

# SPRINGFIELD FIREFIGHTERS' PENSION FUND

---

GASB 67/68 ACTUARIAL VALUATION  
AS OF MARCH 1, 2024



FOR THE FEBRUARY 28, 2025  
FINANCIAL STATEMENT REPORTING

668 N. River Road  
Naperville, IL 60563  
Phone: 630.393.1483  
Fax: 630.393.2516  
[lauterbachamen.com](http://lauterbachamen.com)

# GASB Statements 67 and 68 Actuarial Disclosures

---



## Lauterbach & Amen, LLP

---

CERTIFIED PUBLIC ACCOUNTANTS

### GASB 67: SPRINGFIELD FIREFIGHTERS' PENSION FUND

**Fiscal Year Ending: February 28, 2025**

Actuarial Valuation Date: March 1, 2024

Data Date: February 29, 2024

Measurement Date: February 28, 2025

### GASB 68: CITY OF SPRINGFIELD, ILLINOIS

**Fiscal Year Ending: February 28, 2025**

Actuarial Valuation Date: March 1, 2024

Data Date: February 29, 2024

Measurement Date: February 28, 2025

---

**Contact:**

Todd A. Schroeder

Partner

April 23, 2025

***LAUTERBACH & AMEN, LLP***



## TABLE OF CONTENTS

---

ACTUARIAL CERTIFICATION .....	5
PLAN FIDUCIARY NET POSITION .....	7
Statement of Plan Fiduciary Net Position .....	8
Statement of Changes in Plan Fiduciary Net Position .....	9
ACTUARIAL PENSION LIABILITY INFORMATION .....	10
Statement of Total Pension Liability .....	11
Statement of Changes in Total Pension Liability .....	12
Statement of Changes in Net Pension Liability .....	14
Deferred Outflows and Inflows of Resources .....	15
Deferred Outflows and Inflows of Resources – Detail .....	16
Pension Expense Development .....	17
ACTUARIAL ASSUMPTIONS INFORMATION .....	18
Statement of Significant Actuarial Assumptions .....	19
Assumption Changes .....	19
Actuarial Assumptions (Demographic) .....	21
Postemployment Benefit Changes .....	24
Expected Return on Pension Plan Investments .....	25
Municipal Bond Rate .....	27
Discount Rate .....	27
Discount Rate Sensitivity .....	28
Assessment and Use of Actuarial Models .....	29
PARTICIPANT DATA .....	30
Participant Demographic Data & Average Future Working Career .....	31
FUNDING POLICY .....	32
Components of the Actuarially Determined Contribution .....	33
Formal Funding Policy .....	33
Informal Funding Policy .....	33
Funding Policy – Other Considerations .....	35
SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION .....	36
Schedule of Changes in the Net Pension Liability .....	37
Schedule of Total Pension Liability and Related Ratios .....	38
Schedule of Contributions .....	39
Notes to Schedule of Contributions .....	39
GASB METHODS AND PROCEDURES .....	40
GASB Methods and Procedures .....	41

---

---



## TABLE OF CONTENTS

---

SUPPLEMENTARY TABLES .....	42
GASB Projections – Summary and Procedure .....	43
GASB Projections – Limitations .....	44
Projection of Contributions – Years 1 to 30 .....	45
Projection of Contributions – Years 31 to 60 .....	46
Projection of Contributions – Years 61 to 80 .....	47
Notes to Projection of Contributions .....	47
Projection of the Pension Plan’s Fiduciary Net Position – Years 1 to 30 .....	48
Projection of the Pension Plan’s Fiduciary Net Position – Years 31 to 60 .....	49
Projection of the Pension Plan’s Fiduciary Net Position – Years 61 to 80 .....	50
Notes to Projection of the Pension Plan’s Fiduciary Net Position .....	50
Actuarial Present Value of Projected Benefit Payments – Years 1 to 30 .....	51
Actuarial Present Value of Projected Benefit Payments – Years 31 to 60 .....	52
Actuarial Present Value of Projected Benefit Payments – Years 61 to 80 .....	53
Notes to the Actuarial Present Value of Projected Benefit Payments .....	53
SUMMARY OF PRINCIPAL PLAN PROVISIONS .....	54
Establishment of the Fund .....	55
Administration .....	55
Member Contributions .....	55
Regular Retirement Pension Benefit .....	55
Regular Retirement Pension Benefit - Continued .....	56
Early Retirement Pension Benefit .....	56
Surviving Spouse Benefit .....	57
Termination Benefit – Vested .....	58
Disability Benefit .....	59



---

## ACTUARIAL CERTIFICATION

This certification provides supplemental information as required by the Governmental Accounting Standards Board. The enclosed schedules were prepared by the undersigned to assist in the preparation of the Annual Financial Report. The assumptions and methods used in the preparation of this report meet the parameters set for the disclosures presented in the financial section as required by the Governmental Accounting Standards Board. Additional information is provided solely to assist the auditors in the preparation of the required footnote disclosures.

The results in this report are based on the demographic data and financial information submitted by the City of Springfield, Illinois, and may include results from the prior Actuary. We did not prepare the Actuarial Valuations for the years prior to March 1, 2016. If applicable, those valuations were prepared by the prior Actuary whose reports have been furnished to us, and our disclosures are based on those reports. An audit of the prior Actuary's results was not performed, but high-level reviews were completed for general reasonableness, as appropriate, based on the purpose of this valuation. The accuracy of the results is dependent on the precision and completeness of the underlying information.

The valuation results summarized in this report involve actuarial calculations that require assumptions about future events. The City of Springfield, Illinois selected certain assumptions, while others were the result of guidance and/or judgment from the Plan's Actuary or Advisors. We believe that the assumptions used in this valuation are reasonable and appropriate for the purposes for which they have been used.

In preparing the results, our Actuaries used commercially available software (ProVal) developed by Winklevoss Technologies, LLC. This software is widely used for the purpose of performing Actuarial Valuations. Our Actuaries coded the plan provisions, assumptions, methods, and demographic data summarized in this report, and reviewed the liability and cost outputs for reasonableness. We are not aware of any material weaknesses or limitations in the software, and have determined it is appropriate for performing this valuation.



To the best of our knowledge, all calculations are in accordance with the applicable accounting requirements, while the procedures followed and presentation of results conform to generally accepted actuarial principles and practices. The undersigned consultants of Lauterbach & Amen, LLP, with actuarial credentials, meet the Qualification Standards of the American Academy of Actuaries to render this Actuarial Certification. There is no relationship between the Springfield Firefighters' Pension Fund or the City of Springfield, Illinois and Lauterbach & Amen, LLP that impairs our objectivity.

Respectfully Submitted,  
LAUTERBACH & AMEN, LLP

Todd A. Schroeder, ASA, FCA, EA, MAAA

David Murciano, ASA, FCA, EA, MAAA



## PLAN FIDUCIARY NET POSITION

Statement of Plan Fiduciary Net Position  
Statement of Changes in Plan Fiduciary Net Position

---



---

## STATEMENT OF PLAN FIDUCIARY NET POSITION

	<u>2/29/2024</u>	<u>2/28/2025</u>
<b>Assets</b>		
Cash and Cash Equivalents	\$ 3,715,633	\$ 3,526,371
Total Cash	<u>3,715,633</u>	<u>3,526,371</u>
Receivables:		
Prepays	<u>12,561</u>	<u>12,513</u>
Total Receivables	<u>12,561</u>	<u>12,513</u>
Investments:		
Pooled Investment Accounts	<u>171,874,613</u>	<u>188,501,050</u>
Total Investments	<u>171,874,613</u>	<u>188,501,050</u>
Total Assets	<u>175,602,807</u>	<u>192,039,934</u>
<b>Liabilities</b>		
Payables:		
Expenses Due/Unpaid	<u>33</u>	<u>7,858</u>
Total Liabilities	<u>33</u>	<u>7,858</u>
<b>Plan Fiduciary Net Position</b>	<u>\$ 175,602,774</u>	<u>\$ 192,032,076</u>

The Plan Fiduciary Net Position shown above is intended to be in accordance with GAAP and the Governmental Accounting Standards Board. The Fair Value of Investments has been provided by the reporting entity, and the results are being audited by an independent auditor. The level of the assets has been reviewed for reasonableness, but we make no representation as to the accuracy of the measurement of the Fair Value of Investments. The Statement of Plan Fiduciary Net Position for 2025 is based on audited financials.





---

## STATEMENT OF CHANGES IN PLAN FIDUCIARY NET POSITION

	<u>2/28/2025</u>
<b>Additions</b>	
Contributions	
Employer	\$ 15,195,370
Members	2,066,718
Total Contributions	<u>17,262,088</u>
Investment Income	
Net Appreciation in Fair Value of Investments	15,668,144
Interest and Dividends	3,645,477
Less Investment Expense	<u>(234,223)</u>
Net Investment Income	<u>19,079,398</u>
Total Additions	<u>36,341,486</u>
<b>Deductions</b>	
Benefit Payments	19,738,156
Transfers & Refunds of Member Contributions	-
Administrative Expense	<u>174,028</u>
Total Deductions	<u>19,912,184</u>
Net Increase in Net Position	<u>16,429,302</u>
<b>Plan Fiduciary Net Position</b>	
Beginning of Year	<u>175,602,774</u>
End of Year	<u>\$ 192,032,076</u>

The changes in Plan Fiduciary Net Position shown above are intended to be in accordance with GAAP and the Governmental Accounting Standards Board. The Plan activity has been provided by the reporting entity, and the results are being audited by an independent auditor. The cash flows have been reviewed for reasonableness, but we make no representation as to the accuracy of the measurement of the Fair Value of Investments. The Statement of Changes in Plan Fiduciary Net Position for 2025 is based on audited financials.



## ACTUARIAL PENSION LIABILITY INFORMATION

Statement of Total Pension Liability  
Statement of Changes in Total Pension Liability  
Statement of Changes in Net Pension Liability  
Deferred Outflows and Inflows of Resources  
Deferred Outflows and Inflows of Resources – Detail  
Pension Expense Development

---



---

## STATEMENT OF TOTAL PENSION LIABILITY

	<u>2/29/2024</u>	<u>2/28/2025</u>
Active Members	<u>\$ 97,121,130</u>	<u>\$ 114,585,668</u>
Inactive Members		
Terminated Members	1,103,773	2,229,080
Retired Members	218,817,343	244,677,842
Disabled Members	17,425,593	20,927,542
Other Beneficiaries	<u>18,047,763</u>	<u>16,815,002</u>
Total Inactive Members	<u>255,394,472</u>	<u>284,649,466</u>
Total Pension Liability	<u>\$ 352,515,602</u>	<u>\$ 399,235,134</u>

The Total Pension Liability (“TPL”) shown above is dependent on several factors such as Plan Provisions and Actuarial Assumptions used in this report. In addition, the calculation of the TPL may be dependent on the Plan Fiduciary Net Position shown in the prior section of this report. Changes in the Plan Fiduciary Net Position due to any factor, including adjustments on final audit, could change the TPL. The dependence of the TPL on the Plan Fiduciary Net Position is due to the role of the Plan Fiduciary Net Position (and the Plan’s Projected Fiduciary Net Position) on the determination of the Discount Rate used for the TPL.

The TPL has been determined for GASB 67/68 reporting purposes only. The resulting TPL is intended to be used in the financial statement reporting of the Plan and/or Employer. The resulting liability is not intended to be a representation of the Plan liability for other purposes, including but not limited to, determination of cash funding requirements and recommendations. The TPL is based on data as of the *Actuarial Valuation - Data Date* shown in this report. The TPL has been determined as of the Actuarial Valuation Date and based on the assumptions used in this report, and adjusted to the Measurement Date as needed.



---

## STATEMENT OF CHANGES IN TOTAL PENSION LIABILITY

	<u>2/28/2025</u>
<b>Changes in Total Pension Liability</b>	
Service Cost	\$ 5,354,987
Interest	24,347,420
Changes of Benefit Terms	-
Differences Between Expected and Actual Experience	5,312,010
Change in Assumptions	31,443,271
Benefit Payments and Refunds	<u>(19,738,156)</u>
Net Change in Total Pension Liability	46,719,532
Total Pension Liability - Beginning	<u>352,515,602</u>
Total Pension Liability - Ending (a)	<u>\$ 399,235,134</u>
 Plan Fiduciary Net Position - Ending (b)	 <u>\$ 192,032,076</u>
 <b>Employer's Net Pension Liability - Ending (a) - (b)</b>	 <u><u>\$ 207,203,058</u></u>
 Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	 48.10%
 Covered-Employee Payroll	 \$ 20,969,842
Employer's Net Pension Liability as a Percentage of Covered-Employee Payroll	988.10%

The Plan Fiduciary Net Position was detailed in the prior section of this report. The Employer's Net Pension Liability is the excess of the Total Pension Liability over the Plan Fiduciary Net Position.

Total Pension Liability may be dependent on the Plan Fiduciary Net Position. Changes in the Plan Fiduciary Net Position could change the determination of the Total Pension Liability. Any changes in the Plan Fiduciary Net Position, including adjustments on final audit, can have an impact on the Employer's Net Pension Liability that extends beyond the dollar-for-dollar change in the Plan Fiduciary Net Position.

Covered-Employee Payroll is based on the Covered-Employee Payroll for the Plan Members during the Fiscal Year.



---

A key demographic risk is mortality improvement differing from expected. While the actuarial assumptions reflect small, continuous improvements in mortality experience and these assumptions are refined upon the completion of each actuarial experience study, the risk arises because there is a possibility of a sudden shift in mortality experience. This report reflects the impact of COVID-19 experience that has been accounted for in the underlying demographic data. This report does not reflect the ongoing impact of COVID-19, which is likely to influence demographic and economic experience, at least in the short-term. We will continue to monitor these developments and their impact on the Plan. Actual future experience will be reflected in each subsequent Actuarial Valuation, as experience emerges.



## STATEMENT OF CHANGES IN NET PENSION LIABILITY

The table below illustrates the changes in Net Pension Liability (“NPL”) from the prior Measurement Date to the current Measurement Date. Under Statement 68, the difference between the NPL from the prior Measurement Date to the current Measurement Date should be recognized as a component of Pension Expense, unless permitted to be recognized as a Deferred Outflow or Inflow of Resources.

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
<b>Balances Beginning at 3/1/2024</b>	<u>\$ 352,515,602</u>	<u>\$ 175,602,774</u>	<u>\$ 176,912,828</u>
<b>Changes for the Year:</b>			
Service Cost	5,354,987	-	5,354,987
Interest	24,347,420	-	24,347,420
Actuarial Experience	5,312,010	-	5,312,010
Change in Assumptions	31,443,271	-	31,443,271
Changes of Benefit Terms	-	-	-
Contributions - Employer	-	15,195,370	(15,195,370)
Contributions - Members	-	2,066,718	(2,066,718)
Contributions - Other	-	-	-
Net Investment Income	-	19,079,398	(19,079,398)
Benefit Payments and Refunds	(19,738,156)	(19,738,156)	-
Administrative Expense	-	(174,028)	174,028
<b>Net Changes</b>	<u>\$ 46,719,532</u>	<u>\$ 16,429,302</u>	<u>\$ 30,290,230</u>
<b>Balances Ending at 2/28/2025</b>	<u><u>\$ 399,235,134</u></u>	<u><u>\$ 192,032,076</u></u>	<u><u>\$ 207,203,058</u></u>

The changes in Total Pension Liability shown above are described in the *Statement of Changes in Total Pension Liability* section of this report. The Plan Fiduciary Net Position was detailed in the prior section of this report. The Employer’s Net Pension Liability is the excess of the Total Pension Liability over the Plan Fiduciary Net Position.



## DEFERRED OUTFLOWS AND INFLOWS OF RESOURCES

The table below shows the cumulative amounts to be shown as Deferred Outflows and Inflows of Resources. Changes in Total Pension Liability related to the differences between expected and actual experience, or changes in assumptions regarding future events, are recognized in Pension Expense over the average future working career of all Members (active and inactive) in the Pension Plan. The net difference in projected and actual earnings on Pension Plan investments over the measurement period are recognized over a 5-year period. Amounts not yet recognized are summarized below:

	Deferred Outflows of Resources	Deferred Inflows of Resources	Total Deferred Amounts
Differences Between Expected and Actual Experience	\$ 9,364,752	\$ (8,357,409)	\$ 1,007,343
Change in Assumptions	34,871,519	(18,071,394)	16,800,125
Net Difference Between Projected and Actual Earnings on Pension Plan Investments	10,056,645	(12,490,806)	(2,434,161)
Contributions Subsequent to the Measurement Date*	-	-	-
Total	<u>\$ 54,292,916</u>	<u>\$ (38,919,609)</u>	<u>\$ 15,373,307</u>

\*Contributions Subsequent to the Measurement Date may be recognized as a reduction to the Net Pension Liability. The amount is not known as of the date of this report. Subsequent to the Measurement Date, the following amounts will be recognized in Pension Expense in the upcoming years:

### Year Ended

#### February 28:

2026	\$ 4,263,111
2027	1,471,694
2028	(533,107)
2029	3,843,032
2030	5,904,718
Thereafter	\$ 423,859



## DEFERRED OUTFLOWS AND INFLOWS OF RESOURCES – DETAIL

The table below shows the annual detail amounts that have been summarized on the prior page. Under Statement 68, the level of detail shown on the prior page is sufficient for financial statement reporting. The detail shown below is primarily for tracking purposes.

Pension Expense Source	Date Established	Initial Period	Initial Balance	Remaining Period	2/28/2025 Expense Recognized	2/28/2025 Deferred Balance
Asset Gain	2/28/2025	5.00	\$ (6,879,957)	5.00	\$ (1,375,992)	\$ (5,503,965)
Change in Assumptions Loss	2/28/2025	6.07	31,443,271	6.07	5,180,111	26,263,160
Actuarial Loss	2/28/2025	6.07	5,312,010	6.07	875,126	4,436,884
Asset Gain	2/29/2024	5.00	(11,644,737)	4.00	(2,328,948)	(6,986,841)
Change in Assumptions Gain	2/29/2024	6.18	(7,604,291)	5.18	(1,230,468)	(5,143,355)
Actuarial Loss	2/29/2024	6.18	2,436,476	5.18	394,252	1,647,972
Asset Loss	2/28/2023	5.00	23,544,068	3.00	4,708,814	9,417,626
Change in Assumptions Gain	2/28/2023	5.55	(27,102,540)	3.55	(4,883,341)	(12,452,517)
Actuarial Loss	2/28/2023	5.55	6,444,519	3.55	1,161,175	2,960,994
Asset Loss	2/28/2022	5.00	3,195,111	2.00	639,023	639,019
Change in Assumptions Loss	2/28/2022	5.99	12,376,764	2.99	2,066,238	4,111,812
Actuarial Gain	2/28/2022	5.99	(22,251,631)	2.99	(3,714,797)	(7,392,443)
Asset Gain	2/28/2021	5.00	(12,541,125)	1.00	(2,508,225)	-
Change in Assumptions Loss	2/28/2021	6.21	22,785,262	2.21	3,669,125	4,439,637
Actuarial Gain	2/28/2021	6.21	(4,952,431)	2.21	(797,493)	(964,966)
Change in Assumptions Gain	2/29/2020	6.71	(4,494,064)	1.71	(669,757)	(475,522)
Actuarial Loss	2/29/2020	6.71	2,679,231	1.71	399,290	283,491
Change in Assumptions Loss	2/28/2019	7.17	2,400,265	1.17	334,765	56,910
Actuarial Loss	2/28/2019	7.17	1,493,791	1.17	208,340	35,411
Change in Assumptions Gain	2/28/2018	7.14	(7,907,441)	0.14	(155,046)	-
Actuarial Loss	2/28/2018	7.14	238,569	0.14	4,671	-
Total			\$ 8,971,120		\$ 1,976,863	\$ 15,373,307

Each detail amount shown above was established as of the Fiscal Year End shown and the full amount deferred has been determined as of that time. Any events that occur in subsequent Fiscal Years do not have an impact on the prior Fiscal Year. The bases are established independently each year.





---

## PENSION EXPENSE DEVELOPMENT

The table below displays the Pension Expense development for the current year. The Pension Expense includes items that change the Net Pension Liability from one year to the next, netted out for amounts that are deferred under GASB pronouncement, plus any amounts that are being recognized that were deferred previously.

See below for the Pension Expense development:

	<u>2/28/2025</u>
<b>Pension Expense/(Income) Under GASB 68</b>	
Service Cost	\$ 5,354,987
Interest	24,347,420
Changes of Benefit Terms	-
Contributions - Members	(2,066,718)
Contributions - Other	-
Expected Investment Income	(12,199,441)
Administrative Expense	174,028
Other Changes	-
Initial Pension Expense/(Income)	<u>\$ 15,610,276</u>
Recognition of Outflow/(Inflow) of Resources Due to Liabilities	2,842,191
Recognition of Outflow/(Inflow) of Resources Due to Assets	<u>(865,328)</u>
<b>Total Pension Expense/(Income)</b>	<u><b>\$ 17,587,139</b></u>



## ACTUARIAL ASSUMPTIONS INFORMATION

Statement of Significant Actuarial Assumptions  
Assumption Changes  
Actuarial Assumptions (Demographic)  
Postemployment Benefit Changes  
Expected Return on Pension Plan Investments  
Municipal Bond Rate  
Discount Rate  
Discount Rate Sensitivity  
Assessment and Use of Actuarial Models

---



---

## STATEMENT OF SIGNIFICANT ACTUARIAL ASSUMPTIONS

### Actuarial Assumptions (Economic)

Discount Rate Used for the Total Pension Liability	6.56%
Expected Rate of Return on Investments	7.00%
High-Quality 20 Year Tax-Exempt G.O. Bond Rate	4.15%
Projected Individual Pay Increases	4.00% - 16.79%
Projected Total Payroll Increases	3.25%
Consumer Price Index (Urban)	2.50%
Inflation Rate	2.50%

See the *Actuarial Assumptions (Demographic)* section of this report for further details on Demographic Assumptions.

The Actuarial Assumptions (Economic) rates shown above are assumed to be annual rates, compounded on an annual basis. For more information on the selection of the actuarial assumptions, please see the Actuarial Assumption Summary document prepared for the Plan, available upon request.

### ASSUMPTION CHANGES

The assumptions were changed from the prior year.

The High-Quality 20 Year Tax-Exempt General Obligation (“G.O.”) Bond Rate assumption was changed from 3.54% to 4.15% for the current year. The underlying index used is The Bond Buyer 20-Bond G.O. Index as discussed in more detail later in this section. The choice of Index is unchanged from the prior year. The rate has been updated to the current Fiscal Year End based on changes in market conditions as reflected in the Index. The change was made to reflect our understanding of the requirements of GASB under Statement 67 and Statement 68.

The Discount Rate used in the determination of the Total Pension Liability was changed from 7.00% to 6.56%. The Discount Rate is impacted by a couple of metrics. Any change in the underlying High-Quality 20 Year Tax Exempt G.O. Bond Rate will impact the blended Discount Rate.



---

We performed a comprehensive study of Firefighters and Firefighters' Pension Funds in Illinois. We reviewed the results of the study as well as the demographic experience of the Fund. The actuarial assumptions were changed in the current valuation to the rates shown in the *Actuarial Assumptions* section of this report. The assumptions impacted include:

- Inflation Rate (CPI-U)
- Individual Pay Increases
- Retirement Rates
- Termination Rates
- Disability Rates
- Mortality Rates
- Mortality Improvement Rates
- Duty Death Probability

The assumption changes stated above were made to better reflect the future anticipated experience of the Plan.

In addition, there are changes that can be made that impact the projection of the Plan Fiduciary Net Position. For example, changes in the Formal or Informal Funding Policy can impact the Discount Rate. Actual changes in the Plan Fiduciary Net Position from one year to the next can impact the projections as well.



---

## ACTUARIAL ASSUMPTIONS (DEMOGRAPHIC)

### Projected Individual Pay Increases\*

Projected individual pay increases include a long-term average increase for inflation, average annual increases for promotions, and any additional increases for a step program. Sample rates are as follows:

Service	Rate	Service	Rate
0	16.79%	8	4.00%
1	15.00%	9	5.95%
2	13.61%	10	4.00%
3	4.00%	15	4.00%
4	6.75%	20	4.00%
5	4.00%	25	4.00%
6	4.00%	30	4.00%
7	4.00%	35	4.00%

\* Projected individual pay increases for active Members hired at age 40 or older are assumed annual increases at the ultimate rate reduced by 50 basis points, without adjustments in early service years.

### Retirement Rates – Tier I

125% of the L&A Assumption Study for Tier I Firefighters 2024 Cap Age 65. Sample rates are as follows:

Age	Rate	Age	Rate
50	15.00%	58	25.00%
51	12.50%	59	31.25%
52	12.50%	60	31.25%
53	12.50%	61	31.25%
54	18.75%	62	31.25%
55	25.00%	63	31.25%
56	25.00%	64	31.25%
57	25.00%	65	100.00%



## Retirement Rates – Tier II

125% of the L&A Assumption Study for Tier II Firefighters 2024 Cap Age 65. Sample rates are as follows:

Age	Rate	Age	Rate
50	3.75%	58	25.00%
51	3.13%	59	31.25%
52	3.13%	60	31.25%
53	3.13%	61	31.25%
54	4.69%	62	31.25%
55	43.75%	63	31.25%
56	43.75%	64	31.25%
57	25.00%	65	100.00%

## Termination Rates

100% of the L&A Assumption Study for Firefighters 2024. Sample rates are as follows:

Age/ Service	0	1	2	3	4	5+
25	12.00%	10.00%	5.00%	3.00%	4.00%	4.00%
30	11.20%	8.00%	4.20%	2.80%	3.60%	3.20%
35	10.20%	5.50%	3.20%	2.55%	3.10%	2.20%
40	4.57%	2.43%	1.57%	1.36%	1.57%	1.43%
45	0.50%	4.00%	5.00%	4.00%	2.00%	1.00%
50	0.50%	4.00%	5.00%	4.00%	2.00%	1.00%

## Disability Rates

100% of the L&A Assumption Study for Firefighters 2024. Sample rates are as follows:

Age	Rate	Age	Rate
25	0.00%	40	0.65%
30	0.06%	45	0.65%
35	0.12%	50	0.65%

75% of active Members who become disabled are assumed to be in the Line of Duty.



---

## **Mortality Rates**

Active Mortality follows the Sex Distinct Raw Rates as developed in the PubS-2010(A) Study improved to 2021 using MP-2021 Improvement Rates. These rates are then improved generationally using MP-2021 Improvement Rates.

25% of active Member deaths are assumed to be in the Line of Duty.

Retiree Mortality follows the L&A Assumption Study for Firefighters 2024. These rates are experience weighted with the Sex Distinct Raw Rates as developed in the PubS-2010(A) Study improved to 2021 using MP-2021 Improvement Rates. These rates are then improved generationally using MP-2021 Improvement Rates.

Disabled Mortality follows the Sex Distinct Raw Rates as developed in the PubS-2010 Study for disabled participants improved to 2021 using MP-2021 Improvement Rates. These rates are then improved generationally using MP-2021 Improvement Rates.

Spouse Mortality follows the L&A Assumption Study for Firefighters 2024. These rates are experience weighted with the Sex Distinct Raw Rates as developed in the PubS-2010(A) Study for contingent survivors improved to 2021 using MP-2021 Improvement Rates. For all rates not provided there (ages 45 and younger) the PubG-2010 Study for general employees was used. These rates are then improved generationally using MP-2021 Improvement Rates.

## **Marital Assumptions**

*Active Members:* 80% of active Members are assumed to be married. Female spouses are assumed to be 3 years younger than male spouses.

*Retiree and Disabled Members:* Actual spousal data was utilized for retiree and disabled Members.



---

## **POSTEMPLOYMENT BENEFIT CHANGES**

Eligibility for postemployment benefit increases is determined based on the Illinois Pension Code. Tier I Firefighter retirees are provided with an annual increase of 3.00% of the current retirement benefits by statute when eligible. Tier II Firefighter retirees are provided postemployment benefit increases based on the lesser of 3.00% of the original retirement benefits or one-half of the Consumer Price Index (Urban) for the prior September.

The CPI-U for September 1994 was 149.40. The CPI-U for September 2024 was 315.30. The average increase in the CPI-U for September 1994 through September 2024 was 2.52% (on a compounded basis).





## EXPECTED RETURN ON PENSION PLAN INVESTMENTS

The Long-Term Expected Rate of Return is intended to represent the best estimate of future real rates of return and is shown for each of the major asset classes in the investment policy.

The table below illustrates the best estimates of target allocations and Long-Term Expected Rates of Return developed for each of the major asset classes, adjusted for expected inflation. These rates and target allocations were disclosed by Marquette Associates for the Illinois Firefighters' Pension Investment Fund, dated July 22, 2024.

There are multiple approaches seen to providing these rates. Typically, the information is either based on capital market projections, or historical rates seen for the asset classes. We do not provide an opinion on the reasonableness of the returns provided nor the reasonableness of the approach used in the determination of the rates provided. The information provided is shown below for convenience.

The rates provided in the table below are based on a geometric average. The Investment Policy Statement will provide more detail regarding the Fund's policies on asset allocation targets and acceptable ranges.

Asset Class	Long-Term Expected Rate of Return	Long-Term Inflation Expectation	Long-Term Expected Real Rate of Return	Target Allocation
U.S. Equity	7.60%	2.50%	5.10%	25.00%
Developed Market Equity (Non-US)	7.70%	2.50%	5.20%	13.00%
Emerging Market Equity	8.40%	2.50%	5.90%	7.00%
Private Equity	11.50%	2.50%	9.00%	10.00%
Public Credit	5.40%	2.50%	2.90%	3.00%
Private Credit	9.60%	2.50%	7.10%	7.00%
Core Fixed Income	5.00%	2.50%	2.50%	9.00%
Core Plus Fixed Income	5.50%	2.50%	3.00%	9.00%
Short-Term Treasuries	3.50%	2.50%	1.00%	3.00%
Real Estate	6.40%	2.50%	3.90%	10.00%
Infrastructure	6.90%	2.50%	4.40%	4.00%

Long-Term Expected Real Rates of Return under GASB are expected to reflect the period of time that begins when a Plan Member begins to provide service to the employer and ends at the point when all benefits to the Plan Member have been paid. The rates provided above are intended to estimate those figures.

The Long-Term Inflation Expectation is 2.50% and is included in the Long-Term Expected Rates of Return. The Long-Term Inflation Expectation is from the same source as the Long-Term Expected Real



---

Rates of Return, and is not necessarily reflective of the inflation measures used for other purposes in the report.

Geometric rates of return are equal to arithmetic rates of return when the annual returns exhibit no volatility over time. When arithmetic returns are volatile on a year-to-year basis, the actual realized geometric returns over time will be lower. Higher volatility results in a greater difference.

For additional discussion regarding the Expected Return on Pension Plan Investments, please reference the Actuarial Funding Report. There are additional disclosures regarding reasonableness and market observations included in that report.



---

## **MUNICIPAL BOND RATE**

The Municipal Bond Rate assumption is based on the Bond Buyer 20-Bond G.O. Index. The rate shown earlier in this section of the report is the February 27, 2025 rate. The 20-Bond G.O. Index is based on an average of certain general obligation municipal bonds maturing in 20 years and having an average rating equivalent of Moody's Aa2 and Standard & Poor's AA.

The indices represent theoretical yields rather than actual price or yield quotations. Municipal bond traders are asked to estimate what a current-coupon bond for each issuer in the indices would yield if the bond was sold at par value. The indices are simple averages of the average estimated yields of the bonds.

## **DISCOUNT RATE**

The Discount Rate used in the determination of the Total Pension Liability is based on a combination of the Expected Rate of Return on Plan Investments and the Municipal Bond Rate.

Cash flow projections were used to determine the extent to which the Plan's Projected Fiduciary Net Position will be able to cover Projected Benefit Payments. To the extent that Projected Benefit Payments are covered by the Plan's Projected Fiduciary Net Position, the Expected Rate of Return on Plan Investments is used to determine the portion of the Net Pension Liability associated with those payments. To the extent that Projected Benefit Payments are not covered by the Plan's Projected Fiduciary Net Position, the Municipal Bond Rate is used to determine the portion of the Net Pension Liability associated with those payments.

Projected Benefit Payments are determined during the actuarial process based on the assumptions. More details on the assumptions are earlier in this section of the report. The expected contributions are based on the Funding Policy of the Plan. The Funding Policy is discussed in more detail in the *Funding Policy* section of this report.



---

## DISCOUNT RATE SENSITIVITY

The Employer's Net Pension Liability has been determined using the Discount Rate listed in this section of the report. Below is a table illustrating the sensitivity of the Employer's Net Pension Liability to the Discount Rate assumption.

	<b>1% Decrease (5.56%)</b>	<b>Current Discount Rate (6.56%)</b>	<b>1% Increase (7.56%)</b>
Employer's Net Pension Liability	\$260,807,332	\$207,203,058	\$163,143,362

The sensitivity of the Employer's Net Pension Liability to the Discount Rate is based primarily on two factors:

1. The duration of the Plan's Projected Benefit Payments. Younger Plans with benefit payments further in the future will be more sensitive to changes in the Discount Rate.
2. The Percent Funded of the Plan (ratio of the Plan Fiduciary Net Position to the Total Pension Liability). The higher the Percent Funded, the higher the sensitivity to the Discount Rate.



---

## ASSESSMENT AND USE OF ACTUARIAL MODELS

Actuarial Valuations rely upon the use of actuarial modeling software to predict the occurrence of future events, which include specific demographic and financial potential outcomes. Actuarial assumptions are established to provide a guideline to use for such modeling.

- The model used in this Actuarial Valuation is intended to determine the Recommended Contribution, under the selected Funding Policy, to assist in the preparation of the Annual Financial Report. The actuarial assumptions used were developed with this goal in mind.
- There are no known material limitations or inconsistencies among the actuarial assumptions or methods.
- The output from the model is reasonable based on the individual actuarial assumptions and based on the actuarial assumptions in the aggregate.
- The actuarial software used to calculate plan liabilities has been purchased from an outside vendor. We have performed thorough testing of the software, including review of sample participants, to ensure the intended purpose of the model, the operation of the model, sensitivities and dependencies, and strengths and limitations of the model are sufficient for this purpose.
- Demographic data and financial information have been provided by client professionals, financial advisors, and/or auditors, who are known to be experts in their respective fields. We rely on the fact that the information provided by these experts has been given for the intended purpose of this Actuarial Valuation.
- Where applicable, certain actuarial assumptions and Funding Policy may be required as prescribed by law. In such instances, we have followed legal guidance to ensure conformity.
- The Expected Rate of Return on Investments assumption has been chosen using input from several sources; including, but not limited to: client professionals, financial advisors, auditors, and other capital market outlooks. We have relied on the information provided, in the aggregate, to settle on the selected Expected Rate of Return on Investments assumption.



## PARTICIPANT DATA

Participant Demographic Data & Average Future Working Career

---



---

## PARTICIPANT DEMOGRAPHIC DATA & AVERAGE FUTURE WORKING CAREER

The chart below summarizes the Member count, payroll, and average future working career as of:

Actuarial Valuation - Data Date	2/28/2023	2/29/2024
Fiscal Year End for Reporting	(FYE 2/29/2024)	(FYE 2/28/2025)
Inactive Plan Members or Beneficiaries Currently Receiving Benefits	258	266
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	3	8
Active Plan Members	225	224
Total	486	498
Payroll of Active Plan Members	\$ 19,680,405	\$ 20,200,088
Average Future Working Career (In Years)		
Active Plan Members	13.35	13.49
Inactive Plan Members	0.00	0.00
Total	6.18	6.07

Member counts shown above are as of the Actuarial Valuation Date for the two most recent Fiscal Years. Payroll of Active Plan Members is the pensionable salary for active Plan Members as of the Actuarial Valuation – Data Date. For the Fiscal Year Ending February 28, 2025 a beginning of year Actuarial Valuation Date was used along with a rollforward of liabilities to the end of the Fiscal Year based on assumptions and standard rollforward techniques.

The average future working career is measured as of the Actuarial Valuation Date and is based on the demographic assumptions used in the preparation of this report.



## FUNDING POLICY

Components of the Actuarially Determined Contributions

Formal Funding Policy

Informal Funding Policy

Funding Policy – Other Considerations







---

## COMPONENTS OF THE ACTUARIALLY DETERMINED CONTRIBUTION

The Actuarially Determined Contribution (“ADC”) includes the determination of the Normal Cost Contribution for active Plan Members, as well as a provision for the payment towards Unfunded Liability.

The actuarial funding method used in the determination of the Normal Cost and the Actuarial Accrued Liability is the Projected Unit Credit Cost Method. The method allocates Normal Cost Contributions by Members over the working career of the Member.

Unfunded Liability is the excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The Actuarially Determined Contribution includes a payment towards Unfunded Liability existing at the Actuarial Valuation Date. The payment towards Unfunded Liability is set up as a level percent of payroll payment that is expected to increase during the payment period and target 90% funding. The current Employer Contributions are being compared to the Actuarially Determined Contribution as developed in the March 1, 2023 Actuarial Valuation. The equivalent single amortization period as of that valuation is 17 years.

The Actuarial Value of Assets smooths gains and losses on the Fair Value of Assets over a 5-year period.

Under no circumstances will the Actuarially Determined Contribution be less than the amount determined as the Statutory Minimum Contribution under Illinois State Statutes.

## FORMAL FUNDING POLICY

There is no Formal Funding Policy that exists between the Pension Board and the City at this time.

## INFORMAL FUNDING POLICY

In determining the most appropriate Informal Funding Policy, GASB provides the following guidance in the Statement:

*Application of professional judgment should consider the most recent five-year contribution history of the employers and nonemployer contributing entities as a key indicator of future contributions from those sources and should reflect all other known events and conditions.... the amount of projected cash flows for contributions from employers and nonemployer contributing entities should be limited to an average of contributions from those sources over the most recent five-year period and may be modified based on consideration of subsequent events. For this purpose, the basis for the average (for example, percentage of covered payroll contributed or percentage of Actuarially Determined Contributions made) should be a matter of professional judgment.*



In our review of the Informal Funding Policy, the following factors are considered and described herein:

1. Five-Year Contribution History of the Employer (with a focus on the average contributions from those sources)
2. Other Known Events and Conditions
3. Consideration of Subsequent Events

#### Five-Year Contribution History of the Employer

Employer Contributions (under the Informal Funding Policy) should be limited to the average over the most recent five years. In determining the basis for the average, we reviewed three possibilities: (a) the average dollar contribution; (b) the average percent of pensionable pay; and (c) the average percent of the Actuarially Determined Contribution. Please see the table below for a summary of these values:

<b>Fiscal Year End</b>	<b>Employer Contributions</b>	<b>Most Applicable ADC</b>	<b>% of ADC</b>	<b>Covered- Employee Payroll</b>	<b>% of Payroll</b>
2/28/2025	\$15,195,370	\$14,631,031	103.86%	\$20,969,842	72.46%
2/29/2024	\$15,169,267	\$13,588,737	111.63%	\$20,150,201	75.28%
2/28/2023	\$16,102,506	\$14,466,233	111.31%	\$19,142,062	84.12%
2/28/2022	\$14,818,690	\$14,159,124	104.66%	\$18,539,527	79.93%
2/28/2021	\$13,550,355	\$13,232,121	102.41%	\$19,050,536	71.13%

When compared to the other policies reviewed, history suggests that a contribution as a percent of the Actuarially Determined Contribution is the least volatile, and as a result, the most stable contribution method under an Informal Funding Policy.

#### Other Known Events and Conditions

GASB has a provision for consideration of any other known events or conditions in the most recent five-year history in applying judgement for the Informal Funding Policy. There are no events or conditions that have been considered in the development of the Informal Funding Policy.

#### Consideration of Subsequent Events

GASB has a provision for modification based on consideration of subsequent events in the development of the Informal Funding Policy. There are no subsequent events that have been considered in the development of the Informal Funding Policy.



---

### Informal Funding Policy – Selected

The Informal Funding Policy that has been determined for future contributions is 106.77% of the Actuarially Determined Contribution. This represents the full future contributions expected to be made.

### **FUNDING POLICY – OTHER CONSIDERATIONS**

Under GASB, the future contribution amount is not intended to include dollars contributed on behalf of future employees. Contributions are only intended to cover contributions towards the Normal Cost of current employees as of the Actuarial Valuation Date as well as payment of Unfunded Liability on behalf of the current employees. Contributions under the Funding Policy have been adjusted as necessary to exclude dollars that would be anticipated to be contributed on behalf of future employees hired after the Actuarial Valuation Date.

The contribution level may not pay off the Unfunded Liability during the active working career of current employees. In that case, contributions will persist beyond the working career of current employees. To the extent that a portion of the above total contribution is anticipated to pay contributions for the Normal Cost of future employees, the amount has been netted out. The remaining amount is anticipated to be paid towards the Unfunded Liability existing for current employees.

The Actuarially Determined Contribution is determined annually based on the parameters previously discussed. The funding methods and procedures are assumed to continue into the future. If applicable, the tax levy in the next December is assumed to be the Actuarially Determined Contribution. Funding is assumed to go into the Plan during the next full Fiscal Year.



## SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION

Schedule of Changes in the Net Pension Liability  
Schedule of Total Pension Liability and Related Ratios  
Schedule of Contributions  
Notes to Schedule of Contributions

---



## SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY

	2/28/2025	2/29/2024	2/28/2023	2/28/2022	2/28/2021	2/29/2020	2/28/2019	2/28/2018	2/28/2017	2/29/2016
<b>Total Pension Liability</b>										
Service Cost	\$ 5,354,987	\$ 5,527,534	\$ 6,075,291	\$ 5,643,851	\$ 5,322,103	\$ 5,197,220	\$ 5,205,445	\$ 5,283,043	\$ 4,951,770	\$ 5,111,168
Interest	24,347,420	23,227,630	22,101,830	21,259,437	22,140,316	21,253,481	20,465,858	19,736,353	19,481,955	17,506,592
Changes of Benefit Terms	-	-	(518,660)	-	-	1,976,795	-	-	-	-
Differences Between Expected and Actual Experience	5,312,010	2,436,476	6,444,519	(22,251,631)	(4,952,431)	2,679,231	1,493,791	238,569	(2,744,644)	4,164,750
Change in Assumptions	31,443,271	(7,604,291)	(27,102,540)	12,376,764	22,785,262	(4,494,064)	2,400,265	(7,907,441)	(3,133,319)	14,101,572
Benefit Payments and Refunds	(19,738,156)	(18,760,172)	(17,835,899)	(16,801,355)	(16,317,321)	(16,034,348)	(15,723,823)	(14,928,475)	(14,577,712)	(13,670,346)
<b>Net Change in Total Pension Liability</b>	<b>\$ 46,719,532</b>	<b>\$ 4,827,177</b>	<b>\$ (10,835,459)</b>	<b>\$ 227,066</b>	<b>\$ 28,977,929</b>	<b>\$ 10,578,315</b>	<b>\$ 13,841,536</b>	<b>\$ 2,422,049</b>	<b>\$ 3,978,050</b>	<b>\$ 27,213,736</b>
<b>Total Pension Liability - Beginning</b>	<b>352,515,602</b>	<b>347,688,425</b>	<b>358,523,884</b>	<b>358,296,818</b>	<b>329,318,889</b>	<b>318,740,574</b>	<b>304,899,038</b>	<b>302,476,989</b>	<b>298,498,939</b>	<b>271,285,203</b>
<b>Total Pension Liability - Ending (a)</b>	<b>\$ 399,235,134</b>	<b>\$ 352,515,602</b>	<b>\$ 347,688,425</b>	<b>\$ 358,523,884</b>	<b>\$ 358,296,818</b>	<b>\$ 329,318,889</b>	<b>\$ 318,740,574</b>	<b>\$ 304,899,038</b>	<b>\$ 302,476,989</b>	<b>\$ 298,498,939</b>
<b>Plan Fiduciary Net Position</b>										
Contributions - Employer	\$ 15,195,370	\$ 15,169,267	\$ 16,102,506	\$ 14,818,690	\$ 13,550,355	\$ 12,508,920	\$ 11,916,494	\$ 11,184,141	\$ 10,395,154	\$ 9,786,645
Contributions - Members	2,066,718	1,914,012	1,830,917	1,760,624	1,807,386	1,818,701	1,700,670	1,696,447	1,718,845	1,696,300
Contributions - Other	-	-	-	-	-	-	-	-	-	-
Net Investment Income	19,079,398	22,429,652	(11,864,631)	7,942,634	22,177,023	6,097,536	2,271,252	11,568,713	14,904,623	(5,946,400)
Benefit Payments and Refunds	(19,738,156)	(18,760,172)	(17,835,899)	(16,801,355)	(16,317,321)	(16,034,348)	(15,723,823)	(14,928,475)	(14,577,712)	(13,670,346)
Administrative Expense	(174,028)	(117,286)	(131,848)	(151,998)	(110,520)	(133,450)	(132,495)	(165,250)	(137,137)	(109,969)
Prior Period Audit Adjustment	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
<b>Net Change in Plan Fiduciary Net Position</b>	<b>\$ 16,429,302</b>	<b>\$ 20,635,473</b>	<b>\$ (11,898,955)</b>	<b>\$ 7,568,595</b>	<b>\$ 21,106,923</b>	<b>\$ 4,257,359</b>	<b>\$ 32,098</b>	<b>\$ 9,355,576</b>	<b>\$ 12,303,773</b>	<b>\$ (8,243,770)</b>
<b>Plan Fiduciary Net Position - Beginning</b>	<b>175,602,774</b>	<b>154,967,301</b>	<b>166,866,256</b>	<b>159,297,661</b>	<b>138,190,738</b>	<b>133,933,379</b>	<b>133,901,281</b>	<b>124,545,705</b>	<b>112,241,932</b>	<b>120,485,702</b>
<b>Plan Fiduciary Net Position - Ending (b)</b>	<b>\$ 192,032,076</b>	<b>\$ 175,602,774</b>	<b>\$ 154,967,301</b>	<b>\$ 166,866,256</b>	<b>\$ 159,297,661</b>	<b>\$ 138,190,738</b>	<b>\$ 133,933,379</b>	<b>\$ 133,901,281</b>	<b>\$ 124,545,705</b>	<b>\$ 112,241,932</b>
<b>Employer's Net Pension Liability - Ending (a) - (b)</b>	<b>\$ 207,203,058</b>	<b>\$ 176,912,828</b>	<b>\$ 192,721,124</b>	<b>\$ 191,657,628</b>	<b>\$ 198,999,157</b>	<b>\$ 191,128,151</b>	<b>\$ 184,807,195</b>	<b>\$ 170,997,757</b>	<b>\$ 177,931,284</b>	<b>\$ 186,257,007</b>

The current year information was developed in the completion of this report.



## SCHEDULE OF TOTAL PENSION LIABILITY AND RELATED RATIOS

	2/28/2025	2/29/2024	2/28/2023	2/28/2022	2/28/2021	2/29/2020	2/28/2019	2/28/2018	2/28/2017	2/29/2016
<b>Total Pension Liability - Ending (a)</b>	<u>\$ 399,235,134</u>	<u>\$ 352,515,602</u>	<u>\$ 347,688,425</u>	<u>\$ 358,523,884</u>	<u>\$ 358,296,818</u>	<u>\$ 329,318,889</u>	<u>\$ 318,740,574</u>	<u>\$ 304,899,038</u>	<u>\$ 302,476,989</u>	<u>\$ 298,498,939</u>
<b>Plan Fiduciary Net Position - Ending (b)</b>	<u>\$ 192,032,076</u>	<u>\$ 175,602,774</u>	<u>\$ 154,967,301</u>	<u>\$ 166,866,256</u>	<u>\$ 159,297,661</u>	<u>\$ 138,190,738</u>	<u>\$ 133,933,379</u>	<u>\$ 133,901,281</u>	<u>\$ 124,545,705</u>	<u>\$ 112,241,932</u>
<b>Employer's Net Pension Liability - Ending (a) - (b)</b>	<u>\$ 207,203,058</u>	<u>\$ 176,912,828</u>	<u>\$ 192,721,124</u>	<u>\$ 191,657,628</u>	<u>\$ 198,999,157</u>	<u>\$ 191,128,151</u>	<u>\$ 184,807,195</u>	<u>\$ 170,997,757</u>	<u>\$ 177,931,284</u>	<u>\$ 186,257,007</u>
<b>Plan Fiduciary Net Position as a Percentage of the Total Pension Liability</b>	48.10%	49.81%	44.57%	46.54%	44.46%	41.96%	42.02%	43.92%	41.18%	37.60%
<b>Covered-Employee Payroll</b>	\$ 20,969,842	\$ 20,150,201	\$ 19,142,062	\$ 18,539,527	\$ 19,050,536	\$ 19,027,608	\$ 19,807,840	\$ 19,991,231	\$ 19,361,967	\$ 16,982,730
<b>Employer's Net Pension Liability as a Percentage of Covered-Employee Payroll</b>	988.10%	877.97%	1,006.79%	1,033.78%	1,044.59%	1,004.48%	933.00%	855.36%	918.97%	1,096.74%

Covered-Employee Payroll shown above for the current year is based on the Covered-Employee Payroll for the Plan Members during the Fiscal Year.



## SCHEDULE OF CONTRIBUTIONS

	2/28/2025	2/29/2024	2/28/2023	2/28/2022	2/28/2021	2/29/2020	2/28/2019	2/28/2018	2/28/2017	2/29/2016
Actuarially Determined Contribution	\$ 14,631,031	\$ 13,588,737	\$ 14,466,233	\$ 14,159,124	\$ 13,232,121	\$ 12,508,920	\$ 11,916,494	\$ 11,184,141	\$ 10,395,154	\$ 9,786,645
Contributions in Relation to the Actuarially Determined Contribution	15,195,370	15,169,267	16,102,506	14,818,690	13,550,355	12,508,920	11,916,494	11,184,141	10,395,154	9,786,645
Contribution Deficiency/(Excess)	<u>\$ (564,339)</u>	<u>\$ (1,580,530)</u>	<u>\$ (1,636,273)</u>	<u>\$ (659,566)</u>	<u>\$ (318,234)</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered-Employee Payroll	\$ 20,969,842	\$ 20,150,201	\$ 19,142,062	\$ 18,539,527	\$ 19,050,536	\$ 19,027,608	\$ 19,807,840	\$ 19,991,231	\$ 19,361,967	\$ 16,982,730
Contributions as a Percentage of Covered-Employee Payroll	72.46%	75.28%	84.12%	79.93%	71.13%	65.74%	60.16%	55.95%	53.69%	57.63%

## NOTES TO SCHEDULE OF CONTRIBUTIONS

The Actuarially Determined Contribution shown above for the current year is the Alternative Contribution from the March 1, 2023 Actuarial Valuation completed by Lauterbach & Amen, LLP for the December 2023 tax levy, if applicable. The methods and assumptions shown below are based on the same Actuarial Valuation. For more detail on the age-based and service-based rates disclosed below, please see the Actuarial Valuation.

Actuarial Cost Method	Projected Unit Credit
Amortization Method	Level % Pay (Closed)
Equivalent Single Amortization Period	90% Funded Over 17 Years
Asset Valuation Method	5-Year Smoothed Fair Value
Inflation (CPI-U)	2.25%
Total Payroll Increases	3.25%
Individual Pay Increases	3.75% - 16.54%
Expected Rate of Return on Investments	7.00%
Mortality Rates	Pub-2010 Adjusted for Plan Status, Demographics, and Illinois Public Pension Data, as Described
Retirement Rates	100% of L&A 2020 Illinois Firefighters Retirement Rates Capped at Age 65
Termination Rates	100% of L&A 2020 Illinois Firefighters Termination Rates
Disability Rates	100% of L&A 2020 Illinois Firefighters Disability Rates



# GASB METHODS AND PROCEDURES

GASB Methods and Procedures

---





---

## **GASB METHODS AND PROCEDURES**

	<b>Statement 67 Pension Plan Financials</b>	<b>Statement 68 Employer Financials</b>
Fiscal Year End for Reporting	<b>February 28, 2025</b>	<b>February 28, 2025</b>
Measurement Date	February 28, 2025	February 28, 2025
Actuarial Valuation Date	March 1, 2024	March 1, 2024
Actuarial Valuation - Data Date	February 29, 2024	February 29, 2024
Asset Valuation Method	Fair Value	Fair Value
Actuarial Cost Method	Entry Age Normal (Level %)	Entry Age Normal (Level %)

### **Methodology Used in the Determination of Deferred Outflows and Inflows of Resources**

Amortization Method	Straight Line	Straight Line
Amortization Period		
Actuarial Experience	6.07 Years	6.07 Years
Change in Assumptions	6.07 Years	6.07 Years
Asset Experience	5.00 Years	5.00 Years



## SUPPLEMENTARY TABLES

GASB Projections – Summary and Procedure

GASB Projections – Limitations

Projection of Contributions

Notes to Projection of Contributions

Projection of the Pension Plan's Fiduciary Net Position

Notes to Projection of the Pension Plan's Fiduciary Net Position

Actuarial Present Value of Projected Benefit Payments

Notes to Actuarial Present Value of Projected Benefit Payments

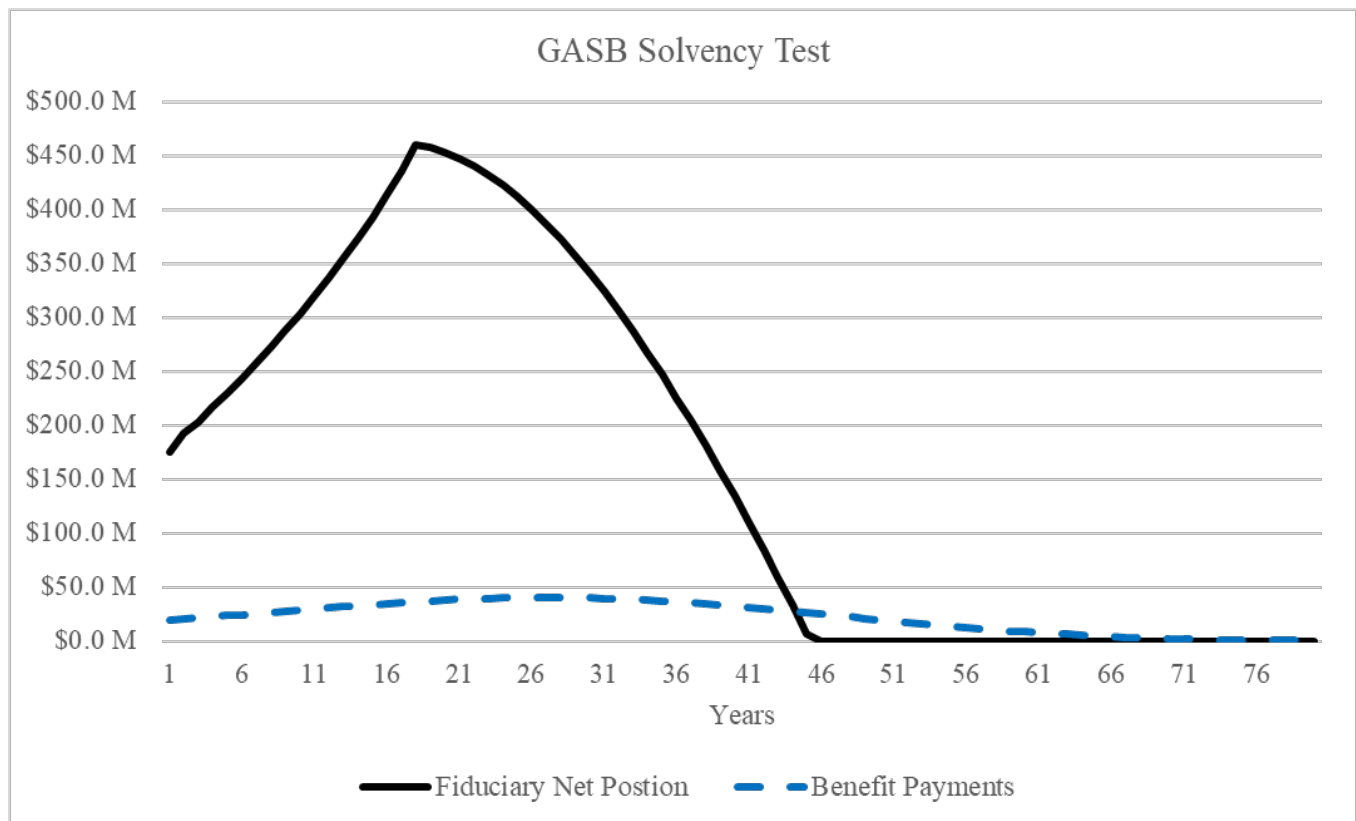
---



## GASB PROJECTIONS – SUMMARY AND PROCEDURE

GASB requires a solvency test to use in the determination of the Discount Rate each year. The Plan Fiduciary Net Position is projected forward. To the extent that the Plan Fiduciary Net Position is anticipated to be greater than \$0, Projected Benefit Payments are discounted based on the Expected Rate of Return on Plan Investments.

If the Plan Fiduciary Net Position is anticipated to reach \$0 prior to the payment of Projected Benefit Payments for employees who are in the Plan as of the Actuarial Valuation Date, then the remaining Projected Benefit Payments are discounted using the High-Quality Municipal Bond Rate, as described in the *Actuarial Assumptions Information* section of this report. The chart below is a high-level summary of the projections:



The Plan's Projected Fiduciary Net Position is anticipated to cover Projected Benefit Payments in full for the current employees through 2069.



---

## **GASB PROJECTIONS – LIMITATIONS**

Projections of any type require assumptions about future events. The projections required for GASB reporting are deterministic in nature. That means that values are projected forward under one set of assumptions which can be thought of as the average result. Actual results could vary, and projections of one deterministic assumption set do not necessarily provide a framework for making risk management or Funding Policy decisions. Projections that deal with risk management are outside the scope of this report.

In addition, GASB requirements create results that are specific only to financial statement reporting, and should not be used or interpreted for other purposes. For example, GASB cash flow projections do not entail the total expected cash flows of the Plan, but rather a subset of cash flows specific to employees who are in the Plan as of the Actuarial Valuation Date. While the likely expectation may be that future employees are hired to replace the current employees, cash flows attributable to their benefits are not considered. Under GASB, when the Plan Fiduciary Net Position reaches \$0, that represents the Plan Fiduciary Net Position for the assets attributable to the current employees.

Also, GASB mandates certain assumptions that are made in the projection process. Most notably, Projected Contributions under an Informal Funding Policy. In proposing an Informal Funding Policy, GASB suggests a focus be placed on the average contributions over the past 5 years. Projected Contributions in this section may be based on the five-year average, unless a Formal Funding Policy is in place.

Contributions reflecting an Informal Funding Policy are applied under GASB, whether or not the projected results dictate a need for more or less contributions. This would not be the case with other uses for projections. Any events that are taken into account (past or future) in the Informal Funding Policy are discussed in the *Funding Policy* section of this report.

Projections further into the future are more sensitive to assumption changes. For projections that run out close to 80 years, a small change in an assumption may have a dramatic impact on the projections. If the solvency of the Plan as determined by GASB remains constant, then dramatic changes in the projection results may not necessarily lead to big changes in the determination of the Total Pension Liability.

We recommend the projections are not used for any other purposes, other than providing information for purposes of the financial statement report.

The following pages provide the detail behind the chart shown on the prior page.



## PROJECTION OF CONTRIBUTIONS – YEARS 1 TO 30

Year	Projected Pensionable Payroll			Projected Contributions			
	Payroll for Current Employees (a)	Payroll for Future Employees (b)	Total Employee Payroll (c) = (a) + (b)	Contributions from Current Employees (d) - Notes	Employer Contributions for Current Employees (e) - Notes	Contributions Related to Payroll of Future Employees (f) - Notes	Total Contributions (g) = (d) + (e) + (f)
1	\$ 20,200,088	\$ -	\$ 20,200,088	\$ 2,066,718	\$ 15,195,370	\$ -	\$ 17,262,088
2	20,234,998	621,593	20,856,591	1,913,219	16,674,976	-	18,588,195
3	20,375,548	1,158,882	21,534,430	1,926,508	18,402,085	-	20,328,593
4	20,213,058	2,021,241	22,234,299	1,911,145	18,946,102	-	20,857,247
5	19,900,473	3,056,440	22,956,914	1,881,590	19,470,269	-	21,351,859
6	19,433,327	4,269,687	23,703,013	1,837,421	19,993,845	-	21,831,266
7	18,987,594	5,485,768	24,473,361	1,795,277	20,515,006	-	22,310,283
8	18,570,835	6,697,910	25,268,745	1,755,872	21,074,333	-	22,830,205
9	18,084,900	8,005,079	26,089,980	1,709,927	21,678,453	-	23,388,380
10	17,501,597	9,436,307	26,937,904	1,654,776	22,293,554	-	23,948,330
11	16,975,457	10,837,929	27,813,386	1,605,029	22,936,314	-	24,541,343
12	16,399,301	12,318,020	28,717,321	1,550,554	23,632,427	-	25,182,981
13	15,631,359	14,019,275	29,650,634	1,477,945	24,380,974	-	25,858,919
14	14,981,222	15,633,057	30,614,279	1,416,475	25,171,109	-	26,587,584
15	14,384,107	17,225,137	31,609,244	1,360,017	26,034,863	-	27,394,880
16	13,636,315	19,000,229	32,636,544	1,289,314	26,973,929	-	28,263,243
17	12,992,634	20,704,598	33,697,232	1,228,454	27,974,685	-	29,203,139
18	12,352,012	22,440,380	34,792,392	1,167,883	1,020,069	-	2,187,952
19	11,522,285	24,400,859	35,923,144	1,089,432	933,599	-	2,023,031
20	10,458,593	26,632,053	37,090,647	988,860	840,876	-	1,829,736
21	9,337,601	28,958,492	38,296,093	882,870	739,055	-	1,621,925
22	8,127,540	31,413,176	39,540,716	768,459	649,132	-	1,417,591
23	7,075,959	33,749,830	40,825,789	669,032	555,291	-	1,224,323
24	6,162,012	35,990,615	42,152,627	582,618	478,999	-	1,061,617
25	5,403,604	38,118,983	43,522,587	510,911	410,733	-	921,644
26	4,616,098	40,320,974	44,937,071	436,452	358,688	-	795,140
27	3,904,640	42,492,887	46,397,526	369,184	301,767	-	670,951
28	3,262,650	44,642,796	47,905,446	308,484	255,084	-	563,568
29	2,513,586	46,948,787	49,462,373	237,660	213,439	-	451,099
30	1,859,247	49,210,653	51,069,900	175,792	165,959	-	341,751

Column d – Contributions from current employees to the Plan (employees in the Plan as of the Actuarial Valuation Date).

Column e – Employer Contributions to the Plan excluding contributions for employees hired after the Actuarial Valuation Date.

Column f – Contributions from future employees to the extent that contributions are assumed to be greater than their Normal Cost.



## PROJECTION OF CONTRIBUTIONS – YEARS 31 TO 60

Year	Projected Pensionable Payroll			Projected Contributions			
	Payroll for Current Employees (a)	Payroll for Future Employees (b)	Total Employee Payroll (c) = (a) + (b)	Contributions from Current Employees (d) - Notes	Employer Contributions for Current Employees (e) - Notes	Contributions Related to Payroll of Future Employees (f) - Notes	Total Contributions (g) = (d) + (e) + (f)
31	\$ 1,362,399	\$ 51,367,272	\$ 52,729,672	\$ 128,815	\$ 122,678	\$ -	\$ 251,493
32	959,323	53,484,063	54,443,386	90,704	91,116	-	181,820
33	672,453	55,540,343	56,212,796	63,580	63,817	-	127,397
34	490,566	57,549,146	58,039,712	46,383	45,017	-	91,400
35	321,815	59,604,188	59,926,003	30,428	32,949	-	63,377
36	205,602	61,667,996	61,873,598	19,440	22,323	-	41,763
37	136,515	63,747,974	63,884,490	12,908	14,469	-	27,377
38	89,169	65,871,567	65,960,736	8,431	9,862	-	18,293
39	49,664	68,054,796	68,104,459	4,696	7,531	-	12,227
40	27,710	70,290,145	70,317,854	2,620	4,190	-	6,810
41	14,510	72,588,675	72,603,185	1,372	2,476	-	3,848
42	6,863	74,955,925	74,962,788	649	1,405	-	2,054
43	3,278	77,395,801	77,399,079	310	660	-	970
44	2,283	79,912,266	79,914,549	216	211	-	427
45	-	82,511,772	82,511,772	-	378	-	378
46	-	85,193,404	85,193,404	-	-	-	-
47	-	87,962,190	87,962,190	-	-	-	-
48	-	90,820,961	90,820,961	-	-	-	-
49	-	93,772,642	93,772,642	-	-	-	-
50	-	96,820,253	96,820,253	-	-	-	-
51	-	99,966,911	99,966,911	-	-	-	-
52	-	103,215,836	103,215,836	-	-	-	-
53	-	106,570,351	106,570,351	-	-	-	-
54	-	110,033,887	110,033,887	-	-	-	-
55	-	113,609,988	113,609,988	-	-	-	-
56	-	117,302,313	117,302,313	-	-	-	-
57	-	121,114,638	121,114,638	-	-	-	-
58	-	125,050,864	125,050,864	-	-	-	-
59	-	129,115,017	129,115,017	-	-	-	-
60	-	133,311,255	133,311,255	-	-	-	-

Column d – Contributions from current employees to the Plan (employees in the Plan as of the Actuarial Valuation Date).

Column e – Employer Contributions to the Plan excluding contributions for employees hired after the Actuarial Valuation Date.

Column f – Contributions from future employees to the extent that contributions are assumed to be greater than their Normal Cost.



## PROJECTION OF CONTRIBUTIONS – YEARS 61 TO 80

	Projected Pensionable Payroll			Projected Contributions			
	Payroll for Current Employees (a)	Payroll for Future Employees (b)	Total Employee Payroll (c) = (a) + (b)	Contributions from Current Employees (d) - Notes	Employer Contributions for Current Employees (e) - Notes	Contributions Related to Payroll of Future Employees (f) - Notes	Total Contributions (g) = (d) + (e) + (f)
Year							
61	\$ -	\$ 137,643,871	\$ 137,643,871	\$ -	\$ -	\$ -	\$ -
62	-	142,117,297	142,117,297	-	-	-	-
63	-	146,736,109	146,736,109	-	-	-	-
64	-	151,505,032	151,505,032	-	-	-	-
65	-	156,428,946	156,428,946	-	-	-	-
66	-	161,512,887	161,512,887	-	-	-	-
67	-	166,762,056	166,762,056	-	-	-	-
68	-	172,181,822	172,181,822	-	-	-	-
69	-	177,777,732	177,777,732	-	-	-	-
70	-	183,555,508	183,555,508	-	-	-	-
71	-	189,521,062	189,521,062	-	-	-	-
72	-	195,680,496	195,680,496	-	-	-	-
73	-	202,040,112	202,040,112	-	-	-	-
74	-	208,606,416	208,606,416	-	-	-	-
75	-	215,386,125	215,386,125	-	-	-	-
76	-	222,386,174	222,386,174	-	-	-	-
77	-	229,613,724	229,613,724	-	-	-	-
78	-	237,076,170	237,076,170	-	-	-	-
79	-	244,781,146	244,781,146	-	-	-	-
80	-	252,736,533	252,736,533	-	-	-	-

### NOTES TO PROJECTION OF CONTRIBUTIONS

Total Employee Payroll is projected to increase annually at the Projected Total Payroll Increases rate shown in the *Actuarial Assumptions Information* section of this report. Payroll for current employees (employees in the Plan as of the Actuarial Valuation Date) are projected on an employee-by-employee basis, using the Projected Individual Pay Increases and probability of remaining an employee in the future.

Employer Contributions are related to current employees in the Plan as of the Actuarial Valuation Date. To the extent that Projected Contributions under the Funding Policy are made to cover the Normal Cost of benefit payments for future employees, those contributions are excluded for purposes of these projections and this report.

Contributions are based on the Funding Policy as described in the *Funding Policy* section of this report. The contributions do not factor in changes in the Funding Policy based on an assumed Employer decision; if, the projections were to play out in this fashion. The only future events that are considered were outlined in the *Funding Policy* section of this report. Contributions from future employees have not been included. It is assumed that contributions made by future employees will not exceed the Normal Cost of their participation in the Plan. In addition, Employer Contributions on behalf of future employees have not been included per the GASB parameters.



## PROJECTION OF THE PENSION PLAN'S FIDUCIARY NET POSITION – YEARS 1 TO 30

Year	Projected Beginning Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expense (d)	Projected Investment Earnings (e)	Projected Ending Fiduciary Net Position (f) = (a)+(b)-(c)-(d)+(e)
1	\$ 175,602,774	\$ 17,262,088	\$ 19,738,156	\$ 174,028	\$ 19,079,398	\$ 192,032,076
2	192,032,076	18,588,195	20,403,583	176,149	13,372,542	203,413,080
3	203,413,080	20,328,593	21,304,530	178,267	14,198,518	216,457,394
4	216,457,394	20,857,247	22,383,801	180,381	15,092,275	229,842,733
5	229,842,733	21,351,859	23,397,282	182,490	16,011,014	243,625,836
6	243,625,836	21,831,266	24,387,672	184,591	16,957,874	257,842,713
7	257,842,713	22,310,283	25,383,029	186,683	17,934,910	272,518,193
8	272,518,193	22,830,205	26,423,491	188,764	18,943,902	287,680,046
9	287,680,046	23,388,380	27,522,946	190,833	19,986,214	303,340,861
10	303,340,861	23,948,330	28,512,664	192,887	21,067,358	319,650,998
11	319,650,998	24,541,343	29,511,848	194,924	22,194,780	336,680,348
12	336,680,348	25,182,981	30,644,406	196,943	23,369,581	354,391,562
13	354,391,562	25,858,919	31,644,210	198,941	24,597,961	373,005,291
14	373,005,291	26,587,584	32,594,807	200,916	25,893,085	392,690,237
15	392,690,237	27,394,880	33,519,946	202,865	27,266,839	413,629,144
16	413,629,144	28,263,243	34,348,052	204,786	28,733,904	436,073,454
17	436,073,454	29,203,139	35,070,094	206,676	30,312,565	460,312,387
18	460,312,387	2,187,952	35,874,477	208,533	31,035,540	457,452,868
19	457,452,868	2,023,031	36,845,449	210,354	30,795,554	453,215,650
20	453,215,650	1,829,736	37,711,223	212,135	30,461,819	447,583,846
21	447,583,846	1,621,925	38,457,655	213,874	30,034,133	440,568,376
22	440,568,376	1,417,591	39,055,003	215,567	29,514,932	432,230,328
23	432,230,328	1,224,323	39,500,320	217,211	28,908,861	422,645,981
24	422,645,981	1,061,617	39,809,824	218,803	28,221,373	411,900,345
25	411,900,345	921,644	40,037,583	220,338	27,456,254	400,020,322
26	400,020,322	795,140	40,154,490	221,814	26,616,082	387,055,240
27	387,055,240	670,951	40,174,989	223,225	25,703,413	373,031,389
28	373,031,389	563,568	40,198,786	224,569	24,717,105	357,888,706
29	357,888,706	451,099	40,100,550	225,840	23,656,574	341,669,990
30	341,669,990	341,751	39,858,396	227,034	22,525,870	324,452,180

Column b – Contributions on behalf of current employees in the Plan as of the Actuarial Valuation Date.

Column d – Based on the average Administrative Expense in recent years, and projected to increase in the future.

Column e – Based on the Expected Rate of Return on Plan Investments, and does not factor in allocation changes.





## PROJECTION OF THE PENSION PLAN'S FIDUCIARY NET POSITION – YEARS 31 TO 60

Year	Projected Beginning Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expense (d)	Projected Investment Earnings (e)	Projected Ending Fiduciary Net Position (f) = (a)+(b)-(c)-(d)+(e)
31	\$ 324,452,180	\$ 251,493	\$ 39,496,386	\$ 228,147	\$ 21,330,096	\$ 306,309,237
32	306,309,237	181,820	39,021,369	229,174	20,074,241	287,314,755
33	287,314,755	127,397	38,449,749	230,109	18,762,697	267,524,990
34	267,524,990	91,400	37,815,145	230,948	17,398,335	246,968,632
35	246,968,632	63,377	37,097,940	231,685	15,983,486	225,685,869
36	225,685,869	41,763	36,300,825	232,315	14,520,813	203,715,305
37	203,715,305	27,377	35,431,460	232,831	13,012,779	181,091,170
38	181,091,170	18,293	34,495,483	233,228	11,461,517	157,842,269
39	157,842,269	12,227	33,498,690	233,499	9,868,760	133,991,068
40	133,991,068	6,810	32,428,104	233,638	8,236,452	109,572,588
41	109,572,588	3,848	31,294,853	233,638	6,566,719	84,614,663
42	84,614,663	2,054	30,103,482	233,492	4,861,304	59,141,047
43	59,141,047	970	28,860,952	233,193	3,121,612	33,169,485
44	33,169,485	427	27,578,259	232,733	1,348,494	6,707,415
45	6,707,415	378	26,262,983	232,104	-	-
46	-	-	24,927,112	-	-	-
47	-	-	23,581,346	-	-	-
48	-	-	22,236,165	-	-	-
49	-	-	20,900,958	-	-	-
50	-	-	19,584,286	-	-	-
51	-	-	18,293,399	-	-	-
52	-	-	17,033,931	-	-	-
53	-	-	15,810,365	-	-	-
54	-	-	14,626,222	-	-	-
55	-	-	13,484,117	-	-	-
56	-	-	12,385,681	-	-	-
57	-	-	11,332,084	-	-	-
58	-	-	10,323,953	-	-	-
59	-	-	9,361,752	-	-	-
60	-	-	8,446,038	-	-	-

Column b – Contributions on behalf of current employees in the Plan as of the Actuarial Valuation Date.

Column d – Based on the average Administrative Expense in recent years, and projected to increase in the future.

Column e – Based on the Expected Rate of Return on Plan Investments, and does not factor in allocation changes.



## PROJECTION OF THE PENSION PLAN'S FIDUCIARY NET POSITION – YEARS 61 TO 80

Year	Projected Beginning Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expense (d)	Projected Investment Earnings (e)	Projected Ending Fiduciary Net Position (f) = (a)+(b)-(c)-(d)+(e)
61	\$ -	\$ -	\$ 7,577,511	\$ -	\$ -	\$ -
62	-	-	6,756,855	-	-	-
63	-	-	5,984,886	-	-	-
64	-	-	5,262,590	-	-	-
65	-	-	4,590,754	-	-	-
66	-	-	3,969,983	-	-	-
67	-	-	3,400,886	-	-	-
68	-	-	2,883,658	-	-	-
69	-	-	2,418,108	-	-	-
70	-	-	2,003,759	-	-	-
71	-	-	1,639,389	-	-	-
72	-	-	1,323,147	-	-	-
73	-	-	1,052,668	-	-	-
74	-	-	824,805	-	-	-
75	-	-	635,889	-	-	-
76	-	-	481,985	-	-	-
77	-	-	358,829	-	-	-
78	-	-	262,128	-	-	-
79	-	-	187,701	-	-	-
80	-	-	131,605	-	-	-

### NOTES TO PROJECTION OF THE PENSION PLAN'S FIDUCIARY NET POSITION

Projected Total Contributions are Employee and Employer Contributions projected to be made under the Funding Policy on behalf of current employees in the Plan as of the Actuarial Valuation Date. The amounts shown are detailed earlier in this section.

Projected Benefit Payments shown represents current employees as of the Actuarial Valuation Date. The Plan will pay benefits in the future on behalf of employees hired after the Actuarial Valuation Date, but those benefit payments are not projected for this purpose.

Projected Investment Earnings are based on the Expected Rate of Return on Plan Investments. Administrative Expense are typically not charged on a per employee basis. Administrative Expenses shown are not projected to distinguish between current and future employees.

The Projected Fiduciary Net Position represents assets held or projected to be held on behalf of current employees in the Plan as of the Actuarial Valuation Date. The Plan will hold assets in the future on behalf of employees hired after the Actuarial Valuation Date, but those assets are not projected for this purpose.



## ACTUARIAL PRESENT VALUE OF PROJECTED BENEFIT PAYMENTS – YEARS 1 TO 30

Year	Projected Beginning Fiduciary Net Position	Projected Benefit Payments	Projected Benefit Payments		Actuarial Present Values of Projected Benefit Payments		
			"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments	Present Value of "Funded" Benefit Payments (7.00%)	Present Value of "Unfunded" Benefit Payments (4.15%)	Present Value of Benefit Payments Using the Single Discount Rate (6.56%)
1	\$ 175,602,774	\$ 19,738,156	\$ 19,738,156	\$ -	\$ 19,081,596	\$ -	\$ 19,120,950
2	192,032,076	20,403,583	20,403,583	-	18,434,475	-	18,548,770
3	203,413,080	21,304,530	21,304,530	-	17,989,227	-	18,175,503
4	216,457,394	22,383,801	22,383,801	-	17,664,064	-	17,920,664
5	229,842,733	23,397,282	23,397,282	-	17,255,931	-	17,578,890
6	243,625,836	24,387,672	24,387,672	-	16,809,685	-	17,195,000
7	257,842,713	25,383,029	25,383,029	-	16,351,172	-	16,795,041
8	272,518,193	26,423,491	26,423,491	-	15,907,864	-	16,407,167
9	287,680,046	27,522,946	27,522,946	-	15,485,770	-	16,037,775
10	303,340,861	28,512,664	28,512,664	-	14,993,116	-	15,591,676
11	319,650,998	29,511,848	29,511,848	-	14,503,297	-	15,144,578
12	336,680,348	30,644,406	30,644,406	-	14,074,655	-	14,757,669
13	354,391,562	31,644,210	31,644,210	-	13,583,042	-	14,301,007
14	373,005,291	32,594,807	32,594,807	-	13,075,774	-	13,823,772
15	392,690,237	33,519,946	33,519,946	-	12,567,200	-	13,340,965
16	413,629,144	34,348,052	34,348,052	-	12,035,207	-	12,828,971
17	436,073,454	35,070,094	35,070,094	-	11,484,302	-	12,292,280
18	460,312,387	35,874,477	35,874,477	-	10,979,169	-	11,800,132
19	457,452,868	36,845,449	36,845,449	-	10,538,625	-	11,373,416
20	453,215,650	37,711,223	37,711,223	-	10,080,613	-	10,924,045
21	447,583,846	38,457,655	38,457,655	-	9,607,610	-	10,454,456
22	440,568,376	39,055,003	39,055,003	-	9,118,543	-	9,963,252
23	432,230,328	39,500,320	39,500,320	-	8,619,173	-	9,456,509
24	422,645,981	39,809,824	39,809,824	-	8,118,419	-	8,943,886
25	411,900,345	40,037,583	40,037,583	-	7,630,716	-	8,441,306
26	400,020,322	40,154,490	40,154,490	-	7,152,334	-	7,944,777
27	387,055,240	40,174,989	40,174,989	-	6,687,837	-	7,459,490
28	373,031,389	40,198,786	40,198,786	-	6,254,017	-	7,004,419
29	357,888,706	40,100,550	40,100,550	-	5,830,592	-	6,557,153
30	341,669,990	39,858,396	39,858,396	-	5,416,246	-	6,116,325

The Projected Fiduciary Net Position and Benefit Payments are based on current employees in the Plan as of the Actuarial Valuation Date. The development of the Projected Fiduciary Net Position is shown in more detail earlier in this section.



## ACTUARIAL PRESENT VALUE OF PROJECTED BENEFIT PAYMENTS – YEARS 31 TO 60

Year	Projected Beginning Fiduciary Net Position	Projected Benefit Payments	Projected Benefit Payments		Actuarial Present Values of Projected Benefit Payments		
			"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments	Present Value of "Funded" Benefit Payments (7.00%)	Present Value of "Unfunded" Benefit Payments (4.15%)	Present Value of Benefit Payments Using the Single Discount Rate (6.56%)
31	\$ 324,452,180	\$ 39,496,386	\$ 39,496,386	\$ -	\$ 5,015,938	\$ -	\$ 5,687,664
32	306,309,237	39,021,369	39,021,369	-	4,631,413	-	5,273,329
33	287,314,755	38,449,749	38,449,749	-	4,265,017	-	4,876,201
34	267,524,990	37,815,145	37,815,145	-	3,920,209	-	4,500,489
35	246,968,632	37,097,940	37,097,940	-	3,594,260	-	4,143,330
36	225,685,869	36,300,825	36,300,825	-	3,286,945	-	3,804,714
37	203,715,305	35,431,460	35,431,460	-	2,998,342	-	3,484,980
38	181,091,170	34,495,483	34,495,483	-	2,728,165	-	3,184,046
39	157,842,269	33,498,690	33,498,690	-	2,476,010	-	2,901,688
40	133,991,068	32,428,104	32,428,104	-	2,240,074	-	2,636,029
41	109,572,588	31,294,853	31,294,853	-	2,020,365	-	2,387,302
42	84,614,663	30,103,482	30,103,482	-	1,816,310	-	2,155,048
43	59,141,047	28,860,952	28,860,952	-	1,627,422	-	1,938,906
44	33,169,485	27,578,259	27,578,259	-	1,453,358	-	1,738,676
45	6,707,415	26,262,983	6,707,415	19,555,568	330,352	3,202,084	1,553,823
46	-	24,927,112	-	24,927,112	-	3,918,998	1,383,998
47	-	23,581,346	-	23,581,346	-	3,559,691	1,228,677
48	-	22,236,165	-	22,236,165	-	3,222,882	1,087,264
49	-	20,900,958	-	20,900,958	-	2,908,649	959,063
50	-	19,584,286	-	19,584,286	-	2,616,819	843,324
51	-	18,293,399	-	18,293,399	-	2,346,935	739,242
52	-	17,033,931	-	17,033,931	-	2,098,274	645,971
53	-	15,810,365	-	15,810,365	-	1,869,950	562,660
54	-	14,626,222	-	14,626,222	-	1,660,967	488,474
55	-	13,484,117	-	13,484,117	-	1,470,253	422,608
56	-	12,385,681	-	12,385,681	-	1,296,672	364,285
57	-	11,332,084	-	11,332,084	-	1,139,097	312,778
58	-	10,323,953	-	10,323,953	-	996,409	267,411
59	-	9,361,752	-	9,361,752	-	867,540	227,560
60	-	8,446,038	-	8,446,038	-	751,495	192,663

The Projected Fiduciary Net Position and Benefit Payments are based on current employees in the Plan as of the Actuarial Valuation Date. The development of the Projected Fiduciary Net Position is shown in more detail earlier in this section.



## ACTUARIAL PRESENT VALUE OF PROJECTED BENEFIT PAYMENTS – YEARS 61 TO 80

Year	Projected Beginning Fiduciary Net Position	Projected Benefit Payments	Projected Benefit Payments		Actuarial Present Values of Projected Benefit Payments		
			"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments	Present Value of "Funded" Benefit Payments (7.00%)	Present Value of "Unfunded" Benefit Payments (4.15%)	Present Value of Benefit Payments Using the Single Discount Rate (6.56%)
61	\$ -	\$ 7,577,511	\$ -	\$ 7,577,511	\$ -	\$ 647,352	\$ 162,210
62	-	6,756,855	-	6,756,855	-	554,242	135,738
63	-	5,984,886	-	5,984,886	-	471,358	112,828
64	-	5,262,590	-	5,262,590	-	397,957	93,104
65	-	4,590,754	-	4,590,754	-	333,320	76,218
66	-	3,969,983	-	3,969,983	-	276,762	61,854
67	-	3,400,886	-	3,400,886	-	227,641	49,725
68	-	2,883,658	-	2,883,658	-	185,329	39,567
69	-	2,418,108	-	2,418,108	-	149,216	31,137
70	-	2,003,759	-	2,003,759	-	118,721	24,213
71	-	1,639,389	-	1,639,389	-	93,262	18,590
72	-	1,323,147	-	1,323,147	-	72,272	14,081
73	-	1,052,668	-	1,052,668	-	55,207	10,513
74	-	824,805	-	824,805	-	41,533	7,730
75	-	635,889	-	635,889	-	30,744	5,593
76	-	481,985	-	481,985	-	22,375	3,978
77	-	358,829	-	358,829	-	15,994	2,779
78	-	262,128	-	262,128	-	11,218	1,905
79	-	187,701	-	187,701	-	7,713	1,280
80	-	131,605	-	131,605	-	5,192	842

### NOTES TO THE ACTUARIAL PRESENT VALUE OF PROJECTED BENEFIT PAYMENTS

The Projected Fiduciary Net Position and Benefit Payments are based on current employees in the Plan as of the Actuarial Valuation Date. The development of the Projected Fiduciary Net Position is shown in more detail earlier in this section.

The Funded and Unfunded Portion of Benefit Payments are split based on the time that the Projected Fiduciary Net Position is to reach \$0 (based on assets for current employees).

The Present Value ("PV") of the Funded and Unfunded Portion of Benefit Payments are determined separately. The PV of the Funded Portion of Benefit Payments uses the Expected Rate of Return on Plan Investments. The PV of the Unfunded Portion of Benefit Payments are determined using the High-Quality Municipal Bond Rate as of the Measurement Date, as described in the *Actuarial Assumptions Information* section of this report.

The Discount Rate used for GASB purposes is the rate such that when applied to the Total Projected Benefit Payments results in a Present Value that equals the sum of the Present Value of the Funded and Unfunded Portion of Benefit Payments. The Discount Rate is rounded to four decimal places; therefore, the resulting Present Value comparisons may show a slight difference due to rounding.



## SUMMARY OF PRINCIPAL PLAN PROVISIONS

Establishment of the Fund  
Administration  
Member Contributions  
Regular Retirement Pension Benefit  
Early Retirement Pension Benefit  
Surviving Spouse Benefit  
Termination Benefit – Vested  
Disability Benefit

---



---

## **ESTABLISHMENT OF THE FUND**

The Firefighters' Pension Fund is established and administered as prescribed by "Article 4 – Firefighters' Pension Fund – Municipalities 500,000 and Under" of the Illinois Pension Code.

## **ADMINISTRATION**

The Firefighters' Pension Fund is administered by a Board of Trustees whose duties are to manage the Pension Fund, determine applications for pensions, authorize payment of pensions, establish rules, pay expenses, and keep records.

## **MEMBER CONTRIBUTIONS**

Members contribute 9.455% of their pensionable salary.

## **REGULAR RETIREMENT PENSION BENEFIT**

### Tier I

*Eligibility:* Age 50 with at least 20 years of creditable service.

*Benefit:* 50% of final salary for the first 20 years of service, plus an additional 2.5% of final salary for each year of service beyond 20 years of service, pro-rated monthly, and not to exceed 75% of final salary. "Final salary" is based on the firefighter's pensionable salary attached to rank held on the last day of service.

*Annual Increase in Benefit:* A firefighter is entitled to receive an initial increase equal to 1/12 of 3% of the original monthly benefit for each full month that has passed since the pension began. The initial increase date will be the later of the first day of the month after the pensioner turns age 55 or the first day of the month after the benefit date anniversary. Subsequent increases of 3% of the current monthly benefit will be granted every January 1<sup>st</sup> thereafter.



---

## REGULAR RETIREMENT PENSION BENEFIT - CONTINUED

### Tier II

*Eligibility:* Age 55 with at least 10 years of creditable service.

*Benefit:* 2.5% of final average salary for each year of service, and not to exceed 75% of final average salary. "Final average salary" is determined by dividing the total pensionable salary during 48 consecutive months of service within the last 60 months of service in which total pensionable salary was the highest, by the number of months of service in that period (or by dividing the total pensionable salary during 96 consecutive months of service within the last 120 months of service in which total pensionable salary was the highest, by the number of months of service in that period, if greater). Annual salary for this purpose will not exceed the salary cap, indexed by the lesser of 3% or the CPI-U for the 12 months ending with the September preceding each November 1<sup>st</sup>. The salary cap will not decrease.

*Annual Increase in Benefit:* The initial increase date will be the later of the January 1<sup>st</sup> after the pensioner turns age 60 or the January 1<sup>st</sup> after the benefit date anniversary. Subsequent increases will be granted every January 1<sup>st</sup> thereafter. The initial increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1<sup>st</sup>.

## EARLY RETIREMENT PENSION BENEFIT

### Tier I

None.

### Tier II

*Eligibility:* Age 50 with at least 10 years of creditable service.

*Benefit:* The regular retirement pension benefit reduced by ½ of 1% for each month that the firefighters' age is between 50 and 55.

*Annual Increase in Benefit:* The initial increase date will be the later of the January 1<sup>st</sup> after the pensioner turns age 60 or the January 1<sup>st</sup> after the benefit date anniversary. Subsequent increases will be granted every January 1<sup>st</sup> thereafter. The initial increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1<sup>st</sup>.





---

## **SURVIVING SPOUSE BENEFIT**

### Tier I

*Eligibility:* Married to an active firefighter, a disabled pensioner at the time of death, or a retired pensioner (at least 12 months prior to the time of death if married post-retirement).

*Active Line of Duty Death Benefit:* An eligible surviving spouse is entitled to receive 100% of the firefighter's final pensionable salary attached to rank held on the last day of service.

*Non-Duty Death Benefit:*

*Disabled or Retired Pensioner:* An eligible surviving spouse is entitled to receive the greater of the pensioner's benefit at the time of death or 54% of the pensioner's final pensionable salary attached to rank held on the last day of service.

*Active Member:* An eligible surviving spouse is entitled to receive the greater of the firefighter's eligible benefit at the time of death or 54% of the firefighter's final pensionable salary attached to rank held on the last day of service.

*Annual Increase in Benefit:* None.

### Tier II

*Eligibility:* Married to an active firefighter, a disabled pensioner at the time of death, or a retired pensioner (at least 12 months prior to the time of death if married post-retirement).

*Active Line of Duty Death Benefit:* An eligible surviving spouse is entitled to receive 100% of the firefighter's final pensionable salary attached to rank held on the last day of service.

*Non-Duty Death Benefit:*

*Disabled or Retired Pensioner and Active Member:* An eligible surviving spouse is entitled to receive the greater of 66⅔% of the firefighter's earned pension benefit at the time of death or 54% of the firefighter's monthly salary at the time of death.

*Annual Increase in Benefit:* The initial increase date will be the January 1<sup>st</sup> after the surviving spouse turns age 60. Subsequent increases will be granted every January 1<sup>st</sup> thereafter. The initial increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1<sup>st</sup>.



---

## **TERMINATION BENEFIT – VESTED**

### Tier I

*Eligibility:* Age 60 with at least 10 but less than 20 years of creditable service.

*Benefit:* An accrual factor times final salary for each year of service. “Accrual factor” is a factor of 1.5% at 10 years of service, increasing ratably up to 2.4% at 19 years of service. “Final salary” is based on the firefighter’s pensionable salary attached to rank held on the last day of service.

*Annual Increase in Benefit:* A firefighter is entitled to receive an initial increase equal to 1/12 of 3% of the original monthly benefit for each full month that has passed since the pension began. The initial increase date will be the first day of the month after the benefit date anniversary. Subsequent increases of 3% of the current monthly benefit will be granted every January 1<sup>st</sup> thereafter.

### Tier II

None.



---

## DISABILITY BENEFIT

### Tier I

*Eligibility:* Duty Disability, Non-Duty Disability with at least 7 years of creditable service, or Occupational Disease Disability with at least 5 years of creditable service.

*Benefit:* For a duty disability or an occupational disease disability with at least 5 years of creditable service, a firefighter is entitled to receive the greater of 65% of final salary or the regular retirement pension benefit at the time of disability. For a non-duty disability with at least 7 years of creditable service, a firefighter is entitled to receive 50% of their final salary. “Final salary” is based on the firefighter’s pensionable salary attached to rank held on the last day of service.

*Annual Increase in Benefit:* A firefighter is entitled to receive an initial increase equal to 3% of the original monthly benefit for each full year that has passed since the pension began. The initial increase date will be the later of the January 1<sup>st</sup> after the pensioner turns age 60 or the January 1<sup>st</sup> after the benefit date anniversary. Subsequent increases of 3% of the original monthly benefit will be granted every January 1<sup>st</sup> thereafter.

### Tier II

*Eligibility:* Duty Disability, Non-Duty Disability with at least 7 years of creditable service, or Occupational Disease Disability with at least 5 years of creditable service.

*Benefit:* For a duty disability or an occupational disease disability with at least 5 years of creditable service, a firefighter is entitled to receive the greater of 65% of final salary or the regular retirement pension benefit at the time of disability. For a non-duty disability, a firefighter is entitled to receive 50% of their final salary. “Final salary” is based on the firefighter’s pensionable salary attached to rank held on the last day of service.

*Annual Increase in Benefit:* The initial increase date will be the later of the January 1<sup>st</sup> after the pensioner turns age 60 or the January 1<sup>st</sup> after the benefit date anniversary. Subsequent increases will be granted every January 1<sup>st</sup> thereafter. The initial increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1<sup>st</sup>.