

Annual Comprehensive Financial Report

# 2021

For the Year Ending December 31, 2021







# ANNUAL COMPREHENSIVE FINANCIAL REPORT 2021

For the Year Ending December 31, 2021

State of Wisconsin Department of Employee Trust Funds  
Cindy Klimke-Armatoski, Chief Trust Financial Officer

Wisconsin Department of Employee Trust Funds  
PO Box 7931  
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State of Wisconsin  
Department of Employee Trust Funds

ET-8501

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# INTRODUCTORY SECTION

The background features a series of overlapping, wavy lines in various shades of teal and green. These lines create a sense of movement and depth. In the lower right quadrant, there is a grid of thin, dark teal lines that also follows the wavy pattern, adding a technical or architectural feel to the design.

State of Wisconsin  
Department of Employee Trust Funds





**STATE OF WISCONSIN**  
**Department of Employee Trust**  
**Funds**  
**A. John Voelker**  
 SECRETARY

Wisconsin Department of  
 Employee Trust Funds  
 PO Box 7931  
 Madison WI 53707-7931  
 1-877-533-5020 (toll free)  
 Fax (608) 267-4549  
<http://etf.wi.gov>

January 13, 2023

GOVERNOR TONY EVERS  
 MEMBERS OF THE STATE LEGISLATURE  
 PUBLIC EMPLOYEES, EMPLOYERS AND OTHER INTERESTED PARTIES:

We are pleased to present the Annual Comprehensive Financial Report (ACFR) of the Wisconsin Department of Employee Trust Funds (ETF) for the year ended December 31, 2021. This report provides comprehensive information about ETF, the Wisconsin Retirement System (WRS), and other employee benefit programs administered by ETF. The WRS continues to be financially strong and one of the best funded public pension systems in the country.

Responsibility for the accuracy of the data and the fairness and completeness of this presentation, including all disclosures, rests with the management of ETF. To the best of our knowledge, the enclosed information is accurate in all material respects and is reported in a manner designed to provide a fair representation of the financial position and results of the operations of ETF.

As required by Wis. Stat. § 13.94 (1) (dd), the Legislative Audit Bureau (LAB) has completed a financial audit of ETF and issued an unmodified ("clean") opinion on the financial statements for the year ended December 31, 2021. The independent auditor's report is located at the beginning of the Financial Section of this ACFR.

Management's Discussion and Analysis (MD&A) immediately follows the independent auditor's report and provides a narrative introduction, overview, and analysis of the financial statements. The MD&A complements this Letter of Transmittal and should be read in conjunction with it.

### **Historical Overview**

The WRS was created effective January 1, 1982. The system covers state and local public employees, including faculty and staff of the University of Wisconsin System, local police and firefighters, and all publicly employed teachers in the state. Those not included are employees of the City of Milwaukee and Milwaukee County, who are covered under separate retirement systems. Pension coverage for local government employees has been in place since 1891, when the legislature required Milwaukee to create a pension fund for retired and disabled police and firefighters. The legislature has since extended pension coverage to other public employees, along with creating group life and health insurance programs.

The Group Insurance Board (GIB) was created in 1959 to monitor the administration of the life and health insurance programs. ETF was created in 1967 to administer the various retirement and related benefit programs.

The WRS is the 8th largest public pension system in the U.S. and provides retirement benefits for more than 663,000 current and former state and local government employees. As of December 31, 2021, the WRS had 258,647 active employees, 226,605 annuitants (retirees, disabilitants, and beneficiaries), and 178,071 inactive participants with deferred benefits payable. The WRS is composed of 28% state employees and 72% local employees.



### **ETF Mission and Responsibilities**

ETF's mission is "to develop and deliver quality benefits and services to our customers while safeguarding the integrity of the Trust." ETF administers retirement benefits, including an optional, supplemental retirement savings plan, health and sick leave benefits, disability benefits, life insurance, income continuation insurance, and pre-tax savings accounts to pay for eligible expenses such as health care and dependent day care. There are five different statutory boards with responsibilities for programs operated by the Department. The ETF Board is both the overall governing body for the Department and the general policy-setting and trustee board for the WRS.

Participation by eligible employees is mandatory for retirement and Social Security, but optional for the other programs. The State of Wisconsin Investment Board (SWIB) invests the trust fund monies of the benefit programs.

ETF is responsible for:

- Collecting monies due the trust funds.
- Calculating and ensuring appropriate disbursement of benefit payments from the trust funds.
- Providing information to, and answering inquiries from, participating employees and employers.
- Establishing the controls, systems, and procedures necessary to ensure the appropriate administration and security of the trust.

### **Major Initiatives**

ETF's strategic goals include:

- Create an effortless customer experience,
- Implement outcomes-driven performance measurement and process management,
- Build a talented and agile workforce, and
- Implement modern, secure, and resilient information technologies.

Throughout 2021 ETF continued its efforts to modernize information technology and business processes, a multi-year program which is critical to accomplishing the above goals.

We successfully implemented an enterprise content management solution, which provides the functions that capture, store, retrieve, share, manage, and integrate information, as well as case (workflow) creation and management. The new system more efficiently scans, indexes, and retrieves customer documents allowing staff to provide an efficient and personalize customer experience.

We contracted with a vendor for an insurance administration system (IAS). The solution will provide a new, fully integrated, best practices-based administration system for benefits including health, life, and income continuation insurance, and several supplemental benefits. Staff have participated in numerous discovery sessions with the vendor to better understand ETF-specific processes and to inform the technical build-out of the IAS platform. The IAS is scheduled to go live in 2024. Work on a new pension administration system will follow the IAS implementation.

Information security continues to be front-and-center in the oversight and implementation of the administration of ETF programs. Security projects are designed to ensure that ETF is addressing the most critical security issues, implementing the most effective controls, and ensuring a solid foundation using industry standards. A few examples of ETF security efforts include: 1) formalizing a collaborative systematic approach to identify technology infrastructure vulnerabilities; 2) beginning an information security self-assessment review effort of ETF's existing security controls and business unit processes against industry standards; and 3) conducting vendor and service provider security reviews to ensure strong security controls exist to secure ETF information. ETF deploys a systematic approach to safeguard ETF's information assets through consistent and continuous mitigation of risk following the ISO 27001 framework.



The work noted above are examples demonstrating ETF's commitment and focus to fulfill our mission of providing quality benefits and services to our customers while safeguarding the integrity of the trust.

### **Funding Status**

#### **PENSION PLAN**

The funded status of the WRS is the measure of the extent to which the system has accumulated enough assets to pay the benefits earned by participants. The funded ratio is the ratio of plan assets to estimated future liabilities. The assets can be measured using either the current fair value of assets or a smoothed funding value of assets. The fair value measurement gives a more timely measurement, but can be extremely volatile. The funding value measurement, where gains and losses are smoothed over a five-year period, is less representative of current fair value, but better presents the funding trends without the year-to-year volatility.

The WRS continues to be one of the best-funded public employee retirement systems in the country. A well-funded system ensures that a lifetime of benefits can be paid to today's workers without burdening the next generation of taxpayers with higher contributions. The financial strength of the WRS is attributable to its unique plan design, funding discipline at the state and local level, strong governance, and the effective investment strategies of the SWIB.

The funding value-based ratio of the WRS remains 100% as of December 31, 2021. The fair value-based ratio, calculated in accordance with standards issued by the Governmental Accounting Standards Board, is 106.0%. This is an increase from 105.3%, and was primarily the result of strong market returns in 2021.

#### **OTHER EMPLOYEE BENEFIT PROGRAMS**

The Health Insurance Fund consists of a State plan and a Local plan. The plans include three separate risk pools, including a fully insured medical Health Maintenance Organization pool, a self-insured pharmacy benefit pool and a self-insured dental benefit pool. The GIB monitors the activity and reserve balances by plan type and within each plan's risk pools; and sets annual premium rates. The GIB policy specifies a range in which the reserve balances should fall as a percentage of projected expenses. The table below shows the reserve balances as of 12/31/2021, the projected reserve balance, and projected surplus as of 12/31/2022 based on reserve targets.



	Health Insurance Reserves (In Millions)							
	State Plan				Local Plan			
	Medical	Pharmacy	Dental	Total	Medical	Pharmacy	Dental	Total
Reserve Balance 12/31/2021	\$96.5	\$90.1	\$23.7	\$210.3	\$(3.3)	\$20.4	\$0.1	\$17.2
Projected Reserve Balance 12/31/2022	97.1	48.9	23.8	169.8	(3.2)	21.2	0.1	18.1
Projected 2023 Expense	1,222.7	449.5	61.4	1,733.6	203.6	61.0	2.2	266.8
GIB reserve policy range (% of projected expense)	3%-5%	8%-10%	5%-7%		3%-5%	8%-10%	5%-7%	
Mid-point reserve target	48.9	40.5	3.7	93.1				
Low-end reserve target					6.1	4.9	0.1	11.1
Projected surplus 12/31/2022	\$48.2	\$8.4	\$20.1	\$76.7	\$(9.3)	\$16.3	\$0.0	\$7.0

Per the policy, the GIB may decide to spread recommended rate adjustments so the surplus target is reached over a period of years rather than in one year. At its August 2022 meeting, the GIB adopted a reserve spend down strategy to apply reserves in a manner that would reduce the State plan surplus to below the mid-point of the target range to avoid a large premium increase that would negatively impact members and participating employers.

Please refer to Note 9, Other Post-Employment Benefit (OPEB) Plans Administered by ETF, and the Statistical Section for the funding status of other employee benefit programs.

### **Investments**

As noted earlier, the SWIB invests the trust fund monies of the program's ETF administrators. The global pandemic, and the economic fallout that came with it, resulted in a volatile investment year. Amidst volatility in the financial markets, the SWIB stayed the course in generating returns. The Core Fund achieved a net return of 16.9% in 2021, representing outperformance of 65 basis points relative to its benchmark. The Variable Fund ended 2021 with a net return of 20.0%. The Core Fund and Variable Fund had net assets of over \$147 billion as of December 31, 2021.

A complete discussion of investment returns, activities, asset allocation strategy, and policies governing those activities can be found in the Investment Section.

### **Legislative Initiatives**

During 2021, there was no legislation enacted that significantly affected the WRS and the employee benefit programs administered by ETF.



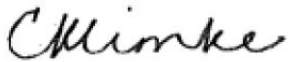
**Acknowledgments**

We would like to express our appreciation to the Governor, members of the Legislature, members of the boards, staff, employers, participants, and all those whose efforts and interest combine to ensure the successful operation of our system, while protecting the integrity of the trust funds.

Sincerely,

A handwritten signature in cursive script that reads "A. John Voelker".

A. John Voelker  
Secretary

A handwritten signature in cursive script that reads "C Klimke".

Cindy Klimke-Armatoski  
Chief Trust Financial Officer



Public Pension Coordinating Council

***Public Pension Standards Award  
For Funding and Administration  
2021***

Presented to

**Wisconsin Department of Employee Trust Funds**

In recognition of meeting professional standards for  
plan funding and administration as  
set forth in the Public Pension Standards.

*Presented by the Public Pension Coordinating Council, a confederation of*

National Association of State Retirement Administrators (NASRA)  
National Conference on Public Employee Retirement Systems (NCPERS)  
National Council on Teacher Retirement (NCTR)

A handwritten signature in black ink that reads "Alan H. Winkle".

Alan H. Winkle  
Program Administrator



## INTRODUCTORY SECTION

## ETF Boards and Department Organization

The individuals who serve on the boards that provide oversight for the Department of Employee Trust Funds (ETF) play important roles. Board decisions affect hundreds of thousands of individuals who participate in the retirement programs funded by the trust funds as well as other fringe benefit programs ETF operates for Wisconsin.

This section explains how board membership is determined and how membership overlaps. Under state law, members of the boards are chosen in a variety of ways. Some members are ex-officio, some are direct appointees of the Governor, others are appointed to fixed terms from lists submitted to the governor by specified organizations, and still others are directly elected by active participants or retirees.

The members and officers of each board are listed below, along with a short explanation of board responsibilities. Membership on the boards as of December 31, 2021, is as follows:

### » *Employee Trust Funds Board (13 Members)*

This board has general oversight of ETF; appoints the ETF Secretary; approves tables used for computing benefits, contribution rates and actuarial assumptions; authorizes all annuities except for disability; approves or rejects ETF administrative rules; and generally oversees administration of the benefit programs, except group health, life and income continuation insurance plans, employee reimbursement account, commuter benefit, and health savings account programs.

State law sets ETF Board membership criteria, with some members appointed by the Teachers Retirement Board (TR Board) and the Wisconsin Retirement Board (WR Board). The ETF Board has established three committees to assist the Board in fulfilling its fiduciary and oversight responsibilities: an Executive Committee, an Audit Committee and a Budget and Operations Committee. The Executive Committee oversees the effective

operation of Board and other Committee meetings and reviews personnel matters relating to the Department and the Secretary. The Audit Committee reviews the adequacy and effectiveness of the Department's system of internal controls, including those relating to information technology systems, and the Department's accounting and financial reporting systems. The Budget and Operations Committee reviews the biennial budget process and the Department's operating budget, as well as the Department's strategic business and information technology planning activities.

### Board Members

#### **Chair: Wayne E. Koessl**

Appointed by the WR Board. WR Board member appointed by the Governor to the WR Board as a chairperson or member of a governing body of a participating county or town. Wis. Stat. § 15.16 (1) (b) 1

#### **Vice Chair: John David**

Appointed by the WR Board. Any WR Board member. Wis. Stat. § 15.16 (1) (b)

#### **Secretary: William Ford**

Elected by WRS annuitants. WRS annuitant. Wis. Stat. § 15.16 (1) (d)

#### **Stephen Arnold**

Appointed by the Governor, with Senate confirmation. Public member who is not a participant or beneficiary in the WRS. The appointee must have substantial actuarial, employee benefit or insurance experience. Wis. Stat. § 15.16 (1) (c)

#### **Malika Evanco**

Ex officio; Administrator of the Division of Personnel Management in the Department of Administration or the Administrator's designee. Wis. Stat. § 15.16 (1) (intro.)

#### **Chris Heller**

Appointed by the TR Board. TR Board member who is a public school or vocational school teacher. Wis. Stat. § 15.16 (1) (a) 1

**Katy Lounsbury**

Ex officio; Governor or the Governor's designee on the Group Insurance Board. Wis. Stat. § 15.16 (1) (intro.)

**Amy Mizialko**

Appointed by the TR Board. TR Board member elected by City of Milwaukee teacher participating employees. Wis. Stat. § 15.16 (1) (a) 3

**Leilani Paul**

Elected by educational support personnel. WRS participant who is either a public school district educational support employee or a technical college district educational support employee. Wis. Stat. § 15.16 (1) (f)

**Roberta Rasmus**

Appointed by the TR Board. TR Board member appointed by the Governor to the TR Board who is a public-school administrator or school board member. Wis. Stat. § 15.16 (1) (a) 4

**David Schalow**

Appointed by TR Board. TR Board member appointed by the Governor as a University of Wisconsin System representative who is a teacher participant in the WRS. Wis. Stat. § 15.16 (1) (a) 2

**Steven Wilding**

Appointed by the WR Board. WR Board member appointed by the Governor to the WR Board as an employee of participating local government. Wis. Stat. § 15.16 (1) (b) 2

**Vacant**

Appointed by the WR Board. WR Board member appointed by the Governor to the WR Board as a participating state employee or public member who is not a participant or beneficiary of the WRS. Wis. Stat. § 15.16 (1) (b) 3

**» Wisconsin Retirement Board (9 Members)**

The WR Board advises the ETF Board on matters relating to retirement; approves or rejects administrative rules; authorizes or terminates disability benefits for non-teachers; and hears appeals of disability rulings. This board appoints four members to the ETF Board and one non-teaching member to the State of Wisconsin Investment Board.

**Board Members**
**Chair: John David**

Appointed by the Governor from a list of five names submitted by the Board of Directors of the League of Wisconsin Municipalities. Chief executive or member of the governing body of a participating city or village. From a different county than subds. 2 & 3. Wis. Stat. § 15.165 (3) (b) 1

**Vice Chair: Steven Wilding**

Appointed by the Governor. Participating employee of a participating city or village. From a different county than subds. 1 & 2. Wis. Stat. § 15.165 (3) (b) 3

**Secretary: Julie Wathke**

Appointed by the Governor. County clerk or deputy county clerk. From a different county than subds. 4 & 6. Wis. Stat. § 15.165 (3) (b) 5

**Mark Afable**

Ex officio; Commissioner of Insurance or an experienced actuary in the Office of the Commissioner designated by the Commissioner. Wis. Stat. § 15.165 (3) (b) 9

**Wayne E. Koessl**

Appointed by the Governor from a list of five names submitted by the executive committee of the Wisconsin Counties Association. Chairperson or member of the governing body of a participating county or town. From a different county than subds. 5 & 6. Wis. Stat. § 15.165 (3) (b) 4

**Herbert Stinski**

Appointed by the Governor. Participating employee and principal finance officer of a participating city or village. From a different county than subds. 1 & 3. Wis. Stat. § 15.165 (3) (b) 2

**Mary Von Ruden**

Appointed by the Governor. Participating employee from a participating local employer other than a city or village. From a different county than subds. 4 & 5. Wis. Stat. § 15.165 (3) (b) 6

**Vacant**

Appointed by Governor. Public member who is not a participant or beneficiary of the WRS. Wis. Stat. § 15.165 (3) (b) 8



## INTRODUCTORY SECTION

**Vacant**

Appointed by the Governor. Participating state employee. Wis. Stat. § 15.165 (3) (b) 7

» **Teachers Retirement Board (13 Members)**

The TR Board advises the ETF Board on retirement and other benefit matters involving public school, technical college, state and university teachers; acts on administrative rules and authorizes or terminates teacher disability benefits and hears disability benefit appeals. Nine of the 13 members are elected. This board appoints four members to the ETF Board and one teacher participant to the State of Wisconsin Investment Board.

**Board Members****Chair: Brent Grochowski**

Elected by public school teachers. Public school teacher. Wis. Stat. § 15.165 (3) (a) 1

**Vice Chair: Chris Heller**

Elected by public school teachers. Public school teacher. Wis. Stat. § 15.165 (3) (a) 1

**Secretary: Esther Ancel**

Elected by annuitants who were teacher participants. Annuitant who was a teacher participant in the WRS. Wis. Stat. § 15.165 (3) (a) 6

**Adam Balz**

Elected by public school teachers. Public school teacher. Wis. Stat. § 15.165 (3) (a) 1

**James Langkamp**

Elected by public school teachers. Public school teacher. Wis. Stat. § 15.165 (3) (a) 1

**Amy Mizialko**

Elected by Milwaukee Public School District teachers who are participating employees. City of Milwaukee teacher who is a participating employee in the WRS. Wis. Stat. § 15.165 (3) (a) 7

**Allison Pratt**

Elected by public school teachers. Public school teacher. Wis. Stat. § 15.165 (3) (a) 1

**Anton (Tony) Przybylski Jr.**

Elected by participating Wisconsin technical college teachers. Public school teacher from a

technical college district who is a participating employee in the WRS. Wis. Stat. § 15.165 (3) (a) 2

**David Schalow**

Appointed by the Governor. UW teacher participant in the WRS (not from same campus as other UW teacher representative). Wis. Stat. § 15.165 (3) (a) 4

**Vacant**

Elected by public school teachers. Public school teacher. Wis. Stat. § 15.165 (3) (a) 1

**Vacant**

Appointed by the Governor. UW teacher participant in the WRS (not from same campus as other UW teacher representative). Wis. Stat. § 15.165 (3) (a) 4

**Vacant**

Appointed by the Governor. Public school administrator who is not a classroom teacher. Wis. Stat. § 15.165 (3) (a) 3

**Vacant**

Appointed by the Governor. Member of a school board. Wis. Stat. § 15.165 (3) (a) 5

» **Group Insurance Board (11 Members)**

This board sets policy for the group health, life, and income continuation insurance plans as well as employee reimbursement account, commuter benefit, and health savings account programs for state employees and the group health, life and income continuation insurance plans for local employers who choose to offer them. The board also can provide other insurance plans, if employees pay the entire premium.

**Board Members****Chair: Herschel Day**

Appointed by the Governor. Insured participant in the WRS who is a teacher. Wis. Stat. § 15.165 (2)

**Vice Chair: Nathan Houdek**

Ex officio; Commissioner of Insurance or Commissioner's designee. Wis. Stat. § 15.165 (2)

**Secretary: Nancy Thompson**

Appointed by the Governor. Chief executive or member of the governing body of a local unit of government that is a participating employer. Wis. Stat. § 15.165 (2)

**Harper Donahue IV**

Appointed by the Governor. Insured participant in the WRS who is an employee of a local unit of government. Wis. Stat. § 15.165 (2)

**Malika Evanco**

Ex officio; Administrator in Department of Administration, Division of Personnel Management or Administrator's designee. Wis. Stat. § 15.165 (2)

**Daniel Fields**

Appointed by the Governor. Insured participant in the WRS who is a retired employee. Wis. Stat. § 15.165 (2)

**Walter Jackson**

Appointed by the Governor. Insured participant in WRS who is not a teacher. Wis. Stat. § 15.165 (2)

**Katy Lounsbury**

Ex officio; Governor or Governor's designee. Wis. Stat. § 15.165 (2)

**Brian Pahnke**

Ex officio; Secretary of Department of Administration or Secretary's designee. Wis. Stat. § 15.165 (2)

**Bob Wimmer**

Ex officio; Attorney General or his/her designee. Wis. Stat. § 15.165 (2)

**Peggy Wirtz-Olsen**

Appointed by the Governor. No membership requirement. Wis. Stat. § 15.165 (2)

**» *Deferred Compensation Board (5 Members)***

This board sets policy, contracts with investment and administrative service providers, and oversees administration of the Deferred Compensation Program. The board is responsible for establishing criteria and procedures for selecting and evaluating investment options offered by the Program. The Governor, with senate confirmation, appoints all board members; there are no statutory requirements for appointments.

**Board Members****Chair: Gail Hanson**

Appointed by the Governor, with Senate confirmation. No membership requirements. Wis. Stat. § 15.165 (4)

**Vice Chair: Jason Rothenberg**

Appointed by the Governor, with Senate Confirmation. No membership requirements. Wis. Stat. § 15.165 (4)

**Secretary: Terrance Craney**

Appointed by the Governor, with Senate confirmation. No membership requirements. Wis. Stat. § 15.165 (4)

**Constance Haberkorn**

Appointed by the Governor, with Senate confirmation. No membership requirements. Wis. Stat. § 15.165 (4)

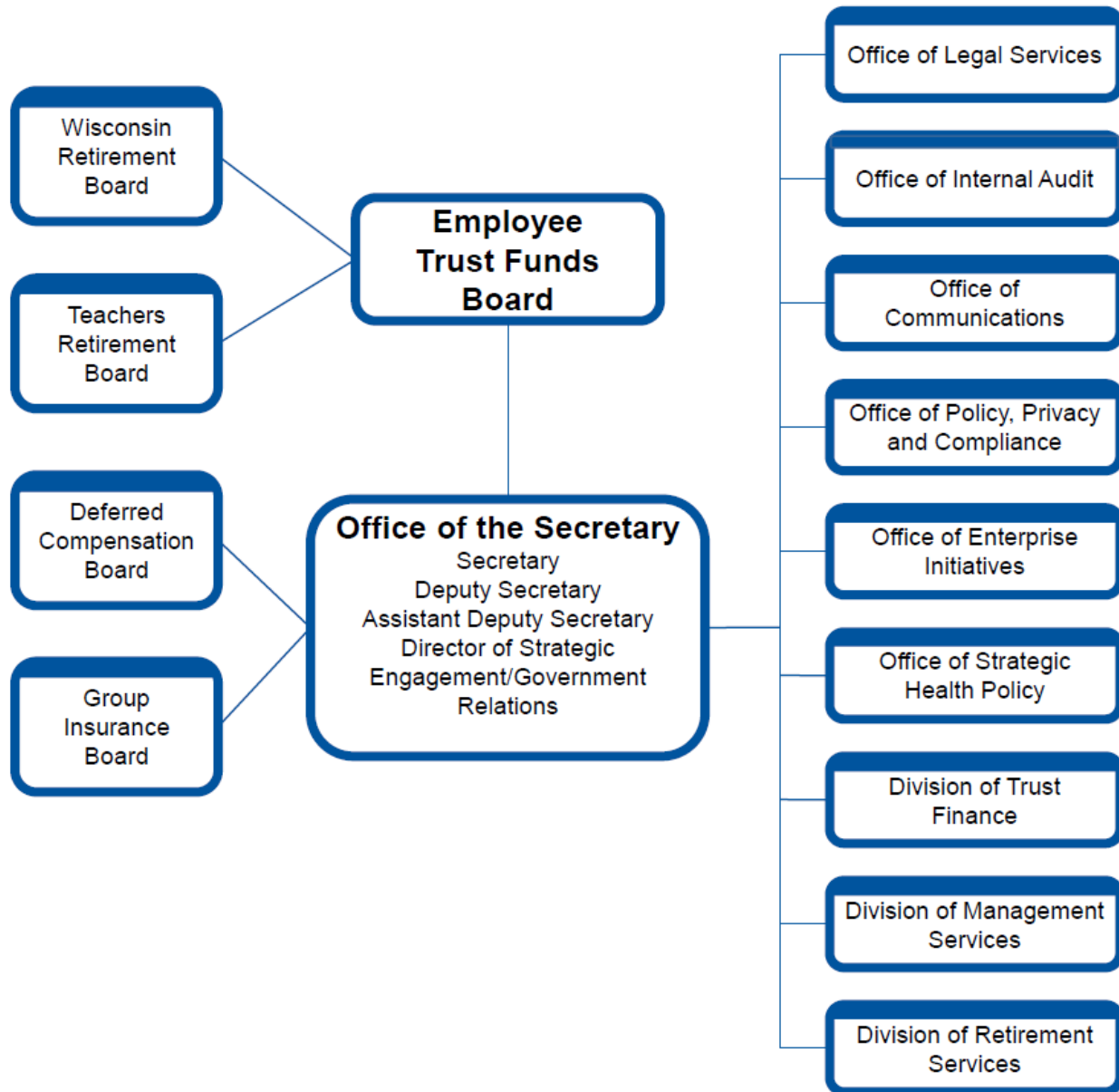
**Arthur Zimmerman**

Appointed by the Governor, with Senate confirmation. No membership requirements. Wis. Stat. § 15.165 (4)

INTRODUCTORY SECTION

» *Department Organization*

The Department of Employee Trust Funds had 275.2 permanent positions at the end of 2021. The Department’s organization chart is shown below:





» **2021 ETF Management Staff**

Secretary: A. John Voelker  
Deputy Secretary: Shirley Eckes  
Assistant Deputy Secretary: Pamela Henning

Director of Strategic Engagement/Government Relations: Tarna Hunter

Division of Retirement Services  
Administrator: Matt Stohr

Division of Management Services  
Administrator: Steve Mueller

Division of Trust Finance  
Administrator: Cindy Klimke-Armatoski

Office of Strategic Health Policy  
Director: Eileen Mallow

Office of Internal Audit  
Director: Yikchau Sze

Office of Communications  
Director: Mark Lamkins

Office of Policy, Privacy and Compliance  
Director: Steve Hurley

Office of Enterprise Initiatives  
Director: Michelle Baxter

Office of Legal Services  
Director: Diana Felsmann

» **Consulting Actuaries**

Gabriel Roeder Smith & Company  
Southfield, Michigan

Segal Consulting  
Atlanta, Georgia

Milliman, Inc.  
Portland, Maine

» **Auditors**

Legislative Audit Bureau  
Madison, Wisconsin

» **Third Party Administrators**

**Pharmacy Benefits Manager**  
Navitus Health Solutions, LLC  
Madison, Wisconsin

**Dental Insurance**  
Delta Dental  
Stevens Point, Wisconsin

**Wellness and Disease Management Program**  
WebMD Health Services  
Portland, Oregon

**Income Continuation Insurance**  
The Hartford  
Hartford, Connecticut

**Deferred Compensation**  
Empower Retirement  
Greenwood Village, Colorado

**Employee Reimbursement Accounts /  
Commuter Benefits Program**  
Optum Financial  
Eden Prairie, Minnesota

**Life Insurance**  
Securian Financial Group, Inc  
Saint Paul, Minnesota



# FINANCIAL SECTION

The background features a series of overlapping, wavy lines in various shades of teal and green. These lines create a sense of movement and depth. In the lower right quadrant, there is a grid of thin, dark teal lines that also follows the wavy pattern, adding a technical or financial feel to the design.

State of Wisconsin  
Department of Employee Trust Funds





STATE OF WISCONSIN

# Legislative Audit Bureau

Joe Chrisman  
State Auditor

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Madison, Wisconsin 53703

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[AskLAB@legis.wisconsin.gov](mailto:AskLAB@legis.wisconsin.gov)

## Independent Auditor's Report on the Financial Statements and Other Reporting Required by *Government Auditing Standards*

Senator Eric Wimberger and  
Representative Robert Wittke, Co-chairpersons  
Joint Legislative Audit Committee

Members of the Employee Trust Funds Board and  
Mr. A. John Voelker, Secretary  
Department of Employee Trust Funds

### Report on the Audit of the Financial Statements

#### Opinions

We have audited the Statement of Fiduciary Net Position; Statement of Changes in Fiduciary Net Position; and the related notes for the following fiduciary funds administered by the State of Wisconsin Department of Employee Trust Funds (ETF) as of and for the year ended December 31, 2021: Wisconsin Retirement System, Supplemental Health Insurance Conversion Credit, Employee Reimbursement Accounts/Commuter Benefits, State Retiree Life Insurance, Local Retiree Life Insurance, Milwaukee Retirement Systems, and Local Retiree Health Insurance. We have also audited the accompanying Statement of Net Position; Statement of Revenues, Expenses, and Changes in Fund Net Position; Statement of Cash Flows; and related notes for the following proprietary funds administered by ETF as of and for the year ended December 31, 2021: Duty Disability Insurance, Health Insurance, Income Continuation Insurance, State Retiree Health Insurance and Accumulated Sick Leave Conversion Credit.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the financial position of each fiduciary fund and each proprietary fund as of December 31, 2021, the changes in financial position, and where applicable, cash flows thereof for the year then ended, in accordance with accounting principles generally accepted in the United States of America.

#### Basis for Opinions

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. Our responsibilities under those standards are further described in the Auditor's Responsibility for the Audit of the Financial Statements section of our report. We are required to be independent of ETF and to meet our other ethical responsibilities in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

#### Emphases of Matter

As discussed in Note 1 to the financial statements, the financial statements referred to in the first paragraph present only the fiduciary and proprietary funds administered by ETF and do not purport to, and do not, present fairly the financial position of the State of Wisconsin as of December 31, 2021, the

changes in its financial position, or where applicable, its cash flows for the year then ended, in accordance with accounting principles generally accepted in the United States of America.

As discussed in Note 2 to the financial statements, the accounting and financial reporting for certain external investment management fees for externally managed assets changed beginning in 2021. These external investment management fees are reported in the Net Increase (Decrease) in the Fair Value of Investments account on the Statement of Changes in Fiduciary Net Position. In addition, as discussed in Note 2, the prior Real Estate account and Limited Partnerships account were combined into the Private Fund Investments account on the Statement of Fiduciary Net Position.

As discussed in Note 3 to the financial statements, the financial statements include investments that do not have readily ascertainable market prices. Some of these investments are valued based on a variety of third-party pricing methods and others, such as private fund investments, are reported based on net asset value. Because of the inherent uncertainty of valuation, these estimated values may differ from the values that could be realized in a secondary market transaction or the amount ultimately realized.

Our opinions are not modified with respect to these matters.

#### **Responsibilities of Management for the Financial Statements**

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

#### **Auditor's Responsibility for the Audit of the Financial Statements**

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance. Therefore, reasonable assurance is not a guarantee that an audit conducted in accordance with auditing standards generally accepted in the United States of America and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgement made by a reasonable user based on the financial statements.

In performing an audit in accordance with auditing standards generally accepted in the United States of America and *Government Auditing Standards*, we exercised professional judgement and maintained professional skepticism throughout the audit. We also identified and assessed the risks of material misstatement of the financial statements, whether due to fraud or error, and designed and performed audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.

In addition, we obtained an understanding of internal control relevant to the audit in order to design audit procedures that were appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of ETF's internal control. Accordingly, no such opinion is expressed. We also evaluated the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, and evaluated the overall presentation of the financial statements.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

**Required Supplementary Information**

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 18 through 33, and the following information found on pages 104 through 122, be presented to supplement the financial statements: claims development information for public entity risk pools; the Wisconsin Retirement System's Schedules of Changes in Net Pension Liability (Asset) and Related Ratios, Schedule of Required Employer Contributions, and Schedule of Investment Returns, which include the related note; the State Retiree Life Insurance Schedules of Changes in Net OPEB Liability (Asset) and Related Ratios, the Local Retiree Life Insurance Schedules of Changes in Net OPEB Liability (Asset) and Related Ratios, the State and Local Retiree Life Insurance Schedule of Investment Returns, which include the related note; and the Supplemental Health Insurance Conversion Credit's Schedules of Changes in Net OPEB Liability (Asset) and Related Ratios, Schedule of Required Employer Contributions, and Schedule of Investment Returns, which include the related note. Such information is the responsibility of management and, although not a part of the financial statements, is required by the Governmental Accounting Standards Board (GASB) who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America. These procedures consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

**Other Information**

Management is responsible for the other information included in the annual report. The other information comprises the sections listed in the table of contents entitled Introductory Section, Statistical Section, Actuarial Section, Investment Section, and Contributions Paid and Employer Unfunded Liability Balances, but does not include the financial statements and our auditor's report thereon. Our opinions on the financial statements do not cover the other information, and we do not express an opinion or provide any other form of assurance thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the financial statements, or whether the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

**Other Reporting Required by *Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated January 13, 2023, and published in report 23-3, on our consideration of ETF's internal control over financial reporting; our tests of its compliance with certain provisions of laws, regulations, and contracts; and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of ETF's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be used when considering ETF's internal control over financial reporting and compliance.

LEGISLATIVE AUDIT BUREAU

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

January 13, 2023

## Management's Discussion and Analysis

Management of the Wisconsin Department of Employee Trust Funds (ETF) presents this discussion and analysis of the financial activities for the year ended December 31, 2021. This narrative is intended to supplement the financial statements which follow and should be read in conjunction with the note disclosures, which are an integral part of the financial statements.

ETF administers a defined benefit pension trust and other employee benefit plans for approximately 663,000 members, retirees, and beneficiaries.

### » *Overview of the Financial Statements*

The following discussion and analysis is intended to serve as an introduction to ETF's financial statements. The financial statements include:

- Statement of Fiduciary Net Position
- Statement of Changes in Fiduciary Net Position
- Statement of Net Position – Proprietary Funds
- Statement of Revenues, Expenses, and Changes in Fund Net Position – Proprietary Funds
- Statement of Cash Flows – Proprietary Funds
- Notes to Financial Statements

Funds are categorized as either fiduciary or proprietary based on the design, purpose and activities of the fund.

Fiduciary funds are used to report assets held by ETF as trustee for others. ETF is responsible for handling the assets placed under its control. The fiduciary funds reported by ETF include:

- Wisconsin Retirement System (WRS)
- Supplemental Health Insurance Conversion Credit (SHICC)
- Employee Reimbursement Accounts/Commuter Benefits
- State Retiree Life Insurance
- Local Retiree Life Insurance
- Milwaukee Retirement Systems
- Local Retiree Health Insurance



## FINANCIAL SECTION

The activities in the proprietary funds operate similar to a private business. Fees are charged for services provided, and the focus is on determining financial position, operating and non-operating income, cash flows, and changes in net position. The proprietary funds reported by ETF include:

- Duty Disability Insurance
- Health Insurance
- Income Continuation Insurance
- State Retiree Health Insurance
- Accumulated Sick Leave Conversion Credit (ASLCC)

### » *Financial Statements*

The Statement of Net Position provides a snapshot of account balances at a point in time. It reports the assets available for future payments to benefit recipients, along with any liabilities that are owed as of the statement date. The full accrual basis of accounting is used.

The difference between assets and liabilities represents the net value of assets held in trust for future benefit payments. These amounts are called “Net Position - Restricted for Pensions, Other Post-Employment Benefits, and Other Purposes” for fiduciary funds and “Net Position Restricted (Unrestricted) for Benefits” for proprietary funds.

The Statement of Changes in Fiduciary Net Position for fiduciary funds and the Statement of Revenues, Expenses, and Changes in Fund Net Position for proprietary funds displays the effect of transactions that occurred during the calendar year. For fiduciary funds, additions less deductions equals the net increase (decrease) in net position. For proprietary funds, revenues less expenses equals the change in net position. This net increase (decrease) reflects the change in the value of net position that occurred between the current and prior year.

Notes to the Financial Statements are an integral part of the financial statements and provide additional information that is essential for a comprehensive understanding of the data reported in the financial statements. The notes describe the accounting and administrative policies under which ETF operates, significant account balances and activities, material risks, obligations, contingencies, and subsequent events, if any.

The Required Supplementary Information (RSI) includes:

- Public Entity Risk Pools Claims Development
- Schedules of Changes in Net Pension Liability (Asset) and Related Ratios - WRS
- Schedule of Required Employer Contributions - WRS
- Schedule of Investment Returns - WRS
- Schedules of Changes in Net OPEB Liability (Asset) and Related Ratios - State and Local Retiree Life Insurance
- Schedule of Investment Returns - State and Local Retiree Life Insurance
- Schedules of Changes in Net OPEB Liability (Asset) and Related Ratios - SHICC
- Schedule of Required Employer Contributions - SHICC
- Schedule of Investment Returns - SHICC

The financial statements and related notes are prepared in accordance with Generally Accepted Accounting Principles (GAAP) established by the Governmental Accounting Standards Board (GASB).



**» Financial Highlights**

<b>Net Position By Program As of December 31 (In Thousands)</b>				
<b>Program</b>	<b>2021</b>	<b>2020</b>	<b>\$ Change</b>	<b>% Change</b>
Wisconsin Retirement System	\$ 141,847,701	\$ 124,966,394	\$ 16,881,307	14 %
Supplemental Health Insurance Conversion Credit	1,371,706	1,208,791	162,915	13
Employee Reimbursement Accounts/Commuter Benefits	1,950	1,325	625	47
State Retiree Life Insurance	319,606	333,752	(14,146)	(4)
Local Retiree Life Insurance	248,190	251,357	(3,167)	(1)
Milwaukee Retirement Systems	252,426	221,184	31,242	14
Local Retiree Health Insurance	0	0	0	0
Duty Disability Insurance	331,443	294,390	37,053	13
Health Insurance	227,516	220,697	6,819	3
Income Continuation Insurance	137,512	89,916	47,596	53
State Retiree Health Insurance	0	0	0	0
Accumulated Sick Leave Conversion Credit	(254,144)	(465,472)	211,328	45
<b>Total</b>	<b>\$ 144,483,906</b>	<b>\$ 127,122,334</b>	<b>\$ 17,361,572</b>	<b>14 %</b>

The WRS funding ratio under the funding methodology used to establish required contributions continues to be 100% as of December 31, 2021. Under the GASB financial reporting method, the WRS is 106% funded as of December 31, 2021. As of December 31, 2021, the WRS had a Net Pension Asset of \$8.1 billion compared to a Net Pension Asset of \$6.2 billion as of December 31, 2020. The increase of approximately \$1.9 billion is primarily attributable to gains on investments due to more favorable market conditions in 2021. The Total Pension Liability increased from \$118.7 billion in 2020 to \$133.8 billion in 2021.

**» Analysis of WRS Financial Activity**

The WRS is a cost-sharing, multiple-employer public employee retirement system established by the State of Wisconsin to provide pension benefits for state and local government employees. The system is administered in accordance with Wis. Stat. § 40. ETF, under the direction of the ETF Board, is responsible for administration of the WRS, including collecting contributions from employers and paying retirement benefits to WRS participants. The State of Wisconsin Investment Board (SWIB) is responsible for managing WRS investments.

The system's funding objective is to meet its long-term benefit obligations through contributions and investment income. Contributions and the income from investments provide the reserves needed to finance the benefits provided under the programs.

Net Position of the WRS increased by \$16.8 billion or 14% from \$125.0 billion in 2020 to \$141.8 billion in 2021. This was primarily a result of returns on investments due to favorable market conditions. The following tables show comparative summaries of the WRS net position and the changes in the WRS net position for 2021 and 2020.





## FINANCIAL SECTION

**Summary of WRS Net Position**  
**As of December 31**  
(In Millions)

	2021	2020	\$ Change	% Change
<b>Assets</b>				
Cash and Cash Equivalents	\$ 6,817	\$ 6,401	\$ 416	6 %
Receivables	11,564	11,850	(286)	(2)
Investments at Fair Value	168,509	139,039	29,470	21
Securities Lending Collateral	396	811	(415)	(51)
Other Assets	25	17	8	47
<b>Total Assets</b>	<b>\$ 187,311</b>	<b>\$ 158,118</b>	<b>\$ 29,193</b>	<b>18 %</b>
<b>Liabilities</b>				
Core Investment Due To Other Benefit Programs	\$ 4,957	\$ 4,408	\$ 549	12 %
Variable Investment Due To Other Benefit Programs	20	22	(2)	(9)
Obligation Under Reverse Repurchase Agreements	17,012	10,659	6,353	60
Investment Payables	13,533	10,012	3,521	35
Securities Lending Collateral Liability	1,157	811	346	43
Other Payables	8,784	7,240	1,544	21
<b>Total Liabilities</b>	<b>\$ 45,463</b>	<b>\$ 33,152</b>	<b>\$ 12,311</b>	<b>37 %</b>
<b>Net Position Restricted for Pensions</b>	<b>\$ 141,848</b>	<b>\$ 124,966</b>	<b>\$ 16,882</b>	<b>14 %</b>

**Summary of Changes in WRS Net Position**  
**For the Years Ended December 31**  
(In Millions)

	2021	2020	\$ Change	% Change
Contributions	\$ 2,252	\$ 2,186	\$ 66	3 %
Net Investment Income	21,056	16,698	4,358	26
<b>Total Additions</b>	<b>\$ 23,308</b>	<b>\$ 18,884</b>	<b>\$ 4,424</b>	<b>23 %</b>
Benefit Expenses	\$ 6,395	\$ 5,978	\$ 417	7 %
Administrative Expenses	31	33	(2)	(6)
<b>Total Deductions</b>	<b>\$ 6,426</b>	<b>\$ 6,011</b>	<b>\$ 415</b>	<b>7 %</b>
<b>Net Increase (Decrease) in Net Position</b>	<b>\$ 16,882</b>	<b>\$ 12,873</b>	<b>\$ 4,009</b>	<b>31 %</b>
<b>Net Position - Beginning of Year</b>	<b>\$ 124,966</b>	<b>\$ 112,093</b>	<b>\$ 12,873</b>	<b>11 %</b>
<b>Net Position - End of Year</b>	<b>\$ 141,848</b>	<b>\$ 124,966</b>	<b>\$ 16,882</b>	<b>14 %</b>

## Cash and Cash Equivalents

Cash and Cash Equivalents increased by \$416 million, or 6%, when comparing calendar year-end 2021 to 2020. The majority of the increase is attributed to an increase in cash held in a short-term investment pool at year-end 2021 due to rebalancing. Routine rebalancing activities fluctuate throughout the year and can impact cash balances at a point in time.

## Receivables

Receivables decreased by \$286 million, or 2%, when comparing calendar year-end 2021 to 2020. Most of this decrease is due to a decrease in the balance for Investment Sales Receivable, which is dependent upon the timing and settlement of securities transactions. Approximately 86% of the Investment Sales Receivable balance relates to the use of To Be Announced (TBA) securities. TBA securities are derivative contracts that consist of mortgage-backed securities (MBS) issued by the Government National Mortgage Association, a government entity, and by government-sponsored enterprises, such as the Federal National Mortgage Association or the Federal Home Loan Mortgage Corp. The term TBA is derived from the fact that the actual MBS that will be delivered to fulfill a TBA trade is not designated at the time the trade is made. Instead, the specific pool of mortgages making up the MBS is announced 48 hours prior to the established trade settlement date. Eligibility rules and standards for MBS pools deliverable into TBA contracts ensure that delivered MBS pools are fungible. TBA securities sold create a receivable on the Statement of Fiduciary Net Position because payment for TBA securities is not made until the settlement date. Other routine rebalancing activities, where investment positions were sold but pending settlement, also contributed to the change in receivables at December 31, 2021.

## Securities Lending Collateral

Securities Lending Collateral decreased by \$415 million as of 2021, compared to 2020. The balance consists of cash received as collateral for securities lending transactions. As of December 31, 2021, SWIB's securities lending agent released \$761 million in cash from the Securities Lending Collateral pool to SWIB. This cash, included in Cash and Cash Equivalents, plus Securities Lending Collateral equals the Securities Lending Collateral Liability at December 31, 2021. The cash released provides liquidity for other investment strategies.

## Securities Lending Collateral Liability

Securities Lending Collateral Liability increased by \$346 million from 2020 to 2021 due to an increase in lending activities primarily used to support Core Fund liquidity needs. Investment policies permit the use of both cash and treasury securities as collateral to support short positions.

## Obligation Under Reverse Repurchase Agreements

Obligation Under Reverse Repurchase Agreements increased by \$6.4 billion, or 60%, when comparing calendar year-end 2021 to 2020. Reverse repurchase agreements involve the sale of assets with the simultaneous agreement to repurchase those assets for a pre-determined price, plus interest, at a future date.

The proceeds from these agreements are invested in Treasury Inflation-Protected Securities (TIPS). During 2021, SWIB increased its capacity to participate in reverse repurchase agreements, providing access to low-cost financing needed to maintain SWIB's strategic allocation targets. The increase in reverse repurchase agreements corresponds with the overall increase in the Core Fund's assets under management.



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## FINANCIAL SECTION

### Investment Payables

Investment Payables increased by \$3.5 billion, or 35%, when comparing calendar year-end 2021 to 2020. The majority of this increase is due to investment purchases payable, which is dependent upon the timing and settlement of pending purchase transactions. Investment purchases payable primarily relate to the use of TBA securities, which accounts for about 91% of the investment purchases payable balance at December 31, 2021. Purchased TBA securities create a payable on the Statement of Fiduciary Net Position because payment for TBA securities is not made until the settlement date. Other routine rebalancing activities, where investment positions were purchased but pending settlement, also contributed to the change in Investment Payables at December 31, 2021.

### Other Payables

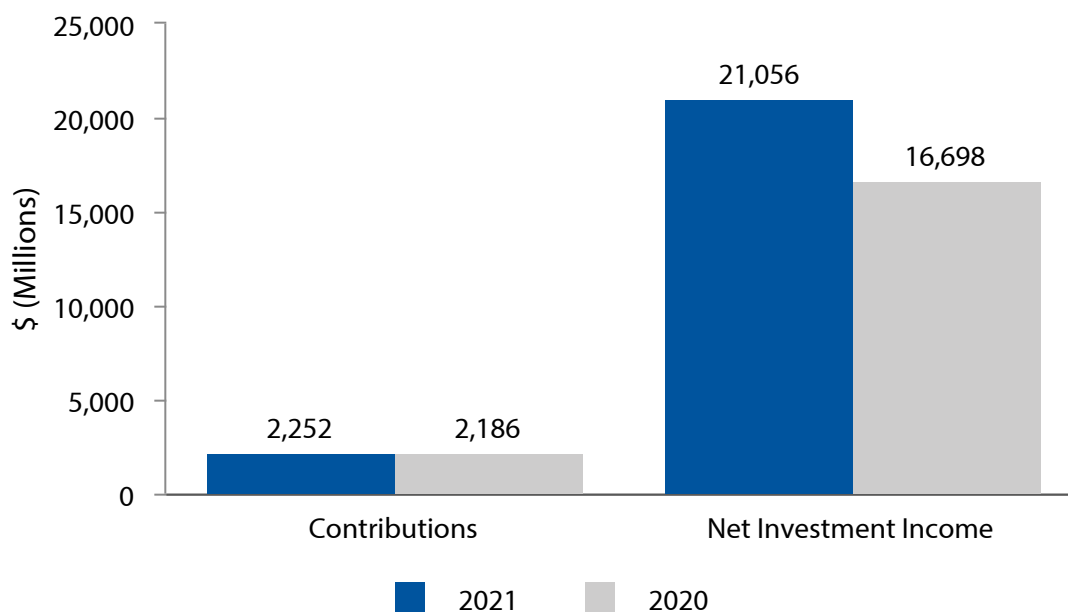
Other Payables increased by \$1.5 billion, or 21%, when comparing calendar year-end 2021 to 2020 primarily relating to Short Sell Obligations. Short sale transactions are created when a security not owned by the portfolio is sold in anticipation of purchasing the security at a lower price in the future. The increase in short sales is largely due to internal equity and fixed income strategies designed to increase active risk.

### Contributions and Investment Earnings

The retirement benefits provided by the WRS are funded from pension trust fund revenue. The primary sources of revenue are investment income generated from the investment of plan assets and contributions for active members made by members and their employers.

Total contributions and investment earnings for the year ended December 31, 2021, was \$23.3 billion compared to \$18.9 billion in December 31, 2020. As the chart below shows, contributions increased by \$66 million, while investment income increased by \$4.4 billion. The increase in contributions was primarily driven by an increase in covered payroll for the year. The increase in investment income during 2021 is primarily attributable to improved market performance, with a total Core Fund net investment return of 16.9% compared to 15.2% in 2020, and a total Variable Retirement Investment Trust (Variable Fund) net investment return of 20.0%, compared to 17.5% in 2020.

### Contributions and Net Investment Income



The assets of the WRS are valued at fair market value and are invested in the Core Fund and the Variable Fund, which are collectively the Retirement Funds. All WRS members have at least half, if not all, of their pension contributions invested in the Core Fund. The Core Fund is a diversified, balanced fund invested for the long-term needs of the WRS. Diversification helps to stabilize the effects of market changes. The investment objective of this trust fund is to meet or exceed an average of 6.8% annual nominal return over the long-term. This objective is based on market rate of return and actuarial assumptions needed to meet the obligations of the WRS. The Variable Fund allows active employees participating in the WRS to put up to half of their pension fund contributions into this global stock fund. Approximately 14% of WRS members participate in the Variable Fund. By statute, the Variable Fund invests in stocks and provides participants the potential for higher returns in exchange for higher risk. The investment objective of the Variable Fund is to meet or exceed broad equity market indices over a full market cycle.

SWIB is responsible for managing the assets of the WRS. See Note 3, Deposits, Investments and Securities Lending Transactions, for additional information.

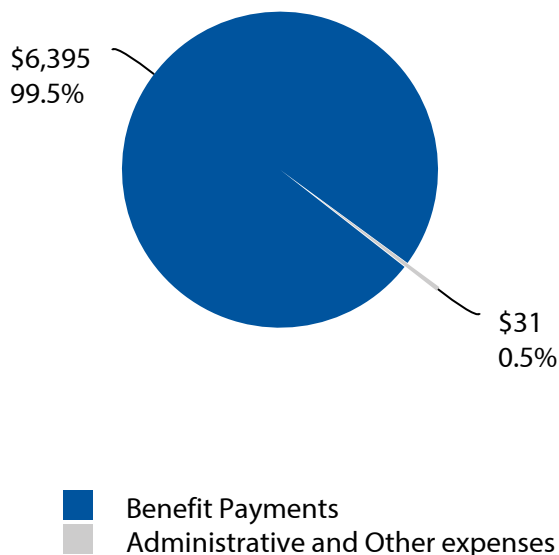
#### Expenses - Deductions from Plan Net Position

The primary expenses of the WRS include annuity benefits for retirees and beneficiaries, refunds of contributions to former members, and expenses associated with the administration of the retirement plans. Benefit payments for 2021 totaled \$6.4 billion, an increase of \$0.4 billion or 7% over the 2020 amount of \$6.0 billion. This was due to the number of participants increasing from 221,019 as of December 31, 2020, to 226,605 as of December 31, 2021, as well as increases in annuities starting with the May 1, 2021 annuity payment. Administrative expenses of approximately \$31 million accounted for less than 0.5% of the deductions to net position in 2021 and remained relatively consistent from 2020.

Investment expenses are deducted from investment income and were \$435 million in 2021, a decrease of 41% from \$742 million in 2020. The decrease was primarily related to an accounting change implemented in 2021 for assets managed by third-party investment managers within external portfolios. See Note 2, Accounting Changes, for more information on this accounting change.



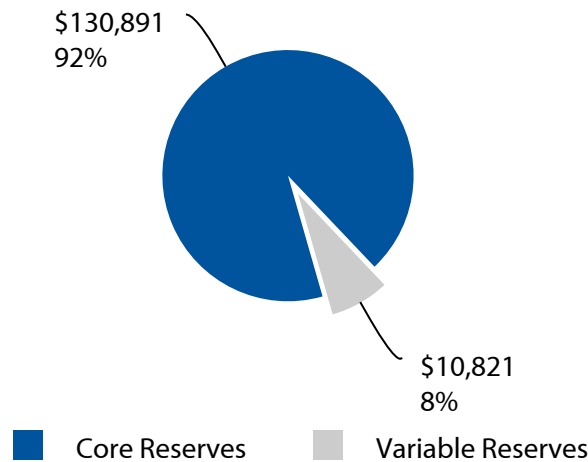
### Expenses as of December 31, 2021 (In Millions)



#### Retirement Reserves

The funds accumulated by the WRS to meet current and future obligations to retirees and beneficiaries are derived from the excess of revenue over expenses. Reserves have been established to reflect legal restrictions established by Wisconsin Statutes on the use of funds. The higher the level of funding a plan achieves, the larger the accumulation of assets and the greater the investment income potential. In 2021, revenues exceeded expenses, leading to an increase of \$16.8 billion in the pension plan reserves. The increase was primarily related to investment earnings in 2021. The reserves are invested in either the Core Fund or the Variable Fund. Approximately 92% of the reserves are invested in the Core Fund and 8% are invested in the Variable Fund.

**Total Reserves Core vs. Variable  
as of December 31, 2021  
(In Millions)**



**Summary of Pension Plan Reserve Balances  
For the Years Ended December 31  
(In Millions)**

<b>Total Reserves</b>	<b>2021</b>	<b>2020</b>	<b>Increase (Decrease)</b>
Annuity	\$ 75,530	\$ 68,760	\$ 6,770
Employee	22,469	20,652	1,817
Employee Additional	268	234	34
Employer	26,406	24,623	1,783
Market Recognition Account (WRS Only)	17,039	10,683	6,356
<b>Total Reserves</b>	<b>\$ 141,712</b>	<b>\$ 124,952</b>	<b>\$ 16,760</b>

**Members, Retirees, Beneficiaries and Employers**

Approximately 260,000 active members were employed with 1,555 WRS-participating employers as of December 31, 2021. The number of inactive, retirees and other annuitants totaled 404,676 at December 31, 2021. Total members served by the WRS in 2021 was approximately 663,000 as shown in the following tables.



## FINANCIAL SECTION

**Distribution of Active Members  
As of December 31**

Active Member Category	2021		2020	
	Number	Percent of Total	Number	Percent of Total
General	132,650	51.3 %	132,985	51.3 %
Teachers	102,753	39.7	102,465	39.5
Elected/Executive/Judges	1,264	0.5	1,292	0.5
Protective with Social Security	19,220	7.4	19,749	7.6
Protective without Social Security	2,760	1.1	2,758	1.1
<b>Total Active Members</b>	<b>258,647</b>	<b>100.0 %</b>	<b>259,249</b>	<b>100.0 %</b>

Additional information about members is presented in Note 4, Description of the Wisconsin Retirement System, and in the Statistical Section.

**Distribution of Inactive, Retirees, and Beneficiaries  
As of December 31**

Inactive, Retirees, Beneficiaries	2021		2020	
	Number	Percent of Total	Number	Percent of Total
Inactive Members:				
Terminated Participants	174,573	43.1 %	168,944	42.9 %
Alternate Payees	3,498	0.9	3,468	0.9
Retirees and Beneficiaries:				
Retirement Annuitants	218,846	54.0	213,268	54.2
Disability Annuitants	6,305	1.6	6,303	1.6
Death Beneficiary Annuitants	1,454	0.4	1,448	0.4
<b>Total Inactive, Retiree and Beneficiaries</b>	<b>404,676</b>	<b>100.0 %</b>	<b>393,431</b>	<b>100.0 %</b>

Additional information about inactive, retirees and beneficiaries is presented in Note, 4, Description of the Wisconsin Retirement System, and the Statistical Section.

The table below presents the number of participating employers by category.

**Distribution of Employers  
As of December 31**

Employer	2021	2020
State Agencies, UW & Public Authorities	56	56
Cities	189	188
Counties	71	71
Villages	291	283
Towns	287	279
School Districts	421	421
Cooperative Educational Service Agencies	12	12
WI Technical College System Districts	16	16
Special Districts	212	211
<b>Total Employers</b>	<b>1,555</b>	<b>1,537</b>

## Actuarial Valuations and Funding Progress - Pension Plan

ETF's actuarial consultant performs an actuarial valuation of the WRS each year to determine funding requirements and establish contribution rates. The funding policy provides for periodic employer contributions at actuarially determined rates that will remain relatively level over time as a percentage of payroll and will accumulate sufficient assets to meet the costs of all benefits when due. The latest valuation of the pension plan was performed by Gabriel Roeder Smith & Company (GRS). Under the funding methodology, the WRS is 100% funded as of December 31, 2021. For financial reporting purposes, a funding ratio is calculated in accordance with GASB pension accounting standards. Under these standards, the WRS was 106% funded as of December 31, 2021.

### » *Analysis of Other Program Financial Activities*

#### Supplemental Health Insurance Conversion Credit (SHICC) Program

The SHICC Program provides additional sick leave credits to eligible employees with at least 15 years of service, which increases their sick leave account balance that can be used to pay for post-retirement health insurance premiums.

For 2021, the SHICC Program collected \$15.7 million in contributions compared to \$15.1 million during 2020, an increase of 4%. The increase in contributions resulted from higher earnings reported by employers, to which the contribution rate is applied. Additionally, Contributions Receivable increased \$0.2 million from 2020, an increase of 16%. This increase was caused by higher earnings reported by employers for December 2021 compared to December 2020 due to certain employers changing timing and frequency of their employees payroll. The program incurred expenses of \$53.3 million in 2021 compared to \$50.1 million in 2020, an increase of 6%. This increase was primarily caused by increased health insurance premiums for certain retirees.

The SHICC Program had a net position of \$1.4 billion at December 31, 2021. This is an increase of \$0.2 billion from a \$1.2 billion net position in 2020. The increase is primarily due to an increase in investment gains experienced in 2021. Total liabilities decreased \$0.2 million from 2020 to 2021. The 2021 liability represents payables due to other benefit programs.

An actuarial valuation, in accordance with GASB standards, shows a Net OPEB Asset of \$329 million as of December 31, 2021. The program Fiduciary Net Position as a percentage of the Total OPEB Liability is 132%. Additional information on this valuation can be found in Note 9, Other Post-Employment Benefit (OPEB) Plans Administered by ETF.

At December 31, 2021, there were approximately 94,800 members participating in the SHICC Program. Total participation in the SHICC Program varies from the ASLCC Program participation because of different eligibility requirements. Participation is comprised of approximately 21,700 retirees and beneficiaries, 400 inactive non-retired members, and 72,700 active members. Active members may become eligible for the SHICC benefit upon meeting the eligibility requirements. Total participation decreased 1% from 2020.

#### Employee Reimbursement Accounts/Commuter Benefits Program

The Employee Reimbursement Accounts Program reimburses qualifying medical and dependent care expenses, while the Commuter Benefits Program reimburses qualifying transportation expenses, for employees of the State of Wisconsin who sign up for pre-tax payroll deductions.





## FINANCIAL SECTION

For 2021, the Employee Reimbursement Accounts/Commuter Benefits Program collected \$39.1 million in contributions from participating employees compared to \$39.0 million in 2020. This minimal increase was caused by higher contribution limits, offset by a 2% decrease in program participants. The program paid benefits and expenses of \$38.5 million in 2021, which was a decrease of \$1.0 million from \$39.5 million in 2020. This decrease was in part caused by a 2% decrease in program participants.

The Employee Reimbursement Accounts/Commuter Benefits Program had a net position of \$1.9 million as of December 31, 2021. This was an increase of approximately \$0.6 million from a net position of \$1.3 million as of December 31, 2020.

During 2021, there were approximately 21,100 members participating in medical reimbursement, 2,700 members participating in commuter benefits, and 3,500 members participating in dependent care reimbursement accounts compared to 21,100 medical, 2,800 commuter benefits, and 3,900 dependent care accounts during 2020.

### State Retiree Life Insurance Program

The State Retiree Life Insurance Program provides fully paid-up life insurance benefits for post-age 64 retired employees of the State of Wisconsin and pre-age 65 annuitants who pay for their coverage.

During 2021, the State Retiree Life Insurance Program collected \$1.7 million in contributions compared to \$1.5 million during 2020. The current employer contribution schedule includes annual increases of 5% for nine years, as approved by the GIB in August 2019. The program incurred expenses of \$24.6 million in 2021 compared to \$25.6 million in 2020. This decrease was primarily caused by lower benefit expenses in 2021, which decreased 4% compared to 2020. COVID-19 related claims accounted for approximately 6% of benefit expense in 2021, compared to 8% in 2020. Contributions received for pre-age 65 annuitants are reported as a reduction to benefit expense, in accordance with GASB Statement No. 74, Financial Reporting for Post-Employment Benefit Plans Other Than Pension Plans.

The State Retiree Life Insurance Program had a net position of \$319.6 million at December 31, 2021. This is a decrease of \$14.1 million from a \$333.8 million net position in 2020. Benefit expenses continue to exceed contributions and investment income.

An actuarial valuation, in accordance with GASB standards, shows a Net OPEB Liability of \$947.8 million as of December 31, 2021. The plan Fiduciary Net Position as a percentage of the Total OPEB Liability was 25%. Additional information on this valuation can be found in Note 9, Other Post-Employment Benefit (OPEB) Plans Administered by ETF.

At December 31, 2021, there were 35,327 members participating in the State Retiree Life Insurance Program, which was a 2% increase in participants from 2020.

### Local Retiree Life Insurance Program

The Local Retiree Life Insurance Program provides fully paid-up life insurance benefits for post-age 64 retired employees of participating local governments in Wisconsin and pre-age 65 annuitants who pay for their coverage.

During 2021, the Local Retiree Life Insurance Program collected \$2.0 million in contributions, similar to 2020. The program incurred expenses of \$11.9 million in 2021 compared to \$14.4 million in 2020, a decrease of 17%. This decrease was primarily caused by lower benefit expenses in 2021, which decreased 19% compared to

2020. COVID-19 related claims accounted for approximately 9% of benefit expense in 2021 compared to 8% in 2020. Contributions received from pre-age 65 annuitants are reported as a reduction to benefit expense, in accordance with GASB Statement No. 74.

The Local Retiree Life Insurance Program had a net position of \$248.2 million at December 31, 2021. This is a decrease of \$3.2 million from a \$251.4 million net position at December 31, 2020. Benefit expenses continue to exceed contributions and investment income.

An actuarial valuation, in accordance with GASB standards, shows a Net OPEB Liability of \$591.0 million as of December 31, 2021. The plan Fiduciary Net Position as a percentage of the Total OPEB Liability was 30%. Additional information on this valuation can be found in Note 9, Other Post-Employment Benefit (OPEB) Plans Administered by ETF.

At December 31, 2021, there were 49,481 members participating in the Local Retiree Life Insurance Program, which was a 3% increase in participants from 2020.

### **Milwaukee Retirement Systems**

The Milwaukee Retirement Systems (MRS) invests funds with the WRS. Since 2014, the MRS only invests funds from two Milwaukee Public Schools Supplemental Retirement Plans. During 2021, the MRS deposited \$3.4 million as compared to \$7.4 million in 2020. The MRS distributed \$9.6 million in 2021, a decrease of \$14.6 million in distributions from 2020. The program experienced an investment gain of \$37.4 million in 2021 compared to an investment gain of \$30.6 million in 2020. The increase was a result of higher market returns in 2021 compared to 2020.

The MRS had a fiduciary net position of \$252.4 million at December 31, 2021. This was a \$31.2 million increase in net position from \$221.2 million in December 31, 2020. Additional information on the MRS can be found in Note 10, Milwaukee Retirement Systems.

### **Local Retiree Health Insurance Program**

Through the Local Retiree Health Insurance Program, participants may choose a health plan within specific provider networks (i.e. HMOs). Required premiums are collected from retired employees of participating local government employers in Wisconsin.

For 2021, the Local Retiree Health Insurance Program collected \$23.9 million in contributions, a 2% increase from \$23.5 million in 2020, primarily due to increased insurance premiums and enrollment. The program incurred other benefit expenses of \$25.0 million in 2021 compared to \$24.2 million in 2020, an increase of 3% primarily due to increased premiums paid to HMOs.

The Local Retiree Health Insurance Program had total assets and liabilities of \$7.7 million at December 31, 2021. This was a decrease of \$1.0 million compared to \$8.7 million at December 31, 2020.

There were approximately 2,100 members participating in the Local Retiree Health Insurance Program at December 31, 2021 and 2020. Additional information for the Local Retiree Health Insurance Program can be found in Note 9, Other Post-Employment Benefit (OPEB) Plans Administered by ETF.

## FINANCIAL SECTION

### Duty Disability Insurance Program

The Duty Disability Insurance Program pays special disability benefits to protective occupation participants in the WRS. The program is self-insured, and the risk is shared between the State of Wisconsin and local government employers in the program.

For 2021, the Duty Disability Insurance Program collected \$4.0 million in contributions from participating employers, a 2% decrease from \$4.1 million in 2020, due to a slight decrease in contribution rates. The program incurred operating expenses of \$93.3 million in 2021 compared to \$38.8 million in 2020, an increase of 141% primarily due to an increase in the change in actuarially determined liabilities.

The Duty Disability Insurance Program had a net position of \$331.4 million at December 31, 2021. This was an increase of \$37.1 million compared to \$294.4 million at December 31, 2020. The program experienced investment income of \$126.4 million in 2021 compared to \$101.9 million in 2020. The increase in investment income is primarily attributable to improved market performance.

At December 31, 2021, there were approximately 22,000 members participating in the Duty Disability Insurance Program, which was a 2% decrease in participants from 2020. Additional information for the Duty Disability Insurance Program can be found in Note 8, Public Entity Risk Pools.

### Health Insurance Program

The Health Insurance Program is a comprehensive benefit plan providing coverage for active employees of the State of Wisconsin and participating local governments. The state and local health plans each include separately managed risk pools for medical, pharmacy and dental benefits.

For 2021, the Health Insurance Program collected \$1,382.6 million in contributions from participating employers, a 2% increase from \$1,352.3 million in December 31, 2020, primarily due to increased insurance premiums. The program incurred operating expenses of \$1,413.4 million in 2021 compared to \$1,391.8 million in December 31, 2020, an increase of 2% primarily due to increased pharmacy and dental claims.

The Health Insurance Program had a net position of \$227.5 million at December 31, 2021. This was an increase of \$6.8 million compared to \$220.7 million at December 31, 2020. The program experienced investment income of \$37.6 million in December 31, 2021 compared to \$34.0 million in December 31, 2020.

At December 31, 2021, there were approximately 78,800 active members participating in the Health Insurance Program, which was a 2% decrease in participants from December 31, 2020. Additional information for the Health Insurance Program can be found in Note 8, Public Entity Risk Pools.

### Income Continuation Insurance (ICI) Program

The ICI Program pays disability benefits for employees of the State of Wisconsin and participating local governments in Wisconsin who enroll in the program. Employee premiums are based on sick leave accumulation and the waiting period selected.

For 2021, the ICI Program collected \$39.4 million in contributions from State agencies, similar to \$39.6 million in 2020. Premiums for State employers remained the same as the prior year and the local employers continued to have a premium holiday. The program incurred operating expenses of \$23.5 million in 2021 compared to \$22.8 million in 2020, an increase of 3% primarily due to an increase in the carrier administrative expenses due to additional allocations to the ICI Program.

The ICI Program had a net position of \$137.5 million at December 31, 2021. This was an increase of \$47.6 million compared to \$89.9 million at December 31, 2020. The program experienced investment income of \$31.6 million in 2021 compared to \$22.0 million in 2020.

At December 31, 2021, there were approximately 54,100 members participating in the ICI Program. This includes approximately 11,600 local employees and 42,500 state employees. Local employees had an increase of 4% and state employees had a 4% decrease in participants from 2020. Additional information for the ICI Program can be found in Note 8, Public Entity Risk Pools.

### State Retiree Health Insurance Program

Through the State Retiree Health Insurance Program, participants may choose a health plan within specific provider networks (i.e. HMOs). Required premiums are collected from retired employees of the State of Wisconsin.

For 2021, the State Retiree Health Insurance Program collected \$247.6 million in contributions from retirees, a 5% increase from \$235.4 million in 2020, primarily due to increased insurance premiums and enrollment. The program incurred benefit expenses of \$266.8 million in 2021 compared to \$258.7 million in 2020, an increase of 3% primarily due to increased premiums paid to HMOs and increased claims.

The State Retiree Health Insurance Program had a net position of zero at December 31, 2021 and 2020.

At December 31, 2021, there were approximately 28,800 members participating in the State Retiree Health Insurance Program, which was a 2% increase in participants from 2020. Additional information for the State Retiree Health Insurance Program can be found in Note 9, Other Post-Employment Benefit (OPEB) Plans Administered by ETF.

### Accumulated Sick Leave Conversion Credit (ASLCC) Program

The ASLCC Program allows retirees of the State of Wisconsin, the University of Wisconsin (UW) System, the UW Hospital & Clinics Authority, and other state authorities, at the time of their retirement, to convert the value of their unused sick leave accumulation into an account to be used to pay for post-retirement health insurance.

For 2021, the ASLCC Program collected \$41.7 million in contributions from participating employers compared to \$45.2 million in 2020, a decrease of 8%. The decrease in contributions resulted from a decrease in the contribution rate, partially offset by higher earnings reported by employers. The program incurred expenses of \$141.9 million in 2021, a decrease of \$43.0 million from \$184.9 million in 2020. The change in the compensated absences liability from year to year impacts expenses and was the primary reason for the change. Additional information on compensated absences can be found in Note 1, Summary of Significant Accounting Policies.

The ASLCC Program had a net position of \$(254.1) million at December 31, 2021. This was an increase of \$211.3 million from a \$(465.5) million net position at December 31, 2020. The program experienced investment income of \$311.5 million in 2021 as compared to investment income of \$249.0 million for 2020.

At December 31, 2021, there were approximately 97,400 members participating in the ASLCC Program. Participation is comprised of approximately 18,500 retirees and others using ASLCC credits; 6,200 retirees or inactive non-retired members who may use ASLCC credits in the future; and 72,700 active members. Active members may become eligible for the ASLCC benefit upon meeting the eligibility requirements. Total participation decreased 1% from 2020.



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**FINANCIAL SECTION****» *Financial Contact***

This financial report is designed to provide a general overview of ETF's finances. Questions concerning any of the information provided in this report should be addressed to ETF at P.O. Box 7931, Madison, Wisconsin, 53707-7931.



**Wisconsin Department of Employee Trust Funds**  
**Statement of Fiduciary Net Position**  
**December 31, 2021** (In Thousands)

	Pension Trust Fund		Other Employee Benefit Trust Funds	
	Wisconsin Retirement System		Supplemental Health Insurance Conversion Credit	Employee Reimbursement Accounts/Commuter Benefits
<b>Assets:</b>				
Equity In Pooled Cash & Cash Equivalents	\$	6,816,816	\$	9,002
Securities Lending Collateral		396,434		0
Prepaid Expenses		19,752	4,348	1,600
Receivables:				
Contributions Receivable		230,826	1,742	2
Federal Subsidy Receivable		0	0	0
Prior Service Contributions Receivable		5,789	0	0
Benefit Overpayments Receivable		2,095	0	385
Due From Other Benefit Programs		1,608	1,204	33
Miscellaneous Receivables		102	1	21
Securities Lending Income Receivable		3,344	0	0
Interest and Dividends Receivable		450,913	0	0
Rebates Receivable		0	0	0
Investment Sales Receivable		10,869,737	0	0
Total Receivables		11,564,414	2,947	441
Investments at Fair Value:				
Equities		83,778,808	0	0
Fixed Income Investments		48,219,267	0	0
Private Fund Investments		26,573,553	0	0
Multi Asset Investments		6,227,923	0	0
Preferred Securities		703,312	0	0
Convertible Securities		2,153	0	0
Foreign Currency Contracts		3,794	0	0
Options Contracts		(1,946)	0	0
Financial Futures Contracts		76,789	0	0
Swaps		25,690	0	0
To Be Announced Securities		2,899,255	0	0
Investment In Core Fund		0	1,364,812	0
Investment In Variable Fund		0	0	0
Investment Contract		0	0	0
Total Investments		168,508,598	1,364,812	0
Capital Assets - Net of Accum. Depreciation		4,865	0	0
Total Assets		187,310,879	1,372,107	11,043
<b>Liabilities:</b>				
Core Investment Due To Other Benefit Programs		4,957,156	0	0
Variable Investment Due To Other Benefit Programs		19,611	0	0
Obligation Under Reverse Repurchase Agreements		17,012,077	0	0
Short Sell Obligations		8,050,666	0	0
Securities Lending Collateral Liability		1,157,434	0	0
Collateral Due to Counterparty		125,917	0	0
Benefits Payable		455,787	0	9,084
Unearned Revenue		11	0	0
Due To Other Benefit Programs		5,639	401	9
Miscellaneous Payables		145,928	0	0
Investment Payables		13,532,952	0	0
Total Liabilities		45,463,178	401	9,093
<b>Net Position - Restricted for Pensions, Other Post-Employment Benefits, and Other Purposes</b>	\$	141,847,701	\$	1,371,706
				\$ 1,950

The accompanying notes are an integral part of the financial statements.

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## FINANCIAL SECTION

**Wisconsin Department of Employee Trust Funds**  
**Statement of Fiduciary Net Position**  
**December 31, 2021** (In Thousands)

	Other Employee Benefit Trust Funds		Investment Trust Fund	Custodial Fund
	State Retiree Life Insurance	Local Retiree Life Insurance	Milwaukee Retirement Systems	Local Retiree Health Insurance
<b>Assets:</b>				
Equity In Pooled Cash & Cash Equivalents	\$ 0	\$ 0	\$ 0	\$ 0
Securities Lending Collateral	0	0	0	0
Prepaid Expenses	0	0	0	13
Receivables:				
Contributions Receivable	0	0	0	0
Federal Subsidy Receivable	0	0	0	1,940
Prior Service Contributions Receivable	0	0	0	0
Benefit Overpayments Receivable	0	0	0	1
Due From Other Benefit Programs	10	13	0	3,927
Miscellaneous Receivables	96	131	0	1
Securities Lending Income Receivable	0	0	0	0
Interest and Dividends Receivable	0	0	0	0
Rebates Receivable	0	0	0	1,850
Investment Sales Receivable	0	0	0	0
Total Receivables	106	144	0	7,719
Investments at Fair Value:				
Equities	0	0	0	0
Fixed Income Investments	0	0	0	0
Private Fund Investments	0	0	0	0
Multi Asset Investments	0	0	0	0
Preferred Securities	0	0	0	0
Convertible Securities	0	0	0	0
Foreign Currency Contracts	0	0	0	0
Options Contracts	0	0	0	0
Financial Futures Contracts	0	0	0	0
Swaps	0	0	0	0
To Be Announced Securities	0	0	0	0
Investment In Core Fund	0	0	232,816	0
Investment In Variable Fund	0	0	19,610	0
Investment Contract	320,853	249,053	0	0
Total Investments	320,853	249,053	252,426	0
Capital Assets - Net of Accum. Depreciation	0	0	0	0
Total Assets	320,959	249,197	252,426	7,732
<b>Liabilities:</b>				
Core Investment Due To Other Benefit Programs	0	0	0	0
Variable Investment Due To Other Benefit Programs	0	0	0	0
Obligation Under Reverse Repurchase Agreements	0	0	0	0
Short Sell Obligations	0	0	0	0
Securities Lending Collateral Liability	0	0	0	0
Collateral Due to Counterparty	0	0	0	0
Benefits Payable	915	710	0	480
Unearned Revenue	332	152	0	1,640
Due To Other Benefit Programs	0	0	0	5,593
Miscellaneous Payables	106	145	0	19
Investment Payables	0	0	0	0
Total Liabilities	1,353	1,007	0	7,732
<b>Net Position - Restricted for Pensions, Other Post-Employment Benefits, and Other Purpose</b>	\$ 319,606	\$ 248,190	\$ 252,426	\$ 0

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The accompanying notes are an integral part of the financial statements.



**Wisconsin Department of Employee Trust Funds**  
**Statement of Changes in Fiduciary Net Position**  
**For the Year Ended December 31, 2021**  
(In Thousands)

	Pension Trust Fund	Other Employee Benefit Trust Funds	
	Wisconsin Retirement System	Supplemental Health Insurance Conversion Credit	Employee Reimbursement Accounts/ Commuter Benefits
<b>Additions:</b>			
Contributions:			
Employer Contributions	\$ 1,164,586	\$ 15,658	\$ 0
Member Contributions	1,086,782	0	39,131
Total Contributions	2,251,368	15,658	39,131
Deposits	0	0	0
Investment Income:			
Net Increase (Decrease) in Fair Value of Investments	19,625,644	0	0
Interest, Dividend, and Other Investment Income	2,564,885	200,599	4
Securities Lending Income	47,080	0	0
Less:			
Investment Income Distributed to Other Benefit Programs	(742,669)	0	0
Investment Expense	(435,466)	0	0
Securities Lending Fees	(3,282)	0	0
Net Investment Income	21,056,192	200,599	4
Interest on Prior Service Receivable	366	0	0
Federal Subsidy Income	0	0	0
Service Reimbursement Income	0	0	0
Miscellaneous Income	0	0	28
Total Additions	23,307,926	216,257	39,163
<b>Deductions:</b>			
Benefits and Refunds:			
Retirement, Disability, and Beneficiary	6,352,709	0	0
Separation Benefits	42,042	0	0
Other Benefit Expense	3	52,632	37,525
Distributions	0	0	0
Carrier Administrative Expenses	0	0	479
Administrative Expenses	31,625	710	534
Other Expenses	240	0	0
Total Deductions	6,426,619	53,342	38,538
<b>Net Increase (Decrease)</b>	16,881,307	162,915	625
<b>Net Position - Beginning of Year</b>	124,966,394	1,208,791	1,325
<b>Net Position - End of Year</b>	\$ 141,847,701	\$ 1,371,706	\$ 1,950

The accompanying notes are an integral part of the financial statements.

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## FINANCIAL SECTION

**Wisconsin Department of Employee Trust Funds**  
**Statement of Changes in Fiduciary Net Position**  
**For the Year Ended December 31, 2021**  
(In Thousands)

	Other Employee Benefit Trust Funds		Investment Trust Fund	Custodial Fund
	State Retiree Life Insurance	Local Retiree Life Insurance	Milwaukee Retirement Systems	Local Retiree Health Insurance
<b>Additions:</b>				
Contributions:				
Employer Contributions	\$ 1,670	\$ 2,047	\$ 0	\$ 0
Member Contributions	0	0	0	23,944
Total Contributions	1,670	2,047	0	23,944
Deposits	0	0	3,447	0
Investment Income:				
Net Increase (Decrease) in Fair Value of Investments	0	0	0	0
Interest, Dividend, and Other Investment Income	8,706	6,586	37,353	(166)
Securities Lending Income	0	0	0	0
Less:				
Investment Income Distributed to Other Benefit Programs	0	0	0	0
Investment Expense	0	0	0	0
Securities Lending Fees	0	0	0	0
Net Investment Income	8,706	6,586	37,353	(166)
Interest on Prior Service Receivable	0	0	0	0
Federal Subsidy Income	0	0	0	1,945
Service Reimbursement Income	96	131	0	0
Miscellaneous Income	0	0	0	2
Total Additions	10,472	8,764	40,800	25,725
<b>Deductions:</b>				
Benefits and Refunds:				
Retirement, Disability, and Beneficiary	0	0	0	0
Separation Benefits	0	0	0	0
Other Benefit Expense	23,746	10,444	0	24,985
Distributions	0	0	9,558	0
Carrier Administrative Expenses	776	1,356	0	441
Administrative Expenses	96	131	0	299
Other Expenses	0	0	0	0
Total Deductions	24,618	11,931	9,558	25,725
<b>Net Increase (Decrease)</b>	(14,146)	(3,167)	31,242	0
<b>Net Position - Beginning of Year</b>	333,752	251,357	221,184	0
<b>Net Position - End of Year</b>	\$ 319,606	\$ 248,190	\$ 252,426	\$ 0

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The accompanying notes are an integral part of the financial statements.



**Wisconsin Department of Employee Trust Funds**  
**Statement of Net Position - Proprietary Funds**  
**December 31, 2021**  
(In Thousands)

	Enterprise Funds				Internal Service Fund
	Duty Disability Insurance	Health Insurance	Income Continuation Insurance	State Retiree Health Insurance	Accumulated Sick Leave Conversion Credit
<b>Assets</b>					
Current Assets:					
Investment In Core Fund	\$ 857,417	\$ 185,658	\$ 230,324	\$ 0	\$ 2,086,129
Prepaid Expenses	0	1,426	0	193	9,099
Rebates Receivable	0	38,958	0	23,936	0
Federal Subsidy Receivable	0	0	0	29,661	0
Contributions Receivable	416	0	0	0	4,643
Due From Other Benefit Programs	297	73,976	0	36,365	3,198
Benefit Overpayments Receivable	226	2	3,240	278	2
Miscellaneous Receivables	0	57	1	13	0
Total Current Assets	858,356	300,077	233,565	90,446	2,103,071
Total Assets	858,356	300,077	233,565	90,446	2,103,071
<b>Liabilities</b>					
Current Liabilities:					
Benefits Payable	2,981	11,899	153	4,989	0
Unearned Revenue	0	16,955	0	17,919	0
Current Portion of Estimated Future Benefits	39,387	1,568	19,855	278	0
Current Portion of Compensated Absences	0	0	0	0	109,028
Due To Other Benefit Programs	172	41,108	81	66,990	803
Miscellaneous Payables	0	1,031	229	270	1
Total Current Liabilities	42,540	72,561	20,318	90,446	109,832
Noncurrent Liabilities:					
Noncurrent Portion of Estimated Future Benefits	484,373	0	75,735	0	0
Noncurrent Portion of Compensated Absences	0	0	0	0	2,247,383
Total Noncurrent Liabilities	484,373	0	75,735	0	2,247,383
Total Liabilities	526,913	72,561	96,053	90,446	2,357,215
<b>Net Position Restricted (Unrestricted) For Benefits</b>	<b>\$ 331,443</b>	<b>\$ 227,516</b>	<b>\$ 137,512</b>	<b>\$ 0</b>	<b>\$ (254,144)</b>

The accompanying notes are an integral part of the financial statements.



## FINANCIAL SECTION

**Wisconsin Department of Employee Trust Funds**  
**Statement of Revenues, Expenses, and Changes in Fund Net Position - Proprietary Funds**  
**For the Year Ended December 31, 2021**  
(In Thousands)

	Enterprise Funds				Internal Service Fund
	Duty Disability Insurance	Health Insurance	Income Continuation Insurance	State Retiree Health Insurance	Accumulated Sick Leave Conversion Credit
Operating Revenues:					
Contributions	\$ 4,027	\$ 1,382,597	\$ 39,387	\$ 247,640	\$ 41,746
Federal Subsidy	0	0	0	32,375	0
Miscellaneous Income	9	0	109	14	0
<b>Total Operating Revenues</b>	<b>4,036</b>	<b>1,382,597</b>	<b>39,496</b>	<b>280,029</b>	<b>41,746</b>
Operating Expenses:					
Benefit Expense	92,405	1,390,318	19,773	266,787	141,178
Carrier Administrative Expenses	0	11,891	2,744	7,058	0
Administrative Expenses	938	11,183	994	4,067	709
<b>Total Operating Expenses</b>	<b>93,343</b>	<b>1,413,392</b>	<b>23,511</b>	<b>277,912</b>	<b>141,887</b>
<b>Operating Income (Loss)</b>	<b>(89,307)</b>	<b>(30,795)</b>	<b>15,985</b>	<b>2,117</b>	<b>(100,141)</b>
Nonoperating Revenues:					
Investment Income	126,360	37,571	31,610	(2,128)	311,469
Penalties and Fees	0	43	1	11	0
<b>Total Nonoperating Revenues</b>	<b>126,360</b>	<b>37,614</b>	<b>31,611</b>	<b>(2,117)</b>	<b>311,469</b>
<b>Net Income (Loss)</b>	<b>37,053</b>	<b>6,819</b>	<b>47,596</b>	<b>0</b>	<b>211,328</b>
<b>Total Net Position - Beginning of Year</b>	<b>294,390</b>	<b>220,697</b>	<b>89,916</b>	<b>0</b>	<b>(465,472)</b>
<b>Total Net Position - End of Year</b>	<b>\$ 331,443</b>	<b>\$ 227,516</b>	<b>\$ 137,512</b>	<b>\$ 0</b>	<b>(254,144)</b>

The accompanying notes are an integral part of the financial statements.



**Wisconsin Department of Employee Trust Funds**  
**Statement of Cash Flows - Proprietary Funds**  
**For the Year Ended December 31, 2021**  
(In Thousands)

	Enterprise Funds				Internal Service Fund
	Duty Disability Insurance	Health Insurance	Income Continuation Insurance	State Retiree Health Insurance	Accumulated Sick Leave Conversion Credit
<b>Cash Flows from Operating Activities</b>					
Cash Received for Rebates	\$ 0	\$ 60,976	\$ 0	\$ 45,080	\$ 0
Cash Received (Paid) for Employer Contributions	0	0	0	0	40,553
Cash Received (Paid) for Insurance Premiums	4,052	1,352,523	39,393	250,709	0
Cash Received (Paid) for Employee Benefits	(36,407)	(1,454,593)	(20,445)	(282,477)	(111,184)
Cash Paid for Administrative Services	(874)	(22,782)	(3,791)	(11,226)	(804)
Miscellaneous Income (Expense)	9	0	109	14	0
Net Cash Provided (Used) by Operating Activities	(33,220)	(63,876)	15,266	2,100	(71,435)
<b>Cash Flows from Noncapital Financing Activities</b>					
Penalties and Fees	0	61	1	28	0
Net Cash Provided (Used) by Noncapital Financing Activities	0	61	1	28	0
<b>Cash Flows from Investing Activities</b>					
Investment Income (Loss)	126,360	37,571	31,609	(2,128)	311,469
Decrease (Increase) in Investment in Core Fund	(93,140)	26,244	(46,876)	0	(240,034)
Net Cash Provided (Used) by Investing Activities	33,220	63,815	(15,267)	(2,128)	71,435
<b>Net Increase (Decrease) in Cash and Cash Equivalents</b>	0	0	0	0	0
<b>Equity in Pooled Cash and Cash Equivalents at Beginning of Year</b>	0	0	0	0	0
<b>Equity in Pooled Cash and Cash Equivalents at End of Year</b>	0	0	0	0	0
<b>Reconciliation of Operating Income (Loss) to Net Cash Provided (Used) by Operating Activities</b>					
Operating Income (Loss)	(89,307)	(30,795)	15,985	2,117	(100,141)
Adjustments to Reconcile Operating Income (Loss) to Net Cash Provided (Used) by Operating Activities					
Changes in Assets and Liabilities:					
Decrease (Increase) in Rebates Receivable	0	(5,282)	0	(3,119)	0
Decrease (Increase) in Federal Subsidy Receivable	0	0	0	(11,794)	0
Decrease (Increase) in Contributions Receivable	(13)	510	6	0	(139)
Decrease (Increase) in Miscellaneous Receivables	0	0	0	0	5
Decrease (Increase) in Benefit Overpayments Receivable	(35)	2	(36)	17	(2)
Decrease (Increase) in Prepaid Expenses	0	(289)	0	23	(10)
Decrease (Increase) in Due From Other Benefit Programs	39	(16,205)	2	(2,325)	(1,035)
Increase (Decrease) in Estimated Future Benefits	56,040	106	(729)	55	29,452
Increase (Decrease) in Premiums Payable	0	(13,994)	0	0	0
Increase (Decrease) in Unearned Revenue	0	299	0	117	0
Increase (Decrease) in Benefits Payable	(8)	1,684	98	822	0
Increase (Decrease) in Miscellaneous Payables	0	310	31	136	(10)
Increase (Decrease) in Due to Other Benefit Programs	64	(222)	(91)	16,051	445
Total Adjustments	56,087	(33,081)	(719)	(17)	28,706
Net Cash Provided (Used) by Operating Activities	\$ (33,220)	\$ (63,876)	\$ 15,266	\$ 2,100	\$ (71,435)

The accompanying notes are an integral part of the financial statements.



## NOTES TO FINANCIAL STATEMENTS

# 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

## » *Presentation Basis*

The financial statements have been prepared in conformity with Generally Accepted Accounting Principles (GAAP) for government units as prescribed by the Governmental Accounting Standards Boards (GASB). ETF is not a general-purpose government and does not present government-wide statements. These statements are not intended to present the financial activity of the State of Wisconsin as a whole. The funds administered by ETF are included in the State of Wisconsin financial reporting entity and are presented in the State's Annual Comprehensive Financial Report.

The assets and operations of ETF are accounted for in the funds described below. Department-wide administrative expenses, capital assets, and general fund activities are most closely associated with the WRS fund and have been blended with that fund for presentation. All material intrafund transactions have been eliminated from fund financial statements. Interfund transactions have not been eliminated.

## *Fiduciary Funds*

Fiduciary funds are used to show assets held by ETF as trustee for others.

## **Pension and Other Employee Benefit Trust Funds**

**Wisconsin Retirement System (WRS):** This fund is used to account for the collection of member and employer contributions; investment of assets; and payment of retirement, disability, and death benefits to former employees, and their beneficiaries, of the State of Wisconsin and participating local governments in Wisconsin.

**Supplemental Health Insurance Conversion Credit (SHICC):** This fund is used to account for the collection of employer contributions, investment of assets, and purchase of post-retirement health insurance premiums for retired employees of the State of Wisconsin and their beneficiaries. This program provides a limited employer match of member credits earned through the Accumulated Sick Leave Conversion Credit (ASLCC) program.

**Employee Reimbursement Accounts/Commuter Benefits (ERA/CB):** This fund is used to account for the collection of voluntary payroll deferrals, investment of assets, and reimbursement of qualifying medical, dependent care, and transportation expenses for employees of the State of Wisconsin, in compliance with Internal Revenue Code Section 125 and Section 132.

**State Retiree Life Insurance (SRL):** This fund is used to account for the accumulation of assets and the payment of life insurance benefits for retired employees of the State of Wisconsin.

**Local Retiree Life Insurance (LRL):** This fund is used to account for the accumulation of assets and the payment of life insurance benefits for retired employees of participating local governments in Wisconsin.

## Custodial Fund

**Local Retiree Health Insurance (LRH):** This fund is used to account for the collection of retiree contributions, the investment of assets, the purchase of health insurance coverage, and the payment of health insurance claims for retired employees of participating local governments in Wisconsin.

## Investment Trust Fund

**Milwaukee Retirement Systems (MRS):** This fund is used to account for the receipt, investment, and disbursement of funds from other public pension funds in Wisconsin.

## Proprietary Funds

Proprietary funds distinguish operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services in connection with a proprietary fund's principal ongoing operations. The principal ongoing operations for these proprietary funds are: collecting premiums and using the accumulated premiums and investment income to pay benefits. Revenues and expenses not directly related to the principal ongoing operations are classified as non-operating.

## Enterprise Funds

**Duty Disability Insurance (DDI):** This fund is used to account for the collection of employer contributions, investment of assets, and payment of special disability benefits to protective occupation participants in the WRS.

**Health Insurance:** This fund is used to account for the collection of employee and employer contributions, the investment of assets, the purchase of health insurance coverage, and the payment of health insurance claims for current employees of both the State of Wisconsin and participating local governments in Wisconsin.

**Income Continuation Insurance (ICI):** This fund is used to account for the collection of employee and employer contributions, the investment of assets, and the payment of disability benefits for employees of both the State of Wisconsin and participating local governments in Wisconsin.

**State Retiree Health Insurance (SRH):** This fund is used to account for the collection of retiree contributions, the investment of assets, the purchase of health insurance coverage, and the payment of health insurance claims for retired employees of the State of Wisconsin.

## Internal Service Fund

**Accumulated Sick Leave Conversion Credit:** This fund is used to account for the collection of employer contributions, investment of assets, and purchase of post-retirement health insurance premiums for retired employees of the State of Wisconsin and their beneficiaries. This benefit allows employees, at the time of their retirement, to convert the value of their unused sick leave accumulation into an account to be used to pay for post-retirement health insurance. The ASLCC program is reported as an internal service fund because the program benefits only State employees.

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**» *Measurement Focus and Basis of Accounting***

The financial statements have been prepared in accordance with GAAP. All fiduciary and proprietary funds are accounted for using the flow of economic resources measurement focus and the accrual basis of accounting. Under the accrual basis of accounting, contributions are recognized in the accounting period in which the underlying earnings on which the contributions are based are paid and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with the terms of each plan. Security transactions and the related gains and losses are recorded on a trade date basis. Dividend income is recorded on the ex-dividend date, and interest income is accrued as earned.

**» *Investments***

The assets of the WRS and the MRS are valued at fair value and are invested in the Core Retirement Investment Trust (Core Fund) and the Variable Retirement Investment Trust (Variable Fund), which are collectively the Retirement Funds. The assets of the Income Continuation Insurance, Duty Disability Insurance, Accumulated Sick Leave Conversion Credit, Supplemental Health Insurance Conversion Credit, Health Insurance, State Retiree Health Insurance, and Local Retiree Health Insurance programs are invested in the Core Fund. Earnings are allocated between the WRS and other benefit programs based on the average balance invested for each program. Earnings allocated to other benefit programs are classified as "Investment Income Distributed to Other Benefit Programs" on the WRS Statement of Changes in Fiduciary Net Position. The total amount invested by the other benefit programs included in the Retirement Funds is presented as "Core Investment Due To Other Benefit Programs" and "Variable Investment Due To Other Benefit Programs" on the Statement of Fiduciary Net Position. Investments for the Retiree Life Insurance Funds are held by the plan administrator and classified as "Investment Contract" on the Statement of Fiduciary Net Position. All other benefit plan assets are invested in the State Investment Fund (SIF). Investments in the SIF are classified as "Equity in Pooled Cash and Cash Equivalents" on the Statement of Fiduciary Net Position. The SIF is a pool of cash balances of various state and local government units with the investment objectives to provide safety, liquidity, and competitive rates of return.

The State of Wisconsin Investment Board (SWIB) manages the Retirement Funds and SIF with oversight by the SWIB Board of Trustees, as authorized in Wis. Stat. § 25.17. SWIB is not registered with the Securities and Exchange Commission as an investment company.

**» *Funding Value of Assets***

While investments are valued at fair value for financial statement presentation, a funding value of assets is used in evaluating the funded status of the benefit plans and in determining future contribution requirements. Funding value does not include deferred market gains and losses that have not yet been distributed from the Market Recognition Account (MRA) to the program reserves. See Note 7, Statutory Reserves, for further explanation of the MRA. As of December 31, 2021, the funding value of reserves (In Millions) was as follows:



Benefit Plan	Reserves at Funding Value	Deferred Market Gains (Losses)	Reserves at Fair Value
Wisconsin Retirement System	\$ 124,808.9	\$ 17,038.8	\$ 141,847.7
Income Continuation Insurance (1)	102.4	35.1	137.5
Duty Disability Insurance (1)	220.8	110.7	331.4
ASLCC (1)	(515.5)	261.4	(254.1)
SHICC	1,189.5	182.2	1,371.7
Health Insurance (1)	199.8	27.7	227.5
State Retiree Health Insurance	(3.5)	3.5	0.0
Local Retiree Health Insurance	0.2	(0.2)	0.0

<sup>(1)</sup> The Reserves at Funding Value and the Reserves at Fair Value for Income Continuation Insurance, Duty Disability Insurance, and Health Insurance programs have been reduced by the estimated future claims for the benefit plans and by a compensated absences liability for the Accumulated Sick Leave Conversion Credit program.

### » *Administrative Expenses*

ETF administrative costs are financed by a separate appropriation and are allocated to each benefit plan administered by ETF in accordance with Wis. Stat. § 40.04. The sources of funds for this appropriation are investment earnings and third-party reimbursements received from the various programs administered by ETF. Total administrative expenses for the year were approximately \$52 million. Costs for third-party administrators are reported as "Carrier Administrative Expenses" within each program.

SWIB incurs expenses related to investing the trust funds. As authorized by Wis. Stat. § 25.187 (2), these costs are charged directly to the investment income of each trust fund.

### » *Capital Assets*

Capital assets consist of office furniture, equipment, computer software (purchased or externally acquired and internally generated software), and certain capitalizable costs related to leased office space. ETF capitalizes purchased assets in excess of \$5,000 at cost and capitalizes internally-generated software and other intangible assets in excess of \$1 million. Costs incurred related to leased office space are valued at purchase price or construction cost plus any costs necessary to place the asset into use. Assets are depreciated over an estimated useful life, ranging from 5 to 20 years, using the straight-line method of depreciation.

As of December 31, 2021, the total value of capital assets was \$15.6 million. The accumulated depreciation is \$10.7 million for a net capital asset value of \$4.9 million. The net capital asset value primarily relates to internally-generated software. Approximately \$1.1 million of the balance are the costs related to the future occupancy of office space leased by SWIB.

### » *Compensated Absences*

The ASLCC fund reports liabilities for compensated absences for sick leave calculated based on the vesting method prescribed in GASB Statement No. 16 "Accounting for Compensated Absences". The amounts reported are based on sick leave balances earned but not used and salary rates as of December 31, 2021. The roll-forward of compensated absences payable for the year ended December 31, 2021 is as follows:





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### Compensated Absences Payable (In Millions)

December 31, 2020	Additions	Reductions	December 31, 2021	Due Within One Year
\$2,327.0	\$141.2	\$111.8	\$2,356.4	\$109.0

### » Interfund Assets/Liabilities

Interfund assets and liabilities at December 31, 2021, consist of the following:

### Due To/From Other Benefit Programs (In Thousands)

	WRS	ERA/ CB	Health Insurance	SRH	LRH	Life Insurance	SRL	LRL	DDI	ICI	ASLCC	SHICC	Deferred Comp.	Total
WRS	\$ 0	\$ 9	\$ 814	\$ 300	\$ 38	\$ 0	\$ 0	\$ 0	\$ 172	\$ 81	\$ 60	\$ 126	\$ 9	\$ 1,609
ERA & Commuter Benefits	33	0	0	0	0	0	0	0	0	0	0	0	0	33
Health Insurance	713	0	0	66,690	5,555	0	0	0	0	0	743	275	0	73,976
SRH	0	0	36,365	0	0	0	0	0	0	0	0	0	0	36,365
LRH	3	0	3,924	0	0	0	0	0	0	0	0	0	0	3,927
Life Insurance	174	0	0	0	0	0	0	0	0	0	0	0	0	174
State Retiree Life Insurance	10	0	0	0	0	0	0	0	0	0	0	0	0	10
Local Retiree Life Insurance	13	0	0	0	0	0	0	0	0	0	0	0	0	13
DDI	297	0	0	0	0	0	0	0	0	0	0	0	0	297
ICI	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ASLCC	3,198	0	0	0	0	0	0	0	0	0	0	0	0	3,198
SHICC	1,199	0	5	0	0	0	0	0	0	0	0	0	0	1,204
<b>Total</b>	<b>\$5,640</b>	<b>\$ 9</b>	<b>\$ 41,108</b>	<b>\$66,990</b>	<b>\$ 5,593</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 172</b>	<b>\$ 81</b>	<b>\$ 803</b>	<b>\$ 401</b>	<b>\$ 9</b>	<b>\$ 120,806</b>

**Due From Other Benefit Programs**

### Due To Other Benefit Programs

Totals may vary from the financial statements due to rounding.

The outstanding balances between benefit programs result from the time lag between when actual receipts and disbursements are made and when those amounts are allocated between benefit programs. All liabilities are expected to be paid within one year of the balance sheet date of December 31, 2021.

### » *Use of Estimates*

The preparation of financial statements in accordance with GAAP requires management to make estimates that affect amounts reported herein. Due to the inherent uncertainty involved, actual results could differ from those estimates.

## 2 ACCOUNTING CHANGES

Beginning in 2021, treatment of fees paid to certain external investment managers in exchange for their management of investments in external portfolios was changed. This change impacted holdings in private equity, real estate, hedge funds, and select public markets portfolios. The investment management fees for these investments, in the amount of \$522 million for CY 2021, are no longer included in "Investment Expense" on the Statement of Changes in Fiduciary Net Position. Rather, they are now included in the "Net Increase (Decrease) in Fair Value of Investments" on the Statement of Changes in Fiduciary Net Position. This change has no net impact on the Net Position - Restricted for Pensions on the Statement of Fiduciary Net Position or on Net Increase (Decrease) on the Statement of Changes in Fiduciary Net Position. In addition, the reporting of fees paid to external investment managers in exchange for their management of investments within SWIB portfolios remains unchanged from prior years. These fees are included in "Investment Expense" on the Statement of Changes in Fiduciary Net Position. Real estate fund investments previously classified as Real Estate on the Statement of Fiduciary Net Position were combined with private equity and real estate limited partnerships. The category for these investments on the Statement of Fiduciary Net Position was renamed Private Fund Investments.

## 3 DEPOSITS, INVESTMENTS AND SECURITIES LENDING TRANSACTIONS

### » *Valuation of Securities*

The investments of the Retirement Funds are reported in the Statement of Fiduciary Net Position at fair value as prescribed by GASB and in accordance with Wis. Stat. § 25.17 (14). Unrealized gains and losses are reflected in the Statement of Changes in Fiduciary Net Position as "Net Increase (Decrease) in Fair Value of Investments".

The fair value of the Retirement Funds' assets is obtained or estimated in accordance with a pricing hierarchy established with SWIB's custodian, Bank of New York Mellon (BNY Mellon). As prescribed by the hierarchy, a variety of independent pricing sources are used to price assets based on type, class, or issue.

When a portfolio includes securities or instruments for which the custodial bank does not receive fair value information from its vendor pricing sources, a variety of third-party pricing methods are used, including appraisals, pricing models, and other methods deemed acceptable by industry standards.

The "Equity in Pooled Cash and Cash Equivalents" account reported on the Statement of Fiduciary Net Position consists of short-term investments, which are used to meet the liquidity requirements of the Retirement Funds. Equity in Pooled Cash and Cash Equivalents held by the Retirement Funds can include cash on deposit, foreign currencies, cash posted as collateral to counterparties, repurchase agreements, certificates of deposit, U.S. Treasury Bills, short-term investment funds, and other U.S. or foreign liquid financial



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instruments with maturities that are generally less than three months. Equity in Pooled Cash and Cash Equivalents are reported at fair value or cost, which approximates fair value.

Privately-held debt, which is included as “Fixed Income Investments” on the Statement of Fiduciary Net Position, is priced using approaches that value each holding based on the best available information using the following hierarchy of pricing sources:

1. Custodian-supplied prices for assets that can be priced in accordance with the pricing hierarchy established with SWIB’s custodian
2. Prices provided by a third party with expertise in the debt markets

For private market investments where no readily ascertainable market value exists, including limited partnerships and real estate pooled funds, fair value is estimated based on the net asset values (NAV) provided by the general partner. Due to the reporting timing of private markets investment managers, reported fair values as of December 31, 2021 are based on actual September 30, 2021 reporting, which has been adjusted to reflect cash flows occurring from October 1, 2021 through December 31, 2021. The reported fair value is considered an estimate that may significantly differ from the value that could be realized in a secondary market transaction or the amount ultimately realized. The financial statements of the limited partnerships and real estate pooled funds are audited by independent auditors annually.

Certain portfolios invest in privately-held companies alongside a strategic partner, such as a limited partnership fund manager. These co-investments are valued by SWIB’s strategic partners, who often employ independent valuation agents and use a variety of methodologies including reviews of subsequent financing rounds, discounted cash flow analyses, cash flow multiples analyses, reviews of market comparable sales or metrics, and reviews of third-party appraisals.

Real estate investments owned by SWIB in limited liability companies are valued by independent appraisers every three years. In years when appraisals are not performed, properties are informally appraised by the asset advisor. Each year audited financial statements are prepared for each property.

SWIB employs portfolio strategies which involve investments across multiple asset classes. The “Multi Asset Investments” account on the Statement of Fiduciary Net Position consists primarily of hedge funds. SWIB values hedge funds based on monthly statements or estimated returns received from each of the hedge fund’s administrators. A third-party administrator’s responsibility is to independently account for the hedge fund’s activity and calculate the NAV of the fund. Generally, hedge fund administrators price financial instruments traded in active markets based on quoted market prices or binding dealer quotations. For certain over-the-counter (OTC) instruments, fair value is determined based on valuation models used by the administrator or independent valuation agent. Annually, the financial statements prepared by the administrator are audited by independent auditors.

Derivative financial instruments are marked to market daily, with valuation changes recognized in income during the period the instruments are held and when the instrument is sold or expires. The nature and use of derivative instruments are discussed later in this note.

A limited number of securities are carried at cost. Certain non-public or closely-held investments are not reported at fair value, but are carried at cost as no independent price quotes are available to estimate fair value for these securities.

**» Credit Risk**

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations to SWIB. Fixed income credit risk investment guidelines outline the minimum ratings required at the time of purchase by individual portfolios, or groups of portfolios, based on the portfolios' investment objectives. In addition, some fixed income portfolios are required to always carry a minimum weighted average rating. Information regarding SWIB's credit risk related to derivative instruments is discussed later in this note.

The table entitled Credit Quality Distribution displays the lowest credit rating assigned by nationally recognized statistical rating organizations on debt securities held by the Retirement Funds as of December 31, 2021. Included in this table are fixed income securities, including certain short-term securities, classified as "Equity in Pooled Cash and Cash Equivalents" on the Statement of Fiduciary Net Position. Also included are interest rate sensitive investments held in the Retirement Funds' securities lending collateral reinvestment pools, which are managed by SWIB's custodian. Additional information regarding the securities lending program is discussed later in this note.

The table also includes SWIB's investment in commingled fixed income funds, which are not rated. Although the funds themselves are not assigned ratings, external management investment guidelines govern minimum credit quality standards for the investments within each portfolio. These standards are determined based on the investment objectives and risk parameters of each fund.

<b>Retirement Funds Credit Quality Distribution As of December 31, 2021 (In Thousands)</b>		
<b>Rating</b>	<b>Fair Value</b>	<b>% of Total</b>
AAA/Aaa	\$ 529,669	1.0 %
AA/Aa	29,717,181	54.3
A	3,082,226	5.6
A-1/P-1	54,709	0.1
A-2/P-2	201,642	0.4
A-3/P-3	17,978	0.0
BBB/Baa	7,603,105	13.9
BB/Ba	2,384,348	4.4
B	1,968,407	3.6
CCC/Caa or below	814,370	1.5
Not Rated	1,467,599	2.7
Commingled Fixed Income Funds	6,843,327	12.5
Total	<u>\$ 54,684,561</u>	<u>100.0 %</u>

SWIB held \$17.0 billion in reverse repurchase agreements at December 31, 2021. Investment guidelines permit certain portfolios to enter into reverse repurchase agreements, which are a sale of securities with a simultaneous agreement to repurchase the securities in the future at the same price plus a stated rate of interest. The market value of the securities underlying reverse repurchase agreements exceeds the cash received, providing the counterparty a margin against a decline in market value of the securities. If the counterparty defaults on their obligation to sell these securities back to SWIB or provide cash of equal value,



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SWIB could suffer an economic loss equal to the difference between the market value of the underlying securities plus accrued interest and the agreement obligation, including accrued interest.

SWIB enters into reverse repurchase agreements with various counterparties and such transactions are governed by Master Repurchase Agreements. Master Repurchase Agreements are negotiated contracts and contain terms in which SWIB seeks to minimize counterparty credit risk. SWIB also controls credit exposures by limiting trades with any one counterparty to stipulated amounts. The counterparty credit exposure is managed through the transfer of margin, in the form of cash or securities, between SWIB and the counterparty. The Retirement Funds' counterparty credit exposure for reverse repurchase agreements at December 31, 2021 is summarized in the table entitled Reverse Repurchase Agreements, Counterparty Credit Exposure.

<b>Retirement Funds</b>	
<b>Reverse Repurchase Agreements Counterparty Credit Exposure</b>	
<b>As of December 31, 2021</b>	
(In Thousands)	
Fair Value of Collateral Held by Counterparty	\$ 17,327,331
Less:	
Cash due to Counterparty	17,012,077
Collateral and Interest due to Counterparty	184,732
Total due to Counterparty	17,196,809
Net Counterparty Credit Exposure	<u>\$ 130,522</u>

The cash proceeds from reverse repurchase agreements are reinvested by the Retirement Funds. The maturities of the purchases made with the proceeds of reverse repurchase agreements are not necessarily matched to the maturities of the agreements. The agreed-upon yields earned by the counterparty for the reverse repurchase agreements held were between 0.07% and 0.22% at December 31, 2021. Portfolio guidelines require agreements to mature between one and 90 days.

The cash due to counterparties resulting from reverse repurchase agreements is reported as "Obligation Under Reverse Repurchase Agreements" and the interest due to counterparties is included in "Investment Payables" on the Statement of Fiduciary Net Position.

### » Custodial Credit Risk

SWIB's custodial credit risk policy addresses the primary risks associated with safekeeping and custody. It requires that SWIB's custodial institution be selected through a competitive bid process and that the institution be designated a Systemically Important Financial Institution (SIFI) by the U.S. Federal Reserve. The policy also requires that SWIB be reflected as beneficial owner on all securities entrusted to the custodian and that SWIB have access to safekeeping and custody accounts. The custodian is also required to carry insurance covering errors and omissions and they must provide SWIB with an annual report on internal controls, prepared in accordance with the Statement on Standards for Attestation Engagements. In addition, SWIB management has established a system of controls for the oversight of services and related processes performed by the custodian. SWIB's current custodial bank was selected in accordance with these guidelines and meets all the requirements stipulated in the custodial credit risk policy.

**Deposits** - Custodial credit risk related to deposits is the risk that, in the event of the failure of a depository financial institution, SWIB will not be able to recover deposits that are in possession of an outside party. Cash deposits totaled \$620.7 million as of December 31, 2021. Of the total, \$123.4 million was collateralized by securities borrowed. Depository insurance covered another \$36.2 million of the total. The remaining deposits,

totaling \$461.1 million, were uninsured and uncollateralized. These uninsured deposits represent the U.S. dollar equivalent of balances held in foreign currencies in SWIB's custodian's nominee name, cash posted as collateral for derivative transactions, and cash collateral posted in excess of the market value of securities borrowed by SWIB for short sales. In addition to cash deposits, the Retirement Funds held \$24.0 million in certificates of deposit, as of December 31, 2021.

**Investments** - Custodial credit risk for investments is the risk that, in the event of failure of the counterparty to a transaction, SWIB will not be able to recover the value of investments that are in the possession of an outside party. The Retirement Funds held repurchase agreements totaling \$268.8 million as of December 31, 2021. These repurchase agreements were tri-party agreements held in a short-term cash management portfolio managed by SWIB's custodian. The underlying securities for these agreements were held by the tri-party agent, not in SWIB's name.

The Core Trust Fund holds committed repos with a major equity derivative clearing organization (counterparty) for an agreed upon commitment amount, from which the counterparty can fully or partially draw upon at their discretion during the commitment period. A separate account is established at the asset custodian in SWIB's name to hold the available cash and the collateral from the counterparty if any of the commitment amount is drawn. For the undrawn commitment amount, the counterparty pays SWIB a commitment fee. Any cash amounts drawn are structured as repo transactions where SWIB receives a fee and U.S. Treasuries as collateral with a margin percentage greater than 100%. Draws are limited to a maximum of 30 days, so the term of each repo transaction is also limited to 30 days. The counterparty is rated AA+ and is a Systematically Important Financial Market Utility. Collateral is marked to market daily. A separate financial services company acts as SWIB's agent and provides indemnification in the event of the counterparty's default.

The Retirements Funds, under a Master Repurchase Agreement, hold mortgage series trust certificates issued by a loan originator. The loan originator, acting as trust sponsor, places Government National Mortgage Association (Ginnie-Mae) eligible loans in a trust and issues trust certificates. The trust sponsor sells trust certificates to SWIB's counterparty in a repo transaction under a separate Master Repurchase Agreement between the trust sponsor and the counterparty. The sponsor and owner trustee utilize a custodian for the loan documents. SWIB purchases the trust certificates and provides funding to the counterparty, which provides funding to the loan originator/trust sponsor. The trust certificates have been pledged by the counterparty to SWIB under the Master Repurchase Agreement between SWIB and the counterparty. The trust certificates are collateralized by the pool of mortgage loans custodied at the custodian. The counterparty is required to make margin adjustments when the value of the collateral pool, based on TBA pricing, falls below the required margin threshold. The collateral held is greater than 100%, and the repurchase transactions have one-month terms.

During 2021, SWIB entered into Institutional Client Account Agreements with prime brokers. These agreements include, but are not limited to the execution, settlement, and clearance of securities, commodities, and other financial products and transactions, including borrowings related to the transactions, commodities, other financial assets, and the extension of credit to SWIB. The Account Agreement is treated as a master netting agreement, a securities contract within the meaning of the United States Bankruptcy Code, or a netting contract within the meaning of the Federal Deposit Insurance Corporation Improvement Act of 1991.

SWIB manages relationships with prime brokers, including instructing asset transfers and margin movements regarding collateral. Collateral is held by the prime brokers and any affiliated entity and are commingled in their accounts along with the right of rehypothecation in accordance with applicable law. Collateral consists of cash, treasuries, and securities subject to prime broker rules and standard terms. Separate agreements govern lock-up rates and fees for borrows, as well as lending and other fees, as applicable. Margin calculation is included in the lock-up terms and rates charged may vary by portfolio. Certain changes can only be made with



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advance notice based on a lock-up term of 29 days. The prime brokers are designated a SIFI. Although SWIB monitors these counterparties, there is no guarantee the counterparty will not become insolvent and there is no certainty that SWIB would not incur losses due to its assets being unavailable for a period of time, ultimately receiving less than a full recovery of its assets, or both.

### » *Concentration of Credit Risk*

Concentration of credit risk is the risk of loss attributed to the magnitude of an organization's investment in a single issuer. SWIB limits concentrations of credit risk by establishing investment guidelines for individual portfolios or groups of portfolios that generally restrict issuer concentrations in any one company or Rule 144A securities to less than 5% of the portfolio's market value. The Retirement Funds did not hold any investments with a single issuer, exclusive of investments issued or explicitly guaranteed by the U.S. government, representing 5% or more of the Retirement Funds' value at December 31, 2021.

### » *Interest Rate Risk*

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. SWIB uses several methods to manage interest rate risk. Fixed income instruments held by the Retirement Funds include investments with variable rate securities, stepped rate securities, securities with no coupon, such as discount notes, and coupons that range between 0.0% and 17.0% at December 31, 2021.

SWIB analyzes long and intermediate term portfolios' interest rate risk using various duration calculations. Modified duration, which is stated in years, is the measure of price sensitivity of a fixed income security to an interest rate change of 100 basis points. The calculation is based on the weighted average of the present values for all cash flows. Some investments are analyzed using an option-adjusted duration calculation which is similar to the modified duration method. Option-adjusted duration incorporates the duration-shortening effect of any embedded call provisions in the securities. Duration statistics are weighted by the dollar value of the position to compute an average duration for each investment type.

Short-term portfolios' interest rate risk is analyzed using the weighted average maturity to next reset. Weighted average maturity is the maturity of each position in a portfolio weighted by the dollar value of the position to compute an average maturity for the portfolio as a whole. This measure indicates a portfolio's sensitivity to interest rate changes: a longer weighted average maturity implies greater volatility in response to interest rate changes.

SWIB's investment guidelines related to interest rate risk vary by portfolio. Some fixed income portfolios require management within a range of a targeted duration, while others require a weighted average maturity at or below a specified number of days or years.

The Interest Rate Sensitivity by Investment Type table on the following page presents the aggregated interest rate exposure for the Retirement Funds' assets at December 31, 2021. Weighted average maturity, where reset dates are assumed to be the effective maturity date for the security, is presented for repurchase agreements and short-term pooled investments. Longer-term instruments held by the Retirement Funds are presented using modified duration, as this measure more accurately states the interest rate sensitivity of these investments. This duration measure is calculated using reset dates for some floating rate instruments, such as term loans. Information about the interest rate sensitivity of derivative contracts is discussed later in this note.

SWIB invests in securities with contractual cash flows, such as asset-backed securities and U.S. government agencies. These types of structured product investments may be highly sensitive to interest rate changes as



they may be subject to early payment in a period of declining interest rates. The resulting changes in timing, or possible reduction in expected total cash flows, affect the fair value of these securities.

**Retirement Funds**  
**Interest Rate Sensitivity by Investment Type\***  
**As of December 31, 2021**  
 (In Thousands)

<b>Investment Type</b>	<b>Fair Value</b>	<b>Weighted Average Duration (Years)</b>	<b>Weighted Average Maturity (Days)</b>
U.S. Treasury Inflation Protected Securities	\$ 21,183,185	7.6	
Corporate Bonds & Private Placements	14,676,074	6.9	
U.S. Treasury Securities	5,576,699	8.5	
U.S Government Agencies	2,312,676	4.8	
Foreign Government/Agency Bonds	2,268,939	7.2	
Asset Backed Securities	832,864	3.3	
Commercial Paper	284,302		69
Repurchase Agreements	268,766		3
Municipal Bonds	188,657	11.5	
Commingled Funds			
Short Term Cash Management	5,404,746		57
Emerging Market Fixed Income	1,221,762	4.9	
Exchange Traded	465,891	7.6	
<b>Total</b>	<b>\$ 54,684,561</b>		

\*Excludes derivatives

### » Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely impact the fair value of an investment. It includes the risk that currencies in which a portfolio's investments are denominated, and currencies in which a portfolio has taken on a long or short active position, will decline or appreciate in value relative to the U.S. dollar.

Foreign currency exchange rates may fluctuate significantly for a number of reasons, including the forces of supply and demand in the foreign exchange markets, actual or perceived changes in interest rates, intervention by U.S. or foreign governments or central banks, currency controls, or political developments in the U.S. or abroad.

SWIB's policies include foreign currency risk management objectives relating to each individual portfolio. These guidelines address the foreign currency management activities permitted for each portfolio based on the portfolio mandates, risk tolerances, and objectives. SWIB also employs discretionary currency overlay strategies at the total fund level when currency market conditions suggest such strategies are warranted. Additional information related to the management of foreign currencies through the use of derivative instruments is discussed later in this note.

The table entitled Currency Exposures by Investment Type presents the Retirement Fund investments which were exposed to foreign currency risk at December 31, 2021.





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**Retirement Funds**  
**Currency Exposure by Investment Type**<sup>1,3</sup>  
**December 31, 2021**  
**Stated in U.S. Dollars**  
(In Thousands)

Currency	Cash & Cash Equivalents	Equities	Fixed Income	Limited Partnerships	Preferred Securities	Financial Futures Contracts	Options	Short Sell Obligations <sup>2</sup>	Swaps	Total <sup>4</sup>
Australian Dollar	\$ 11,677	\$ 966,643	\$ 31,718	\$ 0	\$ 0	\$ 268	\$ 0	\$ (220,666)	\$ 0	\$ 789,640
Brazilian Real	1,004	60,621	14,844	0	64,833	0	0	0	0	141,302
Canadian Dollar	85,883	1,869,006	23,033	0	0	2,184	0	(309,765)	0	1,670,341
Chilean Peso	73	9,379	0	0	0	0	0	0	0	9,452
Chinese Yuan Renminbi (Onshore)	(33)	0	0	0	0	0	0	0	(130)	(163)
Colombian Peso	4	117	0	0	0	0	0	0	0	121
Czech Republic Koruna	1	1,372	2,299	0	0	0	0	0	0	3,672
Denmark Krone	706	562,801	0	0	0	0	0	(188,052)	0	375,455
Euro Member Countries	21,749	6,978,639	334,061	1,741,436	175,624	5,645	(140)	(1,176,868)	2,949	8,083,095
Hong Kong Dollar	6,401	985,886	0	0	0	(302)	0	(41,310)	0	950,675
Hungarian Forint	804	30,165	1,681	0	0	0	0	0	0	32,650
Indian Rupee	0	168,292	0	0	0	0	0	0	0	168,292
Indonesian Rupiah	18	20,404	0	0	0	0	0	0	0	20,422
Israeli Shekel	573	53,239	0	0	0	0	0	(14,779)	0	39,033
Japanese Yen	908	4,389,940	0	0	0	953	0	(761,888)	0	3,629,913
Korean (South) Won	0	324,509	0	0	379	0	0	0	0	324,888
Malaysian Ringgit	415	8,457	32,473	0	0	0	0	0	0	41,345
Mexican Peso	(410)	2,014	45,042	0	0	0	0	0	(1,114)	45,532
New Zealand Dollar	630	71,953	16,393	0	0	0	0	(26,627)	0	62,349
Norwegian Krone	901	254,611	0	0	0	0	0	(50,961)	0	204,551
Peruvian Sol	5	82	0	0	0	0	0	0	0	87
Philippine Peso	54	824	0	0	0	0	0	0	0	878
Poland Zloty	30	47,663	18,491	0	0	0	0	0	0	66,184
Russian Ruble	126	0	3,632	0	0	0	0	0	0	3,758
Singapore Dollar	2,846	135,809	0	0	0	0	0	(49,799)	0	88,856
South African Rand	1,402	48,273	38,114	0	39	0	0	0	0	87,828
Sweden Krona	621	1,041,597	4,329	1,890	0	0	0	(324,837)	0	723,600
Swiss Franc	424	1,394,924	0	0	0	0	0	(342,307)	0	1,053,041
Taiwan New Dollar	275	514,142	0	0	6	0	0	0	0	514,423
Thailand Baht	0	36,586	0	0	0	0	0	0	0	36,586
Turkish Lira	0	3,663	0	0	0	0	0	0	0	3,663
United Kingdom Pound	31,909	2,972,486	34,389	428,991	0	857	0	(510,441)	0	2,958,191
<b>Total<sup>4</sup></b>	<b>\$ 168,996</b>	<b>\$22,954,097</b>	<b>\$ 600,499</b>	<b>\$ 2,172,317</b>	<b>\$ 240,881</b>	<b>\$ 9,605</b>	<b>\$ (140)</b>	<b>\$ (4,018,300)</b>	<b>\$ 1,705</b>	<b>\$ 22,129,660</b>

1) Commingled funds (including limited partnerships and other pooled vehicles) represent investments where the Retirement Funds own only a portion of the overall fund. While the overall fund may be denominated in U.S. dollars, the underlying investments may be exposed to foreign currency risk in various currencies. Commingled funds are shown in the denomination used by the fund for financial reporting.

2) Short Sell Obligations are reported as liabilities on the Statement of Fiduciary Net Position. They are included in the above table because they have exposure to foreign currency risk.

3) Investment types holding instruments denominated only in U.S. Dollars are not included in the above table. At calendar year-end, these include: Convertible Securities, Multi Asset Investments, TBAs, Option Contracts, Swaps, and Obligation Under Reverse Repurchase Agreements.

4) Totals may not add due to rounding.

### » *Fair Value of Investments*

Fair value measurements of the investments held by the WRS are categorized by the hierarchy established by generally accepted accounting principles. The hierarchy, which has three levels, is based on the valuation inputs used to measure the fair value of the investment.

**Level 1** - Investments reflect unadjusted quoted prices in active markets for identical assets.

**Level 2** - Investments reflect prices that are based on inputs that are either directly or indirectly observable for an asset (including quoted prices for similar assets), which may include inputs in markets that are not considered to be active.

**Level 3** - Investments reflect prices based upon valuation techniques in which significant inputs or significant value drivers are unobservable.

The fair value hierarchy gives the highest priority to Level 1 inputs and the lowest priority to Level 3. When the inputs used to measure fair value fall within different levels of the hierarchy, the level within which the fair value measurement is categorized is based on the lowest level input that is significant to fair value. The categorization of investments within the hierarchy is based upon the pricing transparency of the instrument and does not represent the investment's overall risk.

Commingled investments are not categorized under the fair value hierarchy but are disclosed within this note as investments measured at NAV.

The fair value measurements of investments as of December 31, 2021, are found in the table entitled Investments by Fair Value Level.



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**Retirement Funds**  
**Investments by Fair Value Level**  
**As of December 31, 2021**  
(In Thousands)

Asset Type	Fair Value			TOTAL
	Level 1	Level 2	Level 3	
<b>Cash Equivalents</b>				
Certificates of Deposit	\$ 0	\$ 9,008	\$ 15,005	\$ 24,013
Commercial Paper	0	0	180,510	180,510
Money Market Funds	250,005	0	0	250,005
<b>Total Cash Equivalents</b>	<b>250,005</b>	<b>9,008</b>	<b>195,515</b>	<b>454,528</b>
<b>Equities</b>				
Domestic	50,086,973	57	93,048	50,180,078
International	22,942,766	165	11,166	22,954,097
<b>Total Equities</b>	<b>73,029,739</b>	<b>222</b>	<b>104,214</b>	<b>73,134,175</b>
<b>Fixed Income</b>				
Asset Backed Securities	0	811,356	21,508	832,864
Corporate Bonds & Private Placements	0	14,405,143	65,277	14,470,420
Exchange Traded Funds	465,891	0	0	465,891
Foreign Government/Agency Bonds	0	2,268,939	0	2,268,939
Municipal Bonds	0	188,657	0	188,657
U.S. Government Agencies	0	2,312,676	0	2,312,676
U.S. Treasury Inflation Protected Securities	0	21,183,186	0	21,183,186
U.S. Treasury Securities	38,476	5,538,222	0	5,576,698
<b>Total Fixed Income</b>	<b>504,367</b>	<b>46,708,179</b>	<b>86,785</b>	<b>47,299,331</b>
<b>Preferred Securities</b>				
Domestic	1	229,440	232,989	462,430
International	240,882	0	0	240,882
<b>Total Preferred Securities</b>	<b>240,883</b>	<b>229,440</b>	<b>232,989</b>	<b>703,312</b>
Convertibles	0	63	2,090	2,153
<b>Derivatives</b>				
Foreign Exchange Contracts	0	3,793	0	3,793
Futures	76,789	0	0	76,789
Options	(1,946)	0	0	(1,946)
Swaps	0	25,689	0	25,689
To Be Announced Securities	0	2,899,255	0	2,899,255
<b>Total Derivatives</b>	<b>74,843</b>	<b>2,928,737</b>	<b>0</b>	<b>3,003,580</b>
Short Sales	(8,047,473)	0	(3,193)	(8,050,666)
<b>Total</b>	<b>\$ 66,052,364</b>	<b>\$ 49,875,649</b>	<b>\$ 618,400</b>	<b>\$ 116,546,413</b>

Securities classified as Level 1 are generally valued at the official closing price (usually the last trade price). Such investments generally include exchange-traded securities such as equities, preferred stock, certain derivative instruments, and exchange-traded funds. U.S. Treasury Bills and only the most recently-issued U.S. Treasury Notes and Bonds are classified as Level 1 as available pricing for these securities is similarly reliable to exchange-traded securities.

Securities classified as Level 2 are valued using observable inputs provided by third-party pricing services generally using either a bid evaluation or a matrix-pricing technique. Bid evaluations may include market quotations that are based on yields, maturities, call features, and ratings. Matrix-pricing is used to value securities based on their relationship to benchmark market prices for securities with similar interest rates, maturities, and credit ratings. Pricing in this level may also include market approaches that incorporate benchmark interest rates. Debt securities comprise the majority of the Level 2 investments as they are generally traded using a dealer market, with lower trading volumes than Level 1 securities. OTC derivative instruments, such as swaps, TBAs, and foreign exchange contracts, are also included in Level 2 because they are priced using a market approach that considers benchmark interest rates and foreign exchange rates.

Level 3 investments are generally valued using significant inputs that are unobservable to the marketplace. This may occur if an investment is illiquid or its value is based on estimates. For the WRS, such investments primarily include private fund investments, which are valued using appraisals that include significant unobservable inputs. Asset Backed Securities included in Level 3 represent private placements that are valued at purchase price when third-party valuations are unavailable. Equities, convertibles, and preferred securities included in the Level 3 hierarchy are generally privately-held securities valued using valuation models such as price multiples incorporating comparable public companies, discounted cash flows and milestone valuation models. In some instances of privately-held preferred securities, fair value is determined based on recent financing rounds. Bank loans, which are included in corporate bonds and private placements within the Level 3 category, are priced by vendors using proprietary models which may incorporate unobservable inputs. Cash and Cash Equivalents included in Level 3 represent securities priced at cost. Typically, due to their short-term nature, cost approximates fair value for these investments. Other factors such as infrequent trading, an inactive market, or adjusted quoted prices may also result in Level 3 measurements.



## FINANCIAL SECTION

» *Investments Measured at NAV*

The fair value of investments in certain fixed income funds, equities, private equity limited partnerships, stock funds, real estate limited partnerships, equity limited partnerships, and hedge funds are based on the investments' NAV per share (or its equivalent), provided by the investee. The December 31, 2021 investments valued using NAV are shown in the table entitled Investments Measured at NAV.

**Retirement Funds  
Investments Measured at NAV  
As of December 31, 2021  
(In Thousands)**

Investments Measured at NAV	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period <sup>7</sup>
Cash and Cash Equivalents <sup>1</sup>	\$ 5,404,746	\$ 0	Daily	Same Day
Fixed Income <sup>2</sup>	1,221,762	0	Daily	5 days
Private Fund Investments <sup>3</sup>	26,573,553	14,112,896	N/A	N/A
Equities <sup>4</sup>	9,710,717	0	Daily, Monthly	2-30 days
Equity Limited Partnerships <sup>5</sup>	933,917	0	Monthly	15 days
Hedge Funds <sup>6</sup>	6,227,923	746,672	Various	Various
<b>Total</b>	<b>\$ 50,072,618</b>	<b>\$ 14,859,568</b>		

<sup>1</sup>This category consists of short-term cash funds with the investment objective of safety of principal and liquidity while earning a competitive money market rate of return. The short-term cash funds have daily liquidity with same day notice.

<sup>2</sup>This category includes a long-only fixed income manager which can invest across the credit quality spectrum, in varying geographies, and can include derivatives, high yield, and structured securities. The long-only manager requires a redemption notice period of 5 days and has daily liquidity.

<sup>3</sup> Private Fund Investments include direct, co-investments, LLCs with existing SWIB general partners, direct secondary investments, and fund of funds. These investments are illiquid and are generally not resold or redeemed. Distributions from each fund are received as the underlying investments are liquidated or over the life of the investment. The table entitled Limited Partnerships - Estimated Remaining Life provides an estimate of the period over which the underlying assets are expected to be liquidated. As of December 31, 2021, there is one partial sale planned in 2022 on the secondary market. The anticipated sale price of this fund is not expected to be materially different than the NAV as of December 31, 2021.

<sup>4</sup> This category includes long-only equity managers (71%) with various fundamental, quantitative, and other approaches spanning various styles, geographies, and market cap weights. These long-only manager investments can be redeemed either daily or monthly with between 10 and 30 business days' notice. The remaining 29% of this category represents emerging markets equity index funds with an investment strategy designed to track the return of the given segment of the emerging equity markets. These investments can be redeemed daily with 2 business days' notice.

<sup>5</sup> Equity Limited Partnership fund invests in global equity. The long-only manager requires a redemption notice period of 15 days and can be redeemed monthly. The table entitled Limited Partnerships-Estimated Remaining Life indicates that the investments represent open-ended funds that are readily redeemable.

<sup>6</sup> Hedge Fund investments are private investment funds that seek to produce absolute returns using a broad range of strategies. In certain instances, Hedge Fund investments are structured as limited partnerships, whereby participants receive distributions over the life of the fund. Estimated remaining life for four funds structured as limited partnerships is >10 years, and three funds between 5-10 years. Additional information relating to Hedge Funds can be found later in this note.

<sup>7</sup> Redemption terms described for NAV investments reflect contractual agreements and assume withdrawals are made without adverse market impact and under normal market conditions.

» *Private Fund Investments*

Private Fund Investments include private equity, and real estate.

Private Equity Limited Partnerships participated in the following investment strategies at December 31, 2021:

**Leveraged Buyout** - This strategy acquires the controlling interest of a private company using a significant amount of borrowed capital (leverage).

**Distressed Debt** - This strategy can invest in public and private companies undergoing financial distress, a turnaround in business operations, or which are believed to be undervalued because of a discrete extraordinary event.

**Growth Equity** - This strategy is an investment opportunity in relatively mature companies that are going through a transformational event in their lifecycle with potential for significant growth.

**Venture Capital** - This strategy invests in companies with potential for significant growth (generally small to early stage emerging firms).

**Private Debt** - This strategy includes any debt held by or extended to privately held companies. The debt securities can be senior debt, mezzanine debt, and structured capital but commonly involve non-bank institutions making loans to private companies or buying those loans on the secondary market.

**Secondaries** - This strategy provides a market for investors to sell or purchase positions in private markets funds.

Real Estate limited partnerships generally consisted of the following investment strategies at December 31, 2021:

**Core** - Core investments are expected to deliver a significant percentage of their return from income and should experience lower volatility than Opportunistic and Value investments due to lower leverage, higher occupancy, and asset location.

**Value** - Value investments typically have significant near-term leasing, repositioning, and/or renovation risk. This strategy is expected to have modest initial operating revenues with potential for substantial income growth and will likely encounter greater volatility than Core strategies, but lower volatility than Opportunistic strategies.

**Opportunistic** - Opportunistic investments usually have significant development, lease-up, financial restructuring, and/or liquidity risk with little or no initial operating income. This strategy typically uses the highest leverage, is expected to achieve most of its return from future capital gains, and is likely to encounter greater volatility than Core and Value strategies.

Private equity and real estate limited partnerships are generally structured to provide distributions to participants of the fund as the holdings of the partnership are liquidated over time. The table entitled Limited Partnerships - Estimated Remaining Life illustrates the distribution of estimated remaining liquidation periods for the limited partnership holdings as of December 31, 2021.

**Retirement Funds**  
**Limited Partnerships - Estimated Remaining Life**  
**As of December 31, 2021**  
 (In Thousands)

<b>Limited Partnership Type</b>	<b>Estimated Remaining Life</b>				<b>Total</b>
	<b>&lt; 5 Years</b>	<b>5 - 10 Years</b>	<b>&gt; 10 Years</b>	<b>N/A<sup>2</sup></b>	
Private Fund Investments <sup>1</sup>	\$ 6,222,836	\$ 14,799,090	\$ 1,709,477	\$ 3,842,150	\$ 26,573,553
Equity Limited Partnerships	0	0	0	933,917	933,917
<b>Total</b>	<b>\$ 6,222,836</b>	<b>\$ 14,799,090</b>	<b>\$ 1,709,477</b>	<b>\$ 4,776,067</b>	<b>\$ 27,507,470</b>

<sup>1</sup> Estimated remaining life represents subjective estimates, assuming normal market conditions.

<sup>2</sup> N/A investments represent open-ended funds that are readily redeemable.



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## » Hedge Funds

Hedge Fund investments are private investment funds that seek to produce absolute returns using a broad range of strategies. The Retirement Funds participated in the following Hedge Fund strategies at December 31, 2021:

**Long/Short Equity** - This strategy invests both long and short in publicly-traded stocks. These managers vary in their use of short selling and leverage.

**Event-Driven** - This strategy seeks to gain an advantage from pricing inefficiencies that may occur before or after a corporate action or related event, such as a merger, spinoff, earnings call, bankruptcy, or restructuring.

**Tactical Trading** - This strategy invests in indices, commodities, interest rate instruments, and currencies as a result of relative value or directional forecasts from a systematic or discretionary approach.

**Relative Value** - This strategy uses a range of fixed income arbitrage, insurance linked, long-short credit, and/or quantitative strategies that seek to take advantage of price differentials.

**Multistrategy** - This strategy employs a wide range of strategies and instruments in managing assets.

When redeeming Hedge Fund investments, the agreements governing the investment often require advanced notice and may restrict the timing of withdrawals. The table entitled Hedge Fund Redemption Timing depicts redemption terms, independent of other contractual restrictions like lock-up periods as discussed below, for SWIB's Hedge Fund investments at December 31, 2021.

**Retirement Funds  
Hedge Fund Redemption Timing  
As of December 31, 2021  
(In Thousands)**

Redemption Frequency	Redemption Notice Period (Days)	Fair Value
Monthly	3 - 90	\$ 1,745,198
Quarterly <sup>1,3</sup>	30 - 180	3,522,547
Semi - Annual	60	277,559
Other <sup>1,2</sup>	0 - 90, N/A	682,619
Total		\$ 6,227,923

<sup>1</sup> These categories include funds that are in the process of being fully redeemed, with final distribution expected in 2022.

<sup>2</sup> This category also includes funds that are structured as limited partnerships, whereby withdrawals are not permitted, but the participants receive distributions over the life of the fund.

<sup>3</sup> This category includes funds that are subject to rolling locks, whereby the fund automatically re-locks unless a withdrawal request is submitted.

Hedge Fund agreements can also include lock-up periods, which restrict investors from redeeming their investment during a specified time frame. Lock-up periods help portfolio managers mitigate liquidity risks. Lock-ups can be hard, where redemptions are not permitted for a specified time period, or soft, where redemptions are permitted provided the investor pays a penalty. In certain instances, a fund may have both hard and soft lock-up restrictions. In addition, in certain investments, Hedge Fund managers may be allowed to institute a rolling lock-up. A fund with a rolling lock-up period requires investors to commit to an initial lock-up period, and, if the investor does not submit a redemption notice within a set time prior to expiration of the lock-up, the lock-up is reset.

The table entitled Hedge Fund Lock-ups reflects the lock-up terms for the Hedge Fund investments held at December 31, 2021.

**Retirement Funds  
Hedge Fund Lock-ups  
As of December 31, 2021  
(In Thousands)**

<b>Hedge Fund Lock Type</b>	<b>Duration of Lock (Years)</b>	<b>Year of Lock Expiration</b>	<b>Fair Value</b>
Hard Lock	1 - 3	2024	\$ 660,205
Rolling Lock	2	2022 - 2023	357,527
None <sup>1</sup>	N/A	N/A	4,756,338
Other <sup>2</sup>	N/A	N/A	453,853
Total			<u>\$ 6,227,923</u>

<sup>1</sup> This category includes funds that are in the process of being fully redeemed, with final distribution expected in 2022.

<sup>2</sup> This category includes funds that are structured as limited partnerships, whereby withdrawals are not permitted but the participants receive distributions over the life of the fund.

Similar to lock-ups, Hedge Fund agreements also commonly incorporate gating restrictions. An investor-level gate limits redemption on a particular redemption date to a specified percentage of the investor's account value, while a fund-level gate may limit total investor withdrawals on a particular redemption date to a percentage of aggregated fund-level (or master fund-level) NAV. In certain instances, funds can have both investor and fund-level gates in place. Such funds are reflected in the Investor Level category. The table entitled Hedge Fund Gates summarizes the Hedge Fund gates in place at December 31, 2021.

**Retirement Funds  
Hedge Fund Gates  
As of December 31, 2021  
(In Thousands)**

<b>Hedge Fund Gate Type</b>	<b>Gate Range</b>	<b>Fair Value</b>
Investor Level	12.5% - 50.0%	\$ 2,057,613
Fund Level	8.3% - 25.0%	1,009,162
None	N/A	2,481,499
Other <sup>1,2</sup>	N/A	679,649
Total		<u>\$ 6,227,923</u>

<sup>1</sup> This category includes funds that are in the process of being fully redeemed, with final distribution expected in 2022.

<sup>2</sup> This category includes funds that are structured as limited partnerships, whereby withdrawals are not permitted but the participants receive distributions over the life of the fund.



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**» Derivative Instruments**

A derivative instrument, as defined by GASB Statement No. 53 "Accounting and Financial Reporting for Derivative Instruments", is a financial instrument or other contract that has the following characteristics:

- **Settlement factors** - It has (1) one or more reference rates and (2) one or more notional amounts or payment provisions or both. Those terms determine the amount of the settlement or settlements and, in some cases, whether or not a settlement is required.
- **Leverage** - It requires no initial net investment or an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar response to changes in market factors.
- **Net settlement** - Its terms require or permit net settlement, it can readily be settled net by a means outside the contract, or it provides for delivery of an asset that puts the recipient in a position not substantially different from net settlement.

Derivative instruments may be used to implement investment strategies for the Retirement Funds. All derivative instruments are subjected to risk analysis and monitoring processes at the portfolio, asset class, and fund levels. Investment guidelines define allowable derivative activity for each portfolio and are based on the investment objectives which have been approved by the Board. Where derivative instruments are permitted, guidelines stipulate allowable types and the manner and degree to which they are to be used.

Gains and losses for all derivative instruments are reported in the Statement of Changes in Fiduciary Net Position as "Net Increase (Decrease) in Fair Value of Investments." SWIB invests in derivative instruments directly and indirectly through commingled or pooled investment vehicles. Information relating to investments held in commingled funds has not been separately disclosed in the financial statements or the accompanying footnotes, consistent with GASB reporting requirements.

A derivative instrument can take the form of an individually negotiated contract between the Retirement Funds and a specific counterparty. These types of negotiated positions are known as OTC contracts. OTC contracts can be structured as either uncleared or cleared.

Uncleared OTC contracts are non-standardized bilateral contracts that do not include the use of a centralized intermediary, such as a clearinghouse. Uncleared OTC transactions are subject to regulatory requirements with respect to data reporting and recordkeeping, trading relationship documentation, business conduct standards, portfolio reconciliation, and margin collection and posting. For these transactions, master netting agreements and credit support annexes governing the credit relationship and collateral exchange between two parties are put in place to mitigate counterparty credit risk.

Cleared OTC contracts offer additional protections to trade participants. These types of transactions employ the use of an intermediary between counterparties. The intermediary, known as a clearinghouse, serves to facilitate trading and mitigate risks. While not completely standardized, these contracts involve a high degree of standardization. Once cleared, the clearinghouse steps in as the counterparty to all trades. Regulatory bodies govern the tools and procedures for risk mitigation such as margin requirements and daily mark-to-market.

In addition to trading OTC, derivative contracts can also be transacted on established exchanges. These contracts are called exchange-traded and are completely standardized. Like cleared OTC contracts, the clearinghouse is an intermediary to the trade, reducing risks and standardizing the exchange of margin. The table entitled Derivative Contract Types summarizes the differences between OTC and exchange-traded contracts.

<b>Retirement Funds Derivative Contract Types</b>		
<b>Uncleared (OTC)</b>	<b>Cleared (OTC)</b>	<b>Exchange-Traded</b>
Trades negotiated over-the-counter	Trades negotiated over-the-counter	Trades executed on organized exchanges
Customized trade terms are agreed upon by counterparties	Trades limited to standardized terms	Trades limited to standardized terms
Traded bilaterally between counterparties	Trades are submitted through a clearinghouse, which is counterparty	Trades are booked with exchange's clearinghouse, which is counterparty
Margin (collateral) often exchanged but subject to negotiation between counterparties.	Mandatory margin requirements	Mandatory margin requirements
Common example: Forward Contracts	Common example: Credit Default Swaps	Common example: Futures Contracts

Collateral postings are commonplace for derivative contracts and vary based on the type of contract traded. SWIB posted \$423.5 million in cash and \$370.9 million in securities as collateral for derivative positions as of December 31, 2021. More information regarding collateral requirements is included below.

### Uncleared OTC Derivative Instruments

Inherent in the use of uncleared OTC derivative instruments, the Retirement Funds may be exposed to counterparty credit risk. Counterparty credit risk is the risk that a derivative instrument counterparty may fail to meet its payment obligations under the terms of the derivative contract. SWIB seeks to mitigate this risk through counterparty credit evaluations and approvals, counterparty credit limits, and exposure monitoring procedures. Additionally, policies have been established which seek to implement master netting arrangements with counterparties that permit the closeout and netting of transactions with the same counterparty upon the occurrence of certain events, such as payment default, rating downgrade, bankruptcy, illegality, or force majeure. Agreements may also require daily collateral postings to further mitigate credit risk.

The table entitled OTC Derivative Instruments Subject to Counterparty Credit Risk, summarizes, by credit rating, the Retirement Funds' exposure to counterparty credit risk relating to uncleared OTC contracts as of December 31, 2021, without respect to any collateral or netting agreement.



## FINANCIAL SECTION

**Retirement Funds**  
**OTC Derivative Instruments Subject to Counterparty Credit Risk**  
**As of December 31, 2021**  
(In Thousands)

<b>Counterparty Credit Rating</b>	<b>FX Receivables</b>	<b>Swap Receivables</b>	<b>To Be Announced Receivables<sup>1</sup></b>	<b>Warrant Receivables<sup>1,2</sup></b>	<b>Total<sup>3</sup></b>
AA	\$ 772,619	\$ 0	\$ 0	\$ 0	\$ 772,619
A	3,444,485	3,497,233	1,174	0	6,942,892
Not Rated	0	0	0	1,527	1,527
Total	<u>\$ 4,217,104</u>	<u>\$ 3,497,233</u>	<u>\$ 1,174</u>	<u>\$ 1,527</u>	<u>\$ 7,717,038</u>

<sup>1</sup>Exposure to counterparty credit risk for To Be Announced Securities and Warrants is limited to unrealized gains on open positions.

<sup>2</sup>Warrants issued by privately held company that is not rated by statistical credit rating organization.

<sup>3</sup>Aggregate amount of liabilities included in master netting arrangements was \$7.6 billion at December 31, 2021.

The aggregate fair value of receivables relating to uncleared OTC derivative contracts was \$7.7 billion at December 31, 2021. This amount represents the maximum loss that would be recognized at the reporting date if all counterparties failed to perform as contracted. This maximum exposure is reduced to \$7.7 million at December 31, 2021 when counterparty collateral and master netting arrangements are considered. SWIB had credit exposure to 21 uncleared OTC counterparties as of December 31, 2021.

### Cleared OTC and Exchange-Traded Derivatives

Counterparty credit risk is mitigated by an intermediary for cleared OTC and exchange-traded derivative contracts. For these types of derivative investments, a clearinghouse interposes itself as counterparty to all trades and extends a guarantee that trades will be settled as originally intended and to ensure performance and margin requirements are imposed. The requirements are established with the intent to cover nearly all expected price changes based on market risk. Margin payments are settled daily based upon the price movements of the contracts, thereby significantly reducing counterparty credit risk.

### » Foreign Currency Spot and Forward Contracts

Foreign Currency Spot and Forward contracts are uncleared OTC agreements between two parties to exchange designated currencies at a specific time in the future. No cash is exchanged when a foreign exchange spot or forward contract is initiated. Depending upon market movements, forward contracts may require collateral postings either to SWIB or to counterparties. Spot contracts are exempt from collateralization. For deliverable contracts, amounts due are paid or received on the contracted settlement date. In other instances (most often in emerging markets), contracts are established as non-deliverable forwards (NDFs). Unlike deliverable contracts, NDFs are only settled in U.S. dollars.

Currency exposure management is permitted through the use of currency derivative instruments. Direct hedging of currency exposure back to the U.S. dollar is permitted when consistent with the strategy of the portfolio. Cross-currency exposure management seeking to transfer out of an exposed currency and into a benchmark currency is also permitted. SWIB may employ discretionary currency overlay strategies when currency market conditions suggest such strategies are warranted.

Losses may arise from future changes in the value of the underlying currency, or if the counterparties do not perform under the terms of the contract. Spot and forward contracts are valued daily with the changes in fair value included in "Net Increase (Decrease) in Fair Value of Investments" on the Statement of Changes in Fiduciary Net Position. The net receivable or payable for spot and forward contracts is reflected as "Foreign Currency Contracts" on the Statement of Fiduciary Net Position. The tables entitled Foreign Currency Spot and



Forward Contracts present the fair value of foreign currency spot and forward contract assets and liabilities held by the Retirement Funds as of December 31, 2021.

<b>Retirement Funds</b>			
<b>Foreign Currency Spot and Forward Contracts</b>			
<b>December 31, 2021</b>			
(In Thousands)			
<b>Currency</b>	<b>Notional (local currency)</b>	<b>Fair Value (\$U.S.)</b>	<b>Unrealized Gain(Loss) (\$U.S.)</b>
<b>Foreign Currency Contract Receivables</b>			
Australian Dollar	285,883	\$ 207,852	\$ 3,250
Brazilian Real	332,710	58,989	996
Canadian Dollar	216,105	171,084	1,954
Chilean Peso	31,725,130	37,081	(1,126)
Chinese Yuan Renminbi	21,982	3,447	24
Colombian Peso	6,749,977	1,645	(39)
Czech Republic Koruna	1,314,912	59,837	1,393
Danish Krone	111,173	16,999	77
Euro Member Countries	49,708	56,534	135
Hong Kong Dollar	132,781	17,031	(1)
Hungarian Forint	25,913,046	79,625	(798)
Indian Rupee	6,722,639	89,743	736
Indonesian Rupiah	752,892,727	52,721	659
Israeli Shekel	53,671	17,244	149
Japanese Yen	42,612,540	370,070	(6,940)
Mexican Peso	347,464	16,754	548
New Zealand Dollar	37,250	25,503	65
Norwegian Krone	1,745,355	197,745	2,442
Philippine Peso	147,326	2,849	(60)
Poland Zloty	239,503	59,305	363
Russian Ruble	4,076,488	53,895	(928)
Singapore Dollar	106,330	78,863	744
South African Rand	235,006	14,580	54
Sweden Krona	2,152,372	237,819	(495)
Switzerland Franc	344,039	377,613	1,922
Thailand Baht	337,726	10,107	(4)
Turkish Lira	217,840	15,830	(3,803)
United Kingdom Pound	137,749	186,574	2,763
United States Dollar	1,699,764	1,699,765	0
<b>Total Receivables</b>		<b>\$ 4,217,104</b>	<b>\$ 4,080</b>



## FINANCIAL SECTION

**Retirement Funds**  
**Foreign Currency Spot and Forward Contracts**  
**December 31, 2021**  
(In Thousands)

<b>Currency</b>	<b>Notional (local currency)</b>	<b>Fair Value (\$U.S.)</b>	<b>Unrealized Gain(Loss) (\$U.S.)</b>
<b>Foreign Currency Contract Payables</b>			
Australian Dollar	(137,497) \$	(99,971) \$	465
Brazilian Real	(12,183)	(2,178)	(12)
Canadian Dollar	(142,127)	(112,518)	(294)
Chilean Peso	(590,743)	(686)	8
Chinese Yuan Renminbi	(132,907)	(20,838)	(105)
Colombian Peso	(25,636,532)	(6,249)	179
Czech Republic Koruna	(275,830)	(12,605)	(296)
Danish Krone	(269,330)	(41,182)	16
Euro Members Countries	(1,085,567)	(1,235,355)	3,372
Hong Kong Dollar	(37,074)	(4,755)	(2)
Hungarian Forint	(5,598,136)	(17,248)	594
Indian Rupee	(913,581)	(12,162)	(190)
Israeli Shekel	(24,207)	(7,782)	(95)
Japanese Yen	(6,629,934)	(57,576)	409
Korean (South) Won	(15,550,600)	(13,038)	59
Mexican Peso	(129,100)	(6,269)	(13)
New Zealand Dollar	(90,658)	(62,021)	911
Norwegian Krone	(467,605)	(53,025)	(1,357)
Philippine Peso	(914,284)	(17,679)	335
Poland Zioty	(21,678)	(5,374)	(2)
Russian Ruble	(400,161)	(5,267)	13
Singapore Dollar	(49,683)	(36,840)	(495)
South African Rand	(443,031)	(27,543)	277
Sweden Krona	(1,048,484)	(115,809)	396
Switzerland Franc	(75,830)	(83,339)	(832)
Taiwan New Dollar	(1,848,535)	(66,892)	81
Thailand Baht	(843,472)	(25,243)	(402)
Turkish Lira	(217,840)	(15,830)	(3,180)
United Kingdom Pound	(32,751)	(44,358)	(126)
United States Dollar	(2,003,679)	(2,003,678)	0
Total Payables		<u>(4,213,310)</u>	<u>(286)</u>
Net		<u>\$ 3,794</u>	<u>\$ 3,794</u>

**» Futures Contracts**

A futures contract is an exchange-traded agreement to buy or sell a financial instrument, index, or commodity at an agreed upon price and specified date in the future.

The fair value of futures contracts represents the unrealized gain (loss) on the contracts, since trade inception, and is reflected as “Financial Futures Contracts” on the Statement of Fiduciary Net Position. Futures contracts are marked to market daily, based upon the closing market price of the contract at the board of trade or exchange on which they are traded. Gains and losses resulting from investments in futures contracts are included in the “Net Increase (Decrease) in Fair Value of Investments” on the Statement of Changes in Fiduciary Net Position.

Futures contracts involve, to varying degrees, risk of loss in excess of the margin deposited with the clearinghouse. Losses may arise from future changes in the value of the underlying instrument. Futures contracts may be entered into for purposes such as the following:

- To efficiently gain or adjust market exposures for rebalancing,
- To adjust sector, interest rate, or duration exposures, and
- To securitize cash or act as a substitute for cash market transactions.

The table entitled Futures Contracts presents the Retirement Funds investments in futures contracts as of December 31, 2021.

<b>Retirement Funds Futures Contracts As of December 31, 2021 (In Thousands)</b>				
<b>Futures Contract Description</b>	<b>Position</b>	<b>Expiration</b>	<b>Notional Amount</b>	<b>Fair Value*</b>
Commodity	Long	Jan 22 - Dec 22	\$ 481,066	\$ 9,540
	Short	Feb 22 - Sep 22	(301,319)	(2,073)
Currency	Long	Mar 22	(187,712)	(932)
Equity Index	Long	Jan 22 - Mar 22	3,288,773	44,774
	Short	Jan 22 - Apr 22	(247,991)	(745)
Fixed Income	Long	Mar 22	11,160,685	28,893
	Short	Mar 22	(4,985,764)	(2,668)
Total			<u>\$ 9,207,738</u>	<u>\$ 76,789</u>

\* Fair Value includes foreign currency gains (losses).

The table entitled Futures Contracts with Interest Rate Sensitivity presents the interest rate sensitivity of fixed income futures contracts as of December 31, 2021. Duration, which is stated in years, is the measure of price sensitivity of a fixed income security to an interest rate change of 100 basis points. Duration statistics presented in this table are weighted by the notional value of each position to compute an average duration for the contract types held.



## FINANCIAL SECTION

**Retirement Funds**  
**Futures Contracts with Interest Rate Sensitivity**  
**As of December 31, 2021**  
(In Thousands)

<b>Contract Type</b>	<b>Position</b>	<b>Notional Amount</b>	<b>Fair Value</b>	<b>Weighted Average Duration (Years)</b>
U.S. Treasury Notes	Long	\$ 8,726,225	\$ 6,070	4.0
U.S. Treasury Notes	Short	(4,527,766)	(6,820)	6.2
U.S. Treasury Bonds	Long	2,434,460	22,823	17.5
U.S. Treasury Bonds	Short	(109,194)	477	15.4
Foreign Government Bonds	Short	(348,804)	3,675	8.4
Total		<u>\$ 6,174,921</u>	<u>\$ 26,225</u>	

## » Options

An options contract gives the purchaser of the contract the right, but not the obligation, to buy (call) or sell (put) the security or index underlying the contract at an agreed upon price on or before the expiration date of the contract. The seller of the contract is subject to market risk, while the purchaser is subject to credit risk and market risk, to the extent of the premium paid to enter into the contract.

Trust fund rebalancing policies and certain portfolio investment guidelines permit the use of exchange-traded and OTC options. Investment guidelines allow options to be used to improve market exposure efficiency, enhance expected returns, or provide market exposure hedges. Exchange rules require that the seller of short exchange-traded option contracts cover these positions either by collateral deposits in the form of cash or by pledging, in escrow, the actual securities that would be transferred to the contract purchaser in the event the options contract was exercised. In the case of OTC options, investment guidelines mitigate counterparty credit risk by establishing minimum credit ratings and requiring master netting agreements with provisions for collateral exchanges.

The fair value of option contracts is based upon the closing market price of the contract and is reflected as "Options Contracts" on the Statement of Fiduciary Net Position. Gains and losses as a result of investments in option contracts are included in the "Net Increase (Decrease) in Fair Value of Investments" on the Statement of Changes in Fiduciary Net Position. The table entitled Options Contracts presents the fair value of option contracts as of December 31, 2021.

**Retirement Funds  
Options Contracts  
As of December 31, 2021  
(In Thousands)**

<b>Description</b>	<b>Contract Type</b>	<b>Position</b>	<b>Exchange-Traded (EXCH) vs. OTC</b>	<b>Expiration</b>	<b>Notional</b>	<b>Fair Value</b>	<b>Unrealized Gain (Loss)</b>
Equity	CALL	Long	EXCH	Jan 22 - Mar 22	\$ 14,437	\$ 252	\$ (2,872)
Equity	CALL	Short	EXCH	Jan 22 - Mar 22	(48,872)	(456)	502
Equity	PUT	Long	EXCH	Jan 22	9,429	63	(446)
Equity	PUT	Short	EXCH	Jan 22	(24,579)	(1,665)	43
Equity Index	PUT	Short	EXCH	Jan 22	(28)	0	1
OTC Index	PUT	Short	OTC	Jan 22 - Feb 22	(416,946)	(140)	895
Total					<u>\$ (466,559)</u>	<u>\$ (1,946)</u>	<u>\$ (1,877)</u>

**» Swaps**

Swaps are negotiated contractual agreements between two parties which can be either cleared or uncleared OTC investments. As is specified in SWIB's investment guidelines, swaps may be used as an alternative to physical securities when it is deemed advantageous for portfolio construction. In addition, swaps may be used to adjust asset class exposures for the Retirement Funds. Guideline limits and soft risk parameters for each portfolio are applied to the aggregate exposures which includes both physical and synthetic securities. A synthetic security is a security or combination of securities that mirrors the properties of another reference security.

Throughout the calendar year, the Retirement Funds held positions in Total Return Swaps (TRS), Interest Rate Swaps (IRS), and Credit Default Swaps (CDS). The table entitled Open Swap Positions lists the open swap contracts held at December 31, 2021.





## FINANCIAL SECTION

**Retirement Funds  
Open Swap Positions  
As of December 31, 2021  
(In Thousands)**

Type	Maturity Date	Reference Rate	Notional Amount	Fair Value	Unrealized Gain (Loss)
Credit Default	Dec-25	N/A <sup>1</sup>	\$ 12,000	\$ 13	\$ 1,210
Credit Default	Jun-26	N/A <sup>1</sup>	20,000	(825)	2,100
Credit Default	Dec-26	N/A <sup>1</sup>	204,720	5,423	120
Credit Default	Dec-26	N/A <sup>2</sup>	(400,000)	(36,561)	337
Interest Rate <sup>3</sup>	May-25	Pay CNY-7D Fixing Repo Rates, Receive Fixed 2.02	20,397	(187)	50
Interest Rate <sup>3</sup>	Jul-25	Pay CNY-7D Fixing Repo Rates, Receive Fixed 2.53	4,754	34	34
Interest Rate <sup>3</sup>	Jul-26	Pay CNY-7D Fixing Repo Rates, Receive Fixed 2.57	2,510	23	23
Interest Rate <sup>3</sup>	Jun-27	Pay MNX-TIE-Banxico 28D, Receive Fixed 5.42	12,178	(1,114)	(1,114)
Total Return	Jan-22	Pay 1-Day FED FUNDS plus spread, Receive Equity Index Return	(97,758)	2,840	2,840
Total Return	Feb-22	Pay 1-Day FED FUNDS plus spread, Receive Equity Index Return	(687,525)	22,953	22,952
Total Return	Mar-22	Pay 1-Day FED FUNDS plus spread, Receive Equity Index Return	(171,370)	6,773	6,773
Total Return	Apr-22	Pay 1-Day FED FUNDS plus spread, Receive Equity Index Return	(83,227)	605	605
Total Return	May-22	Pay 1-Day FED FUNDS plus spread, Receive Equity Index Return	(153,428)	2,709	2,709
Total Return	Jun-22	Pay 1-Day FED FUNDS plus spread, Receive Equity Index Return	(99,414)	1,185	1,185
Total Return	Jul-22	Pay 1-Day FED FUNDS plus spread, Receive Equity Index Return	(140,527)	4,083	4,083
Total Return	Aug-22	Pay 1-Day FED FUNDS plus spread, Receive Equity Index Return	(90,725)	3,586	3,586
Total Return	Sep-22	Pay 1-Day FED FUNDS plus spread, Receive Equity Index Return	(524,845)	15,071	15,071
Total Return	Sep-22	Pay 1-Day FED FUNDS plus spread, Receive Equity Index Return	(220,717)	(658)	(658)
Total Return	Sep-22	Receive 1-Day FED FUNDS plus spread, Pay Equity Index Return	532,639	(11,636)	(11,636)
Total Return	Oct-22	Pay 1-Day FED FUNDS plus spread, Receive Equity Index Return	(50,000)	124	124
Total Return	Oct-22	Pay 3-Month LIBOR plus spread, Receive Equity Index Return	(89,714)	2,607	2,607
Total Return	Nov-22	Pay 1-Day FED FUNDS plus spread, Receive Equity Index Return	(155,942)	5,412	5,412
Total Return	Nov-22	Pay 1-Day FED FUNDS plus spread, Receive Equity Index Return	(175,302)	6,928	6,928
Total Return	Nov-22	Receive 1-Day FED FUNDS plus spread, Pay Equity Index Return	147,101	(3,698)	(3,698)
Total			<u>\$ (2,184,195)</u>	<u>\$ 25,690</u>	<u>\$ 61,643</u>

<sup>1</sup> SWIB sold credit protection in exchange for periodic payments

<sup>2</sup> SWIB bought credit protection in exchange for periodic payments

<sup>3</sup> Denotes instrument is highly sensitive to interest rate changes

Open CDS contracts represent cleared OTC positions where SWIB gains exposure to credit protection. Under the terms of the contract, SWIB receives or pays periodic payments and, in exchange, agrees to pay or receive a formula-driven amount to counterparties for losses incurred if stipulated credit events occur. CDS spreads are sensitive to credit spread and interest rate changes. The fair value of a CDS is determined using the closing price as reported by the applicable clearinghouse.

IRS positions represent cleared OTC contracts where fair value is determined using the closing price as reported by the applicable clearinghouse. IRS positions are sensitive to changes in interest rates. One stream of future interest payments is exchanged for another between counterparties. In most cases, interest rate swaps include the exchange of a fixed interest rate for a floating rate.

The open TRS contracts represent uncleared OTC positions where SWIB gains exposure to the return of the underlying equity index and, in exchange, agrees to pay or receive the stipulated rate benchmark, plus or minus a spread. The rate benchmark is based on the 3-month London Interbank Offering Rate (LIBOR) rate or the 1-day Fed Funds Rate set by the Federal Open Market Committee (FOMC) and is sensitive to interest rate changes. The fair value of a TRS is based on the change in quoted market price of the underlying equity index and represents the unrealized gain (loss) on the contracts since trade inception.

The fair value of CDS, IRS, and TRS is reflected as "Swaps" on the Statement of Fiduciary Net Position. Gains and losses resulting from investments in swap contracts are included in the "Net Increase (Decrease) in Fair Value of Investments" on the Statement of Changes in Fiduciary Net Position. Any interest owed but not yet paid relating to swap contracts is reported within "Investment Payables" on the Statement of Fiduciary Net Position. Interest expense relating to swap contracts is reported as "Investment Expense" on the Statement of Changes in Fiduciary Net Position.

### » To Be Announced Securities

TBA mortgage-backed securities are uncleared OTC forward contracts consisting of mortgage-backed securities (MBS) issued by Government National Mortgage Association, a government entity, and by government-sponsored enterprises such as the Federal National Mortgage Association or the Federal Home Loan Mortgage Corp. The term TBA is derived from the fact that the actual MBS that will be delivered to fulfill a TBA trade is not designated at the time the trade is made. Instead, the specific pool of mortgages comprising the MBS is announced 48 hours prior to the established trade settlement date. Eligibility rules and standards for MBS pools deliverable into TBA contracts ensure that delivered MBS pools are fungible. Payment for TBA securities is not made until the settlement date.

Certain portfolio investment guidelines allow for both long and short TBA positions. To mitigate counterparty credit risk, guidelines establish minimum credit ratings and require master netting agreements which include provisions for collateral exchanges.

TBAs, much like their underlying MBS securities, may be highly sensitive to interest rate changes. This is because the MBS pool on which these forward contracts are based can be subject to early payment in a period of declining interest rates. The price of TBAs can fluctuate as the marketplace predicts changes in timing, or possible reductions in expected cash flows, associated with a change in interest rates. The table entitled TBA Contracts includes the interest rate sensitivity of TBA contracts as of December 31, 2021. Duration, which is stated in years, is the measure of price sensitivity of a fixed income security to an interest rate change of 100 basis points. Duration statistics presented in this table are weighted by the fair value of each position to compute an average duration for the contracts held.

<b>Retirement Funds</b> <b>TBA Contracts</b> <b>As of December 31, 2021</b> (In Thousands)				
<b>Position</b>	<b>Contract Maturity</b>	<b>Fair Value</b>	<b>Unrealized Gain (Loss)</b>	<b>Weighted Average Duration (Years)</b>
Long	Feb - Mar 22	\$ 4,646,235	\$ 175	4.7
Short	Feb 22	(1,746,980)	(2,475)	6.7
Total		<u>\$ 2,899,255</u>	<u>\$ (2,300)</u>	

## FINANCIAL SECTION

The fair value of TBAs is reflected in “To Be Announced Securities” on the Statement of Fiduciary Net Position. The unrealized gain (loss) associated with these contracts is included within the “Net Increase (Decrease) in Fair Value of Investments” on the Statement of Changes in Fiduciary Net Position.

**» Warrants**

A warrant is a contract that entitles the holder to buy the underlying stock of the issuing company at a specified price. Warrants and options are similar in that the two instruments allow the holder special rights to buy securities. However, warrants differ from options in that they provide additional financing to the issuing company when exercised. As of December 31, 2021, SWIB held warrant contracts valued at \$2.3 million. Warrants are included in the “Equities” section on the Statement of Fiduciary Net Position. The associated unrealized gain of \$1.2 million is included in the “Net Increase (Decrease) in Fair Value of Investments” on the Statement of Changes in Fiduciary Net Position.

**» Securities Lending Transactions**

State statutes and Board policies permit SWIB to use investments of the Retirement Funds to enter into securities lending transactions. These transactions involve the lending of securities to broker-dealers and other entities in exchange for collateral, in the form of cash or securities, with the simultaneous agreement to return the collateral for identical securities in the future. SWIB’s custodian acts as an agent in lending the Retirement Funds’ directly-held domestic and international securities. When the Retirement Funds’ securities are delivered to a borrower as part of a securities lending agreement, the borrower is required to place collateral with the lending agent equal to at least 102% of the loaned securities’ fair value, including interest accrued, as of the delivery date, as long as the securities and the collateral are denominated in the same currency. In the event that securities are loaned against collateral denominated in a different currency, the borrower is required to place collateral with the lending agent totaling at least 105% of the loaned securities’ fair value, including interest accrued, as of the delivery date. Collateral is marked to market daily and adjusted as needed to maintain the required minimum level. Pledging or selling non-cash collateral securities cannot be done without a borrower default. On December 31, 2021, the fair value of the securities on loan to counterparties was approximately \$11.4 billion.

Cash collateral is reinvested by the lending agent in two separate pools, a U.S. dollar cash collateral pool and a pool denominated in Euros. These pools are administered in accordance with contractual investment guidelines which are designed to minimize the risk of principal loss and provide a modest rate of return. Investment guidelines limit credit and liquidity risk by restricting new investments to overnight repurchase agreements collateralized with high quality U.S. government, U.S. government agencies, and sovereign debt securities. To further reduce credit risk, SWIB’s custodian provides indemnification to SWIB against counterparty default. The earnings generated from the collateral investments, plus or minus the rebates received from or paid to the dealers and less fees paid to agents, results in the net earnings from lending activities, which are then split on a percentage basis with the lending agent. Cash from the U.S. dollar pool may be posted as collateral relating to short sale transactions and it earns the Overnight Bank Funding rate plus 10 basis points. Additional information relating to short sales is discussed later in this note. As of December 31, 2021, SWIB’s securities lending agent released \$761 million in cash from the Securities Lending Collateral pool to SWIB. The cash released is included in Cash and Cash Equivalents on the Statement of Fiduciary Net Position and is used to provide liquidity for other investment strategies. The Securities Lending Collateral Liability is fully collateralized when the cash released is combined with the Securities Lending Collateral.

At December 31, 2021, the Retirement Funds had minimal credit risk exposure to borrowers as loans are collateralized in excess of 100%. In addition to the cash collateral reinvestment indemnification, the contract with the lending agent requires it to indemnify the Retirement Funds if the borrowers fail to return the loaned securities and the collateral is inadequate to replace the securities lent. The Retirement Funds are also indemnified against losses resulting from violations of investment guidelines.

The majority of security loans are open-ended and can be terminated on demand by the Retirement Funds or the borrower. Maturities of investments made with cash collateral are not necessarily matched to the maturities of the securities loaned because most loans do not have a fixed maturity date. The risk that SWIB would be unable to return collateral to securities borrowers upon termination of the loan is mitigated by the highly liquid nature of investments held in the collateral reinvestment pools and cash held by SWIB. The average maturities of the loans and the average maturities of the assets held in the collateral reinvestment pools were similar at December 31, 2021.

Securities lending is allowed in certain commingled fund investments. As an investor in such funds, SWIB does not own the underlying securities and does not separately report on securities lending activity. All earnings of these funds are reported in the Statement of Changes in Fiduciary Net Position as "Net Increase (Decrease) in Fair Value of Investments."

### » *Short Sell Obligations*

The Retirement Funds may sell a security it does not own in anticipation of purchasing the security later at a lower price. This is known as a short sale transaction. For the duration of the short sale transaction, a liability is recorded under "Short Sell Obligations" on the Statement of Fiduciary Net Position. The liability presented on the Statement of Fiduciary Net Position represents the fair value of the shorted securities necessary for delivery to the purchaser and is marked-to-market daily. Realized and unrealized gains and losses associated with short sales are recorded on the Statement of Changes in Fiduciary Net Position, in the "Net Increase (Decrease) in Fair Value of Investments" account. Prior to executing a short sale, SWIB borrows the security from a party currently holding it. While the transaction is open, the Retirement Funds incur expenses for securities borrowing costs. In addition, as a security borrower, the Retirement Funds may incur dividend and interest expense as such payments must be remitted to the security lender during the course of the loan. During the duration of the borrow, there may be corporate action elections requiring the borrower to deliver items such as cash or securities to the lender. Expenses resulting from short sales are included in "Investment Expense" on the Statement of Changes in Fiduciary Net Position.

Risks arise from short sales due to the possible illiquidity of the securities markets and from potential adverse movements in security values. The cost to acquire the securities sold short may exceed the amount of proceeds initially received, as well as the amount of the liability recorded as "Short Sell Obligations" in the Statement of Fiduciary Net Position. Short sales expose the short seller to potentially unlimited liability as there is no upward limit on the price a shorted security can reach. Certain portfolio guidelines permit short sales and mitigate risks in various ways, including: limiting the total value of short sales as a percentage of portfolio value, establishing portfolio versus benchmark tracking error limits, and monitoring other statistical and economic risk measures of the portfolio. Investment performance and risk associated with each portfolio is measured against benchmarks and monitored by management.

When a short sale occurs, the shorting portfolio must borrow the security and deliver it to the buyer. If the shorted security is owned by another Retirement Fund portfolio, investment policies allow the borrowing of the shorted securities from other Retirement Fund portfolios, including inter-fund borrowings. In addition to borrowing securities from existing Retirement Fund portfolios, SWIB may borrow securities from external sources. These borrowings are facilitated by SWIB's custodian.

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Except in the case of borrowings within the same trust fund, the Retirement Funds are required to post collateral to the lender, at the required rate of 102% for in-currency loans and 105% for cross-currency loans. The Retirement Funds posted \$127.2 million in cash and \$5.2 billion in securities as collateral to security lenders representing \$46.1 million in excess of the fair market value of the securities borrowed as of December 31, 2021. If the security lender recalled the security and SWIB was not able to supply the lender with the security, the lender would be permitted to use SWIB's collateral to fund the purchase of the security.

**» Investment Policy and Asset Allocation**

As part of its fiduciary responsibilities, SWIB is required by Wis. Stat. § 25.15 (2)(b) "to diversify investments in order to minimize the risk of large losses, unless under the circumstances it is clearly prudent not to do so, considering each trust's or fund's portfolio as a whole at any point in time." SWIB exercises this duty in part by establishing its investment policy and by setting the asset allocation.

SWIB's Board of Trustees has established the asset allocation pursuant to a comprehensive and ongoing evaluation of the appropriate risk and return standards for each fund under management. The Board of Trustees consists of nine members meeting specific requirements as follows:

- Six Governor-appointed and State Senate-approved members, including:
  - Four with at least ten years investment experience
  - One with at least ten years financial experience and who works for a local government participant in the Local Government Investment Pool; and
  - One additional member
- Educator participant in the WRS appointed by the Teachers Retirement Board
- Non-educator participant in the WRS appointed by the Wisconsin Retirement Board
- Secretary of the Department of Administration or designee

The Board-approved investment policy for the WRS is intended to assist in development of a diversified portfolio of investments within acceptable risk parameters. The policy represents a delegation of standing authority to the SWIB's Executive Director/Chief Investment Officer and investment managers within the organization to make prudent investments within the investment guidelines, pursuant to Wis. Stat. § 15.02 (4) and Wis. Stat. § 25.15 (2) and Wisconsin Administrative Code IB 2.02.

Additionally, the Investment Committee (IC) was created to provide oversight of SWIB investments within the parameters established by the Board of Trustees. Oversight includes analysis of risk and investment returns of the portfolios, asset classes, and Core and Variable Funds. The IC is responsible for proposing to the Board of Trustees changes to the WRS investment policy, approving investment guidelines or strategies for internally-managed portfolios, approving the general strategies for each asset class, and for approving new investment and derivative instruments. The Board of Trustees reserves all rights to modify and amend IC guidelines at any time at its discretion.

The IC approved WRS Investment Guidelines include several policies, including a derivatives use policy, rebalancing procedures, and a leverage use policy. The derivatives use policy sets forth the objectives, monitoring, and reporting guidelines relating to derivative investments. The rebalancing procedures used in both mandatory and discretionary asset class rebalancing are described in the Investment Guidelines, and the leverage use policy describes SWIB's leverage philosophy. The total amount of policy leverage is approved by the Board of Trustees through the WRS asset allocation process.

The Board adopts the Retirement Funds' asset allocation policy, based on recommendations by the IC, the Board's asset allocation consultant, Executive Director/Chief Investment Officer, and Head of Asset and Risk Allocation. SWIB undertakes a comprehensive review of its strategic asset allocation plan every other year, including asset/liability modeling, to determine a suitable target allocation for each asset class included in the Core and Variable Funds, and an annual review to assess whether any interim adjustments should be made. The strategic nature of these reviews contemplates a long-term time horizon over which potential results are evaluated. This exercise is not an attempt to predict short-term market movements, but an effort to understand the long-term impacts of poor, normal, and above average market results.

In addition to potential future market impact, SWIB also contemplates the objectives of the funds, the impact of actuarial analysis, and the soundness of investment return and risk expectations. SWIB's asset allocation policies reflect the Board's program of risk allocation that involves reducing equity exposure by leveraging lower-volatility assets, such as fixed income securities. This investment strategy results in Core Fund strategic targets which exceed 100% of invested assets. Currently, the Board has approved an asset allocation target of 15% policy leverage for the Core Fund subject to an allowable range of up to 20%.

SWIB's asset allocation review process also includes assumptions regarding expected rates of return. Long-term (e.g. 30-year) expected real rates of return on pension plan investments are determined using a building block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected real rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The table entitled Asset Allocation Targets and Expected Returns presents the policy asset allocation targets and the best estimates of expected geometric rates of return for each major asset class as of December 31, 2021. In determining asset allocation targets, investments may be categorized differently than they are within the financial statements. For example, SWIB management considers inflation-sensitive assets separately from other fixed income investments for asset allocation purposes.

<b>Retirement Funds Asset Allocation Targets and Expected Returns<sup>2</sup> As of December 31, 2021</b>			
<b>Core Fund Asset Class</b>	<b>Asset Allocation %</b>	<b>Long-Term Expected Nominal Rate of Return %</b>	<b>Long-Term Expected Real Rate of Return %<sup>1</sup></b>
Global Equities	52 %	6.8 %	4.2 %
Fixed Income	25	4.3	1.8
Inflation Sensitive Assets	19	2.7	0.2
Real Estate	7	5.6	3.0
Private Equity/Debt	12	9.7	7.0
Total Core Fund	115 %	6.6 %	4.0 %
<b>Variable Fund Asset Class</b>			
U.S. Equities	70 %	6.3 %	3.7 %
International Equities	30	7.2	4.6
Total Variable Fund	100 %	6.8 %	4.2 %

<sup>1</sup> New England Pension Consultants Long Term US CPI (Inflation) Forecast: 2.5%

<sup>2</sup> Asset Allocations are managed within established ranges, target percentages may differ from actual monthly allocations

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*» Annual Money-Weighted Rate of Return*

Money-weighted rate of return expresses investment performance, net of pension plan investment expense, adjusted for the changing amounts actually invested. For the year ended December 31, 2021, the money-weighted rate of return for the Core Fund was 17.03% and 19.98% for the Variable Fund.

## 4 DESCRIPTION OF THE WISCONSIN RETIREMENT SYSTEM

The WRS is a cost-sharing, multiple-employer public employee retirement system established and administered by the State of Wisconsin to provide pension benefits for state and local government employees. WRS benefits and other plan provisions are established by Wis. Stat. § 40. Benefit terms may only be modified by legislation. ETF, under the direction of the ETF Board, is responsible for the administration of the WRS.

*» Employee Trust Funds Board*

The ETF Board has general oversight of ETF, appoints the ETF Secretary and oversees administration of the benefit programs, other than group insurance and deferred compensation. The ETF Board is comprised of 13 members, including:

- the Governor or the Governor's designee on the Group Insurance Board;
- the Administrator of the Department of Administration's Division of Personnel Management or the Administrator's designee;
- 4 members appointed by the Teachers Retirement Board (an advisory board to the ETF Board);
- 4 members appointed by the Wisconsin Retirement Board (an advisory board to the ETF Board);
- a public member who is not a participant in or beneficiary of the WRS, with at least 5 years of experience in actuarial analysis, administration of an employee benefit plan or significant administrative responsibility in a major insurer;
- a WRS annuitant; and
- a participant in the WRS who is a technical college or public school district educational support personnel employee.



**» WRS Employers**

The WRS is open to all public employers in Wisconsin. Participation is optional, except that participation is mandatory for school districts with respect to teachers, some municipalities with respect to police and firefighters, and all counties except Milwaukee County. As of December 31, 2021, the number of participating employers was:

State Agencies, UW & Public Authorities	56
Cities	189
Counties	71
Villages	291
Towns	287
School Districts	421
Cooperative Educational Service Agencies	12
Wisconsin Technical College System Districts	16
Special Districts	<u>212</u>
Total Employers	<u><u>1,555</u></u>

**» WRS Membership**

All eligible employees of a participating employer who are expected to work at least 1,200 hours per year (880 hours per year for teachers and school district educational support employees) must be covered by the WRS. As of December 31, 2021, the WRS membership consisted of:

<b>Current Employees:</b>	
General	132,650
Teachers	102,753
Elected / Executive / Judges	1,264
Protective with Social Security	19,220
Protective without Social Security	<u>2,760</u>
Total Current Employees	<u>258,647</u>
<b>Inactive Participants:</b>	
Terminated Participants	174,573
Alternate Payees	<u>3,498</u>
Total Inactive Participants	<u>178,071</u>
<b>Retirees and Beneficiaries Currently Receiving Benefits:</b>	
Retirement Annuitants	218,846
Disability Annuitants	6,305
Death Beneficiary Annuitants	<u>1,454</u>
Total Annuitants	<u>226,605</u>
Total Participants	<u><u>663,323</u></u>

*Approximately 1,535 inactive participants are receiving LTDI benefits.*



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» *WRS Benefits*

The WRS provides retirement benefits as well as death and disability benefits. Vesting requirements have changed over time, as follows:

- Participants in the system prior to January 1, 1990 were fully vested at the time they met participation requirements;
- For participants entering the system from January 1, 1990, to April 23, 1998, creditable service in each of five years was required for vesting;
- All active participants in the system at any time from April 24, 1998 to June 30, 2011 are fully vested; and
- 2011 Wisconsin Act 32 generally required participants hired on or after July 1, 2011 to have five years of creditable service to be vested.

Employees who retire at or after age 65 (54 for protective occupations and 62 for elected officials and executive service retirement plan participants, if hired on or before 12/31/2016) are entitled to a retirement benefit based on a formula factor, their final average earnings, and creditable service. Formula factors are shown in the table below:

Employment Category	Service Before 1/1/2000	Service Between 2000 and 2011	Service After 2011
General and Teachers	1.765%	1.6%	1.6%
Executive and Elected	2.165	2.0*	1.6*
Protective with Social Security	2.165	2.0	2.0
Protective without Social Security	2.665	2.5	2.5

\*2011 Wisconsin Act 10 changed the Executive and Elected formula factor from 2.0% to 1.6%. The effective date of the change varies among different employee categories, and generally applies to the service earned after Act 10 effective date (i.e. June 29, 2011).

Final average earnings is the average of the participant's three highest annual earnings periods. Creditable service includes current service and prior service for which a participant received earnings and made contributions as required. Creditable service also includes creditable military service. The retirement benefit will be calculated as a money purchase benefit based on the member's contributions plus matching employer's contributions, with interest, if that benefit is higher than the formula benefit.

Vested participants may retire at or after age 55 (50 for protective occupations) and receive an actuarially-reduced benefit. Participants terminating covered employment prior to eligibility for an annuity may either receive member-required contributions plus interest as a separation benefit or leave contributions on deposit and defer application until eligible to receive a retirement benefit.

» *Post-Retirement Adjustments*

The Employee Trust Funds Board may periodically adjust annuity payments from the retirement system based on annual investment performance in accordance with Wis. Stat. § 40.27. An increase (or decrease) in annuity payments may result when investment gains (losses), together with other actuarial experience factors, create a surplus (shortfall) in the reserves, as determined by the system's consulting actuary. Annuity increases are not based on cost of living or other similar factors. For Core annuities, decreases may be applied only to previously granted increases. By law, Core annuities cannot be reduced to an amount below the original, guaranteed amount (the "floor") set at retirement.

The Core and Variable Fund annuity adjustments granted during the past 10 years are as follows:  
:

Year	Core Adjustment	Variable Adjustment
2012	(7.0)%	(7.0)%
2013	(9.6)	9.0
2014	4.7	25.0
2015	2.9	2.0
2016	0.5	(5.0)
2017	2.0	4.0
2018	2.4	17.0
2019	0.0	(10.0)
2020	1.7	21.0
2021	5.1	13.0

The negative Core annuity adjustments in 2012 and 2013 were primarily due to the Fund's \$21.0 billion investment decline in 2008, caused by the global economic crisis. Core Fund gains and losses are recognized over a five-year period.

#### » *Long-Term Receivables*

The "Prior Service Contributions Receivable" on the Statement of Fiduciary Net Position represents the WRS unfunded actuarial accrued liability (UAAL), determined under the plan's Frozen Initial Liability funding methodology. This liability is being amortized as a level percentage of payroll over a 40-year period beginning January 1, 1990, for employers in the WRS prior to 2009. The remaining balance is expected to be fully amortized by December 31, 2029. Liabilities for employers joining the WRS beginning in 2009 are amortized over 30 years. Interest is assessed on the outstanding liability at year-end at the assumed earnings rate. The level-percentage-of-payroll amortization method results in a relatively lower dollar contribution in earlier years than in later years, when payrolls have increased. During the early years of the amortization period, payments made are less than annual interest assessments, resulting in an increase in the liability. As payrolls increase annually, prior service payments increase proportionally until they exceed annual interest and ultimately fully liquidate the liability at the end of the amortization period. State law requires the accrued retirement cost to be funded. As of December 31, 2021, the receivable balance was \$5.8 million.

#### » *Variable Retirement Option*

Prior to 1980, WRS participants could opt to have one-half of their required contributions and matching employer contributions invested in the Variable Fund. Retirement benefits were adjusted for the difference between the investment experience of the Core Fund and the Variable Fund. Provisions for allowing members to withdraw from the Variable Fund were added with the passage of Chapter 221, Laws of 1979. The Variable Fund was closed to new membership after April 30, 1980. 1999 Wisconsin Act 11 reopened the Variable Fund for existing and future participants, effective January 1, 2001. As of December 31, 2021, there were 50,205 active and inactive members and 42,251 annuitants participating in the Variable Fund.

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**» *Municipal Police and Firefighters Pension Group***

As of March 31, 1978, administration of certain local funds for police officers and firefighters was assumed by the Wisconsin Retirement Fund. This included approximately 2,000 members. As of December 31, 2021, approximately 19 annuitants or their beneficiaries remained in the system. This group was closed to new members after January 1, 1948.

The liability for retirement benefits for these annuitants is funded by the employers, as benefit payments are made. Annuity reserves for these police and firefighter annuities are established by a transfer from the employer accumulation reserve at the time the annuity is approved. Earnings on these reserves are used to fund annuity adjustments on the same basis as for WRS annuitants. The unfunded liability for these annuitants as of December 31, 2021, was \$0.4 million.

**» *Annuity Supplement - General Fund***

As authorized under 1985 Wis. Stat. § 40.27 (1), the State's General Fund provides certain supplemental annuity benefits to annuitants receiving a continuing annuity on or before September 1974. The benefit is subject to continuation of the appropriation by the Legislature. ETF serves as a clearing agent for its payment. Total supplemental annuity benefits paid were approximately \$45,000 in December 31, 2021.

## 5 CONTRIBUTIONS REQUIRED AND MADE

**» *Required Contributions***

WRS contribution rates are determined by the "entry age normal with a frozen initial liability" actuarial method. This is a "level contribution" actuarial method intended to keep employer and member contribution rates at a level percentage of payroll over the years. This method determines the amount of contributions necessary to fund: 1) the current service cost, which represents the estimated amount necessary to pay for benefits earned by the members during the current service year plus actuarial gains or losses arising from the difference between actual and assumed experience; and 2) the prior service cost, which represents the estimated amount necessary to pay for unfunded benefits earned prior to the employer becoming a participating employer in the WRS and the past service cost of benefit improvements. The 2021 contribution requirements were determined by the December 31, 2019, actuarial valuation.

Member contributions are deducted from the member's salary and remitted to ETF by the participating employer. Employers generally may not pay the member required contribution. The member required contribution is one-half of the actuarially-determined contribution rate for General category members, which includes teachers and members in the Executive and Elected Official category. By statute, member required contributions for Protective occupation category members are the same rate as General category members. Employers are required to contribute the remainder of the actuarially-determined contribution rate.

**Contribution rates in effect during 2021 by employment category were:**

Employment Category	Employer Current	Employer Prior *	Member	Total
General, Teachers, Executive & Elected Officials	6.75%	0.03%	6.75%	13.53%
Protective Occupation with Social Security	11.75	0.01	6.75	18.51
Protective Occupation without Social Security	16.35	0.01	6.75	23.11

\*The employer prior service contribution rate is a weighted average of individual employer rates.

**Contributions required and made during 2021 were:**

	Contributions (In Millions)	Percentage of Payroll
Employer Current Service	\$ 1,162.8	7.37%
Employer Prior Service*	0.4	0.00
Member Required	1,065.9	6.75

\*Employer prior service contributions are recorded on the Statement of Fiduciary Net Position as a reduction in the Prior Service Contribution Receivable. Contributions include both mandatory and voluntary payments received from participating employers. Some prior service contributions received after year end are included in Contributions, but are not in the determination of Prior Service Contributions Receivable. This is due to a difference in how these payments are treated for actuarial and financial reporting purposes.

Employers also contributed approximately \$139,000 in reimbursement for benefits paid in accordance with Wis. Stat. § 62.13, Police and Firefighters Pension Program.

**» Member and Employer Additional Contributions**

Contributions in addition to those required contributions by members and/or employers may be made to the retirement system. These contributions are held in separate reserve accounts and are subject to certain restrictions as to amount, form of benefit payments, tax status, etc.

## 6 NET PENSION LIABILITY (ASSET) OF PARTICIPATING EMPLOYERS - WRS

The components of the Net Pension Liability (Asset) of the participating employers at December 31, 2021, were as follows (In Millions):

Total Pension Liability*	<u>\$ 133,787.52</u>
Plan Fiduciary Net Position**	<u>\$ 141,847.70</u>
Participating Employer's Net Pension Liability (Asset)	<u>\$ (8,060.18)</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	106.02 %

\*Includes the impact of known Market Recognition Account deferred gains/losses on the liability for dividend payments.

\*\* Immaterial differences may exist between the Plan Fiduciary Net Position used in the actuarial valuation and that reported in the Statement of Fiduciary Net Position, due to the timing of the actuarial valuation.



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Additional information as of the latest actuarial valuations follows:

Actuarial Valuation Date:	December 31, 2020
Measurement Date of Net Pension Liability (Asset):	December 31, 2021
Experience Study:	January 1, 2018 - December 31, 2020 Published November 19, 2021
Actuarial Cost Method:	Entry Age Normal
Asset Valuation Method:	Fair Value
Long-Term Expected Rate of Return:	6.8%
Discount Rate:	6.8%
Salary Increases:	
Wage Inflation	3.0%
Senior/Merit	0.1% - 5.6%
Mortality:	2020 WRS Experience Mortality Table
Post-retirement Adjustments:*	1.7%

\*No post-retirement adjustments is guaranteed. Actual adjustments are based on recognized investment return, actuarial experience and other factors. 1.7% is assumed annual adjustments based on the investment return assumption and the post-retirement discount rate. Includes the impact of known Market Recognition Account deferred gains/losses on the liability for dividend payments.

Actuarial assumptions are based upon an experience study conducted in 2021 that covered a three-year period from January 1, 2018 to December 31, 2020. Based on this experience study, actuarial assumptions used to measure the Total Pension Liability changed from prior year, including the discount rate, long-term expected rate of return, post-retirement adjustment, price inflation, mortality and separation rates. The Total Pension Liability for December 31, 2021, is based upon a roll-forward of the liability calculated from the December 31, 2020 actuarial valuation.

A single discount rate of 6.8% was used to measure the Total Pension Liability, as opposed to a discount rate of 7.0% for the prior year. The discount rate is based on the expected rate of return on pension plan investments. Because of the unique structure of the WRS, the 6.8% expected rate of return implies that a dividend of approximately 1.7% will always be paid after reflecting known changes in the Market Recognition Account. For purposes of the single discount rate, it was assumed that the dividend would always be paid.

The projection of cash flows used to determine the single discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments (including expected dividends) of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

**» Sensitivity of the Net Pension Liability (Asset) to Changes in the Discount Rate**

The following presents the plan's Net Pension Liability (Asset), calculated using a single discount rate of 6.8%, as well as what the plan's Net Pension Liability (Asset) would be if it were calculated using a single discount rate that is one percentage point lower or one percentage point higher (In Millions):

	<b>Discount Rate</b>		
	<b>1% Decrease 5.8%</b>	<b>Current Discount Rate 6.8%</b>	<b>1% Increase 7.8%</b>
Total Pension Liability	\$ 147,566.97	\$ 133,787.52	\$ 123,868.87
Plan Fiduciary Net Position	141,847.70	141,847.70	141,847.70
Net Pension Liability (Asset)	<u>\$ 5,719.27</u>	<u>\$ (8,060.18)</u>	<u>\$ (17,978.83)</u>

Amounts may not foot due to rounding.

For the WRS, the determination of liabilities also depends on the assumed dividend that is linked to the interest rate used in the liability calculation. Therefore, the following table shows an alternative set of Sensitivity Analysis, which varies the assumed dividend in conjunction with the change in the discount rate. For the liabilities shown below, the assumed dividend was 0.8% for the 5.8% discount rate, 1.7% for the 6.8% discount rate, and 2.7% for the 7.8% discount rate (In Millions):

	<b>Discount Rate</b>		
	<b>1% Decrease 5.8%</b>	<b>Current Discount Rate 6.8%</b>	<b>1% Increase 7.8%</b>
Total Pension Liability	\$ 139,249.23	\$ 133,787.52	\$ 129,828.54
Plan Fiduciary Net Position	141,847.70	141,847.70	141,847.70
Net Pension Liability (Asset)	<u>\$ (2,598.47)</u>	<u>\$ (8,060.18)</u>	<u>\$ (12,019.16)</u>

Amounts may not foot due to rounding.

## 7 STATUTORY RESERVES

The following reserves have been established to reflect legal restrictions on the use of pension trust funds.

**» Employee Accumulation Reserve**

As authorized by Wis. Stat. § 40.04 (4), this reserve includes all required and voluntary member contributions, including contributions made by the employer on behalf of the employee. This reserve may only be used to pay lump sum benefits or transfers to the Annuity Reserve to fund annuities. All legal restrictions on use of this reserve were met during the year. The Employee Accumulation Reserve is fully funded.



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**Employee Accumulation Reserve balances (In Millions) as of December 31, 2021, were:**

	Core	Variable	Total
Employee Required	\$ 19,875.9	\$ 2,593.4	\$ 22,469.3
Employee Additional	248.8	19.3	268.1
<b>Total</b>	<b>\$ 20,124.7</b>	<b>\$ 2,612.7</b>	<b>\$ 22,737.4</b>

Amounts may not foot due to rounding.

**» Employer Accumulation Reserve**

As authorized by Wis. Stat. § 40.04 (5), this reserve includes all required employer contributions, including contributions for amortization of the unfunded accrued actuarial liability. This reserve may only be used to pay lump sum benefits or transfers to the Annuity Reserve to fund annuities. All legal restrictions on use of this reserve were met during the year. The Employer Accumulation Reserve is 100.00% funded.

**Employer Accumulation Reserve balances (In Millions) as of December 31, 2021, were:**

	Core	Variable	Police & Firefighters	Total
Employer Accumulation	\$ 23,812.4	\$ 2,593.4	\$ 0.0	\$ 26,405.8
Less: Unfunded Actuarial Accrued Liability	0.0	0.0	(0.4)	(0.4)
<b>Net Employer Accumulation</b>	<b>\$ 23,812.4</b>	<b>\$ 2,593.4</b>	<b>\$ (0.4)</b>	<b>\$ 26,405.4</b>

Amounts may not foot due to rounding.

**» Annuity Reserve**

As authorized by Wis. Stat. § 40.04 (6), this reserve includes the present value of all annuities. The present value of new annuities is transferred from the Employee Accumulation Reserve and the Employer Accumulation Reserve to the Annuity Reserve. This reserve may only be used for the payment of annuities and death benefits to annuitants. All legal restrictions on use of this reserve were met during the year. The Annuity Reserve is fully funded.

**Annuity Reserve balances (In Millions) as of December 31, 2021, were:**

	Core	Variable	Police & Firefighters	Total
Annuity Reserve	\$ 69,913.8	\$ 5,615.1	\$ 1.4	\$ 75,530.3

**» Market Recognition Account**

As authorized by Wis. Stat. § 40.04 (3), this reserve is used to smooth the flow of investment income into the Employee, Employer, and Annuity Reserves and other benefit plans invested in the Core Fund. Under the Market Recognition Account (MRA), all investment income, including realized and unrealized market gains and losses, is deposited into the MRA. At year-end, income equal to the assumed earnings rate is recognized. Any surplus or shortfall in earnings is recognized equally over five years.

Year-end balances in the MRA (In Millions) for the last five years after annual distributions were as follows:

<b>As of:</b>	<b>MRA</b>
December 31, 2017	\$ 3,273
December 31, 2018	\$ (4,916)
December 31, 2019	\$ 5,712
December 31, 2020	\$ 11,070
December 31, 2021	\$ 17,659

## 8 PUBLIC ENTITY RISK POOLS

ETF operates and reports three public entity risk pools: Health Insurance, Income Continuation Insurance (ICI), and Duty Disability Insurance. In accordance with GASB Statement No. 10 "Accounting and Financial Reporting for Risk Financing and Related Insurance Issues" and GASB Statement No. 30 "Risk Financing Omnibus-an amendment of GASB Statement No. 10", these funds are accounted for as enterprise funds.

ETF also administers the Group Life Insurance Program for current State of Wisconsin employees and employees of participating local public employers. All public employers in the state are eligible to participate. The insurance carrier guarantees coverage and employers and active employees pay premiums directly to the insurance carrier. Because ETF primarily accounts for administrative costs for the fund, it is not reported in the ETF ACFR.

### » *Health Insurance Fund*

The Health Insurance Fund offers group health insurance for current employees of the State of Wisconsin and of participating local public employers. All public employers in the state are eligible to participate. The State of Wisconsin and 393 local employers participated during the year.

The Health Insurance Fund includes three separate risk pools. The first pool includes those members who have chosen health insurance coverage from a Health Maintenance Organization (HMO). All liabilities for medical claims for these participants are the responsibility of the HMO and are not included in the unpaid claims analysis or in the Required Supplementary Information (RSI).

The second pool includes self-insured pharmacy benefits for all members. Liabilities for this pool are presented in the unpaid claims analysis and in the Required Supplementary Information.

The third pool includes self-insured dental benefits for members selecting dental insurance. Prior to 2016, dental benefits were included as part of the HMO coverage. Liabilities for this pool are presented in the unpaid claims analysis and in the Required Supplementary Information.

### » *Income Continuation Insurance Fund*

The Income Continuation Insurance (ICI) Fund offers both long-term and short-term disability benefits (up to 75% of the average monthly earnings) for current employees of the State of Wisconsin and participating local public employers. All public employers in Wisconsin are eligible to participate. The State of Wisconsin and 277 local employers currently participate in the plan, and it is self-insured. Since March 2012, premiums have been suspended for the local employers as a result of the funded status of the local employer program.



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**» *Duty Disability Insurance Fund***

The Duty Disability Insurance Fund offers special disability insurance for State of Wisconsin and local WRS participants in protective occupations. Participation in the program is mandatory for all WRS employers with protective occupation employees. The State of Wisconsin and 500 local employers currently participate. The plan is self-insured, and the risk is shared between the State of Wisconsin and local government employers in the plan.

The Duty Disability Insurance program is intended to compensate WRS protective category employees for duty-related disabilities. Benefits are payable for duty-related injuries or diseases that are likely to be permanent and that cause the employee to retire, accept reduced pay or a light-duty assignment, or that impair the employee's promotional opportunities.

Contributions are actuarially determined and are employer paid. Contributions are based on a graduated, experience-rated formula. During 2021, contribution rates ranged from 0.09% to 2.24% of covered payroll based on employer experience.

**» *Public Entity Risk Pool Accounting Policies***

**Basis of Accounting:** All public entity risk pools are accounted for in enterprise funds using the full accrual basis of accounting and the flow of economic resources measurement focus.

**Valuation of Investments:** Assets of the Health Insurance, ICI, and Duty Disability Insurance funds are invested in the Core Retirement Investment Trust and are valued at fair value.

**Unpaid Claims Liabilities:** The fund establishes claims liabilities based on estimates of the ultimate cost of claims that have been reported but not settled and of claims that have been incurred but not reported. The estimate includes the effects of inflation and other societal and economic factors. Adjustments to claims liabilities are charged or credited to expense in the periods in which they are made. Unpaid claims liability is presented at face value and is not discounted for Health Insurance. These liabilities are discounted using an interest rate of 6.8% for the ICI and Duty Disability Insurance programs. The liabilities of the ICI, Health Insurance, and Duty Disability Insurance programs were determined by actuarial methods. Face value of the liability for these programs is not available.

**Administrative Expenses:** All maintenance expenses are expensed in the period they are incurred. Acquisition costs are immaterial and are treated as maintenance expenses.

**Reinsurance:** Health insurance plans provided by HMOs are fully insured by outside insurers. All remaining risk is self-insured with no reinsurance coverage.

**Risk Transfer:** Participating employers are not subject to supplemental assessments in the event of deficiencies. If the assets of a fund were exhausted, participating employers would not be responsible for the fund's liabilities.

**Premium Setting:** Premiums are established by the GIB (Health Insurance and ICI) and ETF Board for Duty Disability Insurance in consultation with actuaries.

**Statutory Authority:** All programs are operated in accordance with Wis. Stat. § 40.

**Unpaid Claims Liabilities:** Each fund establishes a liability for both reported and unreported insured events, which is an estimate of future payments of losses. The following represents changes in those aggregate liabilities (In Millions) for each fund during the past year.

	<b>Income Continuation Insurance</b>		<b>Duty Disability Insurance</b>		<b>Pharmacy Benefits*</b>		<b>Dental</b>	
	2021	2020	2021	2020	2021	2020	2021	2020
<b>Unpaid claims and claim adjustment expenses at beginning of the calendar year:</b>	\$ 96.4	\$ 96.1	\$ 467.7	\$ 466.3	\$ (33.7)	\$ (27.9)	\$ 1.5	\$ 1.8
<b>Incurred claims and claim adjustment expenses:</b>								
Provision for insured events of the current calendar year	24.5	24.8	38.1	34.0	188.4	176.1	46.0	38.1
Changes in provision for insured events of prior calendar years	(4.7)	(5.2)	54.3	4.0	0.2	0.1	(0.1)	(0.7)
Total incurred claims and claim adjustment expenses	19.8	19.6	92.4	38.0	188.6	176.2	45.9	37.4
<b>Payments:</b>								
Claims and claim adjustment expenses attributable to insured events of the current calendar year	4.7	4.0	0.0	0.0	227.4	209.8	44.4	36.6
Claims and claim adjustment expenses attributable to insured events of prior calendar years	15.8	15.3	36.4	36.6	(33.5)	(27.8)	1.4	1.1
Total payments	20.5	19.3	36.4	36.6	193.9	182.0	45.8	37.7
<b>Total unpaid claims and claim adjustment expenses at end of the calendar year</b>	<b>\$95.7</b>	<b>\$96.4</b>	<b>\$523.8</b>	<b>\$467.7</b>	<b>\$(39.0)</b>	<b>\$(33.7)</b>	<b>\$ 1.6</b>	<b>\$ 1.5</b>

\*Total unpaid claims at the end of 2021 is \$39.0 million in rebates due from pharmaceutical companies. Total unpaid claims at the end of 2020 is \$33.7 million in rebates due from pharmaceutical companies.

Amounts may not foot due to rounding.

## 9 OTHER POST-EMPLOYMENT BENEFIT (OPEB) PLANS ADMINISTERED BY ETF

ETF administers five OPEB plans: the State Retiree Life Insurance, the Local Retiree Life Insurance, the State Retiree Health Insurance, the Local Retiree Health Insurance, and the Supplemental Health Insurance Conversion Credit.

### Governance Boards

The Group Insurance Board (GIB) sets policy for the life insurance as well as the health insurance programs for state employees and for those local employers who chose to offer them. Membership of the GIB is comprised of the following positions as required by Wisconsin Statutes:

- Appointed by the Governor (no membership requirement);

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- Ex officio, Administrator in Department of Administration, Division of Personnel Management (or their designee);
- Appointed by the Governor (insured participant in the WRS who is a teacher);
- Appointed by the Governor (insured participant in the WRS who is a retiree);
- Ex officio, Secretary of the Department of Administration (or their designee);
- Appointed by the Governor (insured participant in the WRS who is an employee of a local government unit);
- Appointed by the Governor (insured participant in the WRS who is not a teacher);
- Ex officio, Attorney General (or their designee);
- Appointed by the Governor (chief executive or member of the governing body of a local government that is a participating employer);
- Ex officio, Commissioner of Insurance (or their designee); and
- Ex officio, Governor (or their designee).

The ETF Board has statutory authority (Wis. Stat. § 40.95) for the SHICC program administration and oversight. The ETF Board is comprised of 13 members, as summarized in Note 4, Description of the Wisconsin Retirement System.

## Plan Descriptions

### » *Retiree Life Insurance Plans*

The State Retiree Life Insurance plan includes the State of Wisconsin (State), the University of Wisconsin, and other component units of the State, and is considered a single-employer defined benefit OPEB plan. The Local Retiree Life Insurance plan includes participating employees of 724 local government employers as of December 31, 2021, and is considered a cost-sharing multiple-employer defined benefit OPEB plan. The plans are reported as Other Post-Employment Benefit Trust Funds. The plans provide post-employment life insurance coverage to all eligible employees of participating employers. The plans are established by Wis. Stat. § 40.70. ETF, under the direction of the Group Insurance Board (GIB), is responsible for the administration of the life insurance programs. ETF contracts with Securian Financial Group, Inc (Securian) as a third-party administrator for the Retiree Life Insurance plans. Benefit terms may be modified by the GIB, subject to state and federal legislative constraints.

### Membership

**Enrollment Eligibility:** Generally, members may enroll during a 30-day enrollment period after their date of hire. Members may also enroll after the initial 30-day enrollment period with evidence of insurability. Members under evidence of insurability enrollment must enroll in group life insurance coverage before age 55 to be eligible for Basic or Supplemental coverage.



Membership as of December 31, 2021, included:

	<u>State</u>	<u>Local</u>	<u>Total</u>
Active*	50,355	75,179	125,534
Inactive:			
Pre-Age 65 Annuitants	6,360	9,848	16,208
Post-Age 64 Annuitants	28,967	39,633	68,600
Totals	<u>85,682</u>	<u>124,660</u>	<u>210,342</u>

\*Active members include disabled

## Contributions

The GIB approves contribution rates annually, based on recommendations from the insurance carrier. Recommended rates are based on an annual valuation, taking into consideration an estimate of the present value of future benefits and the present value of future contributions. A portion of employer contributions made during a member's working lifetime funds a post-retirement benefit.

Employers are required to pay the following contributions based on active member contributions to provide them with Basic Coverage after age 65. There are no employer contributions required for pre-age 65 annuitant coverage. If a member retires prior to age 65, premium payments must continue until age 65 for the member to be eligible for the benefit after age 65.

<b>State and Local Retiree Life Insurance Employer Contribution Rates For the year ended December 31, 2021</b>		
<u>Coverage Type</u>	<u>State</u>	<u>Local</u>
50% Post Retirement Coverage	28% of member contribution	40% of member contribution
25% Post Retirement Coverage	N/A	20% of member contribution

Member contributions are based upon nine age bands through age 69 and an additional eight age bands for those age 70 and over. Participating employees must pay monthly contribution rates per \$1,000 of coverage until the age of 65 (age 70 if active). The member contribution rates in effect for the year ended December 31, 2021 are as listed below:



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**Life Insurance  
Member Contribution Rates  
As of December 31, 2021**

Attained Age	State *		Local *	
	Basic	Supplemental	Basic	Supplemental
Under 30	\$ 0.0463	\$ 0.0463	\$ 0.0500	\$ 0.0500
30-34	0.0463	0.0463	0.0600	0.0600
35-39	0.0463	0.0463	0.0700	0.0700
40-44	0.0695	0.0695	0.0800	0.0800
45-49	0.1158	0.1158	0.1200	0.1200
50-54	0.1852	0.1852	0.2200	0.2200
55-59	0.2547	0.2547	0.3900	0.3900
60-64	0.3473	0.3473	0.4900	0.4900
65-69	0.4515	0.4515	0.5700	0.5700

\* Disabled members under age 70 receive a waiver-of-premium benefit.

The subsequent table provides total contributions earned during 2021 by employers and pre-age 65 annuitants to fund post-retirement benefits.

**State and Local Retiree Life Insurance  
Contributions Earned  
For the year ended December 31, 2021**

Contribution Type	State	Local
Employer	\$ 1,669,854	\$ 2,046,761
Pre-age 65 Annuitants*	4,058,688	6,174,382
Total	<u>\$ 5,728,542</u>	<u>\$ 8,221,143</u>

\* Contributions for pre-age 65 annuitants are recorded as a reduction of benefit expense on the Statement of Changes in Fiduciary Net Position.

## Description of Benefits

**Retirement Eligibility:** At retirement, the member must have active group life insurance coverage and satisfy the following:

- WRS coverage prior to January 1, 1990, or
- At least one month of group life insurance coverage in each of five calendar years after 1989

and one of the following:

- Eligible for an immediate WRS benefit, or
- At least 20 years from their WRS creditable service as of January 1, 1990, plus their years of group life insurance coverage after 1989, or
- At least 20 years on the payroll of their last employer.

In addition, terminating members and retirees must continue to pay the member contributions until age 65 (age 70 if active).

**Basic Coverage Benefits:** After retirement, basic coverage is continued for life in these amounts of the insurance in force before retirement:

Percentage of Basic Coverage Continuing		
Age	State	Local
Before age 65	100%	100%
While age 65	75%	75%
While age 66	50%	50%
After age 66	50%	50%/25% Employer Election

**Supplemental Coverage Benefits:** After retirement, supplemental coverage may be continued until age 65 at 100% of the amount of the insurance in force before retirement at the employee's expense.

**Additional Coverage Benefits:** After retirement, additional coverage may be continued until age 65 at 100% of the amount of the insurance in force before retirement at the employee's expense.

**Spouse and Dependent Coverage Benefits:** After retirement, the coverage is terminated.

**Investment Contract with Insurance Carrier:** Investments for the Retiree Life Insurance funds are held with the insurance carrier, Securian, and are classified as "Investment Contract" on the Statement of Fiduciary Net Position. In accordance with the administrative agreement between the GIB and Securian, interest is calculated and credited to the Retiree Life Insurance funds based on the rate of return for a segment of the insurance carrier's general fund, specifically, 10 Year A- Bonds (as a proxy and not tied to any specific investments). The funds invested during the year earn interest based on that year's rate of return for 10 Year A- Bonds. The overall aggregate interest rate is calculated using a tiered approach based on the year the funds were invested and the rate of return for that year. Investment interest is credited based on the aggregate rate of return and assets are not adjusted to fair market value. Furthermore, the insurance carrier guarantees the principal amounts of the reserves, including all interest previously credited thereto. No significant contract changes occurred during the year.

The targeted asset allocation and expected rates of return are presented in the following table:

**State and Local Retiree Life Insurance  
Asset Allocation Targets and Expected Returns  
As of December 31, 2021**

Asset Class	Index	Target Allocation	Long-Term Expected Geometric Real Rate of Return
U.S. Intermediate Credit Bonds	Bloomberg US Interm Credit	45%	1.68%
U.S. Long Credit Bonds	Bloomberg US Long Credit	5%	1.82%
U.S. Mortgages	Bloomberg US MSB	50%	1.94%
Inflation			2.30%
Long-Term Expected Rate of Return			4.25%



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The annual money-weighted rate of return on plan investments is shown in the below table. The money-weighted rate of return expresses investment performance, net of OPEB plan investment expense, adjusted for the changing amounts actually invested.

The long-term expected rate of return remained unchanged from the prior year at 4.25%. The expected inflation rate increased slightly from 2.20% in the prior year to 2.30% in the current year. The long-term expected rate of return is determined by adding expected inflation to expected long-term real returns and reflecting expected volatility and correlation.

**State and Local Retiree Life Insurance Plans  
Schedule of Investment Returns  
Annual Money-Weighted Rate of Return**

	<u>2021</u>
State Retiree Life Insurance Plan	2.67%
Local Retiree Life Insurance Plan	2.65%

### State Retiree Life Insurance Net OPEB Liability (Asset) of Participating Employers

The components of the Net OPEB Liability (Asset) of the participating State employers at December 31, 2021, were as follows (In Millions):

Total OPEB Liability	\$	1,267.36
Plan Fiduciary Net Position*		319.61
Participating Employer's Net OPEB Liability (Asset)	\$	<u>947.75</u>
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability		25.22 %

\*An Immaterial difference may exist between the Plan Fiduciary Net Position used in the actuarial valuation and that reported in the Statement of Fiduciary Net Position, due to the timing of the actuarial valuation.

Additional information as of the latest actuarial valuation follows:

Actuarial Valuation Date:	January 1, 2021
Measurement Date of Net OPEB Liability (Asset):	December 31, 2021
Experience Study:	January 1, 2018 - December 31, 2020 Published November 19, 2021
Actuarial Cost Method:	Entry Age Normal
20 Year Tax-Exempt Municipal Bond Yield*	2.06%
Long-Term Expected Rate of Return:	4.25%
Discount Rate:	2.15%
Salary Increases:	
Wage Inflation	3.00%
Senior/Merit	0.1% - 5.6%
Mortality:	2020 WRS Experience Mortality Table

\* Based on the Bond Buyers GO index.

Some actuarial assumptions used in the valuation are based upon an experience study conducted in 2021 that covered a three-year period from January 1, 2018 to December 31, 2020. Based on this experience study, actuarial assumptions used to measure the Total OPEB Liability changed from the prior year, including the price inflation, mortality and separation rates. The Total OPEB Liability for December 31, 2021, is based upon a roll-forward of the liability calculated from the January 1, 2021, actuarial valuation.

A discount rate of 2.15% was used to measure the Total OPEB Liability for the current year, as opposed to a discount rate of 2.22% for the prior year. The change in the discount rate was primarily caused by the decrease in the municipal bond rate from 2.12% as of December 31, 2020 to 2.06% as of December 31, 2021. The projection of cash flows used to determine the single discount rate assumed that employer contributions will be made according to the current employer contribution schedule and that contributions are made by plan members retiring prior to age 65. At their August 2019 meeting, the GIB approved an annual premium rate increase of 5% for nine years, effective April 1, 2020.

Based on these assumptions, the plan's fiduciary net position was projected to be insufficient to make all projected future benefit payments of current active and inactive employees. Therefore, the discount rate for calculating the Total OPEB Liability was applied to benefit payments, to the extent that the plan's fiduciary net position is projected to be sufficient to make projected benefit payments, and the municipal bond rate applied to benefit payment to the extent that the plan's fiduciary net position is projected to be insufficient. The plan's fiduciary net position was projected to be available to make projected future benefit payments of current plan members through December 31, 2033. Therefore, the long-term expected rate of return on plan investments was applied through 2033 and the municipal bond index rate was applied for all remaining periods of projected benefit payments to determine the Total OPEB Liability.





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### Sensitivity of the State Retiree Life Insurance Net OPEB Liability (Asset) to Changes in the Discount Rate

The following presents the plan's Net OPEB Liability (Asset) and shows what the plan's Net OPEB Liability (Asset) would be if it were calculated using a single discount rate that is one percentage point lower or one percentage point higher (In Millions):

	Discount Rate		
	1% Decrease 1.15%	Current Rate 2.15%	1% Increase 3.15%
Total OPEB Liability	\$ 1,566.3	\$ 1,267.4	\$ 1,039.6
Plan Fiduciary Net Position	319.6	319.6	319.6
Net OPEB Liability (Asset)	\$ 1,246.7	\$ 947.8	\$ 720.0

### Local Retiree Life Insurance Net OPEB Liability (Asset) of Participating Employers

The components of the Net OPEB Liability (Asset) of the participating local employers at December 31, 2021, were as follows (In Millions):

Total OPEB Liability	\$	839.23
Plan Fiduciary Net Position*		248.19
Participating Employer's Net OPEB Liability (Asset)	\$	591.04
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability		29.57 %

\*An immaterial difference may exist between the Plan Fiduciary Net Position used in the actuarial valuation and that reported in the Statement of Fiduciary Net Position, due to the timing of the actuarial valuation.

Additional information as of the latest actuarial valuations follows:

Actuarial Valuation Date:	January 1, 2021
Measurement Date of Net OPEB Liability (Asset):	December 31, 2021
Experience Study:	January 1, 2018 - December 31, 2020 Published November 19, 2021
Actuarial Cost Method:	Entry Age Normal
20 Year Tax-Exempt Municipal Bond Yield*	2.06%
Long-Term Expected Rate of Return:	4.25%
Discount Rate:	2.17%
Salary Increases:	
Wage Inflation	3.00%
Senior/Merit	0.1% - 5.6%
Mortality:	Wisconsin 2020 Mortality Table

\* Based on the Bond Buyers GO index.

Some actuarial assumptions are based upon an experience study conducted in 2021 that covered a three-year period from January 1, 2018, to December 31, 2020. Based on this experience study, actuarial assumptions used to measure the Total OPEB Liability changed from the prior year, including the price inflation, mortality and separation rates. The Total OPEB Liability for December 31, 2021, is based upon a roll-forward of the liability calculated from the January 1, 2021, actuarial valuation.

A discount rate of 2.17% was used to measure the Total OPEB Liability for the current year, as opposed to discount rate of 2.25% for the prior year. The change in the discount rate was primarily caused by the decrease in the municipal bond rate from 2.12% as of December 31, 2020, to 2.06% as of December 31, 2021. The projection of cash flows used to determine the single discount rate assumed that employer contributions will be made according to the current employer contribution schedule and that contributions are made by plan members retiring prior to age 65.

Based on these assumptions, the plan's fiduciary net position was projected to be insufficient to make all projected future benefit payments of current active and inactive employees. Therefore, the discount rate for calculating the Total OPEB Liability was applied to benefit payments, to the extent that the plan's fiduciary net position is projected to be sufficient to make projected benefit payments, and the municipal bond rate applied to benefit payment to the extent that the plan's fiduciary net position is projected to be insufficient. The plan's fiduciary net position was projected to be available to make projected future benefit payments of current plan members through December 31, 2036. Therefore, the long-term expected rate of return on plan investments was applied through 2036 and the municipal bond index rate was applied for all remaining periods of projected benefit payments to determine the Total OPEB Liability.

### Sensitivity of the Local Retiree Life Insurance Net OPEB Liability (Asset) to Changes in the Discount Rate

The following presents the plan's Net OPEB Liability (Asset) and shows what the plan's Net OPEB Liability (Asset) would be if it were calculated using a single discount rate that is one percentage point lower or one percentage point higher (In Millions):

	Discount Rate		
	1% Decrease 1.17%	Current Rate 2.17%	1% Increase 3.17%
Total OPEB Liability	\$ 1,050.0	\$ 839.2	\$ 680.6
Plan Fiduciary Net Position	248.2	248.2	248.2
Net OPEB Liability (Asset)	\$ 801.8	\$ 591.0	\$ 432.4

### » Retiree Health Insurance Plans

The Retiree Health Insurance plans offer group health insurance to retired State of Wisconsin and local government employees. Retirees pay the full premium amount. The State Retiree Health Insurance Fund includes the State, the University of Wisconsin, and other component units of the State. The Local Retiree Health Insurance Fund includes 393 local government employers. The State Retiree plan is reported as an enterprise fund and the Local Retiree plan is reported as a fiduciary custodial fund. The plans are not administered as trusts. Therefore, each participating employer is responsible for reporting the plan in accordance with GASB Statement No. 75 "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions". The Retiree Health Insurance Funds contain certain non-OPEB components relating to post-Medicare pharmacy and health insurance benefits.

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ETF and the GIB have statutory authority for program administration and oversight [Wis. Stat. § 15.165 (2) and Wis. Stat. § 40.03 (6)].

### Membership

State of Wisconsin and local government employees participating in the State Health Insurance Plan or the Wisconsin Public Employers Insurance Plan (local government plans) are eligible to continue their health insurance coverage after leaving covered employment. Membership as of December 31, 2021, included 28,756 former state employees or their beneficiaries and 2,095 former local government employees and beneficiaries.

### Description of Benefits

Retirees may choose between several health plans with specific provider networks (i.e. Health Maintenance Organizations (HMO), Preferred Provider Organizations (PPO) or Medicare Advantage). The health plans must follow GIB guidelines for eligibility and program requirements. All health plans offer a prescribed benefit package called Uniform Benefits and participate in a yearly competitive premium rate bid process.

The pharmacy benefit is self-insured by the GIB and administered by Navitus Health Solutions. The dental benefit is self-insured by the GIB and administered by Delta Dental.

Effective January 1, 2012, prescription drug coverage for Medicare eligible retirees enrolled in the State group health insurance program is provided by a self-funded Medicare Part D Employer Group Waiver Plan (EGWP). A Medicare "Wrap" product is also included to provide full coverage to members, as required by Uniform Benefits, when they reach the Medicare coverage gap, also known as the "donut hole."

### » Supplemental Health Insurance Conversion Credit Program

The SHICC program includes the State of Wisconsin, the University of Wisconsin, and other component units of the State, and is considered a single-employer defined benefit OPEB plan. The SHICC program is reported as an Other Post-Employment Benefit Trust Fund. The SHICC program was established by Wis. Stat. § 40.95 and is defined in the state compensation plan (Wis. Stat. § 230.12 (9)).

The SHICC program allows members with more than 15 years of eligible service to convert unused sick leave balances into credits to pay for post-retirement health insurance premiums. The SHICC benefit provides a limited match of the members credits earned through the Accumulated Sick Leave Conversion Credit (ASLCC) program. ASLCC program credits are computed at the time of retirement, layoff, or death by multiplying the number of hours of unused sick leave by the highest hourly pay rate at which the employee accrued sick leave that is eligible for conversion. Employment category and number of years of service are also factored into the calculation (as noted in the table below). The SHICC program also includes a provision for the restoration of 500 hours of credits upon retirement, layoff, or death provided at least 500 hours of accrued sick leave were used for a single injury or illness during the three years immediately preceding the retirement, layoff, or death while in state service.

All ASLCC program credits must be used before the SHICC program credits. Unused ASLCC and SHICC credits have no cash value, are carried forward from year to year without interest, and when total health insurance premiums paid on behalf of the retired employee equal or exceed the conversion credits, no further payments are made under the ASLCC and SHICC programs. ASLCC and SHICC credits may be escrowed indefinitely after

retirement for participants who provide evidence of comparable health insurance coverage from another source.

### Eligibility and Membership

Generally, to be eligible to use SHICC credits to pay post-retirement health insurance premiums, members with 15 years of adjusted continuous service (or their insured surviving spouse and/or dependents) must be covered under the State of Wisconsin Group Health Insurance Program. If a member with 20 years of service leaves eligible service prior to retirement, the benefit is vested.

Membership as of December 31, 2021 included:

<u>Employment Status</u>	<u>Count</u>
Retirees and Beneficiaries	21,715
Inactive, Non-retired Members	366
Active Members	72,701
Total	<u>94,782</u>

**Retirement Eligibility:** At retirement, the member must have State of Wisconsin Group Health Insurance Program coverage and satisfy the following:

- Retire on an immediate annuity; or
  - Retire and receive a lump-sum benefit; or
  - Qualify for a Wisconsin Retirement System (WRS) disability retirement benefit, long-term disability benefit or a protective occupation duty disability insurance benefit under Wis. Stat. § 40.65;
- or
- Have 20 years of WRS creditable service and are eligible for an immediate retirement benefit, but have chosen not to apply for retirement or disability benefit immediately (see Escrow Eligibility section below).

**Escrow Eligibility:** At retirement, eligible members may elect to escrow their SHICC credits (to be used at a later date) if they have comparable health insurance coverage through another source.

**Preserved Eligibility:** If not eligible for an immediate annuity, SHICC eligible members must satisfy the following to defer vested (preserved) SHICC credits to pay health premiums when becoming a WRS annuitant:

- Terminate with 20 years of WRS creditable service (providing they do not elect a WRS separation benefit) or
- State constitutional officer, a member or an officer of the legislature or the head of a state department or agency who was appointed by the governor with senate confirmation and are not eligible for an immediate annuity when terminating from state employment (providing they do not elect a WRS separation benefit).

**Permanent Layoff Eligibility:** If not eligible for an immediate annuity and the member is permanently laid off from State employment, the member must have at least 15 years of adjusted continuous service to use SHICC credits to pay health premiums for up to five years after the layoff begins.



## FINANCIAL SECTION

## Contributions

The ETF Board approves contribution rates annually, based on recommendations from the actuary. Recommended rates are based on an annual valuation, taking into consideration an estimate of the present value of future benefits and the present value of future contributions, in accordance with Wis. Stat. § 40.05 (4)(by). Employer contributions made during a member's working lifetime funds a post-retirement benefit. Employers made contributions totaling \$15.7 million based upon a percentage of active member earnings for the year ending December 31, 2021.

## Description of Benefits

The SHICC program provides matching sick leave hours to participants retiring (or terminating employment) with 15 or more years of eligible service, as noted below. These sick leave hours are in addition to, but generally do not exceed, the unused sick leave balances that are used to calculate benefits provided under the ASLCC program.

Employment Category	Benefit Eligible Hours*
Protective	Match up to 78 hours (9.75 days) per full year of service through 24 years, plus 104 hours (13 days) per full year of service over 24 years.
Others	Match up to 52 hours (6.5 days) per full year of service through 24 years, plus up to 104 hours (13 days) per full year of service over 24 years.

\*The SHICC program also includes a restoration benefit of up to 500 hours when certain criteria are met.

The SHICC program also provides benefits after a member's death. The member's surviving spouse and/or dependents may be eligible to use SHICC credits to pay State of Wisconsin Group Health Insurance premiums under the following conditions:

- Member was covered by the State of Wisconsin Group Health Insurance Program under a family policy on the member's date of death and the member is either employed by the state on the date of death or the member is receiving a retirement disability benefit; or
- Member has preserved SHICC credits as described in the Preserved Balance Eligibility section below and the member dies before becoming a WRS annuitant; or
- Member has escrowed SHICC credits as described in the Escrow Balance Eligibility Section below and the member dies.



### SHICC Net OPEB Liability (Asset) of Participating Employers

The components of the Net OPEB Liability (Asset) of the participating state employers at December 31, 2021, were as follows (In Millions):

Total OPEB Liability	\$	1,042.74
Plan Fiduciary Net Position*		1,371.71
Participating Employer's Net OPEB Liability (Asset)	\$	<u>(328.97)</u>
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability		131.55 %

\*An immaterial difference may exist between the Plan Fiduciary Net Position used in the actuarial valuation and that reported in the Statement of Fiduciary Net Position, due to the timing of the actuarial valuation.



## FINANCIAL SECTION

Additional information as of the latest actuarial valuation follows:

Actuarial Valuation Date:	December 31, 2021
Measurement Date of Net OPEB Liability (Asset):	December 31, 2021
Wisconsin Sick Leave Conversion Credit Programs Experience Study:	January 1, 2018 - December 31, 2020 Published November 19, 2021
Actuarial Cost Method:	Entry Age Normal
Long-Term Expected Rate of Return:	6.8%
Discount Rate:	6.8%
Salary Increases:	
Wage Inflation	3.0%
Senior/Merit	0.1% - 5.6%
Mortality:	2020 WRS Experience Mortality Table
Healthcare Cost Trend Rate:	6.0% for the first year grading down to an ultimate health care trend rate of 3.5% over a 12 year period
Health Care Premiums:	Actual premium amounts are used for current annuitants. For all non-annuitants (active, preserved, and escrowed members), average premiums are calculated based on non Medicare and Medicare rates for one person and family coverages.
Participation:	100% of active and preserved members will begin using sick leave credits immediately upon reaching eligibility
Usage for Escrowed Benefits:	50% of members currently in escrow status will at some point begin using their sick leave balances to pay for health care costs.
Sick Leave Accumulation:	The assumed annual sick leave accumulation for each individual is at their same rate as in the past (earned less used), but not more than 100% of the gross earned rate based on the person's employer and not less than 25% of their gross earned rate. The assumed annual gross earned rates range from 6.4 to 16.25 days depending on the employer.

\*Note that mortality assumptions were not applied to members who currently have healthcare coverage for more than one person since the benefit may be transferred to a beneficiary upon death.

Actuarial assumptions are based upon experience studies conducted in 2021 on the WRS and Wisconsin Sick Leave Conversion Credit programs that covered a three-year period from January 1, 2018 to December 31, 2020. Based on these experience studies, actuarial assumptions used to measure the Total OPEB Liability changed from prior year, including the following: discount rate, long-term expected rate of return, price inflation, mortality and separation rates, healthcare trend rates, sick leave accumulation, usage for escrowed benefits, and modeling survivor benefits. Further, the decrement rates for State and non-State members were studied during the 2018-2020 WRS Experience Study for the first time. State only decrements were used in the valuation of the total OPEB liability for SHICC as of December 31, 2021.

A discount rate of 6.8% was used to measure the Total OPEB Liability for the current year, as opposed to a discount rate of 7.0% for the prior year. The projection of cash flows used to determine the single discount rate assumed that employer contributions will be made at rates equal to the actuarially determined contribution rate.

Based on these assumptions, the OPEB plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

### Sensitivity of the SHICC Net OPEB Liability (Asset) to Changes in the Discount Rate

The following presents the plan's Net OPEB Liability (Asset) and shows what the plan's Net OPEB Liability (Asset) would be if it were calculated using a single discount rate that is one percentage point lower or one percentage point higher (In Millions):

	Discount Rate		
	1% Decrease 5.80%	Current Rate 6.80%	1% Increase 7.80%
Total OPEB Liability	\$ 1,153.1	\$ 1,042.7	\$ 947.6
Plan Fiduciary Net Position	1,371.7	1,371.7	1,371.7
Net OPEB Liability (Asset)	<u>\$ (218.6)</u>	<u>\$ (329.0)</u>	<u>\$ (424.1)</u>

### Sensitivity of the SHICC Net OPEB Liability (Asset) to the Healthcare Cost Trend Rate Assumption

The following presents the plan's Net OPEB Liability (Asset), calculated using the assumed healthcare cost trend rate, as well as what the plan's Net OPEB Liability/(Asset) would be if it were calculated using the assumed trend rate that is one percent lower or one percent higher (In Millions):

	Healthcare Cost Trend Rate		
	1% Decrease	Current Rate	1% Increase
Total OPEB Liability	\$ 974.4	\$ 1,042.7	\$ 1,107.4
Plan Fiduciary Net Position	1,371.7	1,371.7	1,371.7
Net OPEB Liability (Asset)	<u>\$ (397.3)</u>	<u>\$ (329.0)</u>	<u>\$ (264.3)</u>





## 10 MILWAUKEE RETIREMENT SYSTEMS

The Milwaukee Retirement Systems (MRS), consisting of two funds within the Milwaukee Public Schools Retirement System, is reported as an Investment Trust Fund. MRS provides assets to ETF for investing in the Core and Variable Funds, described in the Investments section of Note 1, Summary of Significant Accounting Policies. The Core and Variable Funds are managed by SWIB, with oversight by a board of trustees as authorized in Wis. Stat. § 25.17. Participation of the MRS in the Core and Variable Funds is described in the Wisconsin Administrative Code, § ETF 10.12. Monthly, ETF distributes pro-rata shares of total Core Fund and total Variable Fund earnings, less administrative expenses to the MRS accounts. The MRS accounts are adjusted to fair value and gains/losses are recorded directly in the accounts per Wisconsin Administrative Code, § ETF 10.12 (2).

No state statute, legal provision, or legally-binding guarantee exists to support the value of shares. At December 31, 2021, the Core and Variable Funds held \$147.2 billion in investment related accounts, of which \$6.8 billion is classified as cash equivalents. In addition, the Core and Variable Funds held \$0.4 billion of securities lending collateral.

Summary information by investment classification in accordance with GASB Statement No. 31 "Accounting and Financial Reporting for Certain Investments and for External Investment Pools", for the Core and Variable Funds at December 31, 2021, is presented in Note 3, Deposits, Investments and Securities Lending Transactions. Condensed financial data for the Core and Variable Funds for the year ended December 31, 2021, is presented on the next page.

**Core and Variable Retirement Investment Funds**  
**Condensed Statements of Net Position**  
**As of December 31, 2021**  
 (In Thousands)

<b>Assets:</b>	<b>Core</b>	<b>Variable</b>	<b>Combined*</b>
Cash & Cash Equivalents	\$ 6,244,362	\$ 565,481	\$ 6,809,843
Securities Lending Collateral	360,458	35,975	396,433
Prepaid Items	19,744	8	19,752
Capital Assets	1,071	0	1,071
Investment Receivables	11,303,533	20,461	11,323,994
Investments, at fair value	158,161,557	10,347,042	168,508,599
Total Assets	<u>176,090,725</u>	<u>10,968,967</u>	<u>187,059,692</u>
<b>Liabilities:</b>			
Securities Lending Collateral Liability	1,121,458	35,975	1,157,433
Obligation Under Reverse Repurchase Agreements	17,012,077	0	17,012,077
Short Sell Obligations	8,050,666	0	8,050,666
Collateral Due to Counterparty	125,917	0	125,917
Investment Payables	13,524,447	8,505	13,532,952
Total Liabilities	<u>39,834,565</u>	<u>44,480</u>	<u>39,879,045</u>
<b>Net Position Held in Trust for:</b>			
Other Investment Pool Participants	136,023,344	10,904,876	146,928,220
Milwaukee Retirement Systems	232,816	19,611	252,427
<b>Total</b>	<u>\$ 136,256,160</u>	<u>\$ 10,924,487</u>	<u>\$ 147,180,647</u>

\*Combined totals may vary from financial statements due to rounding and non-investment activity.

**Core and Variable Retirement Investment Funds**  
**Condensed Statements of Changes in Net Position**  
**As of December 31, 2021**  
 (In Thousands)

<b>Additions:</b>	<b>Core</b>	<b>Variable</b>	<b>Combined*</b>
Net Increase (Decrease) in Fair Value of Investments	\$ 17,921,101	\$ 1,704,542	\$ 19,625,643
Interest, Dividend, and Other Investment Income	2,425,212	139,672	2,564,884
Securities Lending Income	39,874	7,206	47,080
Total Additions	<u>20,386,187</u>	<u>1,851,420</u>	<u>22,237,607</u>
<b>Deductions:</b>			
Investment Expense	426,820	8,643	435,463
Securities Lending Fees	2,711	571	3,282
Net Withdrawals by Pool Participants	3,858,729	485,887	4,344,616
Total Deductions	<u>4,288,260</u>	<u>495,101</u>	<u>4,783,361</u>
Net Increase (Decrease)	<u>16,097,927</u>	<u>1,356,319</u>	<u>17,454,246</u>
<b>Net Investment Position Held in Trust</b>			
Beginning of Year	120,158,233	9,568,168	129,726,401
End of Year	<u>\$ 136,256,160</u>	<u>\$ 10,924,487</u>	<u>\$ 147,180,647</u>

\*Combined totals may vary from financial statements due to rounding and non-investment activity.



# 11 CONTINGENCIES, RELATED PARTIES, & LITIGATION

## » *Loss Contingencies*

No loss contingencies occurred during calendar year 2021.

## » *Related Party Transactions*

During 2021, the Core Fund entered into reverse repurchase agreements with the State Investment Fund (SIF), for which the investment assets are managed by SWIB, as a counterparty. The transactions were governed by a Master Repurchase Agreement and credit exposure is also managed through the transfer of margin between the Core Fund and SIF. As of December 31, 2021, the Core Fund held \$3.1 billion in a bilateral reverse repurchase agreement with the SIF. The repurchase agreement was an overnight agreement collateralized with U.S. Treasury securities in the amount of 102%. The Core Fund enters into similar reverse repurchase agreements with other counterparties. The Core and Variable Funds are also participants in the SIF, with investments totaling \$3.7 billion and \$499 million, respectively, at December 31, 2021. The SIF is a short-term, commingled fund with the investment objective of safety of principal and liquidity while earning a competitive money market rate of return.

## » *Litigation*

On March 8, 2019, ETF filed a complaint in Dane County Circuit Court against Vitech. The complaint intends to remedy damages suffered when Vitech breached its contract with ETF by failing to fulfill its promises according to the provisions of the contract. In response to the complaint, Vitech filed a counterclaim against ETF. A status conference was held in this case on November 11, 2022. At that conference, the parties requested more time to continue their discussions. As a result, the court instructed the parties to file a joint status report by March 23, 2023. Any resolution of this dispute is not anticipated to have a material effect on the WRS' financial position.

## REQUIRED SUPPLEMENTARY INFORMATION

### » PUBLIC ENTITY RISK POOLS

#### Claims Development Information

The tables on the following pages illustrate how the funds' earned revenues and investment income compare to related costs of loss and other expenses assumed by the funds as of the end of each of the last ten years. The rows of the tables are defined as follows:

1. Net Earned Required Contributions and Investment Revenues. Shows the total of each calendar year's earned contribution revenues and investment revenues.
2. Unallocated Expense. Shows each calendar year's other operating costs of the fund, including overhead and claims expenses not allocable to individual claims.
3. Estimated Incurred Claims and Expenses as of the End of the Policy Year. Shows the fund's incurred claims and allocated claim adjustment expense (both paid and accrued) as originally reported as the end of the first year in which the event that triggered coverage under the contract occurred (called policy year).
4. Paid Claims (Cumulative) as of Year-End. Shows the cumulative amounts paid as of the end of successive years for each policy year.
5. Re-estimated Incurred Claims and Expenses. Shows how each policy year incurred claims increased or decreased as of the end of successive policy years. This annual re-estimation results from new information received on known claims, reevaluation of existing information on known claims, as well as emergence of new claims not previously known.
6. Increase (Decrease) in Estimated Incurred Claims from End of Policy Year. Compares the latest re-estimated incurred claims amount to the amount originally established (line 3) and shows whether this latest estimate of claims cost is greater or less than originally thought.

As data for individual policy years mature, the correlation between original estimates and re-estimated amounts is commonly used to evaluate the accuracy of incurred claims currently recognized in less mature policy years. The columns of the tables show data for successive policy years.



## FINANCIAL SECTION

**Public Entity Risk Pools**  
**Required Supplementary Information**  
**Pharmacy Benefit Claims Development Information**  
(In Millions)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
1. Net Earned Required Contributions and Investment Revenues	\$ 153.7	\$ 159.6	\$ 157.7	\$ 166.5	\$ 214.3	\$ 223.5	\$ 176.0	\$ 154.0	\$ 176.0	\$ 209.1
2. Unallocated Expense	8.0	4.4	6.0	6.0	5.9	5.8	4.6	4.5	4.6	5.0
3. Estimated Incurred Claims and Expenses as of the End of the Policy Year	141.3	149.0	163.5	176.9	156.0	164.5	156.1	155.0	176.1	188.4
4. Paid Claims (Cumulative) as of Year-End:*										
End of Policy Year	148.3	156.6	173.4	196.4	171.0	183.3	177.8	182.7	209.8	227.4
One Year Later	141.2	148.3	163.5	177.0	151.0	159.9	151.7	155.1	176.1	
Two Years Later	141.2	148.3	163.5	177.1	151.0	160.0	151.5	155.3		
Three Years Later	141.2	148.3	163.5	177.1	151.0	160.0	151.5			
Four Years Later	141.2	148.3	163.5	177.1	151.0	160.0				
Five Years Later	141.2	148.3	163.5	177.1	151.0					
Six Years Later	141.2	148.3	163.5	177.1						
Seven Years Later	141.2	148.3	163.5							
Eight Years Later	141.2	148.3								
Nine Years Later	141.2									
5. Re-estimated Incurred Claims and Expenses:										
End of Policy Year	141.3	149.0	163.5	176.9	156.0	164.5	156.1	155.0	176.1	188.4
One Year Later	141.2	148.3	163.5	177.0	151.0	159.6	151.5	155.1	176.1	
Two Years Later	141.2	148.3	163.5	177.1	151.0	159.9	151.5	155.3		
Three Years Later	141.2	148.3	163.5	177.1	151.0	159.9	151.5			
Four Years Later	141.2	148.3	163.5	177.1	151.0	159.9				
Five Years Later	141.2	148.3	163.5	177.1	151.0					
Six Years Later	141.2	148.3	163.5	177.1						
Seven Years Later	141.2	148.3	163.5							
Eight Years Later	141.2	148.3								
Nine Years Later	141.2									
6. Increase (Decrease) in Estimated Incurred Claims and Expenses from End of Policy Year	\$ (0.1)	\$ (0.7)	\$ 0.0	\$ 0.2	\$ (5.0)	\$ (4.6)	\$ (4.6)	\$ 0.3	\$ 0.0	\$ 0.0

\*Paid Claims include payments expected to be reimbursed as rebate payments from participating pharmaceutical companies. Incurred claims are presented net of anticipated rebates.

In accordance with GASB Statement No. 10, retiree health is excluded from risk pool reporting and is not included with the active health information in this table.



**Public Entity Risk Pools**  
**Required Supplementary Information**  
**Dental Insurance Claims Development Information**  
(In Millions)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
1. Net Earned Required Contributions and Investment Revenues	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 41.9	\$ 44.3	\$ 45.6	\$ 47.4	\$ 48.8	\$ 49.4
2. Unallocated Expense	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9	1.0
3. Estimated Incurred Claims and Expenses as of the End of the Policy Year	0.0	0.0	0.0	0.0	44.1	44.4	43.8	45.9	38.1	46.0
4. Paid Claims (Cumulative) as of Year-End:										
End of Policy Year	0.0	0.0	0.0	0.0	42.2	43.4	42.9	44.1	36.6	44.4
One Year Later	0.0	0.0	0.0	0.0	44.0	44.3	43.8	45.2	38.0	
Two Years Later	0.0	0.0	0.0	0.0	44.0	44.3	43.8	45.2		
Three Years Later	0.0	0.0	0.0	0.0	44.0	44.3	43.8			
Four Years Later	0.0	0.0	0.0	0.0	44.0	44.3				
Five Years Later	0.0	0.0	0.0	0.0	44.0					
Six Years Later	0.0	0.0	0.0	0.0						
Seven Years Later	0.0	0.0	0.0							
Eight Years Later	0.0	0.0								
Nine Years Later	0.0									
5. Re-estimated Incurred Claims and Expenses:										
End of Policy Year	0.0	0.0	0.0	0.0	44.1	44.4	43.8	45.9	38.1	46.0
One Year Later	0.0	0.0	0.0	0.0	44.0	44.3	43.8	45.2	38.0	
Two Years Later	0.0	0.0	0.0	0.0	44.0	44.3	43.8	45.2		
Three Years Later	0.0	0.0	0.0	0.0	44.0	44.3	43.8			
Four Years Later	0.0	0.0	0.0	0.0	44.0	44.3				
Five Years Later	0.0	0.0	0.0	0.0	44.0					
Six Years Later	0.0	0.0	0.0	0.0						
Seven Years Later	0.0	0.0	0.0							
Eight Years Later	0.0	0.0								
Nine Years Later	0.0									
6. Increase (Decrease) in Estimated Incurred Claims and Expenses from End of Policy Year	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ (0.1)	\$ (0.1)	\$ 0.0	\$ (0.7)	\$ (0.1)	\$ 0.0

\*Prior to 2016 Dental Benefits were included as part of fully insured HMO coverage.



## FINANCIAL SECTION

**Public Entity Risk Pools**  
**Required Supplementary Information**  
**Income Continuation Insurance Claims Development Information**  
(In Millions)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
1. Net Earned Required Contributions and Investment Revenues	\$ 25.0	\$ 25.7	\$ 20.5	\$ 16.3	\$ 27.1	\$ 38.3	\$ 24.7	\$ 54.7	\$ 61.6	\$ 71.0
2. Unallocated Expense	1.9	2.0	5.7	1.8	3.0	1.8	2.7	3.0	3.2	3.7
3. Estimated Incurred Claims and Expenses as of the End of the Policy Year	33.4	36.0	20.5	22.8	20.7	17.7	19.2	22.6	24.8	24.5
4. Paid Claims (Cumulative) as of Year-End:										
End of Policy Year	5.9	6.4	5.9	6.6	5.6	4.6	4.2	4.1	4.0	4.7
One Year Later	11.0	11.8	11.9	12.5	10.6	9.5	8.9	8.0	8.7	
Two Years Later	12.3	13.8	13.6	14.3	12.5	11.4	10.9	9.3		
Three Years Later	13.8	15.1	14.8	15.7	13.8	12.7	12.3			
Four Years Later	14.5	16.0	15.8	16.6	14.8	13.8				
Five Years Later	15.4	17.0	16.5	17.4	15.6					
Six Years Later	16.2	17.9	17.2	18.1						
Seven Years Later	17.0	18.8	17.8							
Eight Years Later	17.7	19.7								
Nine Years Later	18.2									
5. Re-estimated Incurred Claims and Expenses:										
End of Policy Year	33.4	36.0	20.5	22.8	20.7	17.7	19.2	22.6	24.8	24.5
One Year Later	23.1	22.6	20.4	23.9	21.1	18.7	19.1	13.8	17.5	
Two Years Later	20.9	24.0	22.5	23.4	22.3	19.6	19.9	14.0		
Three Years Later	20.9	24.3	22.2	23.9	21.0	19.7	19.8			
Four Years Later	20.5	23.5	21.5	22.9	21.3	21.0				
Five Years Later	21.0	24.3	22.0	23.4	21.6					
Six Years Later	21.5	25.0	22.0	22.8						
Seven Years Later	21.4	25.5	22.3							
Eight Years Later	21.8	25.9								
Nine Years Later	21.8									
6. Increase (Decrease) in Estimated Incurred Claims and Expenses from End of Policy Year	\$ (11.6)	\$ (10.1)	\$ 1.8	\$ 0.0	\$ 0.9	\$ 3.3	\$ 0.6	\$ (8.6)	\$ (7.3)	\$ 0.0



**Public Entity Risk Pools**  
**Required Supplementary Information**  
**Duty Disability Insurance Claims Development Information**  
(In Millions)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
1. Net Earned Required Contributions and Investment Revenues	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 50.3	\$ 100.5	\$ (13.3)	\$ 123.3	\$ 106.0	\$ 130.4
2. Unallocated Expense	0.0	0.0	0.0	0.0	1.8	4.5	0.8	0.6	0.8	0.9
3. Estimated Incurred Claims and Expenses as of the End of the Policy Year	0.0	0.0	0.0	0.0	11.9	19.2	20.4	33.6	34.0	38.1
4. Paid Claims (Cumulative) as of Year-End:										
End of Policy Year	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
One Year Later	0.0	0.0	0.0	0.0	0.4	0.3	0.2	0.1	0.1	
Two Years Later	0.0	0.0	0.0	0.0	1.1	0.7	0.7	0.4		
Three Years Later	0.0	0.0	0.0	0.0	2.2	1.3	1.4			
Four Years Later	0.0	0.0	0.0	0.0	3.3	2.0				
Five Years Later	0.0	0.0	0.0	0.0	4.4					
Six Years Later	0.0	0.0	0.0	0.0						
Seven Years Later	0.0	0.0	0.0							
Eight Years Later	0.0	0.0								
Nine Years Later	0.0									
5. Re-estimated Incurred Claims and Expenses:										
End of Policy Year	0.0	0.0	0.0	0.0	11.9	19.2	20.4	33.6	34.0	38.1
One Year Later	0.0	0.0	0.0	0.0	6.2	2.9	4.3	0.9	1.6	
Two Years Later	0.0	0.0	0.0	0.0	11.7	5.4	8.5	6.7		
Three Years Later	0.0	0.0	0.0	0.0	14.8	7.4	9.3			
Four Years Later	0.0	0.0	0.0	0.0	17.7	9.1				
Five Years Later	0.0	0.0	0.0	0.0	19.7					
Six Years Later	0.0	0.0	0.0	0.0						
Seven Years Later	0.0	0.0	0.0							
Eight Years Later	0.0	0.0								
Nine Years Later	0.0									
6. Increase (Decrease) in Estimated Incurred Claims and Expenses from End of Policy Year	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 7.8	\$ (10.1)	\$ (11.1)	\$ (26.9)	\$ (32.4)	\$ 0.0

\*Prior to 2016 data not available.





## FINANCIAL SECTION

**Wisconsin Retirement System**  
**Schedules of Changes in Net Pension Liability (Asset) and Related Ratios**  
(In Millions)

Calendar Year Ended, December 31	2021	2020	2019	2018
<b>Total Pension Liability</b>				
Service Cost	\$ 2,019.3	\$ 1,975.8	\$ 1,902.5	\$ 1,860.9
Interest on the Total Pension Liability	8,157.5	7,480.7	6,888.1	7,169.7
Difference between Expected and Actual Experience <sup>1</sup>	9,453.1	6,376.7	5,473.3	(4,968.3)
Assumption Changes	1,829.1	0.0	0.0	361.5
Benefit Payments	(6,352.7)	(5,939.4)	(5,646.3)	(5,516.2)
Refunds of Member Contributions	(42.0)	(38.9)	(44.1)	(40.2)
<b>Net Change in Total Pension Liability</b>	<b>15,064.3</b>	<b>9,855.0</b>	<b>8,573.5</b>	<b>(1,132.6)</b>
<b>Total Pension Liability - Beginning</b>	<b>118,723.3</b>	<b>108,868.3</b>	<b>100,294.8</b>	<b>101,427.3</b>
<b>Total Pension Liability - Ending (a)</b>	<b>\$ 133,787.5</b>	<b>\$ 118,723.3</b>	<b>\$ 108,868.3</b>	<b>\$ 100,294.8</b>
<b>Plan Fiduciary Net Position</b>				
Employer Contributions <sup>2</sup>	\$ 1,164.6	\$ 1,133.3	\$ 1,046.9	\$ 1,030.5
Member Contributions	1,086.8	1,053.2	987.7	973.0
Pension Plan Net Investment Income	21,056.7	16,698.6	19,049.5	(4,049.4)
Benefit Payments	(6,352.7)	(5,939.4)	(5,646.3)	(5,516.2)
Refunds of Member Contributions	(42.0)	(38.9)	(44.1)	(40.2)
Pension Plan Administrative Expense	(31.9)	(33.3)	(34.2)	(31.6)
Other <sup>3</sup>	0.0	0.0	(3.9)	(25.4)
<b>Net Change in Plan Fiduciary Net Position</b>	<b>16,881.4</b>	<b>12,873.6</b>	<b>15,355.7</b>	<b>(7,659.4)</b>
<b>Plan Fiduciary Net Position - Beginning</b>	<b>124,966.4</b>	<b>112,092.8</b>	<b>96,737.1</b>	<b>104,396.5</b>
<b>Plan Fiduciary Net Position - Ending (b)</b>	<b>\$ 141,847.8</b>	<b>\$ 124,966.4</b>	<b>\$ 112,092.8</b>	<b>\$ 96,737.1</b>
<b>Net Pension Liability(Asset) - Ending (a) - (b)</b>	<b>\$ (8,060.3)</b>	<b>\$ (6,243.1)</b>	<b>\$ (3,224.5)</b>	<b>\$ 3,557.7</b>
<b>Plan Fiduciary Net Position as a Percentage of Total Pension</b>	106.02 %	105.26 %	102.96 %	96.45 %
<b>Covered Employee Payroll</b>	\$ 15,780.8	\$ 15,359.9	\$ 14,832.5	\$ 14,301.4
<b>Net Pension Liability(Asset) as a Percentage of Covered Employee Payroll</b>	(51.08)%	(40.65)%	(21.74)%	24.88 %

Immaterial differences may exist between the amounts in this schedule and those reported in the Statement of Changes in Fiduciary Net Position.

Amounts may not foot due to rounding.

<sup>1</sup> Starting with 2015, this item includes the impact of known Market Recognition Account deferred gains/losses on the liability for dividend payments.

<sup>2</sup> Employer contributions shown in the above tables includes Employer Required Contributions in addition to Early Retirement Contributions and Additional Contributions paid by employer on behalf of employee

<sup>3</sup> Other for 2018 relates to an impairment loss on a capital asset.



**Wisconsin Retirement System**  
**Schedules of Changes in Net Pension Liability (Asset) and Related Ratios**  
(In Millions)

Calendar Year Ended, December 31	2017	2016	2015	2014	2013
<b>Total Pension Liability</b>					
Service Cost	\$ 1,842.9	\$ 1,814.1	\$ 1,787.9	\$ 1,757.0	\$ 1,745.0
Interest on the Total Pension Liability	6,627.2	6,372.4	6,347.1	6,089.3	5,680.7
Difference between Expected and Actual Experience <sup>1</sup>	4,459.5	150.3	(4,247.3)	437.3	2,659.9
Assumption Changes	0.0	0.0	1,412.0	0.0	0.0
Benefit Payments	(5,211.3)	(5,022.9)	(4,823.6)	(4,540.2)	(4,224.7)
Refunds of Member Contributions	(38.4)	(39.3)	(37.6)	(34.4)	(33.3)
<b>Net Change in Total Pension Liability</b>	<u>7,679.9</u>	<u>3,274.6</u>	<u>438.5</u>	<u>3,708.9</u>	<u>5,827.7</u>
<b>Total Pension Liability - Beginning<sup>2</sup></b>	<u>93,747.4</u>	<u>90,129.7</u>	<u>89,691.2</u>	<u>85,982.2</u>	<u>80,154.6</u>
<b>Total Pension Liability - Ending (a)</b>	<u><u>\$ 101,427.3</u></u>	<u><u>\$ 93,404.3</u></u>	<u><u>\$ 90,129.7</u></u>	<u><u>\$ 89,691.2</u></u>	<u><u>\$ 85,982.2</u></u>
<b>Plan Fiduciary Net Position</b>					
Employer Contributions <sup>3</sup>	\$ 1,017.6	\$ 963.1	\$ 977.7	\$ 987.8	\$ 914.7
Member Contributions	965.5	921.9	937.2	941.9	871.3
Pension Plan Net Investment Income	14,875.4	7,273.1	(673.1)	4,891.0	11,347.3
Benefit Payments	(5,211.3)	(5,022.9)	(4,823.6)	(4,540.2)	(4,224.7)
Refunds of Member Contributions	(38.4)	(39.3)	(37.6)	(34.4)	(33.3)
Pension Plan Administrative Expense	(26.1)	(20.4)	(22.7)	(24.0)	(22.9)
<b>Net Change in Plan Fiduciary Net Position</b>	<u>11,582.7</u>	<u>4,075.4</u>	<u>(3,642.1)</u>	<u>2,222.0</u>	<u>8,852.4</u>
<b>Plan Fiduciary Net Position - Beginning<sup>4</sup></b>	<u>92,813.8</u>	<u>88,504.7</u>	<u>92,146.8</u>	<u>89,924.7</u>	<u>81,072.3</u>
<b>Plan Fiduciary Net Position - Ending (b)</b>	<u><u>\$ 104,396.5</u></u>	<u><u>\$ 92,580.1</u></u>	<u><u>\$ 88,504.7</u></u>	<u><u>\$ 92,146.8</u></u>	<u><u>\$ 89,924.7</u></u>
<b>Net Pension Liability(Asset) - Ending (a) - (b)</b>	\$ (2,969.1)	\$ 824.2	\$ 1,625.0	\$ (2,455.6)	\$ (3,942.5)
<b>Plan Fiduciary Net Position as a Percentage of Total Pension</b>	102.93 %	99.12 %	98.20 %	102.74 %	104.59 %
<b>Covered Employee Payroll</b>	\$ 13,943.1	\$ 13,706.0	\$ 13,530.5	\$ 13,219.5	\$ 12,884.8
<b>Net Pension Liability(Asset) as a Percentage of Covered Employee Payroll</b>	(21.29)%	6.01 %	12.01 %	(18.58)%	(30.60)%

Immaterial differences may exist between the amounts in this schedule and those reported in the Statement of Changes in Fiduciary Net Position.

Amounts may not foot due to rounding.

<sup>1</sup> Starting with 2015, this item includes the impact of known Market Recognition Account deferred gains/losses on the liability for dividend payments.

<sup>2</sup> As of calendar year 2017, the Long-Term Disability Insurance (LTDI) program is reported within the Wisconsin Retirement System (WRS). Beginning of year liabilities for 2017 were adjusted by \$343,079,422 to reflect the LTDI program.

<sup>3</sup> Employer contributions shown in the above tables includes Employer Required Contributions in addition to Early Retirement Contributions and Additional Contributions paid by employer on behalf of employee.

<sup>4</sup> As of calendar year 2017, the LTDI program is reported within the WRS. Beginning of year net position for 2017 was adjusted by \$233,691,533 to reflect the LTDI program.



## FINANCIAL SECTION

**Wisconsin Retirement System  
Schedule of Required Employer Contributions**  
(In Millions)

<b>Calendar Year Ending December 31,</b>	<b>Actuarially Determined Contributions</b>	<b>Actual Contributions</b>	<b>Contribution Deficiency (Excess)</b>	<b>Covered Payroll</b>	<b>Actual Contributions as a % of Covered Payroll</b>
2013	\$905	\$905	\$0	\$12,885	7.02%
2014	977	977	0	13,220	7.39
2015	968	968	0	13,531	7.15
2016	954	954	0	13,706	6.96
2017	1,015	1,015	0	13,943	7.28
2018	1,028	1,028	0	14,301	7.19
2019	1,045	1,045	0	14,832	7.05
2020	1,131	1,131	0	15,360	7.37
2021	1,163	1,163	0	15,781	7.37

**Wisconsin Retirement System  
Schedule of Investment Returns**  
**Annual Money-Weighted Rate of Return, Net of Investment Expenses**

	<b>2021</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>
Core Trust Fund	17.03 %	15.06 %	19.49 %	(3.56)%	15.85 %	8.29 %	(0.63)%	5.44 %	13.18 %	13.40 %
Variable Trust Fund	19.98 %	17.05 %	28.80 %	(7.61)%	23.27 %	10.49 %	(1.11)%	7.24 %	28.78 %	16.94 %



**State Retiree Life Insurance**  
**Schedules of Changes in Net OPEB Liability (Asset) and Related Ratios**  
(In Millions)

Calendar Year Ended, December 31	2021	2020	2019	2018	2017
<b>Total OPEB Liability</b>					
Service Cost	\$ 46.3	\$ 36.3	\$ 25.4	\$ 30.7	\$ 26.1
Interest on the Total OPEB Liability	27.4	30.0	33.2	31.2	30.7
Difference between Expected and Actual Experience	3.3	(10.5)	(6.2)	(17.5)	(5.3)
Assumption Changes	13.4	138.5	223.0	(94.9)	49.0
Benefit Payments	(23.7)	(24.7)	(19.8)	(19.5)	(17.7)
<b>Net Change in Total OPEB Liability</b>	66.7	169.6	255.6	(70.0)	82.8
<b>Total OPEB Liability - Beginning</b>	1,200.7	1,031.1	775.5	845.5	762.6
<b>Total OPEB Liability - Ending (a)</b>	<u>\$ 1,267.4</u>	<u>\$ 1,200.7</u>	<u>\$ 1,031.1</u>	<u>\$ 775.5</u>	<u>\$ 845.5</u>
<b>Plan Fiduciary Net Position</b>					
Employer Contributions	\$ 1.7	\$ 1.5	\$ 1.1	\$ 1.4	\$ 1.4
Net Investment Income	8.8	9.8	10.4	10.9	11.5
Benefit Payments	(23.7)	(24.7)	(19.8)	(19.5)	(17.7)
OPEB Plan Administrative Expense	(0.9)	(0.9)	(0.8)	(0.7)	(0.6)
Other	0.0	0.0	13.1 *	0.0	0.0
<b>Net Change in Plan Fiduciary Net Position</b>	(14.1)	(14.3)	4.0	(7.9)	(5.4)
<b>Plan Fiduciary Net Position - Beginning</b>	333.7	348.0	344.0	352.0	357.4
<b>Plan Fiduciary Net Position - Ending (b)</b>	<u>\$ 319.6</u>	<u>\$ 333.7</u>	<u>\$ 348.0</u>	<u>\$ 344.0</u>	<u>\$ 352.0</u>
<b>Net OPEB Liability(Asset) - Ending (a) - (b)</b>	\$ 947.8	\$ 867.0	\$ 683.1	\$ 431.5	\$ 493.5
<b>Plan Fiduciary Net Position as a Percentage of Total OPEB Liability</b>	25.22 %	27.80 %	33.75%	44.36%	41.63%
<b>Covered Employee Payroll</b>	\$ 3,529.3	\$ 3,456.5	\$ 3,299.5	\$ 3,182.5	\$ 3,184.0
<b>Net OPEB Liability (Asset) as a Percentage of Covered Employee Payroll</b>	26.85 %	25.08 %	20.70%	13.56%	15.50%
<b>Key Assumptions</b>					
Discount Rate	2.15 %	2.22 %	2.84 %	4.20 %	3.60 %
Long-Term Expected Rate of Return	4.25 %	4.25 %	4.25 %	5.00 %	5.00 %
20 Year Tax-Exempt Municipal Bond Yield	2.06 %	2.12 %	2.74 %	4.10 %	3.44 %

\*Transfer from Active Life Insurance Program

Immaterial differences may exist between the amounts in this schedule and those reported in the Statement of Changes in Fiduciary Net Position.

Amounts may not foot due to rounding.



## FINANCIAL SECTION

**Local Retiree Life Insurance**  
**Schedules of Changes in Net OPEB Liability (Asset) and Related Ratios**  
(In Millions)

Calendar Year Ended, December 31	2021	2020	2019	2018	2017
<b>Total OPEB Liability</b>					
Service Cost	\$ 33.9	\$ 26.7	\$ 17.0	\$ 21.1	\$ 18.1
Interest on the Total OPEB Liability	18.7	20.2	21.7	20.4	19.8
Difference between Expected and Actual Experience	(10.7)	(12.5)	(9.5)	(11.0)	(4.9)
Assumption Changes	6.3	97.7	159.4	(65.1)	33.5
Benefit Payments	(10.4)	(12.8)	(9.3)	(7.6)	(7.3)
<b>Net Change in Total OPEB Liability</b>	<b>37.8</b>	<b>119.2</b>	<b>179.3</b>	<b>(42.2)</b>	<b>59.2</b>
<b>Total OPEB Liability - Beginning</b>	<b>801.4</b>	<b>682.2</b>	<b>502.9</b>	<b>545.1</b>	<b>485.9</b>
<b>Total OPEB Liability - Ending (a)</b>	<b>\$ 839.2</b>	<b>\$ 801.4</b>	<b>\$ 682.2</b>	<b>\$ 502.9</b>	<b>\$ 545.1</b>
<b>Plan Fiduciary Net Position</b>					
Employer Contributions	\$ 2.0	\$ 2.0	\$ 1.8	\$ 1.9	\$ 2.1
Net Investment Income	6.7	7.3	7.5	7.6	7.6
Benefit Payments	(10.4)	(12.8)	(9.3)	(7.6)	(7.3)
OPEB Plan Administrative Expense	(1.5)	(1.5)	(1.4)	(1.2)	(1.2)
Other	0.0	0.0	12.9 *	0.0	0.0
<b>Net Change in Plan Fiduciary Net Position</b>	<b>(3.2)</b>	<b>(5.0)</b>	<b>11.5</b>	<b>0.7</b>	<b>1.2</b>
<b>Plan Fiduciary Net Position - Beginning</b>	<b>251.4</b>	<b>256.4</b>	<b>244.9</b>	<b>244.2</b>	<b>243.1</b>
<b>Plan Fiduciary Net Position - Ending (b)</b>	<b>\$ 248.2</b>	<b>\$ 251.4</b>	<b>\$ 256.4</b>	<b>\$ 244.9</b>	<b>\$ 244.2</b>
<b>Net OPEB Liability (Asset) - Ending (a) - (b)</b>	<b>\$ 591.0</b>	<b>\$ 550.0</b>	<b>\$ 425.8</b>	<b>\$ 258.0</b>	<b>\$ 300.9</b>
<b>Plan Fiduciary Net Position as a Percentage of Total OPEB Liability</b>	29.57%	31.36%	37.58%	48.69%	44.81%
<b>Covered Employee Payroll</b>	\$ 4,418.5	\$ 4,307.4	\$ 4,228.2	\$ 4,115.0	\$ 4,205.3
<b>Net OPEB Liability (Asset) as a Percentage of Covered Employee Payroll</b>	13.38%	12.77%	10.07%	6.27%	7.15%
<b>Key Assumptions</b>					
Discount Rate	2.17 %	2.25 %	2.87 %	4.22 %	3.63 %
Long-Term Expected Rate of Return	4.25 %	4.25 %	4.25 %	5.00 %	5.00 %
20 Year Tax-Exempt Municipal Bond Yield	2.06 %	2.12 %	2.74 %	4.10 %	3.44 %

\*Transfer from Active Life Insurance Program

Immaterial differences may exist between the amounts in this schedule and those reported in the Statement of Changes in Fiduciary Net Position.

Amounts may not foot due to rounding.



**State and Local Retiree Life Insurance  
Schedule of Investment Returns  
Annual Money-Weighted Rate of Return, Net of Investment Expenses**

	<b>2021</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>
State Retiree Life Insurance	2.67%	2.86%	3.09%	3.16%	3.16%
Local Retiree Life Insurance	2.65%	2.84%	3.05%	3.10%	3.10%



## FINANCIAL SECTION

**Supplemental Health Insurance Conversion Credit**  
**Schedules of Changes in Net OPEB Liability (Asset) and Related Ratios**  
(In Millions)

Calendar Year Ended, December 31	2021	2020	2019	2018	2017
<b>Total OPEB Liability</b>					
Service Cost	\$ 23.5	\$ 24.1	\$ 25.5	\$ 23.4	\$ 23.1
Interest on the Total OPEB Liability	63.7	64.4	65.5	66.0	65.9
Difference between Expected and Actual Experience	(36.2)	(47.6)	(55.3)	(41.6)	(31.6)
Assumption Changes	120.4	0.0	0.0	25.2	0.0
Benefit Payments	(52.6)	(49.5)	(53.0)	(55.4)	(56.4)
<b>Net Change in Total OPEB Liability</b>	118.7	(8.6)	(17.2)	17.6	0.9
<b>Total OPEB Liability - Beginning</b>	924.0	932.6	949.8	932.2	931.3
<b>Total OPEB Liability - Ending (a)</b>	<u>\$ 1,042.7</u>	<u>\$ 924.0</u>	<u>\$ 932.6</u>	<u>\$ 949.8</u>	<u>\$ 932.2</u>
<b>Plan Fiduciary Net Position</b>					
Employer Contributions	\$ 15.7	\$ 15.1	\$ 14.4	\$ 18.2	\$ 17.9
Net Investment Income	200.6	159.5	180.3	(36.5)	141.8
Benefit Payments	(52.6)	(49.5)	(53.0)	(55.4)	(56.4)
OPEB Plan Administrative Expense	(0.7)	(0.6)	(0.3)	(0.3)	(0.3)
<b>Net Change in Plan Fiduciary Net Position</b>	162.9	124.4	141.3	(74.0)	102.9
<b>Plan Fiduciary Net Position - Beginning</b>	1,208.8	1,084.4	943.1	1,017.1	914.1
<b>Plan Fiduciary Net Position - Ending (b)</b>	<u>\$ 1,371.7</u>	<u>\$ 1,208.8</u>	<u>\$ 1,084.4</u>	<u>\$ 943.1</u>	<u>\$ 1,017.1</u>
<b>Net OPEB Liability(Asset) - Ending (a) - (b)</b>	\$ (329.0)	\$ (284.8)	\$ (151.8)	\$ 6.8	\$ (84.8)
<b>Plan Fiduciary Net Position as a Percentage of Total OPEB Liability</b>	131.55%	130.82%	116.27%	99.29%	109.10%
<b>Covered Employee Payroll</b>	\$ 5,215.5	\$ 5,018.5	\$ 4,796.1	\$ 4,562.6	\$ 4,454.5
<b>Net OPEB Liability(Asset) as a Percentage of Covered Employee Payroll</b>	(6.31)%	(5.67)%	(3.16)%	0.15%	(1.90)%

Immaterial differences may exist between the amounts in this schedule and those reported in the Statement of Changes in Fiduciary Net Position.

Values may not add due to rounding.



**Supplemental Health Insurance Conversion Credit  
Schedule of Required Employer Contributions**  
(In Millions)

Calendar Year Ending December 31,	Actuarially Determined Contributions	Actual Contributions	Contribution Deficiency (Excess)	Covered Payroll	Actual Contributions as a % of Covered Payroll
2017	17.9	17.9	0.0	4,454.5	0.40%
2018	18.2	18.2	0.0	4,562.6	0.40%
2019	14.4	14.4	0.0	4,796.1	0.30%
2020	15.1	15.1	0.0	5,018.5	0.30%
2021	15.7	15.7	0.0	5,215.5	0.30%

**Supplemental Health Insurance Conversion Credit  
Schedule of Investment Returns  
Annual Money-Weighted Rate of Return, Net of Investment Expenses**

	2021	2020	2019	2018	2017
Core Trust Fund	17.03%	15.06%	19.49%	(3.56)%	15.85%





## NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

### » *Wisconsin Retirement System (WRS)*

#### *Changes in Benefit Terms and Assumptions related to Pension Liabilities (Assets)*

**Benefit Terms:** There were no recent changes in benefit terms.

**Assumptions:**

Based on a three-year experience study conducted in 2021 covering January 1, 2018 through December 31, 2020, the ETF Board adopted assumption changes that were used to measure the total pension liability beginning with the year-end December 31, 2021, including the following:

- Lowering the long-term expected rate of return from 7.0% to 6.8%
- Lowering the discount rate from 7.0% to 6.8%
- Lowering the price inflation rate from 2.5% to 2.4%
- Lowering the post-retirement adjustments from 1.9% to 1.7%
- Mortality assumptions were changed to reflect updated trends by transitioning from the Wisconsin 2018 Mortality Table to the 2020 WRS Experience Mortality Table.

Based on a three-year experience study conducted in 2018 covering January 1, 2015 through December 31, 2017, the ETF Board adopted assumption changes that were used to measure the total pension liability beginning with the year-ended December 31, 2018, including the following:

- Lowering the long-term expected rate of return from 7.2% to 7.0%
- Lowering the discount rate from 7.2% to 7.0%
- Lowering the wage inflation rate from 3.2% to 3.0%
- Lowering the price inflation rate from 2.7% to 2.5%
- Lowering the post-retirement adjustments from 2.1% to 1.9%
- Mortality assumptions were changed to reflect updated trends by transitioning from the Wisconsin 2012 Mortality Table to the Wisconsin 2018 Mortality Table.

**Significant methods and assumptions used in calculating Wisconsin Retirement System Actuarially Determined Contributions:**

	<b>2021</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>
Valuation Date:	December 31, 2019	December 31, 2018	December 31, 2017	December 31, 2016	December 31, 2015
Actuarial Cost Method:	Frozen Entry Age	Frozen Entry Age	Frozen Entry Age	Frozen Entry Age	Frozen Entry Age
Amortization Method:	Level Percent of Payroll-Closed Amortization Period	Level Percent of Payroll-Closed Amortization Period	Level Percent of Payroll-Closed Amortization Period	Level Percent of Payroll-Closed Amortization Period	Level Percent of Payroll-Closed Amortization Period
Amortization Period:	30 Year closed from date of participation in WRS	30 Year closed from date of participation in WRS	30 Year closed from date of participation in WRS	30 Year closed from date of participation in WRS	30 Year closed from date of participation in WRS
Asset Valuation Method:	Five Year Smoothed Market (Closed)	Five Year Smoothed Market (Closed)	Five Year Smoothed Market (Closed)	Five Year Smoothed Market (Closed)	Five Year Smoothed Market (Closed)
<b>Actuarial Assumptions</b>					
Net Investment Rate of Return:	5.4%	5.4%	5.5%	5.5%	5.5%
Weighted based on assumed rate for:					
Pre-retirement:	7.0%	7.0%	7.2%	7.2%	7.2%
Post-retirement:	5.0%	5.0%	5.0%	5.0%	5.0%
<b>Salary Increases</b>					
Wage Inflation:	3.0%	3.0%	3.2%	3.2%	3.2%
Seniority/Merit:	0.1%-5.6%	0.1%-5.6%	0.1%-5.6%	0.1%-5.6%	0.1%-5.6%
Post-retirement Benefit Adjustments*:	1.9%	1.9%	2.1%	2.1%	2.1%
Retirement Age:	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the 2018 valuation pursuant to an experience study of the period 2015-2017.	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the 2018 valuation pursuant to an experience study of the period 2015 - 2017.	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the 2015 valuation pursuant to an experience study of the period 2012 - 2014.	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the 2015 valuation pursuant to an experience study of the period 2012 - 2014.	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the 2015 valuation pursuant to an experience study of the period 2012 - 2014.
Mortality:	Wisconsin 2018 Mortality Table. The rates based on actual WRS experience adjusted for future mortality improvements using the MP-2018 fully generational improvement scale (multiplied by 60%).	Wisconsin 2018 Mortality Table. The rates based on actual WRS experience adjusted for future mortality improvements using the MP-2018 fully generational improvement scale (multiplied by 60%).	Wisconsin 2012 Mortality Table. The rates based on actual WRS experience adjusted for future mortality improvements using the MP-2015 fully generational improvement scale (multiplied by 50%).	Wisconsin 2012 Mortality Table. The rates based on actual WRS experience adjusted for future mortality improvements using the MP-2015 fully generational improvement scale (multiplied by 50%).	Wisconsin 2012 Mortality Table. The rates based on actual WRS experience adjusted for future mortality improvements using the MP-2015 fully generational improvement scale (multiplied by 50%).

\*No post-retirement adjustment is guaranteed. Actual adjustments are based on recognized investment return, actuarial experience and other factors. Value is the assumed annual adjustment based on the investment return assumption and the post-retirement discount rate.



## FINANCIAL SECTION

**Significant methods and assumptions used in calculating Wisconsin Retirement System Actuarially Determined Contributions:**

	2016	2015	2014	2013
Valuation Date:	December 31, 2014	December 31, 2013	December 31, 2012	December 31, 2011
Actuarial Cost Method:	Frozen Entry Age	Frozen Entry Age	Frozen Entry Age	Frozen Entry Age
Amortization Method:	Level Percent of Payroll-Closed Amortization Period	Level Percent of Payroll-Closed Amortization Period	Level Percent of Payroll-Closed Amortization Period	Level Percent of Payroll-Closed Amortization Period
Amortization Period:	30 Year closed from date of participation in WRS	30 Year closed from date of participation in WRS	30 Year closed from date of participation in WRS	30 Year closed from date of participation in WRS
Asset Valuation Method:	Five Year Smoothed Market (Closed)	Five Year Smoothed Market (Closed)	Five Year Smoothed Market (Closed)	Five Year Smoothed Market (Closed)
Actuarial Assumptions				
Net Investment Rate of Return:	5.5%	5.5%	5.5%	5.5%
Weighted based on assumed rate for:				
Pre-retirement:	7.2%	7.2%	7.2%	7.2%
Post-retirement:	5.0%	5.0%	5.0%	5.0%
Salary Increases				
Wage Inflation:	3.2%	3.2%	3.2%	3.2%
Seniority/Merit:	0.1%-5.6%	0.1%-5.6%	0.1%-5.6%	0.1%-5.6%
Post-retirement Benefit Adjustments*:	2.1%	2.1%	2.1%	2.1%
Retirement Age:	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the 2012 valuation pursuant to an experience study of the period 2009 - 2011.	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the 2012 valuation pursuant to an experience study of the period 2009 - 2011.	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the 2012 valuation pursuant to an experience study of the period 2009 - 2011.	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the 2009 valuation pursuant to an experience study of the period 2006 - 2008.
Mortality:	Wisconsin 2012 Mortality Table. The rates based on actual WRS experience projected to 2017 with scale BB to all for future improvements (margin) in mortality.	Wisconsin 2012 Mortality Table. The rates based on actual WRS experience projected to 2017 with scale BB to all for future improvements (margin) in mortality.	Wisconsin 2012 Mortality Table. The rates based on actual WRS experience projected to 2017 with scale BB to all for future improvements (margin) in mortality.	Wisconsin Projected Experience Table - 2005 for women and 90% of the Wisconsin Projected Experience Table - 2005 for men.

\*No post-retirement adjustment is guaranteed. Actual adjustments are based on recognized investment return, actuarial experience and other factors. Value is the assumed annual adjustment based on the investment return assumption and the post-retirement discount rate.

## » *Retiree Life Insurance Plans*

### *Changes in Benefit Terms and Assumptions related to Retiree Life OPEB Liabilities (Assets)*

**Benefit Terms:** There were no recent changes in benefit terms.

**Assumptions:** In addition to the rate changes detailed in the tables above, the State of Wisconsin Employee Trust Funds Board adopted economic and demographic assumption changes based on a three year experience study performed for the Wisconsin Retirement System. These assumptions are used in the actuarial valuations of OPEB liabilities (assets) for the retiree life insurance programs and are summarized below.

The assumption changes that were used to measure the December 31, 2021 total OPEB liabilities, include the following:

- Lowering the price inflation rate from 2.5% to 2.4%
- Mortality assumptions were changed to reflect updated trends by transitioning from the Wisconsin 2018 Mortality Table to the 2020 WRS Experience Mortality Table.

The assumption changes that were used to measure the December 31, 2018 total OPEB liabilities, include the following:

- Lowering the long-term expected rate of return from 5.00% to 4.25%
- Lowering the wage inflation rate from 3.2% to 3.0%
- Lowering the price inflation rate from 2.7% to 2.5%
- Mortality assumptions were changed to reflect updated trends by transitioning from the Wisconsin 2012 Mortality Table to the Wisconsin 2018 Mortality Table.

## » *Supplemental Health Insurance Conversion Credit (SHICC)*

### *Changes in Benefit Terms and Assumptions related to SHICC OPEB Liabilities (Assets)*

**Benefit Terms:** There were no recent changes in benefit terms.

**Assumptions:** Based upon experience studies conducted in 2021 on the WRS and Wisconsin Sick Leave Conversion Credit programs that covered a three-year period from January 1, 2018 through December 31, 2020, the ETF Board adopted assumption changes that were used to measure the December 31, 2021 total OPEB liability (asset), including the following:

- Lowering the long-term expected rate of return from 7.00% to 6.8%
- Lowering the discount rate from 7.0% to 6.8%
- Lowering the price inflation rate from 2.5% to 2.4%
- Mortality assumptions were changed to reflect updated trends by transitioning from the Wisconsin 2018 Mortality Table to the 2020 WRS Experience Mortality Table.
- The healthcare cost trend rate was changed from an increase of 3.0% in each future year to 6.0% for the first year and declining each future year to an ultimate trend rate of 3.5% over a 12-year period.
- Health care premium assumptions were changed to reflect one person and two person coverage for non Medicare and Medicare along with an election percentage assumption of 50%. Previously, the average non Medicare and Medicare premiums were based on active annuitant data with a 10% increase applied to the average premium.

## FINANCIAL SECTION

- The escrowed benefit usage assumes 50% of escrowed members will at some point begin using their sick leave balance to pay for health care costs. The present value of future benefits is now calculated by drawing down each member's account balance using the same average premiums applicable to active members and a 50% factor applied to the present value to account for the 50% escrowed benefit usage assumption. Previously, the present value of future benefits was calculated by taking the balance on deposit for escrowed annuitants multiplied by the ratio of the present value of future benefits for active status annuitants to the balance on deposit for active status annuitants multiplied by 50%
- The sick leave accumulation assumes each individual is at their same rate as in the past (earned less used), but not more than 100% of the gross earned rate based on the person's employer and not less than 25% of their gross earned rate. The assumed annual gross earned rates range from 6.4 to 16.25 days, depending on the employer. Previously, each individual was assumed to continue using sick leave at the same rate as in the past but not less than 25% nor more than 75% of the person's annual accrual rate (usually 16.25 days)

Based upon a three-year experience study conducted in 2018 that covered the period from January 1, 2015 through December 31, 2017, the ETF Board adopted assumption changes that were used to measure the December 31, 2018 total OPEB liability (asset), including the following:

- Lowering the long-term expected rate of return from 7.2% to 7.0%
- Lowering the discount rate from 7.2% to 7.0%
- Lowering the wage inflation rate from 3.2% to 3.0%
- Lowering the price inflation rate from 2.7% to 2.5%
- Mortality assumptions were changed to reflect updated trends by transitioning from the Wisconsin 2012 Mortality Table to the Wisconsin 2018 Mortality Table
- The healthcare cost trend rate was changed from an increase of 3.2% in each future year to 3.0%



**Significant methods and assumptions used in calculating SHICC Actuarially Determined Contributions:**

	2021	2020	2019	2018	2017
Valuation Date:	December 31, 2019	December 31, 2018	December 31, 2017	December 31, 2016	December 31, 2015
Actuarial Cost Method:	Frozen Entry Age	Frozen Entry Age	Frozen Entry Age	Frozen Entry Age	Frozen Entry Age
Amortization Method:	Level Percent of Payroll, (Closed)	Level Percent of Payroll, (Closed)	Level Percent of Payroll, (Closed)	Level Percent of Payroll, (Closed)	Level Percent of Payroll, (Closed)
Remaining Amortization Period:	6 years	7 years	8 years	9 years	10 years
Asset Valuation Method:	Five Year Smoothed Market (Closed)	Five Year Smoothed Market (Closed)	Five Year Smoothed Market (Closed)	Five Year Smoothed Market (Closed)	Five Year Smoothed Market (Closed)
Salary Increases					
Inflation:	3.0%	3.0%	3.2%	2.0%	2.0%
Seniority/Merit:	0.1%-5.6%	0.1%-5.6%	0.1%-5.6%	0.1%-5.6%	0.1%-5.6%
Investment Rate of Return:	7.0%	7.0%	7.2%	7.2%	7.2%
Retirement Age:	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the 2018 valuation pursuant to an experience study of the period 2015-2017.	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the 2018 valuation pursuant to an experience study of the period 2015-2017.	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the 2015 valuation pursuant to an experience study of the period 2012-2014.	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the 2015 valuation pursuant to an experience study of the period 2012-2014.	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the 2015 valuation pursuant to an experience study of the period 2012-2014.
Mortality:	Fully generational mortality utilizing the WRS 2018 Mortality Table adjusted for future mortality improvements using the MP-2018 fully generational improvement scale (multiplied by 60%)	Fully generational mortality utilizing the WRS 2018 Mortality Table adjusted for future mortality improvements using the MP-2018 fully generational improvement scale (multiplied by 60%)	Fully generational mortality utilizing the WRS 2012 Mortality Table adjusted for future mortality improvements using the MP-2015 fully generational improvement scale (multiplied by 50%)	Fully generational mortality utilizing the WRS 2012 Mortality Table adjusted for future mortality improvements using the MP-2015 fully generational improvement scale (multiplied by 50%)	Fully generational mortality utilizing the WRS 2012 Mortality Table adjusted for future mortality improvements using the MP-2015 fully generational improvement scale (multiplied by 50%)
Health Care Trend Rates:	3.0%	3.0%	3.2%	3.2%	3.2%
Other Information					
Notes:	There were no benefit changes during the year.	There were no benefit changes during the year.	There were no benefit changes during the year	There were no benefit changes during the year.	There were no benefit changes during the year.

# STATISTICAL SECTION

The background features a series of overlapping, wavy lines in various shades of teal and green. A prominent feature is a grid of thin, dark teal lines that curves across the lower half of the page, creating a sense of depth and movement. The overall aesthetic is clean, modern, and professional.

State of Wisconsin  
Department of Employee Trust Funds







## STATISTICAL SECTION

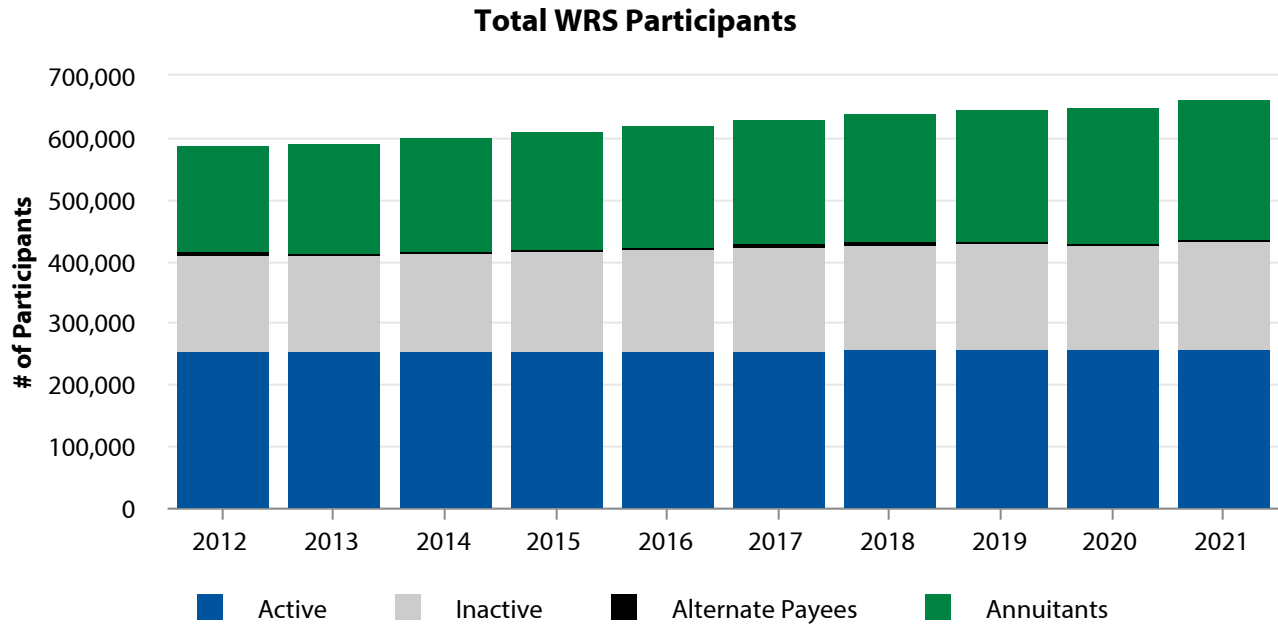
## Wisconsin Retirement System (WRS) Statistics

### WRS Active Participants by Employment Category

Year	General	Teachers	Executives & Elected Officials	Protective Occupations With Social Security	Protective Occupations Without Social Security	Totals
<b>State Participants</b>						
2012	42,433	20,776	733	8,327	0	72,269
2013	42,898	21,065	730	8,398	0	73,091
2014	42,982	21,279	732	8,900	0	73,893
2015	42,498	21,282	728	8,528	0	73,036
2016	42,460	21,722	727	8,605	0	73,514
2017	42,485	22,354	715	8,531	0	74,085
2018	41,939	22,841	712	8,405	0	73,897
2019	41,948	23,653	731	8,428	0	74,760
2020	41,672	23,784	718	8,458	0	74,632
2021	41,057	23,839	718	7,862	0	73,476
<b>Local Participants</b>						
2012	92,122	77,938	687	11,083	2,734	184,564
2013	91,422	77,995	679	10,856	2,745	183,697
2014	90,900	78,339	677	10,703	2,743	183,362
2015	90,887	77,979	668	10,773	2,734	183,041
2016	91,383	78,128	642	10,863	2,755	183,771
2017	90,622	78,384	636	10,934	2,752	183,328
2018	91,193	78,394	605	11,045	2,777	184,014
2019	92,218	78,677	591	11,237	2,768	185,491
2020	91,313	78,681	574	11,291	2,758	184,617
2021	91,593	78,914	546	11,358	2,760	185,171
<b>Total Participants</b>						
2012	134,555	98,714	1,420	19,410	2,734	256,833
2013	134,320	99,060	1,409	19,254	2,745	256,788
2014	133,882	99,618	1,409	19,603	2,743	257,255
2015	133,385	99,261	1,396	19,301	2,734	256,077
2016	133,843	99,850	1,369	19,468	2,755	257,285
2017	133,107	100,738	1,351	19,465	2,752	257,413
2018	133,132	101,235	1,317	19,450	2,777	257,911
2019	134,166	102,330	1,322	19,665	2,768	260,251
2020	132,985	102,465	1,292	19,749	2,758	259,249
2021	132,650	102,753	1,264	19,220	2,760	258,647



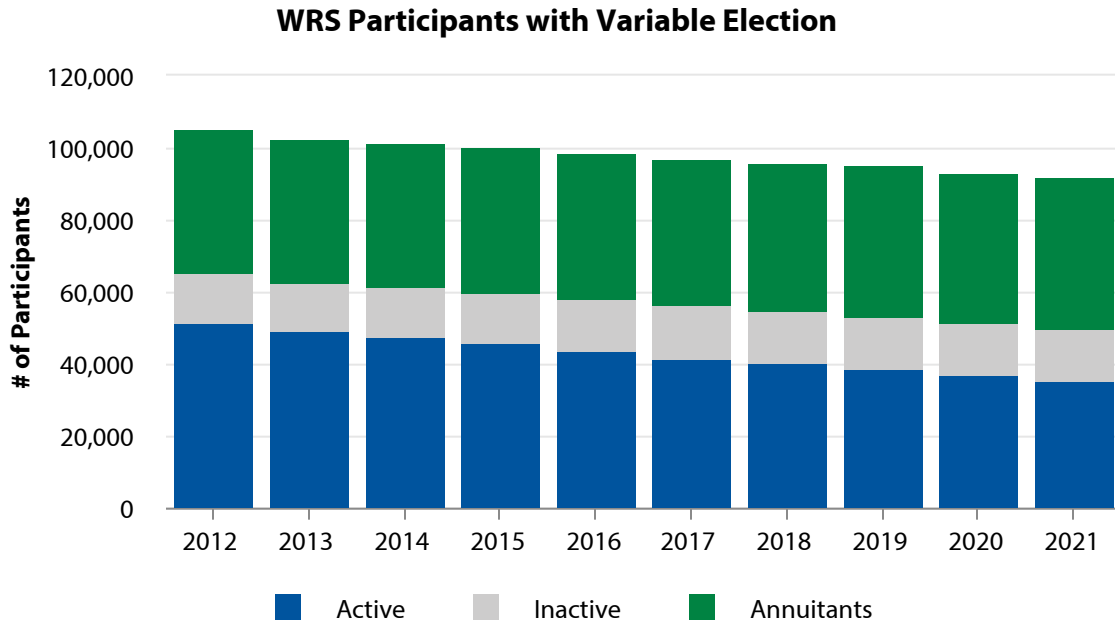
Total WRS Participants					
Year	Active	Inactive	Alternate Payees	Annuitants	Total Participants
2012	256,833	155,887	4,086	173,655	590,461
2013	256,788	153,721	4,040	180,056	594,605
2014	257,255	157,072	4,051	185,605	603,983
2015	256,077	161,851	4,111	191,795	613,834
2016	257,285	163,145	4,046	197,647	622,123
2017	257,413	167,996	4,093	203,300	632,802
2018	257,911	170,869	4,053	209,059	641,892
2019	260,251	169,261	3,904	215,070	648,486
2020	259,249	168,944	3,468	221,019	652,680
2021	258,647	174,573	3,498	226,605	663,323





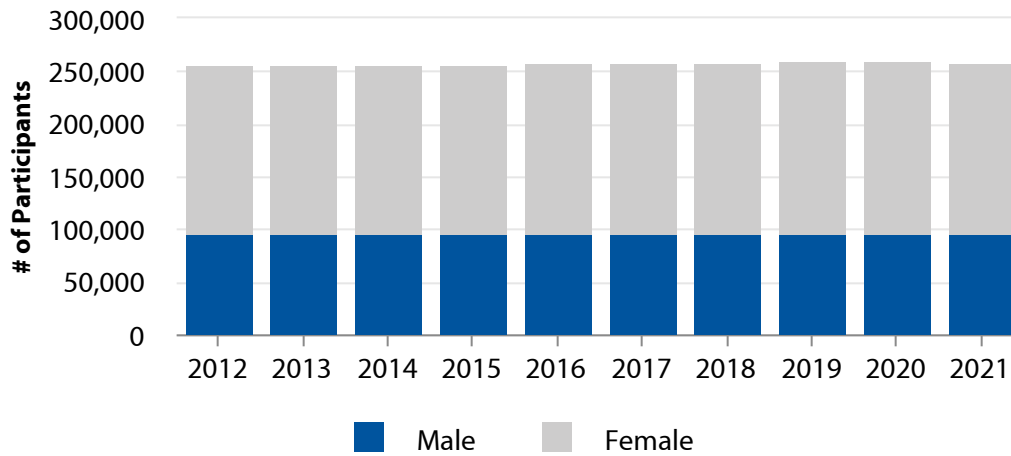
STATISTICAL SECTION

<b>WRS Participants with Variable Election</b>				
<b>Year</b>	<b>Active</b>	<b>Inactive</b>	<b>Annuitants</b>	<b>Totals</b>
2012	51,771	13,858	39,873	105,502
2013	49,299	13,376	40,317	102,992
2014	47,671	13,805	40,402	101,878
2015	45,931	14,276	40,152	100,359
2016	44,083	14,223	40,647	98,953
2017	41,935	14,572	40,877	97,384
2018	40,288	14,747	41,187	96,222
2019	38,786	14,724	41,777	95,287
2020	36,963	14,521	41,753	93,237
2021	35,630	14,575	42,251	92,456



**Active WRS Participants by Gender**

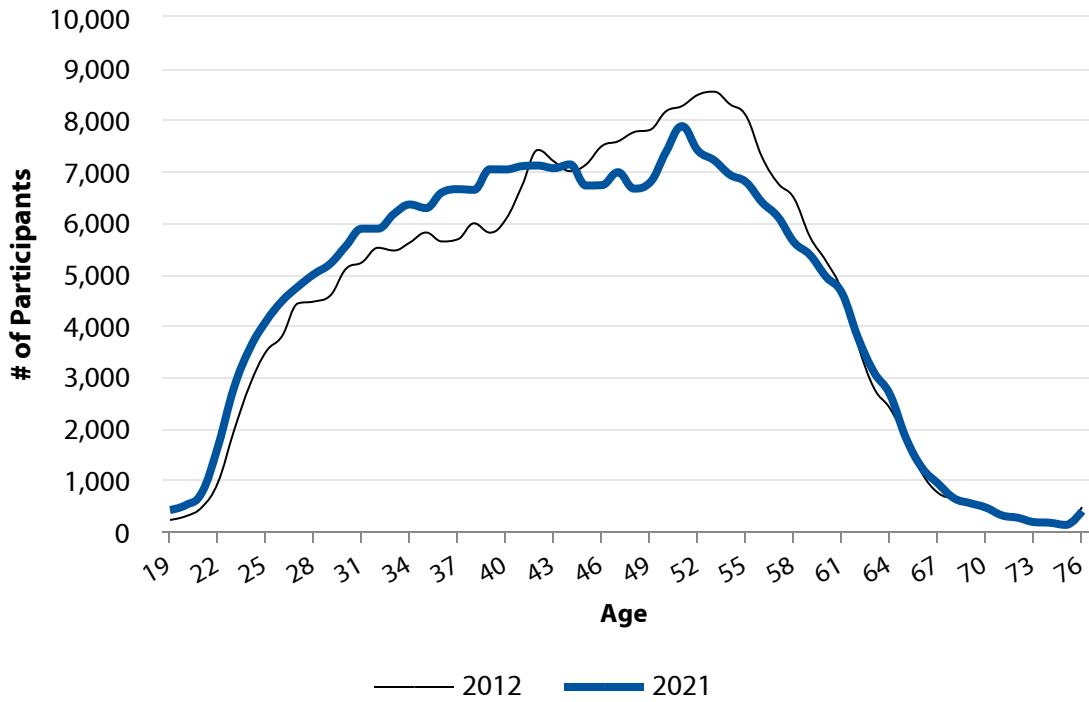
Year	Teachers		Protective Occupations		All Other Participants		Totals	
	Male	Female	Male	Female	Male	Female	Male	Female
2012	30,983	67,761	18,278	3,866	47,836	88,109	97,097	159,736
2013	30,979	68,115	18,354	3,840	47,908	87,592	97,241	159,547
2014	30,949	68,669	18,337	4,009	48,155	87,136	97,441	159,814
2015	30,621	68,640	18,094	3,941	47,971	86,810	96,686	159,391
2016	30,708	69,142	18,192	4,031	47,913	87,299	96,813	160,472
2017	30,915	69,823	18,128	4,089	47,975	86,483	97,018	160,395
2018	30,891	70,344	18,080	4,147	47,966	86,483	96,937	160,974
2019	31,078	71,252	18,178	4,255	48,360	87,128	97,616	162,635
2020	31,004	71,461	18,130	4,377	47,994	86,283	97,128	162,121
2021	30,984	71,769	17,805	4,175	47,789	86,125	96,578	162,069

**Active WRS Participants by Gender**


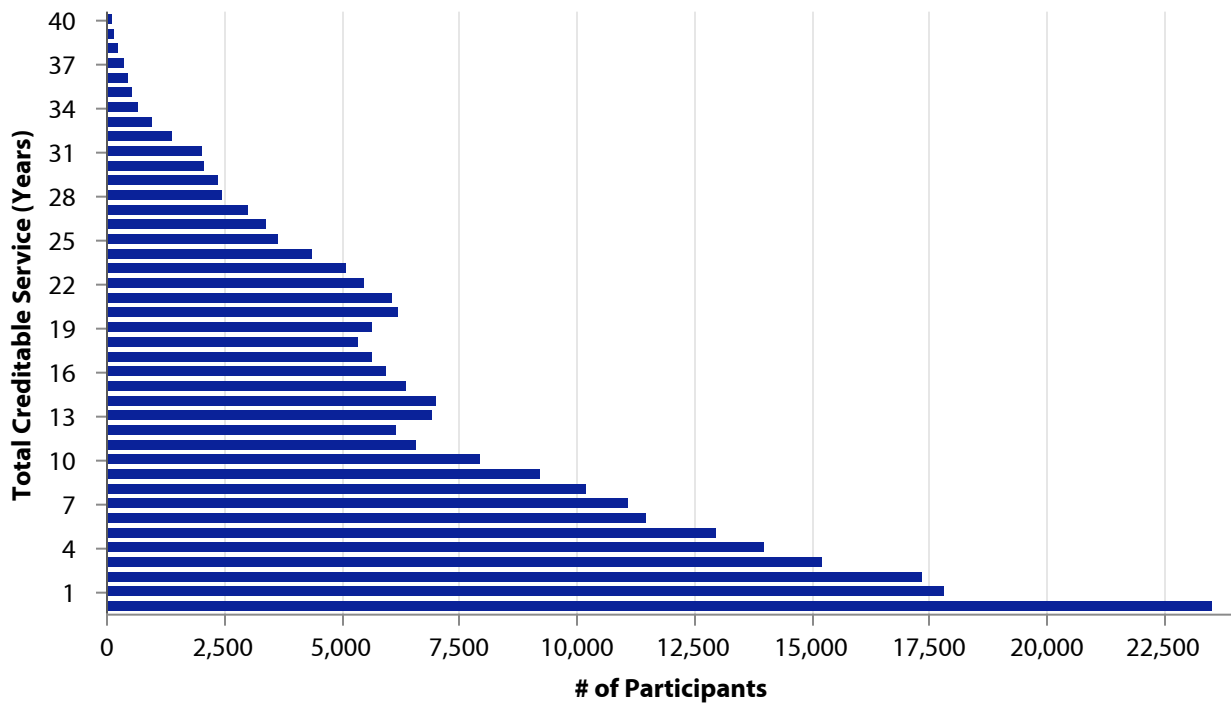


STATISTICAL SECTION

**WRS Active Participants by Age**



**WRS Active Participants by Creditable Service**





### WRS Covered Payroll by Employer Type (In Millions)

Local Employers								
Year	School Districts	Counties	Cities	Technical Colleges	Villages	Towns	Special Districts	Totals
2012	\$ 4,906	\$ 1,526	\$ 1,226	\$ 611	\$ 228	\$ 66	\$ 177	\$ 8,740
2013	4,956	1,551	1,244	616	233	66	187	8,853
2014	5,042	1,591	1,287	603	238	69	188	9,018
2015	5,167	1,629	1,318	611	246	70	195	9,236
2016	5,199	1,656	1,340	615	252	73	210	9,345
2017	5,292	1,703	1,379	620	267	68	151	9,480
2018	5,414	1,750	1,426	631	280	71	158	9,730
2019	5,563	1,810	1,479	642	292	75	166	10,027
2020	5,691	1,890	1,532	648	309	77	185	10,332
2021	5,870	1,898	1,552	658	320	71	188	10,557

State Employers				Total All Employers
Year	State Agencies	University	Totals	
2012	\$ 2,137	\$ 1,751	\$ 3,888	\$ 12,628
2013	2,212	1,820	4,032	12,885
2014	2,306	1,895	4,201	13,219
2015	2,372	1,922	4,294	13,530
2016	2,432	1,929	4,361	13,706
2017	2,496	1,967	4,463	13,943
2018	2,536	2,035	4,571	14,301
2019	2,664	2,141	4,805	14,832
2020	2,830	2,198	5,028	15,360
2021	2,871	2,353	5,224	15,781

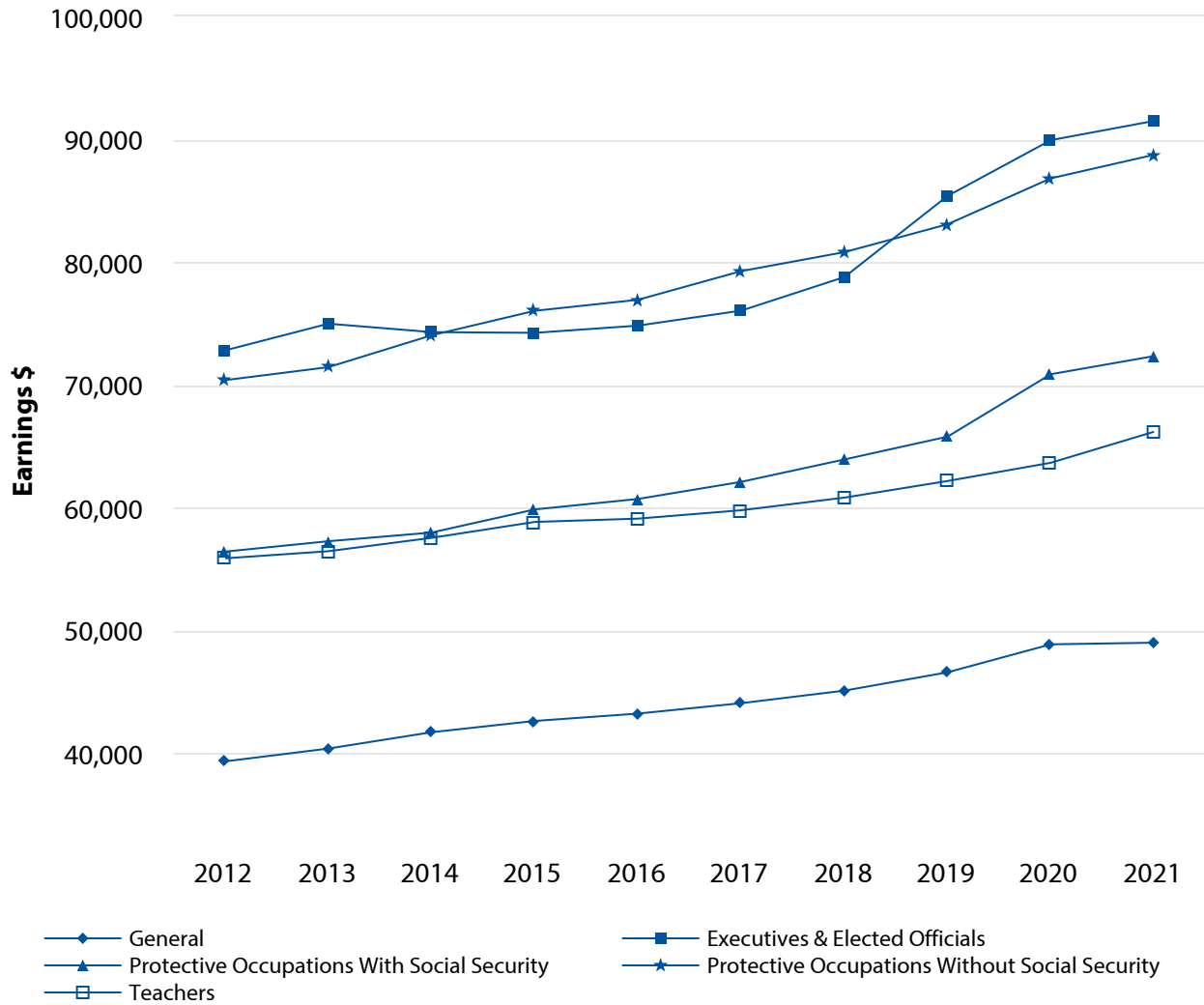
### WRS Covered Payroll by Employment Category (In Millions)

Year	General Employees	Teachers	Executives & Elected Officials	Protective Occupations with Social Security	Protective Occupations without Social Security	Totals
2012	\$ 5,496	\$ 5,707	\$ 107	\$ 1,122	\$ 196	\$ 12,628
2013	5,638	5,809	109	1,129	200	12,885
2014	5,815	5,923	111	1,163	207	13,219
2015	5,951	6,064	112	1,191	212	13,530
2016	6,045	6,118	112	1,217	214	13,706
2017	6,135	6,230	111	1,248	219	13,943
2018	6,295	6,385	113	1,283	225	14,301
2019	6,548	6,603	116	1,333	232	14,832
2020	6,788	6,765	121	1,444	242	15,360
2021	6,882	7,079	121	1,450	249	15,781



STATISTICAL SECTION

**Average Annual Earnings**

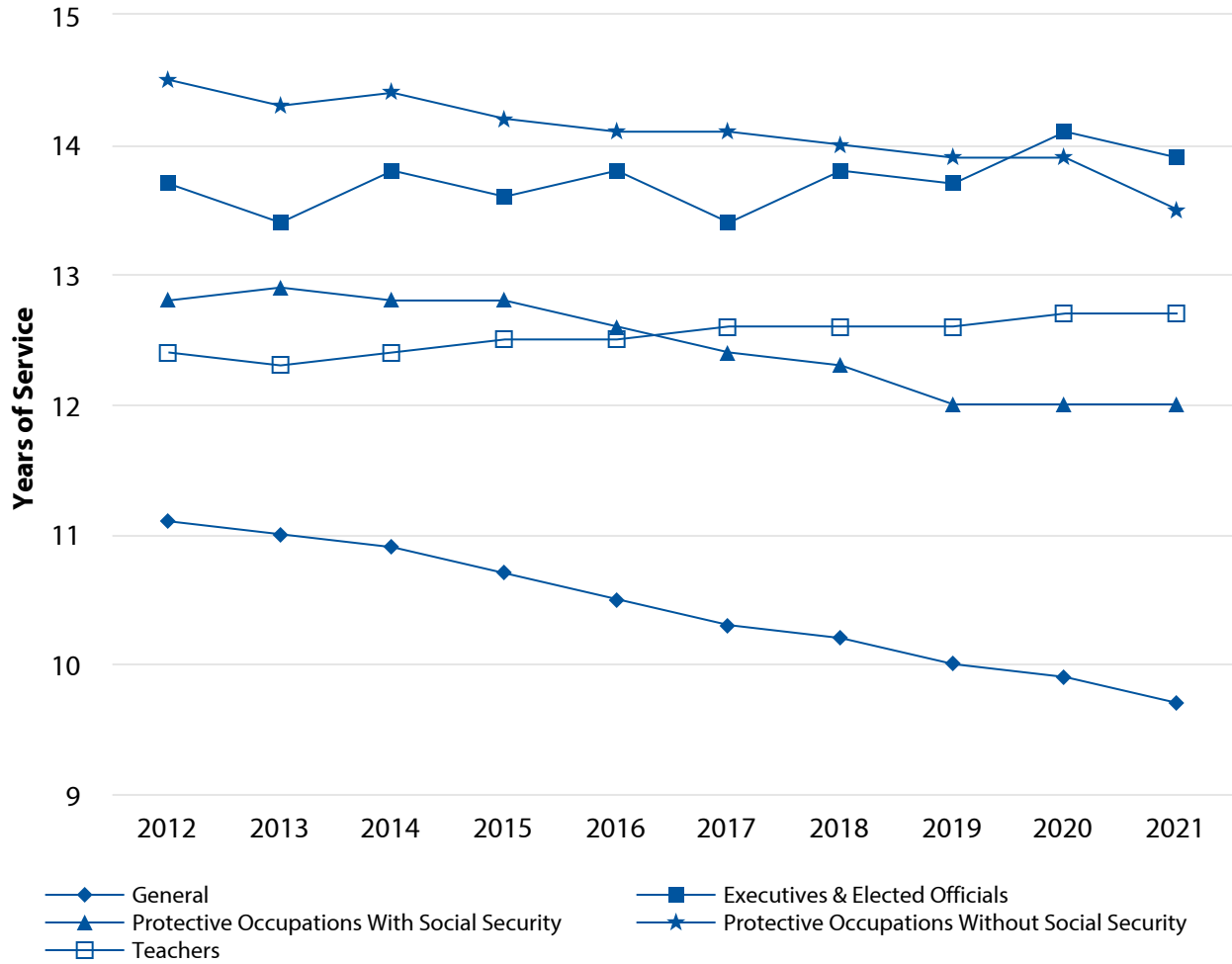


**Average Annual Earnings**

Year	General	Teachers	Executives & Elected Officials	Protective Occupations With Social Security	Protective Occupations Without Social Security	Average
2012	\$ 39,379	\$ 55,902	\$ 72,824	\$ 56,448	\$ 70,402	\$ 47,535
2013	40,422	56,480	74,996	57,294	71,460	48,403
2014	41,750	57,569	74,312	57,999	74,051	49,634
2015	42,669	58,864	74,252	59,881	76,045	50,770
2016	43,268	59,133	74,838	60,733	76,942	51,273
2017	44,114	59,814	76,059	62,127	79,274	52,162
2018	45,135	60,842	78,791	63,947	80,819	53,273
2019	46,627	62,195	85,394	65,806	83,087	54,782
2020	48,904	63,679	89,931	70,885	86,824	57,026
2021	49,035	66,203	91,496	72,357	88,740	58,219



### Average Creditable Service



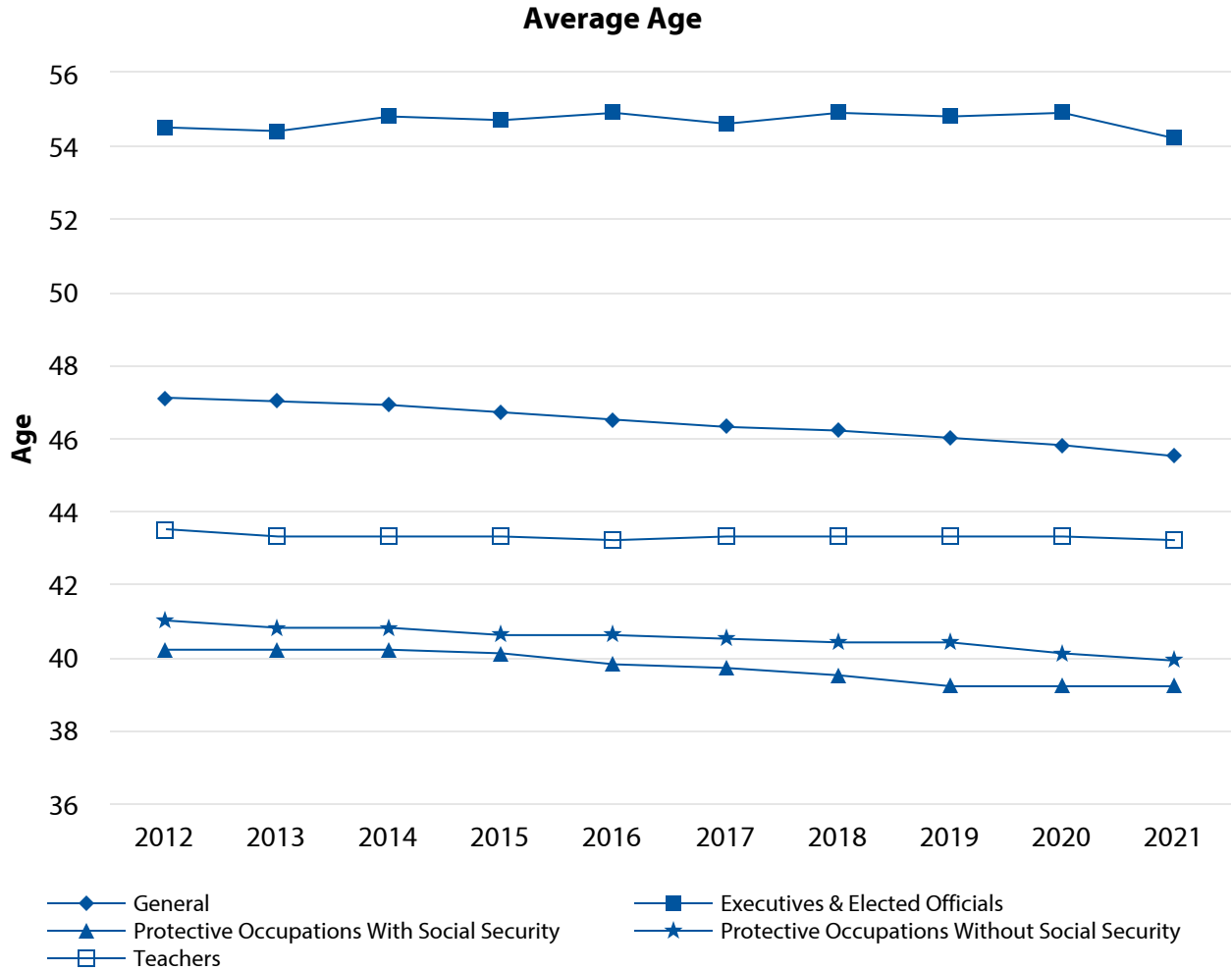
### Average Creditable Service

Year	General	Teachers	Executives & Elected Officials	Protective Occupations With Social Security	Protective Occupations Without Social Security	Average
2012	11.1	12.4	13.7	12.8	14.5	11.8
2013	11.0	12.3	13.4	12.9	14.3	11.7
2014	10.9	12.4	13.8	12.8	14.4	11.7
2015	10.7	12.5	13.6	12.8	14.2	11.6
2016	10.5	12.5	13.8	12.6	14.1	11.5
2017	10.3	12.6	13.4	12.4	14.1	11.4
2018	10.2	12.6	13.8	12.3	14.0	11.4
2019	10.0	12.6	13.7	12.0	13.9	11.2
2020	9.9	12.7	14.1	12.0	13.9	11.2
2021	9.7	12.7	13.9	12.0	13.5	11.1





STATISTICAL SECTION



### Average Age

Year	General	Teachers	Executives & Elected Officials	Protective Occupations With Social Security	Protective Occupations Without Social Security	Average
2012	47.1	43.5	54.5	40.2	41.0	45.2
2013	47.0	43.3	54.4	40.2	40.8	45.1
2014	46.9	43.3	54.8	40.2	40.8	45.0
2015	46.7	43.3	54.7	40.1	40.6	44.8
2016	46.5	43.2	54.9	39.8	40.6	44.7
2017	46.3	43.3	54.6	39.7	40.5	44.6
2018	46.2	43.3	54.9	39.5	40.4	44.5
2019	46.0	43.3	54.8	39.2	40.4	44.4
2020	45.8	43.3	54.9	39.2	40.1	44.3
2021	45.5	43.2	54.2	39.2	39.9	44.1

**WRS Active Participants by Employer Type****Local Employers**

<b>Year</b>	<b>School Districts</b>	<b>Counties</b>	<b>Cities</b>	<b>Technical Colleges</b>	<b>Villages</b>	<b>Towns</b>	<b>Special Districts</b>	<b>Totals</b>
2012	108,758	33,045	22,506	10,036	4,838	1,566	3,815	184,564
2013	108,504	33,044	22,251	9,873	4,746	1,550	3,729	183,697
2014	108,565	32,836	22,211	9,751	4,717	1,519	3,763	183,362
2015	108,492	32,746	22,177	9,487	4,716	1,501	3,922	183,041
2016	109,245	32,757	22,071	9,393	4,789	1,489	4,027	183,771
2017	109,969	32,760	22,236	9,340	4,908	1,367	2,748	183,328
2018	110,457	32,890	22,326	9,162	4,969	1,384	2,826	184,014
2019	111,700	33,007	22,448	9,055	5,046	1,400	2,835	185,491
2020	111,181	32,862	22,244	8,829	5,055	1,385	3,061	184,617
2021	112,170	32,405	22,302	8,817	5,142	1,291	3,044	185,171

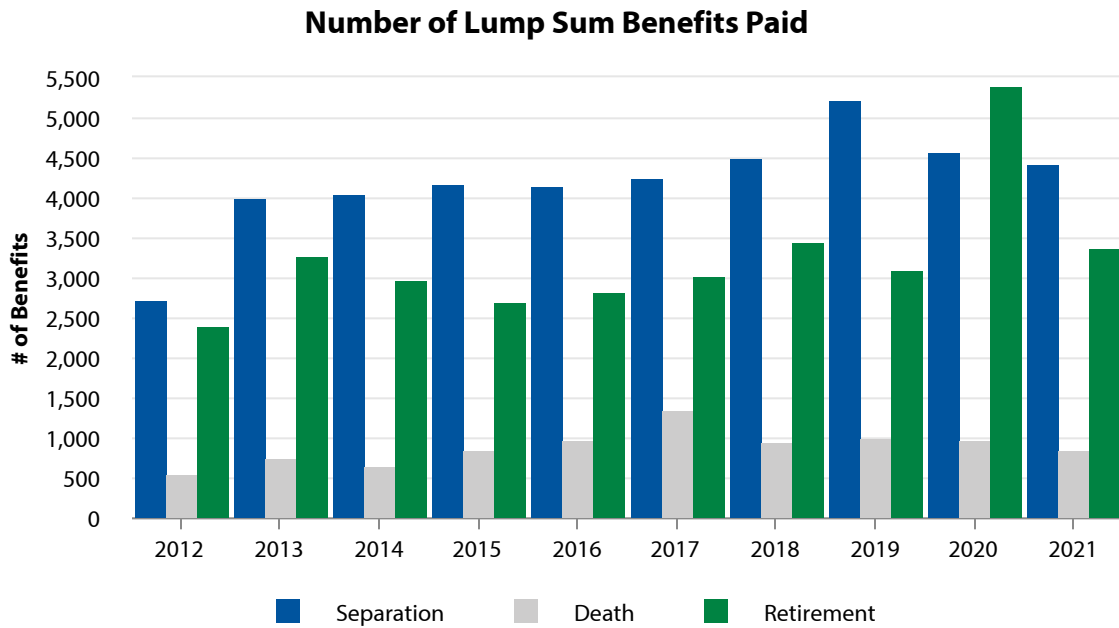
**State Employers**

<b>Year</b>	<b>State Agencies</b>	<b>University</b>	<b>Totals</b>	<b>Totals All Employers</b>
2012	40,745	31,524	72,269	256,833
2013	41,333	31,758	73,091	256,788
2014	42,063	31,830	73,893	257,255
2015	42,096	30,940	73,036	256,077
2016	42,741	30,773	73,514	257,285
2017	42,941	31,144	74,085	257,413
2018	42,553	31,344	73,897	257,911
2019	42,841	31,919	74,760	260,251
2020	43,093	31,539	74,632	259,249
2021	42,495	30,981	73,476	258,647



STATISTICAL SECTION

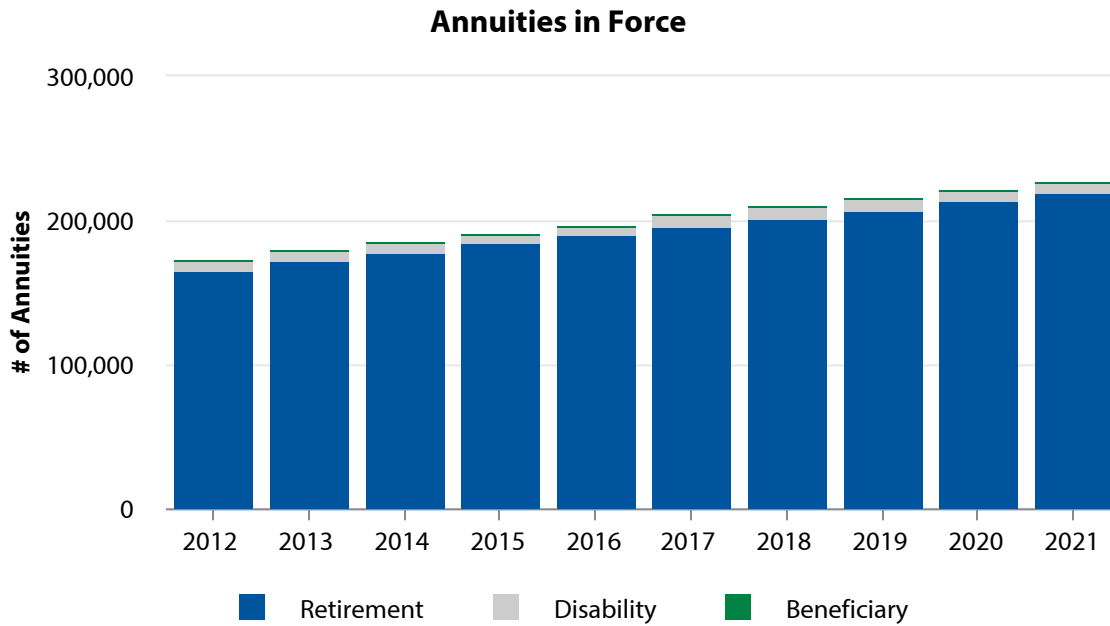
Number of Lump Sum Benefits Paid			
Year	Separation	Death	Retirement
2012	2,725	556	2,403
2013	3,998	740	3,281
2014	4,061	662	2,987
2015	4,167	855	2,710
2016	4,155	968	2,832
2017	4,250	1,362	3,027
2018	4,497	949	3,445
2019	5,227	991	3,102
2020	4,565	981	5,407
2021	4,416	849	3,365





Number of Annuities in Force				
Year	Retirement	Disability <sup>^</sup>	Beneficiary	Totals
2012	165,966	6,473	1,216	173,655
2013	172,430	6,393	1,233	180,056
2014	177,959	6,363	1,283	185,605
2015	184,180	6,305	1,310	191,795
2016	190,111	6,198	1,338	197,647
2017	195,762	8,532	1,349	205,643
2018	201,466	8,281	1,379	211,126
2019	207,362	8,163	1,419	216,944
2020	213,268	8,007	1,448	222,723
2021	218,846	7,861	1,454	228,161

<sup>^</sup>Beginning in 2017, Disability count includes annuities in force for the Long-Term Disability Insurance program.



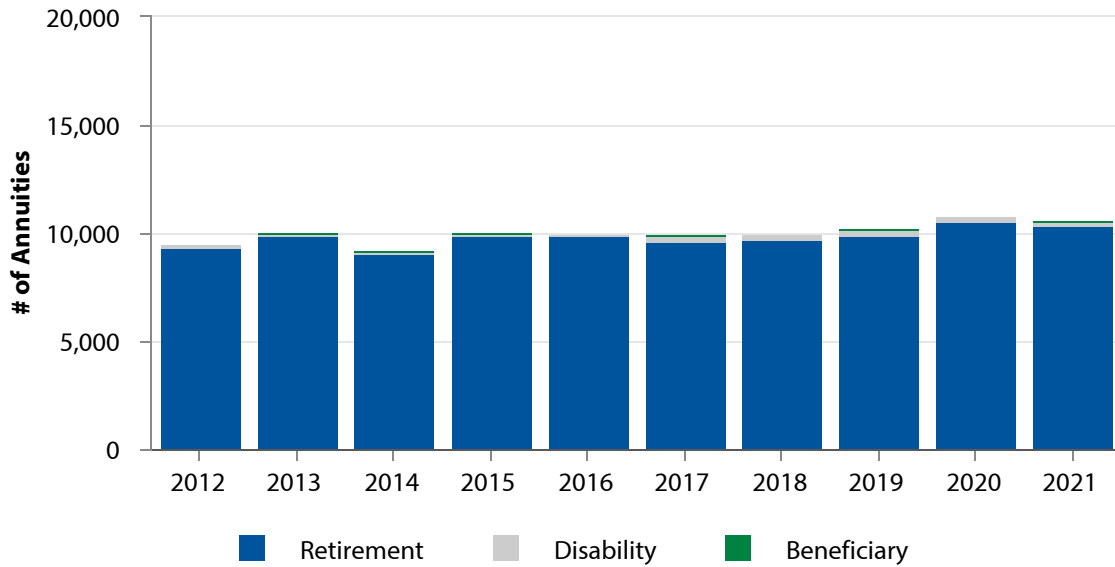


STATISTICAL SECTION

Number of New Annuities Approved				
Year	Retirement	Disability <sup>^</sup>	Beneficiary	Totals
2012	9,322	183	67	9,572
2013	9,889	146	70	10,105
2014	9,080	125	69	9,274
2015	9,881	124	57	10,062
2016	9,866	98	62	10,026
2017	9,591	327	42	9,960
2018	9,735	230	70	10,035
2019	9,936	264	72	10,272
2020	10,529	274	73	10,876
2021	10,346	231	55	10,632

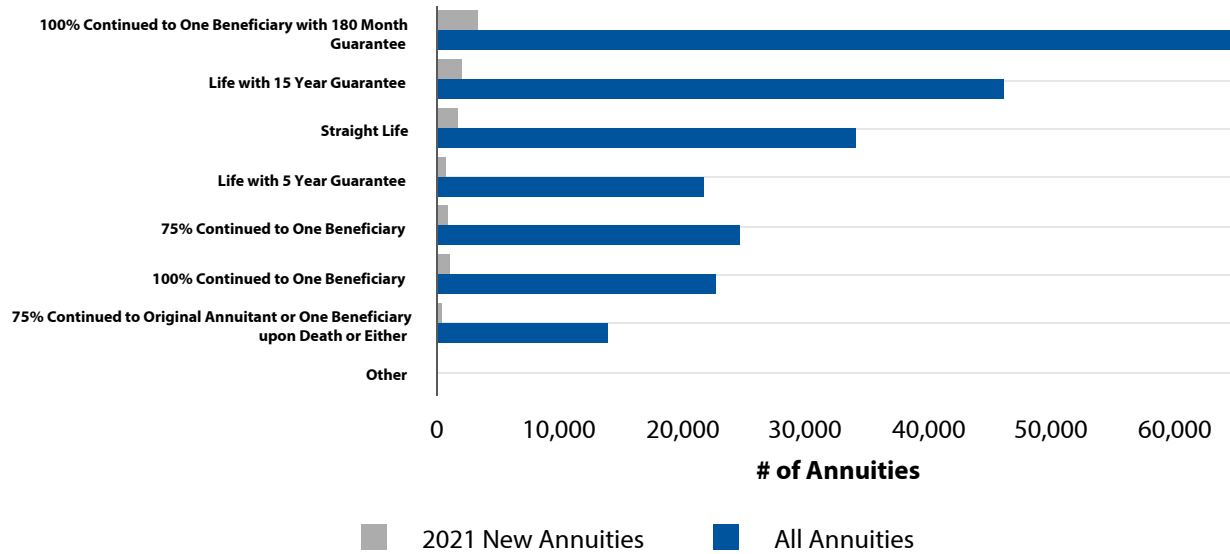
<sup>^</sup>Beginning in 2017, Disability count includes annuities in force for the Long-Term Disability Insurance program.

**New Annuities Approved**





### Annuities by Payment Option



### Average Monthly Annuities by Years of Service

	Years of Service									
	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	Over 45
Average Monthly Annuity	\$ 541	\$ 689	\$ 947	\$ 1,369	\$ 1,975	\$ 2,801	\$ 3,470	\$ 4,444	\$ 6,230	\$10,816
Average Final Average Salary	\$24,907	\$37,319	\$41,852	\$49,342	\$55,724	\$61,073	\$62,388	\$63,660	\$67,631	\$75,107
Number of Annuitants	7,805	20,532	24,491	27,642	29,742	33,540	42,130	15,654	2,808	317

### Annuities by Type of Benefit

Monthly Annuity Amount	Total Number of Annuities	Type of Annuity			Annuity Payment Option			
		Retirement	Disability <sup>^</sup>	Beneficiary	Life Annuity	Life with Guarantee	Joint Survivor	Other <sup>^</sup>
\$ 0 - 500	26,492	25,430	575	487	4,447	10,076	11,944	25
\$ 500 - 1,000	35,934	34,110	1,170	654	6,767	12,792	16,330	45
\$ 1,000 - 1,500	30,517	28,710	1,417	390	5,357	9,664	15,475	21
\$ 1,500 - 2,000	27,741	26,136	1,385	220	4,168	8,210	15,354	9
\$ 2,000 - 2,500	26,000	24,713	1,150	137	3,427	6,934	15,633	6
\$ 2,500 - 3,000	23,712	22,777	838	97	2,919	6,152	14,630	11
\$ 3,000 - 3,500	18,993	18,321	579	93	2,309	4,812	11,868	4
\$ 3,500 - 4,000	14,245	13,771	398	76	1,749	3,483	9,011	2
\$ 4,000 - 4,500	9,959	9,683	238	38	1,173	2,393	6,393	0
\$ 4,500 - 5,000	6,688	6,538	129	21	834	1,559	4,294	1
Over \$ 5,000	14,283	14,033	148	102	1,651	3,097	9,531	4
<b>Total</b>	<b>234,564</b>	<b>224,222</b>	<b>8,027</b>	<b>2,315</b>	<b>34,801</b>	<b>69,172</b>	<b>130,463</b>	<b>128</b>

<sup>^</sup>Includes annuities in force for the Long Term Disability Insurance program.



STATISTICAL SECTION

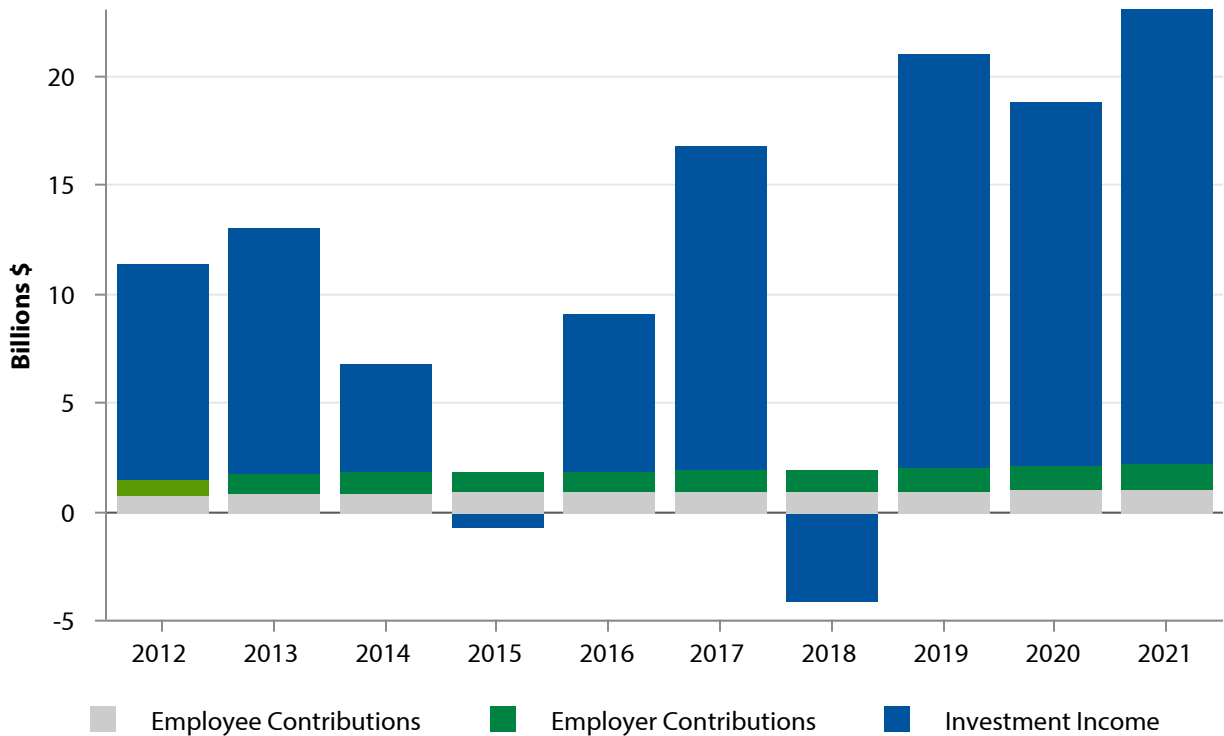
Revenues by Source <sup>1</sup> (In Thousands)							
Year	Member Contributions <sup>2</sup>		Employer Contributions <sup>3</sup>		Investment Income	Other Income	Total Revenues
	Dollars	% of Annual Payroll	Dollars	% of Annual Payroll			
2012	\$ 757,151	6.0 %	\$ 799,350	6.3 %	\$ 9,858,710	\$ 678	\$ 11,415,889
2013	871,260	6.8	914,698	7.1	11,343,231	532	13,129,721
2014	906,499	6.9	1,023,197	7.7	4,888,240	642	6,818,578
2015	937,225	6.9	977,734	7.2	(674,988)	248	1,240,219
2016	921,864	6.7	963,122	7.0	7,271,531	341	9,156,858
2017	965,453	6.9	1,017,559	7.3	14,868,726	5,558	16,857,296
2018	972,950	6.8	1,030,508	7.2	(4,050,510)	382	(2,046,670)
2019	987,662	6.7	1,046,942	7.1	19,048,821	195	21,083,620
2020	1,053,243	6.9	1,133,316	7.4	16,698,111	64	18,884,734
2021	1,086,782	6.9	1,164,586	7.4	21,056,192	0	23,307,560

<sup>1</sup> Employee required contributions made in accordance with statutory requirements. Employer required contributions were made in accordance with actuarially-determined contribution requirements.

<sup>2</sup> Member contributions include all employee required, employee additional and benefit adjustment contributions, including those paid by the employer on behalf of the employee.

<sup>3</sup> Employer contributions include all employer required contributions, including contributions for unfunded actuarial accrued liability.

Revenues by Source





### Expenses by Type (In Millions)

#### Age and Service Benefits

Year	Retirees	Beneficiaries	Disability Benefits <sup>^</sup>	Death Benefits	Separation Benefits	Administrative Expense	Other Expense	Total Expenses
2012	\$ 4,023.8	\$ 18.2	\$ 141.5	\$ 24.8	\$ 26.6	\$ 21.5	\$ 0.0	\$ 4,256.4
2013	4,035.5	18.2	132.9	38.0	33.3	22.9	0.0	4,280.8
2014	4,309.0	19.5	135.9	33.5	34.4	24.0	42.3	4,598.6
2015	4,587.3	20.7	140.5	31.8	37.6	22.7	43.3	4,883.9
2016	4,759.2	21.5	140.5	30.4	39.3	20.4	71.3	5,082.6
2017	4,972.5	21.8	185.7	31.3	38.4	26.1	0.0	5,275.8
2018	5,216.0	69.4	189.3	41.5	40.2	31.6	25.4	5,613.4
2019	5,365.7	60.4	187.5	32.7	44.1	34.2	3.9	5,728.5
2020	5,621.0	96.6	188.4	33.4	38.9	33.2	0.0	6,011.5
2021	6,047.4	75.6	194.1	35.7	42.0	31.6	0.2	6,426.6

<sup>^</sup>Beginning in 2017, balance includes expenses related to Long-Term Disability Insurance program.

### WRS Participating Employers Current Year and Nine Years Ago

Participating Government	2021			2012		
	Covered Employees	Rank	Percentage of Total System	Covered Employees	Rank	Percentage of Total System
State of Wisconsin	73,476	1	28.4 %	72,269	1	28.1 %
Milwaukee Teachers Retirement System	5,721	2	2.2	5,865	2	2.3
Madison Metro School District	4,237	3	1.6	4,643	3	1.8
Green Bay Area School District	3,164	4	1.2	2,831	5	1.1
City of Madison	2,899	5	1.1	2,881	4	1.1
Kenosha Unified School District	2,733	6	1.1	2,726	6	1.1
Racine Unified School District	2,586	7	1.0	2,709	7	1.1
Dane County	2,504	8	1.0	2,317	8	0.9
Appleton Area School District	1,901	9	0.7	1,761	10	0.7
Brown County	1,505	10	0.6	1,470	14	0.6
All Other	157,921		61.1	157,361		61.2
Total (1,555 employers)	258,647		100.0 %	256,833		100.0 %



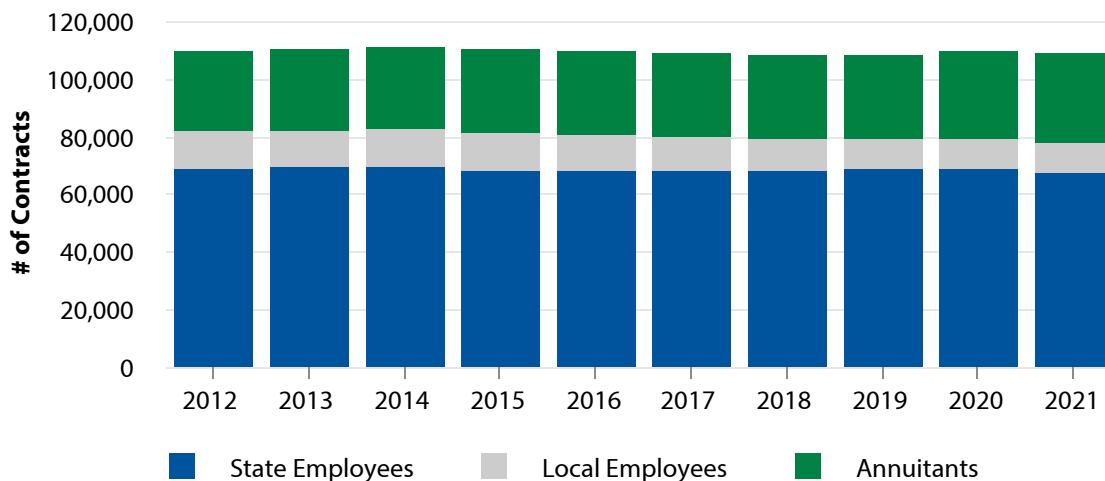


STATISTICAL SECTION

## Group Health Insurance Program Statistics

Group Health Insurance Contracts							
Year	Active Employees	Continuants	Annuitants			Total Retired	Totals
			Annuity Deduction	Sick Leave Conversion	Direct Pay		
<b>State</b>							
2012	69,650	430	9,146	14,398	1,827	25,371	95,451
2013	69,772	367	9,187	14,701	1,777	25,665	95,804
2014	70,219	178	8,913	15,074	1,823	25,810	96,207
2015	68,964	160	8,903	15,800	1,664	26,367	95,491
2016	68,463	180	8,550	16,453	1,568	26,571	95,214
2017	68,864	170	8,359	16,824	1,509	26,692	95,726
2018	68,468	192	8,260	17,238	1,376	26,874	95,534
2019	69,273	191	8,486	17,566	1,298	27,350	96,814
2020	69,251	149	8,713	18,171	1,223	28,107	97,507
2021	67,900	161	8,820	18,728	1,208	28,756	96,817
<b>Local</b>							
2012	12,679	80	2,366	N/A	229	2,595	15,354
2013	12,749	80	2,295	N/A	253	2,548	15,377
2014	12,890	43	2,283	N/A	252	2,535	15,468
2015	12,957	47	2,164	N/A	238	2,402	15,406
2016	12,812	37	2,003	N/A	205	2,208	15,057
2017	11,640	46	1,800	N/A	187	1,987	13,673
2018	11,351	50	1,735	N/A	185	1,920	13,321
2019	10,281	49	1,703	N/A	159	1,862	12,192
2020	10,643	46	1,872	N/A	178	2,050	12,739
2021	10,690	34	1,909	N/A	186	2,095	12,819

### Group Health Insurance Contracts\*



\*For display purposes, state and local continuants were statistically insignificant and therefore not included in this chart.



**Group Health Insurance Premiums by Source  
(In Thousands)**

Year	Employer & Employee *	Annuitant	Sick Leave Conversion	Medicare	Stabilization	Life Insurance Conversion	Totals
<b>State</b>							
2012	\$ 1,034,066	\$ 61,495	\$ 130,154	\$ 17,865	\$ 0	\$ 412	\$ 1,243,993
2013	1,082,211	64,201	133,809	19,438	0	485	1,300,144
2014	1,128,667	67,624	141,449	18,633	0	640	1,357,013
2015	1,173,419	71,537	155,688	23,053	0	681	1,424,378
2016	1,113,654	73,035	166,994	24,767	0	845	1,379,295
2017	1,130,698	75,086	171,961	20,339	0	797	1,398,881
2018	1,119,360	70,336	166,854	22,545	13,754	805	1,393,655
2019	1,119,001	68,424	161,386	28,473	0	673	1,377,957
2020	1,187,147	63,628	155,704	31,275	(29)	525	1,438,250
2021	1,203,884	65,990	163,980	32,375	0	624	1,466,853
<b>Local</b>							
2012	\$ 198,476	\$ 15,011	N/A	\$ 1,846	\$ 0	\$ 3	\$ 215,336
2013	206,812	15,843	N/A	2,047	0	3	224,705
2014	219,413	15,938	N/A	1,808	0	6	237,165
2015	222,514	15,783	N/A	2,051	0	6	240,354
2016	222,052	15,194	N/A	1,982	0	9	239,237
2017	195,553	14,459	N/A	1,835	0	1	211,848
2018	195,610	14,432	N/A	1,661	0	0	211,703
2019	173,085	12,702	N/A	1,759	0	0	187,546
2020	189,526	14,631	N/A	1,719	0	0	205,876
2021	202,979	16,725	N/A	1,945	0	0	221,649

\* Breakout between employer and employee paid portions of active participant health insurance premiums is not available.



## STATISTICAL SECTION

## Group Life Insurance Program Statistics

<b>Group Life Insurance Premiums Collected</b>											
<b>(In Thousands)</b>											
<b>Year</b>	<b>Employee</b>					<b>Employer</b>			<b>Totals</b>		
	<b>Basic</b>	<b>Supplemental</b>	<b>Additional</b>	<b>Spouse &amp; Dependent</b>	<b>Total</b>	<b>Basic</b>	<b>Suppl</b>	<b>Total</b>			
<b>State</b>											
2012	\$ 6,285	\$ 4,557	\$ 6,758	\$ 1,233	\$ 18,833	\$ 2,873	\$ 1,204	\$ 4,078	\$ 22,911		
2013	6,235	4,513	7,008	1,222	18,978	2,926	1,222	4,148	23,125		
2014	6,323	4,573	7,351	1,217	19,465	3,028	1,262	4,290	23,755		
2015	6,412	4,625	7,639	1,204	19,880	3,071	1,275	4,346	24,226		
2016	6,519	4,688	7,912	1,193	20,312	3,074	1,271	4,345	24,657		
2017	6,573	4,700	8,156	1,202	20,631	3,106	1,274	4,380	25,011		
2018	6,768	4,847	8,644	1,226	21,484	3,233	1,329	4,562	26,046		
2019	6,971	4,989	9,019	1,223	22,202	3,335	1,371	4,706	26,908		
2020	7,510	5,358	10,077	1,145	24,090	3,624	1,483	5,107	29,197		
2021	8,110	5,780	10,993	1,089	25,971	3,959	1,618	5,577	31,549		
<b>Local</b>											
2012	\$ 10,612	\$ 2,692	\$ 7,666	\$ 1,248	\$ 22,218	\$ 3,319	\$ 51	\$ 3,370	\$ 25,588		
2013	10,497	2,736	7,575	1,216	22,024	3,264	17	3,281	25,305		
2014	10,561	2,789	7,737	1,209	22,296	3,317	16	3,334	25,629		
2015	10,640	2,897	7,992	1,196	22,725	3,495	18	3,513	26,238		
2016	10,976	3,072	8,312	1,191	23,551	3,576	19	3,595	27,146		
2017	10,973	3,127	8,517	1,185	23,802	3,682	21	3,703	27,505		
2018	11,130	3,202	8,718	1,172	24,222	3,714	19	3,733	27,955		
2019	11,373	3,296	8,948	1,176	24,793	3,766	21	3,786	28,579		
2020	11,537	3,406	9,196	1,165	25,304	3,836	21	3,857	29,161		
2021	11,772	3,489	9,397	1,134	25,792	3,925	22	3,946	29,738		



**Group Life Insurance In Force**  
(In Thousands)

**Pre-Age 65 Insurance**

Year	Pre-Age 65 Insurance			Post-Age 64 Insurance	Spouse & Dependent	Totals
	Basic	Supplemental	Additional			
<b>State</b>						
2012	\$ 3,231,871	\$ 2,321,576	\$ 3,258,782	\$ 493,214	\$ 561,610	\$ 9,867,053
2013	3,327,163	2,387,599	3,424,431	536,246	562,840	10,238,279
2014	3,392,305	2,431,610	3,563,096	581,765	570,825	10,539,601
2015	3,449,798	2,462,720	3,673,851	628,843	566,585	10,781,797
2016	3,592,964	2,537,127	3,870,341	685,322	568,225	11,253,979
2017	3,690,966	2,594,857	4,008,538	735,296	559,785	11,589,442
2018	3,704,144	2,587,730	4,043,321	779,130	562,535	11,676,860
2019	3,805,980	2,650,322	4,195,591	826,410	570,400	12,048,703
2020	3,954,029	2,743,689	4,415,771	869,042	564,610	12,547,141
2021	4,035,540	2,790,014	4,543,087	907,193	552,305	12,828,139
<b>Local</b>						
2012	\$ 4,182,413	\$ 1,346,900	\$ 3,801,144	\$ 339,426	\$ 819,980	\$ 10,489,863
2013	4,340,129	1,412,278	4,146,681	369,512	810,265	11,078,865
2014	4,440,538	1,458,009	4,263,886	401,639	805,950	11,370,022
2015	4,537,463	1,534,501	4,408,995	433,245	807,400	11,721,604
2016	4,706,013	1,620,126	4,609,255	472,046	803,760	12,211,200
2017	4,747,370	1,646,364	4,718,591	509,136	795,935	12,417,396
2018	4,822,753	1,686,176	4,832,893	537,175	796,730	12,675,727
2019	4,938,311	1,756,604	5,006,277	569,561	790,590	13,061,343
2020	5,019,565	1,804,113	4,837,614	600,924	775,685	13,037,901
2021	5,146,614	1,853,367	4,947,767	632,120	758,820	13,338,688



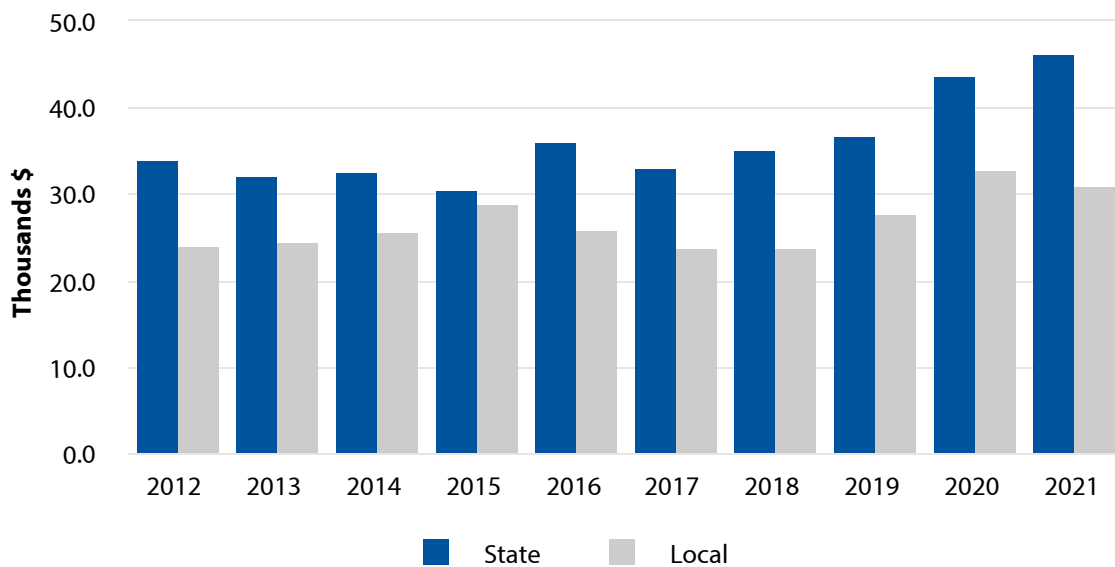
## STATISTICAL SECTION

### Group Life Insurance Paid Claims (In Thousands)

Year	Pre-Age 65 Insurance			Post-Age 64 Insurance	Spouse & Dependent	Living Benefits <sup>1</sup>	Totals
	Life	AD&D	Disability				
<b>State</b>							
2012	\$ 17,137	\$ 1,260	\$ 1,343	\$ 12,040	\$ 1,027	\$ 1,185	\$ 33,992
2013	17,179	284	323	12,894	1,309	252	32,241
2014	13,243	1,314	1,512	14,772	1,091	792	32,724
2015	14,302	45	6	14,180	887	1,111	30,531
2016	19,808	935	(475)	13,897	966	894	36,025
2017	15,337	736	(955)	16,168	842	1,089	33,217
2018	16,223	1,136	(1,341)	17,130	857	1,273	35,278
2019	16,588	788	(1,022)	18,644	992	874	36,863
2020	20,932	78	(1,761)	22,159	1,021	1,372	43,801
2021	21,446	1,359	(563)	22,895	1,062	124	46,323
<b>Local</b>							
2012	\$ 13,704	\$ 788	\$ 1,175	\$ 6,588	\$ 1,180	\$ 655	\$ 24,090
2013	14,456	1,305	6	7,415	1,331	37	24,550
2014	13,195	1,468	1,484	7,337	1,246	928	25,658
2015	16,181	1,225	611	8,705	1,051	1,165	28,938
2016	13,216	743	1,245	8,954	1,202	504	25,864
2017	12,846	486	(245)	8,993	1,031	764	23,875
2018	12,325	993	(1,136)	9,705	1,000	1,035	23,923
2019	15,636	661	(1,222)	11,000	887	726	27,688
2020	17,510	1,551	(1,531)	13,205	1,227	815	32,777
2021	15,597	1,654	(251)	12,650	1,097	352	31,099

<sup>1</sup> Living Benefits may originate as Pre-Retirement, Post-Retirement or Spouse & Dependent Benefits

### Group Life Insurance Paid Claims

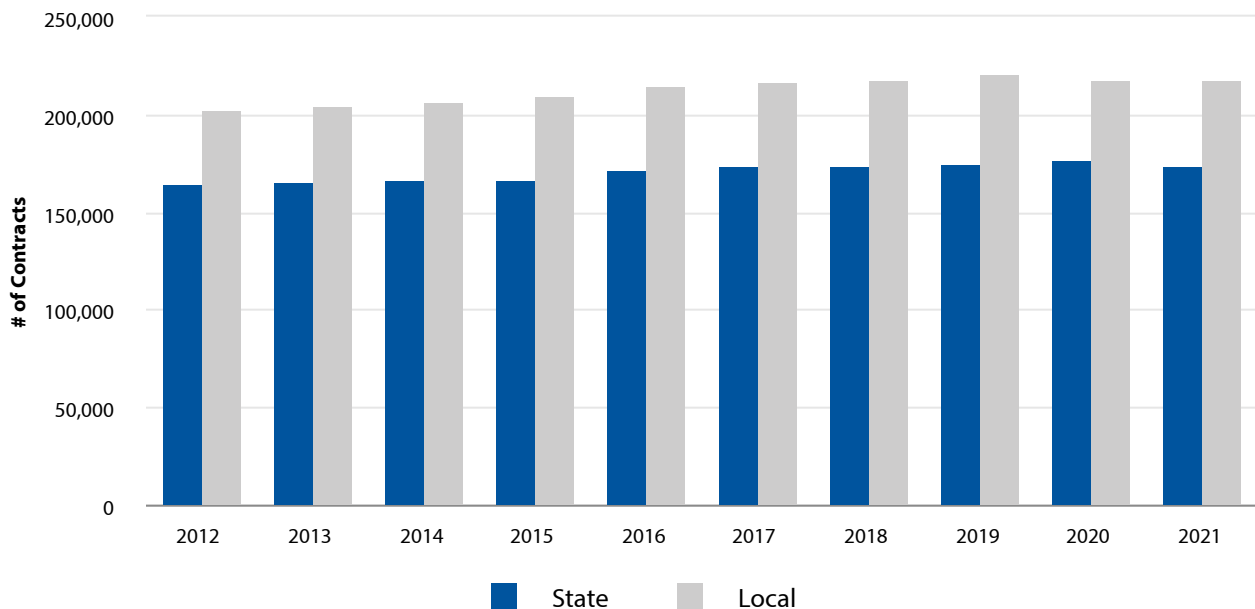




**Group Life Insurance Contracts and Participants**

Year	Pre-Age 65 Insurance			Post-Age 64 Insurance	Spouse & Dependent	Total Contracts	Total Participants
	Basic	Supplemental	Additional				
<b>State</b>							
2012	56,773	40,243	26,288	18,921	23,153	165,378	75,694
2013	56,516	39,940	26,297	20,025	23,203	165,981	76,541
2014	56,652	39,958	26,237	21,168	23,478	167,493	77,820
2015	56,194	39,441	26,120	22,396	23,309	167,460	78,590
2016	58,073	40,135	27,009	23,767	23,393	172,377	81,840
2017	58,470	40,611	27,337	24,973	23,020	174,411	83,443
2018	57,990	39,705	26,928	26,050	23,063	173,736	84,040
2019	58,274	39,723	27,151	27,092	23,329	175,569	85,366
2020	58,288	39,629	27,348	28,137	23,609	177,011	86,425
2021	56,715	38,383	26,687	28,967	23,084	173,836	85,682
<b>Local</b>							
2012	83,863	26,053	33,833	25,573	33,704	203,026	109,436
2013	83,519	26,111	35,166	27,049	33,297	205,142	110,568
2014	83,887	26,288	35,241	28,634	33,117	207,167	112,521
2015	84,087	27,065	35,355	30,209	33,230	209,946	114,296
2016	86,252	28,163	36,194	31,927	32,810	215,346	118,179
2017	85,914	28,258	36,167	33,644	32,786	216,769	119,558
2018	85,838	28,291	36,096	35,525	32,828	218,578	121,363
2019	86,223	28,754	36,370	37,034	32,571	220,952	123,257
2020	85,298	28,837	33,810	38,378	31,946	218,269	123,676
2021	85,027	28,731	33,344	39,633	31,303	218,038	124,660

**Life Insurance Contracts**





## STATISTICAL SECTION

## Duty Disability Insurance Statistics

(In Millions)

Year	Employers	Active Participants	Disabilitants	Benefit <sup>1</sup> Payments	Contributions	Average Contribution Rate
2012	501	22,144	964	\$ 30	\$ 53	4.02 %
2013	512	21,976	973	31	54	4.06
2014	506	22,346	990	32	9	0.70
2015	497	22,035	1,002	33	9	0.64
2016	496	22,223	1,007	34	4	0.28
2017	495	22,217	1,014	43	9	0.61
2018	493	22,227	1,025	25	10	0.66
2019	502	22,433	1,026	48	8	0.51
2020	499	22,507	1,026	38	4	0.24
2021	501	21,980	1,021	92	4	0.24

<sup>1</sup> Benefit Payments increased in 2021 primarily due to \$54.0 million change in actuarially determined liabilities .

## Duty Disability Insurance Funded Status

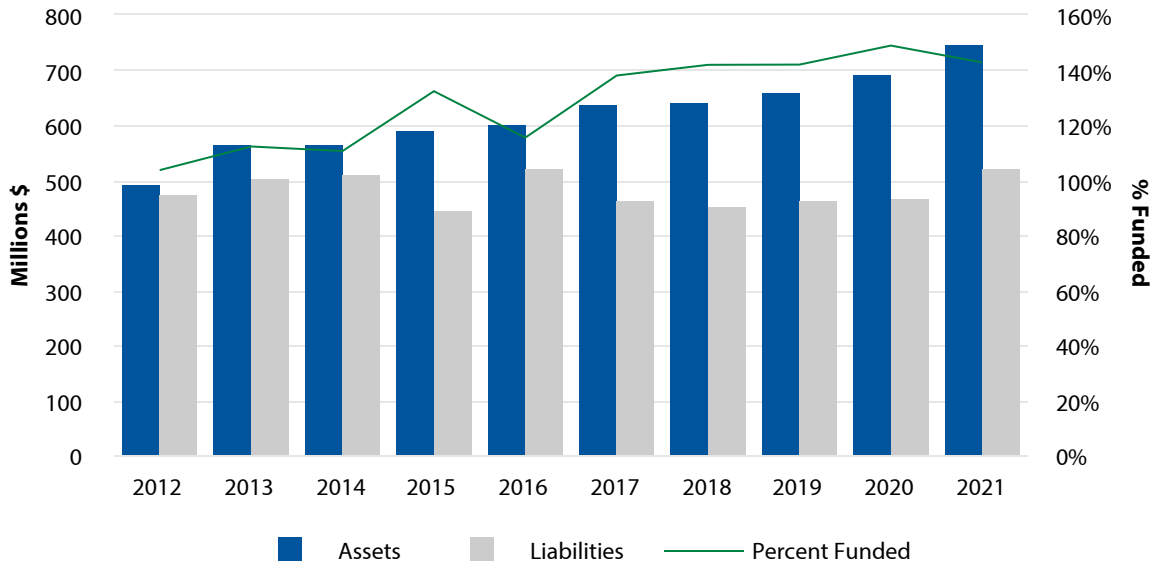
(In Millions)

Year	Assets	Liabilities*	Unfunded (Overfunded) Liability	Percent Funded	Covered Payroll	UAAL as % of Covered Payroll
2012	\$ 494.1	\$ 477.0	\$ (17.1)	103.6 %	\$ 1,318.3	(1.3)%
2013	568.9	507.1	(61.8)	112.2	1,328.2	(4.7)
2014	567.2	513.2	(54.0)	110.5	1,370.7	(3.9)
2015	592.8	448.1	(144.7)	132.3	1,401.3	(10.3)
2016	603.8	523.2	(80.6)	115.4	1,430.8	(5.6)
2017	641.4	464.8	(176.6)	138.0	1,467.6	(12.0)
2018	645.0	454.6	(190.4)	141.9	1,508.1	(12.6)
2019	662.0	466.3	(195.7)	142.0	1,565.6	(12.5)
2020	696.3	467.7	(228.6)	148.9	1,685.8	(13.6)
2021	747.7	523.8	(223.9)	142.7	1,698.5	(13.2)

UAAL = Unfunded Actuarial Accrued Liability

\*Beginning in 2017, Duty Disability Insurance is reported as an enterprise fund following GASB Statement No. 10. This resulted in a change in the way the actuarial liability is calculated compared to prior years.

### Duty Disability Insurance Funding



### Duty Disability Insurance Participating Employers Current Year and Nine Years Ago

Participating Government	2021			2012		
	Covered Employees	Rank	Percentage of Total System	Covered Employees	Rank	Percentage of Total System
State of Wisconsin	7,742	1	35.2 %	8,327	1	37.6 %
City of Madison	854	2	3.9	805	2	3.6
Dane County	431	3	2.0	437	3	2.0
City of Green Bay	373	4	1.7	373	4	1.7
City of Kenosha	357	5	1.6	338	5	1.5
City of Racine	292	6	1.3	336	6	1.5
City of West Allis	218	7	1.0	241	8	1.1
City of Waukesha	221	8	1.0	212	9	1.0
City of Oshkosh	212	9	1.0	204	11	0.9
City of Appleton	199	10	0.9	199	10	0.9
All Other	11,081		50.4	10,672		48.2
<b>Total (501 employers)</b>	<b>21,980</b>		<b>100.0 %</b>	<b>22,144</b>		<b>100.0 %</b>





## STATISTICAL SECTION

<b>Duty Disability Insurance Annuities by Type of Benefit</b>			
<b>Monthly Benefit Amount</b>	<b>Number of Annuitants</b>	<b>Type of Annuity</b>	
		<b>Disability</b>	<b>Beneficiary</b>
\$ 1 - 500	101	98	3
\$ 500 - 1,000	75	60	15
\$ 1,000 - 1,500	79	73	6
\$ 1,500 - 2,000	88	85	3
\$ 2,000 - 2,500	91	84	7
\$ 2,500 - 3,000	78	73	5
\$ 3,000 - 3,500	97	94	3
\$ 3,500 - 4,000	108	101	7
\$ 4,000 - 4,500	95	93	2
\$ 4,500 - 5,000	75	73	2
Over \$ 5,000	134	129	5
<b>Total</b>	<b>1,021</b>	<b>963</b>	<b>58</b>

\* This table excludes annuitants whose benefit is totally offset by other income sources.

<b>Duty Disability Insurance Average Monthly Benefit by Years of Service</b>							
	<b>Years of Service</b>						
	<b>0 - 5</b>	<b>5 - 10</b>	<b>10 - 15</b>	<b>15 - 20</b>	<b>20 - 25</b>	<b>25 - 30</b>	<b>30 - 35</b>
Average Monthly Annuity	\$ 3,495	\$ 3,860	\$ 3,545	\$ 2,982	\$ 2,072	\$ 1,296	\$ 995
Average Final Average Salary	\$ 2,771	\$ 3,560	\$ 3,832	\$ 4,155	\$ 4,343	\$ 4,681	\$ 5,407
Number of Annuitants	58	175	213	261	207	97	9

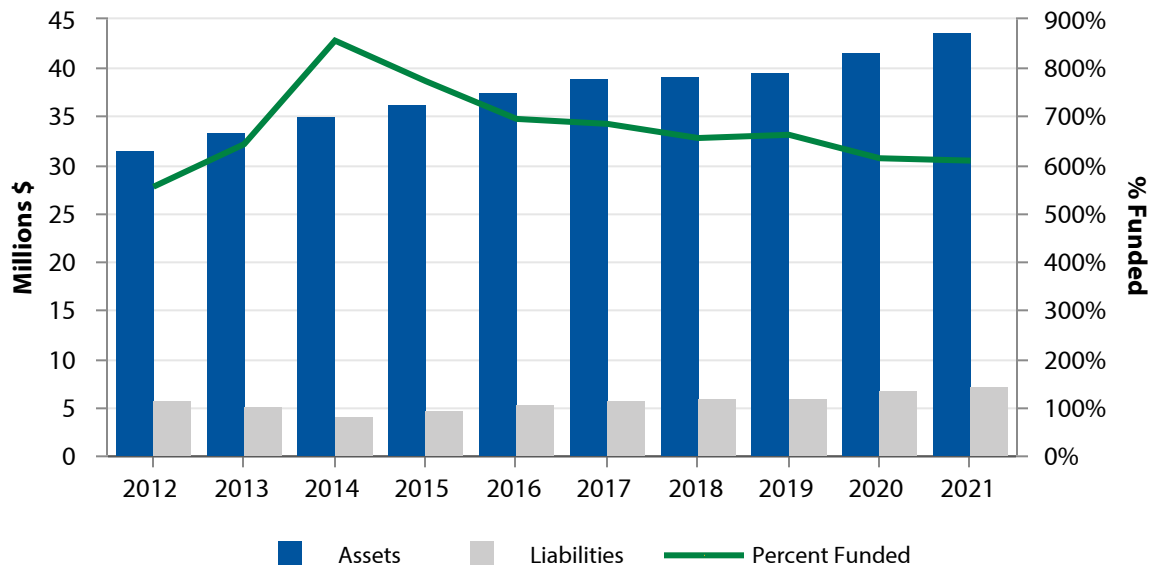
\* This table excludes annuitants for whom years of service data is not available

### Local Income Continuation Insurance Program Statistics

(In Millions)

Year	Members	New Claims	Assets	Liabilities	Unfunded (Overfunded) Liability	Funded Ratio
2012	7,593	90	\$ 31.6	\$ 5.7	\$ (25.9)	554.4 %
2013	8,344	130	33.4	5.2	(28.2)	642.3
2014	8,463	118	35.1	4.1	(31.0)	856.1
2015	8,597	137	36.3	4.7	(31.6)	772.3
2016	8,710	149	37.5	5.4	(32.1)	694.4
2017	8,431	129	39.0	5.7	(33.3)	684.2
2018	9,434	195	39.3	6.0	(33.3)	655.0
2019	9,942	203	39.7	6.0	(33.7)	661.7
2020	11,176	210	41.7	6.8	(34.9)	613.2
2021	11,573	214	43.8	7.2	(36.6)	608.3

### Local Income Continuation Insurance Funding





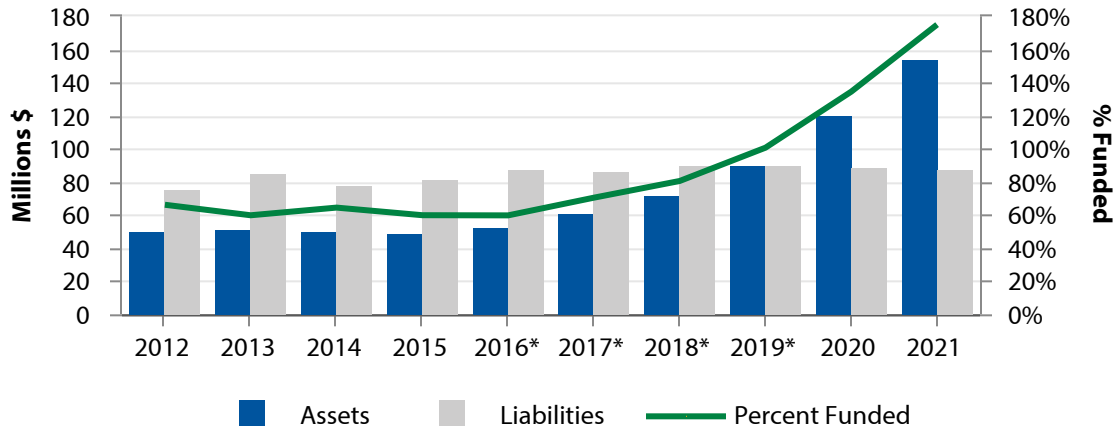
STATISTICAL SECTION

**State Income Continuation Insurance Program Statistics**  
(In Millions)

Year	Members	New Claims	Assets	Liabilities	Unfunded (Overfunded) Liability	Funded Ratio
2012	53,488	1,663	\$ 50.7	\$ 76.6	\$ 25.9	66.2 %
2013	51,692	1,648	51.4	85.9	34.5	59.8
2014	51,379	1,645	50.8	78.8	28.0	64.5
2015	49,769	1,581	49.4	82.5	33.1	59.9
2016*	47,005	1,434	52.6	88.0	35.4	59.8
2017*	48,780	1,413	61.3	87.0	25.7	70.5
2018*	47,110	1,386	72.9	90.5	17.6	80.6
2019*	45,805	1,253	90.7	90.1	(0.6)	100.7
2020	44,418	1,262	120.4	89.5	(30.9)	134.5
2021	42,450	1,238	154.7	88.4	(66.3)	175.0

\*Restated Members count.

**State Income Continuation Insurance Funding**





## Employee Reimbursement Accounts (ERA) and Commuter Benefits Program Statistics

### Salary Reductions and Claims

Year	Medical					Dependent Care				
	Accounts	Salary Reductions	Claims	Forfeitures	Carryover	Accounts	Salary Reductions	Claims	Forfeitures	Carryover
2012	12,373	\$ 15,948,452	\$15,828,849	\$ 119,603	\$ 0	\$ 2,245	\$ 8,911,658	\$8,847,562	\$ 64,096	\$ 0
2013	12,956	15,149,278	14,922,337	226,941	0	2,469	9,750,422	9,675,871	74,551	0
2014	13,370	16,163,180	15,911,661	251,519	0	2,672	10,496,707	10,398,333	98,374	0
2015	14,496	17,522,880	17,363,053	159,827	922,961	2,964	11,258,100	11,063,383	194,717	0
2016	17,562	21,212,300	20,278,280	235,481	1,621,500	3,284	12,668,920	12,440,766	228,154	0
2017	19,102	22,051,502	21,521,725	281,232	1,870,045	3,343	12,996,661	12,761,819	234,842	0
2018	20,097	23,022,646	22,131,963	511,974	2,248,754	3,648	14,255,991	13,915,793	340,198	0
2019	21,479	23,395,884	22,699,187	600,183	2,345,268	3,890	15,370,021	15,016,412	353,609	0
2020	21,077	23,310,135	22,266,815	72,185	3,316,403	3,948	13,725,071	13,164,471	101,619	458,981
2021	21,139	21,687,761	21,864,226	642,213	2,497,725	3,461	16,847,979	16,627,950	679,010	0

### Salary Reductions and Claims

#### Commuter Benefits - Parking & Transit

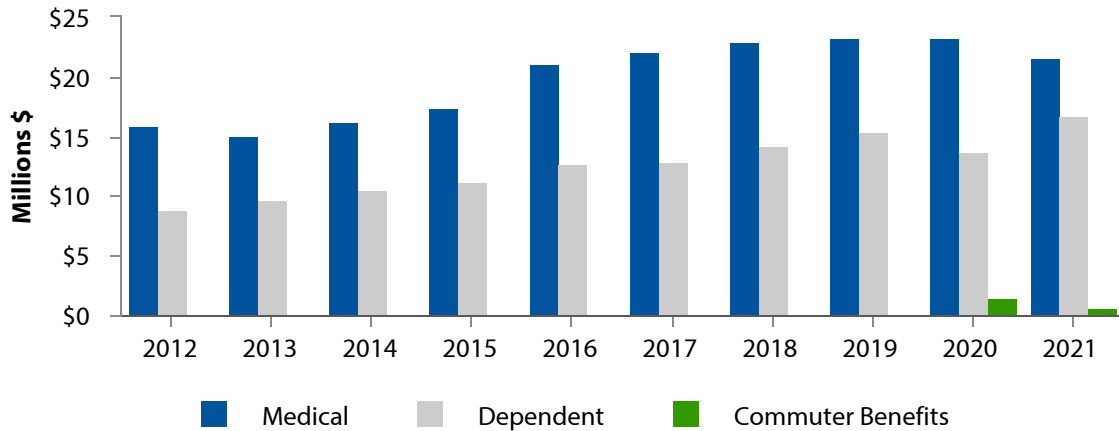
Year	Accounts	Salary Reductions	Claims	Forfeitures	Carryover
2012	—	—	—	—	—
2013	—	—	—	—	—
2014	—	—	—	—	—
2015	—	—	—	—	—
2016	—	—	—	—	—
2017	—	—	—	—	—
2018	—	—	—	—	—
2019	—	—	—	—	—
2020	2,809	1,465,736	951,585	37,881	780,047
2021	2,739	595,087	582,701	59,165	733,268

\*Commuter Benefits program will be built prospectively.



STATISTICAL SECTION

**ERA and Commuter Benefits Salary Reductions**



\*Commuter Benefits program will be built prospectively.

**ERA and Commuter Benefits Administrative Funding**

Year	Receipts				Expenses			Surplus / (Deficit)
	Fees	Interest	Forfeitures	Totals	Administrator	State	Total	
2012	\$ 418,251	\$ 7,260	\$ 183,699	\$ 609,210	\$ 753,307	\$ 226,690	\$ 979,997	\$ (370,787)
2013	500,554	3,910	301,492	805,956	786,888	230,327	1,017,215	(211,259)
2014	671,414	3,685	349,893	1,024,992	847,955	388,875	1,236,830	(211,838)
2015	667,768	5,371	354,544	1,027,683	516,225	246,118	762,343	265,340
2016	536,844	8,647	463,635	1,009,126	592,241	398,038	990,279	18,847
2017	566,568	67,035	516,074	1,149,677	644,467	277,945	922,412	227,265
2018	563,894	115,912	852,173	1,531,979	783,699	293,648	1,077,347	454,632
2019	269,693	168,102	953,792	1,391,587	801,449	354,966	1,156,415	235,172
2020	465,360	34,903	211,685	711,948	788,943	552,431	1,341,374	(629,426)
2021	0	3,987	1,380,388	1,384,375	478,804	533,850	1,012,654	371,721

\*Prior to 2020, amounts presented relate to ERA program. Beginning in 2020 amounts include ERA and Commuter Benefits programs.



## Administrative Expense Statistics

### Administrative Expenses (In Thousands)

Year	ETF Expenses	Investment Expenses	Third Party Administrator Contracts								Deferred Comp	Total Administration
			ERA	Commuter Benefits	Health	Dental*	Wellness^	Pharmacy	ICI	WRS		
2012	\$ 31,500	\$ 290,608	\$ 753	\$ 73	\$ 2,235	\$ 0	\$ 0	\$ 12,413	\$1,455	\$ 1,777	\$ 2,160	\$ 343,630
2013	33,514	362,011	787	87	2,286	0	0	8,756	1,419	1,881	2,484	413,526
2014	36,355	356,811	848	94	2,874	0	0	10,700	5,026	13,189	2,890	426,916
2015	32,795	350,036	516	60	2,938	0	0	10,779	1,508	3,104	3,126	413,579
2016	36,647	391,427	592	55	3,149	1,190	0	10,683	2,380	5,571	1,999	452,812
2017	43,052	487,384	645	22	3,342	1,212	7,738	10,593	1,231	2,170	2,966	560,355
2018	45,949	691,202	784	35	1,318	1,250	8,013	9,331	2,146	881	3,936	764,845
2019	50,486	839,819	801	94	733	1,266	8,114	9,363	2,259	399	5,880	919,214
2020	51,973	741,562	693	96	720	1,234	7,254	9,569	2,306	407	6,708	822,522
2021	52,413	435,466	421	58	1,033	1,291	6,994	10,072	2,744	0	7,928	518,420

\* Prior to 2016, expense included in Health cost.

^ Prior to 2017, expense included in Health cost.

### Administrative Expenses per Participant

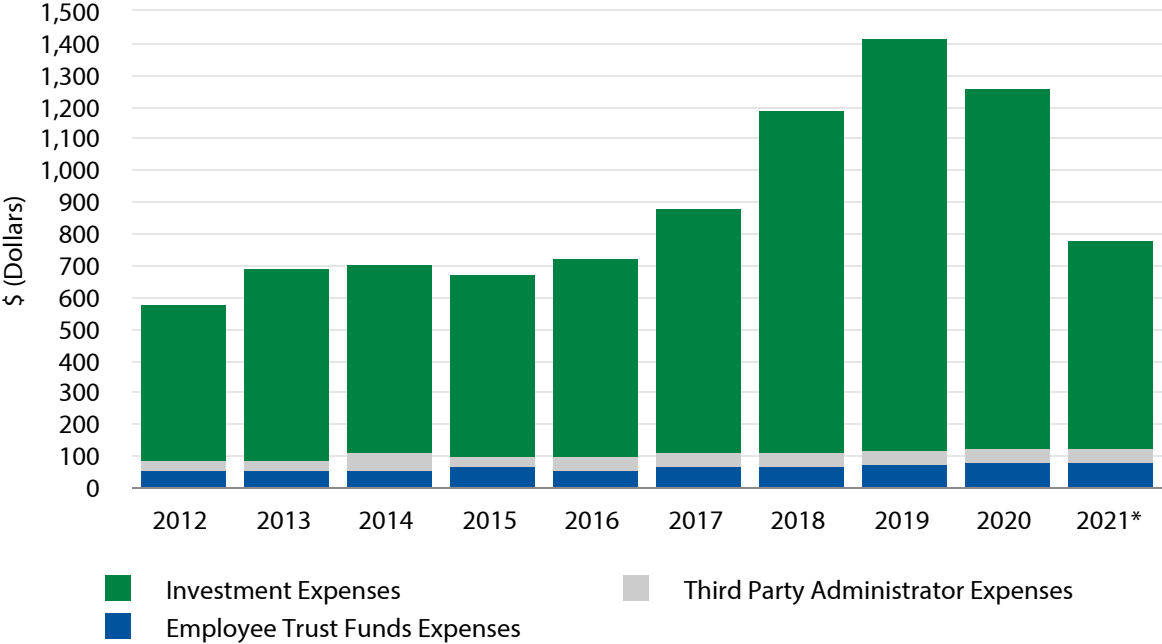
Year	Participants	Employee Trust Funds		Investment Expenses		Third Party Administrators		Total Administration	
		Amount (\$000's)	Per Participant	Amount (\$000's)	Per Participant	Amount (\$000's)	Per Participant	Amount (\$000's)	Per Participant
2012	590,461	\$ 32,154	\$ 54.5	\$ 290,608	\$ 492.2	\$ 20,867	\$ 35.3	\$ 343,629	\$ 582.0
2013	594,605	33,817	56.9	362,011	608.8	17,699	29.8	413,527	695.5
2014	603,983	34,484	57.1	356,811	590.8	35,621	59.0	426,916	706.8
2015	613,834	41,512	67.6	350,036	570.2	22,031	35.9	413,579	673.8
2016	622,123	35,766	57.5	391,427	629.2	25,619	41.2	452,812	727.8
2017	632,802	43,052	68.0	487,384	770.2	29,919	47.3	560,355	885.5
2018	641,892	45,949	71.6	691,202	1,076.8	27,694	43.1	764,845	1,191.5
2019	648,486	50,486	77.9	839,819	1,295.0	28,909	44.6	919,214	1,417.5
2020	652,680	51,973	79.6	741,562	1,136.2	28,987	44.4	822,522	1,260.2
2021*	663,323	52,413	79.0	435,466	656.5	30,541	46.0	518,420	781.5

\* Investment expenses decreased primarily due to an accounting change for fees paid to certain external investment managers.



STATISTICAL SECTION

**Administrative Expenses per Participant**







# ACTUARIAL SECTION



State of Wisconsin  
Department of Employee Trust Funds



## ACTUARIAL SECTION



800.521.0498 | P: 248.799.9000 | www.grsconsulting.com

July 8, 2022

Employee Trust Funds Board  
c/o ETF  
P.O. Box 7931  
Madison, Wisconsin 53707-7931

Re: Wisconsin Retirement System (WRS)  
Actuarial Valuation as of December 31, 2021

Ladies and Gentlemen:

The basic financial objective of the WRS is to establish and receive contributions which:

- When expressed in terms of percents of active member payroll, will remain approximately level from generation-to-generation; and
- When combined with present assets and future investment return, will be sufficient to meet the financial obligations of WRS to present and future retirees and beneficiaries.

The purpose of the valuation was to determine contribution rates for the 2023 fiscal year. The valuation should not be relied upon for any other purpose. The valuation process develops contribution rates that are sufficient to fund the plan's normal cost (i.e., the costs assigned by the valuation method to the year of service about to be rendered), as well as to fund unfunded actuarial accrued liabilities as a level percent of active member payroll over a finite period. The valuations were completed based upon population data, asset data, and plan provisions in effect on December 31, 2021. Note that GRS also prepares separate financial reporting information for accounting purposes.

The valuation was based upon information, furnished by the plan's administrative staff, concerning Retirement System benefits, financial transactions, and individual members, terminated members, retirees and beneficiaries. We checked the data for internal and year-to-year consistency, but did not audit the data. As a result, we do not assume responsibility for the accuracy or completeness of the data provided.

The actuary prepared the following supporting schedules for the Comprehensive Annual Financial Report:

Percent Increase in Salaries  
Single Life Retirement Values  
Rates of Retirement for Those Eligible to Retire  
Early Retirement Pattern  
Percentage of Active Members Withdrawing (Select and Ultimate)  
Percentage of Active Members becoming Disabled  
Solvency Test  
Summary of Accrued and Unfunded Accrued Liabilities

Assets are valued on a statutory market related basis that recognizes assumed return fully each year and spreads each year's gain or loss above or below assumed return over a closed five-year period.

Employee Trust Funds Board  
July 8, 2022  
Page 2

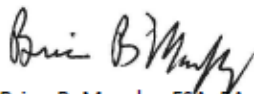
Actuarial valuations are based upon assumptions regarding future activity in specific risk areas including, but not limited to, the rates of investment return and payroll growth, eligibility for the various classes of benefits, and longevity among retired lives. The Board adopts these assumptions after considering the advice of the actuary and other professionals. The assumptions and the methods are in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. Each actuarial valuation takes into account all prior differences between actual and assumed experience in each risk area and adjusts the contribution rates as needed. The December 31, 2021 valuations were based upon assumptions that were recommended in connection with a study of experience covering the 2018-2020 period. Future actuarial measurements may differ significantly from those presented in the valuations due to such factors as experience differing from that anticipated by actuarial assumptions, changes in plan provisions, actuarial assumptions/methods or applicable law. Due to the limited scope of the assignment, we did not perform an analysis of the potential range of future measurements. The valuation report includes various risk factors but does not include an assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of the assignment. However, assessment of risk including stress testing for the WRS was conducted in the fall of 2021 in conjunction with the State of Wisconsin Investment Board and a separate study commissioned in the fall of 2020 by the Department of Employee Trust Funds. Readers desiring a more complete understanding of the actuarial condition of the WRS are encouraged to obtain and read the complete valuation reports. The material in the Actuarial Section and Financial Section of this Annual Report contains some, but not all, of the information in the valuation reports.

The valuation was prepared using our proprietary valuation model and related software which, in our professional judgment, has the capability to provide results that are consistent with the purposes of the valuation. We performed tests to ensure that the model reasonably represents that which is intended to be modeled. We are relying on the GRS actuaries and Internal Software, Training, and Processes Team who developed and maintain the model.

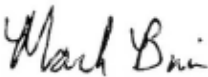
Based upon the results of the December 31, 2021 valuations, we are pleased to report to the Board that the Wisconsin Retirement System is meeting its basic financial objective and continues to operate in accordance with actuarial principles of level percent of payroll financing.

Brian B. Murphy, Mark Buis, and James D. Anderson are Members of the American Academy of Actuaries (MAAA), and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

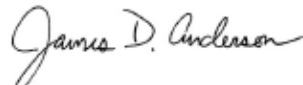
Respectfully submitted,  
Gabriel, Roeder, Smith & Company



Brian B. Murphy, FSA, EA, FCA, MAAA, PhD



Mark Buis, FSA, EA, FCA, MAAA



James D. Anderson, FSA, EA, FCA, MAAA

BBM/MB/JDA:bd





## ACTUARIAL SECTION

**WISCONSIN RETIREMENT SYSTEM**  
**ACTUARIAL STATEMENT OF ASSETS AND LIABILITIES**  
(In Millions)

	December 31, 2021	December 31, 2020	Increase (Decrease)
<b>Assets and Employer Obligations</b>			
Net Assets			
Cash, Investments & Receivables			
Less: Payables & Suspense Items			
Core Division	\$ 113,841.3	\$ 104,729.6	\$ 9,111.7
Variable Division	10,824.1	9,529.6	1,294.5
Totals	<u>124,665.4</u>	<u>114,259.2</u>	<u>10,406.2</u>
Obligations of Employers			
Unfunded Accrued Liability	5.8	5.8	0.0
<b>Total Assets</b>	<u>\$ 124,671.2</u>	<u>\$ 114,265.0</u>	<u>\$ 10,406.2</u>
Reserves and Surplus			
Reserves			
Actuarial Present Value of Projected Benefits Payable to Terminated Vested Participants and Active Members:			
Member Normal Contributions	\$ 22,469.3	\$ 20,650.1	\$ 1,819.2
Member Additional Contributions	268.2	234.3	33.9
Employer Contributions	26,405.0	24,620.8	1,784.2
Total Contributions	<u>49,142.5</u>	<u>45,505.2</u>	<u>3,637.3</u>
Actuarial Present Value of Projected Benefits Payable to Current Retirees and Beneficiaries:			
Core Annuities	65,085.4	60,691.1	4,394.3
Variable Annuities	4,866.0	4,383.0	483.0
Total Annuities	<u>69,951.4</u>	<u>65,074.1</u>	<u>4,877.3</u>
Total Reserves	<u>119,093.9</u>	<u>110,579.3</u>	<u>8,514.6</u>
Surplus			
Core Annuity Reserve Surplus	4,825.3	3,114.7	1,710.6
Variable Annuity Reserve Surplus	752.0	571.0	181.0
Total Surplus	<u>5,577.3</u>	<u>3,685.7</u>	<u>1,891.6</u>
<b>Total Reserves and Surplus</b>	<u>\$ 124,671.2</u>	<u>\$ 114,265.0</u>	<u>\$ 10,406.2</u>

## SUMMARY OF WRS BENEFIT PROVISIONS

### Normal Retirement Eligibility

The age a participant becomes eligible for an unreduced age and service annuity is:

General		Protective Occupation		Executive & Elected <sup>^</sup>	
Age	Service	Age	Service	Age	Service
65	Any *	54	Any*	62	Any*
57	30	53	25	57	30

*\*Participants first employed after 1989 and terminated before April 24, 1998 must have creditable service in five calendar years. Participants first employed after June 30, 2011 must have five years of creditable service.*

*^These conditions apply to those people hired on or before December 31, 2016. For others, the General eligibility conditions apply.*

### Normal Retirement Annuity

The age and service annuity payable at Normal Retirement Age is based on Final Average Earnings (FAE) and Creditable Service (CS) as follows:

Multiplier for Service Rendered			Group
Before 2000	Between 2000 and 2011	After 2011	
2.165%	2.0%	1.6%	Executive group and elected officials
2.165%	2.0%	2.0%	Protective occupation participants covered by Social Security
2.665%	2.5%	2.5%	Protective occupation participants not covered by Social Security
1.765%	1.6%	1.6%	All other participants

FAE is generally the average of the three highest years of earnings preceding retirement (July 1 - June 30 for teachers, educational support staff, and judges; calendar year for others). These years do not have to be consecutive. For legislators and state constitutional officers who are ineligible to receive pay increases during their term, FAE is the statutory rate of earnings at termination.

Maximum formula annuity is 85% of FAE for protective occupation participants not covered by Social Security, 65% of FAE for protectives covered by Social Security, and 70% for all other participants. If greater than the formula amount, an annuity equal to the actuarial equivalent of two times the required accumulated contributions is paid in lieu of the formula amount.

**Early Retirement:** Any participant who has attained age 55 and any protective occupation participant who has attained age 50 may apply for an early retirement annuity. The benefit is reduced 0.4% for each month that the annuity effective date precedes the Normal Retirement Age. For non-protective participants terminating after June 30, 1990, the 0.4% is reduced for months after the attainment of age 57 and before the annuity effective date by .001111% for each month of creditable service.

**Voluntary Termination Before Immediate Benefit Eligibility:** A participant who terminates service before being eligible for a retirement annuity may either (1) receive a refund of accumulated contributions, or (2)



## ACTUARIAL SECTION

leave contributions on deposit and apply for a retirement annuity on or after the minimum retirement age based upon age and accrued service at time of termination.

**Post-Retirement Adjustments:** Annuities are increased annually if the investment income credited to retired life funds is in excess of the assumed rate (presently 5%), other plan experiences are within projected ranges, and the resulting adjustment would be at least 0.5% (2.0% for the Variable Fund).

Previously granted adjustments can be revoked if the investment income is insufficient to support these previously granted increases. However, a Core Fund annuity cannot be reduced below the amount granted upon inception. Slightly different provisions apply to variable annuities.

**Disability Benefits:** Generally, disability means the inability to engage in any substantial gainful activity by reason of a medically determinable physical or mental impairment which can be expected to result in death or to be of long-continued and indefinite duration. Disability applicants must be participating employees who are under normal retirement age, have not already taken a WRS benefit, and who meet a service requirement.

For this purpose normal retirement age is:

- 65 for general employees and executives and elected officials hired after December 31, 2016
- 62 for executives and elected officials hired on or before December 31, 2016
- 53 for protective occupation employees with 25 or more years of creditable service
- 54 for other protective occupation employees

The service requirement is that during the seven years preceding application the individual must have earned:

- At least 6 months of service credit in five of those years or
- A total of five years of service credit

The service credit requirement may be waived if the disability is work related. Protective occupation employees who become disabled between the ages of 50 and 55, who have at least 15 years of service, and who can no longer perform the duties of their position may apply for a special disability benefit until age 55.

**Disability Amount:** The disability benefit is the WRS formula benefit based upon service projected to normal retirement age as described above, without regard to the early retirement reduction.

	<b>WRS Plan</b>	<b>Long-Term Disability Insurance (LTDI) Plan</b>
Participants Covered	- Participants continuously employed by a WRS employer since 10/15/92, who applied for disability benefits prior to 1/1/18, and did not elect LTDI coverage. - All participants who apply for disability benefits after 12/31/17.	- Participants who were eligible for WRS disability, but elected LTDI coverage and applied for disability benefits prior to 1/1/18. - Participants who were not eligible for WRS disability and applied for an LTDI benefit prior to 1/1/18.
Benefit to age 65*	WRS formula benefit based on service projected to normal retirement age.	40% of FAE for participants covered by Social Security; 50% of FAE for non-covered participants who cannot qualify for Social Security disability benefits.
Benefit at age 65*	Continuation of pre-65 amount.	WRS benefit accrued to date of disability plus 7% of FAE money purchase benefit during disability period, both of which are adjusted in accordance with the dividend rate.

\* Conversion age is later for participants becoming disabled after age 61.



**Death In Service:** (a) Prior to age 50 for protective participants and age 55 for others, the benefit is the equivalent of twice the accumulated employee required and all additional contributions and employer amounts contributed prior to 1974 for teachers or 1966 for others. (b) After age 50 for protective participants, and age 55 for others, the benefit is the amount that would have been paid if participant had retired and elected the 100% survivor option. The benefit is payable to any natural living person. If there is no eligible beneficiary, a refund of contributions is paid to the estate.

**Interest Credits:** For years after 1999, and for people with some active service after 1999, participant Core accounts (including the Variable and Core accounts) are credited with interest at the full (Core) effective rate. For others, accounts are credited with interest as shown below:

Date of Participation	Rate Credited For Purpose of	
	Money Purchase Minimum	Refunds
Prior to 1982	Core Effective Rate	Core Effective Rate
January 1, 1982 and later and terminated prior to January 1, 2000	5%	3%
January 1, 1982 and later and not terminated prior to January 1, 2000	Core Effective Rate	Core Effective Rate

Interest is credited on member Variable Fund accounts based on the prior year ending account balance and the Variable effective rate.

Interest on both Core and Variable member additional deposit accounts is based on the prior year ending account balance and the appropriate effective rate.

**Contribution Rates:** The financial objective of the WRS is to establish and receive contributions that will remain level from year to year and decade to decade.

Effective June 28, 2011, the member contribution for general category employees, teachers and executives and elected officials is equal to one-half the actuarially required contribution. The member contribution for protective occupations is the same percentage as general employees. The employer is responsible for the remainder of the actuarially determined contribution. The employer may not pay any portion of the member contribution unless provided for by a pre-existing collective bargaining agreement.

**Normal form of Benefit:** The normal form of benefit is a straight life annuity with no death benefits. Optional forms of benefit which are actuarially reduced are listed below:

- A life annuity with 60 or 180 monthly payments guaranteed.
- A joint survivorship annuity with 75% continued to beneficiary.
- A joint survivorship annuity with 100% continued to beneficiary.
- A joint survivorship annuity reduced 25% upon either your death or your beneficiary's death.
- A joint survivorship annuity with 100% continued to beneficiary combined with 180 monthly payments guaranteed.

For formula benefit calculations, optional forms are calculated at the lower of the current age or age 62 (Normal Retirement Age for Protective occupations). If a retiree (and beneficiary if in receipt of a joint survivorship annuity) dies prior to receiving benefits which, in total, are at least equal to the members contributions, a "residual refund" for the difference is paid.

**Vesting:** Participants hired prior to July 1, 2011 vest immediately. After July 1, 2011, participants vest after five years of service.



## ACTUARIAL METHOD AND ASSUMPTIONS USED IN WRS VALUATIONS

The principal areas of risk assumption are:

1. Long-term rates of investment income likely to be generated by the assets of the retirement fund. This includes both realized and unrealized appreciation and depreciation.
2. Rates of mortality among participants, retirees and beneficiaries.
3. Rates of withdrawal of active participants.
4. Rates of disability among participants.
5. Patterns of salary increases to be experienced by participants.
6. The age and service distribution of actual retirements.

In an actuarial valuation, the actuary projects the monetary value of each assumption for each distinct experience group, for the next year and for each year over the next half-century or longer.

Once actual risk experience has occurred and been observed, it will not coincide exactly with assumed risk experience, regardless of the skill of the actuary, the completeness of the data, and the precision of the calculations. Each valuation provides a complete recalculation of assumed future risk experience and takes into account all past differences between assumed and actual risk experience. The result is a continual series of small adjustments to the computed contribution rate. From time to time it becomes necessary to adjust the package of risk measurements to reflect basic experience trends -- but not random year-to-year fluctuations.

The actuarial funding method used in the valuation was the Frozen Initial Liability (FIL) method. Under this method, the amount of remaining unfunded actuarial accrued liabilities at any valuation date is affected only by the monthly amortization payments, compound interest, the added liability created by new employer units, and any added liabilities caused by changes in benefit provisions.

### » *Economic Assumptions*

The **Investment Return Assumption** for plan assets is 6.8%.

For determining plan liabilities, the Discount Rate is 5.0% for retired participants, 5.0% for active and inactive participants following retirement, and 6.8% for active and inactive participants prior to their retirement. A valuation performed assuming a 5.4% discount rate for all participants at all stages of life, reproduces the results of an actuarial valuation using the 5.0% post-retirement and 6.8% pre-retirement assumptions. Thus, it can be said that the net discount rate assumed in the valuations was 5.4% per year, compounded annually (net after administrative expenses).

The **Wage Inflation Rate** assumed in this valuation was 3.0% per year. The wage inflation rate is defined to be the portion of total pay increases for an individual that are due to macroeconomic forces, including productivity, price inflation, and labor market conditions. The wage inflation rate does not include pay changes related to individual merit and seniority effects.

No specific **Price Inflation** assumption is required to perform this valuation. The price inflation assumption used to evaluate the investment return assumption is 2.4%.



The assumed **Real Rate of Return** over wage inflation is defined to be the portion of total investment return that is more than the assumed total wage growth rate. Considering other economic assumptions, the 6.8% pre-retirement investment return rate translates to an assumed real rate of return over wage inflation of 3.8%. The assumed real rate of return over price inflation is 4.4% considering an inflation assumption of 2.4%.

**Merit and Longevity pay increase assumptions** for individual active participants are shown for sample services below. An additional 3.0% recognizes wage inflation, including price inflation, productivity increases, and other macroeconomic forces.

### % Merit and Longevity Increase Next Year

Service	General Non-State (Not including Schools)	General State (Not Including Schools)	Executive/ Elected Non-State	Executive/ Elected State	University Teachers State
1	3.5%	3.5%	2.5%	2.5%	3.0%
2	3.5	3.5	2.5	2.5	3.0
3	3.1	3.1	2.0	2.0	2.9
4	2.8	2.8	1.6	1.6	2.8
5	2.5	2.5	1.1	1.1	2.7
10	1.5	1.5	0.2	0.2	2.2
15	1.1	1.1	0.2	0.2	1.7
20	0.9	0.9	0.2	0.2	1.2
25	0.6	0.6	0.2	0.2	0.9
30	0.4	0.4	0.2	0.2	0.7

### % Merit and Longevity Increase Next Year

Service	Public School Teachers Non-State	Protective Occupation With SS Non-State	Protective Occupation With SS State	Protective Occupation Without SS Non-State
1	5.6%	4.8%	4.8%	5.5%
2	5.6	4.8	4.8	5.5
3	5.2	4.1	4.1	4.7
4	4.7	3.5	3.5	3.8
5	4.3	2.8	2.8	3.0
10	2.6	1.1	1.1	0.9
15	1.4	0.8	0.8	0.5
20	0.6	0.7	0.7	0.4
25	0.3	0.6	0.6	0.3
30	0.2	0.5	0.5	0.2



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» *Decrement Probabilities*

The Active Member Population is assumed to remain constant. For purposes of financing the unfunded liabilities, total payroll is assumed to grow at the wage inflation rate of 3.00% per year.

The mortality table used to measure mortality for retired participants was the 2020 WRS Experience Tables. The rates in this table were based on actual WRS experience adjusted for future mortality improvements using the MP-2021 fully generated improvement scale from a base year of 2010. This mortality assumption was adopted by the Board in connection with the 2018-2020 Experience Study. Sample retirement values from this table are shown below. This assumption is used to measure the probabilities of participants dying before retirement and the probabilities of each benefit payment being made after retirement.

**Single Life Retirement Values (Retired Participants)**

2020 WRS Experience Table With 5% Interest

Sample Attained Ages in 2021	Present Value of \$1 Monthly for Life*		Future Life Expectancy (years)*		Mortality Rates*	
	Males	Females	Males	Females	Males	Females
40	\$ 216.52	\$ 219.63	47.0	49.1	0.062%	0.042%
45	208.53	212.28	41.8	43.9	0.081	0.054
50	198.37	202.89	36.6	38.7	0.122	0.088
55	185.83	191.37	31.5	33.5	0.245	0.227
60	170.94	177.94	26.6	28.6	0.422	0.351
65	153.52	161.82	21.9	23.9	0.682	0.499
70	133.38	142.38	17.5	19.2	1.134	0.797
75	110.84	119.89	13.3	14.9	2.076	1.524
80	87.27	95.94	9.7	11.0	3.970	3.050
85	64.78	72.65	6.7	7.7	7.635	5.982

\*With a fully generational mortality table, the mortality rate depends on the year of birth. Later years of birth will correspond to a lower mortality rate at a given age.

The values shown above are for non-disabled participants in 2021. For disabled participants, the following table is used:

**Single Life Retirement Values (Disabled Participants)**

2020 WRS Experience Table With 5% Interest

Sample Attained Ages in 2021	Present Value of \$1 Monthly for Life		Future Life Expectancy (years)		Mortality Rates*	
	Males	Females	Males	Females	Males	Females
40	\$ 175.27	\$ 182.00	32.1	34.8	0.957%	0.855%
45	164.66	172.22	28.1	30.8	1.212	1.114
50	152.97	161.70	24.4	27.0	1.719	1.602
55	141.07	151.41	21.1	23.6	2.325	2.048
60	129.40	141.24	18.1	20.5	2.956	2.395
65	117.53	129.37	15.4	17.5	3.508	2.525
70	104.23	113.85	12.7	14.3	4.134	2.962
75	88.61	95.50	10.1	11.2	5.306	4.177
80	71.78	76.74	7.7	8.4	7.585	6.502
85	55.79	59.91	5.7	6.2	11.412	10.364

\*With a fully generational mortality table, the mortality rate depends on the year of birth. Later years of birth will correspond to a lower mortality rate at a given age.

**Active Participant Mortality Rates**

The active participant mortality assumption is used to measure the probability of participants becoming deceased while in service.

Sample Attained Ages in 2021	Mortality Rates*	
	Males	Females
20	0.000398	0.000164
25	0.000213	0.000128
30	0.000345	0.000222
35	0.000500	0.000318
40	0.000624	0.000421
45	0.000806	0.000543
50	0.001189	0.000789
55	0.001891	0.001258
60	0.003118	0.001971
65	0.005013	0.003022
70	0.007513	0.005019
75	0.011006	0.009610
80	0.021987	0.019764

\*With a fully generational mortality table, the mortality rate depends on the year of birth. Later years of birth will correspond to a lower mortality rate at a given age.



**Rates of Retirement for Those Eligible to Retire—Normal Retirement Pattern**

% Retiring Next Year

Age	Public Schools Non-State		Protective*		
	Male	Female	With SS Non-State	With SS State	W/O SS Non-State
50	0.0%	0.0%	6.0%	7.5%	3.0%
51	0.0	0.0	8.0	9.0	3.5
52	0.0	0.0	11.0	11.0	4.5
53	0.0	0.0	34.0	25.0	17.0
54	0.0	0.0	32.0	20.0	24.0
55	0.0	0.0	26.0	20.0	29.0
56	0.0	0.0	23.0	20.0	32.0
57	31.0	27.5	27.0	20.0	23.0
58	29.0	27.5	21.0	20.0	27.0
59	28.0	26.0	23.0	20.0	40.0
60	27.0	29.0	22.0	20.0	25.0
61	26.0	27.0	30.0	20.0	25.0
62	39.0	36.0	35.0	25.0	31.0
63	33.0	31.0	27.0	25.0	40.0
64	30.0	30.0	30.0	36.0	40.0
65	32.0	38.5	34.0	38.0	40.0
66	35.0	44.0	35.0	38.0	100.0
67	31.0	31.0	35.0	38.0	100.0
68	28.0	30.0	35.0	38.0	100.0
69	20.0	30.0	35.0	38.0	100.0
70	30.0	32.0	100.0	100.0	100.0
71	25.0	25.0	100.0	100.0	100.0
72	25.0	25.0	100.0	100.0	100.0
73	25.0	25.0	100.0	100.0	100.0
74	25.0	25.0	100.0	100.0	100.0
75	100.0	100.0	100.0	100.0	100.0

\*Includes reduced retirements for protective with 20+ years of service.



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**Rates of Retirement for Those Eligible to Retire—Early Retirement Pattern**

% Retiring Next Year

Age	General Non-State		General State		Executive/Elected Non-State	Executive/Elected State
	Male	Female	Male	Female		
55	7.3%	7.0%	5.5%	6.0%	2.5%	6.0%
56	6.0	7.0	6.5	8.0	2.5	6.0
57	5.2	5.5	5.5	6.0	2.5	6.0
58	5.6	6.5	5.5	9.0	2.5	6.0
59	5.9	7.0	6.5	7.5	2.5	6.0
60	9.3	9.5	9.0	10.0	5.0	6.0
61	8.0	9.5	12.5	11.0	5.0	6.0
62	19.0	16.0	16.0	18.0	1.0	6.0
63	20.0	18.0	17.0	19.5	1.0	3.0
64	18.0	18.0	21.0	18.0	1.0	3.0

**Rates of Retirement for Those Eligible to Retire—Early Retirement Pattern**

% Retiring Next Year

Age	University State		Public Schools Non-State	
	Male	Female	Male	Female
55	3.3%	5.0%	12.0%	11.0%
56	3.3	5.0	13.0	13.0
57	4.0	5.0	13.0	12.0
58	4.0	5.5	12.0	13.0
59	4.4	6.0	14.3	13.5
60	4.8	7.5	16.0	17.0
61	4.8	9.0	16.0	17.0
62	7.0	11.0	23.0	24.0
63	8.3	12.0	21.0	24.0
64	11.5	14.5	21.0	24.0

The assumed rates of separation from employment prior to service retirement due to disability and other causes are shown below for sample ages. For other terminations it was assumed that a percentage, depending on age of participants terminating after age 35 with five or more years of service, will leave their contributions on deposit and be paid a benefit at normal retirement age and that the remaining participants would take a separation benefit. The percentage taking a separation benefit is 25% at age 35, grading downward to 0% at retirement eligibility. All participants terminating prior to normal retirement age with less than five years of service were assumed to take a separation benefit.

**Assumed Termination Rates**
**% of Active Participants Terminating**

Age	Service	General Non-State		General State		Executive/ Elected Non-State	Executive/ Elected State	University State	
		Male	Female	Male	Female			Male	Female
	0-1	17.7%	20.0%	17.2%	19.5%	25.0%	19.0%	14.0%	14.1%
	1-2	12.5	15.0	12.9	15.5	20.0	16.0	13.8	14.0
	2-3	9.0	11.5	9.5	12.5	17.0	13.0	12.6	12.7
	3-4	7.1	9.6	7.4	10.0	16.0	12.5	11.0	10.0
	4-5	6.6	9.0	7.3	8.7	13.0	12.0	8.6	9.3
	5-6	5.3	7.4	6.1	7.8	4.0	6.0	8.5	8.1
	6-7	4.8	6.3	5.2	6.9	4.0	6.0	7.0	7.0
	7-8	4.6	6.0	5.1	6.0	4.0	6.0	5.6	5.6
	8-9	4.1	5.7	4.5	5.6	4.0	6.0	4.6	4.9
	9-10	4.0	5.0	3.6	5.5	4.0	6.0	4.3	4.3
Under 30	10 & Up	3.2	4.9	3.1	4.8	4.5	4.5	4.2	4.0
35		2.8	4.1	2.7	3.9	4.5	4.5	4.0	4.0
40		2.4	3.2	2.6	3.0	4.2	4.5	3.4	3.7
45		2.0	2.9	2.4	2.7	3.7	4.2	2.8	3.2
50		1.7	2.5	1.9	2.1	3.2	3.7	2.3	2.7
54		1.6	2.2	1.7	1.8	3.0	3.5	2.2	2.5





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**Assumed Termination Rates****% of Active Participants Terminating**

Age	Service	Public Schools Non-State		Protective		
		Male	Female	With SS Non-State	With SS State	W/O SS Non-State
	0-1	12.6%	12.0%	15.6%	18.8%	4.5%
	1-2	11.6	10.0	9.4	15.5	4.0
	2-3	8.5	8.5	5.3	10.5	2.0
	3-4	6.0	6.2	4.4	6.5	1.8
	4-5	5.6	5.8	4.2	5.5	1.7
	5-6	4.5	4.8	3.3	5.0	1.3
	6-7	3.7	4.1	3.2	4.5	1.2
	7-8	2.9	3.5	3.0	4.0	0.9
	8-9	2.6	3.4	2.7	3.5	0.8
	9-10	2.5	3.0	2.3	3.3	0.7
Under 30	10 & Up	2.0	2.2	2.1	2.9	0.7
	35	1.6	1.9	1.8	2.4	0.6
	40	1.4	1.6	1.5	1.8	0.6
	45	1.4	1.4	1.4	1.4	0.5
	50	1.3	1.2	1.3	1.2	0.5
	54	1.3	1.2	1.3	1.2	0.5



## Disability Rates

## % of Active Participants Becoming Disabled

Age	General Non-State		General State		Executive/ Elected Non-State	Executive/ Elected State	University State	
	Male	Female	Male	Female			Male	Female
20	0.01%	0.00%	0.01%	0.01%	0.00%	0.00%	0.00%	0.01%
25	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.01
30	0.01	0.02	0.01	0.04	0.00	0.00	0.00	0.01
35	0.01	0.02	0.01	0.05	0.01	0.01	0.00	0.03
40	0.03	0.03	0.03	0.07	0.01	0.01	0.01	0.04
45	0.06	0.05	0.06	0.10	0.01	0.01	0.02	0.04
50	0.13	0.07	0.13	0.16	0.02	0.02	0.03	0.07
55	0.24	0.13	0.24	0.29	0.09	0.09	0.08	0.11
60	0.43	0.18	0.43	0.41	0.11	0.11	0.11	0.17

## % of Active Participants Becoming Disabled

Age	Public Schools Non-State		Protective		
	Male	Female	With SS Non-State	With SS State	W/O SS Non-State
20	0.01%	0.01%	0.02%	0.02%	0.03%
25	0.01	0.01	0.02	0.02	0.03
30	0.01	0.01	0.02	0.02	0.03
35	0.01	0.01	0.03	0.03	0.03
40	0.01	0.02	0.04	0.05	0.05
45	0.03	0.05	0.05	0.07	0.10
50	0.08	0.10	0.09	0.11	0.55
55	0.14	0.14	1.39	1.73	0.41
60	0.24	0.21	2.34	2.92	0.12



## ACTUARIAL SECTION

## Summary of Member Valuation Data

## General Participants and Teachers

Valuation Date	Participating Employers	Active Participants	Annual Payroll (In Millions)	Annual Average Pay (\$)	% Increase In Average Pay
12/31/2012	1,450	231,765	\$ 11,041.0	\$ 47,639	1.2%
12/31/2013	1,450	231,973	11,270.0	48,584	2.0
12/31/2014	1,454	232,433	11,574.0	49,794	2.5
12/31/2015	1,457	232,646	12,016.6	51,652	3.7
12/31/2016	1,463	233,693	12,163.8	52,050	0.8
12/31/2017	1,473	233,845	12,364.7	52,876	1.6
12/31/2018	1,479	234,367	12,680.7	54,106	2.3
12/31/2019	1,484	236,496	13,150.9	55,607	2.8
12/31/2020	1,504	235,450	13,553.1	57,563	3.5
12/31/2021	1,523	235,403	13,961.4	59,309	3.0

## Executive Group and Elected Officials

Valuation Date	Participating Employers	Active Participants	Annual Payroll (In Millions)	Annual Average Pay (\$)	% Increase In Average Pay
12/31/2012	249	1,408	\$ 104.1	\$ 73,968	4.5%
12/31/2013	249	1,397	106.0	76,125	2.9
12/31/2014	251	1,401	109.0	77,998	2.5
12/31/2015	254	1,396	112.2	80,372	3.0
12/31/2016	252	1,369	111.3	81,300	1.2
12/31/2017	245	1,351	110.8	82,013	0.9
12/31/2018	241	1,317	112.6	85,497	4.2
12/31/2019	235	1,322	116.0	87,746	2.6
12/31/2020	230	1,292	121.0	93,620	6.7
12/31/2021	230	1,264	121.0	95,696	2.2

## Protective With Social Security

Valuation Date	Participating Employers	Active Participants	Annual Payroll (In Millions)	Annual Average Pay (\$)	% Increase In Average Pay
12/31/2012	501	19,353	\$ 1,105.1	\$ 57,104	0.1%
12/31/2013	512	19,290	1,121.0	58,127	1.8
12/31/2014	506	19,533	1,151.0	58,916	1.4
12/31/2015	497	19,301	1,190.9	61,701	4.7
12/31/2016	496	19,468	1,217.4	62,533	1.3
12/31/2017	495	19,465	1,248.4	64,136	2.6
12/31/2018	499	19,450	1,282.7	65,949	2.8
12/31/2019	508	19,665	1,333.4	67,806	2.8
12/31/2020	505	19,749	1,443.8	73,105	7.8
12/31/2021	506	19,220	1,449.9	75,437	3.2

**Protective Without Social Security**

<b>Valuation Date</b>	<b>Participating Employers</b>	<b>Active Participants</b>	<b>Annual Payroll (In Millions)</b>	<b>Annual Average Pay (\$)</b>	<b>% Increase In Average Pay</b>
12/31/2012	57	2,727	\$ 193.5	\$ 70,949	1.5%
12/31/2013	58	2,736	197.0	71,960	1.4
12/31/2014	58	2,733	204.0	74,487	3.5
12/31/2015	57	2,734	210.3	76,920	3.3
12/31/2016	56	2,755	213.2	77,387	0.6
12/31/2017	56	2,752	219.2	79,651	2.9
12/31/2018	55	2,777	225.5	81,203	1.9
12/31/2019	55	2,768	232.2	83,887	3.3
12/31/2020	55	2,758	242.1	87,769	4.6
12/31/2021	56	2,760	248.6	90,062	2.6

**All Participants**

<b>Valuation Date</b>	<b>Participating Employers</b>	<b>Active Participants</b>	<b>Annual Payroll (In Millions)</b>	<b>Annual Average Pay (\$)</b>	<b>% Increase In Average Pay</b>
12/31/2012	1,478	255,253	\$ 12,443.7	\$ 48,750	1.1%
12/31/2013	1,479	255,396	12,694.0	49,703	2.0
12/31/2014	1,482	256,100	13,038.0	50,910	2.4
12/31/2015	1,487	256,077	13,530.0	52,836	3.8
12/31/2016	1,495	257,285	13,705.7	53,270	0.8
12/31/2017	1,499	257,413	13,943.1	54,166	1.7
12/31/2018	1,507	257,911	14,301.4	55,451	2.4
12/31/2019	1,516	260,251	14,832.5	56,993	2.8
12/31/2020	1,537	259,249	15,359.9	59,248	4.0
12/31/2021	1,555	258,647	15,780.8	61,013	3.0



## ACTUARIAL SECTION

### Summary of Accrued and Unfunded Accrued Liabilities

(In Millions)

Valuation Year	Aggregate Accrued Liabilities	Valuation Assets	Assets as a % of Accrued Liabilities	Unfunded Accrued Liabilities	Annual Active Member Payroll	UAL as a % of Annual Active Member Payroll
2012	\$ 78,682.7	\$ 78,613.0	99.9%	\$ 69.7	\$ 12,627.6	0.6%
2013	85,328.7	85,276.1	99.9	52.6	12,884.8	0.4
2014	89,392.1	89,360.4	100.0	31.7	13,219.5	0.2
2015	91,526.5	91,502.4	100.0	24.1	13,530.5	0.2
2016	95,414.0	95,396.2	100.0	17.8	13,706.0	0.1
2017	100,819.3	100,802.5	100.0	16.8	13,943.1	0.1
2018	101,422.3	101,410.5	100.0	11.8	14,301.4	0.1
2019	106,532.4	106,524.4	100.0	8.0	14,832.5	0.1
2020	114,265.0	114,259.2	100.0	5.8	15,359.9	0.0
2021	124,671.2	124,665.4	100.0	5.8	15,780.8	0.0

### Funding Metrics

(In Millions)

Valuation Date Dec 31	Actuarial Value of Assets	F-I-L Accrued Liability For				Percent Funded for			
		Annuitants and Beneficiaries	Member Contribs.	Active & Inactive Members	Total	Annuitants and Beneficiaries	Participant Contribs.	Active & Inactive Members	Total
2012	\$ 78,613.0	\$ 44,055.5	\$ 14,401.1	\$ 20,226.1	\$ 78,682.7	100.0%	100.0%	99.7%	99.9%
2013	85,276.1	48,460.5	15,559.2	21,309.0	85,328.7	100.0	100.0	99.8	99.9
2014	89,360.4	51,131.1	16,259.3	22,001.7	89,392.1	100.0	100.0	99.9	100.0
2015	91,502.4	52,851.8	16,707.2	21,967.5	91,526.5	100.0	100.0	99.9	100.0
2016	95,396.2	55,764.0	17,361.7	22,288.3	95,414.0	100.0	100.0	99.9	100.0
2017	100,802.5	59,224.9	18,434.4	23,160.0	100,819.3	100.0	100.0	99.9	100.0
2018	101,410.5	60,242.9	18,455.6	22,723.9	101,422.4	100.0	100.0	99.9	100.0
2019	106,524.4	63,657.8	19,487.0	23,387.6	106,532.4	100.0	100.0	100.0	100.0
2020	114,259.2	68,759.8	20,884.4	24,620.8	114,265.0	100.0	100.0	100.0	100.0
2021	124,665.4	75,528.7	22,737.5	26,405.0	124,671.2	100.0	100.0	100.0	100.0

## WRS Contribution Rates

### » Notes to Contribution Rates Schedule

1. Prior to June 28, 2011, the member contribution rate was set by Wis. Stat. § 40.05 (1) and part or all the required member contributions could be paid by the employer on behalf of the employee. Effective June 28, 2011, the member contribution rate for general and executive/elected category employees is equal to the general category rate. Employers may not pay the member contribution on their behalf unless provided for by an existing collective bargaining agreement.

2. The unfunded liability was recalculated in 1990 to reflect benefit improvements and is being amortized on a level percentage of salary basis over a period of 40 years beginning January 1, 1990, for the employers in the WRS prior to 2009, or on the effective date of the employer's participation, whichever is later. Liabilities for employers joining the WRS beginning in 2009 are amortized over 30 years. Prior service rates vary by employers. The percentage reported represents a weighted average.

#### General Participants and Teachers

	<b>Current Cost</b>	<b>Prior Cost</b>	<b>Employer Total</b>	<b>Employee</b>	<b>BAC</b>	<b>Total</b>
2012	5.9%	0.1%	6.0%	5.9%	0.0%	11.9%
2013	6.65	0.1	6.75	6.65	0.0	13.4
2014	7.0	0.0	7.0	7.0	0.0	14.0
2015	6.8	0.0	6.8	6.8	0.0	13.6
2016	6.6	0.0	6.6	6.6	0.0	13.2
2017	6.8	0.1	6.9	6.8	0.0	13.7
2018	6.7	0.0	6.7	6.7	0.0	13.4
2019	6.55	0.0	6.55	6.55	0.0	13.1
2020	6.75	0.0	6.75	6.75	0.0	13.5
2021	6.75	0.0	6.75	6.75	0.0	13.5

#### Executive Group and Elected Officials

	<b>Current Cost</b>	<b>Prior Cost</b>	<b>Employer Total</b>	<b>Employee</b>	<b>BAC</b>	<b>Total</b>
2012	7.05%	0.0%	7.05%	7.05%	0.0%	14.1%
2013	7.0	0.0	7.0	7.0	0.0	14.0
2014	7.75	0.0	7.75	7.75	0.0	15.5
2015	7.7	0.0	7.7	7.7	0.0	15.4
2016	6.6	0.0	6.6	6.6	0.0	13.2
2017	6.8	0.1	6.9	6.8	0.0	13.7
2018	6.7	0.0	6.7	6.7	0.0	13.4
2019	6.55	0.0	6.55	6.55	0.0	13.1
2020	6.75	0.0	6.75	6.75	0.0	13.5
2021	6.75	0.0	6.75	6.75	0.0	13.5



## ACTUARIAL SECTION

### Protective With Social Security

	Current Cost	Prior Cost	Duty Disability	Employer Total	Employee	BAC	Total
2012	9.0%	0.0%	4.0%	13.0%	5.9%	0.0%	18.9%
2013	9.75	0.0	4.1	13.85	6.65	0.0	20.5
2014	10.1	0.0	0.7	10.8	7.0	0.0	17.8
2015	9.5	0.0	0.6	10.1	6.8	0.0	16.9
2016	9.4	0.0	0.3	9.7	6.6	0.0	16.3
2017	10.6	0.1	0.6	11.3	6.8	0.0	18.1
2018	10.7	0.0	0.7	11.4	6.7	0.0	18.1
2019	10.55	0.0	0.5	11.05	6.55	0.0	17.6
2020	11.65	0.0	0.2	11.85	6.75	0.0	18.6
2021	11.75	0.0	0.24	11.95	6.75	0.0	18.7

### Protective Without Social Security

	Current Cost	Prior Cost	Duty Disability	Employer Total	Employee	BAC	Total
2012	11.3%	0.3%	4.0%	15.6%	5.9%	0.0%	21.5%
2013	12.35	0.3	4.1	16.75	6.65	0.0	23.4
2014	13.7	0.3	0.7	14.7	7.0	0.0	21.7
2015	13.1	0.3	0.6	14.0	6.8	0.0	20.8
2016	13.2	0.2	0.3	13.7	6.6	0.0	20.3
2017	14.9	0.1	0.6	15.6	6.8	0.0	22.4
2018	14.9	0.1	0.7	15.7	6.7	0.0	22.4
2019	14.95	0.1	0.5	15.55	6.55	0.0	22.1
2020	16.25	0.0	0.2	16.45	6.75	0.0	23.2
2021	16.35	0.0	0.24	16.55	6.75	0.0	23.3

## Analysis of Actuarial Experience WRS

### Gains and Losses in Accrued Liabilities During 2021 Resulting Differences Between Assumed Experience & Actual Experience

(In Millions)

Type of Activity	General	Executive & Elected	Protective Occupation With Social Security	Protective Occupation Without Social Security	Total
<b>Normal Retirement</b>					
If members retire at older ages or with lower final average pay than assumed, there is a gain. If younger ages or higher pay, there is a loss.	\$(3.9)	\$(0.4)	\$(19.2)	\$(3.9)	\$(27.4)
<b>Early Retirement</b>					
If fewer members choose early retirement than assumed, there is a loss. If more early retirements, there is a gain.	(21.1)	0.2	(0.2)	0.2	(20.9)
<b>Death with Benefit</b>					
If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(2.4)	0.0	(0.4)	(0.2)	(3.0)
<b>Disability Retirement</b>					
If disability claims are less than assumed, there is a gain. If more claims, a loss.	3.7	0.0	0.1	0.4	4.2
<b>Other Separations</b>					
If more liabilities are released by separations than assumed, there is a gain. If smaller releases, a loss.	13.3	(0.4)	6.6	0.6	20.1
<b>Salary Increases</b>					
If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	89.1	2.9	65.8	1.5	159.3
<b>Investment Return</b>					
If there is greater investment income than assumed, there is a gain. If less income, a loss.	899.8	1.4	187.9	40.2	1,129.3
<b>Other Activity</b>	(73.5)	(15.3)	1.3	(2.7)	(90.2)
<b>Total Gain (Loss)</b>	\$905.0	\$(11.6)	\$241.9	\$36.1	\$1,171.4
<b>% of accrued liability</b>	2.1%	(7.1)%	5.0%	3.2%	2.4%





## ACTUARIAL SECTION

### Changes in Number of Annuities - WRS

Year	Annuity Type	Beginning	Additions	Deletions	Ending
2021	Retirement	213,268	10,346	4,768	218,846
	Disability	8,007	231	377	7,861
	Beneficiary	1,448	55	49	1,454
	<b>Total</b>	<b>222,723</b>	<b>10,632</b>	<b>5,194</b>	<b>228,161</b>
2020	Retirement	207,362	10,529	4,623	213,268
	Disability	8,163	274	430	8,007
	Beneficiary	1,419	73	44	1,448
	<b>Total</b>	<b>216,944</b>	<b>10,876</b>	<b>5,097</b>	<b>222,723</b>
2019	Retirement	201,466	9,936	4,040	207,362
	Disability	8,281	264	382	8,163
	Beneficiary	1,379	72	32	1,419
	<b>Total</b>	<b>211,126</b>	<b>10,272</b>	<b>4,454</b>	<b>216,944</b>
2018	Retirement	195,762	9,735	4,031	201,466
	Disability	6,091	2,382	192	8,281
	Beneficiary	1,349	70	40	1,379
	<b>Total</b>	<b>203,202</b>	<b>12,187</b>	<b>4,263</b>	<b>211,126</b>
2017	Retirement	190,111	9,591	3,940	195,762
	Disability	6,198	98	205	6,091
	Beneficiary	1,338	42	31	1,349
	<b>Total</b>	<b>197,647</b>	<b>9,731</b>	<b>4,176</b>	<b>203,202</b>
2016	Retirement	184,180	9,866	3,935	190,111
	Disability	6,305	98	205	6,198
	Beneficiary	1,310	62	34	1,338
	<b>Total</b>	<b>191,795</b>	<b>10,026</b>	<b>4,174</b>	<b>197,647</b>
2015	Retirement	177,959	9,881	3,660	184,180
	Disability	6,363	124	182	6,305
	Beneficiary	1,283	57	30	1,310
	<b>Total</b>	<b>185,605</b>	<b>10,062</b>	<b>3,872</b>	<b>191,795</b>
2014	Retirement	172,430	9,080	3,551	177,959
	Disability	6,393	125	155	6,363
	Beneficiary	1,233	69	19	1,283
	<b>Total</b>	<b>180,056</b>	<b>9,274</b>	<b>3,725</b>	<b>185,605</b>
2013	Retirement	165,966	9,889	3,425	172,430
	Disability	6,473	146	226	6,393
	Beneficiary	1,216	70	53	1,233
	<b>Total</b>	<b>173,655</b>	<b>10,105</b>	<b>3,704</b>	<b>180,056</b>
2012	Retirement	160,044	9,322	3,400	165,966
	Disability	6,201	183	(89)	6,473
	Beneficiary	1,208	67	59	1,216
	<b>Total</b>	<b>167,453</b>	<b>9,572</b>	<b>3,370</b>	<b>173,655</b>

Beginning in 2018, disability count includes Long-Term Disability Insurance annuities.



# INVESTMENT SECTION

The background features a series of overlapping, wavy lines in various shades of teal and green. These lines create a sense of movement and depth. In the lower right quadrant, there is a grid of thin, dark teal lines that also follows the wavy pattern, adding a technical or data-oriented feel to the design.

State of Wisconsin  
Department of Employee Trust Funds



## Investments

### Prepared by the State of Wisconsin Investment Board

#### » MESSAGE FROM THE EXECUTIVE DIRECTOR/CHIEF INVESTMENT OFFICER

In 2021, SWIB generated strong investment returns in a volatile market environment dominated by the ongoing effects of the coronavirus pandemic. The year began with positive momentum from the faster-than-expected development and rapid deployment of effective vaccines against COVID-19, which accelerated timelines for re-opening economies. This, coupled with additional fiscal stimulus and continued highly accommodative monetary policy, provided a strong tailwind for most risk assets like equity and non-investment grade bonds.

The Wisconsin Retirement System (WRS) Core Trust Fund achieved a net return of 16.89%, representing outperformance of 65 basis points relative to its benchmark. The WRS Variable Trust Fund, an optional stock-only fund, ended 2021 with a net return of 19.95%.

This performance means WRS annuitants received the highest Core Fund annuity increase in more than two decades. Actively employed WRS participants also benefited from a double-digit effective rate of interest for 2021. Contribution rates for WRS employers and employees alike are remaining relatively stable.

SWIB met and exceeded several of its organizational goals during 2021. SWIB enhanced its existing investment capabilities and access to new markets with the implementation and support of several new instruments while also improving its collateral management through a new liquidity strategy. SWIB continued to mature and strengthen its data management and information security programs while also advancing the implementation of a new portfolio management system. SWIB's ongoing commitment to investing in its platforms is a key component to better supporting cost-efficient, internal investment strategies. SWIB made continued progress on recruitment and retention and also established and built out its Risk Management Division.

SWIB's earnings help fuel one of the only fully funded pension systems in the U.S. About 663,000 current and former employees of Wisconsin state and local governments count on the WRS to help provide their families with a more secure retirement. In uncertain and unpredictable times like these, the WRS is a steady economic pillar for the state of Wisconsin.



Edwin Denson  
Executive Director/Chief Investment Officer

## » ABOUT THE INVESTMENT BOARD

SWIB is a trusted and skilled investment organization contributing to the strong financial future of the beneficiaries of the funds entrusted to us. SWIB is responsible for managing the assets of the WRS, the State Investment Fund (SIF), and other separately managed funds.

The largest portion of the assets managed by SWIB is the trust funds of the WRS. The assets managed by SWIB include the SIF, a pool of invested cash balances of the WRS and various state and local government units. The remaining assets are separately managed funds invested by SWIB including the Injured Patients and Families Compensation Fund, University of Wisconsin System Trust Funds, State Life Insurance Fund, and State Historical Society of Wisconsin Endowment Fund.

SWIB was created under Wis. Stat. § 15.76 and its duties to invest these funds are provided in Wis. Stat. § 25. SWIB is a fiduciary and is governed by the “prudent investor” standard, which requires it to use the diligence, skill, and care that a prudent person acting in a similar capacity and with the same resources would use in managing a large public pension fund. The law also requires SWIB to make investment decisions and conduct its operations solely to fulfill the purpose of the funds under management.

SWIB is governed by a nine-person, independent Board of Trustees (Board). The Board appoints the executive director and sets the overall policy for SWIB. The executive director/chief investment officer (ED/CIO) oversees the staff, develops and recommends agency and investment policies for Board adoption, and ensures adherence to state law and policies. The ED/CIO serves as chair of the Investment Committee. The Investment Committee provides oversight of SWIB’s investments and reports to and makes recommendations to the Trustees.

SWIB publishes an annual report and a detailed schedule of investments as of the end of the calendar year. More information about SWIB and the funds it manages can be found at [www.swib.state.wi.us](http://www.swib.state.wi.us).

## » WISCONSIN RETIREMENT SYSTEM

The WRS is a hybrid defined benefit plan. It contains elements of both a 401(k), or defined contribution plan, and a defined benefit plan. More than 663,000 current and former state and local government employees and their families rely on the WRS for some of their retirement security.

The Core Fund, the larger of the two WRS funds, with diversified holdings in stocks, bonds, private equity, real estate, hedge funds, and other investments, had a net of all fees and costs of 16.9 percent in 2021, which is ahead of its benchmark of 16.3 percent. SWIB’s outperformance is due to the investment strategy that has been implemented. That investment strategy is designed to weather a variety of economic environments to ensure the WRS is able to meet its obligations today and in the future. It also allows SWIB to meet one of its standards of responsibility that is outlined in state statutes. That statute, Wis. Stat. § 25.15 (2)(b), says SWIB should “diversify investments in order to minimize the risk of large losses, unless under the circumstances it is clearly prudent not to do so.” Because of SWIB’s sound investment performance over the long-term, the Core Fund, which had a net asset value of approximately \$136.3 billion as of December 31, 2021, also outperformed its five, ten, and twenty-year benchmarks.

The objective of the Core Fund investment strategy is to earn returns comparable to the actuarial objective of 6.8 percent over the long-term, but with less risk than the typical 60 percent equities/40 percent fixed income portfolio. The 20-year net of external management fees annualized return for the Core Fund, as of December 31, 2021, was 7.9 percent, which is ahead of its benchmark of 7.7 percent.



## INVESTMENT SECTION

The Variable Fund, an optional, U.S. and international stock fund, ended the year with a net of all fees and costs return of 20.0 percent, compared to its benchmark of 20.2 percent. The Variable Fund's net asset value was approximately \$10.9 billion as of December 31, 2021. As of December 31, 2021, the Variable Fund's 20-year net of external management fees annualized return was 8.5 percent, compared to its benchmark return of 8.7 percent.

The investment strategy for the Variable Fund is to achieve returns equal to or above that of similar stock portfolios over a market cycle.

### » BASIS OF PRESENTATION OF INVESTMENT DATA

The investments of the WRS are reported at fair value as prescribed by GASB and per Wis. Stat. § 25.17 (14). Unrealized gains and losses are included as investment income.

The fair value of the WRS assets is obtained or estimated in accordance with a pricing hierarchy established with SWIB's custodian. As prescribed by the hierarchy, a variety of independent pricing sources are used to price assets based on type, class, or issue.

When a portfolio includes securities or instruments for which the custodial bank does not receive fair value information from its vendor pricing sources, a variety of third-party pricing methods are used, including appraisals, pricing models, and other methods deemed acceptable by industry standards.

Cash and cash equivalents consist of short-term investments which are used to meet the liquidity requirements of the WRS. Cash and cash equivalents held by the WRS can include cash on deposit, foreign currencies, cash posted as collateral to counterparties, repurchase agreements, certificates of deposit, U.S. Treasury Bills, short-term investment funds, and other U.S. or foreign liquid financial instruments with maturities that are generally less than three months. Cash and cash equivalents are reported at fair value or cost, which approximates fair value.

Exchange-traded securities such as equities, preferred stock, certain derivatives, and exchange-traded funds are generally valued at the official closing price (usually the last trade price) or the last bid price on the security's primary exchange.

Privately held debt is priced using approaches that value each holding based on the best available information using the following hierarchy of pricing sources:

1. Custodian-supplied prices for assets that can be priced in accordance with the pricing hierarchy established with SWIB's custodian
2. Prices provided by a third party with expertise in the bond market

For private market investments where no readily ascertainable market value exists, including limited partnerships and real estate pooled funds, fair value is estimated based on the net asset values provided by the general partner. Due to the reporting timing of private markets investment managers, reported fair values as of December 31, 2021 are based on actual September 30, 2021 reporting, which has been adjusted to reflect cashflows occurring from October 1, 2021 through December 31, 2021. The reported fair value is considered an estimate that may significantly differ from the value that could be realized in a secondary market transaction or the amount ultimately realized. The financial statements of the limited partnerships and real estate pooled funds are audited by independent auditors annually.

Certain portfolios make investments in privately held companies alongside a strategic partner, such as a limited partnership fund manager. These co-investments are valued by SWIB's strategic partner, who often employ independent valuation agents and use a variety of methodologies such as reviews of subsequent financing rounds, discounted cash flow analyses, cash flow multiples analyses, reviews of market comparable sales or metrics, and reviews of third-party appraisals.

Real estate investments owned by SWIB in limited liability companies are valued by independent appraisers every three years. In years when appraisals are not performed, properties are informally appraised by the asset advisor. Each year audited financial statements are prepared for each property.

SWIB employs portfolio strategies which involve investments across multiple asset classes. The "Multi Asset" category on the Statement of Fiduciary Net Position consists primarily of hedge funds. SWIB values hedge funds based on monthly statements or estimated returns received from each of the hedge fund's administrators. A third-party administrator's responsibility is to independently account for the hedge fund's activity and calculate the net asset value of the fund. Generally, hedge fund administrators, price financial instruments traded in active markets based on quoted market prices or binding dealer quotations. For certain over-the-counter instruments, fair value is determined based on valuation models used by the administrator or independent valuation agent. Annually, the financial statements prepared by the administrator are audited by independent auditors.

Derivative financial instruments are marked to fair value daily, with valuation changes recognized in income during the period the instruments are held and when the instrument is sold or expires.

A limited number of securities are carried at cost. Certain non-public or closely held investments are reported and carried at cost since no independent quotation is available to estimate fair value for these securities.

## » INVESTMENT POLICY

As part of SWIB's fiduciary responsibilities, SWIB is required by Wis. Stat. § 25.15 (2)(b) "To diversify investments in order to minimize the risk of large losses, unless under the circumstances it is clearly prudent not to do so, considering each trust's or fund's portfolio as a whole at any point in time." SWIB exercises this duty in part by establishing its investment policy and by setting the asset allocation.

The Board-approved investment policy for the WRS is intended to assist in development of a diversified portfolio of investments within acceptable risk parameters. The policy represents a delegation of standing authority to the Executive Director/Chief Investment Officer and investment managers within the organization to make prudent investments within the investment guidelines, pursuant to Wis. Stat. § 15.02 (4) and Wis. Stat. § 25.15 (2) and section IB 2.02 of the Wisconsin Administrative Code.

Additionally, the Investment Committee (IC) was created to provide oversight of SWIB investments within the parameters established by the Board. Oversight includes analysis of risk and return of the portfolios, asset classes, and Core and Variable Funds. The IC is responsible for proposing to the Board changes to the WRS investment policy, approving investment guidelines or strategies for internally managed portfolios, approving the general strategies for each asset class, and for approving new investment instruments and derivatives strategies. The Board of Trustees reserves all rights to modify and amend IC guidelines at any time at its discretion.

The IC-approved WRS Investment Guidelines include several policies, including a derivative use policy, rebalancing procedures, and a leverage use policy. The derivatives use policy sets forth the objectives,





## INVESTMENT SECTION

monitoring, and reporting guidelines relating to derivative investments. The rebalancing procedures used in both mandatory and discretionary asset class rebalancing are described in the Investment Guidelines, and the leverage use policy describes SWIB's leverage philosophy. The total amount of financial leverage is approved by the Board through the WRS asset allocation process.

## » SCHEDULE OF INVESTMENT RESULTS

The tables below present returns for the Core and Variable Funds on a total fund basis as well as by asset class. Appropriate benchmark returns are provided for comparison purposes.

<b>Time-Weighted Core Fund &amp; Asset Class Returns<sup>1</sup></b>			
<b>As of December 31, 2021</b>			
	<b>1-Year Return %</b>	<b>5-Year Return %</b>	<b>10-Year Return %</b>
Core Fund	16.9	12.5	10.1
<i>Benchmark</i>	16.3	11.9	9.7
Public Equities	19.0	14.8	12.5
<i>Aggregated Equities Benchmark</i>	19.7	15.1	12.5
Fixed Income	(0.6)	4.6	3.5
<i>Aggregated Fixed Income Benchmark</i>	(1.5)	4.2	3.1
Inflation Sensitive	6.0	5.6	2.7
<i>Aggregated Inflation Sensitive Benchmark</i>	6.0	5.5	2.6
Real Estate	16.1	7.9	10.7
<i>100% ODCE Benchmark (since 1/1/13)</i>	13.6	6.6	8.8
Private Equity/Debt	41.5	19.9	16.1
<i>Aggregated Private Equity Benchmark</i>	41.9	16.9	14.0
Multi Asset	16.3	11.5	8.1
<i>Aggregated Multi Asset Benchmark</i>	12.2	11.4	9.1

<sup>1</sup>Returns presented net of external management fees, except for the Core Fund 1-Year Return is net of all costs.

<b>Time-Weighted Variable Fund &amp; Asset Class Returns<sup>1</sup></b>			
<b>As of December 31, 2021</b>			
	<b>1-Year Return %</b>	<b>5-Year Return %</b>	<b>10-Year Return %</b>
Variable Fund	20.0	15.5	13.8
<i>Benchmark</i>	20.2	15.6	13.7
Public Equities	20.0	15.5	13.7
<i>Aggregated Equities Benchmark</i>	20.2	15.6	13.7

<sup>1</sup>Returns presented net of external management fees, except for the Variable Fund 1-Year Return is net of all costs.

## » ASSET ALLOCATION

SWIB's Board has established the asset allocation pursuant to a comprehensive and ongoing evaluation of the appropriate risk and return standards for each fund under management.

The Board adopts the Retirement Funds' asset allocation policy, based on recommendations by the IC, the Board's asset allocation consultant, the Executive Director/Chief Investment Officer, and the Head of Asset and Risk Allocation. SWIB undertakes a comprehensive review of its strategic asset allocation plan every other year, including asset/liability modeling, to determine a suitable target allocation for each asset class included in the Core and Variable Funds, and an annual review to assess whether any interim adjustments should be made. The strategic nature of these reviews contemplates a long-term time horizon over which potential results are evaluated. This exercise is not an attempt to predict short-term market movements, but an effort to understand the long-term impacts of poor, normal, and above average market results.

In addition to potential future market impact, SWIB also contemplates the objectives of the funds, the impact of actuarial analysis, and the soundness of investment return and risk expectations. SWIB's asset allocation policies reflect the Board's program of risk allocation that involves reducing equity exposure by leveraging low-volatility assets, such as "fixed income" securities. This investment strategy results in Core Fund strategic targets which exceed 100% of invested assets. Currently the Board has approved an asset allocation target of 15% financial leverage for the Core Fund subject to an allowable range of up to 20%.

SWIB's asset allocation review process also includes assumptions regarding expected rates of return. Long-term (e.g., 30-year) expected real rates of return on pension plan investments are determined using a building block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected real rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The table entitled Asset Allocation Targets and Expected Returns presents the policy asset allocation targets and the best estimates of expected geometric rates of return for each major asset class as of December 31, 2021.



## INVESTMENT SECTION

**Retirement Funds**  
**Asset Allocation Targets and Expected Returns<sup>2</sup>**  
 As of December 31, 2021

<b>Core Fund Asset Class</b>	<b>Asset Allocation %</b>	<b>Long-Term Expected Nominal Rate of Return %</b>	<b>Long-Term Expected Real Rate of Return %<sup>1</sup></b>
Global Equities	52.0 %	6.8 %	4.2 %
Fixed Income	25.0	4.3	1.8
Inflation Sensitive Assets	19.0	2.7	0.2
Real Estate	7.0	5.6	3.0
Private Equity/Debt	12.0	9.7	7.0
<b>Total Core Fund</b>	<b>115.0 %</b>	<b>6.6 %</b>	<b>4.0 %</b>
 <b>Variable Fund Asset Class</b>			
U.S. Equities	70.0 %	6.3 %	3.7 %
International Equities	30.0	7.2	4.6
<b>Total Variable Fund</b>	<b>100.0 %</b>	<b>6.8 %</b>	<b>4.2 %</b>

<sup>1</sup> New England Pension Consultants Long Term U.S. CPI (Inflation) Forecast: 2.5%

<sup>2</sup> Asset Allocations are managed within established ranges, target percentages may differ from actual monthly allocations.

For purposes of determining asset allocation targets, investments may be categorized differently than they are within the financial statements. For example, SWIB's management considers inflation-sensitive assets separately from other "fixed income" investments for asset allocation purposes.

**» WRS LARGEST HOLDINGS**

<b>WRS Largest Equity Holdings</b>				
<b>As of December 31, 2021</b>				
<b>(In Thousands)</b>				
<b>Issuer</b>	<b>Shares</b>	<b>Fair Value</b>	<b>% of Total Equities</b>	
APPLE INC	13,212,550	\$ 2,346,153	2.80 %	
MICROSOFT CORP	6,913,936	2,325,295	2.78	
ALPHABET INC	563,613	1,631,914	1.95	
AMAZON.COM INC	439,359	1,464,972	1.75	
META PLATFORMS INC	2,540,106	854,365	1.02	
TESLA INC	682,970	721,749	0.86	
NVIDIA CORP	2,006,247	590,057	0.70	
UNITEDHEALTH GROUP INC	844,802	424,209	0.51	
VISA INC	1,935,919	419,533	0.50	
ROCHE HOLDING AG	970,812	404,404	0.48	

<b>WRS Largest Fixed Income Holdings</b>					
<b>As of December 31, 2021</b>					
<b>(In Thousands)</b>					
<b>Security<sup>1</sup></b>	<b>Coupon Rate</b>	<b>Maturity Date</b>	<b>Fair Value</b>	<b>% of Total Fixed Income</b>	
U.S. TREAS-CPI INFLAT	0.375	7/15/2025	\$ 890,319	1.85 %	
U.S. TREAS-CPI INFLAT	0.125	1/15/2031	817,299	1.69	
U.S. TREAS-CPI INFLAT	0.625	1/15/2024	749,330	1.55	
U.S. TREAS-CPI INFLAT	0.625	4/15/2023	697,788	1.45	
U.S. TREAS-CPI INFLAT	0.375	7/15/2023	693,791	1.44	
U.S. TREAS-CPI INFLAT	0.125	7/15/2030	691,890	1.43	
U.S. TREAS-CPI INFLAT	0.125	1/15/2023	683,595	1.42	
U.S. TREAS-CPI INFLAT	0.375	1/15/2027	655,677	1.36	
U.S. TREAS-CPI INFLAT	0.125	7/15/2024	649,898	1.35	
U.S. TREAS-CPI INFLAT	0.125	10/15/2025	639,645	1.33	

<sup>1</sup>U.S. TREAS-CPI INFLAT - Treasury Inflation Protected Securities

Listing of largest holdings does not include externally managed commingled funds.

A complete list of WRS investments can be found using the following link.

<http://www.swib.state.wi.us/publications>



## INVESTMENT SECTION

## » WRS INVESTMENT INCOME AND FEES

<b>Schedule of WRS Investment Income and Fees</b>			
<b>For the Calendar Year Ended December 31, 2021</b>			
(In Thousands)			
	<u>Core Fund</u>		<u>Variable Fund</u>
Investment Income (Loss)	\$ 20,386,188	\$	1,851,421
Less:			
Investment Operating Expense*	253,927		72
Internal Operating Expense*	83,101		2,816
Custodial, Bank Fees & Operating Services*	5,467		512
Professional Services Expenses*	38,933		1,111
External Investment Management Fees*	45,392		4,132
Securities Lending Fees	2,711		571
<b>Net Investment Income (Loss)</b>	<u>\$ 19,956,657</u>	<u>\$</u>	<u>1,842,207</u>

\*These expenses are combined and reported as "Investment Expense" on the Statement of Changes in Fiduciary Net Position

Investment Expense includes most transaction related expenses, certain external management fees, and expenses tied to Core Fund operations. Transaction related expenses are reflected in Investment Operating Expense and Securities Lending Fees in the table above. These expenses are often related to the execution of specific investment transactions like short sales. In this example, the dividends a shorted security pays are reflected as dividend expense. Two transaction related expense types, commissions, and trade execution fees are excluded from Investment Operating Expense in the table above and are instead included in "Net Increase (Decrease) in the Fair Value of Investments" on the Statement of Changes in Fiduciary Net Position as these fees are not readily separable from the acquisition or disposal of an investment. External management fees include base fees, and, in some cases, performance fees paid to external managers. Administrative-related expenses are included in Internal Operating Expenses. Professional Services Expenses include legal fees, research and data services, and investment consulting fees.

SWIB invests in separate legal entities managed by external investment managers to gain exposure to select private market and other investment strategies. 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. The fees assessed to these external vehicles are considered a fee of the external funds and are included in the Net Increase (Decrease) in the Fair Value of Investments within the Statement of Changes in Fiduciary Net Position. Accordingly, these fees are reported as supplemental information in the table below.

**Schedule of WRS External Management Fees  
for Commingled Portfolios**

**For the Calendar Year Ended December 31, 2021**

(In Thousands)

Private Fund Investments	\$	286,512
Multi Asset		192,810
Equities & Other Public Markets		42,716
<b>Total</b>	<b>\$</b>	<b>522,038</b>



## INVESTMENT SECTION

## » INVESTMENT SUMMARY

**Core Fund Summary of Investments by Asset Type<sup>1</sup>**
**As of December 31, 2021**

(In Thousands)

<b>Asset Type</b>	<b>Fair Value</b>	<b>% of Total Investments</b>
Equities	\$ 73,452,677	46.4 %
Fixed Income	48,219,267	30.5
Private Fund Investments	26,573,553	16.8
Multi Asset	6,227,923	3.9
Preferred Securities	687,501	0.4
Convertible Securities	2,154	0.0
To Be Announced Securities	2,899,255	1.8
Foreign Currency Contracts	3,699	0.0
Option Contracts	(1,781)	0.0
Futures Contracts	71,619	0.1
Swaps	25,690	0.1
<b>Total Core Fund Investments</b>	<b>\$ 158,161,557</b>	<b>100.0 %</b>

<sup>1</sup>Does not include investment related liabilities

**Variable Fund Summary of Investments by Asset Type**
**As of December 31, 2021**

(In Thousands)

<b>Asset Type</b>	<b>Fair Value</b>	<b>% of Total Investments</b>
Equities	\$ 10,326,131	99.8 %
Preferred Securities	15,811	0.2
Foreign Currency Contracts	95	0.0
Options Contracts	(166)	0.0
Futures Contracts	5,170	0.0
<b>Total Variable Fund Investments</b>	<b>\$ 10,347,041</b>	<b>100.0 %</b>





The background features a series of overlapping, wavy lines in various shades of teal and green. These lines create a sense of movement and depth. In the lower right quadrant, there is a grid of thin, dark teal lines that also follows the wavy pattern, adding a technical or data-oriented feel to the design.

# CONTRIBUTIONS PAID AND EMPLOYER UNFUNDED LIABILITY BALANCES

State of Wisconsin  
Department of Employee Trust Funds



## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
<b>State Agencies</b>					
ADMINISTRATION, DEPT OF	\$ 98,047,247	\$ 7,834,242	\$ 6,618,191	\$ 14,452,433	\$ 0
AGRIC TRADE CONS PROT, DEPT OF	39,268,584	3,082,928	2,650,831	5,733,759	0
BD FOR PEOPLE WITH DEVELOP DIS	583,392	45,797	39,379	85,175	0
BOARD AGING & LONG TERM CARE	2,075,785	162,950	140,116	303,066	0
BRD OF COMMSRS OF PUBLIC LANDS	759,917	59,654	51,294	110,948	0
CHILDREN & FAMILIES, DEPT OF	50,846,308	3,991,457	3,432,122	7,423,579	0
CORRECTIONS, DEPT OF	560,068,240	62,536,157	37,805,755	100,341,912	0
COURTS - STATE	79,828,547	6,266,552	5,388,456	11,655,008	0
DISTRICT ATTORNEYS	39,938,261	3,135,164	2,695,834	5,830,998	0
EDUCATIONAL COMMUNICATIONS BD	3,120,730	244,978	210,649	455,627	0
ELECTIONS COMMISSION	2,057,498	161,514	138,881	300,396	0
EMPLOYEE TRUST FUNDS, DEPT OF	19,987,587	1,569,034	1,349,161	2,918,194	0
EMPLOYMENT RELATIONS COMM	495,719	38,914	33,461	72,375	0
ETHICS COMMISSION	531,580	41,729	35,882	77,611	0
EXECUTIVE OFFICE	2,434,896	191,140	164,356	355,496	0
FINANCIAL INSTITUTIONS, DEPT	9,494,800	745,346	640,898	1,386,244	0
HEALTH SERVICES, DEPT OF	385,950,377	34,319,418	26,051,254	60,370,672	0
HIGHER EDUCATIONAL AIDS BOARD	533,863	41,908	36,036	77,944	0
HISTORICAL SOCIETY - STATE	10,048,307	789,760	679,026	1,468,786	0
INSURANCE COMMISSIONR'S OFFICE	8,978,159	704,788	606,027	1,310,815	0
INVESTMENT BOARD	47,039,214	3,692,583	3,175,147	6,867,730	0
JUDICIAL COMMISSION	151,517	11,894	10,227	22,121	0
JUSTICE, DEPT OF	54,351,614	4,826,643	3,668,731	8,495,373	0
KICKAPOO RESERVE MANGMT BD	248,899	19,539	16,801	36,339	0
LABOR & INDUSTRY REVIEW COMM	1,399,121	109,831	94,441	204,272	0
LEGIS ASSEMBLY - CHIEF CLERK	17,177,303	1,348,419	1,159,474	2,507,893	0
LEGISLATIVE AUDIT BUREAU	5,037,792	396,223	340,052	736,276	0
LEGISLATIVE COUNCIL STAFF	2,160,648	169,625	145,833	315,458	0
LEGISLATIVE FISCAL BUREAU	2,572,186	201,917	173,623	375,540	0
LEGISLATIVE REFERENCE BUREAU	3,539,831	277,877	238,939	516,816	0
LEGISLATIVE TECH SERV BUREAU	3,109,489	244,095	209,891	453,986	0
LEGISLATURE - SENATE	12,677,518	995,186	855,736	1,850,922	0
LIEUTENANT GOVERNOR'S OFFICE	262,189	20,582	17,698	38,280	0
LOWER WIS. STATE RIVERWAY BD.	136,905	10,747	9,241	19,988	0
MILITARY AFFAIRS, DEPT OF	28,453,850	2,619,407	1,921,118	4,540,525	0
NATURAL RESOURCES, DEPT OF	164,831,251	14,500,129	11,127,567	25,627,696	0
PUBLIC DEFENDER'S OFFICE	40,746,247	3,198,592	2,750,375	5,948,967	0
PUBLIC INSTRUCTION, DEPT OF	38,157,862	2,995,876	2,575,187	5,571,063	0
PUBLIC SERVICE COMMISSION	11,002,188	863,677	742,646	1,606,322	0
REVENUE, DEPT OF	71,699,690	5,672,835	4,842,547	10,515,381	0
SAFETY & PROFESS SVCES, DEPT	14,657,071	1,149,663	988,473	2,138,136	0
SECRETARY OF STATE'S OFFICE	188,979	14,835	12,756	27,591	0
STATE FAIR PARK BOARD	4,727,115	382,776	319,081	701,857	0
TOURISM, DEPARTMENT OF	1,894,412	148,712	127,873	276,585	0
TRANSPORTATION, DEPT OF	198,741,064	18,546,534	12,448,201	30,994,735	0
TREASURER'S OFFICE - STATE	75,425	5,921	5,091	11,012	0
VETERANS AFFAIRS, DEPT OF	47,010,234	3,709,335	3,174,687	6,884,021	0



Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
WIS TECH COLLEGE SYS BOARD	\$ 4,059,099	\$ 322,518	\$ 273,989	\$ 596,506	\$ 0
WISCONSIN ECON DEVELOP CORP	8,728,320	591,435	586,889	1,178,324	0
WORKFORCE DEVELOPMENT, DEPT OF	96,302,590	7,559,846	6,500,486	14,060,332	0
Total State Agencies (50)	\$ 2,196,189,420	\$ 200,570,682	\$ 147,280,409	\$ 347,851,085	\$ 0
UNIVERSITY OF WISCONSIN SYSTEM	\$ 2,353,339,815	\$ 185,551,731	\$ 158,827,152	\$ 344,378,883	\$ 0
<b>Public Authorities</b>					
BEYOND VISION*	\$ 3,528,941	\$ 296,582	\$ 236,289	\$ 532,871	\$ 564,784
FOX RIVER NAVIGATION SYS AUTH	246,975	22,318	18,801	41,119	0
HEALTH & EDUC FACILITIES AUTH	389,088	40,972	11,556	52,527	0
HOUSING & ECON DEVELOP AUTH	12,331,151	967,999	832,354	1,800,353	0
UW HOSPITAL AUTHORITY	658,635,533	51,752,876	44,415,489	96,168,365	0
Total Public Authorities (5)	\$ 675,131,688	\$ 53,080,747	\$ 45,514,489	\$ 98,595,235	\$ 564,784
Total State of Wisconsin (56)	\$ 5,224,660,923	\$ 439,203,160	\$ 351,622,050	\$ 790,825,203	\$ 564,784

\*Prior to 2020, referred to as WISCRAFT INC - ENT FOR BLIND

## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
<b>Cities</b>					
ABBOTSFORD, CITY OF	\$ 541,464	\$ 36,549	\$ 36,549	\$ 73,098	\$ 0
ADAMS, CITY OF	746,055	65,161	50,359	115,519	68,841
ALGOMA, CITY OF	3,422,334	248,661	231,000	479,661	0
ALMA, CITY OF	301,467	20,349	20,349	40,698	0
ALTOONA, CITY OF	2,987,571	268,028	201,661	469,689	0
AMERY, CITY OF	1,484,254	126,471	100,187	226,659	0
ANTIGO, CITY OF	4,819,059	602,997	216,094	819,091	0
APPLETON, CITY OF	45,283,317	4,387,090	3,057,397	7,444,486	0
ARCADIA, CITY OF	1,725,468	138,697	107,359	246,056	0
ASHLAND, CITY OF	5,580,918	633,590	338,131	971,721	0
AUGUSTA, CITY OF	640,988	58,124	39,358	97,482	0
BARABOO, CITY OF	6,427,885	640,994	349,847	990,842	0
BARRON, CITY OF	1,876,835	147,301	126,686	273,988	0
BAYFIELD, CITY OF	693,608	56,324	46,819	103,143	0
BEAVER DAM, CITY OF	8,332,240	889,713	564,306	1,454,019	2,647,883
BELOIT, CITY OF	23,419,154	2,431,592	1,580,877	4,012,469	0
BERLIN, CITY OF	2,710,586	221,322	182,965	404,286	0
BLACK RIVER FALLS, CITY OF	2,781,813	226,140	184,515	410,655	0
BLAIR, CITY OF	512,586	43,590	34,600	78,189	0
BLOOMER, CITY OF	1,244,060	124,742	68,921	193,662	0
BOSCOBEL, CITY OF	1,632,638	130,219	110,204	240,422	0
BRILLION, CITY OF	1,147,561	107,490	77,461	184,951	0
BRODHEAD, CITY OF	1,532,267	125,905	103,428	229,333	0
BROOKFIELD, CITY OF	27,003,172	2,760,069	1,823,739	4,583,808	0
BUFFALO CITY, CITY OF	71,557	4,830	4,830	9,660	0
BURLINGTON, CITY OF	5,027,701	491,858	339,370	831,228	0
CEDARBURG, CITY OF	6,971,177	588,328	470,553	1,058,881	0
CHETEK, CITY OF	238,611	36,727	7,631	44,358	0
CHILTON, CITY OF	1,429,535	123,296	96,494	219,790	0
CHIPPEWA FALLS, CITY OF	7,358,488	902,171	375,746	1,277,917	0
CLINTONVILLE, CITY OF	2,942,918	241,010	198,368	439,378	0
COLBY, CITY OF	461,477	31,150	31,150	62,300	0
COLUMBUS, CITY OF	2,568,266	209,011	164,139	373,151	0
CORNELL, CITY OF	601,991	48,132	40,635	88,767	0
CRANDON, CITY OF	737,908	65,736	45,578	111,314	0
CUBA CITY, CITY OF	741,992	59,796	50,084	109,881	0
CUDAHY, CITY OF	9,677,078	1,029,033	653,662	1,682,695	0
CUMBERLAND, CITY OF	993,417	90,970	67,056	158,026	0
DARLINGTON, CITY OF	1,001,396	87,485	62,942	150,427	0
DE PERE, CITY OF	11,354,060	1,180,296	766,400	1,946,697	0
DELAFIELD, CITY OF	2,991,062	272,123	201,897	474,019	0
DELAVAN, CITY OF	3,708,816	368,037	216,775	584,812	0
DODGEVILLE, CITY OF	1,969,807	172,856	132,962	305,818	0
DURAND, CITY OF	700,131	62,019	50,570	112,588	0
EAGLE RIVER, CITY OF	1,790,077	142,992	120,830	263,822	0
EAU CLAIRE, CITY OF	37,685,348	3,734,601	2,544,642	6,279,243	0
EDGERTON, CITY OF	1,816,608	156,263	122,621	278,884	0

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
ELKHORN, CITY OF	\$ 5,049,848	\$ 457,981	\$ 340,865	\$ 798,846	\$ 0
ELROY, CITY OF	830,414	63,904	56,053	119,956	0
EVANSVILLE, CITY OF	2,728,963	221,634	186,077	407,711	0
FENNIMORE, CITY OF	1,517,464	121,464	102,429	223,893	0
FITCHBURG, CITY OF	12,863,944	1,183,885	873,082	2,056,967	0
FOND DU LAC, CITY OF	23,910,500	2,684,872	1,485,469	4,170,342	0
FORT ATKINSON, CITY OF	5,119,614	455,442	345,574	801,016	0
FOUNTAIN CITY, CITY OF	199,727	13,482	13,482	26,963	0
FOX LAKE, CITY OF	574,423	44,377	38,774	83,151	0
FRANKLIN, CITY OF	15,132,859	1,563,738	1,021,467	2,585,205	0
GALESVILLE, CITY OF	603,454	52,213	40,733	92,946	0
GILLETT, CITY OF	552,093	50,363	37,176	87,539	0
GLENDALE, CITY OF	5,729,874	606,945	386,767	993,711	0
GLENWOOD CITY, CITY OF	439,616	37,605	29,674	67,279	0
GREEN BAY, CITY OF	66,713,923	7,159,652	4,503,110	11,662,762	0
GREEN LAKE, CITY OF	661,856	64,098	35,507	99,605	0
GREENFIELD, CITY OF	17,892,135	1,778,661	1,207,719	2,986,379	0
GREENWOOD, CITY OF	547,289	54,373	28,554	82,927	0
HARTFORD, CITY OF	8,224,016	686,146	555,880	1,242,026	0
HAYWARD, CITY OF	920,073	84,054	62,105	146,159	0
HILLSBORO, CITY OF	589,408	47,428	39,785	87,213	0
HORICON, CITY OF	1,414,667	119,474	97,017	216,491	0
HUDSON, CITY OF	6,679,423	651,834	386,412	1,038,246	0
HURLEY, CITY OF	984,960	87,777	66,261	154,038	0
INDEPENDENCE, CITY OF	487,320	42,262	32,894	75,156	10,116
JANESVILLE, CITY OF	34,642,165	3,579,222	2,337,740	5,916,962	0
JEFFERSON, CITY OF	4,676,051	365,846	315,073	680,919	0
JUNEAU, CITY OF	1,218,920	98,277	77,293	175,570	0
KAUKAUNA, CITY OF	12,606,353	1,121,443	848,274	1,969,717	0
KENOSHA, CITY OF	60,152,888	6,374,304	4,046,146	10,420,450	0
KEWAUNEE, CITY OF	1,228,115	104,915	82,896	187,811	0
KIEL, CITY OF	2,096,391	174,118	141,506	315,624	0
LA CROSSE, CITY OF	35,303,239	3,827,778	2,122,507	5,950,284	0
LADYSMITH, CITY OF	1,879,991	153,488	125,817	279,305	0
LAKE GENEVA, CITY OF	5,960,234	585,940	347,955	933,895	0
LAKE MILLS, CITY OF	3,505,421	279,657	236,616	516,273	0
LANCASTER, CITY OF	1,598,035	132,306	108,210	240,515	0
LODI, CITY OF	1,613,565	129,534	108,915	238,450	0
LOYAL, CITY OF	464,078	41,219	31,325	72,544	12,083
MADISON, CITY OF	226,230,504	21,816,677	15,276,192	37,092,869	0
MANAWA, CITY OF	529,600	44,555	35,748	80,303	93,469
MANITOWOC, CITY OF	24,976,953	2,365,665	1,700,754	4,066,418	0
MARINETTE, CITY OF	6,588,376	794,810	317,155	1,111,964	0
MARION, CITY OF	484,973	43,828	32,736	76,563	0
MARKESAN, CITY OF	570,107	50,675	38,482	89,157	0
MARSHFIELD, CITY OF	12,737,103	1,311,959	859,614	2,171,572	0
MAUSTON, CITY OF	1,802,830	154,802	121,691	276,493	0
MAYVILLE, CITY OF	1,895,681	160,294	127,246	287,540	0

## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
MEDFORD, CITY OF	\$ 2,351,181	\$ 189,839	\$ 158,704	\$ 348,543	\$ 0
MELLEN, CITY OF	343,612	27,825	23,194	51,019	0
MENASHA, CITY OF	10,252,230	1,070,365	692,026	1,762,391	0
MENOMONIE, CITY OF	8,216,688	891,570	554,376	1,445,946	0
MEQUON, CITY OF	8,998,348	840,278	607,388	1,447,667	0
MERRILL, CITY OF	7,569,108	779,929	510,914	1,290,844	0
MIDDLETON, CITY OF	11,449,752	1,016,834	774,687	1,791,520	0
MILTON, CITY OF	2,344,497	198,291	158,254	356,545	0
MINERAL POINT, CITY OF	942,418	81,780	63,982	145,763	0
MONDOVI, CITY OF	807,205	70,138	52,763	122,902	0
MONONA, CITY OF	5,010,257	462,720	338,048	800,767	0
MONROE, CITY OF	4,923,540	423,296	332,338	755,634	0
MONTELLO, CITY OF	357,880	24,157	24,157	48,314	49,721
MONTREAL, CITY OF	164,956	11,134	11,135	22,269	0
MOSINEE, CITY OF	1,295,187	115,178	87,425	202,603	0
MUSKEGO, CITY OF	8,100,420	730,555	546,777	1,277,332	0
NEENAH, CITY OF	15,108,006	1,547,621	1,019,790	2,567,411	0
NEILLSVILLE, CITY OF	1,058,255	86,152	71,432	157,584	0
NEKOOSA, CITY OF	1,542,130	147,174	88,453	235,627	0
NEW BERLIN, CITY OF	18,260,893	1,777,432	1,232,612	3,010,044	0
NEW HOLSTEIN, CITY OF	1,936,756	150,505	131,743	282,247	0
NEW LISBON, CITY OF	926,357	75,151	62,529	137,681	0
NEW LONDON, CITY OF	4,566,141	376,260	308,215	684,475	0
NEW RICHMOND, CITY OF	5,261,567	438,723	355,156	793,879	0
NIAGARA, CITY OF	710,329	68,475	39,249	107,724	0
OAK CREEK, CITY OF	21,697,445	2,067,585	1,464,578	3,532,163	0
OCONOMOWOC, CITY OF	9,221,541	723,863	625,266	1,349,129	0
OCONTO FALLS, CITY OF	1,640,195	138,228	110,713	248,941	0
OCONTO, CITY OF	2,698,315	279,163	185,100	464,263	0
OMRO, CITY OF	1,343,242	115,131	90,669	205,799	0
ONALASKA, CITY OF	6,502,563	733,158	351,863	1,085,021	0
OSHKOSH, CITY OF	40,712,361	4,110,875	2,748,455	6,859,329	0
OSSEO, CITY OF	658,926	56,822	44,477	101,300	0
OWEN, CITY OF	432,339	35,252	29,152	64,404	0
PARK FALLS, CITY OF	1,303,461	118,846	80,432	199,277	0
PESHTIGO, CITY OF	361,143	53,763	13,374	67,137	0
PEWAUKEE, CITY OF	6,435,330	586,417	434,386	1,020,803	0
PHILLIPS, CITY OF	846,051	76,943	52,170	129,112	0
PITTSVILLE, CITY OF	84,458	10,000	5,701	15,701	0
PLATTEVILLE, CITY OF	4,269,084	356,652	284,712	641,364	0
PLYMOUTH, CITY OF	4,565,017	371,765	308,139	679,903	0
PORT WASHINGTON, CITY OF	5,689,239	487,746	384,022	871,768	0
PORTAGE, CITY OF	4,951,235	471,399	334,208	805,607	0
PRAIRIE DU CHIEN, CITY OF	2,103,700	215,730	109,627	325,357	0
PRESCOTT, CITY OF	1,614,802	144,332	109,000	253,332	0
PRINCETON, CITY OF	670,342	58,470	45,248	103,718	0
RACINE, CITY OF	54,003,224	5,617,261	3,645,216	9,262,478	0
REEDSBURG, CITY OF	7,213,387	573,831	486,899	1,060,729	0



Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
RHINELANDER, CITY OF	\$ 5,849,101	\$ 603,712	\$ 394,892	\$ 998,604	\$ 0
RICE LAKE, CITY OF	5,720,858	547,656	378,492	926,148	0
RICHLAND CENTER, CITY OF	2,962,165	236,966	199,946	436,912	0
RIPON, CITY OF	3,265,423	285,071	206,227	491,298	0
RIVER FALLS, CITY OF	7,701,520	616,489	520,090	1,136,579	0
SCHOFIELD, CITY OF	497,209	33,562	33,561	67,123	0
SEYMOUR, CITY OF	1,125,690	95,507	75,984	171,491	0
SHAWANO, CITY OF	3,938,428	351,912	266,588	618,499	0
SHEBOYGAN FALLS, CITY OF	2,987,512	291,393	170,401	461,794	0
SHEBOYGAN, CITY OF	28,793,675	2,828,936	1,943,571	4,772,507	0
SHELL LAKE, CITY OF	605,527	49,720	40,873	90,593	0
SHULLSBURG, CITY OF	441,323	33,178	29,789	62,968	0
SOUTH MILWAUKEE, CITY OF	10,393,490	1,144,636	701,775	1,846,411	0
SPARTA, CITY OF	3,723,722	332,316	248,416	580,733	0
SPOONER, CITY OF	1,648,127	140,717	103,446	244,164	0
ST CROIX FALLS, CITY OF	1,179,379	117,019	66,710	183,730	0
ST FRANCIS, CITY OF	5,144,071	612,416	347,225	959,641	0
STANLEY, CITY OF	812,995	85,105	41,176	126,281	0
STEVENS POINT, CITY OF	15,964,917	1,646,558	1,095,990	2,742,548	0
STOUGHTON, CITY OF	7,128,846	574,101	481,197	1,055,299	0
STURGEON BAY, CITY OF	6,680,161	657,438	450,911	1,108,349	0
SUN PRAIRIE, CITY OF	14,414,979	1,271,321	973,195	2,244,516	0
SUPERIOR, CITY OF	18,075,419	1,834,438	1,220,250	3,054,688	0
THORP, CITY OF	462,928	39,096	31,248	70,343	0
TOMAH, CITY OF	5,526,839	551,502	329,216	880,718	0
TOMAHAWK, CITY OF	1,650,804	142,363	110,227	252,590	0
TWO RIVERS, CITY OF	8,638,338	898,197	583,088	1,481,286	0
VERONA, CITY OF	6,667,539	603,859	454,434	1,058,293	0
VIROQUA, CITY OF	2,082,447	179,201	139,309	318,510	0
WASHBURN, CITY OF	963,059	79,474	65,006	144,480	0
WATERLOO, CITY OF	1,896,464	156,840	128,012	284,852	0
WATERTOWN, CITY OF	11,272,574	1,084,376	760,896	1,845,272	0
WAUKESHA, CITY OF	42,758,611	4,358,409	2,890,491	7,248,901	0
WAUPACA, CITY OF	3,750,968	342,716	224,693	567,409	0
WAUPUN, CITY OF	4,419,965	384,749	285,594	670,342	0
WAUSAU, CITY OF	21,164,561	2,213,290	1,428,598	3,641,888	0
WAUTOMA, CITY OF	922,245	79,871	62,252	142,123	0
WAUWATOSA, CITY OF	33,469,043	3,609,746	2,262,959	5,872,705	0
WEST ALLIS, CITY OF	38,994,154	4,147,395	2,645,009	6,792,403	0
WEST BEND, CITY OF	15,163,207	1,636,925	1,022,146	2,659,070	0
WESTBY, CITY OF	1,061,755	84,455	71,669	156,123	0
WEYAUWEGA, CITY OF	874,615	80,001	59,037	139,037	0
WHITEHALL, CITY OF	1,075,470	85,573	72,594	158,167	0
WHITEWATER, CITY OF	5,614,968	475,297	379,010	854,308	0
WISCONSIN DELLS, CITY OF	3,562,274	300,903	240,453	541,357	0
WISCONSIN RAPIDS, CITY OF	16,832,115	1,576,195	1,137,688	2,713,882	0
Total Cities (189)	\$ 1,552,210,750	\$ 153,140,028	\$ 103,393,592	\$ 256,533,609	\$ 2,882,113



## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
<b>Villages</b>					
ADELL, VILLAGE OF	\$ 124,297	\$ 8,390	\$ 8,390	\$ 16,780	\$ 0
ALBANY, VILLAGE OF	422,537	36,889	28,431	65,320	0
ALLOUEZ, VILLAGE OF	2,048,128	138,249	138,248	276,497	0
ALMOND, VILLAGE OF	44,910	3,031	3,031	6,063	0
AMHERST, VILLAGE OF	265,600	18,170	17,686	35,856	0
ARENA, VILLAGE OF	267,182	24,780	18,035	42,815	0
ARGYLE, VILLAGE OF	383,531	33,602	21,490	55,092	0
ARLINGTON, VILLAGE OF	139,391	9,409	9,409	18,818	0
ASHWAUBENON, VILLAGE OF	9,064,821	884,544	611,875	1,496,419	0
ATHENS, VILLAGE OF	216,841	17,762	14,637	32,399	0
AVOCA, VILLAGE OF	124,189	8,383	8,383	16,766	0
BALDWIN, VILLAGE OF	1,715,559	169,116	108,938	278,055	0
BALSAM LAKE, VILLAGE OF	307,574	20,762	20,762	41,524	0
BANGOR, VILLAGE OF	867,951	65,539	58,587	124,126	0
BAY CITY, VILLAGE OF	134,036	9,047	9,047	18,095	0
BAYSIDE, VILLAGE OF	3,460,867	284,936	232,077	517,013	0
BELGIUM, VILLAGE OF	340,966	23,015	23,015	46,031	0
BELLEVILLE, VILLAGE OF	1,158,395	98,927	77,950	176,877	0
BELLEVUE, VILLAGE OF (BROWN)	1,423,203	96,194	96,066	192,261	0
BELMONT, VILLAGE OF	413,760	33,203	27,929	61,131	0
BENTON, VILLAGE OF	304,405	22,686	20,547	43,233	0
BIG BEND, VILLAGE OF	473,297	44,413	31,947	76,361	0
BIRCHWOOD, VILLAGE OF	224,509	18,343	15,154	33,498	0
BIRNAMWOOD, VILLAGE OF	79,678	5,378	5,378	10,757	0
BIRON, VILLAGE OF	258,367	17,440	17,440	34,879	0
BLACK CREEK, VILLAGE OF	334,248	25,545	22,439	47,984	0
BLACK EARTH, VILLAGE OF	371,491	25,076	25,076	50,152	0
BLANCHARDVILLE, VILLAGE OF	272,083	21,743	18,366	40,109	0
BLOOMFIELD, VILLAGE OF	1,093,278	108,856	68,779	177,636	0
BLUE MOUNDS, VILLAGE OF	231,449	18,880	15,623	34,503	0
BLUE RIVER, VILLAGE OF	131,943	8,918	8,894	17,812	0
BONDUEL, VILLAGE OF	216,586	16,496	14,620	31,115	0
BOWLER, VILLAGE OF	43,000	2,903	2,903	5,805	0
BOYCEVILLE, VILLAGE OF	387,536	31,756	26,159	57,915	0
BOYD, VILLAGE OF	215,250	15,506	14,529	30,036	0
BRANDON, VILLAGE OF	303,888	20,589	20,512	41,102	0
BRISTOL, VILLAGE OF	1,019,382	82,131	67,447	149,578	321,146
BROOKLYN, VILLAGE OF	339,172	24,386	22,894	47,280	0
BROWN DEER, VILLAGE OF	5,329,801	504,876	359,762	864,638	0
BROWNSVILLE, VILLAGE OF	179,690	12,129	12,129	24,258	0
BROWNTOWN, VILLAGE OF	66,197	4,468	4,468	8,937	0
BRUCE, VILLAGE OF	198,582	16,974	13,404	30,378	0
BUTLER, VILLAGE OF	1,173,902	114,480	79,238	193,719	0
BUTTERNUT, VILLAGE OF	81,675	5,513	5,513	11,026	0
CADOTT, VILLAGE OF	610,939	56,900	33,753	90,653	0
CALEDONIA, VILLAGE OF (RACINE)	11,625,918	1,169,579	783,789	1,953,368	0
CAMBRIA, VILLAGE OF	238,338	16,088	16,088	32,176	0



Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
CAMBRIDGE, VILLAGE OF	\$ 475,706	\$ 32,182	\$ 32,038	\$ 64,221	\$ 0
CAMERON, VILLAGE OF	491,262	39,693	33,160	72,853	0
CAMP DOUGLAS, VILLAGE OF	176,297	12,274	11,900	24,175	0
CAMPBELLSPORT, VILLAGE OF	497,896	35,899	33,608	69,507	0
CASCADE, VILLAGE OF	141,082	10,186	8,860	19,046	0
CASCO, VILLAGE OF	66,041	4,458	4,458	8,916	0
CASHTON, VILLAGE OF	583,957	44,995	39,417	84,412	0
CEDAR GROVE, VILLAGE OF	383,674	25,898	25,898	51,796	0
CENTURIA, VILLAGE OF	312,224	21,081	21,070	42,150	113,489
CHASEBURG, VILLAGE OF	80,948	5,464	5,464	10,928	0
CHENEQUA, VILLAGE OF	1,031,457	108,763	69,623	178,386	0
CLAYTON, VILLAGE OF	178,462	16,047	10,005	26,052	0
CLEAR LAKE, VILLAGE OF	560,241	47,801	37,816	85,617	0
CLEVELAND, VILLAGE OF	423,299	34,713	28,573	63,286	0
CLINTON, VILLAGE OF	740,504	66,819	49,984	116,803	0
CLYMAN, VILLAGE OF	86,893	5,865	5,865	11,731	0
COBB, VILLAGE OF	102,253	6,902	6,902	13,804	0
COCHRANE, VILLAGE OF	109,546	7,422	7,367	14,789	0
COLEMAN, VILLAGE OF	218,341	17,208	14,733	31,941	0
COLFAX, VILLAGE OF	581,040	44,460	39,220	83,680	0
COLOMA, VILLAGE OF	209,828	15,165	13,869	29,034	0
COMBINED LOCKS, VILLAGE OF	453,214	30,592	30,592	61,184	0
COON VALLEY, VILLAGE OF	244,461	19,163	16,501	35,664	0
COTTAGE GROVE, VILLAGE OF	2,056,335	180,474	138,803	319,277	0
CRIVITZ, VILLAGE OF	215,657	14,614	14,557	29,171	0
CROSS PLAINS, VILLAGE OF	1,355,571	110,828	91,501	202,330	(293)
DALLAS, VILLAGE OF	48,718	3,288	3,288	6,577	0
DANE, VILLAGE OF	187,909	12,684	12,684	25,368	0
DARIEN, VILLAGE OF	393,732	26,577	26,577	53,154	0
DE SOTO, VILLAGE OF	74,819	5,050	5,050	10,101	0
DEERFIELD, VILLAGE OF	516,287	34,850	34,849	69,698	0
DEFORREST, VILLAGE OF	4,025,453	358,170	271,718	629,889	0
DENMARK, VILLAGE OF	341,901	23,078	23,078	46,157	0
DICKEYVILLE, VILLAGE OF	241,876	19,359	16,326	35,685	0
DOUSMAN, VILLAGE OF	298,174	20,127	20,127	40,253	0
DRESSER, VILLAGE OF	281,100	26,095	14,915	41,009	0
EAGLE, VILLAGE OF	396,008	38,983	26,731	65,714	0
EAST TROY, VILLAGE OF	1,693,831	150,540	114,333	264,874	0
EASTMAN, VILLAGE OF	76,538	5,166	5,166	10,333	0
EDGAR, VILLAGE OF	347,633	27,465	22,465	49,930	0
EGG HARBOR, VILLAGE OF	540,185	36,489	36,437	72,925	0
ELEVA, VILLAGE OF	194,252	15,745	13,112	28,858	0
ELK MOUND, VILLAGE OF	398,491	31,134	26,898	58,032	0
ELKHART LAKE, VILLAGE OF	716,136	59,653	48,339	107,992	0
ELLSWORTH, VILLAGE OF	1,017,228	97,300	53,622	150,922	0
ELM GROVE, VILLAGE OF	3,449,523	317,571	232,844	550,415	0
ELMWOOD, VILLAGE OF	192,966	14,939	13,025	27,965	0
EPHRAIM, VILLAGE OF	402,017	27,136	27,136	54,272	0

## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
ETTRICK, VILLAGE OF	\$ 179,487	\$ 12,115	\$ 12,115	\$ 24,231	\$ 0
FAIRWATER, VILLAGE OF	72,223	4,875	4,875	9,750	0
FALL CREEK, VILLAGE OF	413,770	33,063	27,930	60,993	0
FALL RIVER, VILLAGE OF	290,130	25,317	19,584	44,901	0
FERRYVILLE, VILLAGE OF	39,000	2,633	2,633	5,265	0
FONTANA ON GNVA LK, VILLAGE OF	1,507,887	128,379	101,520	229,900	0
FOX CROSSING, VILLAGE OF	5,877,677	534,848	396,743	931,591	0
FOX POINT, VILLAGE OF	3,181,407	292,306	214,745	507,051	0
FREDERIC, VILLAGE OF	340,475	24,994	22,982	47,976	0
FREMONT, VILLAGE OF	145,619	12,224	9,819	22,044	0
FRIENDSHIP, VILLAGE OF	174,834	11,801	11,801	23,603	0
GAYS MILLS, VILLAGE OF	160,319	10,822	10,822	21,643	0
GENOA CITY, VILLAGE OF	1,086,625	94,553	73,343	167,896	0
GERMANTOWN, VILLAGE OF	8,410,936	771,746	567,735	1,339,481	0
GILMAN, VILLAGE OF	249,203	19,787	16,821	36,609	0
GRAFTON, VILLAGE OF	5,610,606	499,947	378,621	878,568	0
GRANTON, VILLAGE OF	163,611	11,044	11,044	22,088	0
GRANTSBURG, VILLAGE OF	514,161	43,482	34,706	78,188	0
GRATIOT, VILLAGE OF	51,539	3,479	3,479	6,958	0
GREENDALE, VILLAGE OF	7,590,205	870,134	512,338	1,382,472	0
GREENVILLE, VILLAGE OF	2,093,753	159,162	141,329	300,490	0
GRESHAM, VILLAGE OF	422,211	28,499	28,499	56,999	0
HALES CORNERS, VILLAGE OF	3,030,635	304,903	204,568	509,472	0
HAMMOND, VILLAGE OF	627,734	53,484	42,372	95,856	0
HARRISON, VILLAGE OF	1,069,387	74,542	72,184	146,725	0
HARTLAND, VILLAGE OF	3,731,075	349,714	251,847	601,561	0
HAUGEN, VILLAGE OF	36,920	2,492	2,492	4,984	0
HAWKINS, VILLAGE OF	55,438	3,742	3,742	7,484	0
HAZEL GREEN, VILLAGE OF	519,429	40,725	35,061	75,786	0
HIGHLAND, VILLAGE OF	210,222	16,501	14,190	30,690	0
HILBERT, VILLAGE OF	283,762	19,154	19,154	38,308	0
HIXTON, VILLAGE OF	58,769	3,967	3,967	7,934	10,063
HOBART, VILLAGE OF	1,439,600	140,723	97,173	237,896	0
HOLLANDALE, VILLAGE OF	69,832	4,714	4,714	9,427	0
HOLMEN, VILLAGE OF	2,525,178	218,795	170,449	389,245	0
HORTONVILLE, VILLAGE OF	1,118,413	96,428	75,490	171,918	0
HOWARD, VILLAGE OF	3,395,632	251,554	229,204	480,758	0
HOWARDS GROVE, VILLAGE OF	383,629	25,895	25,895	51,790	0
HUSTISFORD, VILLAGE OF	648,566	43,778	43,778	87,557	55,274
IOLA, VILLAGE OF	441,539	37,810	29,185	66,994	0
IRON RIDGE, VILLAGE OF	152,902	13,149	10,321	23,470	0
JACKSON, VILLAGE OF	2,858,709	263,821	192,963	456,784	0
JOHNSON CREEK, VILLAGE OF	957,687	77,142	63,670	140,812	0
JUNCTION CITY, VILLAGE OF	98,181	6,627	6,627	13,254	0
KENDALL, VILLAGE OF	157,947	10,662	10,662	21,323	0
KEWASKUM, VILLAGE OF	1,356,635	123,827	91,573	215,400	0
KIMBERLY, VILLAGE OF	1,416,316	95,602	95,601	191,203	0
KOHLER, VILLAGE OF	1,321,439	121,453	89,197	210,650	0



Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
KRONENWETTER, VILLAGE OF	\$ 1,464,769	\$ 129,192	\$ 98,872	\$ 228,064	\$ 0
LA FARGE, VILLAGE OF	433,345	31,385	29,251	60,636	0
LA VALLE, VILLAGE OF	63,681	4,298	4,298	8,597	0
LAC LA BELLE, VILLAGE OF	48,078	3,245	3,245	6,490	0
LAKE DELTON, VILLAGE OF	3,249,341	317,277	219,331	536,608	0
LAKE HALLIE, VILLAGE OF	1,068,723	112,153	66,700	178,853	0
LAKE NEBAGAMON, VILLAGE OF	207,275	13,999	13,983	27,982	0
LANNON, VILLAGE OF	121,114	10,642	8,175	18,817	0
LENA, VILLAGE OF	259,341	20,359	17,505	37,864	0
LINDEN, VILLAGE OF	144,711	10,446	9,768	20,213	0
LITTLE CHUTE, VILLAGE OF	4,640,827	415,563	313,256	728,819	0
LOGANVILLE, VILLAGE OF	46,080	3,111	3,110	6,221	0
LOMIRA, VILLAGE OF	645,113	56,275	43,545	99,820	0
LONE ROCK, VILLAGE OF	72,058	4,863	4,864	9,727	0
LUCK, VILLAGE OF	604,552	49,153	40,807	89,961	15,821
LUXEMBURG, VILLAGE OF	300,409	23,436	19,693	43,129	0
MAPLE BLUFF, VILLAGE OF	1,382,363	144,184	93,310	237,493	0
MARATHON CITY, VILLAGE OF	571,055	48,924	36,622	85,546	0
MARSHALL, VILLAGE OF	1,194,825	110,487	80,651	191,138	0
MATTOON, VILLAGE OF	94,468	6,377	6,377	12,753	0
MAZOMANIE, VILLAGE OF	437,936	30,066	29,056	59,122	0
MCFARLAND, VILLAGE OF	4,110,245	375,106	277,442	652,547	0
MENOMONEE FALLS, VILLAGE OF	15,618,036	1,704,316	846,648	2,550,965	0
MERRIMAC, VILLAGE OF	184,371	12,445	12,445	24,890	0
MILLTOWN, VILLAGE OF	378,751	30,992	25,566	56,558	0
MINONG, VILLAGE OF	284,336	24,474	19,192	43,666	0
MISHICOT, VILLAGE OF	373,405	34,095	25,205	59,300	0
MONTFORT, VILLAGE OF	164,727	11,119	11,119	22,238	0
MONTICELLO, VILLAGE OF	381,429	32,659	25,747	58,405	0
MOUNT HOREB, VILLAGE OF	3,711,593	309,192	250,531	559,723	0
MT PLEASANT, VILLAGE OF	14,004,120	1,509,090	945,278	2,454,368	0
MUKWONAGO, VILLAGE OF	4,038,003	368,345	272,566	640,911	0
MUSCODA, VILLAGE OF	604,651	48,811	40,814	89,625	0
NECEDAH, VILLAGE OF	344,568	24,033	23,258	47,292	0
NESHKORO, VILLAGE OF	84,588	5,710	5,710	11,419	93,645
NEW GLARUS, VILLAGE OF	1,149,510	92,976	77,592	170,568	0
NEWBURG, VILLAGE OF	161,013	11,722	10,868	22,591	0
NICHOLS, VILLAGE OF	51,041	3,445	3,445	6,891	0
NORTH FOND DU LAC, VILLAGE OF	2,501,424	232,242	168,492	400,734	0
NORTH FREEDOM, VILLAGE OF	128,515	8,675	8,675	17,349	0
NORTH HUDSON, VILLAGE OF	688,039	65,279	46,443	111,721	0
OCONOMOWOC LAKE, VILLAGE OF	614,858	66,595	41,501	108,096	0
ONTARIO, VILLAGE OF	176,131	13,953	11,889	25,842	0
OOSTBURG, VILLAGE OF	470,794	31,779	31,779	63,557	0
OREGON, VILLAGE OF	3,726,768	323,443	251,557	575,000	0
ORFORDVILLE, VILLAGE OF	500,884	42,593	33,810	76,403	0
OSCEOLA, VILLAGE OF	1,095,310	102,988	63,295	166,283	0
OXFORD, VILLAGE OF (MARQUETTE)	124,136	9,081	8,379	17,460	0

## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
PADDOCK LAKE, VILLAGE OF	\$ 420,856	\$ 28,408	\$ 28,408	\$ 56,816	\$ 0
PALMYRA, VILLAGE OF	650,233	65,226	43,891	109,117	0
PARDEEVILLE, VILLAGE OF	780,295	52,670	52,670	105,340	0
PEPIN, VILLAGE OF	242,485	19,153	16,368	35,520	0
PEWAUKEE, VILLAGE OF	3,131,765	286,829	211,394	498,223	0
PLAIN, VILLAGE OF	240,844	16,257	16,257	32,514	0
PLAINFIELD, VILLAGE OF	222,203	17,425	14,999	32,423	0
PLEASANT PRAIRIE, VILLAGE OF	15,221,791	1,295,366	1,028,761	2,324,127	0
PLOVER, VILLAGE OF	4,775,298	438,644	322,334	760,978	0
PORT EDWARDS, VILLAGE OF	797,866	63,203	53,856	117,059	0
POUND, VILLAGE OF	94,072	6,350	6,350	12,700	0
POYNETTE, VILLAGE OF	904,194	75,821	60,746	136,567	0
PRAIRIE DU SAC, VILLAGE OF	1,300,745	87,811	87,790	175,601	0
PRAIRIE FARM, VILLAGE OF	762,663	54,751	53,752	108,503	0
PULASKI, VILLAGE OF	1,269,269	113,792	85,676	199,468	0
RANDOLPH, VILLAGE OF	507,856	39,918	34,280	74,199	39,964
RANDOM LAKE, VILLAGE OF	390,376	28,345	26,062	54,407	0
RAYMOND, VILLAGE OF	262,714	19,338	16,129	35,467	0
REDGRANITE, VILLAGE OF	258,459	23,487	17,446	40,933	0
RIB LAKE, VILLAGE OF	210,244	16,663	14,191	30,855	0
RICHFIELD, VILLAGE OF	726,079	49,011	49,010	98,021	0
RIO, VILLAGE OF	339,667	28,521	22,928	51,449	0
RIVER HILLS, VILLAGE OF	1,667,920	163,226	112,585	275,811	0
ROBERTS, VILLAGE OF	641,699	53,652	42,826	96,479	0
ROCHESTER, VILLAGE OF	272,582	18,399	18,399	36,798	0
ROCK SPRINGS, VILLAGE OF	62,160	4,196	4,196	8,392	0
ROCKLAND, VILLAGE OF	133,604	9,018	9,018	18,037	0
ROSENDALE, VILLAGE OF	214,083	17,556	14,451	32,006	0
ROSHOLT, VILLAGE OF	72,849	4,917	4,917	9,835	0
ROTHSCHILD, VILLAGE OF	2,133,975	196,515	144,044	340,559	0
SALEM LAKES, VILLAGE OF	1,820,233	152,137	122,865	275,003	0
SAUK CITY, VILLAGE OF	1,239,023	83,634	83,634	167,268	0
SAUKVILLE, VILLAGE OF	1,986,446	179,767	134,085	313,852	0
SHARON, VILLAGE OF	612,693	56,472	41,357	97,829	0
SHERWOOD, VILLAGE OF	397,333	27,145	26,496	53,641	0
SHIOCTON, VILLAGE OF	305,243	24,701	20,604	45,305	0
SHOREWOOD HILLS, VILLAGE OF	1,230,891	108,098	83,085	191,183	0
SHOREWOOD, VILLAGE OF	5,045,840	448,376	340,595	788,971	0
SIREN, VILLAGE OF	396,514	34,490	26,765	61,255	0
SISTER BAY, VILLAGE OF	849,784	57,360	57,361	114,721	0
SLINGER, VILLAGE OF	2,240,309	199,222	151,221	350,443	0
SOLDIERS GROVE, VILLAGE OF	167,709	12,001	10,640	22,641	0
SOLO SPRINGS, VILLAGE OF	148,301	10,010	10,010	20,021	0
SOMERS, VILLAGE OF	2,124,265	198,247	141,870	340,117	0
SOMERSET, VILLAGE OF	1,214,142	101,805	81,906	183,711	0
SOUTH WAYNE, VILLAGE OF	39,077	2,638	2,638	5,275	0
SPENCER, VILLAGE OF	676,312	62,198	42,091	104,289	0
SPRING GREEN, VILLAGE OF	527,673	42,500	35,618	78,118	0



Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
SPRING VALLEY, VILLAGE OF	\$ 276,345	\$ 21,133	\$ 18,653	\$ 39,786	\$ 0
ST NAZIANZ, VILLAGE OF	174,082	11,751	11,751	23,501	0
STAR PRAIRIE, VILLAGE OF	112,891	15,227	14	15,240	0
STOCKBRIDGE, VILLAGE OF	32,869	2,186	1,997	4,183	0
STODDARD, VILLAGE OF	187,621	12,665	12,664	25,329	0
STRATFORD, VILLAGE OF	533,338	43,958	36,000	79,959	0
STRUM, VILLAGE OF	339,792	29,179	22,885	52,064	4,930
STURTEVANT, VILLAGE OF	1,431,228	145,643	96,608	242,251	0
SUAMICO, VILLAGE OF	1,444,910	105,419	97,531	202,951	0
SULLIVAN, VILLAGE OF	115,844	7,843	7,819	15,662	0
SUMMIT, VILLAGE OF (WAUKESHA)	1,372,244	139,736	92,627	232,362	0
SURING, VILLAGE OF	257,267	21,164	17,366	38,529	0
SUSSEX, VILLAGE OF	3,495,701	272,544	235,960	508,504	0
TAYLOR, VILLAGE OF	104,212	7,184	6,885	14,069	0
THIENSVILLE, VILLAGE OF	1,311,913	121,532	88,554	210,086	0
TREMPEALEAU, VILLAGE OF	849,011	67,846	58,462	126,307	0
TURTLE LAKE, VILLAGE OF	619,563	61,257	36,168	97,425	0
TWIN LAKES, VILLAGE OF	2,575,910	242,214	159,403	401,617	0
UNION CENTER, VILLAGE OF	132,068	9,457	8,868	18,325	0
UNION GROVE, VILLAGE OF	931,978	62,909	62,908	125,817	0
VALDERS, VILLAGE OF	531,175	35,854	35,854	71,709	0
VERNON, VILLAGE OF (WAUKESHA)	471,890	36,183	31,853	68,035	0
VESPER, VILLAGE OF	83,000	5,603	5,603	11,205	0
WALWORTH, VILLAGE OF	976,339	93,297	65,903	159,200	0
WARRENS, VILLAGE OF	134,306	13,599	4,533	18,131	0
WATERFORD, VILLAGE OF	1,539,590	114,723	103,922	218,645	0
WAUKESHA, VILLAGE OF (WAUKESHA)	414,428	38,253	27,318	65,570	0
WAUNAKEE, VILLAGE OF	4,934,295	422,072	333,065	755,137	0
WAUSAUKEE, VILLAGE OF	208,625	14,082	14,082	28,164	0
WAUZEKA, VILLAGE OF	93,303	6,299	6,298	12,597	0
WEBSTER, VILLAGE OF	129,916	15,382	8,769	24,151	0
WEST BARABOO, VILLAGE OF	349,446	23,415	23,392	46,808	0
WEST MILWAUKEE, VILLAGE OF	2,949,878	288,876	199,114	487,990	0
WEST SALEM, VILLAGE OF	1,179,055	107,509	79,586	187,096	0
WESTFIELD, VILLAGE OF	336,456	27,736	22,711	50,447	0
WESTON, VILLAGE OF (MARATHON)	2,299,720	155,234	155,228	310,462	0
WHITE LAKE, VILLAGE OF	139,493	9,416	9,416	18,831	0
WHITEFISH BAY, VILLAGE OF	4,611,742	411,828	316,335	728,163	0
WHITELAW, VILLAGE OF	100,863	6,808	6,808	13,617	0
WHITING, VILLAGE OF	283,072	19,107	19,107	38,215	0
WILD ROSE, VILLAGE OF	245,774	19,961	16,590	36,550	0
WILLIAMS BAY, VILLAGE OF	1,337,601	120,449	90,288	210,736	44,926
WILSON, VILLAGE OF	47,830	3,228	3,229	6,457	5,107
WIND POINT, VILLAGE OF	232,528	15,696	15,696	31,391	0
WINDSOR, VILLAGE OF	1,111,893	75,053	75,053	150,106	0
WINNECONNE, VILLAGE OF	795,771	70,357	53,045	123,402	0
WITHEE, VILLAGE OF	103,649	6,996	6,996	13,993	0
WONEWOC, VILLAGE OF	333,579	25,337	22,516	47,853	0

## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
WOODVILLE, VILLAGE OF	\$ 628,069	\$ 55,063	\$ 42,395	\$ 97,458	\$ 0
WRIGHTSTOWN, VILLAGE OF	942,013	79,705	63,586	143,291	0
WYOCENA, VILLAGE OF	138,488	9,348	9,348	18,696	0
YORKVILLE, VILLAGE OF	133,884	9,037	9,037	18,074	0
Total Villages (291)	\$ 319,448,964	\$ 28,574,994	\$ 21,248,943	\$ 49,823,949	\$ 704,072



Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
<b>Special Districts</b>					
ADRC OF THE NORTHWOODS	\$ 372,871	\$ 25,169	\$ 25,169	\$ 50,338	\$ 0
ALBANY HOUSING AUTHORITY	42,550	2,872	2,872	5,744	0
ALGOMA CITY HOUSING AUTH	6,198	418	418	837	0
ALGOMA SANITARY DIST	489,440	33,037	33,037	66,075	0
ALLENTON SANITARY DIST	18,423	1,244	1,244	2,487	0
ANTIGO CITY HOUSING AUTH	350,997	23,692	23,692	47,385	0
APPLETON CITY HOUSING AUTH	906,254	61,173	61,172	122,345	0
ARENA FIRE DEPARTMENT	50,003	3,375	3,375	6,751	0
ASHLAND CITY HOUSING AUTH	374,167	25,257	25,257	50,513	0
ASHLAND COUNTY HOUSING AUTH	611,199	41,256	41,256	82,512	0
BALSAM LK-CENTURIA JOINT PD	174,133	20,617	11,754	32,371	0
BARABOO DISTRICT AMBULANCE	1,311,936	150,821	86,797	237,618	0
BARRON CO HOUSING AUTHORITY	210,285	14,195	14,195	28,390	0
BAY AREA RURAL TRANSIT COMMISS	486,429	32,834	32,834	65,668	0
BAYFIELD COUNTY HOUSING AUTH	146,669	9,901	9,900	19,801	0
BAY-LAKE REGIONAL PLAN COMM	580,281	39,169	39,169	78,338	0
BELLEVILLE FIRE AND EMS DIST	59,308	7,022	4,003	11,025	0
BROCKWAY SANITARY DISTRICT #1	49,630	3,350	3,350	6,700	0
BRUCE VILLAGE HOUSING AUTH	97,136	6,557	6,557	13,114	0
BURLINGTON CITY HOUSING AUTH	51,709	3,491	3,490	6,981	0
CAMBRIDGE FIRE & EMS COMM	322,760	38,215	21,786	60,001	0
CAMBRIDGE-OAKLAND WSTEWTR COMM	138,293	9,335	9,335	18,670	0
CAPITAL AREA REG PLAN COMM	629,530	42,493	42,493	84,987	0
CENTRAL BROWN CTY WATER AUTH	113,440	7,657	7,657	15,314	0
CHILTON CITY HOUSING AUTH	41,961	2,832	2,832	5,665	0
CHIPPEWA CO HOUSING AUTH	544,660	36,765	36,765	73,529	0
CHIPPEWA FIRE DISTRICT	893,826	103,764	60,333	164,097	0
CITY-COUNTY DATA CENTER COMM	2,113,602	142,665	142,665	285,330	0
CLINTONVILLE CITY HOUS AUTH	113,559	7,665	7,665	15,330	0
COLBY/ABBOTSFORD JT POLICE COM	519,270	65,829	28,700	94,529	0
CONSOL KOSHKONONG SANITARY DIS	368,316	24,861	24,861	49,723	0
COUNTRY ESTATES SAN DIST	31,697	2,146	2,133	4,279	0
CROSS PLAINS AREA EMS	181,847	21,531	12,275	33,805	0
CUMBERLAND MUNICIPAL UTILITY	980,286	66,169	66,169	132,338	0
DANE COUNTY DIST #1 EMS	88,600	10,490	5,981	16,471	0
DANE COUNTY HOUSING AUTHORITY	614,965	41,511	41,510	83,021	465,272
DANE-IOWA WASTEWATER COMM	184,082	12,425	12,425	24,851	0
DARBOY JOINT SANITARY DIST #1	328,546	22,177	22,177	44,354	0
DEER-GROVE EMS DIST	598,432	70,855	40,394	111,249	0
DEFOREST WINDSOR FIRE & EMS	638,027	80,758	42,919	123,677	0
DELAFIELD-HARTL WATER POL CNTL	531,884	35,903	35,902	71,805	0
DELAVAN LAKE SANITARY DISTRICT	582,451	39,316	39,316	78,631	0
DELLS-DELTON EMS COMM	1,365,821	162,002	91,904	253,906	0
DELTON FIRE & AMBULANCE COMM	161,414	19,111	10,895	30,007	0
DODGE COUNTY HOUSING AUTHORITY	212,757	14,566	14,550	29,116	0
DOOR CTY TOURISM ZONE COMM	65,958	4,452	4,452	8,904	0
EAGLE RIVER UNION AIRPORT	116,264	7,848	7,848	15,696	0



## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
EAST CENTRAL WIS REG PLAN COMM	\$ 1,051,362	\$ 70,967	\$ 70,967	\$ 141,934	\$ 0
EASTERN COLUMBIA CTY JM COURT	61,425	4,146	4,146	8,293	0
EAU CLAIRE CITY HOUSING AUTH	593,353	40,052	40,052	80,104	0
EAU CLAIRE COUNTY HOUSING AUTH	171,340	11,566	11,565	23,131	0
EAUCLAIRE CITY-CO HEALTH DPT	4,169,127	283,229	279,604	562,834	0
EDGERTON CITY HOUSING AUTH	150,745	10,175	10,175	20,351	0
EDGERTON FIRE PROT DIST	505,596	59,863	34,128	93,990	0
ELLSWORTH AREA AMBULANCE SERV	215,683	15,152	13,965	29,117	0
EVEREST METRO POLICE COMM	2,369,381	269,846	159,933	429,779	0
FISH CREEK SANITARY DIST #1	193,206	13,042	13,041	26,083	0
FITCH-RONA EMS DISTRICT	1,905,787	225,641	128,637	354,278	0
FOND DU LAC CITY HOUSING AUTH	750,986	50,692	50,691	101,383	0
FONTANA/WALWORTH WTR POL CN CM	334,328	22,567	22,567	45,135	0
FOX LAKE INL LAKE PROT & REHAB	49,638	3,595	3,107	6,701	0
FOX LAKE WASTEWATER CONTR COMM	15,532	1,048	1,048	2,097	0
FOX WEST REGIONAL SEWER COMM	182,409	12,313	12,313	24,625	0
FREEDOM SANITARY DISTRICT #1	172,678	11,656	11,656	23,311	0
GB/BROWN CO PRO FTBLL STAD DIS	48,098	3,247	3,247	6,493	0
GOODMAN SANITARY DISTRICT NO 1	70,320	4,747	4,747	9,493	0
GREAT DIVIDE AMB SERV	1,160,001	78,301	78,300	156,601	0
GREEN BAY METRO SEWERAGE DIST	8,578,138	579,026	579,025	1,158,050	0
GREEN LAKE SANITARY DISTRICT	258,159	17,426	17,426	34,851	0
HA OF THE CITY OF S MILWAUKEE	165,620	11,179	11,179	22,359	0
HARMONY GROVE-OKEE JT SEW COMM	148,185	10,002	10,002	20,005	0
HEART OF THE VALLEY MET SEW DS	809,807	54,662	54,662	109,324	0
HOLMEN AREA FIRE DEPT	427,153	53,463	30,492	83,955	0
HUDSON CITY HOUSING AUTHORITY	60,770	4,102	4,102	8,204	0
HUM SRV CTR ONIDA VILAS FORST	2,469,232	166,674	166,673	333,347	0
HURLEY HOUSING AUTHORITY	67,114	4,530	4,530	9,060	0
IPLS LIBRARY SYSTEMS	790,890	53,385	53,385	106,771	0
IRON RIVER SANITARY DIST #1	100,310	6,771	6,771	13,542	0
JEFFERSON CITY HOUSING AUTH	101,766	6,869	6,869	13,739	0
KAUKAUNA CITY HOUSING AUTH	166,136	11,214	11,214	22,428	0
KEGONSA SANITARY DISTRICT	79,468	5,364	5,364	10,728	0
KELLY LAKE SANITARY DIST #1	48,798	3,294	3,294	6,588	0
KENOSHA JOINT SERVICES	4,387,517	296,158	296,157	592,316	0
LA CROSSE CITY HOUSING AUTH	1,038,717	70,114	70,114	140,228	0
LADYSMITH HOUSING AUTH	116,577	7,869	7,869	15,738	0
LAKE COMO SANITARY DIST #1	420,856	28,408	28,408	56,815	19,722
LAKE COUNTRY FIRE & RESCUE	1,781,987	207,507	120,284	327,791	0
LAKE MILLS CITY HOUSING AUTH	114,259	7,713	7,712	15,425	0
LAKE RIPLEY MGT DISTRICT	53,560	3,615	3,615	7,231	0
LAKELAND SANITARY DISTRICT #1	273,650	18,471	18,471	36,943	0
LAKESHORES LIBRARY SYSTEM	414,161	27,956	27,956	55,912	0
LAONA SANITARY DISTRICT #1	85,686	5,784	5,784	11,568	0
LEAGUE OF WISC MUNICIPALITIES	1,130,378	76,301	76,301	152,601	0
LINCOLN COUNTY HOUSING AUTH	112,024	7,562	7,562	15,123	0
LODI COMMUNITY AMBULANCE SERV	218,754	27,171	13,496	40,666	0



Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
LYONS SANITARY DISTRICT #2	\$ 77,315	\$ 5,219	\$ 5,219	\$ 10,437	\$ 0
MADLINE SANITARY DISTRICT	65,019	4,389	4,389	8,778	0
MADISON METRO SEWERAGE DIST	10,013,985	676,968	676,943	1,353,911	0
MANITOWOC CITY HOUSING AUTH	124,567	8,408	8,408	16,817	0
MANITOWOC-CALUMET LIB SYS	102,567	6,923	6,923	13,847	0
MARINETTE CITY HOUSING AUTH	214,060	14,449	14,449	28,898	0
MARSHALL AREA EMS DIST #14	269,108	30,564	18,165	48,729	0
MARSHFIELD CDA	289,002	22,078	16,938	39,016	0
MARSHFIELD ELECTRIC & WATER	3,638,791	245,619	245,618	491,237	0
MENASHA ELECTRIC & WATER	2,980,884	201,210	201,210	402,420	0
MENOMONIE CITY HOUSING AUTH	191,337	12,915	12,915	25,831	0
MEQUON - THIENSVILLE LIBRARY	561,165	37,877	37,877	75,754	0
MERCER SANITARY DISTRICT #1	154,658	10,440	10,439	20,879	0
MERRILL CITY HOUSING AUTHORITY	341,855	23,075	23,075	46,151	0
MIDDLETON FIRE DISTRICT	474,031	67,694	31,997	99,691	0
MID-MORAINNE MUNICIPAL COURT	346,549	23,392	23,392	46,784	0
MILTON & MILTON TOWNSHIP FIRE DEPT	573,223	65,946	38,693	104,639	0
MILWAUKEE CO DOM ANIMAL CONT COMM	1,468,777	98,996	98,979	197,975	0
MILWAUKEE CO FED LIB SYS	345,727	23,401	23,272	46,673	0
MISSISSIPPI RIVER REG PLAN COM	241,704	16,315	16,315	32,630	0
MONARCH LIBRARY SYSTEM	526,429	35,535	35,534	71,069	0
MONROE CITY HOUSING AUTHORITY	175,434	11,842	11,842	23,684	0
MOSINEE FIRE DIST	144,156	17,068	9,731	26,799	0
MT HOREB AREA FIRE DEPT	530,667	87,242	35,820	123,062	0
MUNI COURT W WAUKESHA COUNTY	142,191	9,600	9,596	19,196	0
NEW GLARUS EMS	117,178	13,874	7,910	21,783	0
NEW LONDON CITY HOUSING AUTH	93,583	6,317	6,317	12,634	0
NEW RICHMOND AMBULANCE	492,767	33,262	33,262	66,524	0
NICOLET FEDERATED LIBRARY SYS	266,058	17,959	17,959	35,918	0
NORTH CENTRAL HEALTH CARE FAC	38,249,095	2,581,789	2,581,769	5,163,558	0
NORTH CENTRAL WIS REG PLAN COM	412,727	27,859	27,859	55,719	0
NORTH SHORE FIRE DEPT	9,244,868	1,677,128	626,595	2,303,724	0
NORTH SHORE WATER COMMISSION	578,728	39,064	39,064	78,128	0
NORTHERN MORAINNE UTILITY COMM	120,009	8,101	8,101	16,201	0
NORTHERN WATERS LIBRARY SERV	356,343	24,053	24,053	48,107	0
NORTHWEST REGIONAL PLAN COMM	930,784	62,828	62,828	125,656	0
NORWAY SANITARY DISTRICT #1	314,869	21,253	21,254	42,507	0
OCONTO CITY HOUSING AUTHORITY	133,055	8,981	8,981	17,962	0
ONEIDA-VILAS TRANSIT COMM	290,677	19,621	19,621	39,242	0
OREGON AREA FIRE - EMS DIST	729,258	86,344	49,225	135,569	0
OSHKOSH CITY HOUSING AUTHORITY	1,626,019	109,756	109,756	219,512	0
OUTAGAMIE COUNTY HOUSING AUTH	1,076,278	72,650	72,649	145,298	0
OUTAGAMIE WAUPAC CO FED LIBR SY	545,725	36,837	36,836	73,673	0
PHELPS SANITARY DISTRICT #1	54,412	3,673	3,673	7,346	0
PLEASANT SPRINGS SAN DIS #1	100,439	6,780	6,780	13,559	0
PLYMOUTH CITY HOUSING AUTH	46,363	3,129	3,130	6,259	0
PORTAGE COUNTY HOUSING AUTH	174,455	13,409	10,143	23,552	0
PRAIRIE DU SAC JT SEWER COMM	75,627	5,105	5,105	10,210	0

## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
RACINE COUNTY HOUSING AUTH	\$ 573,243	\$ 38,764	\$ 38,624	\$ 77,388	\$ 0
REEDSBURG AREA AMBULANCE SVCES	633,064	74,955	42,732	117,687	0
REEDSVILLE VIL HOUSING AUTH	35,025	2,364	2,364	4,728	0
RHINELANDER CITY HOUSING AUTH	156,869	10,589	10,589	21,177	0
RIB MOUNTAIN METRO SEW DIST	592,364	39,985	39,985	79,970	0
RICE LAKE CITY HOUSING AUTH	234,773	15,848	15,847	31,694	0
RICHLAND CENTER CITY HOUS AUTH	94,637	9,582	3,194	12,776	0
RICHLAND FIRE DEPARTMENT	16,630	1,969	1,122	3,092	0
RIPON AREA FIRE DISTRICT	68,169	8,071	4,601	12,673	0
RIVER FALLS CITY HOUSING AUTH	348,511	23,525	23,525	47,049	3,052
SAUK CITY HOUSING AUTHORITY	21,083	1,423	1,423	2,846	0
SAUK COUNTY HOUSING AUTHORITY	261,083	17,623	17,623	35,246	0
SAUK PRAIRIE AMBULANCE ASSOC	109,087	12,936	7,343	20,279	0
SAUK PRAIRIE POLICE COMMISSION	1,236,068	161,206	63,871	225,077	0
SAUK PRAIRIE RECREATION COMM	115,439	7,792	7,792	15,584	0
SAWYER COUNTY HOUSING AUTH	154,099	10,402	10,402	20,804	0
SHAWANO CITY HOUSING AUTHORITY	243,330	16,810	16,040	32,850	0
SHAWANO COUNTY HOUSING AUTH	325,170	22,966	20,932	43,898	0
SHAWANO LAKE SANITARY DIST #1	698,527	47,152	47,151	94,303	0
SHAWANO MUNICIPAL UTILITIES	1,378,769	93,066	93,067	186,133	0
SHEBOYGAN CITY HOUSING AUTH	411,959	28,738	26,878	55,617	0
SHELL LAKE CITY HOUS AUTH	56,462	3,811	3,811	7,622	0
SILVER LAKE SAN. DIST.	263,979	17,819	17,819	35,637	0
SLINGER VILLAGE HOUSING AUTH	42,533	2,871	2,871	5,742	0
SOUTH AREA FIRE & EMS DIST	1,456,794	174,185	99,939	274,124	0
SOUTH CENTRAL LIBRARY SYSTEM	2,707,258	182,742	182,740	365,482	0
SOUTHEASTERN WIS REG PLAN COMM	4,454,224	300,662	300,660	601,322	0
SOUTHWEST WIS LIBRARY SYSTEM	206,006	13,905	13,905	27,811	0
SOUTHWESTERN WIS REG PLAN COMM	344,525	23,256	23,256	46,511	0
SPOONER FIRE DISTRICT	66,325	7,853	4,477	12,330	0
ST JOSEPH SANITARY DISTRICT #1	32,688	2,206	2,206	4,413	0
STEVENS POINT CITY HOUS AUTH	535,010	36,114	36,113	72,227	0
SUPERIOR CITY HOUSING AUTH	1,341,098	90,525	90,525	181,049	0
TAYLOR COUNTY HOUSING AUTH	56,924	3,842	3,842	7,685	0
THORP CITY HOUSING AUTHORITY	130,346	8,799	8,798	17,597	0
THREE LAKES SANITARY DIST #1	73,630	4,970	4,970	9,940	0
TREMPEALEAU COUNTY HOUS AUTH	278,652	18,809	18,809	37,618	20,445
TRI-M SANITARY DISTRICT	47,600	3,213	3,213	6,426	0
UNIFIED COMMUNITY SERVICES	2,058,284	138,934	138,934	277,868	0
VALLEY RIDGE CLEAN WATER COMM	63,459	4,284	4,283	8,567	0
VANGUARD ELECTRIC UTIL COMM	449,209	30,322	30,322	60,643	0
VIROQUA CITY HOUSING AUTHORITY	196,146	13,240	13,240	26,480	0
WABENO SANITARY DISTRICT #1	69,729	4,707	4,707	9,414	0
WALES/GENESEE JOINT FIRE BD	3,795	(302)	(176)	(478)	0
WALTER E OLSON MEMORIAL LIB	118,593	8,005	8,005	16,010	0
WALWORTH COUNTY METRO SEW DIST	1,347,227	90,938	90,938	181,876	82,794
WASHBURN CITY HOUSING AUTH	142,805	9,639	9,639	19,278	0
WASHBURN COUNTY HOUSING AUTH	103,605	6,994	6,993	13,987	0



Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
WATERTOWN CITY HOUSING AUTH	\$ 139,972	\$ 9,448	\$ 9,448	\$ 18,896	\$ 1,464
WAUKESHA CITY HOUSING AUTH	717,972	48,463	48,463	96,927	0
WAUNAKEE AREA EMS	537,003	63,581	36,248	99,829	0
WAUNAKEE AREA FIRE DIST	73,836	4,984	4,984	9,968	0
WAUNAKEE WATER & LIGHT	1,476,597	99,671	99,670	199,341	0
WAUPACA CHAIN O'LAKES SAN DIST	68,135	4,599	4,599	9,198	0
WAUSAUKEE VILLAGE HOUS AUTH	147,915	9,984	9,985	19,969	0
WEST BEND CITY HOUSING AUTH	251,772	16,995	16,994	33,989	0
WEST CENTRAL WI BISOLIDS COMM	184,935	12,483	12,483	24,966	0
WEST CENTRAL WIS REG PLAN COMM	830,492	56,058	56,058	112,116	0
WESTERN LAKES FIRE DIST	3,186,595	429,827	246,438	676,265	0
WESTERN RACINE CO SEWERAGE DIS	142,660	9,630	9,630	19,259	0
WINDING RIVERS LIBRARY SYS	514,567	34,784	34,683	69,467	0
WINNEFOX LIBRARY SYSTEM	789,662	53,303	53,302	106,605	0
WIS DELLS-LAKE DELTON SEW COMM	252,416	17,038	17,038	34,076	0
WISCONSIN COUNTIES ASSOCIATION	2,284,412	154,199	154,198	308,396	0
WISCONSIN MUNIC MUTAL INS CO	899,534	72,249	49,188	121,437	0
WISCONSIN RAPIDS CITY HS AUTH	401,238	27,084	27,084	54,167	0
WISCONSIN TOWNS ASSOCIATION	684,805	46,224	46,224	92,449	0
WISCONSIN VALLEY LIBRARY SRV	463,094	31,260	31,259	62,519	0
WPPI ENERGY	11,591,238	782,410	782,408	1,564,819	0
Total Special Districts (212)	\$ 187,478,706	\$ 15,032,546	\$ 12,639,026	\$ 27,671,577	\$ 592,749

## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
<b>Towns</b>					
ADDISON, TOWN OF(WASHINGTON)	\$ 152,561	\$ 10,298	\$ 10,298	\$ 20,596	\$ 0
AGENDA, TOWN OF (ASHLAND)	94,536	6,381	6,381	12,762	0
ALBAN, TOWN OF (PORTAGE)	70,471	4,757	4,757	9,514	0
ALBION, TOWN OF (DANE)	187,705	16,106	9,234	25,340	0
ALBION, TOWN OF (JACKSON)	48,898	3,398	3,203	6,601	0
ALGOMA, TOWN OF (WINNEBAGO)	191,239	12,909	12,909	25,817	0
ANSON, TOWN OF (CHIPPEWA)	67,976	4,614	4,562	9,176	0
ARBOR VITAE, TOWN OF (VILAS)	214,548	14,482	14,482	28,964	0
ASHIPPUN, TOWN OF (DODGE CO)	109,142	7,367	7,367	14,734	0
ASHLAND, TOWN OF (ASHLAND)	61,282	4,137	4,137	8,273	0
ATHELSTANE, TOWN OF(MARINETTE)	105,075	7,093	7,093	14,185	0
AZTALAN, TOWN OF(JEFFERSON)	63,443	4,282	4,282	8,565	0
BAILEYS HARBOR, TOWN OF (DOOR)	501,040	33,821	33,820	67,641	0
BALSAM LAKE, TOWN OF (POLK)	51,998	3,510	3,510	7,020	0
BARABOO, TOWN OF (SAUK)	58,680	3,961	3,961	7,922	0
BARKSDALE, TOWN OF (BAYFIELD)	66,899	4,516	4,516	9,031	0
BARRON, TOWN OF (BARRON)	54,456	3,676	3,676	7,352	0
BAYVIEW, TOWN OF (BAYFIELD)	76,313	5,151	5,151	10,302	0
BEAR CREEK, TOWN OF (SAUK)	70,438	4,760	4,750	9,510	0
BELOIT, TOWN OF (ROCK)	2,778,211	297,642	187,529	485,171	0
BENNETT, TOWN OF (DOUGLAS)	87,435	5,902	5,902	11,804	0
BERGEN, TOWN OF (VERNON)	58,534	3,951	3,952	7,903	0
BERRY, TOWN OF (DANE)	85,730	5,787	5,786	11,574	0
BLACK EARTH, TOWN OF (DANE)	62,127	4,194	4,194	8,387	0
BLOOMING GROVE, TOWN OF(DANE)	192,775	13,012	13,012	26,025	0
BLUE MOUNDS, TOWN OF (DANE)	41,928	3,345	2,315	5,660	0
BOULDER JUNCTION, TOWN (VILAS)	226,347	15,278	15,278	30,556	0
BRADLEY, TOWN OF (LINCOLN)	124,686	8,416	8,416	16,832	0
BRIGHAM, TOWN OF (IOWA)	123,171	8,314	8,314	16,628	0
BRISTOL, TOWN OF (DANE)	72,902	4,921	4,921	9,842	0
BROCKWAY, TOWN OF (JACKSON)	165,103	11,144	11,144	22,289	0
BROOKFIELD, TOWN OF (WAUKESHA)	3,218,870	355,964	217,249	573,213	0
BROOKLYN, TOWN OF (GREEN)	84,497	5,704	5,704	11,407	0
BROTHERTOWN, TOWN OF(CALUMET)	55,057	3,854	3,579	7,433	0
BUCHANAN, TOWN OF(OUTAGAMIE)	164,841	11,127	11,127	22,253	0
BURKE, TOWN OF (DANE)	190,099	12,832	12,831	25,663	0
BURLINGTON, TOWN OF (RACINE)	315,598	21,303	21,303	42,606	0
CABLE, TOWN OF (BAYFIELD)	202,286	14,287	13,022	27,309	0
CAMPBELL, TOWN OF (LA CROSSE)	697,808	66,153	47,102	113,256	0
CAREY, TOWN OF (IRON)	55,125	3,721	3,721	7,442	0
CASSIAN, TOWN OF (ONEIDA)	102,004	6,885	6,885	13,770	0
CEDAR LAKE, TOWN OF (BARRON)	65,363	4,412	4,412	8,824	0
CEDARBURG, TOWN OF (OZAUKEE)	630,722	42,574	42,574	85,148	0
CHETEK, TOWN OF (BARRON)	86,554	6,433	5,252	11,685	0
CHIPPEWA, TOWN OF (ASHLAND)	91,779	6,195	6,195	12,390	0
CHRISTIANA, TOWN OF (DANE)	168,198	11,353	11,353	22,707	0
CLAYTON, TOWN OF (POLK)	49,631	3,350	3,350	6,700	0



Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
CLAYTON, TOWN OF (WINNEBAGO)	\$ 646,429	\$ 47,440	\$ 41,508	\$ 88,948	\$ 0
CLEAR LAKE, TOWN OF (POLK)	68,945	4,654	4,654	9,308	0
CLEVELAND, TOWN OF (MARATHON)	37,895	2,558	2,558	5,116	0
CLIFTON, TOWN OF (MONROE)	49,381	3,333	3,333	6,666	0
CLINTON, TOWN OF (BARRON)	55,578	3,755	3,748	7,503	0
CLOVER, TOWN OF (BAYFIELD)	108,244	7,305	7,306	14,612	0
CLOVERLAND, TOWN OF (VILAS)	20,907	1,411	1,411	2,822	0
COLBY, TOWN OF (CLARK)	50,216	3,390	3,390	6,779	0
COLFAX, TOWN OF (DUNN)	41,542	2,804	2,804	5,608	0
CORNING, TOWN OF (LINCOLN)	41,398	2,794	2,794	5,589	0
COTTAGE GROVE, TOWN OF (DANE)	279,010	18,833	18,833	37,666	0
CRESCENT, TOWN OF (ONEIDA)	165,180	11,150	11,150	22,299	0
CROSS PLAINS, TOWN OF (DANE)	95,215	6,427	6,427	12,854	0
CRYSTAL LAKE, TOWN OF (BARRON)	116,082	8,001	7,670	15,671	0
DAIRYLAND, TOWN OF (DOUGLAS)	67,081	4,528	4,528	9,056	0
DARIEN, TOWN OF (WALWORTH)	104,177	7,032	7,032	14,064	0
DECATUR, TOWN OF (GREEN CO)	48,348	3,263	3,264	6,527	0
DELAN, TOWN OF (WALWORTH)	1,615,518	202,280	73,615	275,895	0
DELTA, TOWN OF (BAYFIELD)	93,433	6,646	5,968	12,614	0
DELTON, TOWN OF (SAUK)	179,799	12,136	12,136	24,273	0
DOVER, TOWN OF (RACINE)	81,862	5,526	5,526	11,051	0
DOVRE, TOWN OF (BARRON)	51,212	3,457	3,457	6,914	0
DRAPER, TOWN OF (SAWYER)	93,477	6,310	6,310	12,619	0
DRUMMOND, TOWN OF (BAYFIELD)	283,388	19,129	19,129	38,257	0
DUNBAR, TOWN OF (MARINETTE)	52,180	3,522	3,522	7,044	0
DUNKIRK, TOWN OF (DANE)	153,826	10,383	10,383	20,767	0
DUNN, TOWN OF (DANE)	549,090	37,064	37,064	74,128	0
EAGLE POINT, TOWN OF (CHIPPEWA)	125,689	8,484	8,484	16,968	0
EAGLE, TOWN OF (WAUKESHA)	377,013	30,016	25,449	55,464	0
EAST TROY, TOWN OF (WALWORTH)	762,528	72,830	51,402	124,232	0
EASTON, TOWN OF (MARATHON)	93,474	6,310	6,310	12,619	0
EAU GALLE, TOWN OF (DUNN)	56,523	3,815	3,815	7,631	0
EDEN, TOWN OF (IOWA)	48,300	3,260	3,260	6,520	0
EGG HARBOR, TOWN OF (DOOR)	53,246	3,594	3,594	7,188	0
ELK MOUND, TOWN OF (DUNN)	53,460	3,609	3,609	7,217	0
ERIN, TOWN OF (WASHINGTON)	162,518	10,970	10,970	21,940	0
EUREKA, TOWN OF (POLK)	62,758	4,236	4,236	8,472	0
EXETER, TOWN OF (GREEN)	80,705	5,448	5,448	10,895	0
FARMINGTON, TOWN OF (LACROSSE)	78,368	5,290	5,290	10,580	0
FARMINGTON, TOWN OF (WAUPACA)	39,111	2,640	2,640	5,280	0
FLAMBEAU, TOWN OF (RUSK)	17,481	1,180	1,180	2,360	0
FLORENCE, TOWN OF (FLORENCE)	981,601	66,258	66,258	132,516	0
FRANKLIN, TOWN OF (MANITOWOC)	69,688	4,906	4,501	9,408	0
FREEDOM, TOWN OF (OUTAGAMIE)	171,247	11,559	11,559	23,118	0
FREEDOM, TOWN OF (SAUK)	68,299	4,610	4,610	9,220	0
FULTON, TOWN OF (ROCK)	58,106	3,922	3,922	7,844	0
GENESEE, TOWN OF (WAUKESHA)	241,502	16,302	16,302	32,603	0
GENEVA, TOWN OF (WALWORTH)	960,284	93,741	64,819	158,561	0



## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
GEORGETOWN, TOWN OF (POLK)	\$ 46,800	\$ 3,159	\$ 3,159	\$ 6,318	\$ 184,134
GERMANTOWN, TOWN (JUNEAU)	133,415	9,006	9,006	18,011	0
GIBRALTAR, TOWN OF (DOOR)	433,068	36,102	29,178	65,280	0
GILMAN, TOWN OF (PIERCE)	60,234	4,065	4,066	8,131	0
GOODMAN, TOWN OF (MARINETTE)	88,266	5,958	5,958	11,916	0
GORDON, TOWN OF (DOUGLAS)	113,029	7,708	7,550	15,259	0
GRAND CHUTE, TOWN OF (OUTAGAME)	8,563,324	845,628	578,307	1,423,935	0
GRAND RAPIDS, TOWN OF (WOOD)	822,516	81,299	55,520	136,819	0
GRANT, TOWN OF (PORTAGE)	46,204	3,119	3,119	6,237	0
GRATIOT, TOWN OF (LAFAYETTE)	84,520	5,705	5,705	11,410	0
GREEN LAKE, TOWN OF (GRN LAKE)	48,046	3,243	3,243	6,486	0
GREENFIELD, TOWN OF (LACROSSE)	96,470	6,512	6,512	13,023	0
GREENVILLE, TOWN OF (OUTAGAMIE)	84,240	6,376	5,686	12,062	0
GREENWOOD, TOWN OF (VERNON)	46,323	3,127	3,127	6,254	0
HAMBURG, TOWN OF (VERNON)	71,842	5,221	4,477	9,699	0
HARRISON, TOWN OF (GRANT)	45,322	3,059	3,059	6,119	0
HAY RIVER, TOWN OF (DUNN)	54,080	3,650	3,650	7,301	0
HAYWARD, TOWN OF (SAWYER)	171,686	12,775	11,589	24,363	0
HAZELHURST, TOWN OF (ONEIDA)	136,294	9,200	9,200	18,400	0
HIGHLAND, TOWN OF (IOWA)	97,368	6,572	6,572	13,145	0
HUGHES, TOWN OF (BAYFIELD)	67,070	6,029	3,025	9,054	0
HULL, TOWN OF (PORTAGE)	326,603	22,046	22,046	44,091	0
IRON RIVER, TOWN OF (BAYFIELD)	400,609	37,172	27,041	64,213	0
ITHACA, TOWN OF (RICHLAND)	50,735	3,425	3,425	6,849	0
IXONIA, TOWN OF (JEFFERSON)	410,815	27,730	27,730	55,461	0
JACKSON, TOWN OF (WASHINGTON)	270,207	18,238	18,238	36,477	0
JEFFERSON, TOWN OF (JEFFERSON)	51,933	3,506	3,506	7,011	0
KIMBALL, TOWN OF (IRON)	107,593	7,263	7,263	14,525	0
KNIGHT, TOWN OF (IRON)	65,122	4,396	4,396	8,792	0
KNOWLTON, TOWN OF (MARATHON)	70,215	4,740	4,740	9,479	0
KOMENSKY, TOWN OF (JACKSON)	55,193	7,451	0	7,451	0
KOSHKONONG, TOWN OF (JEFFERSON)	153,193	10,340	10,341	20,681	0
LA POINTE, TOWN OF (ASHLAND)	833,502	65,672	57,156	122,829	0
LA VALLE, TOWN OF (SAUK)	202,433	16,257	13,664	29,922	0
LAC DU FLAMBEAU, TOWN (VILAS)	324,052	21,874	21,874	43,748	0
LAFAYETTE, TOWN OF (CHIPPEWA)	212,377	14,336	14,335	28,671	0
LAFAYETTE, TOWN OF (WALWORTH)	78,341	5,288	5,288	10,576	0
LAKE HOLCOMBE, TOWN (CHIPPEWA)	54,001	3,711	3,579	7,290	0
LAKE, TOWN OF (MARINETTE)	49,457	3,343	3,333	6,677	0
LAKETOWN, TOWN OF (POLK)	68,907	4,651	4,651	9,302	0
LAMARTINE, TOWN OF (FONDULAC)	50,289	3,394	3,395	6,788	0
LANARK, TOWN OF (PORTAGE)	47,409	3,200	3,200	6,400	0
LAND O LAKES, TOWN OF (VILAS)	315,819	21,318	21,318	42,636	0
LAONA, TOWN OF (FOREST)	163,496	13,179	9,808	22,987	0
LAWRENCE, TOWN OF (BROWN CO)	542,665	36,630	36,630	73,260	0
LEBANON, TOWN OF (DODGE)	118,883	8,025	8,025	16,049	0
LEDGEVIEW, TOWN OF (BROWN)	806,309	54,426	54,426	108,852	0
LINCOLN, TOWN OF (EAU CLAIRE)	96,977	6,546	6,546	13,092	0





Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
LINCOLN, TOWN OF (TREMPEALEAU)	\$ 59,195	\$ 3,995	\$ 3,996	\$ 7,991	\$ 0
LINCOLN, TOWN OF (VILAS)	50,000	3,375	3,375	6,750	0
LINN, TOWN OF (WALWORTH)	867,389	87,596	58,144	145,740	0
LINWOOD, TOWN OF (PORTAGE)	48,174	3,252	3,252	6,504	0
LISBON, TOWN OF (WAUKESHA)	1,098,599	94,866	73,933	168,799	0
LODI, TOWN OF (COLUMBIA)	102,452	8,095	5,735	13,830	0
LUCAS, TOWN OF (DUNN)	50,521	3,410	3,410	6,820	0
LUDINGTON, TOWN OF(EAU CLAIRE)	51,160	3,684	3,223	6,906	0
LYONS, TOWN OF (WALWORTH)	208,105	14,047	14,047	28,094	0
MADISON, TOWN OF (DANE)	1,782,646	180,437	120,328	300,765	0
MANITOWOC RAPIDS,TOWN(MANITWC)	95,212	6,427	6,427	12,854	0
MAPLE, TOWN OF (DOUGLAS)	92,818	6,265	6,265	12,531	0
MARENGO, TOWN OF (ASHLAND)	82,549	5,572	5,572	11,144	0
MARIETTA, TOWN OF (CRAWFORD)	70,853	4,784	4,783	9,567	0
MARION, TOWN OF (WAUSHARA)	31,495	2,126	2,126	4,252	0
MARTELL, TOWN OF (PIERCE)	60,791	4,103	4,103	8,207	0
MAZOMANIE, TOWN OF (DANE)	88,503	6,154	5,792	11,946	0
MEDFORD, TOWN OF (TAYLOR)	51,443	3,472	3,472	6,945	0
MEDINA, TOWN OF (DANE)	148,252	10,007	10,007	20,014	0
MERCER, TOWN OF (IRON)	442,610	29,876	29,876	59,752	0
MERTON, TOWN OF (WAUKESHA)	806,432	54,435	54,435	108,870	0
MIDDLETON, TOWN OF (DANE)	427,977	28,888	28,888	57,776	0
MILLTOWN, TOWN OF (POLK)	131,792	8,896	8,896	17,792	0
MINOCQUA, TOWN OF(ONEIDA)	1,694,422	150,296	114,374	264,670	383,695
MINONG, TOWN OF (WASHBURN)	193,862	13,086	13,086	26,172	0
MISHICOT, TOWN OF(MANITOWOC)	57,146	3,857	3,857	7,715	0
MONTROSE, TOWN OF (DANE)	94,496	6,379	6,379	12,757	0
MORSE, TOWN OF (ASHLAND)	104,416	8,587	5,509	14,096	0
MUKWONAGO, TOWN (WAUKESHA)	868,353	83,283	58,614	141,897	0
NAMAKAGON, TOWN OF (BAYFIELD)	129,277	8,726	8,726	17,452	0
NEENAH, TOWN OF (WINNEBAGO)	60,495	4,083	4,083	8,167	0
NEW GLARUS, TOWN OF (GREEN)	86,627	5,847	5,847	11,694	0
NEW HAVEN, TOWN OF (DUNN)	61,805	4,172	4,172	8,344	0
NEWBOLD, TOWN OF (ONEIDA)	329,760	22,259	22,259	44,518	0
NORWAY, TOWN OF (RACINE)	614,711	44,986	41,493	86,479	0
OAK GROVE, TOWN OF (BARRON)	68,141	4,600	4,600	9,199	0
OAKDALE, TOWN OF (MONROE)	112,479	7,592	7,592	15,185	0
OAKLAND, TOWN OF (JEFFERSON)	203,739	13,980	13,525	27,505	0
OCONOMOWOC, TOWN OF (WAUKESHA)	1,655,462	160,822	111,744	272,566	0
OMA, TOWN OF (IRON)	131,247	8,859	8,859	17,718	0
ONALASKA, TOWN OF (LA CROSSE)	224,090	15,126	15,126	30,252	0
OREGON, TOWN OF (DANE)	232,714	15,708	15,708	31,417	0
ORIENTA, TOWN OF (BAYFIELD)	46,771	3,157	3,157	6,314	0
OSCEOLA, TOWN OF (POLK)	64,879	4,006	4,003	8,010	0
OTTAWA, TOWN OF (WAUKESHA)	101,517	6,852	6,852	13,705	0
PARKLAND, TOWN OF (DOUGLAS)	100,371	6,775	6,775	13,550	0
PELICAN, TOWN OF (ONEIDA)	107,023	7,224	7,224	14,448	0
PEMBINE, TOWN OF (MARINETTE)	87,253	5,890	5,890	11,779	0



## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
PHELPS, TOWN OF (VILAS)	\$ 252,498	\$ 17,044	\$ 17,044	\$ 34,088	\$ 0
PINE LAKE, TOWN OF (ONEIDA)	134,147	9,055	9,055	18,109	0
PLEASANT SPRINGS, TOWN(DANE)	218,593	14,755	14,755	29,510	0
PLEASANT VALLEY, TOWN(EAUCLER)	139,459	9,413	9,413	18,827	0
PLOVER, TOWN OF (PORTAGE)	74,656	5,309	5,039	10,348	0
PORT WASHINGTON, TOWN(OZAUKEE)	41,850	2,825	2,825	5,650	0
PORT WING, TOWN OF (BAYFIELD)	115,648	7,806	7,806	15,612	0
POUND, TOWN OF (MARINETTE)	53,538	3,614	3,614	7,228	0
PRAIRIE LAKE, TOWN OF (BARRON)	135,504	9,147	9,147	18,293	0
PRESQUE ISLE, TOWN OF(VILAS)	272,496	18,394	18,393	36,787	0
PRESTON, TOWN OF (ADAMS)	69,250	4,677	4,671	9,349	0
PRIMROSE, TOWN OF (DANE)	58,819	3,970	3,970	7,941	0
QUINCY, TOWN OF (ADAMS)	109,266	7,376	7,376	14,752	0
RIB MOUNTAIN, TOWN (MARATHON)	745,044	50,291	50,290	100,581	0
RICE LAKE, TOWN OF (BARRON)	134,963	9,111	9,110	18,221	0
RICHMOND, TOWN OF (WALWORTH)	76,613	5,171	5,171	10,343	0
RIDGEVILLE, TOWN OF (MONROE)	47,108	3,180	3,180	6,360	0
RIPON, TOWN OF(FOND DU LAC)	109,680	10,870	7,403	18,273	0
RIVER FALLS, TOWN OF (PIERCE)	134,336	9,069	9,068	18,137	0
ROME, TOWN OF (ADAMS)	1,331,008	126,171	79,742	205,913	0
RUDOLPH, TOWN OF (WOOD)	39,015	2,633	2,634	5,267	0
RUTLAND, TOWN OF (DANE)	155,615	10,504	10,504	21,008	0
SANBORN, TOWN OF (ASHLAND)	90,270	6,093	6,093	12,187	0
SCOTT, TOWN OF (BROWN)	302,296	20,405	20,405	40,810	0
SCOTT, TOWN OF (SHEBOYGAN)	72,852	4,918	4,917	9,835	0
SEVASTOPOL, TOWN OF (DOOR)	57,842	3,905	3,904	7,809	0
SHARON, TOWN OF (PORTAGE)	118,392	8,000	7,983	15,983	0
SHARON, TOWN OF (WALWORTH)	36,926	2,492	2,492	4,985	0
SHEBOYGAN, TOWN OF (SHEBOYGAN)	678,551	45,803	45,802	91,605	0
SHELBY, TOWN OF (LA CROSSE)	672,178	48,626	45,322	93,948	0
SOMERSET, TOWN OF (ST CROIX)	202,484	13,668	13,668	27,335	0
SOUTH LANCASTER, TOWN (GRANT)	52,319	3,532	3,532	7,063	0
SPARTA, TOWN OF (MONROE)	93,464	6,309	6,309	12,618	0
SPIRIT, TOWN OF (PRICE)	39,748	2,683	2,683	5,366	0
SPRING BROOK, TOWN OF (DUNN)	81,826	5,523	5,523	11,047	0
SPRING GREEN, TOWN OF (SAUK)	56,018	3,781	3,781	7,562	0
SPRING GROVE, TOWN OF (GREEN)	43,818	3,047	2,868	5,915	0
SPRING LAKE, TOWN OF (PIERCE)	61,058	4,122	4,121	8,243	0
SPRINGDALE, TOWN OF (DANE)	101,539	6,854	6,854	13,708	0
SPRINGFIELD, TOWN OF (DANE)	171,556	11,580	11,580	23,160	0
SPRINGFIELD, TOWN OF (JACKSON)	54,231	3,661	3,661	7,321	25,663
ST CROIX FALLS, TOWN OF (POLK)	87,262	5,890	5,890	11,780	0
ST GERMAIN, TOWN OF (VILAS)	330,522	12,727	10,385	23,111	0
STANTON, TOWN OF (DUNN)	80,992	5,467	5,467	10,934	0
STETTIN, TOWN OF (MARATHON)	179,211	12,097	12,097	24,194	0
STOCKBRIDGE, TOWN OF(CALUMET)	85,887	5,797	5,797	11,595	0
STOCKTON, TOWN OF (PORTAGE)	201,888	13,628	13,627	27,255	0
STRONGS PRAIRIE, TOWN OF(ADMS)	38,515	2,600	2,600	5,200	0



Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
SUGAR CREEK, TOWN OF(WALWORTH)	\$ 121,260	\$ 8,185	\$ 8,185	\$ 16,370	\$ 0
SULLIVAN, TOWN OF (JEFFERSON)	96,788	6,533	6,533	13,066	0
SUMMIT, TOWN OF (DOUGLAS)	122,610	8,276	8,276	16,552	0
SUMMIT, TOWN OF (JUNEAU)	50,338	3,398	3,398	6,796	0
SUMNER, TOWN OF (BARRON)	61,537	6,132	2,176	8,307	0
SUPERIOR, TOWN OF (DOUGLAS)	137,240	9,264	9,264	18,528	0
TAINTER, TOWN OF (DUNN)	143,435	9,682	9,682	19,363	0
THERESA, TOWN OF (DODGE)	77,513	5,232	5,232	10,464	0
THREE LAKES, TOWN OF (ONEIDA)	832,011	73,569	55,732	129,301	0
TIFFANY, TOWN OF (DUNN)	50,034	3,377	3,377	6,755	0
TRADE LAKE, TOWN OF (BURNETT)	60,375	4,075	4,075	8,150	0
TREMPEALEAU, TOWN (TREMPELEAU)	82,493	5,568	5,568	11,137	0
TRENTON, TOWN OF (WASHINGTON)	221,943	14,981	14,981	29,962	0
TRIPP, TOWN OF (BAYFIELD)	62,934	4,248	4,248	8,496	0
TROY, TOWN OF (WALWORTH)	181,719	12,701	11,831	24,532	0
TURTLE LAKE, TOWN OF (BARRON)	94,490	6,378	6,378	12,756	0
UNION, TOWN OF (ROCK)	65,664	4,432	4,432	8,865	0
UNITY, TOWN OF (CLARK)	33,446	2,258	2,258	4,515	0
VERMONT, TOWN OF (DANE)	54,059	5,185	2,113	7,298	0
VERONA, TOWN OF (DANE)	204,748	13,821	13,821	27,641	0
VIENNA, TOWN OF (DANE)	187,713	12,671	12,671	25,341	0
VIROQUA, TOWN OF (VERNON)	121,813	8,222	8,222	16,445	0
WABENO, TOWN OF (FOREST)	84,651	6,527	4,900	11,428	0
WALWORTH, TOWN OF (WALWORTH)	122,000	8,235	8,235	16,470	0
WARREN, TOWN OF (ST CROIX)	42,642	2,878	2,878	5,757	0
WASCOTT, TOWN OF (DOUGLAS)	254,871	18,023	17,113	35,135	0
WASHINGTON, TOWN OF (DOOR)	552,538	43,892	37,296	81,189	0
WASHINGTON, TOWN OF (LACROSSE)	63,471	4,284	4,284	8,569	0
WASHINGTON, TOWN OF (SAUK)	64,851	4,377	4,377	8,754	0
WASHINGTON, TOWN OF (VILAS)	188,686	12,736	12,736	25,473	0
WASHINGTON, TOWN OF(EAUCLAIRE)	359,393	24,259	24,259	48,518	0
WATERFORD, TOWN OF (RACINE)	1,177,133	119,892	77,500	197,392	0
WAYNE, TOWN OF (LAFAYETTE)	58,388	3,941	3,941	7,882	0
WESCOTT, TOWN OF (SHAWANO)	318,099	21,472	21,472	42,943	0
WEST BEND, TOWN OF(WASHINGTON)	179,146	12,092	12,092	24,185	0
WEST POINT, TOWN (COLUMBIA)	26,210	1,769	1,769	3,538	0
WEST SWEDEN, TOWN OF (POLK)	43,108	2,910	2,910	5,820	0
WESTFIELD, TOWN OF (SAUK)	3,462	234	234	467	0
WESTFORD, TOWN OF (RICHLAND)	43,220	2,935	2,899	5,835	0
WESTPORT, TOWN OF (DANE)	595,410	55,831	24,550	80,380	0
WHEATLAND, TOWN OF (VERNON)	87,751	6,414	5,433	11,846	0
WHEATON, TOWN OF (CHIPPEWA)	112,774	7,612	7,612	15,224	0
WILSON, TOWN OF (SHEBOYGAN)	172,293	11,631	11,630	23,261	0
WILTON, TOWN OF (MONROE)	45,106	3,045	3,045	6,089	0
WINTER, TOWN OF (SAWYER)	208,843	14,097	14,097	28,194	0
WIOTA, TOWN OF (LAFAYETTE)	46,969	3,170	3,170	6,341	0
WOOD RIVER, TOWN OF (BURNETT)	49,680	3,353	3,353	6,707	0



CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
WOODRUFF, TOWN OF (ONEIDA)	\$ 622,445	\$ 60,364	\$ 42,015	\$ 102,378	\$ 0
Total Towns (287)	\$ 70,700,725	\$ 5,894,721	\$ 4,672,714	\$ 10,567,438	\$ 593,492



Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
<b>Counties</b>					
ADAMS COUNTY	\$ 13,691,303	\$ 1,030,903	\$ 924,430	\$ 1,955,332	\$ 0
ASHLAND COUNTY	8,428,499	690,914	521,071	1,211,985	0
BARRON COUNTY	19,539,062	1,433,131	1,318,885	2,752,017	0
BAYFIELD COUNTY	9,262,596	729,952	588,206	1,318,158	0
BROWN COUNTY	84,594,772	6,469,955	5,675,963	12,145,918	0
BUFFALO COUNTY	5,989,214	453,318	415,056	868,375	0
BURNETT COUNTY	7,840,082	590,808	529,180	1,119,988	0
CALUMET COUNTY	16,969,313	1,265,130	1,145,429	2,410,559	0
CHIPPEWA COUNTY	21,426,545	1,571,746	1,444,438	3,016,185	0
CLARK COUNTY	25,493,942	1,830,707	1,726,948	3,557,655	0
COLUMBIA COUNTY	26,183,869	2,036,033	1,670,531	3,706,563	0
CRAWFORD COUNTY	8,052,842	683,821	488,831	1,172,652	0
DANE COUNTY	184,807,655	14,665,158	12,473,654	27,138,811	0
DODGE COUNTY	43,200,252	3,151,695	2,891,162	6,042,857	0
DOOR COUNTY	20,290,322	1,674,867	1,369,598	3,044,465	0
DOUGLAS COUNTY	15,605,611	1,224,018	1,053,379	2,277,397	0
DUNN COUNTY	22,662,750	1,716,270	1,468,535	3,184,805	0
EAU CLAIRE COUNTY	32,455,817	2,366,216	2,189,078	4,555,294	0
FLORENCE COUNTY	3,862,666	302,339	260,178	562,517	0
FOND DU LAC COUNTY	44,312,073	3,321,234	2,912,874	6,234,108	0
FOREST COUNTY	5,924,940	490,433	399,934	890,366	0
GRANT COUNTY	17,278,946	1,268,231	1,165,447	2,433,678	0
GREEN COUNTY	19,123,584	1,435,562	1,289,851	2,725,413	0
GREEN LAKE COUNTY	10,804,635	797,994	729,314	1,527,308	0
IOWA COUNTY	10,880,973	845,409	734,465	1,579,874	0
IRON COUNTY	5,038,666	378,032	340,110	718,142	0
JACKSON COUNTY	10,340,840	775,745	696,615	1,472,360	0
JEFFERSON COUNTY	31,260,879	2,483,995	2,110,615	4,594,610	0
JUNEAU COUNTY	13,853,265	1,098,656	935,096	2,033,752	0
KENOSHA COUNTY	61,853,396	5,182,741	3,752,407	8,935,147	0
KEWAUNEE COUNTY	8,356,414	649,656	564,058	1,213,714	0
LA CROSSE COUNTY	52,850,150	3,719,125	3,569,791	7,288,916	0
LAFAYETTE COUNTY	18,310,892	1,335,698	1,235,943	2,571,641	0
LANGLADE COUNTY	8,647,909	676,160	563,356	1,239,516	0
LINCOLN COUNTY	12,226,534	943,747	825,292	1,769,039	0
MANITOWOC COUNTY	27,176,374	2,267,867	1,650,502	3,918,370	0
MARATHON COUNTY	47,501,130	3,561,409	3,206,230	6,767,639	0
MARINETTE COUNTY	20,177,379	1,508,929	1,361,973	2,870,902	0
MARQUETTE COUNTY	10,497,890	864,655	708,609	1,573,265	0
MENOMINEE COUNTY	3,544,843	263,887	239,277	503,164	0
MONROE COUNTY	18,561,490	1,337,552	1,252,918	2,590,469	0
OCONTO COUNTY	14,894,123	1,126,618	1,005,937	2,132,555	0
ONEIDA COUNTY	15,469,959	1,200,522	1,042,162	2,242,684	0
OUTAGAMIE COUNTY	64,497,666	4,707,152	4,353,993	9,061,145	0
OZAUKEE COUNTY	33,857,065	2,499,002	2,285,052	4,784,054	0
PEPIN COUNTY	4,763,101	387,510	308,146	695,656	0
PIERCE COUNTY	16,420,215	1,359,409	1,016,323	2,375,733	0

## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
POLK COUNTY	21,003,554	1,641,082	1,346,395	2,987,477	0
PORTAGE COUNTY	29,238,965	2,201,231	2,001,743	4,202,974	0
PRICE COUNTY	6,899,255	525,095	465,699	990,794	0
RACINE COUNTY	51,819,880	4,406,110	3,503,475	7,909,585	0
RICHLAND COUNTY	12,251,531	883,578	826,663	1,710,240	0
ROCK COUNTY	72,385,862	5,697,845	4,715,213	10,413,058	0
RUSK COUNTY	7,940,320	634,160	537,951	1,172,112	0
SAUK COUNTY	34,914,491	2,722,723	2,356,741	5,079,464	0
SAWYER COUNTY	9,817,902	747,941	662,704	1,410,645	0
SHAWANO COUNTY	18,061,166	1,394,794	1,218,561	2,613,355	0
SHEBOYGAN COUNTY	43,409,405	3,213,617	2,931,163	6,144,780	0
ST CROIX COUNTY	34,722,717	2,659,144	2,342,866	5,002,010	0
TAYLOR COUNTY	9,395,190	705,398	634,176	1,339,574	0
TREMPEALEAU COUNTY	24,699,289	1,834,111	1,601,646	3,435,757	0
VERNON COUNTY	13,516,208	1,055,191	846,529	1,901,720	0
VILAS COUNTY	10,125,345	810,678	683,461	1,494,139	0
WALWORTH COUNTY	49,098,755	3,935,686	3,050,344	6,986,029	0
WASHBURN COUNTY	9,843,182	726,868	664,416	1,391,284	0
WASHINGTON COUNTY	38,489,218	2,934,890	2,598,023	5,532,913	0
WAUKESHA COUNTY	93,753,039	7,086,382	6,344,778	13,431,160	0
WAUPACA COUNTY	22,584,416	1,709,282	1,525,094	3,234,376	0
WAUSHARA COUNTY	14,755,361	1,181,795	993,315	2,175,110	0
WINNEBAGO COUNTY	59,026,223	4,735,777	3,769,988	8,505,765	0
WOOD COUNTY	31,766,330	2,430,008	2,030,281	4,460,288	0
Total Counties (71)	\$ 1,898,300,047	\$ 146,247,297	\$ 126,062,067	\$ 272,309,362	\$ 0



Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
<b>School Districts</b>					
ABBOTSFORD SCHOOL DISTRICT	\$ 4,226,134	\$ 283,163	\$ 283,321	\$ 566,484	\$ 0
ADAMS-FRIENDSHIP AREA SCH DIST	10,130,976	684,218	683,469	1,367,687	0
ALBANY SCHOOL DISTRICT	2,800,110	189,009	189,008	378,017	0
ALGOMA SCHOOL DISTRICT	4,603,838	310,764	310,761	621,525	0
ALMA CENTER-HUMBRD-MERIL SCH D	4,269,140	288,168	288,168	576,336	0
ALMA SCHOOL DISTRICT	1,889,711	127,556	127,556	255,112	0
ALMOND-BANCROFT SCHOOL DIST	2,561,104	172,875	172,875	345,750	0
ALTOONA SCHOOL DISTRICT	11,274,227	761,133	760,893	1,522,026	0
AMERY SCHOOL DISTRICT	11,700,915	789,817	789,814	1,579,631	0
ANTIGO UNIFIED SCHOOL DISTRICT	14,103,825	952,016	952,009	1,904,025	0
APPLETON AREA SCHOOL DISTRICT	101,451,386	6,847,774	6,847,711	13,695,485	0
ARBOR VITAE-WOODRUFF JSD #1	4,059,121	273,993	273,991	547,984	0
ARCADIA SCHOOL DISTRICT	9,579,231	651,066	650,917	1,301,983	0
ARGYLE SCHOOL DISTRICT	2,078,453	140,298	140,294	280,592	0
ARROWHEAD UNION HIGH SCH DIST	14,623,777	995,698	994,886	1,990,584	0
ASHLAND SCHOOL DISTRICT	11,881,064	801,977	801,973	1,603,949	0
ASHWAUBENON SCHOOL DISTRICT	21,713,816	1,465,688	1,465,683	2,931,371	0
ATHENS SCHOOL DISTRICT	2,949,463	199,465	199,088	398,553	0
AUBURNDALE SCHOOL DISTRICT	4,594,990	310,163	310,162	620,325	0
AUGUSTA SCHOOL DISTRICT	5,208,517	351,576	351,577	703,153	0
BALDWIN-WOODVILLE AREA SCH DIS	12,284,052	829,181	829,176	1,658,357	0
BANGOR SCHOOL DISTRICT	4,113,453	277,661	277,659	555,319	0
BARABOO SCHOOL DISTRICT	20,853,447	1,407,618	1,407,610	2,815,228	0
BARNEVELD SCHOOL DISTRICT	2,779,806	187,637	187,637	375,274	0
BARRON AREA SCHOOL DISTRICT	9,082,307	613,058	613,055	1,226,113	0
BAYFIELD SCHOOL DISTRICT	5,741,629	387,561	387,559	775,121	0
BEAVER DAM UNIFIED SCHOOL DIST	22,989,793	1,552,915	1,550,761	3,103,676	0
BEECHER DUNBAR PEMBINE SCH DIS	2,178,293	147,162	146,908	294,069	0
BELLEVILLE SCHOOL DISTRICT	6,158,862	415,985	415,977	831,962	0
BELMONT COMMUNITY SCHOOL DIST	2,521,833	170,225	170,224	340,450	0
BELOIT SCHOOL DISTRICT	45,652,548	3,124,739	3,083,904	6,208,643	0
BELOIT TURNER SCHOOL DISTRICT	10,084,109	680,721	680,641	1,361,362	0
BENTON SCHOOL DISTRICT	1,593,051	107,532	107,531	215,063	0
BERLIN AREA SCHOOL DISTRICT	9,853,647	665,124	665,121	1,330,246	0
BIG FOOT UHS SCH DIST	3,336,981	225,247	225,246	450,493	0
BIRCHWOOD SCHOOL DISTRICT	1,938,511	130,851	130,850	261,701	0
BLACK HAWK SCHOOL DISTRICT	3,027,025	204,325	204,324	408,649	0
BLACK RIVER FALLS SCH DIST	12,380,337	835,776	835,568	1,671,344	0
BLAIR-TAYLOR SCHOOL DISTRICT	4,064,102	274,783	273,870	548,653	0
BLOOMER SCHOOL DISTRICT	7,442,097	502,346	502,343	1,004,688	0
BONDUEL SCHOOL DISTRICT	4,856,400	327,809	327,807	655,616	0
BOSCOBEL SCHOOL DISTRICT	5,838,413	394,095	394,092	788,187	0
BOWLER SCHOOL DISTRICT	2,946,374	198,882	198,881	397,763	0
BOYCEVILLE COMMUNITY SCH DIST	4,625,589	312,229	312,227	624,457	0
BRIGHTON SCH DIST #1	1,063,069	71,870	71,757	143,627	0
BRILLION PUBLIC SCHOOL DIST	5,857,214	395,364	395,362	790,727	0
BRISTOL, TOWN, SCH DIST #1	5,067,381	346,259	341,871	688,130	0

## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
BRODHEAD SCHOOL DISTRICT	7,660,745	517,105	517,102	1,034,206	0
BROWN DEER SCHOOL DISTRICT	12,316,038	831,874	830,797	1,662,670	0
BRUCE SCHOOL DISTRICT	3,431,827	231,650	231,649	463,298	0
BURLINGTON AREA SCHOOL DIST	21,713,660	1,465,674	1,465,669	2,931,343	0
BUTTERNUT SCHOOL DISTRICT	1,722,050	116,239	116,238	232,477	0
CADOTT COMM SCHOOL DISTRICT	6,291,831	425,063	425,026	850,089	0
CAMBRIA-FRIESLAND SCHOOL DIST	3,185,153	215,405	215,390	430,795	0
CAMBRIDGE SCHOOL DISTRICT	6,718,754	453,517	453,515	907,032	0
CAMERON SCHOOL DISTRICT	7,176,738	484,435	484,431	968,866	0
CAMPBELLSPORT SCHOOL DISTRICT	9,252,274	624,546	624,517	1,249,064	0
CASHTON SCHOOL DISTRICT	4,082,305	275,557	275,556	551,113	0
CASSVILLE SCHOOL DISTRICT	1,684,991	113,738	113,737	227,475	0
CEDAR GROVE-BELGIUM SCH DIST	6,295,205	425,656	424,199	849,855	0
CEDARBURG SCHOOL DISTRICT	20,350,104	1,373,641	1,373,633	2,747,273	0
CHEQUAMEGON SCHOOL DISTRICT	5,512,661	372,903	371,308	744,211	0
CHETEK-WEYERHAEUSER AREA SD	6,883,270	464,521	464,519	929,040	0
CHILTON SCHOOL DISTRICT	7,390,443	498,857	498,854	997,712	0
CHIPPEWA FALLS AREA UNIF SCH	31,070,042	2,097,244	2,097,234	4,194,479	0
CLAYTON SCHOOL DISTRICT	2,682,937	181,100	181,099	362,198	0
CLEAR LAKE SCHOOL DISTRICT	3,969,119	267,916	267,915	535,831	0
CLINTON COMMUNITY SCHOOL DIST	7,385,147	498,500	498,497	996,997	0
CLINTONVILLE PUBLIC SCH DIST	9,861,645	665,670	665,665	1,331,335	0
COCHRANE-FOUNTAIN CITY SCH DIS	3,583,692	241,990	241,831	483,822	0
COLBY SCHOOL DISTRICT	4,669,598	315,199	315,198	630,396	0
COLEMAN SCHOOL DISTRICT	3,977,245	268,467	268,465	536,932	0
COLFAX SCHOOL DISTRICT	5,112,254	345,079	345,077	690,157	0
COLUMBUS SCHOOL DISTRICT	8,150,981	558,576	558,414	1,116,990	0
CORNELL SCHOOL DISTICT	2,874,689	194,046	194,039	388,085	0
CRANDON SCHOOL DISTRICT	6,002,927	405,201	405,198	810,399	0
CRIVITZ SCHOOL DISTRICT	4,513,546	304,667	304,665	609,332	0
CUBA CITY SCHOOL DISTRICT	5,070,765	342,539	342,522	685,061	0
CUDAHY SCHOOL DISTRICT	19,013,348	1,283,407	1,283,402	2,566,809	0
CUMBERLAND SCHOOL DISTRICT	6,720,295	453,676	453,567	907,244	0
DARLINGTON COMM SCHOOL DIST	5,811,568	392,281	392,280	784,561	0
DC EVEREST AREA SCHOOL DIST	42,025,329	2,836,724	2,836,706	5,673,430	0
DEERFIELD COMM SCHOOL DISTRICT	5,305,948	358,154	358,152	716,306	0
DEFOREST AREA SCHOOL DISTRICT	27,222,788	1,837,542	1,837,536	3,675,078	0
DELAVAN-DARIEN SCHOOL DISTRICT	14,081,003	954,214	951,805	1,906,019	0
DENMARK SCHOOL DISTRICT	9,776,161	659,996	659,790	1,319,786	0
DEPERE UNIFIED SCHOOL DISTRICT	26,093,274	1,761,376	1,761,245	3,522,621	0
DESOTO AREA SCHOOL DISTRICT	3,554,452	239,951	239,902	479,852	0
DODGELAND SCHOOL DISTRICT	6,078,345	410,397	410,291	820,687	0
DODGEVILLE SCHOOL DISTRICT	8,812,503	594,846	594,843	1,189,690	0
DRUMMOND SCHOOL DISTRICT	2,594,875	175,255	175,054	350,308	0
DURAND-ARKANSAW SCHOOL DIST	5,644,941	381,037	381,035	762,072	0
EAST TROY COMMUNITY SCH DIST	11,011,857	748,034	743,296	1,491,330	0
EAU CLAIRE AREA SCHOOL DIST	71,456,010	4,838,959	4,828,738	9,667,696	0
EDGAR SCHOOL DISTRICT	3,354,909	226,457	226,456	452,913	0



Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
EDGERTON SCHOOL DISTRICT	12,842,399	866,871	866,868	1,733,739	0
ELCHO SCHOOL DISTRICT	2,228,366	152,202	148,482	300,684	0
ELEVA-STRUM SCHOOL DISTRICT	4,376,679	295,427	295,426	590,853	0
ELK MOUND AREA SCHOOL DISTRICT	7,206,165	486,421	486,418	972,839	0
ELKHART LAKE-GLENBEULAH SCH DS	3,712,352	250,585	250,584	501,169	0
ELKHORN AREA SCHOOL DISTRICT	23,103,940	1,559,525	1,559,518	3,119,044	0
ELLSWORTH COMM SCH DIST	10,832,054	731,167	731,164	1,462,332	0
ELMBROOK SCHOOL DISTRICT	55,222,553	3,727,901	3,727,725	7,455,626	0
ELMWOOD SCHOOL DISTRICT	2,778,303	187,536	187,536	375,073	0
ERIN SCH DIST #2	1,784,617	120,463	120,462	240,924	0
EVANSVILLE COMM SCH DIST	12,341,073	833,099	833,022	1,666,121	0
FALL CREEK SCHOOL DISTRICT	5,151,777	347,746	347,745	695,491	0
FALL RIVER SCHOOL DISTRICT	3,276,122	221,138	221,138	442,276	0
FENNIMORE COMMUNITY SCH DIST	6,010,331	405,699	405,697	811,396	0
FLAMBEAU SCHOOL DISTRICT	4,051,653	274,599	274,586	549,184	0
FLORENCE COUNTY SCH DIST	3,676,113	248,178	248,155	496,333	0
FOND DU LAC SCHOOL DISTRICT	48,483,542	3,421,771	3,293,725	6,715,496	0
FONTANA JT SCH DIST #8 ETAL	1,829,707	124,269	122,744	247,012	0
FORT ATKINSON SCHOOL DISTRICT	21,738,592	1,456,835	1,473,344	2,930,179	0
FOX POINT JT SCH DIST # 2 ETAL	7,566,690	510,755	510,753	1,021,508	0
FRANKLIN PUBLIC SCHOOL DIST	32,933,681	2,243,426	2,238,049	4,481,475	0
FREDERIC SCHOOL DISTRICT	3,992,345	270,802	270,736	541,538	0
FREEDOM AREA SCHOOL DISTRICT	10,049,953	678,375	678,371	1,356,746	0
GALESVILLE SCHOOL DISTRICT ETAL	9,936,518	670,718	670,716	1,341,434	0
GENEVA JT SCH DIST #4 ETAL	1,354,346	91,419	91,418	182,837	0
GENOA CITY JT SCH DIST #2 ETAL	3,453,580	233,118	233,117	466,235	0
GERMANTOWN SCHOOL DISTRICT	26,465,584	1,786,709	1,786,157	3,572,866	0
GIBRALTAR AREA SCHOOL DISTRICT	6,824,585	460,662	460,661	921,323	0
GILLETT SCHOOL DISTRICT	3,942,993	266,154	266,152	532,307	0
GILMAN SCHOOL DISTRICT	2,518,780	170,018	170,018	340,036	0
GILMANTON SCHOOL DISTRICT	908,046	61,293	61,293	122,586	0
GLENDALE-RIVER HILLS SCH DIST	8,166,735	551,259	551,256	1,102,515	0
GLENWOOD CITY SCHOOL DISTRICT	4,365,382	294,665	294,664	589,329	0
GOODMAN-ARMSTRONG SCHOOL DIST	1,074,565	72,533	72,533	145,066	0
GRAFTON SCHOOL DISTRICT	13,476,030	911,818	909,633	1,821,452	0
GRANTON AREA SCHOOL DISTRICT	1,833,936	123,792	123,791	247,583	0
GRANTSBURG SCHOOL DISTRICT	8,090,854	552,813	552,260	1,105,073	0
GREEN BAY AREA PUBLIC SCHOOLS	167,882,987	11,335,615	11,328,628	22,664,244	0
GREEN LAKE SCHOOL DISTRICT	2,441,645	165,792	164,619	330,411	0
GREENDALE SCHOOL DISTRICT	20,801,278	1,404,101	1,404,092	2,808,193	0
GREENFIELD SCHOOL DISTRICT	26,358,097	1,779,379	1,779,174	3,558,553	0
GREENWOOD SCHOOL DISTRICT	2,972,186	200,623	200,623	401,246	0
GRESHAM SCHOOL DIST	2,162,552	145,975	145,973	291,948	0
HAMILTON SCHOOL DISTRICT	32,024,336	2,161,722	2,161,645	4,323,368	0
HARTFORD JT SCH DIST #1 ETAL	10,525,656	722,218	721,880	1,444,098	0
HARTFORD UNION HIGH SCH DIST	9,089,587	614,194	613,550	1,227,744	0
HARTLAND JT SCH DIST #3 ETAL	7,952,141	553,808	553,326	1,107,134	0
HAYWARD COMMUNITY SCHOOL DIST	12,918,427	872,000	871,995	1,743,995	0



## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
HERMAN-NEOSHO-RUBICON SD	2,311,737	158,999	153,089	312,087	0
HIGHLAND SCHOOL DISTRICT	1,660,257	112,068	112,067	224,135	0
HILBERT SCHOOL DISTRICT	3,000,538	202,537	202,537	405,074	0
HILLSBORO SCHOOL DISTRICT	4,231,434	285,625	285,623	571,248	0
HOLMEN SCHOOL DISTRICT	29,057,278	1,963,595	1,963,542	3,927,137	0
HOLY HILL AREA SCHOOL DIST	2,767,203	186,785	186,786	373,571	0
HORICON SCHOOL DISTRICT	5,086,459	343,338	343,337	686,675	0
HORTONVILLE AREA SCHOOL DIST	24,040,962	1,622,770	1,622,767	3,245,538	0
HOWARDS GROVE SCHOOL DISTRICT	6,268,162	423,102	423,101	846,203	0
HOWARD-SUAMICO SCHOOL DISTRICT	38,709,191	2,615,950	2,612,871	5,228,820	0
HUDSON SCHOOL DISTRICT	40,750,085	2,750,977	2,750,292	5,501,269	0
HURLEY SCHOOL DISTRICT	3,591,503	242,429	242,428	484,857	0
HUSTISFORD SCHOOL DISTRICT	2,758,202	186,180	186,179	372,359	0
INDEPENDENCE SCHOOL DISTRICT	2,910,163	196,439	196,437	392,876	0
IOLA-SCANDINAVIA SCHOOL DIST	4,399,167	296,945	296,943	593,888	0
IOWA-GRANT SCHOOL DISTRICT	6,027,862	406,884	406,882	813,765	0
ITHACA SCHOOL DISTRICT	2,955,275	199,482	199,481	398,963	0
JANESVILLE SCHOOL DISTRICT	72,152,194	4,870,304	4,870,265	9,740,569	0
JEFFERSON SCHOOL DISTRICT	13,107,227	884,742	884,738	1,769,479	0
JOHNSON CREEK SCHOOL DISTRICT	4,637,816	313,498	312,608	626,105	0
JUDA SCHOOL DISTRICT	1,733,023	116,980	116,979	233,959	0
KANSASVILLE DOVER DIST #1	694,843	46,902	46,902	93,804	0
KAUKAUNA AREA SCHOOL DISTRICT	24,688,721	1,666,500	1,666,491	3,332,991	0
KENOSHA UNIFIED SCH DIST #1	152,176,202	10,269,816	10,268,713	20,538,530	0
KETTLE MORAINNE SCHOOL DISTRICT	25,031,974	1,691,153	1,688,175	3,379,328	0
KEWASKUM SCHOOL DISTRICT	11,490,077	775,782	775,386	1,551,169	0
KEWAUNEE SCHOOL DISTRICT	6,365,339	429,664	429,661	859,325	0
KICKAPOO AREA SCHOOL DISTRICT	3,680,983	248,468	248,467	496,935	0
KIEL AREA SCHOOL DISTRICT	8,104,300	547,043	547,041	1,094,083	0
KIMBERLY AREA SCHOOL DISTRICT	30,667,732	2,070,084	2,070,074	4,140,158	0
KOHLER SCHOOL DISTRICT	4,290,432	289,609	289,611	579,219	0
LA CROSSE SCHOOL DISTRICT	56,667,554	3,825,073	3,825,060	7,650,133	0
LAC DU FLAMBEAU SCH DIST #1	7,309,906	493,421	493,419	986,841	0
LADYSMITH-HAWKINS SCH DIST	5,335,975	360,181	360,178	720,359	0
LAFARGE SCHOOL DISTRICT	2,001,588	135,108	135,107	270,216	0
LAKE COUNTRY SCH DIST	3,323,542	237,540	224,339	461,879	0
LAKE GENEVA GENOA CITY UHS	10,628,570	717,432	717,429	1,434,861	0
LAKE GENEVA JT SCH DIS #1 ETAL	11,939,685	805,989	805,876	1,611,865	0
LAKE HOLCOMBE SCHOOL DISTRICT	2,390,827	161,382	161,381	322,763	0
LAKE MILLS AREA SCHOOL DIST	9,807,534	662,014	662,010	1,324,024	0
LAKELAND UNION HIGH SCH DIST	7,255,640	489,757	489,756	979,513	0
LANCASTER COMM SCH DIST	6,852,427	462,543	462,540	925,083	0
LAONA SCHOOL DISTRICT	2,030,516	137,061	137,060	274,121	0
LENA PUBLIC SCHOOL DISTRICT	2,545,964	171,855	171,852	343,707	0
LINN JT SCH DIST #4 ETAL	1,061,968	71,704	71,669	143,373	0
LINN JT SCH DIST #6 ETAL	954,063	64,418	64,381	128,799	0
LITTLE CHUTE AREA SCHOOL DIST	9,704,568	655,063	655,059	1,310,123	0
LODI SCHOOL DISTRICT	10,659,557	719,524	719,521	1,439,045	0



Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
LOMIRA SCHOOL DISTRICT	7,010,786	475,859	473,230	949,089	0
LOYAL SCHOOL DISTRICT	3,453,658	233,448	232,796	466,245	0
LUCK SCHOOL DISTRICT	3,386,821	228,611	228,610	457,222	0
LUXEMBURG-CASCO SCHOOL DIST	10,524,775	719,164	707,660	1,426,824	0
MADISON METRO SCHOOL DISTRICT	241,863,686	16,346,198	16,325,450	32,671,648	0
MANAWA SCHOOL DISTRICT	3,768,463	254,373	254,372	508,745	0
MANITOWOC PUBLIC SCHOOL DIST	36,698,469	2,477,189	2,477,110	4,954,298	0
MAPLE DALE-INDIAN HILL SCH DIS	4,158,061	280,671	280,670	561,341	0
MAPLE SCHOOL DISTRICT	8,669,391	584,797	584,301	1,169,098	0
MARATHON CITY SCHOOL DISTRICT	4,146,654	279,901	279,900	559,800	0
MARINETTE SCHOOL DISTRICT	12,031,701	812,143	812,140	1,624,283	0
MARION SCHOOL DISTRICT	2,339,437	157,912	157,912	315,824	0
MARKESAN SCHOOL DISTRICT	5,226,586	352,796	352,795	705,591	0
MARSHALL JT SCH DIST #2 ETAL	7,574,527	511,904	510,661	1,022,565	0
MARSHFIELD UNIFIED SCHOOL DIST	24,023,751	1,622,627	1,620,715	3,243,342	0
MAUSTON SCHOOL DISTRICT	9,560,274	645,362	645,281	1,290,643	0
MAYVILLE SCHOOL DISTRICT	7,654,571	519,810	514,739	1,034,549	0
MCFARLAND SCHOOL DISTRICT	18,887,526	1,274,917	1,274,910	2,549,827	0
MEDFORD AREA PUBLIC SCHL DIST	18,237,113	1,231,009	1,231,011	2,462,020	0
MELLEN SCHOOL DISTRICT	1,821,168	122,930	122,929	245,859	0
MELROSE-MINDORO SCHOOL DIST	5,301,449	357,851	357,847	715,698	0
MENASHA JOINT SCHOOL DISTRICT	25,462,165	1,719,285	1,718,704	3,437,988	0
MENOMINEE INDIAN SCHOOL DIST	9,660,954	652,118	652,114	1,304,232	0
MENOMONEE FALLS SCHOOL DISTRICT	29,313,806	1,979,865	1,977,510	3,957,375	0
MENOMONIE AREA SCHOOL DISTRICT	21,055,309	1,421,240	1,421,234	2,842,475	0
MEQUON-THIENSVILLE SCHOOL DIST	25,758,294	1,738,689	1,738,686	3,477,375	0
MERCER SCHOOL DISTRICT	1,451,816	97,998	97,997	195,995	0
MERRILL AREA COMMON PUB SCH	20,326,632	1,372,053	1,372,048	2,744,101	0
MERTON COMMUNITY SCHOOL DIST	4,949,365	336,099	334,765	670,864	0
MIDDLETON-CROSS PLNS SCH DIST	58,161,010	3,928,823	3,928,623	7,857,446	0
MILTON SCHOOL DISTRICT	22,708,269	1,545,444	1,545,095	3,090,539	0
MILWAUKEE TEACHERS RETIREM SYS	387,719,123	26,201,007	26,202,895	52,403,901	0
MINERAL POINT UNIF SCH DIST	4,888,331	329,961	329,961	659,921	0
MINOCQUA JT SCH DIST #1 M-H-LT	4,520,514	305,137	305,135	610,272	0
MISHICOT SCHOOL DISTRICT	5,916,702	399,506	399,500	799,006	0
MONDOVI SCHOOL DISTRICT	6,645,728	448,590	448,587	897,177	0
MONONA GROVE SCHOOL DISTRICT	24,944,413	1,683,756	1,683,749	3,367,505	0
MONROE SCHOOL DISTRICT	18,096,209	1,221,499	1,221,495	2,442,994	0
MONTELLO SCHOOL DISTRICT	5,218,859	352,375	352,173	704,548	0
MONTICELLO SCHOOL DISTRICT	2,710,690	182,973	182,972	365,945	0
MOSINEE SCHOOL DISTRICT	13,752,390	928,293	928,289	1,856,582	0
MOUNT HOREB AREA SCHOOL DIST	16,544,806	1,116,779	1,116,774	2,233,554	0
MUKWONAGO SCHOOL DISTRICT	31,413,789	2,128,904	2,128,504	4,257,408	0
MUSKEGO-NORWAY SCHOOL DISTRICT	33,227,546	2,242,866	2,242,867	4,485,733	0
NECEDAH AREA SCHOOL DISTRICT	5,334,251	360,063	360,062	720,125	0
NEENAH JOINT SCHOOL DISTRICT	39,762,228	2,683,966	2,683,953	5,367,919	0
NEILLSVILLE SCHOOL DISTRICT	5,327,393	359,601	359,599	719,200	0
NEKOOSA SCHOOL DISTRICT	7,439,074	502,140	502,138	1,004,278	0



## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
NEW AUBURN SCHOOL DISTRICT	2,313,564	156,167	156,165	312,332	0
NEW BERLIN SCHOOL DISTRICT	27,187,634	1,839,023	1,838,929	3,677,952	0
NEW GLARUS SCHOOL DISTRICT	6,684,557	451,210	451,208	902,418	0
NEW HOLSTEIN SCHOOL DISTRICT	6,324,140	426,882	426,880	853,762	0
NEW LISBON SCHOOL DISTRICT	4,116,073	277,836	277,835	555,671	0
NEW LONDON SCHOOL DISTRICT	13,448,177	907,753	907,749	1,815,502	0
NEW RICHMOND SCHOOL DISTRICT	22,455,266	1,516,004	1,515,464	3,031,468	0
NIAGARA SCHOOL DISTRICT	3,079,097	207,840	207,839	415,679	0
NICOLET HIGH SCHOOL DISTRICT	11,192,095	755,470	755,467	1,510,937	0
NORRIS SCHOOL DISTRICT	1,577,424	106,476	106,476	212,952	0
NORTH CAPE CONSOLIDATED S D	1,443,698	97,451	97,450	194,901	0
NORTH CRAWFORD SCHOOL DISTRICT	3,734,916	261,369	252,107	513,476	0
NORTH FOND DU LAC SCH DIST	9,705,633	655,133	655,130	1,310,263	0
NORTH LAKE SCHOOL DISTRICT	1,730,452	116,806	116,806	233,612	0
NORTH LAKELAND SCHOOL DISTRICT	1,760,048	118,804	118,804	237,607	0
NORTHERN OZAUKEE SCHOOL DIST	5,176,146	349,392	349,390	698,783	0
NORTHLAND PINES SCHOOL DIST	10,845,852	732,099	732,096	1,464,194	0
NORTHWOOD SCHOOL DISTRICT	2,680,405	180,930	180,928	361,858	0
NORWALK-ONTARIO SCHOOL DIST	4,615,880	311,571	311,570	623,140	0
NORWAY-RAYMOND JT#7 SD	586,464	39,587	39,587	79,173	52,578
OAK CREEK-FRANKLIN JT SCH DIST	44,494,286	3,005,412	3,001,331	6,006,743	0
OAKFIELD SCHOOL DISTRICT	4,043,653	273,461	272,471	545,932	0
OCONOMOWOC AREA SCHOOL DIST	33,581,490	2,273,956	2,273,323	4,547,279	0
OCONTO FALLS PUBLIC SCH DIST	11,719,427	791,064	791,061	1,582,125	0
OCONTO UNIFIED SCHOOL DISTRICT	6,658,189	449,431	449,428	898,859	0
OMRO SCHOOL DISTRICT	7,584,216	511,937	511,934	1,023,871	0
ONALASKA SCHOOL DISTRICT	21,524,780	1,452,929	1,452,922	2,905,851	0
OOSTBURG SCHOOL DISTRICT	6,407,296	432,493	432,492	864,985	0
OREGON SCHOOL DISTRICT	31,910,884	2,180,311	2,159,020	4,339,331	0
OSCEOLA SCHOOL DISTRICT	11,745,543	792,821	792,818	1,585,639	0
OSHKOSH AREA SCHOOL DISTRICT	69,646,558	4,729,557	4,725,946	9,455,503	0
OSSEO-FAIRCHILD SCHOOL DIST	6,124,332	413,396	413,392	826,787	0
OWEN-WITHEE SCHOOL DISTRICT	3,455,894	233,275	233,274	466,549	0
PALMYRA-EAGLE AREA SCHOOL DIST	4,071,451	275,129	275,118	550,248	0
PARDEEVILLE AREA SCHOOL DIST	5,494,730	370,896	370,895	741,791	399,444
PARIS JT SCH DIST #1 ETAL	1,408,973	95,106	95,106	190,211	0
PARKVIEW SCHOOL DISTRICT	6,112,137	412,753	412,387	825,140	0
PECATONICA AREA SCHOOL DIST	3,522,741	237,787	237,786	475,573	0
PEPIN AREA SCHOOL DISTRICT	2,074,787	140,049	140,048	280,097	0
PESHTIGO SCHOOL DISTRICT	6,784,426	457,951	457,950	915,901	0
PEWAUKEE SCHOOL DISTRICT	19,764,999	1,335,336	1,335,296	2,670,632	0
PHELPS SCHOOL DISTRICT	1,351,544	91,230	91,229	182,459	0
PHILLIPS SCHOOL DISTRICT	5,673,348	384,139	384,080	768,219	0
PITTSVILLE SCHOOL DISTRICT	4,182,784	282,340	282,338	564,679	0
PLATTEVILLE SCHOOL DISTRICT	10,359,485	699,372	699,164	1,398,537	0
PLUM CITY SCHOOL DISTRICT	1,756,330	118,553	118,552	237,105	0
PLYMOUTH JOINT SCHOOL DISTRICT	16,039,798	1,082,883	1,082,687	2,165,570	0
PORT EDWARDS SCHOOL DISTICT	2,860,125	193,059	193,058	386,118	0



Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
PORT WASHINGTON-SAUKVILLE SCH	18,283,103	1,233,510	1,233,490	2,467,000	0
PORTAGE COMMUNITY SCHOOL DIST	15,216,537	1,027,091	1,027,086	2,054,177	0
POTOSI SCHOOL DISTRICT	2,804,962	189,336	189,335	378,671	0
POYNETTE SCHOOL DISTRICT	6,958,600	469,710	469,707	939,417	0
PRAIRIE DU CHIEN AREA SCH DIST	8,063,233	544,271	544,268	1,088,539	0
PRAIRIE FARM PUBLIC SCH DIST	2,662,266	179,984	179,423	359,407	0
PRENTICE SCHOOL DISTRICT	2,606,674	175,953	175,951	351,903	0
PRESCOTT SCHOOL DISTRICT	8,639,905	584,545	581,849	1,166,394	0
PRINCETON SCHOOL DISTRICT	2,333,215	157,283	157,206	314,489	0
PULASKI COMMUNITY SCHOOL DIST	26,107,957	1,764,924	1,759,695	3,524,620	0
RACINE UNIFIED SCHOOL DISTRICT	140,170,542	9,462,422	9,461,836	18,924,258	0
RANDALL JT SCH DIST #1 ETAL	4,293,067	290,347	289,219	579,567	0
RANDOLPH SCHOOL DISTRICT	3,844,431	259,500	259,499	518,999	0
RANDOM LAKE SCHOOL DISTRICT	5,376,820	362,997	362,876	725,873	0
RAYMOND SCH DIST #14	2,614,250	176,489	176,488	352,977	0
REEDSBURG SCHOOL DISTRICT	20,223,990	1,365,125	1,365,120	2,730,245	0
REEDSVILLE SCHOOL DISTRICT	4,057,559	274,261	273,514	547,775	0
RHINELANDER SCHOOL DISTRICT	16,354,793	1,104,252	1,104,237	2,208,488	0
RIB LAKE SCHOOL DISTRICT	3,058,503	206,450	206,449	412,899	0
RICE LAKE AREA SCHOOL DISTRICT	17,076,771	1,152,692	1,152,685	2,305,377	0
RICHLAND SCHOOL DISTRICT	8,865,581	598,431	598,427	1,196,858	0
RICHMOND SCHOOL DISTRICT	2,184,709	152,469	142,469	294,938	0
RIO COMMUNITY SCHOOL DISTRICT	2,993,469	202,060	202,059	404,120	0
RIPON AREA SCHOOL DISTRICT	11,522,566	778,288	777,261	1,555,549	0
RIVER FALLS SCHOOL DISTRICT	22,387,725	1,511,179	1,511,172	3,022,351	0
RIVER RIDGE SCHOOL DISTRICT	3,732,104	251,917	251,916	503,833	0
RIVER VALLEY SCHOOL DISTRICT	8,478,714	572,316	572,313	1,144,628	0
RIVERDALE SCHOOL DISTRICT	4,068,679	274,637	274,636	549,272	0
ROSENDALE-BRANDON SCHOOL DIST	6,354,610	428,987	428,514	857,501	0
ROSHOLT SCHOOL DISTRICT	3,401,545	229,605	229,605	459,210	0
ROYALL SCHOOL DISTRICT	3,896,733	263,032	263,030	526,061	0
SALEM SCHOOL DISTRICT	6,801,784	459,123	459,120	918,243	0
SAUK PRAIRIE SCHOOL DISTRICT	19,449,892	1,312,873	1,312,869	2,625,742	0
SENECA SCHOOL DISTRICT	1,619,685	109,329	109,329	218,658	0
SEVASTOPOL SCHOOL DISTRICT	5,213,322	351,900	351,899	703,799	0
SEYMOUR COMMUNITY SCHOOL DIST	13,886,999	937,375	937,373	1,874,748	0
SHARON JT SCH DIST # 11 ETAL	1,418,138	95,725	95,724	191,449	0
SHAWANO SCHOOL DIST	15,125,391	1,020,969	1,020,964	2,041,933	0
SHEBOYGAN AREA SCHOOL DISTRICT	68,611,359	4,631,285	4,631,273	9,262,558	0
SHEBOYGAN FALLS SCHOOL DIST	11,039,305	745,156	745,153	1,490,310	0
SHELL LAKE SCHOOL DISTRICT	4,805,227	327,093	326,960	654,053	0
SHIOCTON SCHOOL DISTRICT	5,476,987	369,700	369,697	739,397	0
SHOREWOOD SCHOOL DISTRICT	17,315,521	1,168,781	1,168,350	2,337,132	0
SHULLSBURG SCHOOL DISTRICT	2,428,630	163,905	163,904	327,809	0
SILVER LAKE JT SCH DIS #1 ETAL	2,862,146	193,196	193,195	386,391	0
SIREN SCHOOL DISTRICT	3,507,593	236,894	236,631	473,525	0
SLINGER SCHOOL DISTRICT	18,857,259	1,272,867	1,272,863	2,545,730	0
OLON SPRINGS SCHOOL DISTRICT	2,356,393	159,057	159,057	318,114	0



## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
SOMERSET SCHOOL DISTRICT	10,954,768	739,450	739,447	1,478,897	0
SOUTH MILWAUKEE SCHOOL DIST	23,938,713	1,625,581	1,625,063	3,250,645	0
SOUTH SHORE SCHOOL DISTRICT	1,819,886	122,842	122,842	245,684	0
SOUTHERN DOOR COUNTY SCH DIST	7,804,309	526,796	526,792	1,053,588	0
SOUTHWESTERN WISC COMM SCH DIS	3,119,019	210,535	210,534	421,068	0
SPARTA AREA SCHOOL DISTRICT	20,501,040	1,383,834	1,383,824	2,767,658	0
SPENCER SCHOOL DISTRICT	3,439,688	232,181	232,180	464,361	0
SPOONER AREA SCHOOL DISTRICT	8,499,208	573,699	573,696	1,147,395	0
SPRING VALLEY SCHOOL DISTRICT	4,966,601	335,249	335,246	670,495	0
ST CROIX CENTRAL SCH DIST	11,514,041	777,201	777,198	1,554,399	0
ST CROIX FALLS SCHOOL DISTRICT	8,609,888	581,179	581,176	1,162,355	0
ST FRANCIS SCHOOL DISTRICT #6	7,480,151	504,913	504,911	1,009,823	0
STANLEY-BOYD AREA SCHOOL DIST	6,926,016	467,586	467,430	935,017	0
STEVENS POINT AREA PUB SCH DIS	48,564,799	3,279,349	3,278,366	6,557,715	0
STOCKBRIDGE SCH DIST	1,410,815	95,231	95,230	190,460	0
STONE BANK SCHOOL DISTRICT	2,188,175	147,726	147,677	295,404	0
STOUGHTON AREA SCHOOL DISTRICT	20,893,244	1,412,841	1,412,641	2,825,482	0
STRATFORD SCHOOL DISTRICT	5,115,032	345,268	345,266	690,534	0
STURGEON BAY SCHOOL DISTRICT	9,411,445	635,275	635,273	1,270,548	0
SUN PRAIRIE AREA SCH DIS	64,291,915	4,339,683	4,339,649	8,679,332	0
SUPERIOR SCHOOL DISTRICT	34,730,001	2,362,978	2,344,136	4,707,114	0
SURING PUBLIC SCHOOL DISTRICT	2,794,063	183,128	182,614	365,742	0
SWALLOW SCHOOL DISTRICT	2,511,111	169,500	169,500	339,000	0
THORP SCHOOL DISTRICT	4,237,028	286,137	285,865	572,003	0
THREE LAKES SCHOOL DISTRICT	5,242,631	353,881	353,878	707,759	0
TIGERTON SCHOOL DISTRICT	1,574,853	106,303	106,302	212,606	0
TOMAH AREA SCHOOL DISTRICT	21,717,102	1,465,910	1,465,907	2,931,817	0
TOMAHAWK SCHOOL DISTRICT	8,358,951	564,232	564,231	1,128,463	0
TOMORROW RIVER SCHOOL DISTRICT	7,455,469	508,896	508,689	1,017,585	0
TREVOR-WILMOT CONS GR S.D.	3,737,800	252,304	252,302	504,606	0
TRI-COUNTY AREA SCH DIST-PLNFD	4,515,148	304,773	304,774	609,547	0
TURTLE LAKE SCHOOL DISTRICT	3,068,635	207,135	207,134	414,269	0
TWIN LAKES SCH DIST #4	2,463,324	175,312	166,275	341,586	0
TWO RIVERS PUBLIC SCHOOL DIST	12,076,419	815,164	815,159	1,630,323	0
UNION GROVE JT SCH DIS #1 ETAL	5,743,195	387,667	387,665	775,332	0
UNION GROVE UNION HIGH SCH DIS	6,302,897	425,451	425,441	850,892	0
UNITY SCHOOL DISTRICT	7,288,931	492,044	491,968	984,012	0
VALDERS AREA SCHOOL DISTRICT	6,693,330	451,983	451,964	903,946	0
VERONA AREA SCHOOL DISTRICT	44,725,997	3,059,286	3,056,583	6,115,869	0
VIROQUA AREA SCHOOL DISTRICT	7,892,607	532,756	532,752	1,065,508	0
WABENO AREA SCHOOL DISTRICT	3,639,834	245,691	245,689	491,380	0
WALWORTH JT SCH DIST # 1 ETAL	2,522,368	170,261	170,260	340,521	0
WASHBURN SCHOOL DISTRICT	4,165,748	281,189	281,187	562,377	0
WASHINGTON SCHOOL DISTRICT	622,839	42,041	42,042	84,083	0
WASHINGTON-CALDWELL SCH DIST	1,188,241	80,207	80,206	160,413	0
WATERFORD UNION HIGH SCH DIST	8,949,580	604,124	604,097	1,208,220	0
WATERFORD VIL JT SCH DIST #1	9,480,820	639,958	639,958	1,279,916	0
WATERLOO SCHOOL DISTRICT	5,171,727	349,097	349,094	698,190	0



Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
WATERTOWN UNIFIED SCHOOL DIST	25,046,359	1,690,636	1,690,629	3,381,265	0
WAUKESHA SCHOOL DISTRICT	86,545,026	5,841,764	5,841,622	11,683,386	0
WAUNAKEE COMMUNITY SCHOOL DIST	31,878,461	2,151,821	2,151,813	4,303,634	0
WAUPACA SCHOOL DISTRICT	15,074,974	1,017,709	1,017,418	2,035,127	0
WAUPUN AREA SCHOOL DISTRICT	12,879,132	869,347	869,343	1,738,690	0
WAUSAU SCHOOL DISTRICT	62,650,852	4,229,246	4,228,932	8,458,178	0
WAUSAUKEE SCHOOL DISTRICT	2,935,669	198,596	197,721	396,317	0
WAUTOMA AREA SCHOOL DISTRICT	9,383,925	633,419	633,414	1,266,833	0
WAUWATOSA SCHOOL DISTRICT	44,806,773	3,024,467	3,024,458	6,048,924	0
WAUZEKA JT SCH DIST ETAL	2,128,917	143,703	143,702	287,404	0
WEBSTER SCHOOL DISTRICT	4,931,108	331,913	331,893	663,805	0
WEST ALLIS-WEST MILW SCH DIST	51,851,796	3,500,083	3,499,920	7,000,003	0
WEST BEND JT SCH DIST #1	41,411,272	2,795,760	2,794,525	5,590,286	0
WEST DEPERE SCHOOL DISTRICT	20,428,895	1,378,965	1,378,947	2,757,912	0
WEST SALEM SCHOOL DISTRICT	13,121,918	885,780	885,688	1,771,467	0
WESTBY AREA SCHOOL DISTRICT	7,329,576	494,946	494,739	989,685	0
WESTFIELD SCHOOL DISTRICT	6,694,034	451,851	451,848	903,699	0
WESTON SCHOOL DISTRICT	2,267,023	153,024	153,024	306,047	0
WESTOSHA CENTRAL HIGH SCH DIST	7,824,290	528,142	528,140	1,056,281	0
WEYAUWEGA-FREMONT SCHOOL DIST	5,163,674	348,766	348,544	697,310	0
WHEATLAND JT SCH DIST #1 ETAL	4,303,602	290,495	290,494	580,989	0
WHITE LAKE SCHOOL DISTRICT	1,251,497	84,476	84,476	168,953	0
WHITEFISH BAY SCHOOL DISTRICT	19,401,304	1,309,593	1,309,589	2,619,182	0
WHITEHALL SCHOOL DISTRICT	5,222,583	352,526	352,524	705,050	0
WHITEWATER UNIFIED SCHOOL DIST	14,229,143	960,470	960,466	1,920,936	0
WHITNALL SCHOOL DISTRICT	17,471,891	1,179,252	1,179,248	2,358,500	0
WILD ROSE SCHOOL DISTRICT	3,530,691	238,324	238,322	476,647	0
WILLIAMS BAY SCHOOL DISTRICT	4,577,193	309,014	308,909	617,923	0
WILMOT UNION HIGH SCHOOL DIST	8,844,425	600,085	595,503	1,195,588	0
WINNECONNE COMM SCHOOL DIST	10,582,008	714,291	714,287	1,428,578	0
WINTER SCHOOL DISTRICT	2,158,462	145,707	145,685	291,393	0
WISCONSIN DELLS SCHOOL DIST	11,658,521	786,955	786,950	1,573,906	0
WISCONSIN HEIGHTS SCHOOL DIST	5,790,642	390,869	390,870	781,740	0
WISCONSIN RAPIDS SCHOOL DIST	35,555,457	2,400,055	2,400,014	4,800,069	0
WITTENBERG-BIRNAMWOOD SCH DIST	7,323,320	494,326	494,326	988,652	0
WONEWOC & UNION CENTER SCH DIS	2,204,035	148,773	148,772	297,546	0
WRIGHTSTOWN COMMUNITY SCH DIST	7,837,520	529,111	528,964	1,058,075	0
YORKVILLE JT SCH DIST #2 ETAL	2,830,525	191,063	191,061	382,124	0
Total School Districts (421)	\$ 5,794,241,820	\$ 391,715,528	\$ 391,321,749	\$ 783,037,276	\$ 452,022

## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
<b>Technical Colleges</b>					
BLACKHAWK TECHNICAL COLLEGE	\$ 15,179,598	\$ 1,024,628	\$ 1,024,622	\$ 2,049,249	\$ 0
CHIPPEWA VALLEY TECH COLLEGE	34,112,355	2,302,593	2,302,584	4,605,177	0
FOX VALLEY TECHNICAL COLLEGE	68,365,760	4,658,242	4,657,292	9,315,534	0
GATEWAY TECH COLLEGE	50,945,374	3,456,573	3,438,814	6,895,387	0
LAKESHORE TECHNICAL COLLEGE	19,633,729	1,325,283	1,325,278	2,650,560	0
MADISON AREA TECH COLLEGE	101,274,691	6,933,677	6,854,444	13,788,122	0
MID-STATE TECHNICAL COLLEGE	16,543,844	1,116,714	1,116,709	2,233,423	0
MILWAUKEE AREA TECH COLLEGE	117,618,792	7,948,774	7,947,943	15,896,717	0
MORAINES PARK TECHNICAL COLLEGE	28,704,276	1,937,544	1,937,542	3,875,086	0
NICOLET AREA TECHNICAL COLLEGE	11,498,563	776,156	776,153	1,552,310	0
NORTH CENTRAL TECH COLLEGE	27,615,500	1,865,547	1,865,460	3,731,007	0
NORTHEAST WISC TECH COLLEGE	56,168,157	3,792,348	3,792,312	7,584,660	0
NORTHWOOD TECHNICAL COLLEGE	25,431,711	1,716,648	1,716,641	3,433,289	0
SOUTHWEST WISC TECH COLLEGE	12,772,079	862,119	862,116	1,724,235	0
WAUKESHA CO TECHNICAL COLLEGE	41,198,199	2,780,947	2,780,523	5,561,470	0
WESTERN TECH COLLEGE	31,473,718	2,124,590	2,124,512	4,249,102	0
Total Technical Colleges (16)	\$ 658,536,346	\$ 44,622,383	\$ 44,522,945	\$ 89,145,328	\$ 0





Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
<b>CESAs</b>					
CESA #1	\$ 6,516,565	\$ 439,872	\$ 439,869	\$ 879,741	\$ 0
CESA #2	7,375,018	521,914	496,511	1,018,425	0
CESA #3, FENNIMORE	2,029,098	136,965	136,965	273,930	0
CESA #4, LACROSSE	3,444,438	232,952	232,050	465,002	0
CESA #5, PORTAGE	12,118,232	817,984	817,981	1,635,965	0
CESA #6, OSHKOSH	9,595,156	648,517	647,674	1,296,192	0
CESA #7, GREEN BAY	8,328,265	562,161	562,158	1,124,319	0
CESA #8, GILLETT	5,101,224	344,974	344,664	689,637	0
CESA #9, TOMAHAWK	2,677,759	180,750	180,749	361,498	0
CESA #10, CHIPPEWA FALLS	8,787,057	593,128	593,126	1,186,254	0
CESA #11	7,552,961	509,827	509,825	1,019,652	0
CESA #12, ASHLAND	1,733,211	116,993	116,992	233,985	0
Total CESAs (12)	\$ 75,258,984	\$ 5,106,037	\$ 5,078,564	\$ 10,184,600	\$ 0
<b>Total WRS (1555)</b>	<b>\$ 15,780,837,265</b>	<b>\$ 1,229,536,694</b>	<b>\$ 1,060,561,650</b>	<b>\$ 2,290,098,342</b>	<b>\$ 5,789,232</b>

\* Includes contributions for WRS, Accumulated Sick Leave Conversion, Supplemental Health Insurance Conversion and Duty Disability