



## MINUTES

**Meeting of the Investment Committee  
of the Board of Trustees of the  
State Universities Retirement System  
Thursday, October 24, 2024, 9:00 a.m.  
State Universities Retirement System  
1901 Fox Dr. – Main Conference Room – Champaign, IL  
\*Optional Remote Connection for Members of the Public\***

This meeting was held in person at the State Universities Retirement System in Champaign, IL.

The following trustees were present: Dr. Andry Bodnaruk; Dr. Fred Giertz; Mr. Scott Hendrie, chair; Mr. Pranav Kothari; Mr. John Lyons; Mr. Herbert Pitman; Dr. Steven Rock; Mr. Collin Van Meter; and Mr. Antonio Vasquez.

Others present: Ms. Suzanne Mayer, Executive Director; Mr. Michael Schlachter, Chief Investment Officer (CIO); Ms. Jessica Pickens, Mr. Alex Ramos, Mr. Joe Duncan and Mr. Shane Willoughby, Sr. Investment Officers; Mr. Brian Deloria, Investment Officer; Ms. Stephany Brinkman, Associate Investment Officer; Ms. Stephanie Jeffries, Mr. Al Lund, and Mr. Darian Saracevic, Investment Analysts; Ms. Tracy Bennett, Investment Compliance Analyst; Ms. Bianca Green, General Counsel; Ms. Tara Myers, Chief Financial Officer; Ms. Jackie Hohn, Chief Internal Auditor; Ms. Nichole Hemming, Chief Human Resources Officer; Mr. Jefferey Saiger, Chief Technology Officer; Ms. Anna Dempsey, Investment Counsel; Ms. Heather Kimmons, Associate Legal Counsel; Ms. Kristen Houch, Director of Legislative and Stakeholder Relations; Ms. Kelly Carson, Ms. Chelsea McCarty and Ms. Annette Ackerman, Executive Assistants; Mr. David Sancewich and Mr. Colin Bebee, of Meketa; Mr. Munir Iman and Ms. Christine Mays of Callan; and Mr. Michael Calabrese of Foley.

Investment Committee roll call attendance was taken. Trustee Bodnaruk, not called; Trustee Figueroa, absent; Trustee Giertz, present; Trustee Hendrie, present; Trustee Kothari, present; Trustee Lyons, present; Trustee Pitman, present; Trustee Rock, not called; Trustee Van Meter, present; and Trustee Vasquez, present.

### TRUSTEE PARTICIPATION VIA ELECTRONIC MEANS

Trustee Giertz made the following motion:

- That Trustees Bodnaruk and Rock be allowed to participate via video or audio conference call for the Investment Committee Meeting on October 24, 2024, pursuant to Section 7(a) of the Open Meetings Act.

Trustee Kothari seconded the motion which passed via the following roll call vote:

|                  |   |            |
|------------------|---|------------|
| Trustee Bodnaruk | - | not called |
| Trustee Figueroa | - | absent     |

|                   |   |            |
|-------------------|---|------------|
| Trustee Giertz    | - | aye        |
| Trustee Hendrie   | - | aye        |
| Trustee Kothari   | - | aye        |
| Trustee Lyons     | - | aye        |
| Trustee Pitman    | - | aye        |
| Trustee Rock      | - | not called |
| Trustee Van Meter | - | aye        |
| Trustee Vasquez   | - | aye        |

Roll call attendance for trustees participating via electronic means was taken: Trustee Bodnaruk, present, Trustee Rock, present.

### **APPROVAL OF MINUTES**

Trustee Hendrie presented the minutes from the Investment Committee meeting of September 12, 2024.

Trustee Van Meter made the following motion:

- That the minutes from the September 12, 2024, Investment Committee meeting be approved as presented.

Trustee Giertz seconded the motion which passed via all trustees present voting in favor of the motion.

### **APPROVAL OF CLOSED MINUTES**

Trustee Hendrie presented the closed minutes from the Investment Committee meeting of September 12, 2024.

Trustee Van Meter made the following motion:

- That the closed minutes from the September 12, 2024, Investment Committee meeting be approved as presented and remain closed.

Trustee Vasquez seconded the motion which passed via all trustees present voting in favor of the motion.

### **CHAIRPERSON'S REPORT**

Trustee Scott Hendrie did not have a formal chairperson's report.

### **CHIEF INVESTMENT OFFICER'S REPORT**

Mr. Michael Schlachter provided an update regarding the overall SURS total portfolio stating that the SURS portfolio recently reached the value of \$30 billion. He also informed trustees of a new report that can be found in the committee materials regarding action taken under delegated authority.

Copies of the staff memorandums titled “Investment Contracts Approved,” “CIO Report Regarding Actions Taken Under Delegated Authority” and “Report from the September 2024 Investment Committee Meeting” are incorporated as part of these minutes as [Exhibit 1](#), [Exhibit 2](#), and [Exhibit 3](#).

**PRINCIPAL PROTECTION, INFLATION SENSITIVE, PUBLIC CREDIT  
CLASS REVIEW – EDUCATIONAL SESSION**

Mr. Alex Ramos provided an asset class review for public fixed income strategies in the stabilized growth, principal protection and inflation sensitive classes. Throughout his presentation Mr. Ramos discussed policy targets, performance and portfolio characteristics.

The educational session lasted 25 minutes and concluded at 9:30 a.m.

A copy of the staff presentation titled “Public Fixed Income Functional Asset Class Review” is incorporated as part of these minutes as [Exhibit 4](#).

**CONTINUATION OF ASSET LIABILITY STUDY – EDUCATIONAL SESSION**

Mr. Colin Bebee provided additional information regarding the 2024-2025 Asset-Liability study. This discussion will continue during future Investment Committee meetings.

The educational session lasted 90 minutes and concluded at 11:00 a.m.

A copy of the presentation titled “SURS AL Study Part 2” is incorporated as part of these minutes as [Exhibit 5](#).

**RETIREMENT SAVINGS PLAN / DEFINED CONTRIBUTION PLAN  
RECORDKEEPER UPDATE**

Ms. Suzanne Mayer provided a brief update regarding SURS current recordkeeper, and the current expiration date of that contract. Ms. Mayer stated that the contract is scheduled to expire next year, and she discussed a few key reasons why SURS would prefer to extend the contract at this time instead of going back to the market at this time. The board agreed that negotiating an extension of the contract with Voya is in the best interests of SURS at this time, and said negotiations will be pursued.

**RETIREMENT SAVINGS PLAN / DEFINED CONTRIBUTION PLAN INVESTMENT  
MANAGER FUND VEHICLE CHANGE**

Mr. Brian DeLoriea and Mr. Jared Hardin of CAPTRUST provided an overview of the SURS Retirement Savings Plan and the SURS Deferred Compensation Plan regarding the Small-Mid Cap Growth Equity Fund.

Following the presentation, Trustee Giertz made the following motion:

- That based upon the recommendation from SURS staff and CAPTRUST, the SURS assets in the SMA structure of Fiera Capital SMID Growth Fund be transferred to the Founders Class of the CIT structures, as soon as administratively possible to reduce the net investment cost of the SURS Small-Mid Cap Growth Equity Fund from 0.655 percent to 0.60 percent.

Trustee Vasquez seconded the motion which passed via the following roll call vote.

|                   |   |        |
|-------------------|---|--------|
| Trustee Bodnaruk  | - | aye    |
| Trustee Figueroa  | - | absent |
| Trustee Giertz    | - | aye    |
| Trustee Hendrie   | - | aye    |
| Trustee Kothari   | - | aye    |
| Trustee Lyons     | - | aye    |
| Trustee Pitman    | - | aye    |
| Trustee Rock      | - | aye    |
| Trustee Van Meter | - | aye    |
| Trustee Vasquez   | - | aye    |

A copy of the memorandum titled “SURS SMID Growth Recommendation” is incorporated as part of these minute as [Exhibit 6](#).

### **CLOSED SESSION**

Trustee Giertz moved that the Investment Committee go into closed session pursuant to §2(c)(7) of the Illinois Open Meetings Act to consider the sale or purchase of securities, investments or investment contracts. Trustee Vasquez seconded the motion which passed via the following roll call vote.

|                   |   |        |
|-------------------|---|--------|
| Trustee Bodnaruk  | - | aye    |
| Trustee Figueroa  | - | absent |
| Trustee Giertz    | - | aye    |
| Trustee Hendrie   | - | aye    |
| Trustee Kothari   | - | aye    |
| Trustee Lyons     | - | aye    |
| Trustee Pitman    | - | aye    |
| Trustee Rock      | - | aye    |
| Trustee Van Meter | - | aye    |
| Trustee Vasquez   | - | aye    |

### **RETURN TO OPEN SESSION**

The Investment Committee returned to open session at 1:35 p.m.

Trustee Kothari then made the following motion:

- That based upon the recommendation from SURS Staff and Callan, SURS commit the lesser of \$50 million or 10 percent of total fund commitments to Belay Ventures Fund IV, subject to the successful completion of contract negotiations.

Trustee Vasquez seconded the motion which passed via the following roll call vote.

|                   |   |        |
|-------------------|---|--------|
| Trustee Bodnaruk  | - | aye    |
| Trustee Figueroa  | - | absent |
| Trustee Giertz    | - | aye    |
| Trustee Hendrie   | - | aye    |
| Trustee Kothari   | - | aye    |
| Trustee Lyons     | - | aye    |
| Trustee Pitman    | - | aye    |
| Trustee Rock      | - | aye    |
| Trustee Van Meter | - | aye    |
| Trustee Vasquez   | - | aye    |

Next, after being advised again of the change in the investments strategies of UBS and the change in personnel at that company, Trustee Vasquez made the following motion:

- That based on the recommendation of SURS staff, the portfolio with UBS be liquidated and assets with that manager be reallocated as discussed.

Trustee Van Meter seconded the motion which passed via the following roll call vote.

|                   |   |        |
|-------------------|---|--------|
| Trustee Bodnaruk  | - | aye    |
| Trustee Figueroa  | - | absent |
| Trustee Giertz    | - | aye    |
| Trustee Hendrie   | - | aye    |
| Trustee Kothari   | - | aye    |
| Trustee Lyons     | - | aye    |
| Trustee Pitman    | - | aye    |
| Trustee Rock      | - | aye    |
| Trustee Van Meter | - | aye    |
| Trustee Vasquez   | - | aye    |

Trustee Kothari then made the following motion:

- That staff is authorized to terminate the 2022 Tail Risk Hedge and Volatility Management RFP and not enter a contract with the back-up manager originally selected by the Investment Committee.

Trustee Vasquez seconded the motion which passed via the following roll call vote.

|                  |   |        |
|------------------|---|--------|
| Trustee Bodnaruk | - | aye    |
| Trustee Figueroa | - | absent |
| Trustee Giertz   | - | aye    |

|                   |   |     |
|-------------------|---|-----|
| Trustee Hendrie   | - | aye |
| Trustee Kothari   | - | aye |
| Trustee Lyons     | - | aye |
| Trustee Pitman    | - | aye |
| Trustee Rock      | - | aye |
| Trustee Van Meter | - | aye |
| Trustee Vasquez   | - | aye |

**PUBLIC COMMENT**

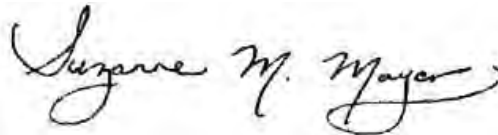
There were no public comments presented to the Investment Committee.

**ADJOURN**

There was no further business brought before the committee and Trustee Giertz moved to adjourn the meeting. The motion was seconded by Trustee Kothari, and it passed via all trustees via the following roll call vote.

|                   |   |        |
|-------------------|---|--------|
| Trustee Bodnaruk  | - | aye    |
| Trustee Figueroa  | - | absent |
| Trustee Giertz    | - | aye    |
| Trustee Hendrie   | - | aye    |
| Trustee Kothari   | - | aye    |
| Trustee Lyons     | - | aye    |
| Trustee Pitman    | - | aye    |
| Trustee Rock      | - | aye    |
| Trustee Van Meter | - | aye    |
| Trustee Vasquez   | - | aye    |

Respectfully submitted,



Ms. Suzanne M. Mayer  
Executive Director and Secretary, Board of Trustees

SMM:kc



To: Investment Committee  
 From: Michael C. Schlachter, CFA  
 Date: October 10, 2024  
 Subject: Report from the September 12, 2024, Investment Committee Meeting

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Enclosed are the Minutes of the September 12 Investment Committee Meeting. The purpose of this memorandum is to provide a status report on the action items for Investments.

There were three motions approved by the Board of Trustees at the September meeting that required further action by SURS staff as all agenda items were for education and/or information. There was one item at the August meeting which required further action by SURS staff. Open motions from prior meetings requiring further action by SURS Staff are listed below.

**1. That based upon the recommendations from SURS Staff and Meketa, the revised Investment Policy for the defined benefit plan be approved, as presented.**

The Investment Policy was signed by the Executive Director and posted to the SURS website, following approval.

**2. That based upon the recommendations from SURS Staff and Meketa, the revised Investment Procurement Policy be approved, as presented.**

The Investment Procurement Policy was slightly edited per the suggestion of the external fiduciary counsel and investment committee, signed by the Executive Director, and posted to the SURS website, following approval.

**3. That based upon the recommendations from SURS Staff and Callan, SURS commit \$100 million to Pantheon Global Infrastructure Fund V, subject to successful completion of contract negotiations.**

The documentation for the fund is in legal review. First close of the fund was extended and we anticipate that we will continue to be eligible for the first close fee discount.

**Open item from December 7, 2023**

**1. That based on the recommendation of SURS staff and Callan, a commitment of the lesser of \$50 million or 10% of total fund commitments be made to Ember Infrastructure Fund II, subject to successful completion of contract negotiations.**

The agreement to effect the investment was executed and delivered on February 8, 2024. The final size of the SURS commitment to the fund is pending the aggregate commitments of other limited partners.

**Open item from June 2, 2022**

- 2. That based on the recommendation from SURS staff and Meketa, the Investment Committee approve the retention of Capstone Investment Advisors to serve as the back-up manager for the tail risk and long volatility mandates, subject to successful contract negotiations.**

SURS staff is in the process of contract negotiations.

Please advise if you have any questions prior to the October 24, 2024, Investment Committee meeting.





To: Investment Committee  
From: Michael C. Schlachter, CFA  
Date: October 10, 2024  
Subject: Actions Taken by the CIO under Delegate Authority

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Since June 30, 2024, the following are actions taken by the SURS Chief Investment Officer that did not require approval from the Investment Committee.

### **Cash Movements**

- To meet liquidity needs and benefit payments, \$75 million was redeemed from the Rhumblin US equity index fund in August, 2024.
- To meet liquidity needs and benefit payments, \$100 million was redeemed from the Neuberger Berman fixed income portfolio in September, 2024.

### **Tail Hedge Portfolio**

- The size of the tail hedge portfolio was adjusted as was discussed in closed session at the June and September Investment Committee meetings. At the time of this writing, trading for the quarterly “roll” of the portfolio is in process. I would be happy to discuss the outcome of trading and the size of the current hedge portfolio in closed session at the next meeting.

### **Follow-on Private Assets Funds**

- No follow-on private assets commitments were made by the Investment Staff without Investment Committee approval during the period from June 30, 2024 to October 10, 2024.

Please advise if you have any questions prior to the October 24, 2024, Investment Committee meeting.



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www.surs.org

Investment Department

To: Suzanne Mayer  
From: Michael C. Schlachter, CFA and Anna M. Dempsey  
Date: October 10, 2024  
Subject: Investment Contracts Approved

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The following investment agreements were approved by the Executive Director subsequent to the mailing for the September 12, 2024, Investment Committee meeting.

**CABOT VII**

A “most favored nation” election with respect to Cabot Industrial Value Fund VII, L.P. was executed on September 4, 2024.

**PUSA VIII**

A consent to extend the term of Pantheon USA Fund VIII, L.P. until October 18, 2025, was executed on October 1, 2024.

**FRANKLIN TEMPLETON MREFF**

A consent to extend the term of Emerging Manager Real Estate Fund of Funds, L.P. until October 25, 2025, was executed on October 9, 2024.

# Functional Asset Class Review: Fixed Income Public Liquid Credit, Principal Protection & Inflation Sensitive

October 2024



# Fiscal Year 2025 Functional Asset Class Review Schedule

| Meeting   | Functional Asset Class                                        | Strategies                                        |
|-----------|---------------------------------------------------------------|---------------------------------------------------|
| September | Annual Review/Investment Plan                                 |                                                   |
| → October | Stabilized Growth, Principal Protection & Inflation Sensitive | Public Liquid Credit, Principal Protection & TIPS |
| December  | Stabilized Growth, Non-Traditional Growth                     | Private Credit, Private Equity & Real Assets      |
| March     | Defined Contribution                                          |                                                   |
| April     | Traditional Growth                                            | Public Equity                                     |
| June      | Crisis Risk Offset                                            | Trend Following, Alternative Risk Premia          |

# Investment Beliefs

- • SURS believes that an appropriately diversified strategic allocation policy is the primary policy tool for maximizing the investment program's long-term return in light of its risk profile. The timing and magnitude of projected SURS's employer contributions and future benefit payments (i.e., its funding policy) can have significant cash flow implications and thus should receive explicit consideration during SURS's risk-framing and asset allocation decision-making process.
- • SURS believes that, in order to achieve its objectives, it must incur a certain amount of investment risk that is tied to economic performance. Exposure to economic growth comes about primarily through the equity risk premium which, while highly variable, produces a significantly positive long-term return.
- • SURS believes that diversification within strategic classes helps to mitigate the risks of the class. Appropriate manager diversification helps to maximize the breadth of capturing alpha after accounting for the major biases in a portfolio. As a result, added value consistency should improve.
- • SURS believes disciplined allocation of capital is necessary to manage the systematic risk of the portfolio and maximize the likelihood of achieving its long-term expectations. Key examples of maintaining disciplined capital allocation includes consistently rebalancing back to strategic targets where appropriate and dollar-cost averaging (and/or pacing) new capital allocations over time into both public-market and private-market portfolios.

# Investment Beliefs

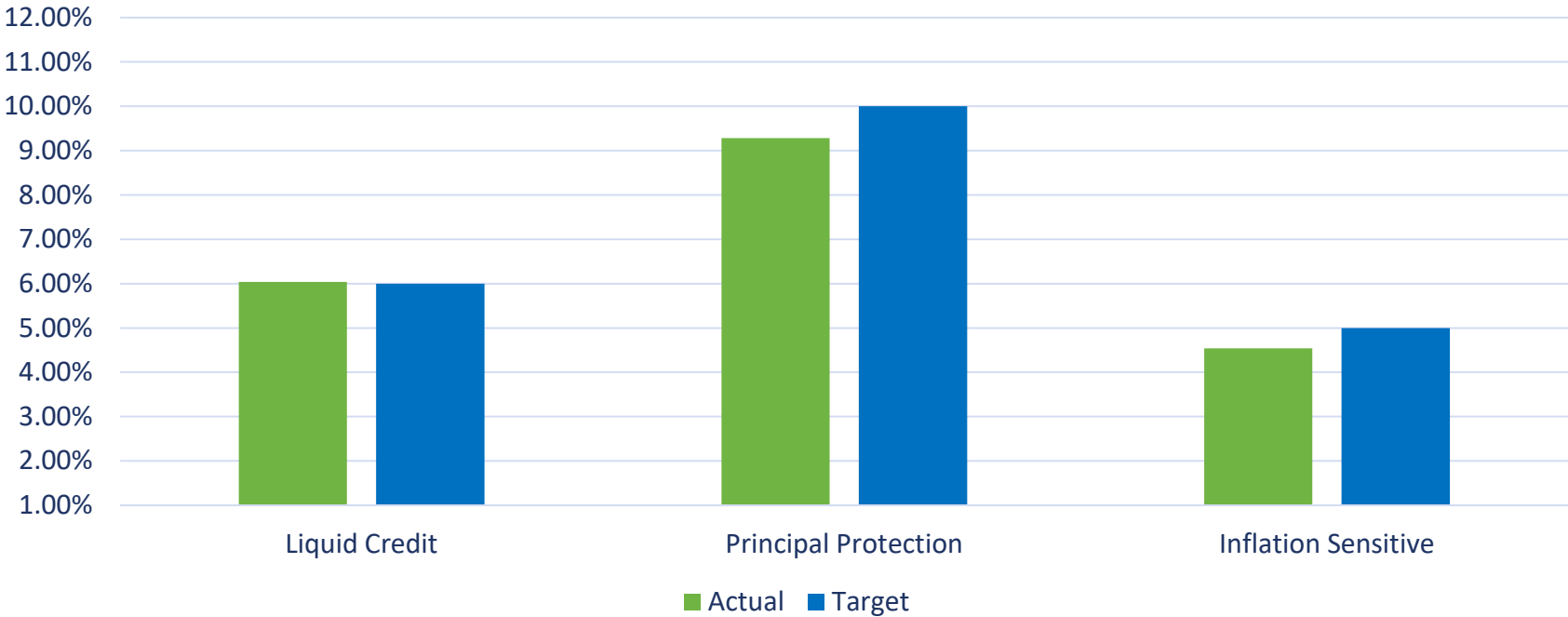
- • SURS believes that utilization of passive approaches in highly-efficient publicly-traded markets should take priority because it is extremely difficult to add consistent value, net of fees, in these markets. In addition, passive management typically provides for rapid, relatively liquid, low-cost exposure to the major risk premiums of the global investment markets.
- • SURS believes active management can prove beneficial in certain market segments when there is evidence that active management can produce consistent significantly-positive, net of fee performance over various market cycles.
- SURS believes that investment costs (fees, expenses and frictional costs) directly impact investment returns and should be monitored and managed carefully. Such costs should be evaluated relative to both expected and realized returns and take into account appropriate alignment of interest considerations.
- SURS believes that the private markets should produce higher returns than public markets due to exposure to the illiquidity risk premium. While illiquidity risk can cause a portfolio's risk to increase, over the long-term the illiquidity risk premium is positive and material.
- • SURS is committed to enhancing diversity by incorporating emerging (minority, woman-owned and disability-owned) investment managers into the portfolio.
- SURS believes that addressing material environmental, social and governance-related (ESG) issues can lead to positive portfolio and governance outcomes. To integrate ESG issues into its investment process SURS may apply certain investment and/or engagement strategies/approaches to its portfolio investments. In addition, proxy rights attached to shareholder interests in public companies are also "plan assets" of SURS and represent a key mechanism for expressing SURS's positions relating to specific ESG issues.

# SURS Policy Targets

| Classes/Strategies          | Current Strategic Policy Target % | Long-Term Strategic Policy Target % |
|-----------------------------|-----------------------------------|-------------------------------------|
| <b>Broad Growth</b>         | <b>68%</b>                        | <b>68%</b>                          |
| Traditional Growth          | 36%                               | 35%                                 |
| Public Equity               | 36%                               | 35%                                 |
| Stabilized Growth           | 17%                               | 17%                                 |
| Core Real Assets            | 8%                                | 8%                                  |
| Liquid Credit               | 5%                                | 4%                                  |
| Private Credit              | 4%                                | 5%                                  |
| Non-Traditional Growth      | 15%                               | 16%                                 |
| Private Equity              | 11%                               | 11%                                 |
| Non-Core Real Assets        | 4%                                | 5%                                  |
| Inflation Sensitive         | <b>5%</b>                         | <b>5%</b>                           |
| TIPS                        | 5%                                | 5%                                  |
| <b>Principal Protection</b> | <b>10%</b>                        | <b>10%</b>                          |
| <b>Crisis Risk Offset</b>   | <b>17%</b>                        | <b>17%</b>                          |
| Long Duration               | 2%                                | 2%                                  |
| Long Volatility             | 1.7%                              | 1.7%                                |
| Tail Risk                   | 0.3%                              | 0.3%                                |
| Trend Following             | 10%                               | 10%                                 |
| Alt. Risk Premia            | 3%                                | 3%                                  |
| <b>Total</b>                | <b>100%</b>                       | <b>100%</b>                         |

The Current Strategic Target % may change over time and reflects gradually shifting of assets to the Long-Term Strategic Policy Target %, due to practical implementation considerations and liquidity constraints.

# Liquid Credit, Principal Protection & Inflation Sensitive Actual vs. Target Allocation



Actual allocations for Principal Protection and Inflation Sensitive are slightly below their target allocations

Data as of June 30, 2024



# Due Diligence Process

- Manager due diligence is an essential component of the investment process
- Due diligence is completed both before (RFP) and after managers are hired
- Staff conducts regular meetings/calls with existing managers in the portfolio and formally reviews them on an annual basis
- Key areas of the manager due diligence process include:
  - Ownership
  - Staffing
  - Assets Under Management
  - Investment Process
  - Performance
  - Compliance
  - Fees
  - Client Service
  - Diversity & Inclusion
  - ESG

# Market Review



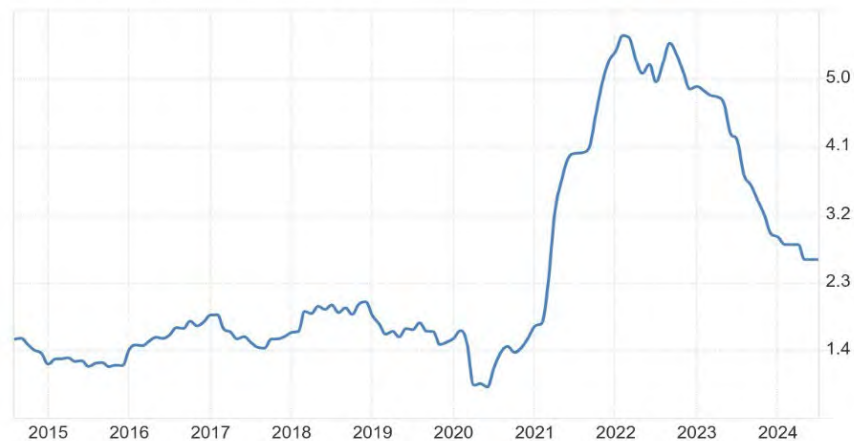
# Market Review

The US Federal Reserve and most developed markets lowered rates in September.

- The Fed's goals are maximum employment, stable prices, and moderate long-term interest rates
- Eleven rate hikes in 2022 and 2023
- Fed Funds Rate hit 22 year high in July 2023 (5.25% to 5.50%)

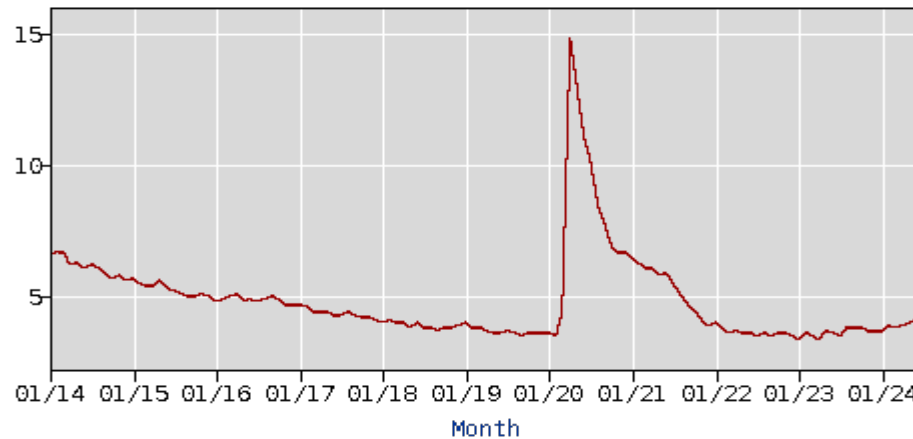
U.S. inflation has been dropping:

US Core PCE Price Index Annual Change - percent



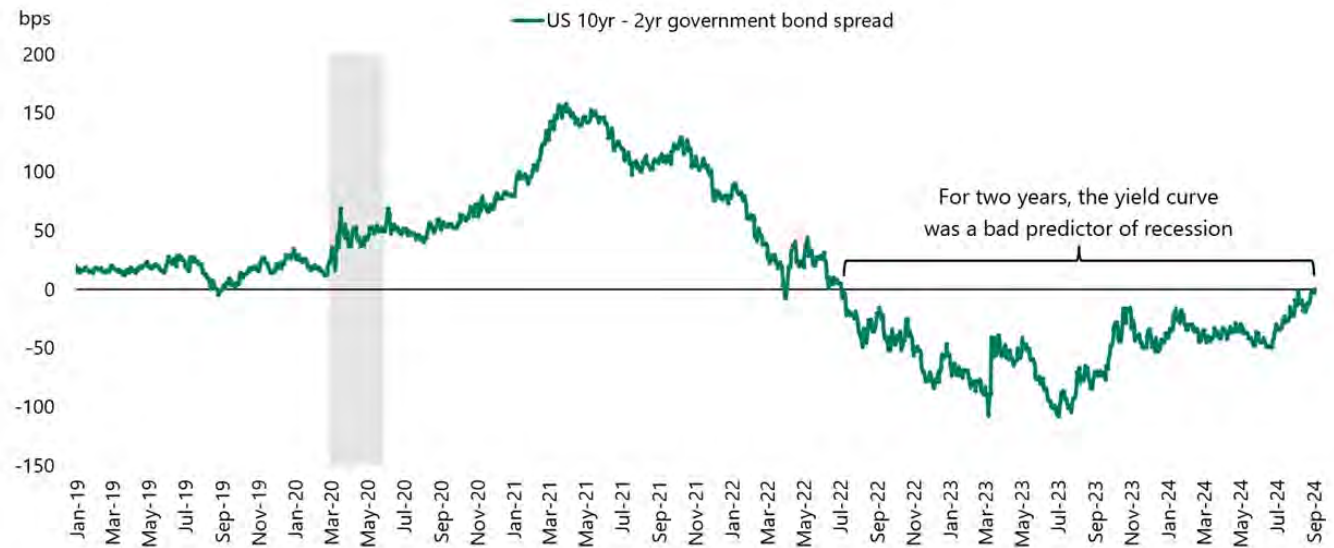
# Market Review

- Employment is a concern for the Fed as the unemployment rate remains low by historical standards at 4.1% but higher than last year's level of 3.5%.



- Risks to global growth outlook remain along with rising geopolitical risks.
- Bond yields are down from last year and the yield curve is no longer inverted, in relation to the 2-year and 10-year yields:
  - 2 Year Treasury 3.64% (10/5/24) vs. 5.03% (10/5/23)
  - 10 Year Treasury 4.12% (10/5/24) vs. 4.72% (10/5/23)

# Recession Fears Subsiding and The Yield Curve is Normalizing



Source: Board of Governors of the Federal Reserve System, Bloomberg, Apollo Chief Economist

# Market Review

- One year returns for various fixed income sub-asset classes as of 6-30-24

| Fixed Income Sub-Asset Class   | 1 Year Return |
|--------------------------------|---------------|
| US Aggregate Bond Index        | 2.6%          |
| US Tips                        | 2.7%          |
| US Intermediate Agg ex Credit  | 2.9%          |
| Global Agg Corporates          | 4.5%          |
| Global High Yield              | 10.6%         |
| Emerging Market Debt           | 9.2%          |
| Corporate Emerging Market Debt | 8.1%          |
| Global Leveraged Loan          | 11.0%         |
| US Convertible                 | 6.2%          |
| US Inv Grade Convertible       | 6.8%          |

# Principal Protection



# Accomplishments & Initiatives

- Fiscal Year 2024 Accomplishments:
  - No changes to the asset class over the past year.
- Fiscal Year 2025 Initiatives:
  - Monitor managers and make any necessary recommendations for changes.



# Principal Protection

*The role of the Principal Protection asset class is to provide an anchor to the portfolio by exhibiting low volatility with minimal or zero exposure to equity risk. Designed to provide consistent, stable returns during most market environments and preserve principal during periods where growth investments are experiencing significant drawdowns.*

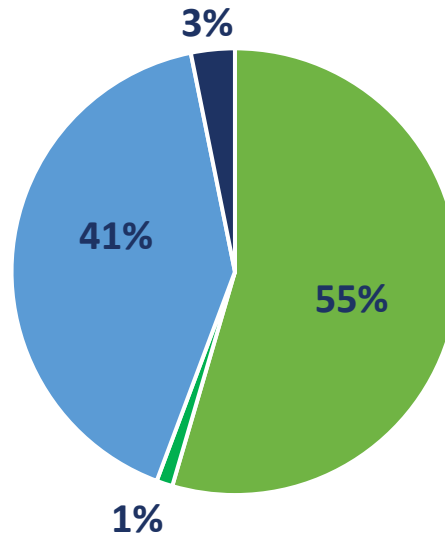
Source of Liquidity

# Policy Benchmark

- Benchmark Name: Bloomberg Barclays Intermediate Agg. Ex Credit
- Benchmark Description:
  - Shorter maturity (bonds with up to 10 years to maturity)
  - Higher credit quality (excludes credit-oriented bonds)
  - Less volatility
  - Less interest rate sensitivity
  - Comparable yield/income
- The Index includes:
  - Mortgage-Backed Securities
  - Treasuries
  - Securitized Mortgage-Backed Securities
  - Government Related Securities

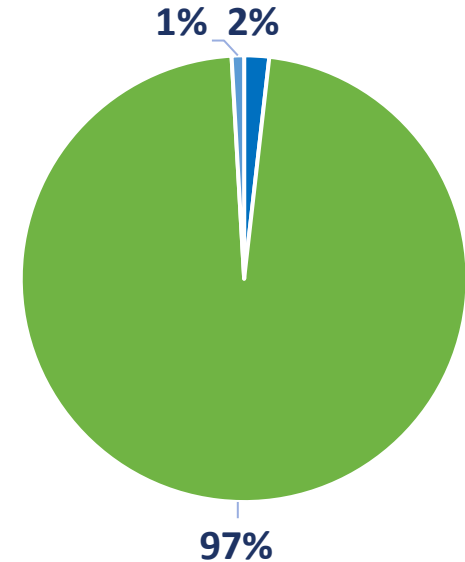
# Policy Benchmark

Sector Breakout



■ Treasuries ■ Agency ■ MBS ■ ABS/CMBS

Credit Quality



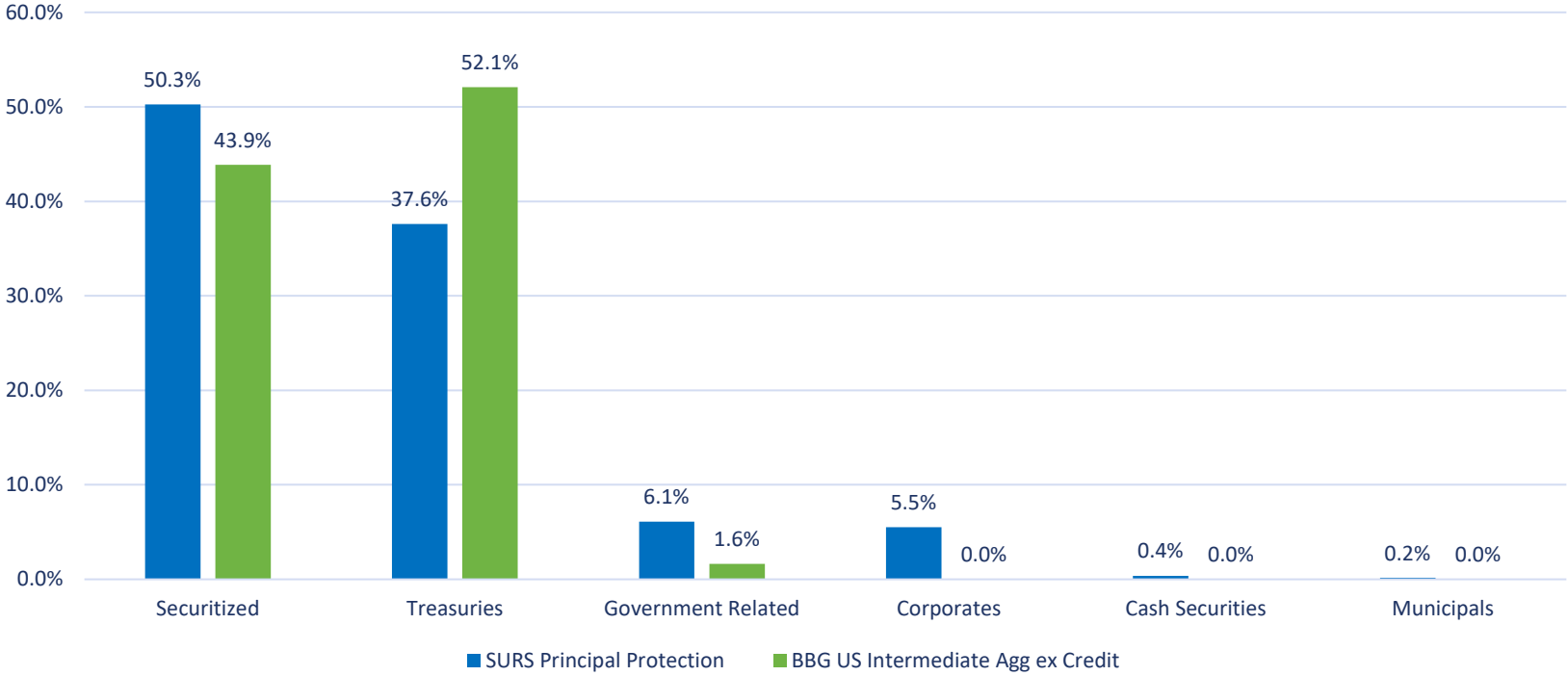
■ AAA ■ AA ■ Other

| Characteristics                   |      |
|-----------------------------------|------|
| Maturity (Years)                  | 5.5  |
| Yield to Maturity                 | 4.9% |
| Weighted Average Coupon           | 3.0% |
| Weighted Average Duration (Years) | 4.6  |

High Quality – Primarily Treasury and Mortgage Securities – Maturities Less Than 10 Years

# Aladdin Risk System Information

**Principal Protection**  
Allocation by Sector

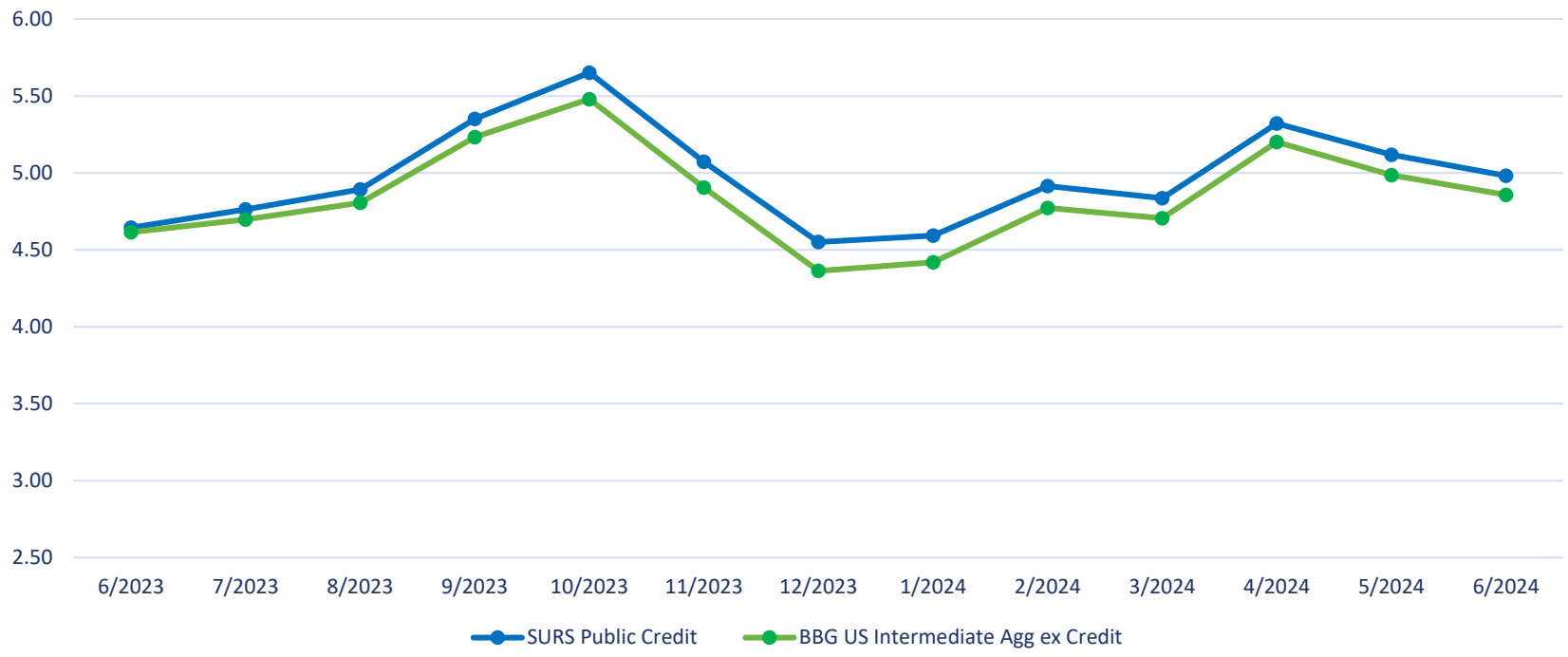


Asset class sector weights show modest active positioning relative to the blended benchmark

Source: BlackRock Aladdin  
Data as of June 30, 2024

# Aladdin Risk System Information

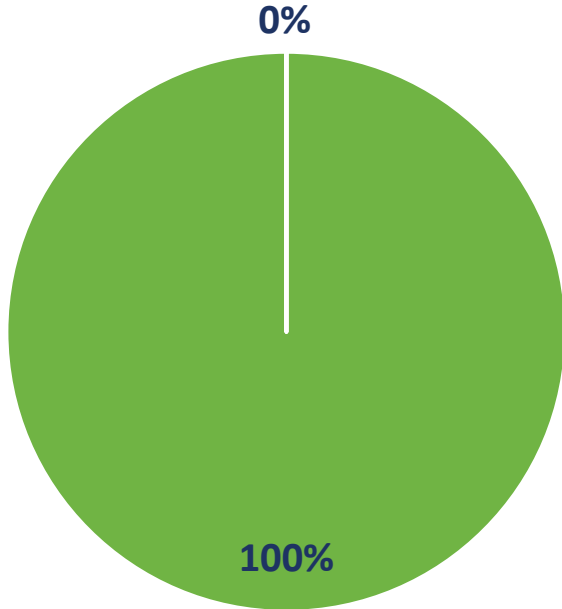
**Principal Protection**  
Yield to Maturity vs Benchmark



Yields remain elevated continuing to provide fixed income as an attractive risk/reward option.

Source: BlackRock Aladdin  
Data as of June 30, 2024

# Minority Firm Exposure



■ Minority ■ Other

**Managers: Garcia, LM, Pugh, Ramirez**

**100% Managed by Minority Owned Firms**

Data as of June 30, 2024

# Performance Summary

|                             | 1 Year<br>(Net) | 3 Year<br>(Net) | 5 Year<br>(Net) |
|-----------------------------|-----------------|-----------------|-----------------|
| <b>Principal Protection</b> | 2.9%            | -1.7%           | N/A             |
| <b>Policy Benchmark</b>     | 2.9%            | -2.1%           | N/A             |
| <b>Excess Return</b>        | <b>0.0%</b>     | <b>+0.4%</b>    | <b>N/A</b>      |

Performance is reported net of fees.

The Principal Protection guidelines were implemented September 2019.

**Fees for the asset class are approximately 12 basis points per year**

# Stabilized Growth

*The role of the Stabilized Growth asset class is to provide growth through strategies that are exposed to market beta, exhibiting expected returns similar to Traditional Growth but with lower volatility.*

Growth with Lower Volatility

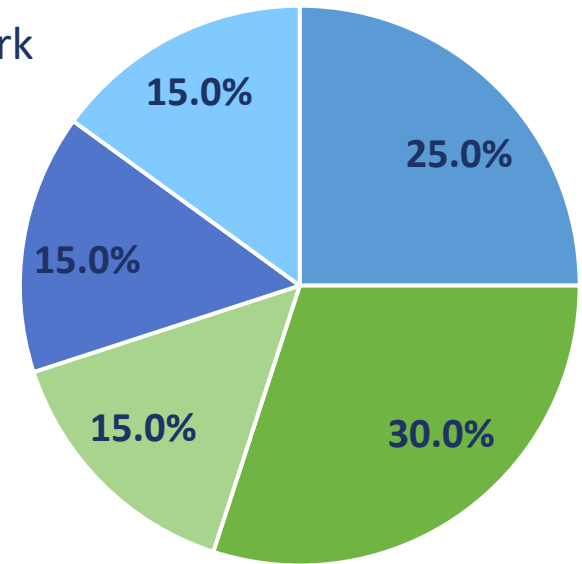


# Public Liquid Credit



# Policy Benchmark

- Benchmark Name: Blended Benchmark
- Benchmark Description:
  - 25% Investment Grade Credit
  - 30% High Yield
  - 30% Emerging Market Debt
  - 15% Bank Loans
- The Index includes:
  - Corporate Securities
    - Non-Investment Grade Securities
    - Emerging Market Debt Securities
      - Government (USD Denominated)
      - Corporate
  - Bank Loans



- BB Global Agg Corporate Index
- ICE BoA Global HY Index
- JPM EMBI Global Diversified
- JPM CEMBI Broad Diversified
- S&P US LSTA Global Leveraged Loan

# Accomplishments & Initiatives

- Fiscal Year 2024 Accomplishments:
  - No changes to the asset class over the past year.
- Fiscal Year 2025 Initiatives:
  - Monitor managers and make any necessary recommendations for changes.
  - Review potential Manager of Managers portfolio changes and consider graduation candidates.
  - Explore investment opportunity set and complementary features of convertible fixed income strategies.

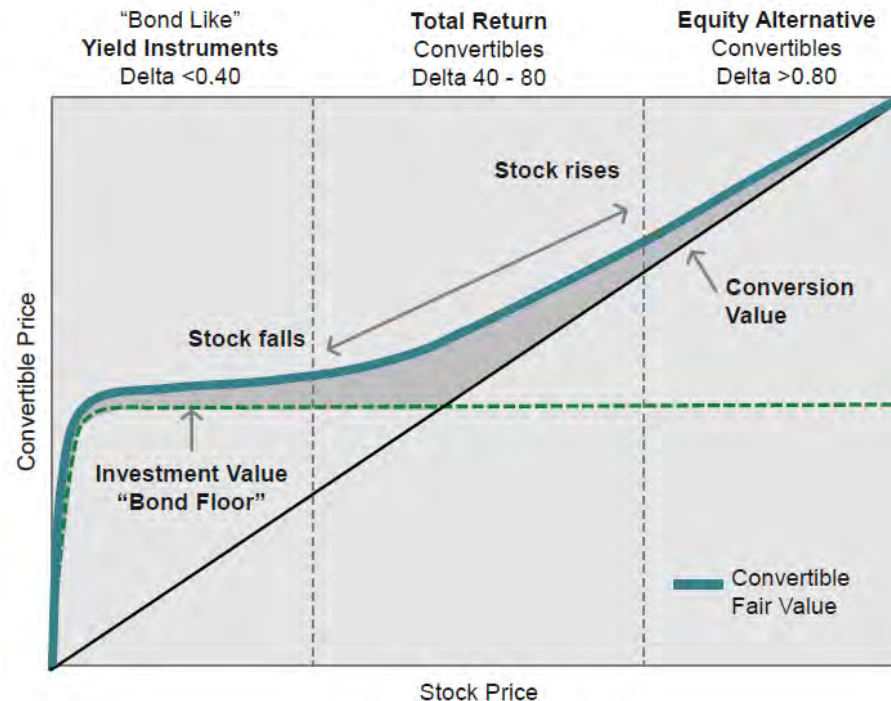
# Convertible Bond Strategies

- A convertible bond is a fixed-income debt security that pays interest but can be converted into common stock. As a hybrid security, the price of a convertible bond has sensitivity to interest rates, the price of the underlying stock, and the issuer's credit rating.
- Features of convertible bond strategies:
  - Lower interest rate sensitivity – lower duration compared to high yield bonds.
  - Higher equity sensitivity relative to high yield.
  - Convertible securities are categorized in three areas: Debt Like/Balanced/Equity Like
  - Convertible market is more balanced by sector diversification compared to high yield which has larger issuance in the Energy and Materials sectors.
- Returns as of 6-30-24:

| Index                                 | Returns - 10 Yr | Standard Deviation - 10 Yr | Max Drawdown - 10 Yr |
|---------------------------------------|-----------------|----------------------------|----------------------|
| S&P 500                               | 12.9            | 15.7                       | -23.9                |
| ICE BofAML All US Convertible         | 8.1             | 14.4                       | -20.6                |
| ICE BofAML US Invnt Grade Convertible | 8.9             | 10.7                       | -15.1                |
| ICE BofAML US High Yield              | 4.2             | 8.6                        | -14.6                |
| Bloomberg US Aggregate                | 1.3             | 5.0                        | -15.9                |

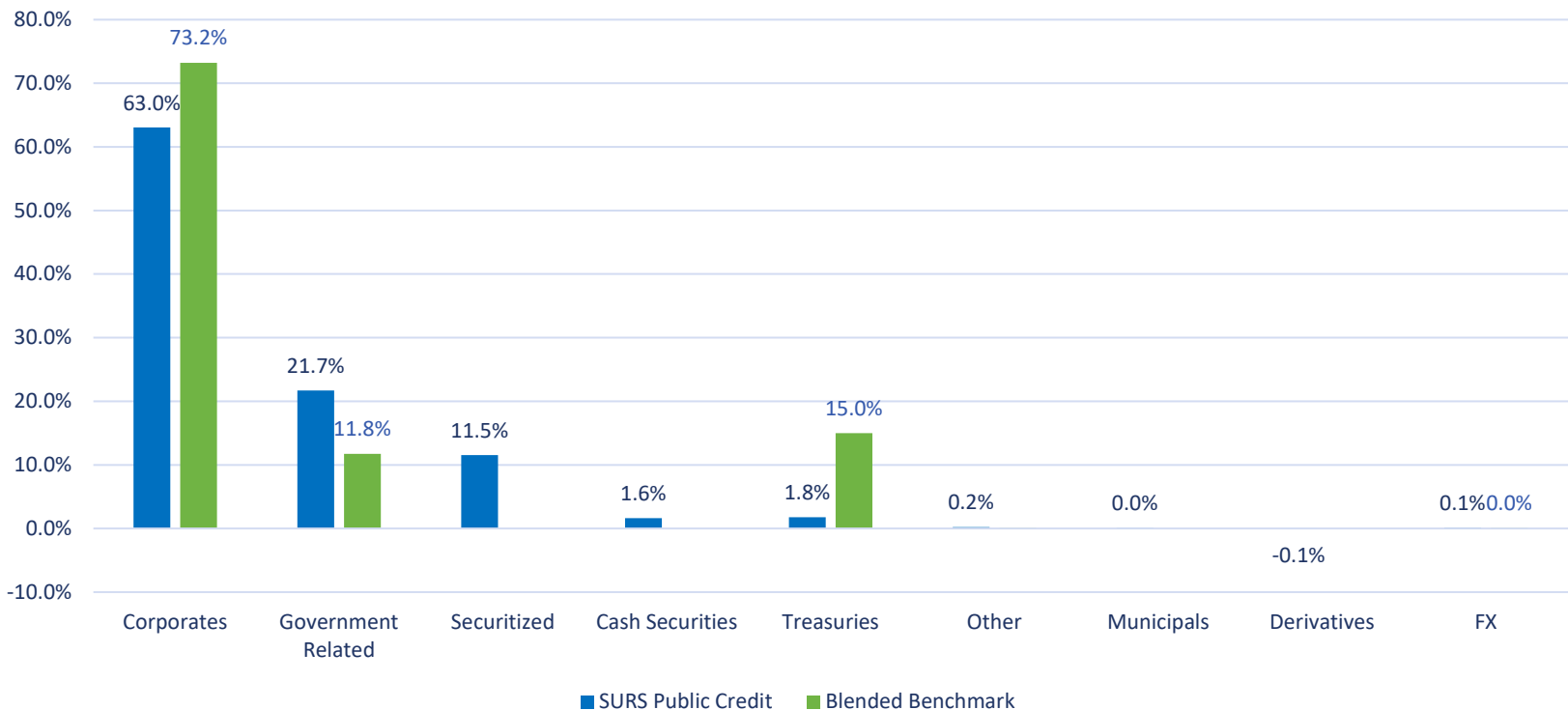
# Convertible Bond Market Characteristics

- Issuers tend to be mid sized growth companies.
- Convertible strategies allow exposure to growth with less volatility and higher yield than an equity strategy.
- Current delta (a measure of the sensitivity of the convertible bond to changes in the stock price) of the convertible market is low and more bond like relative to history.



# Aladdin Risk System Information

**Public Credit Fixed Income**  
Allocation by Sector

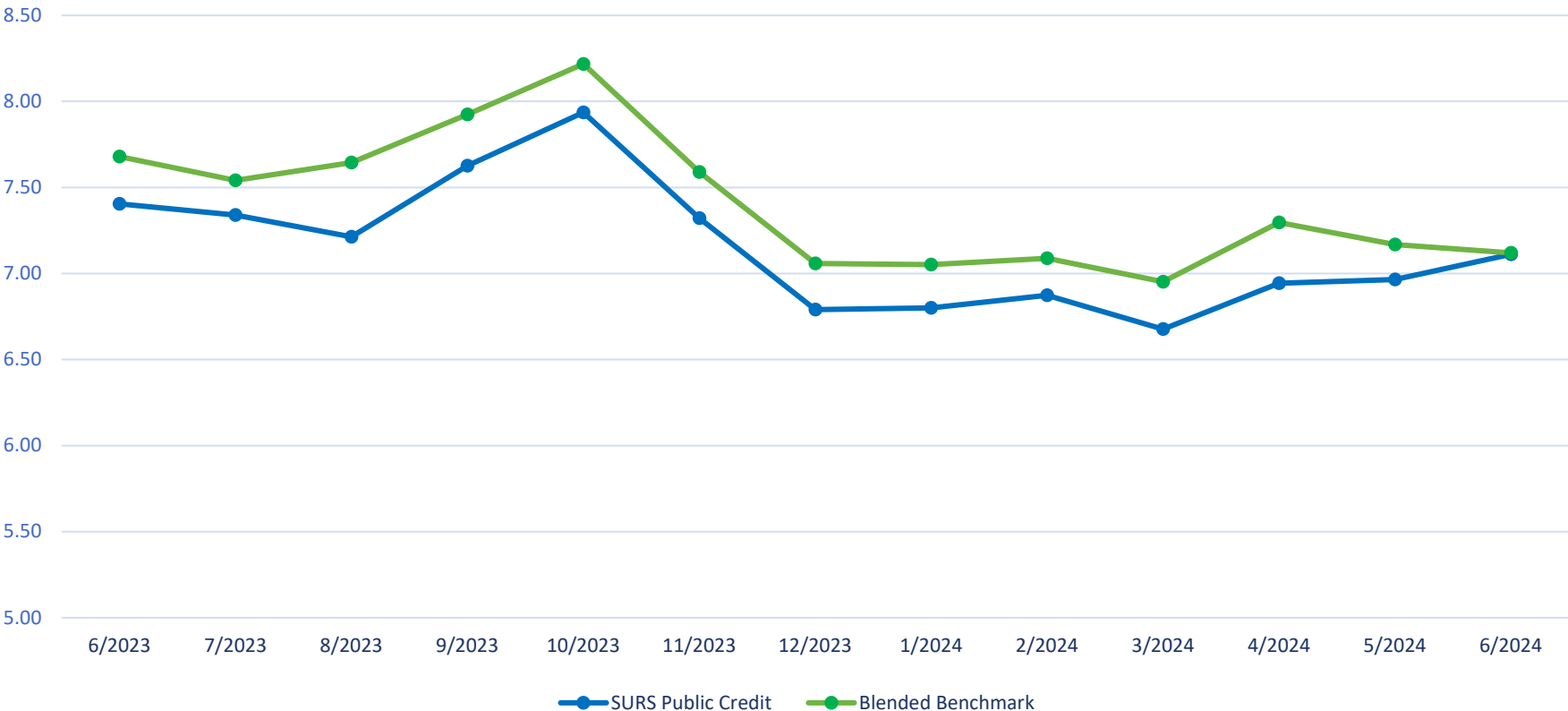


Asset class sector weights show modest active positioning relative to the blended benchmark

Source: BlackRock Aladdin  
Data as of June 30, 2024

# Aladdin Risk System Information

**Public Credit Fixed Income**  
Yield to Maturity vs Benchmark

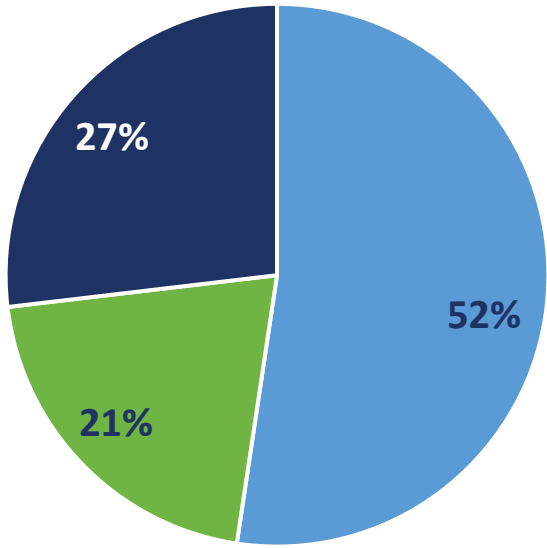


Yield to maturity was slightly lower than the blended benchmark for most of the year.

Source: BlackRock Aladdin  
Data as of June 30, 2024

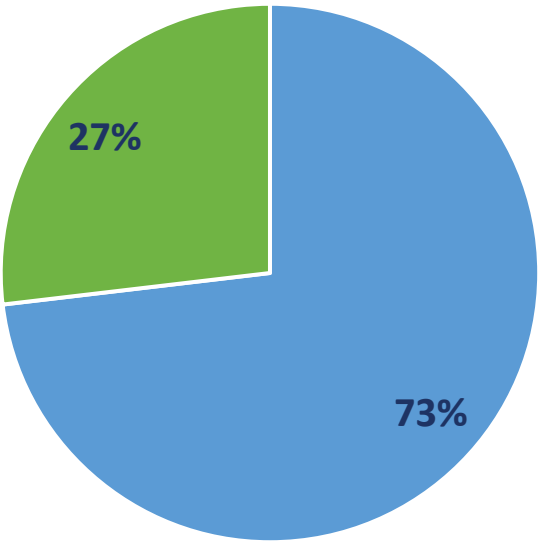
# Manager Allocation

Manager Allocation



■ Neuberger ■ PIMCO ■ Bivium

Portfolio Type

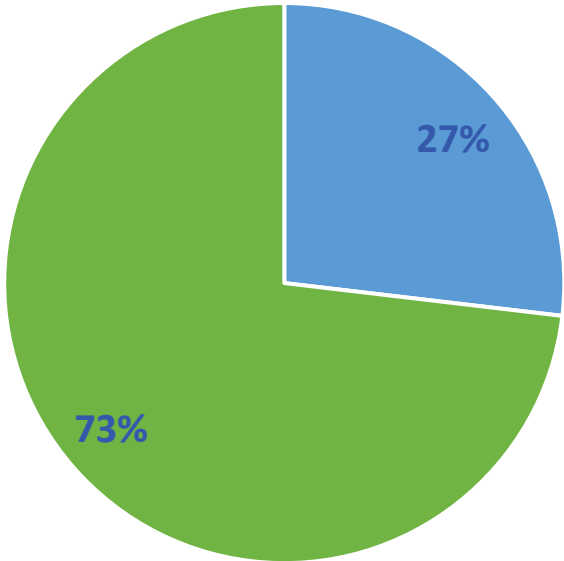


■ Multi Sector Credit ■ Manager of Managers

Data as of June 30, 2024



# Minority Firm Exposure



■ Minority ■ Other

**MWDBE-Owned Managers: Bivium**

**27% Managed by MWDBE-Owned Firms**

Data as of June 30, 2024

# Performance Summary

|                         | 1 Year<br>(Net) | 3 Year<br>(Net) | 5 Year<br>(Net) |
|-------------------------|-----------------|-----------------|-----------------|
| <b>Public Credit</b>    | 10.7%           | 1.0%            | N/A             |
| <b>Policy Benchmark</b> | 9.2%            | -0.1%           | N/A             |
| <b>Excess Return</b>    | <b>+1.5%</b>    | <b>+1.1%</b>    | <b>N/A</b>      |

Performance is reported net of fees. The Public Credit Inception Date is September 2019.

Fees for the asset class are approximately 37 basis points per year

Data as of June 30, 2024

# Inflation Sensitive



# Accomplishments & Initiatives

- **Fiscal Year 2024 Accomplishments:**
  - No changes to the asset class over the past year.
- **Fiscal Year 2025 Initiatives:**
  - Monitor managers and make any necessary recommendations for changes.

# Inflation Sensitive

*The role of the Inflation Sensitive asset class is to help protect the portfolio during periods of high inflation.*

**Inflation Protection**

# Policy Benchmark

Benchmark Name: Bloomberg US TIPS Index

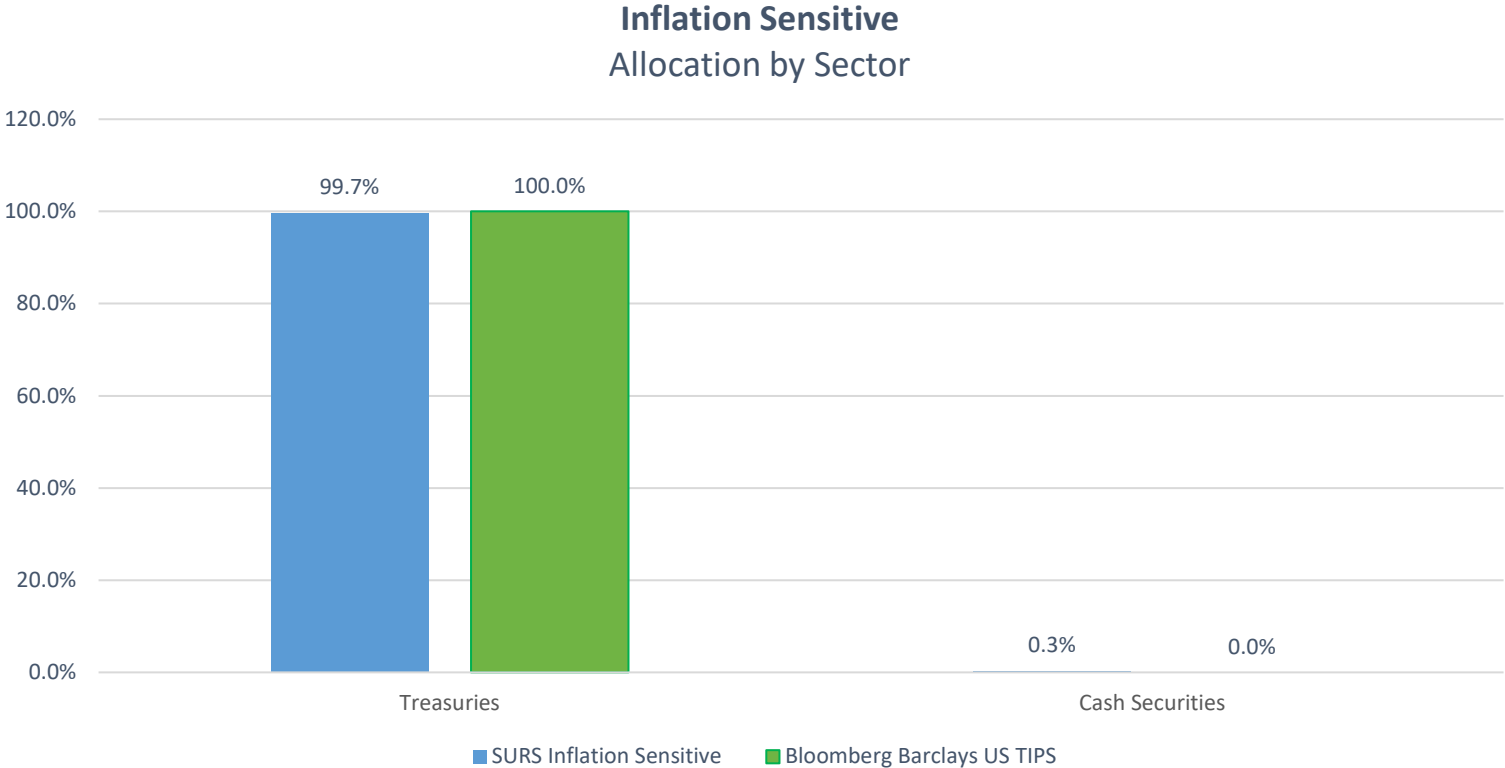
Benchmark Description:

- The index includes all publicly issued, U.S. Treasury inflation-protected securities that have at least one year remaining to maturity, are rated investment grade, and have \$250 million or more of outstanding face value

The Index Includes:

- U.S. Treasury Inflation-Protected Securities

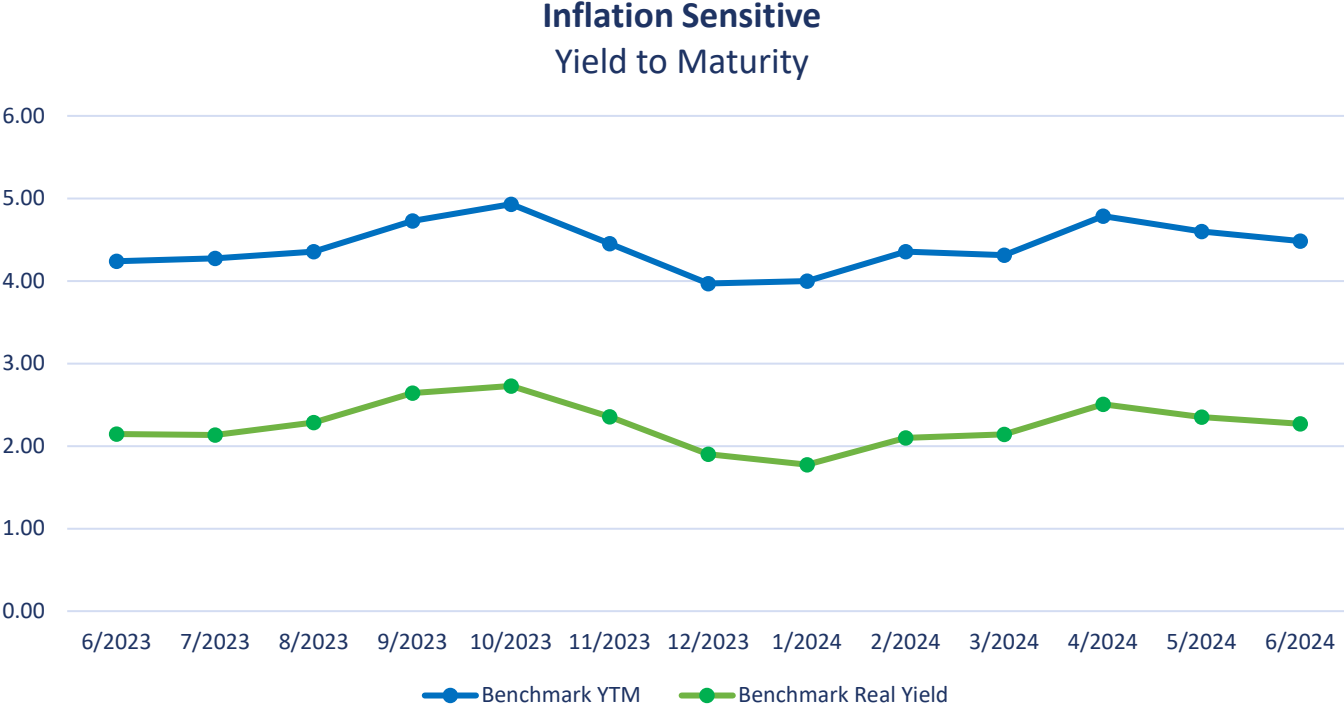
# Aladdin Risk System Information



Asset class sector weights consistent with that of the benchmark

Source: BlackRock Aladdin  
Data as of June 30, 2023

# Aladdin Risk System Information

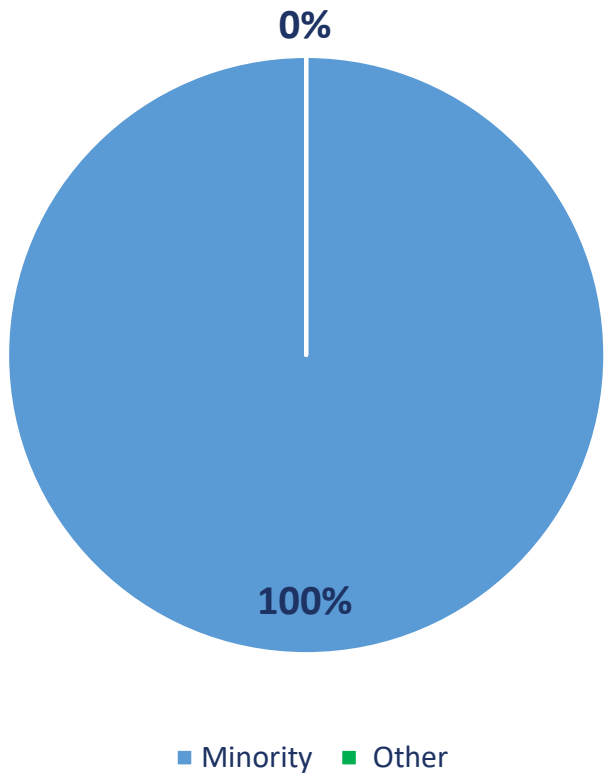


Over the past 12 months both YTM and real yields have been consistent for the asset class, with real yields remaining above 2%

Source: BlackRock Aladdin  
Data as of June 30, 2024



# Minority Firm Exposure



100% Managed by Minority Owned Firms

Data as of June 30, 2024

# Performance Summary

|                             | 1 Year<br>(Net) | 3 Year<br>(Net) | 5 Year<br>(Net) |
|-----------------------------|-----------------|-----------------|-----------------|
| <b>Inflation Protection</b> | 2.7%            | -1.3%           | 0.0%            |
| <b>Policy Benchmark</b>     | 2.7%            | -1.3%           | 0.0%            |
| <b>Excess Return</b>        | <b>0.0%</b>     | <b>0.0%</b>     | <b>0.0%</b>     |

Performance is reported net of fees.

The TIPS portfolio is passively managed and was funded in May 2017.

Fees for the asset class are less than one basis point per year

Data as of June 30, 2024

# Market Outlook

- Economy

- Most economic forecasts expect real GDP growth to slow from above-trend growth this year to below-trend in 2025.
- Fed easing cycle is expected to buffer financial conditions and improve funding conditions, particularly for small businesses, which should solidify the economic soft landing.



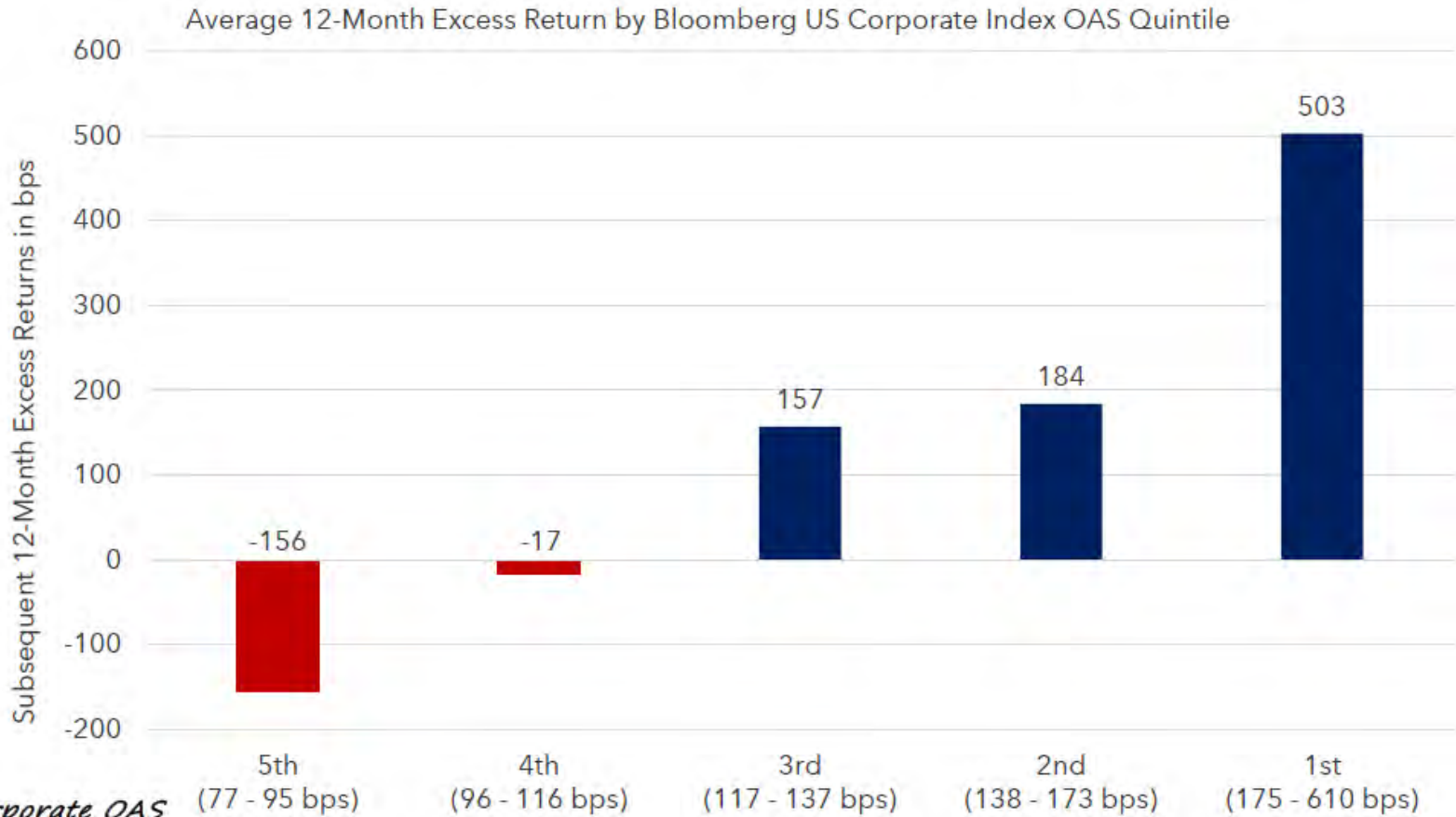
# Market Outlook

- Unemployment
  - The labor market is proving resilient with strong jobs numbers in the wake of the 50 bps rate cut in September.
  - If corporate hiring remains soft, even with few layoffs, the unemployment rate will likely rise.
- Rates
  - The markets are pricing in a 25 bps cut for November and December, but that will hinge on forthcoming economic data.
    - Housing demand is weak.
    - Cumulative excess savings have declined since the covid era peak.
    - Credit card losses have been on the rise.
    - Corporate profits remain strong.
  - The market has priced in an additional 150 bps of easing through the end of 2025.
- Volatility
  - Uncertainty remains regarding upcoming US elections and geopolitical tensions.

# Market Outlook

- Mortgage-backed securities are attractive relative to history.
- High yield securities are trading at a premium and may be due for a correction in the near term, but the long-term return potential is still attractive.
- Emerging market debt is still considered attractive although active managers need to manage geopolitical risks.
- Investment grade issuance is expected to increase.
- Convertible fixed income may be attractive as market participants seek return alternatives to large cap growth equities.
- Correlation between fixed income and equities has normalized after a period of close correlation especially in 2022.
- The return/risk characteristics for fixed income remain attractive due to current yields and principal protection.

# Corporate spread levels are tight relative to history



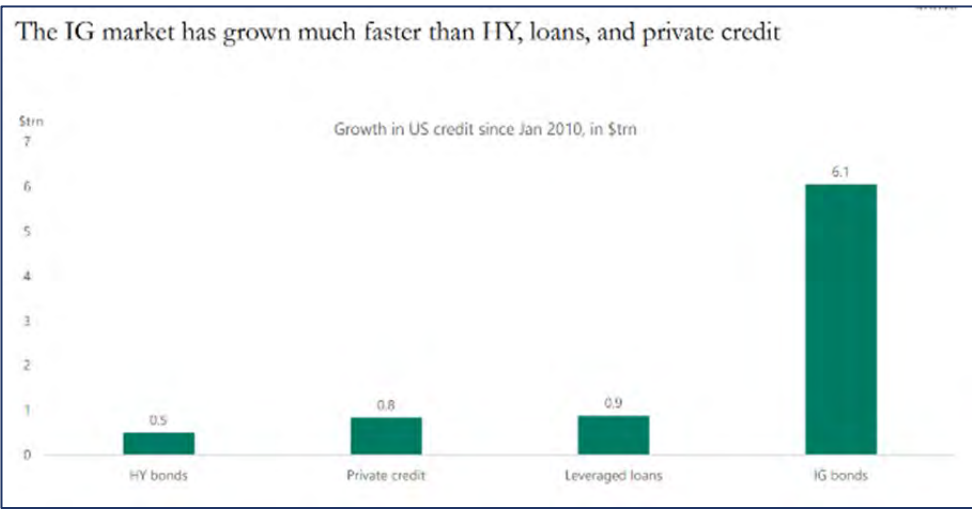
Corporate OAS Entered 5th Quintile March 2024 (90bps)



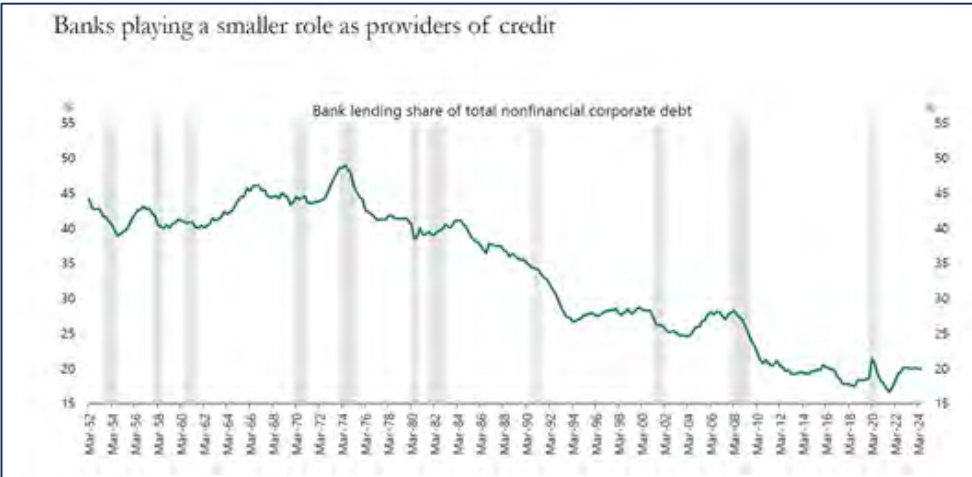
Historical Option Adjusted Spreads (OAS) Distributed by Quintile

# Market Review

The IG market has grown much faster than HY, loans, and private credit



Banks playing a smaller role as providers of credit



Source: FRB, Haver Analytics, Apollo Chief Economist

# State Universities Retirement System of Illinois

October 24, 2024

2024/2025  
Asset-Liability Study

Part 2: CMAs and Actuarial  
Metric Comparisons





# State Universities Retirement System of Illinois

## Table of Contents

1. Introduction
2. Capital Market Assumptions
3. Actuarial/Valuation Measures: Comparisons to Peers
4. Appendix

# Introduction



# State Universities Retirement System of Illinois

## Introduction

The purpose of this presentation is to discuss two items:

- 1) Capital market assumptions for the classes that will be modeled.
  - These remain unchanged from early-2024 when first presented to SURS.
  - Additional asset classes may be explored during the modeling process, and if so, Staff and Meketa will present any material findings to the Board.
  - The concept of an “Opportunistic” class cannot be explicitly modeled but will be discussed with the Board during the implementation planning phase.
- 2) Overview of additional actuarial/valuation metrics.
  - Examine SURS vs. two peer universes:
    - Illinois peers
    - Public plans across the US with similar portfolio sizes.

# Capital Market Assumptions



# State Universities Retirement System of Illinois

## Our Process

### Setting Capital Market Assumptions (“CMAs”)

- CMAs are the inputs needed to calculate a portfolio’s expected return, volatility, and relationships (i.e., correlations) to the broader markets.
  - CMAs are also used in mean-variance optimization, simulation-based optimization, asset-liability modeling, and every other technique for finding “optimal” portfolios.
- Consultants (including Meketa) generally set them once per year.
  - Our results are published in January based on December 31 data.
- This involves setting long-term expectations for a variety of asset class/strategy attributes:
  - Returns
  - Standard Deviations
  - Correlations
- Our process relies on both quantitative and qualitative methodologies.



# State Universities Retirement System of Illinois

## Our Process

### Developing Expected Returns

- Market practitioners generally make use of three methods for developing long-term expected returns:
  - Historical average returns
  - Financial/economic theory (e.g., higher risk = higher returns, capital structures, etc.)
  - Current measures (e.g., starting valuations relative to history)
- In addition to the above, practitioners also incorporate general projections for macroeconomic metrics such as GDP and inflation, among others.
- Meketa's methods are in-line with industry standards and represent a mixture of the three mechanisms.
  - Historical average returns play the smallest role in our assumptions.



# State Universities Retirement System of Illinois

## Our Process

### Building 10-year Forecasts

→ Our first step is to develop 10-year forecasts based on fundamental models.

- Each model is based on the most important factors that drive returns for that asset class:

| Asset Class Category  | Major Factors                                       |
|-----------------------|-----------------------------------------------------|
| Equities              | Dividend Yield, GDP Growth, Valuation               |
| Bonds                 | Yield to Worst, Default Rate, Recovery Rate         |
| Commodities           | Collateral Yield, Roll Yield, Inflation             |
| Infrastructure        | Public IS Valuation, Income, Growth                 |
| Natural Resources     | Price per Acre, Income, Public Market Valuation     |
| Real Estate           | Cap Rate, Yield, Growth                             |
| Private Equity        | EBITDA Multiple, Debt Multiple, Public VC Valuation |
| Hedge Funds and Other | Leverage, Alternative Betas                         |

- The common components are income, growth, and valuation.
- Leverage (and cost of debt) and fees are also directly incorporated, where applicable.

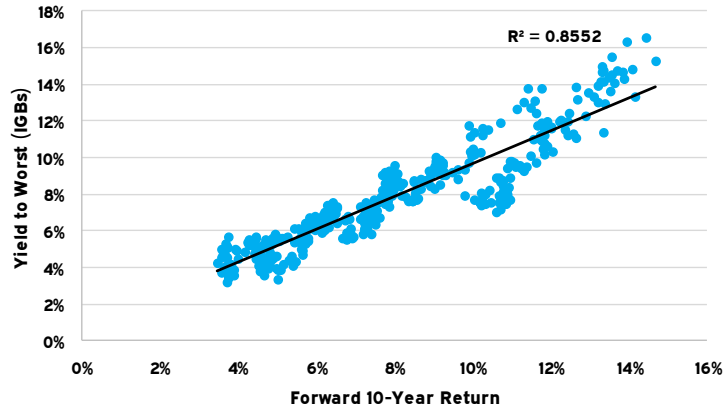


# State Universities Retirement System of Illinois

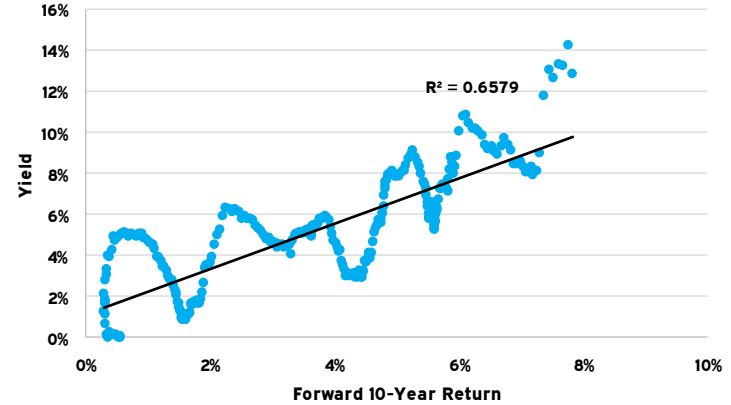
## Our Process

Some factors are naturally more predictive than others

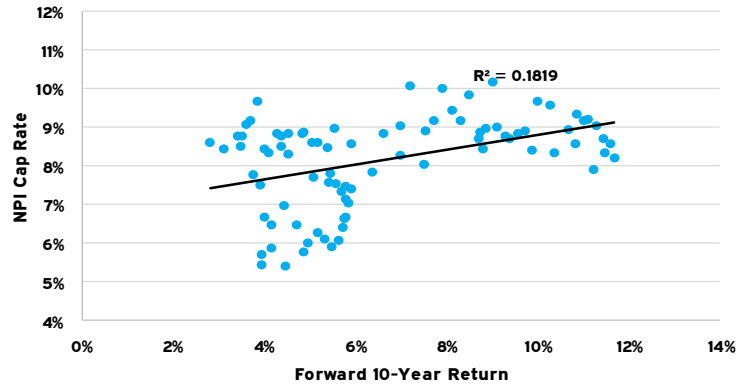
**Investment Grade Bonds**  
Yield to Worst vs. Forward 10-Year Returns



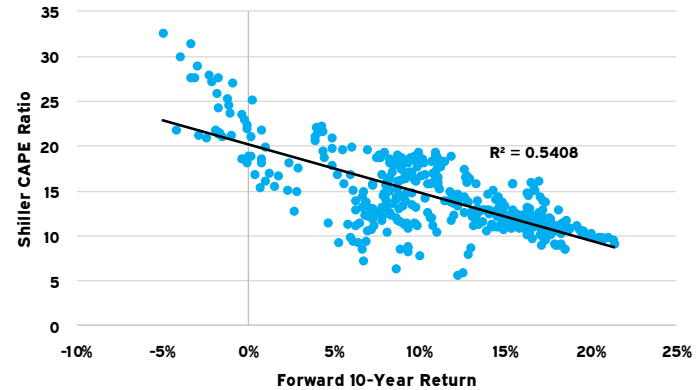
**Cash (90-day T-Bill)**  
Yield vs. Forward 10-Year Returns



**Core Real Estate**  
Cap Rates vs. Forward 10-Year Returns



**US Equities**  
Shiller CAPE vs. Forward 10-Year Returns







# State Universities Retirement System of Illinois

## Our Process

### CMA Development Example: Public Equities

→ We use a fundamental model for equities that combines income and capital appreciation:

$$E(R) = \text{Dividend Yield} + \text{Price Return} + \text{Currency Effect}$$

$$\text{Price Return} = \text{Earnings Growth} + \text{Multiple Effect}$$

→ We use the current dividend yield on the respective index.<sup>1</sup>

→ Earnings growth is a function of real GDP growth, inflation, and exposure to foreign revenue sources.

→ We use three approaches to calculate the multiple effect.

- The models assume reversion to the mean or fair value.

→ We arrive at our preliminary 10-year assumption (in local currency)

$$\text{US Equity } E(R) = 1.5\% + [(1 + 6.4\%) \times (1 - 1.0\%) - 1] = 6.9\%$$

→ For non-US equities, we add the expected currency effect vs. the US Dollar to the local expected return.

<sup>1</sup> The source for dividend yields is S&P for the US and MSCI for non-US equities.



### CMA Development Example: Bonds

- The short version for most investment grade bond models is:  $E(R) = \text{Current YTW}$  (*yield to worst*)
- The longer version accounts for the expected term structure in the future.
  - If the average duration is roughly five years, we calculate the expected yield in five years.
  - The net effect tends to be minimal, since higher income in years 5 to 10 is offset by price declines in years 1 to 5.
- For corporate bonds, we assume the spread vs. Treasuries will revert most of the way back to their mean since 1990.
- For cash, we use an average of the current rate and the rate suggested by the Taylor Rule (inputs are current & potential GDP, current & desired inflation).
- For TIPS, we add the real yield for the TIPS index to the expected inflation rate used in the equities models.
- As with equities, we also make currency adjustments when necessary.
  - This currently provides a tailwind to foreign and EM local currency debt.



# State Universities Retirement System of Illinois

## Our Process

### CMA Development Example: Bonds (con't)

→ For anything with credit risk, we also take into account the expected default & recovery rates.

|              | Inv. Grade Corporate (%) | LT Corporate (%) | Foreign Debt (%) | EM Debt (major) (%) | EM Debt (local) (%) | High Yield (%) | Bank Loans (%) |
|--------------|--------------------------|------------------|------------------|---------------------|---------------------|----------------|----------------|
| Default Rate | 0.08                     | 0.08             | 0.09             | 1.78                | 0.40                | 2.50           | 2.50           |
| Loss Rate    | 50                       | 50               | 50               | 50                  | 50                  | 45             | 40             |

→ As a guide, we use Moody's historical global default & recovery data for each bucket as it is currently rated.

- Example: EM Debt (local currency)

| Rating                               | Weighting (%) | Default Rate (%) | Weighted Default (%) |
|--------------------------------------|---------------|------------------|----------------------|
| Aa                                   | 6.2%          | 0.06%            | 0.00%                |
| A                                    | 29.3%         | 0.09%            | 0.03%                |
| Baa                                  | 44.1%         | 0.27%            | 0.12%                |
| Ba                                   | 18.9%         | 1.06%            | 0.20%                |
| B                                    | 1.5%          | 3.40%            | 0.05%                |
| Total Weighted Average Default Rate: |               |                  | 0.40%                |



# State Universities Retirement System of Illinois

## Our Process

### CMA Development Example: Private Equity

- For Buyouts, we start with public equity expected returns.
- We add a premium or discount based on the pricing of buyouts relative to stocks.
  - EBITDA multiples provide an indication of pricing.
  - 2022 and 2023 saw the first meaningful reduction in multiples since the GFC.
- We add a premia for control (e.g., for greater operational efficiencies) and leverage.
- We subtract borrowing costs and estimated fees.
  - We assume borrowing costs are consistent with the yield on bank loans.
- We also look at how closely valuations compared to price changes occurring in the public markets, given that buyouts pricing often lags that of public equities.



# State Universities Retirement System of Illinois

## Our Process

### CMA Development Example: Private Equity (cont.)

- For Venture Capital (VC), we create a public market proxy that we can compare through time.
- The composite is composed of: traditional technology, biotech, pharmaceuticals, life sciences, IT services, internet, and clean tech & environmental stocks.
    - The weighting to each sector varies through time.
    - The data is an imperfect proxy and the correlation with future returns is not high.
    - Still, this proxy provides some indication of pricing relative to small cap stocks.
  - We also look at how VC valuations compared to price changes for public markets.
- For Growth Equity, we infer a return that is between that of buyouts and venture capital.
- The relative weightings place the return closer to that of VC than buyouts.

Aggregate private equity assumption utilizes a weighted average based on a typical institutional allocation to private equity.

| Component                       | Weight | E(R)        |
|---------------------------------|--------|-------------|
| Buyouts                         | 65%    | 9.5%        |
| Growth Equity                   | 10%    | 10.4%       |
| Venture Capital                 | 25%    | 10.8%       |
| <b>Private Equity Composite</b> |        | <b>9.9%</b> |



# State Universities Retirement System of Illinois

## Our Process

### CMA Development Example: Private Credit

- For direct lending and asset-based lending (formerly specialty finance), we use a building blocks approach that is based on income and loss thereof.
  - For income, we make an estimate based on our private credit team's assessment of what the current average coupon rate is.
- We add an upfront fee (paid by the borrower) or original issue discount if applicable.
  - This usually ranges between 1% and 3%.
- We incorporate default and recovery rates.
  - We use a default rate and recovery rate roughly the same as for bank loans.
  - These are subjective, as no long-term data exists on private credit defaults.
- We add leverage (more applicable in direct lending) and subtract the cost of borrowing.
- We subtract management fees and carried interest.



# State Universities Retirement System of Illinois

## Our Process

### CMA Development Example: Private Credit (cont.)

→ For Special Situations Lending, we use a combination of models for capital solutions and more traditional distressed debt.

- The capital solutions model resembles that for direct lending, but with higher equity kickers, coupons, and default rates.
- The distressed debt model resembles that for public high yield bonds and is based on data for the Bloomberg US CCC and Ca-D indices.
  - It uses a much higher default rate than high yield bonds (often in the range of 15-20%).
- We subtract management fees and carried interest.

→ For aggregate private credit, we take a weighted average based on a mix of the broad opportunity set and a typical client allocation to private debt.

| Component                     | Weight (%) | E(R) (%)   |
|-------------------------------|------------|------------|
| Direct Lending                | 35         | 8.2        |
| Asset Based Lending           | 35         | 9.7        |
| Special Situations            | 30         | 9.7        |
| <b>Private Debt Composite</b> |            | <b>9.2</b> |



# State Universities Retirement System of Illinois

## Our Process

### CMA Development Example: Real Estate

→ For Core Real Estate, we use two models.

- The first model adds a premium to the Cap Rate<sup>1</sup>.
  - Core RE has historically returned approximately 1.0% more than its cap rate at the start of the period over the subsequent ten years.
- The second model combines income with capital appreciation potential.
  - The income for core RE has historically been the cap rate minus 2-3% (for Cap Ex).
  - We assume income (NOI) grows at the rate of inflation.
  - We assume there is some measure of fair value for cap rates relative to bond yields.
    - We make a price adjustment based on the forward yield curve.
- We adjust for leverage, borrowing costs, and fees.

<sup>1</sup> Source: NCREIF.





# State Universities Retirement System of Illinois

## Our Process

### CMA Development Example: Real Estate (cont.)

- For Non-Core Real Estate, we start with a historical premiums versus core RE.
  - This includes the effect of greater control, development, buying at distress, etc.
- We add a non-US component (e.g., premium for lower cap rates) and a currency effect.
  - We assume 10% to 30% of non-core commitments will be ex-US (majority in Europe).
- We lever the portfolio and then subtract the cost of borrowing.
  - Value-added leverage ranges 50-70% while opportunistic ranges 60-80%.
  - The cost of debt is higher for value added than core, and higher still for opportunistic.
- Finally, we subtract management fees and carried interest.



# State Universities Retirement System of Illinois

## Our Process

### The Other Inputs: Standard Deviation and Correlation

→ Standard deviation:

- We review the trailing fifteen-year standard deviation, as well as skewness.
- Historical standard deviation serves as the base for our assumptions.
- If there is a negative skew, we increase the volatility assumption based on the size of the historical skewness.

| Asset Class   | Historical Standard Deviation (%) | Skewness | Assumption <sup>1</sup> (%) |
|---------------|-----------------------------------|----------|-----------------------------|
| Bank Loans    | 6.5                               | -2.9     | 10.0                        |
| FI/L-S Credit | 5.8                               | -2.7     | 9.0                         |

- We also adjust for private market asset classes with “smoothed” return streams.

→ Correlation:

- We use trailing fifteen-year correlations as our guide.
- Again, we make adjustments for “smoothed” return streams.

→ Most of our adjustments are conservative in nature (i.e., they increase the standard deviation and correlation).

<sup>1</sup> Note that we typically round our standard deviation assumptions to whole numbers.



# State Universities Retirement System of Illinois

## Our Process

### Moving from 10-Year to 20-Year Forecasts

- Our next step is to combine our 10-year forecasts with projections for years 11-20 for each asset class.
- We use a risk premia approach to forecast 10-year returns in ten years (i.e., years 11-20).
  - We start with an assumption (market informed, such as the 10-year forward rate) for what the risk free rate will be in ten years.
  - We then add a risk premia for each asset class.
  - We use historical risk premia as a guide, but many asset classes will differ from this, especially if they have a shorter history.
  - We seek consistency with finance theory (i.e., riskier assets will have a higher risk premia assumption).
- Essentially, we assume mean-reversion over the first ten years (where appropriate), and consistency with CAPM thereafter.
- The final step is to make any qualitative adjustments.
  - The Investment Policy Committee reviews the output and may make adjustments.



# State Universities Retirement System of Illinois

## Final Results

### SURS Capital Market Assumptions

| Composite/Asset Class /Strategy | 2024<br>Expected Return:<br>10-Year Geometric<br>(%) | 2024<br>Expected Return:<br>20-Year Geometric<br>(%) | 2024<br>Annual<br>Volatility<br>(%) |
|---------------------------------|------------------------------------------------------|------------------------------------------------------|-------------------------------------|
| <b>Traditional Growth</b>       |                                                      |                                                      |                                     |
| Public Equity                   | 7.2                                                  | 8.7                                                  | 17.0                                |
| <b>Stabilized Growth</b>        |                                                      |                                                      |                                     |
| Core Real Estate                | 4.8                                                  | 6.9                                                  | 12.0                                |
| Core Infrastructure             | 6.5                                                  | 8.0                                                  | 14.0                                |
| Investment Grade Credit         | 5.2                                                  | 5.4                                                  | 7.0                                 |
| Bank Loans                      | 6.5                                                  | 6.6                                                  | 10.0                                |
| High Yield Credit               | 6.5                                                  | 6.8                                                  | 11.0                                |
| EMD – Hard                      | 7.0                                                  | 6.8                                                  | 12.0                                |
| EMD – Local                     | 6.3                                                  | 6.2                                                  | 12.0                                |
| Private Credit                  | 9.2                                                  | 9.2                                                  | 15.0                                |
| <b>Non-Traditional Growth</b>   |                                                      |                                                      |                                     |
| Private Equity                  | 9.9                                                  | 11.2                                                 | 25.0                                |
| Value Add Real Estate           | 7.3                                                  | 9.0                                                  | 20.0                                |
| Opportunistic Real Estate       | 8.4                                                  | 10.3                                                 | 26.0                                |
| Non-Core Infrastructure         | 8.0                                                  | 10.0                                                 | 22.0                                |
| <b>Inflation Sensitive</b>      |                                                      |                                                      |                                     |
| TIPS                            | 4.3                                                  | 4.7                                                  | 7.0                                 |
| <b>Principal Protection</b>     |                                                      |                                                      |                                     |
| Intermediate Govt Bonds         | 4.0                                                  | 4.1                                                  | 3.0                                 |
| <b>Crisis Risk Offset*</b>      |                                                      |                                                      |                                     |
| Long U.S. Treasuries            | 4.3                                                  | 5.0                                                  | 12.0                                |
| Systematic Trend Following      | 3.8                                                  | 4.7                                                  | 15.0                                |
| Alternative Risk Premia         | 4.8                                                  | 6.4                                                  | 10.0                                |
| Long Volatility                 | 0.7                                                  | 1.2                                                  | 9.0                                 |

\*Tail risk hedging is modeled conditionally based on the historical average option premium cost and corresponding global equity behavior during the simulations.

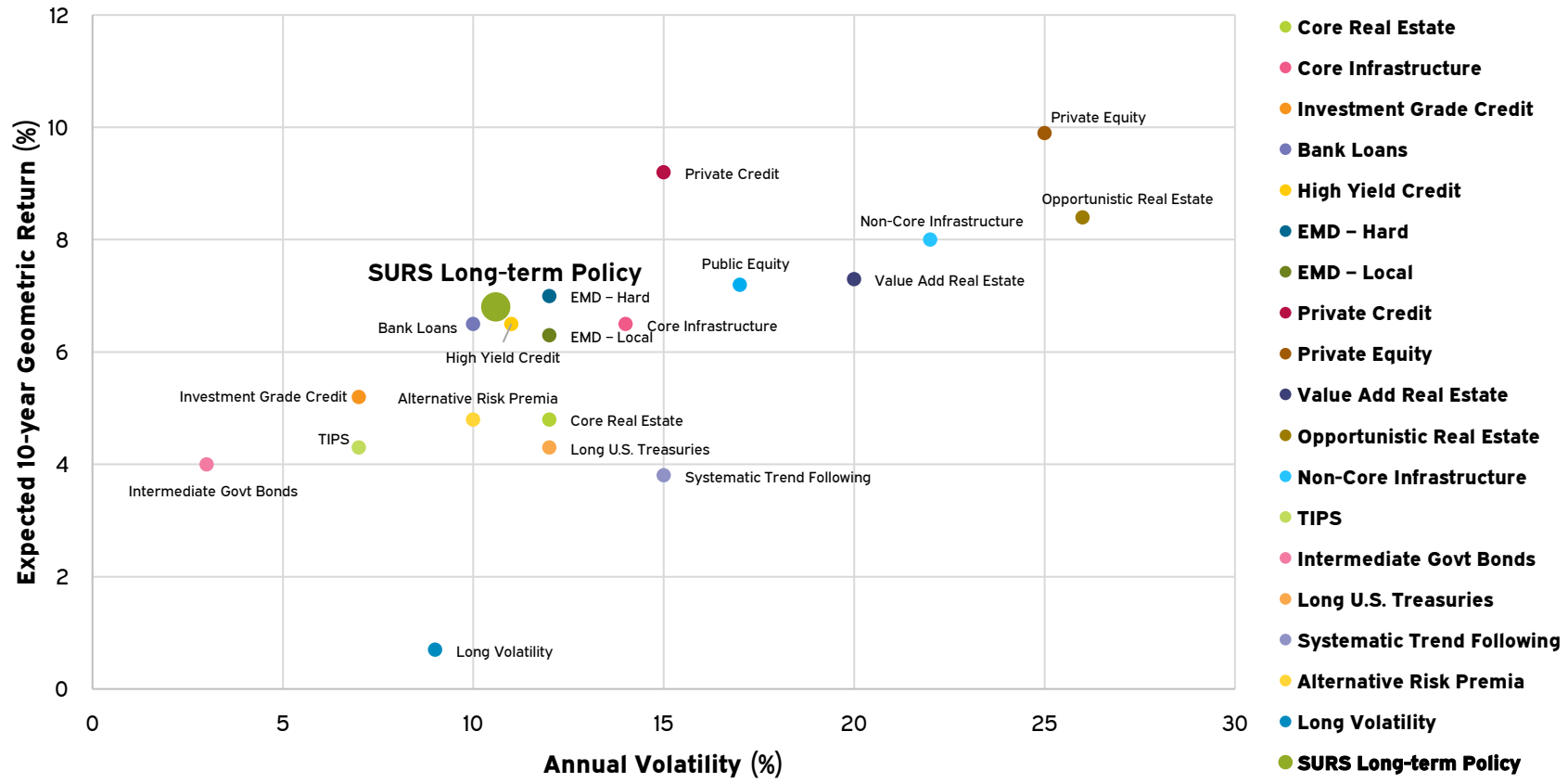


# State Universities Retirement System of Illinois

## Final Results

### SURS Capital Market Assumptions

#### 10-year CMAs



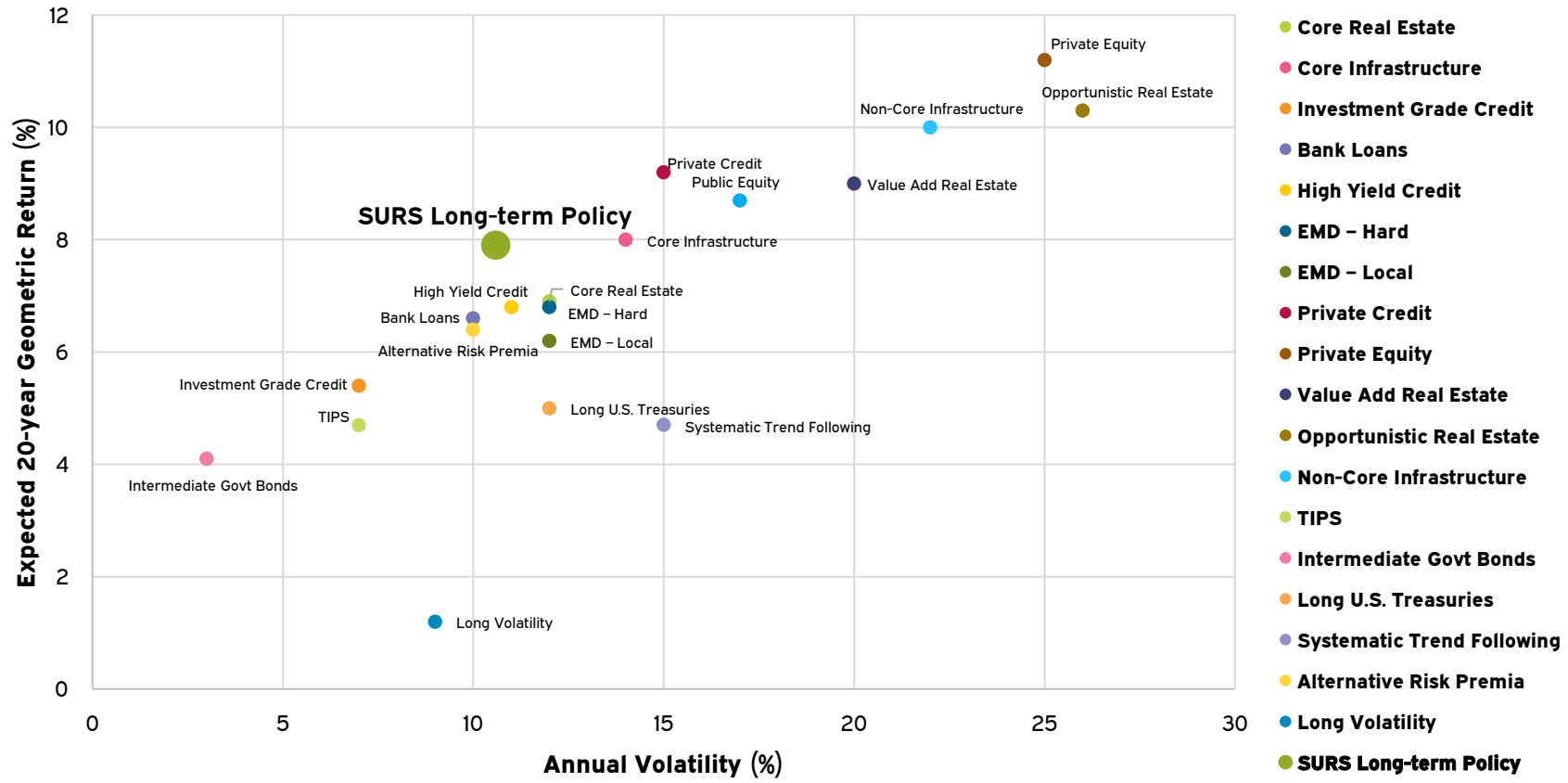


# State Universities Retirement System of Illinois

## Final Results

### SURS Capital Market Assumptions

#### 20-year CMAs





# State Universities Retirement System of Illinois

## Exploring New Strategies

### Adding Strategies Within a Functional Framework

→ New strategies/asset classes may be added to the SURS portfolio in a variety of ways:

1. As part of an A/L study
  - This is generally the most appropriate for large-scale classes (e.g., CRO).
2. As part of a strategic class review
3. During material market events (e.g., dislocations)



→ One of the most useful attributes of a functional/risk-based allocation framework is the ability for SURS to improve the risk/return posture of the portfolio under method #3.

- When dislocations occur, so long as a given strategy aligns with the objectives of a given strategic class/component, SURS has the flexibility to explore its inclusion.
- This maintains the relative rigidity of the strategic structure of the portfolio while improving nimbleness.
- Any strategy that is included needs to be additive/complementary to strategies already in the class/component.

→ The concept of an “Opportunistic” class is a fourth method that can overlap with #1-3. Its primary benefit is it can isolate new strategies into a dedicated class for monitoring.

## **Actuarial/Valuation Measures: Comparisons to Peers**





# State Universities Retirement System of Illinois

## Actuarial/Valuation Measures

### Comparisons to Peers

- During the 2020/2021 Asset-Liability Study, several SURS-specific metrics were compared to two universes:
  1. Similar peers across the US
  2. Illinois peers
- The examined metrics are holistic in nature in that they all combine to describe various elements of health and resilience/risk for a defined benefit system:
  - Funded ratio
  - Net cash flow
  - Actual contributions as a percent of actuarially required contributions
  - Actives-to-Retirees ratio
  - Market value relative to payroll
- For the 2024/2025 study, we used similar universes:
  1. ~70 US peers with assets between \$10b and \$60b *(utilizes FY 2022 data for data robustness)*
  2. Large Illinois peers

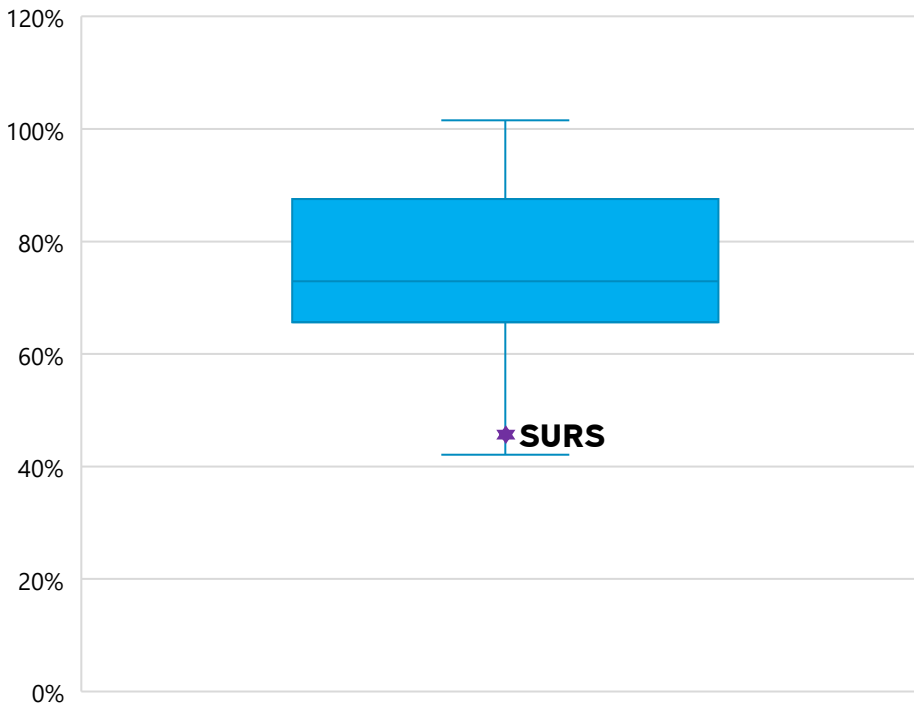


# State Universities Retirement System of Illinois

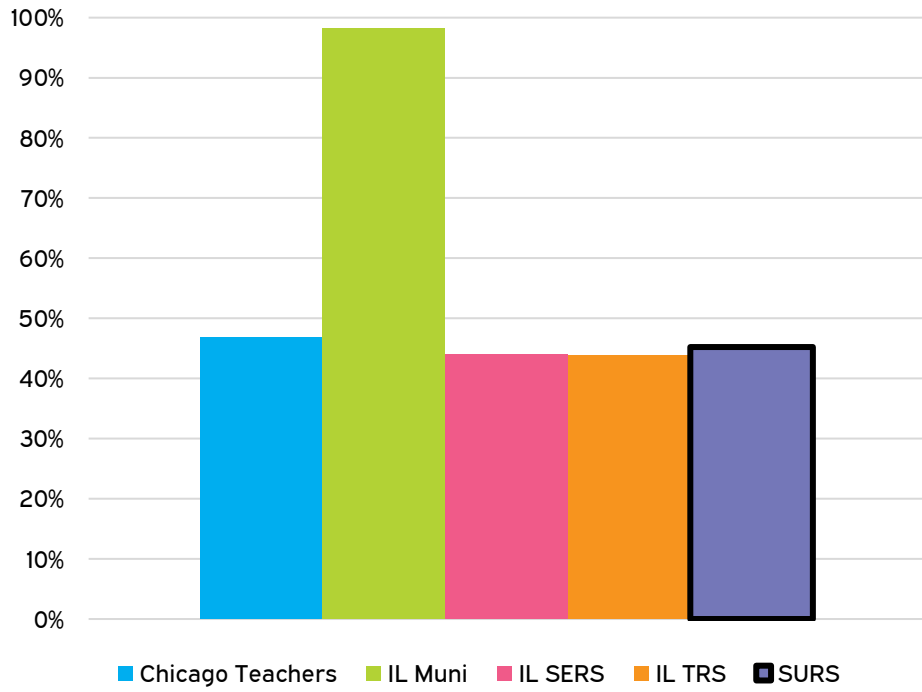
## Actuarial/Valuation Measures

### Funded Ratio

#### Similar US Peers



#### Illinois Peers



- Compared to similar US peers, SURS is in the bottom decile.
- Relative to other Illinois peers, SURS is in-line (excluding IL Muni).

Source: Boston College Center for Retirement Research (2022 fiscal year-end).

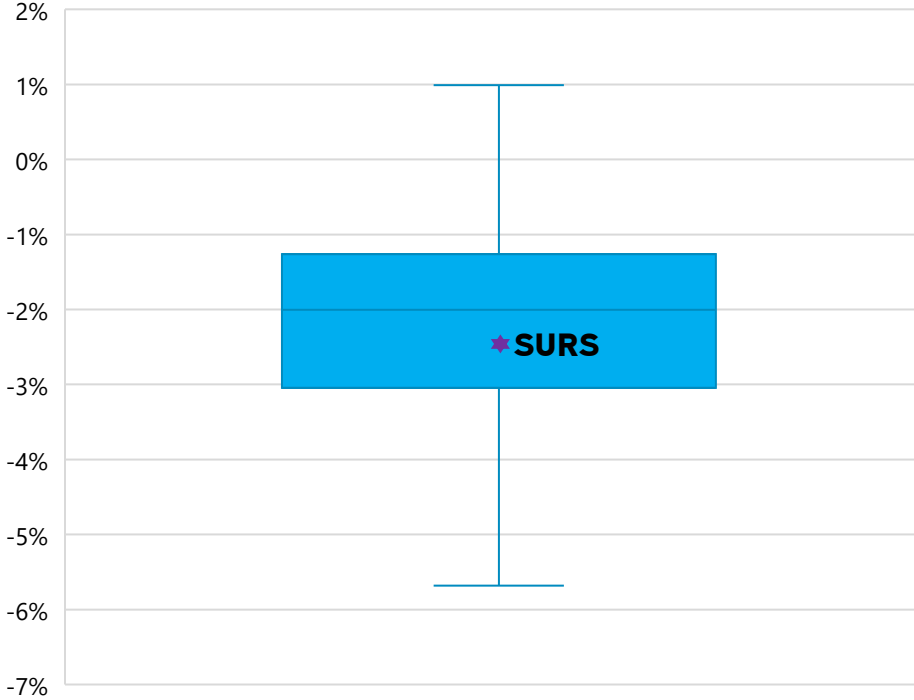


# State Universities Retirement System of Illinois

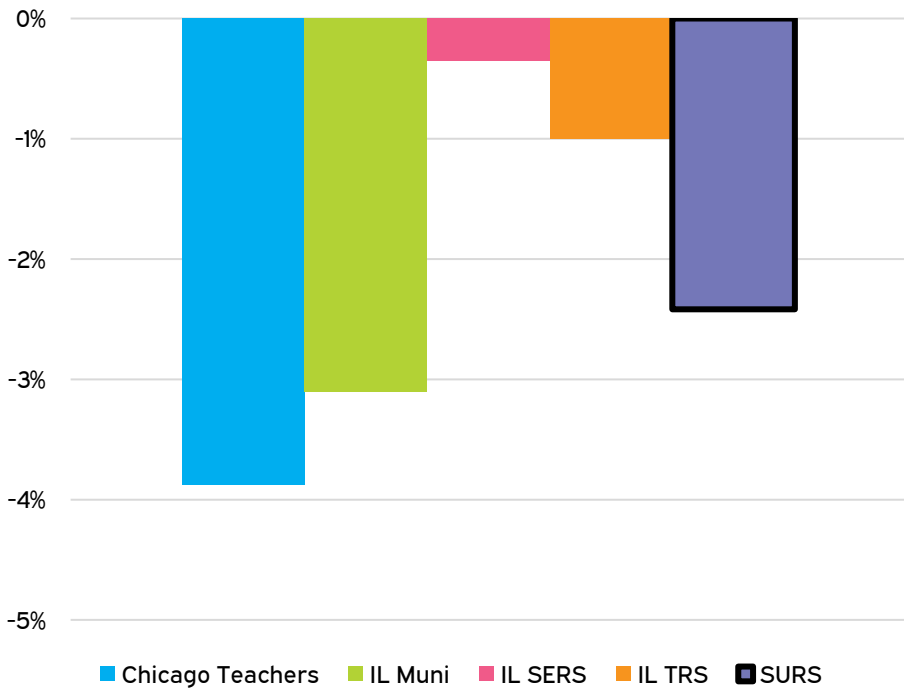
## Actuarial/Valuation Measures

### Net Cash-Flow

#### Similar US Peers



#### Illinois Peers



- Compared to similar US peers, SURS is marginally below average.
- Relative to other Illinois peers, SURS is in the middle of the group (i.e., average).

Source: Boston College Center for Retirement Research (2022 fiscal year-end). Plan AUM is based on average FY 2022 market value, not actuarial asset value.

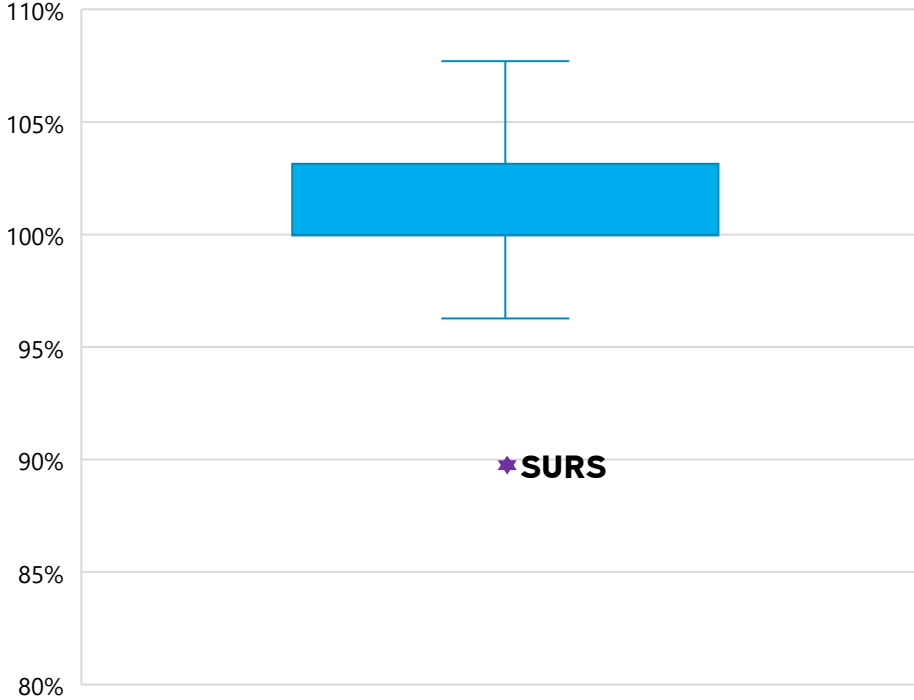


# State Universities Retirement System of Illinois

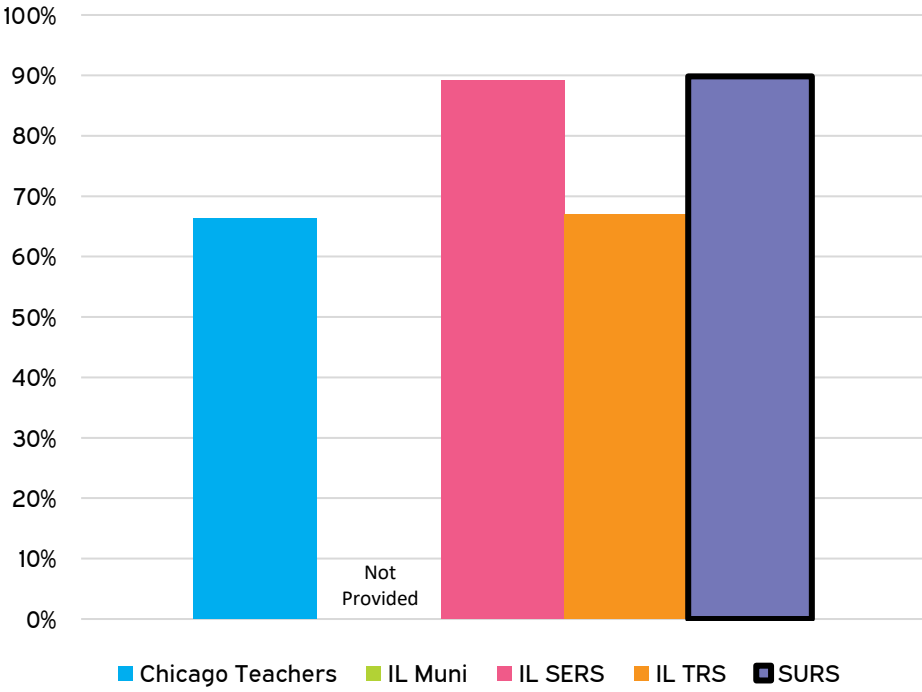
## Actuarial/Valuation Measures

### Actual Contributions as % of Required

#### Similar US Peers



#### Illinois Peers



- Similar US peers contribute near the actuarially recommended amount.
- No Illinois peer contributes 100%, but SURS is now much closer to the actuarially recommended contribution.

Source: Boston College Center for Retirement Research (2022 fiscal year-end).



# State Universities Retirement System of Illinois

## Actuarial/Valuation Measures

Additional attributes that provide insight into risk-bearing capabilities of a DB plan:

### Plan maturity

Numerous ways to measure. This presentation uses actives/retirees ratio. The lower this ratio, the more mature the plan. Mature plans typically have funding and cash flow challenges because there are less active employees to support the plan.

### Contribution sensitivity to asset fluctuations

Measured by market value of assets divided by payroll. Higher ratio means assets have a larger impact on contribution rates as a % of pay. Asset return can also be highly volatile. If asset values shift down dramatically, required contributions will theoretically spike to produce the offsetting adjustment.

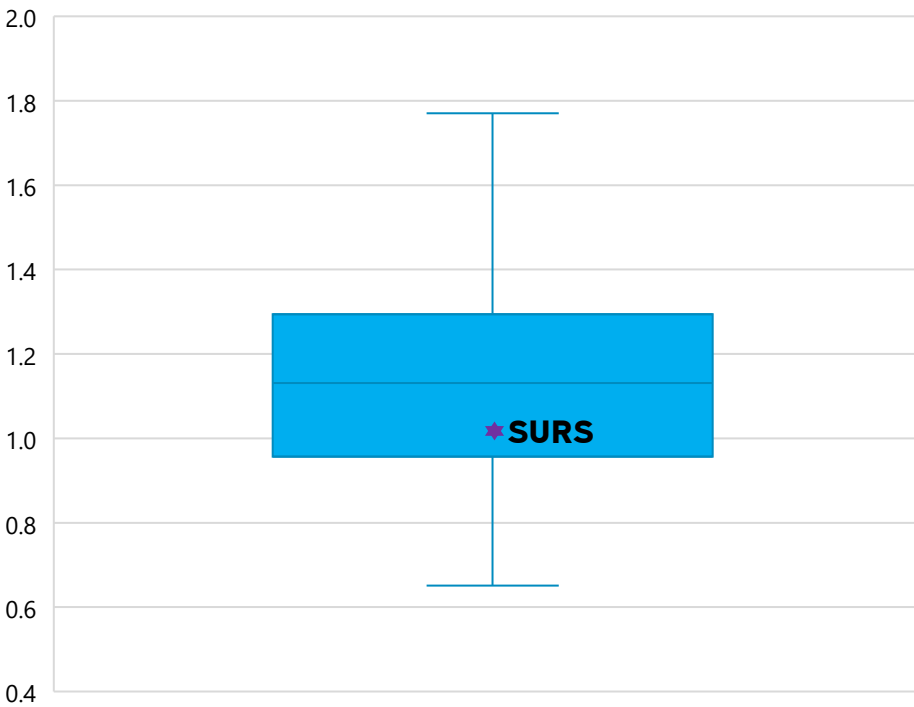


# State Universities Retirement System of Illinois

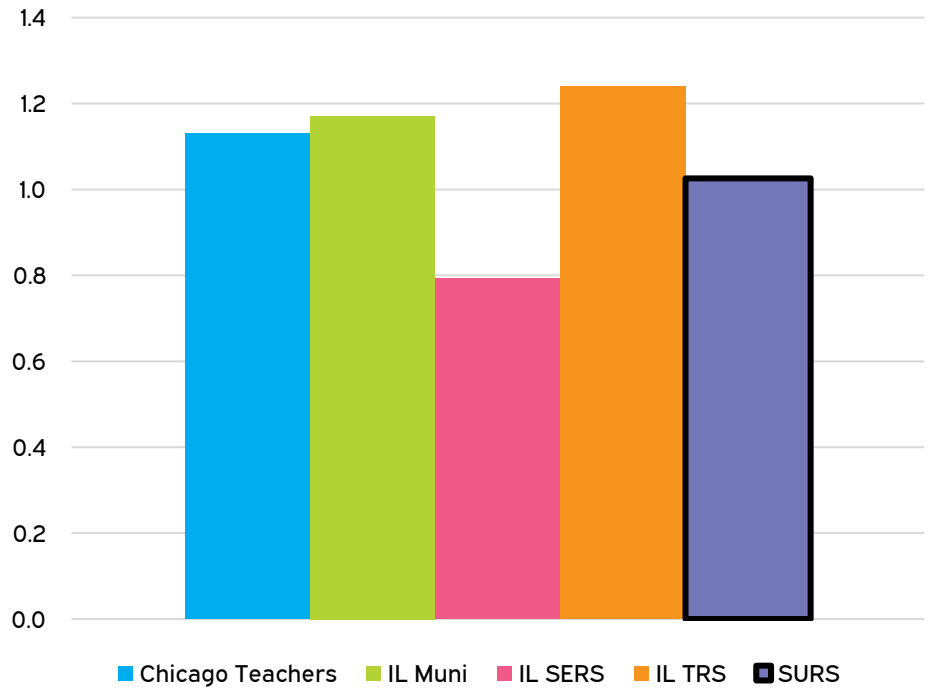
## Actuarial/Valuation Measures

### Plan Maturity (Actives-to-Retirees)

#### Similar US Peers



#### Illinois Peers



- SURS is slightly more mature (demographically) than median US peer.
- Relative to Illinois peers, SURS is marginally older (demographically) than all but IL SERS.

Source: Boston College Center for Retirement Research (2022 fiscal year-end).

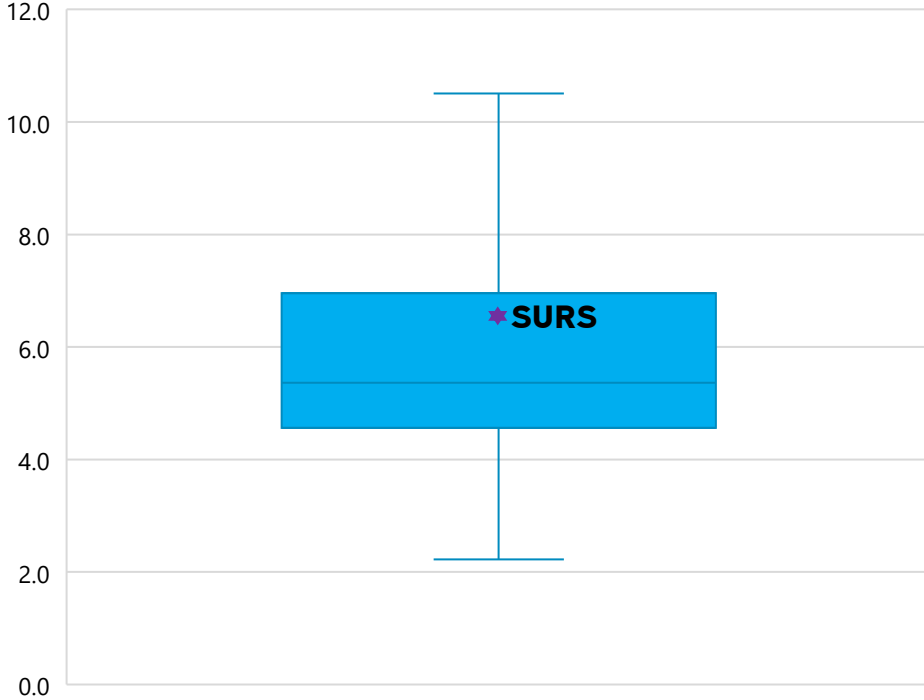


# State Universities Retirement System of Illinois

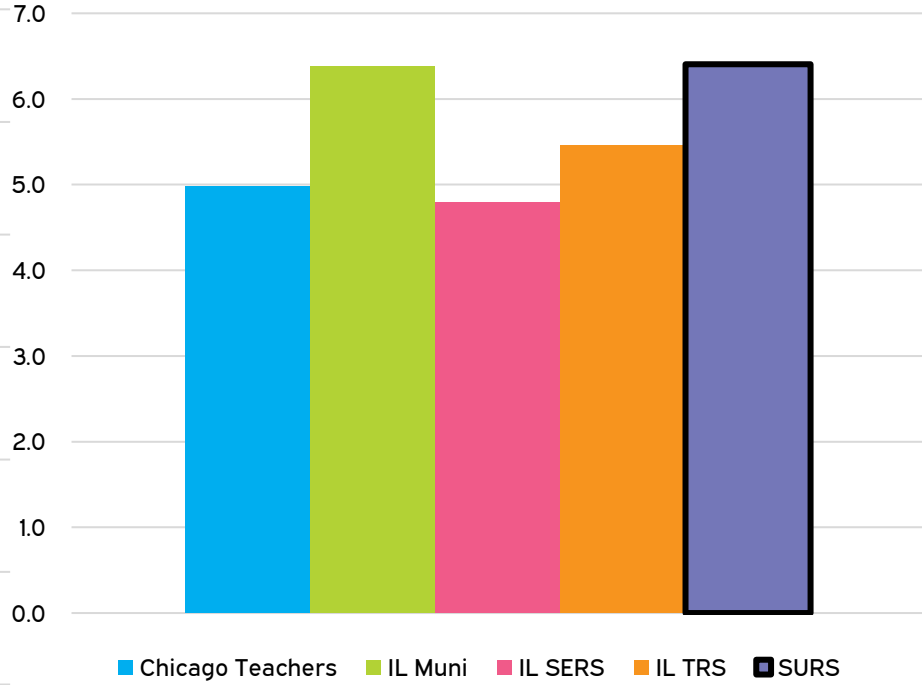
## Actuarial/Valuation Measures

### Market Value / Payroll (i.e., Contribution Sensitivity to Asset Volatility)

Similar US Peers



Illinois Peers



- SURS's contribution rates are slightly more susceptible to asset volatility than US peers.
- Relative to most Illinois peers, SURS is also more susceptible to asset volatility.

Source: Boston College Center for Retirement Research (2022 fiscal year-end).



# State Universities Retirement System of Illinois

## Summary

### Summary

- Capital market assumptions indicate that the current SURS policy portfolio (and long-term policy portfolio that is not yet achieved) should exceed the actuarial rate.
  - This gives the SURS Board flexibility in modifying the portfolio structure as an outcome of the asset-liability study.
- Compared to similar retirement systems across the nation, SURS generally exhibits actuarial characteristics that are median or worse.
- SURS's characteristics are comparable to the average Illinois peer.
- While it is a useful exercise to examine how SURS compares to peers, asset-liability decisions should be made on SURS's specific situation.
- Designing a portfolio that takes into account the capital market environment and SURS's specific actuarial positioning is the focus of the 2024/2025 Asset-Liability Study.





# State Universities Retirement System of Illinois

## Next Steps

### Next Steps

→ From now until March 2025, the focus of the discussions will be on model output, refinement, and final portfolio selection.

| Meeting Date  | Activity                                                                                                                                                                                        |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| December 2024 | <p>Presentation of Initial Model Output</p> <ul style="list-style-type: none"><li>• Dialogue regarding initial findings and additional items for consideration prior to finalization.</li></ul> |
| March 2025    | Final Model and Portfolio Selection                                                                                                                                                             |

# Appendix



# State Universities Retirement System of Illinois

## Peer Universe

### Similar US Peers

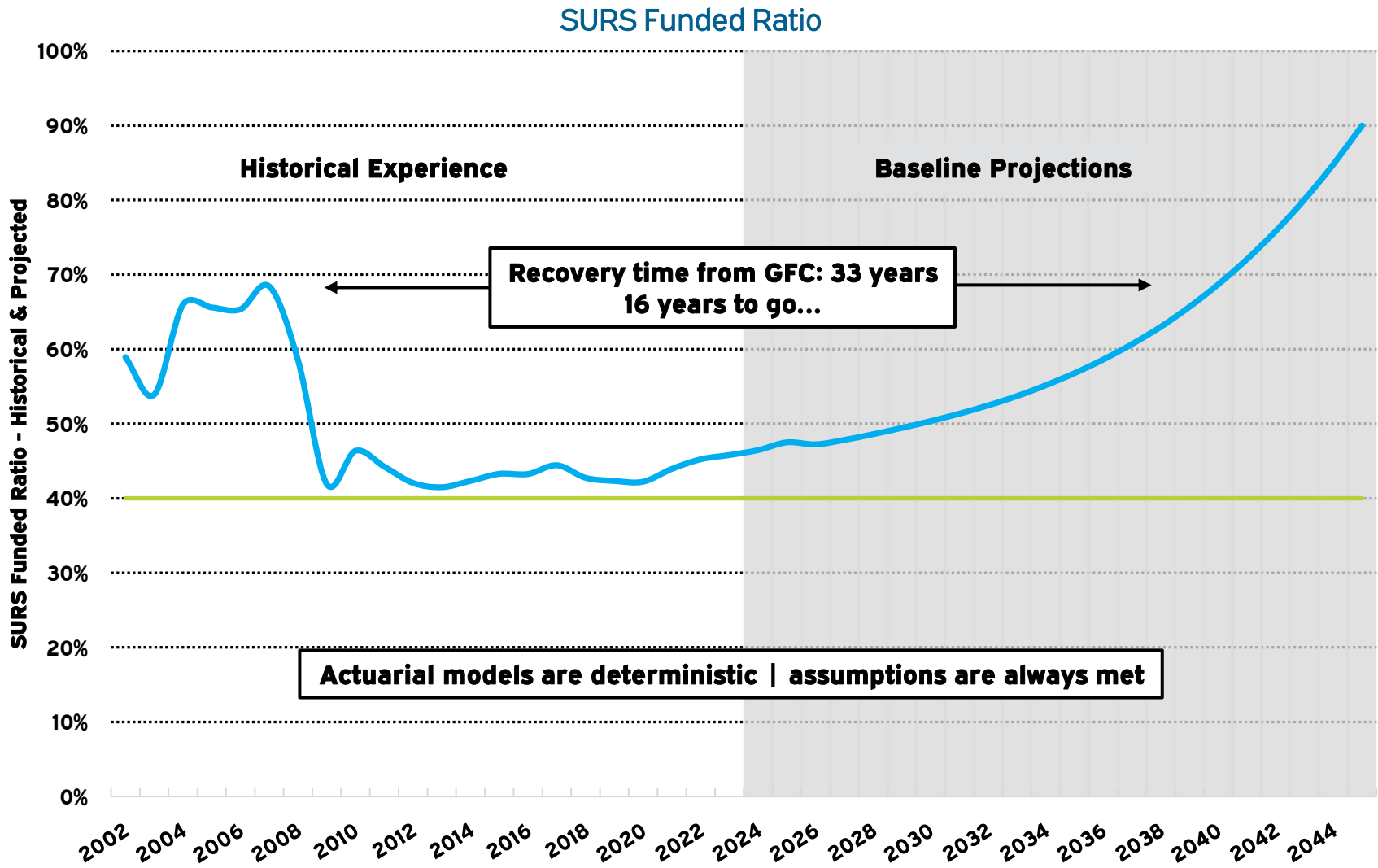
|                          |                                       |                                 |
|--------------------------|---------------------------------------|---------------------------------|
| Alabama ERS              | Kentucky Teachers                     | New Jersey Police & Fire        |
| Alabama Teachers         | Los Angeles ERS                       | New Jersey Teachers             |
| Arizona SRS              | Los Angeles Fire and Police           | New Mexico Educational          |
| Arkansas PERS            | Los Angeles Water and Power           | New Mexico PERA                 |
| Arkansas Teachers        | Louisiana SERS                        | New York City Fire              |
| Chicago Teachers         | Louisiana Teachers                    | New York City Police            |
| Colorado Schools         | Maine State and Teacher               | North Carolina Local Government |
| Colorado State           | Maryland PERS                         | NY State & Local Police & Fire  |
| Connecticut SERS         | Maryland Teachers                     | Ohio Police & Fire              |
| Connecticut Teachers     | Massachusetts SRS                     | Ohio School Employees           |
| Contra Costa County      | Massachusetts Teachers                | Oklahoma PERS                   |
| Cook County ERS          | Michigan Municipal                    | Oklahoma Teachers               |
| Delaware State Employees | Michigan Public Schools               | Orange County ERS               |
| Georgia ERS              | Michigan SERS                         | Pennsylvania State ERS          |
| Hawaii ERS               | Minnesota GERF                        | Sacramento County ERS           |
| Idaho PERS               | Minnesota Police and Fire             | San Diego County                |
| Illinois Municipal       | Minnesota State Employees             | San Francisco City & County     |
| Illinois SERS            | Minnesota Teachers                    | South Carolina RS               |
| Illinois Teachers        | Mississippi PERS                      | South Dakota RS                 |
| Illinois Universities    | Missouri Teachers                     | Texas County & District         |
| Indiana PERF             | Nebraska Schools                      | Texas ERS                       |
| Indiana Teachers         | Nevada Police Officer and Firefighter | Texas Municipal                 |
| Iowa PERS                | Nevada Regular Employees              | TN State and Teachers           |
| Kansas PERS              | New Hampshire RS                      |                                 |
| Kentucky County          | New Jersey PERS                       |                                 |

Source: Boston College Center for Retirement Research (2022 fiscal year-end).



# State Universities Retirement System of Illinois

## Basic A/L Metrics – Funded Ratio Trend

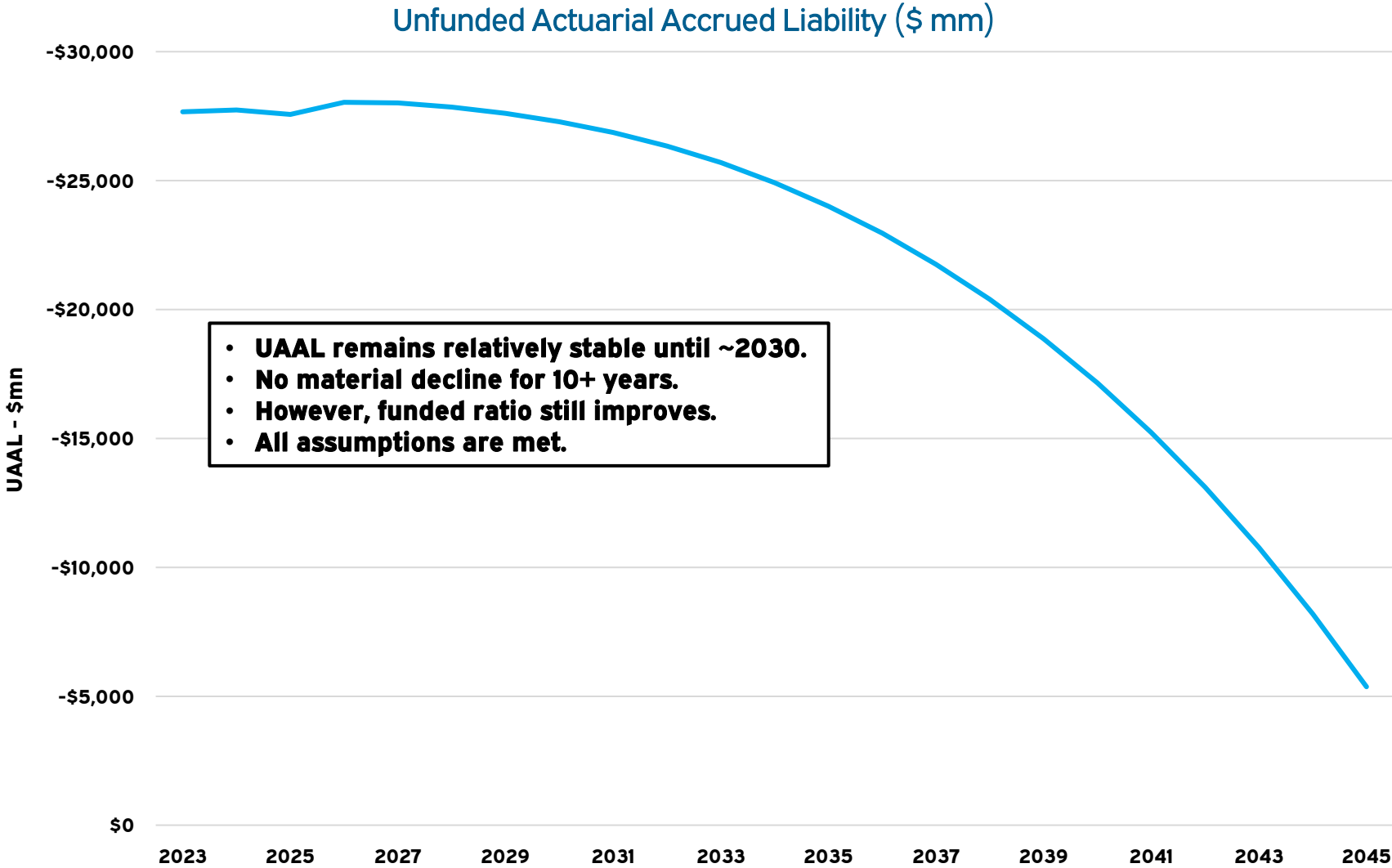


Source: GRS 6/2023 valuation, prior ACFRs



# State Universities Retirement System of Illinois

## Basic A/L Metrics – Projected UAAL



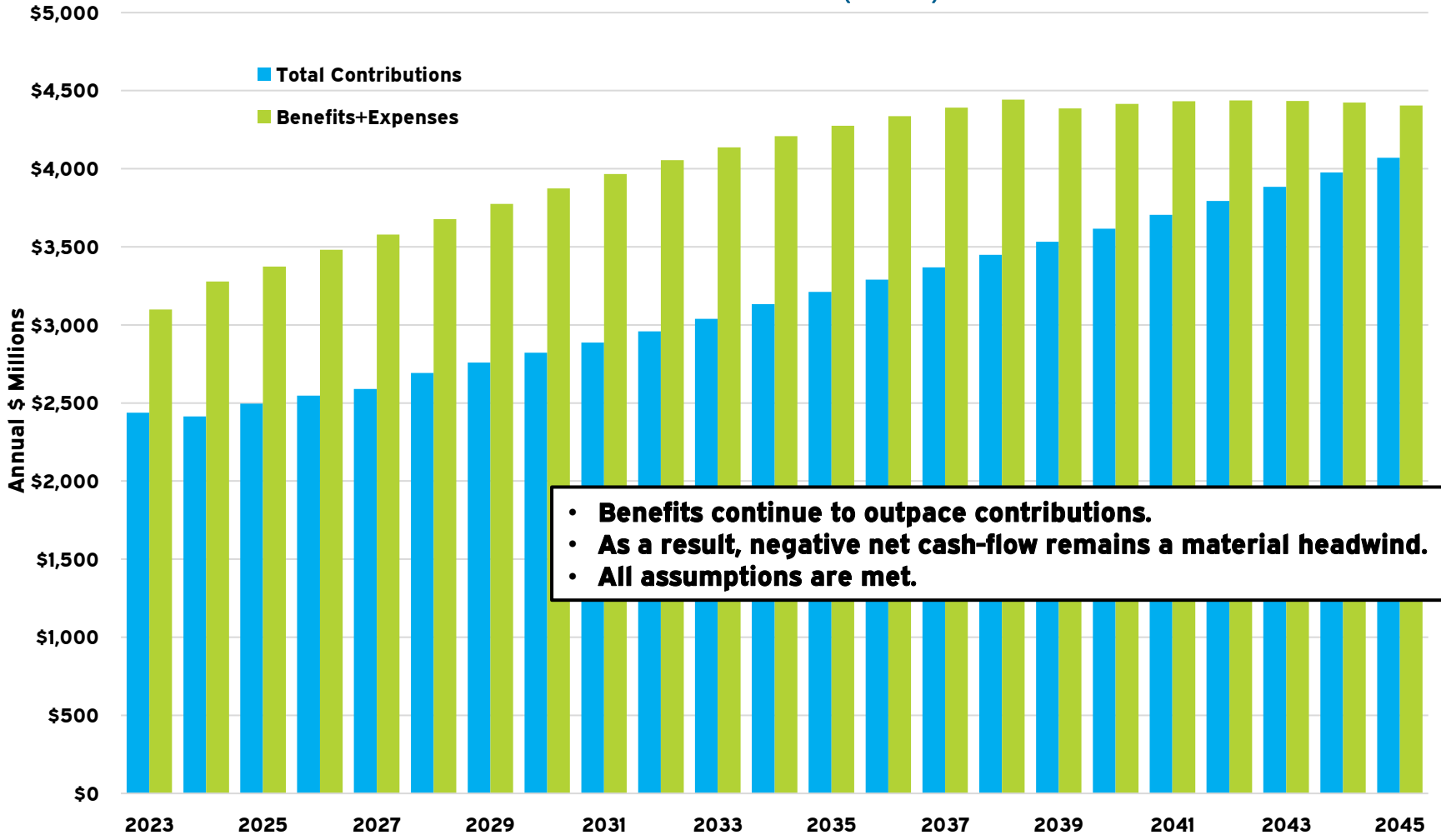
Source: GRS 6/2023 valuation



# State Universities Retirement System of Illinois

## Basic A/L Metrics – Projected Contributions and Benefits

Contributions vs. Benefits (\$ mm)



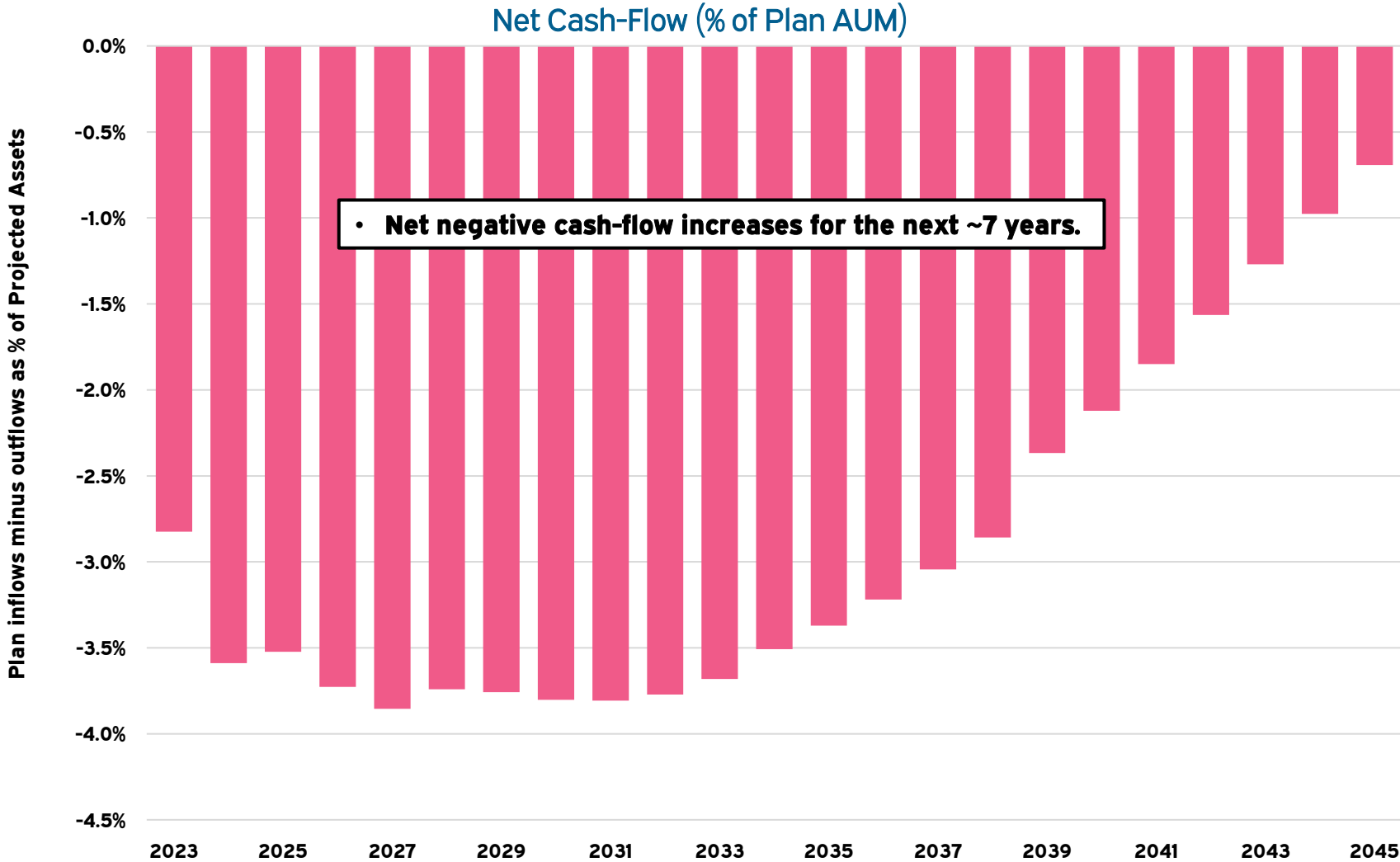
- **Benefits continue to outpace contributions.**
- **As a result, negative net cash-flow remains a material headwind.**
- **All assumptions are met.**

Source: GRS 6/2023 valuation | Contributions = statutory SURS + employee contributions.



# State Universities Retirement System of Illinois

## Basic A/L Metrics – Projected Net Cash-Flow



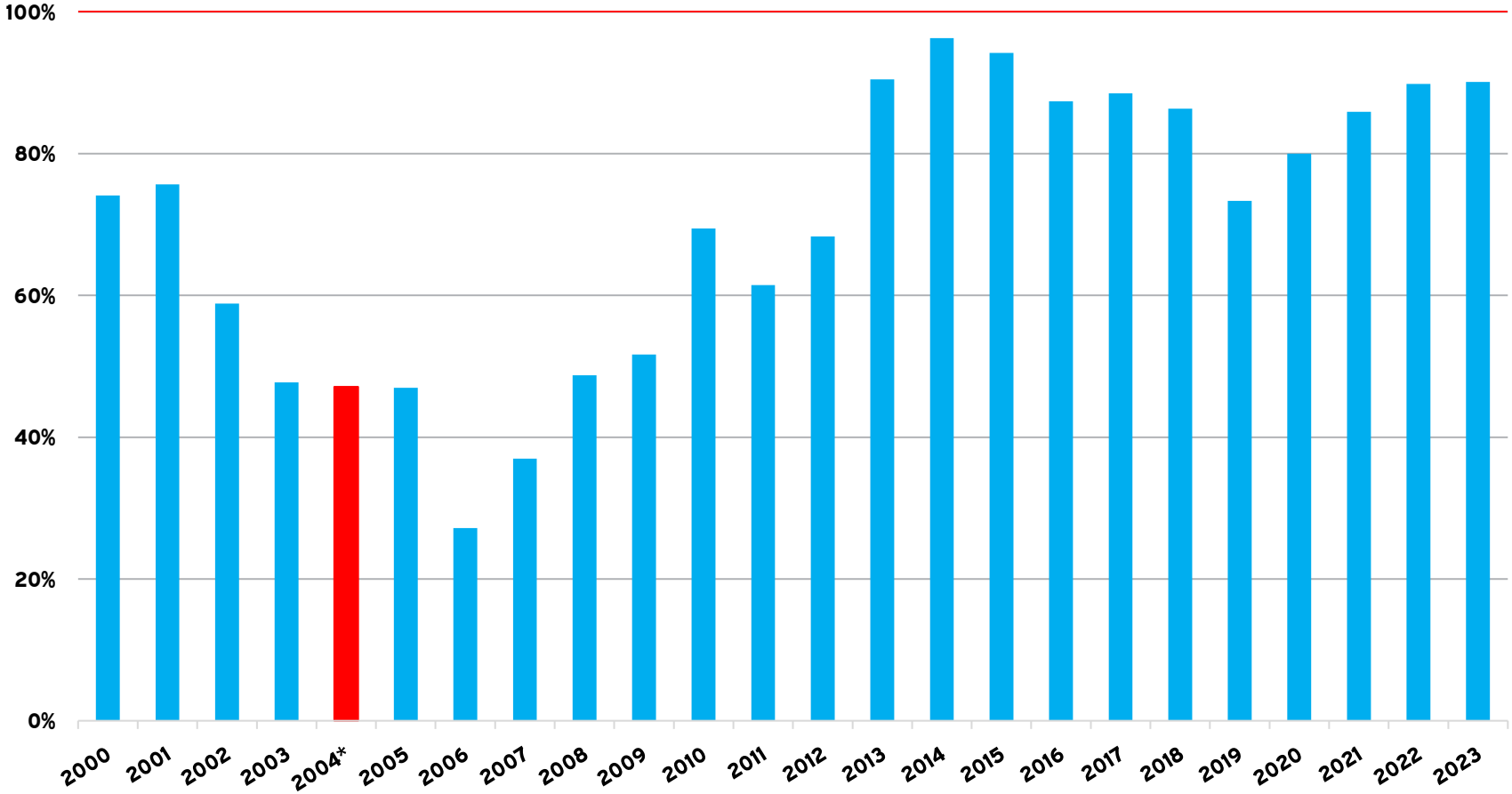
Source: GRS 6/2023 valuation



# State Universities Retirement System of Illinois

## Basic A/L Metrics – Contributions vs. ADC

Actual SURS Contributions as % of Actuarially Determined Contributions  
(by Fiscal Year)



Source: GRS 6/2023 valuation | \*Excludes \$1.4bn of proceeds from GO Bond issuance.





# CAPTRUST

**To:** Investment Committee of the State Universities Retirement System of Illinois  
**From:** CAPTRUST  
**Date:** October 24, 2024  
**Re:** Recommendation for SURS Small-Mid Cap Growth Equity Fund

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## OVERVIEW

The investment options for the SURS Retirement Savings Plan and the SURS Deferred Compensation Plan (“the Plans”) include the SURS Small-Mid Cap Growth Equity Fund which is intended to provide specialized diversification within U.S. equities. The underlying fund, Fiera Capital SMID Growth, is an actively managed strategy that seeks both stable (75%) and emerging (25%) growth companies within industries and sectors poised to benefit from global secular growth trends. As of June 30, 2024, the Plans’ assets in the strategy total \$45,228,178.

The Investment Committee approved use of Fiera Capital SMID Growth during the April 2023 meeting due to concerns with the previous underlying investment including changes to the portfolio management team, style and investment strategy deviations, and related underperformance. At that time, Fiera Capital SMID Growth was only offered under either a mutual fund or a separately managed account (SMA) structure, the latter of which provided the most favorable terms for the Plans.

During SURS’ implementation of the SMA, a collective investment trust (CIT) structure was launched for Fiera Capital SMID Growth. To incentivize initial funding, Fiera Capital (“Fiera”), the investment manager, is making available a Founders Class of the CIT offered at an expense of 0.60%, approximately 0.055% less than the SMA’s current aggregate expense<sup>1</sup>.

## RECOMMENDATION

To realize a reduction in the net investment cost of the SURS Small-Mid Cap Growth Equity Fund, from 0.655% (aggregate) to 0.60%, CAPTRUST and SURS Staff recommend transferring the Plans’ assets in the SMA structure of Fiera Capital SMID Growth to the Founders Class of the CIT structure, as soon as administratively possible. CAPTRUST anticipates use of the CIT will result in initial savings of \$25,000/year, based on current invested assets, and compounded annual savings as fund assets increase.

Although the Plans would be initial investors in the CIT, conversations with Fiera have confirmed their intention to support the strategy long-term and continuously develop a pipeline for additional investment. Fiera has already received commitment from another retirement plan committee to use the CIT, with funding expected to occur in Q1 2025 with a market value of approximately \$25 million. Additionally, in terms of liquidity, Fiera only requires a 5-business day notice from any investor seeking to liquidate 20% or more of their investment in the fund. Given the recordkeeper’s standard fund change timeline and participant notification procedures, this requirement would not be an issue for the Plans if the Investment Committee were to select a different underlying investment in the future. These liquidity guidelines will be included in the CIT’s adoption agreement to ensure contractual understanding.

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<sup>1</sup> The Plans’ current fee structure for the SMA is 0.70% on the first \$25 million in assets and 0.60% on all other assets.