



Agenda
Village of Glen Ellyn
Finance Commission Meeting
Friday, October 8, 2021
7:00 AM
Glen Ellyn Civic Center, Room 306
In Person Only

Any individual with a disability requiring a reasonable accommodation in order to participate in a meeting should contact The Village of Glen Ellyn ADA Coordinator, 630-469-5000, in advance of the next scheduled meeting. All matters on the Agenda may be discussed, amended, and acted upon.

- A. Call to Order**
- B. Public Comment (Non Agenda Items)**
- C. Approval of Minutes**
 - 1) Minutes - September 20, 2021
- D. Police Pension Actuary Presentation**
 - 1) Jason Franken from Foster & Foster will present the 2021 Police Pension Actuarial Report as well as some additional information on a 15 year open amortization model.
- E. Trustee Liaison's Report**
- F. Chairman's Report**
- G. Other Business**
 - 1) Economic Development Update
 - 2) Next Meeting: Friday, November 12, 7:00AM
- H. Adjournment**

**SPECIAL FINANCE COMMISSION MEETING
MINUTES
SEPTEMBER 20, 2021**

CALL TO ORDER:

Jeremy S. VanEk	Chairman	Present
Michael Campagna	Commissioner	Present
Lea Dan	Commissioner	Present
Lisa A. Cleaver	Commissioner	Present
Scott R. Greeno	Commissioner	Present
Christopher Oakes	Commissioner	Present
Jose DeLeon	Commissioner	Excused Absence
Brenton J. Peck	Commissioner	Excused Absence

Also, present: Trustee Christiansen, Trustee Payne, Village Manager Franz, Finance Director Coyle, Assistant Finance Director Patrick Brankin, and Recording Secretary Haslett.

A. Call To Order

The special meeting was called to order at 7:00AM.

B. Public Comment (Non-Agenda Item)

None.

C. Approval of Minutes

- 1) Minutes - August 11, 2021
- 2) Minutes - September 2, 2021

MOVE TO APPROVE MINUTES OF FINANCE COMMISSION MEETINGS AS PRESENTED FROM 8/11/2021 and 9/2/2021.

RESULT Motion Unanimously Carried
MOVER: Commissioner Cleaver
SECONDER: Commissioner Greeno
AYES: Campagna, Cleaver, Dan, Greeno, J. VanEk, and Oakes
ABSENT: DeLeon and Peck

D. Debt Policy

- 1) Finance Director Coyle will brief the Commission on a proposed update to the Village's Debt Management Policy.

Finance Director Coyle referenced the updated debt policy included in the agenda packet. Finance Director Coyle said although the revamped policy is substantially similar to the current policy, there are some key differences. The updated policy now includes a debt

limitation of 5% of the equalized assessed valuation (EAV) which represents about \$77.5 million. Home-rule communities do not have a debt limitation, compared to non-home rule communities which are limited by state statute to 8.625% of EAV. Chairman VanEk asked how much is the current outstanding debt. Finance Director Coyle replied about \$40 million. Chairman VanEk asked where the Village is positioned with the other GFOA recommended metrics. Finance Director Coyle responded that she will pull these other metrics together. Finance Director Coyle noted the Village is triple AAA rated because the Village is doing really well with all the metrics the rating company reviews. Commissioner Oakes inquired if the new 5% limitation would impact the Village's rating in the future. Finance Director Coyle said it would positively impact the Village's rating because of the lower permissible debt. Chairman VanEk commended Finance Director Coyle's debt policy update.

- 2) Motion to recommend that the Village Board approve the updated Debt Management Policy.

MOTION TO RECOMMEND THAT THE VILLAGE BOARD APPROVE THE UPDATED DEBT MANAGEMENT POLICY.

RESULT Motion Unanimously Carried
MOVER: Commissioner Oakes
SECONDER: Commissioner Campagna
AYES: Campagna, Cleaver, Dan, Greeno, J. VanEk, and Oakes
ABSENT: DeLeon and Peck

E. Financial Reports

- 1) Finance Director Coyle will present the second quarter financial report.

Finance Director referenced the second quarter General Fund report include in the packet covering the period of January 1, 2021 through June 30, 2021. Some of the Village's revenues exceeded the prior year actuals. Income taxes are up \$600,000 above last year. Expenditures are trending below budget with personnel about \$500,000 under budget, with turnover created a positive budget variance. 2021 year-to-date revenues through June 30, 2021 are at \$10,596,429, while expenses are at \$9,590,283. Sales tax, home rule sales tax, and income taxes are tending above budget. Sales taxes are at about 59% of budget at June 30, 2021. Sales taxes are higher due to recent tax law changes which became effective on January 1, 2021. Sales tax application is now based upon the destination address, unless the business has a physical premise in Illinois or if there is a distribution center in Illinois. Municipalities with distribution centers receive the sales tax and not the delivery destination.

Lower staffing expenses in 2021 were experienced for the Information Technology, Planning, and Police Departments. Also, lower Covid expenditures in 2021 caused the Village Manager's Office to be below budget as well. Food and beverage taxes remain fairly constant partially due to the strong grocer presence in the Village. In 2020, the food and beverage tax amounted to \$1.3 million, which is about \$150,000 above the original projections. Real estate transfer taxes are performing well with the recent high market trend.

The Village committed about \$2.85 to purchase the hotels on Roosevelt Road and a budget amendment will be needed for this.

All of the Village funds are above the cash reserve levels. The Village Links is now above the cash reserve level for the first time since June of 2017. The Police Pension performance target is 6.5% for actuarial modeling and the year-to-date performance is 7.5%, thereby exceeding the target.

2) Sales Tax and Home Rule Sales Tax by Standard Industrial Code as of June 30, 2021

Finance Director Coyle discussed the Standard Industrial Code (SIC) sales and home rule sales tax report as of June 30, 2021. The food sector performs really well in the Village. Drugs and miscellaneous retail are doing good as well. Automotive and filling stations taxes are more volatile, because they are dependent upon the economy. The biggest growth category for the Village's sales tax is eating and drinking places.

3) Village Links/Reserve 22 Financial Report, as of July 31, 2021

July 2021 was a great month for golf due to the mild and dry weather. Through July 31, 2021 the Village Links and Reserve 22 experienced a positive change in net position of \$1,022,419, compared to \$235,970 last year. The Village Links cash reserves for June 2022 are projected at \$3.0 million under a best-case scenario, \$1.5 at an average scenario, and \$22,000 at worst.

4) Comprehensive Annual Financial Report as of December 31, 2020

Finance Director Coyle noted the Village received an unmodified opinion for the 2020 audit, which is the highest rating possible from the independent auditor. Finance Director Coyle noted the police pension actuary will be attending the October 2021 meeting. Finance Director Coyle said the IMRF pension is funded at 107.29%. The Village paid 8.92% of payroll in 2020 to IMRF for non-sworn staff and the rates was lowered to 6.85% in 2021.

The Village has been increasing the funded status for the police pension, which stands at 65.03% funded. The 2020 weighted rate of return was 9.69%. Finance Director Coyle anticipates pension consolidation at the state level will begin in October 2021 for the fire pensions first and next year for the police pensions. Once the consolidation is complete, the Village will no longer control the investments for the police pension, but will still control the funding assumptions. Finance Director Coyle said there were no significant management letter comments.

5) General Fund Update, as of August 31, 2021

Finance Director Coyle distributed a food and beverage tax report. Finance Director Coyle reported that on a budget basis, overall General Fund revenues are up 11%. Vehicle stickers, liquor licenses, building permit, court fines, and investment income revenues are down for

the year. Finance Director Coyle projected that transfers into the General Fund from other funds would not be needed in 2021. The positive expense variances are caused by staff turnover and position vacancies.

F. Trustee Liaison's Report

Trustee Payne updated the Finance Commission on recent Village Board activities.

G. Chairman's Report

Chairman VanEk thanked Assistant Finance Director Brankin for reviewing the applications for the Finance Commission. Chairman VanEk said he has done some outreach for a student commissioner.

H. Other Business

1) Economic Development Update

Finance Director Coyle shared the recent economic development activity with the Finance Commission.

2) Next Meeting: Friday, October 8, 7:00AM

I. Adjournment

1. Motion to Adjourn

Commissioner Oakes moved and Commissioner Cleaver seconded, to adjourn the meeting. The meeting was adjourned at 8:14AM.

Submitted by Aileen Haslett, Recording Secretary



Glen Ellyn Finance Commission
535 Duane Street
Glen Ellyn, IL 60137

Meeting 10/8/2021 7:00 AM
Department: Finance
Department Head:
Category: Discussion Item
Prepared By:

**AGENDA ITEM (ID # 2021-
1507)**

DOC ID: 2021-1507

Jason Franken from Foster & Foster will present the 2021 Police Pension Actuarial Report as well as some additional information on a 15 year open amortization model.

Statement of the Issue:

Each year, the Village is required to perform an actuarial valuation for its Police Pension Fund. This is required to determine the annual contribution for the next year in accordance with the Village's funding policy as well as state statutes.

Several years ago, the Village reviewed the concept of transitioning from a closed amortization period (which ends in 2040) to a rolling 15 year open amortization. Unfortunately, the time of the review coincided with state cuts to Village revenues and the issue did not proceed forward. The goal with a 15-year open model is to provide a more stable funding model as compared to a closed model which has highly escalating contributions as we near 2040. The one caveat is that, under state statutes, the Village is required to contribute a minimum contribution based upon the 2040 closed model. It is anticipated the state will move the 2040 target date; however, it has not done so to date.

Analysis:

Please see the attached reports.

At Friday's meeting, Jason Franken will walk the Commission through highlights of the 2021 report and the modeled 15 year open scenarios.

Budget Impact:

The annual required contribution is included in the annual budget.

Action Requested:

The report presented for 2021 is informational only. Much of this information is included in the

Village's annual Comprehensive Annual Financial Report which the Commission saw at the prior meeting.

Staff requests the Commission's questions on the 15-year open model and if the Commissioners think the Village should revive the discussion in moving the model in that direction. Based on the Commission's questions and feedback, staff can provide guidance on the next steps in this process.

Attachments:

1. Valuation Report - Glen Ellyn Police - 2021
2. Projection_GlenEllynPolice_2021.10.08

VILLAGE OF GLEN ELLYN
POLICE PENSION FUND
ACTUARIAL VALUATION
AS OF JANUARY 1, 2021
CONTRIBUTIONS APPLICABLE TO THE
PLAN/FISCAL YEAR ENDING DECEMBER 31, 2022
GASB 67/68 DISCLOSURE INFORMATION
AS OF DECEMBER 31, 2020



FOSTER & FOSTER
ACTUARIES AND CONSULTANTS



May 11, 2021

Christina Coyle, Finance Director
Village of Glen Ellyn Police Pension Fund

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

Dear Ms. Coyle:

We are pleased to present to the Village this report of the annual actuarial valuation of the Village of Glen Ellyn 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 Village, 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.

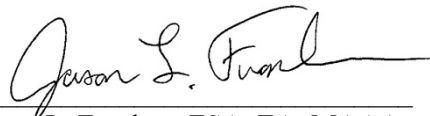
The undersigned are familiar with the immediate and long-term aspects of pension valuations and meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the 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 Glen Ellyn, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Village of Glen Ellyn 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, FSA, EA, MAAA

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

JLF/lke
Enclosures

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SUMMARY OF REPORT

The regular annual actuarial valuation of the Village of Glen Ellyn Police Pension Fund, performed as of January 1, 2021, 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, 2022.

The contribution requirements, compared with those set forth in the January 1, 2020 actuarial report, are as follows:

Valuation Date	1/1/2021	1/1/2020
Applicable to Fiscal Year Ending	<u>12/31/2022</u>	<u>12/31/2021</u>
Total Recommended Contribution	\$2,356,579	\$2,413,007
% of Projected Annual Payroll	62.3%	67.4%
Member Contributions (Est.)	(374,998)	(354,789)
% of Projected Annual Payroll	(9.9%)	(9.9%)
Village Recommended Contribution	1,981,581	2,058,218
% of Projected Annual Payroll	52.4%	57.5%

As you can see, the Total Recommended Contribution shows a decrease when compared to the results determined in the January 1, 2020 actuarial valuation report. The decrease is attributable to favorable experience realized by the plan. The decrease was offset in part by the natural increase in the amortization payment due to the payroll growth assumption.

Plan experience was favorable overall on the basis of the plan's actuarial assumptions. Sources of favorable experience included higher than expected inactive mortality, more turnover than expected, and an average salary increase of 3.83% which fell short of the 4.98% assumption. There were no significant sources of unfavorable 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

	<u>1/1/2021</u>	<u>1/1/2020</u>
A. Participant Data		
Number Included		
Actives	39	37
Service Retirees	30	31
Beneficiaries	5	4
Disability Retirees	2	2
Terminated Vested	<u>9</u>	<u>6</u>
Total	85	80
Total Annual Payroll	\$3,784,040	\$3,580,113
Payroll Under Assumed Ret. Age	3,784,040	3,580,113
Annual Rate of Payments to:		
Service Retirees	2,094,159	2,153,924
Beneficiaries	299,106	178,995
Disability Retirees	87,176	86,722
Terminated Vested	46,999	0
B. Assets		
Actuarial Value	34,556,947	32,459,565
Market Value	35,656,781	32,808,661
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	22,825,278	22,247,123
Disability Benefits	2,118,948	2,075,403
Death Benefits	298,065	279,175
Vested Benefits	2,202,934	2,184,092
Service Retirees	32,251,526	33,578,820
Beneficiaries	2,706,360	1,889,698
Disability Retirees	1,195,713	1,198,956
Terminated Vested	<u>353,498</u>	<u>58,678</u>
Total	63,952,322	63,511,945

C. Liabilities - (Continued)	<u>1/1/2021</u>	<u>1/1/2020</u>
Present Value of Future Salaries	42,096,302	39,885,426
Present Value of Future Member Contributions	4,171,744	3,952,646
Normal Cost (Retirement)	613,649	621,195
Normal Cost (Disability)	106,571	104,775
Normal Cost (Death)	14,885	13,719
Normal Cost (Vesting)	<u>111,752</u>	<u>110,224</u>
Total Normal Cost	846,857	849,913
Present Value of Future Normal Costs	8,549,642	8,675,182
Accrued Liability (Retirement)	16,406,311	15,680,559
Accrued Liability (Disability)	981,248	954,158
Accrued Liability (Death)	135,510	133,147
Accrued Liability (Vesting)	1,372,514	1,342,747
Accrued Liability (Inactives)	<u>36,507,097</u>	<u>36,726,152</u>
Total Actuarial Accrued Liability	55,402,680	54,836,763
Unfunded Actuarial Accrued Liability (UAAL)	20,845,733	22,377,198
Funded Ratio (AVA / AL)	62.4%	59.2%

	<u>1/1/2021</u>	<u>1/1/2020</u>
D. Actuarial Present Value of Accrued Benefits		
Vested Accrued Benefits		
Inactives	36,507,097	36,726,152
Actives	4,768,131	4,415,022
Member Contributions	<u>3,430,420</u>	<u>3,287,591</u>
Total	44,705,648	44,428,765
Non-vested Accrued Benefits	<u>1,177,546</u>	<u>1,038,781</u>
Total Present Value Accrued Benefits	45,883,194	45,467,546
Funded Ratio (MVA / PVAB)	77.7%	72.2%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	115,969	
Benefits Paid	(2,572,118)	
Interest	2,871,797	
Other	<u>0</u>	
Total	415,648	

Valuation Date Applicable to Fiscal Year Ending	1/1/2021 <u>12/31/2022</u>	1/1/2020 <u>12/31/2021</u>
E. Pension Cost		
Normal Cost ¹	\$901,903	\$905,157
% of Total Annual Payroll ¹	23.8	25.3
Administrative Expenses ¹	18,043	20,040
% of Total Annual Payroll ¹	0.5	0.6
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 20 years (as of 1/1/2021) ¹	1,436,633	1,487,810
% of Total Annual Payroll ¹	38.0	41.5
Total Recommended Contribution	2,356,579	2,413,007
% of Total Annual Payroll ¹	62.3	67.4
Expected Member Contributions ¹	(374,998)	(354,789)
% of Total Annual Payroll ¹	(9.9)	(9.9)
Expected Village Contribution	1,981,581	2,058,218
% of Total Annual Payroll ¹	52.4	57.5
F. Past Contributions		
Plan Years Ending:	<u>12/31/2020</u>	
Total Recommended Contribution	2,312,584	
Village Requirement	1,924,575	
Actual Contributions Made:		
Members (excluding buyback)	388,009	
Village	<u>1,959,000</u>	
Total	2,347,009	
G. Net Actuarial (Gain)/Loss	(1,510,050)	

¹ Contributions developed as of 1/1/2021 displayed above have been adjusted to account for assumed interest.

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

<u>Year</u>	<u>Projected Unfunded Accrued Liability</u>
2021	20,845,733
2022	20,764,073
2023	20,626,823
2028	18,903,659
2032	15,853,578
2037	8,968,319
2041	0

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

		<u>Actual</u>	<u>Assumed</u>
Year Ended	12/31/2020	3.83%	4.98%
Year Ended	12/31/2019	3.91%	5.03%
Year Ended	12/31/2018	8.67%	4.89%
Year Ended	12/31/2017	4.92%	5.57%
Year Ended	12/31/2016	0.99%	5.00%

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

		<u>Actual MVA</u>	<u>Actual AVA</u>	<u>Assumed</u>
Year Ended	12/31/2020	9.45%	7.23%	6.50%
Year Ended	12/31/2019	15.35%	4.87%	6.50%
Year Ended	12/31/2018	-5.72%	3.79%	6.50%
Year Ended	12/31/2017	12.00%	5.64%	6.50%
Year Ended	12/31/2016	6.00%	4.62%	6.75%

DEVELOPMENT OF JANUARY 1, 2021 AMORTIZATION PAYMENT

(1)	Unfunded Actuarial Accrued Liability as of January 1, 2020	\$22,377,198
(2)	Sponsor Normal Cost developed as of January 1, 2020	495,124
(3)	Expected administrative expenses for the year ended December 31, 2020	18,817
(4)	Expected interest on (1), (2) and (3)	1,487,312
(5)	Sponsor contributions to the System during the year ended December 31, 2020	1,959,000
(6)	Expected interest on (5)	63,668
(7)	Expected Unfunded Actuarial Accrued Liability as of December 31, 2020, (1)+(2)+(3)+(4)-(5)-(6)	22,355,783
(8)	Change to UAAL due to Benefits/Assumption Change	0
(9)	Change to UAAL due to Actuarial (Gain)/Loss	(1,510,050)
(10)	Unfunded Accrued Liability as of January 1, 2021	20,845,733
(11)	UAAL Subject to Amortization (100% AAL less Actuarial Assets)	20,845,733

<u>Date Established</u>	<u>Years Remaining</u>	<u>1/1/2021 Amount</u>	<u>Amortization Amount</u>
1/1/2021	20	20,845,733	1,348,951

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of January 1, 2020	\$22,377,198
(2) Expected UAAL as of January 1, 2021	22,355,783
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	(237,428)
Salary Increases	(296,064)
Active Decrements	(1,081,525)
Inactive Mortality	(243,010)
Other	<u>347,977</u>
Change in UAAL due to (Gain)/Loss	(1,510,050)
Change to UAAL due to Benefits/Assumption Change	<u>0</u>
(4) Actual UAAL as of January 1, 2021	\$20,845,733

RECONCILIATION OF CHANGES IN CONTRIBUTION REQUIREMENT

(1) Contribution Determined as of January 1, 2020	\$ 2,058,218
(2) Summary of Contribution Impact by component:	
Change in Normal Cost	(3,254)
Change in Assumed Administrative Expense	(1,997)
Investment Return (Actuarial Asset Basis)	(16,363)
Salary Increases	(20,404)
New Entrants	4,003
Active Decrements	(74,536)
Inactive Mortality	(16,748)
Contributions (More) or Less than Recommended	(2,450)
Increase in Amortization Payment Due to Payroll Growth Assumption	52,073
Change in Expected Member Contributions	(20,209)
Benefits/Assumption Change	-
Other	<u>23,248</u>
Total Change in Contribution	(76,637)
(3) Contribution Determined as of January 1, 2021	\$1,981,581

STATUTORY MINIMUM REQUIRED CONTRIBUTION

Contribution requirements shown on this page are calculated according to statutory minimum funding requirements of the Illinois Pension Code. We do not believe this method is sufficient to fund future benefits; as such, we recommend funding according to the contributions developed in Section E of this report.

Valuation Date Applicable to Fiscal Year Ending	1/1/2021 <u>12/31/2022</u>	1/1/2020 <u>12/31/2021</u>
Actuarial Accrued Liability (PUC)	52,542,919	52,214,546
Actuarial Value of Assets	<u>34,556,947</u>	<u>32,459,565</u>
Unfunded Actuarial Accrued Liability (UAAL)	17,985,972	19,754,981
UAAL Subject to Amortization	12,731,680	14,533,526
Normal Cost ¹	\$1,048,379	\$1,011,789
% of Total Annual Payroll ¹	27.7	28.3
Administrative Expenses ¹	18,043	20,040
% of Total Annual Payroll ¹	0.5	0.6
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 20 years (as of 1/1/2021) ¹	877,434	966,302
% of Total Annual Payroll ¹	23.2	26.9
Total Required Contribution	1,943,856	1,998,131
% of Total Annual Payroll ¹	51.4	55.8
Expected Member Contributions ¹	(374,998)	(354,789)
% of Total Annual Payroll ¹	(9.9)	(9.9)
Expected Village Contribution	1,568,858	1,643,342
% of Total Annual Payroll ¹	41.5	45.9
Assumptions and Methods:		
Actuarial Cost Method	Projected Unit Credit	
Amortization Method	90% Funding by 2040	

All other assumptions and methods are as described in the Actuarial Assumptions and Methods section.

¹ Contributions developed as of 1/1/2021 displayed above have been adjusted to account for assumed interest.

PROJECTION OF BENEFIT PAYMENTS

Year	Payments for Current Actives	Payments for Current Inactives	Total Payments
2021	95,575	2,533,539	2,629,114
2022	160,183	2,501,969	2,662,152
2023	217,306	2,541,604	2,758,910
2024	265,926	2,578,717	2,844,643
2025	310,107	2,626,311	2,936,418
2026	355,574	2,659,730	3,015,304
2027	417,545	2,688,879	3,106,424
2028	499,158	2,713,129	3,212,287
2029	631,711	2,731,898	3,363,609
2030	822,159	2,744,655	3,566,814
2031	991,395	2,750,968	3,742,363
2032	1,197,304	2,750,510	3,947,814
2033	1,404,453	2,743,087	4,147,540
2034	1,635,118	2,728,598	4,363,716
2035	1,848,452	2,707,048	4,555,500
2036	2,048,472	2,678,497	4,726,969
2037	2,232,285	2,643,086	4,875,371
2038	2,408,229	2,601,014	5,009,243
2039	2,577,226	2,597,592	5,174,818
2040	2,725,641	2,543,977	5,269,618
2041	2,889,653	2,507,181	5,396,834
2042	3,069,036	2,443,259	5,512,295
2043	3,214,755	2,373,870	5,588,625
2044	3,443,977	2,299,421	5,743,398
2045	3,593,087	2,220,342	5,813,429
2046	3,773,302	2,137,071	5,910,373
2047	3,975,011	2,050,016	6,025,027
2048	4,180,713	1,959,565	6,140,278
2049	4,451,187	1,866,047	6,317,234
2050	4,604,465	1,769,746	6,374,211
2051	4,816,824	1,670,923	6,487,747
2052	4,969,721	1,569,828	6,539,549
2053	5,080,232	1,466,734	6,546,966
2054	5,193,384	1,362,107	6,555,491
2055	5,272,207	1,256,634	6,528,841
2056	5,333,570	1,151,225	6,484,795
2057	5,380,759	1,047,007	6,427,766
2058	5,412,605	945,210	6,357,815
2059	5,430,140	847,020	6,277,160
2060	5,430,182	753,498	6,183,680

ACTUARIAL ASSUMPTIONS AND METHODS

Interest Rate	6.50% 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	<i>Active Lives:</i> PubS-2010 Employee mortality, projected 5 years past the valuation date with Scale MP-2020. 10% of active deaths are assumed to be in the line of duty. <i>Inactive Lives:</i> PubS-2010 Healthy Retiree mortality, projected 5 years past the valuation date with Scale MP-2020. <i>Beneficiaries:</i> PubS-2010 Survivor mortality, projected 5 years past the valuation date with Scale MP-2020. <i>Disabled Lives:</i> PubS-2010 Disabled mortality, projected 5 years past the valuation date with Scale MP-2020. 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 2041. 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		% Becoming Disabled During the Year		% Retiring During the Year (Tier 1)		% Retiring During the Year (Tier 2)	
Age	Rate	Age	Rate	Age	Rate	Age	Rate
20	14.00%	20	0.000%	50 - 51	15%	50 - 54	5%
25	10.40%	25	0.030%	52 - 54	20%	55	40%
30	5.60%	30	0.140%	55 - 64	25%	56 - 64	25%
35	3.10%	35	0.260%	65 - 69	40%	65 - 69	40%
40	1.90%	40	0.420%	70+	100%	70+	100%
45	1.50%	45	0.590%				
50	1.50%	50	0.710%				
56+	0.00%	55	0.900%				
		60	1.150%				

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.

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

Unfunded Accrued Liability is a liability which arises when a pension plan is initially established or improved and such establishment or improvement is applicable to all years of past service.

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. The unfunded accrued liability equals the total accrued liability less the actuarial value of assets.
- (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.

- Investment Return: 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.
- Salary Increases: 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.
- Payroll Growth: 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.
- Demographic Assumptions: 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.
- Contribution Risk: 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 92.7% on January 1, 2018 to 84.8% on January 1, 2021, indicating that the plan has been 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 65.9%. 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 61.1% on January 1, 2018 to 62.4% on January 1, 2021, due mainly to favorable plan experience.
- 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, 2018 to January 1, 2021. The current Net Cash Flow Ratio of -0.7% indicates that contributions are not currently 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

	<u>1/1/2021</u>	<u>1/1/2020</u>	<u>1/1/2019</u>	<u>1/1/2018</u>
<u>Support Ratio</u>				
Total Actives	39	37	38	38
Total Inactives	46	43	41	41
Actives / Inactives	84.8%	86.0%	92.7%	92.7%
 <u>Asset Volatility Ratio</u>				
Market Value of Assets (MVA)	35,656,781	32,808,661	28,842,655	30,480,565
Total Annual Payroll	3,784,040	3,580,113	3,571,005	3,485,670
MVA / Total Annual Payroll	942.3%	916.4%	807.7%	874.5%
 <u>Accrued Liability (AL) Ratio</u>				
Inactive Accrued Liability	36,507,097	36,726,152	35,707,291	29,985,118
Total Accrued Liability	55,402,680	54,836,763	52,804,592	49,324,821
Inactive AL / Total AL	65.9%	67.0%	67.6%	60.8%
 <u>Funded Ratio</u>				
Actuarial Value of Assets (AVA)	34,556,947	32,459,565	31,371,025	30,118,735
Total Accrued Liability	55,402,680	54,836,763	52,804,592	49,324,821
AVA / Total Accrued Liability	62.4%	59.2%	59.4%	61.1%
 <u>Net Cash Flow Ratio</u>				
Net Cash Flow ¹	(242,051)	(428,117)	109,138	(198,316)
Market Value of Assets (MVA)	35,656,781	32,808,661	28,842,655	30,480,565
Ratio	-0.7%	-1.3%	0.4%	-0.7%

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

STATEMENT OF FIDUCIARY NET POSITION
December 31, 2020

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Money Market	265,155
Total Cash and Equivalents	265,155
Receivables:	
Accrued Past Due Interest	67,760
Total Receivable	67,760
Investments:	
Municipal Obligations	30,000
Corporate Bonds	6,473,383
U.S. Gov't and Agency Obligations	5,044,542
Insurance Company Contracts	2,228,231
Mutual Funds	21,560,210
Total Investments	35,336,366
Total Assets	35,669,281
<u>LIABILITIES</u>	
Liabilities:	
Payable:	
Expenses	12,500
Total Liabilities	12,500
Net Assets:	
Active and Retired Members' Equity	35,656,781
NET POSITION RESTRICTED FOR PENSIONS	35,656,781
TOTAL LIABILITIES AND NET ASSETS	35,669,281

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED December 31, 2020
Market Value Basis

ADDITIONS

Contributions:

Member	388,009
Village	1,959,000

Total Contributions	2,347,009
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Investment Income:

Miscellaneous Income	227
Net Realized Gain (Loss)	173,398
Unrealized Gain (Loss)	2,330,484
Net Increase in Fair Value of Investments	2,504,109
Interest & Dividends	688,250
Less Investment Expense ¹	(102,188)

Net Investment Income	3,090,171
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Total Additions	5,437,180
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DEDUCTIONS

Distributions to Members:

Benefit Payments	2,479,617
Refund of Contributions/Transfers	92,501

Total Distributions	2,572,118
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Administrative Expenses	16,942
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Total Deductions	2,589,060
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Net Increase in Net Position	2,848,120
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NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year	32,808,661
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End of the Year	35,656,781
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¹ Investment Related expenses include investment advisory, custodial and performance monitoring fees.

ACTUARIAL ASSET VALUATION

December 31, 2020

Development of Actuarial Value of Assets

Market Value of Assets, 12/31/2020	35,656,781
(Gains)/Losses Not Yet Recognized	<u>(1,099,834)</u>
Actuarial Value of Assets, 12/31/2020	34,556,947
12/31/2020 Limited Actuarial Assets:	34,556,947

Development of Investment Gain/Loss

Market Value of Assets, 12/31/2019	32,808,661
Contributions Less Benefit Payments & Administrative Expenses	<u>(242,051)</u>
Expected Investment Earnings ¹	2,124,696
Actual Net Investment Earnings	<u>3,090,171</u>
2020 Actuarial Investment Gain/(Loss)	965,475

¹ Expected Investment Earnings = 6.50% x (32,808,661 + 0.5 x -242,051)

Gains/(Losses) Not Yet Recognized

Plan Year Ending	Gain/(Loss)	Amounts Not Yet Recognized by Valuation Year				
		2021	2022	2023	2024	2025
12/31/2017	1,501,145	300,229	0	0	0	0
12/31/2018	(3,731,832)	(1,492,733)	(746,366)	0	0	0
12/31/2019	2,533,264	1,519,958	1,013,306	506,653	0	0
12/31/2020	965,475	772,380	579,285	386,190	193,095	0
Total		1,099,834	846,225	892,843	193,095	0

Development of Asset Returns

(A) 12/31/2019 Actuarial Assets:	32,459,565
(I) Net Investment Income:	
1. Interest and Dividends	688,477
2. Realized Gains (Losses)	173,398
3. Change in Actuarial Value	1,579,746
4. Investment Expenses	<u>(102,188)</u>
Total	2,339,433
(B) 12/31/2020 Actuarial Assets:	34,556,947
Actuarial Asset Rate of Return = (2 x I) / (A + B - I):	7.23%
Market Value of Assets Rate of Return:	9.45%
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)	237,428

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
December 31, 2020
Actuarial Asset Basis

INCOME		
Contributions:		
Member	388,009	
Village	1,959,000	
Total Contributions		2,347,009
Earnings from Investments		
Interest & Dividends	688,250	
Miscellaneous Income	227	
Net Realized Gain (Loss)	173,398	
Change in Actuarial Value	1,579,746	
Total Earnings and Investment Gains		2,441,621
EXPENSES		
Administrative Expenses:		
Investment Related ¹	102,188	
Other	16,942	
Total Administrative Expenses		119,130
Distributions to Members:		
Benefit Payments	2,479,617	
Refund of Contributions/Transfers	92,501	
Total Distributions		2,572,118
Change in Net Assets for the Year		2,097,382
Net Assets Beginning of the Year		32,459,565
Net Assets End of the Year ²		34,556,947

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

² Net Assets may be limited for actuarial consideration.

STATISTICAL DATA

	<u>1/1/2021</u>	<u>1/1/2020</u>	<u>1/1/2019</u>	<u>1/1/2018</u>
<u>Actives - Tier 1</u>				
Number	21	23	24	27
Average Current Age	43.3	42.0	41.6	41.9
Average Age at Employment	24.6	24.5	25.5	25.5
Average Past Service	18.7	17.5	16.1	16.4
Average Annual Salary	\$111,910	\$108,768	\$105,527	\$102,584
<u>Actives - Tier 2</u>				
Number	18	14	14	11
Average Current Age	27.9	27.5	27.5	27.2
Average Age at Employment	24.4	24.1	24.9	24.9
Average Past Service	3.5	3.4	2.6	2.3
Average Annual Salary	\$79,663	\$77,032	\$74,168	\$65,082
<u>Service Retirees</u>				
Number	30	31	29	28
Average Current Age	67.5	66.8	66.8	67.2
Average Annual Benefit	\$69,805	\$69,481	\$67,174	\$64,082
<u>Beneficiaries</u>				
Number	5	4	3	3
Average Current Age	75.5	73.0	73.1	72.1
Average Annual Benefit	\$59,821	\$44,749	\$42,770	\$42,770
<u>Disability Retirees</u>				
Number	2	2	3	3
Average Current Age	62.7	61.7	63.3	62.3
Average Annual Benefit	\$43,588	\$43,361	\$45,333	\$44,865
<u>Terminated Vested</u>				
Number	9	6	6	7
Average Current Age	35.9	36.4	40.9	35.6
Average Annual Benefit ¹	\$46,999	N/A	\$58,440	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	2	0	0	0	0	0	0	0	0	0	0	2
25 - 29	3	2	1	2	3	0	0	0	0	0	0	11
30 - 34	0	0	0	0	0	4	0	0	0	0	0	4
35 - 39	1	0	0	0	0	0	2	3	0	0	0	6
40 - 44	0	0	0	0	0	0	2	6	3	0	0	11
45 - 49	0	0	0	0	0	0	1	1	0	0	0	2
50 - 54	0	0	0	0	0	0	0	0	1	1	0	2
55 - 59	0	0	0	0	0	0	0	0	0	0	1	1
60 - 64	0	0	0	0	0	0	0	0	0	0	0	0
65+	0	0	0	0	0	0	0	0	0	0	0	0
Total	6	2	1	2	3	4	5	10	4	1	1	39

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 1/1/2020	37
b. Terminations	
i. Vested (partial or full) with deferred benefits	(2)
ii. Non-vested or full lump sum distribution received	(2)
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	<u>0</u>
f. Continuing participants	33
g. New entrants	<u>6</u>
h. Total active life participants in valuation	39

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

	Service Retirees, Vested Receiving <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested <u>Deferred</u>	<u>Total</u>
a. Number prior valuation	31	4	2	6	43
Retired	0	0	0	0	0
Vested Deferred	0	0	0	2	2
Death, With Survivor	(1)	1	0	0	0
Death, No Survivor	0	0	0	0	0
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	1	1
b. Number current valuation	30	5	2	9	46

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 (8-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

Valuation Date	1/1/2021	1/1/2020
Measurement Date	12/31/2020	12/31/2019
Plan Membership:		
Inactives Currently Receiving Benefits	37	37
Inactives Not Yet Receiving Benefits	9	6
Active Plan Members	<u>39</u>	<u>37</u>
Total	85	80
Covered Payroll	\$ 3,784,040	\$ 3,580,113
Net Pension Liability		
Total Pension Liability	\$ 54,828,604	\$ 54,257,944
Plan Fiduciary Net Position	<u>35,656,781</u>	<u>32,808,661</u>
Net Pension Liability	\$ 19,171,823	\$ 21,449,283
Plan Fiduciary Net Position		
As a Percentage of Total Pension Liability	65.03%	60.47%
Net Pension Liability		
As a Percentage of Covered Payroll	506.65%	599.12%
Total Pension Expense	\$ 1,983,641	\$ 3,177,809
Development of Single Discount Rate		
Single Discount Rate	6.50%	6.50%
Long-Term Expected Rate of Return	6.50%	6.50%
High-quality Municipal Bond Rate	1.93%	3.26%
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	12/31/2020	12/31/2019
Measurement Date	12/31/2020	12/31/2019
Total Pension Liability		
Service Cost	863,320	835,473
Interest	3,499,288	3,362,848
Changes of Benefit Terms	-	151,633
Differences Between Expected and Actual Experience	(1,219,830)	367,487
Changes of Assumptions	-	-
Benefit Payments, Including Refunds of Employee Contributions	(2,572,118)	(2,720,298)
Net Change in Total Pension Liability	570,660	1,997,143
Total Pension Liability - Beginning	54,257,944	52,260,801
Total Pension Liability - Ending (a)	\$ 54,828,604	\$ 54,257,944
Plan Fiduciary Net Position		
Contributions - Employer	1,959,000	1,959,000
Contributions - Employee	388,009	351,998
Net Investment Income	3,090,171	4,394,123
Benefit Payments, Including Refunds of Employee Contributions	(2,572,118)	(2,720,298)
Administrative Expense	(16,942)	(18,817)
Net Change in Plan Fiduciary Net Position	2,848,120	3,966,006
Plan Fiduciary Net Position - Beginning	32,808,661	28,842,655
Plan Fiduciary Net Position - Ending (b)	\$ 35,656,781	\$ 32,808,661
Net Pension Liability - Ending (a) - (b)	\$ 19,171,823	\$ 21,449,283
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	65.03%	60.47%
Covered Payroll	\$ 3,784,040	\$ 3,580,113
Net Pension Liability as a Percentage of Covered Payroll	506.65%	599.12%

STATEMENT OF CHANGES IN NET PENSION LIABILITY
VILLAGE REPORTING

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	(a)	(b)	(a)-(b)
Balances at December 31, 2019	\$ 54,257,944	\$ 32,808,661	\$ 21,449,283
Changes for a Year:			
Service Cost	863,320	-	863,320
Interest	3,499,288	-	3,499,288
Differences Between Expected and Actual Experience	(1,219,830)	-	(1,219,830)
Changes of Assumptions	-	-	-
Changes of Benefit Terms	-	-	-
Contributions - Employer	-	1,959,000	(1,959,000)
Contributions - Employee	-	388,009	(388,009)
Net Investment Income	-	3,090,171	(3,090,171)
Benefit Payments, Including Refunds of Employee Contributions	(2,572,118)	(2,572,118)	-
Administrative Expense	-	(16,942)	16,942
Net Changes	570,660	2,848,120	(2,277,460)
Balances at December 31, 2020	\$ 54,828,604	\$ 35,656,781	\$ 19,171,823

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

	Current Discount		
	1% Decrease	Rate	1% Increase
	5.50%	6.50%	7.50%
Sponsor's Net Pension Liability	\$ 27,450,780	\$ 19,171,823	\$ 12,467,082

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, 2020

For the year ended December 31, 2020, the Sponsor will recognize a pension expense of \$1,983,641.

On December 31, 2020, 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	714,937	1,075,287
Changes of assumptions	567,800	442,434
Net difference between projected and actual earnings on pension plan investments	0	1,099,836
Total	\$1,282,737	\$2,617,557

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:

2021	(\$422,969)
2022	(\$5,455)
2023	(\$604,872)
2024	(\$98,219)
2025	(\$203,305)
Thereafter	\$0

COMPONENTS OF PENSION EXPENSE
YEAR-END DECEMBER 31, 2020

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning Balance	\$ 21,449,283	\$ 3,501,385	\$ 4,468,666	
Total Pension Liability Factors:				
Service Cost	863,320	-	-	863,320
Interest	3,499,288	-	-	3,499,288
Changes in Benefit Terms	-	-	-	-
Differences Between Expected and Actual Experience With Regard to Economic or Demographic Assumptions	(1,219,830)	1,219,830	-	-
Current Year Amortization	-	(251,558)	(246,244)	(5,314)
Changes in Assumptions About Future Economic or Demographic Factors or Other Inputs	-	-	-	-
Current Year Amortization	-	(324,866)	(661,713)	336,847
Benefit Payments, Including Refunds of Employee Contributions	(2,572,118)	-	-	-
Net Change	570,660	643,406	(907,957)	4,694,141
Plan Fiduciary Net Position:				
Contributions - Employer	1,959,000	-	-	-
Contributions - Employee	388,009	-	-	(388,009)
Projected Net Investment Income	2,124,696	-	-	(2,124,696)
Difference Between Projected and Actual Earnings on Pension Plan Investments	965,475	965,475	-	-
Current Year Amortization	-	(999,977)	(785,240)	(214,737)
Benefit Payments, Including Refunds of Employee Contributions	(2,572,118)	-	-	-
Administrative Expenses	(16,942)	-	-	16,942
Net Change	2,848,120	(34,502)	(785,240)	(2,710,500)
Ending Balance	\$ 19,171,823	\$ 4,110,289	\$ 2,775,469	\$ 1,983,641

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)	2020	2021	2022	2023	2024	Thereafter
2020	\$ (1,219,830)	6	\$ (203,305)	\$ (203,305)	\$ (203,305)	\$ (203,305)	\$ (203,305)	\$ (203,305)
2019	\$ 367,487	6	\$ 61,248	\$ 61,248	\$ 61,248	\$ 61,248	\$ 61,248	\$ -
2018	\$ 664,880	7	\$ 94,983	\$ 94,983	\$ 94,983	\$ 94,983	\$ 94,983	\$ -
2017	\$ (176,284)	6	\$ (29,381)	\$ (29,381)	\$ (29,381)	\$ -	\$ -	\$ -
2016	\$ 540,079	6	\$ 90,013	\$ 90,013	\$ -	\$ -	\$ -	\$ -
2015	\$ (140,172)	5.78	\$ (18,872)	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			(5,314)	13,558	(76,455)	(47,074)	(47,074)	(203,305)

AMORTIZATION SCHEDULE – CHANGES OF ASSUMPTIONS

Increase (Decrease) in Pension Expense Arising from the Recognition of the
Effects of Changes of Assumptions

Year Base Established	Effects of Changes in Assumptions	Recognition Period (Years)	2020	2021	2022	2023	2024	Thereafter
2018	\$ 993,650	7	\$ 141,950	\$ 141,950	\$ 141,950	\$ 141,950	\$ 141,950	\$ -
2017	\$ (705,405)	6	\$ (117,568)	\$ (117,568)	\$ (117,568)	\$ -	\$ -	\$ -
2016	\$ (1,243,789)	6	\$ (207,298)	\$ (207,298)	\$ -	\$ -	\$ -	\$ -
2015	\$ 3,830,149	5.78	\$ 519,763	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 336,847	\$ (182,916)	\$ 24,382	\$ 141,950	\$ 141,950	\$ -

AMORTIZATION SCHEDULE – INVESTMENTS

Increase (Decrease) in Pension Expense Arising from the Recognition of the Differences Between Projected and Actual Earnings on Pension Plan Investments									
Year Base Established	Differences Between Projected and Actual Earnings	Recognition Period (Years)	2020	2021	2022	2023	2024	Thereafter	
2020	\$ (965,475)	5	\$ (193,095)	\$ (193,095)	\$ (193,095)	\$ (193,095)	\$ (193,095)	\$	-
2019	\$ (2,533,264)	5	\$ (506,653)	\$ (506,653)	\$ (506,653)	\$ (506,653)	\$ -	\$	-
2018	\$ 3,731,832	5	\$ 746,366	\$ 746,366	\$ 746,366	\$ -	\$ -	\$	-
2017	\$ (1,501,145)	5	\$ (300,229)	\$ (300,229)	\$ -	\$ -	\$ -	\$	-
2016	\$ 194,370	5	\$ 38,874	\$ -	\$ -	\$ -	\$ -	\$	-
Net Increase (Decrease) in Pension Expense			\$ (214,737)	\$ (253,611)	\$ 46,618	\$ (699,748)	\$ (193,095)	\$	-

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
12/31/2020	1,924,575	1,959,000	(34,425)	3,784,040	51.77%
12/31/2019	1,770,649	1,959,000	(188,351)	3,580,113	54.72%

The following assumptions were used to determine the Actuarially Determined Contribution for the plan year ending December 31, 2020:

Calculation Timing	The Actuarially Determined Contribution is calculated using a January 1, 2019 valuation date.
Interest Rate	6.50%
Mortality Rate	Active Lives: PubS-2010 Employee mortality, projected 5 years past the valuation date with Scale MP-2018. 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-2018. Beneficiaries: PubS-2010 Survivor mortality, projected 5 years past the valuation date with Scale MP-2018. Disabled Lives: PubS-2010 Disabled mortality, projected 5 years past the valuation date with Scale MP-2018.
Assumptions	All other assumptions and methods used for determining the Actuarially Determined Contribution can be found in the January 1, 2019 Actuarial Valuation Report for the Village of Glen Ellyn Police Pension Fund prepared by Foster & Foster Actuaries and Consultants.

SCHEDULE OF INVESTMENT RETURNS

For the year ended December 31, 2020, the annual money-weighted return on Pension Plan investments, net of pension plan investment expense, was 9.69 percent. 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
12/31/2020	9.69%
12/31/2019	15.30%

ASSUMPTIONS – GASB PENSION LIABILITY AND PENSION EXPENSE

The GASB 67/GASB 68 Pension Liability as of December 31, 2020 and GASB 68 Pension Expense were determined as follows:

Valuation Date	January 1, 2021
Measurement Date	December 31, 2020
GASB 68 Expense Measurement Period	January 1, 2020 - December 31, 2020
Reporting Period	January 1, 2020 - December 31, 2020
Discount Rate	6.50%
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, 2021 for the Village of Glen Ellyn 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, 2020, as provided by Marquette Associates Inc., are summarized in the following table:

Asset Class	Target Allocation	Long Term Expected Real Rate of Return ¹
Fixed Income	35.0%	2.1%
US Equity	30.0%	5.8%
International Equity	20.0%	6.3%
Global Tactical	5.0%	3.0%
Real Estate - Core	10.0%	5.5%
Total	100.0%	

¹ Please note that the implied long-term expected return of the total portfolio provided by the investment advisor would suggest that the Discount Rate is not supported. We will continue to monitor this in light of longer time horizons and the impact of Consolidation.

Inflation rate of investment advisor 2.00%

Concentrations

The Plan did not hold 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 6.50 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 (6.50 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 6.50 percent. The municipal bond rate is 1.93 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 6.50 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, 2021 for the Village of Glen Ellyn Police Pension Fund prepared by Foster & Foster Actuaries and Consultants.

GLEN ELLYN POLICE PENSION PLAN
PROJECTION OF AMORTIZATION AND
ASSUMPTION CHANGE IMPACT
OCTOBER 8, 2021



FOSTER & FOSTER
ACTUARIES AND CONSULTANTS



October 8, 2021

Ms. Christina Coyle
Finance Director
Village of Glen Ellyn
535 Duane St.
Glen Ellyn, IL 60137

Dear Ms. Coyle:

This report, prepared by Foster & Foster, Inc., outlines the impact of updating the amortization of the unfunded liability to ultimately arrive at a 15-year rolling amortization schedule.

This report has been prepared as requested by the Village of Glen Ellyn for assisting in making decisions about future financing of the pension. This report is the property of the Village of Glen Ellyn and may only be used for its intended purpose.

This analysis has 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 reflects 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.

In conducting this study, 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.

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.

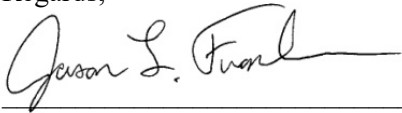
The undersigned is familiar with the immediate and long-term aspects of pension valuations and meets the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the 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 Glen Ellyn, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Village of Glen Ellyn 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.

We look forward to discussing the results with you.

Regards,

A handwritten signature in cursive script, appearing to read "Jason L. Franken", written in black ink.

Jason L. Franken, FSA, EA, MAAA

Enrollment Number: 20-06888
Foster & Foster, Inc.

Projection of Amortization Schedule Change

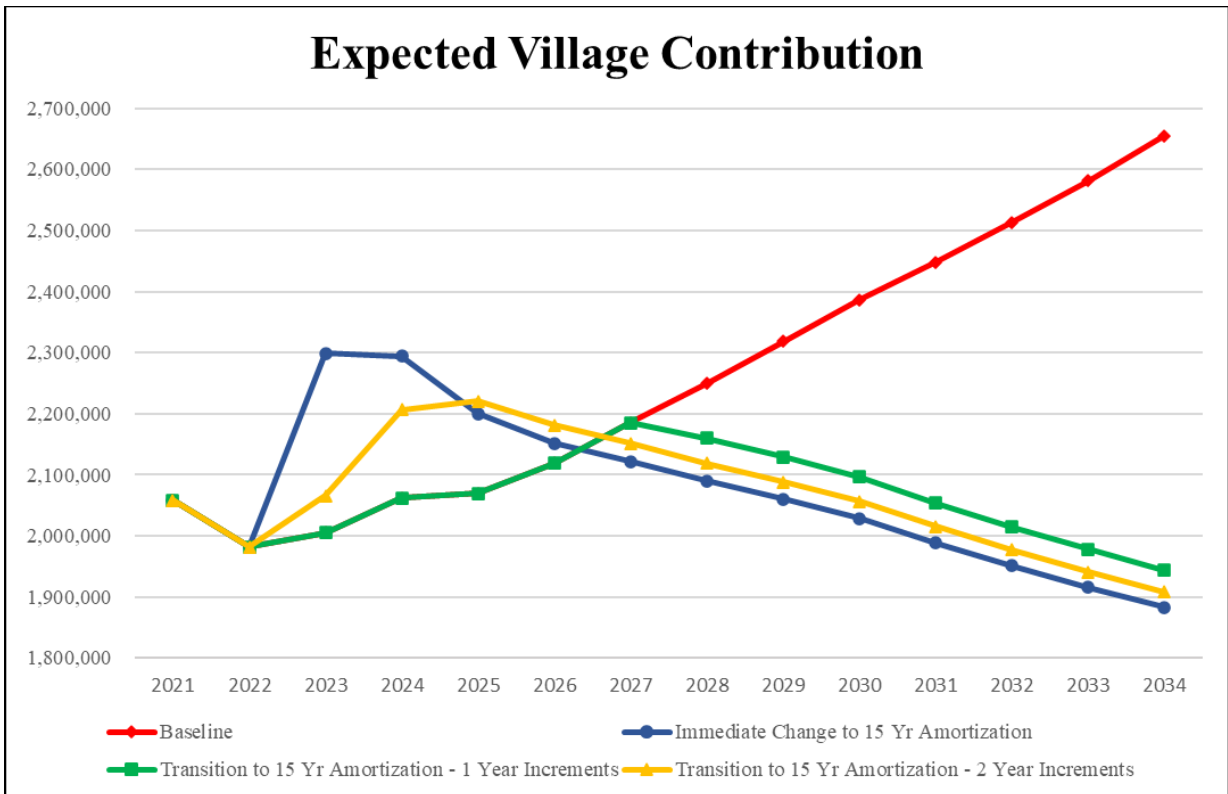
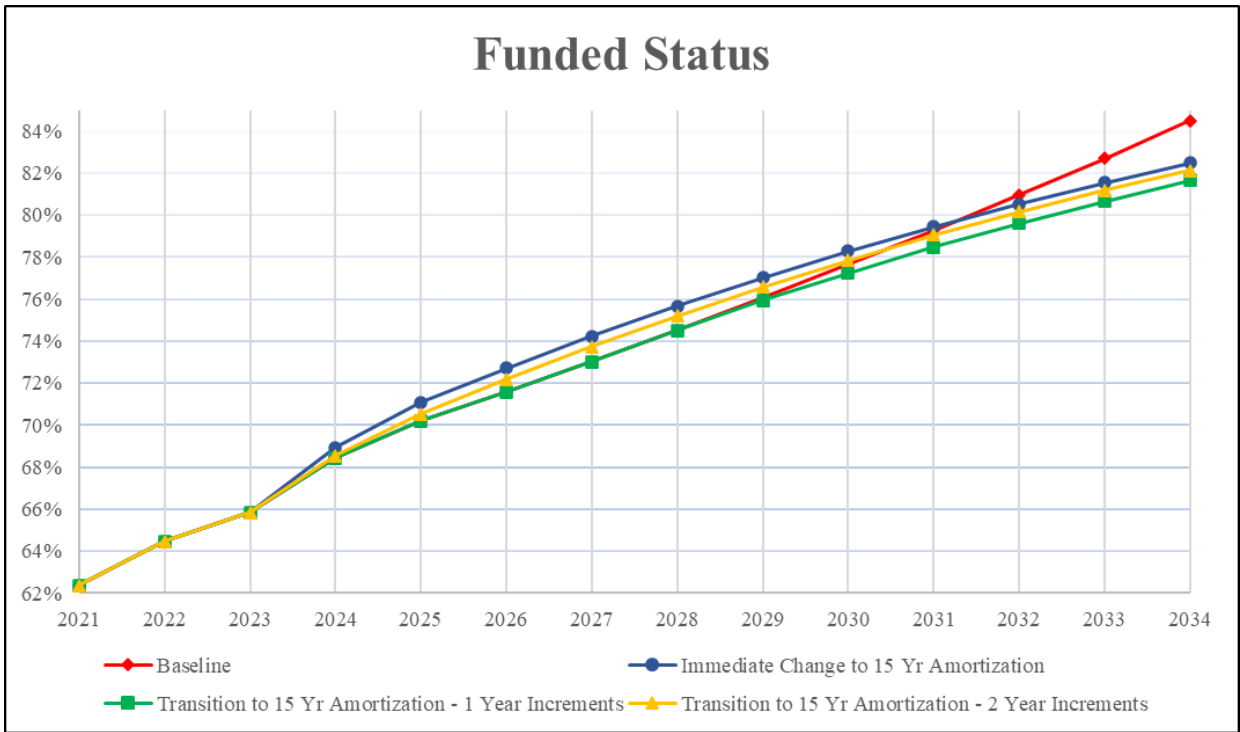
To illustrate the impact of a change to the amortization of the unfunded actuarial accrued liability, we have assembled four scenarios for comparison:

1. Baseline: This is the “status quo” scenario.
2. Immediate Change to 15 Year Amortization: In this scenario, we immediately jump to the 15-year rolling amortization schedule in the 2022 valuation.
3. Transition to 15 Year Amortization: This scenario arrives at the 15-year rolling amortization on a more gradual basis by reducing the amortization period by 1 year annually, similar to how it moves in the Baseline scenario, but then staying on 15 years once it reaches that point.
4. Transition to 15 Year Amortization: This scenario arrives at the 15-year rolling amortization slightly faster than option 3 by reducing the amortization period by 2 years annually instead of the one-year reduction in amortization period.

All assumptions are consistent with the January 1, 2021 actuarial valuation report issued on May 11, 2021. A complete summary of those assumptions and methods can be found on page 7 to 9 of this report.

As you can see by the charts and tables on the following pages, the short-term impact of making this change is a substantial increase in contributions. However, over time, this relationship reverses, and the Baseline scenario contributions exceed the rolling 15 Year Amortization contributions.

Funded status improves slightly faster and is higher long term the sooner that you move to the 15-year rolling amortization. However, the difference between the Baseline funded status and the other scenarios is never more than 3%.



Impact of Change to Amortization Schedule

Valuation Year	2021	2022	2023	2024	2025	2026	2027
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Baseline

Funded Status	62.4%	64.5%	65.8%	68.4%	70.2%	71.6%	73.0%
Expected Village Contribution	2,058,218	1,981,581	2,004,848	2,062,409	2,069,525	2,118,994	2,184,767

Immediate Change to 15 Yr Amortization

Funded Status	62.4%	64.5%	65.8%	68.9%	71.1%	72.7%	74.2%
Expected Village Contribution	2,058,218	1,981,581	2,299,016	2,294,087	2,199,779	2,151,750	2,121,619
Annual Impact (vs. Baseline)	-	-	294,168	231,678	130,254	32,756	(63,148)

Transition to 15 Yr Amortization - 1 Year Increments

Funded Status	62.4%	64.5%	65.8%	68.4%	70.2%	71.6%	73.0%
Expected Village Contribution	2,058,218	1,981,581	2,004,848	2,062,409	2,069,525	2,118,994	2,184,767
Annual Impact (vs. Baseline)	-	-	-	-	-	-	-

Transition to 15 Yr Amortization - 2 Year Increments

Funded Status	62.4%	64.5%	65.8%	68.5%	70.5%	72.2%	73.7%
Expected Village Contribution	2,058,218	1,981,581	2,065,896	2,207,031	2,220,494	2,181,547	2,151,512
Annual Impact (vs. Baseline)	-	-	61,048	144,622	150,969	62,553	(33,255)

Valuation Year	2028	2029	2030	2031	2032	2033	2034
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Baseline

Funded Status	74.5%	76.1%	77.6%	79.3%	81.0%	82.7%	84.5%
Expected Village Contribution	2,249,695	2,318,348	2,386,956	2,447,782	2,512,970	2,581,649	2,654,965

Immediate Change to 15 Yr Amortization

Funded Status	75.7%	77.0%	78.3%	79.4%	80.5%	81.5%	82.5%
Expected Village Contribution	2,089,647	2,060,032	2,028,855	1,988,362	1,950,990	1,915,582	1,883,334
Annual Impact (vs. Baseline)	(160,048)	(258,316)	(358,101)	(459,420)	(561,980)	(666,067)	(771,631)

Transition to 15 Yr Amortization - 1 Year Increments

Funded Status	74.5%	75.9%	77.3%	78.5%	79.6%	80.7%	81.7%
Expected Village Contribution	2,159,810	2,129,145	2,096,225	2,053,970	2,014,876	1,977,791	1,943,909
Annual Impact (vs. Baseline)	(89,885)	(189,203)	(290,731)	(393,812)	(498,094)	(603,858)	(711,056)

Transition to 15 Yr Amortization - 2 Year Increments

Funded Status	75.2%	76.6%	77.9%	79.1%	80.2%	81.2%	82.1%
Expected Village Contribution	2,118,835	2,088,462	2,056,539	2,015,320	1,977,240	1,941,142	1,908,223
Annual Impact (vs. Baseline)	(130,860)	(229,886)	(330,417)	(432,462)	(535,730)	(640,507)	(746,742)

Actuarial Assumptions and Methods for January 1, 2021 Valuation

Interest Rate	6.50% 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-2020. 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-2020. Beneficiaries: PubS-2010 Survivor mortality, projected 5 years past the valuation date with Scale MP-2020. Disabled Lives: PubS-2010 Disabled mortality, projected 5 years past the valuation date with Scale MP-2020. 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 2041. 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		% Becoming Disabled During the Year		% Retiring During the Year (Tier 1)		% Retiring During the Year (Tier 2)	
Age	Rate	Age	Rate	Age	Rate	Age	Rate
20	14.00%	20	0.000%	50 - 51	15%	50 - 54	5%
25	10.40%	25	0.030%	52 - 54	20%	55	40%
30	5.60%	30	0.140%	55 - 64	25%	56 - 64	25%
35	3.10%	35	0.260%	65 - 69	40%	65 - 69	40%
40	1.90%	40	0.420%	70+	100%	70+	100%
45	1.50%	45	0.590%				
50	1.50%	50	0.710%				
56+	0.00%	55	0.900%				
		60	1.150%				



Glen Ellyn Finance Commission
535 Duane Street
Glen Ellyn, IL 60137

Meeting 10/8/2021 7:00 AM
Department: Finance
Department Head:
Category: Other
Prepared By:

AGENDA ITEM (ID # 2021-1503)

DOC ID: 2021-1503

Economic Development Update

Statement of the Issue:

Analysis:

Budget Impact:

Action Requested:

Attachments:



Glen Ellyn Finance Commission
535 Duane Street
Glen Ellyn, IL 60137

Meeting 10/8/2021 7:00 AM
Department: Finance
Department Head:
Category: Reminder
Prepared By:

**AGENDA ITEM (ID # 2021-
1504)**

DOC ID: 2021-1504

Next Meeting: Friday, November 12, 7:00AM

Statement of the Issue:

Analysis:

Budget Impact:

Action Requested:

Attachments: