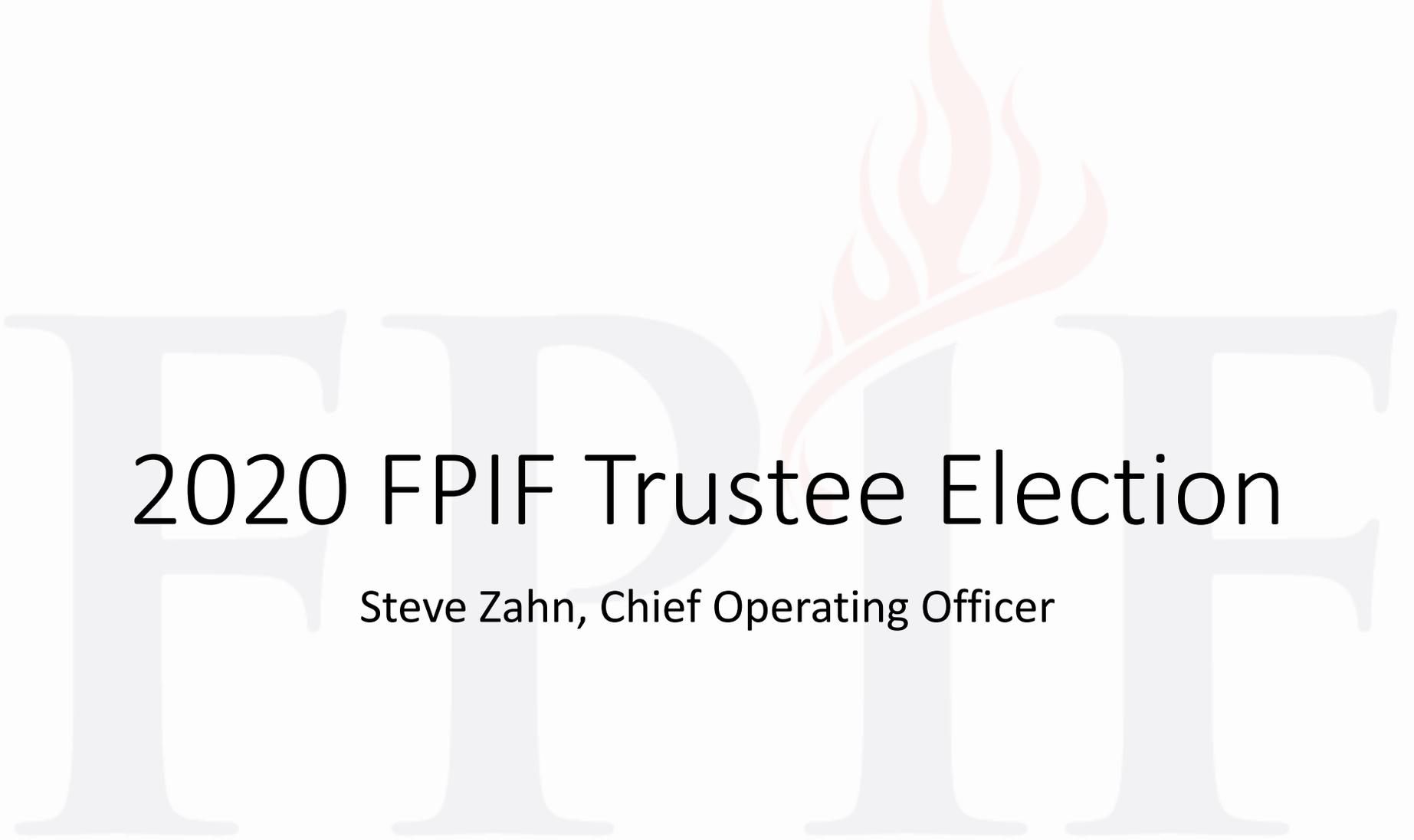


FPIF Participating Pension Fund Trustee Training

November 10, 2020

FIREFIGHTERS' PENSION INVESTMENT FUND

The logo for the Firefighters' Pension Investment Fund (FPIF) features the letters 'FPIF' in a large, light blue, serif font. A stylized torch with a flame is positioned behind the 'P' and 'I'. The flame is rendered in shades of orange and red, while the torch handle is a light blue. The entire logo is centered on a white background.

2020 FPIF Trustee Election

Steve Zahn, Chief Operating Officer

FIREFIGHTERS' PENSION INVESTMENT FUND



Board of Trustees

The Firefighters' Pension Investment Fund will be governed by a 9-member Permanent Board of Trustees:

- 3 Participant Trustees to be elected by participants
- 1 Beneficiary Trustee to be elected by beneficiaries
- 3 Executive Trustees to be elected by employers
- 1 appointed member recommended by a statewide organization representing firefighters
- 1 appointed member recommended by the Illinois Municipal League

Trustees serve 4-year terms, except that one Participant Trustee, the Beneficiary Trustee, and one Executive Trustee shall serve an initial term of 2-years.



Slate of Candidates

Participant Trustee 4-year Term

- Kevin Bramwell (Participant, Bolingbrook Firefighters' Pension Fund)
- Matthew Kink (Participant, Springfield Firefighters' Pension Fund)

Participant Trustee 2-year Term

- George Schick (Participant, Orland Firefighters' Pension Fund)

Participant trustees were elected by the Election Panel via acclamation. No election will be conducted for Participant Trustee positions.



Slate of Candidates

Beneficiary Trustee 2-year Term (1 Trustee To Be Elected)

- Russell Hunt (Beneficiary, Bolingbrook Firefighters' Pension Fund)
- Gregory Knoll (Beneficiary, Homewood Firefighters' Pension Fund)

Executive Trustee 4-year Term (2 Trustees To Be Elected)

- Patrick Nichting (City Treasurer, City of Peoria)
- John Perry (Treasurer/Trustee, Lisle Woodridge Fire Protection District)
- Herb Roach (Mayor, City of O'Fallon)

Executive Trustee 2-year Term (1 Trustee To Be Elected)

- David Geary (Fire Chief, Wauconda Fire Protection District)
- Jeff Rowitz (Deputy Village Manager/Chief Financial Officer, Village of Northbrook)



Eligible Voters

- **Beneficiary Trustee:** Individuals who are annuitants, deferred pensioners or disabled pensioners as of August 16, 2020
- **Executive Trustees:** Individuals who are mayors or presidents of municipalities and fire protection districts that have participating pension funds



Election Materials

- The following election materials have been mailed to eligible voters:
 - Candidate Biographies
 - Voting Instructions
 - The mail ballot(s) for the applicable trustee position(s)
 - A pre-printed return envelope with a form of certificate stating that the person voting the ballot is an eligible voter
- An eligible voter who has not received any or all of the election materials must contact the Election Panel at least 10 days prior to the Election Date to request election materials.
- An individual who believes they are an eligible voter but has not received election materials may vote using a provisional ballot. Any such individual must contact the Election Panel at least 10 days prior to the Election Date to request a provisional ballot.



Casting & Returning of Ballots

A valid ballot must conform to the following requirements:

- The choice of candidates must be clearly indicated as directed on the voting instructions.
- Each eligible voter is entitled to only one vote for any candidate.
- With respect to a ballot on which more than one trustee is to be elected, each eligible voter may vote for only one candidate for each position to be elected. If more candidates are selected than the number of positions to be elected, the ballot is invalid and will not be counted. If the number of candidates selected is fewer than the number of positions to be elected, the ballot is valid and will be counted.

A valid ballot shall be returned by:

- Placing the completed ballot into the return envelope provided and seal the envelope.
- Signing the certificate on the envelope and mailing, via U.S. mail only, the return envelope to the address on the envelope.



Ballot Counting & Results

- Ballots must be received by 4:30 pm on December 1, 2020. Ballots received after 4:30 pm on December 1, 2020 are invalid and will not be counted. A record of the receipt date of each ballot will be maintained.
- Ballots delivered to the Fund in bulk, via hand delivery, or any delivery method other than U.S. Mail are invalid and will not be counted.
- The candidates who have received the greatest number of votes in each trustee position will be elected trustees.
- The results of the election process shall be certified by the Election Panel, posted on the Fund website, and reported to the Transition Board. The Election Panel will certify the election results by 4:30 pm on December 7th.

A stylized flame logo in a light red color, positioned behind the main title text.

Firefighters' Pension Investment Fund

William R. Atwood, Executive Director

FIREFIGHTERS' PENSION INVESTMENT FUND



Illinois Pension Fund Consolidation Task Force

Report issued October 10, 2019

- Consolidate Article 3 and Article 4 Investment Assets into two new Investment Boards
- Improve Returns
- Reduce Costs

SB1300 introduced during the Fall Veto Session



Public Act 101-610

- Signed into law December 18, 2019, Effective January 1, 2020
- Interim Board Appointed by the Governor on January 31, 2020

Chuck Sullivan, Chair

Brad Cole, Vice Chair

Kevin Bramwell

Steve Chirico

Russ Hunt

Mathew Kink

Patrick Nichting

Jeff Rowitz

George Schick



Critical Functions Through the Transition Period

- Elect a Permanent Board
- Transfer Consolidated Pension Assets into FPIF Portfolio
- Provide Statutorily Required Training
- Communicate With Local Pension Funds, Municipalities, and Stakeholders



Key Dates

- Investments
 - June 30, 2022
 - Statutory deadline for transference of local fire fund assets into the FPIF portfolio
- Operations
 - December 31, 2020
 - Statutory deadline for the election of the permanent Board of Trustees



Staff

William Atwood, Executive Director

Steve Zahn, Chief Operating Officer

David Zaloga, Chief Financial Officer

Mitchell Green, Portfolio Officer



Elements for Investments Transition

Required External Services

- External Auditor
 - Perform independent audit of FPIF
 - Q1/ FY2021
 - Sikich
- Investment Consultant
 - Advise FPIF on custodian oversight
 - Develop and implement investment policy
 - Q2 FY21



Elements for Investments Transition

- Internal Audit/Audit Consultant
 - Advise FPIF on development of systems and procedures and best practice
 - Monitor custodian
 - Assist in external audit
 - Q2 FY21
- Custodian
 - Transition and hold portfolio assets
 - Interface with constituent pension funds
 - Advise and build systems and procedures
 - Q3 FY21
- Retention of Actuary
 - Q3 FY21



Critical Functions Through the Transition Period

- Elect a Permanent Board
- Transfer Consolidated Pension Assets into FPIF Portfolio
- Provide Statutorily Required Training
- Communicate With Local Pension Funds, Municipalities, and Stakeholders



Communicate With Local Pension Funds & Stakeholders

- Website
- Email
- Conventional mail
- Group meetings
- One on one contact

Organize and schedule these communications in cooperation with staff, Board, and retained professionals.



Conclusion of Transition

- As Transition concludes FPIF will provide key services for constituent pension funds and communities.
- Audit Services
 - FPIF will retain audit firm to audit all firefighter pension funds on a three-year cycle
 - In cooperation with DOI
- Actuarial Services
 - An actuarial firm will be retained by FPIF to provide actuarial services for the FPIF, as well as for the constituent pension systems
 - In cooperation with DOI

FPIF Contact Information

The logo for the Firefighters' Pension Investment Fund (FPIF) features the letters 'FPIF' in a large, light blue, serif font. A stylized fire flame in shades of red and orange is positioned behind the letters 'P' and 'I'. Below the main title, the full name 'FIREFIGHTERS' PENSION INVESTMENT FUND' is written in a smaller, light red, sans-serif font.

Firefighters Pension Investment Fund
1919 South Highland Ave.
Building A, Suite 237
Lombard, IL 60148

(630) 785-2567

www.ifpif.org

information@ifpif.org

FIREFIGHTERS' PENSION INVESTMENT FUND

A stylized flame graphic in shades of orange and red, positioned above the letter 'I' in the acronym 'FPIF'.

FPIF

Questions

FIREFIGHTERS' PENSION INVESTMENT FUND



FPIF Transition Period

David Zaloga, Chief Financial Officer

FIREFIGHTERS' PENSION INVESTMENT FUND



Key Elements Related to the Transition of Investments from Local Funds to FPIF

- Hire Executive Director and Senior Staff (Chief Operating Officer, Chief Financial Officer, Portfolio Officer)
- Onboard key consultants and partners
 - Investment Consultant
 - Accounting/Audit Consultant
 - Custodian
 - Actuary
 - Audit Firm (FPIF Audit and post consolidation audits of Local Funds on a three- year cycle)
- Partner with key stakeholders - Firefighters (AFFI and other) and Local Funds/Municipalities (IGFOA and other)
- Develop transition rules in coordination with key stakeholders, consultants and partners
- Execute the Transition of Assets from Local Funds to FPIF
- Reconcile Investment Assets transferred to FPIF and provide Local Funds with a receipt
- Post transition support (Audit and Actuarial services currently provided by the Department of Insurance)



Summary Timeline

ALL TASKS AND DATES BELOW ARE TENTATIVE AND WILL CHANGE AS THE PROJECT EVOLVES

- Q3 and Q4 of 2020
 - Issue RFP's for Investment Consultant, Accounting/Audit Consultant, Custodian, CPA Firm for Certified Asset Lists and Transition Manager
 - Retention of Investment and Accounting/Audit Consultants
 - Complete Election of Permanent Board
 - Certify and Seat Permanent Board

- Q1 of 2021
 - Adoption of Asset Consolidation Rules
 - Retention of Custodian, Transition Manager, CPA Firm for Certified Asset Lists and Actuary
 - Formal Transmittal of Transfer Date Notices to Local Funds



Summary Timeline (cont.)

ALL TASKS AND DATES BELOW ARE TENTATIVE AND WILL CHANGE AS THE PROJECT EVOLVES

- Q2/ Q3/Q4 of 2021
 - Formal Transmittal of Certified Asset List to Local Funds
 - Transfer of Investment Assets from Local Funds to FPIF
 - Transmittal of Transfer Receipts to Local Funds
 - Adoption of FPIF Actuarial Assumptions and Completion of Actuarial Study

- Q2 2022
 - Statutory End of Transition

A stylized flame graphic in shades of orange and red, positioned behind the letter 'I' in the acronym.

FIREFIGHTERS' PENSION INVESTMENT FUND

Questions

FIREFIGHTERS' PENSION INVESTMENT FUND



CONSOLIDATION BILL - IMPACT ON DEPARTMENT OF INSURANCE

PRESENTED BY KEVIN FRY, CHIEF OPERATING OFFICER
ILLINOIS DEPARTMENT OF INSURANCE

DEPARTMENT OF INSURANCE IMPACTS FROM PENSION CONSOLIDATION BILL

- DOI role with consolidation training
- Changes to examination mandate
- Changes to actuarial opinion requirements
- Required filings to the DOI
- Certified invested asset list
- Creation of trustee election tie breaking rule



Funding, Actuarial & Audit

Steve Zahn, Chief Operating Officer

FIREFIGHTERS' PENSION INVESTMENT FUND



- Article 4 of the Illinois Pension Code requires a statutory minimum annual tax levy.
 - Funding requirements under Section 4-118 unchanged by P.A. 101-610.
- Target 90% funded ratio by 2040.
- Article 4 funds maintain their State Comptroller intercept.



Actuarial Statements

- Prior to the conclusion of the Transition Period:
 - Department of Insurance
 - Article 4 Pension Fund
 - Municipality/Fire Protection District

- After the conclusion of the Transition Period:
 - FPIF
 - Article 4 Pension Fund
 - Municipality/Fire Protection District



FPIF Actuarial Statements

- Required upon the conclusion of the Transition Period
 - Replaces the Department of Insurance actuarial statements.
- Statutory minimum contribution.
- Assumptions Adopted by the Permanent Board of Trustees.
 - Requires a vote of 6 trustees.
- Assumption changes to be smoothed over a 3-year period.



Periodic Audits

- Prior to the Conclusion of the Transition Period, the Department of Insurance is required to periodically audit or examine each Article 4 pension fund.
- After the conclusion of the Transition Period, FPIF may retain an independent certified public accountant to audit or examine Article 4 pension funds.
- Required every 3 years.

A stylized flame graphic in shades of orange and red, positioned behind the letter 'I' in the acronym.

FIREFIGHTERS' PENSION INVESTMENT FUND

Questions

FIREFIGHTERS' PENSION INVESTMENT FUND



Investment Portfolio Construction

Mitchell Green, Portfolio Officer

FIREFIGHTERS' PENSION INVESTMENT FUND

Objective

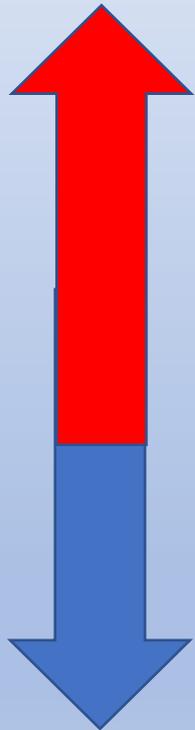
- Construct a high-quality pension fund for municipal firefighters throughout Illinois to provide retirement income and security by generating strong returns, mitigating risks, and minimizes costs



Benefits of Scale

- Lower Investment Fees
- Access to Broader Opportunity Set
- Removal of Article 4 Investment Restrictions
- Professional Investment Staff

New Opportunities



Asset Class
Emerging Markets Equity
Private Equity
Non-Core Real Estate
US Equity
Developed International Equity
Private Debt
Infrastructure
High Yield Fixed Income
Bank Loans
Core Real Estate
Emerging Markets Debt
US Core Fixed Income
TIPS
Cash and Cash Equivalents

- Greater exposure to higher-return investments
- Access to new asset classes
- Ability to leverage size and scale
- Diversification can reduce overall risk

Portfolio Construction – Asset Allocation

What is Asset Allocation?

- Asset allocation refers to the distribution of assets across a number of asset classes that exhibit different correlations with each other. Each asset class exhibits a unique combination of risk and reward. The expected and realized long-term returns vary by asset class, as does the interim volatility of those returns.
- Some asset classes, like equities, exhibit high degrees of volatility, but also offer high returns over time. Other asset classes, like cash, experience very little volatility, but offer limited return potential.

Portfolio Construction – Asset Allocation

Why is Asset Allocation Important?

- The distribution of assets across various asset classes exerts a major influence on the return behavior of the aggregate pool over short and long time periods.

How does Asset Allocation affect aggregate performance?

- In addition to exhibiting unique characteristics, each asset class interacts differently with other asset classes. When asset classes have low correlations, the likelihood that those asset classes will move together in the same direction is limited, with the movement of one asset class often offsetting another's. Combining asset classes allows investors to control more fully the aggregate risk and return of their portfolios, and to benefit from the reduction in volatility that stems from diversification.

Portfolio Construction – Asset Allocation

What is the Fund's long-term return objective?

- Financial goals:
 - Achieve a rate of return based on the actuarial assumed rate of return and the Board's long-term return objectives
 - Continue to meet the Systems' benefit obligations in perpetuity

What are the Fund's risk objectives?

- In general, minimize the risk in the portfolio, given the return objectives
 - Structure the portfolio to be able to withstand year-to-year fluctuations in asset values and contributions
- Understand the risks in the portfolio, accept certain risks as necessary to meeting the return objectives, and monitor these risks:
 - Find an appropriate balance between the risk of short-term loss and the potential for long-term growth in riskier assets
 - Mitigate as much as possible the risk of capital impairment

Portfolio Construction – Asset Allocation

What are the liquidity needs of the fund?

- Net cash inflows and outflows will be evaluated for each pension fund
- FPIF will maintain more than sufficient liquidity for benefit payments and cash needs

Portfolio Construction – Asset Allocation

Asset Allocation Review Process

- Evaluate the spectrum of asset allocation options, ranging from conservative to aggressive
- Choose a portfolio with expected returns and risk that are appropriate for the financial position of the Fund
- Accept equity risk as means of achieving an acceptable long-term return and allowing the Fund to provide reasonable retirement benefits
- Understand the risks in a portfolio predominantly invested in equity and fixed income

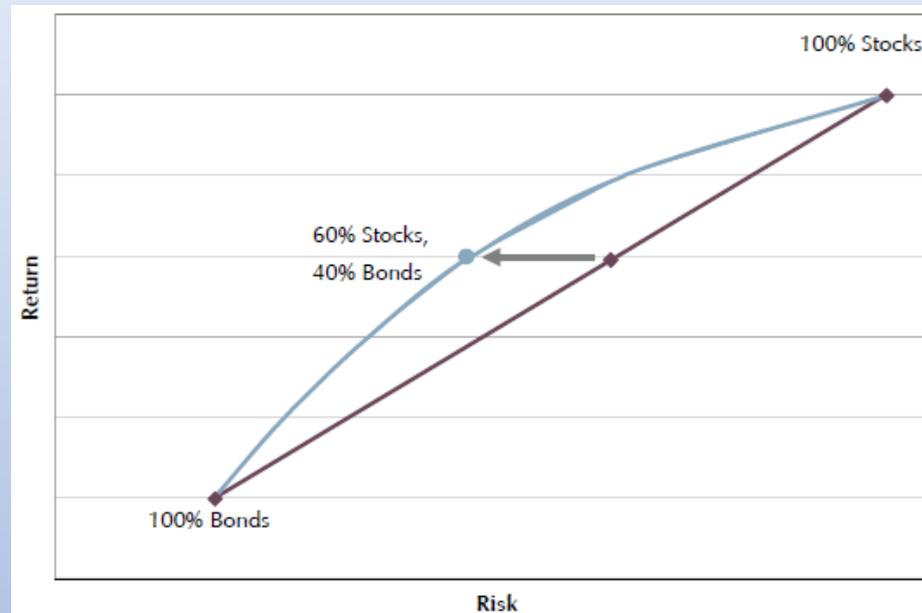


Portfolio Construction – Asset Allocation

Mean Variance Optimization

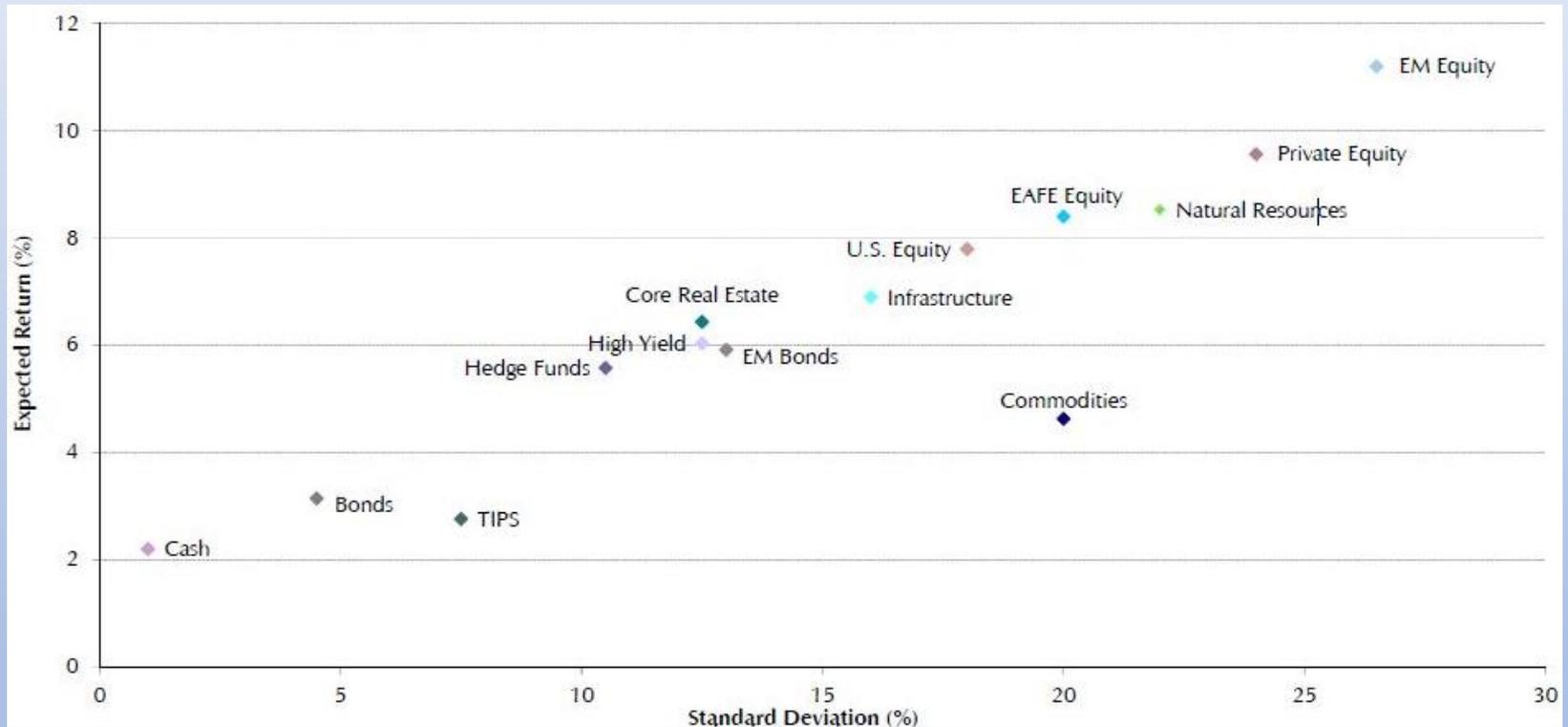
- Mathematically determines an “efficient frontier” of policy portfolios with the highest risk-adjusted returns
- All asset classes exhibit three characteristics, which serve as inputs to the model:
 - Expected return
 - Expected volatility
 - Expected covariance with all other assets

Portfolio Construction – The Efficient Frontier



- Combining uncorrelated assets produces an “efficient frontier.” Different combinations of assets (e.g., 60% stocks & 40% bonds) will lie along this efficient frontier.
- By combining assets that are not highly correlated with each other, the Fund can produce a higher return for a given level of risk than it could by investing in perfectly correlated assets. Alternatively, it can experience lower risk for a given level of return.

Portfolio Construction – Expected Return and Volatility

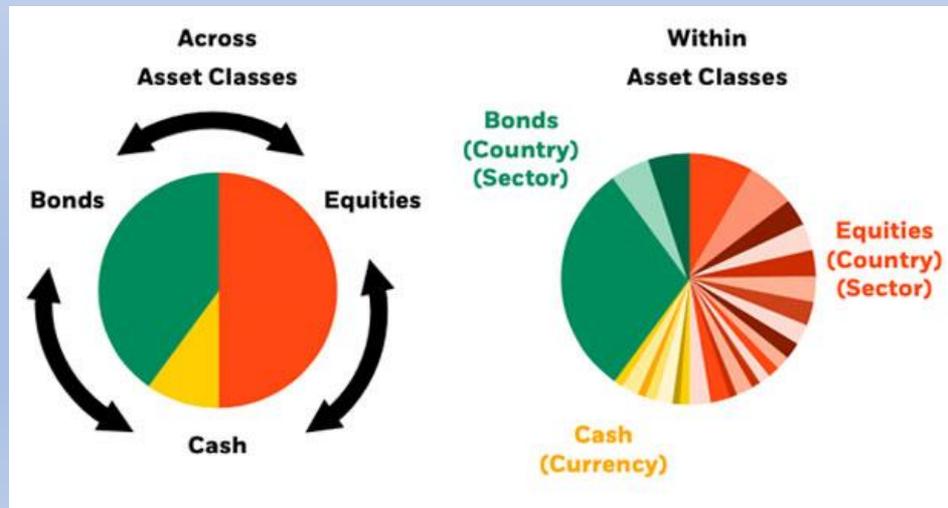


- A positive correlation exists between long-term return expectations and the level of risk accepted

Portfolio Construction – Asset Allocation

Diversification

- The primary motive for diversifying a portfolio is to reduce risk, ideally without reducing return
- Diversification is the only way to reduce risk without reducing expected returns
- Therefore, investments will be allocated across multiple asset classes, based in part on the expected correlation of their returns



Asset Class Descriptions

Firefighters' Pension Investment Fund

Asset Class Descriptions

Equity

- A stock, also known as equity, is a financial instrument that represents ownership of a fraction of a corporation. Stocks entitle owners to a proportion of a corporation's assets and profits.
- Corporations sell stock to raise funds to operate their businesses.
- While equity is likely to be a higher-returning asset class, it is also a more volatile asset class.



Asset Class Descriptions

Domestic Equity

- US equity typically comprises a substantial portion of institutional investment portfolios
- US equities are often classified into three broad categories
 - Small-Capitalization (Less than \$2 billion)
 - Medium-Capitalization (Between \$2 billion and \$10 billion)
 - Large Capitalization (Greater than \$10 billion)
- Market capitalization is the total value of a company's outstanding equity (Market Price x Shares Outstanding)
- Historically, small capitalization stocks have produced higher average annual returns with higher volatility, compared to large capitalization equities.
- Large capitalization stocks typically have lower volatility than small-cap stocks. At the same time, they may have less growth potential.

Asset Class Descriptions

Developed International Equity

- The U.S. equity market comprises only a portion of the world's capital markets. Developed international equity refers to stocks of companies that are in developed countries (i.e. Japan, United Kingdom, France, Germany)
- Foreign and domestic equity markets have produced alternating superior and inferior relative returns during various time periods
- There is a material diversification benefit to owning both U.S. and non-U.S. equities. Investors have generally experienced lower overall equity volatility if their equity assets include diversified investments in foreign equities.
- In the same manner that investors receive risk-reduction benefits from owning a variety of individual domestic stocks, they similarly benefit from owning investments representing a variety of international markets
- When investing in international equities, it is important to allocate assets among a variety of regions, countries, and industries, to ensure appropriate diversification.
- International equities are subject to risks such as currency risk, political risk, and liquidity risk

Asset Class Descriptions

International Small Cap

- International small caps are the smaller stocks in the developed overseas markets (i.e., Japan, United Kingdom, France, Germany)
 - Their Market capitalization is usually below \$5 billion
- Foreign small capitalization stocks have outperformed foreign large capitalization stocks, perhaps benefitting from the same “small stock effect” as in the U.S.
- The large investable universe broadens FPIF’s investment opportunities
- Limited analyst coverage creates a relatively inefficient area of the market where alpha can be generated
- Volatility will likely be higher than for US stocks

Asset Class Descriptions

Emerging Markets Equity

- Emerging markets are not easily defined, but typically encompass countries with low per capita income
- Emerging markets comprise roughly 80% of the world's population and 37% of global economic output
- The B.R.I.C. (Brazil, Russia, India, and China) countries are amongst the prominent emerging markets
- The rationale for investing in emerging markets is simple: growth
- Expected returns are higher in emerging markets than developed markets
- Emerging markets have displayed greater volatility, as well as political risk

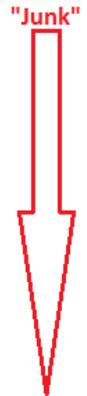
Asset Class Descriptions

U.S. Investment Grade Fixed Income

- Investment grade fixed income is an asset class focused on preservation of capital and income
- Investors in investment grade fixed income loan their assets to entities such as the U.S. government, State governments, municipalities, and credit-worthy corporations
- To qualify as “investment grade,” borrowers must be rated as Baa or better by Moody’s, or BBB or better by S&P and Fitch
- These bonds tend to offer lower yields than below-investment-grade bonds, since more creditworthy borrowers do not pay as high of an interest rate as riskier borrowers
- While lower risk, the asset class is still exposed to interest rate, inflation, credit, and liquidity risks

Credit Rating Scales by Agency, Long-Term

Moody's	S&P	Fitch	
Aaa	AAA	AAA	Prime
Aa1	AA+	AA+	High grade
Aa2	AA	AA	
Aa3	AA-	AA-	
A1	A+	A+	Upper medium grade
A2	A	A	
A3	A-	A-	
Baa1	BBB+	BBB+	Lower medium grade
Baa2	BBB	BBB	
Baa3	BBB-	BBB-	
Ba1	BB+	BB+	Non-investment grade speculative
Ba2	BB	BB	
Ba3	BB-	BB-	
B1	B+	B+	Highly speculative
B2	B	B	
B3	B-	B-	
Caa1	CCC+	CCC	Substantial risk
Caa2	CCC		Extremely speculative
Caa3	CCC-		Default imminent with little prospect for recovery
Ca	CC	CC	
	C	C	
C			In default
/	D	D	
/			



Asset Class Descriptions

Treasury Inflation Protected Securities

- TIPS are inflation-linked bonds issued by the U.S. Treasury
- They were first issued in 1997 and they are most often issued in maturities of 5, 10, and 30 years
- The coupon is applied against the principal, which grows at the rate of inflation
- TIPS are backed by the US Treasury
- Prices of TIPS rise when higher inflation is perceived
- The asset class is negatively correlated with equities
- TIPS are less liquid than treasuries, but much more liquid than corporate bonds
- Historically, TIPS have been more volatile than Treasuries
- TIPS are likely to underperform during periods of perceived deflation

Asset Class Descriptions

High Yield Bonds

- Bonds that are rated as less than investment grade by the credit-rating agencies (e.g., S&P, Moody's)
- High yield bonds provide higher income than from traditional bonds
- High yield bonds have produced outsized gains during economic rebounds
- The risk of default is the primary risk
- Liquidity risk
- Returns are highly tied to the economic cycle

Asset Class Descriptions

Emerging Markets Debt

- Debt issued by governments and corporations based in emerging markets.
- This type of debt can be denominated in U.S. dollars, although most (80%) is denominated in local currencies
- Offers a higher yield than U.S. government bonds
- Only moderate correlation to U.S. equity and bond markets
- Significantly improved creditworthiness over the past decade
- Potential for currency to move against US investors
- High Default risk historically and lower liquidity than US government bonds
- Event and political risks

Asset Class Descriptions

Bank Loans

- Bank loans are senior floating-rate loans made to corporations, usually made by a syndicate of banks
- These loans are originated by banks and then traded freely in a secondary market for investors
- They are typically used by firms to fund everything from working capital needs to acquisitions
- Companies have historically used these loans to access capital more cheaply than by issuing high yield bonds
- Bank loans provide higher income than that available from traditional bonds
- A more senior position in the capital structure implies less risk than for high yield bonds
- The floating-rate feature can provide a hedge against rising interest rates
- Bank loans carry the risk of default and liquidity risk is greater than high yield bonds

Asset Class Descriptions

Real Estate

- Core real estate represents high-quality, income-producing properties with stable cash flows.
- The most common property types are: office, industrial (warehouse), retail (malls, shopping centers), and residential (apartments, condominiums).
- Institutional investors can invest via public markets (REITs) or private markets.
- Core properties produce stable income.
- The asset class has a low correlation to traditional equity and bond markets
- Historically, returns have been cyclical and linked to the performance of the broad economy.
- During periods of large net redemptions, liquidity may dry up.

Asset Class Descriptions

Infrastructure

- Infrastructure assets are the underlying foundation of basic services, facilities, and institutions upon which a community depends:
 - Transportation (roads, bridges, airports)
 - Environmental (water, waste, sanitation)
 - Energy (pipelines, power generation, power distribution)
 - Communication (cable, internet, phone networks)
 - Social (hospitals, schools, parks)
- Equity-like returns
- Provides a hedge against inflation
- Low correlation to other asset classes
- Investors can access infrastructure through public and private markets
- Private market structures are illiquid and can use leverage

Asset Class Descriptions

Private Equity

- Private equity represents investments in privately held companies
- These investments are generally structured as partnerships that consist of 10 to 20 equity investments in individual companies
- Investments come in many forms, including: venture capital, buyouts, mezzanine debt, and special situations
- Institutional investors can invest in direct funds or via fund of funds
- Private equity offers the potential for returns in excess of those from public equities
- Private equity funds may utilize leverage, offer limited liquidity, and have higher fees than other asset classes

Questions?



Please subscribe to our
newsletter at www.ifpif.org.

FIREFIGHTERS' PENSION INVESTMENT FUND