



STATE OF WISCONSIN

Legislative Audit Bureau

NONPARTISAN • INDEPENDENT • ACCURATE

Report 23-13
September 2023

Retirement Funds Investment Activity

Calendar Year 2022

State of Wisconsin Investment Board



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Retirement Funds Investment Activity
Calendar Year 2022

State of Wisconsin Investment Board



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Legislative Audit Bureau

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Reports are submitted to the Joint Legislative Audit Committee and made available to other committees of the Legislature and to the public. The Audit Committee may arrange public hearings on the issues identified in a report and may introduce legislation in response to the audit recommendations. However, the findings, conclusions, and recommendations in the report are those of the Legislative Audit Bureau.

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Contents

Letter of Transmittal	1
Introduction	3
SWIB Administration	3
Audit Results	4
Total Investment Assets	4
Net Investment Income	5
Net Investment Position	6
External Management of Investments	7
Future Considerations	10
Auditor's Report	11
Appendix	
Members of the SWIB Board of Trustees	

Opinions Published Separately

The financial statements and our unmodified opinions on them are included in the State of Wisconsin Investment Board's *2022 Retirement Funds Annual Report*.



STATE OF WISCONSIN

Legislative Audit Bureau

Joe Chrisman
State Auditor

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September 6, 2023

Senator Eric Wimberger and
Representative Robert Wittke, Co-chairpersons
Joint Legislative Audit Committee
State Capitol
Madison, Wisconsin 53702

Dear Senator Wimberger and Representative Wittke:

As required by ss. 13.94 (1) (df) and 25.17 (51), Wis. Stats., we have completed an audit of the financial statements of the Core Retirement Investment Trust Fund (Core Fund) and the Variable Retirement Investment Trust Fund (Variable Fund) administered by the State of Wisconsin Investment Board (SWIB) as of and for the year ended December 31, 2022. SWIB invests assets of the Wisconsin Retirement System through the Core Fund and Variable Fund, and together these funds are known as the Retirement Funds. The financial statements report the investment activity for the Retirement Funds. The financial statements and our unmodified opinions on them are included in SWIB's *2022 Retirement Funds Annual Report*, which may be found on SWIB's website.


Net investment position provides a measure of overall financial condition. On the basis of generally accepted accounting principles (GAAP), the net investment position of the Core Fund decreased from \$136.3 billion as of December 31, 2021, to \$114.4 billion as of December 31, 2022. The Core Fund reported net investment income of \$20.0 billion in 2021 and a net investment loss of \$17.4 billion in 2022. The reported one-year investment return, net of all fees and costs, decreased from 16.9 percent in 2021 to a negative 12.9 percent in 2022. The Core Fund investment return in 2022 is largely attributed to negative investment returns from public equity and fixed income investments.

The net investment position of the Variable Fund decreased from \$10.9 billion as of December 31, 2021, to \$8.4 billion as of December 31, 2022. The Variable Fund reported net investment income of \$1.8 billion in 2021 and a net investment loss of \$1.9 billion in 2022. The reported one-year investment return, net of all fees and costs, decreased from 20.0 percent in 2021 to a negative 17.8 percent in 2022. The Variable Fund investment return in 2022 is largely attributed to negative investment returns from public equity investments.

The Independent Auditor's Report on Internal Control over Financial Reporting and on Compliance and Other Matters, which is required by *Government Auditing Standards*, begins on page 13.

We appreciate the courtesy and cooperation extended to us by SWIB staff in completing this audit.

Respectfully submitted,



Joe Chrisman
State Auditor

JC/CS/ag

SWIB Administration
Audit Results
Total Investment Assets
Net Investment Income
Net Investment Position
External Management of Investments
Future Considerations

Introduction

SWIB invests the assets of the Wisconsin Retirement System through the Core Fund and the Variable Fund, which together are known as the Retirement Funds.

The Wisconsin Retirement System (WRS) provides postemployment benefits to participating state and local government employees. The Department of Employee Trust Funds (ETF) is responsible for administering the WRS, including collecting employee and employer contributions and paying benefits. The State of Wisconsin Investment Board (SWIB) invests the assets of the WRS through the Core Retirement Investment Trust Fund (Core Fund) and the Variable Retirement Investment Trust Fund (Variable Fund). The Core Fund is a diversified fund that typically is invested for the long term in several types of investments and provides less volatile investment returns. The Variable Fund is a public equities securities fund, or stock fund, that provides returns that are typically more volatile than the Core Fund. Together, these funds are known as the Retirement Funds. SWIB reports the investment activity of the Retirement Funds in the financial statements that are included in its *2022 Retirement Funds Annual Report*, which may be found on SWIB's website. SWIB prepares these financial statements using generally accepted accounting principles (GAAP) prescribed by the Governmental Accounting Standards Board (GASB).

SWIB Administration

SWIB is governed by a nine-member Board of Trustees.

SWIB is governed by a nine-member Board of Trustees, who have a fiduciary responsibility to administer the assets of each fund solely for the purpose of the fund at a reasonable cost and to manage investments with care, skill, prudence, and diligence. Board members include the Department of Administration's Secretary, six individuals appointed by the Governor and confirmed by the Senate to serve six-year terms, and two WRS participants. Four members appointed by the Governor must have at least 10 years of experience making investments, and one must have at least 10 years of financial

experience, including in local government. The two WRS participants, who serve six-year terms, include one teacher appointed by the Teacher Retirement Board and one individual who is not a teacher and is appointed by the Wisconsin Retirement Board. The Appendix shows the members as of December 2022.

The Board of Trustees appoints the executive director/chief investment officer and the internal audit director. Although the Board establishes an overall investment plan for SWIB-managed funds, it delegated day-to-day investment management decisions to the executive director/chief investment officer and investment staff. In addition, the Board delegated certain investment decisions to a SWIB staff investment committee that is chaired by the executive director/chief investment officer and meets regularly to make investment decisions, including changes to investment guidelines and strategies. SWIB senior managers work with the executive director/chief investment officer to make organizational decisions to ensure staff operate within the policies, objectives, and guidelines established by the Board.

Audit Results

We provided unmodified opinions on the financial statements of the Retirement Funds investment activity as of and for the year ended December 31, 2022.

As required by Wisconsin Statutes, we completed an audit of the financial statements and related notes of the Retirement Funds as of and for the year ended December 31, 2022. The financial statements include information on the investment activity of the Retirement Funds, including important disclosures, such as those related to deposit and investment risk and fair value measurements as of December 31, 2022. To complete our audit of the financial statements, we reviewed SWIB's internal controls over financial reporting, tested financial transactions, and reviewed the financial statements, notes, and required supplementary information that were prepared by SWIB management. We provided unmodified opinions on the financial statements and related notes as of and for the year ended December 31, 2022.

We also issued our Independent Auditor's Report on Internal Control over Financial Reporting and on Compliance and Other Matters, which is required by *Government Auditing Standards* and begins on page 13.

Total Investment Assets

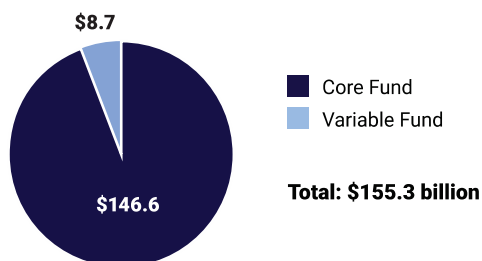
The Core Fund accounted for 94.4 percent of the total investment assets of the Retirement Funds as of December 31, 2022.

On a GAAP basis, total investment assets of the Retirement Funds decreased from \$187.1 billion as of December 31, 2021, to \$155.3 billion as of December 31, 2022, or by 17.0 percent. As of December 31, 2022, the Core Fund accounted for \$146.6 billion (94.4 percent) of the total investment assets of the Retirement Funds and the Variable Fund accounted for \$8.7 billion (5.6 percent), as shown in Figure 1.

Figure 1

Total Investment Assets Retirement Funds

As of December 31, 2022
(in billions)



The Core Fund investment assets include cash balances and receivables related to investment sales, as well as investments. The Core Fund investments include a distinct mix of investment types, including public equities, fixed income instruments, derivative instruments, and private fund investments, which are made up largely of private equity and real estate limited partnerships. The Variable Fund is a public equities securities fund that provides returns that are typically more volatile than the Core Fund. The Variable Fund investment assets include cash balances and receivables, in addition to investments comprised mostly of public equities.

Net Investment Income

The Core Fund and the Variable Fund reported net investment losses in 2022 of \$17.4 billion and \$1.9 billion, respectively.

On a GAAP basis, the net investment income reported by the Core Fund decreased from \$20.0 billion in 2021 to a net investment loss of \$17.4 billion in 2022, or by 187.0 percent. The reported one-year investment return, net of all fees and costs, decreased from 16.9 percent in 2021 to a negative 12.9 percent in 2022. One-year investment returns exceeded the Core Fund benchmark of a negative 13.3 percent in 2022. On a GAAP basis, the net investment income reported by the Variable Fund decreased from \$1.8 billion in 2021 to a net investment loss of \$1.9 billion in 2022, or by 205.6 percent. The reported one-year investment return, net of all fees and costs, decreased from 20.0 percent in 2021 to a negative 17.8 percent in 2022. One-year investment returns exceeded the Variable Fund benchmark of a negative 18.1 percent in 2022.

SWIB reported that the 20-year investment return for the Core Fund was 7.7 percent.

SWIB has a fiduciary responsibility to prudently invest the assets of the Retirement Funds in a diversified manner to meet WRS funding needs, while minimizing the risk of large losses. SWIB's investment strategy is to meet the long-term expected rate-of-return assumption, which is 6.8 percent. As of December 31, 2022, SWIB's 20-year return for the Core Fund, net of external management fees but not other

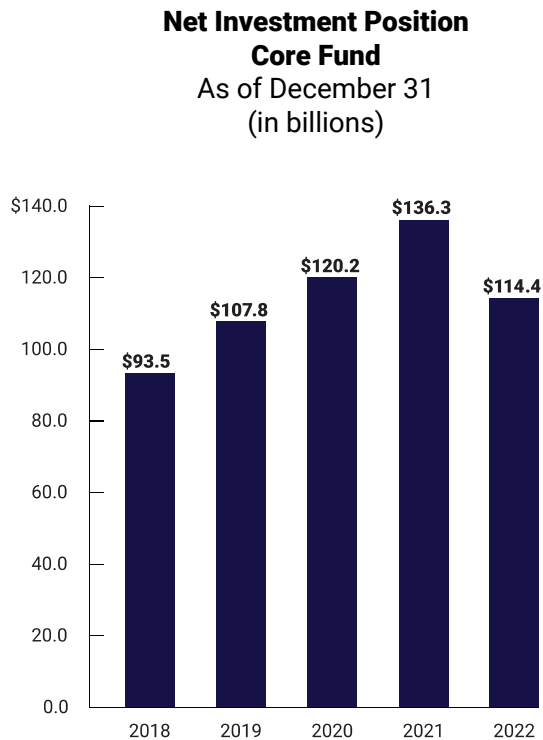
costs, was 7.7 percent. SWIB reported that the 10-year return for the Core Fund as of December 31, 2022, also exceeded the long-term expected rate-of-return assumption. However, the one-year and five-year returns as of December 31, 2022, did not exceed the long-term expected rate-of-return assumption.

Net Investment Position

The net investment position of the Core Fund decreased from \$136.3 billion as of December 31, 2021, to \$114.4 billion as of December 31, 2022.

Net investment position, which is the investment assets less investment liabilities, is a measure of overall financial condition. As shown in Figure 2, the net investment position of the Core Fund decreased on a GAAP basis from \$136.3 billion as of December 31, 2021, to \$114.4 billion as of December 31, 2022, or by 16.1 percent. The decrease is largely attributed to negative investment returns from public equity and fixed income investments. From December 31, 2018, through December 31, 2022, the net investment position of the Core Fund increased by \$20.9 billion, or by 22.4 percent.

Figure 2

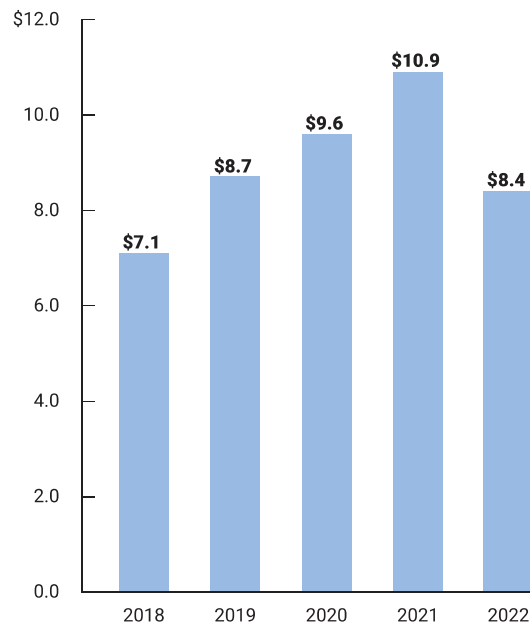


The net investment position of the Variable Fund decreased from \$10.9 billion as of December 31, 2021, to \$8.4 billion as of December 31, 2022.

As shown in Figure 3, the net investment position of the Variable Fund decreased from \$10.9 billion as of December 31, 2021, to \$8.4 billion as of December 31, 2022, or by 22.9 percent. The decrease is largely attributed to negative investment returns from public equity investments. From December 31, 2018, through December 31, 2022, the net investment position of the Variable Fund increased by \$1.3 billion, or by 18.3 percent.

Figure 3

**Net Investment Position
Variable Fund**
As of December 31
(in billions)



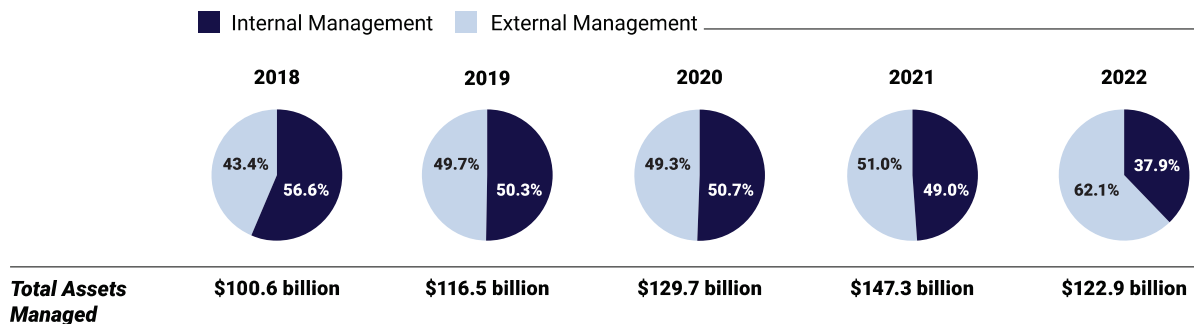
External Management of Investments

As of December 31, 2022, 37.9 percent of the assets of the Retirement Funds were managed internally by SWIB.

SWIB's investment strategy for the assets of the Retirement Funds employs a mix of internal and external management of assets. Total assets managed, which are the total investment assets less related investment liabilities, are reported by SWIB in quarterly reports, which are required to be submitted to the Legislature under s. 25.17 (13m), Wis. Stats. As shown in Figure 4, the percentage of assets managed internally by SWIB has decreased from 56.6 percent as of December 31, 2018, to 37.9 percent as of December 31, 2022.

Figure 4

**Internal and External Management
Retirement Funds' Total Assets Managed¹**
As of December 31



¹ Total assets managed, which are the total investment assets less related investment liabilities, are reported by SWIB in quarterly reports, which are required to be submitted to the Legislature under s. 25.17 (13m), Wis. Stats.

SWIB staff indicated the decrease in internal management of assets from December 31, 2021, to December 31, 2022, was largely the result of decreases in the value of public market investments.

SWIB staff indicated the decrease in internal management of assets from December 31, 2021, to December 31, 2022, was largely the result of decreases in the value of public market investments in 2022, such as public equities, which are largely internally managed. At the same time, private market investments, such as private equity limited partnerships, which are managed externally, had small increases in value in 2022. As a result, according to SWIB staff, as the total assets invested decreased, the proportion of assets invested externally in private market investments increased relative to assets managed internally in public market investments.

Historically, SWIB's goal had been to increase the percentage of assets managed internally because external management is more expensive. However, SWIB did not establish a target or target ranges for the proportion of assets to manage internally, and it did not have a written plan for moving certain investment strategies to internal management. In report 22-8, we recommended SWIB develop a multi-year strategic plan that includes goals for the proportion of assets managed internally. In the June 2023 SWIB board meeting materials, SWIB reported that a cross-functional working group was convened with plans for development of a strategic plan by October 2023. SWIB noted that it is developing a framework to select active versus passive investment strategies and internal versus external investment management strategies. SWIB indicated it is not targeting a certain threshold for internal versus external management of assets.

In 2021, SWIB changed how it accounts for certain external investment management fees charged by external managers.

Management fees are charged by external investment managers who invest in assets, including private equity limited partnerships and hedge funds. Management fees typically include two components: base fees and performance fees. Base fees are calculated as a proportion of assets invested, and performance fees are typically calculated based on investment returns. As noted in report 22-12, SWIB changed how it accounts for certain external investment management fees beginning

in 2021 by no longer reporting these fees in the separate external investment management fees account on the financial statements. Instead, SWIB reported these fees in the Net Increase (Decrease) in the Fair Value of Investments account. SWIB indicated that it made this change, in part, because it does not directly pay certain external investment management fees, which are reported to SWIB by external managers net of the value of the investments.

In report 22-12, we reported a concern with a lack of transparency in the presentation of external investment management fees.

In report 22-12, we reported a concern with a lack of transparency in the presentation of external investment management fees in its annual report and recommended that SWIB include specific information on external investment management fees in its annual report; provide specific information on external investment management fees to the Department of Employee Trust Funds to assist it in transparently reporting external investment management fees in its financial reporting; and report to the Joint Legislative Audit Committee by November 30, 2022, on the status of its efforts to implement these recommendations. SWIB implemented corrective actions to address these recommendations. In its *2022 Retirement Funds Annual Report*, SWIB included information on external investment management fees in the management discussion and analysis section of the report.

As shown in Table 1, external investment management fees reported by SWIB were \$1,107.8 million as of December 31, 2022, compared to \$1,831.4 million as of December 31, 2021.

Table 1

External Investment Management Fees¹
For the Year Ended December 31
(in millions)

Investment Type	2022	2021
Private Equity Investments	\$ 509.6	\$ 1,345.3
Hedge Funds	252.5	193.3
Public Market Investments ^{2, 3}	109.8	91.9
Real Estate Limited Partnerships	235.9	200.9
Total	\$1,107.8	\$1,831.4

¹ Includes carried interest, which is a type of performance fee paid when a fund manager liquidates an investment and the rate-of-return exceeds an agreed-upon minimum rate.

² Includes investments in separately managed accounts and commingled investments, largely in equities and public fixed income.

³ Includes \$46.9 million for the year ended December 31, 2022, and \$49.5 million for the year ended December 31, 2021, in external investment management fees reported in the External Investment Management Fees account on the Statement of Changes in Net Investment Position.

The decrease in external investment management fees related largely to private equity investments management fees, which decreased by 62.1 percent from 2021 to 2022. SWIB staff attributed this decrease to the decline in performance of private equity investments in 2022. SWIB reported investment returns for private equity investments of 3.9 percent for 2022, compared to 41.5 percent for 2021.

Future Considerations

In August 2022, the Attorney General issued opinion OAG-02-22, and indicated that SWIB has the authority to issue debt.

In December 2021, SWIB requested an opinion from the Wisconsin Attorney General regarding SWIB's authority to issue public debt. SWIB noted in its request that issuing debt is one of many methods an investor may use to generate leverage, which is an investment strategy of using borrowed money to increase the potential return of an investment. The SWIB Board of Trustees first approved the use of leverage for the Core Fund in 2012. In making its request to the Attorney General, SWIB indicated it was seeking clarification on its authority to issue debt to ensure it had clear documentation of its authority for stakeholders involved in the debt issuance process, such as credit rating agencies and underwriters. In August 2022, the Attorney General issued opinion OAG-02-22, and indicated that SWIB has the authority to issue debt provided that the statutory prudent person standard, as defined in s. 25.15(2), Wis. Stats., is met. This standard requires SWIB to manage the assets with the care, skill, prudence, and diligence of a prudent person acting in a similar capacity.

In June 2023, S&P Global Ratings provided the WRS a AAA credit rating. In July 2023, SWIB staff indicated there are no plans to issue debt in the near future. It will be important that SWIB carefully considers financial reporting and disclosure requirements at such time as it begins to issue debt.

■ ■ ■ ■

Auditor's Report



Independent Auditor's Report on Internal Control over Financial Reporting and on Compliance and Other Matters

Senator Eric Wimberger and
Representative Robert Wittke, Co-chairpersons
Joint Legislative Audit Committee
State Capitol
Madison, Wisconsin 53702

Members of the Board of Trustees, and
Mr. Edwin Denson, Executive Director/Chief Investment Officer
State of Wisconsin Investment Board

We have audited the financial statements and the related notes of the Core Retirement Investment Trust Fund and the Variable Retirement Investment Trust Fund (Retirement Funds), administered by the State of Wisconsin Investment Board (SWIB), as of and for the year ended December 31, 2022, and have issued our report thereon dated August 31, 2023. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, which is issued by the Comptroller General of the United States. The financial statements and related auditor's opinions have been included in SWIB's *2022 Retirement Funds Annual Report*.

Report on Internal Control over Financial Reporting

Management of SWIB is responsible for establishing and maintaining effective internal control over financial reporting (internal control) for the Retirement Funds. In planning and performing our audit of the financial statements, we considered SWIB's internal control as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of SWIB's internal control. Accordingly, we do not express an opinion on the effectiveness of SWIB's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent misstatements or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency or a combination of deficiencies in internal control such that there is a reasonable possibility that a material misstatement of the financial statements of the Retirement Funds will not be prevented, or that a material misstatement will not be detected and corrected on a timely basis. A *significant deficiency* is a deficiency or a combination of deficiencies in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses or significant deficiencies may exist that were not identified.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether the financial statements of the Retirement Funds are free from material misstatement, we performed tests of compliance with certain provisions of laws, regulations, and contracts, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of This Report

This report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be used when considering SWIB's internal control and compliance. The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the result of that testing, and not to provide an opinion on the effectiveness of SWIB's internal control or on compliance. Accordingly, this report is not suitable for any other purpose.

LEGISLATIVE AUDIT BUREAU

A handwritten signature in cursive script that reads "Legislative Audit Bureau".

August 31, 2023

Appendix

Appendix

Members of the SWIB Board of Trustees

December 2022¹

Department of Administration, Secretary

Kathy Blumenfeld

Public Members

Barbara Nick (Chair), term expires 2027,
Dairyland Power Cooperative,
President and Chief Executive Officer (Retired)

Clyde Tinnen (Vice-Chair), term expires 2027,
Foley & Lardner LLP, Corporate Partner

David Stein (Former Chair), term expires 2023,
Associated Banc-Corp, Executive Vice President
and Head of Retail Banking

Esther Ancel, term expires 2027,
University of Wisconsin-Milwaukee,
Emeritus Professor of Finance

Jeff DeAngelis, term expires 2029,
Northwestern Mutual Wealth Management Company,
Former Chief Investment Officer;
Mason Street Advisors, Former President

Local Government Representative

Kristi Palmer, term expires 2029,
Marathon County, Finance Director

Wisconsin Retirement System Participants

John Voelker, term expires 2027,
Department of Employee Trust Funds, Secretary

Dave Schalow, term expires 2025,
University of Wisconsin-Stevens Point,
Professor of Finance

¹ David Stein retired from the Board in 2023, and Tom Merfeld, CUNA Mutual Group, Chief Risk Officer and Chief Financial Officer (retired), joined the Board as a public member at the June 2023 board meeting.