

November 12, 2021

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

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

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

Representative Samantha Kerkman, Co-Chair  
 Joint Legislative Audit Committee  
 P.O. Box 8952  
 Madison WI 53708-8952

Secretary Joel Brennan  
 Department of Administration  
 101 East Wilson Street  
 P.O. Box 7864  
 Madison, WI 53707-7864

Dear Senator Marklein, Senator Cowles, Representative Born, Representative Kerkman, and Secretary Brennan:

State statutes require the State of Wisconsin Investment Board (SWIB) to report all costs and expenses charged to the trust funds under management during the prior quarter as well as 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 September 30, 2021.

Total Cost of Management Summary	4Q2020	1Q2021	2Q2021	3Q2021	Trailing 4 Qtr Total	% of Total
<b>Internal Operating Expenses</b>						
Operating Budget Expenses	\$ 12,809,354	\$ 11,960,506	\$ 39,468,133	\$ 12,882,486	\$ 77,120,479	60.9%
Custodial, Investment Operations & Banking	1,945,599	1,597,860	1,667,094	1,712,812	6,923,365	5.5%
Legal	916,718	412,361	237,486	642,792	2,209,357	1.7%
Investment Research & Consulting	8,861,556	8,716,569	9,505,930	10,099,210	37,183,265	29.4%
<b>Total Internal Operating Expenses</b>	<b>\$ 24,533,227</b>	<b>\$ 22,687,296</b>	<b>\$ 50,878,643</b>	<b>\$ 25,337,300</b>	<b>\$ 123,436,466</b>	<b>97.5%</b>
Securities Lending Agent Expenses	633,569	906,556	884,053	706,762	3,130,940	2.5%
<b>Total SWIB Operating Costs</b>	<b>\$ 25,166,796</b>	<b>\$ 23,593,852</b>	<b>\$ 51,762,696</b>	<b>\$ 26,044,062</b>	<b>\$ 126,567,406</b>	<b>100.0%</b>
<b>External Investment Management Fees</b>						
<b>Externally Managed Separate Account Fees</b>						
Beta One & Other - Separately Managed	\$ 10,014,059	\$ 11,815,893	\$ 12,846,225	\$ 15,897,862	\$ 50,574,039	8.5%
<b>Supplemental Information - External Fund Fees</b>						
Real Estate	\$ 14,508,274	\$ 16,246,132	\$ 16,794,113	\$ 17,175,742	\$ 64,724,261	10.8%
Private Equity & Venture Capital	53,017,487	42,901,170	57,849,368	56,476,982	210,245,007	35.2%
Hedge Funds	80,920,383	60,313,126	43,171,220	46,910,532	231,315,261	38.7%
Beta One & Other - External Funds	2,465,978	3,971,887	15,468,903	18,697,235	40,604,003	6.8%
<b>Total External Investment Management Fee</b>	<b>\$ 160,926,181</b>	<b>\$ 135,248,208</b>	<b>\$ 146,129,829</b>	<b>\$ 155,158,353</b>	<b>\$ 597,462,571</b>	<b>100.0%</b>
<b>Total Cost of Management</b>	<b>\$ 186,092,977</b>	<b>\$ 158,842,060</b>	<b>\$ 197,892,525</b>	<b>\$ 181,202,415</b>	<b>\$ 724,029,977</b>	

For definitions of the expense categories presented above, please refer to Attachment C.

<sup>1</sup>Wisconsin Statutes Section 25.17 (13m): All 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 and externally managed fund fees are netted against the 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, 2020, after consideration of all expenses, costs, and fees, SWIB generated \$1.91 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. SWIB's total authorized positions are 261 as shown in the table below.

<b>Assets Under Management &amp; Positions</b>		
	<b>6/30/2021</b>	<b>9/30/2021</b>
Internal Management	55.5%	55.0%
External Management	44.5%	45.0%
<b>Total SWIB Positions</b>	<b>261</b>	<b>261</b>

In addition, Attachment B provides details of the services provided to SWIB and their associated quarterly costs.

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)	12/31/2020		3/31/2021		6/30/2021		9/30/2021	
	Amount (in millions)	Percent	Amount (in millions)	Percent	Amount (in millions)	Percent	Amount (in millions)	Percent
Internally Managed	<b>\$65,735</b>	<b>50.7%</b>	<b>\$68,456</b>	<b>51.6%</b>	<b>\$72,061</b>	<b>51.4%</b>	<b>\$72,136</b>	<b>51.2%</b>
Externally Managed Dedicated Accounts	<b>37,393</b>	<b>28.8%</b>	<b>35,943</b>	<b>27.1%</b>	<b>36,723</b>	<b>26.2%</b>	<b>35,978</b>	<b>25.5%</b>
Externally Managed Commingled Accounts	<b>26,617</b>	<b>20.5%</b>	<b>28,164</b>	<b>21.2%</b>	<b>31,351</b>	<b>22.4%</b>	<b>32,809</b>	<b>23.3%</b>
1. Passive Index Funds	2,730	2.1%	2,864	2.2%	2,966	2.1%	2,894	2.1%
2. Limited Partnerships	16,724	12.9%	17,894	13.5%	19,692	14.1%	22,128	15.7%
3. Actively Managed Commingled Accounts	7,163	5.5%	7,406	5.6%	8,693	6.2%	7,787	5.5%
<b>TOTAL WRS Assets</b>	<b>\$129,745</b>	<b>100.0%</b>	<b>\$132,563</b>	<b>100.0%</b>	<b>\$140,136</b>	<b>100.0%</b>	<b>\$140,923</b>	<b>100.0%</b>

State Investment Fund - Internally Managed	<b>\$11,861</b>		<b>\$13,988</b>		<b>\$15,426</b>		<b>\$14,648</b>	
Separately Managed Funds - Internal	<b>\$129</b>		<b>\$119</b>		<b>\$124</b>		<b>\$123</b>	
Separately Managed Funds - External	<b>\$2,174</b>		<b>\$2,148</b>		<b>\$2,221</b>		<b>\$2,225</b>	

<b>Total Assets Under Management</b>	<b>\$143,909</b>		<b>\$148,819</b>		<b>\$157,906</b>		<b>\$157,919</b>	
<b>Total Internal Management</b>	<b>\$77,725</b>	<b>54.0%</b>	<b>\$82,564</b>	<b>55.5%</b>	<b>\$87,611</b>	<b>55.5%</b>	<b>\$86,906</b>	<b>55.0%</b>
<b>Total External Management</b>	<b>\$66,184</b>	<b>46.0%</b>	<b>\$66,255</b>	<b>44.5%</b>	<b>\$70,295</b>	<b>44.5%</b>	<b>\$71,012</b>	<b>45.0%</b>

**STATE OF WISCONSIN INVESTMENT BOARD**  
**Expenses for All Funds Under Management**  
**Quarter Ending September 30, 2021**

**ATTACHMENT B**

<b>EXPENSE CATEGORY<sup>1</sup></b>	<b>SERVICE PROVIDED</b>	<b>EXPENSES</b>
<b><u>Internal Operating Expenses</u></b>		
Staff Compensation	Staff Compensation	\$ 9,349,519
Fringe Benefits	Fringe Benefits	2,108,678
Equipment, Supplies & Services	General Supplies & Services	1,424,289
<b>Total Internal Operating Expenses</b>		<b>\$ 12,882,486</b>
<b><u>Custodial, Investment Operations and Banking Fees</u></b>		
BNY Mellon Asset Servicing - Custody	Master Custody Services	\$ 285,318
BNY Mellon Asset Servicing - Investment Operations	Investment Operating Services	1,427,414
US Bank	Banking Fees	80
<b>Total Custodial, Investment Operations and Banking Fees</b>		<b>\$ 1,712,812</b>
<b><u>Legal Fees</u></b>		
Chapman & Cutler LLP	Legal Work for Investment Strategies	\$ 65,880
Cox Castle & Nicholson LLP	Legal Work for Investment Strategies	67,935
DLA Piper LLP (US)	Legal Work for Investment Strategies	168,799
Godfrey & Kahn SC	Legal Work for Investment Strategies	10,712
Latham & Watkins LLP	Legal Work for Investment Strategies	100,000
Purrington Moody Weill LLP	Legal Work for Investment Strategies	20,560
Quarles & Brady	Legal Work for Investment Strategies	167,493
Reinhart Boerner Van Deuren SC	Legal Work for Investment Strategies	153
Shearman & Sterling LLP	Legal Work for Investment Strategies	41,260
<b>Total Legal Fees</b>		<b>\$ 642,792</b>
<b><u>Investment Counsel</u></b>		
ABG Sundal Collier Inc	Investment Research	\$ 750
Adeptyx Consulting	Investment Consulting Services	128,901
Aksia LLC	Hedge Fund Investment Consulting	193,750
Alembic Global Advisors	Market Research	2,400
Alex Solutions	Research & Data Service	38,750
Arb Journal	Regulatory Research & Analysis	22,000
B Riley FBR Inc	Investment Research	6,000
Bank of America Merrill Lynch	Investment Research	136,900
BCA Research Inc	Global & Domestic Fixed Income Strategy Research	44,167
Berenberg	Investment Research	94,216
BITA Risk Limited	Risk Oversight Service	45,000
Blackrock Financial Management Inc	Risk Services	75,000
Bloomberg Finance LP	Market, Company, Industry & Benchmark Information	1,017,114
BMO Capital Markets Corp	Investment Research Services	22,000
BNY Mellon Asset Servicing - Eagle/Pace	Investment Consulting Services	150,530
Boenning & Scattergood Inc	Investment Research	3,150
BTIG, LLC	Investment Research	1,800
Canaccord Genuity	Investment Research	8,500
Capital Economics LTD	Market Research	56,611
Carnegie Inc	Investment Research	500
CBOE Global Markets, Inc.	Research and Data Services	1,500
CFRA Research	Investment Research Services	23,100
Charles River System Inc	Portfolio Management Trading Software & Services	346,475
CIBC World Markets Inc	Investment Research	8,500
CL King & Associates	Investment Research	5,600
Codrington Japan	Investment Research	500
Colliers Securities LLC	Investment Research	9,000
Compass Point Research & Trading, LLC	Investment Research	1,000
Cornerstone Macro LLC	Macro Economic Research	29,050
CoStar Portfolio Strategy	Real Estate Consulting & Research Services	28,738
Cowen and Company LLC	Investment Research	41,400
Craig-Hallum Capital Group	Investment Research	5,700
Crane Data LLC	Research and Data Services	3,000
CreditSights	Credit Assessments	17,500
Cross Current Research LLC	Healthcare Sector Research	10,000
DA Davidson & Co	Investment Research	18,500
Dacheng Xiu	Investment Research	37,500
Daiwa Capital Markets America	Investment Research	34,400
Davy Securities Limited	Investment Research	11,750
Deutsche Bank	Tax registration fees	71,300
DNB Bank ASA	Investment Research	1,000
DTCC – EPN	Trade Settlement Service	3,000
DTCC ITP LLC	Trade Settlement Service	772
EFront Financial Solutions Inc	Private Markets Portfolio Management Services	225,473
Elevation LLC	Research and Data	20,000
Empirical Research Partners LLC	Investment Research	77,450
Ernst & Young LLP	Tax Compliance Services & Investment Consulting	12,510
Euromonitor International	Research and Data Services	18,915
Evercore Group LLC	Investment Research	63,800

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**Quarter Ending September 30, 2021**

EXPENSE CATEGORY <sup>1</sup>	SERVICE PROVIDED	EXPENSES
Exane Inc	Investment Research	79,300
FactSet Research Systems Inc	Financial & Economic Database	983,410
Fairleads Strategies	Research & Data Service	1,875
FBN Securities, Inc.	Investment Research	11,500
FIS Data Systems Inc.	Research and Data Services	39,000
Fitch Solutions Inc	Credit Rating Services	42,500
Furey Research Partners LLC	Small Cap Research	14,000
Future of the Money Management Industry	Research and Data Services	30,000
Gabriel Roeder Smith & Company	Actuarial Consulting	61,500
Gartner Inc	Technology Sector Research	28,715
Goodbody	Investment Research	5,750
Grandview Analytics LLC	Investment Information Technology Consulting Services	92,984
Green Street Advisor	Real Estate Analytics	16,937
Guggenheim Securities LLC	Investment Research	11,900
Handelsbanken Markets Securities Inc.	Investment Research	6,000
Haver Analytics	Global Macroeconomic Research	22,700
Healthy Markets Association	Research & Data Service	12,500
HSBC Securities (USA) Inc.	Investment Research	3,500
Ice Data LP	Fixed Income Indices	20,097
IHS Markit KY3P LLC	Risk Management Service	10,000
In Focus Information LLC	Private Placement Investment Research	1,400
InsiderScore LLC	Investment Research & Analytics	30,000
Institutional Investor	Investment Data and Research Services	19,500
Institutional Shareholder Services Inc	Proxy Voting Analysis	41,914
Investec Securities (US) LLC	Investment Research	2,500
Jannay Montgomery Scott	Investment Research	1,100
Jefferies Research Services LLC	Investment Research	66,525
Keefe Bruyette & Woods (KBW)	Investment Research	44,500
Kepler Capital Markets Inc	Investment Research Services	16,100
KeyBanc Capital Markets Inc	Investment Research	22,250
Keystone Consulting Inc	Investment Information Technology Consulting Services	253,840
Kreischer Miller LLP	Investment Consulting	223,100
Liberum Capital Inc	Investment Research	26,550
Longbow Securities LLC	Investment Research	1,000
Loop Capital Markets LLC	Investment Research	7,500
Mackey LLC	Research Management System	58,463
Macquarie Capital (USA) Inc	Investment Research	23,100
Markit-EDM Limited	Investment Consulting	200,174
Matrix IDM, LLC	Investment Consulting	82,600
McLagan Partners Inc	Investment Compensation Data and Analysis	90,000
Meketa Investment Group	Public Markets External Manager Consultant	65,548
MKM Partners	Investment Research Services	14,000
Moodys Analytics	Economic, Currency & Bond Analysis	35,198
Morningstar Inc	Industrial Sector Market Research & Analysis	9,000
MSCI Inc - Risk Metrics Solutions	Research and Data Services	413,018
MUFG Securities America	Investment Research	27,900
National Bank Financial Inc	Investment Research	7,000
Needham & Company LLC	Investment Research	10,000
Nephron Research LLC	Investment Research	5,000
New Street Research LLC	Investment Research	25,000
Noble Capital Markets Inc	Investment Research	500
Northland Securities	Investment Research	3,700
Novus Partners Inc	Profit & Loss Analytics System	47,025
Nuware Technology Corp	Investment Information Technology Consulting Services	235,008
NYSE Market Inc	New York Stock Exchange Data	7,617
Odeon Capital Group, LLC	Research and Data Services	7,500
Oliver James	Investment Consulting	137,991
Oppenheimer & Co Inc	Investment Research	11,000
OptionMetrics	Investment Data Service	500
Options Price Reporting Authority	Quote System for Options Market	2,678
Pac-invest	Research and Data Services	12,156
Phil Erlanger Research Co Inc	Investment Research	2,000
Piper Sandler & Co	Investment Research	39,700
PremiaLab	Investment Research	12,451
RCM Technologies	Investment Consulting	39,000
Redburn Europe Limited	Investment Research	33,800
Refinitiv	Research Pricing (Autex, Baseline, FirstCall)	72,759
Renaissance Macro Research	Macro Economic Research	34,350
Research Alliance	Investment Research	15,000
Robert W. Baird & Co.	Investment Research	51,500
Rosenblatt Securities Inc	Investment Research	12,800
Roth Capital Partners	Investment Research	5,000
Russell Investment Group	Index Data	8,932
Rystad Energy AS	Investment Research	15,000

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EXPENSE CATEGORY <sup>1</sup>	SERVICE PROVIDED	EXPENSES
S&P Global Market Intelligence	Industry & Corporate Research	114,800
Sanford C Bernstein & Co LLC	Investment Research	181,338
Santander Investment Securities Inc	Investment Research	16,000
Seaport Global Securities LLC	Research and Data Services	10,970
SEB Securities Inc	Investment Research	1,000
Sharp Decisions Inc	Investment Information Technology Consulting Services	82,064
Sidoti & Company LLC	Investment Research	5,500
Simcorp USA, Inc.	Investment System	1,263,536
Simmons & Simmons	Global Regulatory Services	7,301
SMBC Nikko Securities America, Inc.	Investment Research	42,500
Snowflake Inc	Research and Data Services	25,000
Solve Advisors Inc	Investment Research	9,000
Standards Board for Alternative Investments Limited	Investment Membership	2,767
Stephens Inc	Investment Research	18,400
StepStone Group	Private Equity Consulting Services	239,587
StepStone Group Real Estate	Real Estate Consulting Services	56,471
Stifel Nicolaus & Company Incorporated	Investment Research	38,900
Stuart Frankel & Co., Inc	Investment Research	5,000
SVB Leerink	Research and Data Services	4,000
SWIFT SC	Research and Data Services	793
SystemsAccountants	Investment Information Technology Consulting Services	81,920
Taranis, Inc.	Investment Information Technology Consulting Services	63,200
TD Securities (USA) LLC	Investment Research	4,500
Telsey Advisory Group	Consumer Sector Research	31,250
The Benchmark Company LLC	Investment Research	4,000
The Leuthold Group LLC	Broad Based Market Research	12,500
The Nasdaq Stock Market, LLC	Research & Data Services	4,500
Toronto Stock Exchange	Market Data	12,812
TradeWeb	On-Line Fixed Income Trading Services	9,534
Trivariate Research LP	Investment Research	5,000
Truist Securities, Inc.	Investment Research	13,900
Tudor Pickering Holt & Co	Investment Research	13,100
Unit4 Business Software Inc	Financial & Administration Services System	56,746
Urban Land Institute	Investment Consulting Services	813
Vertical Research Partners	Industrial Sector Market Research & Analysis	13,350
Verus Advisory Inc	Benchmarking Consulting Services	42,000
Visible Alpha LLC	Research and Data Services	36,619
V-Soft Consulting Group Inc	Investment Information Technology Consulting Services	76,800
Wall Street Journal	Investment Research & Information	12
Wedbush	Investment Research	14,000
Wells Fargo Securities, LLC	Investment Research Services	42,700
William Blair & Company LLC	Investment Research	9,500
Wolfe Trahan	Transportation and Macro Economic Research	80,300
Wolverine Execution Services LLC	Options Trading Platform	1,341
WorldBridge Partners Inc	Recruitment Consulting	32,500
Yipit, LLC	Research and Data Services	10,000
<b>Total Investment Counsel</b>		<b>\$ 10,099,210</b>
<b><u>Securities Lending Agent Fees</u></b>		
BNY Mellon Asset Servicing	Securities Lending Agent Fees	\$ 706,762
<b>Total Securities Lending Agent Fees</b>		<b>\$ 706,762</b>
<b>Total Quarterly Charges to Funds</b>		<b>\$ 26,044,062</b>

<sup>1</sup>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 the 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. The Attorney General annually reviews and approves a list of law firms to provide investment legal services for SWIB.

### **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. The securities lending agent fees are no longer netted with income and are reported as securities lending agent fee expenses starting on July 1, 2019.

### **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.