SWIB Board of Trustees Meeting of September 10, 2025

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12. Adjourn

Name of Meeting: **Regular Meeting of the Board of Trustees**
Date/Time: Wednesday, September 10, 2025 9:00 am
Room: 1st Floor Conference Room
Address: 4703 Madison Yards Way, Madison, WI 53705
Virtual: Join the meeting now, 608-267-3179, code 780625834#

OPEN SESSION
1. Committee Reports – Open Session Items A. Audit and Finance B. Benchmark and Performance C. Compensation and Workforce Development D. Strategic Planning and Corporate Governance
2. Consent Agenda A. Open Session Minutes of June 11, 2025 B. Recommended Actions from Committee Agendas – Open Session Items
3. Investment Forum Recap
4. Biennial Ethics Training
5. Fiduciary & Public Records Topics
6. Investment Performance and Market Updates A. Board Investment Performance Report, Q2 2025 B. Callan Quarterly Report
7. Committee Open Session Business A. Approved Open Session Investment Committee Meeting Minutes of May 27, June 24, and July 29, 2025 B. Final Open Session Investment Committee Agenda for August 26, 2025 and Draft Open Session Agendas for September 23 and October 28, 2025 C. Draft Open Session Minutes of May 22, 2025 Enterprise Risk and Compliance Committee Meeting
8. Quarterly Investment Update, Q2 2025

CLOSED SESSION*
RECONVENE IN OPEN SESSION
9. Announcement of Matters Taken Up in Closed Session
10. In the Absence of Questions, the Following Reports will be Filed Without Comment (For informational purposes): A. Quarterly Charges to Funds Reports, Q2 2025 B. Private Markets and Funds Alpha Commitments, Q2 2025 C. Board Contact Log
11. Future Items for Discussion A. 2025 Board Meeting and Agenda Plan
12. Motion to Adjourn
NOTES: Items may be taken in order other than listed. *Estimated times are for planning purposes only. Agenda items will last until discussion is concluded.* *The meeting site is physical accessible. Upon prior request, reasonable accommodations will be provided.*

*For further details on virtual format of meeting, please contact Dawn Tuescher (608-261-9341 or dawn.tuescher@swib.state.wi.us).

* The motion to go into closed session at this meeting is made pursuant to: (i) Sections 19.36(5) and 19.85(1)(e) of the Wisconsin Statutes to consider confidential and proprietary strategies for the investment of public funds relating to specific proprietary investment strategies of internal WRS portfolios, asset allocation, and risk management, and/or for any comments or discussion on prior closed session minutes that discuss the same; (ii) Section 19.85(1)(c) of the Wisconsin Statutes to discuss the compensation and performance evaluation data of specific SWIB employees, including SWIB's executive director/chief investment officer and SWIB's board of trustees, and/or for any comments or discussion on prior closed session minutes that discuss the same; and (iii) Section 19.85(1)(g) of the Wisconsin Statutes to confer with SWIB's chief legal counsel to receive advice concerning legal strategy for ongoing and potential litigation, and/or for any comments or discussion on prior closed session minutes that discuss the same. The Board may convene in additional closed sessions or announce additional closed session items at the meeting in accordance with the procedure outlined in the Attorney General's Opinion reported at 66 OAG 106 (1977). Whenever a closed session is held, the Board will subsequently reconvene in open session to cover remaining agenda items.

Board Meeting

Tab 1 – Committee Reports – Open Session Items

A. Audit and Finance Committee

B. Benchmark and Performance Committee

C. Compensation and Workforce Development Committee

D. Strategic Planning and Corporate Governance Committee

Reports

Board Meeting

Tab 2 – Consent Agenda

A. Open Session Minutes of June 11, 2025

B. Recommended Actions from Committee Agendas – Open Session Items

Summary: Any Trustee may request to move a consent agenda item to the regular agenda for further discussion.

Review and Action

Proposed Motion: Move to approve the consent agenda, as presented.

Regular Meeting of the Board of Trustees

Wednesday, September 10, 2025
STATE OF WISCONSIN INVESTMENT BOARD

CONSENT AGENDA – OPEN SESSION ITEMS

Proposed Motions:

1. Move to approve the Open Session Minutes of June 11, 2025, as presented.
2. *[TBD after Committee meetings]*

STATE OF WISCONSIN INVESTMENT BOARD

Board of Trustees Meeting – Open Session
Tuesday/Wednesday, June 10-11, 2025

Investment Forum: Virtual
Regular Board Meeting: 4703 Madison Yards Way, Madison, WI

OPEN SESSION

Trustee Tinnen, Chair, called the meeting of the Board of Trustees to order at 1:30 p.m. on June 10, 2025. Trustee Tinnen introduced the other Trustees and Edwin Denson, Executive Director/Chief Investment Officer. Mr. Denson thanked the CFA Society Madison for joining the Board of Trustees in hosting this annual event and then acknowledged and thanked the planning committee and additional contributors.

INVESTMENT FORUM (Session I, June 10, 2025) ***(See Attachment 1 for Attendance List)***

1. Knowledge Sharing and Collective Learning

Sebastien Page, Head of Global Multi-Asset and CIO, T. Rowe Price

Sebastian Page, Head of Global Multi-Asset and CIO at T. Rowe Price, discussed how organizations and individuals often overemphasize hard skills and success, while underemphasizing soft skills and the ability to learn from failure. Mr. Page explained how soft skills should be focused on the goal of building mental resilience. As an example, he cited Roger Federer, a now-retired exemplary tennis player who won 80% of his matches by winning a narrow 54% of the points across all games played. In Mr. Page's view, in competitive games and markets, the best players have a very real but seemingly narrow edge. Thus, professional athletes and investors alike need to be able to assess and build upon their edge across all games played, both wins and losses. Mr. Page explained how stress can both enhance and detract from performance; stress can work as an actuator that improves performance to a point, but, beyond this point, likely negatively impacts performance.

Mr. Page then transitioned to a discussion of the implementation of these ideas in organizations. He believes the best organizations have found ways to instill soft skills around mental resiliency and process support into their culture. Also, these organizations train and support managers who show a continual appetite for learning and who are willing to ask for and grow from feedback.

2. U.S. Economic Trends and the Consumer Outlook

David Mericle, Chief U.S. Economist, Goldman Sachs

David Mericle, Chief U.S. Economist at Goldman Sachs, views tariff, fiscal and immigration policies as the biggest factors affecting the economy today. In particular, he believes that tariffs are the most significant factor and have been the largest surprise under the current administration. Tariffs are expected to add 200 bps to core personal consumption expenditures ("PCE") inflation, but net to just 100 bps of core PCE inflation considering other deflationary factors in the economy today. Mr. Mericle expects tariffs to be a 100-150 bps headwind to GDP growth over the next year. In his view, the key forward-looking considerations are incremental tariff policy and financial conditions, since both are unknowns and will be material swing factors.

Fiscal policy is largely in line with pre-January 2025 expectations. Mr. Mericle is chiefly concerned with the large U.S. fiscal deficit despite a generally stable economy and sees the U.S.'s elevated debt/GDP ratio, combined with high interest rates, as weighing on and limiting fiscal policy.

Finally, immigration has thus far been a benign economic factor under the current administration. Annual immigration is running at 500,000 per year, down from a peak of four million per year and a pre-Covid normal run-rate of 1.5 million per year. Incremental policy that further limits immigration may weigh on potential job growth and lower potential GDP growth, but, to date, immigration policy enforcement has not necessarily been economically impactful relative to prior expectations.

3. <u>Opportunities and Challenges in Power Demand</u>

Ravi Bellur, Founder and CIO, Ripple Effect Asset Management
Kris Moldovan, Executive Vice President and CFO, Vistra

Kris Moldovan, Executive Vice President and CFO at Vistra, began by discussing how Vistra is seeing significant power demand across their operating areas in the northeastern U.S. and in Texas. Data centers are a key driver, with 100 MW of demand growth expected by 2030, representing a mid-teens compound annual growth rate. Beyond data centers, cooling, oil and gas and crypto are driving additional demand.

Ravi Bellur, Founder and CIO at Ripple Effect Asset Management, spoke about how the current environment has opened up a variety of investment opportunities. Mr. Bellur noted that data center and AI-led demand is new and unpredictable, and our current grid infrastructure is aging and outdated. Most current generation capex investment is for replacement and will not meet the current predicted power needs over the next few years. Power markets are also illiquid today, and related volatility should also create future investment opportunities. Mr. Bellur mentioned how regulators are worried about power shortages starting in 2028, driven by multiple bottlenecks across the supply chain. He is optimistic about the investment opportunity set available in the market and sees potential in generation, transmission, midstream and even gas producers. He believes many of these assets have the potential to see their valuations reset once the market sees the improved durability of their cash flows as power markets tighten in the years ahead.

Mr. Moldovan then explained how data centers are not necessarily a new concept, but today's data centers are significantly larger in terms of size, complexity and power needs. These data centers fuel AI computing power that uses up to 10x the power required for traditional web-based searches. Data center customers also require co-location with power and further back-up generation to ensure stability. Mr. Bellur noted how renewable power generation was helpful in a low-growth environment, but today's world requires dispatchable generation that can be relied upon during peak demand periods and in emergencies.

The Board recessed for the day at 4:30 p.m.

REGULAR BOARD MEETING (June 11, 2025)

Board Members Present: Clyde Tinnen, Chair
Tom Merfeld, Vice Chair & Secretary
Esther Ancel, Trustee
Kathy Blumenfeld, Trustee
Barb Bolens, Trustee
J. Michael Collins, Trustee
Jeff DeAngelis, Trustee
Robert Scott, Trustee
John Voelker, Trustee

Staff/Others Present: Nathan Ballard, Senior Legal Counsel
Eric Barber, Chief Legal Counsel
Brandon Brickner, Head of Internal Audit
Sara Chandler, Chief of Staff & Strategy
Edwin Denson, Executive Director/Chief Investment Officer
Anne-Marie Fink, Private Markets & Funds Alpha CIO
Greg Fletcher, Performance Director
Shannon Gannon, Communications Director
Jameson Greenfield, Chief Financial Officer
Dan Gyorog, Internal Auditor
Rochelle Klaskin, Deputy Executive Director/Chief Operating Officer
Jon Loboda, Performance Measurement Operations Manager
Todd Mattina, Head Economist, Asset & Risk Allocation CIO
Frank Mazzucco, Senior Legal Counsel
Cefe Quesada, Chief Technology Officer
Jay Risch, Government Relations Liaison
Mike Shearer, Head of Fixed Income Strategies
Nick Stanton, Head of Mult-Asset Strategies
Dawn Tuescher, Executive Administrative Assistant
Sam Rebenstorf, Legislative Audit Bureau
Chloe Zhang, Legislative Audit Bureau
Cyril Espanol, With Intelligence
Lindsay Saienni, FIN News
Eric Hansen, Public Attendee
Peter Knotek, Public Attendee
Anne Steinberg, Public Attendee
(Some individuals may have attended only portions of the meeting.)

DRAFT

Trustee Tinnen, Chair of the Board of Trustees, declared a quorum was present and called the Board of Trustees meeting to order at 9:00 a.m. on June 11, 2025.

1. Annual Committee Assignments by Board Chair

Trustee Tinnen reviewed certain updates to Committee assignments, included on page 9 of the meeting materials, following former Trustee Schalow's retirement and Trustee Collins joining the Board.

2. Committee Reports – Open Session Items

A. Strategic Planning and Corporate Governance Committee

Trustee Tinnen, Chair of the Strategic Planning and Corporate Governance Committee, reported that in open session, the Committee: (i) approved prior meeting minutes; (ii) heard a hedge fund strategy report and market outlook presentation from Aksia, SWIB's hedge fund consultant; and (iii) received an update on innovation and projects in process at SWIB.

B. Audit and Finance Committee

Trustee Merfeld, Chair of the Audit and Finance Committee, reported that in open session, the Committee: (i) approved prior meeting minutes; (ii) reviewed and approved the Calendar Year 2024 Retirement Funds Annual Report, including the Retirement Funds' Audited Financial Statements for Calendar Year 2024, which included a clean and unmodified opinion from the Legislative Audit Bureau ("LAB"); (iii) reviewed the Open Audit Issues Report as of May 31, 2025; (iv) reviewed annual affirmations and disclosures; (v) reviewed the 2025 Internal Audit Plan Status; (vi) reviewed the Five-Year Audit Summary; (vii) reviewed the Quarterly Cost of Management Update for Q1 2025; and (viii) recommended that the Board approve the FY 2026 State Operating Budget.

3. Consent Agenda

Eric Barber, Chief Legal Counsel, distributed a proposed consent agenda. Trustee Tinnen asked whether there were any motions listed on the consent agenda that should be removed for further discussion and individual action. Hearing none, he referred to the following items on the consent agenda:

- Move to approve the Open Session Minutes of March 19, 2025, as presented.
- Move to approve the preliminary FY 2026 State Operating Budget of $104.8 million, as recommended by the Audit and Finance Committee, and as set forth in the Committee's materials.

Motion: A motion was made by Trustee Voelker and seconded by Trustee Scott to approve the consent agenda, as presented. The motion passed unanimously.

4. Board Contact Log

Trustee Tinnen stated that the Board Contact Log was included on pages 21-23 of the meeting materials and described the purpose and distribution cadence for the log. He encouraged Trustees to contact himself or Mr. Barber if they wished to discuss any of the communications or submissions received at a subsequent Board meeting.

5. Investment Performance and Market Updates

A. Board Investment Performance Report, Q1 2025

Greg Fletcher, Performance Director, presented the *Investment Performance Report as of March 31, 2025*, included on pages 25-40 of the meeting materials. Mr. Fletcher reported that: (i) the Core Trust Fund ("CTF") returned 1.59% net of all fees and expenses in Q1 2025, resulting in excess performance of 38 basis points ("bps") for the quarter; (ii) the CTF returned 6.56% net of all fees and expenses for the one-year period, resulting in an excess return of 88 bps; (iii) the CTF five-year return net of all fees and expenses was 10.24% and outperformed the Policy Benchmark by 105 bps on an annualized basis; and

(iv) the CTF net of external manager fee return outperformed the 60/40 Reference Portfolio return by 34.0% (cumulative) over the past twenty years, which equates to an excess value add of $17.2 billion over the same period.

Mr. Fletcher highlighted: (i) the CTF net of all fees and expenses return outperformed its benchmark for the year-to-date, one-, three-, and five-year time periods; (ii) the CTF net of external manager fee return outperformed its benchmark for the ten-, fifteen-, and twenty-year time periods; (iii) the CTF gross of fee return outperformed its benchmark for the thirty-year time period; (iv) the Variable Trust Fund ("VTF") net of all fees and expenses return outperformed its benchmark for the year-to-date and one-year time periods and underperformed for the three- and five-year time periods; (v) the VTF net of external manager fee return outperformed its benchmark for the ten-, fifteen-, and twenty-year time periods; and (vi) the VTF gross of fee return outperformed its benchmark for the thirty-year time period. Mr. Fletcher then noted that SWIB's investment management has added more than $5.7 billion above benchmark returns to the Wisconsin Retirement System ("WRS") over the last five years.

Mr. Fletcher reviewed the overall assets under management ("AUM") of SWIB, noting that the gross market value of assets increased by $5.1 billion over the past year. He then referenced that the percentage of WRS assets that are actively managed has remained consistent year-over-year, and the percentage of WRS assets that are internally managed decreased slightly over the same period. Next, Mr. Fletcher: (i) provided a breakdown of CTF asset class exposures, noting that the portfolio remains well diversified and all asset classes are within asset allocation target ranges; (ii) reviewed the asset class performance for the CTF over various time periods and discussed the performance of the alpha pool overlay; (iii) reviewed VTF performance and asset class exposures, noting that asset class exposures were within target ranges; and (iv) presented return information for the Separately Managed Funds.

Finally, Mr. Fletcher reviewed the Leverage Performance, included on pages 41-42 of the meeting materials. He noted that policy leverage contributed zero bps to CTF absolute performance year-to-date and remained a positive contributor over the one- and five-year periods, but was negative over the three-year period, driven by the unique market decline of 2022.

B. Callan Quarterly Report

Mr. Fletcher noted that the *Callan Quarterly Report Summary as of March 31, 2025* was included on pages 43-57 of the meeting materials. He highlighted that the CTF's total fund unadjusted performance rankings are in the first quartile for the one-year period, at or above median for the five- and ten-year periods, and below median for the three-year period. On an asset allocation adjusted basis, the CTF's rankings are in the first quartile for the one-, three-, and five-year periods and in the second quartile for the ten-year period. When comparing the CTF ten-year cumulative performance to peers, Mr. Fletcher noted the CTF exhibits low tracking error relative to its peers and produces stable, ascending cumulative performance over 10 years. Finally, Mr. Fletcher answered questions regarding peer group composition and foreign currency hedging.

6. Investment Committee Open Session Business

A. Amendments to WRS Investment Committee Investment Guidelines

Mr. Barber discussed amendments to the *SWIB Investment Committee Wisconsin Retirement System Investment Guidelines,* approved by the Investment Committee on April 22, 2025 and included on pages 59-103 of the meeting materials. He noted amendments to: the derivatives use policy to better align with overall risk monitoring by the Executive Director/Chief Investment Officer and Risk Management,

internally managed passive portfolio guidelines, leveraged loan portfolio guidelines,, and certain soft risk parameters.

B. Approved Open Session Investment Committee Minutes

Mr. Barber stated that the approved open session minutes of the February 25, April 1, and April 22, 2025 Investment Committee meetings were included on pages 104-121 of the meeting materials for the Board's review and noted that staff had previously reviewed the agendas for these meetings with the Board.

C. Agendas for Upcoming Meetings

Mr. Barber also stated that the final open session agenda for the May 27, 2025 Investment Committee meeting and the draft open session agendas for the June 24 and July 29, 2025 meetings were included on pages 122-127 of the meeting materials for the Board's review.

7. Quarterly Investment Update, Q1 2025

Todd Mattina, Head Economist and Asset & Risk Allocation CIO, presented the Performance Trends & Outlook*,* included on pages 129-135 of the meeting materials. Mr. Mattina began with a review of the CTF five-year rolling annualized net of external manager fee return compared to the CTF twenty-year net of fee return and the actuarial target rate of return. He noted that despite volatility over the last few years, the five-year rolling return continues to outperform the actuarial target as well as the policy benchmark.

Mr. Mattina then provided a brief commentary on the CTF five-year return estimate, which projected a five-year annualized return of 5.5% using NEPC's assumptions for 2025. He also discussed the five-year forward estimate and highlighted the potential negative impact to the five-year annualized return as the 2020 and 2021 performance years, which had meaningfully positive performance of 15.2% and 16.9%, respectively, fall out of the five-year performance time period and are replaced with the NEPC 10-year expected return assumption of 6.4%. Mr. Mattina noted that the average return required to avoid any negative dividend adjustment in 2027 was a 10.1% average return for 2025 and 2026.

Mr. Mattina concluded by referencing the Asset Class Review included on pages 136-145 of the meeting materials for the Board's review.

8. Motion to Convene in Closed Session

Motion: A motion to convene in closed session pursuant to: (i) Sections 19.36(5) and 19.85(1)(e) of the Wisconsin Statutes to consider confidential and proprietary strategies for the investment of public funds relating to specific proprietary investment strategies of internal WRS portfolios, asset allocation, and risk management and/or for any comments or discussion on prior closed session minutes that discuss the same; (ii) Section 19.85(1)(c) of the Wisconsin Statutes to discuss the compensation and performance evaluation data of specific SWIB employees, including SWIB's executive director/chief investment officer and SWIB's board of trustees, and/or for any comments or discussion on prior closed session minutes that discuss the same; and (iii) Section 19.85(1)(g) of the Wisconsin Statutes to confer with SWIB's chief legal counsel to receive advice concerning legal strategy for ongoing and potential litigation, and/or for any comments or discussion on prior closed session minutes that discuss the same, was made by Trustee Ancel and seconded by Trustee Blumenfeld.

The Chair called for a roll call vote.

Ancel–Aye	Blumenfeld–Aye	Bolens-Aye	Collins-Aye	DeAngelis-Aye
Scott-Aye	Tinnen-Aye	Voelker-Aye		

There being eight ayes and no nays, the Chair declared the motion passed. The Board convened in closed session at 9:56 a.m. and reconvened in open session at 12:30 p.m.

9. Announcement of Board Actions Relating to Items Taken up in Closed Session

Trustee Tinnen announced that, while in closed session, the Board: (i) received a closed session quarterly investment update; (ii) received closed session committee reports; (iii) approved prior closed session and executive closed session meeting minutes; (iv) received a risk management update; and (v) discussed Investment Committee closed session business. Trustee Tinnen commented that, while in executive closed session, the Board received an update on various litigation matters from the Chief Legal Counsel.

10. Reports Filed Without Comment

In the absence of questions, the following reports, included on pages 200-212 of the meeting materials, were filed without comment: (i) Quarterly Charges to Funds Report, Q1 2025; and (ii) Private Markets and Funds Alpha Commitments, Q1 2025.

11. Future Items for Discussion

Mr. Barber noted that the 2025 Board Meeting and Agenda Plan was included on pages 214-217 in the meeting materials for the Board's information.

Motion: A motion to adjourn was made by Trustee Bolens and seconded by Trustee Voelker. The motion passed unanimously, and the meeting adjourned at 12:31 p.m.

DRAFT

INVESTMENT FORUM (Session II, June 11, 2025) ***(See Attachment 1 for Attendance List)***

The Chair called Session II of the Investment Forum to order at 1:30 p.m.

1. Geopolitics: Emerging Trends and Hot Spots

Willis Sparks, Director of Global Macro, Eurasia Group

Willis Sparks, Director of Global Macro at Eurasia Group, opened by noting that the post-2011 world is materially more complex and dangerous, making shock-absorption an imperative for investors. He argued that political actors may create uncertainty, thus complicating markets, U.S. foreign policy commitments, and American global leadership. When the balance of power is ambiguous, Mr. Sparks warned non-dominant nations become more willing to test the incumbent power.

China featured prominently in the discussion. Beijing, he said, is pursuing tactical wins, easing six-month restrictions on rare-earth exports to preserve leverage in broader negotiations. At home, Xi Jinping's consolidation of power marks a break with the post-Mao consensus; "Xi Thought" is now effectively law, creating a highly personalist, and therefore less predictable, policy engine for a country that represents roughly 19% of global GDP. A full-scale invasion of Taiwan remains unlikely, but Mr. Sparks takes seriously Xi's 2027 readiness order; a blockade, he contends, is the more probable scenario.

Turning to Europe, he views Russia's 2022 invasion of Ukraine as a "five-alarm fire" that galvanized Sweden and Finland's entry into NATO and forced Europe to accept greater defense responsibility. Germany's commitment under Friedrich Merz to build "Europe's most potent fighting force" is real, yet interoperability problems still hobble EU militaries. He believes that Russia, now the world's most consequential rogue state alongside North Korea and Iran, will remain a security wildcard for at least 5-10 years, particularly as low-cost drones reshape warfare.

In the Middle East, Israel's battlefield successes have left Iran isolated, Hezbollah degraded, and Hamas depleted. Against that backdrop, Mr. Sparks reiterated the impossibility of forecasting black-swan events such as 9/11 or the Hamas attack, urging investors to build resilience before the next crisis rather than after.

2. The Disruptive Economics of Artificial Intelligence

Avi Goldfarb, Professor, University of Toronto, Rotman School of Management

Professor Avi Goldfarb, Professor at the University of Toronto Rotman School of Management, framed modern AI as "cheap prediction at scale." As the cost of prediction plunges, industries built on human forecasting, from credit underwriting to medical diagnosis, face existential pressure. Yet cheaper prediction raises, rather than lowers, the premium on human judgment: model design, data curation, and post-prediction decision-making become central competitive advantages. Professor Goldfarb likened the moment to the 1890s phase of electrification: light bulbs and motors existed, but factories and homes were not yet re-architected to exploit them. True AI value, he argued, will emerge from system-level workflow redesigns, not isolated point solutions.

Early movers include advertising, which has already migrated from relationship-based media buying to algorithmic auctions and is now poised for another leap, from keyword search to large-language-model-powered intent matching. Organizations that cling to legacy missions are vulnerable; Professor Goldfarb's

example was airports, whose core "smooth travel" mandate has been eclipsed by retail-heavy, experience-first designs.

Professor Goldfarb proposed two deployment paradigms: Lane 1, which is lightweight AI that leaves workflows intact and focuses on well-defined KPIs, and Lane 2, which is mission-level transformations that must be driven from the top and may take a decade to mature. Understanding how entire systems will change, he concluded, is ultimately more valuable than building the next algorithm.

3. Challenges and Trends in Commercial Real Estate

Spencer Levy, Global Client Strategist and Senior Economic Advisor, CBRE

Spencer Levy, Global Client Strategist and Senior Economic Advisor at CBRE, began by noting that the imposition of tariffs briefly shocked commercial real estate markets, but sentiment has since stabilized. Macro views are split, yet most participants now assume that interest rates will remain higher for longer. Owners who bought between 2019-2022 face painful refinancing math, equity is impaired and forced sales remain unattractive, so slow and steady operators with patient capital are best positioned.

All real estate is becoming operational, Mr. Levy stressed, with the most attractive returns found in asset-heavy, service-intensive niches such as senior housing, student accommodation and logistics. San Francisco, battered by tech layoffs, now offers compelling entry points, particularly as AI investment revives office demand. Institutions are selectively returning to office assets, and the conversion of under-performing hotels or obsolete offices into alternative uses is accelerating.

Mr. Levy contended that data centers are today's hottest subsector; meanwhile, retail is quietly staging a comeback and industrial remains a long-run winner as reshoring and a projected doubling of global trade volumes boost demand. Mr. Levy sees manufacturing-oriented facilities as the next breakout segment, supported by elevated cap rates. On valuation, he believes near-term multifamily is "over-loved," with risk of price erosion if the 10-year Treasury breaches 5%. Immigration policy and the stockpile of dry powder will influence cap-rate spreads, and he reminded the audience that larger, institutionally held assets still trade at lower yields than comparable small-cap properties. The overarching megatrend, he concluded, is a shift from financial engineering toward operational excellence as the primary driver of commercial real estate value creation.

4. Adjournment

Mr. Denson thanked the presenters and attendees for taking part in the Investment Forum and Trustee Tinnen adjourned the meeting at 4:30 p.m.

Date of Board Approval: _____

Signed: _____

Thomas J. Merfeld, Board Secretary

DRAFT

Attachment 1

Investment Forum Audience Members Attending Day 1		
First Name	**Last Name**	**Organization**
Jon		Star Capital Inc.
Prasad		UT Austin
Safranek		Ninepeaks Capital Management
Macauly	Addesso	State of Wisconsin Investment Board
Esther	Ancel	State of Wisconsin Investment Board
Nathan	Ballard	State of Wisconsin Investment Board
Eric	Barber	State of Wisconsin Investment Board
Chelsey	Barczak	State of Wisconsin Investment Board
Ryan	Battist	Allianz Life
Christopher	Benish	State of Wisconsin Investment Board
Naganaveen	Bhagam	State of Wisconsin Investment Board
Kevin	Blank	State of Wisconsin Investment Board
Allison	Blessing	State of Wisconsin Investment Board
Derek	Bloom	State of Wisconsin Investment Board
Kathy	Blumenfeld	Wisconsin Department of Administration
Becky	Bormett	Wisconsin Alumni Research Foundation
patrick	bourbon	BFM
Tom	Bowes	State of Wisconsin Investment Board
Brandon	Brickner	State of Wisconsin Investment Board
Adam	Brown	State of Wisconsin Investment Board
Rosa	Brown	State of Wisconsin Investment Board
Eric	Buchholtz	State of Wisconsin Investment Board
Nick	Bultman	State of Wisconsin Investment Board
Patrick	Caragher	Principal Asset Management
Stefano	Cavaglia	State of Wisconsin Investment Board
Sara	Chandler	State of Wisconsin Investment Board
Hassan	Chehime	State of Wisconsin Investment Board
Maggie	Clanfield	State of Wisconsin Investment Board
Josh	Coburn	State of Wisconsin Investment Board
Christian	Comito	State of Wisconsin Investment Board
Andrew	Crossman	State of Wisconsin Investment Board
John	Culley	State of Wisconsin Investment Board
Eric	Cullison	State of Wisconsin Investment Board
Tunc	Dayioglu	State of Wisconsin Investment Board
Roger	Ding	State of Wisconsin Investment Board
Monte	Dop	Invesco
John	Drake	State of Wisconsin Investment Board
Tom	Drake	State of Wisconsin Investment Board
David	Duchow	US Bank Private Wealth Management
Chris	Eckerman	State of Wisconsin Investment Board
Trey	Edgerle	State of Wisconsin Investment Board
Randy	Eggert	State of Wisconsin Investment Board
Anne-Marie	Fink	State of Wisconsin Investment Board

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Harrison	Freuck	State of Wisconsin Investment Board
Rhiannon	Friedel	State of Wisconsin Investment Board
Megan	Gall	State of Wisconsin Investment Board
Kara	Gamlin	State of Wisconsin Investment Board
Shannon	Gannon	State of Wisconsin Investment Board
Maximillian	Garcia	State of Wisconsin Investment Board
Robyn	Geffner	Ripple Effect Asset Management
Jameson	Greenfield	State of Wisconsin Investment Board
Thomas	Gregg	State of Wisconsin Investment Board
Bella	Greno	State of Wisconsin Investment Board
Arnav	Gupta	GCA
Susannah	Gustafson	University of Wisconsin Madison, School of Business
Dan	Gyorog	State of Wisconsin Investment Board
Michael	Harmelink	Global Advisory Partners
Daniel	Harris	Borealis Strategic Capital Partners
Dylan	Hastings	State of Wisconsin Investment Board
Annette	Hellmer	Johnson Financial Group
Brian	Hiestand	William & Mary
Kent	Hill	American Family Life Insurance Company
Beth	Holzberger	State of Wisconsin Investment Board
Jason	Huibregtse	TruStage
Alain	Hung	WARF
Rine	Jahiu Beka	State of Wisconsin Investment Board
Vince	Janecky	State of Wisconsin Investment Board
Nicholas	Johnson	State of Wisconsin Investment Board
Laura	Johnson	State of Wisconsin Investment Board
Nick	Johnson	State of Wisconsin Investment Board
Ryan	Johnston	State of Wisconsin Investment Board
Emily	Joseph	State of Wisconsin Investment Board
Salah	Khalaf	State of Wisconsin Investment Board
Rochelle	Klaskin	State of Wisconsin Investment Board
Jason	Kowalke	State of Wisconsin Investment Board
Dylan	Krivoshein	State of Wisconsin Investment Board
Leo	Kropywiansky	State of Wisconsin Investment Board
Alex	Kubiak	State of Wisconsin Investment Board
Andy	Kuehn	State of Wisconsin Investment Board
Katie	Kuryla	State of Wisconsin Investment Board
Vicki	LaFond	State of Wisconsin Investment Board
Lisa	Lange	State of Wisconsin Investment Board
Dorothy	Lariviere	JPMorgan Asset Management
Sean	Lavin	State of Wisconsin Investment Board
Alex	Li	State of Wisconsin Investment Board
Diane	Linn	State of Wisconsin Investment Board
Angela	Lin-Reeve	HOOPP
Shan	Lo	State of Wisconsin Investment Board
Anthony	Lubarsky	State of Wisconsin Investment Board

DRAFT

Bill	Luetzow	State of Wisconsin Investment Board
Nate	Maier	State of Wisconsin Investment Board
Ed	Martinez	State of Wisconsin Investment Board
Todd	Mattina	State of Wisconsin Investment Board
Lin	Maung	State of Wisconsin Investment Board
Frank	Mazzucco	State of Wisconsin Investment Board
Casey	McCowen	Vistra Corp
Colm	McDermott	Twenty Acre
Bret	McKeel	H7 Capital
Tom	Merfeld	State of Wisconsin Investment Board
J	Michael Collins	UW Madison
Anmol	Mital	Rice Management Company
Alyssa	Moore	State of Wisconsin Investment Board
Joy	Mukherjee	State of Wisconsin Investment Board
Emmanuel	Munoz Monsalve	State of Wisconsin Investment Board
Josef	Najar	Rockefeller Capital Management
Chase	Nicholson	State of Wisconsin Investment Board
Kaleigh	Olsen	Sagefield Capital
Austin	Papenthien	UW Madison MBA
Scott	Parrish	State of Wisconsin Investment Board
Dan	Perik	State of Wisconsin Investment Board
Davis	Petersen	State of Wisconsin Investment Board
Scott	Pfeil	BACKFLIP
Brian	Planey	State of Wisconsin Investment Board
Chris	Preisler	State of Wisconsin Investment Board
Chris	Prestigiacomo	State of Wisconsin Investment Board
Cefe	Quesada	State of Wisconsin Investment Board
Al	Rauch	Rauch Utility Advisory
vishnu	reddy	State of Wisconsin Investment Board
Zhihui	Redlin	State of Wisconsin Investment Board
David	Reese	State of Wisconsin Investment Board
Amanda	Rice	Ripple Effect
Robby	Richlen	State of Wisconsin Investment Board
Jay	Risch	State of Wisconsin Investment Board
Tom	Robinson	State of Wisconsin Investment Board
Jordan	Robinson	Cedar Pine
Jason	Rothenberg	State of Wisconsin Investment Board
Camille	Rudge	1st & Main Growth Partners
Andrea	Ruiz	State of Wisconsin Investment Board
Charles	Saunders	University of Wisconsin
Valbona	Schwab	Grinnell College
Patrick	Sheedy	Borealis
Cora	Shi	State of Wisconsin Investment Board
Sam	Shibilski	State of Wisconsin Investment Board
Robby	Sikka	SMART

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Ken	Smedema	State of Wisconsin Investment Board
Hannibal	Smith	State of Wisconsin Investment Board
Gabriel	Souza	State of Wisconsin Investment Board
Judith	Stadler	Climate Safe Pensions Wisconsin
Nicholas	Stanton	State of Wisconsin Investment Board
Anne	Steinberg	Climate Safe Pensions for Wisconsin
Don	Stoltz	Ripple Effect
Jack	Su	State of Wisconsin Investment Board
Adam	Sweet	Jacobson & Schmitt Advisors
Lyle	Tang	State of Wisconsin Investment Board
Matthew	Terpstra	State of Wisconsin Investment Board
Dawn	Tuescher	State of Wisconsin Investment Board
Chuck	Turgeon, CFA	T Rowe Price
Jim	Vander Meer	State of Wisconsin Investment Board
John	Voelker	Department of Employee Trust Funds
Janet	W. Reinke	TruStage
Nathan	Wack	American Family
Robin	Wang	State of Wisconsin Investment Board
Madeline	Warkins	State of Wisconsin Investment Board
Lori	Wersal	Annuitant
Jeremy	Whitish	University of Wisconsin School of Business
Amy	Widiger	State of Wisconsin Investment Board
Tim	Wirkus	State of Wisconsin Investment Board
Kirk	Wolff	State of Wisconsin Investment Board
Ping	Wong	State of Wisconsin Investment Board
Dan	Woods	State of Wisconsin Investment Board
Shu	Yang Wei	Harvard
Ryan	Yanke	State of Wisconsin Investment Board
Ivy	Zhang	State of Wisconsin Investment Board
Alex	Zhang	Teacher Retirement System of Texas
Sarah	Zhao	State of Wisconsin Investment Board
Mohamed	Zire	State of Wisconsin Investment Board

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Investment Forum Audience Members Attending Day 2		
First Name	**Last Name**	**Organization**
Macauly	Addesso	State of Wisconsin Investment Board
Esther	Ancel	State of Wisconsin Investment Board
Nathan	Ballard	State of Wisconsin Investment Board
Eric	Barber	State of Wisconsin Investment Board
Ryan	Battist	Allianz Life
Christopher	Benish	State of Wisconsin Investment Board
Kevin	Blank	State of Wisconsin Investment Board
Kathy	Blumenfeld	Wisconsin Department of Administration
Barb	Bolens	State of Wisconsin Investment Board
Becky	Bormett	WARF
Patrick	Bourbon	BFM
Tom	Bowes	State of Wisconsin Investment Board
Brandon	Brickner	State of Wisconsin Investment Board
Adam	Brown	State of Wisconsin Investment Board
Rosa	Brown	State of Wisconsin Investment Board
Michael	Brusberg	State of Wisconsin Investment Board
Eric	Buchholtz	State of Wisconsin Investment Board
Stefano	Cavaglia	State of Wisconsin Investment Board
Sara	Chandler	State of Wisconsin Investment Board
Jan	Cliff	
Christian	Comito	State of Wisconsin Investment Board
Andrew	Crossman	State of Wisconsin Investment Board
John	Culley	State of Wisconsin Investment Board
Eric	Cullison	State of Wisconsin Investment Board
Tunc	Dayioglu	State of Wisconsin Investment Board
Roger	Ding	State of Wisconsin Investment Board
Monte	Dop	Invesco
John	Drake	State of Wisconsin Investment Board
Tom	Drake	State of Wisconsin Investment Board
David	Duchow	US Bank
Chris	Eckerman	State of Wisconsin Investment Board
Trey	Edgerle	State of Wisconsin Investment Board
Randy	Eggert	State of Wisconsin Investment Board
Patti	Epstein	ETF
Anne-Marie	Fink	State of Wisconsin Investment Board
Eric	Flores	US Bank
Harrison	Freuck	State of Wisconsin Investment Board
Megan	Gall	State of Wisconsin Investment Board
Shannon	Gannon	State of Wisconsin Investment Board
Maximillian	Garcia	State of Wisconsin Investment Board
Annabella	Glotzbach	Insight Investment
Julianne	Goodman	PPC Enterprises
Jameson	Greenfield	State of Wisconsin Investment Board
Thomas	Gregg	State of Wisconsin Investment Board
Bella	Greno	State of Wisconsin Investment Board

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Dan	Gyorog	State of Wisconsin Investment Board
Alex	Hansen	State of Wisconsin Investment Board
Michael	Harmelink	Global Advisory Partners
Daniel	Harris	Borealis Strategic Capital Partners
Dylan	Hastings	State of Wisconsin Investment Board
Charles	Hatlen	Northwestern Mutual
Annette	Hellmer	Johnson Financial Group
Brian	Hellmer	Mendota Financial
Kent	Hill	American Family
Beth	Holzberger	State of Wisconsin Investment Board
Jason	Huibregtse	Trustage
Alain	Hung	WARF
Rine	Jahiu Beka	State of Wisconsin Investment Board
Nicholas	Johnson	State of Wisconsin Investment Board
Phil	Johnson	State of Wisconsin Investment Board
Ryan	Johnston	State of Wisconsin Investment Board
Emily	Joseph	State of Wisconsin Investment Board
Salah	Khalaf	State of Wisconsin Investment Board
Rochelle	Klaskin	State of Wisconsin Investment Board
Peter	Knotek	Climate Safe Pensions for Wisconsin
Jason	Kowalke	State of Wisconsin Investment Board
Dan	Krebsbach	American Family
Dylan	Krivoshein	State of Wisconsin Investment Board
Alex	Kubiak	State of Wisconsin Investment Board
Andy	Kuehn	State of Wisconsin Investment Board
Katie	Kuryla	State of Wisconsin Investment Board
James	Laufenberg	State of Wisconsin Investment Board
Sean	Lavin	State of Wisconsin Investment Board
Jamie	Lewis	One Step Capital
Diane	Linn	State of Wisconsin Investment Board
Angela	Lin-Reeve	Hoopp
Shan	Lo	State of Wisconsin Investment Board
Anthony	Lubarsky	State of Wisconsin Investment Board
Nate	Maier	State of Wisconsin Investment Board
Ed	Martinez	State of Wisconsin Investment Board
Lin	Maung	State of Wisconsin Investment Board
Frank	Mazzucco	State of Wisconsin Investment Board
Tom	Merfeld	State of Wisconsin Investment Board
J	Michael Collins	State of Wisconsin Investment Board
Alyssa	Moore	State of Wisconsin Investment Board
Sadi	Ozelge	State of Wisconsin Investment Board
Austin	Papenthien	UW Madison MBA
Scott	Parrish	State of Wisconsin Investment Board
Dan	Perik	State of Wisconsin Investment Board
Davis	Petersen	State of Wisconsin Investment Board
Brian	Planey	State of Wisconsin Investment Board
Chris	Preisler	State of Wisconsin Investment Board

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Chris	Prestigiacomo	State of Wisconsin Investment Board
Cefe	Quesada	State of Wisconsin Investment Board
Al	Rauch	Rauch Utility Advisory
Vishnu	Reddy	State of Wisconsin Investment Board
Zhihui	Redlin	State of Wisconsin Investment Board
Amanda	Rice	Ripple Effect
Robby	Richlen	State of Wisconsin Investment Board
Jay	Risch	State of Wisconsin Investment Board
Tom	Robinson	State of Wisconsin Investment Board
Jason	Rothenberg	State of Wisconsin Investment Board
Camille	Rudge	1st & Main Growth Partners
Andrea	Ruiz	State of Wisconsin Investment Board
Charles	Saunders	University of Wisconsin
Dan	Schally	State of Wisconsin Investment Board
Hemish	Shah	
Michael	Shearer	State of Wisconsin Investment Board
Cora	Shi	State of Wisconsin Investment Board
Sam	Shibilski	State of Wisconsin Investment Board
Ken	Smedema	State of Wisconsin Investment Board
Hannibal	Smith	State of Wisconsin Investment Board
Gabriel	Souza	State of Wisconsin Investment Board
Judith	Stadler	Climate Safe Pensions Wisconsin
Nicholas	Stanton	State of Wisconsin Investment Board
Adam	Sweet	Jacobson & Schmitt Advisors
Lyle	Tang	State of Wisconsin Investment Board
Mark	Taylor	State of Wisconsin Investment Board
Matthew	Terpstra	State of Wisconsin Investment Board
Dawn	Tuescher	State of Wisconsin Investment Board
Jim	Vander Meer	State of Wisconsin Investment Board
John	Voelker	State of Wisconsin Investment Board
Janet	W. Reinke	TruStage
Nathan	Wack	American Family
Robin	Wang	State of Wisconsin Investment Board
Lori	Wersal	Annuitant
Jeremy	Whitish	UW Madison
Amy	Widiger	State of Wisconsin Investment Board
Tim	Wirkus	State of Wisconsin Investment Board
Kirk	Wolff	State of Wisconsin Investment Board
Ping	Wong	State of Wisconsin Investment Board
Dan	Woods	State of Wisconsin Investment Board
Shu	Yang Wei	Harvard
Ivy	Zhang	State of Wisconsin Investment Board
Sarah	Zhao	State of Wisconsin Investment Board

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Board Meeting

Tab 3 – Investment Forum Recap

Board Meeting

Tab 4 – Biennial Ethics Training

State of Wisconsin
Ethics Commission

Lobbying and the Code of Ethics for Investment Board members and employees

David Buerger, *Staff Counsel*

About The Ethics Commission

- Partisan Commissioners
  - Two former judges, four other appointees
  - 5-year terms
- Bipartisan Cooperation Required
  - All actions require four votes
- Nonpartisan Staff
- Strict Confidentiality – Advice & Complaints

Responsibilities

- Administer Wisconsin Statutes
  - Chapter 11: Campaign Finance
  - Subchapter III, Chapter 13: Lobbying
  - Subchapter III, Chapter 19: Code of Ethics
- Conduct programs to explain and interpret these laws.
- Compile and make the information provided to us available to the public!

JURISDICTION

- Co-Equal Jurisdiction with District Attorneys, but historically…

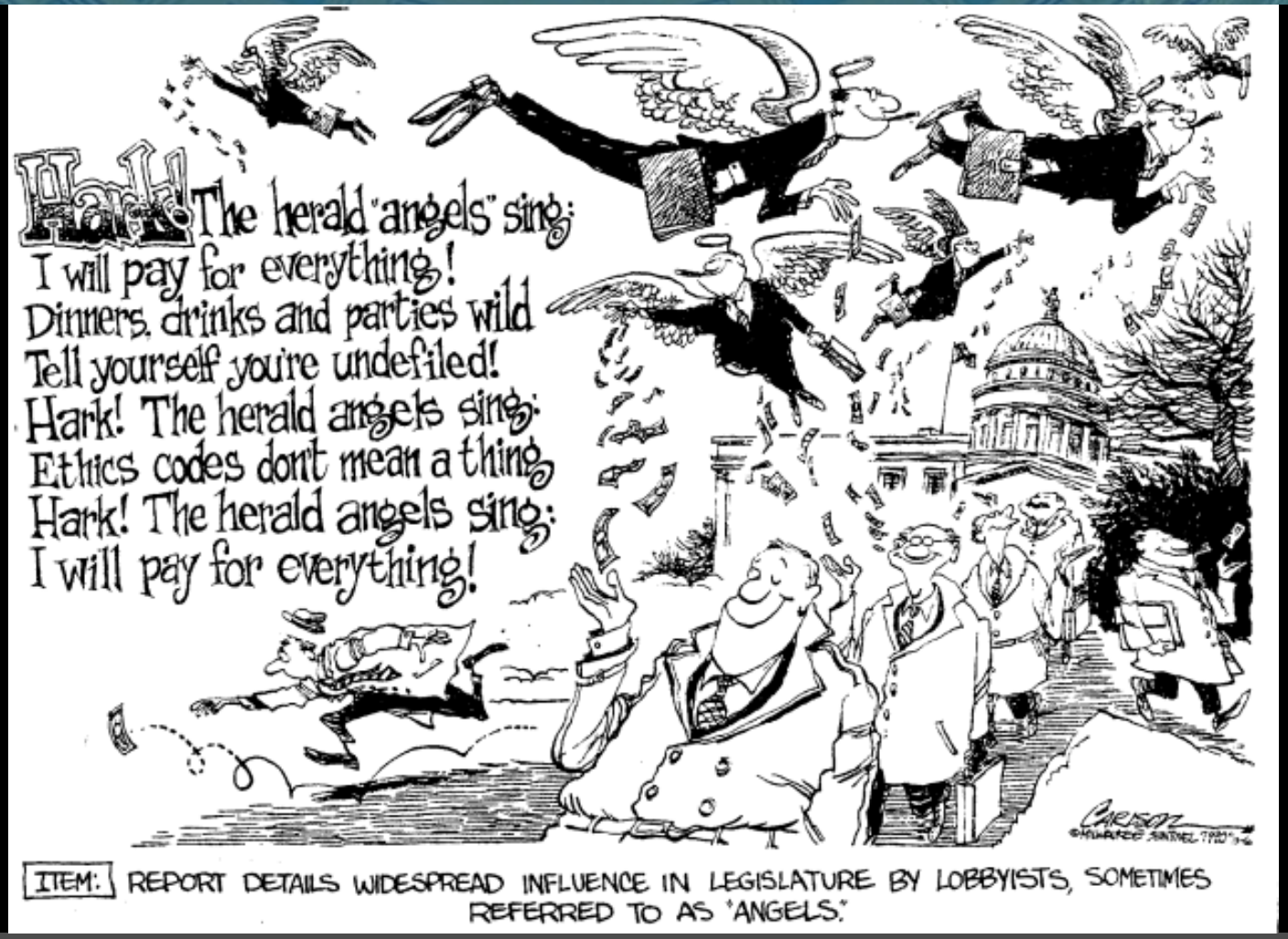
Ethics Commission	District Attorneys
• Legislators, aides, service agencies • Governor, Lt. Governor, appointees, secretaries, deputies, executive assistants, administrators • Justices and judges • Lobbyists and Lobbying Principals (organizations) • Most campaign committees • Any individual holding a state public office	• Code of Ethics for Local Officials • Local candidate and local referendum committees

Important Laws to Know

- Lobbying
  - Wis. Stat. § 13.625 (Restrictions on Lobbyists/Principals)
  - Wis. Stat. § 13.695 (Legislative Liaison Reporting)
- Code of Ethics
  - Wis. Stat. § 19.45 (Code of Ethics for State Public Officials)
  - Wis. Stat. § 19.46 (Conflict of Interest)
  - Wis. Stat. § 19.43-19.44 (Statement of Economic Interests)

Lobbying Laws

Beware of Angels



Who Is a Lobbyist/principal?

WI Lobbying

- Lobbying.wi.gov
- Search by name, type, or interest keywords.
- Download directories in PDF or Excel
- Tracks lobbying on rules, budget bills subjects, legislative proposals, etc.

WHO IS AN AGENCY OFFICIAL?

- "Agency Official"
  - A member, officer, employee or consultant of any agency who **as part of such person's official responsibilities** participates in any administrative action in other than a solely clerical, secretarial or ministerial capacity.

- "Administrative Action"
  - The proposal, drafting, development, consideration, promulgation, amendment, repeal or rejection by any agency of any rule promulgated under ch. 227.

Lobbying: Prohibited Practices

- Wis. Stat. § 13.625
- No lobbyist or lobbying principal may give to an agency official, legislative employee, any elective state official, or candidate for state elective office, or to the candidate committee of the official, employee or candidate:
  - Lodging
  - Transportation
  - Food, meals, beverages
  - Money or any other thing of pecuniary value
- Except…

EXCEPTIONS

- Actual and reasonable expenses for presenting a talk or participating in a meeting. WIS. STAT. §§ 13.621(7)(a), 19.56(3)(a).
- Admission to events to discuss official business of agency. WIS. STAT. § 13.621(7)(b).
  - May not accept food, beverage, etc. included with admission without payment of actual cost.
- Items and services made available to the general public. WIS. STAT. § 13.625(4m)(a).
- Educational/informational materials. WIS. STAT. § 13.625(4m)(i).
- Compensation to employees of lobbying principals who are agency officials solely because of membership on a state commission, board, council, or committee, who receive no compensation other than a per diem or reimbursement of expenses for state service. WIS. STAT. § 13.625(4m)(g).
  - Compensation may not exceed that paid to those similarly-situated.

Other exceptions may apply!

Legislative Liaison Reporting

- Wis. Stat. § 13.695

- State agencies are required to file legislative liaison reports semi-annually, on January 31, for the preceding July – December and on July 31, for the preceding January – June.

- A legislative liaison is a paid officer or employee of a state agency whose regular duties include attempting to influence legislative action.
  - Not subject to licensing, registration, or most reporting requirements.
  - May not use state funds to engage in prohibited practices.

Legislative Liaison Reporting

- Reports must contain the following:
  - Name of agency
  - Name, title, and salary of each officer or employee engaged in legislative activity
  - The proportionate amount of time spent on legislative activity and attempting to influence legislation
  - The general area of legislative action which the officer or employee has attempted to influence.

- Reports are filed using the Eye on Lobbying website (lobbying.wi.gov)
  - User Manual for Legislative Liaisons

Code of Ethics

Definitions

- "State public office" includes the following positions at SWIB:
  - All positions regularly appointed by the Governor (most board members)
  - Executive Director
  - Executive Assistant to the Executive Director
  - Internal Auditor
  - Chief Investment Officer
  - Chief Financial Officer
  - Chief Legal Counsel
  - Chief Risk Officer
  - Investment Directors

DEFINITIONS, CONT.

- "Immediate family" means:
  - An individual's spouse
  - An individual's relative by marriage, lineal descent, or adoption who receives, directly or indirectly, more than 50% of his or her support from the official, or from whom the official receives more than 50% of his or her support
- "Associated" when used with reference to an organization, includes any organization in which an official or a member of the immediate family:
  - Is a director, officer, or trustee
  - Owns or controls, directly or indirectly, and severally or in the aggregate, at least 10% of the outstanding equity
  - Is an authorized representative or agent

DEFINITIONS, CONT.

- "Organization" means:
  - Any corporation, partnership, proprietorship, firm, enterprise, franchise, association, trust, or other legal entity other than an individual or body politic.
- "Anything of value" means:
  - Any money or property, favor, service, payment, advance, forbearance, loan, or promise of future employment.
  - Does not include:
    - Compensation and expenses paid by the state
    - Political contributions reported under ch. 11.
    - Hospitality extended for a purpose unrelated to state business by a person other than an organization.

Use of Office for Private Gain

- Wis. Stat. § 19.45(2)
  - No state public official may use his or her public position or office to obtain financial gain or anything of substantial value for the private benefit of himself or herself or his or her immediate family, or for an organization with which he or she is associated.
- Exceptions:
  - Campaign contributions
  - Candidates/officeholders may solicit for donations to nonprofits
- Do NOT use governmental resources for a nongovernmental purpose (e.g., personal, commercial).
- Do NOT ask staff to engage in nongovernmental activity on state time.

EXAMPLE – PERSONAL BENEFIT

Thursday February 25, 1993 THE MILWAUKEE JOURNAL

Ethics in government

Official settles ethics flap by paying $150

Agriculture chief bought airline tickets through wife's travel agency

By JAMES ROWEN
of The Journal staff

State agriculture secretary Alan T. Tracy has paid a $150 forfeiture to the Wisconsin Ethics Board after disclosing that his department paid $1,493 to a travel agency owned by his wife for airline tickets that Tracy used.

Tracy, secretary of the Wisconsin Department of Agriculture, Trade and Consumer Protection, paid the forfeiture Tuesday in a settlement reached Monday with the ethics board.

The settlement came after The Milwaukee Journal earlier this month requested under the Wisconsin Open Records law information about department travel arranged through Uniglobe Professional Travel, according to Jonathan Becker, ethics board attorney.

TRACY

Uniglobe, in the Madison suburb of Middleton, is operated and owned by Kris Tracy, Alan Tracy's wife, ethics board records show.

The forfeiture "was equal to the amount of the commission his wife had made" for writing the plane tickets, Becker said.

The ethics board settlement says that while the travel arrangements with Uniglobe did not impose any improper costs on the state, "Mr. Tracy, to avoid any claim of personal gain, has agreed to forfeit $150."

State law forbids state officials from using their public positions "to obtain financial gain or anything of substantial value for the private benefit of himself or herself or his or her immediate family."

TRACY 'VIOLATED THE LAW'

"I think it's fair to say that he violated the law," said R. Roth Judd, executive director of the ethics board, in an interview Wednesday night.

Judd said that he and Tracy had agreed that the ethics board would make the settlement public Thursday, allowing Tracy enough time to notify the department board in writing.

But Gov. Tommy G. Thompson defended Tracy when a reporter asked him about the forfeiture.

"He volunteered that," Thompson said. "He went to the ethics board because he recognized that there was some question. I think he should be complimented for coming forward and paying a forfeiture."

In paying the forfeiture, Alan Tracy is among several top state agency officials whose recent actions have posed potential conflicts of interest or who have had ethical or personnel difficulties.

Alan Tracy booked the travel through Uniglobe "as a matter of convenience or economy . . . with no thought of personal gain," according to the settlement agreement.

The trips booked through Uniglobe were for Alan Tracy to attend a conference in April 1992 in Louisiana and meetings in Washington, D.C., and Chicago in December 1991.

Tracy said The Journal's open records request triggered his concern about the potentially inappropriate appearance of the booking.

"I felt I should report them to the ethics board," he said in an interview Wednesday.

Tracy explained that he had instructed his secretary not to book travel through Uniglobe because he "did not want there to be a perception that I was traveling . . . throwing business to a family member."

But for reasons of personal convenience, he said, he twice directed his secretary to use Uniglobe and on one occasion booked a trip himself.

TRACY SAYS HE WAS CARELESS

"In retrospect, that was careless, and I'm embarrassed by it," he said.

Travel agencies earn income through commissions on airplane tickets and other travel arrangements provided to customers.

Tracy booked about 30 trips between 1990 and 1992, only three of which he booked through Uniglobe, according to a Feb. 23 letter from the department to The Journal.

State agencies are encouraged to use, but are not required to patronize, four travel agencies that have been placed on an approved list through a competitive bidding procedure, according to the Wisconsin Department of Administration.

Disposal of Impermissible Gifts

- Give the item the official's agency to use or sell.
  - Agency may not sell the item to any government employee or official.
- Give the item to another state agency or to a public institution, such as a local school, library, or museum, that can use the item.
- Give the item to a charitable organization
  - Not including one with which the official or their immediate family is associated.
- Return the item to the donor.
- If the donor is neither a lobbyist nor an organization that employs a lobbyist, purchase the item (by paying the donor the full retail value) and retain it.

Wis. Stat. § 19.45(14)

Influence and Reward

- Wis. Stat. § 19.45(3)
  - No person may offer or give to a state public official, directly or indirectly, and no state public official may accept from any person, directly or indirectly, anything of value if it could reasonably be expected to influence the state public official's vote, official actions, or judgment, or could reasonably be considered as a reward for any official action or inaction on the part of the state public official.
  - As a general rule officials should not accept anything of more than nominal value from organizations that have a special or specific interest in an item or matter likely to be before the official.

Food, Beverage, Travel, and Lodging

- Wis. Stat. § 19.45(3m)
  - No state public official may accept or retain any transportation, lodging, meals, food or beverage, or reimbursement therefor, except in accordance with § 19.56(3).
- Exceptions (see Guideline ETH-1211):
  - Official talk or meeting
  - Unrelated to holding public office
  - State benefit
  - Reported as an expense by a political committee
  - WEDC/Department of Tourism
- Remember that items from lobbying principals must also meet an exception of the lobbying law to be accepted.

Use of Confidential Information

- Wis. Stat. § 19.45(4)
  - No state public official may intentionally use or disclose information gained in the course of or by reason of his or her official position or activities in any way that could result in the receipt of anything of value for himself or herself, for his or her immediate family, or for any other person, if the information has not been communicated to the public or is not public information.

Unlawful Benefits

- Wis. Stat. § 19.45(5)
  - No state public official may use or attempt to use the public position held by the public official to influence or gain unlawful benefits, advantages or privileges personally or for others.

Conflict of Interest

- Wis. Stat. § 19.46(1): No state public official may:
  - Take any official action substantially affecting a matter in which the official, a member of his or her immediate family, or an organization with which the official is associated has a substantial financial interest.
  - Use his or her office or position in a way that produces or assists in the production of a substantial benefit, direct or indirect, for the official, one or more members of the official's immediate family either separately or together, or an organization with which the official is associated.
  - Except…

OFFICIAL MAY ACT IF…

- The official action affects a whole class of similarly-situated interests; and,
- Neither the interests of the official, a member of the official's immediate family, nor a business or organization with which the official is associated is significant when compared to all affected interests in the class; and
- The action's effect on the interests of the official, of a member of their immediate family, or of an associated business or organization is neither significantly greater nor less than upon other members of the class

Ethics Commission Guideline 1232

OFFICIAL MAY ACT IF…

- The official action is concerning: (1) the lawful payment of salaries or employee benefits or reimbursement of actual and necessary expenses, or (2) the modification of a county or municipal ordinance.
- The impact on the official's interests is remote or speculative.

Investment Board – Qualifications for Membership

- Wis. Stat. § 15.76 (2)
  - …but any person having a financial interest in or whose employer is primarily a dealer or broker in securities or mortgage or real estate investments is not eligible for appointment, and any member who acquires such an interest or accepts such appointment shall thereupon vacate his membership.

Statement of Economic Interest

- Wis. Stat. §§ 19.43, 19.44
- Annual requirement (April 30th) or within 21 days of leaving your position.
- Must identify investments, real estate, businesses, and creditors as of the last day of the prior year.
- All direct sources of family income from prior year of $1,000 or more.
- All sources of income from prior year of $10,000 or more received from partnerships, sub S corporations, service corporations, and LLCs (including customers, clients, and tenants) in which your family has a 10% or greater interest.
- Confidential for SWIB Members/Employees

Investment Board Quarterly Reports

- Quarterly requirement (due January 31, April 30, July 31, October 31)
- Must identify changes to investments, business interests, real estate, offices and organizations represented, and creditors over the previous 3-month period.
- Copies are forwarded to the Legislative Audit Bureau for auditing and comparison with Investment Board activity.
- Confidential (not open to public)

Where to Find More Information

- **Wisconsin Statutes**
  - https://docs.legis.wisconsin.gov
- **Advisory Opinions**
  - Prompt, Confidential, Authoritative
- **Guidelines**
  - https://ethics.wi.gov

Ethics@wi.gov
https://ethics.wi.gov
Phone: (608) 266-8123
Fax: (608) 264-9319

Board Meeting

Tab 5 – Fiduciary & Public Records Topics

Board Meeting

Tab 6 – Investment Performance and Market Updates

A. Board Investment Performance Report, Q2 2025

B. Callan Quarterly Report

SWIB

Investment Performance Report

as of June 30, 2025

STATE OF WISCONSIN
INVESTMENT BOARD

Executive Summary

as of June 30, 2025

- The Core Trust Fund returned 5.71% net of all fees and expenses in Q2, resulting in excess performance of +37 bps. For the year ended June 30, 2025, the Core Trust Fund has returned 11.16% net of all fees and expenses, resulting in an excess return of +99 bps.

- The Core Trust Fund five-year net of all fees and expenses return of 9.09% outperforms the Policy Benchmark by +93 bps on an annualized basis.

- The Core Trust Fund net of external manager fee return outperformed the 60/40 Reference Portfolio return by 27.9% (cumulative) over a 20-year period, which equates to an excess value add of $15.4 billion over the same period.

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

WRS Performance

as of June 30, 2025

	Net of All Fees and Expenses Return %			
Fund	**Calendar – YTD**	**1 Year**	**3 Year**	**5 Year**
Core Trust Fund	7.40	11.16	9.24	9.09
Core Trust Fund Benchmark	6.62	10.17	8.35	8.16
Excess	+0.78	+0.99	+0.89	+0.93
Net Excess Value Add ($M)	+$949.7	+$1,190.6	+$3,058.0	+$5,289.5
Variable Trust Fund	9.67	16.56	17.83	14.45
Variable Trust Fund Benchmark	9.42	16.26	17.87	14.44
Excess	+0.25	+0.30	(0.04)	+0.01
Net Excess Value Add ($M)	+$29.1	+$32.4	($1.4)	+$11.6

Periods greater than 1 yr show annualized return

SWIB's investment management has added more than $5.2 billion above benchmark returns over the last five years to the WRS after consideration of all fees and expenses.

	Net of External Manager Fee Return %			Gross of Fee Return %
Fund	**10 Year**	**15 Year**	**20 Year**	**30 Year**
Core Trust Fund	7.94	8.67	7.25	8.08
Core Trust Fund Benchmark	7.36	8.13	6.84	7.60
Excess	+0.59	+0.54	+0.41	+0.48
Variable Trust Fund	11.11	12.35	9.19	9.18
Variable Trust Fund Benchmark	11.08	12.26	9.14	8.90
Excess	+0.04	+0.09	+0.04	+0.28

Periods greater than 1 yr show annualized return

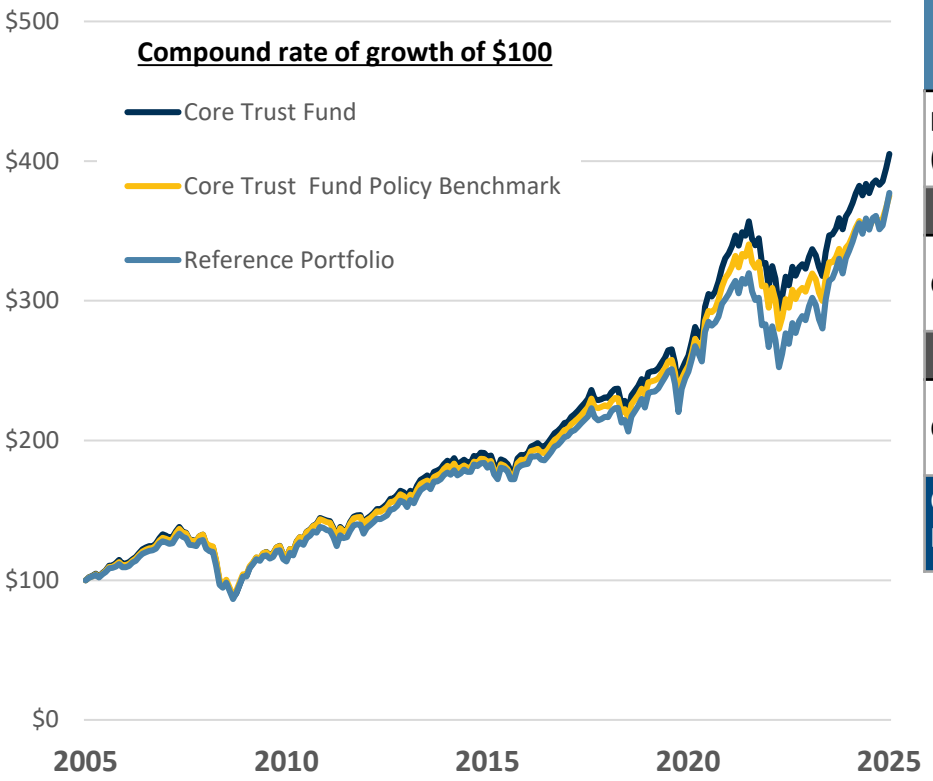
Excess returns may contain rounding differences

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

CTF NoF Performance vs. 60/40 Reference Portfolio

20-year cumulative return[1]: July 1, 2005, to June 30, 2025

Indexed Benefit of CTF's Asset Allocation & Active Management Over Time



Net of External Manager Fee Return & EVA			
Portfolio / Benchmark	**Annualized Return**	**Cumulative Return**	**Cumulative $ Excess Value Added**
Reference Portfolio[2] (60% equity/40% bonds)	**6.9%**	**277.3%**	**= Passive Market Return**
Benefit of CTF Asset Allocation			
CTF Policy Benchmark	**6.8%**	**275.3%**	**+$3.0B**
Benefit of CTF Active Management			
CTF	**7.2%**	**305.2%**	**+$12.4B**
CTF Excess Return vs. Reference Portfolio	**+0.4% pts**	**+27.9% pts**	**+$15.4B**

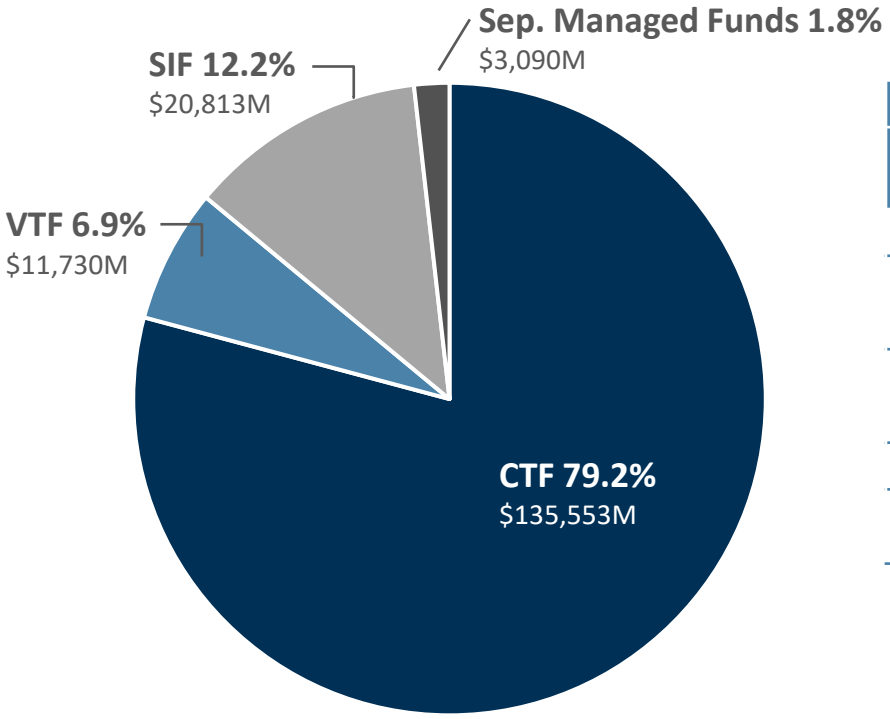
[1] Core Trust Fund beginning market value, as of July 1, 2005, was $64.0B and ending market value, as of June 30, 2025, was $135.5B.

[2] Reference Portfolio is composed of 60% MSCI World and 40% Bloomberg US Gov't / Credit (rebalanced monthly).

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

Total Assets Under Management (AUM)

as of June 30, 2025



Gross Market Value of Assets ($millions)			
By Fund	6/30/2024	6/30/2025	1 Year Change
Total WRS	137,027	147,282	+10,255
Core Trust Fund	126,422	135,553	+9,130
Variable Trust Fund	10,605	11,730	+1,125
State Investment Fund (SIF) [1]	20,327	20,813	+486
Separately Managed Funds	2,863	3,090	+227
Total SWIB AUM	**$160,217**	**$171,186**	**+$10,968**

[1] *Excludes cash invested in SIF held on behalf of CTF and VTF.*

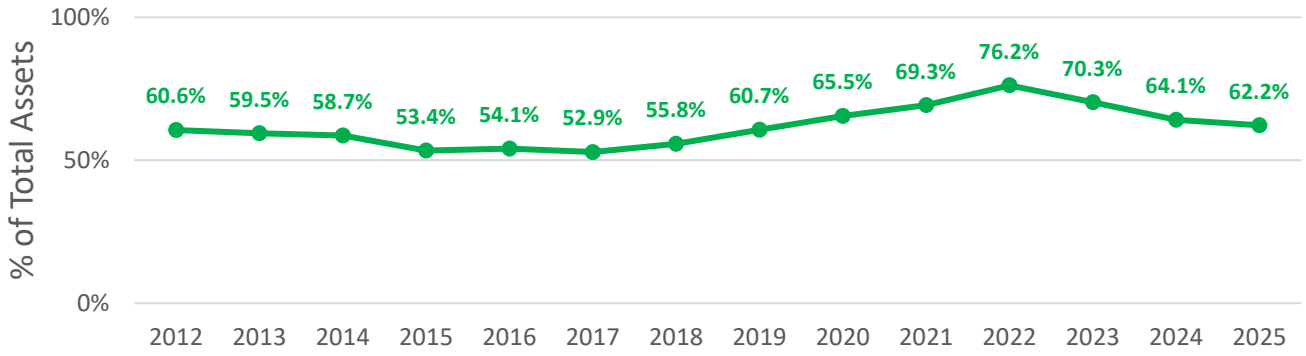
Refer to the disclosure section for additional details

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

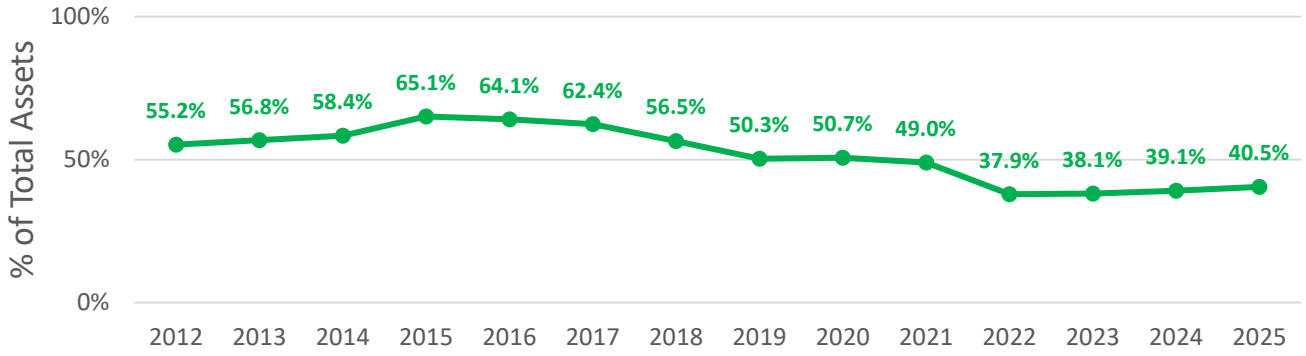
WRS Assets as of June 30, 2025

Breakdown of Active vs. Passive and Internal vs. External

Actively Managed Assets



Internally Managed Assets



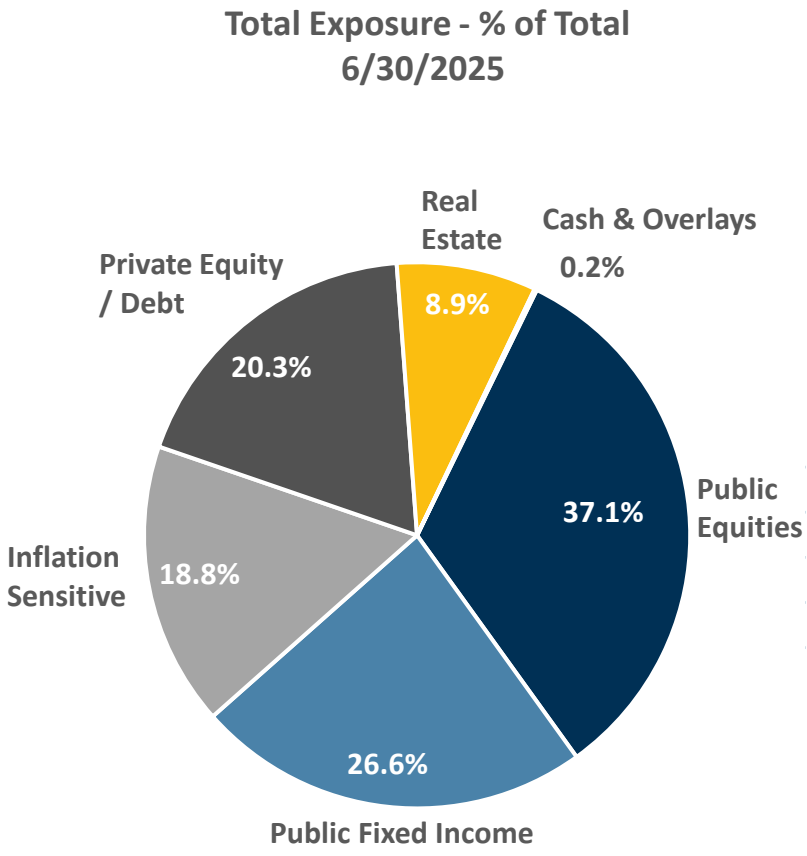
47% of Total SWIB Assets (including SIF) are internally managed

Refer to the disclosure section for additional details.

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

Core Trust Fund Assets Under Management

Breakdown by Asset Class as of June 30, 2025



Total Exposure $ & Adjusted AUM ($millions)			
Total CTF by Asset Class	**Total Exposure $ [1] 6/30/2024**	**Total Exposure $ 6/30/2025**	**Year over Year Change**
Public Equities	47,610	50,319	+2,709
Public Fixed Income	33,250	36,074	+2,824
Inflation Sensitive	23,854	25,539	+1,685
Real Estate [2]	11,710	12,010	+300
Private Equity / Debt [2]	24,923	27,499	+2,576
Cash & Overlays	176	211	+35
Total Exposure	**$141,523**	**$151,652**	**+10,129**
Less: Policy Leverage	*15,097*	*16,100*	*+1,003*
Total CTF AUM	**$126,426**	**$135,552**	**+9,126**

[1] Total Exposure is composed of the gross market value of investments, plus beta exposure added or offset through derivative instruments.

[2] The Real Estate and Private Equity / Debt asset classes (29% of the Core Trust Fund) contain Illiquid Investments, as defined in "Report Disclosures: Glossary, Definitions & Data Sources", below.

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

Core Trust Fund Allocation

as of June 30, 2025

Allocation – Exposure Based

Strategies	($ millions) Total Exposure	As % of Total Fund Portfolio Exposure %	As % of Total Fund Benchmark Target %	Target Range %	Notes
Public Equities	**50,319**	**37.1**	**37.3**	**31.3 – 43.3**	Public & Private exposures include cash
Global Developed	40,714	30.0	30.2		
US Small Cap	2,871	2.1	2.1		
International Small Cap	2,689	2.0	2.0		Cash / Overlays: Includes liquidity, overlay cash, cash used to fund synthetic beta related to Alpha Pool.
Emerging Markets	4,045	3.0	3.0		
Public Fixed Income	**36,074**	**26.6**	**26.6**	**20.6 – 32.6**	
Investment Grade	21,766	16.1	15.9		
Non-Investment Grade	10,715	7.9	8.0		Benchmark Target weights are adjusted monthly to reflect the actual exposure to Private Equity/Debt and Real Estate. Offsetting adjustments are made to Public Equities and Public Fixed Income.
Emerging Market Debt	3,593	2.7	2.7		
Inflation Sensitive	**25,539**	**18.8**	**19.0**	**14.0 – 24.0**	
Real Estate	**12,010**	**8.9**	**8.9**	**4.0 – 12.0**	
Private Equity / Debt	**27,499**	**20.3**	**20.3**	**12.0 – 28.0**	
Cash / Overlays	**211**	**0.2**	**0.0**		
Leverage	**(16,100)**	**(11.9)**	**(12.0)**	**(20.0) to (4.0)**	Additional CTF leverage details available in disclosure section
Total Fund – Total Exposure	**$151,652**	**111.9**	**112.0**	**104.0 – 120.0**	
Total Fund – Market Value	**$135,552**	**100.0**	**100.0**		

Asset $ exposures and % weights may contain rounding differences

SWIB STATE OF WISCONSIN INVESTMENT BOARD

Core Trust Fund: Asset Class Returns

as of June 30, 2025

Asset Class Group: Public Equities	Performance Start Date	Total Exposure Value ($millions)	Net of External Manager Fee Return %				
			Calendar YTD	1 Year	3 Year	5 Year	10 Year or ITD
Public Equities	**12/31/2002**	$49,989	10.54	16.72	17.72	14.07	10.32
Benchmark			9.90	16.05	17.53	14.04	10.41
Excess			**+0.64**	**+0.67**	**+0.19**	**+0.03**	**(0.09)**
Global Developed	**2/28/2017**	$38,288	9.87	16.83	18.73	14.81	11.97
Benchmark			9.76	16.77	18.86	15.07	12.26
Excess			**+0.11**	**+0.05**	**(0.13)**	**(0.26)**	**(0.29)**
Global Equities w/EM	**5/31/2021**	$2,382	12.20	18.42	18.39		10.31
Benchmark			10.28	16.60	17.83		8.63
Excess			**+1.91**	**+1.82**	**+0.56**		**+1.68**
US Small Cap	**2/28/2017**	$2,871	2.10	13.06	13.94	12.41	8.91
Benchmark			(0.08)	9.72	11.84	11.31	7.74
Excess			**+2.18**	**+3.34**	**+2.10**	**+1.10**	**+1.18**
International Small Cap	**1/31/2020**	$2,652	25.53	25.91	15.90	11.34	8.04
Benchmark			17.93	18.71	13.75	9.69	6.74
Excess			**+7.60**	**+7.20**	**+2.16**	**+1.65**	**+1.30**
Emerging Market ex China	**3/31/2022**	$3,179	13.26	8.60	12.98		5.03
Benchmark			14.58	9.48	13.33		5.63
Excess			**(1.32)**	**(0.88)**	**(0.35)**		**(0.59)**
Emerging Market China	**3/31/2022**	$606	14.80	29.76	1.51		2.18
Benchmark			11.72	27.35	1.33		2.26
Excess			**+3.07**	**+2.41**	**+0.18**		**(0.08)**

Periods greater than 1 yr show annualized return, since inception returns shown for strategies with less than 10-year history

Excess returns may contain rounding differences
Refer to the disclosure section for additional details

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

Core Trust Fund: Asset Class Returns

as of June 30, 2025

Asset Class Group: Public Fixed Income & Inflation Sensitive	Performance Start Date	Total Exposure Value ($millions)	Net of External Manager Fee Return %				
			Calendar YTD	1 Year	3 Year	5 Year	10 Year or ITD
Public Fixed Income	**12/31/2003**	$35,874	4.71	7.70	5.42	1.05	2.88
Benchmark			4.55	7.31	5.01	0.56	2.65
Excess			**+0.17**	**+0.39**	**+0.41**	**+0.49**	**+0.22**
Investment Grade US Credit	**2/28/2022**	$8,579	4.66	7.49	4.97		1.13
Benchmark			4.22	6.83	4.19		0.79
Excess			**+0.43**	**+0.66**	**+0.78**		**+0.34**
US Treasuries	**2/28/2022**	$8,888	3.75	5.13	1.26		(0.96)
Benchmark			3.79	5.30	1.53		(0.74)
Excess			**(0.05)**	**(0.17)**	**(0.27)**		**(0.22)**
US Long Treasuries	**9/30/2022**	$1,243	3.30	1.86			(0.20)
Benchmark			3.08	1.56			(0.42)
Excess			**+0.22**	**+0.31**			**+0.23**
MBS	**4/30/2020**	$2,859	5.00	8.16	4.28	0.24	0.29
Benchmark			4.23	6.52	2.32	(0.60)	(0.57)
Excess			**+0.78**	**+1.64**	**+1.96**	**+0.84**	**+0.87**

Periods greater than 1 yr show annualized return, since inception returns shown for strategies with less than 10-year history

Excess returns may contain rounding differences
Refer to the disclosure section for additional details

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

Core Trust Fund: Asset Class Returns

as of June 30, 2025

Asset Class Group: Public Fixed Income & Inflation Sensitive	Performance Start Date	Total Exposure Value ($millions)	Net of External Manager Fee Return %				
			Calendar YTD	1 Year	3 Year	5 Year	10 Year or ITD
High Yield	**7/31/2019**	$7,147	4.56	9.65	9.55	5.10	4.28
Benchmark			4.71	9.16	9.32	5.42	4.57
Excess			**(0.15)**	**+0.49**	**+0.23**	**(0.32)**	**(0.30)**
Leveraged Loans	**3/31/2023**	$3,570	2.61	7.26			9.88
Benchmark			3.21	7.78			9.78
Excess			**(0.60)**	**(0.51)**			**+0.10**
Emerging Market Debt - USD	**6/30/2005**	$1,802	6.06	10.61	9.68	2.95	3.89
Benchmark			5.64	9.97	8.86	1.79	3.53
Excess			**+0.41**	**+0.64**	**+0.82**	**+1.16**	**+0.36**
Emerging Market Debt - Local	**7/31/2017**	$1,786	13.56	15.60	9.10	2.53	1.35
Benchmark			12.26	13.81	8.47	1.88	1.36
Excess			**+1.30**	**+1.79**	**+0.63**	**+0.65**	**(0.00)**
Inflation Sensitive	**12/31/2003**	$25,536	4.67	5.85	2.38	1.67	2.41
Benchmark			4.67	5.84	2.34	1.61	2.34
Excess			**+0.01**	**+0.00**	**+0.04**	**+0.06**	**+0.08**

Periods greater than 1 yr show annualized return, since inception returns shown for strategies with less than 10-year history

Excess returns may contain rounding differences
Refer to the disclosure section for additional details

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

Core Trust Fund: Asset Class Returns

as of June 30, 2025

Asset Class Group: Private Markets & Other Strategies	Performance Start Date	Total Exposure Value ($millions)	Net of External Manager Fee Return %				
			Calendar YTD	1 Year	3 Year	5 Year	10 Year or ITD
Real Estate	**12/31/2003**	$12,010	1.29	1.61	(1.91)	4.59	6.21
Benchmark			1.82	1.17	(5.07)	2.01	4.69
Excess			**(0.53)**	**+0.44**	**+3.17**	**+2.58**	**+1.52**
Private Equity / Debt	**11/30/2006**	$27,499	5.63	8.98	5.61	16.76	13.53
Benchmark			4.82	8.50	4.91	15.37	11.21
Excess			**+0.81**	**+0.48**	**+0.70**	**+1.40**	**+2.31**
Other strategies:							
Alpha Pool Overlay	**1/31/2011**	$14,271	3.95	5.39	3.17	4.91	2.59
Benchmark (set to zero as of 1/1/2019)		(at 1/1/22 = $6,336)	0.00	0.00	0.00	0.00	0.53
Excess			**+3.95**	**+5.39**	**+3.17**	**+4.91**	**+2.06**

Periods greater than 1 yr show annualized return, since inception returns shown for strategies with less than 10-year history

Excess returns may contain rounding differences
Refer to the disclosure section for additional details

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

Core Trust Fund: Asset Class Returns

Net of External Mgr Fee - Excess Returns as of June 30, 2025

[1] Either 10-year annualized return or Since Inception (ITD) annualized return is used if there is insufficient return history.

Excess returns may contain rounding differences
Refer to the disclosure section for additional details

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

Core Trust Fund: Alpha Pool Overlay

as of June 30, 2025

Alpha Pool Return	Performance Start Date	Market Value ($ millions)	Net of External Manager Fee Return %				
			Calendar YTD	1 Year	3 Year	5 Year	10 Year
Total Alpha Pool Composite	**1/31/2011**	**$14,271**	**3.95**	**5.39**	**3.17**	**4.91**	**2.59**

- Prior to 2022, Hedge Fund sub strategy assets composed > 90% of the Alpha Pool Composite.
- Each sub strategy in the composite incurs the cost of implementation expense (assessed on a pro rata basis using AUM). Hence, each sub strategy is assigned a Zero Benchmark.

Alpha Pool: Key Sub Strategies	Inclusion Date	Market Value ($ millions)	Calendar YTD NoF Return %	1 Year NoF Return %
Hedge Funds	1/31/2011	$9,089 (64%)	3.77	6.67
Multi Strat	2/1/2022	$2,631 (18%)	2.32	1.51

Alpha Pool Overlay Return (Alpha Pool + Beta Return)	Calendar YTD	1 Year	3 Year	5 Year	10 Year
CTF Policy Benchmark (Beta)	**6.62**	**10.17**	**8.35**	**8.16**	**7.36**
Alpha Pool Overlay Return (Alpha Pool + Beta)	***10.57***	***15.56***	***11.52***	***13.07***	***9.94***

Periods greater than 1 yr show annualized return

Excess returns may contain rounding differences
Refer to the disclosure section for additional details

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

Variable Trust Fund

as of June 30, 2025

Performance

Fund	Performance Start Date	Market Value ($ millions)	Net of External Manager Fee Return %				
			Calendar YTD	1 Year	3 Year	5 Year	10 Year
Variable Trust Fund	**6/30/77**	$11,729	9.67	16.59	17.88	14.50	11.11
Variable Trust Fund Benchmark			9.42	16.26	17.87	14.44	11.08
Excess			**+0.25**	**+0.33**	**+0.01**	**+0.06**	**+0.04**

Periods greater than 1 yr show annualized return

Portfolio Allocation

By Portfolio	($ millions) Total Exposure	As % of Total Fund: Portfolio Exposure	As % of Total Fund: Exposure Target	Target Range
Public Equities	11,662	99.4	100.0	
US Equities	8,177	69.7	70.0	65.0 – 75.0%
International Equities	3,485	29.7	30.0	25.0 – 35.0%
Cash & Overlays	67	0.6	0.0	
Total Fund	$11,729	100.0	100.0	

- ***Asset class exposures are within the Target Range***

Excess returns may contain rounding differences
Refer to the disclosure section for additional details

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

Separately Managed Funds

as of June 30, 2025

Fund	Performance Start Date	Market Value ($ millions)	Net of External Manager Fee Return %				
			Calendar YTD	1 Year	3 Year	5 Year	10 Year or ITD
State Investment Fund (SIF)	**6/30/1975**	$23,845	2.19	4.82	4.71	2.86	2.02
SIF Benchmark			2.12	4.63	4.59	2.80	1.97
Excess			**+0.07**	**+0.19**	**+0.12**	**+0.07**	**+0.05**
State Life Insurance Fund	**10/31/1994**	$96	3.85	4.66	1.41	(2.41)	2.17
No Benchmark							
Historical Society Endowment Fund	**12/31/1993**	$30	5.32	13.17	15.34	12.31	10.61
Historical Society Endowment Benchmark			5.38	13.01	14.97	11.82	10.33
Excess			**(0.06)**	**+0.17**	**+0.36**	**+0.49**	**+0.27**
Injured Patients & Families Comp. Fund	**10/31/1993**	$1,581	4.72	7.77	5.39	2.14	3.97
IP&FC Benchmark			4.53	7.40	5.02	1.65	3.52
Excess			**+0.19**	**+0.37**	**+0.37**	**+0.49**	**+0.45**
UW System Long Term Fund	**3/31/2018**	$619	7.07	10.41	8.86	8.70	7.60
UW System Benchmark			6.95	10.31	8.74	8.57	7.41
Excess			**+0.12**	**+0.11**	**+0.12**	**+0.14**	**+0.18**
UW Cash Management Fund	**4/30/2022**	$764	4.82	8.49	6.81		5.49
UW Cash Management Benchmark			4.85	8.48	6.82		5.53
Excess			**(0.03)**	**+0.01**	**(0.01)**		**(0.03)**

Periods greater than 1 yr show annualized return, since inception returns shown for strategies with less than 10-year history

Excess returns may contain rounding differences
Refer to the disclosure section for additional details

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

Leverage Performance

As of June 30, 2025

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

CTF Policy Leverage Performance

as of June 30, 2025

Core Trust Fund	Net of All Fees and Expenses Return %			
	Calendar YTD	1 Year	3 Year	5 Year
Unlevered Returns (as estimated):				
Portfolio[1]	6.94	10.61	8.91	8.65
CTF Benchmark Return[1]	6.16	9.61	8.02	7.72
Excess Return	**+0.78**	**+1.00**	**+0.89**	**+0.93**
Portfolio Return (Unlevered)	6.94	10.61	8.91	8.65
Absolute Return from Leverage[1,2]	0.46	0.56	0.33	0.44
Implementation (+) or (-)	0.00	0.00	0.00	0.00
Levered Returns (as reported):				
Portfolio	7.40	11.16	9.24	9.09
CTF Benchmark	6.62	10.17	8.35	8.16
Excess	**+0.78**	**+0.99**	**+0.89**	**+0.93**

Periods greater than 1 yr show annualized return

Leverage notes:

[1] The Unlevered Portfolio Return, Unlevered CTF Benchmark Return, Absolute Return from Leverage and Implementation (+) or (-) are estimated.

[2] Policy leverage was first introduced into the CTF and the benchmark at the end of April 2012.

- Policy leverage at SWIB is implemented passively. Therefore, it generally does not contribute to active risk or excess returns[1]
- Policy leverage amplifies absolute returns (whether positive or negative), which is an important component in SWIB's strategy to meet the 6.8% actuarial target over the long-term
- The CTF benchmark return is levered to create an apples-to-apples comparison for evaluating relative performance of the CTF (i.e., excess return)

Excess returns may contain rounding differences
Refer to the disclosure section for additional details

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

Callan Quarterly Report Summary

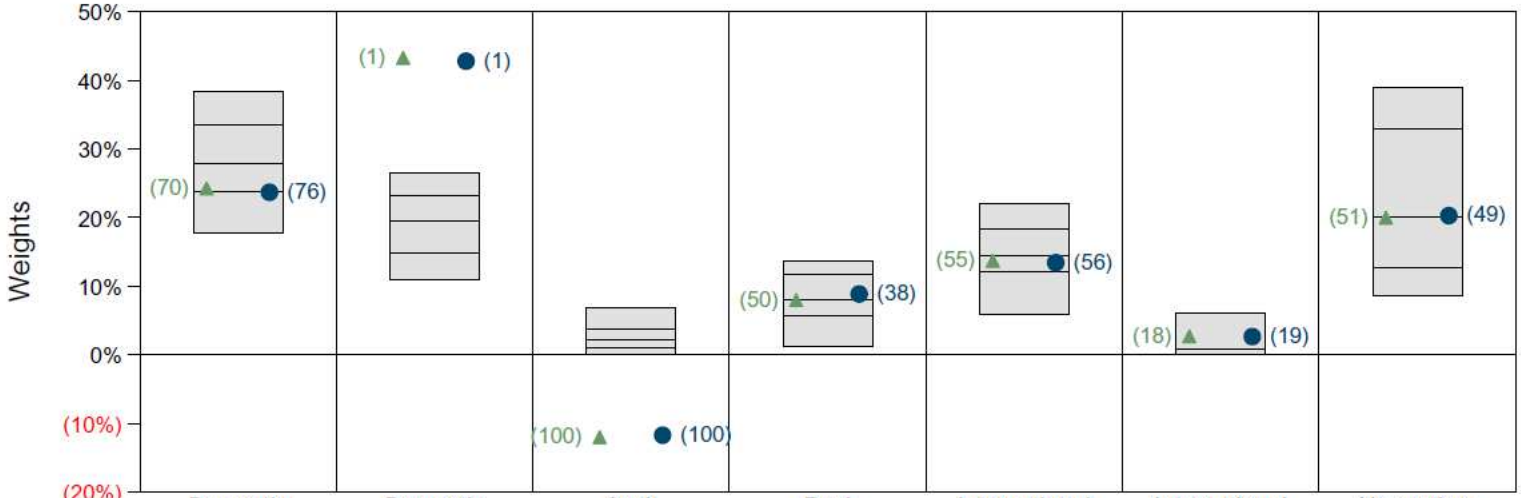
2nd Quarter 2025

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

Callan Peer Rank Update (6.30.2025)

CTF Asset Allocation Comparison to Peer Group

Asset Class Weights vs Callan Public Fund Spons- V Lg DB (>10B)



	Domestic Equity	Domestic Fixed	Cash Equivalent	Real Estate	International Equity	International Fixed	Alternatives
10th Percentile	38.40	26.42	6.88	13.58	21.96	6.04	39.02
25th Percentile	33.44	23.16	3.83	11.64	18.43	0.85	32.84
Median	27.91	19.56	2.17	7.96	14.46	0.02	20.17
75th Percentile	23.76	14.78	1.02	5.75	12.15	0.00	12.76
90th Percentile	17.73	10.99	0.00	1.18	5.81	0.00	8.61
Fund ●	23.69	42.80	(11.72)	8.86	13.43	2.65	20.29
Target ▲	24.28	43.30	(12.00)	8.00	13.72	2.70	20.00

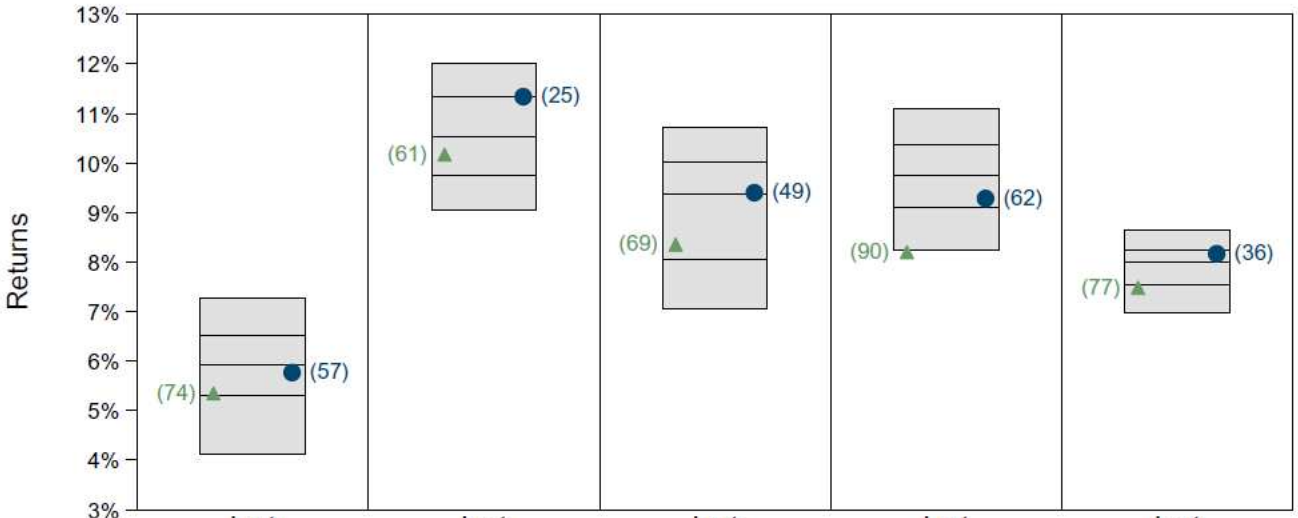
- SWIB's use of financial leverage (policy target of 12%) enables more risk reducing / diversifying assets without sacrificing growth assets.

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

Callan Peer Rank Update (6.30.2025)

CTF Performance vs. Peer Group Universe

Callan Public Fund Spons- V Lg DB (>10B)



	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	7.26	12.01	10.72	11.10	8.65
25th Percentile	6.52	11.33	10.02	10.37	8.25
Median	5.92	10.53	9.38	9.75	8.00
75th Percentile	5.29	9.76	8.04	9.10	7.54
90th Percentile	4.12	9.04	7.05	8.23	6.99
Total Fund ●	5.77	11.34	9.40	9.28	8.17
Policy Target ▲	5.35	10.17	8.35	8.20	7.48

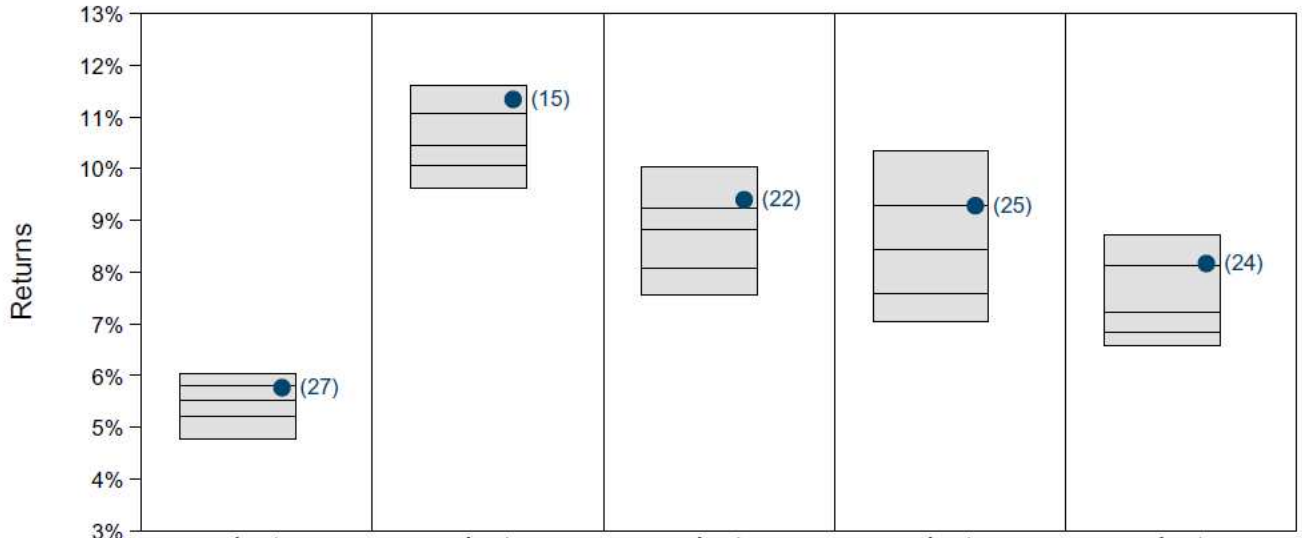
- CTF return exceeds Policy Target over all periods.
- The 1-year return is in the 1st quartile, while 3-year return is 2nd quartile, 5-year return 3rd quartile, and 10-year return is in the 2nd quartile.

SWIB STATE OF WISCONSIN INVESTMENT BOARD

Callan Peer Rank Update (6.30.2025)

CTF Performance on Asset Allocation Adjusted Basis vs. Peer Group

Asset Allocation Adjusted Ranking



	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	6.02	11.62	10.02	10.34	8.73
25th Percentile	5.81	11.07	9.24	9.28	8.12
Median	5.52	10.44	8.82	8.43	7.21
75th Percentile	5.21	10.05	8.07	7.59	6.83
90th Percentile	4.78	9.61	7.55	7.05	6.59
Total Fund ●	5.77	11.34	9.40	9.28	8.17

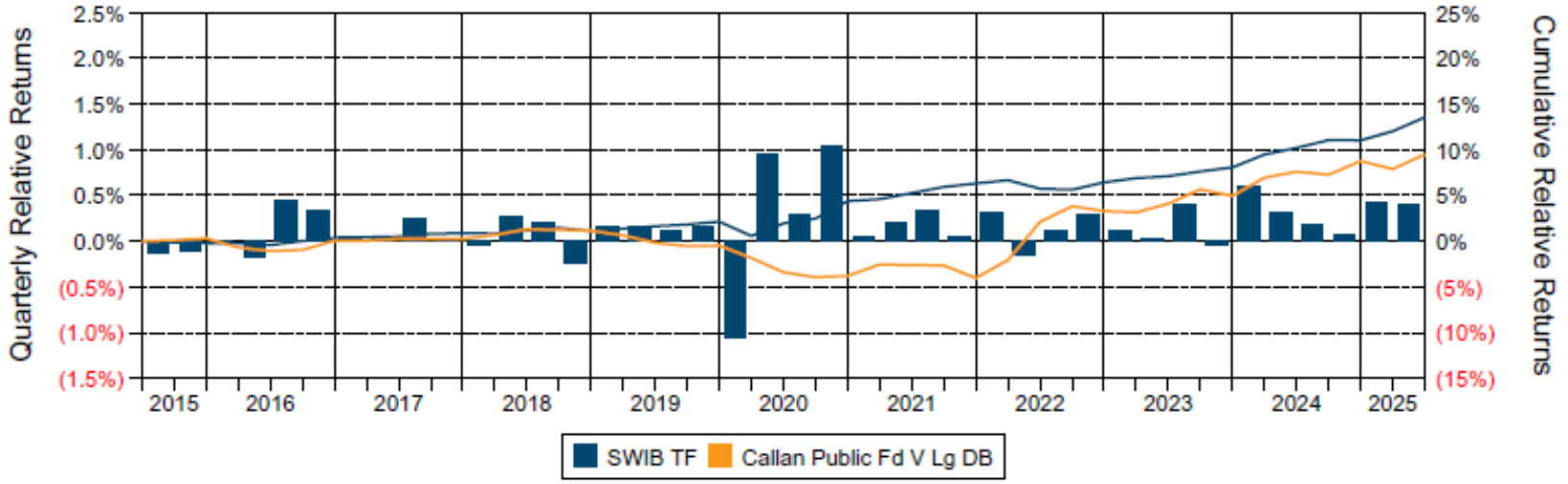
- Peer universe returns are adjusted to match the CTF risk-balanced allocation.
- CTF Fund achieved 1st quartile results over 1-, 3-, 5-, and 10-year periods

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

Callan Peer Rank Update (6.30.2025)

10 Year Return Consistency vs. > $10B Peer Group (Gross Returns)

Cumulative and Quarterly Relative Returns vs Target



- The CTF exhibits low tracking error relative to its peers and produces stable, ascending cumulative performance over 10 years.
- CTF Qtrly relative returns vs. Policy Benchmark are generally positive over the 10-year period.

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Report Disclosures

Glossary, Definitions & Data Sources

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Key Terms and Portfolio Return Information

Term	Description / Definitions
Gross of Fee Return ("GoF Return")	The total investment fund, composite or investment portfolio return that reflects a reduction for: (i) transaction expenses, (ii) cost of implementing leverage expense (if applicable) (iii) all fees and expenses attributable to externally managed, pooled funds where expenses are included in the fund Net Asset Value ("NAV"). GoF Return is used by SWIB for long-term history (> 20 years), internal analytics and to fulfill consultant data submissions where GoF returns are requested. SWIB's primary reported return types are NoF Return and NoA Return.
Net of External Manager Fee Return ("NoF Return")	The GoF return plus additional deductions for external management fees, performance fees and any identifiable carried interest incurred in investment portfolios. SWIB has account records to support NoF return history over approximately 20 years.
Net of All Fees and Expenses Return ("NoA Return")	The NoF return plus additional deductions for administrative expenses, categorized by SWIB as either Direct or Indirect expenses, that are permitted to be charged directly to the Trust Funds under statutory authority. The recording of official, NoA return at the portfolio or account level began in 2017.
Annualized Return Calculation	SWIB reports containing portfolio and benchmark return calculations for time periods greater than 1 year generally utilize a geometric averaging calculation. Returns shown for periods of less than 1 year are not presented utilizing the annualization calculation method. In this instance, compound returns are reported for the specified calendar period (e.g., month to date, quarter to date or year to date). ***Annualized Return = ((1 + r^1) x (1 + r^2) x (1 + r^3) …) ^ (calendar units / time interval measured) – 1***; $r^{(n)}$ = series of holding period returns and calendar units are often expressed as days, months or years
Cumulative Return Calculation	SWIB uses the cumulative return calculation ("cumulative basis") to reflect the aggregate amount an investment has gained or lost over time for portfolios and benchmarks. This measurement shares aspects of the annualized return calculation, however, it excludes the geometric averaging. **Cumulative Return = ((1 + r^1) x (1 + r^2) x (1 + r^3) …) – 1;** $r^{(n)}$ = series of holding period returns
Compound rate of growth of $100	The cumulative and compounded rate of growth of portfolio and benchmark returns may also be presented on an indexed basis over time (measurement may be calculated using any return type). **Compound rate of growth of $100** = ($100 x (1 + r^1) x (1 + r^2) x (1 + r^3) …); r(n) = series of holding period returns

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Key Terms and Portfolio Return Information

Term	Description / Definitions
Excess Return % ("Excess")	Portfolio return or security level return minus the benchmark return. Portfolio or Composite Returns are generally compared against benchmarks with a similar level of risk. It is widely used as a measure of the value added by the portfolio or investment manager or the manager's ability to outperform the market.
Net Excess Value Add $ ("NEVA")	NEVA calculates the portfolio's performance NoA return in total dollars relative to a benchmark. NEVA is a measure used to assess the value-add dollars that a particular investment strategy or team generated over specified time periods. NEVA is also used to monitor the return objectives set forth in the annual Active Risk Budget which is prepared for the Core Trust Fund ("CTF") and Variable Trust Fund ("VTF") managed by SWIB.
Net of External Manager Fee Excess Value Add $	A fund's Excess Value Add $ may be calculated using NoF returns. The CTF Fund long-term performance comparisons vs. the 60/40 Reference Portfolio and Policy Benchmark are measured over 20-year time intervals. NoF return historical records date back to 1998.
SWIB Inception To Date Reporting	The Quarterly Performance Summary discloses a reporting period described as **10 years or ITD**. The return disclosed in this reporting field yields either 10-year annualized returns for funds or portfolios with at least 10 years of return history or the data field may revert to the return since inception for portfolios with less than 10 years of history. The quarterly report provides a performance start date for those portfolios with the abbreviated return history.
Performance Start Date	The date denotes the initial period of a portfolio or composites' return data series that is stored and calculated by the SWIB Performance Measurement Service Agent.
Time-weighted Rate of Return	A method of calculating period-by-period returns that reflects the change in value and negates the effects of external cash flows. This methodology is applied to portfolios that are processed with daily frequency and where daily valuation updates of the underlying instruments are available.
Modified Dietz Total Rate of Return	A measurement that evaluates a portfolio's return based on a weighted calculation of its cash flow. The method considers the timing of cash flows and assumes a constant rate of return over the specified time period. This methodology is applied to portfolios and composites that are processed with monthly frequency (and where only monthly valuation updates are available).

Report Disclosures

Key Terms and Portfolio Return Information

Term	Description / Definitions
Policy Benchmark	The Fund level Benchmark as approved by the Benchmark Committee. The Benchmark is composed of multiple indices that reflect the Fund's exposure to a diverse set of investment strategies. (can also referred to as "Policy Target" as implemented through SWIB's Asset Allocation plan).
Reference Portfolio	Hypothetical global portfolio comprised of 60% MSCI World Net (using a SWIB custom net variant as of 2010) and 40% Bloomberg Barclays Government Credit Index. The return is presented on a gross of fee basis and assumes no contributions or withdrawals.
Zero or No Benchmark (for Official Measurement purposes)	**Zero Benchmark**: This designation applies to the CTF Alpha Pool Overlay. Since 1/1/2019, the benchmark associated with the Alpha Pool Overlay has been set to zero. The Cost of Implementation (which includes an estimate of financing costs) is directly allocated to the underlying strategies that make up the Alpha Pool Overlay and the effect of the cost allocation will usually result in a deduction from the strategy's return. **No Benchmark:** In certain instances, a benchmark is not assigned for the purpose of measuring excess performance. For example, SWIB's client, the State Life Insurance Fund ("SLIF"), has no assigned benchmark for its investment mandate due to the limitations placed on SWIB's investment activities by the SLIF. The SLIF portfolio invests in fixed income securities that approximate the expected life of the Fund's insurance contracts, and SWIB is directed to hold all securities to maturity other than in extraordinary circumstances.
Reported Net Benchmark Returns	The SWIB Benchmark and Performance Committee and its designated benchmark consultant follow the parameters set forth in the SWIB Benchmarking Philosophy. Under the Philosophy, selected benchmarks should exhibit the characteristics described in the *Benchmark Qualities* criteria to ensure portfolio and benchmark attributes are closely aligned. **Net Total Return Benchmarks:** benchmark type commonly used for most publicly-traded portfolio strategies. The benchmark returns reflect the price performance, plus the net amount of all special and regular dividends after applying an assumed foreign tax withholding rate (as determined by the benchmark data provider.) **SWIB Custom Net Benchmark for non-U.S. Public Equity Strategies:** SWIB's custodian bank customizes SWIB's non-U.S. equity benchmarks to reflect the actual, historical reinvestment of withholding tax rates rather than index provider's assumption for varying countries. **Net of External Manager Fee-based Benchmarks:** benchmark type most frequently used to gain better alignment when the measured SWIB portfolio return is inclusive of external management fees, performance fees and carried interest charges (e.g., private market investments.)

Report Disclosures

Key Terms and Portfolio Return Information

Term	Description / Definitions
Custom Weighted Calculated Benchmarks	SWIB managed funds and / or portfolios may require the construction of custom benchmarks that are created through applying static or asset weighted calculations to achieve a blended benchmark that is representative of the investment strategy. When available or feasible, SWIB will request its third-party benchmark data provider(s) to blend benchmarks as a part of the market data service. If this option is not available, SWIB will calculate the benchmark using market data inputs. In certain cases, SWIB may customize a benchmark to more accurately reflect the SWIB managed Fund's tax status and actual tax rate experience in non-U.S jurisdictions with investment portfolio with-holding taxes applicable to dividends and capital gains. This type of custom benchmark is designated as "SWIB Custom Net".
Gross Market Value	The price at which the fund investor can buy or sell the underlying investment instruments held in the portfolio at a given time multiplied by the quantity held, plus any accrued income. The Gross Market Value of a portfolio is the market value of the portfolio or composite without any deduction for SWIB expenses.
Illiquid Investments	Those investments that may be difficult to sell or be sold quickly because of a lack of market or ready or willing investors.
Total Exposure	For SWIB managed funds governed by the Wisconsin Retirement System ("WRS") Investment Policy, this measure reflects the total value of the fund's exposure to investable markets by asset class and sub asset class. Total Exposure is inclusive of those instruments utilized under the WRS Leverage Use Policy to achieve the asset exposures approved under the asset allocation strategy and active risk target.
Internally Managed Portfolios	Portfolios managed by SWIB investment professionals. Each internal portfolio is assigned compulsory investment guidelines and is also assigned "soft risk parameters." Soft risk parameters refer to desired characteristics and/or risk exposures.
Externally Managed Portfolios	Portfolios managed by third-party investment managers hired by SWIB. External active and passive managers operate under contractual investment guidelines approved by SWIB's Investment Committee or by SWIB's investment management staff, as designated in the Investment Committee Charter.
Active Management	Actively managed portfolios have the objective of out-performing their respective benchmarks (or generating alpha) by using investment insights or quantitative tools to deploy buy, hold, and sell decisions. This style of management will result in portfolio positioning decisions that will add active risk and generate higher tracking error. Actively managed portfolios are governed through investment guidelines and soft risk parameters.
Passive Management	Passively managed portfolios have the objective of closely tracking the returns and risk of their respective benchmarks. This style of management usually involves mirroring the benchmark security holdings (or constituents) to closely replicate the benchmark risk and return.

Report Disclosures

Key Terms and Portfolio Return Information

Term	Description / Definitions
Note on report data sources and processing	Return Calculation Processing Bank of New York (BNY), an independent 3rd party, provides services related to custodial records, accounting and performance return calculations for SWIB managed funds. BNY also serves as the source for certain standard, market-based benchmarks and static weight blended benchmarks. Return Calculations Prepared on a Notional or Unlevered Basis (CTF only) SWIB uses leverage to help achieve the CTF's diversification objectives. A description of the Leverage Use Policy is contained in the WRS Investment Committee Investment Guidelines. For those accounts and composites deploying leverage, the calculation of notional or unlevered returns (using gross asset exposure) is required to achieve a comparable return vs. market indices. BNY performed the unlevered return calculation from 7/1/2017 – 9/30/2024. Beginning 10/1/2024, this calculation was processed using the SWIB IBOR. Consistent with Leverage Use Policy guidelines, this calculation is processed inside the reported composites that contain US Large Cap Equity, US Small Cap Equity, MSCI World x US Equity, US TIPS and US Treasury exposures. State Investment Fund ("SIF") Commingled Fund Processing The SIF pools the cash of the State of Wisconsin and its agencies, WRS, and various local government units (Local Government Investment Pool) into a commingled fund with the investment objectives of safety of principal and liquidity while earning a competitive money market rate of return. For purposes of calculating earnings to each participant , all investments are valued at amortized cost. SIF returns are calculated using the monthly net earnings distributed to all commingled fund participants. SIF returns are presented net of all allocated SWIB administrative costs and State Controller's Office costs that are allocated to the participants of the Local Government Investment Pool. Benchmark Market Data and Selection Process The data source for this information is provided by multiple investment industry market data vendors and analytics firms depending on the investment strategy. The SWIB Benchmark and Performance Committee governs the benchmark selection process. An independent consultant (selected by the Board of Trustees or "Board") makes recommendations to initially select or change benchmarks. Peer Rank Return Comparison Data This information is provided and processed by industry consultants that consume return information for SWIB managed funds and then provide investor universe return comparisons and analytics using proprietary databases. When consultant info is included in the Quarterly Performance Summary the preparer of the work is identified. SWIB Annual Reports: Additional WRS disclosures can be found in the Annual Reports, available at https://www.swib.state.wi.us/list-of-investments.

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Key Terms and Portfolio Return Information

Term	Description / Definitions
(continued) **Note on report data sources and processing**	On 1/1/2024, the BNY ABOR processing platform became the primary source for CTF and VTF return calculations and market value amounts contained in this report. Beginning 10/1/2024, returns and market values for the SIF and the SWIB-managed Separately Managed Funds were processed using the SWIB IBOR. This report contains unlevered return calculations that are processed using Total Exposure (Notional-based) Assets for accounts with substantial derivative positions that generate leverage for the CTF. The objective of this calculation is to generate meaningful returns that compare to the account or composite's benchmark. The following composites are presented on an unlevered basis: CTF – Public Equities (pg. 9) CTF – Global Developed (pg. 9) CTF – Public Fixed Income (pg. 10) CTF – US Treasuries (pg. 10) CTF – Inflation Sensitive (pg. 11)

Leverage Disclosures

Calculation formulas to estimate impact

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Notes on CTF Leverage Analysis

Term	Description / Definitions
Portfolio Return (Unlevered)	This is an estimated-only CTF return because SWIB does not implement a CTF unlevered portfolio to calculate actual performance against. Leverage is used to expand the CTF's entire asset base. All definitions that include (unlevered) are ESTIMATES only for this reason. It is estimated by: 1) Excess Return (Levered) is first subtracted from the Portfolio Return (Levered)[1]; 2) The result of Step 1 is then divided by the Policy Leverage Factor; then 3) Excess Return (Levered) is added back to the result of Step 2 and that number is then adjusted to account for the cost of financing (i.e., the expense of acquiring leverage, which would not be applicable to an unlevered portfolio). $$\textit{Portfolio Return (Unlevered)} = \left(\frac{\textit{Portfolio Return (Levered)} - \textit{Excess Return (Levered)}}{\textit{Policy Leverage Factor}}\right) + \textit{Excess Return (Levered)} - \textit{cost of implementation}$$ [1] Note, because Excess Return (Levered) is the difference between two similarly "levered" portfolios (Portfolio Return (Levered) and Benchmark Return (Levered)), it represents outperformance that is not attributable to leverage. Accordingly, it is subtracted first as it would be inaccurate to reduce such amount by the Policy Leverage Factor for purposes of this calculation. Policy Leverage Factor is the amount of the approved Policy Leverage during any given period, time weighted for multi-year periods. Policy Leverage was first introduced into the CTF Portfolio and Benchmark at the end of April 2012 and was raised from 10% to 15%, effective Calendar Year 2021.
CTF Benchmark Return (Unlevered)	Estimated by the Benchmark Return (Levered) divided by the Policy Leverage Factor for the period.

Report Disclosures

Notes on CTF Leverage Analysis

Term	Description / Definitions
Excess Return (Unlevered)	The Excess Return (Unlevered) is the excess return that it is estimated SWIB would have achieved if it did not implement leverage for the CTF. Estimated as Portfolio Return (Unlevered) minus Benchmark Return (Unlevered). Can also be estimated by taking the actual Excess Return (Levered) minus Implementation (+) or (-) (see below for definition).
Absolute Return from Leverage	Estimated by the Portfolio Return (Levered) minus Portfolio Return (Unlevered) minus Implementation (+) or (-).
Implementation (+) or (-)	The relative cost of financing (i.e., the actual cost of financing minus the CTF benchmark cost of financing). The CTF benchmark cost of financing is the CTF cash benchmark, previously LIBOR plus 30 bps and now BSBY plus 30 bps. Implementation (+) or (-) can also result from outperformance or underperformance relative to how efficiently SWIB replicates the index in connection with policy leverage (this is called basis risk). Can either be positive or negative. When the leverage implementation is achieved at a cost saving compared to the CTF cash benchmark (i.e., less than the CTF cash benchmark), it is positive (+); but when it is achieved with additional cost compared to the CTF cash benchmark (i.e., more than the CTF cash benchmark), it is negative (-). Cost savings can generate minor excess returns for the CTF. Basis risk can also generate minor contributions to or detractions from relative performance with respect to policy leverage.
Portfolio Return (Levered)	Actual performance of the CTF Portfolio for the period presented, from all strategies including Policy Leverage.
CTF Benchmark Return (Levered)	Actual performance of the CTF Benchmark for the period, taking into account the use of Policy Leverage.
Excess Return (Levered)	Actual excess return of the CTF. Portfolio Return (Levered) minus Benchmark Return (Levered).

Board Meeting

Tab 7 – Committee Open Session Business

A. Approved Open Session Investment Committee Meeting Minutes for May 27, June 24, and July 29, 2025

B. Final Open Session Investment Committee Agenda for August 26, 2025, and Draft Open Session Agendas for September 23 and October 28, 2025

C. Draft Open Session Minutes of May 22, 2025 Enterprise Risk and Compliance Committee Meeting

STATE OF WISCONSIN INVESTMENT BOARD
Investment Committee Meeting–Open Session

Tuesday, May 27, 2025

Offices of the Investment Board
4703 Madison Yards Way, Madison, Wisconsin

Committee Members Present:
Edwin Denson, Executive Director/Chief Investment Officer (Chair)
Anne-Marie Fink, Private Markets & Funds Alpha–Chief Investment Officer
Todd Mattina, Head Economist & Asset and Risk Allocation Chief Investment Officer
Stefano Cavaglia, Senior Portfolio Manager–Asset & Risk Allocation
Derek Drummond, Head of Funds Alpha
Diane Linn, Senior Portfolio Manager–Multi-Asset Strategies
Lin Maung, Senior Portfolio Manager–Private Equity
Chase Nicholson, Senior Portfolio Manager–Multi-Asset Strategies
Jason Rector, Senior Portfolio Manager–Funds Alpha
Mike Shearer, Head of Fixed Income Strategies
Nick Stanton, Head of Multi-Asset Strategies
Ivy Zhang, Senior Portfolio Manager–Asset & Risk Allocation

Eric Barber, Chief Legal Counsel (non-voting)
Hassan Chehime, Head of Risk Management (non-voting)
Rochelle Klaskin, Deputy Executive Director/Chief Operating Officer (non-voting)

Also in Attendance:
Kathy Blumenfeld, Trustee
J. Michael Collins, Trustee
Clyde Tinnen, Trustee
John Voelker, Trustee
Nathan Ballard, Senior Legal Counsel
Chelsey Barczak, GPMS Business Director
Kevin Blank, Senior Analyst–Funds Alpha
Brandon Brickner, Head of Internal Audit
Rosa Brown, Quantitative Analyst–Asset & Risk Allocation
Kate Burkart-Paulson, Senior Legal Counsel
John Burkhartzmeyer, Senior Trader
Sara Chandler, Chief of Staff & Strategy
Bridget Chen, Portfolio Manager–MBS
Christian Comito, Senior Portfolio Manager–MBS
Jack Drew, Trader
Kliton Duri, Senior Portfolio Manager–High Yield and Leveraged Loans
Trey Edgerle, Compliance Analyst
Tom Freeman, Director of Quantamental Research
Scott Freundlich, Portfolio Manager–High Yield and Leveraged Loans
Shannon Gannon, Communications Director
Max Garcia, Analyst–Funds Alpha
Jameson Greenfield, Chief Financial Officer

Dan Gyorog, Internal Auditor
Alex Hansen, Investment Operations Analyst
Phil Johnson, Senior Portfolio Manager–High Yield and Leveraged Loans
Ryan Johnston, Senior Analyst–Funds Alpha
Salah Khalaf, Senior Portfolio Engineer–Private Markets & Funds Alpha
Jason Kowalke, PMFA Operations Manager
Dylan Krivoshein, Investment Operations Analyst
Jason Krueger, Compliance Analyst
Alex Kubiak, Investment Operations Analyst
Lisa Lange, Director of Compliance & Senior Legal Counsel
Alex Li, Analyst–Asset & Risk Allocation
Shan Lo, Senior Portfolio Manager–Multi-Asset Strategies
Jon Loboda, Performance Measurement Operations Manager
Tony Lubarsky, Investment Operations Analyst
Jeff Lucas, Senior Portfolio Manager–Investment Grade Fixed Income
Bill Luetzow, Legal Counsel
Michael Mandarino, Senior Analyst–High Yield and Leveraged Loans
Matt Marek, Senior Analyst–Asset & Risk Allocation
Frank Mazzucco, Senior Legal Counsel
David Meyer, Senior Trader
Nick Mokha, Portfolio Manager–High Yield and Leveraged Loans
Joy Mukherjee, Senior Portfolio Manager–U.S. Small Cap Strategy
Sunil Nair, Operational, Financing & Counterparty Risk Director
Scott Nichols, Head of Trading
Matt Notzon, Performance Analyst
Hunter Olson, Analyst–High Yield and Leveraged Loans
Anand Rakesh, Director of Risk Analytics & Financial Engineering Systems
Vishnu Reddy, Senior Trader
Zhihui Redlin, Legal Counsel
Robby Richlen, Analyst–Funds Alpha
Tom Robinson, Head of Corporate Governance
Andrea Ruiz, Senior Portfolio Manager–Liquidity, Inflation & Rates Mgmt.
Gabriel Souza, Investment Operations Analyst
Mark Taylor, Senior Portfolio Manager–Quantitative Research
Matt Terpstra, Internal Auditor
Rob Thornton, ARA Business Director
Leif Thybony, Senior Portfolio Manager–High Yield and Leveraged Loans
Dawn Tuescher, Executive Administrative Assistant
Ping Wong, Portfolio Manager–Liquidity, Inflation & Rates Mgmt.
Sarah Zhao, Investment Operations Analyst
Eileen Neill, Verus Advisory
Audrey Woller, Legislative Audit Bureau
(Some individuals may have attended only portions of the meeting.)

OPEN SESSION

With a quorum present, Edwin Denson, Chair of the Investment Committee, called the meeting to order at 1:00 p.m.

1. Approval of the Minutes

Mr. Denson asked if there were any comments on either the open or closed session minutes of the April 22, 2025 Investment Committee ("Committee") meeting. Hearing no comments, Mr. Denson stated that the Committee could approve both the open and closed session minutes in open session.

Motion: A motion was made by Mr. Stanton and seconded by Mr. Nicholson to approve both the open session and the closed session minutes of April 22, 2025, as presented. The motion passed unanimously.

2. Global Public Market Strategies Division Update

Nick Stanton, Head of Multi-Asset Strategies, reported on performance from the Global Public Market Strategies division in the *Global Public Market Strategies Quarterly Update, Q1 2025*, included on pages 11-13 in the meeting materials. He commented that four of eight division strategies generated positive relative returns in the first quarter, and reviewed the performance of the division strategies over the three- and five-year periods.

3. Q1 2025 Quarterly Updates

A. Fixed Income Strategies

Mike Shearer, Head of Fixed Income Strategies, presented the *Fixed Income Strategies Review*, included on pages 14-30 in the meeting materials. He reviewed the overall positioning of the strategies with respect to active duration, beta risk and tracking error, commenting that **(i)** overall the portfolios are neutral duration and positioned for yield curve steepening, **(ii)** most portfolios have increased tracking error since Q4 2024, particularly the to-be-announced ("TBA") strategy portfolio as it ramps up risk opportunistically, and **(iii)** security selection is critical in the current macroeconomic environment.

Mr. Shearer then provided a fixed income market review, stating that **(a)** market pricing of expected cumulative Federal Reserve interest rate cuts over the next twelve months was volatile during the first quarter, **(b)** U.S. Treasury yields fell during the quarter, **(c)** credit spreads generally widened during the quarter, **(d)** the energy sector has continued to perform well in the current environment, while consumer-related sectors struggled, **(e)** mortgage-backed securities ("MBS") nominal spreads are inexpensively priced given the levels of implied rate volatility, **(f)** higher-tier consumer credit remains strong, while lower-tier consumer credit appears mixed, and **(g)** commercial MBS weakened at the end of the first quarter after a strong start to the year.

Lastly, he confirmed that the portfolios were in compliance with their guidelines in Q1 2025, with the exception of the leveraged loans portfolio, which had been out of compliance in the first quarter with the investment guideline limiting investments in non-benchmark instruments, as previously reported to the Committee. Mr. Shearer noted that the Committee

approved amendments to the relevant leveraged loans guideline in April following the end of the first quarter.

B. Small Cap Strategy

Joy Mukherjee, Senior Portfolio Manager–U.S. Small Cap Strategy, referred to the *U.S. Small Cap Strategy Review*, included on pages 31-37 in the meeting materials. He highlighted that the portfolio outperformed its benchmark by 61 basis points ("bps") in the first quarter, and that absolute and relative performance over the three- and five-year periods were positive. Mr. Mukherjee then **(a)** discussed trends related to small cap market performance, noting that small cap names performed well early in the quarter amid market optimism for favorable policy and regulatory changes and then faced headwinds as tariffs and overall market uncertainty led to elevated volatility, **(b)** provided sector commentary, stating that energy and healthcare were the top-performing sectors for the portfolio in the quarter, while the financials and information technology sectors detracted, and **(c)** confirmed that the portfolio remained in compliance with its guidelines. Lastly, Mr. Mukherjee answered questions regarding the potential impact on small cap names of proposed changes at the Federal Trade Commission.

C. LIRM

Andrea Ruiz, Senior Portfolio Manager–Liquidity, Inflation & Rates Mgmt., presented the *Investment Strategies: Liquidity, Inflation and Rates Management* ("LIRM") quarterly update, included on pages 38-43 in the meeting materials. With respect to the market, she noted that **(a)** money market fund net assets increased during the first quarter, while U.S. Treasury bills outstanding declined, **(b)** the overnight reverse repurchase agreement balance remains low, but could be affected by federal debt ceiling pressures, and **(c)** market participants continued to adjust expectations regarding future interest rate cuts by the Federal Reserve. Ms. Ruiz then reviewed performance for the State Investment Fund ("SIF"), noting that the SIF returned positive absolute and relative performance for the year-to-date, one-, three- and five-year periods, and confirmed that the portfolio remained in compliance with its guidelines.

D. Multi-Strat

Chase Nicholson, Senior Portfolio Manager–Multi-Asset Strategies, presented the *Multi-Strat Portfolio Review*, included on pages 44-47 in the meeting materials. He reported that the multi-strat portfolio outperformed its benchmark by 135 bps in the first quarter, driven by performance from fundamental security selection and fundamental arbitrage strategies, and that the portfolio returned positive absolute and relative performance for the year-to-date, three- and five-year periods. Mr. Nicholson then **(a)** discussed intraday performance trends, particularly in the context of recent tariff announcements, and **(b)** confirmed that the portfolio remained in compliance with its guidelines.

4. Convene in Closed Session

Motion: A motion to go into closed session as authorized pursuant to sections 19.85(1)(e) and 19.36(5) of the Wisconsin Statutes to consider confidential strategies for the investment of public funds, including **(a)** the review of active risk profiles and positioning of portfolio investments and the Core and Variable Trust Funds, **(b)** the review of specific proprietary

investment strategies and investment instruments related to LIRM, multi-strat, fixed income strategies, small cap equities, private markets & funds alpha, and exposure management, and **(c)** discussion of the impact of recent events on portfolio positioning, was made by Mr. Stanton and seconded by Mr. Mattina.

Mr. Denson called for a roll call vote.

Denson-Aye	Fink-Aye	Mattina-Aye	Cavaglia-Aye
Drummond-Aye	Linn-Aye	Maung-Aye	Nicholson-Aye
Rector-Aye	Shearer-Aye	Stanton-Aye	Zhang-Aye

There being twelve ayes and no nays, Mr. Denson declared the motion passed. The Committee convened in closed session at 1:23 p.m. and reconvened in open session at 3:04 pm.

5. Announcement of Committee Actions Relating to Items Taken Up in Closed Session

Mr. Denson announced that, while in closed session, the Committee **(i)** reviewed active risk profiles and positioning of portfolio investments and the Core and Variable Trust Funds, **(ii)** reviewed specific proprietary investment strategies and investment instruments related to LIRM, multi-strat, fixed income strategies, small cap equities, private markets & funds alpha, and exposure management, and **(iii)** discussed the impact of recent events on portfolio positioning.

6. Private Markets & Funds Alpha Division Performance Update

Anne-Marie Fink, Private Markets & Funds Alpha–Chief Investment Officer, reminded the Committee that benchmark returns for the private equity and current return portfolios were not yet available when Q1 2025 quarterly updates were provided at the prior Committee meeting. She then presented a performance update for the private equity and current return portfolios, included on pages 164-166 in the meeting materials, highlighting that **(a)** the private equity portfolio outperformed its benchmark by 36 bps in Q1 2025, led by performance from both small and mega-cap managers, and **(b)** the current return portfolio outperformed its benchmark by 76 bps in the quarter, driven by special situations/distressed managers.

7. Soft Risk Parameters

Hassan Chehime, Head of Risk Management, noted that the report *Soft Risk Parameters–Asset Class and Portfolio*, as of April 30, 2025, was included on pages 167-168 in the meeting materials for the Committee's review. Mr. Chehime noted that there were no new discussion triggers this month and that the soft risk parameters had been updated to reflect the guideline amendments approved by the IC at its prior meeting. With the updates, the discussion trigger relating to the TBA strategy portfolio's ex-ante beta to MBS benchmark that had been flagged in April is no longer included.

8. Future Meeting Topics

Mr. Denson noted that draft agendas for the June 24, 2025 and July 29, 2025 Committee meetings were included on pages 169-172 in the meeting materials for the Committee's review.

9. Adjournment

Motion: A motion to adjourn the meeting was made by Mr. Rector and seconded by Mr. Maung. The motion passed unanimously, and the meeting adjourned at 3:06 p.m.

Date of Committee Approval: 06/24/25

Signed: */s/ Eric Barber*
Eric Barber, Secretary
Investment Committee

STATE OF WISCONSIN INVESTMENT BOARD
Investment Committee Meeting–Open Session

Tuesday, June 24, 2025

Offices of the Investment Board
4703 Madison Yards Way, Madison, Wisconsin

Committee Members Present:
Edwin Denson, Executive Director/Chief Investment Officer (Chair)
Anne-Marie Fink, Private Markets & Funds Alpha–Chief Investment Officer
Todd Mattina, Head Economist & Asset and Risk Allocation Chief Investment Officer
Stefano Cavaglia, Senior Portfolio Manager–Asset & Risk Allocation
Diane Linn, Senior Portfolio Manager–Multi-Asset Strategies
Lin Maung, Senior Portfolio Manager–Private Equity
Chase Nicholson, Senior Portfolio Manager–Multi-Asset Strategies
Jason Rector, Senior Portfolio Manager–Funds Alpha
Mike Shearer, Head of Fixed Income Strategies
Nick Stanton, Head of Multi-Asset Strategies
Ivy Zhang, Senior Portfolio Manager–Asset & Risk Allocation

Eric Barber, Chief Legal Counsel (non-voting)
Hassan Chehime, Head of Risk Management (non-voting)
Rochelle Klaskin, Deputy Executive Director/Chief Operating Officer (non-voting)

Also in Attendance:
J. Michael Collins, Trustee
John Voelker, Trustee
Kevin Blank, Senior Analyst–Funds Alpha
Brandon Brickner, Head of Internal Audit
Rosa Brown, Quantitative Analyst–Asset & Risk Allocation
Kate Burkart-Paulson, Senior Legal Counsel
John Burkhartzmeyer, Senior Trader
Sara Chandler, Chief of Staff & Strategy
Bridget Chen, Portfolio Manager–MBS
Christian Comito, Senior Portfolio Manager–MBS
Kliton Duri, Senior Portfolio Manager–High Yield and Leveraged Loans
Trey Edgerle, Compliance Analyst
Greg Fletcher, Performance Director
Tom Freeman, Director of Quantamental Research
Scott Freundlich, Portfolio Manager–High Yield and Leveraged Loans
Megan Gall, Investment Operations Analyst
Shannon Gannon, Communications Director
Max Garcia, Analyst–Funds Alpha
Jameson Greenfield, Chief Financial Officer
Thomas Gregg, PMFA Operations Manager
Dan Gyorog, Internal Auditor
Syed Haider, Quantitative Analyst–Multi-Asset Strategies
Alex Hansen, Investment Operations Analyst

Brian Heimsoth, Senior Portfolio Manager–Asset & Risk Allocation
Phil Johnson, Senior Portfolio Manager–High Yield and Leveraged Loans
Ryan Johnston, Senior Analyst–Funds Alpha
Salah Khalaf, Senior Portfolio Engineer–Private Markets & Funds Alpha
Jason Kowalke, PMFA Operations Manager
Jason Krueger, Compliance Analyst
Alex Kubiak, Investment Operations Analyst
Katie Kuryla, Senior Paralegal/Records Specialist
Lisa Lange, Director of Compliance & Senior Legal Counsel
Shan Lo, Senior Portfolio Manager–Multi-Asset Strategies
Jon Loboda, Performance Measurement Operations Manager
Bill Luetzow, Legal Counsel
Michael Mandarino, Senior Analyst–High Yield and Leveraged Loans
Ed Martinez, PMFA Business Director
Frank Mazzucco, Senior Legal Counsel
David Meyer, Senior Trader
Jason Mirr, Senior Portfolio Manager–U.S. Small Cap Strategy
Nick Mokha, Portfolio Manager–High Yield and Leveraged Loans
Scott Nichols, Head of Trading
Hunter Olson, Analyst–High Yield and Leveraged Loans
Alex Orthey, Investment Analyst Intern
Anand Rakesh, Director of Risk Analytics & Financial Engineering Systems
Vishnu Reddy, Senior Trader
Zhihui Redlin, Legal Counsel
Robby Richlen, Analyst–Funds Alpha
Edouard Senechal, Senior Portfolio Manager–Asset & Risk Allocation
Sam Shibilski, Investment Operations Analyst
Gabriel Souza, Investment Operations Analyst
Mark Taylor, Senior Portfolio Manager–Quantitative Research
Rob Thornton, ARA Business Director
Leif Thybony, Senior Portfolio Manager–High Yield and Leveraged Loans
Dawn Tuescher, Executive Administrative Assistant
Ping Wong, Portfolio Manager–Liquidity, Inflation & Rates Mgmt.
Sarah Zhao, Investment Operations Analyst
Joe Nankof, NEPC
Eileen Neill, Verus Advisory
(Some individuals may have attended only portions of the meeting.)

OPEN SESSION

With a quorum present, Edwin Denson, Chair of the Investment Committee, called the meeting to order at 1:00 p.m.

1. Approval of the Minutes

Mr. Denson asked if there were any comments on either the open or closed session minutes of the May 27, 2025 Investment Committee ("Committee") meeting. Hearing no comments, Mr. Denson stated that the Committee could approve both the open and closed session minutes in open session.

Motion: A motion was made by Mr. Mattina and seconded by Mr. Maung to approve both the open session and the closed session minutes of May 27, 2025, as presented. The motion passed unanimously.

2. June Investment Forum Debrief

Kevin Blank, Senior Analyst – Funds Alpha, provided a summary of the June Investment Forum, which was held virtually on June 10-11, 2025. Mr. Blank reported that 235 individuals registered for the conference, including SWIB staff and trustees. He noted that feedback has been favorable, with attendees pleased with the conference's substantive topics and speaker lineup.

3. Transition Update (Q1 2025)

Mr. Denson reported that there were no transition events in Q1 2025.

4. Convene in Closed Session

Motion: A motion to go into closed session as authorized pursuant to sections 19.85(1)(e) and 19.36(5) of the Wisconsin Statutes to consider confidential strategies for the investment of public funds, including **(a)** the review of active risk profiles and positioning of portfolio investments and the Core and Variable Trust Funds, **(b)** the review of specific proprietary investment strategies and investment instruments related to asset and risk allocation and exposure management, **(c)** the review of broker information, and **(d)** discussion of the impact of recent events on portfolio positioning, was made by Mr. Shearer and seconded by Mr. Nicholson.

Mr. Denson called for a roll call vote.

Denson-Aye	Fink-Aye	Mattina-Aye	Cavaglia-Aye
Linn-Aye	Maung-Aye	Nicholson-Aye	Rector-Aye
Shearer-Aye	Stanton-Aye	Zhang-Aye	

There being eleven ayes and no nays, Mr. Denson declared the motion passed. The Committee convened in closed session at 1:03 p.m. and reconvened in open session at 1:58 p.m.

5. Announcement of Committee Actions Relating to Items Taken Up in Closed Session

Mr. Denson announced that, while in closed session, the Committee **(i)** reviewed active risk profiles and positioning of portfolio investments and the Core and Variable Trust Funds, **(ii)** reviewed specific proprietary investment strategies and investment instruments related to asset and risk allocation and exposure management, **(iii)** reviewed broker

information, and **(iv)** discussed of the impact of recent events on portfolio positioning.

6. Research Task Force Report

Stefano Cavaglia, Senior Portfolio Manager–Asset & Risk Allocation, presented the *Research Task Force Update*, included on pages 91-102 in the meeting materials. He discussed recent Research Task Force initiatives, including: **(a)** sponsoring seminars relating to overall economic conditions, Federal Reserve interest rate policy, the use of AI tools to quantify certain asset price impacts, and total portfolio management; (**b)** promoting knowledge-sharing and educational programs, including participation in sessions related to SWIB's membership in the International Centre for Pension Management and a forum for quantitative research in finance, as well as potentially sponsoring a course on strategic information collection; **(c)** holding exploratory sessions on private equity benchmark design and cross-asset institutional holdings and trading behavior; and **(d)** supporting the June Investment Forum.

7. Quarterly Performance Review (Q1 2025)

Mr. Denson noted that the *Investment Performance Report*, as of March 31, 2025, was included on pages 103-135 in the meeting materials for the Committee's information.

8. Soft Risk Parameters

Hassan Chehime, Head of Risk Management, noted that the report *Soft Risk Parameters–Asset Class and Portfolio*, as of May 30, 2025, was included on pages 136-137 in the meeting materials for the Committee's review. Mr. Chehime noted that there were no new discussion triggers this month and that no discussion triggers had been dropped.

9. Future Meeting Topics

Mr. Denson noted that draft agendas for the July 29, 2025 and August 26, 2025 Committee meetings were included on pages 138-141 in the meeting materials for the Committee's review.

10. Adjournment

Motion: A motion to adjourn the meeting was made by Mr. Shearer and seconded by Mr. Cavaglia. The motion passed unanimously, and the meeting adjourned at 2:05 p.m.

Date of Committee Approval: 07/29/25

Signed: */s/ Eric Barber*
Eric Barber, Secretary
Investment Committee

STATE OF WISCONSIN INVESTMENT BOARD
Investment Committee Meeting–Open Session

Tuesday, July 29, 2025

Offices of the Investment Board
4703 Madison Yards Way, Madison, Wisconsin

Committee Members Present:
Edwin Denson, Executive Director/Chief Investment Officer (Chair)
Anne-Marie Fink, Private Markets & Funds Alpha–Chief Investment Officer
Todd Mattina, Head Economist & Asset and Risk Allocation Chief Investment Officer
Stefano Cavaglia, Senior Portfolio Manager–Asset & Risk Allocation
Derek Drummond, Head of Funds Alpha
Diane Linn, Senior Portfolio Manager–Multi-Asset Strategies
Lin Maung, Senior Portfolio Manager–Private Equity
Chase Nicholson, Senior Portfolio Manager–Multi-Asset Strategies
Jason Rector, Senior Portfolio Manager–Funds Alpha
Mike Shearer, Head of Fixed Income Strategies
Nick Stanton, Head of Multi-Asset Strategies
Ivy Zhang, Senior Portfolio Manager–Asset & Risk Allocation

Eric Barber, Chief Legal Counsel (non-voting)
Hassan Chehime, Head of Risk Management (non-voting)
Rochelle Klaskin, Deputy Executive Director/Chief Operating Officer (non-voting)

Also in Attendance:
Barb Bolens, Trustee
Clyde Tinnen, Trustee
John Voelker, Trustee
Kevin Blank, Senior Analyst–Funds Alpha
Brandon Brickner, Head of Internal Audit
Rosa Brown, Quantitative Analyst–Asset & Risk Allocation
Sara Chandler, Chief of Staff & Strategy
Bridget Chen, Portfolio Manager–MBS
Christian Comito, Senior Portfolio Manager–MBS
Tunc Dayioglu, Senior Portfolio Manager–Funds Alpha
Jack Drew, Trader
Trey Edgerle, Compliance Analyst
Greg Fletcher, Performance Director
Tom Freeman, Director of Quantamental Research
Shannon Gannon, Communications Director
Max Garcia, Analyst–Funds Alpha
Jameson Greenfield, Chief Financial Officer
Thomas Gregg, PMFA Operations Manager
Dan Gyorog, Internal Auditor
Alex Hansen, Investment Operations Analyst
Logan Hash, Investment Associate–Funds Alpha

Phil Johnson, Senior Portfolio Manager–High Yield and Leveraged Loans
Ryan Johnston, Senior Analyst–Funds Alpha
Salah Khalaf, Senior Portfolio Engineer–Private Markets & Funds Alpha
Jason Kowalke, PMFA Operations Manager
Dylan Krivoshein, Investment Operations Analyst
Jason Krueger, Compliance Analyst
Alex Kubiak, Investment Operations Analyst
Katie Kuryla, Senior Paralegal/Records Specialist
Lisa Lange, Director of Compliance & Senior Legal Counsel
Alex Li, Analyst–Asset & Risk Allocation
Shan Lo, Senior Portfolio Manager–Multi-Asset Strategies
Jon Loboda, Performance Measurement Operations Manager
Bill Luetzow, Legal Counsel
Michael Mandarino, Senior Analyst–High Yield and Leveraged Loans
Matt Marek, Senior Analyst–Asset & Risk Allocation
Ed Martinez, PMFA Business Director
Frank Mazzucco, Senior Legal Counsel
David Meyer, Senior Trader
Nick Mokha, Portfolio Manager–High Yield and Leveraged Loans
Scott Nichols, Head of Trading
Hunter Olson, Analyst–High Yield and Leveraged Loans
Cefe Quesada, Chief Technology Officer
Anand Rakesh, Director of Risk Analytics & Financial Engineering Systems
Vishnu Reddy, Senior Trader
Zhihui Redlin, Legal Counsel
Robby Richlen, Analyst–Funds Alpha
Dan Schally, Analyst–Real Estate
Gabriel Souza, Investment Operations Analyst
Mark Stockley, Senior Trader
Mark Taylor, Senior Portfolio Manager–Quantitative Research
Leif Thybony, Senior Portfolio Manager–High Yield and Leveraged Loans
Dawn Tuescher, Executive Administrative Assistant
Sarah Zhao, Investment Operations Analyst
(Some individuals may have attended only portions of the meeting.)

OPEN SESSION

With a quorum present, Edwin Denson, Chair of the Investment Committee, called the meeting to order at 1:02 p.m.

1. <u>Approval of the Minutes</u>

Mr. Denson asked if there were any comments on either the open or closed session minutes of the June 24, 2025 Investment Committee ("Committee") meeting. Hearing no comments,

Mr. Denson stated that the Committee could approve both the open and closed session minutes in open session.

Motion: A motion was made by Mr. Mattina and seconded by Mr. Shearer to approve both the open session and the closed session minutes of June 24, 2025, as presented. The motion passed unanimously.

2. Q2 2025 Quarterly Updates

A. Private Debt

Chris Prestigiacomo, Head of Private Debt & Venture Capital, presented the *Private Debt Portfolio Investment Committee Quarterly Report*, included on pages 8-19 in the meeting materials. He provided a private debt market update, noting that **(a)** fundraising totaled approximately $70 billion in the first quarter of 2025, representing a year-over-year increase in both commitments and fund count, **(b)** investors continue to prefer more established managers, which received the significant majority of fund commitments, **(c)** direct lending and distressed debt remain the preferred sub-strategies within private debt, **(d)** new deal activity is generally constrained due to tariff-related headwinds and an evolving regulatory landscape, but lenders continue to compete aggressively for high-quality transactions, and **(e)** average leveraged buyout purchase price multiples declined in the second quarter, while default rates remain low.

Mr. Prestigiacomo then reviewed the portfolio's **(i)** characteristics, noting that three loans paid off during the quarter and that average coupon and duration held steady, while average life increased slightly, **(ii)** current below investment grade ("BIG") holdings remained at 6%, but may increase by the end of the third quarter due to several new BIG loans in the pipeline, **(iii)** sector mix, which remained slightly underweight industrial relative to the benchmark, and **(iv)** originations within and outside Wisconsin, noting that there were several Wisconsin opportunities under evaluation.

With respect to performance, Mr. Prestigiacomo stated that the portfolio outperformed its benchmark over the one- and five-year time periods but underperformed for the three-year period, with one loan creating some of the drag. He then reported that there were no problem credits or workouts in the portfolio, confirmed that the portfolio remained in compliance with its guidelines, and discussed the pipeline under review.

B. Real Estate

Jason Rothenberg, Head of Real Estate, presented the *Quarterly Activity Report – Real Estate*, included on pages 20-32 in the meeting materials. He provided a real estate market overview, noting that **(a)** the road to recovery in the real estate market has been bumpier than anticipated through the first half of 2025, with transaction sentiment dampened by macroeconomic and political uncertainty, **(b)** the office sector outlook has improved, with an uptick in leasing and transaction activity, **(c)** cap rate adjustments are likely nearly done and benchmark total return has trended upward over the past few quarters, although net operating income growth has slowed, **(d)** certain subsectors that fared particularly well or poorly during the pandemic have seen a reversal of fortune, as exemplified by the life science office and senior housing sectors, and **(e)** whereas property type dispersion was the dominant theme during the pandemic, returns at present are more dependent on asset and market

selection. Lastly, Mr. Rothenberg answered questions regarding the impact of macroeconomic uncertainty and federal government workforce job cuts on government-related leasing activity.

Mr. Rothenberg then reviewed the real estate portfolio, noting that the portfolio's market value of approximately $11.9 billion, representing just under 9% of the Core Trust Fund ("CTF"), remained relatively flat. He commented that distributed capital slightly exceeded capital calls year-to-date and the team is optimistic that the portfolio will see additional asset sales over the remainder of the year. Mr. Rothenberg also reviewed the portfolio's performance, highlighting outperformance relative to the benchmark over all time periods despite negative absolute returns for the three-year period. He then discussed the portfolio's **(i)** risk profile, which has not materially changed relative to the prior quarter, **(ii)** diversification by property type, highlighting the year-over-year increase in the portfolio's credit exposure, and **(iii)** performance by sub-strategy, noting that industrial has weakened over the one-year period due to new supply coming online and tariff-related uncertainty. Mr. Rothenberg also reviewed the two commitments made in the second quarter, discussed the pipeline under review, and confirmed that the portfolio remained in compliance with its investment guidelines. Lastly, he led the Committee's discussion regarding post-pandemic industrial sector performance.

C. Private Equity & Current Return

Scott Parrish, Head of Private Equity, presented the *Quarterly Activity Report – Private Equity & Current Return*, included on pages 33-58 in the meeting materials. He provided a private equity market update for Q2 2025, noting that **(a)** U.S. private equity fundraising dollars decreased slightly year-over-year, even as the number of funds increased, due to a challenging fundraising environment and longer fundraising periods, **(b)** funds exceeding $1 billion in commitments account for approximately 80% of the capital raised year-to-date, **(c)** U.S. enterprise value-to-EBITDA entry multiples increased slightly year-over-year for transactions funded by broadly syndicated loans while debt levels generally remained flat, indicating an uptick in equity financing, **(d)** U.S. private equity deal volume and value, as well as exit volume and value, all increased year-over-year, **(e)** the number of portfolio company exits was split evenly between corporate acquisitions and sponsor-to-sponsor transactions, with limited overall IPO activity, and **(f)** the uncertainty around tariffs has slowed European fundraising, deal value, and exit value when compared to the U.S.

Mr. Parrish then reported that, as of June 30, 2025, the market value of the private equity and current return portfolios, excluding the venture capital and private debt portfolios, was approximately $23.7 billion and made up nearly 18% of the CTF. He commented that distributed capital exceeded capital calls year-to-date, yielding optimism that the portfolios will be cash flow positive in 2025.

With respect to performance, Mr. Parrish highlighted that **(a)** as of March 31, 2025, the combined private equity and current return portfolios, inclusive of co-investments, achieved second quartile performance for vintage years 2014-2022, with first quartile performance for 2023 and 2024, and **(b)** the private equity and current return portfolios outperformed their benchmarks for the one-, three- and five-year time periods. He then discussed **(i)** the portfolios' contributors and detractors for the second quarter by sub-asset class, with small buyout funds and structured capital driving private equity and current return portfolio performance, respectively, **(ii)** the portfolios' sub-asset class diversification, noting that the

team seeks to increase the percentage of co-investments over time, and **(iii)** public versus private portfolio company exposure, noting that public company exposure remained low. Lastly, Mr. Parrish reviewed the commitments made in Q2 2025, discussed the portfolio pipeline for the third quarter, and confirmed that the portfolio remained in compliance with all investment guidelines.

D. Funds Alpha

Derek Drummond, Head of Funds Alpha, presented the *Funds Alpha Q2 2025 Update*, included on pages 59-65 in the meeting materials. He highlighted that the hedge funds and beta one portfolios all generated positive excess value added ("EVA") across all time periods. With respect to second quarter performance, he commented that **(a)** beta one equity portfolio alpha was driven by international small cap and momentum-focused strategies, **(b)** beta one fixed income portfolio outperformance for the quarter was attributable primarily to country selection and basis trading in emerging markets, and **(c)** the hedge funds portfolio's positive performance was broadly diversified across sub-strategies, led by relative value, tactical trading, and long/short managers.

Mr. Drummond then provided an update on the market environment and portfolio positioning, noting that **(i)** hedge fund managers maintain high gross leverage but low overall net exposure, and are positioned for more dispersion and volatility, **(ii)** U.S. fixed income managers have maintained their risk-off positioning, while emerging market debt idiosyncratic risk remains elevated, and **(iii)** the potential impact of tariffs on consumers, growth, and monetary policy is likely to constitute a key consideration for managers in the third quarter. Mr. Drummond also reviewed manager positioning and factor exposures in the beta one portfolios and confirmed that all portfolios were in compliance with their guidelines for Q2 2025. Lastly, he led the Committee's discussion regarding managers declining to take material amounts of directional risk amid an uncertain macroeconomic environment.

3. Convene in Closed Session

Motion: A motion to go into closed session as authorized pursuant to sections 19.85(1)(e) and 19.36(5) of the Wisconsin Statutes to consider confidential strategies for the investment of public funds, including **(a)** the review of active risk profiles and positioning of portfolio investments and the Core and Variable Trust Funds, **(b)** the review of specific proprietary investment strategies and investment instruments related to private debt, venture capital, real estate, private equity, funds alpha, and exposure management, and **(c)** discussion of the impact of recent events on portfolio positioning, was made by Mr. Stanton and seconded by Mr. Drummond.

Mr. Denson called for a roll call vote.

Denson-Aye	Fink-Aye	Mattina-Aye	Cavaglia-Aye
Drummond-Aye	Linn-Aye	Maung-Aye	Nicholson-Aye
Rector-Aye	Shearer-Aye	Stanton-Aye	Zhang-Aye

There being twelve ayes and no nays, Mr. Denson declared the motion passed. The Committee convened in closed session at 1:40 p.m. and reconvened in open session at 2:51 p.m.

4. Announcement of Committee Actions Relating to Items Taken Up in Closed Session

Mr. Denson announced that, while in closed session, the Committee **(i)** reviewed active risk profiles and positioning of portfolio investments and the Core and Variable Trust Funds, **(ii)** reviewed specific proprietary investment strategies and investment instruments related to private debt, venture capital, real estate, private equity, funds alpha, and exposure management, and **(iii)** discussed of the impact of recent events on portfolio positioning.

5. Soft Risk Parameters

Hassan Chehime, Head of Risk Management, noted that the report *Soft Risk Parameters–Asset Class and Portfolio*, as of June 30, 2025, was included on pages 152-153 in the meeting materials for the Committee's review. Mr. Chehime noted that there was one new discussion trigger relating to the small cap portfolio's ex ante tracking error and that no discussion triggers had been dropped.

6. Future Meeting Topics

Mr. Denson noted that draft agendas for the August 26, 2025 and September 23, 2025 Committee meetings were included on pages 154-157 in the meeting materials for the Committee's review.

7. Adjournment

Motion: A motion to adjourn the meeting was made by Mr. Shearer and seconded by Mr. Maung. The motion passed unanimously, and the meeting adjourned at 2:53 p.m.

Date of Committee Approval: 08/26/25

Signed: */s/ Eric Barber*
Eric Barber, Secretary
Investment Committee

AGENDA / NOTICE

SWIB STATE OF WISCONSIN INVESTMENT BOARD

Name of Meeting: Staff Investment Committee Meeting
Date/Time: Tuesday, August 26, 2025 1:00 pm
Room: 7th Floor Conference Room - 7022
Address: 4703 Madison Yards Way, Madison, WI 53705

Est. Time Minutes	Action Item	Topic	Presenter
		OPEN SESSION	
	Motion	1. Approval of the Minutes – Open Session A. July 29, 2025	
5		2. October Board Workshop Preview	Todd Mattina
5	Motion	3. NEPC 2025 Benchmark Review and Recommendation	Joe Nankof, NEPC
5		4. Global Public Market Strategies Division Update	Mike Shearer Nick Stanton
20		5. Q2 2025 Quarterly Updates A. Multi-Strat B. Fixed Income C. Small Cap D. LIRM	 Chase Nicholson Mike Shearer Joy Mukherjee Andrea Ruiz
	Motion	**CLOSED SESSION***	
	Motion	**RECONVENE IN OPEN SESSION**	
		6. Announcement of Committee Actions Relating to Items Taken Up in Closed Session	
		7. Soft Risk Parameters (No presentation unless requested)	
		8. Future Meeting Topics	
	Motion	9. Motion to Adjourn	

* A motion to go into closed session at this meeting is authorized pursuant to sections 19.85(1)(e) and 19.36(5) of the Wisconsin Statutes (a) to consider confidential strategies for the investment of public funds, including (i) the review of active risk profiles and positioning of portfolio investments and the Core and Variable Trust Funds, (ii) the review of specific proprietary investment strategies and investment instruments related to multi-strat, fixed income strategies, small cap equities, LIRM, and exposure management, and (iii) discussion of the impact of recent events on portfolio positioning, and (b) to discuss and approve prior closed session minutes that discuss the same. The Committee may convene in additional closed sessions or announce additional closed session items at the meeting in accordance with the procedure outlined in the Attorney General's Opinion reported at 66 OAG 106 (1977). Whenever a closed session is held, the committee will subsequently reconvene in open session to cover remaining agenda items.

		NOTES: Items may be taken in order other than listed. *The meeting site is physically accessible. Upon prior request, reasonable accommodations will be provided.*	

Future Meetings	**Voting Committee Members:**
9/23/25 – September Committee Mtg. 10/28/25 – October Committee Mtg. 11/25/25 – November Committee Mtg. 12/18/25 – December Committee Mtg.	**Edwin Denson (Chair)**, Executive Director/Chief Investment Officer **Anne-Marie Fink**, Private Markets & Funds Alpha–CIO **Todd Mattina**, Head Economist, Asset & Risk Allocation–CIO **Stefano Cavaglia**, Senior Portfolio Manager–Asset & Risk Allocation **Derek Drummond**, Head of Funds Alpha **Diane Linn**, Senior Portfolio Manager–Multi-Asset Strategies **Lin Maung**, Senior Portfolio Manager–Private Equity **Chase Nicholson**, Senior Portfolio Manager–Multi-Asset Strategies **Jason Rector**, Senior Portfolio Manager–Funds Alpha **Mike Shearer**, Head of Fixed Income Strategies **Nick Stanton**, Head of Multi-Asset Strategies **Ivy Zhang**, Senior Portfolio Manager–Asset & Risk Allocation **Non-voting Committee Members:** **Rochelle Klaskin**, Deputy Executive Director/Chief Operating Officer **Eric Barber (Secretary)**, Chief Legal Counsel **Hassan Chehime**, Head of Risk Management

AGENDA / NOTICE

SWIB STATE OF WISCONSIN INVESTMENT BOARD

Name of Meeting: Staff Investment Committee Meeting
Date/Time: Tuesday, September 23, 2025 1:00 pm
Room: 7th Floor Conference Room - 7022
Address: 4703 Madison Yards Way, Madison, WI 53705

Est. Time Minutes	Action Item	Topic	Presenter
		OPEN SESSION	
	Motion	1. Approval of the Minutes – Open Session A. August 26, 2025	
5		2. October Board Workshop Preview	Todd Mattina
10	Motion	3. Amendments to Investment Committee WRS Investment Guidelines	Lisa Lange
5		4. Transition Update (Q2 2025)	Joe Roth
	Motion	**CLOSED SESSION***	
	Motion	**RECONVENE IN OPEN SESSION**	
		5. Announcement of Committee Actions Relating to Items Taken Up in Closed Session	
15		6. Separately Managed Funds Update	Bridget Chen Rob Thornton
5		7. Research Task Force Report	Stefano Cavaglia
10		8. Corporate Governance Update	Tom Robinson
		9. Quarterly Performance Review (Q2 2025) (No presentation unless requested)	
		10. Soft Risk Parameters (No presentation unless requested)	

* A motion to go into closed session at this meeting is authorized pursuant to sections 19.85(1)(e) and 19.36(5) of the Wisconsin Statutes (a) to consider confidential strategies for the investment of public funds, including (i) the review of active risk profiles and positioning of portfolio investments and the Core and Variable Trust Funds, (ii) the review of specific proprietary investment strategies and investment instruments related to asset and risk allocation, multi-asset, and exposure management, (iii) the review of broker information, and (iv) discussion of the impact of recent events on portfolio positioning, and (b) to discuss and approve prior closed session minutes that discuss the same. The Committee may convene in additional closed sessions or announce additional closed session items at the meeting in accordance with the procedure outlined in the Attorney General's Opinion reported at 66 OAG 106 (1977). Whenever a closed session is held, the committee will subsequently reconvene in open session to cover remaining agenda items.

		11. Fair Value Measurement Review of WRS Investments (No presentation unless requested)	
		12. Future Meeting Topics	
	Motion	13. Motion to Adjourn	
		NOTES: Items may be taken in order other than listed. *The meeting site is physically accessible. Upon prior request, reasonable accommodations will be provided.*	

Future Meetings	**Voting Committee Members:**
10/28/25 – October Committee Mtg. 11/25/25 – November Committee Mtg. 12/18/25 – December Committee Mtg.	**Edwin Denson (Chair)**, Executive Director/Chief Investment Officer **Anne-Marie Fink**, Private Markets & Funds Alpha–CIO **Todd Mattina**, Head Economist, Asset & Risk Allocation–CIO **Stefano Cavaglia**, Senior Portfolio Manager–Asset & Risk Allocation **Derek Drummond**, Head of Funds Alpha **Diane Linn**, Senior Portfolio Manager–Multi-Asset Strategies **Lin Maung**, Senior Portfolio Manager–Private Equity **Chase Nicholson**, Senior Portfolio Manager–Multi-Asset Strategies **Jason Rector**, Senior Portfolio Manager–Funds Alpha **Mike Shearer**, Head of Fixed Income Strategies **Nick Stanton**, Head of Multi-Asset Strategies **Ivy Zhang**, Senior Portfolio Manager–Asset & Risk Allocation **Non-voting Committee Members:** **Rochelle Klaskin**, Deputy Executive Director/Chief Operating Officer **Eric Barber (Secretary)**, Chief Legal Counsel **Hassan Chehime**, Head of Risk Management

AGENDA / NOTICE

SWIB STATE OF WISCONSIN INVESTMENT BOARD

Name of Meeting: Staff Investment Committee Meeting
Date/Time: Tuesday, October 28, 2025 1:00 pm
Room: 7th Floor Conference Room - 7022
Address: 4703 Madison Yards Way, Madison, WI 53705

Est. Time Minutes	Action Item	Topic	Presenter
		OPEN SESSION	
	Motion	1. Approval of the Minutes – Open Session A. September 23, 2025	
20	Motion	2. Annual Benchmark Presentation	Joe Nankof, NEPC
5		3. Private Markets & Funds Alpha Division Update	Anne-Marie Fink
45		4. Q3 2025 Quarterly Updates A. Private Debt B. Real Estate C. Private Equity & Current Return D. Funds Alpha	 Chris Prestigiacomo Jason Rothenberg Scott Parrish Derek Drummond
	Motion	**CLOSED SESSION***	
	Motion	**RECONVENE IN OPEN SESSION**	
		5. Announcement of Committee Actions Relating to Items Taken Up in Closed Session	
5		6. October Board Workshop Debrief	Todd Mattina
		7. Soft Risk Parameters (No presentation unless requested)	
		8. Future Meeting Topics	
	Motion	9. Motion to Adjourn	

* A motion to go into closed session at this meeting is authorized pursuant to sections 19.85(1)(e) and 19.36(5) of the Wisconsin Statutes (a) to consider confidential strategies for the investment of public funds, including (i) the review of active risk profiles and positioning of portfolio investments and the Core and Variable Trust Funds, (ii) the review of specific proprietary investment strategies and investment instruments related to private debt, venture capital, real estate, private equity, funds alpha, and exposure management, and (iii) discussion of the impact of recent events on portfolio positioning, and (b) to discuss and approve prior closed session minutes that discuss the same. The Committee may convene in additional closed sessions or announce additional closed session items at the meeting in accordance with the procedure outlined in the Attorney General's Opinion reported at 66 OAG 106 (1977). Whenever a closed session is held, the committee will subsequently reconvene in open session to cover remaining agenda items.

NOTES: Items may be taken in order other than listed.

The meeting site is physically accessible. Upon prior request, reasonable accommodations will be provided.

Future Meetings

11/25/25 – November Committee Mtg.
12/18/25 – December Committee Mtg.

Voting Committee Members:

Edwin Denson (Chair), Executive Director/Chief Investment Officer
Anne-Marie Fink, Private Markets & Funds Alpha–CIO
Todd Mattina, Head Economist, Asset & Risk Allocation–CIO
Stefano Cavaglia, Senior Portfolio Manager–Asset & Risk Allocation
Derek Drummond, Head of Funds Alpha
Diane Linn, Senior Portfolio Manager–Multi-Asset Strategies
Lin Maung, Senior Portfolio Manager–Private Equity
Chase Nicholson, Senior Portfolio Manager–Multi-Asset Strategies
Jason Rector, Senior Portfolio Manager–Funds Alpha
Mike Shearer, Head of Fixed Income Strategies
Nick Stanton, Head of Multi-Asset Strategies
Ivy Zhang, Senior Portfolio Manager–Asset & Risk Allocation

Non-voting Committee Members:

Rochelle Klaskin, Deputy Executive Director/Chief Operating Officer
Eric Barber (Secretary), Chief Legal Counsel
Hassan Chehime, Head of Risk Management

STATE OF WISCONSIN INVESTMENT BOARD
Enterprise Risk and Compliance Committee-Open Session

Thursday May 22, 2025

Offices of the Investment Board
4703 Madison Yards Way, Madison, Wisconsin

Committee Members Present: Hassan Chehime, Head of Risk Management (Co-Chair)
Lisa Lange, Director of Compliance & Senior Legal Counsel (Co-Chair)
Jameson Greenfield, Chief Financial Officer (Vice Chair)
Eric Barber, Chief Legal Counsel (Secretary)
Edwin Denson, Executive Director/Chief Investment Officer
Rochelle Klaskin, Deputy Executive Director/Chief Operating Officer
Todd Mattina, Head Economist, Asset & Risk Allocation CIO
Cefe Quesada, Chief Technology Officer

Brandon Brickner, Head of Internal Audit *(non-voting)*

Others Present: Sara Chandler, Chief of Staff & Strategy
Jason Krueger, Compliance Analyst
Alyssa Moore, Compliance Analyst
Trey Edgerle, Compliance Analyst
Sunil Nair, Operational, Financing & Counterparty Risk Director
Olu Olubiyi, Information Security & Governance Manager
Dawn Tuescher, Executive Administrative Assistant
Madeline Warkins, Legal Counsel
Hannibal Smith, Operational Risk Analyst
Vince Janecky, Internal Auditor Data Analyst
Matt Terpstra, Internal Auditor
Dan Gyong, Internal Auditor
J. Michael Collins, Trustee

DRAFT

Open Session

Lisa Lange, Co-Chair of the Enterprise Risk and Compliance Committee ("ERCC"), declared that a quorum was present and called the meeting to order at 10:01 a.m.

1. <u>Approval of Minutes</u>

Ms. Lange confirmed that there were no questions or comments on either the open session or closed session minutes of November 19, 2024, which were included on pages 4-6 in the meeting materials.

Motion: A motion was made by Rochelle Klaskin, Deputy Executive Director/Chief Operating Officer and seconded by Hassan Chehime, Head of Risk Management, to approve the open session and closed session minutes of November 19, 2024, as presented. The motion passed unanimously.

2. Risk Management Division Update

Mr. Chehime presented the Risk Management Update, included on pages 7-11 in the meeting materials. Mr. Chehime updated the Committee on the risk analytics monitor and plans to build architecture around this in 2025. Enhancements to the external manager data process to account for the increase in more complex portfolios were also discussed. Mr. Chehime also gave updates on a number of other initiatives and improvements to investment risk management, including (a) a centralized dashboard to assess physical hazard risks within the Real Estate portfolio, (b) a dashboard to track daily drawdowns and perform ex-post performance attribution and risk for the Global Public Markets Strategies team, (c) improved portfolio and benchmark coverage for Private Equity and Real Estate FactSet modeling, and (d) enhanced extraction of asset characteristics, risk measures, attribution data, factor exposures, and scenario testing outputs from FactSet. Mr. Chehime also summarized the recurring portfolio risk review meetings.

3. Compliance Update

Lisa Lange, Director of Compliance and Senior Legal Counsel, presented the *Compliance Update* for Q4 2024 and Q1 2025, which were included on pages 12-30 in the meeting materials.

A. Q4 2024

Ms. Lange reported that the fourth quarter of 2024 had a higher number of personal trading requests compared to the prior corresponding quarter, with about the same approval rate. There were three personal trading violations in the quarter and no guideline violations or waivers. There were two employees with late compliance affirmations.

B. Q1 2025

Ms. Lange noted that the first quarter of 2025 had a higher number of personal trading requests than the prior quarter, with a slightly higher approval rate. There were two personal trading violations in the quarter. Ms. Lange noted one guideline violation and a related waiver. There were no employees with late compliance affirmations.

Ms. Lange discussed insights with respect to personal trading violations, the response to such violations and the outlook for Compliance initiatives for the remainder of 2025 and for 2026.

4. Convene in Closed Session

Motion: A motion to go into closed session pursuant to section 19.85(1)(d) of the Wisconsin Statutes to consider confidential strategies for crime detection and prevention relating to SWIB's information technology systems and pursuant to sections 19.85(1)(e) and 19.36(5) of the Wisconsin Statutes to consider confidential strategies for the investment of public funds,

including the review of proprietary credit counterparty and broker information, was made by Jameson Greenfield, Chief Financial officer and seconded by Ms. Klaskin.

Eric Barber, Chief Legal Counsel (Secretary), called for a roll call vote.

Barber-Aye	Chehime-Aye	Denson-Aye	Greenfield-Aye
Klaskin-Aye	Lange-Aye	Mattina-Aye	Quesada-Aye

There being eight ayes and no nays, Ms. Lange declared the motion passed. The Committee convened in closed session at 10:40 a.m. and reconvened in open session at 11:33 a.m.

5. Announcement of Matters Taken Up in Closed Session

Ms. Lange announced that, while in closed session, the Committee reviewed (i) risk related to the adoption of artificial intelligence ("AI") tools and chief technology officer updates, and (ii) confidential operational risk updates.

6. Future Meeting Topics

No future meeting topics were discussed.

7. Adjournment

Motion: A motion to adjourn was made by Mr. Barber and seconded by Mr. Chehime. The motion passed unanimously, and the ERCC meeting was adjourned at 11:34 a.m.

Date of Committee Approval: _____

Signed: _____
Eric Barber, Secretary
Enterprise Risk and Compliance Committee

DRAFT

Board Meeting

Tab 8 – Quarterly Investment Update, Q2 2025

SWIB

Quarterly Investment Update

Board Meeting

September 10, 2025

STATE OF WISCONSIN
INVESTMENT BOARD

Performance Trends & Outlook

SWIB
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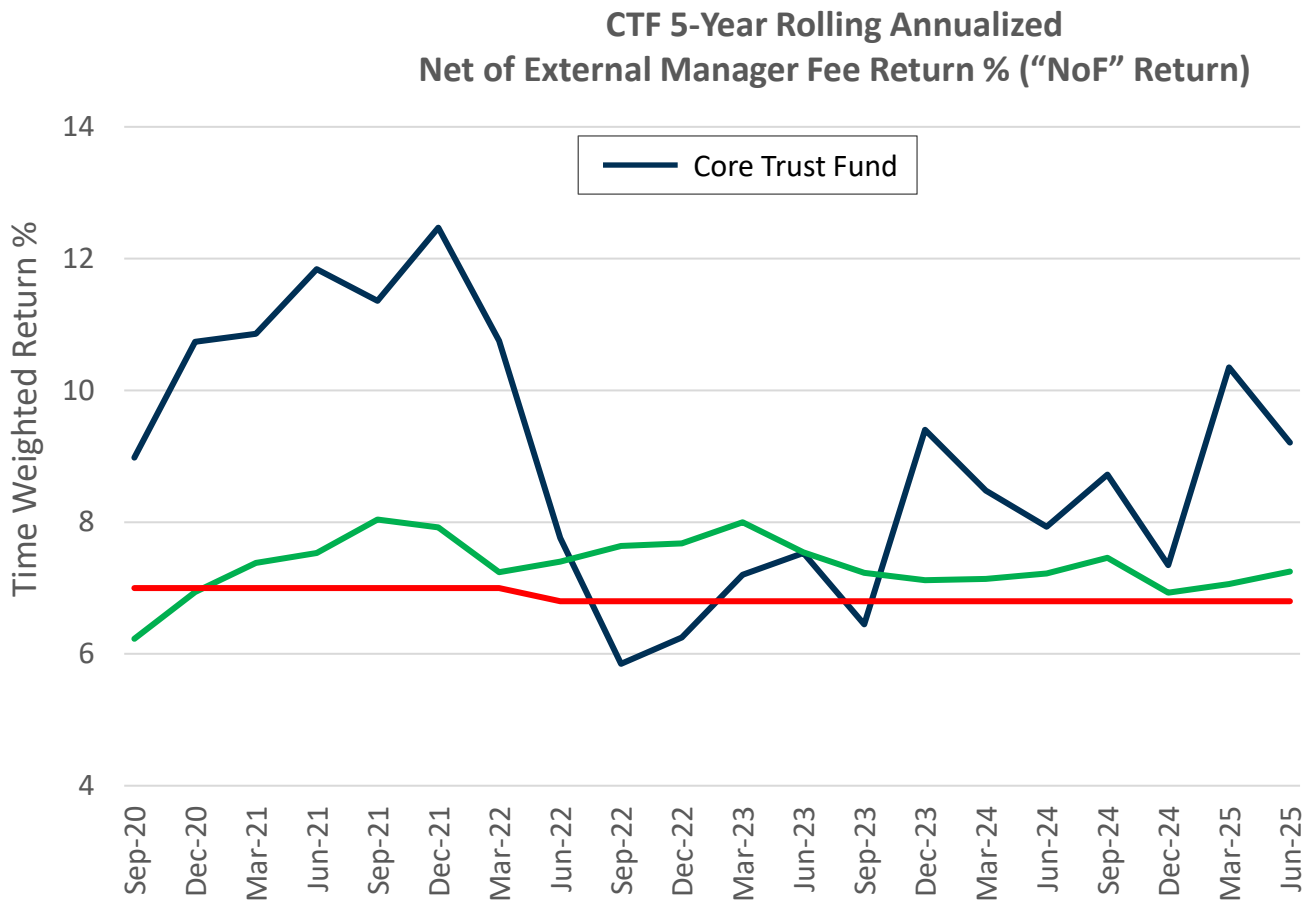
INVESTMENT BOARD

CTF 5-Year Rolling NoF Return Trend

Quarter-end Results Through June 30, 2025



5-Year Annualized NoF Return (as of June 30, 2025)	
9.21%	Core Trust Fund
8.16%	CTF Policy Benchmark

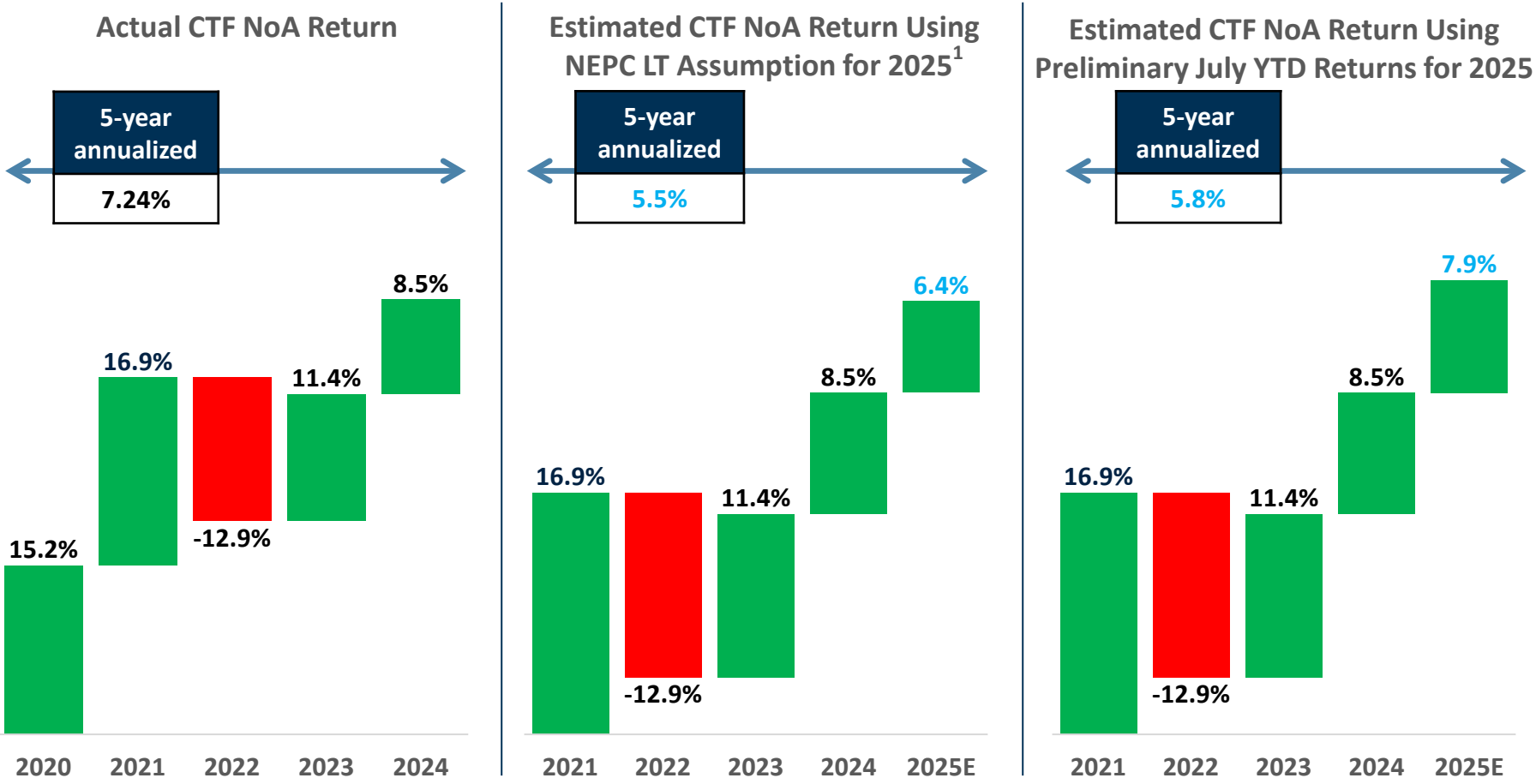
7.25% CTF 20-Year NoF Return

6.8% Actuarial Target Rate of Return

SWIB STATE OF WISCONSIN INVESTMENT BOARD

CTF 5-Year NoA Return Estimate

Calendar year and 5-year annualized returns



[1] 6.4% is NEPC's 10-year expected return for SWIB's 2025 policy portfolio and is used to estimate future year performance through 2028. SWIB's asset allocation process balances risk and expected return to set its asset allocation. The 10-year expected return does not always equal or exceed the WRS assumed rate of return, currently 6.8%. SWIB's actual results may be more or less than the NEPC 10-year expected return.

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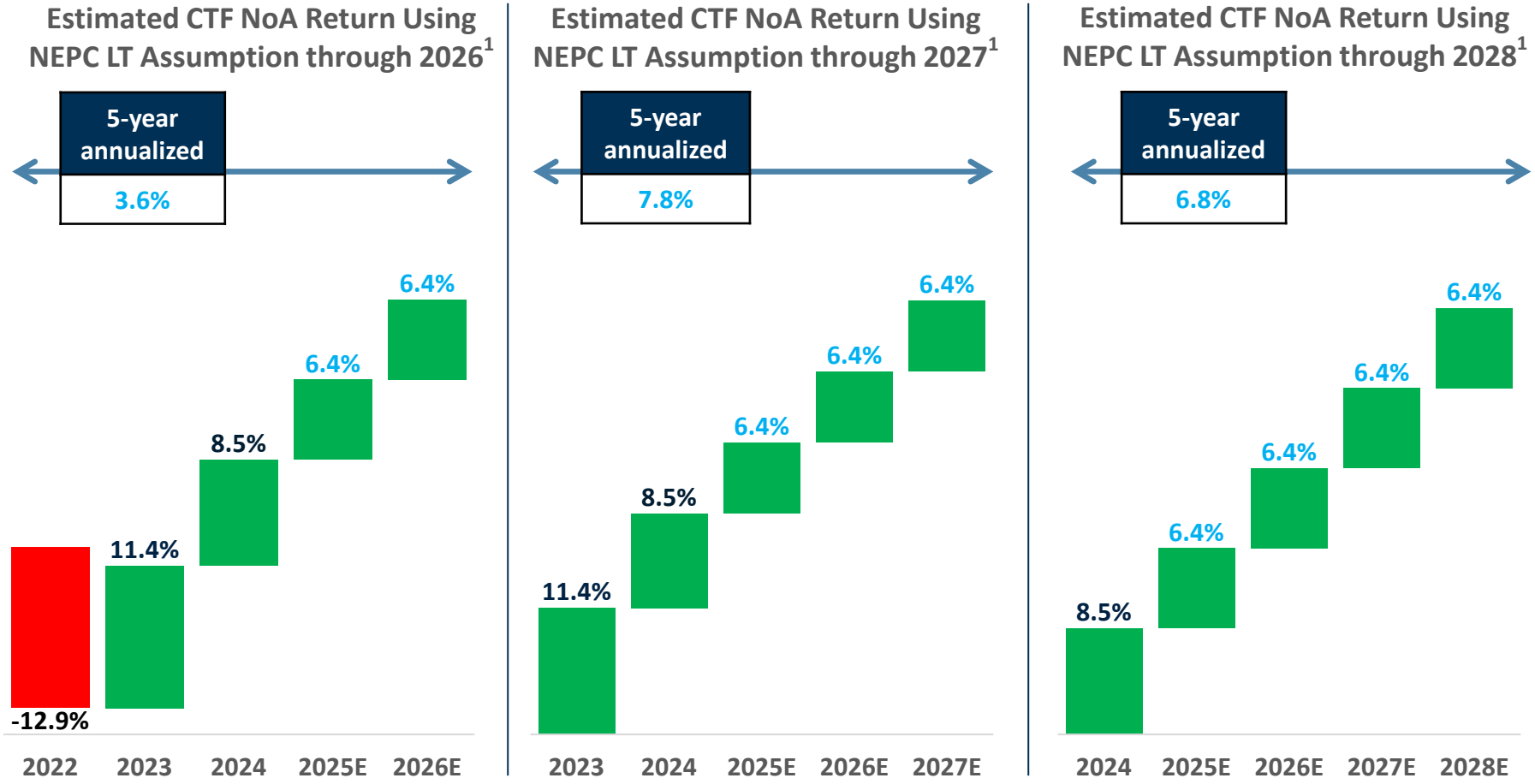
STATE OF WISCONSIN INVESTMENT BOARD

CTF 5-Year NoA Return Forward Estimate

Calendar year and 5-year annualized returns



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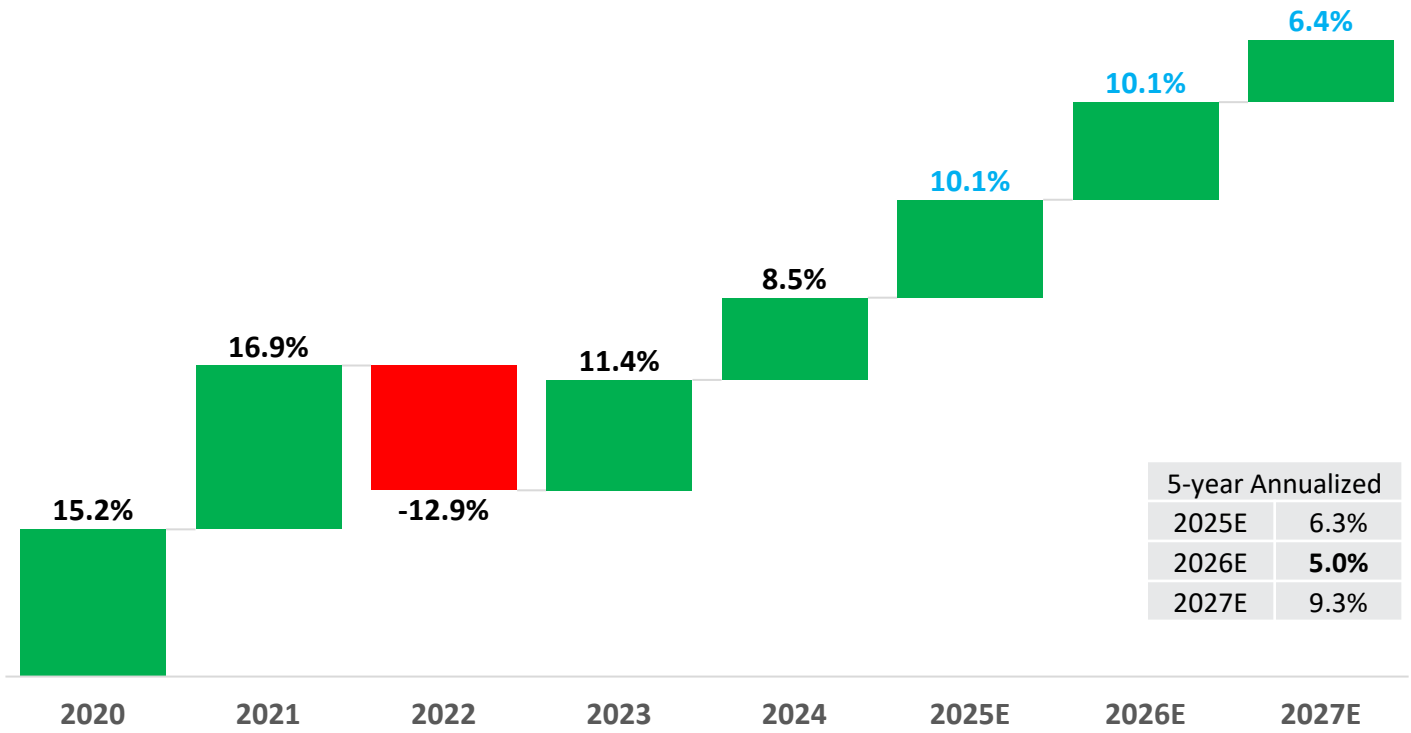
SWIB STATE OF WISCONSIN INVESTMENT BOARD

Average Return Required for No Dividend Cut

Calendar year and 5-year annualized returns

A 10.1% average return for 2025-2026 avoids a negative CTF dividend adjustment[1]



5-year Annualized	
2025E	6.3%
2026E	**5.0%**
2027E	9.3%

[1] Based on SWIB calculations, calendar year returns of 10.1% in 2025E to 2026E would maintain the 5-year annualized return at 5% or higher to avoid a negative dividend adjustment. The ETF Effective Rate is assumed to be the same as the 5-year annualized CTF NOA Return. NEPC 10-year expected return assumption is used to estimate 2027.

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CTF Policy Benchmark & Other Indices

July 31, 2025: Total Rate of Return %, Annualized					
Index Name (Gross Return Basis, unless noted)	**YTD**	**1yr**	**5yr**	**10yr**	**10yr volatility**
CTF Policy Benchmark (Net)	7.2	8.9	7.5	7.4	8.7
MSCI USA	8.8	17.0	15.7	13.6	15.7
MSCI USA Small Cap	1.9	3.9	11.9	9.0	20.1
MSCI World ex US Equities (Net)	17.6	13.7	10.7	6.4	15.3
MSCI World ex US Equities (Net) (Local)	9.5	10.1	12.6	7.0	12.2
MSCI EAFE Small Cap	21.2	16.4	9.0	6.9	16.8
MSCI Emerging Markets ex China	15.9	10.2	10.3		
MSCI China	23.1	42.3	(1.7)	3.9	24.3
MSCI ACWI	11.9	16.4	13.3	10.6	14.9
MSCI ACWI (Local)	9.6	15.3	14.0	11.0	13.7
Bloomberg US Gov't / Credit	3.7	3.3	(1.3)	1.8	5.2
ICE BOFA High Yield BB/B	5.0	7.6	4.4	20.8	7.3
Bloomberg U.S. TIPs	4.8	4.1	1.2	2.7	5.0

Source: Factset, SWIB

SWIB STATE OF WISCONSIN INVESTMENT BOARD

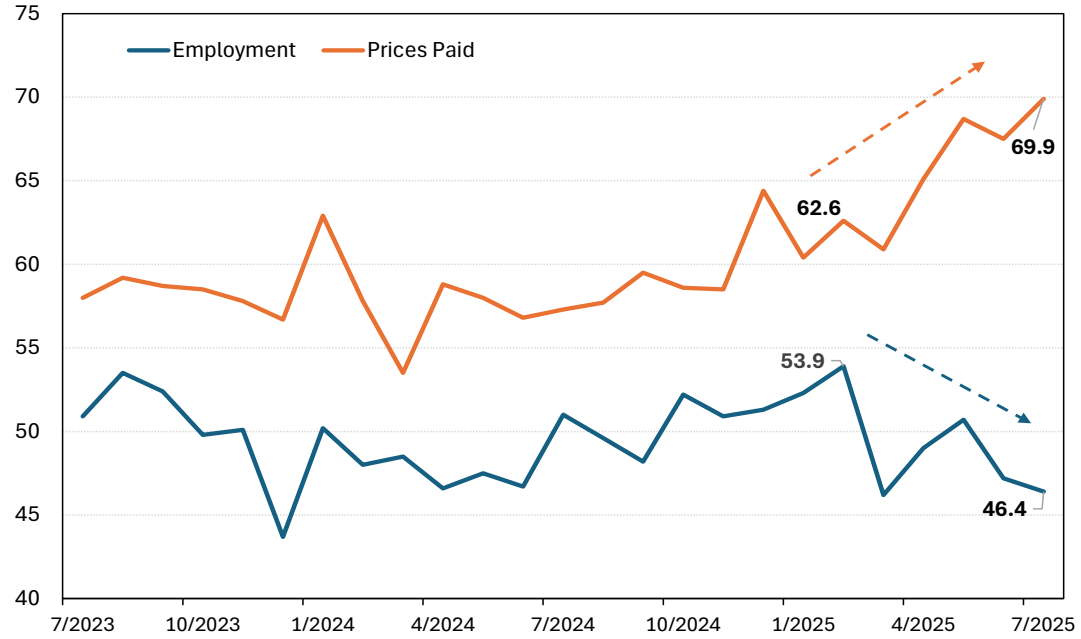
Economic Update:
Review of recent economic developments

Summary

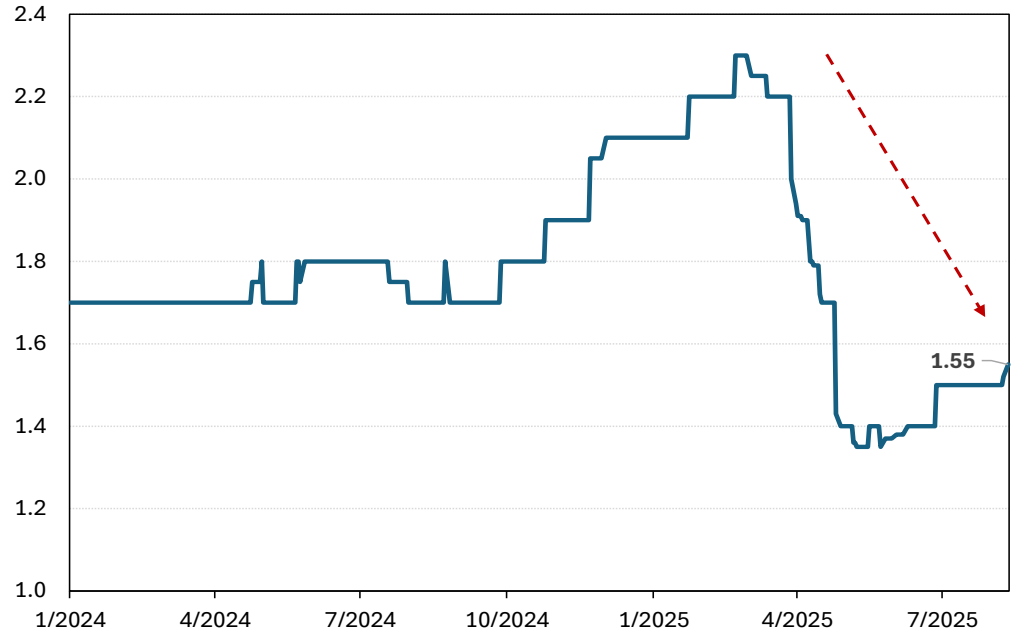
- US economic momentum has slowed while inflation remains above target and trending higher.
- Goods prices are rising, even before tariffs, and service sector prices are not helping much in reducing inflation. The impact of higher tariffs and the weaker dollar may add to inflationary pressures.
- Swap markets are pricing in inflation of about 3% or more in the next two years. Inflation expectations could become "unanchored" from the 2% target if current pricing becomes entrenched.
- The labor market has also cooled this year with a slower pace of net payroll gains.
- Markets anticipate about two Fed rate cuts by year-end, reflecting the softer labor market.
- The US equity market has "looked through" slowing growth momentum and higher inflation expectations.
- Reflecting richer equity valuations, the expected return of US stocks in the next decade has declined. Credit spreads are also below historical averages.
- In contrast, the real yield of TIPS remains attractive relative to history and provides inflation sensitivity.

Economy losing momentum as prices rise

US Services Sector: Higher Prices, Lower Employment
(ISM Employment and Price Indicators: Over 50=Expansion)



Economists Expect Lower Real GDP Growth in 2025
(median forecast in Bloomberg survey)



- ISM indicators* for the US service sector, representing over 70% of GDP, have consistently pointed to higher prices and weaker employment this year.
- Real GDP growth in 2025 is expected to slow to 1.55% based on the consensus survey of forecasters.
- A "stagflationary" shift in the economy is typically bad news for both stocks and fixed income.

*Sources: The Institute for Supply Management (ISM) is a monthly report that measures the economic activity and conditions of the U.S. services sector. The report surveys purchasing and supply executives across numerous service industries, providing key indicators for new orders, employment, prices, and more. A reading above 50 indicates expansion, while a reading below 50 signals contraction. ISM Services data for Employment and Prices Paid are provided via Bloomberg.

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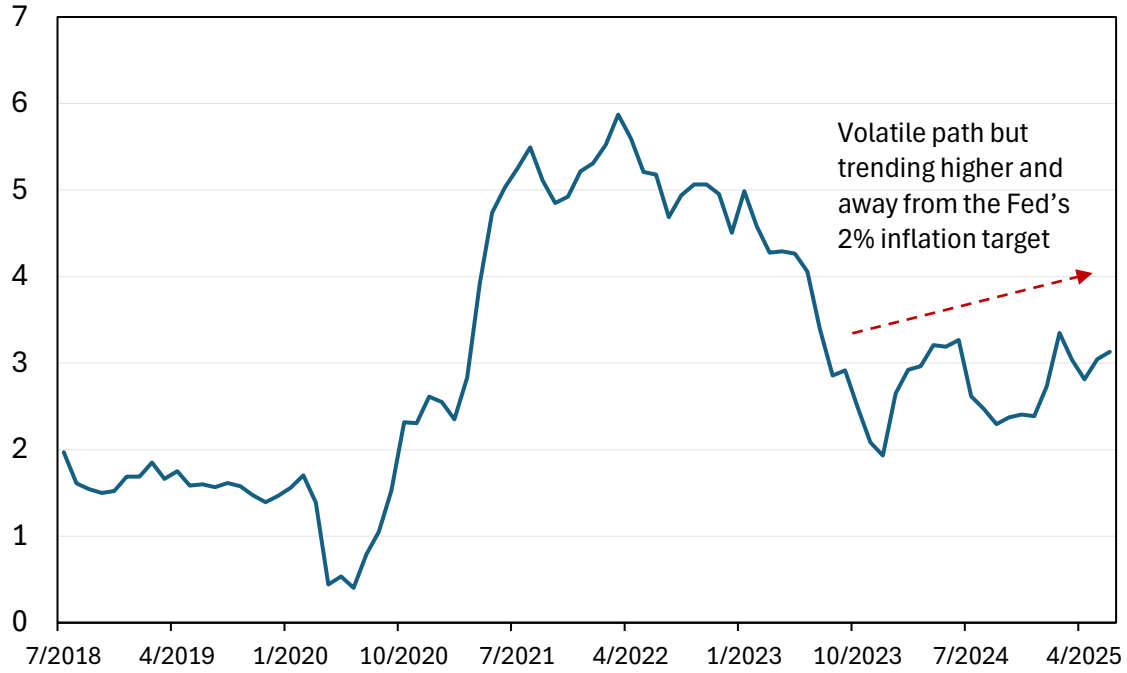
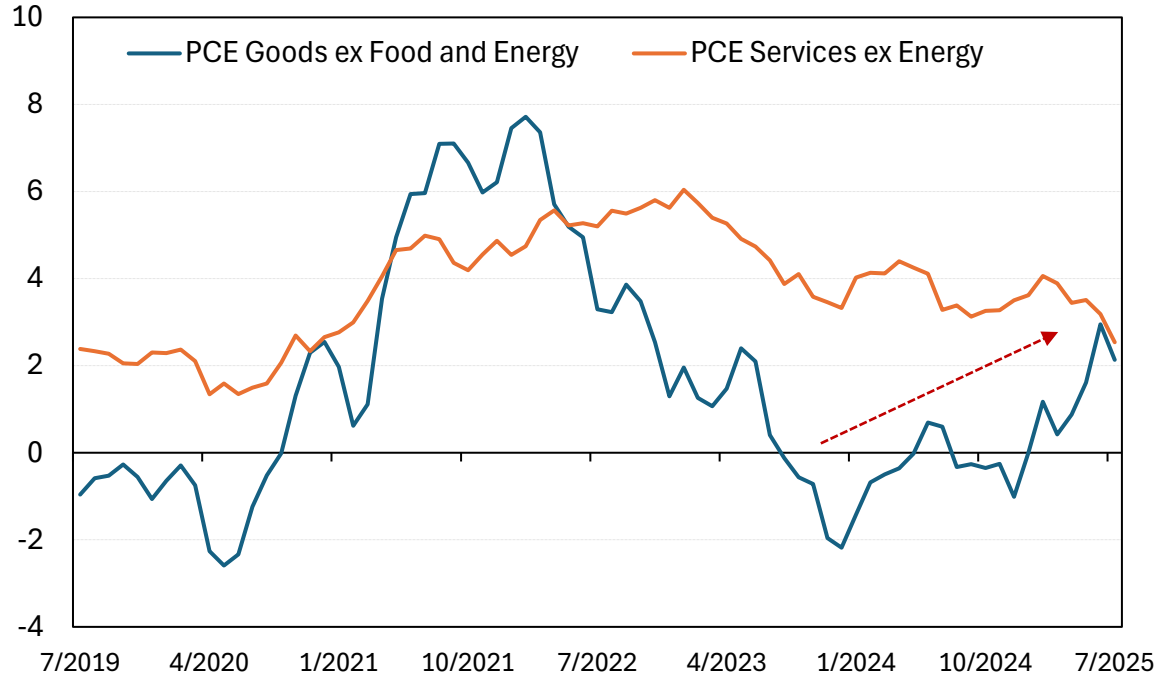
Goods prices are driving inflation even before tariffs

Core PCE Inflation: Above Target and Trending Higher
(6-month average, annualized in %)



Core PCE Inflation Driven by Goods Prices
(6-month average, annualized in %)



- Core PCE inflation (excluding food and energy) has trended higher since 2024.
- Goods prices have been important drivers of the upward trend, even before higher tariffs, while service sector prices have not helped much in reducing overall inflation.

Sources: Core PCE, PCE for Goods excluding Food and Energy, and PCE for Services excluding Energy are provided via Bloomberg.

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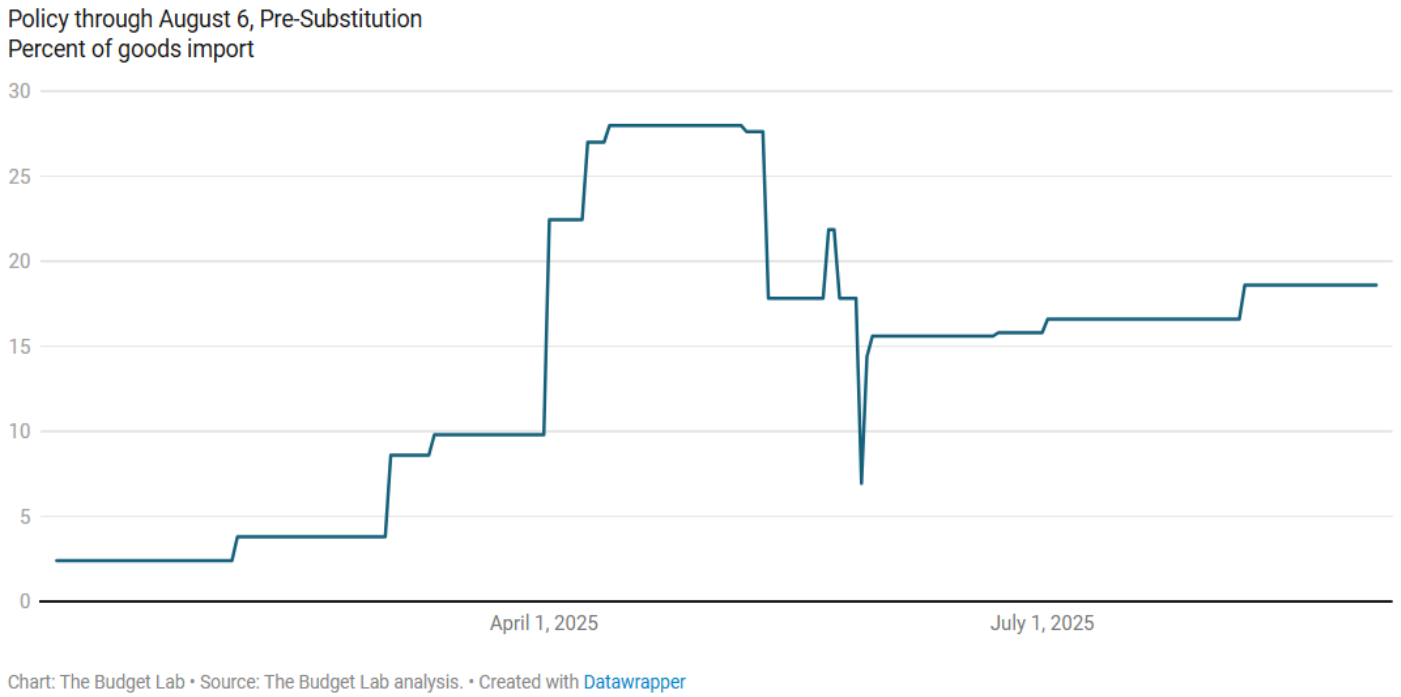
STATE OF WISCONSIN INVESTMENT BOARD

Limited tariff impact on inflation might be unsustainable

Average Effective Tariff Rate in 2025 Based on Announced Policies



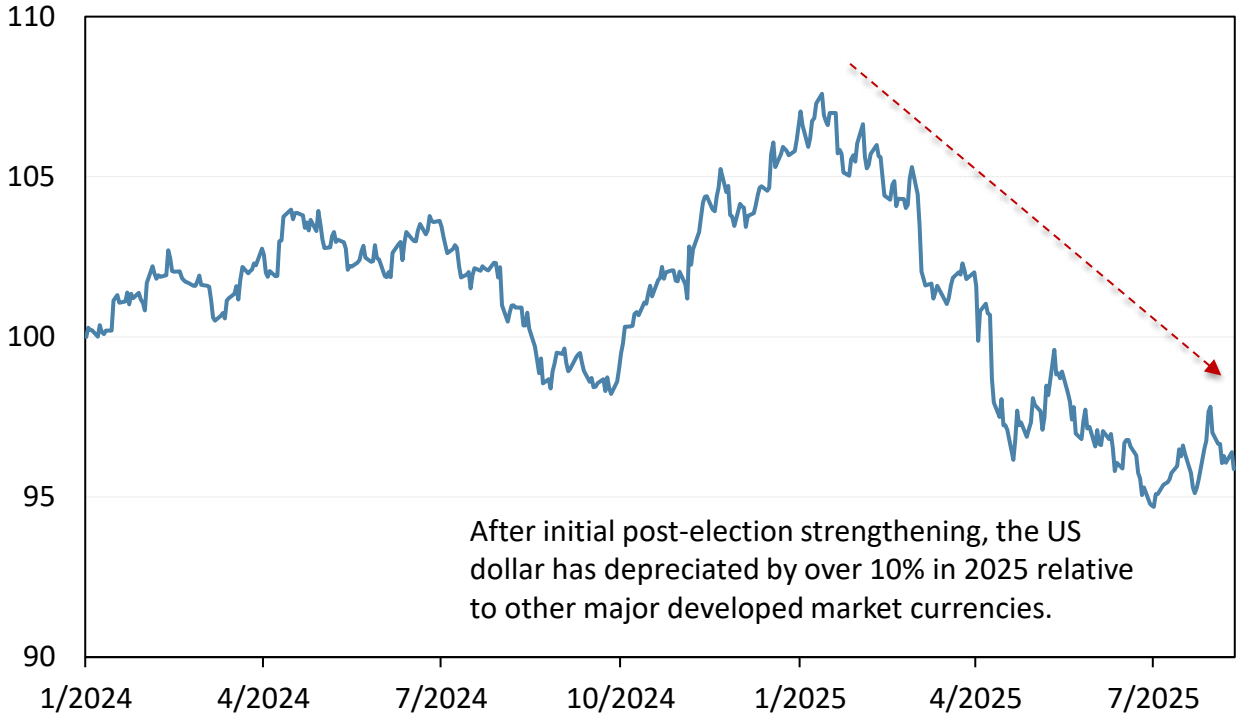
- The US average effective tariff rate based on announced policies has oscillated significantly during the year.
- Based on current policies, the effective tariff rate has increased to 18.6%, the highest in a century.
- The impact on consumer prices has been limited so far.
- However, it is unclear how much of the tariff burden can be sustainably absorbed through lower profit margins.

Source: Yale Budget Lab as of August 12.

SWIB STATE OF WISCONSIN INVESTMENT BOARD

Further US dollar depreciation could add pressure on imported goods prices

US Dollar is Weakening Relative to Major World Currencies
(based on Bloomberg 'DXY' index)



- After initially strengthening following the November election, the US dollar has weakened sharply in 2025.
- The pace of depreciation has stabilized in recent months.
- Further weakening of the US dollar could amplify the inflationary impact of tariffs on imported goods prices.

Sources: Bloomberg's "DXY Index' tracks the US dollar relative to a basket of major world currencies as of August 12.

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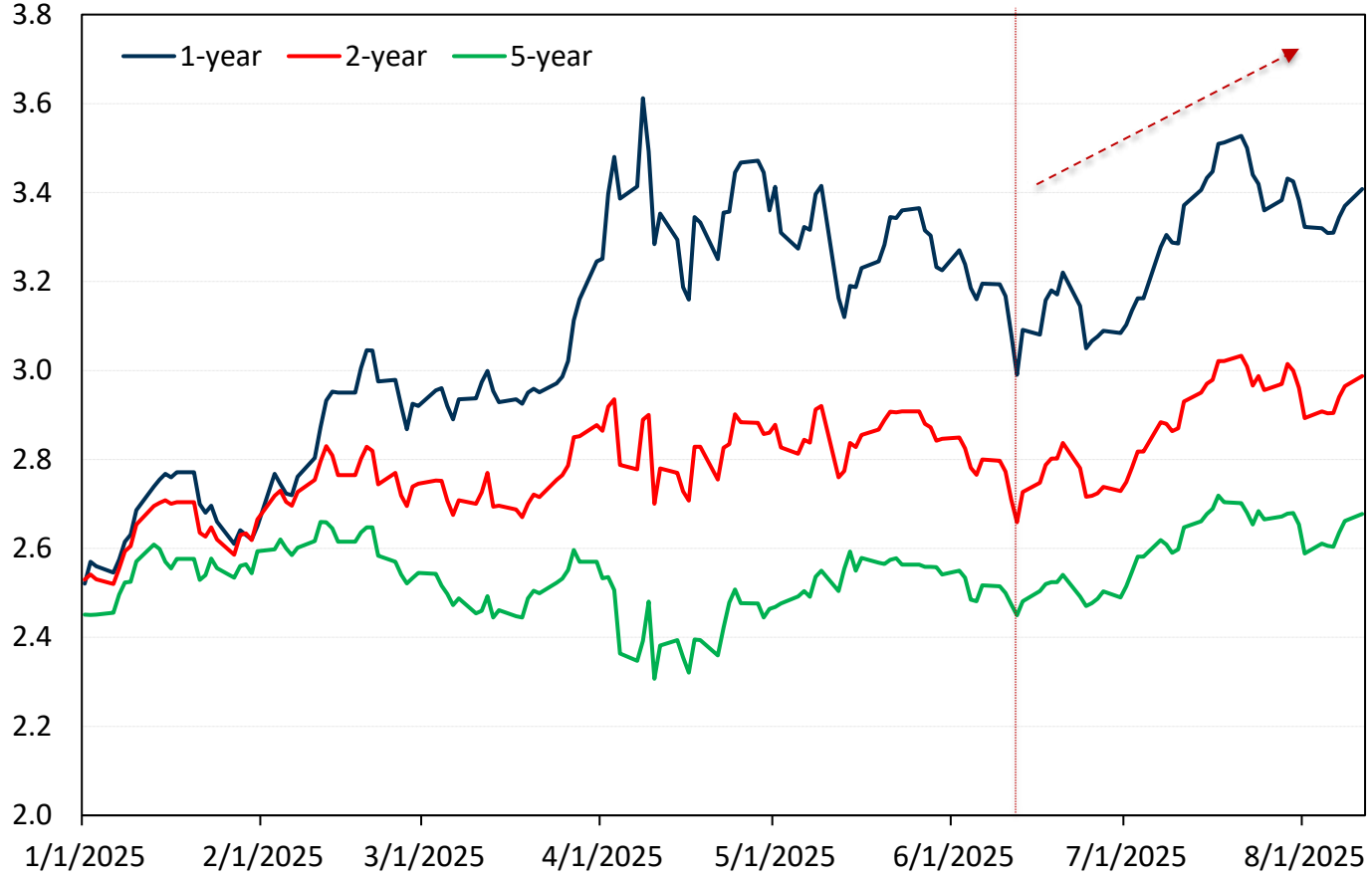
Swap markets are pricing in higher near-term inflation

CPI Inflation Swaps Imply Investors Expect Higher Near-Term Inflation



- From about mid-June, swap markets began pricing in higher expected inflation over the next 5 years.
- At the 1- and 2-year horizons, swaps imply CPI inflation of 3% or more.
- If high expected inflation persists, there is a risk that expectations become unanchored from the Fed's 2% target.

Sources: CPI swap (zero coupon) data for the 1-year, 2-year and 5-year tenors are provided via Bloomberg as of August 14.

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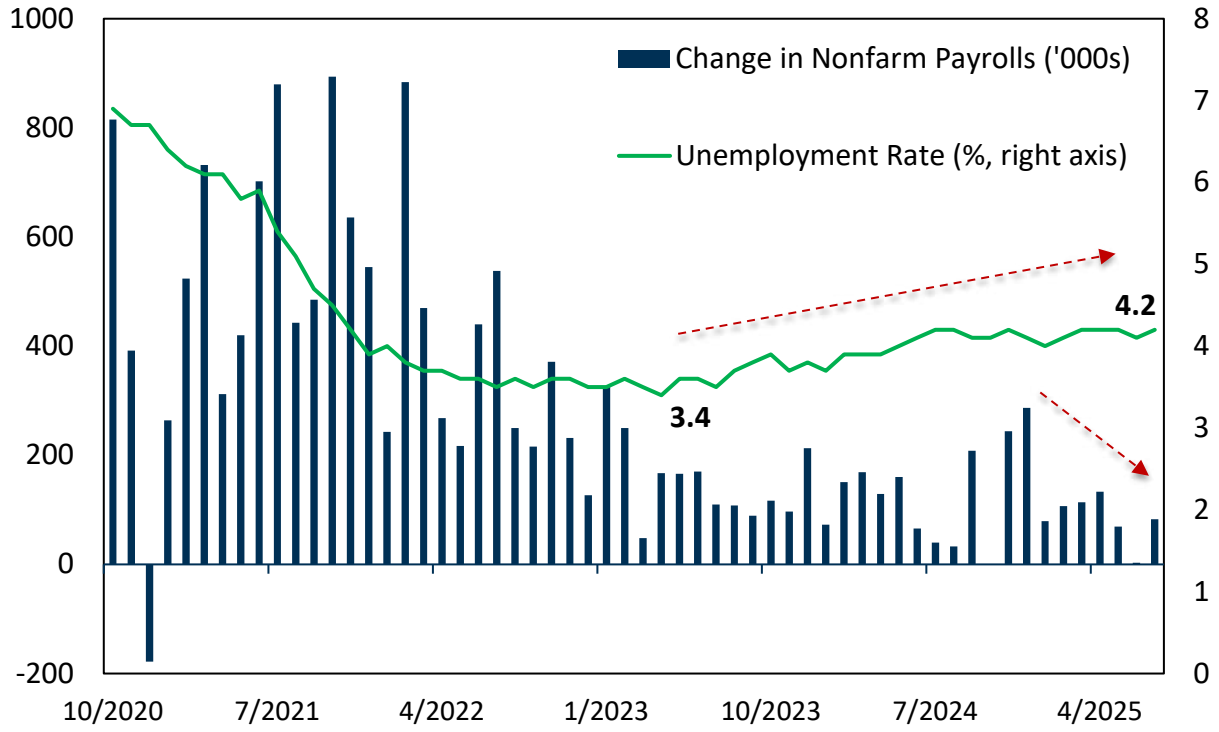
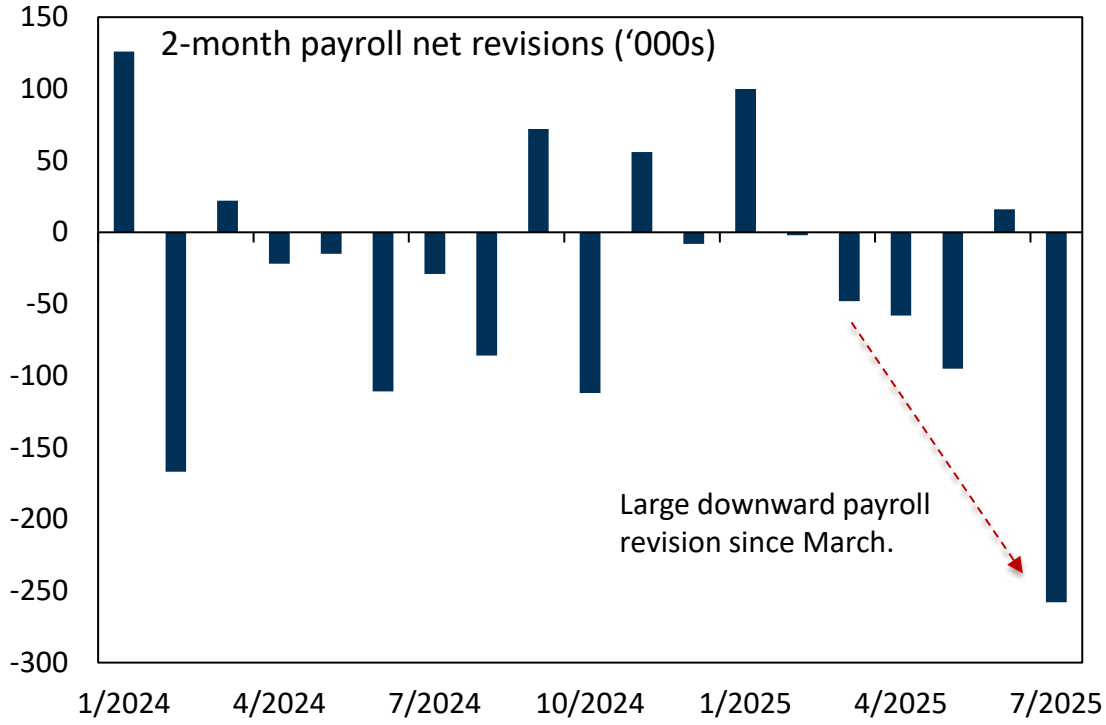
Labor market showing signs of cooling

Slower Pace of Payroll Gains and Rising Unemployment Rate



Large Downward Revision in Net Payrolls Since March



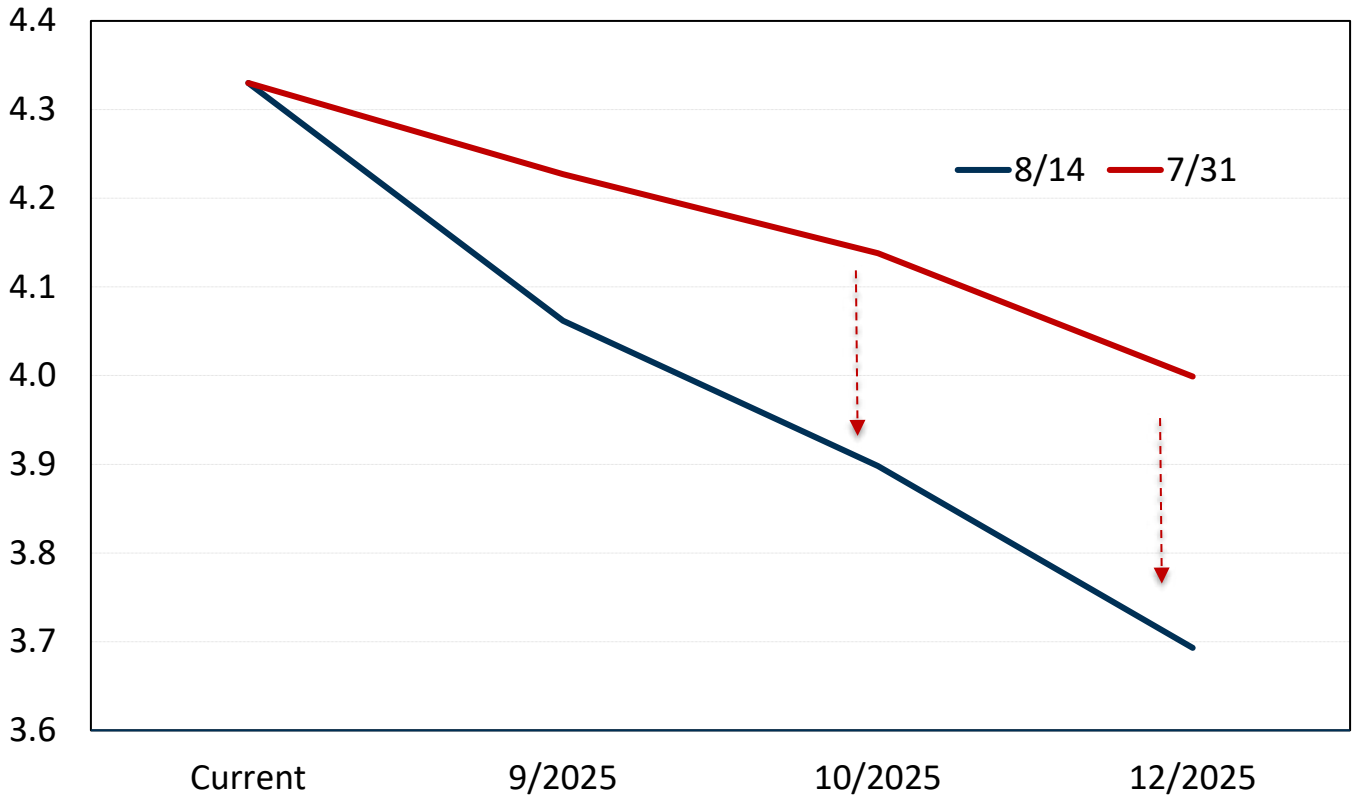
- After showing signs of post-Covid overheating, the labor market has cooled.
- The unemployment rate has steadily increased, and the recent pace of net payroll gains has slowed. Downward revisions since March also suggest a cooler labor market than previously believed.

Sources: Change in nonfarm payrolls, unemployment rate, and net revisions to nonfarm payrolls are provided via Bloomberg. First preliminary estimates of employment are published each month approximately 3 weeks after the month. Estimates are then revised twice. Second preliminary estimates for a given month are published the month following the initial release, and final estimates are published 2 months after the initial release.

SWIB STATE OF WISCONSIN INVESTMENT BOARD

Markets anticipate the Fed will cut rates in response to the softer labor market

Market Expects Additional Fed Rate Cuts After July Payroll Report
(implied Fed Funds Rate in 2025)



- The disappointing payroll report on August 1st led to a re-pricing of Fed rate cuts by year-end.
- Based on Fed Funds Futures, markets anticipate an end-of-year rate of about 3.7% compared to about 4.3% today (over 2 rate cuts).
- With the labor market cooling, but not yet showing signs of stress, the Fed faces a policy dilemma since inflation remains well above the 2% target.

Sources: Implied Fed Funds Rate expectations are calculated and provided via Bloomberg as of August 14.

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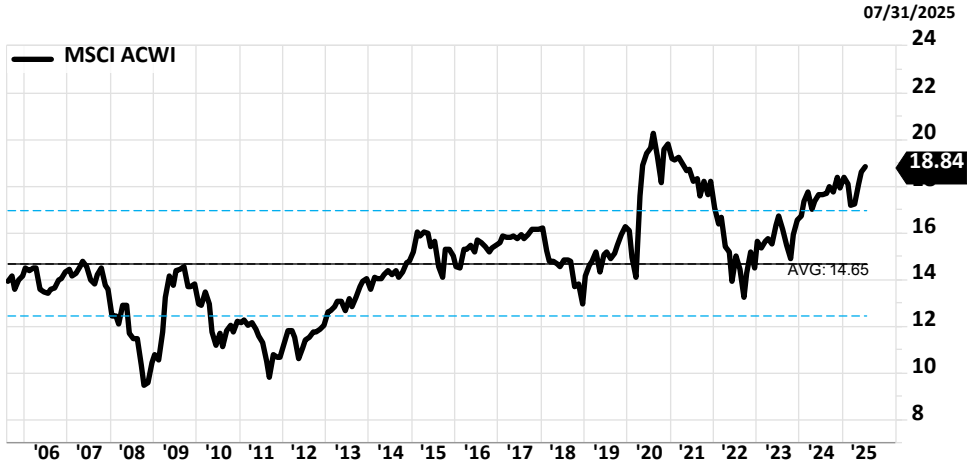
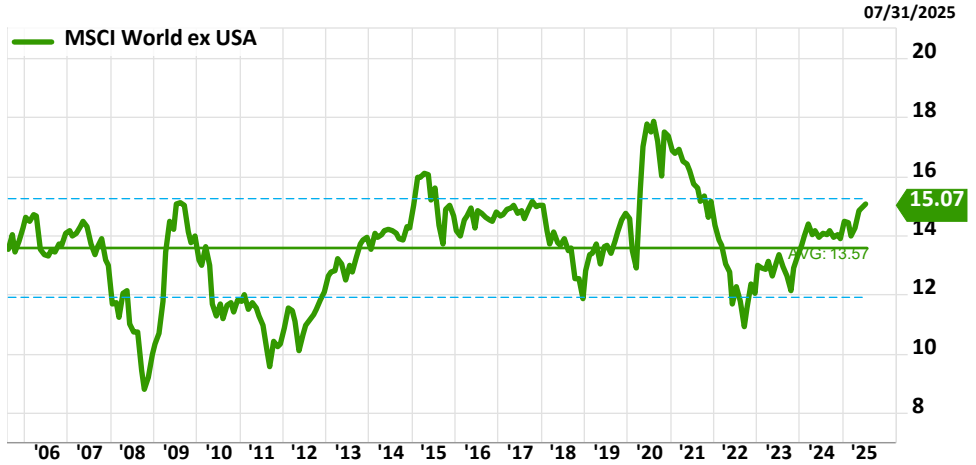
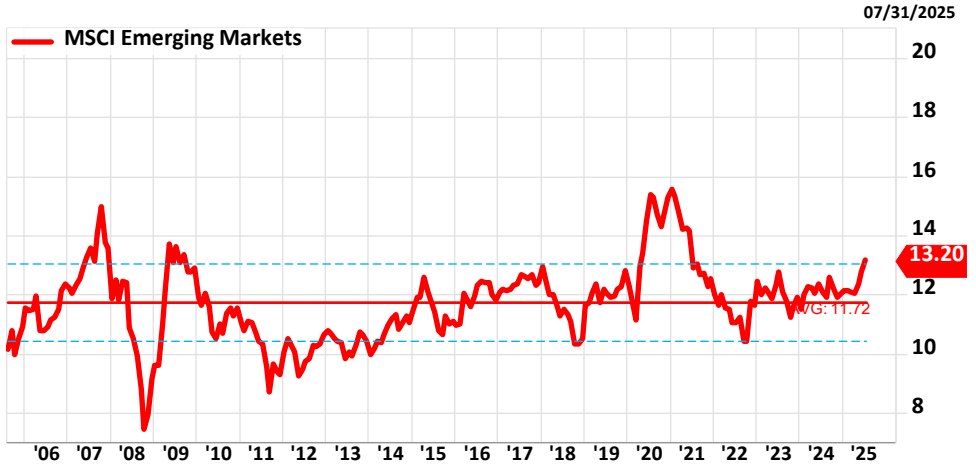
Global Equities - Valuation

US P/E ratio is almost two standard deviations above its 20-year average







Source: FactSet Market Aggregates - Next Twelve Month P/E Ratio, monthly, 20-year Average with 1 Std. Dev. Bands

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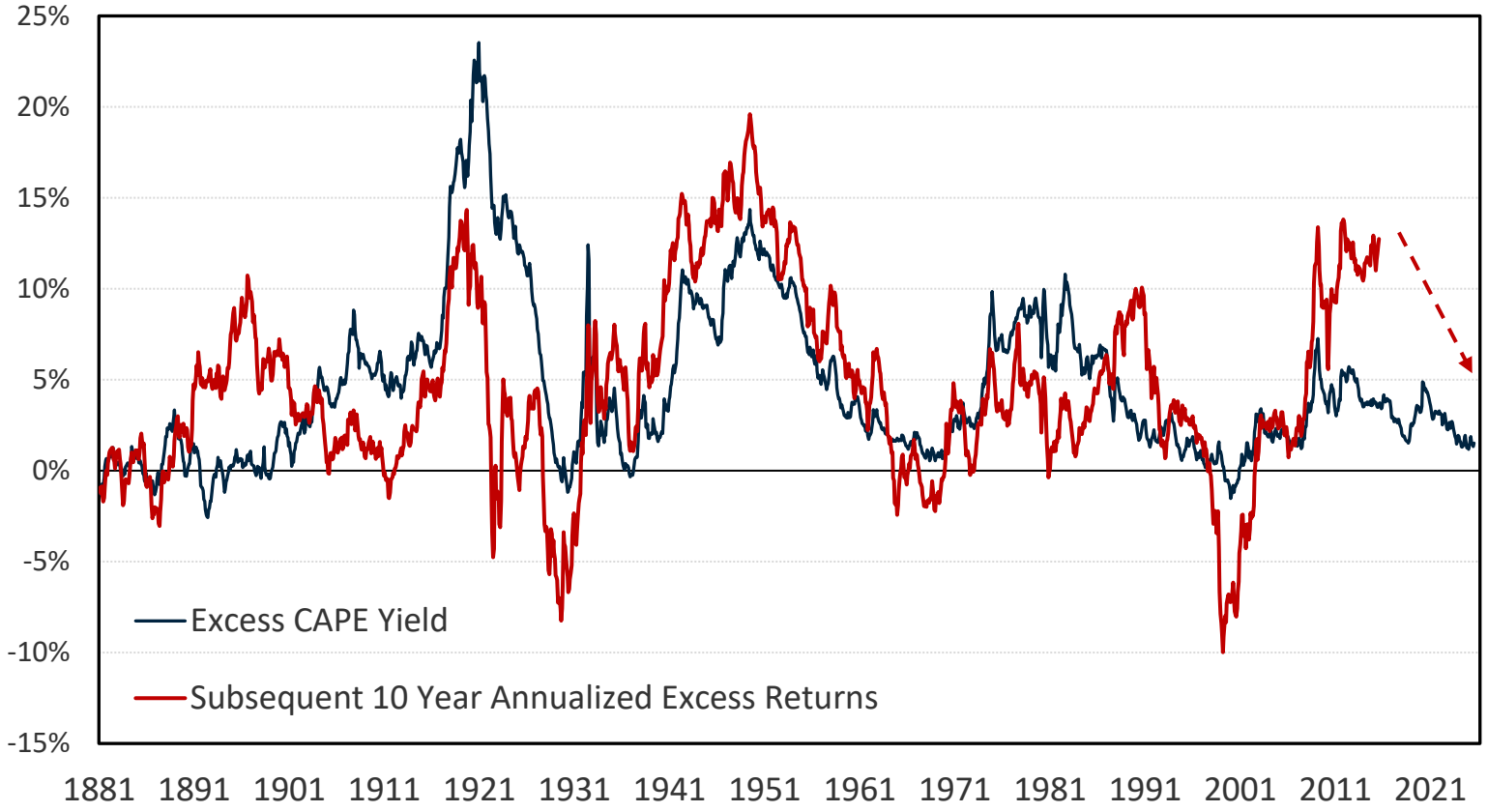
Rich valuations signal lower expected returns in US equities

Shiller's "Excess CAPE Yield" Implies Lower US Equity Returns in Next Decade



- Shiller's "Excess CAPE Yield" is defined as the cyclically-adjusted earnings yield for US stocks less the 10-year Treasury yield after inflation.
- Historically, the Excess CAPE Yield has broadly comoved with the subsequent 10-year equity return.
- The currently low Excess CAPE Yield signals a lower expected return in the next decade, if the historical pattern persists.

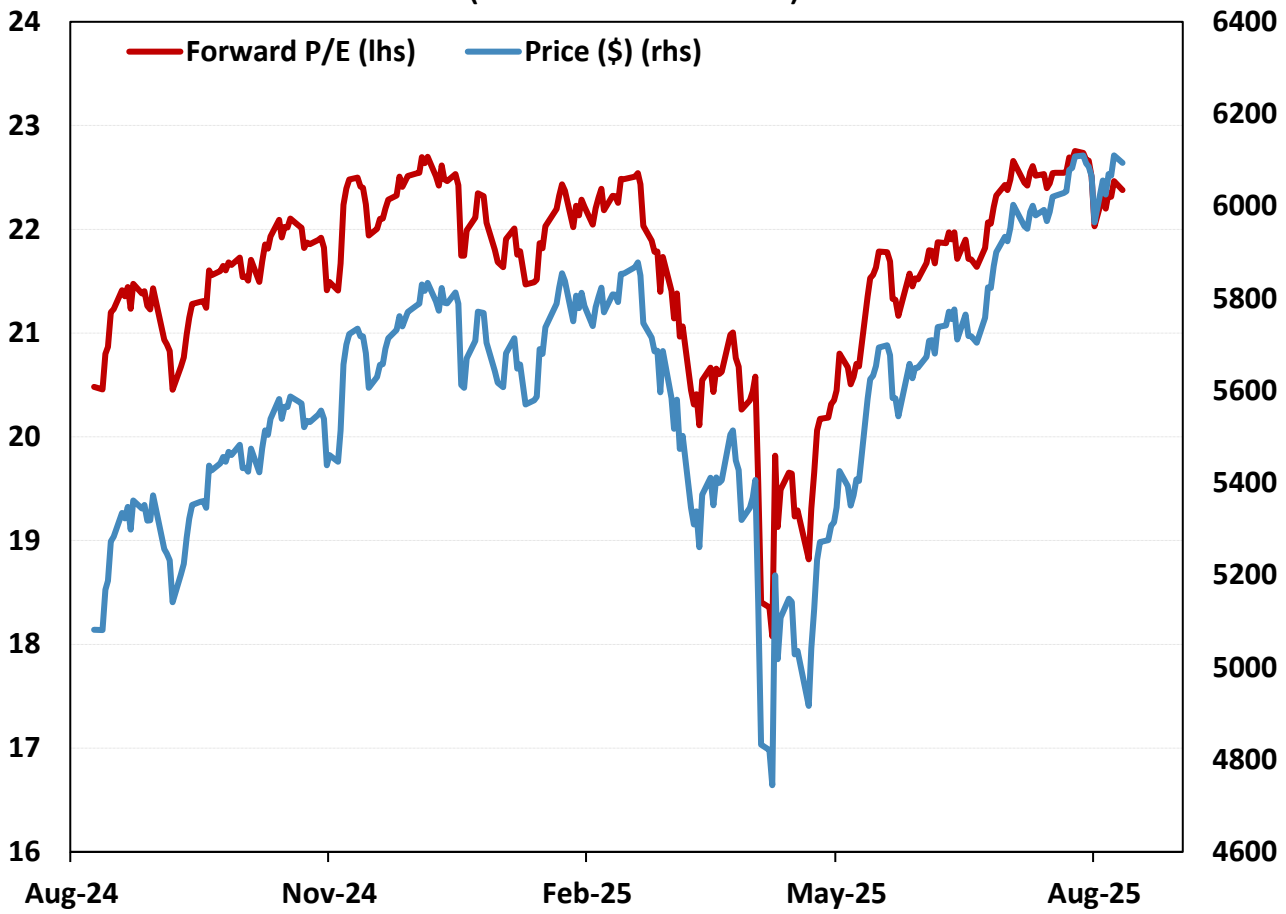
Sources: The "Excess CAPE Yield" is calculated and provided by Professor Robert Shiller at https://shillerdata.com/.

SWIB STATE OF WISCONSIN INVESTMENT BOARD

Richer valuations driving the US equity market rally

Rebound from April Low Driven Largely by Higher Valuations

(MSCI USA index)



- The post-April rebound in US equities was powered mainly by an expansion in valuation multiples (higher Forward P/E) as investors were willing to pay more for the same expected earnings.
- As earnings growth has been uneven across sectors, overall index valuation increasingly depends on narrow leadership.

Sources: Forward P/E ratio and price index data for the MSCI USA are provided via Bloomberg as of August 12.

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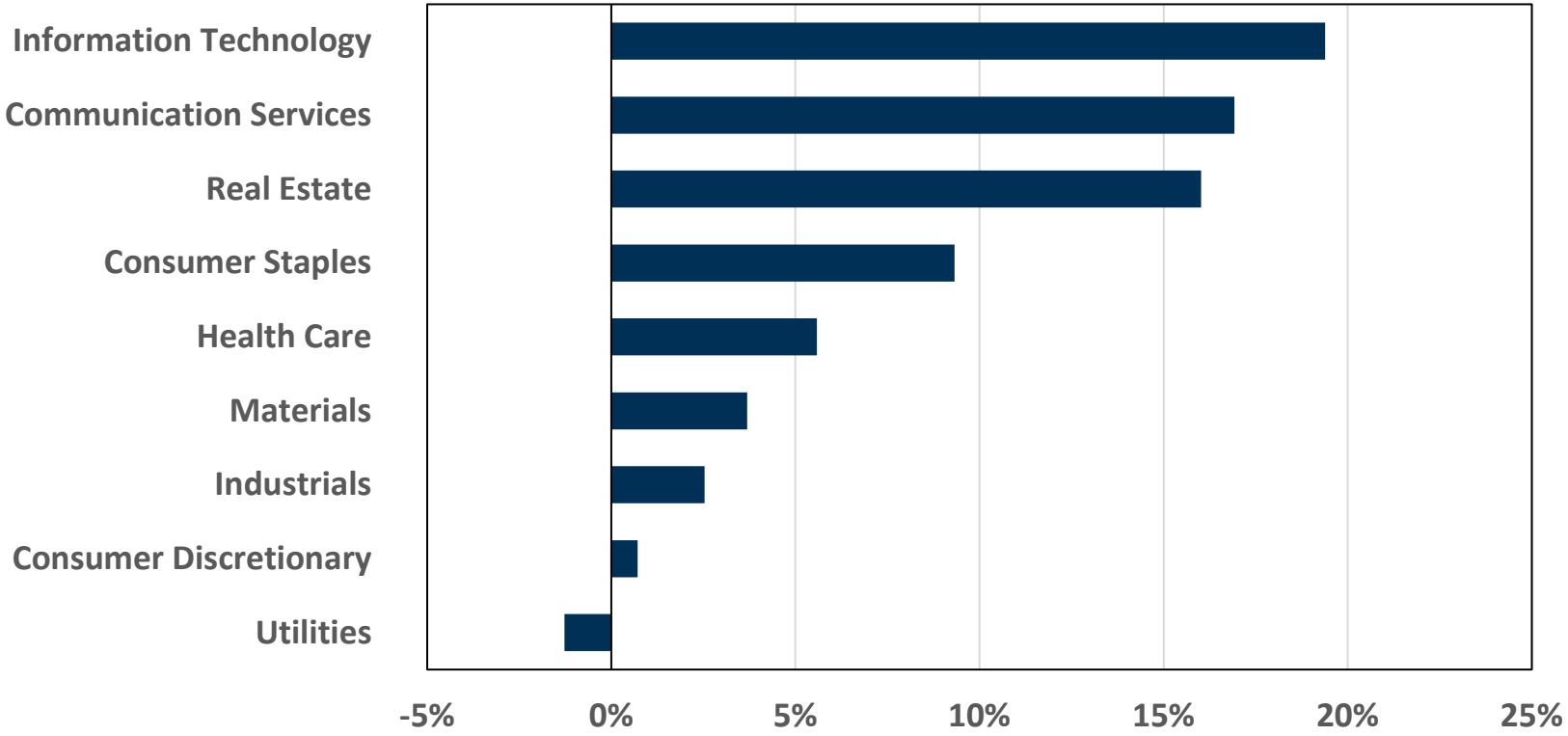
Uneven earnings growth across sectors

Q2 Annual Operating Profit Growth of MSCI USA Sectors
(MSCI USA companies reporting through 8/11/2025)



- Information Technology and Communication Services continue to generate strong earnings growth.
- These two sectors account for approximately 44% of the index market capitalization. Earnings growth is not evenly distributed.
- Earnings growth in the more cyclically sensitive sectors has slowed, notably in Materials, Industrials, and Consumer Discretionary.

Sources: Q2 annual operating profit growth for MSCI USA sectors provided via Worldscope and MSCI.

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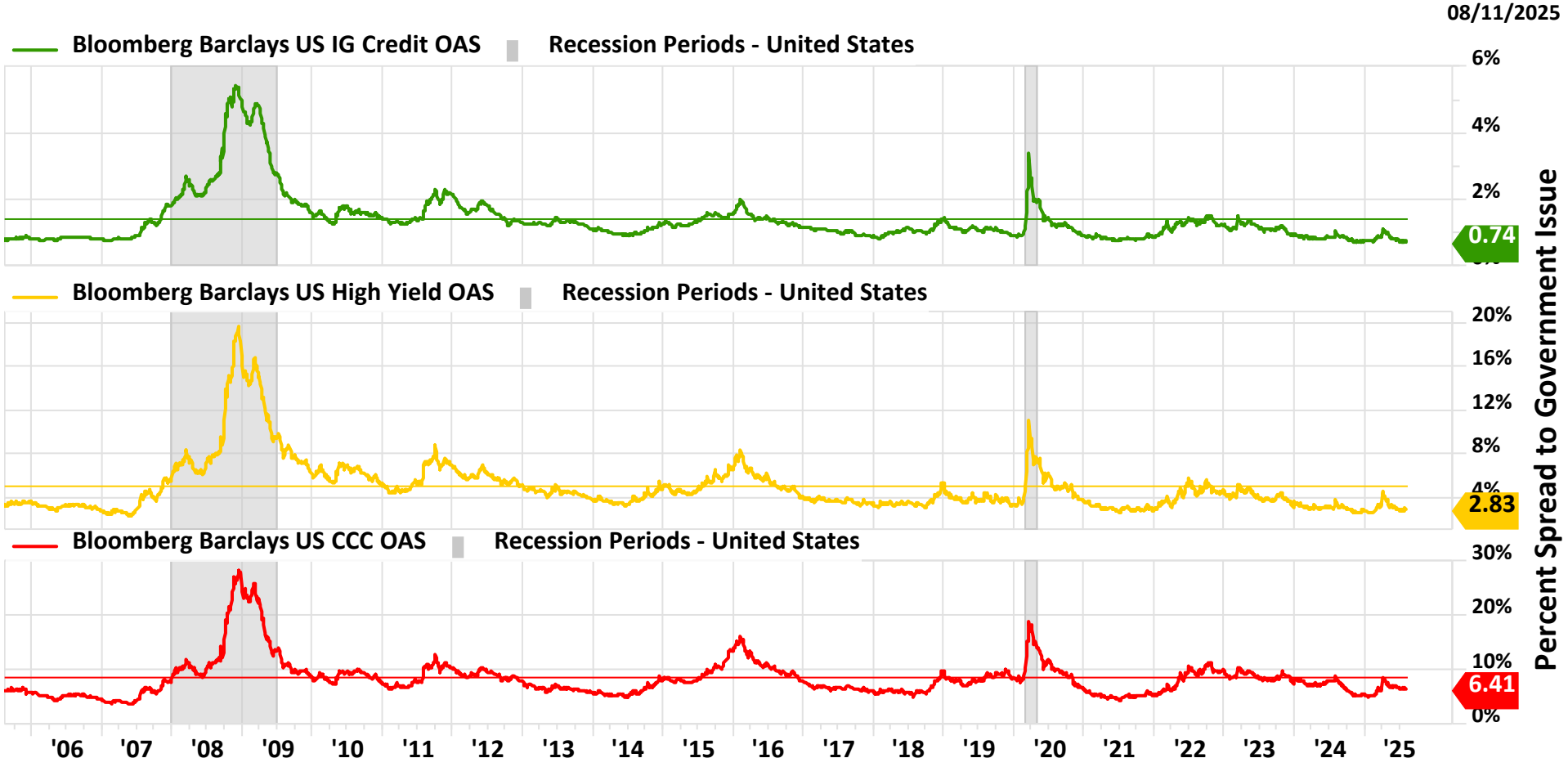
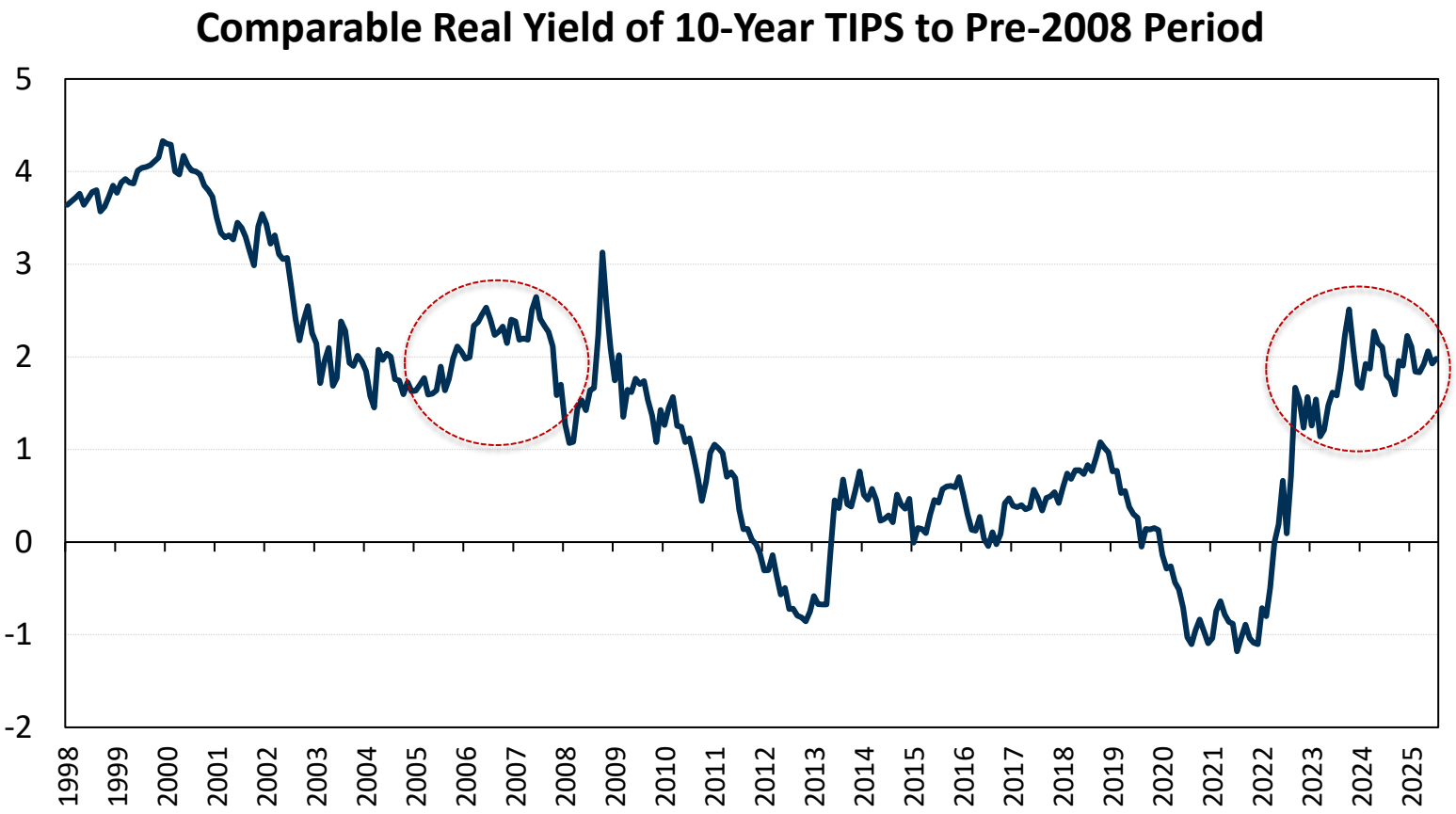
Credit Sectors

Spread levels are below the long run averages



Source: FactSet

TIPS offer both attractive real yields relative to history and inflation sensitivity



- Real yield of 10-year TIPS has been consistently 2% or greater since late 2023.
- High real yields reflect several potential factors, including Fed policy, increased Treasury supply and fiscal risk, and reduced foreign demand.
- TIPS also provide inflation sensitivity. However, TIPS can still underperform in high inflation periods if the Fed hikes rates to control inflation (that is, TIPS have high real rate duration).

Sources: Yield of 10-year TIPS provided via Bloomberg during January 30, 1998 to July 31, 2025.

SWIB STATE OF WISCONSIN INVESTMENT BOARD

Conclusions

- Financial markets have been resilient year to date despite the cooling labor market and core inflation that remains above target and trending higher.
- Earnings growth has been uneven with the technology and communication sectors driving gains.
- Valuation metrics of US equities have deteriorated as stocks rebounded sharply from the April low.
- Richer equity valuations signal lower expected returns in the next decade. Credit spreads are also below average and are not especially attractive relative to history.
- With the economy's "stagflationary" shift in direction, TIPS remain attractive given both high real yields relative to history and inflation sensitivity.

Asset Class Review

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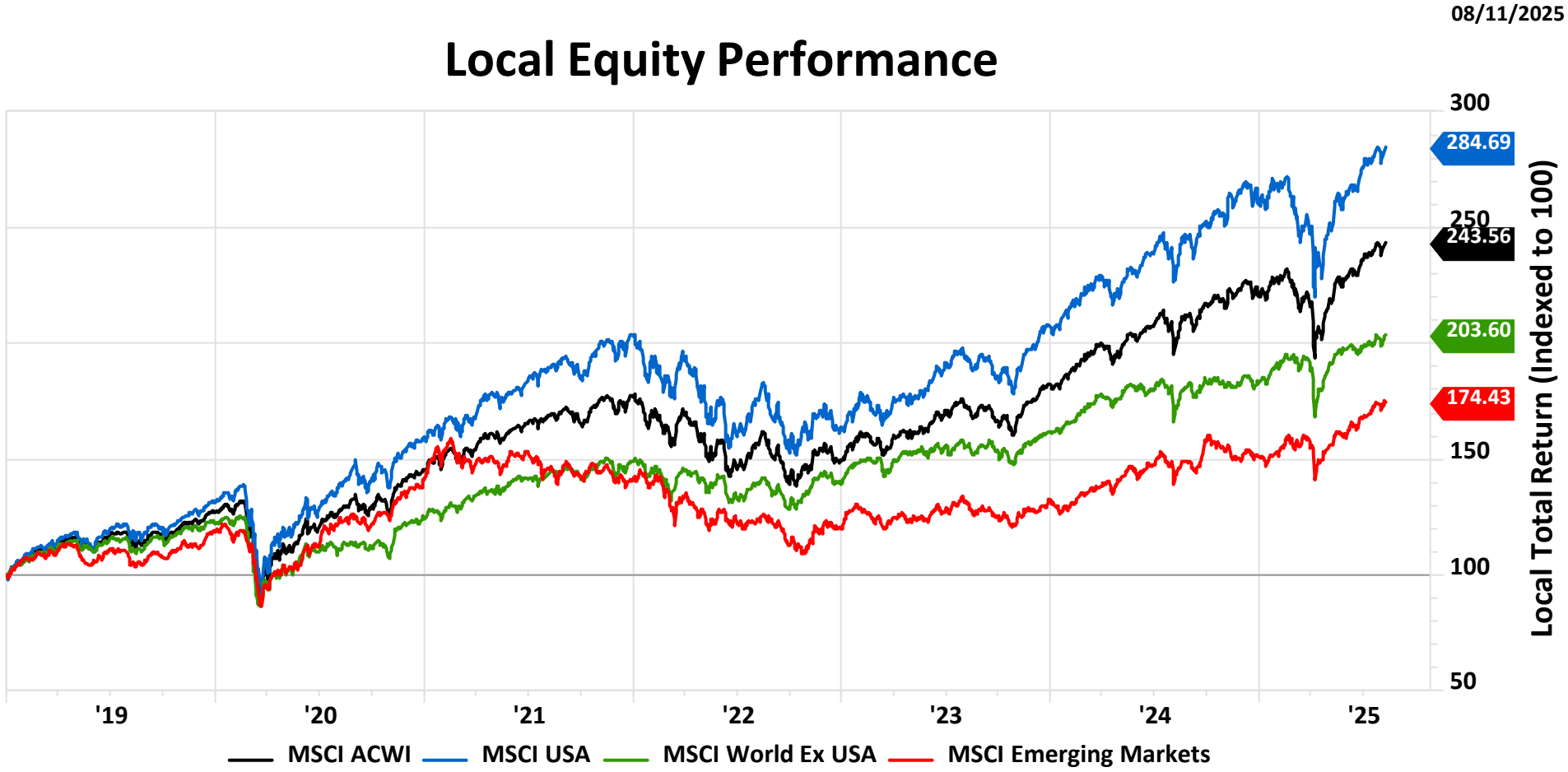
INVESTMENT BOARD

Global Equities - Performance

Both DM and EM equities have increased in the last few weeks



Source: FactSet

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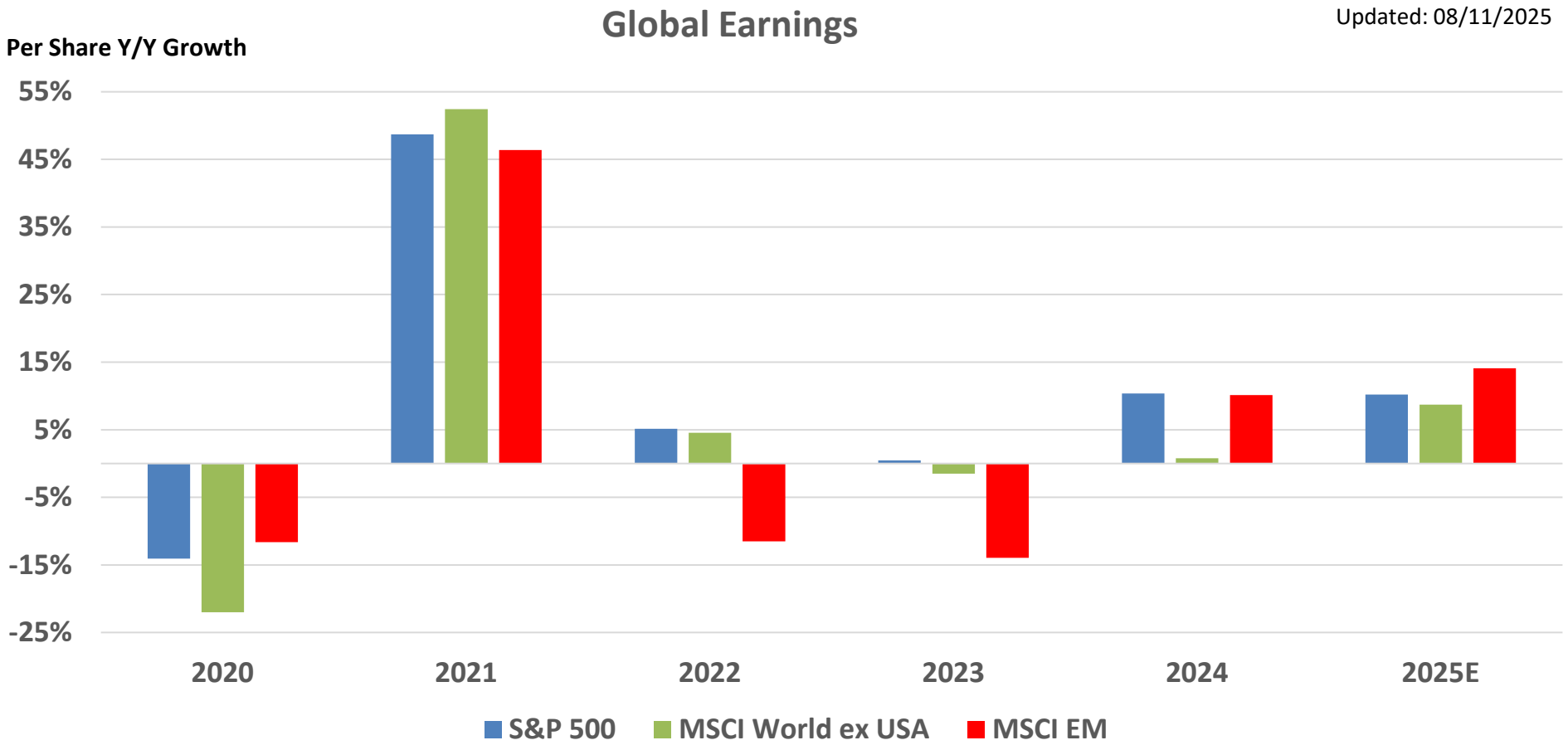
Earnings Growth

Rebound in Developed ex US profits expected for 2025



Source: Analyst Consensus; FactSet

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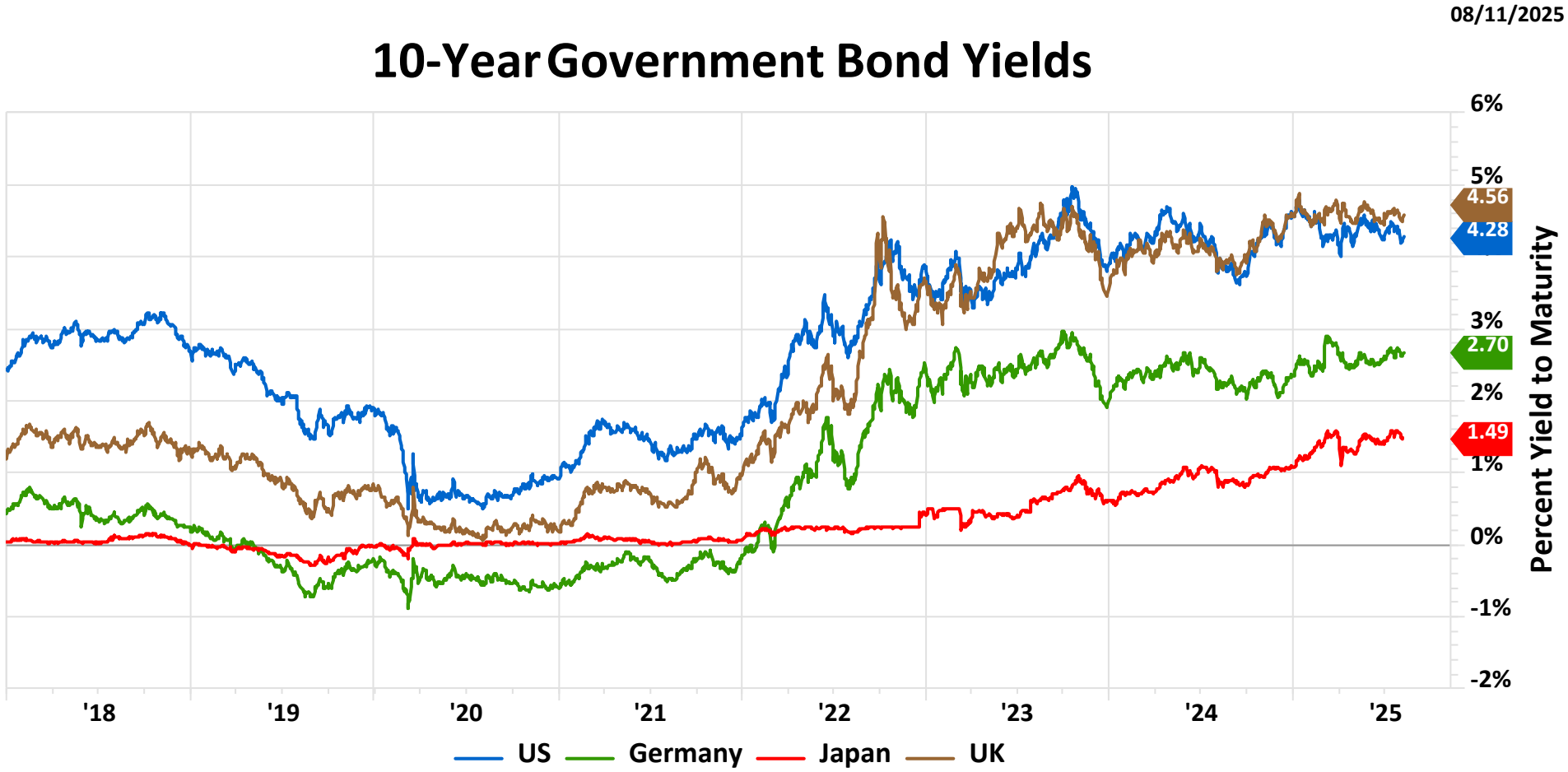
Global Bonds

DM yields have been largely steady in recent weeks



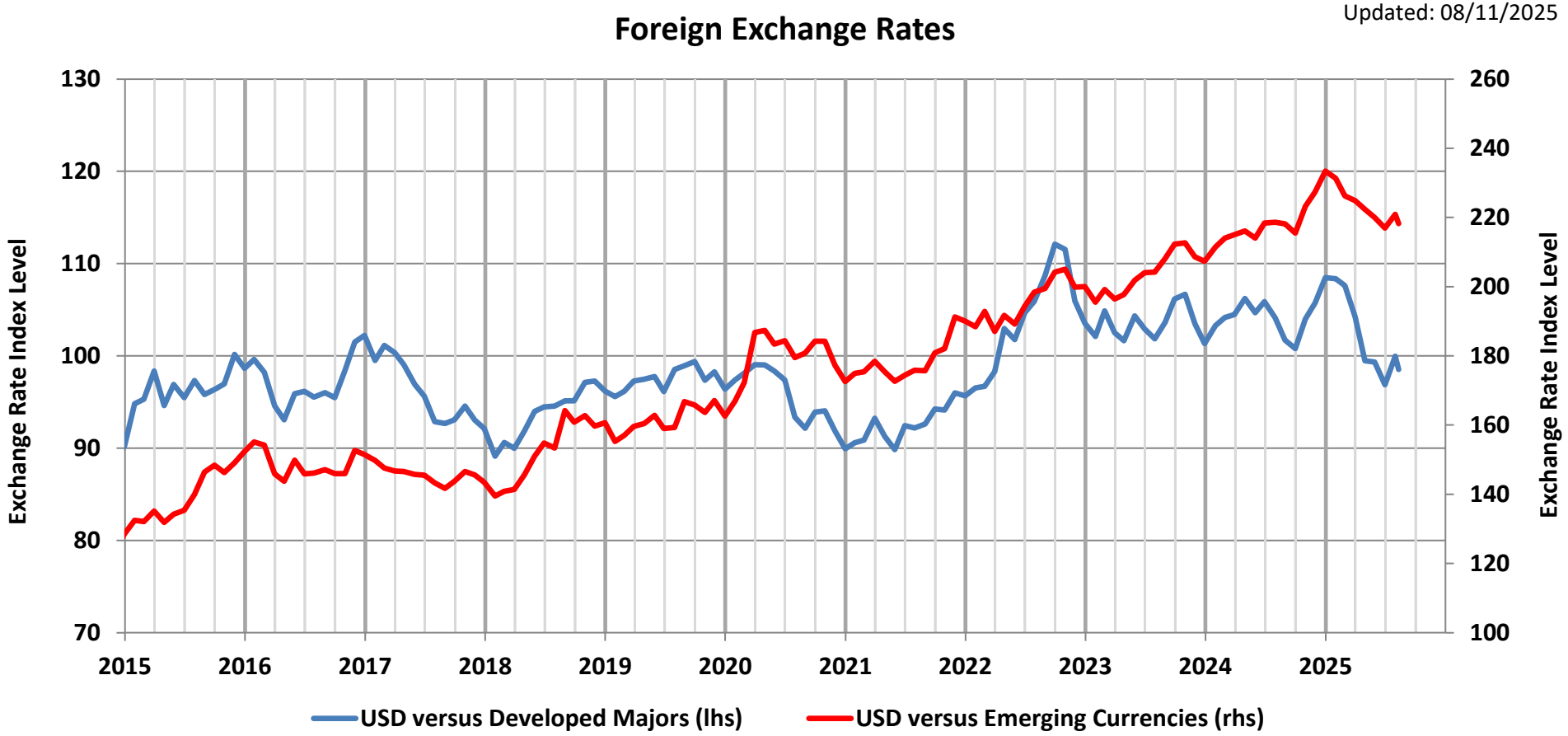
Source: FactSet

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

Currency Performance

US Dollar is weaker in 2025

Updated: 08/11/2025



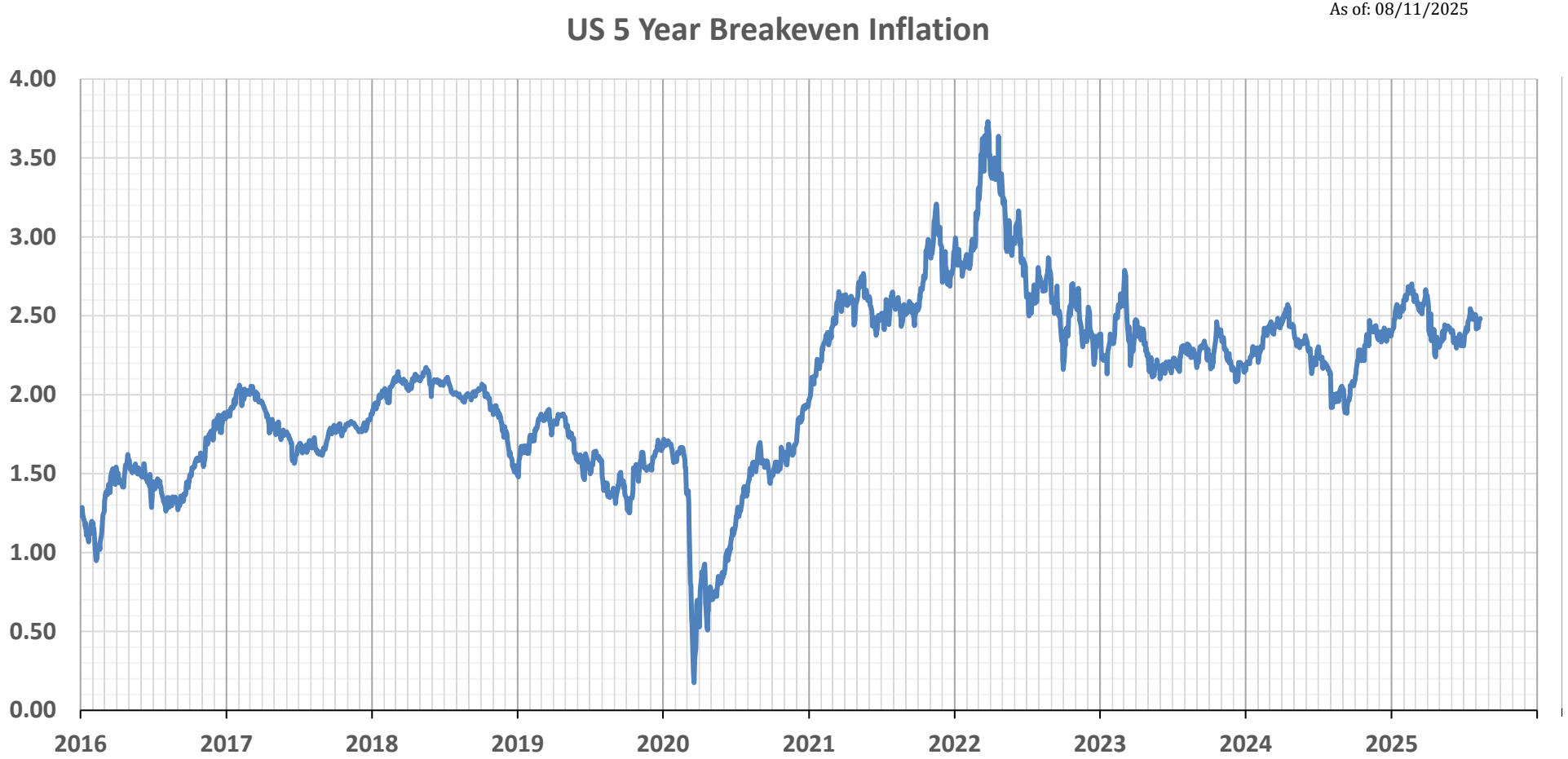
Source: Bloomberg, DXY Index, JPM Emerging Markets Currency Index (Inverted)

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

U.S. Inflation

Inflation expectations remain in a range of about 2.5%

As of: 08/11/2025



Source: Bloomberg

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

Board Meeting

Tab 9 – Announcement of Matters Taken Up in Closed Session

Board Meeting

Tab 10 – In the Absence of Questions, the Following Reports will be filed without comment (for informational purposes):

A. Quarterly Charges to Funds Reports, Q2 2025

B. Private Markets and Funds Alpha Commitments, Q2 2025

C. Board Contact Log

SWIB STATE OF WISCONSIN INVESTMENT BOARD

August 14, 2025

Senator Howard Marklein, Co-Chair
Joint Committee on Finance
P.O. Box 7882
Madison, WI 53707

Representative Mark Born, Co-Chair
Joint Committee on Finance
P.O. Box 8952
Madison, WI 53708

Senator Eric Wimberger, Co-Chair
Joint Legislative Audit Committee
P.O. Box 7882
Madison, WI 53707

Representative Robert Wittke, Co-Chair
Joint Legislative Audit Committee
P.O. Box 8953
Madison, WI 53708

Secretary Kathy Blumenfeld
Department of Administration
101 East Wilson Street
P.O. Box 7864
Madison, WI 53707

Dear Senator Marklein, Senator Wimberger, Representative Born, Representative Wittke and Secretary Blumenfeld:

State statutes require the State of Wisconsin Investment Board (SWIB) to report all expenses charged to the trust funds under management and the number of full-time equivalent positions created or abolished during the quarter[1]. The information contained in this report is for the quarter ended June 30, 2025.

Total Cost of Management Summary	3Q 2024	4Q 2024	1Q 2025	2Q 2025	Trailing 4 Qtr Total	% of Total
Internal Operating Expenses						
Operating Budget Expenses	$ 20,205,307	$ 17,503,147	$ 17,170,058	$ 60,501,443	$ 115,379,955	69.6%
Custodial, Investment Operations & Banking	2,153,795	2,278,712	926,620	1,663,283	7,022,410	4.2%
Legal	251,976	634,388	408,550	91,372	1,386,286	0.8%
Investment Research, Data & Consulting	8,176,891	10,165,448	9,515,341	9,676,291	37,533,971	22.7%
Total Internal Operating Expenses	**$ 30,787,969**	**$ 30,581,695**	**$ 28,020,569**	**$ 71,932,390**	**$ 161,322,623**	**97.4%**
Total Securities Lending Agent Expenses	**$ 848,703**	**$ 1,005,967**	**$ 1,430,511**	**$ 1,104,449**	**$ 4,389,630**	**2.6%**
Total SWIB Operating Costs	**$ 31,636,672**	**$ 31,587,662**	**$ 29,451,080**	**$ 73,036,839**	**$ 165,712,253**	**100.0%**
Supplemental Info - External Investment Management Fees						
Real Estate	$ 21,408,439	$ 24,130,057	$ 21,589,301	$ 23,263,966	$ 90,391,763	9.4%
Private Equity[1]	49,781,071	58,061,425	47,392,129	55,162,651	210,397,276	22.0%
Venture Capital[1]	8,997,014	9,291,005	8,226,788	10,553,219	37,068,026	3.9%
Current Return[1]	7,815,311	9,603,396	6,792,512	8,756,046	32,967,264	3.4%
Hedge Funds	58,200,199	126,855,977	99,493,495	98,108,041	382,657,711	40.0%
Beta One & Other - External Funds[2]	(2,602,707)	45,589,576	84,364,922	76,995,552	204,347,343	21.3%
Total External Investment Management Fees	**$ 143,599,327**	**$ 273,531,436**	**$ 267,859,146**	**$ 272,839,475**	**$ 957,829,384**	**100.0%**
Grand Total Cost of Management	**$ 175,235,999**	**$ 305,119,098**	**$ 297,310,226**	**$ 345,876,313**	**$ 1,123,541,636**	

[1]Beginning 3Q 2024, Private Equity & Venture Capital external fund fees are broken out in greater detail and reflected retroactively for the prior quarters presented.
[2]Beginning 3Q 2024, Beta One & Other separately managed fund fees and commingled fees have been combined to align with other SWIB external reporting.

[1]Wisconsin Statutes Section 25.17 (13m): Investment-related costs and expenses charged to the WRS Trust Funds, State Investment Fund, State Life Insurance Fund, Historical Society Endowment Fund, Injured Patients and Families Compensation Fund and UW Trust Fund. Investment transaction expenses, such as trading commissions and interest expense, are included in investment returns, and therefore not included in this report.

SWIB operating costs are charged to the trust funds under management. Externally managed fund fees for commingled assets are netted against investment returns generated by SWIB's external fund holdings. It is important to consider costs in the context of value-added investment returns. For example, during the five years ended December 31, 2024, after consideration of all expenses, costs, and fees, SWIB generated approximately $4.1 billion in additional profits beyond what would have been generated by the benchmark portfolio SWIB is measured against. These profits all go directly into the Wisconsin Retirement System for the benefit of its beneficiaries.

Attachment A provides a breakdown of the amount and percentage of assets managed under each type of dedicated and commingled account or partnership, and the change in the amount and percentage from the prior calendar quarter. As of June 30, 2025, SWIB's total authorized full-time equivalent positions are 298 as shown in the table below.

Assets Under Management & Positions		
	3/31/2025	**6/30/2025**
Internal Management	45.2%	47.0%
External Management	54.8%	53.0%
Total SWIB Positions	**298**	**298**

In addition, Attachment B provides details of the services provided to SWIB and their associated quarterly costs. For definitions of the expense categories presented in the Total Cost of Management Summary table, please refer to Attachment C.

As new investment strategies are implemented and markets continue to evolve, SWIB will continue evaluating the most efficient means to manage the trust fund assets. Please contact us if you have any questions or comments about this report.

Sincerely,

Edwin Denson
Executive Director/Chief Investment Officer

Attachments
cc: Members, Joint Committee on Finance
Members, Joint Committee on Audit
Robert Lang, Legislative Fiscal Bureau
Joe Chrisman, Legislative Audit Bureau

Total Assets Under Management	**9/30/2024**		**12/31/2024**		**3/31/2025**		**6/30/2025**	
Wisconsin Retirement System (WRS)	Amount (in millions)	%	Amount (in millions)	%	Amount (in millions)	%	Amount (in millions)	%
Internally Managed Assets	**$56,273**	**39.4%**	**$54,585**	**39.1%**	**$52,649**	**37.6%**	**$59,590**	**40.5%**
Externally Managed Dedicated Assets	**36,150**	**25.3%**	**35,109**	**25.2%**	**35,484**	**25.4%**	**33,540**	**22.8%**
Externally Managed Commingled Assets	**50,245**	**35.2%**	**49,765**	**35.7%**	**51,832**	**37.0%**	**54,102**	**36.7%**
1. Passive Index	*699*	*0.5%*	*517*	*0.4%*	*522*	*0.4%*	*543*	*0.4%*
2. Limited Partnerships	*36,048*	*25.3%*	*36,387*	*26.1%*	*37,430*	*26.7%*	*37,938*	*25.8%*
3. Active Managed Commingled	*13,498*	*9.5%*	*12,861*	*9.2%*	*13,879*	*9.9%*	*15,622*	*10.6%*
Total WRS Assets	**$142,669**	**100.0%**	**$139,460**	**100.0%**	**$139,964**	**100.0%**	**$147,232**	**100.0%**
Other Funds								
State Investment Fund - Internally Managed	$20,735		$20,383		$21,764		$20,813	
Separately Managed Funds - Internally Managed	$98		$92		$94		$93	
Separately Managed Funds - Externally Managed	$2,908		$2,856		$2,895		$2,996	
Total Other Funds	**$23,742**		**$23,331**		**$24,753**		**$23,903**	
Total Assets Under Management	**$166,410**		**$162,791**		**$164,718**		**$171,136**	
Supplemental AUM Breakout								
Total Internal Assets Under Management	**$77,107**	**46.3%**	**$75,060**	**46.1%**	**$74,507**	**45.2%**	**$80,497**	**47.0%**
Total External Asset Under Management	**$89,304**	**53.7%**	**$87,731**	**53.9%**	**$90,211**	**54.8%**	**$90,639**	**53.0%**

STATE OF WISCONSIN INVESTMENT BOARD
Expenses for All Funds Under Management
Quarter Ending June 30, 2025

EXPENSE CATEGORY	EXPENSES
Internal Expenses[1]	
Staff Compensation	$ 47,993,305
Fringe Benefits	8,749,764
Staff Travel	402,923
Supplies, Services, and Facilities	
Advanced Systems Concepts	$ 15,609
Ahern Fire	306
Amazon.com	2,027
AT&T Landline	3,119
Atlassian.com	799
Australian Super	(5,000)
Barrons	167
BiZZdesign United States Inc.	31,677
Bloomberg BusinessWeek	2,315
BrightSign LLC	49
Capital Data Inc.	45,088
Carahsoft Technology Corp	135,594
CDS MY Block 1 Office, LLC	847,110
Center City Film and Video	21,000
Centurylink	75
Charter Communications (Spectrum Business)	9,282
Ciphereus LLC	2,000
Coffee Werks Machine Service and Sales	245
Column Software PBC	544
Creative Business Interiors	798
Datacamp Inc	8,068
Dell Marketing LP	6,227
Department of Administration (DOA)	92,664
Department of Employee Trust Funds (ETF)	56,113
Department of Workforce Development (DWD)	2,134
Depreciation Expense	993,744
Disa Global Solutions, Inc	5,873
Dow Jones News Service	164
Fearing's	159
Fed Ex	743
Forte	96,667
Gallagher	(15,875)
Gordon Flesch	14,593
Harvard Business Review	390
Historical Society of WI State	2,973
Indeed	15,750
Info-Tech Research Group	40,671
Infogram	1,788
Institutional Investor	1,798
International Swaps and Derivatives Assn	(11,458)
Katom Restaurant Supply, Inc.	2,165
KeyStone Peer Review Organization Inc	869
Klein-Dickert Glass	1,006

EXPENSE CATEGORY	EXPENSES
Legislative Audit Bureau (LAB)	304,315
LexisNexis	(331)
LinkedIn	17,205
Litera Corp	3,659
Madison Gas and Electric Company	67,989
Mathworks	1,270
Milwaukee Journal Sentinel	220
mxtoolbox.com	297
n-Tier Financial Services, LLC	6,225
National Institute on Retirement Security	9,800
Nationwide Power Solutions Inc	45,951
New York Times	676
Next Electric	6,488
OpenAI LLC	36,000
Packerland Rent-A-Mat, Inc.	704
Paycor, Inc	3,870
PEI Media Inc	(11,875)
Plansponsor	175
Podcamp Media, LLC	20,000
Postmaster	1,980
Private Equity Women Investor Network	50
Reuters.com	45
SailPoint Technologies, Inc.	(10,551)
ServerCentral, LLC	12,450
Shred-it	385
Software House Intl	387,039
Staples Advantage	2,051
SurveyMonkey.com	468
The Alphabet Shop	360
The Economist	2,243
The Financial Times Limited	(460)
Thomson Reuters (Baseline and FC) - CH25	8,715
US Bank	7,898
Validity Screening Solutions	543
Verizon Wireless	3,522
Wall Street Journal	(57)
Wheeler Reports Inc	2,160
Wisconsin Independent Network	1,350
Wisconsin State Journal	95
Wisconsin Technology Council	(7,500)
Total Supplies, Services, and Facilities	**$ 3,355,451**
Total Operting Budget Expenses	**$ 60,501,443**
Custodial, Investment Operations & Banking	
Albourne America LLC	$ 187,500
BNY Asset Servicing - Custody	874,848
BNY Asset Servicing - Investment Operations	350,122
Markit NA	(194,522)
S&P Global Limited (Markit Group Limited)	445,335
Total Custodial, Investment Operations & Banking	**$ 1,663,283**
Legal	
DLA Piper LLP (US)	$ 90,240

EXPENSE CATEGORY	EXPENSES
Godfrey and Kahn SC	6,983
Legal Services Expense Accrual	(181,597)
Purrington Moody Weill LLP	18,118
Quarles & Brady	132,125
Sidley Austin (Domestic)	5,391
Vedder Price PC	20,113
Total Legal	**$ 91,372**
Investment Research, Data & Consulting	
12358433 Canada Inc.	$ 59,150
22V Research LLC	5,000
3x108 Fintech Consulting Limited	(26,080)
AE Business Solutions	23,800
Aksia LLC	356,621
Alex Solutions	44,500
Apex Systems, LLC	75,594
Arthur Selender	20,000
Australian Super	5,000
Automation Anywhere, Inc.	46,937
BackStop Solutions Group	48,474
Barra LLC	7,442
Barrons	53
BCA Research Inc	29,792
BITA Risk Limited	54,857
Blackrock Financial Management Inc	67,763
Bloomberg Finance LP	1,662,627
BMO Capital Markets Corp	(20,900)
Bridge Consulting Partners Ltd	84,480
Callan Associates Inc	6,250
Canoe Software Inc.	16,450
Capital Economics LTD	15,500
Carahsoft Technology Corp	28,100
CBJL Incorporated	103,320
CBOE Global Markets, Inc.	1,770
CEM Benchmarking Inc	46,875
CFRA Research	18,750
Charles River System Inc	445,757
CLO Research Group	1,875
CoStar Portfolio Strategy	23,795
CUSIP Global Services	10,833
Dacheng Xiu	83,300
Deloitte Consulting LLP	145,833
Deutsche Bank	20,650
DTCC EPN	6,000
DTCC ITP LLC	2,037
efilemyforms.com	15
EFront Financial Solutions Inc	203,496
Elevation LLC	8,750
Eliassen Group	28,500
EquiLend Holdings LLC	32,100
Ernst & Young LLP	(3,250)
Eurasia Group Ltd	15,000
Exchange Analytics Inc	3,000
FactSet Research Systems Inc	1,008,446

EXPENSE CATEGORY	EXPENSES
FBN Securities, Inc.	9,000
Finarch LLC	111,981
FIS Data Systems Inc.	79,044
Fitch Solutions Inc	20,672
Funston Advisory Services LLC	29,000
Gallagher	31,750
Goldfarb Analytics Corporation	5,000
Green Street Advisor	21,925
Haver Analytics	24,593
Hawking LLC	5,291
Ice Data Derivatives, Inc.	2,864
Ice Data LP	227,893
IHS Markit KY3P LLC	22,340
Institutional Shareholder Services Inc	55,812
International Swaps and Derivatives Assn	11,458
Intex Solutions, Inc.	30,600
Investment Research Expense Accrual	241,950
IPC Systems Inc	7,000
JP Morgan	15,000
JPSB Consulting Limited	81,600
Kenneth D West	3,000
KeyStone Consulting Inc	79,120
Knowledge Services	30,119
Kroll, LLC	5,775
LexisNexis	1,324
Manalo Advisors Limited	3,750
Markit Group Limited	(16,100)
Markit NA	5,508
Markit-EDM Limited	210,929
McLagan Partners Inc	25,500
Microsoft, Inc.	82,888
Moodys Analytics	97,800
MorningStar Inc	15,910
MSCI Inc - Risk Metrics Solutions	219,273
MSCI, Inc.	159,849
My Data Outlet International, LLC	53,733
NEPC LLC	80,000
NYSE Market Inc	5,211
Octus Intelligence, Inc.	30,000
OptionMetrics	6,750
Options Price Reporting Authority	1,449
Oxford Economics USA INC	87,428
Pac-invest	14,343
PEI Media Inc	23,750
Phil Erlanger Research Co Inc	2,000
Pitchbook Data Inc	21,000
PremiaLab	13,750
Preyer	168,750
Private Placements Investors Association	300
Quantum Research Consulting LLC	(14,720)
RavenPack International S.L.U.	21,250
RCM Technologies	40,592
Refinitiv	309,177
RIMES Technologies Corporation	51,622

EXPENSE CATEGORY	EXPENSES
Russell Investment Group	9,423
S&P Global Limited (Markit Group Limited)	38,588
S&P Global Market Intelligence	184,661
SailPoint Technologies, Inc.	38,751
Seaport Global Securities LLC	3,070
Seaport Research Partners, LLC	6,000
SEI Investments	22,736
Sharp Decisions Inc	32,182
Simcorp USA, Inc.	995,048
Snowflake Inc	40,000
Software House Intl	69,180
SPACInsider	3,300
State Street	25,000
Stepstone Group Real Estate	59,125
SWIFT SC	12,349
SystemsAccountants	83,200
TechVest Global Solutions Inc.	202,672
The Financial Times Limited	12,530
The Nasdaq Stock Market, LLC	6,800
The Spaulding Group, Inc.	33,500
Toronto Stock Exchange	13,438
TradeWeb	11,184
UFP Research SA	12,500
Unit4 Business Software Inc	84,991
Variyas Global Solutions, Inc	(39,135)
Verity LLC	16,625
Verus Advisory Inc	2,500
Virtu ITG Analytics LLC	27,000
Wall Street Journal	65
Wisconsin Technology Council	7,500
With Intelligence LLC	10,796
Wolverine Execution Services LLC	1,047
Workday Implementation Capitalized Expenses	(213,857)
Workday, Inc.	80,148
WorldBridge Partners Inc	89,310
Total Investment Research, Data & Consulting	**$ 9,676,291**
Securities Lending Agent Expenses	
Securities Lending Agent Expenses	$ 1,104,449
Total Securities Lending Agent Expenses	**$ 1,104,449**
TOTAL QUARTERLY CHARGES TO FUNDS	**$ 73,036,839**

[1]All costs reported are on an accrual basis except for internal expenses which are on a cash basis of accounting. Negative expense amounts are due to accrual adjustments and/or other miscellaneous adjustments.

Explanation of Expenses

Internal Operating Expenses

Internal operating expenses consist primarily of staff compensation and fringe benefits. SWIB employs a staff of professional investment and support staff to manage trust fund assets. Other internal operating expenses consist of office equipment, supplies, business travel, information technology equipment and services, and general services.

Custodial, Investment Operations & Banking

Wisconsin Certificate of Deposit Program: Under a contract with SWIB, Bankers' Bank administers the program under which the State Investment Fund (SIF) purchases certificates of deposit from Wisconsin-based banks and thrifts. Most administrative costs are paid by the participating banks. SWIB's expenses help underwrite other administrative costs, such as insurance that SWIB requires to be purchased. There are currently no investments in Bankers' Bank certificates of deposit and no fees were incurred.

BNY: Provides master custodial and administrative services (safekeeping of assets, income collection, valuations and accounting) for public and private domestic and foreign securities in the Wisconsin Retirement System (WRS), the SIF, and the other separately managed trust funds. In addition, SWIB receives performance measurement and analytical services through its contract with BNY, which serves as the official book of record for SWIB's accounting and performance measurement functions. BNY provides data and analytical tools used by SWIB for compliance and risk management. These include global collateral management, data management, and hosting services. Fees for these services are established by contract.

US Bank: The State of Wisconsin contracted with US Bank to be the state's working bank. The fees paid to US Bank by the SIF reflect bank service charges that are not directly applicable to the fund participants.

Legal

Under authority delegated by the Attorney General, pursuant to s. 25.18 (1) (a) Statutes, SWIB may employ legal counsel for any matters arising out of the scope of its investment authority. This includes legal services relating to bankruptcies, class actions, private markets transactions, fiduciary advice, securities law, investment litigation, and other similar matters.

Investment Research, Data & Consulting

Current law gives SWIB the authority to employ investment counsel in any matters arising out of the scope of its investment authority. Investment research and services provided include global market, industry, economic and company information, financial and performance analytics, news information, pricing and exchange data, credit ratings, financial modeling, economic forecasting, trading services, and a variety of Board consultations. These services enable SWIB to perform due diligence on current and future holdings and assist in monitoring investments.

Securities Lending Agent Expenses

Securities lending programs generally earn income through the reinvestment of cash collateral posted by borrowers and through the collection of fees for loans where non-cash collateral is posted. SWIB's securities lending income is shared with the agent to pay the costs associated with the administration of the program. Securities lending agent fees are reported as expenses.

External Investment Management Fees

Some external asset managers have been granted delegated authority to determine investment strategy and purchase securities in SWIB's name in accordance with approved investment guidelines. These investment vehicles are known as separately managed accounts (SMAs). Fees for managing SMAs are typically assessed as a percentage of the market value of assets under management and in some cases, fees are based on investment performance. These costs are actual expenses to SWIB that are, in accordance with accounting guidelines generally accepted in the U.S., recognized as expenses on the WRS Statement of Changes in Net Investment Position.

SWIB also invests in separate legal entities managed by external investment managers to gain exposure to select strategies including Public Markets, Private Markets[1], and Hedge Funds. These investment vehicles are known as "commingled" accounts. In exchange for their investment management services, the external managers charge a fee within the entity they manage. These fees generally do not require SWIB to remit payment. Fees are typically assessed as a percentage of the market value of assets under management, commitments, and in some cases are based on investment performance. While the fees charged to these external vehicles do not meet the statutory definition of a cost or expense to SWIB, they are included in SWIB's total cost of management reporting as a supplemental reporting item that falls outside the statutory requirements of this report.

[1] External Investment Management Fees for private markets, encompassing Private Equity, Venture Capital, Current Return and Real Estate asset classes, are reported on a net of fee basis rather than gross. Net fees reflect fee offsets, waivers, and deferrals.

Private Equity Commitments*

April 2025 – June 2025

Investment	*Commitment (millions)*
Atlas Capital Resources V	$125.0
Recognize Partners II	$70.0
Seaside Equity Partners III-A	$75.0
Seaside Equity Partners Navigator I-A	$25.0
Sixth Street Opportunities Partners VI	$150.0
TB Co-Invest Opportunities (Robin)	$50.0
Turn/River Capital VI (WI-Sidecar)	$75.0
Consumer Co-Investment	$25.0
IT Co-Investment	$21.0
Consumer Co-Investment	$25.0

**Includes Current Return Portfolio and Co-Investments.*

Private Debt Investments/Commitments

April 1, 2025 to June 30, 2025 (Second Quarter)

Investment	*Investment/Commitment*
Consulting	$5,000,000
Energy	$14,000,000
Total	**$19,000,000**

Real Estate Commitments

April 2025 – June 2025

Investment	*Commitment (millions)*
Carson Industrial JV II	$45
Beacon Fund 9	$50
Total	**$95**

SWIB
STATE OF WISCONSIN INVESTMENT BOARD

Funds Alpha Commitments*

April 1 – June 30, 2025

Manager	Commitment (Millions)
Ares Badger Fund	$ 150
Artisan Partners EMLO	$ 150
Man AHL	$ 11
Voleon	$ 100
PIMCO EMD Local	$ 150
Artisan International Value CTF	$ 200
Artisan International Value VTF	$ 50
PIMCO EMD Local	$ 100
I-94	$ 100
Total	**$ 1,011**

**Includes Hedge Funds and Beta One*

Board Contact Log – September 2025 Board Meeting

DATE OF INBOUND COMMUNICATION	DATE COMMUNICATED TO THE BOARD	COMMUNICATION SOURCE	TOPIC
June 4, 2025	August 29, 2025	Anne Steinberg	Follow up on WCOA Conference
August 13, 2025	August 29, 2025	Jordan Ash	SWIB investments with Thomas Bravo
August 20, 2025	August 29, 2025	Gilman N Halsted	Fossil fuel divestment and systemic climate risks
August 20, 2025	August 29, 2025	Judith Brey	Fossil fuel divestment and systemic climate risks
August 20, 2025	August 29, 2025	Janet Davis	Fossil fuel divestment and systemic climate risks
August 20, 2025	August 29, 2025	Anne Steinberg	Report about systemic climate change risks
August 20, 2025	August 29, 2025	James Danky	Climate-friendly retirement
August 20, 2025	August 29, 2025	Steve Steinhoff	Fossil fuel divestment and systemic climate risks
August 20, 2025	August 29, 2025	Anna Keefe	Fossil fuel divestment and systemic climate risks
August 20, 2025	August 29, 2025	Beth Darlington	No comment
August 20, 2025	August 29, 2025	Mark Smith	Divestment from fossil fuels into renewable energy
August 20, 2025	August 29, 2025	Bruce Barrett	Fossil fuel divestment and systemic climate risks
August 21, 2025	August 29, 2025	Sarah O'Brien	Fossil fuel divestment and systemic climate risks
August 21, 2025	August 29, 2025	Lora Schmid-Dolan	Divestment from fossil fuels into renewable energy

Board Contact Log – September 2025 Board Meeting

DATE OF INBOUND COMMUNICATION	DATE COMMUNICATED TO THE BOARD	COMMUNICATION SOURCE	TOPIC
August 21, 2025	August 29, 2025	Molly Krueger	Divestment from fossil fuels into renewable energy
August 22, 2025	August 29, 2025	Peter Knotek	Request for Trustees to be more vocal
August 22, 2025	August 29, 2025	Patricia	Divestment from fossil fuels into renewable energy
August 22, 2025	August 29, 2025	Lewis Kuhlman	Fossil fuel divestment and systemic climate risks
August 22, 2025	August 29, 2025	Robin McClure Greenler	Divestment from fossil fuels into renewable energy
August 22, 2025	August 29, 2025	Eric Hansen	NYC Pension example of divestment from fossil fuels

Board Meeting

Tab 11 – Future Items for Discussion

2025 Board Meeting and Agenda Plan

March 2025	
Audit & Finance	**Open Session** • Annual Charters Review • Open Audit Issues Report(s) • Approval of Draft Audit Report(s) • 2025 Internal Audit Plan Status • 2025 Internal Audit Goals • Compliance Overview • Financial Reporting • Administrative Reports **Executive Closed Session** • Evaluation of Head of Internal Audit • Head of Internal Audit Compensation Recommendation
Compensation & Workforce Development	**Open Session** • Annual Committee Charter Review • Comprehensive RPM Review Timeline • Strategic Results Scorecard Approval • Incentive Compensation Program Review and Division Scorecards Results • Incentive Compensation Award Recommendations • Talent Acquisition Update **Executive Closed Session** • Incentive Compensation Award Recommendations for Specific Individuals • Long Term Incentive Plan Awards • Deputy Executive Director/Chief Operating Officer Incentive Compensation Award Recommendation • ED/CIO Evaluation and Compensation
SPCG	**Open Session** • Real Estate Strategy Report and Market Outlook • Corporate Governance Program Update • June Investment Forum Preview • Innovation and Projects Update **Executive Closed Session** • ED/CIO Goals Review
Board Meeting	**Open Session** • Committee Reports • Election of Secretary and Assistant Secretary • Annual Committee Assignments • Proposed Meeting Dates for Next Year • Investment Performance and Market Updates; Callan Annual Report • Committee Open Session Business • Quarterly Investment Update • Q4 Direct Charges to Funds / PMFA Commitments / Board Contact Log **Closed Session** • Risk Management Update • Committee Closed Session Business • Operational, Financing & Counterparty Risk Overview **Executive Closed Session** • Incentive Compensation Award Recommendations for Specific Individuals

2025 Board Meeting and Agenda Plan

June 2025	
Audit & Finance	**Open Session** • WRS Audited Financial Statements • Open Audit Issues Report(s) • Approval of Draft Audit Report(s) • Annual Affirmations and Disclosures • 2025 Internal Audit Plan Status • Five-Year Audit Summary • Financial Reporting • Administrative Reports **Executive Closed Session** • LAB Review of Statements of Economic Interest
SPCG	**Open Session** • Hedge Fund Strategy Report and Market Outlook **Executive Closed Session** • ED/CIO Goals Review
INVESTMENT FORUM	
Board Meeting	**Open Session** • Committee Reports • Investment Performance and Market Updates; Callan Quarterly Report • Committee Open Session Business • Quarterly Investment Update • Q1 Direct Charges to Funds / PMFA Commitments / Board Contact Log **Closed Session** • Risk Management Update • Committee Closed Session Business
INVESTMENT FORUM	

2025 Board Meeting and Agenda Plan

September 2025	
Audit & Finance	**Open Session** • Open Audit Issues Report(s) • Approval of Draft Audit Report(s) • 2025 Internal Audit Plan Status and Plan Update • 2026 Internal Audit Plan Preview • Financial Reporting • Administrative Reports
Benchmark & Performance	**Open Session** • NEPC 2025 Benchmark Review and Recommendation
Compensation & Workforce Development	**Open Session** • Comprehensive RPM Review Preview • Talent Acquisition and Employee Engagement Update
SPCG	**Open Session** • Private Equity and Private Debt Strategy Reports and Market Outlook • Annual Corporate Governance Policy Review and Corporate Governance 2025 Proxy Voting Review • October Workshop Preview • Trustee Manual and Policies Review **Closed Session** • Co-Investment and Venture Capital Strategy Reports and Market Outlook • Data Management and Information Technology Update • Board/Staff Consultant Annual Reporting **Executive Closed Session** • Targeted Strategic Planning • ED/CIO Goals Review
Board Meeting	**Open Session** • Committee Reports • Investment Forum Recap • Biennial Ethics Training • Fiduciary & Public Records Training • Investment Performance and Market Updates; Callan Quarterly Report • Committee Open Session Business • Quarterly Investment Update • Q2 Direct Charges to Funds / PMFA Commitments / Board Contact Log **Closed Session** • Risk Management Update • Board/Staff Consultant Annual Reporting • Committee Closed Session Business **Executive Closed Session** • Board Self-Evaluation with Governance Consultant

OCTOBER BOARD WORKSHOP
• Outside Speakers • Asset Allocation review

2025 Board Meeting and Agenda Plan

December 2025	
Audit & Finance	**Open Session** • SIF Audited Financial Statements • Open Audit Issues Report(s) • Approval of Draft Audit Report(s) • 2025 Internal Audit Plan Status • Proposed 2026 Internal Audit Plan • Financial Reporting, including Budget and Position Request • Administrative Reports **Executive Closed Session** • LAB Review of Statements of Economic Interests
Benchmark & Performance	**Open Session** • Annual Committee Charter, Policies, and Benchmarking Philosophy Review
Compensation & Workforce Development	**Open Session** • Compensation Philosophy Review • Compensation Consultant Report • Incentive Compensation Plan Changes for Next Performance Year (if any) • Incentive Compensation Projections • Comprehensive RPM Review • Talent Acquisition Update and People Metrics **Executive Closed Session** • Succession Planning
SPCG	**Open Session** • Annual Committee Charter Review • Beta One Strategy Report and Market Outlook **Executive Closed Session** • Targeted Strategic Planning • ED/CIO Goals Review
Board Meeting	**Open Session** • Committee Reports • Investment Performance and Market Updates; Callan Quarterly Report • Annual Presentation on Cost Benchmarking • Asset Allocation Recommendation • Quarterly Investment Update • Committee Open Session Business • Q3 Direct Charges to Funds / PMFA Commitments / Board Contact Log **Closed Session** • Asset Allocation Implementation Discussion • Risk Management Update • Committee Closed Session Business • Annual Review of Expected Tail Loss Analysis