ILLINOIS FIREFIGHTERS' PENSION INVESTMENT FUND

USER'S GUIDE TO VALUATION REPORTS (v2023.1)



I. BACKGROUND

The Illinois Firefighters' Pension Investment Fund (IFPIF), in addition to its primary responsibility of investing consolidated assets, is charged to annually prepare the statutory minimum required contribution for each Illinois Article 4 downstate and suburban fire pension plan. The reports prepared prior to 2022 were brief documents providing key numbers and assumptions. The IFPIF report format is expanded to provide additional details in terms of results and information in compliance with all applicable standards.

Moving from a report of a few pages to one with more than 20 pages can allow for additional insights for the local parties but can also be confusing to those who are not familiar with all the newly included information. The goal of this user guide is to give an introduction so that users can have at least a basic understanding of the intent of each section of the new report. Those sections are as follows:

- Section II: Summary Information (report pages 2 10)
- Section III: Assumptions & Methods / Glossary (report pages 11 14)
- Section IV: Discussion of Risk (report pages 15 18)
- Section V: Assets (report page 19)
- Section VI: Summary of Current Plan (report pages 20 22)

It is important to keep in mind that the reports provided by the IFPIF are for statutory minimum funding purposes only. Accounting information for GASB 67/68 disclosures are not included, as they are considered outside the scope of the IFPIF's directive.



II. SUMMARY INFORMATION

The report's summary information covers several pages, including a lot of introductory wording and all the key numerical support. This section can be broken down into the following subsections:

• Cover letter (report pages 2-3)

These pages clarify the pension fund for whom the report is prepared. It also includes several paragraphs to keep the report in compliance with the Actuarial Standards of Practice.

- Table of Contents (report page 4)
- Summary of Report (report page 5)

This page provides the key results of the valuation: the statutory minimum required contribution.

- Total Statutory Contribution The total of amounts required to be paid by the municipality and active members.
- Member Contributions (Est.) The offset for contributions from active members.
- Statutory Minimum Required Contribution The bottom-line contribution due from the municipality. This equals the summation of the lines above it.

Additional numerical support for these calculations is provided in the "Summary of Principal Valuation Results".

The footnote states the specific purpose and basis of these calculations. Additionally, it provides commentary on the plan sponsor's ability to have another actuarial valuation performed to determine a contribution amount in excess of the Statutory Minimum Contribution calculated in this report.

Changes Since Prior Valuation (report page 6)

This page states any changes in benefit provisions ("plan changes") or assumptions / methods since the prior valuation that have an impact on the current valuation. Changes are anticipated to be rare.



• Summary of Principal Valuation Results (report pages 7 – 9)

These pages provide a summary of the numerical information used in preparing the statutory minimum required contribution. Section A summarizes the participant data used in the calculations. Section B displays the asset information; additional information is provided in the "Assets" page of the report. Section C summarizes the liability information, including the present value of benefits, the actuarial accrued liability, and the normal cost (terms defined in the "Glossary" page of the report). The unfunded liability and funded ratio are the last items shown in Section C.

Section D summarizes the portion of the liability that is subject to amortization. Under current statutes, the funding target for amortization is 90%.

Section E provides more details on the contribution calculation.

• Projection of Benefit Payments (report page 10)

This page provides projected benefit payments for current actives and current non-actives. The payments underlie the present value of benefits liability.



III. ASSUMPTIONS & METHODS / GLOSSARY

The report's "Actuarial Assumptions and Methods" section summarizes the assumptions adopted by the IFPIF Board, based on an experience study performed in 2021. The key assumptions are as follows:

Interest Rate

This rate is used to discount the valuation's projected cash flows to the measurement date. It is based on the long-term expected return of the Fund assets, net of investment related expenses. The rate is reviewed more frequently than the other assumptions, but that does not imply that it will regularly change.

• Demographic Assumptions

These assumptions, including mortality, retirement, disability, and termination rates, allow the valuation to model how members will leave active service and receive any benefits earned over time.

Salary Increases

This assumption projects current individual member salaries into the future, so that projected benefits can be determined.

• Inflation / Cost-of-Living Adjustment

Inflation underlies all of the economic-related assumptions but is set on its own for its role in the cost-of-living adjustment (COLA). While the COLA for Tier 1 members is fixed in law, the COLA for Tier 2 members is tied to inflation. Similar to the interest rate, the rate used should be tied to long-term expectations and not be overly influenced by short-term changes in actual inflation.

This section also summarizes the funding methods required under Article 4 for statutory minimum required contributions. The methods are as follows:

• Funding Method

This method is an actuarial approach to allocating the present value of benefits into two pieces: actuarial accrued liability for past service and normal cost for future service. There are several actuarial methods available for this purpose, but the Projected Unit Credit cost method is required by law.

Asset Method

Assets can be very volatile, which can lead to volatility in the annual contribution requirements. The goal of an asset method is to smooth actual experience over a period of years to help reduce the volatility of the contribution from year to year. Under law, investment gains and losses are smoothed over a five-year period.



• Amortization Method

By law, any unfunded liability, where the target liability is 90% of the actuarial accrued liability, is to be amortized as part of the contribution calculation. The unfunded liability is to be amortized over a period ending in 2040. The amortization is permitted to make use of a payroll growth assumption, so if all assumptions are met, the amortization payment will remain a level percentage of the Fund's payroll for the entire period.



IV. DISCUSSION OF RISK

Actuarial standards require disclosure / discussion of the risks associated with pension plans. Certainly, the entire valuation is made up of assumptions and to whatever degree the assumed future outcomes differ from the actual future outcomes, it will impact the Fund. These impacts could be positive or negative to the Fund. The goal in setting assumptions is to make each individual assumption reasonable so that as positive and negative experience develops, it can hopefully result in something near expectation in the aggregate.

This section of the report speaks directly to key risks of which stakeholders should be aware. Further, various metrics are defined to help the stakeholders to monitor the risk over time. The "Risk Metrics" page (report page 18) provides the results for each of the defined metrics from the current valuation. When reviewed over time, the stakeholder can see the change and determine if there are any issues to address.

There is an additional metric in this section beginning in 2023 that provides an estimate of the liability if the assets were invested only in a low-risk asset portfolio. This is called the Low Default-Risk Obligation Measure (LDROM). The Board actually invests the pension plan's contributions in a diversified portfolio of stocks and bonds and other investments with the objective of maximizing investment returns at a reasonable level of risk. Consequently, the difference between the plan's Actuarial Accrued Liability disclosed earlier in this section and the LDROM can be thought of as representing the expected taxpayer savings from investing in the plan's diversified portfolio compared to investing only in high quality bonds.

The actuarial valuation reports the funded status and develops contributions based on the expected return of the plan's investment portfolio. If instead, the plan switched to investing exclusively in high quality bonds, the LDROM illustrates that reported funded status would be lower (which also implies that the Actuarially Determined Contributions would be higher), perhaps significantly. Unnecessarily high contribution requirements in the near term may not be affordable and could imperil plan sustainability and benefit security.



V. ASSETS

The "Assets" section (report page 19) provides information both on the market value and the actuarial (smoothed) value of assets.

- The top of the page reconciles the assets from the prior valuation date to the current valuation date, itemizing contributions, benefit payments, expenses, and investment earnings.
- The middle of the page develops the prior year's investment gain or loss and adds it to the schedule of prior investment gains / losses to be recognized. Note, investment gains or losses are defined as gains or losses relative to the assumed interest rate at that time. For example, if the interest rate used in the 2022 valuation was 7.125%, the 2023 row will show a gain if the market value of assets exceeded a 7.125% return and a loss if the market value of assets returned less than 7.125% over the previous year.
- The bottom of the page applies the asset method to develop the actuarial (smoothed) value of assets.



VI. SUMMARY OF CURRENT PLAN

The "Summary of Current Plan" section of the report is a summary of benefit provisions included in the valuation. While Article 4 has many more provisions and details that impact the membership, the items shown are the key items that are used in measuring a Fund's liabilities. This section includes the benefits to be paid, the various eligibilities for receiving benefits, and contributions to be made, both by the employee and the municipality.

