

GASB 67/68 Report
For Use in Financial Statement Reporting



SPRINGFIELD POLICE
PENSION FUND

Actuarial Valuation
as of March 1, 2021

LAUTERBACH & AMEN, LLP

GASB Statements 67 and 68 Actuarial Disclosures



Lauterbach & Amen, LLP

CERTIFIED PUBLIC ACCOUNTANTS

GASB 67: SPRINGFIELD POLICE PENSION FUND

Fiscal Year Ending: February 28, 2022
Actuarial Valuation Date: March 1, 2021
Utilizing Data as of February 28, 2021
Measurement Date: February 28, 2022

GASB 68: CITY OF SPRINGFIELD, ILLINOIS

Fiscal Year Ending: February 28, 2022
Actuarial Valuation Date: March 1, 2021
Utilizing Data as of February 28, 2021
Measurement Date: February 28, 2022

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August 11, 2022

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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	13
Deferred Outflows and Inflows of Resources	14
Deferred Outflows and Inflows of Resources – Detail	15
Pension Expense Development	16
ACTUARIAL ASSUMPTIONS INFORMATION	17
Statement of Significant Actuarial Assumptions	18
Assumption Changes	18
Actuarial Assumptions (Demographic)	19
Postemployment Benefit Changes	21
Expected Return on Pension Plan Investments	22
Municipal Bond Rate	24
Discount Rate	24
Sensitivity of the Discount Rate	25
Assessment and Use of Actuarial Models	26
PARTICIPANT DATA	27
Participant Demographic Data & Average Future Working Career	28
FUNDING POLICY	29
Components of the Actuarially Determined Contribution	30
Formal Funding Policy	30
Informal Funding Policy	30
Funding Policy – Other Considerations	32
SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION	33
Schedule of Changes in the Net Pension Liability	34
Schedule of Total Pension Liability and Related Ratios	35
Schedule of Contributions	36
Notes to Schedule of Contributions	36
GASB METHODS AND PROCEDURES	37
GASB Methods and Procedures	38



TABLE OF CONTENTS

SUPPLEMENTARY TABLES	39
GASB Projections – Summary and Procedure	40
GASB Projections – Limitations	41
Projection of Contributions – Years 1 to 30	42
Projection of Contributions – Years 31 to 60	43
Projection of Contributions – Years 61 to 80	44
Notes to Projection of Contributions	44
Projection of the Pension Plan’s Fiduciary Net Position – Years 1 to 30.....	45
Projection of the Pension Plan’s Fiduciary Net Position – Years 31 to 60.....	46
Projection of the Pension Plan’s Fiduciary Net Position – Years 61 to 80.....	47
Notes to Projection of the Pension Plan’s Fiduciary Net Position.....	47
Actuarial Present Value of Projected Benefit Payments – Years 1 to 30.....	48
Actuarial Present Value of Projected Benefit Payments – Years 31 to 60.....	49
Actuarial Present Value of Projected Benefit Payments – Years 61 to 80.....	50
Notes to the Actuarial Present Value of Projected Benefit Payments.....	50
SUMMARY OF PRINCIPAL PLAN PROVISIONS	51
Establishment of the Fund	52
Administration	52
Member Contributions.....	52
Regular Retirement Pension Benefit.....	52
Regular Retirement Pension Benefit - Continued.....	53
Early Retirement Pension Benefit.....	53
Surviving Spouse Benefit	54
Termination Benefit – Vested.....	55
Disability Benefit.....	56



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 Comprehensive 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 census 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 participant 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, and 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 Police Pension Fund or the City of Springfield, Illinois and Lauterbach & Amen, LLP that impairs our objectivity.

Respectfully Submitted,
LAUTERBACH & AMEN, LLP

A handwritten signature in cursive script that reads "Todd A. Schroeder".

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

A handwritten signature in cursive script that reads "Robert L. Rietz, Jr.".

Robert L. Rietz, Jr., 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>2/28/2021</u>	<u>2/28/2022</u>
Assets		
Cash and Cash Equivalents	\$ 7,740,205	\$ 7,895,868
Total Cash	<u>7,740,205</u>	<u>7,895,868</u>
Receivables:		
Due from Treasury	-	-
Investment Income - Accrued Interest	<u>184,589</u>	<u>149,719</u>
Total Receivables	<u>184,589</u>	<u>149,719</u>
Investments:		
Fixed Income	64,733,930	64,798,661
Insurance Contracts	15,719,933	18,725,350
Mutual Funds	<u>110,864,241</u>	<u>116,616,375</u>
Total Investments	<u>191,318,104</u>	<u>200,140,386</u>
Total Assets	<u>199,242,898</u>	<u>208,185,973</u>
Liabilities		
Payables:		
Expenses Due/Unpaid	<u>35,160</u>	<u>56,127</u>
Total Liabilities	<u>35,160</u>	<u>56,127</u>
Plan Fiduciary Net Position	<u>\$ 199,207,738</u>	<u>\$ 208,129,846</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 have 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 2022 is based on audited financials.



STATEMENT OF CHANGES IN PLAN FIDUCIARY NET POSITION

	<u>2/28/2022</u>
Additions	
Contributions	
Employer	\$ 13,667,031
Members	<u>1,942,188</u>
Total Contributions	<u>15,609,219</u>
Investment Income	
Net Appreciation in Fair Value of Investments	7,853,518
Interest and Dividends	4,291,084
Less Investment Expense	<u>(438,570)</u>
Net Investment Income	<u>11,706,032</u>
Total Additions	<u>27,315,251</u>
Deductions	
Benefit Payments and Refunds of Member Contributions	18,211,896
Administrative Expense	<u>181,247</u>
Total Deductions	<u>18,393,143</u>
Net Increase in Net Position	<u>8,922,108</u>
Plan Fiduciary Net Position	
Beginning of Year	<u>199,207,738</u>
End of Year	<u>\$ 208,129,846</u>

The changes in Plan Fiduciary Net Position shown above is 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 2022 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>2/28/2021</u>	<u>2/28/2022</u>
Active Members	\$ 146,884,682	\$ 117,860,035
Inactive Members		
Terminated Members	1,933,969	875,272
Retired Members	274,699,544	275,675,195
Disabled Members	6,313,375	5,867,024
Other Beneficiaries	<u>9,386,072</u>	<u>9,936,584</u>
Total Inactive Members	<u>292,332,960</u>	<u>292,354,075</u>
Total Pension Liability	<u>\$ 439,217,642</u>	<u>\$ 410,214,110</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>2/28/2022</u>
Changes in Total Pension Liability	
Service Cost	\$ 6,732,848
Interest	23,276,563
Changes of Benefit Terms	-
Differences Between Expected and Actual Experience	(16,425,003)
Change in Assumptions	(24,376,044)
Benefit Payments and Refunds	<u>(18,211,896)</u>
Net Change in Total Pension Liability	(29,003,532)
Total Pension Liability - Beginning	<u>439,217,642</u>
Total Pension Liability - Ending (a)	<u>\$ 410,214,110</u>
Plan Fiduciary Net Position - Ending (b)	<u>\$ 208,129,846</u>
Employer's Net Pension Liability - Ending (a) - (b)	<u>\$ 202,084,264</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	50.74%
Covered-Employee Payroll	\$ 19,074,828
Employer's Net Pension Liability as a Percentage of Covered-Employee Payroll	1,059.43%

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.



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)
Balances Beginning at 3/1/2021	<u>\$ 439,217,642</u>	<u>\$ 199,207,738</u>	<u>\$ 240,009,904</u>
Changes for the Year:			
Service Cost	6,732,848	-	6,732,848
Interest	23,276,563	-	23,276,563
Actuarial Experience	(16,425,003)	-	(16,425,003)
Change in Assumptions	(24,376,044)	-	(24,376,044)
Changes of Benefit Terms	-	-	-
Contributions - Employer	-	13,667,031	(13,667,031)
Contributions - Members	-	1,942,188	(1,942,188)
Contributions - Other	-	-	-
Net Investment Income	-	11,706,032	(11,706,032)
Benefit Payments and Refunds	(18,211,896)	(18,211,896)	-
Administrative Expense	-	(181,247)	181,247
Prior Period Audit Adjustment	-	-	-
Other Deductions	-	-	-
Net Changes	<u>\$ (29,003,532)</u>	<u>\$ 8,922,108</u>	<u>\$ (37,925,640)</u>
Balances Ending at 2/28/2022	<u>\$ 410,214,110</u>	<u>\$ 208,129,846</u>	<u>\$ 202,084,264</u>

The changes in Total Pension Liability shown above are described on the prior page. 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	\$ 1,207,421	\$ (13,968,548)	\$ (12,761,127)
Change in Assumptions	44,659,249	(23,957,675)	20,701,574
Net Difference Between Projected and Actual Earnings on Pension Plan Investments	5,247,360	(9,991,101)	(4,743,741)
Contributions Subsequent to the Measurement Date*	-	-	-
Total	<u>\$ 51,114,030</u>	<u>\$ (47,917,324)</u>	<u>\$ 3,196,706</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:	
2023	\$ 931,787
2024	1,555,522
2025	1,421,042
2026	1,597,842
2027	(2,309,487)
Thereafter	\$ -



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	2/28/2022 Expense Recognized	2/28/2022 Deferred Balance
Asset Loss	2/28/2022	5.00	\$ 2,141,072	5.00	\$ 428,215	\$ 1,712,857
Change in Assumptions Gain	2/28/2022	5.30	(24,376,044)	5.30	(4,599,254)	(19,776,790)
Actuarial Gain	2/28/2022	5.30	(16,425,003)	5.30	(3,099,058)	(13,325,945)
Asset Gain	2/28/2021	5.00	(16,651,835)	4.00	(3,330,367)	(9,991,101)
Change in Assumptions Loss	2/28/2021	5.67	44,807,789	4.67	7,902,609	29,002,571
Actuarial Loss	2/28/2021	5.67	535,492	4.67	94,444	346,604
Asset Loss	2/29/2020	5.00	4,018,295	3.00	803,659	1,607,318
Change in Assumptions Loss	2/29/2020	6.82	27,952,499	4.82	4,098,607	15,656,678
Actuarial Loss	2/29/2020	6.82	1,239,833	4.82	181,794	694,451
Asset Loss	2/28/2019	5.00	9,635,937	2.00	1,927,188	1,927,185
Change in Assumptions Gain	2/28/2019	6.56	(1,351,671)	3.56	(206,048)	(527,479)
Actuarial Gain	2/28/2019	6.56	(1,646,679)	3.56	(251,019)	(642,603)
Asset Gain	2/28/2018	5.00	(4,758,100)	1.00	(951,620)	-
Change in Assumptions Gain	2/28/2018	6.43	(7,183,405)	2.43	(1,117,171)	(1,597,550)
Actuarial Loss	2/28/2018	6.43	184,291	2.43	28,662	40,981
Change in Assumptions Gain	2/28/2017	6.43	(30,742,288)	1.43	(4,781,072)	(2,055,856)
Actuarial Loss	2/28/2017	6.43	1,874,991	1.43	291,601	125,385
Change in Assumptions Loss	2/29/2016	6.67	54,324,917	0.67	5,456,921	-
Actuarial Gain	2/29/2016	6.67	(8,623,937)	0.67	(866,267)	-
Total			\$ 34,956,154		\$ 2,011,824	\$ 3,196,706

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>2/28/2022</u>
Pension Expense/(Income) Under GASB 68	
Service Cost	\$ 6,732,848
Interest	23,276,563
Changes of Benefit Terms	-
Contributions - Members	(1,942,188)
Contributions - Other	-
Expected Investment Income	(13,847,104)
Administrative Expense	181,247
Other Changes	-
Initial Pension Expense/(Income)	<u>\$ 14,401,366</u>
Recognition of Outflow/(Inflow) of Resources Due to Liabilities	3,134,749
Recognition of Outflow/(Inflow) of Resources Due to Assets	<u>(1,122,925)</u>
Total Pension Expense/(Income)	<u>\$ 16,413,190</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
Sensitivity of the Discount Rate
Assessment and Use of Actuarial Models



STATEMENT OF SIGNIFICANT ACTUARIAL ASSUMPTIONS

Actuarial Assumptions (Economic)

Discount Rate Used for the Total Pension Liability	6.05%
Expected Rate of Return on Investments	7.00%
High-Quality 20 Year Tax-Exempt G.O. Bond Rate	2.51%
Projected Individual Pay Increases	3.75% - 16.79%
Projected Total Payroll Increases	3.25%
Consumer Price Index (Urban)	2.25%
Inflation Rate	2.25%

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 2.44% to 2.51% 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 5.63% to 6.05%. 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.

The above stated assumption changes 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	3.75%
1	15.00%	9	8.65%
2	13.61%	10	3.75%
3	3.75%	15	3.75%
4	5.75%	20	3.75%
5	3.75%	25	3.75%
6	3.75%	30	3.75%
7	3.75%	35	3.75%

* 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

100% of the L&A Assumption Study for Police 2020 Cap Age 65. Sample rates are as follows:

Age	Rate	Age	Rate
50	11.00%	58	16.25%
51	11.55%	59	16.25%
52	12.13%	60	16.25%
53	12.73%	61	16.25%
54	13.37%	62	18.00%
55	14.04%	63	20.00%
56	14.74%	64	20.00%
57	15.48%	65	100.00%



Termination Rates

100% of the L&A Assumption Study for Police 2020. Sample rates are as follows:

Age	Rate	Age	Rate
25	8.00%	40	2.17%
30	3.40%	45	1.56%
35	2.79%	50	0.46%

Disability Rates

100% of the L&A Assumption Study for Police 2020. Sample rates are as follows:

Age	Rate	Age	Rate
25	0.00%	40	0.38%
30	0.06%	45	0.53%
35	0.18%	50	0.48%

65% 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. Mortality improvement uses MP-2019 Improvement Rates applied on a fully generational basis.

50% of active Member deaths are assumed to be in the Line of Duty.

Retiree Mortality follows the L&A Assumption Study for Police 2020. These rates are experience weighted with the Sex Distinct Raw Rates as developed in the PubS-2010(A) Study improved to 2017 using MP-2019 Improvement Rates. These rates are then improved fully generationally using MP-2019 Improvement Rates.

Disabled Mortality follows the Sex Distinct Raw Rates as developed in the PubS-2010 Study for disabled participants. Mortality improvement uses MP-2019 Improvement Rates applied on a fully generational basis.



Mortality Rates (Continued)

Spouse Mortality follows the Sex Distinct Raw Rates as developed in the PubS-2010(A) Study for contingent survivors. For all rates not provided there (ages 45 and younger) the PubG-2010 Study for general employees was used. Mortality improvement uses MP-2019 Improvement Rates applied on a fully generational basis.

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 1 Police retirees are provided with an annual increase of 3.00% of the current retirement benefits by statute when eligible. Tier 2 Police 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 1991 was 137.2. The CPI-U for September 2021 was 274.31. The average increase in the CPI-U for September 1991 through September 2021 was 2.34% (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 target asset allocations shown below are representative expectations as disclosed in the Illinois Police Officers' Pension Investment Fund Actuarial Experience Study, dated March 4, 2022, for plan funding purposes. The table below illustrates the best estimate of Long-Term Expected Rates of Return developed for each of the major asset classes, adjusted for expected inflation, as disclosed in the Horizon Actuarial Services Survey of Capital Market Assumptions 2021 Edition, dated August 2021.

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
US Large	6.65%	2.50%	4.15%	23.00%
US Small	7.04%	2.50%	4.54%	5.00%
International Developed	7.14%	2.50%	4.64%	18.00%
International Developed Small	2.25%	2.50%	-0.25%	5.00%
Emerging Markets	7.81%	2.50%	5.31%	7.00%
Private Equity (Direct)	9.65%	2.50%	7.15%	7.00%
Bank Loans	4.98%	2.50%	2.48%	3.00%
High Yield Corp. Credit	4.98%	2.50%	2.48%	3.00%
Emerging Market Debt	5.32%	2.50%	2.82%	3.00%
Private Credit	6.87%	2.50%	4.37%	5.00%
US TIPS	2.38%	2.50%	-0.12%	3.00%
Real Estate/Infrastructure	6.50%	2.50%	4.00%	8.00%
Cash	2.23%	2.50%	-0.27%	1.00%
Short-Term Gov't/Credit	3.23%	2.50%	0.73%	3.00%
US Treasury	1.90%	2.50%	-0.60%	3.00%
Core Plus Fixed Income	3.23%	2.50%	0.73%	3.00%



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.



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 24, 2022 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 20-Bond G.O. Index consists of 20 general obligation bonds that mature in 20 years. The average rating of the 20 bonds is roughly equivalent to Moody's Investors Service's Aa2 rating and Standard & Poor's Corp.'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.



SENSITIVITY OF THE DISCOUNT RATE

The Employer's Net Pension Liability has been determined using the Discount Rate listed earlier 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.

	1% Decrease (5.05%)	Current Discount Rate (6.05%)	1% Increase (7.05%)
Employer's Net Pension Liability	\$263,977,739	\$202,084,264	\$151,980,744

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 Comprehensive 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.
- Census 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	2/29/2020	2/28/2021
Fiscal Year End for Reporting	(FYE 2/28/2021)	(FYE 2/28/2022)
Inactive Plan Members or Beneficiaries Currently Receiving Benefits	262	278
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	38	38
Active Plan Members	247	227
Total	<u>547</u>	<u>543</u>
Payroll of Active Plan Members	<u>\$ 20,825,933</u>	<u>\$ 19,743,671</u>
Average Future Working Career (In Years)		
Active Plan Members	12.56	12.67
Inactive Plan Members	0.00	0.00
Total	5.67	5.30

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, 2022, 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 Contribution
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, 2020 Actuarial Valuation. The equivalent single amortization period as of that valuation is 20 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 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:

Fiscal Year End	Employer Contributions	Most Applicable ADC	% of ADC	Covered- Employee Payroll	% of Payroll
2/28/2022	\$13,667,031	\$13,029,355	104.89%	\$19,074,828	71.65%
2/28/2021	\$11,908,796	\$11,637,707	102.33%	\$20,775,455	57.32%
2/29/2020	\$10,991,768	\$10,991,768	100.00%	\$19,932,784	55.14%
2/28/2019	\$10,844,009	\$10,843,009	100.01%	\$22,047,109	49.19%
2/28/2018	\$10,116,706	\$10,116,706	100.00%	\$22,186,171	45.60%

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 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 101.45% 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

	2/28/2022	2/28/2021	2/28/2020	2/28/2019	2/28/2018	2/28/2017	2/28/2016	2/28/2015	2/28/2014	2/28/2013
Total Pension Liability										
Service Cost	\$ 6,732,848	\$ 6,270,637	\$ 5,433,549	\$ 5,402,823	\$ 5,748,820	\$ 5,393,901	\$ 6,838,653	\$ 5,469,903		
Interest	23,276,563	23,765,466	22,328,221	21,610,194	20,741,627	21,725,059	16,130,049	18,510,532		
Changes of Benefit Terms	-	-	1,385,547	-	-	-	-	-		
Differences Between Expected and Actual Experience	(16,425,003)	535,492	1,239,833	(1,646,679)	184,291	1,874,991	(8,623,937)	-		
Change in Assumptions	(24,376,044)	44,807,789	27,952,499	(1,351,671)	(7,183,405)	(30,742,288)	54,324,917	-		
Benefit Payments and Refunds	(18,211,896)	(16,696,378)	(15,232,522)	(14,426,366)	(13,748,823)	(12,646,059)	(12,066,816)	(11,585,442)		
Net Change in Total Pension Liability	\$ (29,003,532)	\$ 58,683,006	\$ 43,107,127	\$ 9,588,301	\$ 5,742,509	\$ (14,394,396)	\$ 56,602,866	\$ 12,394,993		
Total Pension Liability - Beginning	439,217,642	380,534,636	337,427,509	327,839,208	322,096,699	336,491,095	279,888,229	267,493,236		
Total Pension Liability - Ending (a)	\$ 410,214,110	\$ 439,217,642	\$ 380,534,636	\$ 337,427,509	\$ 327,839,208	\$ 322,096,699	\$ 336,491,095	\$ 279,888,229		
Plan Fiduciary Net Position										
Contributions - Employer	\$ 13,667,031	\$ 11,908,796	\$ 10,991,768	\$ 10,844,009	\$ 10,116,706	\$ 9,942,505	\$ 9,050,592	\$ 9,608,968		
Contributions - Members	1,942,188	1,980,847	2,040,242	2,040,972	2,051,279	1,900,135	1,895,118	1,956,068		
Contributions - Other	-	-	-	-	12,373	-	-	-		
Net Investment Income	11,706,032	28,692,339	7,672,564	2,054,003	15,485,439	17,594,578	(6,690,669)	8,926,872		
Benefit Payments and Refunds	(18,211,896)	(16,696,378)	(15,232,522)	(14,426,366)	(13,748,823)	(12,646,059)	(12,066,816)	(11,585,442)		
Administrative Expense	(181,247)	(176,869)	(171,151)	(168,690)	(189,477)	(216,033)	(228,877)	(164,934)		
Prior Period Audit Adjustment	-	-	-	-	-	-	-	-		
Other	-	-	-	-	-	-	7,757	302		
Net Change in Plan Fiduciary Net Position	\$ 8,922,108	\$ 25,708,735	\$ 5,300,901	\$ 343,928	\$ 13,727,498	\$ 16,575,126	\$ (8,032,895)	\$ 8,741,834		
Plan Fiduciary Net Position - Beginning	199,207,738	173,499,003	168,198,102	167,854,174	154,126,676	137,551,550	145,584,445	136,842,611		
Plan Fiduciary Net Position - Ending (b)	\$ 208,129,846	\$ 199,207,738	\$ 173,499,003	\$ 168,198,102	\$ 167,854,174	\$ 154,126,676	\$ 137,551,550	\$ 145,584,445		
Employer's Net Pension Liability - Ending (a) - (b)	\$ 202,084,264	\$ 240,009,904	\$ 207,035,633	\$ 169,229,407	\$ 159,985,034	\$ 167,970,023	\$ 198,939,545	\$ 134,303,784		

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



SCHEDULE OF TOTAL PENSION LIABILITY AND RELATED RATIOS

	<u>2/28/2022</u>	<u>2/28/2021</u>	<u>2/28/2020</u>	<u>2/28/2019</u>	<u>2/28/2018</u>	<u>2/28/2017</u>	<u>2/28/2016</u>	<u>2/28/2015</u>	<u>2/28/2014</u>	<u>2/28/2013</u>
Total Pension Liability - Ending (a)	<u>\$ 410,214,110</u>	<u>\$ 439,217,642</u>	<u>\$ 380,534,636</u>	<u>\$ 337,427,509</u>	<u>\$ 327,839,208</u>	<u>\$ 322,096,699</u>	<u>\$ 336,491,095</u>	<u>\$ 279,888,229</u>		
Plan Fiduciary Net Position - Ending (b)	<u>\$ 208,129,846</u>	<u>\$ 199,207,738</u>	<u>\$ 173,499,003</u>	<u>\$ 168,198,102</u>	<u>\$ 167,854,174</u>	<u>\$ 154,126,676</u>	<u>\$ 137,551,550</u>	<u>\$ 145,584,445</u>		
Employer's Net Pension Liability - Ending (a) - (b)	<u>\$ 202,084,264</u>	<u>\$ 240,009,904</u>	<u>\$ 207,035,633</u>	<u>\$ 169,229,407</u>	<u>\$ 159,985,034</u>	<u>\$ 167,970,023</u>	<u>\$ 198,939,545</u>	<u>\$ 134,303,784</u>		
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	50.74%	45.36%	45.59%	49.85%	51.20%	47.85%	40.88%	52.02%		
Covered-Employee Payroll	\$ 19,074,828	\$ 20,775,455	\$ 19,932,784	\$ 22,047,109	\$ 22,186,171	\$ 21,487,817	\$ 20,250,340	\$ 18,716,719		
Employer's Net Pension Liability as a Percentage of Covered-Employee Payroll	1,059.43%	1,155.26%	1,038.67%	767.58%	721.10%	781.70%	982.40%	717.56%		

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

	<u>2/28/2022</u>	<u>2/28/2021</u>	<u>2/28/2020</u>	<u>2/28/2019</u>	<u>2/28/2018</u>	<u>2/28/2017</u>	<u>2/28/2016</u>	<u>2/28/2015</u>	<u>2/28/2014</u>	<u>2/28/2013</u>
Actuarially Determined Contribution	\$ 13,029,355	\$ 11,637,707	\$ 10,991,768	\$ 10,843,009	\$ 10,116,706	\$ 9,942,505	\$ 9,050,592	\$ 9,108,968		
Contributions in Relation to the Actuarially Determined Contribution	13,667,031	11,908,796	10,991,768	10,844,009	10,116,706	9,942,505	9,050,592	9,608,968		
Contribution Deficiency/(Excess)	<u>\$ (637,676)</u>	<u>\$ (271,089)</u>	<u>\$ -</u>	<u>\$ (1,000)</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (500,000)</u>		
Covered-Employee Payroll	\$ 19,074,828	\$ 20,775,455	\$ 19,932,784	\$ 22,047,109	\$ 22,186,171	\$ 21,487,817	\$ 20,250,340	\$ 18,716,719		
Contributions as a Percentage of Covered-Employee Payroll	71.65%	57.32%	55.14%	49.19%	45.60%	46.27%	44.69%	51.34%		

NOTES TO SCHEDULE OF CONTRIBUTIONS

The Actuarially Determined Contribution shown above for the current year is the Statutory Minimum Contribution from the March 1, 2020 Actuarial Valuation completed by Lauterbach & Amen, LLP for the December 2020 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 20 Years
Asset Valuation Method	5-Year Smoothed Fair Value
Inflation (CPI-U)	2.25%
Total Payroll Increases	3.25%
Individual Pay Increases	3.75% - 16.79%
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 Police Retirement Rates Capped at Age 65
Termination Rates	100% of L&A 2020 Illinois Police Termination Rates
Disability Rates	100% of L&A 2020 Illinois Police Disability Rates



GASB METHODS AND PROCEDURES

GASB Methods and Procedures



GASB METHODS AND PROCEDURES

	Statement 67	Statement 68
	<u>Pension Plan Financials</u>	<u>Employer Financials</u>
Fiscal Year End for Reporting	February 28, 2022	February 28, 2022
Measurement Date	February 28, 2022	February 28, 2022
Actuarial Valuation Date	March 1, 2021	March 1, 2021
Actuarial Valuation - Data Date	February 28, 2021	February 28, 2021
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	5.30 Years	5.30 Years
Change in Assumptions	5.30 Years	5.30 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

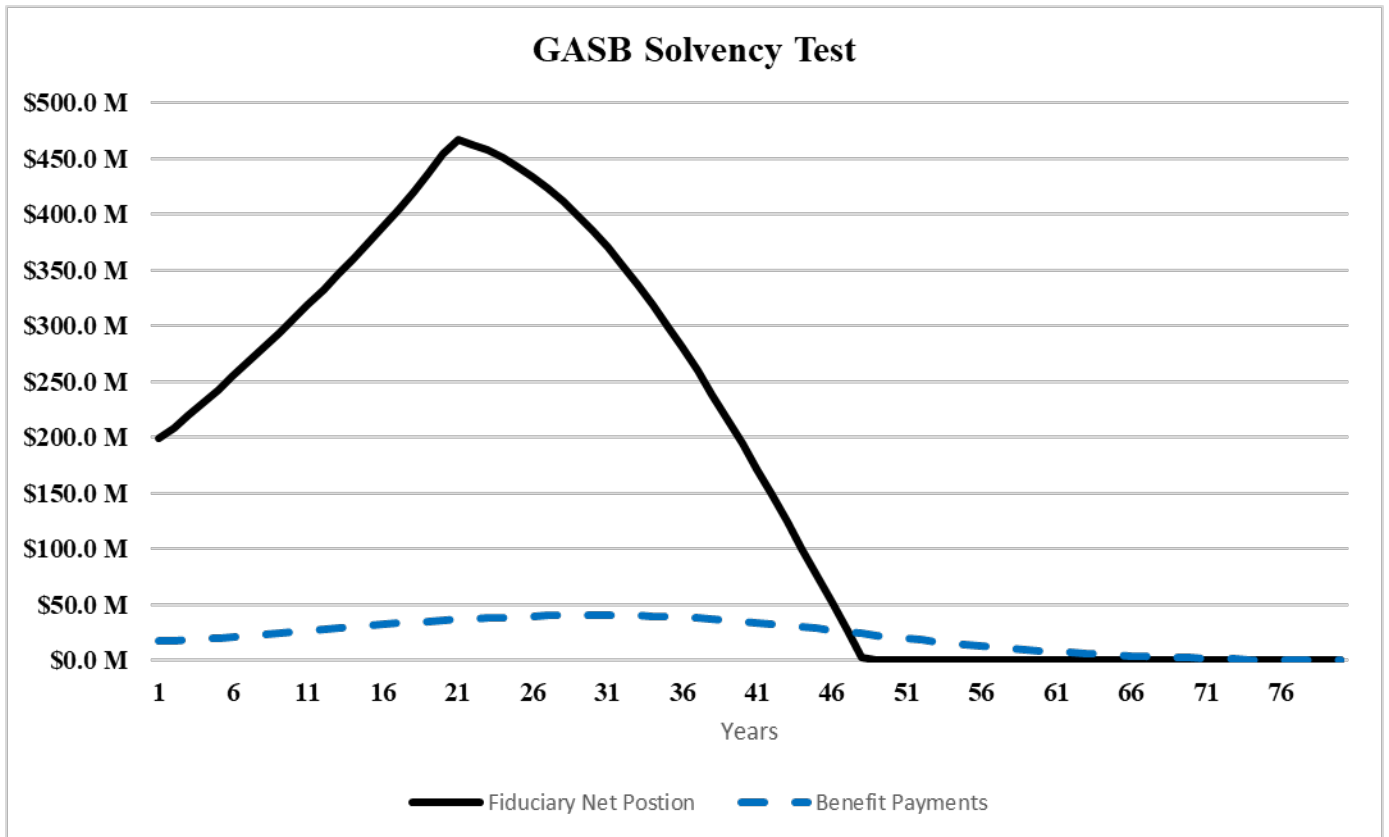
Notes to Actuarial Present Value of Projected Benefit Payments



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 2068.



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	\$ 19,743,670	\$ -	\$ 19,743,670	\$ 1,942,188	\$13,667,031	\$ -	\$ 15,609,219
2	19,806,800	578,539	20,385,340	1,962,854	13,899,740	-	15,862,594
3	19,882,178	1,165,685	21,047,863	1,970,324	13,347,254	-	15,317,578
4	19,706,660	2,025,259	21,731,919	1,952,930	13,742,715	-	15,695,645
5	19,477,880	2,960,326	22,438,206	1,930,258	14,132,392	-	16,062,650
6	19,153,347	4,014,101	23,167,448	1,898,097	14,526,684	-	16,424,781
7	18,722,906	5,197,483	23,920,390	1,855,440	14,931,635	-	16,787,075
8	18,199,266	6,498,536	24,697,803	1,803,547	15,345,054	-	17,148,601
9	17,599,029	7,901,452	25,500,481	1,744,064	15,759,881	-	17,503,945
10	17,065,901	9,263,345	26,329,247	1,691,231	16,188,180	-	17,879,411
11	16,484,152	10,700,796	27,184,947	1,633,579	16,659,700	-	18,293,279
12	15,863,778	12,204,680	28,068,458	1,572,100	17,163,167	-	18,735,267
13	15,154,439	13,826,244	28,980,683	1,501,805	17,699,492	-	19,201,297
14	14,523,889	15,398,666	29,922,555	1,439,317	18,256,110	-	19,695,427
15	13,790,508	17,104,530	30,895,038	1,366,639	18,887,112	-	20,253,751
16	13,062,898	18,836,229	31,899,127	1,294,533	19,528,333	-	20,822,866
17	12,211,857	20,723,991	32,935,849	1,210,195	20,240,658	-	21,450,853
18	11,445,653	22,560,611	34,006,264	1,134,264	20,970,274	-	22,104,538
19	10,669,058	24,442,409	35,111,467	1,057,304	21,797,959	-	22,855,263
20	9,999,399	26,253,191	36,252,590	990,940	14,883,263	-	15,874,203
21	9,331,337	28,099,462	37,430,799	924,735	641,491	-	1,566,226
22	8,594,140	30,053,160	38,647,300	851,679	551,845	-	1,403,524
23	7,923,822	31,979,515	39,903,337	785,251	453,746	-	1,238,997
24	7,181,745	34,018,451	41,200,196	711,711	390,168	-	1,101,879
25	6,540,476	35,998,726	42,539,202	648,161	306,622	-	954,783
26	5,826,582	38,095,144	43,921,726	577,414	268,725	-	846,139
27	5,062,531	40,286,651	45,349,182	501,697	232,706	-	734,403
28	4,408,481	42,414,550	46,823,031	436,880	175,464	-	612,344
29	3,786,062	44,558,717	48,344,779	375,199	141,434	-	516,633
30	3,194,339	46,721,646	49,915,984	316,559	113,044	-	429,603

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	\$ 2,666,591	\$ 48,871,663	\$ 51,538,254	\$ 264,259	\$ 83,602	\$ -	\$ 347,861
32	2,140,674	51,072,573	53,213,247	212,141	72,130	-	284,271
33	1,781,937	53,160,741	54,942,678	176,590	44,106	-	220,696
34	1,448,714	55,279,601	56,728,315	143,568	39,968	-	183,536
35	1,160,635	57,411,350	58,571,985	115,019	34,048	-	149,067
36	879,159	59,596,416	60,475,575	87,125	33,121	-	120,246
37	676,717	61,764,314	62,441,031	67,063	23,045	-	90,108
38	474,091	63,996,273	64,470,364	46,982	23,237	-	70,219
39	296,353	66,269,298	66,565,651	29,369	20,619	-	49,988
40	172,102	68,556,932	68,729,035	17,055	14,509	-	31,564
41	65,004	70,897,724	70,962,728	6,442	12,947	-	19,389
42	34,569	73,234,448	73,269,017	3,426	3,544	-	6,970
43	10,266	75,639,994	75,650,260	1,017	2,953	-	3,970
44	-	78,108,893	78,108,893	-	1,279	-	1,279
45	-	80,647,433	80,647,433	-	-	-	-
46	-	83,268,474	83,268,474	-	-	-	-
47	-	85,974,700	85,974,700	-	-	-	-
48	-	88,768,877	88,768,877	-	-	-	-
49	-	91,653,866	91,653,866	-	-	-	-
50	-	94,632,616	94,632,616	-	-	-	-
51	-	97,708,176	97,708,176	-	-	-	-
52	-	100,883,692	100,883,692	-	-	-	-
53	-	104,162,412	104,162,412	-	-	-	-
54	-	107,547,691	107,547,691	-	-	-	-
55	-	111,042,990	111,042,990	-	-	-	-
56	-	114,651,888	114,651,888	-	-	-	-
57	-	118,378,074	118,378,074	-	-	-	-
58	-	122,225,361	122,225,361	-	-	-	-
59	-	126,197,686	126,197,686	-	-	-	-
60	-	130,299,110	130,299,110	-	-	-	-

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

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)
61	\$ -	\$ 134,533,832	\$ 134,533,832	\$ -	\$ -	\$ -	\$ -
62	-	138,906,181	138,906,181	-	-	-	-
63	-	143,420,632	143,420,632	-	-	-	-
64	-	148,081,802	148,081,802	-	-	-	-
65	-	152,894,461	152,894,461	-	-	-	-
66	-	157,863,531	157,863,531	-	-	-	-
67	-	162,994,096	162,994,096	-	-	-	-
68	-	168,291,404	168,291,404	-	-	-	-
69	-	173,760,875	173,760,875	-	-	-	-
70	-	179,408,103	179,408,103	-	-	-	-
71	-	185,238,866	185,238,866	-	-	-	-
72	-	191,259,129	191,259,129	-	-	-	-
73	-	197,475,051	197,475,051	-	-	-	-
74	-	203,892,990	203,892,990	-	-	-	-
75	-	210,519,513	210,519,513	-	-	-	-
76	-	217,361,397	217,361,397	-	-	-	-
77	-	224,425,642	224,425,642	-	-	-	-
78	-	231,719,475	231,719,475	-	-	-	-
79	-	239,250,358	239,250,358	-	-	-	-
80	-	247,025,995	247,025,995	-	-	-	-

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	\$ 199,207,738	\$ 15,609,219	\$ 18,211,896	\$ 181,247	\$ 11,706,032	\$ 208,129,846
2	208,129,846	15,862,594	18,190,927	153,222	14,482,235	220,130,526
3	220,130,526	15,317,578	18,903,990	156,670	15,278,129	231,665,572
4	231,665,572	15,695,645	19,695,318	160,195	16,070,995	243,576,700
5	243,576,700	16,062,650	20,575,098	163,799	16,886,700	255,787,153
6	255,787,153	16,424,781	21,515,567	167,485	17,721,061	268,249,943
7	268,249,943	16,787,075	22,514,539	171,253	18,571,041	280,922,267
8	280,922,267	17,148,601	23,565,326	175,106	19,433,845	293,764,281
9	293,764,281	17,503,945	24,603,433	179,046	20,308,751	306,794,498
10	306,794,498	17,879,411	25,627,894	183,075	21,198,010	320,060,951
11	320,060,951	18,293,279	26,725,249	187,194	22,102,596	333,544,383
12	333,544,383	18,735,267	27,859,215	191,406	23,022,069	347,251,099
13	347,251,099	19,201,296	28,957,579	195,712	23,959,257	361,258,362
14	361,258,362	19,695,427	30,092,469	200,116	24,917,185	375,578,389
15	375,578,389	20,253,751	31,181,697	204,618	25,900,848	390,346,673
16	390,346,673	20,822,866	32,344,083	209,222	26,913,702	405,529,935
17	405,529,935	21,450,853	33,384,776	213,930	27,961,921	421,344,003
18	421,344,003	22,104,538	34,421,546	218,743	29,055,329	437,863,580
19	437,863,580	22,855,262	35,282,339	223,665	30,207,675	455,420,514
20	455,420,514	15,874,204	36,151,918	228,697	31,161,712	466,075,814
21	466,075,814	1,566,227	36,990,994	233,843	31,377,256	461,794,459
22	461,794,459	1,403,524	37,689,575	239,105	31,047,232	456,316,535
23	456,316,535	1,238,997	38,364,216	244,484	30,634,218	449,581,050
24	449,581,050	1,101,879	38,906,678	249,985	30,138,756	441,665,022
25	441,665,022	954,783	39,410,643	255,610	29,561,650	432,515,201
26	432,515,201	846,139	39,942,880	261,361	28,898,531	422,055,631
27	422,055,631	734,403	40,258,928	267,242	28,151,182	410,415,047
28	410,415,047	612,345	40,496,112	273,255	27,323,558	397,581,582
29	397,581,582	516,632	40,643,143	279,403	26,416,504	383,592,173
30	383,592,173	429,603	40,706,129	285,690	25,431,775	368,461,731

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	\$ 368,461,731	\$ 347,861	\$ 40,665,359	\$ 292,118	\$ 24,370,985	\$ 352,223,101
32	352,223,101	284,270	40,475,008	298,690	23,238,487	334,972,160
33	334,972,160	220,696	40,204,036	304,172	22,037,988	316,722,636
34	316,722,636	183,535	39,811,996	288,459	20,773,492	297,579,209
35	297,579,209	149,067	39,361,582	271,908	19,448,590	277,543,376
36	277,543,376	120,246	38,722,430	254,566	18,068,050	256,754,676
37	256,754,676	90,108	38,005,362	236,496	16,637,516	235,240,442
38	235,240,442	70,220	37,183,240	217,771	15,160,253	213,069,904
39	213,069,904	49,988	36,236,185	198,435	13,641,431	190,326,702
40	190,326,702	31,565	35,200,432	178,555	12,085,709	167,064,990
41	167,064,990	19,389	34,037,305	158,192	10,498,386	143,387,268
42	143,387,268	6,970	32,801,052	137,415	8,884,506	119,340,277
43	119,340,277	3,970	31,492,533	116,291	7,247,650	94,983,073
44	94,983,073	1,279	30,122,956	94,866	5,591,236	70,357,766
45	70,357,766	-	28,709,416	73,185	3,917,653	45,492,819
46	45,492,819	-	27,263,021	51,279	2,228,497	20,407,016
47	20,407,016	-	25,795,479	29,169	524,628	-
48	-	-	24,318,746	-	-	-
49	-	-	22,845,116	-	-	-
50	-	-	21,386,232	-	-	-
51	-	-	19,952,759	-	-	-
52	-	-	18,553,305	-	-	-
53	-	-	17,194,949	-	-	-
54	-	-	15,883,047	-	-	-
55	-	-	14,621,975	-	-	-
56	-	-	13,415,373	-	-	-
57	-	-	12,265,033	-	-	-
58	-	-	11,171,934	-	-	-
59	-	-	10,136,464	-	-	-
60	-	-	9,158,416	-	-	-

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	\$ -	\$ -	\$ 8,237,565	\$ -	\$ -	\$ -
62	-	-	7,373,175	-	-	-
63	-	-	6,564,481	-	-	-
64	-	-	5,811,049	-	-	-
65	-	-	5,112,368	-	-	-
66	-	-	4,467,552	-	-	-
67	-	-	3,875,411	-	-	-
68	-	-	3,334,594	-	-	-
69	-	-	2,843,498	-	-	-
70	-	-	2,400,477	-	-	-
71	-	-	2,003,653	-	-	-
72	-	-	1,651,330	-	-	-
73	-	-	1,341,964	-	-	-
74	-	-	1,073,787	-	-	-
75	-	-	844,754	-	-	-
76	-	-	652,446	-	-	-
77	-	-	494,018	-	-	-
78	-	-	366,209	-	-	-
79	-	-	265,422	-	-	-
80	-	-	187,854	-	-	-

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 (2.51%)	Present Value of Benefit Payments Using the Single Discount Rate (6.05%)
1	\$ 199,207,738	\$ 18,211,896	\$ 18,211,896	\$ -	\$ 17,606,104	\$ -	\$ 17,684,787
2	208,129,846	18,190,927	18,190,927	-	16,435,358	-	16,656,695
3	220,130,526	18,903,990	18,903,990	-	15,962,247	-	16,322,129
4	231,665,572	19,695,318	19,695,318	-	15,542,460	-	16,035,246
5	243,576,700	20,575,098	20,575,098	-	15,174,518	-	15,795,882
6	255,787,153	21,515,567	21,515,567	-	14,830,030	-	15,575,575
7	268,249,943	22,514,539	22,514,539	-	14,503,356	-	15,368,932
8	280,922,267	23,565,326	23,565,326	-	14,187,149	-	15,168,527
9	293,764,281	24,603,433	24,603,433	-	13,843,107	-	14,933,272
10	306,794,498	25,627,894	25,627,894	-	13,476,187	-	14,667,683
11	320,060,951	26,725,249	26,725,249	-	13,133,851	-	14,423,136
12	333,544,383	27,859,215	27,859,215	-	12,795,446	-	14,177,385
13	347,251,099	28,957,579	28,957,579	-	12,429,825	-	13,895,649
14	361,258,362	30,092,469	30,092,469	-	12,071,933	-	13,616,445
15	375,578,389	31,181,697	31,181,697	-	11,690,551	-	13,304,391
16	390,346,673	32,344,083	32,344,083	-	11,333,037	-	13,013,060
17	405,529,935	33,384,776	33,384,776	-	10,932,415	-	12,665,501
18	421,344,003	34,421,546	34,421,546	-	10,534,508	-	12,313,843
19	437,863,580	35,282,339	35,282,339	-	10,091,541	-	11,901,725
20	455,420,514	36,151,918	36,151,918	-	9,663,794	-	11,499,348
21	466,075,814	36,990,994	36,990,994	-	9,241,204	-	11,094,997
22	461,794,459	37,689,575	37,689,575	-	8,799,744	-	10,659,621
23	456,316,535	38,364,216	38,364,216	-	8,371,270	-	10,231,426
24	449,581,050	38,906,678	38,906,678	-	7,934,241	-	9,784,155
25	441,665,022	39,410,643	39,410,643	-	7,511,228	-	9,345,489
26	432,515,201	39,942,880	39,942,880	-	7,114,642	-	8,931,352
27	422,055,631	40,258,928	40,258,928	-	6,701,810	-	8,488,469
28	410,415,047	40,496,112	40,496,112	-	6,300,274	-	8,051,371
29	397,581,582	40,643,143	40,643,143	-	5,909,485	-	7,619,616
30	383,592,173	40,706,129	40,706,129	-	5,531,442	-	7,196,063

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 (2.51%)	Present Value of Benefit Payments Using the Single Discount Rate (6.05%)
31	\$ 368,461,731	\$ 40,665,359	\$ 40,665,359	\$ -	\$ 5,164,394	\$ -	\$ 6,778,742
32	352,223,101	40,475,008	40,475,008	-	4,803,944	-	6,362,104
33	334,972,160	40,204,036	40,204,036	-	4,459,610	-	5,958,992
34	316,722,636	39,811,996	39,811,996	-	4,127,218	-	5,564,247
35	297,579,209	39,361,582	39,361,582	-	3,813,574	-	5,187,455
36	277,543,376	38,722,430	38,722,430	-	3,506,215	-	4,812,090
37	256,754,676	38,005,362	38,005,362	-	3,216,155	-	4,453,540
38	235,240,442	37,183,240	37,183,240	-	2,940,733	-	4,108,630
39	213,069,904	36,236,185	36,236,185	-	2,678,348	-	3,775,562
40	190,326,702	35,200,432	35,200,432	-	2,431,581	-	3,458,409
41	167,064,990	34,037,305	34,037,305	-	2,197,415	-	3,153,355
42	143,387,268	32,801,052	32,801,052	-	1,979,069	-	2,865,463
43	119,340,277	31,492,533	31,492,533	-	1,775,812	-	2,594,203
44	94,983,073	30,122,956	30,122,956	-	1,587,462	-	2,339,825
45	70,357,766	28,709,416	28,709,416	-	1,413,990	-	2,102,807
46	45,492,819	27,263,021	27,263,021	-	1,254,909	-	1,882,948
47	20,407,016	25,795,479	20,407,016	5,388,463	877,877	1,701,512	1,679,954
48	-	24,318,746	-	24,318,746	-	7,491,091	1,493,428
49	-	22,845,116	-	22,845,116	-	6,864,850	1,322,896
50	-	21,386,232	-	21,386,232	-	6,269,107	1,167,766
51	-	19,952,759	-	19,952,759	-	5,705,690	1,027,339
52	-	18,553,305	-	18,553,305	-	5,175,595	900,786
53	-	17,194,949	-	17,194,949	-	4,679,222	787,210
54	-	15,883,047	-	15,883,047	-	4,216,386	685,666
55	-	14,621,975	-	14,621,975	-	3,786,573	595,216
56	-	13,415,373	-	13,415,373	-	3,389,041	514,944
57	-	12,265,033	-	12,265,033	-	3,022,571	443,931
58	-	11,171,934	-	11,171,934	-	2,685,777	381,298
59	-	10,136,464	-	10,136,464	-	2,377,179	326,221
60	-	9,158,416	-	9,158,416	-	2,095,219	277,930

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 (2.51%)	Present Value of Benefit Payments Using the Single Discount Rate (6.05%)
61	\$ -	\$ 8,237,565	\$ -	\$ 8,237,565	\$ -	\$ 1,838,407	\$ 235,724
62	-	7,373,175	-	7,373,175	-	1,605,207	198,952
63	-	6,564,481	-	6,564,481	-	1,394,154	167,026
64	-	5,811,049	-	5,811,049	-	1,203,923	139,421
65	-	5,112,368	-	5,112,368	-	1,033,237	115,660
66	-	4,467,552	-	4,467,552	-	880,808	95,306
67	-	3,875,411	-	3,875,411	-	745,355	77,958
68	-	3,334,594	-	3,334,594	-	625,637	63,252
69	-	2,843,498	-	2,843,498	-	520,434	50,859
70	-	2,400,477	-	2,400,477	-	428,592	40,486
71	-	2,003,653	-	2,003,653	-	348,982	31,865
72	-	1,651,330	-	1,651,330	-	280,574	24,764
73	-	1,341,964	-	1,341,964	-	222,428	18,977
74	-	1,073,787	-	1,073,787	-	173,620	14,318
75	-	844,754	-	844,754	-	133,243	10,621
76	-	652,446	-	652,446	-	100,391	7,736
77	-	494,018	-	494,018	-	74,152	5,523
78	-	366,209	-	366,209	-	53,622	3,861
79	-	265,422	-	265,422	-	37,913	2,638
80	-	187,854	-	187,854	-	26,176	1,761

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 Police Pension Fund is established and administered as prescribed by “Article 3 – Police Pension Fund – Municipalities 500,000 and Under” of the Illinois Pension Code.

ADMINISTRATION

The Police 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, invest assets, and keep records.

MEMBER CONTRIBUTIONS

Members contribute 9.910% of 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, and not to exceed 75% of final salary. “Final salary” is based on the police officer’s pensionable salary attached to rank held on the last day of service, unless the pensionable salary was greater at some point within the year prior to the last day of service. If so, the pensionable salary is averaged over the last 12 months.

Annual Increase in Benefit: A police officer 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 latter 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 1st 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 1st. The salary cap will not decrease.

Annual Increase in Benefit: The initial increase date will be the latter of the January 1st after the pensioner turns age 60 or the January 1st after the benefit date anniversary. Subsequent increases will be granted every January 1st 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 1st.

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 police officer's age is between 50 and 55.

Annual Increase in Benefit: The initial increase date will be the latter of the January 1st after the pensioner turns age 60 or the January 1st after the benefit date anniversary. Subsequent increases will be granted every January 1st 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 1st.



SURVIVING SPOUSE BENEFIT

Tier I

Eligibility: Married to an active police officer with at least 8 years of creditable service, a disabled pensioner at the time of death, or a retired pensioner on the last day of service.

Active Line of Duty Death Benefit: An eligible surviving spouse is entitled to receive 100% of the police officer'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 pensioner's benefit at the time of death.

Active Member with 20+ Years of Service: An eligible surviving spouse is entitled to the police officer's eligible benefit at the time of death.

Active Member with 10-20 Years of Service: An eligible surviving spouse is entitled to receive 50% of the police officer's pensionable salary attached to rank held on the last day of service, unless the pensionable salary was greater at some point within the year prior to the last day of service. If so, the pensionable salary is averaged over the last 12 months.

Annual Increase in Benefit: None.

Tier II

Eligibility: Married to an active police officer with at least 8 years of creditable service, a disabled pensioner at the time of death, or a retired pensioner on the last day of service.

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

Non-Duty Death Benefit:

Disabled or Retired Pensioner, Active Member with 20+ Years of Service, and Active Member with 10-20 Years of service: An eligible surviving spouse is entitled to receive the greater of 66⅔% of the police officer's earned pension benefit at the time of death or 54% of the police officer's monthly salary at the time of death.

Annual Increase in Benefit: The initial increase date will be the January 1st after the surviving spouse turns age 60. Subsequent increases will be granted every January 1st 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 1st.



TERMINATION BENEFIT – VESTED

Tier I

Eligibility: Age 60 with at least 8 but less than 20 years of creditable service.

Benefit: 2.5% of final salary for each year of service. “Final salary” is based on the police officer’s pensionable salary attached to rank held on the last day of service, unless the pensionable salary was greater at some point within the year prior to the last day of service. If so, the pensionable salary is averaged over the last 12 months.

Annual Increase in Benefit: A police officer 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 1st thereafter.

Tier II

None.



DISABILITY BENEFIT

Tier I

Eligibility: Duty or Non-Duty Disability 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 police officer 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 police officer is entitled to receive 50% of final salary. “Final salary” is based on the police officer’s pensionable salary attached to rank held on the last day of service.

Annual Increase in Benefit: A police officer 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 latter of the January 1st after following pensioner turns age 60 or the January 1st after the benefit date anniversary. Subsequent increases of 3% of the original monthly benefit will be granted every January 1st thereafter.

Tier II

Eligibility: Duty or Non-Duty Disability 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 police officer 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 police officer is entitled to receive 50% of final salary. “Final salary” is based on the police officer’s pensionable salary attached to rank held on the last day of service.

Annual Increase in Benefit: A police officer 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 latter of the January 1st after following pensioner turns age 60 or the January 1st after the benefit date anniversary. Subsequent increases of 3% of the original monthly benefit will be granted every January 1st thereafter.



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CERTIFIED PUBLIC ACCOUNTANTS