of the rates for females and 113% of the rates for males, projected generationally using scale MP-2021. Pre-retirement mortality rates were based on the PubG-2010 Employee Amount-weighted Below Median mortality table (sex-specific), using 92% of the rates for females and 90% of the rates for males, projected generationally using scale MP-2021.

The actuarial assumptions used in the December 31, 2022, valuation were based on the results of an experience study for the period January 1, 2017, through December 31, 2021.

Discount rate: The discount rate used to measure the total pension liability was 6.57%. The projection of cash flows used to determine the discount rate assumed member contributions will be made according to the contribution rate applicable for each member's tier and that employer contributions will be made as specified by Public Act 100-0023, with an additional supplemental contribution of $101.6 million during 2023. For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included. Projected employer contributions and contributions from future plan members that are intended to fund the service costs of future plan members and their beneficiaries are not included. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make projected future benefit payments of current plan members through the year 2078. Therefore, the long-term expected rate of return on pension plan investments of 6.75% was applied to projected benefits for all periods through 2077 and the municipal bond index rate of 3.72% was applied thereafter to determine the total pension liability. This results in single equivalent discount rate of 6.57%.

Sensitivity of the net pension liability to changes in the discount rate. The following presents the net pension liability as of December 31, 2022, calculated using the discount rate of 6.57%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (5.57%) or 1-percentage-point higher (7.57%) than the current rate:

	1% Decrease (5.57%)	**Current Discount Rate (6.57%)**	**1% Increase (7.57%)**
Net pension liability as of December 31, 2022	$17,481,065,428	$15,156,099,444	$13,213,817,487

Exhibit 2 – Schedules of Changes in Net Pension Liability

	2022	2021
Total pension liability		
Service cost	$263,993,363	$246,065,733
Interest	1,269,644,675	1,228,904,759
Change of benefit terms	0	0
Differences between expected and actual experience	84,258,204	121,988,642
Changes of assumptions	143,995,810	0
Benefit payments, including refunds of employee contributions	(1,055,584,541)	(1,010,191,404)
Net change in total pension liability	706,307,511	$586,767,730
Total pension liability – beginning	18,401,579,972	17,814,812,242
Total pension liability – ending (a)	$19,107,887,483	$18,401,579,972
Plan fiduciary net position		
Contributions – employer*	$959,550,492	$573,198,646
Contributions – employee	176,338,741	163,410,877
Net investment income	(429,912,148)	498,299,160
Benefit payments, including refunds of employee contributions	(1,055,584,541)	(1,010,191,404)
Administrative expense	(6,873,529)	(6,687,339)
Other	0	0
Net change in plan fiduciary net position	(356,480,985)	218,029,940
Plan fiduciary net position – beginning	$4,308,269,024	$4,090,239,084
Plan fiduciary net position – ending (b)	3,951,788,039	4,308,269,024
Fund's net pension liability – ending (a) – (b)	$15,156,099,444	$14,093,310,948
Plan fiduciary net position as a percentage of the total pension liability	20.68%	23.41%
Covered payroll	$2,166,181,666	$2,001,180,743
Fund's net pension liability as percentage of covered payroll	699.67%	704.25%

**Receivable amount to be paid the following year*

Changes in the net pension liability from the beginning of the year to the end of the year arise from the net difference between changes in the total pension liability and plan fiduciary net position that occurred during the year. Changes in net pension liability will be recognized immediately as pension expense, or reported as deferred outflows of resources related to pensions or deferred inflows of resources related to pensions, depending on the nature of the change.

Differences between actual and expected investment-related experience are recognized over a closed five-year period. Differences between actual and expected non-investment-related experience and changes of assumptions are recognized over the average of the expected remaining service lives of all members who are provided with pensions through the pension plan (active employees and inactive employees). The amounts below that are not included in pension expense for the current year are included in deferred outflows of resources or deferred inflows of resources related to pensions.

Exhibit 3 – Reconciliation of Net Pension Liability

	Increase/(Decrease) For Fiscal Year Ending December 31, 2022		
	Total Pension Liability (a)	**Plan Fiduciary Net Position (b)**	**Net Pension Liability (a) – (b)**
Balances at beginning of year	$18,401,579,972	$4,308,269,024	$14,093,310,948
Changes for the year			
Service cost	263,993,363		263,993,363
Interest	1,269,644,675		1,269,644,675
Differences between expected and actual experience	84,258,204		84,258,204
Contributions – employer		959,550,492	(959,550,492)
Contributions – member		176,338,741	(176,338,741)
Other income		0	0
Net investment income		(429,912,148)	429,912,148
Benefit payments, including refunds of employee contributions	(1,055,584,541)	(1,055,584,541)	0
Administrative expense		(6,873,529)	6,873,529
Change of assumptions	143,995,810	0	143,995,810
Changes of benefit terms	0	0	0
Net changes	706,307,511	(356,480,985)	1,062,788,496
Balances at end of year	$19,107,887,483	$3,951,788,039	$15,156,099,444

Exhibit 4 – Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

	Year Established	Original Balance	Original Amortizati Period	Amortization Amount	Outstanding Balance at December 31, 2022
Outflows					
Investment	2018	$496,300,674	5	$99,260,135	$0
Demographic	2018	95,540,469	5	19,108,094	0
Demographic	2019	16,675,541	5	3,335,108	3,335,108
Demographic	2020	100,937,565	5	20,187,513	40,375,026
Demographic	2021	121,988,642	4	30,497,161	60,994,320
Demographic	2022	84,258,204	5*	16,851,640	67,406,564
Assumption	2022	143,995,810	5	28,799,162	115,196,648
Investment	2022	702,524,303	5	140,504,859	562,019,444
Total outflows				**$358,543,672**	**$849,327,110**
Inflows					
Investment	2019	299,534,148	5	59,906,830	59,906,830
Investment	2020	76,455,910	5	15,291,182	30,582,364
Investment	2021	241,853,799	5	48,370,760	145,112,279
Total inflows				**$123,568,772**	**$235,601,473**

** The average expected remaining service lives of all members is 5 years, determined as of January 1, 2022. This amount is equal to the total expected remaining service of 361,118 years, divided by total employees that are provided with pensions through the plan of 79,912 (as shown in the table below), rounded to the nearest integer year.*

	Expected Remaining Service	Counts	Average of the Expected Remaining Service
Actives Members	361,118	32,925	10.97
Inactive Members		21,304	
Retirees and Beneficiaries		25,683	
Total Members	361,118	79,912	4.52

Exhibit 4 – Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions (continued)

At December 31, 2022, deferred outflows of resources and deferred inflows of resources related to pensions are:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$172,111,018	$0
Changes of assumptions	115,196,648	0
Net differences between projected and actual earnings on pension plan investments	326,417,971	0
Total	$613,725,637	$0

Deferred outflows of resources and deferred inflows of resources related to pensions will be recognized as follows:

Year ended December 31:	
2023	$116,606,674
2024	173,178,394
2025	137,784,905
2026	186,155,664
2027	-
Thereafter	-

Exhibit 5 – Pension Expense

	Fiscal Year Ending December 31, 2022	Fiscal Year Ending December 31, 2021
Components of pension expense		
Service cost	$263,993,363	$246,065,733
Interest on the total pension liability	1,269,644,675	1,228,904,759
Projected earnings on plan investments	(272,612,155)	(256,445,361)
Contributions – member	(176,338,741)	(163,410,877)
Administrative expense	6,873,529	6,687,339
Current year recognition of:		
Changes of assumptions	28,799,162	(1,486,238,258)
Difference between expected and actual experience	89,979,516	37,576,877
Difference between projected and actual earnings on pension plan investments	116,196,222	(83,563,676)
Change of benefit terms	0	0
Total pension expense	1,326,535,571	($470,423,464)

Exhibit 6 – Schedule of Employer Contributions

Year Ended December 31	Actuarially Determined Contributions	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Actual Payroll	Contributions as a Percentage of Covered Payroll
2014	$839,038,303	$149,746,748	$689,291,555	$1,602,977,593	9.34%
2015	677,200,246	149,225,191	527,975,055	1,643,480,973	9.08%
2016	961,769,955	149,718,491	812,051,464	1,646,939,238	9.09%
2017	1,005,456,621	261,763,635	743,692,986	1,686,532,720	15.52%
2018	1,049,915,647	349,574,257	700,341,390	1,734,595,691	20.15%
2019	1,117,387,759	418,268,575	699,119,184	1,802,790,156	23.20%
2020	1,167,153,830	496,991,504	670,162,326	1,861,905,323	26.69%
2021	1,218,360,892	573,198,646	645,162,246	2,001,180,743	28.64%
2022	1,262,413,314	959,550,492	302,862,822	2,166,181,666	44.30%

Notes to Exhibit 6

Valuation date	December 31, 2021
Methods and assumptions used to establish "actuarially determined contribution" rates:	Actuarially determined contribution amount is determined as of December 31, with appropriate interest to the end of the year.
Actuarial cost method	Entry Age Actuarial cost method
Amortization method	30-year open, level dollar amortization
Asset valuation method	5-year smoothed fair value
Actuarial assumptions:	
Investment rate of return	7.00%, net of investment expense
Projected salary increases	3.50% to 7.75% (1.50% to 6.50% for 2020–2022), varying by years of service
Mortality	Post-retirement mortality rates were based on the RP-2014 Healthy Annuitant Mortality Tables, set forward two years for males and one year for females, and projected generationally using scale MP-2016. Pre-retirement mortality rates were based on 120% of the RP-2014 Employee Mortality Tables projected generationally using scale MP-2016.
Cost of living adjustments	Tier 1: 3% compound Tier 2 & 3: The lesser of 3% or one-half of the change in CPI, simple
Other assumptions:	Same as those used in the December 31, 2021, actuarial funding valuation

Section 6: GASB 74 and 75 Information

Exhibit 1 – Net OPEB Liability

The components of the net OPEB liability at December 31, 2022, were as follows:	
Total OPEB liability	$6,637,653
Plan fiduciary net position	0
Net OPEB liability	6,637,653
Plan fiduciary net position as a percentage of the total OPEB liability	0.0%

Actuarial assumptions. The total OPEB liability was determined by an actuarial valuation as of December 31, 2022, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.50%
Investment rate of return	6.75%, net of investment expense
Municipal bond index	3.72%, based on the Bond Buyer 20-Bond Index of general obligation municipal bonds as of December 31, 2022
Election assumption	25% of eligible City of Chicago employee annuitants are assumed to participate in a group health care plan for which the Fund offers to deduct health insurance premiums from monthly annuities, and thus receive the health care insurance premium subsidy

Post-retirement mortality rates were based on the PubG-2010 Retiree Amount-weighted Below Median mortality Tables (sex-specific), using 117% of the rates for females and 111% of the rates for males, projected generationally using scale MP-2021. Beneficiary mortality rates were based on the PubG-2010 Contingent Survivor Table Amount-weighted Below Median Mortality table (sex-specific), using 111% of the rates for females and 113% of the rates for males, projected generationally using scale MP-2021. Pre-retirement mortality rates were based on the PubG-2010 Employee Amount-weighted Below Median mortality table (sex-specific), using 92% of the rates for females and 90% of the rates for males, projected generationally using scale MP-2021.

The actuarial assumptions used in the December 31, 2022, valuation were based on the results of an experience study for the period January 1, 2017, through December 31, 2021.

Discount rate: Since there are no assets dedicated to the OPEB plan, the discount rate used to measure the total OPEB liability was 3.72% based on the municipal bond Index.

Sensitivity of the net OPEB liability to changes in the discount rate. The following presents the net OPEB liability as of December 31, 2022, calculated using the discount rate of 3.72%, as well as what the net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (2.72%) or 1-percentage-point higher (4.72%) than the current rate:

	1% Decrease (2.72%)	**Current Discount Rate (3.72%)**	**1% Increase (4.72%)**
Net OPEB liability as of December 31, 2022	$7,245,433	$6,637,653	$6,112,913

Exhibit 2 – Schedules of Changes in Net OPEB Liability

	2022	2021
Total OPEB liability		
Service cost	$78,336	$173,216
Interest	335,718	685,539
Change of benefit terms	0	0
Differences between expected and actual experience	30,922	(84,240)
Changes of assumptions	(9,801,735)	(16,243,917)
Benefit payments, including refunds of employee contributions	(448,508)	(502,375)
Net change in total OPEB liability	(9,805,267)	(15,971,777)
Total OPEB liability – beginning	16,442,920	32,414,697
Total OPEB liability – ending (a)	$6,637,653	$16,442,920
Plan fiduciary net position		
Contributions – employer*	448,508	502,375
Contributions – employee	0	0
Net investment income	0	0
Benefit payments	(448,508)	(502,375)
Administrative expense	0	0
Other	0	0
Net change in plan fiduciary net position	$0	$0
Plan fiduciary net position – beginning	0	0
Plan fiduciary net position – ending (b)	0	0
Fund's net OPEB liability – ending (a) – (b)	$6,637,653	$16,442,920
Plan fiduciary net position as a percentage of the total OPEB liability	0.0%	0.0%
Covered payroll	$2,166,181,666	$2,001,180,743
Fund's net OPEB liability as percentage of covered payroll	0.31%	0.82%

**Receivable amount to be paid the following year*

Changes in the net OPEB liability from the beginning of the year to the end of the year arise from the net difference between changes in the total OPEB liability and plan fiduciary net position that occurred during the year. Changes in net OPEB liability will be recognized immediately as OPEB expense, or reported as deferred outflows of resources related to OPEBs or deferred inflows of resources related to OPEBs, depending on the nature of the change.

Differences between actual and expected investment-related experience are recognized over a closed five-year period. Differences between actual and expected non-investment-related experience and changes of assumptions are recognized over the average of the expected remaining service lives of all members who are provided with OPEB through the OPEB plan (active employees and inactive employees). The amounts below that are not included in OPEB expense for the current year are included in deferred outflows of resources or deferred inflows of resources related to OPEB.

Exhibit 3 – Reconciliation of Net OPEB Liability

	Increase/(Decrease) For Fiscal Year Ending December 31, 2022		
	Total OPEB Liability (a)	**Plan Fiduciary Net Position (b)**	**Net OPEB Liability (a) – (b)**
Balances at beginning of year	$16,442,920	$0	$16,442,920
Changes for the year			
Service cost	78,336	0	78,336
Interest	335,718	0	335,718
Differences between expected and actual experience	30,922	0	30,922
Contributions – employer	0	448,508	(448,508)
Contributions – member	0	0	0
Other income	0	0	0
Net investment income	0	0	0
Benefit payments, including refunds of employee contributions	(448,508)	(448,508)	0
Administrative expense	0	0	0
Change of assumptions	(9,801,735)	0	(9,801,735)
Changes of benefit terms	0	0	0
Net changes	(9,805,267)	0	(9,805,267)
Balances at end of year	$6,637,653	$0	$6,637,653

Exhibit 4 – Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

	Year Established	Original Balance	Original Amortization Period	Amortization Amount	Outstanding Balance at December 31, 2022
Outflows					
Assumption	2019	$4,752,619	5	$950,523	$950,523
Assumption	2020	1,977,443	4	494,360	494,360
Demographic	2022	30,922	3*	10,306	20,616
Total outflows				**$1,455,189**	**$1,465,499**
Inflows					
Demographic	2019	$350,163	5	$70,031	$70,031
Demographic	2020	5,128,018	4	1,282,006	1,282,006
Demographic	2021	84,240	3	28,080	28,080
Assumption	2021	16,243,917	3	5,414,639	5,414,639
Assumption	2022	9,801,735	3*	3,267,245	6,534,490
Total inflows				**$10,062,001**	**$13,329,246**

** The average expected remaining service lives of all members is 3 years, determined as of January 1, 2022. This amount is equal to the total expected remaining service of 36,816 years, divided by total employees that are provided with OPEB benefits through the plan of 12,548 (as shown in the table below), rounded to the nearest integer year.*

	Expected Remaining Service	Counts	Average of the Expected Remaining Service
Actives Members	36,816	4,983	7.39
Inactive Members		351	-
Retirees		7,214	-
Total Members	36,816	12,548	2.93

Exhibit 4 – Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB (continued)

At December 31, 2022, deferred outflows of resources and deferred inflows of resources related to OPEB are:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$0	$1,359,501
Changes of assumptions	1,444,883	11,949,129
Net differences between projected and actual earnings on OPEB plan investments	0	0
Total	$1,444,883	$13,308,630

Deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized as follows:

Year ended December 31:	
2023	($8,606,812)
2024	(3,256,935)
2025	-
Thereafter	-

Exhibit 5 – OPEB Expense

	Fiscal Year Ending December 31, 2022	Fiscal Year Ending December 31, 2021
Components of OPEB expense		
Service cost	$78,336	$173,216
Interest on the total OPEB liability	335,718	685,539
Projected earnings on plan investments	0	0
Contributions – member	0	0
Other income	0	0
Administrative expense	0	0
Current year recognition of:		
Changes of assumptions	(7,237,001)	(3,969,754)
Difference between expected and actual experience	(1,369,810)	(1,380,117)
Difference between projected and actual earnings on OPEB plan investments	0	0
Change of benefit terms	0	0
Total OPEB expense	($8,192,757)	($4,491,116)

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