# Agenda

Village of Arlington Heights
Board of Trustees of the Firefighters Pension Fund
Fire Station #2 Training Room
1150 N. Arlington Heights Rd., 60005
August 8, 2022
9:00 AM

## I. CALL TO ORDER

## II. ROLL CALL

## III. APPROVAL OF MINUTES

A. Approval of Minutes - May 9, 2022 Regular Meeting

## IV. PUBLIC COMMENTS

## V. CLOSED SESSION

## VI. TREASURER'S REPORT

A. Financials - June 2022
B. Annual Police and Firefighters Report for 2022
C. Actuary Report - Firefighters Pension

## VII. PAYMENT OF BILLS

A. Check Register - June 2022

## VIII. REPORTS

A. Firefighters Pension Investment Fund (FPIF) - May 2022 Arlington Heights Pension Statement

## IX. OLD BUSINESS

A. Annual Medical Evaluation Retired Disabled FF Under Age 50 - Heidi Arndorferer
B. Retirement Pension of FF William Essling - Update
C. Disability Pension 3% Increase of Retired FF Victor Tamosaitis - Update
D. Retired FF Bryan Smith - Medical Evaluation Update
E. Application of Occupational Disease Disability Pension for Chief Andrew Larson - Update

F. Pension Conversion for Retired FF John Leligdon - Update

## X. NEW BUSINESS

A. Death of Candace Nering, widow of FF Gerald Nering, on 5/29/22 - Cessation of Benefits

B. IL Public Pension Advisory Committee - Membership Renewal

C. Alliant/Mesirow Fiduciary Insurance - Policy Renewal

## XI. OTHER BUSINESS

A. FOIA request for May 9 meeting documents from "With Intelligence" financial company. Request granted and documents sent.

B. FPIF Trustee Election - October 2022

## 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 Rosangela Maldonado, at 33 S. Arlington Heights Road, Arlington Heights, Illinois 60005, rmaldonado@vah.com or (847)368-5791.

CITY OF GOOD NEIGHBORS
ARLINGTON HEIGHTS, ILLINOIS

# Board of Trustees of the Firefighters Pension Fund
## 8/8/2022

**Item:** minutes

**Department**: fire

Approval of Minutes - May 9, 2022 Regular Meeting

### ATTACHMENTS:

| **Description** | **Type** |
|---|---|
| minutes may 9, 2022 | Minutes |

# ARLINGTON HEIGHTS
# FIREFIGHTERS' PENSION BOARD

## Minutes of the Regular Meeting held on May 9, 2022

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

| | |
|---|---|
| Members in Attendance: | Mark Aleckson<br>Tom Kuehne<br>Curt Hanselman<br>Kert Evans<br>Carl Brandon |
| Others in Attendance: | Thomas Radja, Board Attorney (Collins, Radja & Hartwell)<br>Adam Sielig, Incoming Elected Trustee<br>Melissa Cayer, Public Observer<br>Keith Moens, Public Observer |

### CALL TO ORDER

Mark Aleckson called the meeting to order at 9:05 AM.  Roll was called with board members Tom Kuehne, Curt Hanselman, Mark Aleckson, Kert Evans and Carl Brandon.

Also present were Thomas Radja, Board Attorney representing Law Offices of Collins, Radja & Hartwell; FF Adam Sielig (incoming Elected Trustee), and public observers Melissa Cayer and Keith Moens.

### APPROVAL OF MINUTES

Minutes from the February 28, 2022 Regular Board Meeting and minutes from Executive Session also on February 28, 2022 were reviewed for approval.

A motion was made and seconded (T. Kuehne/C. Brandon) to approve the minutes from the Regular Board meeting on February 28, 2022.  A motion was made and seconded (C. Brandon/K. Evans) to approve the minutes from the Closed Executive Session on February 28, 2022.

Roll was called.
Ayes:  M. Aleckson, T. Kuehne, C. Hanselman, K. Evans, C. Brandon
Ayes – 5; Nays - 0.
Motion carried.

### PUBLIC COMMENTS
None

### CLOSED SESSION
None.

## TREASURER’S REPORT / DISBURSEMENTS

Tom Kuehne distributed the Financial Report and the Cash Flow Report ending March 2022.

During the 1st quarter we had a $7 million dollar loss due to a market adjustment in March. The market in general has not been doing well. It has been a difficult year so far, compared to last year. Expense side we’re at 25% and nothing surprising on the Budget side.

### Projected Cash Flow

Projection shows we will need to transfer $1 million from the State consolidated fund into our cash account to pay for upcoming pension funding. This transfer should take place in June.

Motion was made and seconded (T. Kuehne/C. Hanselman) to transfer $1 million from the Consolidated fund into the Cash fund.

Roll was called.
Ayes: M. Aleckson, T. Kuehne, C. Hanselman, K. Evans, C. Brandon
Ayes – 5; Nays - 0.
Motion carried.

## PAYMENT OF BILLS

Next, the Check Register was reviewed and Tom Kuehne asked for approval of check #708 (journal voucher 003) through check #714 (journal voucher 068).

Motion was made and seconded (C. Hanselman/C. Brandon) to approve payments of check #708 (JV 003) through check 714 (JV 068).

Roll was called.
Ayes: M. Aleckson, T. Kuehne, C. Hanselman, K. Evans, C. Brandon
Ayes – 5; Nays - 0.
Motion carried.

### Actuary Results

Tom Kuehne briefly discussed the Actuary results. In the past, our pension fund levied a little more than the Actuary side recommended. This year there is an increased assessment for Firefighters lives (based on the mortality table), and the Actuary numbers have likewise increased. At present, we remain within the Actuary results until next year. He will provide more information at the next pension board meeting.

## REPORTS

- **Firefighters Pension Investment Fund (FPIF)**
  Tom Kuehne covered the current Consolidated fund situation, indicating a down turn due to the current market.

## OLD BUSINESS

- **Annual Medical Evaluation Retired Disabled FF Under Age 50 – Heidi Arndorfer**
  Attorney Tom Radja issued a subpoena to the physician, Dr. William Bates, requesting medical records in his determination that Heidi Arndorfer continues to be disabled. He has not yet received those records and will follow up on the request.

- **Duty Disability Pension of retired FF William Essling – Execute Decision & Order**
  Tom Radja had distributed the Decision & Order document in advance of our meeting, and it was agreed that the document should be executed as written.

  Motion was made and seconded (T. Kuehne/C. Brandon) to approve and execute the Decision & Order document, denying line-of-duty disability retirement of FF William Essling.

  Roll was called.
  Ayes: M. Aleckson, T. Kuehne, C. Hanselman, K. Evans, C. Brandon
  Ayes – 5; Nays - 0.
  Motion carried.

- **Duty Disability Pension of retired FF William Essling - Update**
  Since the last meeting, a lawsuit was filed by William Essling disputing the effective date of his pension. The Village and Pension Board recently filed a motion to dismiss, and Attorney Duda has 21 days to respond. We're currently awaiting their response.

- **Disability Pension 3% Increase of Retired FF Victor Tamosaitis – Update**
  Since the last meeting retired FF Tamosaitis and his attorney have filed a lawsuit requesting the Court to dismiss the individual board members from this case. Attorney Radja then asked the Court allow more time to respond and we have until May 19 to do so. This case is related to moving his effective date of pension earlier while collecting Workers Compensation, thus considered as being on payroll. Tom Radja will file a response for distribution to the Board.

- **Retired FF Bryan Smith – Medical Evaluation Update**
  At the last Court hearing, the Judge requested additional time to take the matter under advisement before issuing a ruling. Tom Radja has not received the Judge's decision and we are still waiting. Currently there is no case law to refer to and it's an important issue as to whether a Board has the authority to request a medical evaluation after being granted disability and over 50 years of age.

- **Application for Occupational Disease Disability for Chief Andrew Larson - Update**
  Tom Radja indicated we are processing his application. There were twelve medical advisors and we have received most medical records, but are still awaiting three to submit their records. Once all records are received, we will then coordinate the appropriate physicians to review all the records.

- **Annual Confirmation Form by Retired FF Harold Calvert- Update**
  The correct annual retiree form from Harold Calvert has been received and placed in our files.

## NEW BSINESS

- **Certify Trustee Election Results**
  Due to the ending term of Trustee Kert Evans, an election was held of the Active Firefighters to elect a Trustee for a 3-year term beginning May 1, 2022. On April 29, the Village Clerk (Becky

Hume) along with Lt. Schubert, FF Dobbins, and FF Roden canvassed the results. A total of 70 ballots were received, five of which were after the deadline and thus disqualified. Votes were 41 for Adam Sielig, 4 for Albert Zloza, 19 for Brad Lindgren, and 1 for retiree FF Heidi Arndorfer. Based on the votes received, it was unofficially certified that FF Adam Sielig has been elected as Trustee.

Motion was made and seconded (M. Aleckson/C. Brandon) to certify the election results with Adam Sielig elected as Trustee for the Board.

Roll was called.
Ayes: M. Aleckson, T. Kuehne, C. Hanselman, K. Evans, C. Brandon
Ayes – 5; Nays - 0.
Motion carried.

The Board expressed gratitude to Kert Evans for his years of participation on the Board and also congratulated Adam Sielig on his election victory.

- **Trustee Board Nominations**
  Nomination of Board positions were considered.

  Motion was made and seconded (T. Kuehne/C. Brandon) to nominate Mark Aleckson as Board President and Adam Sielig is Board Secretary.

  Roll was called.
  Ayes: M. Aleckson, T. Kuehne, C. Hanselman, K. Evans, C. Brandon
  5 Ayes – 5; Nays - 0.
  Motion carried.

- **Application for Retirement – FF Peter Newman on March 18, 2022**
  FF Peter Newman submitted an application for regular pension retirement effective March 18, 2022. He was previously married and divorced, at which time he agreed to a QUILDRO document.

  The pension calculation sheet indicates Peter Newman's annual pension at $62,479.66, resulting in a monthly pension of $5,206.64. The actual payouts are $4,779.06 to retired FF Peter Newman and a QUILDRO payout of $427.56 monthly, with the first pension payment adjusted accordingly.

  Motion was made and seconded (K. Evans/C. Brandon) to approve the pension application of FF Peter Newman and the monthly pension calculation of $5,206.64, (with payouts of $4,779.06 to retiree Peter Newman and QUILDRO payout of $427.56) effective March 18, 2022.

  Roll was called.
  Ayes: M. Aleckson, T. Kuehne, C. Hanselman, K. Evans, C. Brandon
  5 Ayes – 5; Nays - 0.
  Motion carried.

- **Application for Membership – Jonathan Cvetan hired March 28, 2022**
- **Application for Membership – Brent Chubb hired April 18, 2022**

  All required forms and documents were received from the two newly hired firefighter applicants, Jonathan Cvetan and Brent Chubb.

  Motion was made and seconded (M. Aleckson/K. Evans) to accept the applications for membership from firefighters Jonathan Cvetan hired March 28, 2022, and Brent Chubb hired April 18, 2022, as members of the Arlington Heights Firefighters' Pension Fund

  Roll was called.
  Ayes: M. Aleckson, T. Kuehne, C. Hanselman, K. Evans, C. Brandon
  5 Ayes – 5; Nays - 0.
  Motion carried.

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

  It was agreed to keep all Executive Sessions minutes as confidential.

  Motion was made and seconded (K. Evans/C. Hanselman) to keep Executive Session meeting minutes as confidential.

  Roll was called.
  Ayes: M. Aleckson, T. Kuehne, C. Hanselman, K. Evans, C. Brandon
  5 Ayes – 5; Nays - 0.
  Motion carried.

- **Possible Pension Conversion – Retired FF John Leligdon**

  Retiree FF John Leligdon, now age 84, was originally granted disability pension and is now inquiring whether it is feasible to convert to a regular pension. Carl Brandon pointed out that a firefighter cannot work past age 65, so it doesn't seem reasonable that he can convert after so many years have passed.

  Tom Radja advised that the Statute permits conversion from a disability to a regular pension as long as all requisites are reached – appropriate age, combined 20 years of service, and salary attached to rank. Upon retirement, he was a Captain and that rank no longer exists. When converting to a regular pension it then becomes taxable. so the question is whether it would be beneficial to him at this after so many years. Tom Radja will send a letter to the Department of Insurance for their determination.

- **2022 Annual Medical Evaluation of Disabled Under Age 50 FF Gregory O'Rourke – Evaluation Results and Physician's Invoice**

  We received the detailed medical examination results from Dr. Petrucci indicating retired FF O'Rourke continues to be disabled. We also received the physician's invoice of $2,400.

  Motion was made and seconded (K. Evans/M. Aleckson) to approve the continuation of disability for retired FF Gregory O'Rourke, and process payment of Petrucci Orthopedics invoice of $2,400.

  Roll was called.
  Ayes: M. Aleckson, T. Kuehne, C. Hanselman, K. Evans, C. Brandon
  5 Ayes – 5; Nays - 0.

Motion carried.

## OTHER BUSINESS

Mark Aleckson discussed the FPIF Consolidated investment fund report as to whether it needs to be posted onto the Village website, in addition to the Arlington Heights FF Pension fund summary. It was agreed that having the summary for Arlington Heights pension would be sufficient. The monthly IL Consolidated investment report is available for all persons to view on the IFPIF website.

Tom Radja provided a quick update on the lawsuit related to the Illinois pension consolidation. The court met two weeks ago and the judge indicated that he will issue a ruling on May 20 as to whether the consolidation statute is legal or not. The issue being whether the consolidation is diluting the authority of the local pension boards. Tom believes there will be a motion to stay and then an appeal to the Supreme Court.

## ADJOURNMENT

As there was no other business to present before the Board, a motion was made and seconded (K. Evans/T. Kuehne) to adjourn the meeting.

Roll was called.
Ayes: M. Aleckson, T. Kuehne, C. Hanselman, K. Evans, C. Brandon
5 Ayes – 5; Nays - 0.
Motion carried.

Meeting adjourned at 10:44 AM.

**NEXT REGULAR MEETING** – Scheduled for Monday, August 8, 2022 at 9:00 AM

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Respectfully submitted,

________________________
Laura Potts
Recording Secretary

________________________
Adam Sielig
Board Secretary

CITY OF GOOD NEIGHBORS
ARLINGTON HEIGHTS, ILLINOIS

# Board of Trustees of the Firefighters Pension Fund
## 8/8/2022

**Item:** Treasurer

**Department**: Fire

Financials - June 2022

### ATTACHMENTS:

| Description | Type |
|---|---|
| Financials Q2, 2022 | Exhibits |

# Arlington Heights
# Firefighters' Pension Fund

## June 2022 Financial Report

### CY 2022 BALANCE SHEET
June 30, 2022
FIREFIGHTERS' PENSION FUND

| ASSETS | YTD ACTUAL |
|---|---:|
| **Cash and Investments** | |
| Cash and Equivalents | 1,770,116 |
| Pension Investments | 132,155,048 |
| Illinois Funds | 0 |
| | 133,925,164 |
| **Receivables** | |
| Accrued Interest | 254,073 |
| Other | 0 |
| Due From Other Funds | 0 |
| TOTAL ASSETS | 134,179,237 |
| **LIABILITIES** | |
| Accounts Payable | 0 |
| Deferred Portability Payment | 0 |
| Due To Other Funds | 0 |
| TOTAL LIABILITIES | 0 |
| NET ASSETS | 134,179,237 |

June 30, 2022

### BUDGET COMPARISON REPORT CALENDAR YEAR 2022
FIREFIGHTERS' PENSION FUND

50% of the Calendar Year

| REVENUES | 2022 BUDGET | MTD BUDGET | MTD ACTUAL | YTD BUDGET | YTD ACTUAL | UNREALIZED DOLLARS | PERCENT RECEIVED |
|---|---:|---:|---:|---:|---:|---:|---:|
| Interest on Investments | 900,000 | 75,000 | 25,472 | 450,000 | 267,237 | 632,763 | 30% |
| Market Value Adjustments | 2,000,000 | 166,666 | 324,576 | 999,996 | (14,630,683) | 16,630,683 | -732% |
| Dividend Income | 900,000 | 75,000 | 78,440 | 450,000 | 203,266 | 696,734 | 23% |
| Contributions - Participants | 1,100,000 | 91,666 | 90,778 | 549,996 | 532,777 | 567,223 | 48% |
| Contributions - R/E Tax | 4,962,000 | 0 | 11,294 | 2,778,700 | 2,741,021 | 2,220,979 | 55% |
| Portability Payments | 0 | 0 | 0 | 0 | 340 | (340) | N/A |
| Other Income | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| TOTAL | 9,862,000 | 408,332 | 530,559 | 5,228,692 | (10,886,044) | 20,748,044 | -110% |

| EXPENDITURES | 2022 BUDGET | MTD BUDGET | MTD ACTUAL | YTD BUDGET | YTD ACTUAL | AVAILABLE DOLLARS | PERCENT SPENT |
|---|---:|---:|---:|---:|---:|---:|---:|
| Service Pensions | 5,601,800 | 466,816 | 475,894 | 2,800,896 | 2,882,977 | 2,718,823 | 51% |
| Non-Duty Disability Pensions | 32,300 | 2,691 | 7,367 | 16,146 | 44,201 | (11,901) | 137% |
| Duty Disability Pensions | 1,389,300 | 115,775 | 105,619 | 694,650 | 633,712 | 755,588 | 46% |
| Surviving Spouse Pensions | 1,147,200 | 95,600 | 93,407 | 573,600 | 580,923 | 566,277 | 51% |
| Occupational Disease Pensions | 257,200 | 21,433 | 15,334 | 128,598 | 92,004 | 165,196 | 36% |
| Legal Services | 25,000 | 2,083 | 7,100 | 12,498 | 43,371 | (18,371) | 173% |
| Investment Manager Services | 25,000 | 2,083 | 0 | 12,498 | 5,000 | 20,000 | 20% |
| Investment Custodian | 1,000 | 83 | 815 | 498 | 6,017 | (5,017) | 602% |
| Bank Services | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Examinations | 10,000 | 833 | 0 | 4,998 | 7,200 | 2,800 | 72% |
| Other Services | 20,000 | 1,666 | 0 | 9,996 | 775 | 19,225 | 4% |
| Dues | 1,500 | 125 | 0 | 750 | 0 | 1,500 | 0% |
| Training | 2,000 | 166 | 0 | 996 | 0 | 2,000 | 0% |
| Postage | 400 | 33 | 0 | 198 | 0 | 400 | 0% |
| Publications/Periodicals | 500 | 41 | 0 | 246 | 0 | 500 | 0% |
| Office Supplies & Equip | 300 | 25 | 0 | 150 | 0 | 300 | 0% |
| Pension Refunds | 25,000 | 2,083 | 0 | 12,498 | 0 | 25,000 | 0% |
| Foreign Taxes Paid | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| TOTAL | 8,538,500 | 711,536 | 705,535 | 4,269,216 | 4,296,180 | 4,242,320 | 50% |
| REVENUE OVER (UNDER) EXPENDITURES | 1,323,500 | (303,204) | (174,976) | 959,476 | (15,182,224) | 16,505,724 | -1147% |
| BEG. FUND BALANCE | 149,361,460 | | | | 149,361,460 | | |
| ENDING FUND BALANCE | 150,684,960 | | | | 134,179,237 | | |

# FIRE PENSION ILLINIOS FUNDS

## Projected Cash Flow by Month 2022

| | | January 2022 | February 2022 | March 2022 | April 2022 | May 2022 | June 2022 | Projected July 2022 | Projected August 2022 | Projected September 2022 | Projected October 2022 | Projected November 2022 | Projected December 2022 | | Projected 2022 Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cash In | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | 0 |
| | From the US BANK Account | | 0 | 0 | 7,000,000 | | | | | | | | | | 7,000,000 |
| | Interest | | | | 2,181 | 4,747 | 6,140 | 3,000 | 3,000 | 2,500 | 2,500 | 2,500 | 2,000 | | 28,569 |
| Total In | | 0 | 0 | 0 | 7,002,181 | 4,747 | 6,140 | 3,000 | 3,000 | 2,500 | 2,500 | 2,500 | 2,000 | 0 | 7,028,569 |
| Cash Out | | | | | | | | | | * | | | | | |
| | Transfer to Checking Account | | | | 0 | | 2,000,000 | | 1,000,000 | | | | 1,000,000 | | 4,000,000 |
| Total Out | | 0 | 0 | 0 | 0 | 0 | 2,000,000 | 0 | 1,000,000 | 0 | 0 | 0 | 1,000,000 | | 4,000,000 |
| | Change in Cash | 0 | 0 | 0 | 7,002,181 | 4,747 | (1,993,860) | 3,000 | (997,000) | 2,500 | 2,500 | 2,500 | (998,000) | | 3,028,569 |
| | Beg Cash Balance | 0 | 0 | 0 | 0 | 7,002,181 | 7,006,929 | 5,013,069 | 5,016,069 | 4,019,069 | 4,021,569 | 4,024,069 | 4,026,569 | | 0 |
| | **Ending Cash Balance** | **0** | **0** | **0** | **7,002,181** | **7,006,929** | **5,013,069** | **5,016,069** | **4,019,069** | **4,021,569** | **4,024,069** | **4,026,569** | **3,028,569** | | **3,028,569** |

CITY OF GOOD NEIGHBORS
ARLINGTON HEIGHTS, ILLINOIS

# Board of Trustees of the Firefighters Pension Fund
## 8/8/2022

**Item:** Annual

**Department**: fire

Annual Police and Firefighters Report for 2022

### ATTACHMENTS:

| Description | Type |
|---|---|
| Annual Police & Firefighters Report for 2022 | Exhibits |

**INTER OFFICE**

# MEMO

**To:** Randy Recklaus, Village Manager
**From:** Tom Kuehne, Finance Director/Treasurer
**Date:** June 21, 2022
**Subject:** **ANNUAL POLICE AND FIREFIGHTER PENSION REPORTS**

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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 the 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, 2022. Each report also includes the annual actuarial requirement for the respective 2022 pension levies, which will be accounted for in the Village's budget and financial statements for the 2023 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. The funded ratio increased for both the Police Pension Fund (84.08% to 87.01%) and the Firefighter's Pension Fund (79.99% to 80.85%). Each fund experienced investment gains for 2021. This year's actuary reports reflected revised mortality tables which extended the lives of the municipal public safety pensioners. This put upward pressure on the annual required contribution (ARC), which was offset somewhat by positive interest earnings in 2021. The proposed 2022 levy for the Firefighter's Pension Fund will match the ARC for this fund. The Police Fund levy for 2022 will show a decrease, but will still be above the ARC, providing a small hedge against a future market downturn. The Police Pension Fund's investment portfolio has historically had a riskier profile that does better during positive markets, and the Firefighter's Pension Fund's more conservative investment structure has done better during market downturns.

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

C: Mark Aleckson, 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 2022 LEVY (2023 BUDGET)

Source: Actuarial Valuation as of January 1, 2022, MWM Consulting Group

| | |
|---|---|
| Actuarial value of assets | $173,625,279 |
| Total actuarial liability | ($199,539,605) |
| Unfunded actuarial liability* | ($25,914,326) |
| Funded ratio | 87.01% |
| Annual actuarial requirement for 2022 | $3,757,141 |

| | |
|---|---|
| Village contribution as percent of Police participant payroll | 32.00% |
| Projected employee contributions | $1,162,810 |
| Employee contribution rate per State Statute | 9.91% |

| | | |
|---|---|---|
| Actuarial assumed investment return | | 6.75% |
| Actual investment return | | 17.57% |
| Assumed investment return for 12 month period ended December 31, 2021 | | $10,209,056 |
| Actual Investment return for 12 month period ended December 31, 2021 | | $16,365,915 |
| Actuarial investment gain/(loss) smoothed over three years: | | |
| One-third of investment gain/(loss) for 2021 | $5,455,305 | |
| One-third of investment gain/(loss) for 2020 | $2,936,249 | |
| One-third of investment gain/(loss) for 2019 | $5,759,753 | |
| Total smoothed actuarial gain/(loss) | | $14,151,307 |

| | | |
|---|---|---|
| Number of active members contributing to the Police Pension Fund | | 102 |
| Number of inactive members | | 8 |
| Number of members receiving benefits/expense | 119/ | $8,876,971 |

| | Tier 1 | Tier 2 | Total |
|---|---|---|---|
| Vested Active | 47 | 5 | 52 |
| Non-Vested Active | 1 | 52 | 53 |
| Terminated - Inactive | 5 | 3 | 8 |
| Retirees | 95 | 0 | 95 |
| Surviving Spouses | 16 | 0 | 16 |
| Disability Participants | 12 | 0 | 12 |
| Tot | 176 | 60 | 236 |

*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, 2021, the most recent audited fiscal year-end.

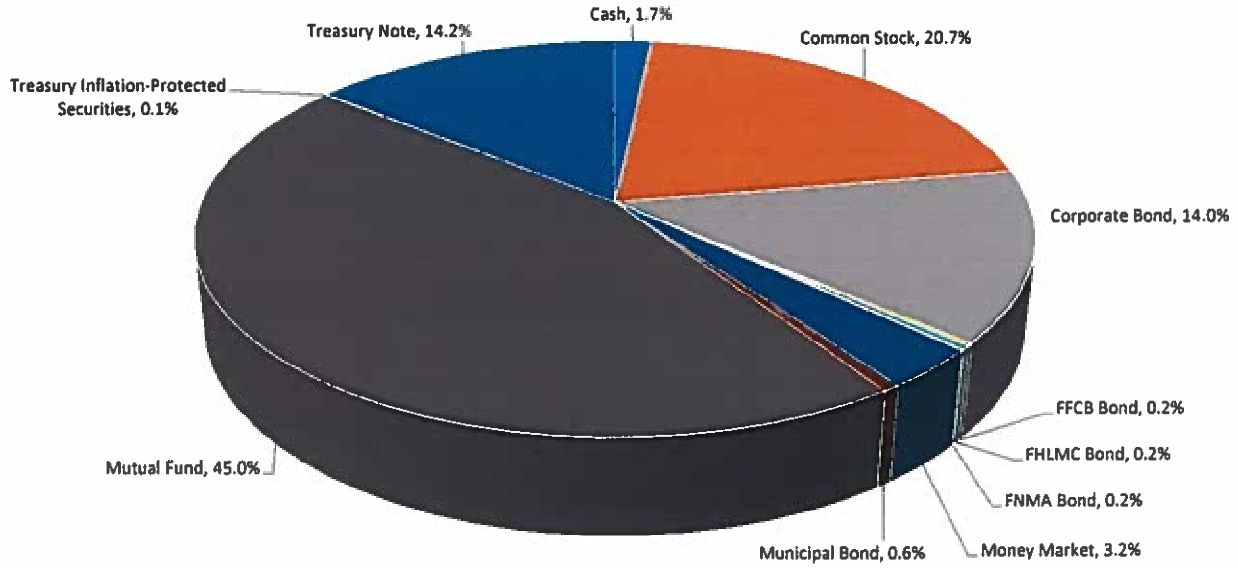
## CERTIFICATION:

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 21 day of JUNE, 2022.

______________________________, 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 | 3,105,664.44 | 3,105,664.44 | 1.7% | 3,105,664.44 |
| Common Stock | 510,903.00 | 27,442,143.94 | 20.7% | 38,430,450.80 |
| Corporate Bond | 25,381,480.45 | 25,797,026.06 | 14.0% | 25,898,064.04 |
| FFCB Bond | 370,000.00 | 370,010.00 | 0.2% | 403,307.40 |
| FHLMC Bond | 415,586.98 | 431,253.94 | 0.2% | 442,462.64 |
| FNMA Bond | 275,371.75 | 282,610.06 | 0.2% | 280,856.69 |
| Money Market | 5,951,623.51 | 5,951,623.51 | 3.2% | 5,951,623.51 |
| Municipal Bond | 980,000.00 | 1,013,458.80 | 0.6% | 1,043,308.80 |
| Mutual Fund | 524,767.35 | 53,173,998.62 | 45.0% | 83,511,242.29 |
| Treasury Inflation-Protected Securities | 175,216.00 | 173,221.62 | 0.1% | 202,605.77 |
| Treasury Note | 26,647,000.00 | 26,493,280.37 | 14.2% | 26,280,900.99 |
| **TOTAL / AVERAGE** | **64,337,613.48** | **144,234,291.36** | **100.0%** | **185,550,487.37** |

# ARLINGTON HEIGHTS FIREFIGHTERS' PENSION FUND
# ANNUAL REPORT TO THE VILLAGE BOARD
# FOR THE 2022 LEVY (2023 BUDGET)

Source: Actuarial Valuation as of January 1, 2022, MWM Consulting Group

| | |
|---|---|
| Actuarial value of assets | $145,069,772 |
| Total actuarial liability | ($179,441,272) |
| Unfunded actuarial liability* | ($34,371,500) |
| Funded actuarial ratio | 80.85% |
| Annual actuarial requirement for 2022 | $5,255,147 |

| | |
|---|---|
| Village contribution as percent of Firefighter/Paramedic participant payroll | 43.30% |
| Projected employee contributions | $1,147,187 |
| Employee contribution rate per State Statute | 9.455% |

| | | |
|---|---|---|
| Actuarial assumed investment return | | 6.75% |
| Actual investment return | | 11.52% |
| Assumed investment return for 12 month period ended December 31, 2021 | | $8,786,291 |
| Actual Investment return for 12 month period ended December 31, 2021 | | $14,996,271 |
| Actuarial investment gain/(loss) smoothed over three years: | | |
| One-third of investment gain/(loss) for 2021 | $2,069,993 | |
| One-third of investment gain/(loss) for 2020 | $1,811,697 | |
| One-third of investment gain/(loss) for 2019 | $3,151,331 | |
| Total smoothed actuarial gain/(loss) | | $7,033,021 |

| | | |
|---|---|---|
| Number of active members contributing to the Firefighters' Pension Fund | | 106 |
| Number of inactive members | | 3 |
| Number of members receiving benefits/expense | 107/ | $7,608,141 |

| | Tier 1 | Tier 2 | Total |
|---|---|---|---|
| Vested Active | 75 | 4 | 79 |
| Non-Vested Active | 0 | 27 | 27 |
| Terminated - Inactive | 1 | 3 | 4 |
| Retirees | 62 | 0 | 62 |
| Surviving Spouses | 20 | 0 | 20 |
| Minor Dependents | 2 | 0 | 2 |
| Disability Participants | 23 | 0 | 23 |
| Tot | 183 | 34 | 217 |

*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, 2021, the most recent audited fiscal year-end.

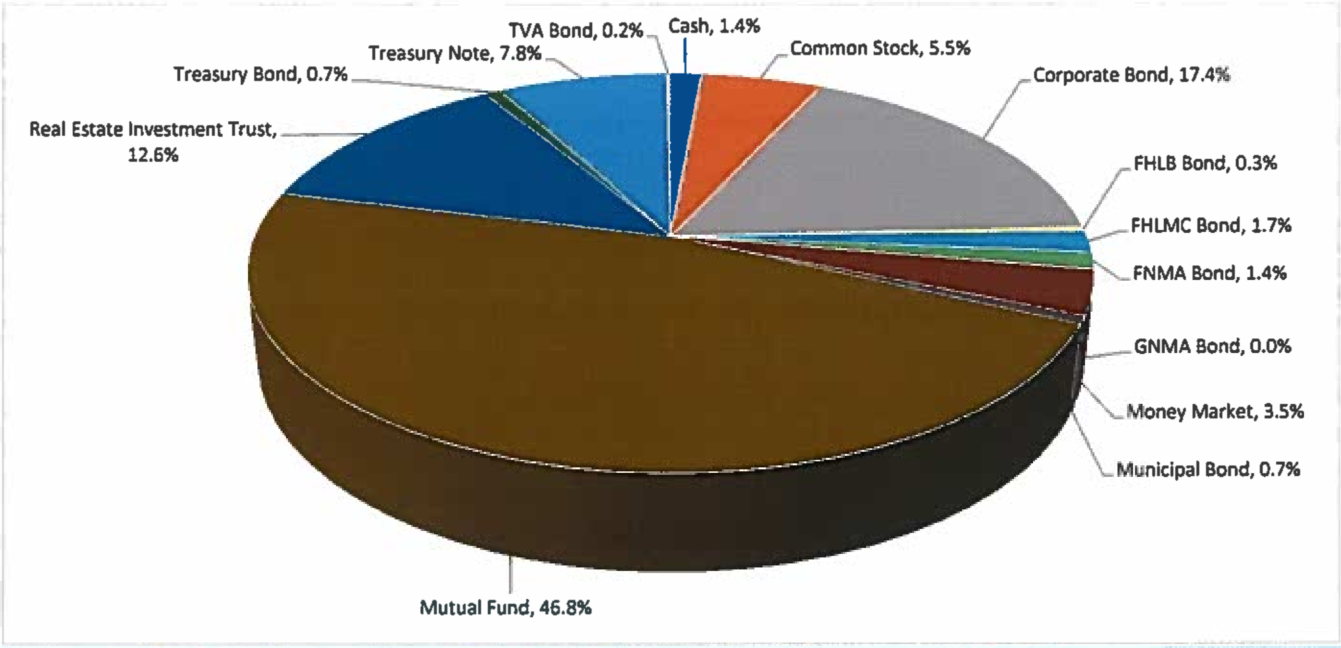
## CERTIFICATION:

I, Mark Aleckson, 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 27 day of June, 2022.

______________________, President
Arlington Heights Firefighters' Pension Board

## Fire Pension Portfolio Holdings Distribution by Security Type



| Security Type | Face Amount/Shares | Cost Value | % of Portfolio | Market Value |
|---|---|---|---|---|
| Cash | 2,104,137.73 | 2,104,137.73 | 1.4% | 2,104,137.73 |
| Common Stock | 134,967.00 | 6,441,251.45 | 5.5% | 8,215,780.15 |
| Corporate Bond | 24,776,265.05 | 26,067,685.74 | 17.4% | 25,893,158.62 |
| FHLB Bond | 420,000.00 | 467,419.50 | 0.3% | 469,203.00 |
| FHLMC Bond | 2,445,107.44 | 2,519,074.38 | 1.7% | 2,552,309.19 |
| FNMA Bond | 2,162,209.48 | 2,131,688.60 | 1.4% | 2,126,758.47 |
| GNMA Bond | 28,268.93 | 28,191.32 | 0.0% | 31,173.60 |
| Money Market | 5,265,952.87 | 5,265,952.87 | 3.5% | 5,265,952.87 |
| Municipal Bond | 985,000.00 | 998,173.30 | 0.7% | 996,905.30 |
| Mutual Fund | 1,207,619.70 | 38,615,548.63 | 46.8% | 69,720,117.45 |
| Real Estate Investment Trust | 264,316.28 | 71.08 | 12.6% | 18,788,299.40 |
| Treasury Bond | 1,165,000.00 | 1,121,720.49 | 0.7% | 1,086,455.70 |
| Treasury Note | 11,245,000.00 | 11,439,213.27 | 7.8% | 11,610,584.80 |
| TVA Bond | 250,000.00 | 252,555.00 | 0.2% | 246,552.50 |
| **TOTAL / AVERAGE** | **52,453,844.48** | **97,452,683.36** | **100.0%** | **149,107,388.78** |

CITY OF GOOD NEIGHBORS
ARLINGTON HEIGHTS, ILLINOIS

# Board of Trustees of the Firefighters Pension Fund
## 8/8/2022

**Item:** actuary

**Department**: fire

Actuary Report - Firefighters Pension

## ATTACHMENTS:

| Description | Type |
|---|---|
| Actuary Report - Firefighters pension | Exhibits |

# Actuarial Valuation

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

*As of January 1, 2022*
*For the Year Ending December 31, 2022*

MWM Consulting Group
Taking Measure of Tomorrow

# Table of Contents

# Section 1: Summary of Principal Valuation Results

MWM Consulting Group was retained to prepare an actuarial valuation as of January 1, 2022 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, 2022 are summarized in this overview section along with (for comparison) the results from the prior year.

## CONTRIBUTIONS

*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.*

*Other contribution amounts are shown including Funding Policy Contribution and the contribution required to prevent negative funding.*

| Item | Current Valuation as of 1/1/2022 | Prior Year Valuation as of 1/1/2021 |
|---|---|---|
| Contribution Required To Prevent Negative Funding | $5,109,466 (42.1%) | $4,778,353 (40.3%) |
| Actuarially Determined Funding Policy Contribution | $5,255,147 (43.3%) | $4,828,817 (40.7%) |
| Statutory Minimum Contribution per 40 ILCS 5/4 Section 118 | $4,025,724 (33.2%) | $3,779,638 (31.9%) |

*() amounts expressed as a percentage of payroll*

## STATUTORY MINIMUM FUNDING COST ELEMENTS

*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.*

| Item | Current Valuation as of 1/1/2022 | Prior Year Valuation as of 1/1/2021 |
|---|---|---|
| Accrued Liability | $ 179,617,561 | $ 164,720,547 |
| Market Value of Assets | $ 149,361,461 | $ 136,198,812 |
| Actuarial (Smoothed) Value of Assets | $ 145,069,772 | $ 131,084,082 |
| Normal Cost (employer) | $ 2,584,012 | $ 2,359,708 |
| Amortization Amount | $ 1,114,619 | $ 1,110,084 |
| Statutory Minimum Contribution | $ 4,025,724 | $ 3,779,638 |

## FUNDING POLICY CONTRIBUTION COST ELEMENTS

*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 19 years on a closed basis.*

| Item | Current Valuation as of 1/1/2022 | Prior Year Valuation as of 1/1/2021 |
|---|---|---|
| Accrued Liability | $ 179,441,272 | $ 163,873,563 |
| Market Value of Assets | $ 149,361,461 | $ 136,198,812 |
| Actuarial (Smoothed) Value of Assets | $ 145,069,772 | $ 131,084,082 |
| Normal Cost (employer) | $ 2,540,473 | $ 2,332,016 |
| Amortization Amount | $ 2,309,843 | $ 2,120,613 |
| Actuarially Determined Funding Policy Contribution | $ 5,255,147 | $ 4,828,817 |

## FUNDING POLICY CONTRIBUTION AMOUNT REQUIRED TO AVOID NEGATIVE FUNDING

*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.*

| Item | Current Valuation as of 1/1/2022 | Prior Year Valuation as of 1/1/2021 |
|---|---|---|
| Accrued Liability | $ 179,441,272 | $ 163,873,563 |
| Market Value of Assets | $ 149,361,461 | $ 136,198,812 |
| Actuarial (Smoothed) Value of Assets | $ 145,069,772 | $ 131,084,082 |
| Normal Cost (employer) | $ 2,540,473 | $ 2,332,016 |
| Amortization Amount | $ 2,320,076 | $ 2,213,290 |
| Amount of Contribution Needed to Avoid Negative Funding | $ 5,109,466 | $ 4,778,353 |

## FINANCIAL THUMBNAIL RATIOS

*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.*

*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.*

| Tests | 1/1/2022 Valuation | 1/1/2021 Valuation |
|---|---|---|
| Liquidity Ratio (based upon year ended) | 265% | 261% |
| Coverage Ratio (Market Value Assets) | 83.24% | 83.11% |
| Annual Benefit Payments (expected) | $ 8,513,453 | $ 8,031,774 |
| Annual Contributions (expected) | | |
| Members | $ 1,147,187 | $ 1,120,525 |
| Village | $ 5,255,147 | $ 4,828,817 |

## PLAN MATURITY MEASURES

*This chart includes financial relationship measures which are meant to help understand the risks associated with the plan.*

*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.*

*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.*

*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%.*

*The Support Ratio (Actives: Retirees). A number less than 1 indicates a more mature plan.*

| Tests | 1/1/2022 Valuation | 1/1/2021 Valuation |
|---|---|---|
| Ratio of Market Value of Assets to Active Participant Payroll is a measure of volatility risk associated with asset losses | 12.31 | 11.49 |
| Ratio of Accrued Liability to Payroll is a measure of volatility risk associated with changes in assumptions | 14.79 | 13.84 |
| Ratio of retired life Actuarial Accrued Liability to total Actuarial Accrued Liability | 0.58 | 0.58 |
| Percentage of Contributions less Benefit Payments to Market Value of Assets | -1.29% | -1.08% |
| Ratio of Benefit Payments to Contributions | 1.29 | 1.21 |
| Support Ratio: Ratio of Active Participants to Retired Participants | 0.95 | 0.96 |

## PARTICIPANT DATA SUMMARY

*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.*

| Item | Current Year Valuation as of 1/1/2022 | | | Prior Year Valuation as of 1/1/2021 | | |
|---|---|---|---|---|---|---|
| | Tier 1 | Tier 2 | Total | Tier 1 | Tier 2 | Total |
| Active Members | | | | | | |
| Vested | 75 | 4 | 79 | 76 | 7 | 83 |
| Non-Vested | 0 | 27 | 27 | 1 | 22 | 23 |
| Total Active | 75 | 31 | 106 | 77 | 29 | 106 |
| Terminated entitled to future benefits | 1 | 3 | 4 | 1 | 2 | 3 |
| Retired | 62 | 0 | 62 | 63 | 0 | 63 |
| Surviving Spouse | 20 | 0 | 20 | 17 | 0 | 17 |
| Minor Dependent | 2 | 0 | 2 | 2 | 0 | 2 |
| Disabled | 23 | 0 | 23 | 25 | 0 | 25 |
| Total | 183 | 34 | 217 | 185 | 31 | 216 |

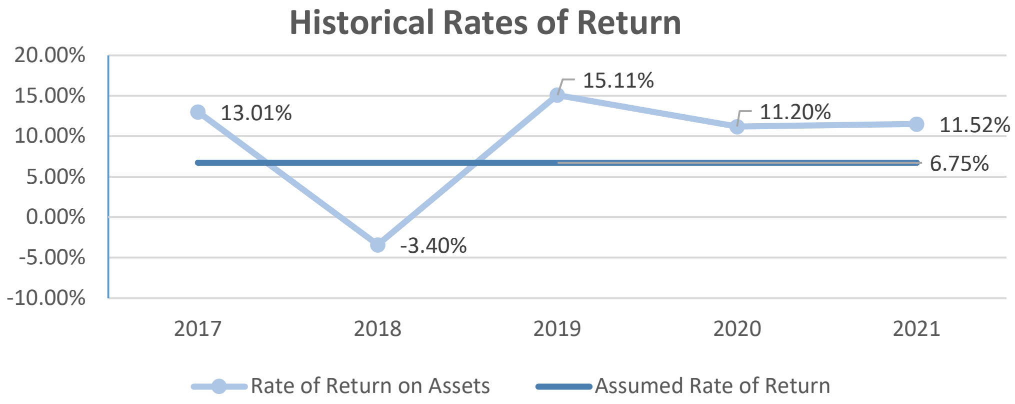
## SECTION 2:  VALUATION RESULTS

### 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 12/31/2021*

The approximate 11.52% return (not time weighted) on net assets was above the actuarial assumption of 6.75% in effect for the 2021 year.



#### *Change in Assumptions*

The mortality table was updated from the RP-2014 base rates with blue collar adjustment projected to the valuation date with scale MP2020 to the PubS-2010 base rates projected to the valuation date with scale MP2021.

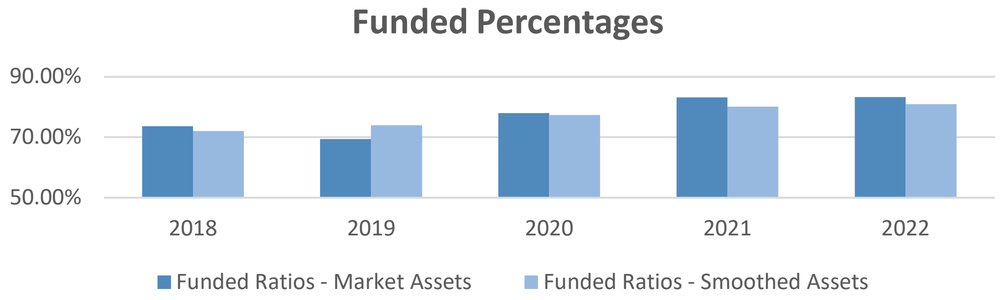
#### *Funded Status*

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 slightly 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.

## ACTUARIAL CERTIFICATION

This is to certify that MWM Consulting Group has prepared an Actuarial Valuation of the Plan as of January 1, 2022 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). 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

Kyle Bang

4/13/2022

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 | |
|---|---|---|
| | 12/31/2021 | 12/31/2020 |
| **1. Investments at Fair Value**: | | |
| a. Cash and Cash Equivalents | $ 3,752,387 | $ 1,865,528 |
| 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 | 3,617,704 | 3,623,827 |
| g. Illinois Funds Invesment Pool: | 0 | 0 |
| h. Pension Investments | 141,737,297 | 130,476,424 |
| i. Accrued Interest and Receivables | 254,073 | 233,033 |
| j. Other | 0 | 0 |
| k. Subtotal Assets (a + b + c + d + e + f + g + h + i + j) | $ 149,361,461 | $ 136,198,812 |
| **2. Liabilities**: | | |
| a. Expenses Payable | $ 0 | $ 0 |
| b. Liability for benefits due and unpaid | 0 | 0 |
| c. Other Liabilities | 0 | 0 |
| d. Total Liabilities | $ 0 | $ 0 |
| **3. Net Market Value of Assets Available for Benefits: (1k – 2d)** | $ 149,361,461 | $ 136,198,812 |

## Exhibit 2 - Statement of Change in Net Assets

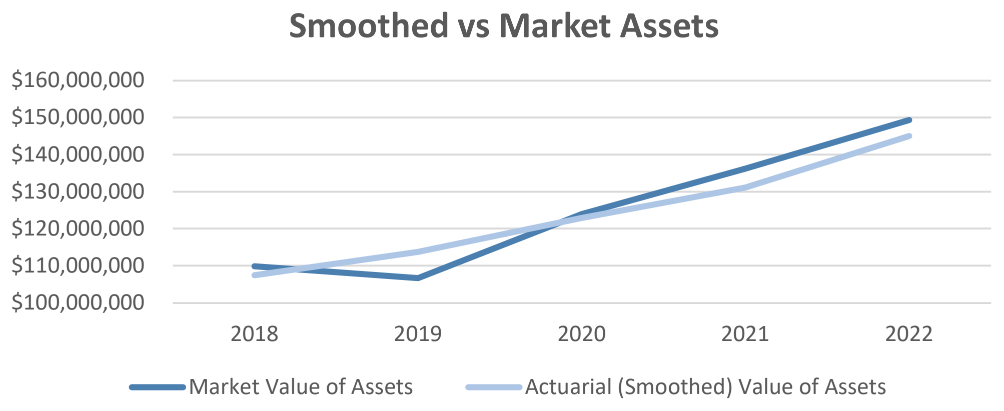
| Item | Plan Year Ending | |
|---|---|---|
| | 12/31/2021 | 12/31/2020 |
| **Additions** | | |
| Contributions | | |
| Employer | $ 4,913,000 | $ 5,130,000 |
| Plan Member | 1,145,403 | 1,141,126 |
| Other | 94,381 | 6,208 |
| Total Contributions | $ 6,152,784 | $ 6,277,334 |
| Investment Income | | |
| Net realized and unrealized appreciation in fair value of investments | $ 12,551,814 | $ 11,745,221 |
| Interest | 2,692,346 | 2,155,407 |
| Dividends | 0 | 0 |
| Other Income | 0 | 0 |
| Investment Expenses | (247,889) | (216,909) |
| Net Investment Income | $ 14,996,271 | $ 13,683,719 |
| **Total additions** | $ 21,149,055 | $ 19,961,053 |
| **Deductions** | | |
| Benefits | $ 7,913,187 | $ 7,608,141 |
| Refunds | 0 | 9,682 |
| Administrative Expenses | 73,219 | 28,116 |
| **Total deductions** | $ 7,986,406 | $ 7,645,939 |
| **Total increase (decrease)** | $ 13,162,649 | $ 12,315,114 |
| **Net Market Value of Assets Available for Benefits:** | | |
| Beginning of year | $ 136,198,812 | $ 123,883,698 |
| End of year | $ 149,361,461 | $ 136,198,812 |

# 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, 2022 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 | $ 131,084,082 |
| b. Income and Disbursements During the year | |
| i. Contributions Received (weighted 50%) | $ 3,076,392 |
| ii. Benefit Payments and Expenses (weighted 50%) | 3,993,203 |
| iii. Weighted net income (other than investment income) (i) – (ii) | (916,811) |
| c. Actuarial Value adjusted for income and disbursements | $ 130,167,271 |
| **d. Expected Return on Assets at assumed rate of 6.75%** | **$ 8,786,291** |
| **2. Actual Return on Assets for year** | |
| a. Market Value of Assets (Beginning of Year) | $ 136,198,812 |
| b. Income (less investment income) | 6,152,784 |
| c. Disbursements | 7,986,406 |
| d. Market Value of Assets (End of Year) | 149,361,461 |
| e. Actual Return on Assets (d) – (a) – (b) + (c) | 14,996,271 |
| **f. Investment Gain/(Loss) for year 2(e) - 1(d)** | **$ 6,209,980** |
| 3. **Actuarial Value of Assets** | |
| a. Expected Actuarial Value of Assets as of End of Year | $ 138,036,751 |
| b. Deferred Investment gains/(losses) | |
| i. 1/3 of 2021 gain of $6,209,980 | 2,069,993 |
| ii. 1/3 of 2020 gain of $5,435,090 | 1,811,697 |
| iii. 1/3 of 2019 gain of $9,453,993 | 3,151,331 |
| iv. Total | 7,033,021 |
| **c. Actuarial Value of Assets as of December 31, 2021 3(a) + 3(b)(iv)** | **$ 145,069,772** |

The Chart Below shows the comparison of smoothed to market assets over the past five years.



## 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).

### Funding Elements for 40 ILCS 5/4

| | Present Value of Benefits as of 1/1/2022 | Projected Unit Credit (PUC) Normal Cost as of 1/1/2022 | PUC Actuarial Accrued Liability as of 1/1/2022 |
|---|---|---|---|
| 1. Actives | | | |
| a) Normal & Early Retirement | $ 94,707,400 | $ 3,144,677 | $ 67,894,506 |
| b) Vested Withdrawal | 1,990,042 | 107,599 | 1,303,789 |
| c) Pre-Retirement Death | 923,788 | 44,770 | 616,184 |
| d) Disability | 9,727,841 | 434,153 | 6,503,833 |
| e) Total Actives | $ 107,349,071 | $ 3,731,199 | $ 76,318,312 |
| 2. Inactives and Survivors: | | | |
| a) Normal Retirees | $ 72,062,313 | | $ 72,062,313 |
| b) Widows (survivors) | 10,704,613 | | 10,704,613 |
| c) Deferred Vested | 121,035 | | 121,035 |
| d) Disabled | 20,411,288 | | 20,411,288 |
| e) Total - Nonactive | $ 103,299,249 | | $ 103,299,249 |
| 3. Total – All | $ 210,648,320 | | $ 179,617,561 |

### Minimum Statutory Contribution under 40 ILCS 5/4

| Item | Amount |
|---|---|
| 1. Annual Payroll | $ 12,133,125 |
| 2. Normal Cost (net of employee/member contributions) | 2,584,012 |
| 3. Employee Contributions (expected) | 1,147,187 |
| 4. Funding Actuarial Liability | 179,617,561 |
| 5. 90% of Funding Actuarial Liability | 161,655,805 |
| 6. Actuarial Value of Assets (Exhibit 3) | 145,069,772 |
| 7. Unfunded Actuarial Balance | 16,586,033 |
| 8. Amortization of Unfunded Balance over 19 years as a level percentage of payroll | 1,114,619 |
| 9. Interest on (2), (3) and (8) | 327,093 |
| 10. Minimum statutory tax levy contribution per 40 ILCS 5/4 – (2) + (8) + (9) | **$4,025,724 (33.2%)** |

*() 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 19 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 1/1/2022 | Entry Age Normal Cost as of 1/1/2022 | Entry Age Accrued Liability as of 1/1/2022 |
|---|---|---|---|
| 1. Actives | | | |
| a) Normal & Early Retirement | $ 94,707,400 | $ 2,835,803 | $ 71,150,765 |
| b) Vested Withdrawal | 1,990,042 | 195,989 | 211,005 |
| c) Pre-Retirement Death | 923,788 | 53,987 | 405,724 |
| d) Disability | 9,727,841 | 601,881 | 4,374,529 |
| e) Total Actives | $ 107,349,071 | $ 3,687,660 | $ 76,142,023 |
| 2. Inactives and Survivors: | | | |
| a) Normal Retirees | $ 72,062,313 | | $ 72,062,313 |
| b) Widows (survivors) | 10,704,613 | | 10,704,613 |
| c) Deferred Vested | 121,035 | | 121,035 |
| d) Disabled | 20,411,288 | | 20,411,288 |
| e) Total - Nonactive | $ 103,299,249 | | $ 103,299,249 |
| 3. Total – All | $ 210,648,320 | | $ 179,441,272 |

### Actuarially Determined Funding Policy Contribution for Tax Levy

| Item | Amount |
|---|---|
| 1. Normal Cost (net of employee/member contributions) | $ 2,540,473 |
| 2. Employee Contributions (expected) | 1,147,187 |
| 3. Funding Actuarial Liability | 179,441,272 |
| 4. 100% of Funding Actuarial Liability | 179,441,272 |
| 5. Actuarial Value of Assets (Exhibit 3) | 145,069,772 |
| 6. Unfunded Actuarial Balance | 34,371,500 |
| 7. Amortization of Unfunded Balance over 19 years as a level percentage of payroll | 2,309,843 |
| 8. Interest on (1), (2) and (7) | 404,831 |
| 9. Actuarially Determined Funding Policy Contribution for Tax Levy (1) + (7) + (8) | **$5,255,147 (43.3%)** |

## Exhibit 6- Contribution Required to Prevent Negative Funding

| Item | Amount |
|---|---|
| 1. Normal Cost (net of employee/member contributions) | $ 2,540,473 |
| 2. Employee Contributions (expected) | 1,147,187 |
| 3. 100% of Funding Actuarial Liability | 179,441,272 |
| 4. Actuarial Value of Assets (Exhibit 3) | 145,069,772 |
| 5. Unfunded Actuarial Balance | 34,371,500 |
| 6. Interest on Unfunded Liability | 2,320,076 |
| 7. Interest on (1), (2) | 248,917 |
| 8. Contribution Necessary to Prevent Negative Funding (1) + (6) + (7) | **$5,109,466 (42.1%)** |

# Exhibit 7 – Summary of Participant Data as of January 1, 2022

## Participant Data

| Item | As of 1/1/2022 | | |
|---|---|---|---|
| | Tier 1 | Tier 2 | Total |
| Active Members | | | |
| Vested | 75 | 4 | 79 |
| Non-Vested | 0 | 27 | 27 |
| Total Actives | 75 | 31 | 106 |
| Terminated Members entitled to future benefits | 1 | 3 | 4 |
| Retired Members | 62 | 0 | 62 |
| Surviving Spouses | 20 | 0 | 20 |
| Minor Dependents | 2 | 0 | 2 |
| Disabled Participants | 23 | 0 | 23 |
| Total | 183 | 34 | 217 |

## AGE AND SERVICE DISTRIBUTION AS OF JANUARY 1, 2022

### 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 | | | | | | | | | | 0 |
| 25 - 29 | 5 | | | | | | | | | 5 |
| 30 - 34 | 5 | 7 | 1 | | | | | | | 13 |
| 35 - 39 | 4 | 5 | 7 | | | | | | | 16 |
| 40 - 44 | | 1 | 9 | 4 | | | | | | 14 |
| 45 - 49 | | | 3 | 6 | 9 | | | | | 18 |
| 50 - 54 | | 1 | 1 | 2 | 18 | 10 | | | | 32 |
| 55 - 59 | | | | | 1 | 3 | 1 | 1 | | 6 |
| 60 - 64 | | | | | | 1 | 1 | | | 2 |
| 65 & Over | | | | | | | | | | 0 |
| Total | **14** | **14** | **21** | **12** | **28** | **14** | **2** | **1** | **0** | **106** |

| | |
|---|---|
| Average Age: | 44.7 years |
| Average Length of Service: | 16.3 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 the highest salary 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 2022 is $130,166.

Minimum Monthly Benefit: $1,159.27

Maximum Benefit Percentage: 75% of salary

### *Termination Pension Amount*

Any firefighter who retires or is separated from service with at least 10, but less than 20 years of credited service, shall be entitled to a monthly pension commencing at age 60 equal to the monthly rate of compensation based on rank at separation multiplied by the applicable percentage below:

| Years of Credited Service | Applicable Percentage |
|---|---|
| 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% |

### *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* .

### *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.

<table>
<tr><th>Actuarial Assumption</th><th>Annual Actuarial Valuation Statutory Minimum</th><th>Annual Actuarial Valuation Funding Policy Amount for Tax Levy</th></tr>
<tr><td><b>Interest</b></td><td>6.75% per annum</td><td>6.75% per annum</td></tr>
<tr><td><b>Mortality</b></td><td>PubS-2010 Base Rates Projected to 2022 with Scale MP2021</td><td>PubS-2010 Base Rates Projected to 2022 with Scale MP2021</td></tr>
<tr><td><b>Retirement</b></td><td>Rates of retirement for all ages are:<br><b>Tier 1 / Tier 2</b>
<table>
<tr><th>Age</th><th></th><th>Age</th><th></th></tr>
<tr><td>50</td><td>10.00%</td><td>61</td><td>25.00%</td></tr>
<tr><td>51</td><td>10.00%</td><td>62</td><td>25.00%</td></tr>
<tr><td>52</td><td>12.00%</td><td>63</td><td>33.00%</td></tr>
<tr><td>53</td><td>12.00%</td><td>64</td><td>33.00%</td></tr>
<tr><td>54</td><td>15.00%</td><td>65</td><td>100%</td></tr>
<tr><td>55</td><td>15.00%</td><td>66</td><td>100%</td></tr>
<tr><td>56</td><td>20.00%</td><td>67</td><td>100%</td></tr>
<tr><td>57</td><td>20.00%</td><td>68</td><td>100%</td></tr>
<tr><td>58</td><td>20.00%</td><td>69</td><td>100%</td></tr>
<tr><td>59</td><td>20.00%</td><td>70</td><td>100%</td></tr>
<tr><td>60</td><td>25.00%</td><td></td><td></td></tr>
</table></td><td>Rates of retirement for all ages are:<br><b>Tier 1 / Tier 2</b>
<table>
<tr><th>Age</th><th></th><th>Age</th><th></th></tr>
<tr><td>50</td><td>10.00%</td><td>61</td><td>25.00%</td></tr>
<tr><td>51</td><td>10.00%</td><td>62</td><td>25.00%</td></tr>
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<tr><td>54</td><td>15.00%</td><td>65</td><td>100%</td></tr>
<tr><td>55</td><td>15.00%</td><td>66</td><td>100%</td></tr>
<tr><td>56</td><td>20.00%</td><td>67</td><td>100%</td></tr>
<tr><td>57</td><td>20.00%</td><td>68</td><td>100%</td></tr>
<tr><td>58</td><td>20.00%</td><td>69</td><td>100%</td></tr>
<tr><td>59</td><td>20.00%</td><td>70</td><td>100%</td></tr>
<tr><td>60</td><td>25.00%</td><td></td><td></td></tr>
</table></td></tr>
<tr><td><b>Withdrawal</b></td><td>Rates of termination are based upon age only.<br>Sample rates for selected ages are:
<table>
<tr><th>Age</th><th></th></tr>
<tr><td>25</td><td>5.80%</td></tr>
<tr><td>40</td><td>1.10%</td></tr>
<tr><td>50</td><td>1.00%</td></tr>
<tr><td>55</td><td>1.00%</td></tr>
</table></td><td>Rates of termination are based upon age only.<br>Sample rates for selected ages are:
<table>
<tr><th>Age</th><th></th></tr>
<tr><td>25</td><td>5.80%</td></tr>
<tr><td>40</td><td>1.10%</td></tr>
<tr><td>50</td><td>1.00%</td></tr>
<tr><td>55</td><td>1.00%</td></tr>
</table></td></tr>
<tr><td><b>Disability</b></td><td>Rates of disability are based upon age only.<br>Sample rates for selected ages are:
<table>
<tr><th>Age</th><th></th></tr>
<tr><td>25</td><td>0.02%</td></tr>
<tr><td>40</td><td>0.42%</td></tr>
<tr><td>50</td><td>0.90%</td></tr>
<tr><td>55</td><td>1.24%</td></tr>
</table>
<i>80% of disablities are assumed to occur in the line of duty</i></td><td>Rates of disability are based upon age only.<br>Sample rates for selected ages are:
<table>
<tr><th>Age</th><th></th></tr>
<tr><td>25</td><td>0.02%</td></tr>
<tr><td>40</td><td>0.42%</td></tr>
<tr><td>50</td><td>0.90%</td></tr>
<tr><td>55</td><td>1.24%</td></tr>
</table>
<i>80% of disablities are assumed to occur in the line of duty</i></td></tr>
</table>

| Actuarial Assumption | Annual Actuarial Valuation Statutory Minimum | Annual Actuarial Valuation Funding Policy Amount for Tax Levy |
|---|---|---|
| **Salary Increase** | Graded by service from 13.25% to ultimate of 4.25%. | Graded by service from 13.25% to ultimate of 4.25%. |
| **Payroll Growth** | 3.75% per annum | 3.75% per annum |
| **Percentage Married** | 85% are married, females are assumed to be 3 years younger | 85% 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** | Projected Unit Credit Cost Method<br>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. | Entry Age Normal Cost Method<br>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 19 years on a closed basis as a level percentage of pay. |

## 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, 2022 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 Liabilty | 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 | | | | | | | | | | |
| 2022 | 179,441,272 | - | 179,441,272 | 145,069,772 | 34,371,500 | 12,133,125 | 5,255,147 | 43.31% | 1,147,187 | 13,620,758 | 20,023,092 | 8,513,453 | 11,509,639 |
| 2023 | 186,657,291 | - | 186,657,291 | 156,579,411 | 30,077,880 | 12,562,141 | 5,014,866 | 39.92% | 1,187,750 | 12,496,806 | 18,699,422 | 8,986,914 | 9,712,508 |
| 2024 | 193,763,413 | 127,471 | 193,890,884 | 166,291,920 | 27,598,964 | 13,049,718 | 4,888,297 | 37.46% | 1,233,851 | 10,943,970 | 17,066,117 | 9,639,694 | 7,426,423 |
| 2025 | 200,540,929 | 400,494 | 200,941,423 | 173,718,343 | 27,223,080 | 13,570,967 | 4,945,040 | 36.44% | 1,283,135 | 11,293,340 | 17,521,515 | 10,234,055 | 7,287,460 |
| 2026 | 207,034,469 | 854,901 | 207,889,370 | 181,005,803 | 26,883,567 | 14,180,508 | 5,007,811 | 35.31% | 1,340,767 | 11,716,937 | 18,065,515 | 10,918,332 | 7,147,183 |
| 2027 | 213,120,877 | 1,503,692 | 214,624,569 | 188,152,986 | 26,471,583 | 14,822,073 | 5,084,910 | 34.31% | 1,401,427 | 12,183,202 | 18,669,539 | 11,549,432 | 7,120,107 |
| 2028 | 218,825,513 | 2,380,656 | 221,206,169 | 195,273,093 | 25,933,076 | 15,475,959 | 5,159,138 | 33.34% | 1,463,252 | 12,653,025 | 19,275,415 | 12,202,515 | 7,072,900 |
| 2029 | 224,095,661 | 3,493,868 | 227,589,529 | 202,345,992 | 25,243,537 | 16,067,370 | 5,218,115 | 32.48% | 1,519,170 | 13,123,758 | 19,861,043 | 12,820,849 | 7,040,194 |
| 2030 | 228,909,481 | 4,867,795 | 233,777,276 | 209,386,186 | 24,391,090 | 16,626,669 | 5,267,383 | 31.68% | 1,572,052 | 13,595,310 | 20,434,744 | 13,437,557 | 6,997,187 |
| 2031 | 233,224,204 | 6,511,982 | 239,736,186 | 216,383,374 | 23,352,812 | 17,161,614 | 5,333,056 | 31.08% | 1,622,631 | 14,067,472 | 21,023,159 | 14,042,240 | 6,980,919 |
| 2032 | 237,042,121 | 8,440,813 | 245,482,934 | 223,364,292 | 22,118,642 | 17,694,731 | 5,399,970 | 30.52% | 1,673,037 | 14,542,967 | 21,615,974 | 14,590,871 | 7,025,103 |
| 2033 | 240,394,233 | 10,662,581 | 251,056,814 | 230,389,395 | 20,667,419 | 18,219,970 | 5,468,760 | 30.02% | 1,722,698 | 15,014,230 | 22,205,689 | 15,108,798 | 7,096,891 |
| 2034 | 243,275,899 | 13,202,922 | 256,478,821 | 237,486,286 | 18,992,535 | 18,740,177 | 5,547,650 | 29.60% | 1,771,884 | 15,493,188 | 22,812,722 | 15,639,673 | 7,173,049 |
| 2035 | 245,658,547 | 16,077,700 | 261,736,247 | 244,659,335 | 17,076,912 | 19,242,317 | 5,615,507 | 29.18% | 1,819,361 | 15,980,345 | 23,415,213 | 16,128,482 | 7,286,731 |
| 2036 | 247,542,283 | 19,301,827 | 266,844,110 | 251,946,066 | 14,898,044 | 19,736,291 | 5,684,615 | 28.80% | 1,866,066 | 16,479,778 | 24,030,459 | 16,631,251 | 7,399,208 |
| 2037 | 248,887,177 | 22,895,836 | 271,783,013 | 259,345,274 | 12,437,739 | 20,219,373 | 5,752,118 | 28.45% | 1,911,742 | 16,991,802 | 24,655,662 | 17,102,657 | 7,553,005 |
| 2038 | 249,694,163 | 26,889,241 | 276,583,404 | 266,898,279 | 9,685,125 | 20,718,756 | 5,816,130 | 28.07% | 1,958,958 | 17,521,316 | 25,296,405 | 17,539,570 | 7,756,835 |
| 2039 | 249,987,198 | 31,299,684 | 281,286,882 | 274,655,114 | 6,631,768 | 21,224,631 | 5,847,409 | 27.55% | 2,006,789 | 18,068,508 | 25,922,706 | 17,981,749 | 7,940,957 |
| 2040 | 249,735,117 | 36,148,779 | 285,883,896 | 282,596,071 | 3,287,825 | 21,728,460 | 5,760,474 | 26.51% | 2,054,426 | 18,633,139 | 26,448,039 | 18,415,663 | 8,032,376 |
| 2041 | 248,925,529 | 41,458,336 | 290,383,865 | 290,628,447 | - | 22,247,464 | 2,247,366 | 10.10% | 2,103,498 | 19,143,021 | 23,493,885 | 18,865,724 | 4,628,161 |

# Board of Trustees of the Firefighters Pension Fund
# 8/8/2022

**Item:** Check Register - June 2022

**Department**: fire

Check Register - June 2022

**ATTACHMENTS:**

| Description | Type |
|---|---|
| check register june 2022 | Exhibits |

# FIREFIGHTERS' PENSION FUND
## CALENDAR YEAR ENDING 12 / 31 / 2022
## CHECK REGISTER AND JOURNAL VOUCHER PAYMENTS

| Check Number | JV or Group Number | Date | Payee | Description | Expense | MONTHLY TOTAL |
|---|---|---|---|---|---|---|
| | JV 003 | 01/31/22 | Marquette Associates | Management Fee | 5,000.00 | |
| 708 | JV 003 | 01/31/22 | Collins Radja & Hartwell | Legal Services | 9,000.00 | |
| 709 | JV 003 | 01/31/22 | Petrucci Orthopedics | Medical Exams | 2,400.00 | |
| 710 | JV 003 | 01/31/22 | Collins Radja & Hartwell | Legal Services | 2,812.50 | |
| 711 | JV 003 | 01/31/22 | 1099 Pro | 1099 Services | 112.24 | **19,324.74** |
| | JV 034 | 02/28/22 | US Bank | Administrative Services | 797.49 | |
| 712 | JV 034 | 02/28/22 | Collins Radja & Hartwell | Legal Services | 7,750.00 | **8,547.49** |
| 713 | JV 068 | 03/31/22 | Petrucci Orthopedics | Medical Exams | 2,400.00 | |
| | JV 068 | 03/31/22 | US Bank | Administrative Services | 41.67 | |
| 714 | JV 068 | 03/31/22 | Collins Radja & Hartwell | Legal Services | 8,825.00 | **11,266.67** |
| 715 | JV 120 | 04/30/22 | 1099 Pro | 1099 Services | 85.00 | |
| | JV 120 | 04/30/22 | US Bank | Administrative Services | 41.67 | **126.67** |
| | JV 149 | 05/31/22 | US Bank | Administrative Services | 41.67 | |
| 716 | JV 149 | 05/31/22 | Petrucci Orthopedics | Medical Exams | 2,400.00 | |
| 717 | JV 149 | 05/31/22 | Collins Radja & Hartwell | Legal Services | 7,306.05 | |
| 718 | JV 149 | 05/31/22 | Laura Potts | Secretarial Services | 577.50 | |
| 719 | JV 149 | 05/31/22 | Collins Radja & Hartwell | Legal Services | 6,570.25 | **16,895.47** |
| 730 | JV 208 | 06/30/22 | Collins Radja & Hartwell | Legal Services | 7,100.00 | **7,100.00** |
| | | | | | **$ 63,261.04** | |

*Checks 720 - 729 were voided and sent to JPMorgan Chase for positive pay setup testing.

# Board of Trustees of the Firefighters Pension Fund
# 8/8/2022

**Item:** FPIF

**Department**: fire

Firefighters Pension Investment Fund (FPIF) - May 2022 Arlington Heights Pension Statement

## ATTACHMENTS:

| Description | Type |
|---|---|
| AH Investment Statement | Exhibits |

## Statement of Results

## Illinois Firefighters Pension Investment Fund

| Currency: USD ($) | May 2022 | 2022 YTD |
|---|---|---|
| **Beginning NAVs:** | | |
| Beginning NAV | 126,720,446.57 | - |
| Contributions | - | 141,841,720.25 |
| Withdrawals | - | - |
| Net Time Weighted Activity | - | |
| Allocation Balance | 126,720,446.57 | |
| Allocation Percent | 1.84% | |
| **Income & Expenses:** | | |
| Unrealized Gain/Loss | 381,270.50 | -10,488,337.97 |
| Realized Gain/Loss | -56,694.72 | -4,632,499.90 |
| Dividend Income | 78,439.61 | 199,260.84 |
| Interest Income | 19,331.85 | 225,964.17 |
| Other Income | - | - |
| **Total Income** | 422,347.24 | -14,695,612.86 |
| Administrator Expenses | - | - |
| Other Fee & Expenses | -815.15 | -4,128.73 |
| Management Fee | - | - |
| Performance Fee | - | - |
| **Total Fee & Expenses** | -815.15 | -4,128.73 |
| **Net Income** | 421,532.09 | -14,699,741.59 |
| **Ending NAVs:** | | |
| Ending NAV | 127,141,978.66 | 127,141,978.66 |
| **Rate of Returns:** | | |
| Net Return | 0.33% | -10.88% |
| Ownership | 1.83% | |

Disclaimer / Important Information:

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