VILLAGE OF KENILWORTH
POLICE PENSION FUND

ACTUARIAL VALUATION
AS OF JANUARY 1, 2023

CONTRIBUTIONS APPLICABLE TO THE
PLAN/FISCAL YEAR ENDING DECEMBER 31, 2023

GASB 67/68 DISCLOSURE INFORMATION
AS OF DECEMBER 31, 2022

FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

April 26, 2023

Board of Trustees
Village of Kenilworth Police Pension Fund

Re: Actuarial Valuation Report (including GASB Statements No. 67 and No. 68) – Village of Kenilworth Police Pension Fund

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the Village of Kenilworth Police Pension Fund. Included are the related results for GASB Statements No. 67 and No. 68. The funding valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits and to develop the appropriate funding requirements for the applicable plan year. The calculation of the liability for GASB results was performed for the purpose of satisfying the requirements of GASB Statements No. 67 and No. 68. Use of the results for other purposes may not be applicable and could produce significantly different results.

The valuations have been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflect laws and regulations issued to date pursuant to the provisions of Article 3, Illinois Pension Code, as well as applicable federal laws and regulations. In our opinion, the assumptions used in this valuation, as adopted by the Board of Trustees, represent reasonable expectations of anticipated plan experience]. Future actuarial measurements may differ significantly from the current measurements presented in this report for a variety of reasons including: changes in applicable laws, changes in plan provisions, changes in assumptions, or plan experience differing from expectations. Due to the limited scope of the valuations, we did not perform an analysis of the potential range of such future measurements.

The funding percentages and unfunded accrued liability as measured based on the actuarial value of assets will differ from similar measures based on the market value of assets. These measures, as provided, are appropriate for determining the adequacy of future contributions, but may not be appropriate for the purpose of settling a portion or all of its liabilities.

In conducting the valuations, we have relied on personnel, plan design, and asset information supplied by the Board, financial reports prepared by the custodian bank and the actuarial assumptions and methods described in the Actuarial Assumptions section of this report. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results. This information, along with any adjustments or modifications, is summarized in various sections of this report.

The total pension liability, net pension liability, and certain sensitivity information shown in the GASB results are based on an actuarial valuation performed as of the valuation date.

In performing the analysis, we used third-party software to model (calculate) the underlying liabilities and costs. These results are reviewed in the aggregate and for individual sample lives. The output from the software is either used directly or input into internally developed models to generate the costs. All internally developed models are reviewed as part of the process. As a result of this review, we believe that the models have produced reasonable results. We do not believe there are any material inconsistencies among assumptions or unreasonable output produced due to the aggregation of assumptions.

The undersigned are familiar with the immediate and long-term aspects of pension valuations and meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the actuarial opinions.

To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the Village of Kenilworth, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Village of Kenilworth Police Pension Fund. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

If there are any questions, concerns, or comments about any of the items contained in this report, please contact us at 630-620-0200.

Respectfully submitted,

Foster & Foster, Inc.

By: Jason L. Franken
Jason L. Franken, FSA, EA, MAAA

By: Heidi Andorfer
Heidi E. Andorfer, FSA, EA, MAAA

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Enclosures

TABLE OF CONTENTS

SUMMARY OF REPORT

The regular annual actuarial valuation of the Village of Kenilworth Police Pension Fund, performed as of January 1, 2023, has been completed and the results are presented in this report. The contribution amounts set forth herein are applicable to the plan/fiscal year ended December 31, 2023.

The contribution requirements, compared with those set forth in the January 1, 2022 actuarial report, are as follows:

Valuation Date	1/1/2023	1/1/2022
Applicable to Fiscal Year Ending	12/31/2023	12/31/2022
Total Recommended Contribution	$831,687	$806,609
% of Projected Annual Payroll	136.8%	112.3%
Member Contributions (Est.)	(60,256)	(71,169)
% of Projected Annual Payroll	(9.9%)	(9.9%)
Village Recommended Contribution	771,431	735,440
% of Projected Annual Payroll	126.9%	102.4%

As you can see, the Total Recommended Contribution shows an increase when compared to the results determined in the January 1, 2022 actuarial valuation report. The increase is attributable to natural increase in the amortization payment due to the payroll growth assumption and unfavorable plan experience. The increase was offset in part by contributions that were greater than the recommended amount.

Plan experience was unfavorable overall on the basis of the plan's actuarial assumptions. Sources of unfavorable experience included more retirements than expected, an investment return of 3.38% (Actuarial Asset Basis) which fell short of the 6.00% assumption, and an average salary increase of 4.88% which exceeded the 3.95% assumption. There were no significant sources of favorable experience.

CHANGES SINCE PRIOR VALUATION

Plan Changes Since Prior Valuation

There were no plan changes since the prior valuation.

Actuarial Assumption/Method Changes Since Prior Valuation

There were no assumption or method changes since the prior valuation.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	1/1/2023	1/1/2022
A. Participant Data		
Number Included		
Actives	6	7
Service Retirees	9	9
Beneficiaries	3	3
Disability Retirees	0	0
Terminated Vested	0	0
Total	18	19
Total Annual Payroll	$608,031	$718,153
Payroll Under Assumed Ret. Age	608,031	718,153
Annual Rate of Payments to:		
Service Retirees	745,112	703,106
Beneficiaries	143,722	85,288
Disability Retirees	0	0
Terminated Vested	0	0
B. Assets		
Actuarial Value	10,270,056	9,878,694
Market Value	9,285,065	10,189,867
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	5,496,148	6,878,676
Disability Benefits	304,662	358,950
Death Benefits	40,632	46,957
Vested Benefits	182,567	188,571
Service Retirees	13,115,842	11,274,297
Beneficiaries	758,490	525,345
Disability Retirees	0	0
Terminated Vested	0	0
Total	19,898,341	19,272,796

C. Liabilities - (Continued)	1/1/2023	1/1/2022
Present Value of Future Salaries	4,069,709	4,741,209
Present Value of Future Member Contributions	403,308	469,854
Normal Cost (Retirement)	172,609	198,274
Normal Cost (Disability)	22,987	26,715
Normal Cost (Death)	2,461	3,072
Normal Cost (Vesting)	10,737	12,851
Total Normal Cost	208,794	240,912
Present Value of Future Normal Costs	1,309,962	1,516,516
Accrued Liability (Retirement)	4,408,127	5,619,988
Accrued Liability (Disability)	147,365	176,938
Accrued Liability (Death)	26,809	30,487
Accrued Liability (Vesting)	131,746	129,225
Accrued Liability (Inactives)	13,874,332	11,799,642
Total Actuarial Accrued Liability	18,588,379	17,756,280
Unfunded Actuarial Accrued Liability (UAAL)	8,318,323	7,877,586
Funded Ratio (AVA / AL)	55.2%	55.6%

	1/1/2023	1/1/2022
D. Actuarial Present Value of Accrued Benefits		
Vested Accrued Benefits		
Inactives	13,874,332	11,799,642
Actives	1,959,758	2,641,176
Member Contributions	779,348	951,393
Total	16,613,438	15,392,211
Non-vested Accrued Benefits	216,942	318,323
Total Present Value Accrued Benefits	16,830,380	15,710,534
Funded Ratio (MVA / PVAB)	55.2%	64.9%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	1,022,729	
Benefits Paid	(820,888)	
Interest	918,005	
Other	0	
Total	1,119,846	

Valuation Date	1/1/2023	1/1/2022
Applicable to Fiscal Year Ending	12/31/2023	12/31/2022
E. Pension Cost		
Normal Cost [1]	$221,322	$255,367
% of Total Annual Payroll [1]	36.4	35.6
Administrative Expenses [1]	14,907	11,072
% of Total Annual Payroll [1]	2.5	1.5
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 18 years (as of 1/1/2023) [1]	595,458	540,170
% of Total Annual Payroll [1]	97.9	75.2
Total Recommended Contribution	831,687	806,609
% of Total Annual Payroll [1]	136.8	112.3
Expected Member Contributions [1]	(60,256)	(71,169)
% of Total Annual Payroll [1]	(9.9)	(9.9)
Expected Village Contribution	771,431	735,440
% of Total Annual Payroll [1]	126.9	102.4
F. Past Contributions		
Plan Years Ending:	12/31/2022	
Total Recommended Contribution	805,991	
Village Requirement	735,440	
Actual Contributions Made:		
Members (excluding buyback)	70,551	
Village	820,872	
Total	891,423	
G. Net Actuarial (Gain)/Loss	622,894	

[1] Contributions developed as of 1/1/2023 displayed above have been adjusted to account for assumed interest.

H. Schedule Illustrating the Amortization of the Total Unfunded Actuarial Accrued Liability as of:

Year	Projected Unfunded Accrued Liability
2023	8,318,323
2024	8,221,964
2025	8,098,983
2029	7,291,756
2033	5,839,958
2037	3,510,579
2041	0

I. (i) 5 Year Comparison of Actual and Assumed Salary Increases

		Actual	Assumed
Year Ended	12/31/2022	4.88%	3.95%
Year Ended	12/31/2021	2.24%	4.07%
Year Ended	12/31/2020	2.10%	4.20%
Year Ended	12/31/2019	2.33%	4.20%
Year Ended	12/31/2018	1.10%	4.29%

(ii) 5 Year Comparison of Investment Return on Actuarial Value

		Actual MVA	Actual AVA	Assumed
Year Ended	12/31/2022	-9.41%	3.38%	6.00%
Year Ended	12/31/2021	7.85%	6.91%	6.00%
Year Ended	12/31/2020	8.18%	6.08%	6.00%
Year Ended	12/31/2019	12.30%	4.19%	6.00%
Year Ended	12/31/2018	-2.58%	2.87%	6.00%

DEVELOPMENT OF JANUARY 1, 2023 AMORTIZATION PAYMENT

(1)	Unfunded Actuarial Accrued Liability as of January 1, 2022	$7,877,586
(2)	Sponsor Normal Cost developed as of January 1, 2022	169,743
(3)	Expected administrative expenses for the year ended December 31, 2022	10,445
(4)	Expected interest on (1), (2) and (3)	483,153
(5)	Sponsor contributions to the System during the year ended December 31, 2022	820,872
(6)	Expected interest on (5)	24,626
(7)	Expected Unfunded Actuarial Accrued Liability as of December 31, 2022, (1)+(2)+(3)+(4)-(5)-(6)	7,695,429
(8)	Change to UAAL due to Benefits/Assumption Change	0
(9)	Change to UAAL due to Actuarial (Gain)/Loss	622,894
(10)	Unfunded Accrued Liability as of January 1, 2023	8,318,323
(11)	UAAL Subject to Amortization (100% AAL less Actuarial Assets)	8,318,323

Date Established	Years Remaining	1/1/2023 Amount	Amortization Amount
1/1/2023	18	8,318,323	561,753

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1)	Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2022	$7,877,586
(2)	Expected UAAL as of January 1, 2023	7,695,429
(3)	Summary of Actuarial (Gain)/Loss, by component:	
	Investment Return (Actuarial Asset Basis)	259,526
	Salary Increases	61,397
	Active Decrements	284,311
	Inactive Mortality	(40,571)
	Other	58,231
	Change in UAAL due to (Gain)/Loss	622,894
	Change to UAAL due to Benefits/Assumption Change	0
(4)	Actual UAAL as of January 1, 2023	$8,318,323

RECONCILIATION OF CHANGES IN CONTRIBUTION REQUIREMENT

(1)	Contribution Determined as of January 1, 2022	$ 735,440
(2)	Summary of Contribution Impact by component:	
	Change in Normal Cost	(34,045)
	Change in Assumed Administrative Expense	3,835
	Investment Return (Actuarial Asset Basis)	18,578
	Salary Increases	4,395
	New Entrants	-
	Active Decrements	20,352
	Inactive Mortality	(2,904)
	Contributions (More) or Less than Recommended	(6,299)
	Increase in Amortization Payment Due to Payroll Growth Assumption	18,906
	Change in Expected Member Contributions	10,913
	Benefits/Assumption Change	-
	Other	2,260
	Total Change in Contribution	35,991
(3)	Contribution Determined as of January 1, 2023	$771,431

PROJECTION OF BENEFIT PAYMENTS

Year	Payments for Current Actives	Payments for Current Inactives	Total Payments
2023	17,051	879,050	896,101
2024	49,985	889,604	939,589
2025	80,924	899,655	980,579
2026	110,518	906,799	1,017,317
2027	135,658	913,907	1,049,565
2028	161,720	920,959	1,082,679
2029	192,129	927,892	1,120,021
2030	217,222	934,615	1,151,837
2031	250,923	940,996	1,191,919
2032	281,555	946,848	1,228,403
2033	310,656	951,951	1,262,607
2034	351,059	956,051	1,307,110
2035	386,241	958,894	1,345,135
2036	425,580	960,251	1,385,831
2037	459,828	959,960	1,419,788
2038	489,529	957,936	1,447,465
2039	521,406	954,206	1,475,612
2040	548,606	948,880	1,497,486
2041	574,870	942,105	1,516,975
2042	595,937	934,025	1,529,962
2043	615,024	924,750	1,539,774
2044	638,912	914,303	1,553,215
2045	655,176	902,617	1,557,793
2046	670,434	889,537	1,559,971
2047	684,646	874,791	1,559,437
2048	697,510	858,013	1,555,523
2049	709,267	838,763	1,548,030
2050	719,767	816,559	1,536,326
2051	728,867	790,913	1,519,780
2052	736,096	761,425	1,497,521
2053	741,671	727,878	1,469,549
2054	745,635	690,303	1,435,938
2055	747,341	649,015	1,396,356
2056	746,857	604,552	1,351,409
2057	743,933	557,600	1,301,533
2058	738,310	508,910	1,247,220
2059	729,738	459,272	1,189,010
2060	718,007	409,503	1,127,510
2061	702,992	360,477	1,063,469
2062	684,700	313,074	997,774

ACTUARIAL ASSUMPTIONS AND METHODS

Interest Rate	6.00% per year compounded annually, net of investment related expenses. This is supported by the target asset allocation of the trust and the expected long-term return by asset class.
Mortality Rate	***Active Lives:*** PubS-2010 Employee mortality, projected 5 years past the valuation date with Scale MP-2021. 10% of active deaths are assumed to be in the line of duty. ***Inactive Lives:*** PubS-2010 Healthy Retiree mortality, projected 5 years past the valuation date with Scale MP-2021. ***Beneficiaries:*** PubS-2010 Survivor mortality, projected 5 years past the valuation date with Scale MP-2021. ***Disabled Lives:*** PubS-2010 Disabled mortality, projected 5 years past the valuation date with Scale MP-2021. The mortality assumptions sufficiently accommodate anticipated future mortality improvements.
Retirement Age	See table later in this section. This is based on a 2017 experience study performed for the State of Illinois Department of Insurance.
Disability Rate	See table later in this section. 60% of the disabilities are assumed to be in the line of duty. This is based on a 2017 experience study performed for the State of Illinois Department of Insurance.
Termination Rate	See table later in this section. This is based on a 2017 experience study performed for the State of Illinois Department of Insurance.
Inflation	2.50%.
Cost-of-Living Adjustment	<u>Tier 1</u>: 3.00% per year after age 55. Those that retire prior to age 55 receive an increase of 1/12 of 3.00% for each full month since benefit commencement upon reaching age 55. <u>Tier 2:</u> 1.25% per year after the later of attainment of age 60 or first anniversary of retirement.

Salary Increases	See table below. This is based on a 2017 experience study performed for the State of Illinois Department of Insurance.

Salary Scale	
Service	Rate
0	11.00%
1	10.75%
2	8.75%
3	8.50%
4	7.00%
5	6.25%
6	5.25%
7	4.25%
8 - 16	4.00%
17 - 32	3.75%
32+	3.50%

Marital Status	80% of Members are assumed to be married.
Spouse's Age	Males are assumed to be three years older than females.
Funding Method	Entry Age Normal Cost Method.
Actuarial Asset Method	Investment gains and losses are smoothed over a 5-year period. In the first year, 20% of the gain or loss is recognized. In the second year 40%, in the third year 60%, in the fourth year 80%, and in the fifth year 100% of the gain or loss is recognized. The actuarial investment gain or loss is defined as the actual return on investments minus the actuarial assumed investment return. Actuarial Assets shall not be less than 80% nor greater than 120% of the Market Value of Assets.
Funding Policy Amortization Method	The UAAL is amortized according to a Level Percentage of Payroll method over a period ending in 2040. The initial amortization amount is 100% of the Accrued Liability less the Actuarial Value of Assets.
Payroll Growth	3.50% per year.
Administrative Expenses	Expenses paid out of the fund other than investment-related expenses are assumed to be equal to those paid in the previous year.

Decrement Tables

% Terminating During the Year	
Age	Rate
20	14.00%
25	10.40%
30	5.60%
35	3.10%
40	1.90%
45	1.50%
50	1.50%
56+	0.00%

% Becoming Disabled During the Year	
Age	Rate
20	0.000%
25	0.030%
30	0.140%
35	0.260%
40	0.420%
45	0.590%
50	0.710%
55	0.900%
60	1.150%

% Retiring During the Year (Tier 1)	
Age	Rate
50 - 51	15%
52 - 54	20%
55 - 64	25%
65 - 69	40%
70+	100%

% Retiring During the Year (Tier 2)	
Age	Rate
50 - 54	5%
55	40%
56 - 64	25%
65 - 69	40%
70+	100%

GLOSSARY

Total Annual Payroll is the projected annual rate of pay for the fiscal year following the valuation date of all covered members.

Present Value of Benefits is the single sum value on the valuation date of all future benefits to be paid to current Members, Retirees, Beneficiaries, Disability Retirees and Vested Terminations.

Accrued Actuarial Liability is determined according to the plan's actuarial cost method. This amount represents the portion of the anticipated future benefits allocated to years prior to the valuation date.

Normal (Current Year's) Cost is the current year's cost for benefits yet to be funded.

Market Value of Assets is the fair market value of plan assets as of the valuation date. This amount may be adjusted to produce an Actuarial Value of Assets for plan funding purposes.

Actuarial Value of Assets is the asset value used in the valuation to determine contribution requirements. It represents the plan's Market Value of Assets, with adjustments according to the Actuarial Asset Method. These adjustments produce a "smoothed" value that is likely to be less volatile from year to year than the Market Value of Assets.

Unfunded Accrued Liability is the excess of the Accrued Actuarial Liability over the Actuarial Value of Assets.

Total Recommended Contribution is equal to the Normal Cost plus an amount sufficient to amortize the Unfunded Accrued Liability over a period ending in 2041. The recommended amount is adjusted for interest according to the timing of contributions during the year.

Entry Age Normal Cost Method - Under this method, the normal cost is the sum of the individual normal costs for all active participants. For an active participant, the normal cost is the participant's normal cost accrual rate, multiplied by the participant's current compensation.

(a) The normal cost accrual rate equals:
   (i) the present value of future benefits for the participant, determined as of the participant's entry age, divided by
   (ii) the present value of the compensation expected to be paid to the participant for each year of the participant's anticipated future service, determined as of the participant's entry age.

(b) In calculating the present value of future compensation, the salary scale is applied both retrospectively and prospectively to estimate compensation in years prior to and subsequent to the valuation year based on the compensation used for the valuation.

(c) The accrued liability is the sum of the individual accrued liabilities for all participants and beneficiaries. A participant's accrued liability equals the present value, at the participant's attained age, of future benefits less the present value at the participant's attained age of the individual normal costs payable in the future. A beneficiary's accrued liability equals the present value, at the beneficiary's attained age, of future benefits.

(d) Under this method, the entry age used for each active participant is the participant's age at the time he or she would have commenced participation if the plan had always been in existence under current terms, or the age as of which he or she first earns service credits for purposes of benefit accrual under the current terms of the plan.

DISCUSSION OF RISK

ASOP No. 51, Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions, states that the actuary should identify risks that, in the actuary's professional judgment, may reasonably be anticipated to significantly affect the plan's future financial condition.

Throughout this report, actuarial results are determined under various assumption scenarios. These results are based on the premise that all future plan experience will align with the plan's actuarial assumptions; however, there is no guarantee that actual plan experience will align with the plan's assumptions. It is possible that actual plan experience will differ from anticipated experience in an unfavorable manner that will negatively impact the plan's funded position.

Below are examples of ways in which plan experience can deviate from assumptions and the potential impact of that deviation. Typically, this results in an actuarial gain or loss representing the current-year financial impact on the plan's unfunded liability of the experience differing from assumptions; this gain or loss is amortized over a period of time determined by the plan's amortization method. When assumptions are selected that adequately reflect plan experience, gains and losses typically offset one another in the long term, resulting in a relatively low impact on the plan's contribution requirements associated with plan experience. When assumptions are too optimistic, losses can accumulate over time and the plan's amortization payment could potentially grow to an unmanageable level.

- <u>Investment Return</u>: When the rate of return on the Actuarial Value of Assets falls short of the assumption, this produces a loss representing assumed investment earnings that were not realized. Further, it is unlikely that the plan will experience a scenario that matches the assumed return in each year as capital markets can be volatile from year to year. Therefore, contribution amounts can vary in the future.

- <u>Salary Increases</u>: When a plan participant experiences a salary increase that was greater than assumed, this produces a loss representing the cost of an increase in anticipated plan benefits for the participant as compared to the previous year. The total gain or loss associated with salary increases for the plan is the sum of salary gains and losses for all active participants.

- <u>Payroll Growth</u>: The plan's payroll growth assumption, if one is used, causes a predictable annual increase in the plan's amortization payment in order to produce an amortization payment that remains constant as a percentage of payroll if all assumptions are realized. If payroll does not increase according to the plan's payroll growth assumption, the plan's amortization payment can increase significantly as a percentage of payroll even if all assumptions other than the payroll growth assumption are realized.

- <u>Demographic Assumptions:</u> Actuarial results take into account various potential events that could happen to a plan participant, such as retirement, termination, disability, and death. Each of these potential events is assigned a liability based on the likelihood of the event and the financial consequence of the event for the plan. Accordingly, actuarial liabilities reflect a blend of financial consequences associated with various possible outcomes (such as retirement at one of various possible ages). Once the outcome is known (e.g. the participant retires) the liability is adjusted to reflect the known outcome. This adjustment produces a gain or loss depending on whether the outcome was more or less favorable than other outcomes that could have occurred.

- <u>Contribution Risk</u>: This risk results from the potential that actual employer contributions may deviate from actuarially determined contributions, which are determined in accordance with the

Board's funding policy. The funding policy is intended to result in contribution requirements that if paid when due, will result in a reasonable expectation that assets will accumulate to be sufficient to pay plan benefits when due. Contribution deficits, particularly large deficits and those that occur repeatedly, increase future contribution requirements and put the plan at risk for not being able to pay plan benefits when due.

Impact of Plan Maturity on Risk

For newer pension plans, most of the participants and associated liabilities are related to active members who have not yet reached retirement age. As pension plans continue in operation and active members reach retirement ages, liabilities begin to shift from being primarily related to active members to being shared amongst active and retired members. Plan maturity is a measure of the extent to which this shift has occurred. It is important to understand that plan maturity can have an impact on risk tolerance and the overall risk characteristics of the plan. For example, plans with a large amount of retired liability do not have as long of a time horizon to recover from losses (such as losses on investments due to lower than expected investment returns) as plans where the majority of the liability is attributable to active members. For this reason, less tolerance for investment risk may be warranted for highly mature plans with a substantial inactive liability. Similarly, mature plans paying substantial retirement benefits resulting in a small positive or net negative cash flow can be more sensitive to near term investment volatility, particularly if the size of the fund is shrinking, which can result in less assets being available for investment in the market.

To assist with determining the maturity of the plan, we have provided some relevant metrics in the table following titled "Plan Maturity Measures and Other Risk Metrics". Highlights of this information are discussed below:

- The Support Ratio, determined as the ratio of active to inactive members, has decreased from 58.3% on January 1, 2020 to 50.0% on January 1, 2023, indicating that the plan has been rapidly maturing.

- The Accrued Liability Ratio, determined as the ratio of the Inactive Accrued Liability, which is the liability associated with members who are no longer employed but are due a benefit from the plan, to the Total Accrued Liability, is 74.6%. With a plan of this maturity, losses due to lower than expected investment returns or demographic factors will need to be made up for over a shorter time horizon than would be needed for a less mature plan.

- The Funded Ratio, determined as the ratio of the Actuarial Value of Assets to the Total Accrued Liability, has increased from 51.2% on January 1, 2020 to 55.2% on January 1, 2023, due mainly to excess village contributions above the recommended amount.

- The Net Cash Flow Ratio, determined as the ratio of the Net Cash Flow (contributions minus benefit payments and administrative expenses) to the Market Value of Assets, stayed approximately the same from January 1, 2020 to January 1, 2023. The current Net Cash Flow Ratio of 0.6% indicates that contributions are generally covering the plan's benefit payments and administrative expenses.

It is important to note that the actuary has identified the risks above as the most significant risks based on the characteristics of the plan and the nature of the project, however, it is not an exhaustive list of potential risks that could be considered. Additional advanced modeling, as well as the identification of additional risks, can be provided at the request of the audience addressed on page 2 of this report.

PLAN MATURITY MEASURES AND OTHER RISK METRICS

	1/1/2023	1/1/2022	1/1/2021	1/1/2020
Support Ratio				
Total Actives	6	7	7	7
Total Inactives	12	12	12	12
Actives / Inactives	50.0%	58.3%	58.3%	58.3%
Asset Volatility Ratio				
Market Value of Assets (MVA)	9,285,065	10,189,867	9,314,958	8,575,530
Total Annual Payroll	608,031	718,153	702,416	688,000
MVA / Total Annual Payroll	1,527.1%	1,418.9%	1,326.1%	1,246.4%
Accrued Liability (AL) Ratio				
Inactive Accrued Liability	13,874,332	11,799,642	11,724,138	11,691,845
Total Accrued Liability	18,588,379	17,756,280	17,181,638	16,709,164
Inactive AL / Total AL	74.6%	66.5%	68.2%	70.0%
Funded Ratio				
Actuarial Value of Assets (AVA)	10,270,056	9,878,694	9,106,371	8,548,765
Total Accrued Liability	18,588,379	17,756,280	17,181,638	16,709,164
AVA / Total Accrued Liability	55.2%	55.6%	53.0%	51.2%
Net Cash Flow Ratio				
Net Cash Flow [1]	56,472	138,509	36,533	120,682
Market Value of Assets (MVA)	9,285,065	10,189,867	9,314,958	8,575,530
Ratio	0.6%	1.4%	0.4%	1.4%

[1] Determined as total contributions minus benefit payments and administrative expenses.

STATEMENT OF FIDUCIARY NET POSITION
December 31, 2022

ASSETS	MARKET VALUE
Cash and Cash Equivalents:	
Cash	529,789
Total Cash and Equivalents	529,789
Receivables:	
From Village	145,737
Accrued Past Due Interest	10
Total Receivable	145,747
Investments:	
Pooled/Common/Commingled Funds	8,609,529
Total Investments	8,609,529
Total Assets	9,285,065
LIABILITIES	
Total Liabilities	0
Net Assets:	
Active and Retired Members' Equity	9,285,065
NET POSITION RESTRICTED FOR PENSIONS	9,285,065
TOTAL LIABILITIES AND NET ASSETS	9,285,065

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED December 31, 2022
Market Value Basis

ADDITIONS		
Contributions:		
Member	70,551	
Village	820,872	
Total Contributions		891,423
Investment Income:		
Net Increase in Fair Value of Investments		(980,397)
Interest & Dividends		32,038
Less Investment Expense [1]		(12,915)
Net Investment Income		(961,274)
Total Additions		(69,851)
DEDUCTIONS		
Distributions to Members:		
Benefit Payments	820,888	
Refund of Contributions/Transfers	0	
Total Distributions		820,888
Administrative Expenses		14,063
Total Deductions		834,951
Net Increase in Net Position		(904,802)
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		10,189,867
End of the Year		9,285,065

[1] Investment Related expenses include investment advisory, custodial and performance monitoring fees.

ACTUARIAL ASSET VALUATION
December 31, 2022

Development of Actuarial Value of Assets

Market Value of Assets, 12/31/2022	9,285,065
(Gains)/Losses Not Yet Recognized	984,991
Actuarial Value of Assets, 12/31/2022	10,270,056
12/31/2022 Limited Actuarial Assets:	10,270,056

Development of Investment Gain/Loss

Market Value of Assets, 12/31/2021	10,189,867
Contributions Less Benefit Payments & Administrative Expenses	56,472
Expected Investment Earnings[1]	613,086
Actual Net Investment Earnings	(961,274)
2022 Actuarial Investment Gain/(Loss)	(1,574,360)

[1] Expected Investment Earnings = 6.00% x (10,189,867 + 0.5 x 56,472)

Gains/(Losses) Not Yet Recognized

Plan Year		Amounts Not Yet Recognized by Valuation Year				
Ending	Gain/(Loss)	2022	2023	2024	2025	2026
12/31/2019	477,908	95,582	0	0	0	0
12/31/2020	187,267	74,907	37,453	0	0	0
12/31/2021	173,347	104,008	69,339	34,669	0	0
12/31/2022	(1,574,360)	(1,259,488)	(944,616)	(629,744)	(314,872)	0
Total		(984,991)	(837,824)	(595,075)	(314,872)	0

Development of Asset Returns

(A) 12/31/2021 Actuarial Assets:	9,878,694
(I) Net Investment Income:	
1. Interest and Dividends	32,038
2. Realized Gains (Losses)	0
3. Change in Actuarial Value	315,767
4. Investment Expenses	(12,915)
Total	334,890
(B) 12/31/2022 Actuarial Assets:	10,270,056
Actuarial Asset Rate of Return = (2 x I) / (A + B - I):	3.38%
Market Value of Assets Rate of Return:	-9.41%
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)	(259,526)

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
December 31, 2022
Actuarial Asset Basis

INCOME		
Contributions:		
Member	70,551	
Village	820,872	
Total Contributions		891,423
Earnings from Investments		
Interest & Dividends	32,038	
Change in Actuarial Value	315,767	
Total Earnings and Investment Gains		347,805
EXPENSES		
Administrative Expenses:		
Investment Related[1]	12,915	
Other	14,063	
Total Administrative Expenses		26,978
Distributions to Members:		
Benefit Payments	820,888	
Refund of Contributions/Transfers	0	
Total Distributions		820,888
Change in Net Assets for the Year		391,362
Net Assets Beginning of the Year		9,878,694
Net Assets End of the Year[2]		10,270,056

[1] Investment Related expenses include investment advisory, custodial and performance monitoring fees.
[2] Net Assets may be limited for actuarial consideration.

STATISTICAL DATA

	1/1/2023	1/1/2022	1/1/2021	1/1/2020
Actives - Tier 1				
Number	6	7	7	7
Average Current Age	49.9	49.4	48.4	47.4
Average Age at Employment	32.8	31.6	31.6	31.6
Average Past Service	17.1	17.8	16.8	15.8
Average Annual Salary	$101,339	$102,593	$100,345	$98,286
Actives - Tier 2				
Number	0	0	0	0
Average Current Age	N/A	N/A	N/A	N/A
Average Age at Employment	N/A	N/A	N/A	N/A
Average Past Service	N/A	N/A	N/A	N/A
Average Annual Salary	N/A	N/A	N/A	N/A
Service Retirees				
Number	9	9	9	9
Average Current Age	64.6	68.0	67.0	66.0
Average Annual Benefit	$82,790	$78,123	$76,020	$73,979
Beneficiaries				
Number	3	3	3	3
Average Current Age	87.0	86.6	85.6	84.6
Average Annual Benefit	$47,907	$28,429	$28,430	$28,430
Disability Retirees				
Number	0	0	0	0
Average Current Age	N/A	N/A	N/A	N/A
Average Annual Benefit	N/A	N/A	N/A	N/A
Terminated Vested				
Number	0	0	0	0
Average Current Age	0.0	N/A	N/A	N/A
Average Annual Benefit [1]	N/A	N/A	N/A	N/A

[1] Average Annual Benefit for Terminated Vested members reflects the benefit for members entitled to a future annual benefit from the plan.

AGE AND SERVICE DISTRIBUTION

PAST SERVICE

AGE	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30+	Total
15 - 19	0	0	0	0	0	0	0	0	0	0	0	0
20 - 24	0	0	0	0	0	0	0	0	0	0	0	0
25 - 29	0	0	0	0	0	0	0	0	0	0	0	0
30 - 34	0	0	0	0	0	0	0	0	0	0	0	0
35 - 39	0	0	0	0	0	0	1	0	0	0	0	1
40 - 44	0	0	0	0	0	0	0	1	0	0	0	1
45 - 49	0	0	0	0	0	0	1	0	0	0	0	1
50 - 54	0	0	0	0	0	0	0	1	0	1	0	2
55 - 59	0	0	0	0	0	0	0	0	0	0	0	0
60 - 64	0	0	0	0	0	1	0	0	0	0	0	1
65+	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	2	2	0	1	0	6

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 1/1/2022	7
b. Terminations	
i. Vested (partial or full) with deferred benefits	0
ii. Non-vested or full lump sum distribution received	0
iii. Transferred service to other fund	0
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	(1)
f. Continuing participants	6
g. New entrants	0
h. Total active life participants in valuation	6

2. Non-Active lives (including beneficiaries receiving benefits)

	Service Retirees, Vested Receiving Benefits	Receiving Death Benefits	Receiving Disability Benefits	Vested Deferred	Total
a. Number prior valuation	9	3	0	0	12
Retired	1	0	0	0	1
Vested Deferred	0	0	0	0	0
Death, With Survivor	(1)	1	0	0	0
Death, No Survivor	0	(1)	0	0	(1)
Disabled	0	0	0	0	0
Refund of Contributions	0	0	0	0	0
Rehires	0	0	0	0	0
Expired Annuities	0	0	0	0	0
Data Corrections	0	0	0	0	0
Hired/Termed in Same Year	0	0	0	0	0
b. Number current valuation	9	3	0	0	12

SUMMARY OF CURRENT PLAN

Article 3 Pension Fund	The Plan is established and administered as prescribed by "Article 3. Police Pension Fund – Municipalities 500,000 and Under" of the Illinois Pension Code.
Plan Administration	The Plan is a single employer defined benefit pension plan administered by a Board of Trustees comprised of: a.) Two members appointed by the Municipality, b.) Two active Members of the Police Department elected by the Membership, and c.) One retired Member of the Police Department elected by the Membership.
Credited Service	Complete years of service as a sworn police officer employed by the Municipality.
Normal Retirement	
Date	**Tier 1**: Age 50 and 20 years of Credited Service. **Tier 2:** Age 55 with 10 years of Credited Service.
Benefit	**Tier 1:** 50% of annual salary attached to rank on last day of service plus 2.50% of annual salary for each year of service over 20 years, up to a maximum of 75% of salary. The minimum monthly benefit is $1,000 per month. **Tier 2**: 2.50% per year of service times the average salary for the 48 consecutive months of service within the last 60 months of service in which the total salary was the highest prior to retirement times the number of years of service, up to a maximum of 75% of average salary. The minimum monthly benefit is $1,000 per month. For Tier 2 participants, the salary is capped at a rate of $106,800 as of 2011, indexed annually at a rate of CPI-U, but not to exceed 3.00%.
Form of Benefit	**Tier 1:** For married retirees, an annuity payable for the life of the Member; upon the death of the member, 100% of the Member's benefit payable to the spouse until death. For unmarried retirees, the normal form is a Single Life Annuity. **Tier 2**: Same as above, but with 66 2/3% of benefit continued to spouse.

Early Retirement

Date	**Tier 1**: Age 60 and 8 years of Credited Service. **Tier 2:** Age 50 with 10 years of Credited Service.
Benefit	**Tier 1:** Normal Retirement benefit with no minimum. **Tier 2**: Normal Retirement benefit, reduced 6.00% each year before age 55, with no minimum benefit.
Form of Benefit	Same as Normal Retirement

Disability Benefit

Eligibility	Total and permanent as determined by the Board of Trustees.
Benefit Amount	A maximum of: a.) 65% of salary attached to the rank held by Member on last day of service, and; b.) The monthly retirement pension that the Member is entitled to receive if he or she retired immediately. For non-service connected disabilities, a benefit of 50% of salary attached to rank held by Member on last day of service.

Cost-of-Living Adjustment

Tier 1:

Retirees: An annual increase equal to 3.00% per year after age 55. Those that retire prior to age 55 receive an increase of 1/12 of 3.00% for each full month since benefit commencement upon reaching age 55.

Disabled Retirees: An annual increase equal to 3.00% per year of the original benefit amount beginning at age 60. Those that become disabled prior to age 60 receive an increase of 3.00% of the original benefit amount for each year since benefit commencement upon reaching age 60.

Tier 2: An annual increase each January 1 equal to 3.00% per year or one-half of the annual unadjusted percentage increase in the consumer price index-u for the 12 months ending with the September preceding each November 1, whichever is less, of the original pension after the attainment of age 60 or first anniversary of pension start date whichever is later.

Pre-Retirement Death Benefit

Service Incurred	100% of salary attached to rank held by Member on last day of service.
Non-Service Incurred	A maximum of: a.) 54% of salary attached to the rank held by Member on last day of service, and; b.) The monthly retirement pension earned by the deceased Member at the time of death, regardless of whether death occurs before or after age 50. For non-service deaths with less than 10 years of service, a refund of member contributions is provided.

Vesting (Termination)

Vesting Service Requirement	**Tier 1:** 8 years. **Tier 2**: 10 years.
Non-Vested Benefit	Refund of Member Contributions.
Vested Benefit	Either the termination benefit, payable upon reaching age 60 (55 for Tier 2), provided contributions are not withdrawn, or a refund of member contributions. The termination benefit is 2.50% of annual salary held in the year prior to termination (4-year final average salary for Tier 2) times creditable service.

Contributions

Employee	9.91% of Salary.
Municipality	Remaining amount necessary for payment of Normal (current year's) Cost and amortization of the accrued past service liability.

SUMMARY

	1/1/2023	1/1/2022
Valuation Date	1/1/2023	1/1/2022
Measurement Date	12/31/2022	12/31/2021
Plan Membership:		
Inactives Currently Receiving Benefits	12	12
Inactives Not Yet Receiving Benefits	0	0
Active Plan Members	6	7
Total	18	19
Covered Payroll	$ 711,917	$ 736,478
Net Pension Liability		
Total Pension Liability	$ 18,473,475	$ 17,622,372
Plan Fiduciary Net Position	9,285,065	10,189,867
Net Pension Liability	$ 9,188,410	$ 7,432,505
Plan Fiduciary Net Position As a Percentage of Total Pension Liability	50.26%	57.82%
Net Pension Liability As a Percentage of Covered Payroll	1290.66%	1009.20%
Total Pension Expense	$ 1,075,488	$ 570,810
Development of Single Discount Rate		
Single Discount Rate	6.00%	6.00%
Long-Term Expected Rate of Return	6.00%	6.00%
High-quality Municipal Bond Rate	4.31%	2.25%
Number of Years Future Benefit Payments Are Expected to be Paid	99	99

SCHEDULE OF CHANGES IN NET PENSION LIABILITY
PLAN AND VILLAGE REPORTING

GASB 68 Reporting Period Ending	12/31/2022	12/31/2021
Measurement Date	12/31/2022	12/31/2021
Total Pension Liability		
Service Cost	257,265	245,539
Interest	1,048,152	1,014,772
Changes of Benefit Terms	-	-
Differences Between Expected and Actual Experience	366,574	78,661
Changes of Assumptions	-	-
Benefit Payments, Including Refunds of Employee Contributions	(820,888)	(767,867)
Net Change in Total Pension Liability	851,103	571,105
Total Pension Liability - Beginning	17,622,372	17,051,267
Total Pension Liability - Ending (a)	$ 18,473,475	$ 17,622,372
Plan Fiduciary Net Position		
Contributions - Employer	820,872	843,836
Contributions - Employee	70,551	72,985
Net Investment Income	(961,274)	736,400
Benefit Payments, Including Refunds of Employee Contributions	(820,888)	(767,867)
Administrative Expense	(14,063)	(10,445)
Net Change in Plan Fiduciary Net Position	(904,802)	874,909
Plan Fiduciary Net Position - Beginning	10,189,867	9,314,958
Plan Fiduciary Net Position - Ending (b)	$ 9,285,065	$ 10,189,867
Net Pension Liability - Ending (a) - (b)	$ 9,188,410	$ 7,432,505
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	50.26%	57.82%
Covered Payroll	$ 711,917	$ 736,478
Net Pension Liability as a Percentage of Covered Payroll	1290.66%	1009.20%

STATEMENT OF CHANGES IN NET PENSION LIABILITY
VILLAGE REPORTING

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a)-(b)
Balances at December 31, 2021	$ 17,622,372	$ 10,189,867	$ 7,432,505
Changes for a Year:			
Service Cost	257,265	-	257,265
Interest	1,048,152	-	1,048,152
Differences Between Expected and Actual Experience	366,574	-	366,574
Changes of Assumptions	-	-	-
Changes of Benefit Terms	-	-	-
Contributions - Employer	-	820,872	(820,872)
Contributions - Employee	-	70,551	(70,551)
Net Investment Income	-	(961,274)	961,274
Benefit Payments, Including Refunds of Employee Contributions	(820,888)	(820,888)	-
Administrative Expense	-	(14,063)	14,063
Net Changes	851,103	(904,802)	1,755,905
Balances at December 31, 2022	$ 18,473,475	$ 9,285,065	$ 9,188,410

Sensitivity of Net Pension Liability to changes in the Discount Rate:

	1% Decrease 5.00%	Current Discount Rate 6.00%	1% Increase 7.00%
Sponsor's Net Pension Liability	$ 11,844,950	$ 9,188,410	$ 7,027,878

Pension Plan Fiduciary Net Position

Detailed information about the Pension Plan's Fiduciary Net Position is available in a separately issued Plan financial report.

PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS
YEAR-END DECEMBER 31, 2022

For the year ended December 31, 2022, the Sponsor will recognize a pension expense of $1,075,488.
On December 31, 2022, the Sponsor reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between actual and expected experience	270,602	0
Changes of assumptions	0	0
Net difference between projected and actual earnings on pension plan investments	984,994	0
Total	$1,255,596	$0

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year-ended December 31:	
2023	$295,580
2024	$364,941
2025	$280,203
2026	$314,872
2027	$0
Thereafter	$0

COMPONENTS OF PENSION EXPENSE
YEAR-END DECEMBER 31, 2022

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning Balance	$ 7,432,505	$ 442,197	$ 196,504	
Total Pension Liability Factors:				
Service Cost	257,265	-	-	257,265
Interest	1,048,152	-	-	1,048,152
Changes in Benefit Terms	-	-	-	-
Differences Between Expected and Actual Experience With Regard to Economic or Demographic Assumptions	366,574	-	366,574	-
Current Year Amortization	-	-	(161,450)	161,450
Changes in Assumptions About Future Economic or Demographic Factors or Other Inputs	-	-	-	-
Current Year Amortization	-	-	-	-
Benefit Payments, Including Refunds of Employee Contributions	(820,888)	-	-	-
Net Change	851,103	-	205,124	1,466,867
Plan Fiduciary Net Position:				
Contributions - Employer	820,872	-	-	-
Contributions - Employee	70,551	-	-	(70,551)
Projected Net Investment Income	613,086	-	-	(613,086)
Difference Between Projected and Actual Earnings on Pension Plan Investments	(1,574,360)	-	1,574,360	-
Current Year Amortization	-	(167,703)	(445,898)	278,195
Benefit Payments, Including Refunds of Employee Contributions	(820,888)	-	-	-
Administrative Expenses	(14,063)	-	-	14,063
Net Change	(904,802)	(167,703)	1,128,462	(391,379)
Ending Balance	$ 9,188,410	$ 274,494	$ 1,530,090	$ 1,075,488

AMORTIZATION SCHEDULE – EXPERIENCE

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences between Expected and Actual Experience

Year Base Established	Differences Between Expected and Actual Experience	Recognition Period (Years)	2022	2023	2024	2025	2026	Thereafter
2022	$ 366,574	3	$ 122,192	$ 122,191	$ 122,191	$ -	$ -	$ -
2021	$ 78,661	3	$ 26,220	$ 26,220	$ -	$ -	$ -	$ -
2020	$ 15,782	3	$ 5,261	$ -	$ -	$ -	$ -	$ -
2019	$ 31,106	4	$ 7,777	$ -	$ -	$ -	$ -	$ -
Net Increase (Decrease) in Pension Expense			161,450	148,411	122,191	-	-	-

AMORTIZATION SCHEDULE – INVESTMENTS

Year Base Established	Differences Between Projected and Actual Earnings	Recognition Period (Years)	Increase (Decrease) in Pension Expense Arising from the Recognition of the Differences Between Projected and Actual Earnings on Pension Plan Investments 2022	2023	2024	2025	2026	Thereafter
2022	$ 1,574,360	5	$ 314,872	$ 314,872	$ 314,872	$ 314,872	$ 314,872	$ -
2021	$ (173,347)	5	$ (34,669)	$ (34,669)	$ (34,669)	$ (34,669)	$ -	$ -
2020	$ (187,267)	5	$ (37,453)	$ (37,453)	$ (37,453)	$ -	$ -	$ -
2019	$ (477,907)	5	$ (95,581)	$ (95,581)	$ -	$ -	$ -	$ -
2018	$ 655,129	5	$ 131,026	$ -	$ -	$ -	$ -	$ -
Net Increase (Decrease) in Pension Expense			$ 278,195	$ 147,169	$ 242,750	$ 280,203	$ 314,872	$ -

SCHEDULE OF CONTRIBUTIONS

Plan Year-End	Actuarially Determined Contribution	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a Percentage of Covered Payroll
12/31/2022	735,440	820,872	(85,432)	711,917	115.30%
12/31/2021	721,270	843,836	(122,566)	736,478	114.58%

The following assumptions were used to determine the Actuarially Determined Contribution for the plan year ending December 31, 2022:

Calculation Timing	The Actuarially Determined Contribution is calculated using a January 1, 2022 valuation date.
Interest Rate	6.00%
Mortality Rate	***Active Lives:*** PubS-2010 Employee mortality, projected 5 years past the valuation date with Scale MP-2021. 10% of active deaths are assumed to be in the line of duty. ***Inactive Lives:*** PubS-2010 Healthy Retiree mortality, projected 5 years past the valuation date with Scale MP-2021. ***Beneficiaries:*** PubS-2010 Survivor mortality, projected 5 years past the valuation date with Scale MP-2021. ***Disabled Lives:*** PubS-2010 Disabled mortality, projected 5 years past the valuation date with Scale MP-2021.
Assumptions	All other assumptions and methods used for determining the Actuarially Determined Contribution can be found in the January 1, 2022 Actuarial Valuation Report for the Village of Kenilworth Police Pension Fund prepared by Foster & Foster Actuaries and Consultants.

SCHEDULE OF INVESTMENT RETURNS

For the year ended December 31, 2022, the annual money-weighted return on Pension Plan investments, net of pension plan investment expense, was unknown. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Plan Year-End	Annual Money-Weighted Rate of Return Net of Investment Expense
12/31/2022	N/A
12/31/2021	8.10%

ASSUMPTIONS – GASB PENSION LIABILITY AND PENSION EXPENSE

The GASB 67/GASB 68 Pension Liability as of December 31, 2022 and GASB 68 Pension Expense were determined as follows:

Valuation Date	January 1, 2023
Measurement Date	December 31, 2022
GASB 68 Expense Measurement Period	January 1, 2022 - December 31, 2022
Reporting Period	January 1, 2022 - December 31, 2022
Discount Rate	6.00%
Inflation	2.50%
Salary Increases	Service-based rates
Other Assumptions	A summary of complete assumptions can be found in the accompanying Actuarial Valuation as of January 1, 2023 for the Village of Kenilworth Police Pension Fund prepared by Foster & Foster Actuaries and Consultants.

NOTES TO THE FINANCIAL STATEMENTS

Support for Long-Term Expected Rate of Return

The Long-Term Expected Rate of Return on Pension Plan investments can be determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of Pension Plan investment expenses and inflation) are developed for each major asset class.

These ranges are combined to produce the Long-Term Expected Rate of Return by weighting the expected future real rates of return by target asset allocation percentage and by adding expected inflation.

Best estimates of geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation adopted as of December 31, 2022, are unknown.

Concentrations

It is unknown if the Plan held investments in any one organization that represent 5 percent or more of the Pension Plan's fiduciary net position.

Discount Rate

The Discount Rate used to measure the Total Pension Liability was 6.00 percent.

The projection of cash flows used to determine the Discount Rate assumed that Plan Member contributions will be made at the current contribution rate and that Sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the Member rate. Based on those assumptions, the Pension Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the Long-Term Expected Rate of Return on Pension Plan investments (6.00 percent) was applied to all periods of projected benefit payments to determine the Total Pension Liability.

For the purpose of this valuation, the expected rate of return on pension plan investments is 6.00 percent. The municipal bond rate is 4.31 percent (based on the daily rate closest to, but not later than the measurement date of the S&P Municipal Bond 20 Year High Grade Rate Index). The resulting single discount rate is 6.00 percent.

SUMMARY OF CURRENT PLAN

Article 3 Pension Fund	The Plan is established and administered as prescribed by "Article 3. Police Pension Fund – Municipalities 500,000 and Under" of the Illinois Pension Code.
Plan Administration	The Plan is a single employer defined benefit pension plan administered by a Board of Trustees comprised of: a.) Two members appointed by the Municipality, b.) Two active members of the Police Department elected by the Membership. c.) One retired member of the Police Department elected by the Membership.
Benefits Provided	The Plan provides retirement, termination, disability and death benefits. A summary of the benefit provisions can be found in the accompanying Actuarial Valuation as of January 1, 2023 for the Village of Kenilworth Police Pension Fund prepared by Foster & Foster Actuaries and Consultants.