



Agenda
Village of Arlington Heights
Board of Trustees of the Firefighters Pension Fund
Fire Station #2, Conference Room
1150 N. Arlington Heights Rd, 60004
August 14, 2023
9:00 AM

I. CALL TO ORDER

II. ROLL CALL

III. APPROVAL OF MINUTES

- A. Approval of Minutes - May 8, 2023

IV. CLOSED SESSION

V. TREASURER'S REPORT

- A. Financial Report - Q2, 2023
- B. FF Pension Fund - Actuarial Valuation 2023
- C. Annual Police & Fire Pension Compliance Report

VI. PAYMENT OF BILLS

- A. Payment of Bills - Q2, 2023

VII. REPORTS

- A. FPIF - AH Pension Fund Summary as of May 2023
- B. FPIF - Consolidated Fund as of May 2023

VIII. OLD BUSINESS

- A. Retirement Pension of FF William Essling - Update
- B. Annual Medical Evaluation Retired, Disabled FF Daniel Bennett - Update
- C. Application of Duty Disability Pension FF Steven Landt - Update Board Decision on Intervention Petition
- D. Funds in Former U.S. Bank Account

IX. NEW BUSINESS

- A. Application for Membership - Jeffrey Jakalski hired July 5, 2023
- B. Death of FF Phillip Palczynski on June 4, 2023 - Spousal Benefits

- C. Refund of Pension Contributions - Former FF Bryan Gronset
- D. Retiree John Leligdon - Pension Conversion Request

X. OTHER BUSINESS

XI. PUBLIC COMMENTS

XII.ADJOURNMENT

Persons with disabilities requiring auxiliary aids or services, such as an American Sign Language interpreter or written materials in accessible formats, should contact Erin Mercado, at 33 S. Arlington Heights Road, Arlington Heights, Illinois 60005, emercado@vah.com or (847)368-5793.



**Board of Trustees of the Firefighters Pension Fund
8/14/2023**

Item: Minutes

Department: Fire

Approval of Minutes - May 8, 2023

ATTACHMENTS:

Description

Approval of Minutes - May 8, 2023
Regular Meeting

Type

Minutes

**ARLINGTON HEIGHTS
FIREFIGHTERS' PENSION BOARD**

Minutes of the Regular Meeting held on May 8, 2023

Arlington Heights Fire Department Administrative Headquarters
1150 No. Arlington Heights Road – Arlington Heights IL 60004

Members in Attendance: Mark Aleckson
Lance Harris
Thomas Kuehne
Adam Sielig

Board Member Absent: Carl Brandon

Others in Attendance: Thomas Radja, Board Attorney (Collins, Radja & Hartwell)
Melissa Cayer, Public Observer
Elizabeth Landt, Public Observer

CALL TO ORDER

Mark Aleckson called the meeting to order at 9:03 AM. Roll was called with board members Mark Aleckson, Lance Harris, Thomas Kuehne, and Adam Sielig present. Board Member Carl Brandon was absent.

Also present were Thomas Radja, Board Attorney, Melissa Cayer, Public Observer; and Elizabeth Landt, Public Observer.

Certify Trustee Election Results

The recent election of a Trustee from the firefighter retired group resulted in Peter Ahlman receiving the most votes, thus winning the election. Due to a previously planned vacation, he was not able to attend today's meeting. We need a motion to certify the election results.

Motion was made and seconded (T. Kuehne/A. Sielig) to certify the election results and Peter Ahlman as Board Trustee.

All in favor, motion passed.

Board Nominations

For the office of President of the Board, Mark Aleckson nominated Adam Sielig.

A motion was made and seconded (T. Kuehne/L. Harris) to approve Adam Sielig as Board President.

All in favor, motion passed.

For the office of Secretary of the Board, Lance Harris nominated Peter Ahlman.

A motion was made and seconded (L. Harris/M. Aleckson) to approve Peter Ahlman as Board Secretary.

All in favor, motion passed.

APPROVAL OF MINUTES

Minutes from the Regular Board Meeting of February 27, 2023 were reviewed for approval.

A motion was made and seconded (L. Harris/M. Aleckson) to approve the minutes from the Regular Board meeting on February 27, 2023.
All in favor, motion passed.

Minutes from the Closed Session Meeting on February 27, 2023 were reviewed for approval.
A motion was made and seconded (T. Kuehne/M. Aleckson) to approve the minutes from the Closed Executive Session meeting on February 27, 2023.
All in favor, motion passed.

PUBLIC COMMENTS

None.

CLOSED SESSION

Attorney Tom Radja informed the Board that the Settlement Agreement was accepted and signed by retired firefighter Victor Tamosaitis. The agreement includes the details as discussed at the last meeting and all is in proper order. There is no need to go into Closed Executive Session.

TREASURER'S REPORT

Tom Kuehne distributed the Financial Report ending March 31, 2023, as well as the Projected Cash Flow report for 2023. The Financial Report indicates our total net assets to be approximately \$130.4 million. We are now 25% through the calendar year and right on schedule as far as expenses, but will be a challenging year.

Projected Cash Flow

Next Tom Kuehne discussed the Cash Flow Projection. There are two areas to highlight. One is under the projected March 2023 column which identifies transfers from the Illinois Fund. A recommendation is to transfer \$2.5 million in May from our checking account to the Illinois Fund to earn greater interest. This additional amount is partially due to receipt of property tax revenue, but primarily due to the \$2 million transfer of surplus money from the Village's General Fund to the Fire Pension Fund. Last year was tough and it was very beneficial to receive this surplus money. It continues to protect our long-term liability. The second recommendation is to move \$1 million in August from the Illinois Fund back to our checking account, and thus have the funds needed to pay pension amounts.

Motion was made and seconded (T. Kuehne/M. Aleckson) to transfer \$2.5 million in May from checking to the Illinois Fund, and in August, transfer \$1 million from the Illinois Fund to the checking account, as needed.

Roll was called.

Ayes: M. Aleckson, L. Harris, T. Kuehne, Adam Sielig

Ayes – 4; Nays - 0.

Motion carried.

Trustees expressed their appreciation to both Tom Kuehne and the Village Board for being so forward-thinking. This is very significant to ensure the pension fund continues to remain strong and stable when it comes time for our members to retire. On several occasions the Village Board has approved

the transfer of funds into the Fire Pension Fund, and it's important that our membership understands how grateful we are to have the ongoing support of the Village Board.

As Adam Sielig was nominated today as Board President, he's now a signer on bank accounts. Tom Kuehne suggested Mark and Adam meet with Mary Ellen Juarez to change authorizations at our banking accounts.

PAYMENT OF BILLS

The Check Register ending March 31, 2023 was reviewed and Tom Kuehne asked for approval of wire transfer #741 (journal voucher 004) through check #746 (journal voucher 011).

Motion was made and seconded (T. Kuehne/M. Aleckson) to approve payments of wire transfer #741 (JV 004) through check #746 (JV 011).

Roll was called.

Ayes: M. Aleckson, L. Harris, T. Kuehne, Adam Sielig

Ayes – 4; Nays - 0.

Motion carried.

REPORTS

- **Illinois Firefighters Pension Investment Fund (FPIF)**

Mark Aleckson distributed the March 2023 statement from FPIF, specifically the Arlington Heights pension fund portion. The Net Asset Value ended the year at \$126,247,730, a nice improvement from the prior quarter with a YTD return of 5.09%.

OLD BUSINESS

- **Retirement Pension of FF William Essling - Update**

Attorney Tom Radja stated the Circuit Court agreed with the Board's decision to deny duty disability pension of retired firefighter William Essling. The order was entered on April 20, 2023 with a window to appeal of 35-days. If there is no further appeal, the Court's decision will be final. If there is an appeal, Tom Radja will notify the Board.

- **Former Chief Andrew Larson – Decision & Order Document**

Prior to this meeting, Board members received a copy of the Decision & Order document for review. All back pay has been processed and now we require a motion to approve the Decision & Order document for former Fire Chief Andrew Larson.

Motion was made and seconded (M. Aleckson/A. Sielig) to approve the Decision & Order document for former Fire Chief Andrew Larson.

Roll was called.

Ayes: M. Aleckson, L. Harris, T. Kuehne, Adam Sielig
Ayes – 4; Nays - 0.
Motion carried.

- **Retirement Pension of FF Victor Tamosaitis – Settlement Agreement**

Tom Radja advised the Settlement Agreement as written has been accepted and signed by retired firefighter Victor Tamosaitis. Everything is in order and we now require a motion to approve the Settlement Agreement document.

Motion was made and seconded (T. Kuehne/L. Harris) to approve the Settlement Agreement between retired firefighter Victor Tamosaitis and the Firefighters Pension Board.

Roll was called.

Ayes: M. Aleckson, L. Harris, T. Kuehne, Adam Sielig
Ayes – 4; Nays - 0.
Motion carried.

- **Annual Medical Evaluation Retired, Disabled FF Under Age 50 - Gregory O'Rourke update**

Gregory O'Rourke, retired disabled firefighter, was recently evaluated by Dr. Petrucci who certified that he continues to be disabled as a firefighter.

Motion was made and seconded (A. Sielig/L. Harris) to approve the continuation of disability benefits for retired firefighter Gregory O'Rourke.

Roll was called.

Ayes: M. Aleckson, L. Harris, T. Kuehne, Adam Sielig
Ayes – 4; Nays – 0.
Motion carried.

- **Annual Medical Evaluation Retired, Disabled FF Under Age 50 – Daniel Bennett update**

Tom Radja recently sent a questionnaire form to the treating physician for retired FF Daniel Bennett. The evaluation will establish what medications Dan Bennett is currently taking, whether he is undergoing any treatments, is he currently employed, etc. The physician will then determine whether he continues to be disabled and has 30 days to return the completed form with a certification of his decision. Upon receipt, Tom will forward a copy to the Board and it will remain on the agenda for review at the next meeting.

- **Annual Confirmation – Retiree James Prickett update**

Mark Aleckson relayed that we now have the confirmed Retiree Form returned by James Prickett, and all is in order.

- **Updated Pension Board Forms**

Tom Radja hasn't had an opportunity to complete new updated forms. If there is any form that's needed soon, he will be happy to supply a copy. Likely he will have new forms available by the next board meeting.

NEW BUSINESS

- **Application for Membership – Joshua Cardin hired March 31, 2023**

All required documents have been signed and submitted by FF Joshua Cardin, newly hired as of March 31, 2023.

Motion was made and seconded (M. Aleckson/A. Sielig) to accept FF Joshua Cardin's application for membership to the Firefighters Pension Fund.

All in favor, motion carried.

- **Closed Executive Session – Release of Minutes**

Tom Radja recommends that we continue to keep minutes from Closed Executive Sessions as confidential and not for release.

Motion was made and seconded (M. Aleckson/T. Kuehne) to keep Closed Executive Session minutes as confidential and refrain from releasing.

All in favor, motion carried.

- **Application for Duty Disability Pension – FF Steven Landt**

Tom Radja has been working on getting all the proper documentation and medical records needed in order to begin the process of reviewing the application from FF Steven Landt for Duty Disability Pension. We are awaiting a few more records before we can proceed. He recently received a call from Steve Landt's attorney, asking for a status update. There is the issue of intervention and there should not be any objection. Tom Radja will speak with the attorney and set appointments with IME's as soon as possible.

Chief Harris questioned a statement causing some confusion. FF Landt requested a 30-day extension of unpaid leave of absence, and in this he indicated "my expected return would be based upon approval of my duty disability pension or upon my full recovery to return to full duty as determined by my treating physician." This seems if the Board does not grant Duty Disability, he may return to work. It's unclear as to how this applies?

Tom Radja explained that if the Pension Board learns that he is no longer disabled, then we must certify that he can return to work. If it's determined that he is disabled, then the Board reviews his application in detail, whether Duty or Non-Duty pension, at the Disability Hearing. If the treating physician finds that he's recovered from disability, then he has the potential to return to work.

Chief Harris indicated granting a 30-day extension will allow FF Landt to continue to pay the employee portion of health insurance. His injury was on July 23, and to be consistent with past allowances, we can permit an extension up to July 23 which is one year from date of injury.

- **Firefighters Secondary Employer Reporting**

Tom Radja explained the pension code requires that if we have a full-time firefighter who also works with another fire department, that secondary FD must notify us at the end of the fiscal year of how many hours were worked and whether there were any incidents or injuries. Tom is willing

to create a standard letter when notifying secondary employers of the pension code and what's required of them.

Chief Harris next asked whether this secondary employment notification applies only to those who handle actual firefighter duties? We have one firefighter who works with another FD acting as their Public Education Coordinator, but is not handling regular firefighting duties. Tom Radja explained the written details of the pension code indicate this is related only to regular firefighting duties. Thus, no notification would be required in this instance. Although, if there was an injury to a non-firefighter secondary employee, we would still issue a subpoena to determine responsibility.

- **Funds in former U.S. Bank Account**

Previously we had 83 cents in our account and after several phone calls, this was finally sent to us and the account was down to zero. Recently there was a favorable class action lawsuit, resulting in almost \$8,000 disbursement added to the account. Adam Sielig will work with Mary Ellen Juarez to confirm these funds and bring the U.S. Bank account to a zero close.

OTHER BUSINESS

Legal Office

Tom Radja had previously sent an email to all his clients notifying them that one of their partners was charged with alleged criminal activity and there is now an on-going investigation. This was related to events over three years ago in Kane County, prior to joining their firm. Tom does not believe anything will come of it, but wanted the Board be aware of the situation as more may come out from the media. The Board expressed appreciation to Attorney Radja in his being so forthright as to what is transpiring.

Admin – Pay Increase

Laura Potts acts as the Administrative/Recording Secretary for the Pension Board and her last increase in hourly pay was made at the January 27, 2020 meeting, over three years ago. Her current rate is \$38.50 and Chief Harris recommended an increase to \$43.13 as a new hourly rate.

Motion was made and seconded (L. Harris/M. Aleckson) to increase Laura Potts' hourly rate to \$43.13.

Roll was called.

Ayes: M. Aleckson, L. Harris, T. Kuehne, Adam Sielig

Ayes – 4; Nays – 0.

Motion carried.

ADJOURNMENT

As there was no other business to present before the Board, a motion was made and seconded (M. Aleckson/T. Kuehne) to adjourn the meeting. Meeting adjourned at 9:47 AM. All in favor, motion carried.

NEXT REGULAR MEETING – Scheduled for Monday, August 14, 2023 at 9:00 AM

Respectfully submitted,

Laura Potts
Recording Secretary

Peter Ahlman
Board Secretary



**Board of Trustees of the Firefighters Pension Fund
8/14/2023**

Item: Treasurer

Department: fire

Financial Report - Q2, 2023

ATTACHMENTS:

Description

Financial Report - Q2, 2023

Type

Report



**Board of Trustees of the Firefighters Pension Fund
8/14/2023**

Item: Actuarial

Department: Fire

FF Pension Fund - Actuarial Valuation 2023

ATTACHMENTS:

Description	Type
Pension Fund Actuarial Valuation 2023	Agreement

Actuarial Valuation

*Village of Arlington Heights
Arlington Heights Firefighters' Pension Fund*

*As of January 1, 2023
For the Year Ending December 31, 2023*



MWM Consulting Group
Taking Measure of Tomorrow

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Section 1: Summary of Principal Valuation Results

MWM Consulting Group was retained to prepare an actuarial valuation as of January 1, 2023 for the Arlington Heights Firefighters' Pension Fund. The purpose of the actuarial valuation was to determine the financial position and the annual actuarial requirements of the pension fund under Illinois statute 40 ILCS 5/4, Section 118, and to develop a recommended minimum contribution amount.

For quick reference, some of the key results of the valuation, along with selected financial and demographic information for the year ending December 31, 2023 are summarized in this overview section along with (for comparison) the results from the prior year.

CONTRIBUTIONS	Item	Current Valuation as of 1/1/2023	Prior Year Valuation as of 1/1/2022
<p><i>The plan sponsor must contribute at least the statutorily required minimum contribution under Illinois statutes equal to the normal cost plus the amount necessary to amortize the unfunded accrued liability such that by 2040, the liabilities will be 90% funded.</i></p> <p><i>Other contribution amounts are shown including Funding Policy Contribution and the contribution required to prevent negative funding.</i></p>	Contribution Required To Prevent Negative Funding	\$5,400,541 (43.4%)	\$5,109,466 (42.1%)
	Actuarially Determined Funding Policy Contribution	\$5,880,365 (47.3%)	\$5,255,147 (43.3%)
	Statutory Minimum Contribution per 40 ILCS 5/4 Section 118	\$4,529,912 (36.4%)	\$4,025,724 (33.2%)
<i>() amounts expressed as a percentage of payroll</i>			

STATUTORY MINIMUM FUNDING COST ELEMENTS	Item	Current Valuation as of 1/1/2023	Prior Year Valuation as of 1/1/2022
<p><i>Illinois statutes require employers to contribute at least the amount necessary such that assets will equal at least 90% of the accrued liability by 2040. The minimum amount is determined under the Projected Unit Credit funding method, with smoothed assets, and is equal to the normal cost plus the amortization amount. The absolute minimum statutory contribution is determined and separately provided by the Pension Board.</i></p>	Accrued Liability	\$ 188,260,944	\$ 179,617,561
	Market Value of Assets	\$ 127,478,716	\$ 149,361,461
	Actuarial (Smoothed) Value of Assets	\$ 147,835,727	\$ 145,069,772
	Normal Cost (employer)	\$ 2,570,561	\$ 2,584,012
	Amortization Amount	\$ 1,598,547	\$ 1,114,619
	Statutory Minimum Contribution	\$ 4,529,912	\$ 4,025,724

FUNDING POLICY CONTRIBUTION COST ELEMENTS	Item	Current Valuation as of 1/1/2023	Prior Year Valuation as of 1/1/2022
<p><i>The funding policy contribution amount is determined under the Entry Age Normal funding method, with smoothed assets, and is equal to the normal cost plus the amortization amount. 100% of the unfunded liability is amortized as a level percentage of pay over 18 years on a closed basis.</i></p>	Accrued Liability	\$ 189,539,868	\$ 179,441,272
	Market Value of Assets	\$ 127,478,716	\$ 149,361,461
	Actuarial (Smoothed) Value of Assets	\$ 147,835,727	\$ 145,069,772
	Normal Cost (employer)	\$ 2,347,655	\$ 2,540,473
	Amortization Amount	\$ 3,086,515	\$ 2,309,843
	Actuarially Determined Funding Policy Contribution	\$ 5,880,365	\$ 5,255,147

FUNDING POLICY CONTRIBUTION AMOUNT REQUIRED TO AVOID NEGATIVE FUNDING	Item	Current Valuation as of 1/1/2023	Prior Year Valuation as of 1/1/2022
<p><i>The funding policy contribution amortization amount is based upon a percentage of increasing payroll and, in the early years of funding, may not be sufficient to cover the interest cost on the unfunded liability. In order to avoid an increase in the unfunded liability (known as negative funding), the minimum amortization amount must be adjusted to be at least equal to the interest on the unfunded liability. The amount shown in the table as "Contribution to Avoid Negative Funding" provides for interest on 100% of the unfunded liability.</i></p>	Accrued Liability	\$ 189,539,868	\$ 179,441,272
	Market Value of Assets	\$ 127,478,716	\$ 149,361,461
	Actuarial (Smoothed) Value of Assets	\$ 147,835,727	\$ 145,069,772
	Normal Cost (employer)	\$ 2,347,655	\$ 2,540,473
	Amortization Amount	\$ 2,815,030	\$ 2,320,076
	Amount of Contribution Needed to Avoid Negative Funding	\$ 5,400,541	\$ 5,109,466

FINANCIAL THUMBNAIL RATIOS	Tests	1/1/2023 Valuation	1/1/2022 Valuation
<p><i>This chart summarizes traditional financial ratios as applied to the pension plan. This liquidity ratio relates the cash flow position of the Fund by comparing the investment income plus employer and employee contributions to the annual benefit payments. Maintaining a ratio well above 100% prevents the liquidation of assets to cover benefit payments. The increase in benefits paid over the years is generally a result of the maturing of the pension plan.</i></p> <p><i>Coverage of the Accrued Liabilities by the Assets is the Coverage Ratio and is one indication of the long term funding progress of the plan.</i></p>	Liquidity Ratio (based upon year ended)	-153%	265%
	Coverage Ratio (Market Value Assets)	67.26%	83.24%
	Annual Benefit Payments (expected)	\$ 9,266,379	\$ 8,513,453
	Annual Contributions (expected)		
	Members	\$ 1,176,133	\$ 1,147,187
	Village	\$ 5,880,365	\$ 5,255,147

PLAN MATURITY MEASURES	Tests	1/1/2023 Valuation	1/1/2022 Valuation
<p><i>This chart includes financial relationship measures which are meant to help understand the risks associated with the plan.</i></p> <p><i>The ratio of Market Value of Assets to Active Payroll is measure of volatility risk associated with asset losses. The higher the ratio, the greater the volatility in contribution risks.</i></p> <p><i>The Ratio of Accrued Liability to Payroll is a measure of the volatility risk associated with assumption or other changes in liabilities. The higher the ratio, the greater the volatility in contribution risks.</i></p> <p><i>The Ratio of retired life actuarial accrued liability to total actuarial accrued liability is a measure of the maturity of the Plan. A mature plan will have a ratio above 60%.</i></p> <p><i>The Support Ratio (Actives: Retirees). A number less than 1 indicates a more mature plan.</i></p>	Ratio of Market Value of Assets to Active Participant Payroll is a measure of volatility risk associated with asset losses	10.25	12.31
	Ratio of Accrued Liability to Payroll is a measure of volatility risk associated with changes in assumptions	15.24	14.79
	Ratio of retired life Actuarial Accrued Liability to total Actuarial Accrued Liability	0.59	0.58
	Percentage of Contributions less Benefit Payments to Market Value of Assets	-0.25%	-1.29%
	Ratio of Benefit Payments to Contributions	1.05	1.29
	Support Ratio: Ratio of Active Participants to Retired Participants	0.95	0.95

PARTICIPANT DATA SUMMARY	Item	Current Year Valuation as of 1/1/2023			Prior Year Valuation as of 1/1/2022		
		Tier 1	Tier 2	Total	Tier 1	Tier 2	Total
<p><i>The Actuarial Valuation takes into account demographic and benefit information for active employees, vested former employees, and retired pensioners and beneficiaries. The statistics for the past two years are compared in the chart.</i></p>	Active Members						
	Vested	72	7	79	75	4	79
	Non-Vested	<u>0</u>	<u>28</u>	<u>28</u>	<u>0</u>	<u>27</u>	<u>27</u>
	Total Active	72	35	107	75	31	106
	Terminated entitled to future benefits	1	2	3	1	3	4
	Retired	65	0	65	62	0	62
	Surviving Spouse	19	0	19	20	0	20
	Minor Dependent	1	0	1	2	0	2
	Disabled	<u>24</u>	<u>1</u>	<u>25</u>	<u>23</u>	<u>0</u>	<u>23</u>
	Total	182	38	220	183	34	217

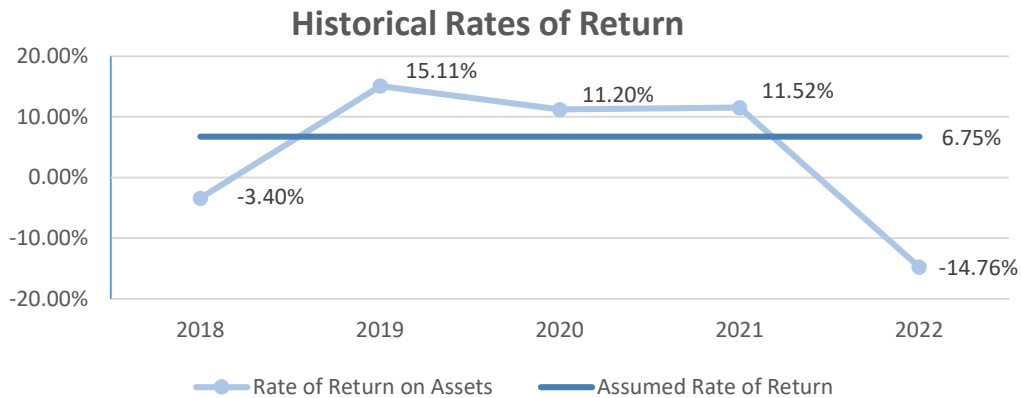
SECTION 2: VALUATION RESULTS

Significant Events, Disclosure Risks and Issues Influencing Valuation Results

Actuarial valuations are snapshot calculations which incorporate and reflect the experience and events of the past year such as changes in the demographics of the plan participants, gains and losses in the plan assets, changes in actuarial assumptions about future experience and outside influences such as legislation. Some of the more significant issues affecting the Plan's contribution level are described here.

Asset Performance for yearend 12/31/2022

The approximate -14.76% return (not time weighted) on net assets was below the actuarial assumption of 6.75% in effect for the 2022 year.



Change in Assumptions

The mortality table was updated from the PubS-2010 base rates projected to the valuation date with scale MP2021 to the PubS-2010 base rates projected generationally with scale MP2021. Rates (probability of death at each age) have been adjusted by a factor of 1.081 for healthy male retirees, 1.178 for disabled male retirees, and 1.098 female surviving spouses.

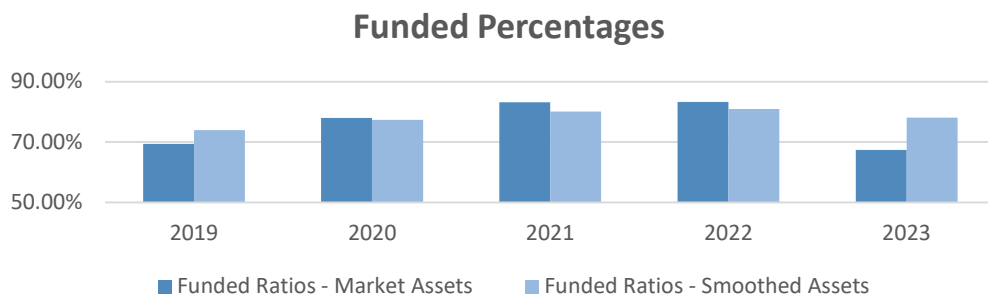
Retirement and withdrawal rates have been updated to reflect the rates recommended from the recent actuarial experience study completed for the Illinois Firefighters' Pension Investment Fund. Projected salary increases (graded by service) were updated from 13.25% initially to an ultimate rate of 4.25% to 12.50% initially to an ultimate rate of 4.00%. Payroll growth was reduced from 3.75% to 3.00%.

Funded Status

The funded ratio measurement presented in the Actuarial Valuation Report for the Fund is the ratio of the actuarial value of fund assets available for benefits compared to the actuarial accrued liability. By monitoring changes in the funding ratio each year, one can determine whether or not funding progress is being made. Please understand that:

- The funded ratio measurement is inappropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations by transferring the obligations to a unrelated third party in an arm's length market value type transaction, such as purchasing annuities from an insurance company.

- The funded ratio measurement is dependent upon the actuarial cost method which, in combination with the plan’s amortization policy, affects the timing and amounts of future contributions. The amounts of future contributions will most certainly differ from those assumed in this report due to future actual experience differing from assumed experience based upon the actuarial assumptions. Attainment of a funded status measurement in the Actuarial Valuation of 90% or 100% is not synonymous with no required future annual contributions. Even if the funded status attained is 100%, the plan would still require future normal cost contributions (i.e., contributions to cover the annual cost of the active membership accruing an additional year of service credit).
- The funded ratio measurement is a different result depending upon whether the market value of assets or the actuarial value of assets is used.



Employer Contributions

The employer contribution is expected to be paid according to the Funding Policy, and exceeds the required Statutory Minimum contribution. An additional funding contribution amount is included which determines the amount necessary to prevent negative funding (also known as "treading water" funding). This year, the Funding Policy contribution exceeds the treading water funding contribution. This is because the percentage of payroll amortization (with interest to end of year) that is determined under the Funding Policy exceeds 6.75% of the unfunded liability. That is, the amortization under the Funding Policy covers interest on the unfunded liability and thus helps to reduce the unfunded.

Assuming the Funding Policy contributions are received (and the actuarial assumptions are met) each year through 2040, the Fund’s funded ratio is projected to increase to 100% by 2040. If only the Statutory Minimum contributions are made, the Fund’s funded ratio would be projected to increase to 90% by 2040.

However, the ability of the fund to reach 100% funding by 2040 is heavily dependent on the Village contributing the Funding Policy employer contribution each and every year until 2040. Actuarial standards do not require the actuary to evaluate the ability of the Village or other contributing entity to make such required contributions to the Fund when due. Such an evaluation is not within the actuary’s domain of expertise. Consequently, the actuary performed no such evaluation.

The current Funding Policy amortizes the unfunded amount based upon a level percentage of payroll. This amortization method develops dollar amounts which increase as payroll increases. The dollar amounts towards the end of the closed amortization period are necessarily much larger, and if payroll does not increase as expected, the amortization amount can dramatically increase the contribution as a percentage of payroll.

Pension Valuations and Risks

Actuarial Standards of Practice (ASOP No. 51), states that the actuary should identify risks that, in the actuary's professional judgment, may reasonably be anticipated to significantly affect future financial condition. Actuarial valuation results are developed based upon a single set of assumptions and a "snapshot" of the participant census and financial data as of the valuation date. The actuarial valuation represents an estimated forecast. The actual cost will be determined by the benefits and expenses paid, as they develop through the future experience of the participants and invested assets. There is a risk that emerging results may differ significantly as actual experience proves to be different from what is projected based on the current assumptions.

MWM has not been engaged to perform a detailed analysis of the potential range of the impact of risks relative to the Fund's future financial condition but included below is a description of some of the funding related risks that could significantly affect the Fund.

- **Investment Risk** – Investment performance may create volatility in the funded status as well as future contributions. A gain or loss in asset value would directly affect the unfunded liability shortfall and funded status, either positively or negatively, depending upon whether the change is a gain or loss.
- **Longevity and Demographic Risk** – Longevity and other demographic risks are the possibility that actual demographic experience differs from the actuarial assumptions. For example, if participants live longer than projected by the mortality assumption, it will create an actuarial experience loss and increase liability.

Valuation Model

MWM valuation results are developed using actuarial modeling software named "ProVal" which is licensed from Winklevoss Technologies. This software is widely considered to be the premier actuarial valuation software and is licensed by many of the largest actuarial firms. The actuarial valuation model generates a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. The actuarial team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results.

ACTUARIAL CERTIFICATION

This is to certify that MWM Consulting Group has prepared an Actuarial Valuation of the Plan as of January 1, 2023 for the purposes of determining statutory contribution requirements for the Fund in accordance with the requirements of 40 ILCS 5/4, Section 118, of determining the funding policy contribution amount (the Actuarially Determined Contribution), under the assumptions detailed in this report. The absolute minimum statutory contribution is determined and separately provided by the Pension Board. The funding policy is selected by the Village. The contributions determined are net of contributions made by active members during the year.

The results shown in this report have been calculated under the supervisions of a qualified Actuary as defined in appropriate State statutes. All results are based upon demographic data submitted by the Fund / Village, financial data submitted by the Fund, applications of actuarial assumptions, and generally accepted actuarial methods.

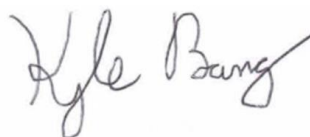
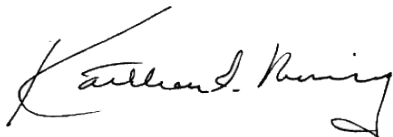
This valuation report has been prepared at the request of Village of Arlington Heights to assist in administering the Plan and meeting specified financial and accounting requirements. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Fund sponsor and may only be provided to other parties in its entirety. The information and valuation results shown in this report are prepared with reliance upon information and data provided to us, which we believe to the best of our knowledge to be complete and accurate and include:

- Employee census data submitted by the Village of Arlington Heights. This data was not audited by us but appears to be consistent with prior information, and sufficient and reliable for purposes of this report.
- Financial data submitted by the Village of Arlington Heights.

The measurements shown in this actuarial valuation may not be applicable for other purposes. Actuarial valuations involve calculations that require assumptions about future events. Certain of the assumptions or methods are mandated for specific purposes. Future actuarial measurements may differ significantly from the current measurements presented in the report due to such factors as experience that deviates from the assumptions, changes in assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period, or additional cost or contributions based on the Plan’s funded status) and changes in plan provisions or applicable law. This report does not include an analysis of the potential range of such future measurements.

We believe the assumptions and methods used are within the range of possible assumptions that are reasonable and appropriate for the purposes for which they have been used. In our opinion, all methods, assumptions and calculations are in accordance with requirements and the procedures followed and presentation of results are in conformity with generally accepted actuarial principles and practices. The undersigned actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. There is no relationship between the Village of Arlington Heights and MWM Consulting Group that impacts our objectivity. I certify that the results presented in this report are accurate and correct to the best of my knowledge.

MWM CONSULTING GROUP



3/21/2023

Kathleen E. Manning, FSA, EA, FCA, MAAA
Managing Principal and Consulting Actuary

Kyle Bang, FSA, EA, FCA, MAAA
Consulting Actuary

Date



SECTION 3 - FINANCIAL AND ACTUARIAL EXHIBITS

Exhibit 1 - Statement of Market Value of Assets

Item	Plan Year Ending	
	12/31/2022	12/31/2021
1. Investments at Fair Value:		
a. Cash and Cash Equivalents	\$ 4,314,748	\$ 3,752,387
b. Money Market Mutual Funds	0	0
c. Municipal Bonds	0	0
d. Corporate Bonds	0	0
e. US Government and Agency Bonds	0	0
f. Common and Preferred Stocks	0	3,617,704
g. Illinois Firefighters' Pension Investment Fund	120,136,304	0
h. Pension Investments	0	141,737,297
i. Accrued Interest and Receivables*	3,058,216	254,073
j. Other	0	0
k. Subtotal Assets (a + b + c + d + e + f + g + h + i + j)	<u>\$ 127,509,268</u>	<u>\$ 149,361,461</u>
2. Liabilities:		
a. Expenses Payable	\$ 30,552	\$ 0
b. Liability for benefits due and unpaid	0	0
c. Other Liabilities	0	0
d. Total Liabilities	<u>\$ 30,552</u>	<u>\$ 0</u>
3. Net Market Value of Assets Available for Benefits: (1k – 2d)	<u>\$ 127,478,716</u>	<u>\$ 149,361,461</u>

* Includes \$2,000,000 transfer from General Fund at December 31, 2022.

Exhibit 2 - Statement of Change in Net Assets

Item	Plan Year Ending	
	12/31/2022	12/31/2021
Additions		
Contributions		
Employer*	\$ 6,962,000	\$ 4,913,000
Plan Member	1,168,906	1,145,403
Other	0	<u>94,381</u>
Total Contributions	\$ 8,130,906	\$ 6,152,784
Investment Income		
Net realized and unrealized appreciation in fair value of investments	\$ (22,206,917)	\$ 12,551,814
Interest	905,769	2,692,346
Dividends	0	0
Other Income	0	0
Investment Expenses	<u>(74,280)</u>	<u>(247,889)</u>
Net Investment Income	<u>(21,375,428)</u>	<u>14,996,271</u>
Total additions	<u>\$ (13,244,522)</u>	<u>\$ 21,149,055</u>
Deductions		
Benefits	\$ 8,508,695	\$ 7,913,187
Refunds	0	0
Administrative Expenses	<u>129,528</u>	<u>73,219</u>
Total deductions	<u>\$ 8,638,223</u>	<u>\$ 7,986,406</u>
Total increase (decrease)	<u>\$ (21,882,745)</u>	<u>\$ 13,162,649</u>
Net Market Value of Assets Available for Benefits:		
Beginning of year	<u>\$ 149,361,461</u>	<u>\$ 136,198,812</u>
End of year	<u>\$ 127,478,716</u>	<u>\$ 149,361,461</u>

* Includes \$2,000,000 transfer from General Fund at December 31, 2022.

Exhibit 3 – Actuarial Value of Assets

Under 40 ILCS 5/4, the statutory minimum required contribution is to be determined based upon **Actuarial Value of Assets**, which are asset values which have been smoothed over a three-year period, beginning with the year 2011. The **Actuarial Value of Assets** has been calculated below based upon the market value of assets at January 1, 2023 with adjustments for the preceding year’s gains/losses, which are reflected at the rate of 33-1/3% per year.

1. Expected Return on Assets	
a. Actuarial Value of Assets as of Beginning of Year	\$ 145,069,772
b. Income and Disbursements During the year	
i. Contributions Received (weighted 50%)	\$ 4,065,453
ii. Benefit Payments and Expenses (weighted 50%)	4,319,112
iii. Weighted net income (other than investment income) (i) – (ii)	(253,659)
c. Actuarial Value adjusted for income and disbursements	\$ 144,816,113
d. Expected Return on Assets at assumed rate of 6.75%	\$ 9,775,088
2. Actual Return on Assets for year	
a. Market Value of Assets (Beginning of Year)	\$ 149,361,461
b. Income (less investment income)	8,130,906
c. Disbursements	8,638,223
d. Market Value of Assets (End of Year)	127,478,716
e. Actual Return on Assets (d) – (a) – (b) + (c)	(21,375,428)
f. Investment Gain/(Loss) for year 2(e) - 1(d)	\$ (31,150,516)
3. Actuarial Value of Assets	
a. Expected Actuarial Value of Assets as of End of Year	\$ 154,337,542
b. Deferred Investment gains/(losses)	
i. 1/3 of 2022 loss of \$(31,150,516)	(10,383,505)
ii. 1/3 of 2021 gain of \$6,209,980	2,069,993
iii. 1/3 of 2020 gain of \$5,435,090	1,811,697
iv. Total	(6,501,815)
c. Actuarial Value of Assets as of December 31, 2022 3(a) + 3(b)(iv)	\$ 147,835,727

The chart below shows the comparison of smoothed to market assets over the past five years.

Smoothed vs Market Assets

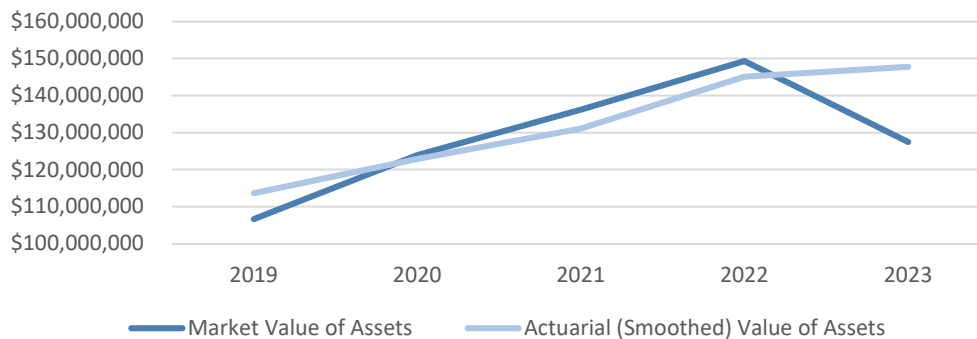


Exhibit 4 - Determination of the Statutory Minimum Required Annual Contribution

Under 40 ILCS 5/4, the statutory minimum required contribution is to be determined based upon the Projected Unit Credit actuarial funding method, where the unfunded liability is amortized such that 90% of the liability will be funded as of 2040. Under the statute, 90% of the unfunded liability is to be amortized as a level percentage of payroll over the period through 2040. The mandated funding method, the Projected Unit Credit funding method, requires the annual cost of the plan to be developed in two parts: that attributable to benefits allocated to the current year (the normal cost); and that allocated to benefits attributable to prior service (the accrued liability). In accordance with legislation enacted in 2020, the statutory minimum contribution for tax levy purposes as calculated and provided by the Pension Board will be the absolute minimum contribution amount. The calculation below is provided based upon the statutory requirements for the minimum and the assumptions summarized in Section 5 of this report.

Funding Elements for 40 ILCS 5/4

	Present Value of Benefits as of 1/1/2023	Projected Unit Credit (PUC) Normal Cost as of 1/1/2023	PUC Actuarial Accrued Liability as of 1/1/2023
1. Actives			
a) Normal & Early Retirement	\$ 94,503,543	\$ 3,105,969	\$ 68,739,009
b) Vested Withdrawal	2,087,457	118,133	1,330,983
c) Pre-Retirement Death	839,134	42,732	540,922
d) Disability	<u>9,765,944</u>	<u>479,860</u>	<u>6,211,260</u>
e) Total Actives	\$ 107,196,078	\$ 3,746,694	\$ 76,822,174
2. Inactives and Survivors			
a) Normal Retirees	\$ 78,245,851		\$ 78,245,851
b) Widows (survivors)	9,930,884		9,930,884
c) Deferred Vested	61,183		61,183
d) Disabled	<u>23,200,852</u>		<u>23,200,852</u>
e) Total - Nonactive	\$ 111,438,770		\$ 111,438,770
3. Total – All	\$ 218,634,848		\$ 188,260,944

Minimum Statutory Contribution under 40 ILCS 5/4

Item	Amount
1. Annual Payroll	\$ 12,439,265
2. Normal Cost (net of employee/member contributions)	2,570,561
3. Employee Contributions (expected)	1,176,133
4. Funding Actuarial Liability	188,260,944
5. 90% of Funding Actuarial Liability	169,434,850
6. Actuarial Value of Assets (Exhibit 3)	147,835,727
7. Unfunded Actuarial Balance	21,599,123
8. Amortization of Unfunded Balance over 18 years as a level percentage of payroll	1,598,547
9. Interest on (2), (3) and (8)	360,804
10. Minimum statutory tax levy contribution per 40 ILCS 5/4 – (2) + (8) + (9)	\$4,529,912 (36.4%)

*() amount as a percent of payroll

Exhibit 5 - Determination of the Funding Policy Annual Contribution

The Tax Levy has been based upon the funding policy actuarially determined contribution, rather than the amount determined as the minimum under 40 ILCS 5/4. The funding policy contribution is developed below, based upon the Entry Age Normal Funding Method, with 100% of the unfunded accrued liability amortized as a level percentage of payroll amount over the 18 years through 2040. The contribution is then the sum of the Normal Cost (developed under the entry age method, but where the total normal cost is not less than 17.5% of Annual Payroll) plus the amortization payment.

Funding Elements for Funding Policy Contribution

	Present Value of Benefits as of 1/1/2023	Entry Age Normal Cost as of 1/1/2023	Entry Age Accrued Liability as of 1/1/2023
1. Actives			
a) Normal & Early Retirement	\$ 94,503,543	\$ 2,670,715	\$ 73,122,081
b) Vested Withdrawal	2,087,457	203,396	272,906
c) Pre-Retirement Death	839,134	47,876	365,688
d) Disability	<u>9,765,944</u>	<u>601,801</u>	<u>4,340,423</u>
e) Total Actives	\$ 107,196,078	\$ 3,523,788	\$ 78,101,098
2. Inactives and Survivors			
a) Normal Retirees	\$ 78,245,851		\$ 78,245,851
b) Widows (survivors)	9,930,884		9,930,884
c) Deferred Vested	61,183		61,183
d) Disabled	<u>23,200,852</u>		<u>23,200,852</u>
e) Total - Nonactive	\$ 111,438,770		\$ 111,438,770
3. Total – All	\$ 218,634,848		\$ 189,539,868

Actuarially Determined Funding Policy Contribution for Tax Levy

Item	Amount
1. Normal Cost (net of employee/member contributions)	\$ 2,347,655
2. Employee Contributions (expected)	1,176,133
3. Funding Actuarial Liability	189,539,868
4. 100% of Funding Actuarial Liability	189,539,868
5. Actuarial Value of Assets (Exhibit 3)	147,835,727
6. Unfunded Actuarial Balance	41,704,141
7. Amortization of Unfunded Balance over 18 years as a level percentage of payroll	3,086,515
8. Interest on (1), (2) and (7)	446,195
9. Actuarially Determined Funding Policy Contribution for Tax Levy (1) + (7) + (8)	\$5,880,365 (47.3%)

Exhibit 6 - Contribution Required to Prevent Negative Funding

Item	Amount
1. Normal Cost (net of employee/member contributions)	\$ 2,347,655
2. Employee Contributions (expected)	1,176,133
3. 100% of Funding Actuarial Liability	189,539,868
4. Actuarial Value of Assets (Exhibit 3)	147,835,727
5. Unfunded Actuarial Balance	41,704,141
6. Interest on Unfunded Liability	2,815,030
7. Interest on (1), (2)	237,856
8. Contribution Necessary to Prevent Negative Funding (1) + (6) + (7)	\$5,400,541 (43.4%)

Exhibit 7 – Summary of Participant Data as of January 1, 2023

Participant Data

Item	As of 1/1/2023		
	<u>Tier 1</u>	<u>Tier 2</u>	<u>Total</u>
Active Members			
Vested	72	7	79
Non-Vested	<u>0</u>	<u>28</u>	<u>28</u>
Total Actives	72	35	107
Terminated Members entitled to future benefits	1	2	3
Retired Members	65	0	65
Surviving Spouses	19	0	19
Minor Dependents	1	0	1
Disabled Participants	<u>24</u>	<u>1</u>	<u>25</u>
Total	182	38	220

AGE AND SERVICE DISTRIBUTION AS OF JANUARY 1, 2023

Active Employee Participants

Age Group	Service									Total
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40+	
Under 20										0
20 - 24	2									2
25 - 29	5									5
30 - 34	5	4	1							10
35 - 39	1	9	6	2						18
40 - 44	1	2	6	7						16
45 - 49				8	5	1				14
50 - 54			1	4	16	11				32
55 - 59	1				3	4	1			9
60 - 64								1		1
65 & Over										0
Total	15	15	14	21	24	16	1	1	0	107

Average Age: 44.7 years

Average Length of Service: 16.1 years

SECTION 4 - SUMMARY OF PRINCIPAL PLAN PROVISIONS

This summary provides a general description of the major eligibility and benefit provisions of the pension fund upon which this valuation has been based. It is not intended to be, nor should it be interpreted as, a complete statement of all provisions

Definitions

Tier 1 – For Firefighters first entering Article 4 prior to January 1, 2011

Tier 2 – For Firefighters first entering Article 4 after December 31, 2010

Firefighter (4-106): Any person employed in the municipality's fire service as a firefighter, fire engineer, marine engineer, fire pilot, bomb technician or scuba diver.

Creditable Service (4-108): Time served by a firefighter, excluding furloughs and leaves of absence in excess of 30 days, but including leaves of absence for illness or accident and periods of disability where no disability pension payments are received and also including up to 3 years during which disability payments have been received provided contributions are made.

Creditable Service from other specified agencies is also included. Combined service credit option is available on a voluntary basis.

Pension (4-109)

Normal Pension Age

Tier 1 - Age 50 with 20 or more years of creditable service.

Tier 2 - Age 55 with 10 or more years of creditable service.

Normal Pension Amount

Tier 1 - 50% of the greater of the annual salary held in the year preceding retirement or the annual salary held on the last day of service, plus 2½% of such annual salary for service from 20 to 30 year (maximum 25%).

Tier 2 - 2½% of Final Average salary for each year of service. Final Average Salary is based on the highest consecutive 48 months of the final 60 months of service.

Early Retirement at age 50 with 10 or more years of service but with a penalty of ½% for each month prior to age 55.

Annual Salary capped at \$106,800 increased yearly by the lesser of the Consumer Price Index- Urban (CPI-U) or 3%. The Salary cap for valuations beginning in 2023 is \$134,071.

Minimum Monthly Benefit: \$1,159.27

Maximum Benefit Percentage: 75% of salary

Termination Retirement Pension

Separation of service prior to meeting retirement eligibility after completion of at least 10 years of creditable service.

Termination Pension Amount

Tier 1 - Commencing at age 60 (or age 50 if at least 20 years of creditable service at termination), an amount equal to the monthly rate of compensation based on rank at separation multiplied by the applicable percentage below:

<u>Years of Credited Service</u>	<u>Applicable Percentage</u>
10	15.0%
11	17.6%
12	20.4%
13	23.4%
14	26.6%
15	30.0%
16	33.6%
17	37.4%
18	41.4%
19	45.6%

For termination after at least 20 years of creditable service, 2½% of annual salary held on the last day of service times years of creditable service.

Tier 2 - Commencing at age 55 (or age 50 but with a penalty of ½% for each month prior to age 55), 2½% of Final Average Salary for each year of service. Final Average Salary is based on the highest consecutive 48 months of the final 60 months of service.

Pension Increase Non-Disabled

Tier 1 - 3% increase of the original pension amount after attainment of age 55 for each year elapsed since retirement, followed by an additional 3% of the original pension amount on each January 1 thereafter. Effective July 1, 1993, 3% of the amount of pension payable at the time of the increase including increases previously granted, rather than 3% of the originally granted pension amount.

Tier 2 - The lesser of ½ of the Consumer Price Index-Urban (CPI-U) or 3% increase of the original pension amount after attainment of age 60 and an additional such increase of the original pension amount on each January 1 thereafter.

Disabled

3% increase of the original pension amount after attainment of age 60 for each year he or she received pension payments, followed by an additional 3% of the original pension amount on each January 1 thereafter.

Pension to Survivors (4-114)

Death Benefit

Tier 1 - 54% of annual salary based on attained rank at date of separation of service to surviving spouse, plus 12% of such salary to dependent children under 18.

Tier 2 - 66 2/3% of pension amount to surviving spouse (or dependent children), subject to the following increase: The lesser of ½ of the Consumer Price Index-Urban (CPI-U) or 3% increase of the original pension amount after attainment of age 60 and an additional such increase of the original pension amount on each January 1 thereafter.

Tier 1 / Tier 2 - Greater of 100% of monthly retirement benefit or 54% of annual salary if completed 20 years of service or on disability retirement.

Tier 1 / Tier 2 - 100% of annual salary if death occurs in the line of duty.

Minimum Survivor Pension

\$1,159.27 per month.

Disability Pension - Line of Duty (4-110)

Eligibility

Suspension or retirement from fire service due to sickness, accident or injury while on duty.

Pension

Greater of 65% of salary attached to rank at date of suspension or retirement and the retirement pension available. Minimum Benefit: \$1,159.27 per month.

Disability Pension - Not on Duty (4-111)

Eligibility

Suspension or retirement from fire service for any cause other than while on duty.

Pension

50% of salary attached to rank at date of suspension or retirement.

Disability Pension - Occupational Disease (4-110.1)

Eligibility

Suspension or retirement from service after 5 years of service from causes of heart disease, cancer, tuberculosis or other lung disease.

Pension

Greater of 65% of salary attached to rank at date of suspension or retirement and the retirement pension available. Minimum Benefit: \$1,159.27 per month.

Other Provisions

Refund (4-116)

At death with no survivors, contributions are returned to estate.

At termination with less than 20 years of service, contributions are refunded upon request.

Contributions by Firefighters (4-118.1)

9.455% of salary including longevity, but excluding overtime pay, holiday pay, bonus pay, merit pay or other cash benefit. Additional 1% of salary if combined service credit option is selected.

Actuarial Accrued Liability

See ***Entry Age Normal Cost Method*** and ***Projected Unit Credit Cost Method***.

Actuarial Assumptions

The economic and demographic predictions used to estimate the present value of the plan's future obligations. They include estimates of investment earnings, salary increases, mortality, withdrawal and other related items. The *Actuarial Assumptions* are used in connection with the *Actuarial Cost Method* to allocate plan costs over the working lifetimes of plan participants.

Actuarial Cost Method

The method used to allocate the projected obligations of the plan over the working lifetimes of the plan participants. Also referred to as an *Actuarial Funding Method*.

Actuarial Funding Method

See *Actuarial Cost Method*

Actuarial Gain (Loss)

The excess of the actual *Unfunded Actuarial Accrued Liability* over the expected *Unfunded Actuarial Accrued Liability* represents an *Actuarial Loss*. If the expected *Unfunded Actuarial Accrued Liability* is greater, an *Actuarial Gain* has occurred.

Actuarial Present Value

The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of *Actuarial Assumptions*.

Actuarial Value of Assets

The asset value derived by using the plan's *Asset Valuation Method*.

Asset Valuation Method

A valuation method designed to smooth random fluctuations in asset values. The objective underlying the use of an asset valuation method is to provide for the long-term stability of employer contributions.

Employee Retirement Income Security Act of 1974 (ERISA)

The primary federal legislative act establishing funding, participation, vesting, benefit accrual, reporting, and disclosure standards for pension and welfare plans.

Entry Age Normal Cost Method

One of the standard actuarial funding methods in which the *Present Value of Projected Plan Benefits* of each individual included in the *Actuarial Valuation* is allocated on a level basis over the earnings of the individual between entry age and assumed exit age(s). The portion of this *Actuarial Present Value* allocated to a valuation year is called the *Normal Cost*. The portion of this *Actuarial Present Value* not provided for at a valuation date by the *Actuarial Present Value* of future *Normal Costs* is called the *Actuarial Accrued Liability*.

GLOSSARY (Continued)

Normal Cost

The portion of the *Present Value of Projected Plan Benefits* that is allocated to a particular plan year by the *Actuarial Cost Method*. See *Entry Age Normal Cost Method* for a description of the Normal Cost under the *Entry Age Normal Cost Method*. See *Projected Unit Credit Cost Method* for a description of the Normal Cost under the *Projected Unit Credit Cost Method*.

Present Value of Future Normal Costs

The present value of future normal costs determined based on the *Actuarial Cost Method* for the plan. Under the *Entry Age Normal Cost Method*, this amount is equal to the excess of the *Present Value of Projected Plan Benefits* over the sum of the *Actuarial Value of Assets* and *Unfunded Actuarial Accrued Liability*.

Present Value of Projected Plan Benefits

The present value of future plan benefits reflecting projected credited service and salaries. The present value is determined based on the plan's actuarial assumptions.

Projected Unit Credit Cost Method

One of the standard actuarial funding methods in which the *Present Value of Projected Plan Benefits* of each individual included in the *Actuarial Valuation* is allocated by a consistent formula to valuation years. The *Actuarial Present Value* allocated to a valuation year is called the *Normal Cost*. The *Actuarial Present Value* of benefits allocated to all periods prior to a valuation year is called the *Actuarial Accrued Liability*.

Unfunded Actuarial Accrued Liability

The excess of the *Actuarial Accrued Liability* over the *Actuarial Value of Assets*.

SECTION 5 - SUMMARY OF ACTUARIAL ASSUMPTIONS AND COST METHODS

Nature of Actuarial Calculations

The results documented in this report are estimates based on data that may be imperfect and on assumptions about future events, some of which are mandated assumptions. Certain provisions may be approximated or deemed immaterial and therefore are not valued. Assumptions may be made about participant data or other factors. A range of results, different from those presented in this report could be considered reasonable. The numbers are not rounded, but this is for convenience and should not imply precisions, which is not inherent in actuarial calculations.

Actuarial Assumption	Annual Actuarial Valuation Statutory Minimum	Annual Actuarial Valuation Funding Policy Amount for Tax Levy																																																																																																																																																																																																
Interest	6.75% per annum	6.75% per annum																																																																																																																																																																																																
Mortality	<p>PubS-2010 base rates projected generationally with Scale MP2021.</p> <p>Rates (probability of death at each age) have been adjusted by a factor of 1.081 for healthy male retirees, 1.178 for disabled male retirees, and 1.098 female surviving spouses.</p>	<p>PubS-2010 base rates projected generationally with Scale MP2021.</p> <p>Rates (probability of death at each age) have been adjusted by a factor of 1.081 for healthy male retirees, 1.178 for disabled male retirees, and 1.098 female surviving spouses.</p>																																																																																																																																																																																																
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Salary Increase	Graded by service from 12.50% to ultimate of 4.00%.	Graded by service from 12.50% to ultimate of 4.00%.																				
Payroll Growth	3.00% per annum	3.00% per annum																				
Percentage Married	80% are married, females are assumed to be 3 years younger	80% are married, females are assumed to be 3 years younger																				
Asset Valuation Method	Assets are valued at fair market value and smoothed over three years, reflecting gains and losses at 33-1/3% per year.	Assets are valued at fair market value and smoothed over three years, reflecting gains and losses at 33-1/3% per year.																				
Actuarial Cost Methods	<p>Projected Unit Credit Cost Method</p> <p>This is the mandated actuarial method to be used in determining the statutory contribution requirements and under PA 096-1495. This method determines the present value of projected benefits and prorates the projected benefit by service to date to determine the accrued liability. Amounts attributable to past service are amortized as a level percentage of pay with the goal of reaching 90% of the accrued liability by 2040.</p>	<p>Entry Age Normal Cost Method</p> <p>This method projects benefits from entry age to retirement age and attributes costs over total service, as a level percentage of pay. Amounts attributable to past service have been amortized over 18 years on a closed basis as a level percentage of pay.</p>																				

SECTION 6 - TWENTY YEAR CASH FLOW PROJECTION

The information contained in the following charts are estimates only, intended to illustrate patterns of funding and cash flows rather than absolute values. These estimates are based upon the actuarial assumptions and funding methods outlined in the January 1, 2023 actuarial valuation report. The values are illustrated predicated upon a diversified portfolio according to the current investment policy and asset allocations. Any changes in the investment policy or asset allocation may affect the results and nullify the contribution patterns illustrated. Actual experience may differ significantly from that assumed and produce significantly different results than those presented in the charts. Many factors may change which affect results and therefore these projections should not be relied upon as other than estimates depicting trends. The projections are based upon an “open group” methodology which replaces active members expected to leave the group with hypothetical new employees with characteristics as assumed in the new entrant profile.

Fiscal Year	Accrued Liability			Actuarial Value of Assets	Unfunded Liability	Annual Payroll	Employer Contributions	Employer Contribution as a Percent of Payroll	Employee Contributions	Investment Income	Total Revenue	Benefit Payments	Excess of Revenue over Payments
	Current Members	Future New Entrants	Total										
2023	189,539,868	-	189,539,868	147,835,727	41,704,141	12,439,265	5,880,365	47.27%	1,176,133	1,046,401	8,102,899	9,266,379	(1,163,480)
2024	196,482,741	-	196,482,741	146,672,247	49,810,494	12,781,514	6,653,027	52.05%	1,208,492	(1,486,553)	6,374,966	9,868,572	(3,493,606)
2025	203,119,238	151,601	203,270,839	143,178,641	60,092,198	13,170,222	7,689,493	58.39%	1,245,244	8,504,801	17,439,539	10,506,217	6,933,322
2026	209,377,969	479,496	209,857,465	150,111,963	59,745,502	13,618,453	7,886,739	57.91%	1,287,625	9,345,414	18,519,778	11,184,521	7,335,257
2027	215,198,196	1,001,749	216,199,945	157,447,220	58,752,725	14,116,272	8,059,541	57.09%	1,334,694	10,066,823	19,461,057	11,807,914	7,653,143
2028	220,603,558	1,742,910	222,346,468	165,100,363	57,246,105	14,673,313	8,219,768	56.02%	1,387,362	10,593,572	20,200,702	12,436,453	7,764,249
2029	225,563,604	2,722,552	228,286,156	172,864,612	55,421,544	15,262,000	8,382,784	54.93%	1,443,022	11,120,220	20,946,026	13,008,450	7,937,576
2030	230,099,715	3,972,127	234,071,842	180,802,189	53,269,653	15,913,417	8,550,630	53.73%	1,504,614	11,656,087	21,711,331	13,567,673	8,143,658
2031	234,200,908	5,505,068	239,705,976	188,945,846	50,760,130	16,561,564	8,742,042	52.79%	1,565,896	12,208,799	22,516,737	14,105,583	8,411,154
2032	237,893,044	7,336,485	245,229,529	197,357,000	47,872,529	17,208,660	8,936,061	51.93%	1,627,079	12,783,416	23,346,556	14,610,106	8,736,450
2033	241,193,106	9,470,988	250,664,094	206,093,450	44,570,644	17,840,266	9,134,394	51.20%	1,686,797	13,383,788	24,204,979	15,055,863	9,149,116
2034	244,145,997	11,919,890	256,065,887	215,242,566	40,823,321	18,443,446	9,339,832	50.64%	1,743,828	14,000,063	25,083,723	15,543,423	9,540,300
2035	246,685,518	14,709,913	261,395,431	224,782,866	36,612,565	18,997,260	9,527,865	50.15%	1,796,191	14,645,791	25,969,847	15,977,531	9,992,316
2036	248,808,823	17,865,692	266,674,515	234,775,181	31,899,334	19,554,048	9,723,712	49.73%	1,848,835	15,326,113	26,898,661	16,396,273	10,502,388
2037	250,520,301	21,405,931	271,926,232	245,277,569	26,648,663	20,110,774	9,926,312	49.36%	1,901,474	16,046,427	27,874,213	16,787,569	11,086,644
2038	251,842,682	25,350,293	277,192,975	256,364,213	20,828,762	20,668,557	10,120,076	48.96%	1,954,212	16,811,639	28,885,927	17,146,395	11,739,532
2039	252,795,908	29,715,364	282,511,272	268,103,745	14,407,527	21,238,421	10,289,571	48.45%	2,008,093	17,624,373	29,922,037	17,504,252	12,417,785
2040	253,372,020	34,520,231	287,892,251	280,521,530	7,370,721	21,816,737	10,357,576	47.48%	2,062,772	18,486,618	30,906,967	17,866,999	13,039,968
2041	253,556,985	39,786,303	293,343,288	293,561,498	-	22,393,998	2,515,644	11.23%	2,117,353	19,217,558	23,850,555	18,286,147	5,564,408
2042	253,267,987	45,540,362	298,808,349	299,125,906	-	22,969,052	2,541,914	11.07%	2,171,724	19,730,660	24,444,298	18,678,606	5,765,692



**Board of Trustees of the Firefighters Pension Fund
8/14/2023**

Item: Compliance

Department: Fire

Annual Police & Fire Pension Compliance Report

ATTACHMENTS:

Description	Type
Annual Pension Compliance Report 2023	Report

I N T E R

O F F I C E

MEMO

To: Randy Recklaus, Village Manager
From: Tom Kuehne, Finance Director/Treasurer
Date: June 12, 2023
Subject: ANNUAL POLICE AND FIREFIGHTER PENSION REPORTS

In compliance with the Illinois Compiled Statutes outlined in ILCS 5/4-134, the Police and Firefighter Pension Boards are required to provide a report to the Village Board on the financial condition of their respective funds. The attached reports are in addition to the public safety pension information that is already provided in the Village's Annual Comprehensive Financial Report.

The annual pension report to the Village presents selected data from the most recent actuarial report prepared by the independent actuarial firm, MWM Consulting Group as of January 1, 2023. Each report also includes the annual actuarial requirement for the respective 2023 pension levies, which will be accounted for in the Village's budget and financial statements for the 2024 Budget. These reports will also be posted on the Village's website under the Finance Department tab.

To offset some of the volatility in the financial markets, the actuarial gain or loss on investments is smoothed over three years. Each fund experienced significant investment losses for 2022. This resulted in a decrease in the funded ratio for both the Police Pension Fund (88.09% to 87.76%) and the Firefighter's Pension Fund (80.85% to 78.53%). The proposed 2023 levies for the Police and Firefighter's Pension Funds both match the Annual Required Contribution (ARC) for each fund. The ARC is calculated on an annual basis by the Village's actuary, based on the actuarial value of assets, unfunded actuarial liability, an assumed rate of return, actual investment returns, and other assumptions. Due to the 2022 investment losses, the ARC or property tax levies for each of the public safety pension funds is increasing over the prior year's levy.

No Board action is needed on this memo. It is provided to fulfill the aforementioned statutory provision.

C: Adam Sielig, President, Firefighter Pension Fund
Petar Milutinovic, President, Police Pension Fund
Mary Juarez, Assistant Finance Director

**ARLINGTON HEIGHTS POLICE PENSION FUND
ANNUAL REPORT TO THE VILLAGE BOARD
FOR THE 2023 LEVY (2024 BUDGET)**

Source: Actuarial Valuation as of January 1, 2023, MWM Consulting Group

Actuarial value of assets		\$179,766,559
Total actuarial liability		(\$204,830,284)
Unfunded actuarial liability*		(\$25,063,725)
Funded ratio		87.76%
Annual actuarial requirement for 2023		<u>\$4,189,711</u>
Village contribution as percent of Police participant payroll		34.00%
Projected employee contributions		\$1,222,153
Employee contribution rate per State Statute		9.91%
Actuarial assumed investment return		6.75%
Actual investment return		-13.73%
Assumed investment return for 12 month period ended December 31, 2022		\$11,648,269
Actual Investment return for 12 month period ended December 31, 2022		(\$23,697,368)
Actuarial investment gain/(loss) smoothed over three years:		
One-third of investment gain/(loss) for 2022	(\$11,781,879)	
One-third of investment gain/(loss) for 2021	\$5,455,305	
One-third of investment gain/(loss) for 2020	\$2,936,249	
Total smoothed actuarial gain/(loss)		(\$3,390,325)
Number of active members contributing to the Police Pension Fund		107
Number of inactive members		12
Number of members receiving benefits/expense	124/	\$10,296,202

	<u>Tier 1</u>	<u>Tier 2</u>	<u>Total</u>
Vested Active	49	5	54
Non-Vested Active	0	53	53
Terminated - Inactive	5	7	12
Retirees	96	0	96
Surviving Spouses	16	0	16
<u>Disability Participants</u>	12	0	12
Tot	178	65	243

*The unfunded actuarial liability represents the difference between the actuarial value of pension fund assets less the actuarial liability. To avoid unnecessary market fluctuations, actuarial assets are determined by applying an assumed rate of investment return and smoothing the gains/(losses) of the last three years. The actuarial liability represents the present value of lifetime benefits earned to date of all plan participants, including current Police Officers. The unfunded actuarial liability is amortized over the years remaining through 2040.

To determine the annual required contribution or pension property tax amount for the Village, the normal cost of the Police pension plan is added to the amortized value of the fund's unfunded liability.

Police Pension Fund Report (page 2)

The investment policy of the Police Pension Fund is established in accordance with Illinois State Statutes, 40 ILCS 5/1-113.2-.4, and is available upon request. The attached pie chart depicts the fund's assets at market value as of December 31, 2022, the most recent audited fiscal year-end.

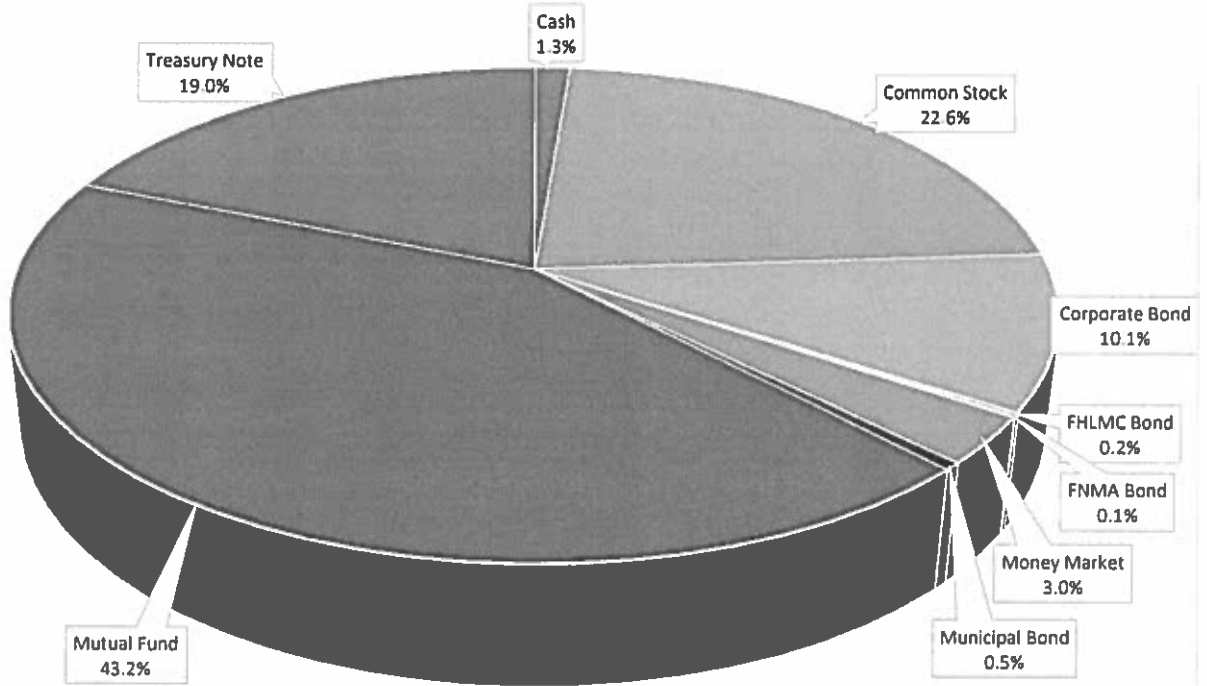
CERTIFICATION:

I, PETAR MILUTINOVIC President of the Police Pension Board,
Village of Arlington Heights, Illinois, do hereby certify that this document is a true and correct copy of:
"Required Reporting to Municipality By Pension Board" as outlined in 40 ILCS 5/4-134.

Witness my hand this 13th day of JUNE, 2023.

 President
Arlington Heights Police Pension Board

Police Pension Portfolio Holdings Distribution by Security Type



Security Type	Face Amount/Shares	Cost Value	% of Portfolio	Market Value
Cash	1,991,859.79	1,991,859.79	1.3%	1,991,859.79
Common Stock	575,575.00	29,969,519.37	22.6%	35,450,827.30
Corporate Bond	17,130,186.22	17,122,033.99	10.1%	15,815,578.14
FHLMC Bond	398,298.00	413,883.42	0.2%	355,707.64
FNMA Bond	106,125.16	109,015.64	0.1%	102,636.83
Money Market	4,776,590.89	4,776,590.89	3.0%	4,776,590.89
Municipal Bond	760,000.00	795,098.80	0.5%	727,371.80
Mutual Fund	535,652.72	54,298,797.90	43.2%	67,677,837.40
Treasury Note	33,009,000.00	31,469,732.36	19.0%	29,746,388.17
TOTAL / AVERAGE	59,283,287.78	140,946,532.16	100%	156,644,797.96

**ARLINGTON HEIGHTS FIREFIGHTERS' PENSION FUND
ANNUAL REPORT TO THE VILLAGE BOARD
FOR THE 2023 LEVY (2024 BUDGET)**

Source: Actuarial Valuation as of January 1, 2023, MWM Consulting Group

Actuarial value of assets	\$147,835,727
Total actuarial liability	(\$188,260,944)
Unfunded actuarial liability*	(\$40,425,217)
Funded actuarial ratio	78.53%
Annual actuarial requirement for 2023	<u>\$5,880,365</u>

Village contribution as percent of Firefighter/Paramedic participant payroll	47.30%
Projected employee contributions	\$1,176,133
Employee contribution rate per State Statute	9.455%

Actuarial assumed investment return	6.75%
Actual investment return	-14.76%
Assumed investment return for 12 month period ended December 31, 2022	\$9,775,088
Actual investment return for 12 month period ended December 31, 2022	(\$21,375,428)
Actuarial investment gain/(loss) smoothed over three years:	

One-third of investment gain/(loss) for 2022	\$10,383,505)	
One-third of investment gain/(loss) for 2021	\$2,069,993	
One-third of investment gain/(loss) for 2020	\$1,811,697	
Total smoothed actuarial gain/(loss)		(\$6,501,815)

Number of active members contributing to the Firefighters' Pension Fund		107
Number of inactive members		3
Number of members receiving benefits/expense	110/	\$7,608,141

	<u>Tier 1</u>	<u>Tier 2</u>	<u>Total</u>
Vested Active	72	7	79
Non-Vested Active	0	28	28
Terminated - Inactive	1	2	3
Retirees	65	0	65
Surviving Spouses	19	0	19
Minor Dependents	1	0	1
<u>Disability Participants</u>	24	1	25
Tot	182	38	220

*The unfunded actuarial liability represents the difference between the actuarial value of pension fund assets less the actuarial liability. To avoid unnecessary market fluctuations, actuarial assets are determined by applying an assumed rate of investment return and smoothing the gains/(losses) of the last three years. The actuarial liability represents the present value of lifetime benefits earned to date of all plan participants, including current Firefighters/Paramedics. The unfunded actuarial liability is amortized over the years remaining through 2040.

To determine the annual required contribution or pension property tax amount for the Village, the normal cost of the Firefighters' pension plan is added to the amortized value of the fund's unfunded liability.

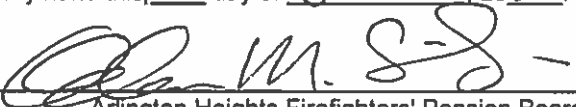
Firefighters' Pension Fund Report (page 2)

The investment policy of the Firefighters' Pension Fund is established in accordance with Illinois State Statutes, 40 ILCS 5/1-113.2-.4, and is available upon request. The attached pie chart depicts the fund's assets at market value as of December 31, 2022, the most recent audited fiscal year-end.

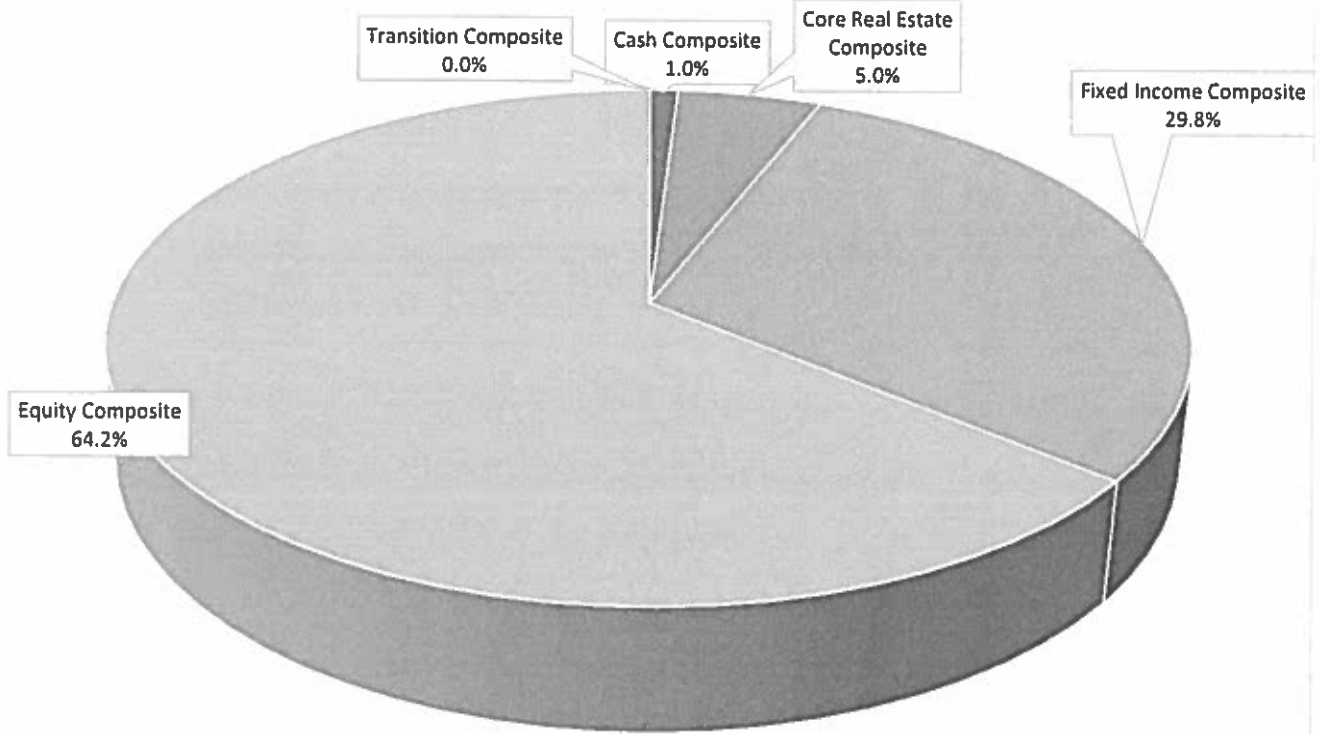
CERTIFICATION:

I, ADAM SIELIG, President of the Firefighters' Pension Board, Village of Arlington Heights, Illinois, do hereby certify that this document is a true and correct copy of: "Required Reporting to Municipality By Pension Board" as outlined in 40 ILCS 5/4-134.

Witness my hand this 20th day of June, 2023.

, President
Arlington Heights Firefighters' Pension Board

Fire Pension Portfolio Holdings Distribution by Security Type



Security Type	% of Portfolio	Market Value
Cash Composite	1.0%	1,148,866.41
Core Real Estate Composite	5.0%	6,050,574.09
Fixed Income Composite	29.8%	35,815,647.95
Equity Composite	64.2%	77,120,315.76
Transition Composite	0.0%	899.56
TOTAL / AVERAGE	100%	120,136,303.78

*Based on December 31, 2022 IFPIF Quarterly Statement and the Arlington Heights Firefighter's Pension Fund ownership portion.



**Board of Trustees of the Firefighters Pension Fund
8/14/2023**

Item: Payment of Bills - Q2, 2023

Department: Fire

Payment of Bills - Q2, 2023

ATTACHMENTS:

Description

Payment of Bills - 2Q, 223

Type

Report

**FIREFIGHTERS' PENSION FUND
 CALENDAR YEAR ENDING 12 / 31 / 2023
 CHECK REGISTER AND JOURNAL VOUCHER PAYMENTS**

<u>Check Number</u>	<u>JV or Group Number</u>	<u>Date</u>	<u>Payee</u>	<u>Description</u>	<u>Expense</u>	<u>MONTHLY TOTAL</u>
W/T	01-004	01/05/23	Collins Radja & Hartwell	Legal Services	9,575.00	
741	01-004	01/18/23	ExamWorks	Medical Exams	7,050.00	
742	01-004	01/31/23	1099 Pro LLC	1099 Services	185.44	16,810.44
W/T	02-204	02/22/23	Collins Radja & Hartwell	Legal Services	6,401.75	
743	02-204	02/27/23	Void		0.00	6,401.75
744	03-011	03/31/23	Kathleen Bono, CSR	Court Reporting	632.90	
745	03-011	03/31/23	IPPFA	Harris Training	500.00	
746	03-011	03/31/23	Collins Radja & Hartwell	Legal Services	5,637.50	6,770.40
747	04-145	04/30/23	Summit Print Solutions	Office Supplies	256.00	
748	04-145	04/30/23	Petrucci Orthopedics	Medical Exams	2,700.00	
W/T	04-145	04/30/23	Collins Radja & Hartwell	Legal Services	10,933.28	13,889.28
749	05-467	05/31/23	Laura Potts	Secretarial Services	625.63	625.63
					44,497.50	



**Board of Trustees of the Firefighters Pension Fund
8/14/2023**

Item: FPI - AH

Department: Fire

FPIF - AH Pension Fund Summary as of May 2023

ATTACHMENTS:

Description	Type
AH Pension Fund Summary - May 2023	Report

Arlington Heights Firefighters Pension Fund

Statement of Results

Illinois Firefighters Pension Investment Fund

Currency: USD (\$)	May 2023	2023 YTD
Beginning NAVs:		
Beginning NAV	127,580,802.99	120,136,303.78
Contributions	-	-
Withdrawals	-	-
Net Time Weighted Activity	-	
Allocation Balance	127,580,802.99	
Allocation Percent	1.66%	
Income & Expenses:		
Unrealized Gain/Loss	-1,788,574.28	8,177,100.07
Realized Gain/Loss	-6,428.19	-3,021,396.30
Dividend Income	86,614.13	346,479.52
Interest Income	131,017.06	400,069.16
Other Income	-	3.16
Total Income	-1,577,371.28	5,902,255.61
Administrator Expenses (FPIF)	-	10,408.59
Other Fee & Expenses (FPIF)	1,667.15	23,492.01
Other Expenses	449.23	882.21
Management Fee	2,209.00	4,670.25
Performance Fee	-	-
Total Fee & Expenses	4,325.38	39,453.06
Net Income	-1,581,696.66	5,862,802.55
Ending NAVs:		
Ending NAV	125,999,106.33	125,999,106.33
Rate of Returns:		
Return on Invested Capital	-1.24%	4.88%
Return on Total Assets	-1.24%	4.88%
Ownership	1.66%	

Disclaimer / Important Information:

The Plan Total reflects the total of underlying plan balances, and may not be equal to the sum of displayed columns.

Although this report has been prepared using information believed to be reliable, it may contain information provided by third parties or derived from third party information, and/or information that may have been obtained from, categorized or otherwise reported based upon client direction. The Northern Trust Company does not guarantee the accuracy, timeliness or completeness of any such information. The information included in this report is intended to assist clients with their financial reporting needs, but you must consult with your accountants, auditors and/or legal counsel to ensure your accounting and financial reporting complies with applicable laws, regulations and accounting guidance. The Northern Trust Company and its affiliates shall have no responsibility for the consequences of investment decisions made in reliance on information contained in this report.



**Board of Trustees of the Firefighters Pension Fund
8/14/2023**

Item: FPIF - Consolidated

Department: Fire

FPIF - Consolidated Fund as of May 2023

ATTACHMENTS:

Description	Type
FPIF - Consolidated Pension Fund as of May 2023	Report



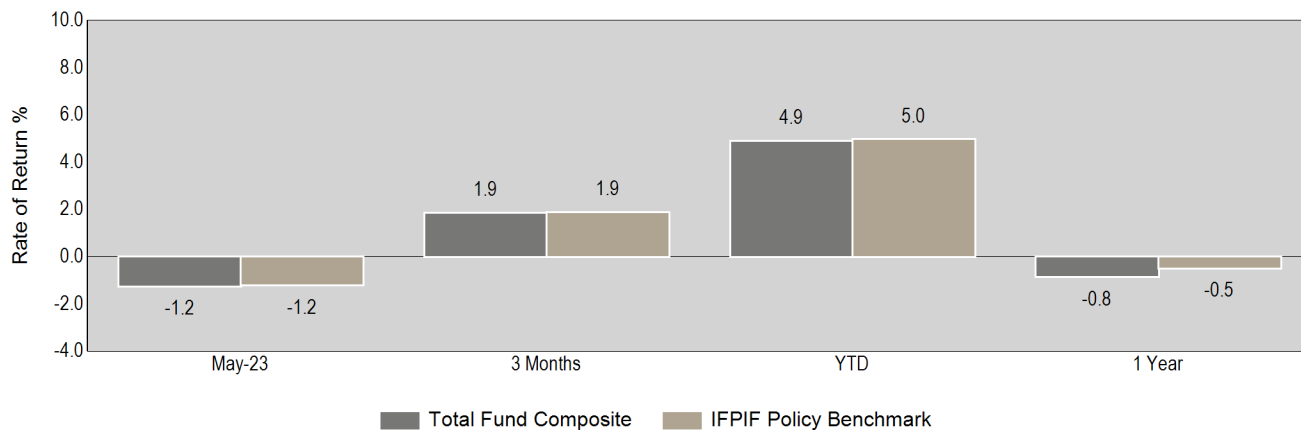
Illinois Firefighters' Pension Investment Fund

Monthly Summary

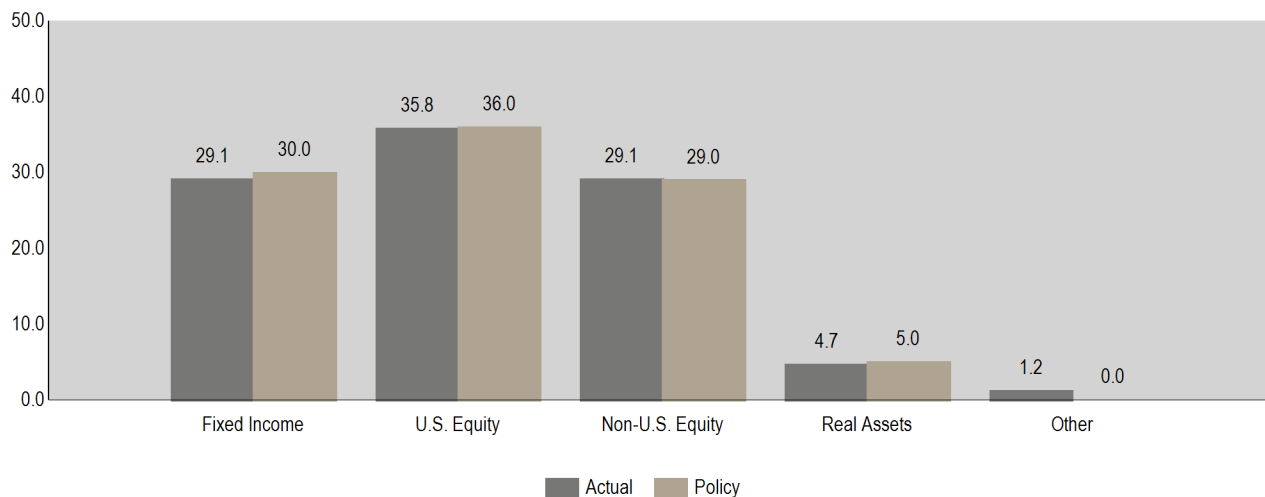
May 31, 2023

* Preliminary, subject to change

**Return Summary
Ending May 31, 2023**



Actual vs Target Allocation (%)



Return Summary - 1 Month

	Total Return
Total Fund Composite	-1.2%
IFPIF Policy Benchmark	-1.2%
Total Fund Composite excl. Member Funds	-1.2%
IFPIF Policy Benchmark	-1.2%
U.S. Equity Composite	0.3%
Russell 3000	0.4%
Non-U.S. Equity Composite	-3.4%
MSCI ACWI ex USA IMI	-3.5%
Total Fixed Income Composite	-1.0%
Bloomberg US Universal TR	-1.0%
Total Real Estate Composite	-1.2%
Real Estate Custom Benchmark	-1.3%

Total Fund Composite

Asset Allocation

Market Value: \$7,609.3 Million and 100.0% of Fund

Ending May 31, 2023

	Asset Class	Market Value	% of Portfolio	Policy %
Total Fund Composite		\$7,609,253,851	100.0%	100.0%
Total Fund Composite excl. Member Funds		\$7,609,253,851	100.0%	100.0%
Total Equity Composite		\$4,942,793,642	65.0%	65.0%
U.S. Equity Composite		\$2,727,029,709	35.8%	36.0%
Rhumblin Russell 200	Large-Cap Core	\$1,941,546,445	25.5%	25.0%
Rhumblin Russell Midcap	Mid-Cap Core	\$644,445,512	8.5%	9.0%
Rhumblin S&P 600	Small-Cap Core	\$141,037,752	1.9%	2.0%
Non-U.S. Equity Composite		\$2,215,763,933	29.1%	29.0%
International Developed Equity Composite		\$1,475,396,730	19.4%	19.0%
SSGA World ex US	Non-U.S. Large-Cap Core	\$1,257,840,253	16.5%	16.0%
SSGA World ex US Small	Non-U.S. Small-Cap Core	\$217,556,477	2.9%	3.0%
Emerging Markets Equity Composite		\$740,367,204	9.7%	10.0%
SSGA MSCI EM	Emerging Markets	\$590,844,945	7.8%	8.0%
SSGA EM Small	EM Small-Cap	\$149,522,259	2.0%	2.0%
Total Fixed Income Composite		\$2,216,394,140	29.1%	30.0%
Rate Sensitive Composite		\$1,991,133,090	26.2%	27.0%
Short-Term Treasury Composite		\$220,708,877	2.9%	3.0%
SSGA Short Treasury	Short-Term Govt. Fixed Income	\$220,708,877	2.9%	3.0%
Core Fixed Income Composite		\$1,770,424,213	23.3%	24.0%
Garcia Hamilton & Associates	Core Fixed Income	\$880,729,386	11.6%	12.0%
Brown Brothers Harriman & Co	Core Plus Fixed Income	\$889,694,827	11.7%	12.0%
Credit Fixed Income Composite		\$225,261,050	3.0%	3.0%
Emerging Markets Debt Composite		\$225,261,050	3.0%	3.0%
SSGA EM Global Diversified	EM Fixed Income	\$225,261,050	3.0%	3.0%
Total Real Estate Composite		\$356,129,172	4.7%	5.0%
Core Real Estate Composite		\$356,129,172	4.7%	5.0%
Public Real Estate Composite		\$122,041,287	1.6%	2.0%
SSGA FTSE NAREIT	U.S. REIT	\$122,041,287	1.6%	2.0%
Private Real Estate Composite		\$234,087,885	3.1%	3.0%
Principal USPA Fund	Core Real Estate	\$234,087,885	3.1%	3.0%
Cash Composite		\$93,887,941	1.2%	0.0%
Transition Composite		\$48,956	0.0%	0.0%
Member Funds Composite		--	--	0.0%

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$7,609.3 Million and 100.0% of Fund

Ending May 31, 2023

	1 Mo	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Total Fund Composite	-1.2	1.9	4.9	-0.8	--	--	--	-4.7	Oct-21
<i>IFPIF Policy Benchmark</i>	-1.2	1.9	5.0	-0.5	6.5	5.3	6.4	-4.3	Oct-21
Total Fund Composite excl. Member Funds	-1.2	1.9	4.9	-0.7	--	--	--	-5.9	Oct-21
<i>IFPIF Policy Benchmark</i>	-1.2	1.9	5.0	-0.5	6.5	5.3	6.4	-6.4	Oct-21
Total Equity Composite	-1.4	2.4	6.7	0.3	--	--	--	-7.2	Oct-21
<i>MSCI ACWI IMI Net USD</i>	-1.2	2.5	7.0	0.3	10.0	6.3	7.7	-7.5	Oct-21
U.S. Equity Composite	0.3	4.0	8.6	1.7	--	--	--	-6.3	Oct-21
<i>Russell 3000</i>	0.4	4.2	8.7	2.0	12.2	10.1	11.5	-6.5	Oct-21
Rhumblin Russell 200	1.6	8.5	12.4	4.8	--	--	--	-4.4	Oct-21
<i>Russell Top 200</i>	1.6	8.5	12.4	4.9	13.2	12.0	12.7	-4.3	Oct-21
Rhumblin Russell Midcap	-2.8	-4.8	0.6	-4.6	--	--	--	-10.8	Oct-21
<i>Russell MidCap</i>	-2.8	-4.8	0.6	-4.5	10.2	6.9	9.3	-10.7	Oct-21
Rhumblin S&P 600	-1.7	-9.4	-2.0	-7.2	--	--	--	-10.5	Oct-21
<i>S&P 600 SmallCap</i>	-1.8	-9.4	-2.0	-7.3	13.6	3.8	8.9	-10.5	Oct-21
Non-U.S. Equity Composite	-3.4	0.5	4.6	-1.8	--	--	--	-8.4	Oct-21
<i>MSCI ACWI ex USA IMI</i>	-3.5	0.2	4.6	-1.9	7.3	2.1	4.0	-8.6	Oct-21
International Developed Equity Composite	-4.2	0.3	5.9	1.0	--	--	--	-6.4	Oct-21
<i>MSCI World ex USA IMI NR USD</i>	-4.3	0.1	5.7	0.5	8.4	3.0	4.6	-6.8	Oct-21
SSGA World ex US	-4.3	0.8	6.5	1.9	--	--	--	-5.3	Oct-21
<i>MSCI World ex USA</i>	-4.4	0.5	6.2	1.5	8.8	3.4	4.5	-5.6	Oct-21
SSGA World ex US Small	-4.0	-2.2	2.6	-4.7	--	--	--	-12.7	Oct-21
<i>MSCI World ex USA Small Cap</i>	-4.2	-2.5	2.4	-5.2	6.0	0.9	5.2	-13.1	Oct-21
Emerging Markets Equity Composite	-1.5	0.7	2.0	-7.4	--	--	--	-12.6	Oct-21
<i>MSCI Emerging Markets IMI</i>	-1.3	0.5	1.7	-7.8	4.8	-0.3	2.1	-13.2	Oct-21
SSGA MSCI EM	-2.1	0.2	1.0	-8.5	--	--	--	-13.9	Oct-21
<i>MSCI Emerging Markets</i>	-1.7	0.2	1.1	-8.5	3.5	-0.7	1.9	-13.9	Oct-21
SSGA EM Small	0.9	2.7	5.9	-3.1	--	--	--	-7.9	Oct-21
<i>MSCI Emerging Markets Small Cap</i>	1.1	2.7	5.7	-3.0	15.3	2.6	3.2	-8.0	Oct-21
Total Fixed Income Composite	-1.0	1.6	2.2	-2.0	--	--	--	-6.2	Oct-21
<i>Bloomberg US Universal TR</i>	-1.0	1.9	2.5	-1.9	-3.1	1.0	1.6	-7.0	Oct-21
Rate Sensitive Composite	-1.1	1.7	2.2	-2.1	--	--	--	-5.8	Oct-21
<i>Bloomberg US Aggregate TR</i>	-1.1	2.0	2.5	-2.1	-3.6	0.8	1.4	-7.0	Oct-21
Short-Term Treasury Composite	-0.4	--	--	--	--	--	--	-0.1	Mar-23
<i>Bloomberg US Treasury 1-3 Yr TR</i>	-0.4	1.5	1.5	0.0	-0.9	1.0	0.8	-0.1	Mar-23
SSGA Short Treasury	-0.4	--	--	--	--	--	--	-0.1	Mar-23
<i>Bloomberg US Treasury 1-3 Yr TR</i>	-0.4	1.5	1.5	0.0	-0.9	1.0	0.8	-0.1	Mar-23

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$7,609.3 Million and 100.0% of Fund

Ending May 31, 2023

	1 Mo	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Core Fixed Income Composite	-1.2	1.6	2.2	-2.3	--	--	--	-6.6	Oct-21
<i>Bloomberg US Aggregate TR</i>	-1.1	2.0	2.5	-2.1	-3.6	0.8	1.4	-7.0	Oct-21
Garcia Hamilton & Associates	-1.2	--	--	--	--	--	--	-0.7	Mar-23
<i>Bloomberg US Aggregate TR</i>	-1.1	2.0	2.5	-2.1	-3.6	0.8	1.4	-0.5	Mar-23
Brown Brothers Harriman & Co	-1.1	--	--	--	--	--	--	-0.4	Mar-23
<i>Bloomberg US Aggregate TR</i>	-1.1	2.0	2.5	-2.1	-3.6	0.8	1.4	-0.5	Mar-23
Credit Fixed Income Composite	-0.6	0.9	1.6	-1.7	--	--	--	-10.5	Oct-21
<i>JP Morgan EMBI Global Diversified</i>	-0.6	0.9	1.8	-1.5	-2.7	-0.1	2.1	-10.9	Oct-21
Emerging Markets Debt Composite	-0.6	0.9	1.6	-1.7	--	--	--	-10.5	Oct-21
<i>JP Morgan EMBI Global Diversified</i>	-0.6	0.9	1.8	-1.5	-2.7	-0.1	2.1	-10.9	Oct-21
SSGA EM Global Diversified	-0.6	0.9	1.6	-1.7	--	--	--	-10.5	Oct-21
<i>JP Morgan EMBI Global Diversified</i>	-0.6	0.9	1.8	-1.5	-2.7	-0.1	2.1	-10.9	Oct-21
Total Real Estate Composite	-1.2	-3.2	-2.0	-9.4	--	--	--	-0.5	Oct-21
<i>Real Estate Custom Benchmark</i>	-1.3	-4.0	-1.9	-6.4	8.7	6.6	8.0	-0.3	Oct-21
Core Real Estate Composite	-1.2	-3.2	-2.0	-9.4	--	--	--	-0.5	Oct-21
<i>Real Estate Custom Benchmark</i>	-1.3	-4.0	-1.9	-6.4	8.7	6.6	8.0	-0.3	Oct-21
Public Real Estate Composite	-3.2	-4.9	0.2	-12.0	--	--	--	-11.8	Oct-21
<i>FTSE NAREIT Equity REIT</i>	-3.2	-4.9	0.2	-12.1	8.2	4.4	5.7	-11.8	Oct-21
SSGA FTSE NAREIT	-3.2	-4.9	0.2	-12.0	--	--	--	-11.8	Oct-21
<i>FTSE NAREIT Equity REIT</i>	-3.2	-4.9	0.2	-12.1	8.2	4.4	5.7	-11.8	Oct-21
Private Real Estate Composite	-0.2	-2.2	-3.1	-8.3	--	--	--	6.6	Oct-21
<i>NFI-ODCE Equal Weighted</i>	0.0	-3.5	-3.5	-3.7	8.2	7.1	8.8	6.7	Oct-21
Principal USPA Fund	-0.2	-2.2	-3.1	-8.3	--	--	--	6.6	Oct-21
<i>NFI-ODCE Equal Weighted</i>	0.0	-3.5	-3.5	-3.7	8.2	7.1	8.8	6.7	Oct-21

Investment Manager	Fee Schedule
Rhumbline	0.005% on the Balance
SSGA	0.011% on the Balance
Garcia Hamilton & Associates	0.14% on the First \$100 million 0.09% on the Next \$600 million 0.05% on the Balance
Brown Brothers Harriman & Co	0.17% on the First \$250 million 0.13% on the Next \$250 million 0.10% on the Balance
Principal USPA Fund	0.75% on the Balance

Benchmark History

Total Fund Composite		
4/1/2023	Present	25% Russell Top 200 / 9% Russell MidCap / 2% S&P 600 SmallCap / 16% MSCI World ex USA / 3% MSCI World ex USA Small Cap / 8% MSCI Emerging Markets / 2% MSCI Emerging Markets Small Cap / 3% Bloomberg US Treasury 1-3 Yr TR / 24% Bloomberg US Aggregate TR / 3% JP Morgan EMBI Global Diversified / 2% FTSE NAREIT Equity REIT / 3% NFI-ODCE Equal Weighted
10/1/2021	3/31/2023	25% Russell Top 200 / 9% Russell MidCap / 2% S&P 600 SmallCap / 16% MSCI World ex USA / 3% MSCI World ex USA Small Cap / 8% MSCI Emerging Markets / 2% MSCI Emerging Markets Small Cap / 3% Bloomberg 1-3 Year US TIPS / 9% Bloomberg US Credit Int TR / 6% Bloomberg US Treasury Int TR / 3% Bloomberg US Treasury Long TR / 6% Bloomberg US Securitized MBS ABS CMBS TR / 3% JP Morgan EMBI Global Diversified / 2% FTSE NAREIT Equity REIT / 3% NFI-ODCE Equal Weighted
Total Real Estate Composite		
10/31/2021	Present	60% NFI-ODCE Equal Weighted / 40% FTSE NAREIT Equity REIT

Performance Disclosures

Inception Performance	
Total Fund Composite, Private Real Estate Composite, and the Principal USPA Fund inception performance are based on an October 1, 2021 start. All other account and composite inception performance is based on an October 31, 2021 start.	
NFI-ODCE Equal Weighted	
Quarterly valued index. Value of the quarterly return is recognized in the last month of each quarter.	

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