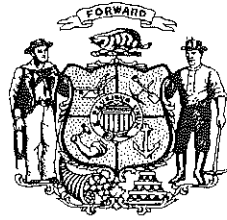


# STATE OF WISCONSIN

SENATE CHAIR  
**Howard Marklein**

316 East, State Capitol  
P.O. Box 7882  
Madison, WI 53707-7882  
Phone: (608) 266-0703



ASSEMBLY CHAIR  
**Mark Born**

308 East, State Capitol  
P.O. Box 8952  
Madison, WI 53708-8953  
Phone: (608) 266-2540

## JOINT COMMITTEE ON FINANCE

### MEMORANDUM

To: Members  
Joint Committee on Finance

From: Senator Howard Marklein  
Representative Mark Born

Date: May 15, 2023

Re: SWIB Report to JFC

Attached is a report on all expenses charged to the trust funds under management and the number of full-time equivalent positions created or abolished during the quarter from the State of Wisconsin Investment Board, pursuant to s. 25.17(13m), Stats.

This report is being provided for your information only. No action by the Committee is required. Please feel free to contact us if you have any questions.

Attachments

HM:MB:jm



STATE OF WISCONSIN  
INVESTMENT BOARD

MAY 15 2023

*St. Finance*

May 12, 2023

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<sup>1</sup>. The information contained in this report is for the quarter ended March 31, 2023.

Total Cost of Management Summary	2Q2022	3Q2022	4Q2022	1Q2023	Trailing 4 Qtr Total	% of Total
<b>Internal Operating Expenses</b>						
Operating Budget Expenses	\$ 42,801,859	\$ 13,275,388	\$ 16,013,990	\$ 14,718,435	\$ 86,809,672	63.9%
Custodial, Investment Operations & Banking	1,692,456	1,647,965	1,961,451	2,057,242	7,359,114	5.4%
Legal	625,000	625,000	371,714	561,635	2,183,349	1.6%
Investment Research & Consulting	9,150,155	9,112,954	7,570,768	8,387,483	34,221,360	25.3%
<b>Total Internal Operating Expenses</b>	<b>\$ 54,269,470</b>	<b>\$ 24,661,307</b>	<b>\$ 25,917,923</b>	<b>\$ 25,724,795</b>	<b>\$ 130,573,495</b>	<b>96.2%</b>
Securities Lending Agent Expenses	\$ 1,412,138	\$ 1,198,959	\$ 1,125,732	\$ 1,455,665	\$ 5,192,494	3.8%
<b>Total SWIB Operating Costs</b>	<b>\$ 55,681,608</b>	<b>\$ 25,860,266</b>	<b>\$ 27,043,655</b>	<b>\$ 27,180,460</b>	<b>\$ 135,765,989</b>	<b>100.0%</b>
<b>External Investment Management Fees</b>						
<b>Externally Managed Separate Account Fees</b>						
Beta One & Other - Separately Managed	\$ 6,621,385	\$ 15,970,497	\$ 12,231,686	\$ 10,289,679	\$ 45,113,247	6.2%
<b>Supplemental Information - External Fund Fees</b>						
Real Estate	\$ 19,257,344	\$ 20,775,122	\$ 20,890,279	\$ 19,702,319	\$ 80,625,065	11.1%
Private Equity & Venture Capital	72,498,709	67,722,428	72,422,893	55,955,436	268,599,465	36.8%
Hedge Funds	60,862,749	58,023,466	61,423,994	52,940,887	233,251,096	32.0%
Beta One & Other - External Funds	26,091,654	3,044,345	15,891,147	55,999,027	101,026,172	13.9%
<b>Total External Investment Management Fees</b>	<b>\$ 185,331,841</b>	<b>\$ 165,535,858</b>	<b>\$ 182,859,999</b>	<b>\$ 194,887,348</b>	<b>\$ 728,615,045</b>	<b>100.0%</b>
<b>Total Cost of Management</b>	<b>\$ 241,013,449</b>	<b>\$ 191,396,124</b>	<b>\$ 209,903,654</b>	<b>\$ 222,067,808</b>	<b>\$ 864,381,034</b>	

<sup>1</sup>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, 2022, after consideration of all expenses, costs, and fees, SWIB generated more than \$2.7 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 March 31, 2023, SWIB's total authorized positions are 290 as shown in the table below.

Assets Under Management & Positions		
	12/31/2022	03/31/2023
Internal Management	45.0%	46.5%
External Management	55.0%	53.5%
Total SWIB Positions	290	290

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

Wisconsin Retirement System (WRS)	6/30/2022		9/30/2022		12/31/2022		3/31/2023	
	Amount (in millions)	Percent	Amount (in millions)	Percent	Amount (in millions)	Percent	Amount (in millions)	Percent
Internally Managed Assets	\$52,094	41.7%	\$45,843	39.1%	\$46,587	37.9%	\$49,730	39.2%
Externally Managed Dedicated Assets	27,907	22.4%	26,743	22.8%	29,344	23.9%	29,282	23.1%
Externally Managed Commingled Assets	44,852	35.9%	44,579	38.0%	46,979	38.2%	47,809	37.7%
1. Passive Index	1,689	1.4%	1,711	1.5%	1,488	1.2%	1,168	0.9%
2. Limited Partnerships	30,212	24.2%	30,771	26.3%	31,719	25.8%	32,060	25.3%
3. Active Managed Commingled	12,950	10.4%	12,097	10.3%	13,772	11.2%	14,581	11.5%
<b>TOTAL WRS Assets</b>	<b>\$124,853</b>	<b>100.0%</b>	<b>\$117,165</b>	<b>100.0%</b>	<b>\$122,910</b>	<b>100.0%</b>	<b>\$126,821</b>	<b>100.0%</b>

State Investment Fund - Internally Managed	\$18,401		\$17,876		\$17,742		\$19,285	
Separately Managed Funds - Internally Managed	\$101		\$93		\$95		\$98	
Separately Managed Funds - Externally Managed	\$2,409		\$2,438		\$2,523		\$2,582	

<b>Total SWIB Assets Under Management</b>	<b>\$145,764</b>		<b>\$137,573</b>		<b>\$143,269</b>		<b>\$148,786</b>	
<b>Total Internal Management</b>	<b>\$70,596</b>	<b>48.4%</b>	<b>\$63,813</b>	<b>46.4%</b>	<b>\$64,423</b>	<b>45.0%</b>	<b>\$69,113</b>	<b>46.5%</b>
<b>Total External Management</b>	<b>\$75,168</b>	<b>51.6%</b>	<b>\$73,760</b>	<b>53.6%</b>	<b>\$78,846</b>	<b>55.0%</b>	<b>\$79,673</b>	<b>53.5%</b>

**STATE OF WISCONSIN INVESTMENT BOARD**  
**Expenses for All Funds Under Management**  
**Quarter Ending March 31, 2023**

**ATTACHMENT B**

EXPENSE CATEGORY	SERVICE PROVIDED	EXPENSES
<b><u>Internal Expenses</u></b>		
Staff Compensation	Staff Compensation	\$ 10,363,827
Fringe Benefits	Fringe Benefits	2,898,899
Supplies, Travel & Facilities	General Supplies & Services	1,455,709
<b>Total Internal Expenses</b>		<b>\$ 14,718,435</b>
<b><u>Custodial, Investment Operations and Banking Fees</u></b>		
BNY Mellon Asset Servicing - Custody	Master Custody Services	\$ 393,556
BNY Mellon Asset Servicing - Investment Operations	Investment Operating Services	1,328,484
Markit NA	Investment Data Management Software	335,201
US Bank	Banking Fees	(9)
<b>Total Custodial, Investment Operations and Banking Fees</b>		<b>\$ 2,057,242</b>
<b><u>Legal Fees</u></b>		
Chapman & Cutler LLP	Legal Work for Investment Strategies	\$ 60,396
DLA Piper LLP (US)	Legal Work for Investment Strategies	59,466
Godfrey & Kahn SC	Legal Work for Investment Strategies	20,223
Latham & Watkins LLP	Legal Work for Investment Strategies	1,265
Legal Services Expense Accrual	Legal Work for Investment Strategies	300,367
Neal Gerber Eisenberg	Legal Work for Investment Strategies	35,989
Quarles & Brady	Legal Work for Investment Strategies	81,285
Rutherford & Bechtold LLC	Legal Work for Investment Strategies	2,645
<b>Total Legal Fees</b>		<b>\$ 561,635</b>
<b><u>Investment Counsel</u></b>		
AE Business Solutions	Information Technology Consulting Services	\$ 18,000
Aksia LLC	Hedge Fund Investment Consulting	193,750
Alex Solutions	Research and Data Services	40,750
Algomi Corporation	Investment Consulting Services	7,058
Apex Systems	Investment Consulting Services	65,822
Arthur Selender	Investment Consulting Services	13,000
Automation Anywhere, Inc.	Process Automation Software	49,400
Backstop Solutions Group	Investment Software	(23,792)
Barrons	Investment Research	62
BCA Research Inc	Global & Domestic Fixed Income Strategy Research	34,125
Blacklight Technology Partners, LLC	Research and Data Services	31,500
Blackrock Financial Management Inc	Risk Services	85,000
Bloomberg Finance LP	Market, Company, Industry & Benchmark Information	1,073,424
BNY Mellon Asset Servicing - Eagle/Pace	Investment Consulting Services	115,000
Bonfire Interactive LTD	Strategic Sourcing Software	20,000
Bridge Consulting Partners Ltd	Investment Consulting Services	43,040
Callan Associates Inc	Investment Consulting & Performance Benchmarking	12,500
CappThesis, LLC	Research and Data Services	2,500
Carahsoft Technology Corp	Investment Consulting Services	26,767
CBJL Incorporated	Investment Consulting Services	99,220
CBOE Global Markets, Inc.	Research and Data Services	4,860
CFRA Research	Investment Research Services	21,637
Charles River System Inc	Portfolio Management Trading Software & Services	445,498
CoStar Portfolio Strategy	Real Estate Consulting & Research Services	28,738
CUSIP Global Services	Research and Data Services	16,250
Cutter Associates	Investment Organization and Systems Consulting	30,400
Dacheng Xiu	Investment Research	37,500
Datacamp Inc	Research and Data Services	114
DiatomC LLC	Investment Consulting Services	95,320
DigTimes Inc	Investment Research	440
Dow Jones News Service	Company and Industry News Services	1,822
DTCC - EPN	Trade Settlement Service	3,400
DTCC ITP LLC	Trade Settlement Service	3,257
efilemyforms.com	On-Line Filing Service	70
EFront Financial Solutions Inc	Private Markets Portfolio Management Services	196,914
enableIT LLC	Investment Research	11,935
Ernst & Young LLP	Tax Compliance Services & Investment Consulting	46,000
Euromonitor International	Research and Data Services	19,766
FactSet Research Systems Inc	Financial & Economic Database	1,015,903
FIS Data Systems Inc.	Research and Data Services	15,969
Fitch Solutions Inc	Credit Rating Services	18,333
FTSE International Inc	Real Time Index Data	14,343

EXPENSE CATEGORY	SERVICE PROVIDED	EXPENSES
Funston Advisory Services LLC	Consulting Services	14,500
Gallagher	Insurance and Risk Management Services	15,647
Green Street Advisor	Real Estate Analytics	21,046
Haver Analytics	Global Macroeconomic Research	22,740
Ice Data LP	Fixed Income Indices	25,764
Institutional Limited Partners Association ILPA	Private Equity Research	5,000
Institutional Shareholder Services Inc	Proxy Voting Analysis	41,914
Intelligent Automation Consulting	Automation Consulting Services	16,200
Investment Research Expense Accrual	Investment Research	665,025
IPC Systems Inc	Trading Telecommunication System	15,258
Joyce C Knauff & Associates	Investment Consulting	40,000
Keystone Consulting Inc	Investment Information Technology Consulting Services	66,880
Knowledge Services	Recruitment Consulting	83,576
Kreischer Miller LLP	Investment Consulting Services	50,000
London Stock Exchange	London Stock Exchange Data	44,716
Mackey LLC	Research Management System	53,366
Manalo Advisors Limited	Research and Data Services	3,750
Markit Group Limited	Investment Consulting Services	7,730
Markit NA	Investment Data Management Software	27,500
Markit-EDM Limited	Investment Consulting	191,319
Matrix IDM, LLC	Investment Consulting Services	26,600
McLagan Partners Inc	Investment Compensation Data and Analysis	43,750
Meketa Investment Group	Public Markets External Manager Consultant	66,930
MNI Market News	Research and Data Services	1,947
Moodys Analytics	Economic, Currency & Bond Analysis	84,100
MSCI Inc - Risk Metrics Solutions	Research and Data Services	320,108
MSCI, Inc	Research and Data Services	62,198
NAIOP Commercial Real Estate Development Association	Investment Consulting Services	395
National Council of Real Estate Investment Fiduciaries	Real Estate Performance Research	2,500
NEPC LLC	Investment Consulting Services	80,000
Novus Partners Inc	Profit & Loss Analytics System	18,885
Nuware Technology Corp	Investment Information Technology Consulting Services	119,888
NYSE Market Inc	New York Stock Exchange Data	6,282
OptionMetrics	Investment Data Service	38,340
Options Price Reporting Authority	Quote System for Options Market	2,459
Oxford Economics USA INC	Research and Data Service	24,463
Pac-invest	Research and Data Services	12,945
Pension Real Estate Association	Real Estate Investment Research	330
Pitchbook Data Inc	Research and Data Services	17,176
PremiaLab	Investment Research	12,451
Quantum Research Consulting LLC	Investment Consulting Services	30,600
Refinitiv	Research Pricing (Autex, Baseline, FirstCall)	207,989
RIMES Technologies Corporation	Research and Data Service	81,250
Russell Investment Group	Index Data	8,932
S&P Global Market Intelligence	Industry & Corporate Research	105,825
SallPoint Technologies, Inc.	Information Security Software	18,750
Seaport Global Securities LLC	Research and Data Services	2,510
Sharp Decisions Inc	Investment Information Technology Consulting Services	90,784
Simcorp USA, Inc.	Investment System	806,163
Snowflake Inc	Research and Data Services	25,000
Solve Advisors Inc	Investment Research	10,000
Spherion	Staffing Services	6,680
Statista	Investment Research	177
StepStone Group	Private Equity Consulting Services	154,330
StepStone Group Real Estate	Real Estate Consulting Services	57,883
SWIFT SC	Research and Data Services	5,032
SystemsAccountants	Investment Information Technology Consulting Services	70,400
Taranis, Inc.	Investment Information Technology Consulting Services	68,640
Tetsey Advisory Group	Consumer Sector Research	18,750
The Financial Times Limited	Investment Research	187
The Institute for Quantitative Research in Finance	Research and Data Services	5,500
The Nasdaq Stock Market, LLC	Research and Data Services	4,650
The Spaulding Group, Inc.	Audit Services	21,250
Toronto Stock Exchange	Market Data	14,601
TradeWeb	On-Line Fixed Income Trading Services	10,188
Trepp, LLC	Investment Research	50,400
Unit4 Business Software Inc	Financial & Administration Services System	77,019
Vadim Moroz	Investment Consulting Services	(27,000)
Virtu ITG Analytics LLC	Trading Transaction Cost Analysis	20,500
Visible Alpha LLC	Research and Data Services	25,633
WallachBeth Capital LLC	Investment Consulting Services	3,000
Werner De Bondt	Investment Consulting Services	5,000
Wolters Kluwer Law & Business	GDP Forecasting Services	2,891

EXPENSE CATEGORY	SERVICE PROVIDED	EXPENSES
Wolverine Execution Services LLC	Options Trading Platform	1,395
WorldBridge Partners Inc	Recruitment Consulting	120,800
Yipit, LLC	Research and Data Services	(7,500)
<b>Total Investment Counsel</b>		<b>\$ 8,387,483</b>
<b><u>Separate Account Public Market Management Fees</u></b>		
Alliance Bernstein	Public Market Management Fees	\$ 2,994,734
Blackrock	Public Market Management Fees	1,483,822
Dodge and Cox	Public Market Management Fees	742,162
Driehaus Private Equity	Public Market Management Fees	463,731
eSecLending	Public Market Management Fees	4,089
Fidelity Investments	Public Market Management Fees	1,347,494
Parametric	Public Market Management Fees	579,563
Prudential Global Investment Management (PGIM)	Public Market Management Fees	348,665
Wellington Trust Company	Public Market Management Fees	2,345,419
<b>Total Separate Account Public Market Management Fees</b>		<b>\$ 10,289,679</b>
<b><u>Securities Lending Agent Fees</u></b>		
BNY Mellon Asset Servicing	Securities Lending Agent Fees	\$ 1,455,665
<b>Total Securities Lending Agent Fees</b>		<b>\$ 1,455,665</b>
<b>Total Quarterly Charges to Funds</b>		<b>\$ 37,470,139</b>

All costs reported are on an accrual basis except for internal operating costs 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 & Banking Fees**

*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.

*BNY Mellon:* 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 Mellon, which serves as the official book of record for SWIB's accounting and performance measurement functions. BNY Mellon 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 Fees, Services, and Expenses**

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 Counsel**

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 Fees**

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.



### **Externally Managed Separate Account Fees**

External asset managers have been delegated authority within guidelines established by SWIB to determine investment strategy and purchase securities in SWIB's name within a SWIB account. Fees are typically assessed as a percentage of the market value of assets under management and in some cases, fees are based on investment performance.

### **External Funds Fees**

SWIB invests in separate legal entities managed by external investment managers to gain exposure to select strategies including Public Markets, Private Equity, Venture Capital, Real Estate and Hedge Funds. In exchange for their investment management services, the external managers charge a fee within the entity they manage. 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 currently included in SWIB's total cost of management. Accordingly, these fees are reported as supplemental information. Beginning in 2023, External Funds Fees for private markets are reported on a net fee basis rather than gross. Net fees reflect fee offsets, waivers, and deferrals.