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**State of Wisconsin**  
**Additional/Voluntary Filing#2021-28**  
Dated October 28, 2021

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This Additional/Voluntary Filing does not concern an event described in Securities and Exchange Act Rule 15c2-12, as amended. The State of Wisconsin provides this information as it may be material to financial evaluation of one or more obligations of the State of Wisconsin.

**Issuer:** State of Wisconsin

**CUSIP Numbers:** 977055 Prefix (All)                      977056 Prefix (All)  
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977123 Prefix (All)                                      977100 Prefix (All)

**Type of Information:** Financial/Operating Data Disclosures; Additional Financial Information

The Wisconsin Department of Employee Trust Funds (ETF) has released its **Annual Comprehensive Financial Report (ACFR) for the year ended December 31, 2020**. The attached ACFR is not for the State of Wisconsin; rather it addresses the Wisconsin Retirement System (WRS) and other benefit plans administered by ETF.

The State of Wisconsin is providing this Additional/Voluntary Filing with the Municipal Securities Rulemaking Board through its Electronic Municipal Market Access system. This Additional/Voluntary Filing is also available on the State of Wisconsin Capital Finance Office web site and State of Wisconsin investor relations web site at:

[doa.wi.gov/capitalfinance](http://doa.wi.gov/capitalfinance)

[wisconsinbonds.com](http://wisconsinbonds.com)

The undersigned represents that he is the Capital Finance Director, State of Wisconsin Capital Finance Office, which is the office of the State of Wisconsin responsible for providing additional/voluntary filings, annual reports, and Event Filings pursuant to the State's Master Agreement on Continuing Disclosure (Amended and Restated March 1, 2019) and is authorized to distribute this information publicly.

/s/ DAVID R. ERDMAN

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[wisconsinbonds.com](http://wisconsinbonds.com)

# ANNUAL COMPREHENSIVE FINANCIAL REPORT 2020

For the Year Ending December 31, 2020



State of Wisconsin  
Department of Employee Trust Funds





# ANNUAL COMPREHENSIVE FINANCIAL REPORT 2020

For the Year Ending December 31, 2020

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

Wisconsin Department of Employee Trust Funds  
PO Box 7931  
Madison, WI 53707-7931  
1-877-533-5020  
<http://etf.wi.gov>



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services, or employment. If you are  
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impaired and need assistance,  
call toll free 1-877-533-5020  
or 608-266-3285.  
Wisconsin Relay Service  
(for speech and  
hearing impaired),  
dial 7-1-1.

State of Wisconsin  
Department of Employee Trust Funds



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# INTRODUCTORY SECTION







**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)  
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September 28, 2021

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, 2020. This report provides comprehensive information about ETF, the Wisconsin Retirement System (WRS), and other employee benefit programs administered by ETF.

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, 2020. 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.

Currently, the WRS is composed of 29% state employees and 71% local employees. As of December 31, 2020, the WRS had 259,249 active employees, 221,019 annuitants (retirees, disability beneficiaries, and beneficiaries), and 172,412 inactive participants with deferred benefits payable.

### **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**

As we all are aware, 2020 was a year like no other due to the global pandemic. Despite the challenges, ETF continued to provide services to members and make progress in achieving our goals. The abrupt shift to stay-at-home orders and social distancing requirements impacted the ability to deliver in-person service. With the commitment and readiness of our staff, we quickly pivoted to virtual education and counseling, responding to member inquiries, and processing business remotely. This was a significant undertaking, and we are proud of the success of this effort.

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.

Critical to accomplishing these goals is the modernization of information technology systems and business processes. This is a multi-year effort that will replace 17 legacy systems. Successful implementation will enable ETF to (1) meet the significant growth in demand for services with limited need for additional staff; (2) meet the growing marketplace demand for online services; (3) improve operational efficiency; (4) achieve overall improvement in customer service; (5) reduce long-term administrative costs for Wisconsin public employers; and (6) mitigate the risk that system failures will impact the department's ability to make benefit payments accurately and timely.

In 2020 we successfully implemented appointment-scheduling software, which allowed members to schedule appointments with an ETF benefits specialist online. There are approximately 6,000 appointments scheduled annually and more than 50 percent of the appointments are now being scheduled using the online, self-service tool. This has resulted in many efficiencies for staff and members, including reductions in repeat telephone calls.

We also launched several projects last year including a vendor search for an insurance administration system, implementation of an imaging and workflow system, and a data management program to name a few. Progress continues on each of these initiatives. We are committed and focused to move ETF forward in continuing to deliver on our promise 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, 2020. The fair value-based ratio, calculated in accordance with standards issued by the Governmental Accounting Standards Board, is 105.3%. This is an increase from 103.0%, and was primarily the result of strong market returns in 2020. Recently, the state's bond rating was upgraded providing the state of Wisconsin an avenue to borrow money at lower interest rates, which result in lower debt service costs to Wisconsin taxpayers. The fully funded WRS and relatively low exposure to other post-employment benefit (OPEB) costs were cited by S&P Global as key factors underpinning longer-term credit stability. S&P Global also noted the state has historically maintained a policy framework to manage current service demands and long-term fixed costs (particularly pensions and OPEB) effectively.

### 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 12/31/2020, the projected reserve balance, and projected surplus as of 12/31/2021 based on reserve targets. The GIB has historically set a reserve target at the mid-point of the reserve policy range for the plans. At its August 2021 meeting, the GIB approved moving to a low-end reserve target for the Local plan.



	Health Insurance Reserves (In Millions)							
	State Plan				Local Plan			
	Medical	Pharmacy	Dental	Total	Medical	Pharmacy	Dental	Total
Reserve Balance 12/31/2020	\$86.3	\$100.1	\$19.6	\$206.0	\$(2.3)	\$16.8	\$0.1	\$14.6
Projected Reserve Balance 12/31/2021	95.9	82.3	23.6	201.8	(1.7)	16.2	0.1	14.6
Projected 2022 Expense	1,153.5	397.2	59.6	1,610.3	192.5	53.5	2.0	248.0
GIB reserve policy range (% of projected expense)	3%-5%	8%-10%	5%-7%		3%-5%	8%-10%	5%-7%	
Mid-point reserve target	46.1	35.8	3.6	85.5				
Low-end reserve target					5.8	4.3	0.1	10.2
Projected surplus 12/31/2021	\$49.8	\$46.5	\$20.0	\$116.3	\$(7.5)	\$11.9	\$0.0	\$4.4

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 2021 meeting, the GIB approved an incremental drawdown reserve strategy to meet policy targets over the next three years to smooth health care premium rate increases to 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 15.2% in 2020, representing outperformance of 106 basis points relative to its benchmark. The Variable Fund ended 2020 with a net return of 17.5%. The Core Fund and Variable Fund had net assets of over \$129 billion as of December 31, 2020.

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 2020, 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 black ink that reads "A. John Voelker".

A. John Voelker  
Secretary

A handwritten signature in black ink that reads "C Klimke".

Cindy Klimke-Armatoski  
Chief Trust Financial Officer



Public Pension Coordinating Council

***Public Pension Standards Award  
For Funding and Administration  
2020***

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)



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, 2020, 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: Robert M. Niendorf**

Appointed by the 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

#### **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.)

#### **William Ford**

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



**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

**Michael Langyel**

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

**Katy Lounsbury**

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

**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

**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)

**Vacant**

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

**Board Members****Acting Chair/Vice Chair: Gail Hanson**

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

**Secretary: Arthur Zimmerman**

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

**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)

**Jason Rothenberg**

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

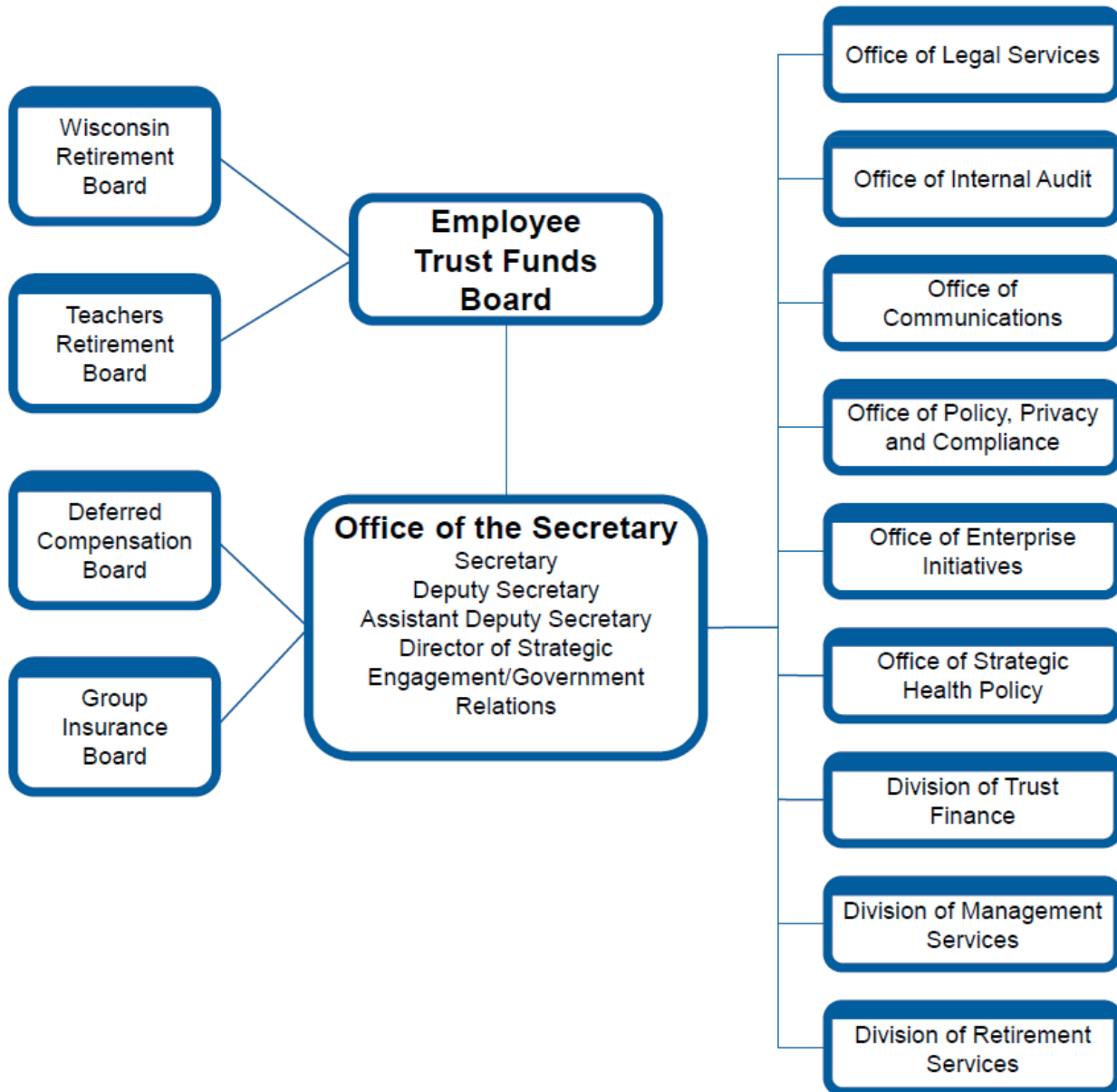
**» *Deferred Compensation Board (5 Members)***

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.

INTRODUCTORY SECTION

» *Department Organization*

The Department of Employee Trust Funds had 274.2 permanent positions at the end of 2020. The Department’s organization chart is shown below:





» **2020 ETF Management Staff**

Secretary: Robert J. Conlin  
Deputy Secretary: A. John Voelker  
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: David Nispel

» **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**

The StayWell Company, LLC  
Saint Paul, Minnesota

**Income Continuation Insurance**

The Hartford  
Hartford, Connecticut

**Deferred Compensation**

Empower Retirement  
Greenwood Village, Colorado

**Employee Reimbursement Accounts /  
Commuter Benefits Program**

ConnectYourCare, LLC  
Hunt Valley, Maryland

**Life Insurance**

Securian Financial Group, Inc  
Saint Paul, Minnesota



# FINANCIAL SECTION





STATE OF WISCONSIN

# Legislative Audit Bureau

Joe Chrisman  
State Auditor

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

Senator Robert Cowles and  
Representative Samantha Kerkman, 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 Financial Statements

We have audited the accompanying 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, 2020: 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 the related notes for the following proprietary funds administered by ETF as of and for the year ended December 31, 2020: Duty Disability Insurance, Health Insurance, Income Continuation Insurance, State Retiree Health Insurance, and Accumulated Sick Leave Conversion Credit.

### Management's Responsibility for the Financial Statements

Management of ETF is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America. This includes 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

Our responsibility is to express opinions on these financial statements based on our audit. 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. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or



error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on these financial statements.

### **Opinions**

In our opinion, the financial statements present fairly, in all material respects, the financial position of each fiduciary fund and each proprietary fund referred to in the first paragraph as of December 31, 2020, the changes in its financial position and, where applicable, cash flows for the year then ended, in accordance with accounting principles generally accepted in the United States of America.

### **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 the ETF and do not purport to, and do not, present fairly the financial position of the State of Wisconsin as of December 31, 2020, 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 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 limited partnerships, are reported based on net asset value. Because of the inherent uncertainty of valuation, these estimated values may differ from the values that would have been used had a ready market for the investments existed.

Our opinions are not modified with respect to these matters.

### **Other Matters**

*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 116 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, and the State and Local Retiree Life Insurance Schedule of Investment Returns; 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.

Required supplementary information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board (GASB), which considers it to be essential for placing the financial statements in an appropriate operational, economic, or historical context. In accordance with auditing standards generally accepted in the United States of America, we have applied certain limited procedures to the required supplementary information that included inquiries of management about the methods of preparing the information. We further compared the information for consistency with

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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 do so.

*Accompanying Information*—Our audit was conducted for the purpose of forming opinions on the financial statements referred to in the first paragraph. The supplementary information included in 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 is presented for purposes of additional analysis and is not a required part of the financial statements. Such information has not been subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we do not express an opinion or provide any assurance on it.

**Other Reporting Required by Government Auditing Standards**

In accordance with *Government Auditing Standards*, we have also issued a report dated September 28, 2021, and published in report 21-14, 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 result of that testing, and not to provide an opinion on 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, appearing to read "Joe Chrisman".

Joe Chrisman  
State Auditor

September 28, 2021

## 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, 2020. 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 653,000 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

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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>2020</b>	<b>2019</b>	<b>\$ Change</b>	<b>% Change</b>
Wisconsin Retirement System	\$ 124,966,394	\$ 112,092,758	\$ 12,873,636	11.5 %
Supplemental Health Insurance Conversion Credit	1,208,791	1,084,365	124,426	11.5
Employee Reimbursement Accounts/Commuter Benefits	1,325	1,800	(475)	(26.4)
State Retiree Life Insurance	333,752	348,020	(14,268)	(4.1)
Local Retiree Life Insurance	251,357	256,403	(5,046)	(2.0)
Milwaukee Retirement Systems	221,184	207,410	13,774	6.6
Local Retiree Health Insurance	0	0	0	0.0
Duty Disability Insurance	294,390	227,128	67,262	29.6
Health Insurance	220,697	226,216	(5,519)	(2.4)
Income Continuation Insurance	89,916	51,026	38,890	76.2
State Retiree Health Insurance	0	3,994	(3,994)	(100.0)
Accumulated Sick Leave Conversion Credit	(465,472)	(574,845)	109,373	19.0
<b>Total</b>	<b>\$ 127,122,334</b>	<b>\$ 113,924,275</b>	<b>\$ 13,198,059</b>	<b>11.6 %</b>

The WRS funding ratio under the funding methodology used to establish required contributions continues to be 100% as of December 31, 2020. Under the GASB financial reporting method, the WRS is 105% funded as of December 31, 2020. As of December 31, 2020, the WRS had a Net Pension Asset of \$6.2 billion compared to a Net Pension Asset of \$3.2 billion as of December 31, 2019. The increase of \$3.0 billion is primarily attributable to gains on investments in 2020. The Total Pension Liability increased from \$108.9 billion in 2019 to \$118.7 billion in 2020.

**» 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 \$12.9 billion or 11.5% from \$112.1 billion in 2019 to \$125.0 billion in 2020. 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 2020 and 2019.



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

	2020	2019	\$ Change	% Change
<b>Assets</b>				
Cash and Cash Equivalents	\$ 6,401	\$ 4,668	\$ 1,733	37.1 %
Receivables	11,850	7,046	4,804	68.2
Investments at Fair Value	139,039	125,332	13,707	10.9
Securities Lending Collateral	811	471	340	72.2
Prepaid Expenses	14	32	(18)	(56.3)
Capital Assets	3	4	(1)	(25.0)
<b>Total Assets</b>	<b>\$ 158,118</b>	<b>\$ 137,553</b>	<b>\$ 20,565</b>	<b>15.0 %</b>
<b>Liabilities</b>				
Core Investment Due To Other Benefit Programs	\$ 4,408	\$ 3,983	\$ 425	10.7 %
Variable Investment Due To Other Benefit Programs	22	20	2	10.0
Obligation Under Reverse Repurchase Agreements	10,659	9,845	814	8.3
Investment Payables	10,012	6,035	3,977	65.9
Securities Lending Collateral Liability	811	471	340	72.2
Other Payables	7,240	5,106	2,134	41.8
<b>Total Liabilities</b>	<b>\$ 33,152</b>	<b>\$ 25,460</b>	<b>\$ 7,692</b>	<b>30.2 %</b>
<b>Net Position Restricted for Pensions</b>	<b>\$ 124,966</b>	<b>\$ 112,093</b>	<b>\$ 12,873</b>	<b>11.5 %</b>

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

	2020	2019	\$ Change	% Change
Contributions	\$ 2,186	\$ 2,034	\$ 152	7.5 %
Net Investment Income	16,698	19,049	(2,351)	(12.3)
Other Income	0	1	(1)	(100.0)
<b>Total Additions</b>	<b>\$ 18,884</b>	<b>\$ 21,084</b>	<b>\$ (2,200)</b>	<b>(10.4)%</b>
Benefit Expenses	\$ 5,978	\$ 5,690	\$ 288	5.1 %
Administrative Expenses	33	34	(1)	(2.9)
Other Expenses	0	4	(4)	(100.0)
<b>Total Deductions</b>	<b>\$ 6,011</b>	<b>\$ 5,728</b>	<b>\$ 283</b>	<b>4.9 %</b>
<b>Net Increase (Decrease) in Net Position</b>	<b>\$ 12,873</b>	<b>\$ 15,356</b>	<b>\$ (2,483)</b>	<b>(16.2)%</b>
<b>Net Position - Beginning of Year</b>	<b>\$ 112,093</b>	<b>\$ 96,737</b>	<b>\$ 15,356</b>	<b>15.9 %</b>
<b>Net Position - End of Year</b>	<b>\$ 124,966</b>	<b>\$ 112,093</b>	<b>\$ 12,873</b>	<b>11.5 %</b>

### Cash and Cash Equivalents

Cash and Cash Equivalents increased by \$1.7 billion, or 37.1%, when comparing calendar year-end 2020 to 2019. The majority of the increase is attributed to rebalancing the Core Retirement Investment Trust's (Core

Fund) asset allocation and changes in investment strategies at year-end 2020. Also, securitized cash positions and synthetic exposure accounts used to manage liquidity and leverage can fluctuate throughout the year. These investment strategies require adequate levels of margin to meet risk mitigation requirements. At December 31, 2020, securitized cash positions were used to adjust risk and exposure to desired levels for internal portfolio restructuring and rebalancing activities. Additionally, increased liquidity was reserved to accommodate the funding of a new investment strategy in early 2021.

Short-term investments with maturities generally less than three months are included in Cash and Cash Equivalents.

### Receivables

Receivables increased by \$4.8 billion, or 68.2%, when comparing calendar year-end 2020 to 2019. Most of this increase is due to an increase in the balance for Investment Sales Receivable, which is dependent upon the timing and settlement of securities transactions. Approximately 77% 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, 2020.

### Prepaid Expenses

Prepaid Expenses decreased by \$18 million when comparing calendar year-end 2020 to 2019. This change is not representative of a change in total expenses, but rather reflects a difference in timing for the billing and payment of the Core Fund operating expenses in 2020, as compared to the prior year.

### Securities Lending Collateral and Securities Lending Collateral Liability

Securities Lending Collateral and Securities Lending Collateral Liability increased by \$340 million as of 2020, compared to 2019. These collateral balances represent cash received as collateral for securities lending transactions. SWIB increased its internal shorting capacity in 2020, which contributed to this increase. 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 \$814 million, or 8.3%, when comparing calendar year-end 2020 to 2019. 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 2020, SWIB increased its capacity to participate in reverse repurchase agreements, providing access to low-



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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.

### Investment Payables

Investment Payables increased by \$4.0 billion, or 65.9%, when comparing calendar year-end 2020 to 2019. 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 84% of the investment purchases payable balance at December 31, 2020. 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, 2020.

### Other Payables

Other Payables increased by \$2.1 billion, or 41.8%, when comparing calendar year-end 2020 to 2019 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.

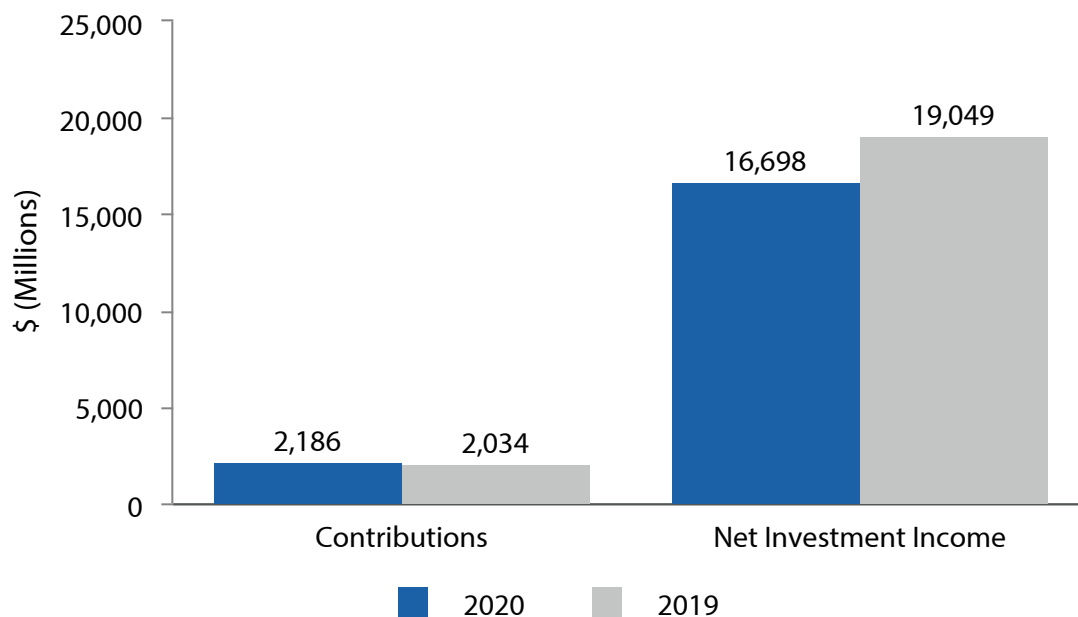


## Contributions and Investment Earnings

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, 2020, was \$18.9 billion compared to \$21.1 billion in 2019. As the chart below shows, contributions increased by \$152 million, while investment income decreased by \$2.4 billion. The increase in contributions was primarily driven by an increase in contributions rates and covered payroll for the year. The decrease in investment income during 2020 is primarily attributable to a decline in market performance, with a total Core Fund net investment return of 15.2% compared to 19.4% in 2019, and a total Variable Retirement Investment Trust (Variable Fund) net investment return of 17.5%, compared to 28.5% in 2019.

### 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 7.0% 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.

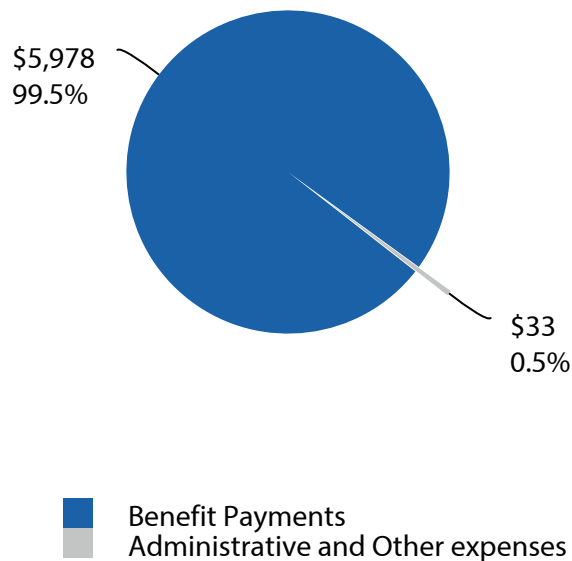
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### Expenses - Deductions from Plan Net Position

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 2020 totaled \$5,978 million, an increase of \$288 million or 5.1% over the 2019 amount of \$5,690 million. This was due to the number of participants increasing from 215,070 as of December 31, 2019, to 221,019 as of December 31, 2020. Administrative expenses of approximately \$33 million accounted for less than 1% of the deductions to net position in 2020 and remained relatively consistent from 2019.

Investment expenses are deducted from investment income and were \$742 million in 2020, a decrease of 11.7% from \$840 million in 2019. The decrease was primarily related to a significant decline in short-term interest rates resulting in lower interest paid on reverse repurchase agreements, which are used to finance certain investment strategies.

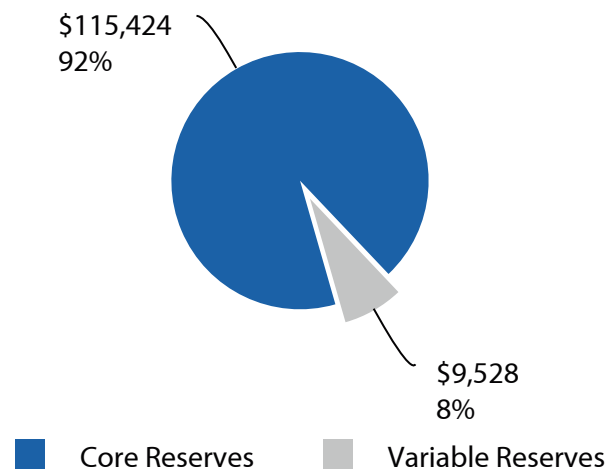
### Expenses as of December 31, 2020 (In Millions)



## 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 2020, revenues exceeded expenses, leading to an increase of \$12.9 billion in the pension plan reserves. The increase was primarily related to investment earnings in 2020. 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, 2020 (In Millions)



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

Total Reserves	2020	Increase (Decrease)	2019
Annuity	\$ 68,760	\$ 5,102	\$ 63,658
Employee	20,652	1,380	19,272
Employee Additional	234	19	215
Employer	24,623	1,234	23,389
Market Recognition Account (WRS Only)	10,683	5,167	5,516
<b>Total Reserves</b>	<b>\$ 124,952</b>	<b>\$ 12,902</b>	<b>\$ 112,050</b>



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## Members, Retirees, Beneficiaries and Employers

Approximately 260,000 active members were employed with 1,537 WRS-participating employers as of December 31, 2020. The number of inactive, retirees and other annuitants totaled 393,431 at December 31, 2020. Total members served by the WRS in 2020 was approximately 653,000 as shown in the following tables.

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

Active Member Category	2020		2019	
	Number	Percent of Total	Number	Percent of Total
General	132,985	51.3 %	134,166	51.6 %
Teachers	102,465	39.5	102,330	39.3
Elected/Executive/Judges	1,292	0.5	1,322	0.5
Protective with Social Security	19,749	7.6	19,665	7.5
Protective without Social Security	2,758	1.1	2,768	1.1
<b>Total Active Members</b>	<b>259,249</b>	<b>100.0 %</b>	<b>260,251</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	2020		2019	
	Number	Percent of Total	Number	Percent of Total
Inactive Members:				
Terminated Participants	168,944	42.9 %	169,261	43.6 %
Alternate Payees	3,468	0.9	3,904	1.0
Retirees and Beneficiaries:				
Retirement Annuitants	213,268	54.2	207,362	53.4
Disability Annuitants	6,303	1.6	6,289	1.6
Death Beneficiary Annuitants	1,448	0.4	1,419	0.4
<b>Total Inactive, Retiree and Beneficiaries</b>	<b>393,431</b>	<b>100.0 %</b>	<b>388,235</b>	<b>100.0 %</b>

Additional information about retirees and beneficiaries is presented in the Statistical Section.

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

<b>Distribution of Employers As of December 31</b>		
<b>Employer</b>	<b>2020</b>	<b>2019</b>
State Agencies, UW & Public Authorities	56	56
Cities	188	188
Counties	71	71
Villages	283	274
Towns	279	272
School Districts	421	421
Cooperative Educational Service Agencies	12	12
WI Technical College System Districts	16	16
Special Districts	211	206
<b>Total Employers</b>	<b>1,537</b>	<b>1,516</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, 2020. For financial reporting purposes, a funding ratio is calculated in accordance with GASB pension accounting standards. Under these standards, the WRS was 105% funded as of December 31, 2020.

#### » 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 2020, the SHICC Program collected \$15.1 million in contributions compared to \$14.4 million during 2019, an increase of 4.9%. The increase in contributions resulted from higher earnings reported by employers. Additionally, Contributions Receivable increased \$0.8 million from 2019, an increase of 104.8%. This significant increase was caused by higher earnings reported for the month of December in 2020 compared to December 2019, primarily due to an additional payroll cycle for certain employers in December 2020. The program incurred expenses of \$50.1 million in 2020 compared to \$53.3 million in 2019, a decrease of 6.0%. This decrease was primarily caused by lower health insurance premiums for certain retirees.

The SHICC Program had a net position of \$1.2 billion at December 31, 2020. This is an increase of \$124.4 million from a \$1.1 billion net position in 2019. The increase is primarily due to an increase in investment gains experienced in 2020. Total liabilities decreased \$10.9 million from 2019 to 2020. The 2019 liability was

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primarily a result of restatements for changes in reporting for the SHICC Program. The 2020 liability represents payables due to other benefit programs.

An actuarial valuation, in accordance with GASB standards, shows a Net OPEB Asset of \$284.8 million as of December 31, 2020. The program Fiduciary Net Position as a percentage of the Total OPEB Liability is 131%. Additional information on this valuation can be found in Note 9, Other Post-Employment Benefit (OPEB) Plans Administered by ETF.

At December 31, 2020, there were approximately 95,700 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 21,300 retirees and beneficiaries, 300 inactive non-retired members, and 74,100 active members. Active members may become eligible for the SHICC benefit upon meeting the eligibility requirements. Total participation decreased 2.5% from 2019.

### 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.

For 2020, the Employee Reimbursement Accounts/Commuter Benefits Program collected \$39.0 million in contributions from participating employees compared to \$41.0 million in 2019. The decrease was primarily due to a 1.8% decrease in program participants. The program paid benefits and expenses of \$39.5 million in 2020, which was a decrease of \$1.8 million from \$41.3 million in 2019.

The Employee Reimbursement Accounts/Commuter Benefits Program had a net position of \$1.3 million as of December 31, 2020. This was a decrease of approximately \$0.5 million from a net position of \$1.8 million as of December 31, 2019.

During 2020, there were approximately 21,100 members participating in medical reimbursement, 2,800 members participating in commuter benefits, and 3,900 members participating in dependent care reimbursement accounts compared to 21,500 medical, 3,000 commuter benefits, and 3,900 dependent care accounts during 2019.

### 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 2020, the State Retiree Life Insurance Program collected \$1.5 million in contributions compared to \$1.1 million during 2019. 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 \$25.6 million in 2020 compared to \$20.7 million in 2019. This increase was primarily caused by higher benefit expenses in 2020, which increased 24.5% compared to 2019. COVID-19 related claims accounted for approximately 8% of benefit expense in 2020. Contributions received for pre-age 65 annuitants are reported as a reduction to benefit expense, in accordance with GASB Statement No. 74.

The State Retiree Life Insurance Program had a net position of \$333.8 million at December 31, 2020. This is a decrease of \$14.2 million from a \$348.0 million net position in 2019. Benefit expenses continue to exceed contributions and investment income.

An actuarial valuation, in accordance with GASB standards, shows a Net OPEB Liability of \$867.0 million as of December 31, 2020. The plan Fiduciary Net Position as a percentage of the Total OPEB Liability was 28%. Additional information on this valuation can be found in Note 9, Other Post-Employment Benefit Plans Administered by ETF.

At December 31, 2020, there were 34,526 members participating in the State Retiree Life Insurance Program, which was a 2.5% increase in participants from 2019.

### 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.

For 2020, the Local Retiree Life Insurance Program collected \$2.0 million in contributions compared to \$1.8 million during 2019. The program incurred expenses of \$14.4 million in 2020 compared to \$10.7 million in 2019, an increase of 34.6%. This increase was primarily caused by higher benefit expenses in 2020, which increased 37.6% compared to 2019. COVID-19 related claims accounted for approximately 8% of benefit expense 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 \$251.4 million at December 31, 2020. This is a decrease of \$5.0 million from a \$256.4 million net position at December 31, 2019. Benefit expenses continue to exceed contributions and investment income.

An actuarial valuation, in accordance with GASB standards, shows a Net OPEB Liability of \$550.1 million as of December 31, 2020. The plan Fiduciary Net Position as a percentage of the Total OPEB Liability was 31%. Additional information on this valuation can be found in Note 9, Other Post-Employment Benefit Plans Administered by ETF.

At December 31, 2020, there were 48,185 members participating in the Local Retiree Life Insurance Program, which was a 2.6% increase in participants from 2019.

### 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 2020, the MRS deposited \$7.4 million as compared to \$9.5 million in 2019. The MRS distributed \$24.2 million in 2020, an increase of \$12.5 million in distributions from 2019. The program experienced an investment gain of \$30.6 million in 2020 compared to an investment gain of \$34.9 million in 2019. The decrease was a result of lower market returns in 2020 compared to 2019.

The MRS had a fiduciary net position of \$221.2 million at December 31, 2020. This was a \$13.8 million increase in net position from \$207.4 million in 2019. Additional information on the MRS can be found in Note 10, Milwaukee Retirement Systems.



## FINANCIAL SECTION

### 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 2020, the Local Retiree Health Insurance Program collected \$23.5 million in contributions from retirees, a 16.7% increase from \$20.1 million in 2019, primarily due to increased insurance premiums and enrollment. The program incurred other benefit expenses of \$24.2 million in 2020 compared to \$21.0 million in 2019, an increase of 15.2% primarily due to increased premiums paid to HMOs and increased claims.

The Local Retiree Health Insurance Program had total assets and liabilities of \$8.7 million at December 31, 2020. This was an increase of \$1.4 million compared to \$7.3 million at December 31, 2019.

At December 31, 2020, there were approximately 2,100 members participating in the Local Retiree Health Insurance Program, which was a 10.1% increase in participants from 2019. Additional information for the Local Retiree Health Insurance Program can be found in Note 9, Other Post-Employment Benefit (OPEB) Plans Administered by ETF.

### 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 2020, the Duty Disability Insurance Program collected \$4.1 million in contributions from participating employers, a 46.0% decrease from \$7.6 million in 2019, primarily due to a decrease in contribution rates. The program incurred operating expenses of \$38.8 million in 2020 compared to \$48.7 million in 2019, a decrease of 20.3% primarily due to a decrease in the change in actuarially determined liabilities.

The Duty Disability Insurance Program had a net position of \$294.4 million at December 31, 2020. This was an increase of \$67.3 million compared to \$227.1 million at December 31, 2019. The program experienced investment income of \$101.9 million in 2020 compared to \$115.7 million in 2019.

At December 31, 2020, there were approximately 22,500 members participating in the Duty Disability Insurance Program, which was a 0.3% increase in participants from 2019. 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 2020, the Health Insurance Program collected \$1,352.3 million in contributions from participating employers, a 5.3% increase from \$1,284.6 million in 2019, primarily due to increased insurance premiums. The program incurred operating expenses of \$1,391.8 million in 2020 compared to \$1,323.2 million in 2019, an increase of 5.2% primarily due to increased premiums paid to HMOs, and increased claims.



The Health Insurance Program had a net position of \$220.7 million at December 31, 2020. This was a decrease of \$5.5 million compared to \$226.2 million at December 31, 2019. The program experienced investment income of \$34.0 million in 2020 compared to \$42.4 million in 2019.

At December 31, 2020, there were approximately 80,100 active members participating in the Health Insurance Program, which was a 0.4% increase in participants from 2019. 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 2020, the ICI Program collected \$39.6 million in contributions from State agencies, a 19.3% increase from \$33.2 million in 2019, primarily due to a 20% premium rate increase for the State ICI Program. The local employers continued to have a premium holiday. The program incurred operating expenses of \$22.8 million in 2020 compared to \$22.0 million in 2019, an increase of 3.6% primarily due to an increase in the change in actuarially determined liabilities.

The ICI Program had a net position of \$89.9 million at December 31, 2020. This was an increase of \$38.9 million compared to \$51.0 million at December 31, 2019. The program experienced investment income of \$22.0 million in 2020 compared to \$21.4 million in 2019.

At December 31, 2020, there were approximately 55,600 members participating in the ICI Program. This includes 11,200 local employees and 44,400 state employees. Local employees had an increase of 12.4% and state employees had a 3.0% decrease in participants from 2019. 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 2020, the State Retiree Health Insurance Program collected \$235.4 million in contributions from retirees, a 2.1% increase from \$230.5 million in 2019, primarily due to increased insurance premiums and enrollment. The program incurred benefit expenses of \$258.7 million in 2020 compared to \$244.7 million in 2019, an increase of 5.7% 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, 2020. This was a decrease of \$4.0 million compared to \$4.0 million at December 31, 2019.

At December 31, 2020, there were approximately 28,100 members participating in the State Retiree Health Insurance Program, which was a 2.8% increase in participants from 2019. Additional information for the State Retiree Health Insurance Program can be found in Note 9, Other Post-Employment Benefit (OPEB) Plans Administered by ETF.

## FINANCIAL SECTION

**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 2020, the ASLCC Program collected \$45.2 million in contributions from participating employers compared to \$38.4 million in 2019, an increase of 17.7%. The increase in contributions resulted from higher earnings reported by employers as well as an increase in the contribution rate. Additionally, Contributions Receivable increased \$2.6 million from 2019, an increase of 130.5%. This significant increase was caused by higher earnings reported for the month of December in 2020 compared to December 2019, primarily due to an additional payroll cycle for certain employers in December 2020. The program incurred expenses of \$184.9 million in 2020, an decrease of \$22.6 million from \$207.5 million in 2019. 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 \$(465.5) million at December 31, 2020. This was an increase of \$109.3 million from a \$(574.8) million net position at December 31, 2019. The program experienced investment income of \$249.0 million in 2020 as compared to investment income of \$279.5 million for 2019.

At December 31, 2020, there were approximately 98,300 members participating in the ASLCC Program. Participation is comprised of approximately 18,000 retirees and others using ASLCC credits; 6,200 retirees or inactive non-retired members who may use ASLCC credits in the future; and 74,100 active members. Active members may become eligible for the ASLCC benefit upon meeting the eligibility requirements. Total participation increased 2% from 2019.

**» 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, 2020** (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	\$	6,401,321	\$	9,765
Securities Lending Collateral		810,685		0
Prepaid Expenses		14,284	4,138	1,600
Receivables:				
Contributions Receivable		214,464	1,502	2
Federal Subsidy Receivable		0	0	0
Prior Service Contributions Receivable		6,909	0	0
Benefit Overpayments Receivable		2,185	0	193
Due From Other Benefit Programs		2,807	769	0
Miscellaneous Receivables		571	0	0
Securities Lending Income Receivable		2,865	0	0
Interest and Dividends Receivable		387,889	0	1
Rebates Receivable		0	0	0
Investment Sales Receivable		11,232,245	0	0
Total Receivables		11,849,935	2,271	196
Investments at Fair Value:				
Equities		72,347,224	0	0
Fixed Income Investments		42,385,338	0	0
Limited Partnerships		16,889,530	0	0
Multi Asset Investments		5,967,126	0	0
Real Estate		1,379,939	0	0
Preferred Securities		607,671	0	0
Convertible Securities		1,156	0	0
Foreign Currency Contracts		15,131	0	0
Options Contracts		(8,401)	0	0
Financial Futures Contracts		32,221	0	0
Swaps		107,239	0	0
To Be Announced Securities		(685,009)	0	0
Investment In Core Fund		0	1,202,976	0
Investment In Variable Fund		0	0	0
Investment Contract		0	0	0
Total Investments		139,039,165	1,202,976	0
Capital Assets - Net of Accum. Depreciation		2,671	0	0
Total Assets		158,118,061	1,209,385	11,561
<b>Liabilities:</b>				
Core Investment Due To Other Benefit Programs		4,407,766	0	0
Variable Investment Due To Other Benefit Programs		22,115	0	0
Obligation Under Reverse Repurchase Agreements		10,658,824	0	0
Short Sell Obligations		6,479,968	0	0
Securities Lending Collateral Liability		810,685	0	0
Collateral Due to Counterparty		199,498	0	0
Benefit and Loss Liability		0	0	0
Benefits Payable		421,435	0	9,115
Unearned Revenue		14	0	1,060
Due To Other Benefit Programs		3,499	588	61
Miscellaneous Payables		136,360	6	0
Investment Payables		10,011,503	0	0
Total Liabilities		33,151,667	594	10,236
<b>Net Position - Restricted for Pensions, Other Post-Employment Benefits, and Other Purposes</b>	\$	124,966,394	\$	1,325

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, 2020** (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	6
Receivables:				
Contributions Receivable	0	0	0	0
Federal Subsidy Receivable	0	0	0	1,028
Prior Service Contributions Receivable	0	0	0	0
Benefit Overpayments Receivable	0	0	0	0
Due From Other Benefit Programs	0	0	0	6,165
Miscellaneous Receivables	106	145	0	2
Securities Lending Income Receivable	0	0	0	0
Interest and Dividends Receivable	0	0	0	0
Rebates Receivable	0	0	0	1,529
Investment Sales Receivable	0	0	0	0
<b>Total Receivables</b>	<b>106</b>	<b>145</b>	<b>0</b>	<b>8,724</b>
Investments at Fair Value:				
Equities	0	0	0	0
Fixed Income Investments	0	0	0	0
Limited Partnerships	0	0	0	0
Multi Asset Investments	0	0	0	0
Real Estate	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	199,069	0
Investment In Variable Fund	0	0	22,115	0
Investment Contract	335,312	252,153	0	0
<b>Total Investments</b>	<b>335,312</b>	<b>252,153</b>	<b>221,184</b>	<b>0</b>
Capital Assets - Net of Accum. Depreciation	0	0	0	0
<b>Total Assets</b>	<b>335,418</b>	<b>252,298</b>	<b>221,184</b>	<b>8,730</b>
<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
Benefit and Loss Liability	0	0	0	3
Benefits Payable	1,258	637	0	391
Unearned Revenue	302	159	0	1,614
Due To Other Benefit Programs	18	27	0	6,710
Miscellaneous Payables	88	118	0	12
Investment Payables	0	0	0	0
<b>Total Liabilities</b>	<b>1,666</b>	<b>941</b>	<b>0</b>	<b>8,730</b>
<b>Net Position - Restricted for Pensions, Other Post-Employment Benefits, and Other Purpose</b>	<b>\$ 333,752</b>	<b>\$ 251,357</b>	<b>\$ 221,184</b>	<b>\$ 0</b>

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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, 2020**  
(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	\$ 1,133,316	\$ 15,080	\$ 465	
Member Contributions	1,053,243	0	38,501	
Total Contributions	2,186,559	15,080	38,966	
Deposits	0	0	0	
Investment Income:				
Net Increase (Decrease) in Fair Value of Investments	15,892,746	0	0	
Interest, Dividend, and Other Investment Income	2,106,774	159,467	35	
Securities Lending Income	38,086	0	0	
Less:				
Investment Income Distributed to Other Benefit Programs	(595,137)	0	0	
Investment Expense	(741,562)	0	0	
Securities Lending Fees	(2,796)	0	0	
Net Investment Income	16,698,111	159,467	35	
Interest on Prior Service Receivable	381	0	0	
Federal Subsidy Income	0	0	0	
Service Reimbursement Income	0	0	0	
Miscellaneous Income	64	0	5	
Total Additions	18,885,115	174,547	39,006	
<b>Deductions:</b>				
Benefits and Refunds:				
Retirement, Disability, and Beneficiary	5,939,365	0	0	
Separation Benefits	38,858	0	0	
Other Benefit Expense	5	49,482	38,140	
Distributions	0	0	0	
Carrier Administrative Expenses	407	0	789	
Administrative Expenses	32,844	639	552	
Total Deductions	6,011,479	50,121	39,481	
<b>Net Increase (Decrease)</b>	12,873,636	124,426	(475)	
<b>Net Position - Beginning of Year</b>	112,092,758	1,084,365	1,800	
<b>Net Position - End of Year</b>	\$ 124,966,394	\$ 1,208,791	\$ 1,325	

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, 2020**  
(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	\$ 1,535	\$ 1,994	\$ 0	\$ 0
Member Contributions	0	0	0	23,501
Total Contributions	1,535	1,994	0	23,501
Deposits	0	0	7,440	0
Investment Income:				
Net Increase (Decrease) in Fair Value of Investments	0	0	0	0
Interest, Dividend, and Other Investment Income	9,727	7,191	30,559	(329)
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	9,727	7,191	30,559	(329)
Interest on Prior Service Receivable	0	0	0	0
Federal Subsidy Income	0	0	0	1,719
Service Reimbursement Income	106	145	0	0
Miscellaneous Income	0	0	0	2
Total Additions	11,368	9,330	37,999	24,893
<b>Deductions:</b>				
Benefits and Refunds:				
Retirement, Disability, and Beneficiary	0	0	0	0
Separation Benefits	0	0	0	0
Other Benefit Expense	24,730	12,873	0	24,214
Distributions	0	0	24,226	0
Carrier Administrative Expenses	800	1,359	0	410
Administrative Expenses	106	144	0	269
Total Deductions	25,636	14,376	24,226	24,893
<b>Net Increase (Decrease)</b>	(14,268)	(5,046)	13,773	0
<b>Net Position - Beginning of Year</b>	348,020	256,403	207,411	0
<b>Net Position - End of Year</b>	\$ 333,752	\$ 251,357	\$ 221,184	\$ 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, 2020**  
(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	\$ 764,277	\$ 211,902	\$ 183,448	\$ 0	\$ 1,846,095
Prepaid Expenses	0	1,137	0	216	9,089
Rebates Receivable	0	33,676	0	20,817	0
Federal Subsidy Receivable	0	0	0	17,867	0
Contributions Receivable	403	510	6	0	4,504
Due From Other Benefit Programs	336	57,771	2	34,040	2,163
Benefit Overpayments Receivable	191	4	3,204	295	0
Miscellaneous Receivables	0	75	0	29	5
Total Current Assets	765,207	305,075	186,660	73,264	1,861,856
Total Assets	765,207	305,075	186,660	73,264	1,861,856
<b>Liabilities</b>					
Current Liabilities:					
Benefits Payable	2,989	10,215	55	4,167	0
Premiums Payable	0	13,994	0	0	0
Unearned Revenue	0	16,656	0	17,801	0
Current Portion of Estimated Future Benefits	36,435	1,462	19,847	223	0
Current Portion of Compensated Absences	0	0	0	0	109,058
Due To Other Benefit Programs	108	41,330	172	50,939	358
Miscellaneous Payables	0	721	198	134	11
Total Current Liabilities	39,532	84,378	20,272	73,264	109,427
Noncurrent Liabilities:					
Noncurrent Portion of Estimated Future Benefits	431,285	0	76,472	0	0
Noncurrent Portion of Compensated Absences	0	0	0	0	2,217,901
Total Noncurrent Liabilities	431,285	0	76,472	0	2,217,901
Total Liabilities	470,817	84,378	96,744	73,264	2,327,328
<b>Net Position Restricted (Unrestricted) For Benefits</b>	<b>\$ 294,390</b>	<b>\$ 220,697</b>	<b>\$ 89,916</b>	<b>\$ 0</b>	<b>(465,472)</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, 2020**  
(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	\$ 4,094	\$ 1,352,257	\$ 39,575	\$ 235,374	\$ 45,223
Federal Subsidy	0	0	0	31,275	0
Miscellaneous Income	12	0	124	6	0
Administrative Reimbursement Income	0	0	0	0	0
<b>Total Operating Revenues</b>	<b>4,106</b>	<b>1,352,257</b>	<b>39,699</b>	<b>266,655</b>	<b>45,223</b>
Operating Expenses:					
Benefit Expense	37,989	1,370,205	19,572	258,699	184,208
Carrier Administrative Expenses	0	11,574	2,306	6,793	0
Administrative Expenses	794	10,059	918	3,684	663
<b>Total Operating Expenses</b>	<b>38,783</b>	<b>1,391,838</b>	<b>22,796</b>	<b>269,176</b>	<b>184,871</b>
<b>Operating Income (Loss)</b>	<b>(34,677)</b>	<b>(39,581)</b>	<b>16,903</b>	<b>(2,521)</b>	<b>(139,648)</b>
Nonoperating Revenues:					
Investment Income	101,939	34,004	21,978	(1,501)	249,021
Penalties and Fees	0	58	9	28	0
<b>Total Nonoperating Revenues</b>	<b>101,939</b>	<b>34,062</b>	<b>21,987</b>	<b>(1,473)</b>	<b>249,021</b>
<b>Net Income (Loss)</b>	<b>67,262</b>	<b>(5,519)</b>	<b>38,890</b>	<b>(3,994)</b>	<b>109,373</b>
<b>Total Net Position - Beginning of Year</b>	<b>227,128</b>	<b>226,216</b>	<b>51,026</b>	<b>3,994</b>	<b>(574,845)</b>
<b>Total Net Position - End of Year</b>	<b>\$ 294,390</b>	<b>\$ 220,697</b>	<b>\$ 89,916</b>	<b>\$ 0</b>	<b>\$ (465,472)</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, 2020**  
(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	\$ 47,226	\$ 0	\$ 42,618	\$ 0
Cash Received (Paid) for Employer Contributions	0	0	0	0	44,845
Cash Received (Paid) for Insurance Premiums	4,670	1,359,385	39,568	238,640	0
Cash Received (Paid) for Employee Benefits	(36,520)	(1,425,065)	(19,166)	(269,211)	(98,466)
Cash Paid for Administrative Services	(67)	(21,010)	(3,286)	(10,585)	(615)
Miscellaneous Income (Expense)	12	0	125	5	0
Net Cash Provided (Used) by Operating Activities	(31,905)	(39,464)	17,241	1,467	(54,236)
<b>Cash Flows from Noncapital Financing Activities</b>					
Penalties and Fees	0	50	9	34	0
Net Cash Provided (Used) by Noncapital Financing Activities	0	50	9	34	0
<b>Cash Flows from Investing Activities</b>					
Investment Income (Loss)	101,939	34,004	21,978	(1,501)	249,021
Decrease (Increase) in Investment in Core Fund	(70,034)	5,410	(39,228)	0	(194,785)
Net Cash Provided (Used) by Investing Activities	31,905	39,414	(17,250)	(1,501)	54,236
<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)	(34,677)	(39,581)	16,903	(2,521)	(139,648)
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	(5,727)	0	(1,942)	0
Decrease (Increase) in Federal Subsidy Receivable	0	0	0	(3,675)	0
Decrease (Increase) in Contributions Receivable	194	(333)	(6)	0	(2,550)
Decrease (Increase) in Miscellaneous Receivables	0	5	0	0	(5)
Decrease (Increase) in Benefit Overpayments Receivable	79	(1)	136	(48)	4
Decrease (Increase) in Prepaid Expenses	0	(246)	0	108	(313)
Decrease (Increase) in Due From Other Benefit Programs	1,001	(23,704)	0	(14,513)	11,007
Increase (Decrease) in Estimated Future Benefits	1,398	(291)	256	(35)	77,686
Increase (Decrease) in Premiums Payable	0	12,708	0	0	0
Increase (Decrease) in Unearned Revenue	0	1,146	0	634	0
Increase (Decrease) in Benefits Payable	(5)	264	8	1,076	0
Increase (Decrease) in Miscellaneous Payables	0	(427)	10	(159)	9
Increase (Decrease) in Due to Other Benefit Programs	105	16,723	(66)	22,542	(426)
Total Adjustments	2,772	117	338	3,988	85,412
Net Cash Provided (Used) by Operating Activities	\$ (31,905)	\$ (39,464)	\$ 17,241	\$ 1,467	\$ (54,236)

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 employee 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.

## FINANCIAL SECTION

**» *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, 2020, the funding value of reserves (In Millions) was as follows:

<b>Benefit Plan</b>	<b>Reserves at Funding Value</b>	<b>Deferred Market Gains (Losses)</b>	<b>Reserves at Fair Value</b>
Wisconsin Retirement System	\$ 114,283.8	\$ 10,682.6	\$ 124,966.4
Income Continuation Insurance (1)	65.3	24.6	89.9
Duty Disability Insurance (1)	225.5	68.9	294.4
ASLCC (1)	(623.8)	158.3	(465.5)
SHICC	1,093.0	115.8	1,208.8
Health Insurance (1)	205.4	15.3	220.7
State Retiree Health Insurance	(4.2)	4.2	0.0
Local Retiree Health Insurance	0.1	(0.1)	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 and equipment and computer software (purchased or externally acquired and internally generated software). ETF capitalizes furniture and equipment, and purchased computer software with a purchase price in excess of \$5,000, and internally-generated software and other intangible assets in excess of \$1 million. Assets are depreciated on a composite basis over an estimated life, ranging from 5 to 20 years, using the straight-line method of depreciation.

As of December 31, 2020, the total value of capital assets was \$13.2 million, less accumulated depreciation of \$10.5 million for a net capital asset value of \$2.7 million. The net capital asset value primarily relates to internally-generated software.

### » *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, 2020. The roll-forward of compensated absences payable for the year ended December 31, 2020 is as follows:



## FINANCIAL SECTION

**Compensated Absences Payable**  
(In Millions)

12/31/2019	Additions	Reductions	12/31/2020	Due Within One Year
\$2,249.3	\$184.2	\$106.5	\$2,327.0	\$109.1

» *Interfund Assets/Liabilities*

Interfund assets and liabilities at December 31, 2020, 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	\$ 61	\$ 1,058	\$ 611	\$ 42	\$ 222	\$ 18	\$ 27	\$ 108	\$ 172	\$ 154	\$ 313	\$ 21	\$ 2,807
Health Insurance	295	0	0	50,328	6,668	0	0	0	0	0	204	276	0	\$ 57,771
SRH	0	0	34,040	0	0	0	0	0	0	0	0	0	0	\$ 34,040
LRH	0	0	6,165	0	0	0	0	0	0	0	0	0	0	\$ 6,165
DDI	336	0	0	0	0	0	0	0	0	0	0	0	0	\$ 336
ICI	2	0	0	0	0	0	0	0	0	0	0	0	0	\$ 2
ASLCC	2,149	0	14	0	0	0	0	0	0	0	0	0	0	\$ 2,163
SHICC	717	0	52	0	0	0	0	0	0	0	0	0	0	\$ 769
<b>Total</b>	<b>\$3,499</b>	<b>\$ 61</b>	<b>\$ 41,329</b>	<b>\$50,939</b>	<b>\$ 6,710</b>	<b>\$ 222</b>	<b>\$ 18</b>	<b>\$ 27</b>	<b>\$ 108</b>	<b>\$ 172</b>	<b>\$ 358</b>	<b>\$ 589</b>	<b>\$ 21</b>	<b>\$ 104,053</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, 2020.

» *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

No accounting changes occurred during CY 2020.

## 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. 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 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, 2020 are based on actual September 30, 2020 reporting, which has been adjusted to reflect cash flows occurring from October 1, 2020 through December 31, 2020. As a result, the fair value reported is considered an estimate that may significantly differ from the value that could be realized in a



## FINANCIAL SECTION

secondary market transaction and/or from the amounts 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 properties wholly owned by SWIB 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 is 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 carry a minimum weighted average rating at all times. 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, 2020. 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, 2020</b> (In Thousands)		
Rating	Fair Value	% of Total
AAA/Aaa	\$ 336,799	0.7 %
A-1/P-1	27,389	0.1
AA/Aa	26,644,024	54.8
A-2/P-2	104,366	0.2
A	2,996,413	6.2
BBB/Baa	6,689,184	13.6
BB/Ba	2,006,141	4.1
B	1,408,956	2.9
CCC/Caa or below	337,388	0.7
Not Rated	1,786,196	3.7
Commingled Fixed Income Funds	6,322,210	13.0
Total	<u>\$ 48,659,066</u>	<u>100 %</u>

SWIB held \$10.7 billion in reverse repurchase agreements at December 31, 2020. 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, 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, 2020 is summarized in the table entitled Reverse Repurchase Agreements, Counterparty Credit Exposure.

<b>Retirement Funds Reverse Repurchase Agreements Counterparty Credit Exposure As of December 31, 2020</b> (In Thousands)		
Fair Value of Collateral Held by Counterparty		\$ 11,149,589
Less:		
Cash due to Counterparty	10,658,824	
Collateral and Interest due to Counterparty	<u>363,621</u>	
Total due to Counterparty		<u>11,022,445</u>
Net Counterparty Credit Exposure		<u>\$ 127,144</u>

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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 0.13% and 0.23% at December 31, 2020. Portfolio guidelines require agreements to mature between one and ninety 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. The underlying assets, as well as the reinvested proceeds, are reported in the "Investments at Fair Value" section on the Statement of Fiduciary Net Position.

**» Custodial Credit Risk**

**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 \$774.1 million as of December 31, 2020. Of the total, \$87.3 million was collateralized by securities borrowed. Depository insurance covered another \$383.4 million of the total. The remaining deposits, totaling \$303.4 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 also held \$52.9 million in certificates of deposit, all of which were covered by depository insurance as of December 31, 2020.

**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 \$733.8 million as of December 31, 2020. 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.

During 2020, SWIB signed a committed repo agreement 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.

Also, during 2020, SWIB entered into transactions under a Master Repurchase Agreement with another counterparty to purchase mortgage series trust certificates (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.

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" 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 of the requirements stipulated in the custodial credit risk policy.

### » *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, 2020.

### » *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 a number of different 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, 2020.

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.



## FINANCIAL SECTION

The Interest Rate Sensitivity by Investment Type table below presents the aggregated interest rate exposure for the Retirement Funds' assets at December 31, 2020. 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, 2020**  
(In Thousands)

Investment Type	Fair Value	Weighted Average Duration (Years)	Weighted Average Maturity (Days)
U.S. Treasury Inflation Protected Securities	\$ 18,691,566	7.6	
Corporate Bonds & Private Placements	13,109,679	7.3	
U.S. Treasury Securities	4,866,093	9.2	
Foreign Government/Agency Bonds	2,022,059	8.1	
Repurchase Agreements	733,828		4
Asset Backed Securities	355,267	3.2	
U.S. Government Agencies	2,293,953	3.1	
Commercial Paper	140,247		93
Municipal Bonds	154,098	11.9	
Commingled Funds			
Short Term Cash Management	4,778,935		37
Emerging Market Fixed Income	1,102,521	5.7	
Exchange Traded	410,820	7.2	
Total	<u>\$ 48,659,066</u>		

\*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, 2020.



## FINANCIAL SECTION

**Retirement Funds**  
**Currency Exposure by Investment Type**<sup>1,3</sup>  
**December 31, 2020**  
**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	\$ 7,866	\$ 1,061,499	\$ 32,521	\$ 0	\$ 0	\$ (159)	\$ 0	\$ (179,519)	\$ 0	\$ 922,208
Brazilian Real	192	64,358	1,672	0	38,416	0	0	0	0	104,638
Canadian Dollar	12,584	1,659,332	23,530	0	0	(929)	0	(214,152)	0	1,480,365
Chilean Peso	16	2,474	0	0	0	0	0	0	0	2,490
Chinese Yuan Renminbi	(14)	0	0	0	0	0	0	0	(544)	(558)
Czech Republic Koruna	961	328	0	0	0	0	0	0	0	1,289
Denmark Krone	1,237	552,353	0	0	0	0	0	(206,754)	0	346,836
Euro Member Countries	4,578	6,413,200	328,881	1,246,669	242,315	29	(79)	(902,421)	3,186	7,336,358
Hong Kong Dollar	3,868	945,249	0	0	0	0	0	(26,515)	0	922,602
Hungarian Forint	451	20,732	0	0	0	0	0	0	0	21,183
Indian Rupee	3	66,281	0	0	0	0	0	0	0	66,284
Indonesian Rupiah	128	7,227	0	0	0	0	0	0	0	7,355
Israeli Shekel	1,084	48,572	0	0	0	0	0	(18,354)	0	31,302
Japanese Yen	16,011	4,708,455	0	0	0	865	0	(675,608)	0	4,049,723
Korean (South) Won	17	372,788	0	0	426	0	0	0	0	373,231
Malaysian Ringgit	497	17,407	12,236	0	0	0	0	0	0	30,140
Mexican Peso	1,051	4,523	31,380	0	0	0	0	0	526	37,480
New Zealand Dollar	793	90,193	16,728	0	0	0	0	(15,256)	0	92,458
Norwegian Krone	1,241	253,104	0	0	0	0	0	(25,781)	0	228,564
Philippine Peso	23	431	0	0	0	0	0	0	0	454
Poland Zloty	0	15,630	4,996	0	0	0	0	0	0	20,626
Russian Ruble	5	0	0	0	0	0	0	0	0	5
Singapore Dollar	4,073	184,424	0	0	0	0	0	(33,737)	0	154,760
South African Rand	1,366	57,776	40,047	0	31	0	0	0	0	99,220
Sweden Krona	732	846,914	4,057	2,584	0	0	0	(195,563)	0	658,724
Swiss Franc	416	1,365,280	0	0	0	0	0	(205,130)	0	1,160,566
Taiwan New Dollar	257	397,210	0	0	0	0	0	0	0	397,467
Thailand Baht	2	21,283	0	0	0	0	0	0	0	21,285
Turkish Lira	55	62,575	0	0	0	0	0	0	0	62,630
United Kingdom Pound	9,153	2,675,593	30,932	324,370	0	876	0	(339,460)	0	2,701,464
<b>Total<sup>4</sup></b>	<b>\$ 68,646</b>	<b>\$21,915,191</b>	<b>\$ 526,980</b>	<b>\$ 1,573,623</b>	<b>\$ 281,188</b>	<b>\$ 682</b>	<b>\$ (79)</b>	<b>\$ (3,038,250)</b>	<b>\$ 3,168</b>	<b>\$ 21,331,149</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, Real Estate, 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, 2020, are found in the table entitled Investments by Fair Value Level.



## FINANCIAL SECTION

**Retirement Funds**  
**Investments by Fair Value Level**  
**As of December 31, 2020**  
(In Thousands)

Asset Type	Fair Value			TOTAL
	Level 1	Level 2	Level 3	
<b>Cash Equivalents</b>				
Certificates of Deposit	\$ 0	\$ 35,873	\$ 15,000	\$ 50,873
Commercial Paper	0	0	140,247	140,247
Money Market Funds	250,388	0	0	250,388
<b>Total Cash Equivalents</b>	<b>250,388</b>	<b>35,873</b>	<b>155,247</b>	<b>441,508</b>
<b>Equities</b>				
Domestic	41,447,255	0	69,289	41,516,544
International	21,877,798	0	37,394	21,915,192
<b>Total Equities</b>	<b>63,325,053</b>	<b>0</b>	<b>106,683</b>	<b>63,431,736</b>
<b>Fixed Income</b>				
Asset Backed Securities	0	351,380	3,887	355,267
Corporate Bonds & Private Placements	0	12,325,921	67,624	12,393,545
Exchange Traded Funds	410,820	0	0	410,820
Foreign Government/Agency Bonds	0	2,022,059	0	2,022,059
Municipal Bonds	0	154,098	0	154,098
U.S. Government Agencies	0	2,293,952	0	2,293,952
U.S. Treasury Inflation Protected Securities	0	18,691,566	0	18,691,566
U.S. Treasury Securities	37,955	4,828,138	0	4,866,093
<b>Total Fixed Income</b>	<b>448,775</b>	<b>40,667,114</b>	<b>71,511</b>	<b>41,187,400</b>
Real Estate	0	0	1,379,939	1,379,939
<b>Preferred Securities</b>				
Domestic	0	233,190	93,293	326,483
International	281,188	0	0	281,188
<b>Total Preferred Securities</b>	<b>281,188</b>	<b>233,190</b>	<b>93,293</b>	<b>607,671</b>
Convertibles	0	19	1,137	1,156
<b>Derivatives</b>				
Foreign Exchange Contracts	0	15,131	0	15,131
Futures	32,221	0	0	32,221
Options	(8,402)	0	0	(8,402)
Swaps	0	107,239	0	107,239
To Be Announced Securities	0	(685,009)	0	(685,009)
<b>Total Derivatives</b>	<b>23,819</b>	<b>(562,639)</b>	<b>0</b>	<b>(538,820)</b>
Short Sales	(6,477,303)	(2,165)	(500)	(6,479,968)
<b>Total</b>	<b>\$ 57,851,920</b>	<b>\$ 40,371,392</b>	<b>\$ 1,807,310</b>	<b>\$ 100,030,622</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 directly-held real estate, which is 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 public company comparables, 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, private equity limited partnerships, stock funds, real estate limited partnerships, and hedge funds are based on the investments' net asset value (NAV) per share (or its equivalent), provided by the investee. The December 31, 2020 investments valued using NAV are shown in the table entitled Investments Measured at NAV and include commingled/pooled funds, private equity, and real estate limited partnerships.

<b>Retirement Funds Investments Measured at NAV As of December 31, 2020 (In Thousands)</b>				
<b>Investments Measured at NAV</b>	<b>Fair Value</b>	<b>Unfunded Commitments</b>	<b>Redemption Frequency</b>	<b>Redemption Notice Period<sup>7</sup></b>
Cash and Cash Equivalents <sup>1</sup>	\$ 4,774,492	\$ 0	Daily	Same Day
Fixed Income <sup>2</sup>	1,615,932	207,872	Daily, N/A	5 days, N/A
Private Equity Limited Partnerships <sup>3</sup>	10,897,338	9,469,624	N/A	N/A
Equities <sup>4</sup>	8,915,489	0	Daily, Monthly	2-30 days
Real Estate Limited Partnerships <sup>5</sup>	5,992,192	1,515,852	Quarterly, Annually, N/A	30-90 days, Other, N/A
Hedge Funds <sup>6</sup>	5,967,126	582,354	Various	Various
<b>Total</b>	<b>\$ 38,162,569</b>	<b>\$ 11,775,702</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 (68%), 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. The remaining 32% of this category includes LLCs which invest in private real estate debt. These LLC investments distribute earnings over the life of the investment. The majority of these LLC investments have an average, estimated remaining life of less than 5 years. One LLC investment has an estimated remaining life of >10 years.

<sup>3</sup> Private Equity Limited Partnerships include direct, co-investments 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. 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, 2020, there is no expectation that any of the investments will be sold in the secondary market.

<sup>4</sup> This category includes long-only equity managers (69%) 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 31% 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> This category includes funds that invest directly in real estate and real estate related assets. Approximately 67% of these investments are generally not resold or redeemed. Distributions from each fund will be received as the underlying investments are liquidated. The table entitled Limited Partnerships - Estimated Remaining Life provides an estimate of the period over which the underlying assets are expected to be liquidated. The remaining 33% of this category consists of open-ended funds that invest directly in real estate and real estate related assets. The majority of these investments can be redeemed quarterly with between 30 and 90 days' notice. One fund can be redeemed annually with notice provided in the first quarter of the calendar year.

<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 two funds structured as limited partnerships is <5 years, two funds between 5-10 years, and two funds >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 Equity and Real Estate Limited Partnerships

The Private Equity Limited Partnerships participated in the following investment strategies at December 31, 2020:

**Buyout** - This strategy acquires shares of a private company in an attempt to gain a controlling interest.

**Mezzanine** - This strategy provides mezzanine debt to finance leveraged buyouts, recapitalizations, and corporate acquisitions.

**Distressed/Turnaround** - 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).

The Real Estate Limited Partnerships generally consisted of the following investment strategies at December 31, 2020:

**Core** - Core investments are expected to deliver a significant percentage of their return from income and should demonstrate 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.

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 Retirement Funds' private equity and real estate limited partnership holdings as of December 31, 2020.

**Retirement Funds**  
**Limited Partnerships - Estimated Remaining Life**  
**As of December 31, 2020**  
 (In Thousands)

Limited Partnership Type	Estimated Remaining Life*				Total
	< 5 Years	5 - 10 Years	> 10 Years	N/A	
Private Equity	\$ 1,626,431	\$ 5,737,236	\$ 3,533,671	\$ 0	\$ 10,897,338
Real Estate	463,632	3,340,160	280,759	1,907,642	5,992,193
<b>Total</b>	<b>\$ 2,090,063</b>	<b>\$ 9,077,396</b>	<b>\$ 3,814,430</b>	<b>\$ 1,907,642</b>	<b>\$ 16,889,531</b>

\* Estimated remaining life represents subjective estimates, assuming normal market conditions.

N/A investments represent open-ended funds that are readily redeemable.



## FINANCIAL SECTION

## » 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, 2020:

**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 indexes, 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, 2020.

**Retirement Funds  
Hedge Fund Redemption Timing  
As of December 31, 2020  
(In Thousands)**

Redemption Frequency	Redemption Notice Period (Days)	Fair Value
Monthly <sup>2</sup>	30 - 90	\$ 1,446,399
Quarterly <sup>1,2,3</sup>	30 - 90	3,540,467
Semi - Annual	60	46,454
Other <sup>1,3</sup>	0 - 90, N/A	933,806
<b>Total</b>		<b>\$ 5,967,126</b>

<sup>1</sup> These categories include funds that are in the process of being fully redeemed, with final distribution expected in 2021.

<sup>2</sup> This category includes funds that have a funding date of January 1, 2021. SWIB was contractually obligated to wire funds to the fund manager prior to the funding date.

<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. 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.

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, 2020.

**Retirement Funds  
Hedge Fund Lock-ups  
As of December 31, 2020  
(In Thousands)**

<b>Hedge Fund Lock Type</b>	<b>Initial Duration of Lock (Years)</b>	<b>Year of Lock Expiration</b>	<b>Fair Value</b>
Hard Lock	1 - 3	2021 - 2022	\$ 823,851
Soft Lock <sup>2</sup>	1	2021	243,936
Rolling Lock <sup>1</sup>	2 - 3	2021 - 2023	459,304
None <sup>1,2</sup>	N/A	N/A	4,174,970
Other <sup>3</sup>	N/A	N/A	265,065
<b>Total</b>			<b>\$ 5,967,126</b>

<sup>1</sup> These categories include funds that are in the process of being fully redeemed, with final distribution expected in 2021.

<sup>2</sup> This category includes funds that have a funding date of January 1, 2021. SWIB was contractually obligated to wire funds to the fund manager prior to the funding date.

<sup>3</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, 2020.

**Retirement Funds  
Hedge Fund Gates  
As of December 31, 2020  
(In Thousands)**

<b>Hedge Fund Gate Type</b>	<b>Gate Range</b>	<b>Fair Value</b>
Investor Level <sup>1</sup>	12.5% - 50%	\$ 2,059,182
Fund Level <sup>1</sup>	8.33% - 33%	1,375,708
None <sup>1,2</sup>	N/A	2,267,171
Other <sup>3</sup>	N/A	265,065
<b>Total</b>		<b>\$ 5,967,126</b>

<sup>1</sup> These categories include funds that are in the process of being fully redeemed, with final distribution expected in 2021.

<sup>2</sup> This category includes funds that have a funding date of January 1, 2021. SWIB was contractually obligated to wire funds to the fund manager prior to the funding date.

<sup>3</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.

## FINANCIAL SECTION

**» 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 all of 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 of Trustees. 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 as well as 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 \$306.2 million in cash and \$439.5 million in securities as collateral for derivative positions as of December 31, 2020. 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, 2020, without respect to any collateral or netting agreement.



## FINANCIAL SECTION

**Retirement Funds**  
**OTC Derivative Instruments Subject to Counterparty Credit Risk**  
**As of December 31, 2020**  
(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	\$ 931,513	\$ 0	\$ 0	\$ 0	\$ 931,513
A	3,644,726	3,818,749	7,099	0	7,470,574
Not Rated	0	0	0	75	75
<b>Total</b>	<b>\$ 4,576,239</b>	<b>\$ 3,818,749</b>	<b>\$ 7,099</b>	<b>\$ 75</b>	<b>\$ 8,402,162</b>

<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 \$8.1 billion at December 31, 2020.

The aggregate fair value of receivables relating to uncleared OTC derivative contracts was \$8.4 billion at December 31, 2020. 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 \$135.1 million at December 31, 2020 when counterparty collateral and master netting arrangements are taken into account. The number of uncleared OTC counterparties with credit exposure at year end was 17.

### 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. To ensure performance, 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 permitted. In select portfolios, currencies of non-benchmark countries may be held through the use of forward contracts, provided that the notional value of any single non-benchmark currency does not exceed 5% of the market value of the portfolio. SWIB may employ discretionary currency overlay strategies at the total fund and asset class level 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 table entitled Foreign Currency Spot and Forward Contracts presents the fair value of foreign currency spot and forward contract assets and liabilities held by the Retirement Funds as of December 31, 2020.

<b>Retirement Funds</b> <b>Foreign Currency Spot and Forward Contracts</b> <b>December 31, 2020</b> (In Thousands)			
Currency	Notional (local currency)	Fair Value (\$US)	Unrealized Gain(Loss) (\$US)
<b>Foreign Currency Contract Receivables</b>			
Australian Dollar	199,608	\$ 154,065	\$ 2,549
Brazilian Real	222,302	42,780	1,208
Canadian Dollar	113,261	88,908	732
Chilean Peso	29,815,307	41,959	3,470
Chinese Yuan Renminbi	228,684	35,091	973
Colombian Peso	12,038,905	3,514	59
Czech Republic Koruna	1,239,277	57,753	1,201
Danish Krone	487,744	80,195	1,347
Euro Member Countries	48,780	59,711	155
Hong Kong Dollar	260,081	33,545	(5)
Hungarian Forint	22,665,961	76,462	175
Indian Rupee	5,203,371	70,846	884
Indonesian Rupiah	784,077,549	56,187	2,548
Israeli Shekel	107,780	33,601	463
Japanese Yen	20,340,249	197,058	742
Korea (South) Won	8,948,433	8,228	11
Mexican Peso	556,343	27,698	269
New Zealand Dollar	10,077	7,257	91
Norway Krone	3,508,119	409,676	13,117
Philippine Peso	181,491	3,766	11
Poland Zloty	212,502	57,041	1,052
Russian Ruble	4,434,463	59,545	645
Singapore Dollar	444,547	336,439	2,564
Sweden Krona	3,212,569	391,396	13,677
Switzerland Franc	146,586	165,947	649
Thailand Baht	431,403	14,401	41
Turkish Lira	350,875	46,264	2,948
United Kingdom Pound	83,913	114,725	1,361
United States Dollar	1,902,181	1,902,181	0
Total Receivables		\$ 4,576,239	\$ 52,937



## FINANCIAL SECTION

**Retirement Funds**  
**Foreign Currency Spot and Forward Contracts**  
**December 31, 2020**  
(In Thousands)

Currency	Notional (local currency)	Fair Value (\$US)	Unrealized Gain(Loss) (\$US)
<b>Foreign Currency Contract Payables</b>			
Australian Dollar	(148,115) \$	(114,305) \$	(3,981)
Brazil Real	(57,337)	(11,039)	(4)
Canadian Dollar	(184,702)	(144,986)	(2,103)
Chile Peso	(6,662,786)	(9,378)	(465)
Chinese Yuan Renminbi	(134,773)	(20,668)	(563)
Colombian Peso	(22,128,375)	(6,458)	(258)
Czech Republic Koruna	(110,821)	(5,163)	(362)
Denmark Krone	(436,850)	(71,823)	197
Euro Members Countries	(1,229,089)	(1,505,107)	(31,347)
Hong Kong Dollar	(163,267)	(21,057)	3
Hungarian Forint	(2,288,427)	(7,720)	(224)
Indian Rupee	(368,663)	(5,010)	(55)
Israeli Shekel	(19,468)	(6,067)	(49)
Japanese Yen	(10,059,404)	(97,436)	(182)
Korea (South) Won	(7,922,855)	(7,285)	(15)
Mexican Peso	(73,987)	(3,683)	1
New Zealand Dollar	(84,681)	(60,979)	(2,105)
Norway Krone	(201,591)	(23,545)	(173)
Peru Sol	(4,651)	(1,286)	4
Philippines Peso	(79,651)	(1,653)	(8)
Poland Zioty	(9,926)	(2,664)	(7)
Russian Ruble	(275,687)	(3,698)	7
Singapore Dollar	(8,466)	(6,405)	(7)
South African Rand	(529,297)	(35,786)	(2,129)
Sweden Krona	(892,439)	(108,691)	(1,614)
Switzerland Franc	(74,584)	(84,406)	(1,364)
Taiwan New Dollar	(8,946,754)	(325,927)	537
Thailand Baht	(68,526)	(2,288)	(14)
United Kingdom Pound	(89,847)	(122,824)	(2,037)
United States Dollar	(1,743,771)	(1,743,771)	0
Total Payables		(4,561,108)	(48,317)
Net		\$ 15,131	\$ 4,620

**» 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 including:

- 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, 2020.

<b>Retirement Funds Futures Contracts As of December 31, 2020 (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 21 - Dec 21	\$ 193,496	\$ 9,767
	Short	Feb 21 - Mar 21	(3,159)	155
Currency	Long	Mar 21	164,478	2,083
Equity Index	Long	Jan 21 - Mar 21	2,166,195	35,816
	Short	Jan 21 - May 21	(280,485)	(5,444)
Fixed Income	Long	Mar 21	8,870,728	(1,230)
	Short	Mar 21	(4,420,396)	(8,926)
Total			\$ 6,690,857	\$ 32,221

\* 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, 2020. 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, 2020**  
(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	\$ 7,045,237	\$ 7,623	4.0
U.S. Treasury Notes	Short	(4,068,853)	(8,269)	6.6
U.S. Treasury Bonds	Long	1,766,633	(8,822)	18.3
U.S. Treasury Bonds	Short	(67,893)	510	13.9
Foreign Government Bonds	Long	58,858	(31)	7.2
Foreign Government Bonds	Short	(283,650)	(1,167)	8.7
Total		<u>\$ 4,450,332</u>	<u>\$ (10,156)</u>	

## » Options

An option 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 options 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 option purchaser in the event the option contracts were 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 options 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 options 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 options contracts as of December 31, 2020.

**Retirement Funds  
Options Contracts  
As of December 31, 2020**  
(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	Jun 21	\$ 110,212	\$ 31,267	\$ 15,877
Equity	CALL	Short	EXCH	Jan 21 - Feb 21	(141,672)	(35,767)	(15,787)
Equity	PUT	Long	EXCH	Jan 21 - Jun 21	119,227	4,411	(10,664)
Equity	PUT	Short	EXCH	Jan 21 - Apr 21	(167,223)	(8,081)	11,337
Fixed Income Index	CALL	Short	EXCH	Feb 21 - Mar 21	(4,636)	(37)	(16)
Fixed Income Index	PUT	Long	EXCH	Jan 21 - Feb 21	5,288	6	(30)
Futures Index	PUT	Short	EXCH	Jan 21	(351,445)	(56)	1,086
Equity Index	CALL	Long	EXCH	Jun 21	439	69	33
Equity Index	CALL	Short	EXCH	Jan 21	(439)	(80)	(32)
Equity Index	PUT	Long	EXCH	Jan 21 - Jun 21	972	15	(32)
Equity Index	PUT	Short	EXCH	Jan 21 - Feb 21	(10,157)	(70)	99
OTC Index	PUT	Short	OTC	Jan 21 - Feb 21	(477,120)	(79)	1,694
<b>Total</b>					<u>\$ (916,554)</u>	<u>\$ (8,402)</u>	<u>\$ 3,565</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, 2020.



## FINANCIAL SECTION

**Retirement Funds  
Open Swap Positions  
As of December 31, 2020**  
(In Thousands)

Type	Maturity Date	Reference Rate	Notional Amount	Fair Value	Unrealized Gain (Loss)
Credit Default	Jun-25	N/A <sup>1</sup>	\$ 100,000	\$ 1,628	\$ 1,745
Credit Default	Dec-25	N/A <sup>1</sup>	122,355	3,186	622
Credit Default	Dec-25	N/A <sup>2</sup>	(65,000)	(6,053)	(180)
Interest Rate <sup>3</sup>	May-25	Receive Fixed 2.02, Pay CNY-7D China Fixing Repo	19,878	(520)	(282)
Interest Rate <sup>3</sup>	Jul-25	Receive Fixed 2.53, Pay CNY-7D China Fixing Repo	4,633	(24)	(24)
Interest Rate <sup>3</sup>	Jun-27	Receive Fixed 5.42, Pay MXN-TIE-Banxico 28D	19,071	526	526
Total Return	Sep-21	Pay Equity Index, Receive 3-Month LIBOR plus	(434,023)	(10,207)	(10,207)
Total Return	Dec-21	Pay Equity Index, Receive 3-Month LIBOR plus	(140,002)	0	0
Total Return	Jan-21	Pay 3-month LIBOR plus Spread, Receive Equity	65,698	5,278	5,278
Total Return	Jan-21	Pay 3-month LIBOR plus Spread, Receive Equity	77,182	1,089	1,089
Total Return	Feb-21	Pay 3-month LIBOR plus Spread, Receive Equity	67,766	4,778	4,778
Total Return	Feb-21	Pay 3-month LIBOR plus Spread, Receive Equity	66,153	3,173	3,173
Total Return	Feb-21	Pay 3-month LIBOR plus Spread, Receive Equity	144,314	4,405	4,405
Total Return	Mar-21	Pay 3-month LIBOR plus Spread, Receive Equity	224,266	2,824	2,824
Total Return	Apr-21	Pay 3-month LIBOR plus Spread, Receive Equity	64,134	6,842	6,842
Total Return	Apr-21	Pay 3-month LIBOR plus Spread, Receive Equity	126,973	13,326	13,326
Total Return	May-21	Pay 3-month LIBOR plus Spread, Receive Equity	124,892	8,805	8,805
Total Return	May-21	Pay 3-month LIBOR plus Spread, Receive Equity	124,943	4,628	4,627
Total Return	Jun-21	Pay 3-month LIBOR plus Spread, Receive Equity	65,102	1,747	1,747
Total Return	Jun-21	Pay 3-month LIBOR plus Spread, Receive Equity	78,397	832	832
Total Return	Jun-21	Pay 3-month LIBOR plus Spread, Receive Equity	224,770	4,664	4,664
Total Return	Jul-21	Pay 3-month LIBOR plus Spread, Receive Equity	212,714	16,720	16,720
Total Return	Aug-21	Pay 3-month LIBOR plus Spread, Receive Equity	63,002	3,022	3,022
Total Return	Aug-21	Pay 3-month LIBOR plus Spread, Receive Equity	116,846	562	562
Total Return	Sep-21	Pay 3-month LIBOR plus Spread, Receive Equity	68,538	1,382	1,382
Total Return	Sep-21	Pay 3-month LIBOR plus Spread, Receive Equity	461,722	5,933	5,933
Total Return	Sep-21	Pay 3-month LIBOR plus Spread, Receive Equity	72,286	1,991	1,991
Total Return	Sep-21	Pay 3-month LIBOR plus Spread, Receive Equity	225,454	3,980	3,980
Total Return	Oct-21	Pay 3-month LIBOR plus Spread, Receive Equity	184,257	18,850	18,850
Total Return	Nov-21	Pay 3-month LIBOR plus Spread, Receive Equity	67,728	3,248	3,248
Total Return	Dec-21	Pay 3-month LIBOR plus Spread, Receive Equity	58,798	624	624
Total Return	Dec-21	Pay 3-month LIBOR plus Spread, Receive Equity	140,004	0	0
Total			<u>\$ 2,752,851</u>	<u>\$ 107,239</u>	<u>\$ 110,902</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 contracts, 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.

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. The rate benchmark is based on the 3-month London Interbank Offering Rate (LIBOR) rate 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.

### » *To Be Announced Securities*

To be announced (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, 2020. 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.



## FINANCIAL SECTION

<b>Retirement Funds TBA Contracts As of December 31, 2020 (In Thousands)</b>				
<b>Position</b>	<b>Contract Maturity</b>	<b>Fair Value</b>	<b>Unrealized Gain (Loss)</b>	<b>Weighted Average Duration (Years)</b>
Long	Jan-Feb 21	\$ 2,027,689	\$ 7,100	4.8
Short	Feb 21	(2,712,698)	(4,574)	2.5
Total		<u>\$ (685,009)</u>	<u>\$ 2,526</u>	

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, 2020, SWIB held one warrant contract valued at \$73,884, and it is included in the “Equities” section on the Statement of 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, so 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, 2020, the fair value of the securities on loan to counterparties was approximately \$13.6 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.

At December 31, 2020, 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. The average maturities of the loans and the average maturities of the assets held in the collateral reinvestment pools were similar at December 31, 2020.

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 at a later time 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.

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## FINANCIAL SECTION

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.

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 \$89.7 million in cash and \$4.6 billion in securities as collateral to security lenders representing \$189.2 million in excess of the fair market value of the securities borrowed as of December 31, 2020. 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
  - 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 of Trustees-approved investment policy 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 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 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 financial leverage is approved by the Board of Trustees through the WRS asset allocation process.

The Board of Trustees adopts the Retirement Funds' asset allocation policy, based on recommendations by the IC, the Board of Trustees's asset allocation consultant, Executive Director/Chief Investment Officer, and Managing Director of Assets 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 of Trustees'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, 2020.



## FINANCIAL SECTION

**Retirement Funds**  
**Asset Allocation Targets and Expected Returns<sup>2</sup>**  
**As of December 31, 2020**

<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	51 %	7.2 %	4.7 %
Fixed Income	25	3.2 %	0.8 %
Inflation Sensitive Assets	16	2.0 %	(0.4) %
Real Estate	8	5.6 %	3.1 %
Private Equity/Debt	11	10.2 %	7.6 %
Multi-Asset	4	5.8 %	3.3 %
Total Core Fund	115 %	6.6 %	4.1 %
<b>Variable Fund Asset Class</b>			
U.S. Equities	70 %	6.6 %	4.1 %
International Equities	30	7.4 %	4.9 %
Total Variable Fund	100 %	7.1 %	4.6 %

<sup>1</sup> New England Pension Consultants Long Term U.S. CPI (Inflation) Forecast: 2.4%

<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.

### » 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, 2020, the money-weighted rate of return for the Core Fund was 15.06% and 17.05% 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, 2020, the number of participating employers was:

State Agencies, UW & Public Authorities	56
Cities	188
Counties	71
Villages	283
Towns	279
School Districts	421
Cooperative Educational Service Agencies	12
Wisconsin Technical College System Districts	16
Special Districts	211
Total Employers	<u>1,537</u>

## FINANCIAL SECTION

» *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, 2020, the WRS membership consisted of:

<b>Current Employees:</b>	
General	132,985
Teachers	102,465
Elected / Executive / Judges	1,292
Protective with Social Security	19,749
Protective without Social Security	2,758
Total Current Employees	259,249
<b>Inactive Participants:</b>	
Terminated Participants	168,944
Alternate Payees	3,468
Total Inactive Participants	172,412
<b>Retirees and Beneficiaries Currently Receiving Benefits:</b>	
Retirement Annuitants	213,268
Disability Annuitants	6,303
Death Beneficiary Annuitants	1,448
Total Annuitants	221,019
Total Participants	652,680

*Approximately 1,675 inactive participants are receiving LTDI benefits.*

» *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.



## FINANCIAL SECTION

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

Year	Core Adjustment	Variable Adjustment
2011	(1.2)%	11.0 %
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

The negative Core annuity adjustments from 2011 to 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, 2020, the receivable balance was \$6.9 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, 2020, there were 51,484 active and inactive members and 41,753 annuitants participating in the Variable Fund.



### » *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, 2020, approximately 25 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, 2020, was \$0.5 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 \$56,000 in 2020.

## 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 2020 contribution requirements were determined by the December 31, 2018, 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.



## FINANCIAL SECTION

**Contribution rates in effect during 2020 by employment category were:**

Employment Category	Employer Current	Employer Prior *	Member	Total
General, Teachers, Executive & Elected Officials	6.75%	0.04%	6.75%	13.54%
Protective Occupation with Social Security	11.65%	0.01%	6.75%	18.41%
Protective Occupation without Social Security	16.25%	0.02%	6.75%	23.02%

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

**Contributions required and made during 2020 were:**

	Contributions (In Millions)	Percentage of Payroll
Employer Current Service	\$ 1,131.5	7.37%
Employer Prior Service*	\$ 2.5	0.02%
Member Required	\$ 1,037.4	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 \$194,000 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 employees 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, 2020, were as follows (In Millions):

Total Pension Liability*	<u>\$ 118,723.26</u>
Plan Fiduciary Net Position**	<u>\$ 124,966.39</u>
Participating Employer's Net Pension Liability (Asset)	<u>\$ (6,243.13)</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	105.26 %

\*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.

Additional information as of the latest actuarial valuations follows:

Actuarial Valuation Date:	December 31, 2019
Measurement Date of Net Pension Liability (Asset):	December 31, 2020
Actuarial Cost Method:	Entry Age Normal
Asset Valuation Method:	Fair Value
Long-Term Expected Rate of Return:	7.0%
Discount Rate:	7.0%
Salary Increases:	
Inflation	3.0%
Senior/Merit	0.1% - 5.6%
Mortality:	Wisconsin 2018 Mortality Table
Post-retirement Adjustments:*	1.9%

\*No post-retirement adjustments is guaranteed. Actual adjustments are based on recognized investment return, actuarial experience and other factors. 1.9% 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 2018 that covered a three-year period from January 1, 2015 to December 31, 2017. The Total Pension Liability for December 31, 2020, is based upon a roll-forward of the liability calculated from the December 31, 2019 actuarial valuation.

A single discount rate of 7.0% was used to measure the Total Pension Liability for the current and 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 7.0% expected rate of return implies that a dividend of approximately 1.9% 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.



## FINANCIAL SECTION

» *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 7.0%, 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):

	Discount Rate		
	1% Decrease 6.0%	Current Discount Rate 7.0%	1% Increase 8.0%
Total Pension Liability	\$ 130,909.00	\$ 118,723.26	\$ 109,772.92
Plan Fiduciary Net Position	124,966.39	124,966.39	124,966.39
Net Pension Liability (Asset)	\$ 5,942.60	\$ (6,243.14)	\$ (15,193.48)

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 1.0% for the 6.0% discount rate, 1.9% for the 7.0% discount rate, and 2.9% for the 8.0% discount rate (In Millions):

	Discount Rate		
	1% Decrease 6.0%	Current Discount Rate 7.0%	1% Increase 8.0%
Total Pension Liability	\$ 123,591.37	\$ 118,723.26	\$ 115,084.94
Plan Fiduciary Net Position	124,966.39	124,966.39	124,966.39
Net Pension Liability (Asset)	\$ (1,375.02)	\$ (6,243.13)	\$ (9,881.45)

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.

**Employee Accumulation Reserve balances (In Millions) as of December 31, 2020, were:**

	Core	Variable	Total
Employee Required	\$ 18,372.3	\$ 2,279.3	\$ 20,651.6
Employee Additional	217.3	17.0	234.3
<b>Total</b>	<u>\$ 18,589.6</u>	<u>\$ 2,296.3</u>	<u>\$ 20,885.9</u>

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, 2020, were:**

	Core	Variable	Police & Firefighters	Total
Employer Accumulation	\$ 22,343.7	\$ 2,279.3	\$ 0.0	\$ 24,623.0
Less: Unfunded Actuarial Accrued Liability	0.0	0.0	(0.5)	(0.5)
<b>Net Employer Accumulation</b>	<u>\$ 22,343.7</u>	<u>\$ 2,279.3</u>	<u>\$ (0.5)</u>	<u>\$ 24,622.5</u>

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, 2020, were:**

	Core	Variable	Police & Firefighters	Total
Annuity Reserve	\$ 63,806.4	\$ 4,952.2	\$ 1.8	\$ 68,760.4

**» 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.

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

As of:	MRA
December 31, 2016	\$ (3,086)
December 31, 2017	\$ 3,273
December 31, 2018	\$ (4,916)
December 31, 2019	\$ 5,712
December 31, 2020	\$ 11,070

## 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 382 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 261 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.

### » *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 498 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 2020, 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 7.0% 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.



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**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.

	Income Continuation Insurance		Duty Disability Insurance		Pharmacy Benefits		Dental	
	2020	2019	2020	2019	2020	2019	2020	2019
<b>Unpaid claims and claim adjustment expenses at beginning of the calendar year:</b>	\$ 96.1	\$ 96.5	\$ 466.3	\$ 454.6	\$ (27.9)	\$ (21.9)	\$ 1.8	\$ 0.9
<b>Incurred claims and claim adjustment expenses:</b>								
Provision for insured events of the current calendar year	24.8	22.6	34.0	33.6	176.1	155.0	38.1	45.9
Changes in provision for insured events of prior calendar years	(5.2)	(3.6)	4.0	14.5	0.1	(4.3)	(0.7)	0.0
Total incurred claims and claim adjustment expenses	19.6	19.0	38.0	48.1	176.2	150.7	37.4	45.9
<b>Payments:</b>								
Claims and claim adjustment expenses attributable to insured events of the current calendar year	4.0	4.1	0.0	0.0	209.8	182.7	36.6	44.1
Claims and claim adjustment expenses attributable to insured events of prior calendar years	15.3	15.3	36.6	36.4	(27.8)	(26.0)	1.1	0.9
Total payments	19.3	19.4	36.6	36.4	182.0	156.7	37.7	45.0
<b>Total unpaid claims and claim adjustment expenses at end of the calendar year</b>	<b>\$ 96.4</b>	<b>\$ 96.1</b>	<b>\$467.7</b>	<b>\$ 466.3</b>	<b>\$(33.7)*</b>	<b>\$(27.9)*</b>	<b>\$ 1.5</b>	<b>\$ 1.8</b>

\*Total unpaid claims at the end of 2020 is \$33.7 million in rebates due from pharmaceutical companies. Total unpaid claims at the end of 2019 is \$27.9 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);
- 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 722 local government employers as of December 31, 2020, 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, 2020, included:

	<b>State</b>	<b>Local</b>	<b>Total</b>
Active*	51,899	75,491	127,390
Inactive:			
Pre-Age 65 Annuitants	6,389	9,807	16,196
Post-Age 64 Annuitants	28,137	38,378	66,515
Totals	<u>86,425</u>	<u>123,676</u>	<u>210,101</u>

\*Active members include disabled



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## Contributions

The GIB approves contribution rates annually, based on recommendations from the insurance carrier, Securian. 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.

State and Local Retiree Life Insurance Employer Contribution Rates For the year ended December 31, 2020		
Coverage Type	State	Local
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, 2020 are as listed below:

Life Insurance Member Contribution Rates As of December 31, 2020				
Attained Age	State *		Local *	
	Basic	Supplemental	Basic	Supplemental
Under 30	\$ 0.0441	\$ 0.0441	\$ 0.0500	\$ 0.0500
30-34	0.0441	0.0441	0.0600	0.0600
35-39	0.0441	0.0441	0.0700	0.0700
40-44	0.0662	0.0662	0.0800	0.0800
45-49	0.1103	0.1103	0.1200	0.1200
50-54	0.1764	0.1764	0.2200	0.2200
55-59	0.2426	0.2426	0.3900	0.3900
60-64	0.3308	0.3308	0.4900	0.4900
65-69	0.4300	0.4300	0.5700	0.5700

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



The subsequent table provides total contributions earned during 2020 by employers and pre-age 65 annuitants to fund post-retirement benefits.

<b>State and Local Retiree Life Insurance Contributions Earned For the year ended December 31, 2020</b>				
<b>Contribution Type</b>	<b>State</b>		<b>Local</b>	
Employer	\$	1,534,835	\$	1,994,070
Pre-age 65 Annuitants*		3,890,161		5,961,196
<b>Total</b>	<b>\$</b>	<b>5,424,996</b>	<b>\$</b>	<b>7,955,266</b>

\* 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:

<b>Percentage of Basic Coverage Continuing</b>			
<b>Age</b>	<b>State</b>		<b>Local</b>
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.



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**Investment Contract with Insurance Carrier (Securian):** 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:

<b>State and Local Retiree Life Insurance Asset Allocation Targets and Expected Returns As of December 31, 2020</b>			
<b>Asset Class</b>	<b>Index</b>	<b>Target Allocation</b>	<b>Long-Term Expected Geometric Real Rate of Return</b>
U.S. Credit Bonds	Barclays Credit	50%	1.47%
U.S. Mortgages	Barclays MBS	50%	0.82%
	Inflation		2.20%
	Long-Term Expected Rate of Return		4.25%

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 long-term expected rate of return is determined by adding expected inflation to expected long-term real returns and reflecting expected volatility and correlation.

<b>State and Local Retiree Life Insurance Plans Schedule of Investment Returns Annual Money-Weighted Rate of Return</b>	
	2020
State Retiree Life Insurance Plan	2.86%
Local Retiree Life Insurance Plan	2.84%



## 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, 2020, were as follows (In Millions):

Total OPEB Liability	\$	1,200.74
Plan Fiduciary Net Position*		333.75
Participating Employer's Net OPEB Liability (Asset)	\$	<u>866.99</u>
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability		27.80 %

\*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, 2020
Measurement Date of Net OPEB Liability (Asset):	December 31, 2020
Actuarial Cost Method:	Entry Age Normal
20 Year Tax-Exempt Municipal Bond Yield*	2.12%
Long-Term Expected Rate of Return:	4.25%
Discount Rate:	2.22%
Salary Increases:	
Wage Inflation	3.00%
Senior/Merit	0.1% - 5.6%
Mortality:	Wisconsin 2018 Mortality Table

\* Based on the Bond Buyers GO index.

Actuarial assumptions are based upon an experience study conducted in 2018 that covered a three-year period from January 1, 2015 to December 31, 2017. The Total OPEB Liability for December 31, 2020, is based upon a roll-forward of the liability calculated from the January 1, 2020, actuarial valuation.

A discount rate of 2.22% was used to measure the Total OPEB Liability for the current year, as opposed to a discount rate of 2.84% for the prior year. The significant change in the discount rate was primarily caused by the decrease in the municipal bond rate from 2.74% as of December 31, 2019 to 2.12% as of December 31, 2020. 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 a 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



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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.

### 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 1.22%	Current Rate 2.22%	1% Increase 3.22%
Total OPEB Liability	\$ 1,478.9	\$ 1,200.7	\$ 987.8
Plan Fiduciary Net Position	333.8	333.8	333.8
Net OPEB Liability (Asset)	<u>\$ 1,145.1</u>	<u>\$ 866.9</u>	<u>\$ 654.0</u>

### 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, 2020, were as follows (In Millions):

Total OPEB Liability	\$ 801.43
Plan Fiduciary Net Position*	251.36
Participating Employer's Net OPEB Liability (Asset)	<u>\$ 550.07</u>
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	31.36 %

\*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, 2020
Measurement Date of Net OPEB Liability (Asset):	December 31, 2020
Actuarial Cost Method:	Entry Age Normal
20 Year Tax-Exempt Municipal Bond Yield*	2.12%
Long-Term Expected Rate of Return:	4.25%
Discount Rate:	2.25%
Salary Increases:	
Wage Inflation	3.00%
Senior/Merit	0.1% - 5.6%
Mortality:	Wisconsin 2018 Mortality Table

\* Based on the Bond Buyers GO index.

Actuarial assumptions are based upon an experience study conducted in 2018 that covered a three-year period from January 1, 2015, to December 31, 2017. The Total OPEB Liability for December 31, 2020, is based upon a roll-forward of the liability calculated from the January 1, 2020, actuarial valuation.

A discount rate of 2.25% was used to measure the Total OPEB Liability for the current year, as opposed to discount rate of 2.87% for the prior year. The significant change in the discount rate was primarily caused by the decrease in the municipal bond rate from 2.74% as of December 31, 2019, to 2.12% as of December 31, 2020. 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 1.25%	Current Rate 2.25%	1% Increase 3.25%
Total OPEB Liability	\$ 999.6	\$ 801.4	\$ 651.5
Plan Fiduciary Net Position	251.4	251.4	251.4
Net OPEB Liability (Asset)	\$ 748.2	\$ 550.0	\$ 400.1

### » 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 382 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, 2020, included 28,107 former state employees or their beneficiaries and 2,050 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, 2020 included:

<u>Employment Status</u>	<u>Count</u>
Retirees and Beneficiaries	21,313
Inactive, Non-retired Members	335
Active Members	74,099
Total	<u>95,747</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.



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## 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 \$15.1 million based upon a percentage of active member earnings for the year ending December 31, 2020.

## 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, 2020, were as follows (In Millions):

Total OPEB Liability	\$	924.02
Plan Fiduciary Net Position*		1,208.79
Participating Employer's Net OPEB Liability (Asset)	\$	<u>(284.77)</u>
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability		130.82 %

\*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:	December 31, 2020
Measurement Date of Net OPEB Liability (Asset):	December 31, 2020
Actuarial Cost Method:	Entry Age Normal
Long-Term Expected Rate of Return:	7.00%
Discount Rate:	7.00%
Salary Increases:	
Wage Inflation	3.00%
Senior/Merit	0.1% - 5.6%
Mortality:	Wisconsin 2018 Mortality Table
Healthcare Cost Trend Rate	3.0% per year

Actuarial assumptions are based upon an experience study conducted in 2018 that covered a three-year period from January 1, 2015 to December 31, 2017 . The Total OPEB Liability is based upon an actuarial valuation as of December 31, 2020.

A discount rate of 7.00% was used to measure the Total OPEB Liability for the current and 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.

Each individual sick leave balance at retirement was estimated assuming historical accrual and usage rates but not less than 25% nor more than 75% of the person's annual accrual 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.



## FINANCIAL SECTION

### 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 6.00%	Current Rate 7.00%	1% Increase 8.00%
Total OPEB Liability	\$ 1,018.0	\$ 924.0	\$ 842.9
Plan Fiduciary Net Position	1,208.8	1,208.8	1,208.8
Net OPEB Liability (Asset)	\$ (190.8)	\$ (284.8)	\$ (365.9)

### 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 2.00%	Current Rate 3.00%	1% Increase 4.00%
Total OPEB Liability	\$ 854.3	\$ 924.0	\$ 991.5
Plan Fiduciary Net Position	1,208.8	1,208.8	1,208.8
Net OPEB Liability (Asset)	\$ (354.5)	\$ (284.8)	\$ (217.3)

## 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, 2020, the Core and Variable Funds held \$129.7 billion in investment related accounts, of which \$6.4 billion is classified as cash equivalents. In addition, the Core and Variable Funds held \$0.8 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, 2020, 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, 2020, is presented on the next page.



## FINANCIAL SECTION

**Core and Variable Retirement Investment Funds**  
**Condensed Statements of Net Position**  
**As of December 31, 2020**  
(In Thousands)

<b>Assets:</b>	<b>Core</b>	<b>Variable</b>	<b>Combined*</b>
Cash & Cash Equivalents	\$ 6,259,669	\$ 140,078	\$ 6,399,747
Securities Lending Collateral	777,813	32,872	810,685
Prepaid Items	12,632	1,652	14,284
Investment Receivables	11,601,937	21,062	11,622,999
Investments, at fair value	129,604,271	9,434,894	139,039,165
Total Assets	148,256,322	9,630,558	157,886,880
<b>Liabilities:</b>			
Securities Lending Collateral Liability	777,813	32,872	810,685
Obligation Under Reverse Repurchase Agreements	10,658,824	0	10,658,824
Short Sell Obligations	6,479,968	0	6,479,968
Collateral Due to Counterparty	199,478	20	199,498
Investment Payables	9,982,006	29,498	10,011,504
Total Liabilities	28,098,089	62,390	28,160,479
<b>Net Position Held in Trust for:</b>			
Other Investment Pool Participants	119,959,164	9,546,053	129,505,217
Milwaukee Retirement Systems	199,069	22,115	221,184
<b>Total</b>	\$ 120,158,233	\$ 9,568,168	\$ 129,726,401

\*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, 2020**  
(In Thousands)

<b>Additions:</b>	<b>Core</b>	<b>Variable</b>	<b>Combined*</b>
Net Increase (Decrease) in Fair Value of Investments	\$ 14,591,496	\$ 1,301,250	\$ 15,892,746
Interest, Dividend, and Other Investment Income	1,979,315	127,459	2,106,774
Securities Lending Income	32,216	5,870	38,086
Total Additions	16,603,027	1,434,579	18,037,606
<b>Deductions:</b>			
Investment Expense	732,538	9,023	741,561
Securities Lending Fees	2,315	481	2,796
Net Withdrawals by Pool Participants	3,482,407	543,222	4,025,629
Total Deductions	4,217,260	552,726	4,769,986
Net Increase (Decrease)	12,385,767	881,853	13,267,620
<b>Net Investment Position Held in Trust</b>			
Beginning of Year	107,772,466	8,686,315	116,458,781
End of Year	\$ 120,158,233	\$ 9,568,168	\$ 129,726,401

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

# 11 CONTINGENCIES, RELATED PARTIES, & LITIGATION

## » *Loss Contingencies*

On September 5, 2008, the Internal Revenue Service (IRS) provided SWIB with a “Notice of Transferee Liability”. This claim seeks taxes, penalties, and interest relating to the sale of Shockley Communications Corporation (SCC) stock in 2001.

SWIB is classified as a tax-exempt entity by the IRS. However, the IRS asserted that the shareholders’ sale of SCC stock in 2001 should have been characterized as a sale of assets by SCC, on which SCC should have paid income taxes. Based on the theory of transferee liability, the IRS asserted that the former SCC shareholders, including SWIB, are liable for SCC’s unpaid taxes, penalties, and interest.

SWIB filed a petition in the United States Tax Court contesting the proposed IRS assessment. The principal shareholders of SCC were issued similar notices from the IRS and have been litigating their case through the Tax Court and United States Court of Appeals. In April 2014, SWIB and the IRS agreed to stay the Tax Court proceeding with respect to SWIB pending the resolution of the tax case initiated by the principal shareholders of SCC challenging the IRS’ characterization of the SCC sale. In 2015, the Tax Court found that the principal shareholders of SCC were liable as putative transferees for the tax, penalties, and interest owed by SCC related to its sale. In October 2017, the 11<sup>th</sup> Circuit Court of Appeals upheld the 2015 Tax Court opinion with respect to the principal shareholders of SCC; concluding its litigation. Because SWIB had separate and distinct arguments from the principal shareholders of SCC, the Tax Court granted SWIB the opportunity to pursue its case with the Court. In 2018, SWIB’s tax counsel and the IRS filed briefs with the Tax Court. In January 2020, SWIB was informed that the Tax Court had ruled in favor of the IRS. While SWIB had the option to appeal, as well as the ability to negotiate the final payment amount with the IRS, the adverse ruling from the Tax Court made it more likely that SWIB’s liability exposure would be higher than previously estimated.

SWIB accrued an additional loss of \$13.8 million as of December 31, 2020 from the SCC transaction based on the Tax Court’s adverse opinions against the principal shareholders and SWIB. This additional estimated loss was based on a settlement strategy with the IRS. Since calendar year 2015, SWIB has accrued a total loss of \$43.8 million, which represented the estimated minimum amount of the possible loss to which SWIB believed it may be exposed as of December 31, 2020.

During April 2021, SWIB and the IRS resolved the case with SWIB making a payment in accordance with the settlement terms on May 11, 2021. The difference between the total accrued loss and final payment is not material to the financial statements.

In the ordinary course of operations, SWIB may be party to other various legal actions. SWIB’s Chief Legal Counsel handles these matters either directly or with assistance of outside legal counsel. As of December 31, 2020, these matters are not anticipated to have a material financial impact on the WRS’s financial position.

## » *Related Party Transactions*

During the calendar year, the Core Fund entered into reverse repurchase agreement transactions 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 investment guidelines limit exposure



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## FINANCIAL SECTION

with the SIF to \$3.0 billion. Credit exposure is also managed through the transfer of margin between the Core Fund and SIF. As of December 31, 2020, the Core Fund held \$2.1 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 agreement transactions with other counterparties. The Core Fund is also a participant in the SIF, with an investment totaling \$3.8 billion at December 31, 2020. The SIF is a short-term, commingled fund with the investment objective of safety of principle 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.

Each party filed Summary Judgment motions in circuit court. At hearings held in April and May 2020 the circuit court denied both motions. As a result, the Complaint and Counterclaim will move forward towards trial. The parties are currently engaged in discovery activities. The resolution of this dispute is not anticipated to have a material effect on the WRS's 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)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
1. Net Earned Required Contributions and Investment Revenues	\$ 169.9	\$ 153.7	\$ 159.6	\$ 157.7	\$ 166.5	\$ 214.3	\$ 223.5	\$ 176.0	\$ 154.0	\$ 176.0
2. Unallocated Expense	6.4	8.0	4.4	6.0	6.0	5.9	5.8	4.6	4.5	4.6
3. Estimated Incurred Claims and Expenses as of the End of the Policy Year	144.6	141.3	149.0	163.5	176.9	156.0	164.5	156.1	155.0	176.1
4. Paid Claims (Cumulative) as of Year-End:*										
End of Policy Year	150.7	148.3	156.6	173.4	196.4	171.0	183.3	177.8	182.7	209.8
One Year Later	145.1	141.2	148.3	163.5	177.0	151.0	159.9	151.7	155.1	
Two Years Later	145.1	141.2	148.3	163.5	177.1	151.0	160.0	151.5		
Three Years Later	145.1	141.2	148.3	163.5	177.1	151.0	160.0			
Four Years Later	145.1	141.2	148.3	163.5	177.1	151.0				
Five Years Later	145.1	141.2	148.3	163.5	177.1					
Six Years Later	145.1	141.2	148.3	163.5						
Seven Years Later	145.1	141.2	148.3							
Eight Years Later	145.1	141.2								
Nine Years Later	145.1									
5. Re-estimated Incurred Claims and Expenses:										
End of Policy Year	144.6	141.3	149.0	163.5	176.9	156.0	164.5	156.1	155.0	176.1
One Year Later	145.1	141.2	148.3	163.5	177.0	151.0	159.6	151.5	155.1	
Two Years Later	145.1	141.2	148.3	163.5	177.1	151.0	159.9	151.5		
Three Years Later	145.1	141.2	148.3	163.5	177.1	151.0	159.9			
Four Years Later	145.1	141.2	148.3	163.5	177.1	151.0				
Five Years Later	145.1	141.2	148.3	163.5	177.1					
Six Years Later	145.1	141.2	148.3	163.5						
Seven Years Later	145.1	141.2	148.3							
Eight Years Later	145.1	141.2								
Nine Years Later	145.1									
6. Increase (Decrease) in Estimated Incurred Claims and Expenses from End of Policy Year	\$ 0.5	\$ (0.1)	\$ (0.7)	\$ 0.0	\$ 0.2	\$ (5.0)	\$ (4.6)	\$ (4.6)	\$ 0.1	\$ 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)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
1. Net Earned Required Contributions and Investment Revenues	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 41.9	\$ 44.3	\$ 45.6	\$ 47.4	\$ 48.8
2. Unallocated Expense	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9
3. Estimated Incurred Claims and Expenses as of the End of the Policy Year	0.0	0.0	0.0	0.0	0.0	44.1	44.4	43.8	45.9	38.1
4. Paid Claims (Cumulative) as of Year-End:										
End of Policy Year	0.0	0.0	0.0	0.0	0.0	42.2	43.4	42.9	44.1	36.6
One Year Later	0.0	0.0	0.0	0.0	0.0	44.0	44.3	43.8	45.2	
Two Years Later	0.0	0.0	0.0	0.0	0.0	44.0	44.3	43.8		
Three Years Later	0.0	0.0	0.0	0.0	0.0	44.0	44.3			
Four Years Later	0.0	0.0	0.0	0.0	0.0	44.0				
Five Years Later	0.0	0.0	0.0	0.0	0.0					
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	0.0	44.1	44.4	43.8	45.9	38.1
One Year Later	0.0	0.0	0.0	0.0	0.0	44.0	44.3	43.8	45.2	
Two Years Later	0.0	0.0	0.0	0.0	0.0	44.0	44.3	43.8		
Three Years Later	0.0	0.0	0.0	0.0	0.0	44.0	44.3			
Four Years Later	0.0	0.0	0.0	0.0	0.0	44.0				
Five Years Later	0.0	0.0	0.0	0.0	0.0					
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	\$ 0.0	\$ (0.1)	\$ (0.1)	\$ 0.0	\$ (0.7)	\$ 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)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
1. Net Earned Required Contributions and Investment Revenues	\$ 16.6	\$ 25.0	\$ 25.7	\$ 20.5	\$ 16.3	\$ 27.1	\$ 38.3	\$ 24.7	\$ 54.7	\$ 61.6
2. Unallocated Expense	2.3	1.9	2.0	5.7	1.8	3.0	1.8	2.7	3.0	3.2
3. Estimated Incurred Claims and Expenses as of the End of the Policy Year	42.4	33.4	36.0	20.5	22.8	20.7	17.7	19.2	22.6	24.8
4. Paid Claims (Cumulative) as of Year-End:										
End of Policy Year	6.7	5.9	6.4	5.9	6.6	5.6	4.6	4.2	4.1	4.0
One Year Later	11.9	11.0	11.8	11.9	12.5	10.6	9.5	8.9	8.0	
Two Years Later	12.8	12.3	13.8	13.6	14.3	12.5	11.4	10.9		
Three Years Later	13.6	13.8	15.1	14.8	15.7	13.8	12.7			
Four Years Later	14.3	14.5	16.0	15.8	16.6	14.8				
Five Years Later	14.9	15.4	17.0	16.5	17.4					
Six Years Later	15.4	16.2	17.9	17.2						
Seven Years Later	15.9	17.0	18.8							
Eight Years Later	16.3	17.7								
Nine Years Later	16.7									
5. Re-estimated Incurred Claims and Expenses:										
End of Policy Year	42.4	33.4	36.0	20.5	22.8	20.7	17.7	19.2	22.6	24.8
One Year Later	22.3	23.1	22.6	20.4	23.9	21.1	18.7	19.1	13.8	
Two Years Later	20.0	20.9	24.0	22.5	23.4	22.3	19.6	19.9		
Three Years Later	19.5	20.9	24.3	22.2	23.9	21.0	19.7			
Four Years Later	19.5	20.5	23.5	21.5	22.9	21.3				
Five Years Later	19.5	21.0	24.3	22.0	23.4					
Six Years Later	19.7	21.5	25.0	22.0						
Seven Years Later	19.7	21.4	25.5							
Eight Years Later	20.0	21.8								
Nine Years Later	20.3									
6. Increase (Decrease) in Estimated Incurred Claims and Expenses from End of Policy Year	\$ (22.1)	\$ (11.6)	\$ (10.5)	\$ 1.5	\$ 0.6	\$ 0.6	\$ 2.0	\$ 0.7	\$ (8.8)	\$ 0.0



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

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
1. Net Earned Required Contributions and Investment Revenues	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 50.3	\$ 100.5	\$ (13.3)	\$ 123.3	\$ 106.0
2. Unallocated Expense	0.0	0.0	0.0	0.0	0.0	1.8	4.5	0.8	0.6	0.8
3. Estimated Incurred Claims and Expenses as of the End of the Policy Year	0.0	0.0	0.0	0.0	0.0	11.9	19.2	20.4	33.6	34.0
4. Paid Claims (Cumulative) as of Year-End:										
End of Policy Year	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
One Year Later	0.0	0.0	0.0	0.0	0.0	0.4	0.3	0.2	0.1	
Two Years Later	0.0	0.0	0.0	0.0	0.0	1.1	0.7	0.7		
Three Years Later	0.0	0.0	0.0	0.0	0.0	2.2	1.3			
Four Years Later	0.0	0.0	0.0	0.0	0.0	3.3				
Five Years Later	0.0	0.0	0.0	0.0	0.0					
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	0.0	11.9	19.2	20.4	33.6	34.0
One Year Later	0.0	0.0	0.0	0.0	0.0	6.2	2.9	4.3	0.9	
Two Years Later	0.0	0.0	0.0	0.0	0.0	11.7	5.4	8.5		
Three Years Later	0.0	0.0	0.0	0.0	0.0	14.8	7.4			
Four Years Later	0.0	0.0	0.0	0.0	0.0	17.7				
Five Years Later	0.0	0.0	0.0	0.0	0.0					
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	\$ 0.0	\$ 5.8	\$ (11.8)	\$ (11.9)	\$ (32.7)	\$ 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	2020	2019	2018	2017
<b>Total Pension Liability</b>				
Service Cost	\$ 1,975.8	\$ 1,902.5	\$ 1,860.9	\$ 1,842.9
Interest on the Total Pension Liability	7,480.7	6,888.1	7,169.7	6,627.2
Difference between Expected and Actual Experience <sup>1</sup>	6,376.7	5,473.3	(4,968.3)	4,459.5
Assumption Changes	0.0	0.0	361.5	0.0
Benefit Payments	(5,939.4)	(5,646.3)	(5,516.2)	(5,211.3)
Refunds of Member Contributions	(38.9)	(44.1)	(40.2)	(38.4)
<b>Net Change in Total Pension Liability</b>	<b>9,855.0</b>	<b>8,573.5</b>	<b>(1,132.6)</b>	<b>7,679.9</b>
<b>Total Pension Liability - Beginning</b>	<b>108,868.3</b>	<b>100,294.8</b>	<b>101,427.3</b>	<b>93,747.4</b> <sup>2</sup>
<b>Total Pension Liability - Ending (a)</b>	<b>\$ 118,723.3</b>	<b>\$ 108,868.3</b>	<b>\$ 100,294.8</b>	<b>\$ 101,427.3</b>
<b>Plan Fiduciary Net Position</b>				
Employer Contributions <sup>3</sup>	\$ 1,133.3	\$ 1,046.9	\$ 1,030.5	\$ 1,017.6
Member Contributions	1,053.2	987.7	973.0	965.5
Pension Plan Net Investment Income	16,698.6	19,049.5	(4,049.4)	14,875.4
Benefit Payments	(5,939.4)	(5,646.3)	(5,516.2)	(5,211.3)
Refunds of Member Contributions	(38.9)	(44.1)	(40.2)	(38.4)
Pension Plan Administrative Expense	(33.3)	(34.2)	(31.6)	(26.1)
Other <sup>4</sup>	0.0	(3.9)	(25.4)	0.0
<b>Net Change in Plan Fiduciary Net Position</b>	<b>12,873.6</b>	<b>15,355.7</b>	<b>(7,659.4)</b>	<b>11,582.7</b>
<b>Plan Fiduciary Net Position - Beginning</b>	<b>112,092.8</b>	<b>96,737.1</b>	<b>104,396.5</b>	<b>92,813.8</b> <sup>5</sup>
<b>Plan Fiduciary Net Position - Ending (b)</b>	<b>\$ 124,966.4</b>	<b>\$ 112,092.8</b>	<b>\$ 96,737.1</b>	<b>\$ 104,396.5</b>
<b>Net Pension Liability(Asset) - Ending (a) - (b)</b>	<b>\$ (6,243.1)</b>	<b>\$ (3,224.5)</b>	<b>\$ 3,557.7</b>	<b>\$ (2,969.1)</b>
<b>Plan Fiduciary Net Position as a Percentage of Total Pension</b>	<b>105.26 %</b>	<b>102.96 %</b>	<b>96.45 %</b>	<b>102.93 %</b>
<b>Covered Employee Payroll</b>	<b>\$ 15,359.9</b>	<b>\$ 14,832.5</b>	<b>\$ 14,301.4</b>	<b>\$ 13,943.1</b>
<b>Net Pension Liability(Asset) as a Percentage of Covered Employee Payroll</b>	<b>(40.65)%</b>	<b>(21.74)%</b>	<b>24.88 %</b>	<b>(21.29)%</b>

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> Other for 2018 relates to an impairment loss on a capital asset.

<sup>5</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.



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

Calendar Year Ended, December 31	2016	2015	2014	2013
<b>Total Pension Liability</b>				
Service Cost	\$ 1,814.1	\$ 1,787.9	\$ 1,757.0	\$ 1,745.0
Interest on the Total Pension Liability	6,372.4	6,347.1	6,089.3	5,680.7
Difference between Expected and Actual Experience <sup>1</sup>	150.3	(4,247.3)	437.3	2,659.9
Assumption Changes	0.0	1,412.0	0.0	0.0
Benefit Payments	(5,022.9)	(4,823.6)	(4,540.2)	(4,224.7)
Refunds of Member Contributions	(39.3)	(37.6)	(34.4)	(33.3)
<b>Net Change in Total Pension Liability</b>	<u>3,274.6</u>	<u>438.5</u>	<u>3,708.9</u>	<u>5,827.7</u>
<b>Total Pension Liability - Beginning</b>	<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>\$ 93,404.3</u>	<u>\$ 90,129.7</u>	<u>\$ 89,691.2</u>	<u>\$ 85,982.2</u>
<b>Plan Fiduciary Net Position</b>				
Employer Contributions <sup>2</sup>	\$ 963.1	\$ 977.7	\$ 987.8	\$ 914.7
Member Contributions	921.9	937.2	941.9	871.3
Pension Plan Net Investment Income	7,273.1	(673.1)	4,891.0	11,347.3
Benefit Payments	(5,022.9)	(4,823.6)	(4,540.2)	(4,224.7)
Refunds of Member Contributions	(39.3)	(37.6)	(34.4)	(33.3)
Pension Plan Administrative Expense	(20.4)	(22.7)	(24.0)	(22.9)
Other	0.0	0.0	0.0	0.0
<b>Net Change in Plan Fiduciary Net Position</b>	<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</b>	<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>\$ 92,580.1</u>	<u>\$ 88,504.7</u>	<u>\$ 92,146.8</u>	<u>\$ 89,924.7</u>
<b>Net Pension Liability(Asset) - Ending (a) - (b)</b>	\$ 824.2	\$ 1,625.0	\$ (2,455.6)	\$ (3,942.5)
<b>Plan Fiduciary Net Position as a Percentage of Total Pension</b>	99.12 %	98.20 %	102.74 %	104.59 %
<b>Covered Employee Payroll</b>	\$ 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>	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> 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



## 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%

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

	<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>	<b>2011</b>
Core Trust Fund	15.06 %	19.49 %	(3.56)%	15.85 %	8.29 %	(0.63)%	5.44 %	13.18 %	13.40 %	1.25 %
Variable Trust Fund	17.05 %	28.80 %	(7.61)%	23.27 %	10.49 %	(1.11)%	7.24 %	28.78 %	16.94 %	(3.02)%



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

Calendar Year Ended, December 31	2020	2019	2018	2017
<b>Total OPEB Liability</b>				
Service Cost	\$ 36.3	\$ 25.4	\$ 30.7	\$ 26.1
Interest on the Total OPEB Liability	30.0	33.2	31.2	30.7
Difference between Expected and Actual Experience	(10.5)	(6.2)	(17.5)	(5.3)
Assumption Changes	138.5	223.0	(94.9)	49.0
Benefit Payments	(24.7)	(19.8)	(19.5)	(17.7)
<b>Net Change in Total OPEB Liability</b>	169.6	255.6	(70.0)	82.8
<b>Total OPEB Liability - Beginning</b>	1,031.1	775.5	845.5	762.6
<b>Total OPEB Liability - Ending (a)</b>	<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	\$ 1.5	\$ 1.1	\$ 1.4	\$ 1.4
Net Investment Income	9.8	10.4	10.9	11.5
Benefit Payments	(24.7)	(19.8)	(19.5)	(17.7)
OPEB Plan Administrative Expense	(0.9)	(0.8)	(0.7)	(0.6)
Other	0.0	13.1 *	0.0	0.0
<b>Net Change in Plan Fiduciary Net Position</b>	(14.3)	4.0	(7.9)	(5.4)
<b>Plan Fiduciary Net Position - Beginning</b>	348.0	344.0	352.0	357.4
<b>Plan Fiduciary Net Position - Ending (b)</b>	<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>	\$ 867.0	\$ 683.1	\$ 431.5	\$ 493.5
<b>Plan Fiduciary Net Position as a Percentage of Total OPEB Liability</b>	27.80 %	33.75%	44.36%	41.63%
<b>Covered Employee Payroll</b>	\$ 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>	25.08 %	20.70%	13.56%	15.50%

\*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	2020	2019	2018	2017
<b>Total OPEB Liability</b>				
Service Cost	\$ 26.7	\$ 17.0	\$ 21.1	\$ 18.1
Interest on the Total OPEB Liability	20.2	21.7	20.4	19.8
Difference between Expected and Actual Experience	(12.5)	(9.5)	(11.0)	(4.9)
Assumption Changes	97.7	159.4	(65.1)	33.5
Benefit Payments	(12.8)	(9.3)	(7.6)	(7.3)
<b>Net Change in Total OPEB Liability</b>	119.2	179.3	(42.2)	59.2
<b>Total OPEB Liability - Beginning</b>	682.2	502.9	545.1	485.9
<b>Total OPEB Liability - Ending (a)</b>	<u>\$ 801.4</u>	<u>\$ 682.2</u>	<u>\$ 502.9</u>	<u>\$ 545.1</u>
<b>Plan Fiduciary Net Position</b>				
Employer Contributions	\$ 2.0	\$ 1.8	\$ 1.9	\$ 2.1
Net Investment Income	7.3	7.5	7.6	7.6
Benefit Payments	(12.8)	(9.3)	(7.6)	(7.3)
OPEB Plan Administrative Expense	(1.5)	(1.4)	(1.2)	(1.2)
Other	0.0	12.9 *	0.0	0.0
<b>Net Change in Plan Fiduciary Net Position</b>	(5.0)	11.5	0.7	1.2
<b>Plan Fiduciary Net Position - Beginning</b>	256.4	244.9	244.2	243.1
<b>Plan Fiduciary Net Position - Ending (b)</b>	<u>\$ 251.4</u>	<u>\$ 256.4</u>	<u>\$ 244.9</u>	<u>\$ 244.2</u>
<b>Net OPEB Liability (Asset) - Ending (a) - (b)</b>	\$ 550.0	425.8	\$ 258.0	\$ 300.9
<b>Plan Fiduciary Net Position as a Percentage of Total OPEB Liability</b>	31.36%	37.58%	48.69%	44.81%
<b>Covered Employee Payroll</b>	\$ 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>	12.77%	10.07%	6.27%	7.15%

\*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**

	2020	2019	2018	2017
State Retiree Life Insurance	2.86%	3.09%	3.16%	3.19%
Local Retiree Life Insurance	2.84%	3.05%	3.10%	3.13%

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

Calendar Year Ended, December 31	2020	2019	2018	2017
<b>Total OPEB Liability</b>				
Service Cost	\$ 24.1	\$ 25.5	\$ 23.4	\$ 23.1
Interest on the Total OPEB Liability	64.4	65.5	66.0	65.9
Difference between Expected and Actual Experience	(47.6)	(55.3)	(41.6)	(31.6)
Assumption Changes	0.0	0.0	25.2	0.0
Benefit Payments	(49.5)	(53.0)	(55.4)	(56.4)
<b>Net Change in Total OPEB Liability</b>	(8.6)	(17.2)	17.6	0.9
<b>Total OPEB Liability - Beginning</b>	932.6	949.8	932.2	931.3
<b>Total OPEB Liability - Ending (a)</b>	<u>\$ 924.0</u>	<u>\$ 932.6</u>	<u>\$ 949.8</u>	<u>\$ 932.2</u>
<b>Plan Fiduciary Net Position</b>				
Employer Contributions	\$ 15.1	\$ 14.4	\$ 18.2	\$ 17.9
Net Investment Income	159.5	180.3	(36.5)	141.8
Benefit Payments	(49.5)	(53.0)	(55.4)	(56.4)
OPEB Plan Administrative Expense	(0.6)	(0.3)	(0.3)	(0.3)
<b>Net Change in Plan Fiduciary Net Position</b>	124.4	141.3	(74.0)	102.9
<b>Plan Fiduciary Net Position - Beginning</b>	1,084.4	943.1	1,017.1	914.1
<b>Plan Fiduciary Net Position - Ending (b)</b>	<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>	\$ (284.8)	\$ (151.8)	\$ 6.8	\$ (84.8)
<b>Plan Fiduciary Net Position as a Percentage of Total OPEB Liability</b>	130.82 %	116.27 %	99.29 %	109.10 %
<b>Covered Employee Payroll</b>	\$ 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>	(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.



## FINANCIAL SECTION

**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%

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

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

## NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

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

	<b>2020</b>
Valuation Date:	December 31, 2018
Actuarial Cost Method:	Frozen Entry Age
Amortization Method:	Level Percent of Payroll-Closed Amortization Period
Amortization Period:	30 Year closed from date of participation in WRS
Asset Valuation Method:	Five Year Smoothed Market (Closed)
Actuarial Assumptions	
Net Investment Rate of Return:	5.4%
Weighted based on assumed rate for:	
Pre-retirement:	7.0%
Post-retirement:	5.0%
Salary Increases	
Inflation:	3.0%
Seniority/Merit:	0.1%-5.6%
Post-retirement Benefit Adjustments*:	1.9%

\*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.

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

	<b>2020</b>
Valuation Date:	December 31, 2018
Actuarial Cost Method:	Frozen Entry Age
Amortization Method:	Level Percent of Payroll, (Closed)
Remaining Amortization Period:	7 years
Asset Valuation Method:	Five Year Smoothed Market (Closed)
Salary Increases	
Inflation:	3.0%
Seniority/Merit:	0.1%-5.6%
Investment Rate of Return:	7.0%
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.
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%)
Health Care Trend Rates:	3.0%
Other Information:	
Notes	There were no benefit changes during the year.



**STATISTICAL SECTION**





## STATISTICAL SECTION

## Wisconsin Retirement System (WRS) Statistics

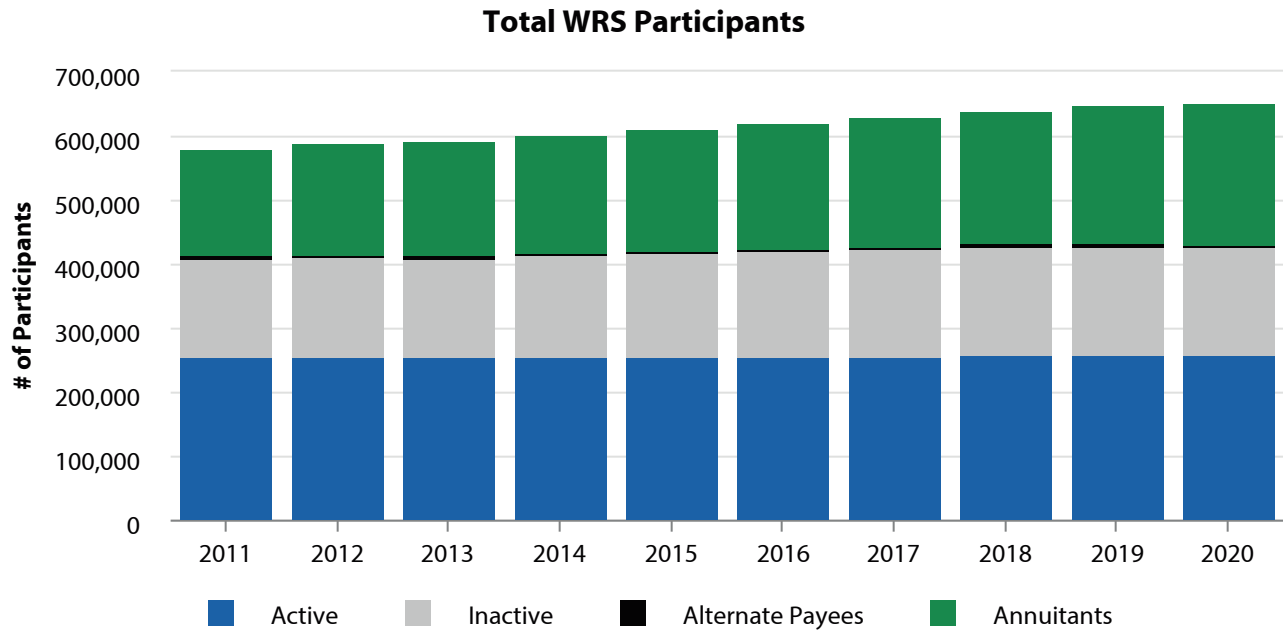
### WRS Active Participants by Employment Category

Year	General	Teachers	Executives & Elected Officials	Protective Occupations With Social Security	Protective Occupations Without Social Security	Totals
<b>State Participants</b>						
2011	41,136	20,184	717	8,354	0	70,391
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
<b>Local Participants</b>						
2011	93,797	78,348	720	11,280	2,718	186,863
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
<b>Total Participants</b>						
2011	134,933	98,532	1,437	19,634	2,718	257,254
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





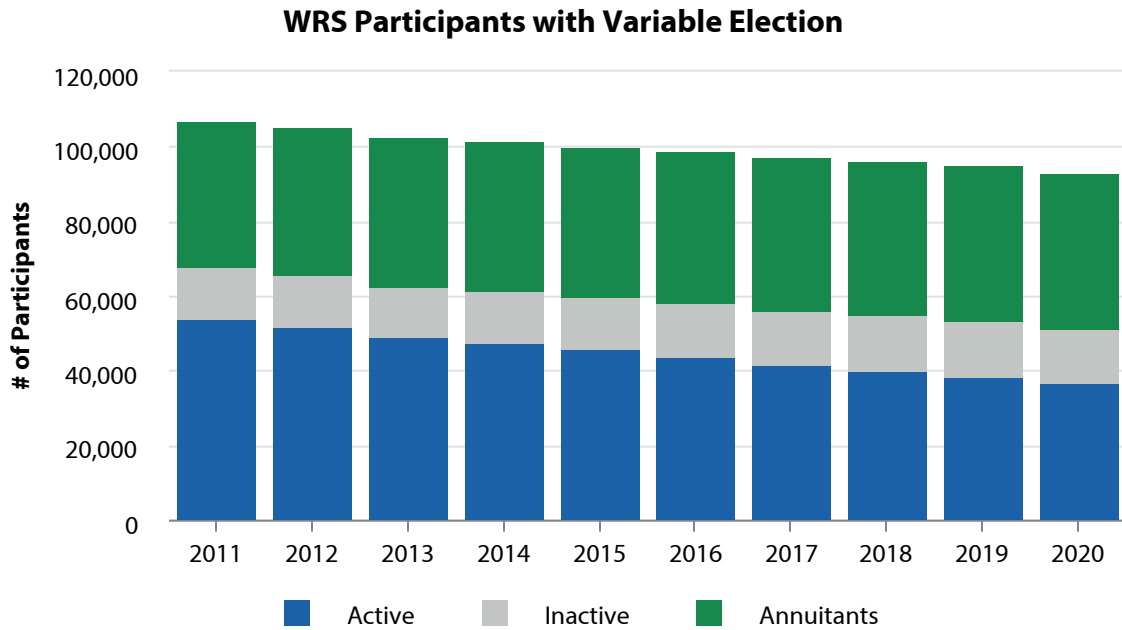
Total WRS Participants					
Year	Active	Inactive	Alternate Payees	Annuitants	Total Participants
2011	257,254	153,123	4,063	167,453	581,893
2012	256,833	155,887	4,086	173,655	590,461
2013	256,788	153,721	4,040	180,056	594,605
2014	257,255	157,072	4,051	185,605	603,983
2015	256,077	161,851	4,111	191,795	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





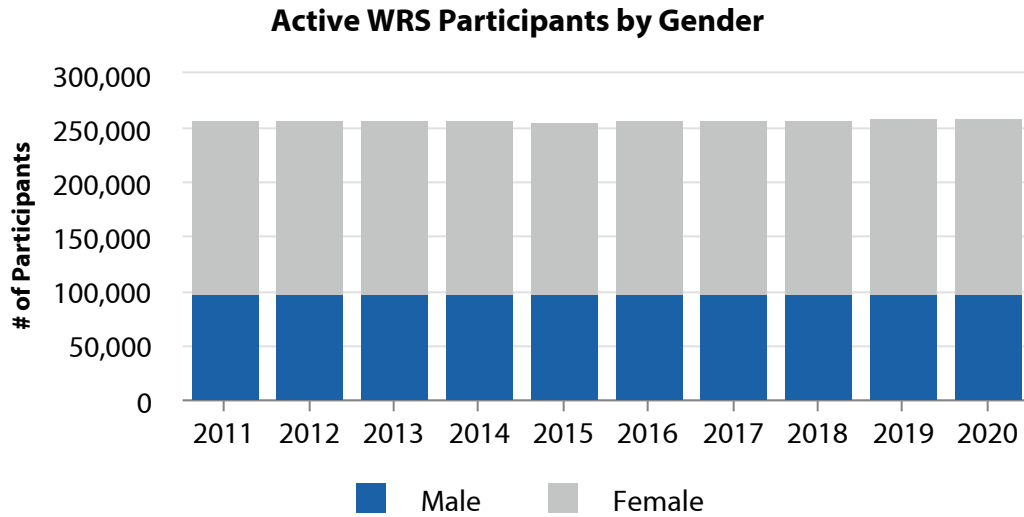
STATISTICAL SECTION

<b>WRS Participants with Variable Election</b>				
<b>Year</b>	<b>Active</b>	<b>Inactive</b>	<b>Annuitants</b>	<b>Totals</b>
2011	54,273	13,889	38,949	107,111
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





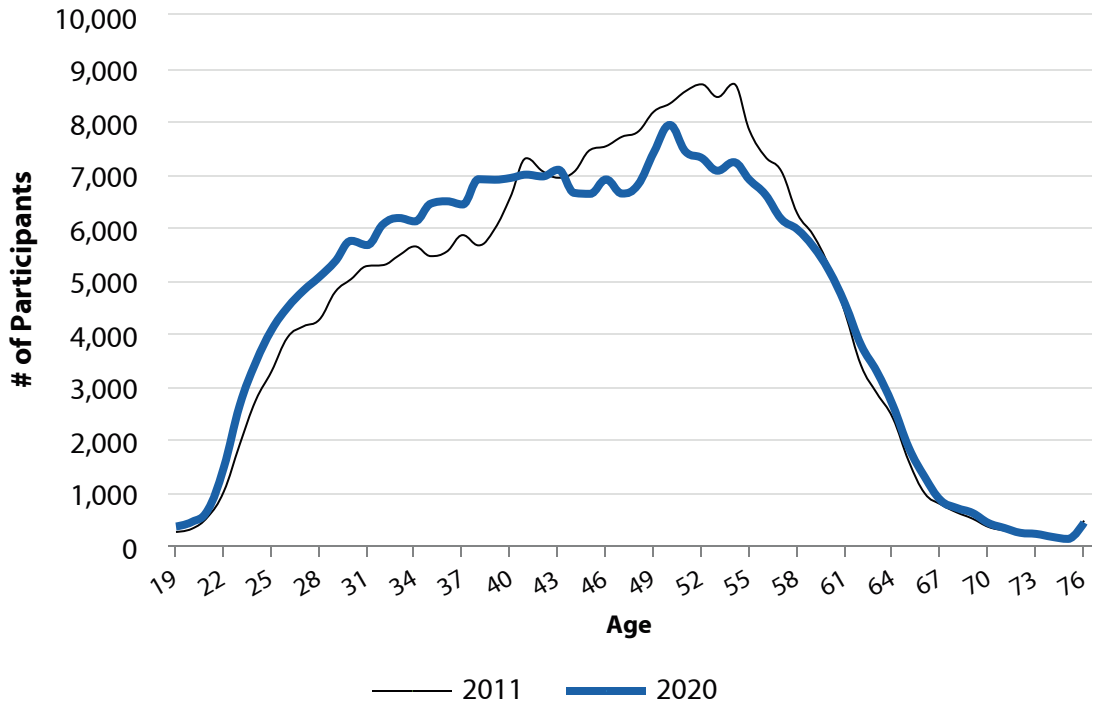
Active WRS Participants by Gender								
Year	Teachers		Protective Occupations		All Other Participants		Totals	
	Male	Female	Male	Female	Male	Female	Male	Female
2011	30,784	67,748	18,374	3,978	47,829	88,541	96,987	160,267
2012	30,983	67,761	18,278	3,866	47,836	88,109	97,097	159,736
2013	30,979	68,115	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



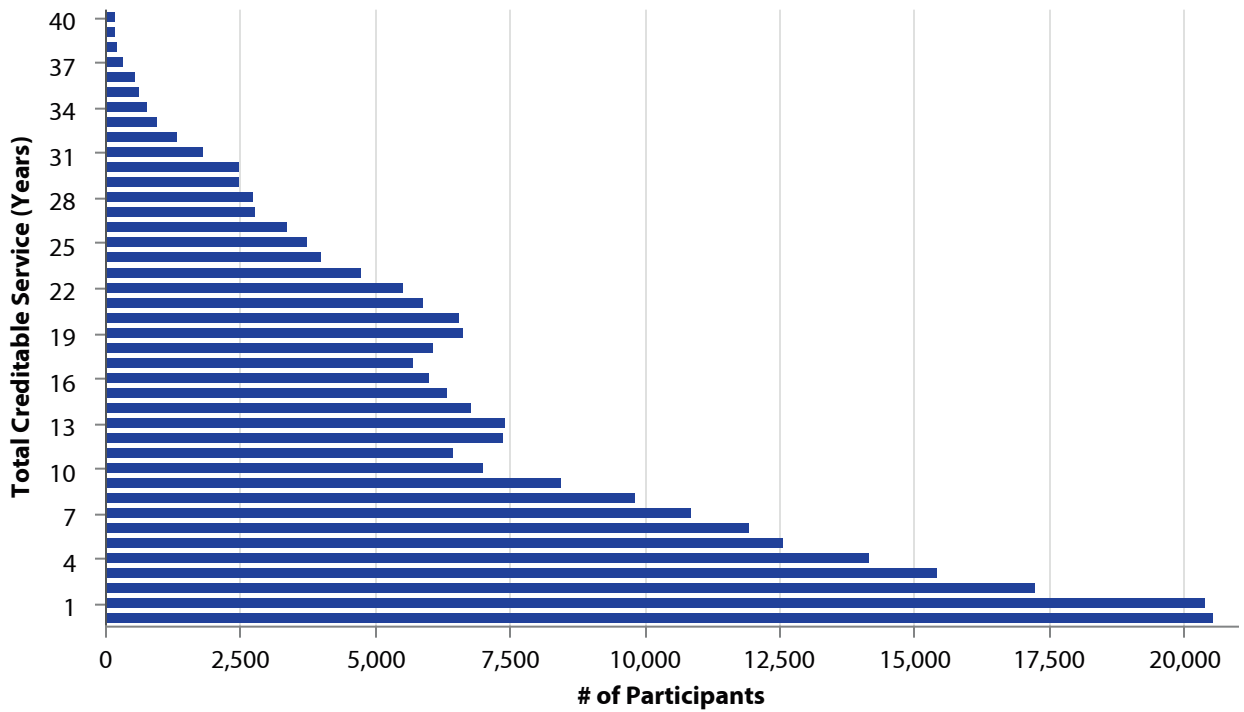


STATISTICAL SECTION

**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
2011	\$ 5,006	\$ 1,537	\$1,236	\$ 607	\$ 227	\$ 63	\$ 171	\$ 8,847
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

State Employers				Total All Employers
Year	State Agencies	University	Totals	
2011	\$ 2,126	\$ 1,746	\$ 3,872	\$ 12,719
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

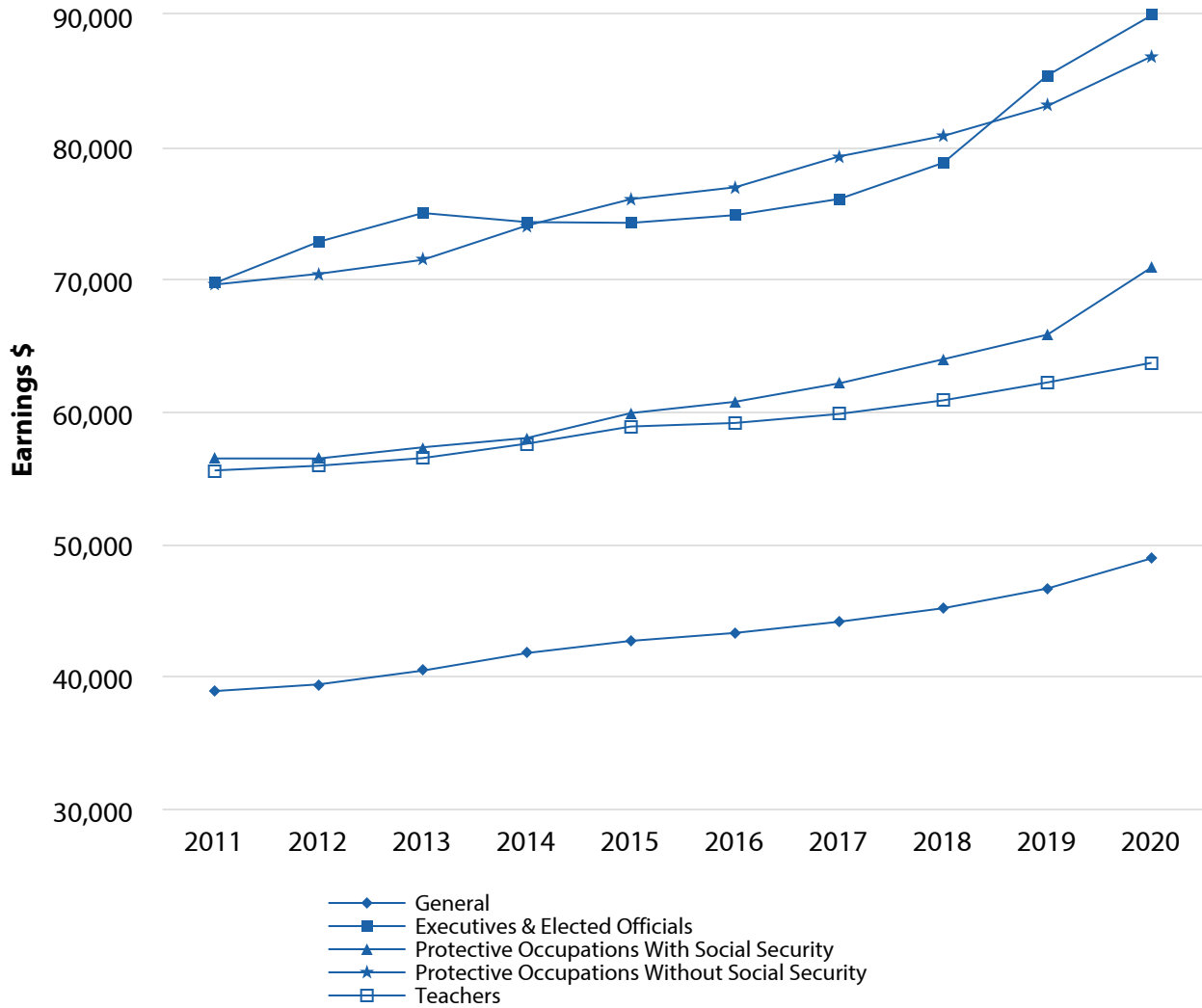
### WRS Covered Payroll by Employment Category (In Millions)

Year	General Employees	Teachers	Executives & Elected Officials	Protective Occupations with Social Security	Protective Occupations without Social Security	Totals
2011	\$ 5,485	\$ 5,797	\$ 105	\$ 1,139	\$ 193	\$ 12,719
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



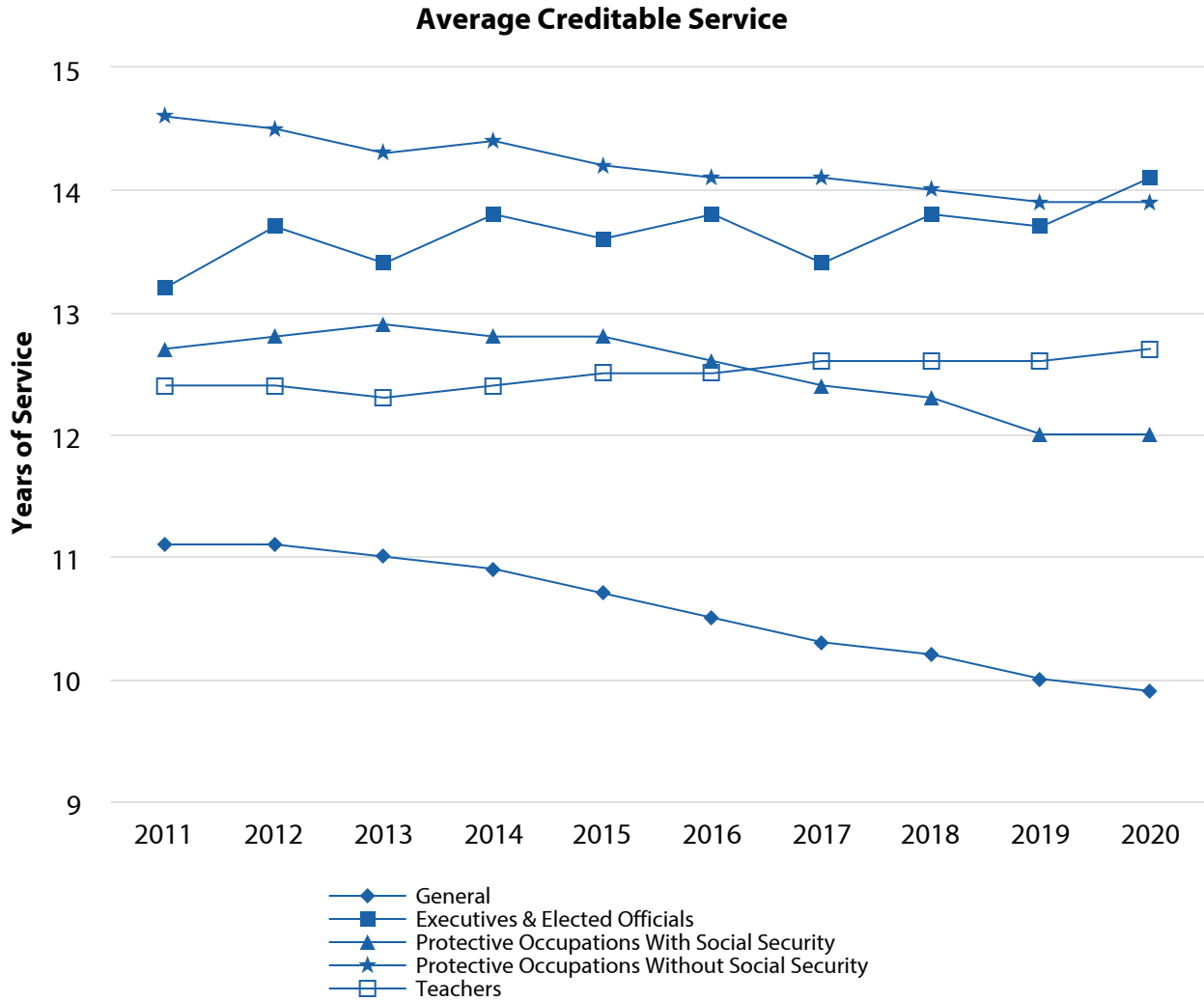
STATISTICAL SECTION

**Average Annual Earnings**



**Average Annual Earnings**

Year	General	Teachers	Executives & Elected Officials	Protective Occupations With Social Security	Protective Occupations Without Social Security	Average
2011	\$ 38,874	\$ 55,546	\$ 69,699	\$ 56,451	\$ 69,590	\$ 47,098
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

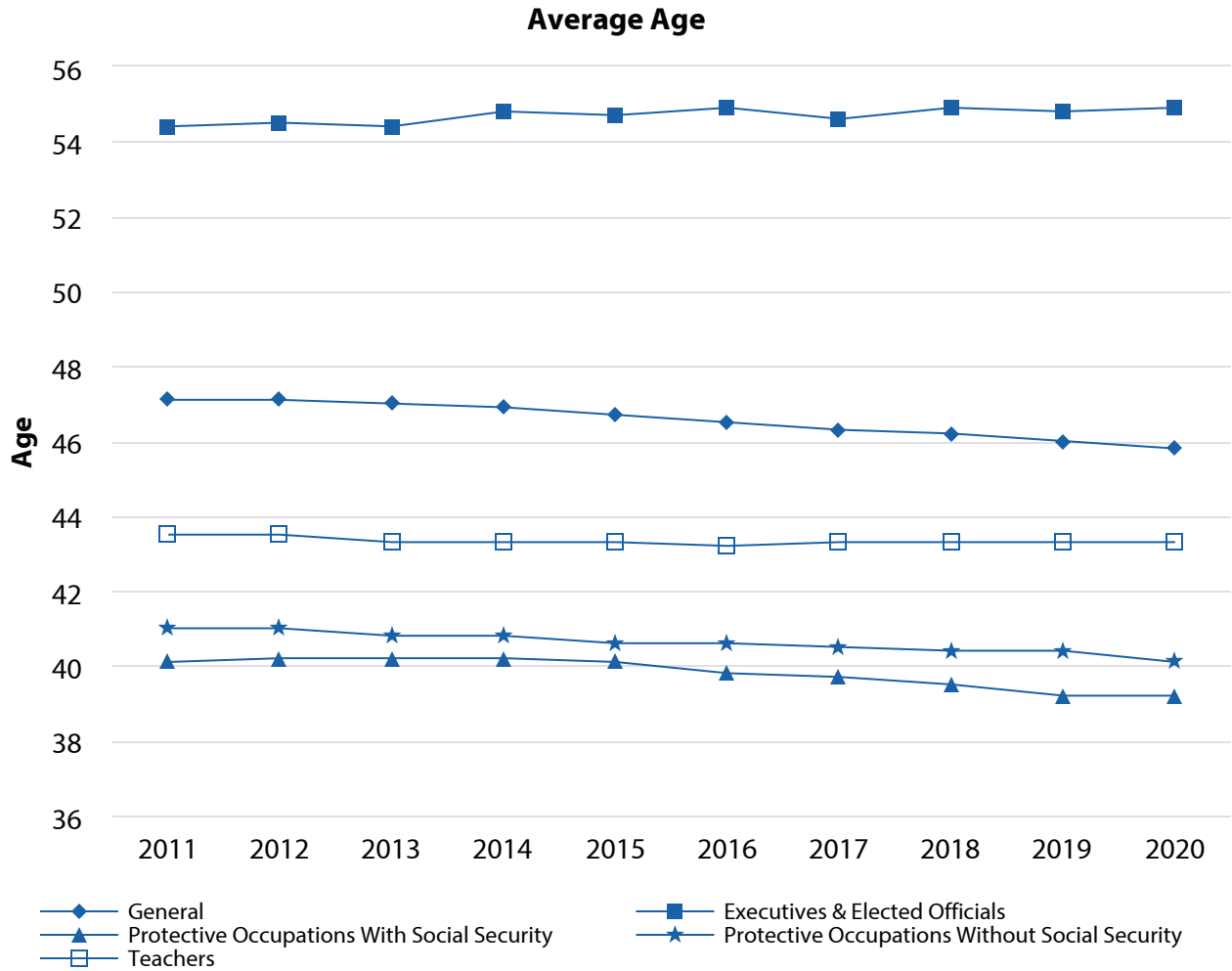


### Average Creditable Service

Year	General	Teachers	Executives & Elected Officials	Protective Occupations With Social Security	Protective Occupations Without Social Security	Average
2011	11.1	12.4	13.2	12.7	14.6	11.8
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



STATISTICAL SECTION



### Average Age

Year	General	Teachers	Executives & Elected Officials	Protective Occupations With Social Security	Protective Occupations Without Social Security	Average
2011	47.1	43.5	54.4	40.1	41.0	45.2
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



**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>
2011	110,008	33,549	22,993	10,129	4,952	1,552	3,680	186,863
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

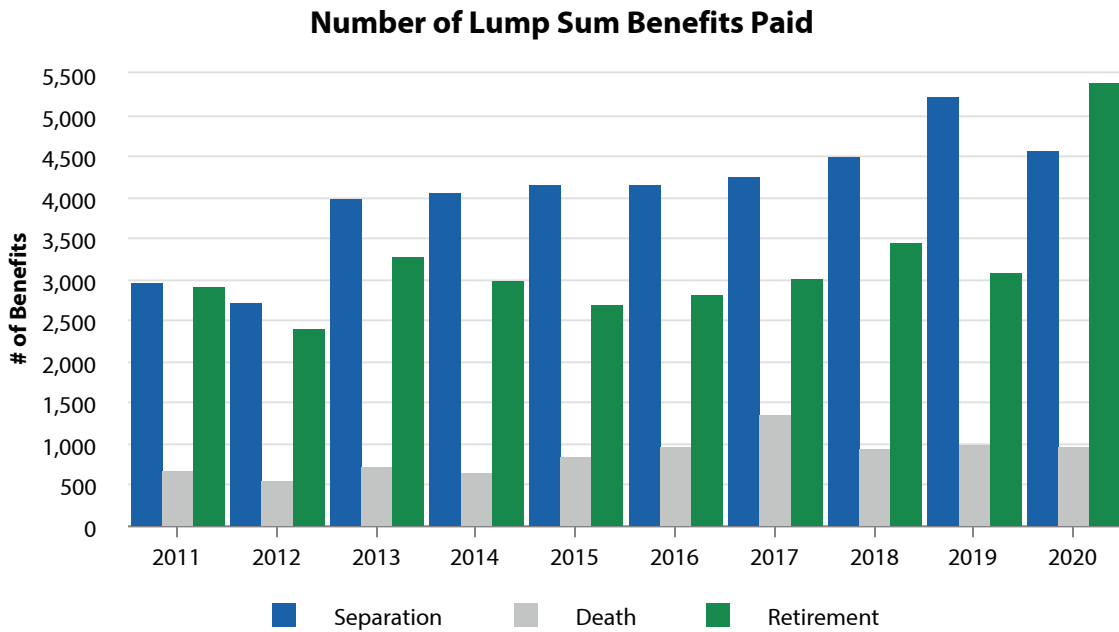
**State Employers**

<b>Year</b>	<b>State Agencies</b>	<b>University</b>	<b>Totals</b>	<b>Totals All Employers</b>
2011	39,642	30,749	70,391	257,254
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



STATISTICAL SECTION

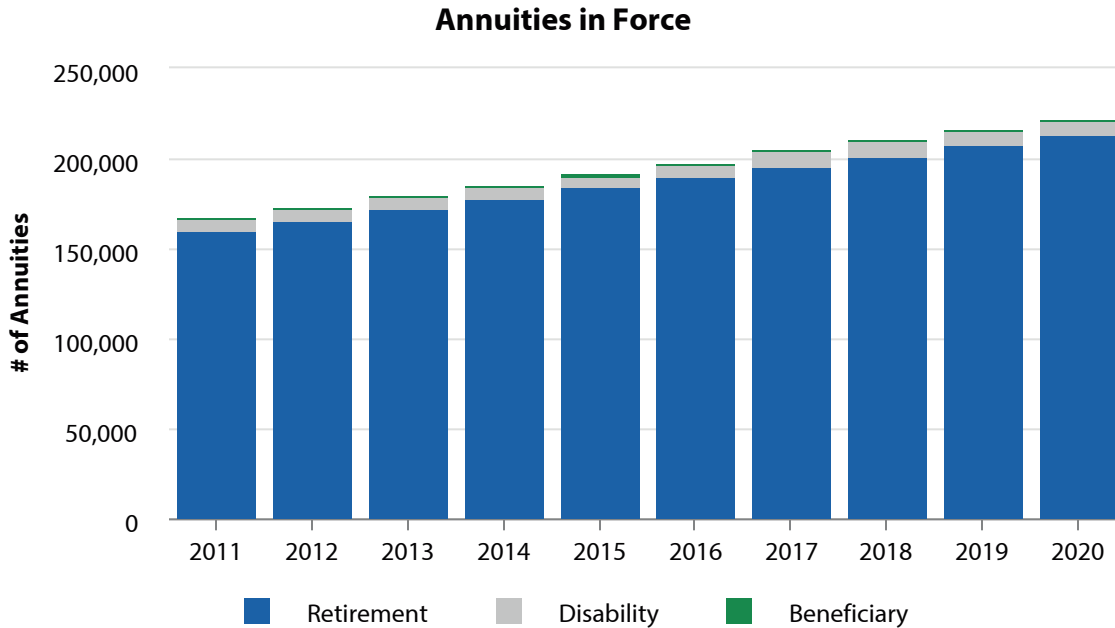
Number of Lump Sum Benefits Paid			
Year	Separation	Death	Retirement
2011	2,979	670	2,929
2012	2,725	556	2,403
2013	3,998	740	3,281
2014	4,061	662	2,987
2015	4,167	855	2,710
2016	4,155	968	2,832
2017	4,250	1,362	3,027
2018	4,497	949	3,445
2019	5,227	991	3,102
2020	4,565	981	5,407





Number of Annuities in Force				
Year	Retirement	Disability <sup>^</sup>	Beneficiary	Totals
2011	160,044	6,201	1,208	167,453
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

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



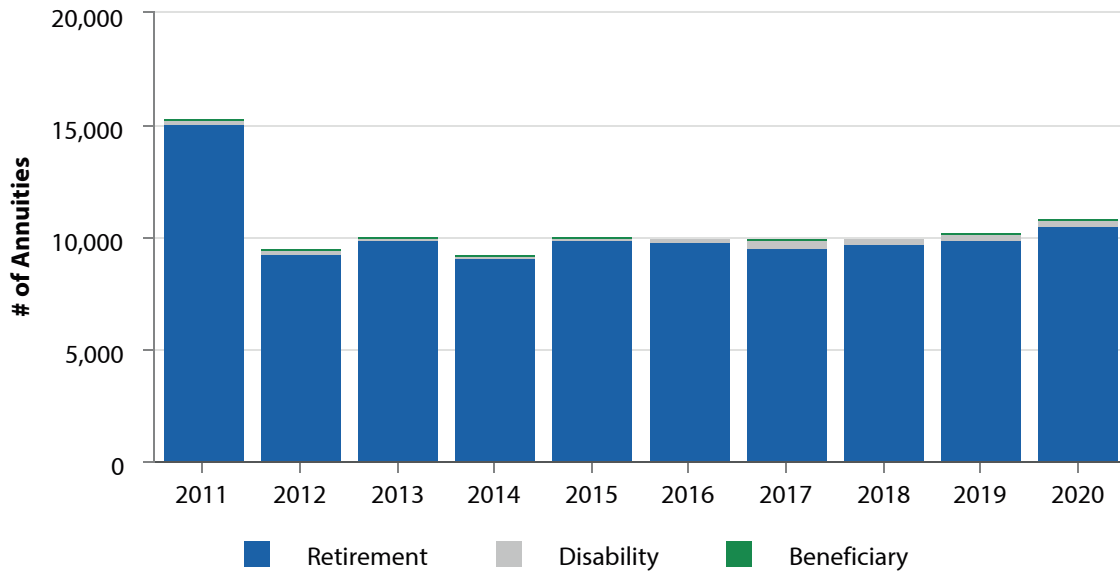


STATISTICAL SECTION

Number of New Annuities Approved				
Year	Retirement	Disability <sup>^</sup>	Beneficiary	Totals
2011	15,096	196	60	15,352
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

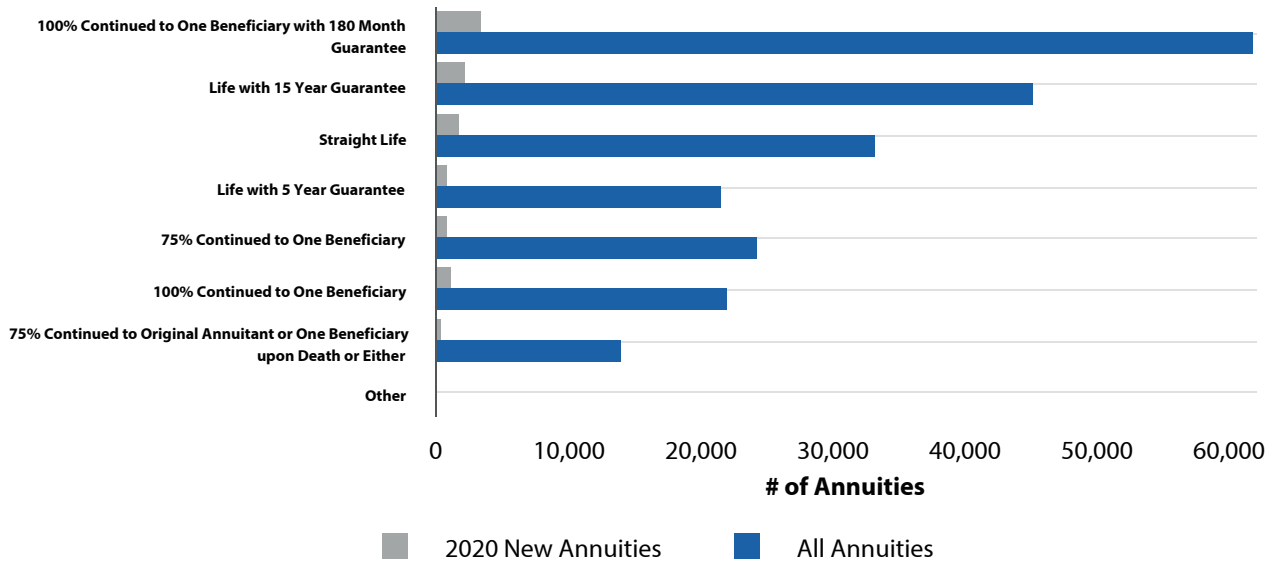
<sup>^</sup>Beginning in 2017, Disability count includes annuities in force for the Long-Term Disability Insurance program.

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	\$ 511	\$ 654	\$ 899	\$ 1,301	\$ 1,871	\$ 2,655	\$ 3,283	\$ 4,213	\$ 5,865	\$ 10,250
Average Final Average Salary	\$ 24,510	\$ 36,371	\$ 41,087	\$ 48,540	\$ 54,751	\$ 60,051	\$ 61,438	\$ 62,765	\$ 66,683	\$ 75,197
Number of Annuitants	7,734	19,954	23,899	26,850	28,698	32,651	41,281	15,572	2,729	299

### 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	28,250	27,078	646	526	4,806	10,907	12,507	30
\$ 500 - 1,000	35,791	33,836	1,280	675	6,779	12,759	16,210	43
\$ 1,000 - 1,500	30,884	28,929	1,562	393	5,311	9,775	15,776	22
\$ 1,500 - 2,000	28,064	26,390	1,473	201	4,156	8,190	15,707	11
\$ 2,000 - 2,500	26,414	25,120	1,169	125	3,383	7,058	15,963	10
\$ 2,500 - 3,000	23,202	22,303	783	116	2,841	5,992	14,363	6
\$ 3,000 - 3,500	18,008	17,368	543	97	2,227	4,594	11,183	4
\$ 3,500 - 4,000	12,708	12,302	350	56	1,537	3,117	8,053	1
\$ 4,000 - 4,500	8,664	8,438	195	31	1,035	2,059	5,569	1
\$ 4,500 - 5,000	5,516	5,389	103	24	620	1,323	3,573	0
Over \$ 5,000	11,296	11,118	93	85	1,342	2,421	7,528	5
<b>Total</b>	<b>228,797</b>	<b>218,271</b>	<b>8,197</b>	<b>2,329</b>	<b>34,037</b>	<b>68,195</b>	<b>126,432</b>	<b>133</b>

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



## STATISTICAL SECTION

### Revenues by Source<sup>1</sup>

(In Thousands)

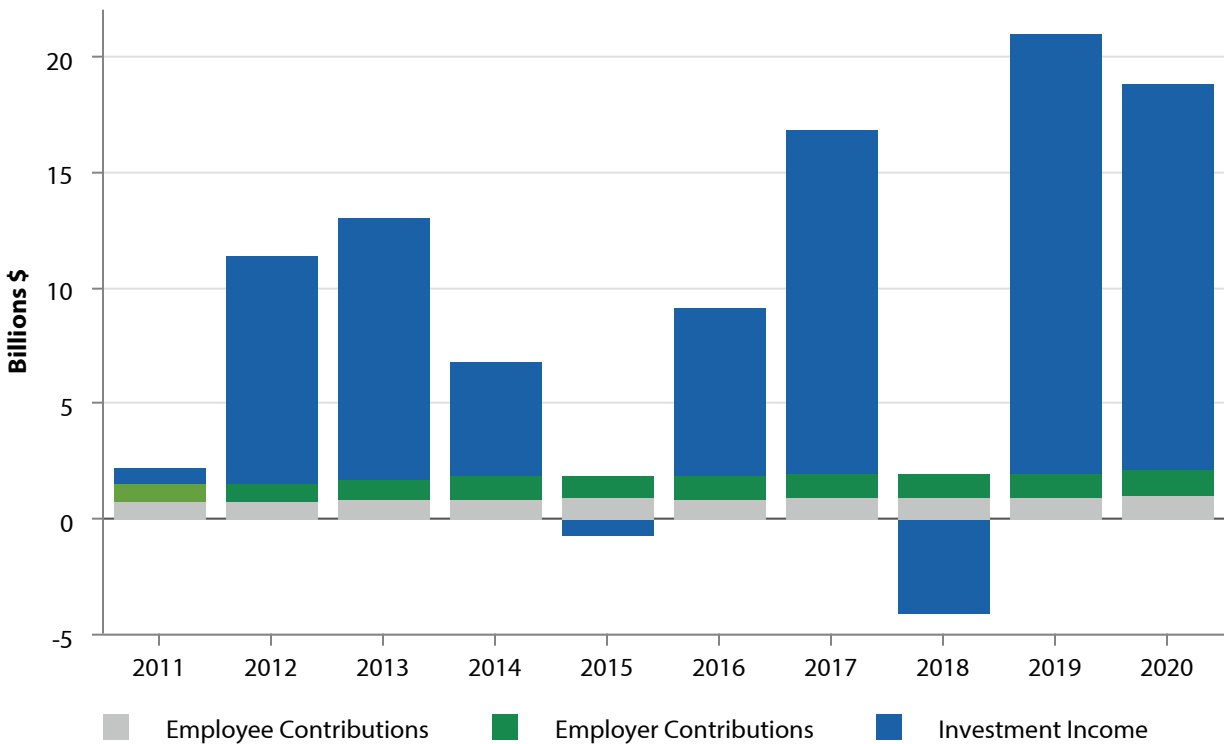
Year	Member Contributions <sup>2</sup>		Employer Contributions <sup>3</sup>		Investment Income	Other Income	Total Revenues
	Dollars	% of Annual Payroll	Dollars	% of Annual Payroll			
2011	\$ 797,856	6.3 %	\$ 789,244	6.2 %	\$ 664,151	\$ 849	\$ 2,252,100
2012	757,151	6.0	799,350	6.3	9,858,710	678	11,415,889
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

<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
2011	\$ 3,941.6	\$ 17.8	\$ 144.4	\$ 33.1	\$ 28.0	\$ 18.6	\$ 0.0	\$ 4,183.5
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

<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	2020			2011		
	Covered Employees	Rank	Percentage of Total System	Covered Employees	Rank	Percentage of Total System
State of Wisconsin	74,632	1	28.8 %	70,391	1	27.4 %
Milwaukee Teachers Retirement System	5,797	2	2.2	5,920	2	2.3
Madison Metro School District	4,292	3	1.7	4,462	3	1.7
Green Bay Area School District	3,053	4	1.2	2,847	6	1.1
City of Madison	2,985	5	1.2	2,993	4	1.2
Kenosha Unified School District	2,705	6	1.0	2,868	5	1.1
Racine Unified School District	2,617	7	1.0	2,683	7	1.0
Dane County	2,459	8	0.9	2,301	8	0.9
Appleton Area School District	1,901	9	0.7	1,698	9	0.7
Brown County	1,526	10	0.6	1,499	13	0.6
All Other	157,282		60.7	159,592		62.0
Total (1,537 employers)	259,249		100.0 %	257,254		100.0 %

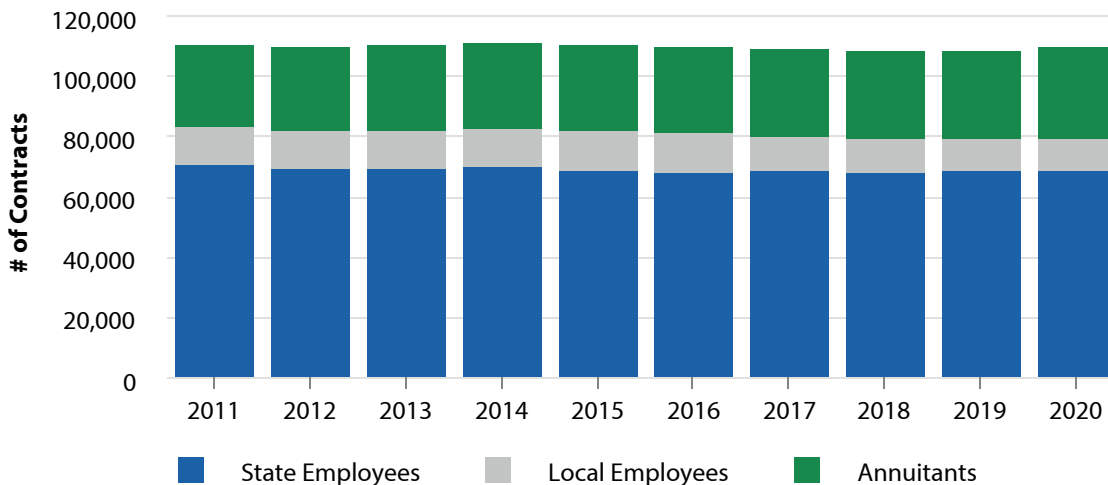


STATISTICAL SECTION

## 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>							
2011	70,656	378	9,126	14,157	1,727	25,010	96,044
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
<b>Local</b>							
2011	12,826	86	2,284	N/A	236	2,520	15,432
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

### 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>							
2011	\$ 1,112,382	\$ 73,166	\$ 130,840	\$ 11,733	\$ 0	\$ 464	\$ 1,328,585
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	0	525	1,438,279
<b>Local</b>							
2011	\$ 205,211	\$ 15,685	N/A	\$ 427	\$ 0	\$ 2	\$ 221,325
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

\* Breakout between employer and employee paid portions of active participant health insurance premiums is not available.



## STATISTICAL SECTION

## Group Life Insurance Program Statistics

Group Life Insurance Premiums Collected (In Thousands)										
Year	Employee					Employer			Totals	
	Basic	Supplemental	Additional	Spouse & Dependent	Total	Basic	Suppl	Total		
<b>State</b>										
2011	\$ 7,302	\$ 4,577	\$ 7,248	\$ 1,275	\$ 20,402	\$3,488	\$ 1,180	\$4,668	\$25,070	
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	
<b>Local</b>										
2011	\$ 10,933	\$ 2,702	\$ 7,761	\$ 1,298	\$ 22,694	\$3,250	\$ 54	\$3,304	\$25,997	
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	



**Group Life Insurance In Force**  
(In Thousands)

Year	Pre-Age 65 Insurance			Post-Age 64 Insurance	Spouse & Dependent	Totals
	Basic	Supplemental	Additional			
<b>State</b>						
2011	\$ 3,296,564	\$ 2,385,886	\$ 3,250,843	\$ 449,897	\$ 567,755	\$ 9,950,945
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
<b>Local</b>						
2011	\$ 4,303,919	\$ 1,364,577	\$ 3,903,476	\$ 296,558	\$ 852,035	\$ 10,720,565
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



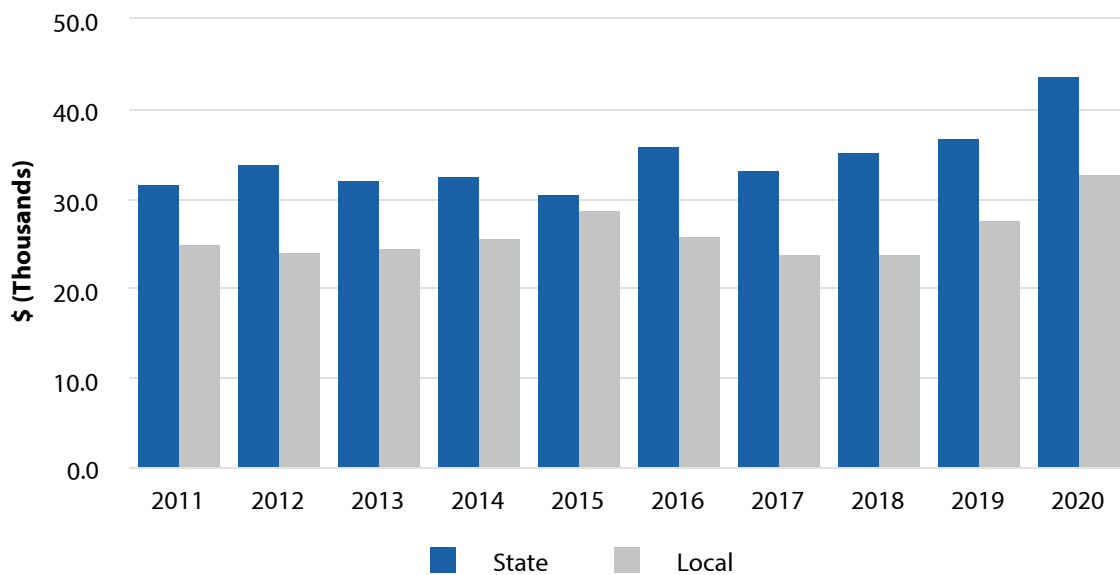
## STATISTICAL SECTION

### 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>							
2011	\$ 16,749	\$ 1,285	\$ 1,184	\$ 9,881	\$ 1,241	\$ 1,211	31,551
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
<b>Local</b>							
2011	\$ 14,646	\$ 1,188	\$ 1,215	\$ 6,141	\$ 1,633	\$ 81	24,904
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

<sup>1</sup> Living Benefits may originate as Pre-Retirement, Post-Retirement or Spouse & Dependent Benefits

### Group Life Insurance Paid Claims

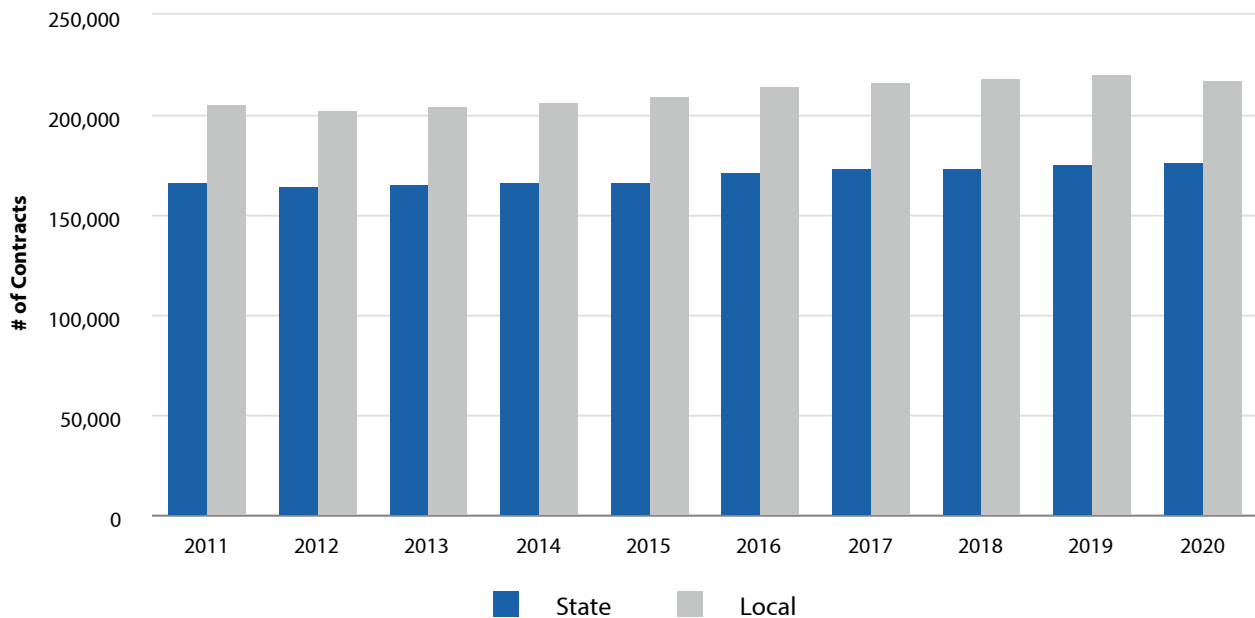




**Group Life Insurance Contracts and Participants**

Year	Pre-Age 65 Insurance			Post-Age 64 Insurance	Spouse & Dependent	Total Contracts	Total Participants
	Basic	Supplemental	Additional				
<b>State</b>							
2011	57,673	41,247	26,503	17,847	23,446	166,716	75,520
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
<b>Local</b>							
2011	85,714	26,155	34,768	23,956	35,036	205,629	109,670
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

**Life Insurance Contracts**





## STATISTICAL SECTION

## Duty Disability Insurance Statistics

(In Millions)

Year	Employers	Active Participants	Disabilitants	Benefit Payments	Contributions	Average Contribution Rate
2011	503	22,352	957	\$ 30	\$ 53	3.98 %
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

## Duty Disability Insurance Funded Status

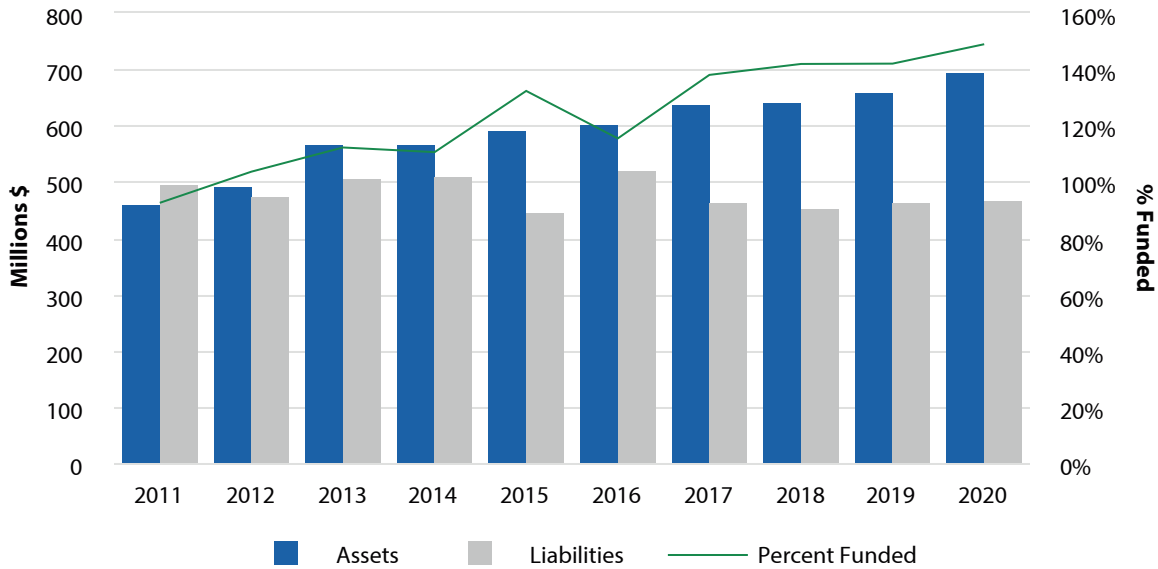
(In Millions)

Year	Assets	Liabilities*	Unfunded (Overfunded) Liability	Percent Funded	Covered Payroll	UAAL as % of Covered Payroll
2011	\$ 461.6	\$ 499.0	\$ 37.4	92.5 %	\$ 1,332.7	2.8 %
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)

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	2020			2011		
	Covered Employees	Rank	Percentage of Total System	Covered Employees	Rank	Percentage of Total System
State of Wisconsin	8,537	1	37.8 %	8,354	1	37.5 %
City of Madison	874	2	3.9	799	2	3.6
Dane County	443	3	2.0	431	3	1.9
City of Green Bay	369	4	1.6	364	4	1.6
City of Kenosha	349	5	1.6	346	5	1.5
City of Racine	275	6	1.2	338	6	1.5
City of West Allis	219	7	1.0	234	8	1.0
City of Waukesha	218	8	1.0	211	9	0.9
City of Oshkosh	205	9	0.9	200	11	0.9
City of Appleton	200	10	0.9	199	10	0.9
All Other	10,818		48.1	10,876		48.7
<b>Total (499 employers)</b>	<b>22,507</b>		<b>100.0 %</b>	<b>22,352</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	89	87	2
\$ 500 - 1,000	67	51	16
\$ 1,000 - 1,500	76	70	6
\$ 1,500 - 2,000	95	90	5
\$ 2,000 - 2,500	105	98	7
\$ 2,500 - 3,000	78	74	4
\$ 3,000 - 3,500	106	102	4
\$ 3,500 - 4,000	120	113	7
\$ 4,000 - 4,500	87	85	2
\$ 4,500 - 5,000	81	79	2
Over \$ 5,000	122	118	4
<b>Total</b>	<b>1,026</b>	<b>967</b>	<b>59</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	\$ 3,362	\$ 3,815	\$ 3,518	\$ 2,997	\$ 2,214	\$ 1,366	\$ 1,003
Average Final Average Salary	\$ 2,706	\$ 3,532	\$ 3,736	\$ 4,121	\$ 4,258	\$ 4,535	\$ 5,407
Number of Annuitants	58	174	215	264	209	96	9

\* This table excludes annuitants for whom years of service data is not available

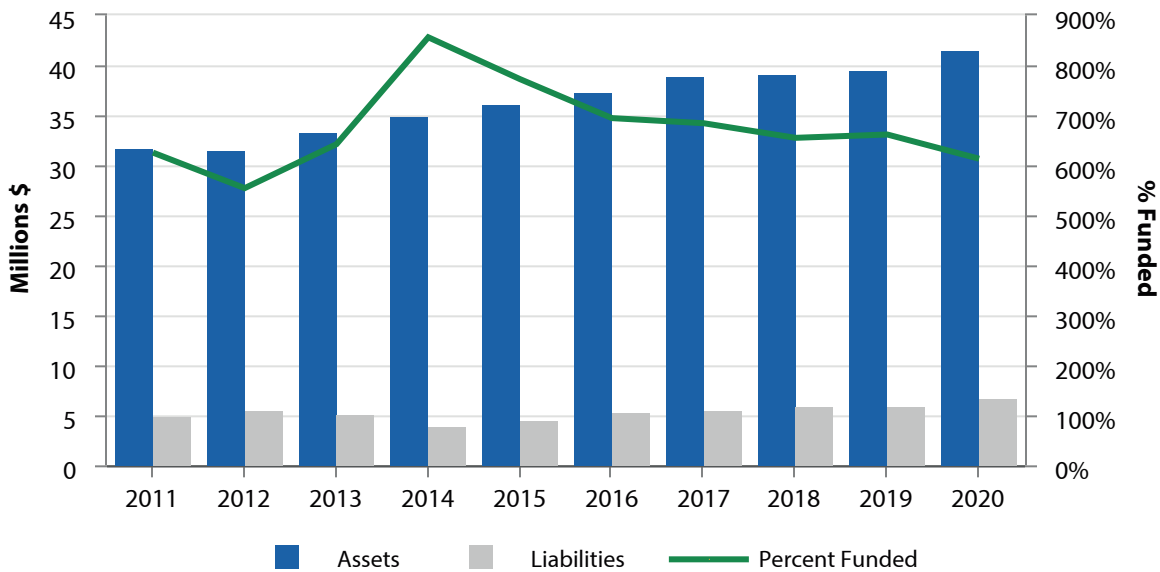


### Local Income Continuation Insurance Program Statistics

(In Millions)

Year	Members	New Claims	Assets	Liabilities	Unfunded (Overfunded) Liability	Funded Ratio
2011	7,878	93	\$ 31.9	\$ 5.1	\$ (26.8)	625.5 %
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

### Local Income Continuation Insurance Funding





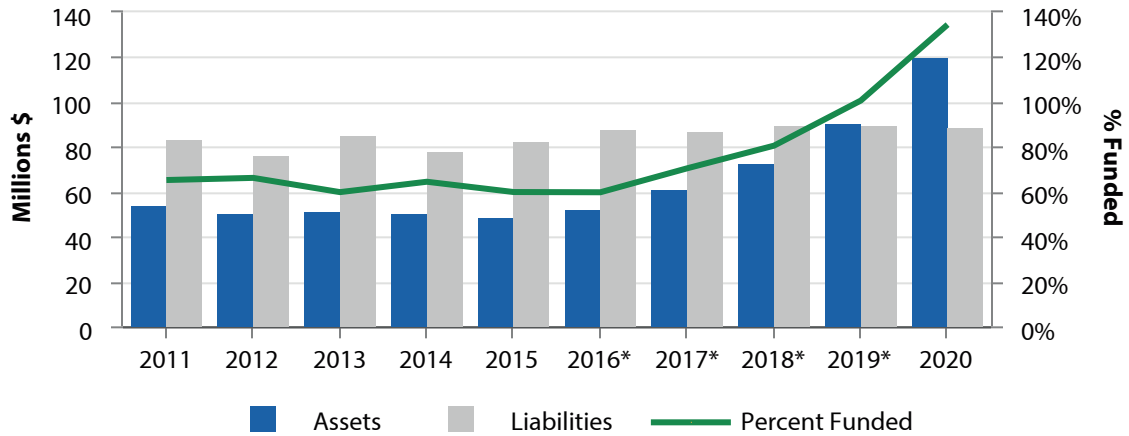
STATISTICAL SECTION

**State Income Continuation Insurance Program Statistics**  
(In Millions)

Year	Members	New Claims	Assets	Liabilities	Unfunded (Overfunded) Liability	Funded Ratio
2011	52,573	1,545	\$ 54.6	\$ 83.7	\$ 29.1	65.2 %
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

\*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
2011	10,723	\$ 13,498,149	\$13,373,269	\$ 124,880	\$ 0	\$ 2,133	\$ 8,476,558	\$8,420,493	\$ 56,065	\$ 0
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

### Salary Reductions and Claims

#### Commuter Benefits - Parking & Transit

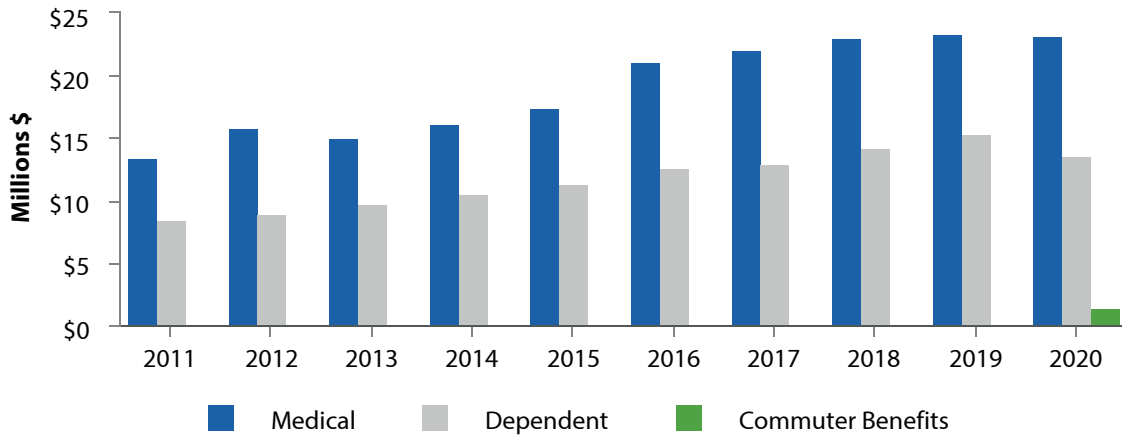
Year	Accounts	Salary Reductions	Claims	Forfeitures	Carryover
2011	—	—	—	—	—
2012	—	—	—	—	—
2013	—	—	—	—	—
2014	—	—	—	—	—
2015	—	—	—	—	—
2016	—	—	—	—	—
2017	—	—	—	—	—
2018	—	—	—	—	—
2019	—	—	—	—	—
2020	2,809	1,465,736	951,585	37,881	780,047

\*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	
2011	\$ 427,725	\$ 10,435	\$ 180,945	\$ 619,105	\$ 681,803	\$ 111,024	\$ 792,827	\$ (173,722)
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)

\*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			
2011	\$ 28,775	\$ 241,413	\$ 682	\$ 77	\$ 2,264	\$ 0	\$ 0	\$ 9,056	\$1,449	\$ 1,692	\$ 2,639	\$ 287,935	
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	

\* Prior to 2016, expense included in Health cost.

^ Prior to 2017, expense included in Health cost.

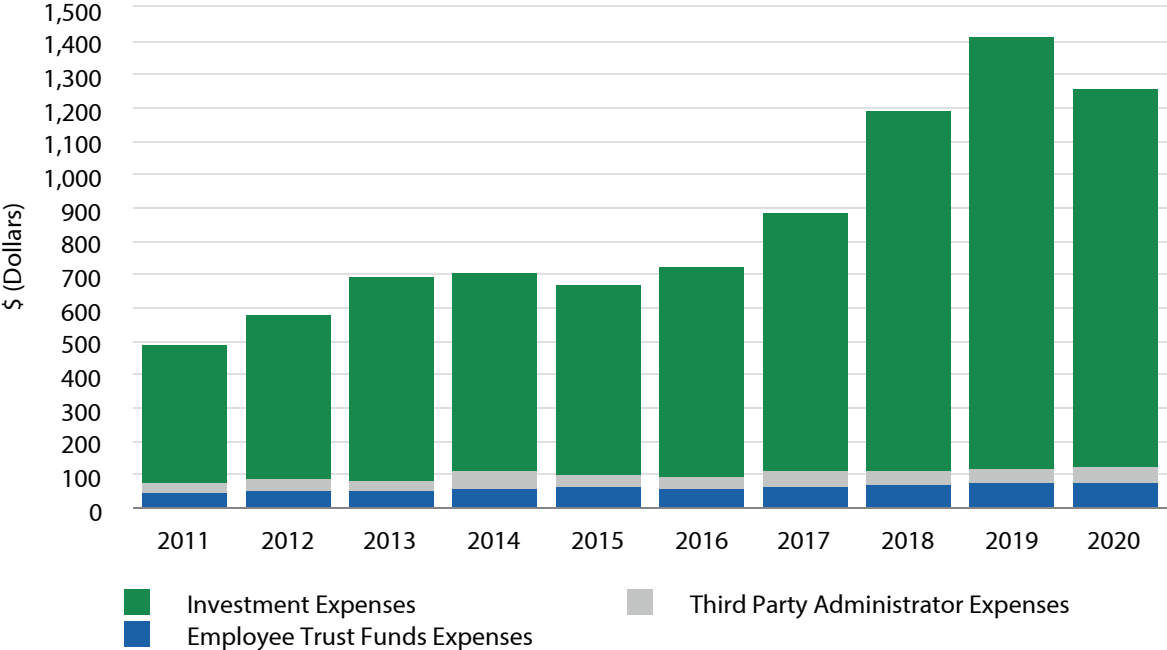
### Administrative Expenses per Participant

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
2011	581,893	\$ 28,664	\$ 49.3	\$ 241,413	\$ 414.9	\$ 17,859	\$ 30.7	\$ 287,936	\$ 494.8
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



STATISTICAL SECTION

Administrative Expenses per Participant



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# ACTUARIAL SECTION





## ACTUARIAL SECTION



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July 8, 2021

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, 2020**

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 2022 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, 2020. 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, 2021  
Page 2

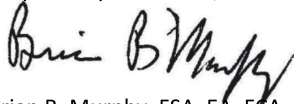
Actuarial valuations are based upon assumptions regarding future activity in specific risk areas including, but not limited to, the rates of investment return and payroll growth, eligibility for the various classes of benefits, and longevity among retired lives. The Board adopts these assumptions after 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, 2020 valuations were based upon assumptions that were recommended in connection with a study of experience covering the 2015-2017 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 2019 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.

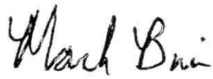
**Based upon the results of the December 31, 2020 valuations, we are pleased to report to the Board that the Wisconsin Retirement System is meeting its basic financial objective and continues to operate in accordance with actuarial principles of level percent of payroll financing.**

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.

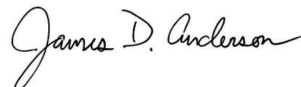
Respectfully submitted,



Brian B. Murphy, FSA, EA, FCA, MAAA, PhD



Mark Buis, FSA, EA, FCA, MAAA



James D. Anderson, FSA, EA, FCA, MAAA

BBM/MB/JDA:sc





## ACTUARIAL SECTION

**WISCONSIN RETIREMENT SYSTEM**  
**ACTUARIAL STATEMENT OF ASSETS AND LIABILITIES**  
(In Millions)

	December 31, 2020	December 31, 2019	Increase (Decrease)
<b>Assets and Employer Obligations</b>			
Net Assets			
Cash, Investments & Receivables			
Less: Payables & Suspense Items			
Core Division	\$ 104,729.6	\$ 97,876.0	\$ 6,853.6
Variable Division	9,529.6	8,648.5	881.1
Totals	<u>114,259.2</u>	<u>106,524.5</u>	<u>7,734.7</u>
Obligations of Employers			
Unfunded Accrued Liability	5.8	8.0	(2.2)
<b>Total Assets</b>	<u>\$ 114,265.0</u>	<u>\$ 106,532.5</u>	<u>\$ 7,732.5</u>
Reserves and Surplus			
Reserves			
Actuarial Present Value of Projected Benefits Payable to Terminated Vested Participants and Active Members:			
Member Normal Contributions	\$ 20,650.1	\$ 19,272.0	\$ 1,378.1
Member Additional Contributions	234.3	215.0	19.3
Employer Contributions	24,620.8	23,387.6	1,233.2
Total Contributions	<u>45,505.2</u>	<u>42,874.6</u>	<u>2,630.6</u>
Actuarial Present Value of Projected Benefits Payable to Current Retirees and Beneficiaries:			
Core Annuities	60,691.1	58,157.0	2,534.1
Variable Annuities	4,383.0	3,728.6	654.4
Total Annuities	<u>65,074.1</u>	<u>61,885.6</u>	<u>3,188.5</u>
Total Reserves	<u>110,579.3</u>	<u>104,760.2</u>	<u>5,819.1</u>
Surplus			
Core Annuity Reserve Surplus	3,114.7	981.4	2,133.3
Variable Annuity Reserve Surplus	571.0	790.9	(219.9)
Total Surplus	<u>3,685.7</u>	<u>1,772.3</u>	<u>1,913.4</u>
<b>Total Reserves and Surplus</b>	<u>\$ 114,265.0</u>	<u>\$ 106,532.5</u>	<u>\$ 7,732.5</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.

<sup>^</sup>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) 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.



## ACTUARIAL SECTION

**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 7.0%.

For determining plan liabilities, the Discount Rate is 5.0% for retired participants, 5.0% for active and inactive participants following retirement, and 7.0% 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 7.0% 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 2.5%.



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 7.0% pre-retirement investment return rate translates to an assumed real rate of return over wage inflation of 4.0%. The assumed real rate of return over price inflation is 4.5% considering an inflation assumption of 2.5%.

**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**

<b>Service</b>	<b>General</b>	<b>University Teachers</b>	<b>Public School Teachers</b>	<b>Protective Occupation With SS</b>	<b>Protective Occupation Without SS</b>	<b>Executive/Elected</b>
1	3.5%	3.0%	5.6%	4.8%	5.5%	2.5%
2	3.5	3.0	5.6	4.8	5.5	2.5
3	3.1	2.9	5.2	4.1	4.7	2.0
4	2.8	2.8	4.7	3.5	3.8	1.6
5	2.5	2.7	4.3	2.8	3.0	1.1
10	1.5	2.2	2.6	1.1	0.9	0.2
15	1.1	1.7	1.4	0.8	0.5	0.2
20	0.9	1.2	0.6	0.7	0.4	0.2
25	0.6	0.9	0.3	0.6	0.3	0.2
30	0.4	0.7	0.2	0.5	0.2	0.2

**» 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 Wisconsin 2018 Mortality Table. The rates in this table were based on actual WRS experience adjusted for future mortality improvements using the MP-2018 fully generated improvement scale (multiplied by 60%). This mortality assumption was adopted by the Board in connection with the 2015-2017 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.



## ACTUARIAL SECTION

**Single Life Retirement Values (Retired Participants)**

Wisconsin 2018 Mortality Table With 5% Interest

Sample Attained Ages	Present Value of \$1 Monthly for Life*		Future Life Expectancy (years)*		Mortality Rates*	
	Males	Females	Males	Females	Males	Females
40	\$ 213.04	\$ 217.69	45.4	48.3	0.100%	0.062%
45	204.74	210.36	40.3	43.2	0.124	0.092
50	194.30	201.24	35.3	38.2	0.161	0.134
55	181.69	190.09	30.4	33.2	0.375	0.241
60	167.45	176.84	25.8	28.4	0.543	0.352
65	150.47	160.89	21.4	23.7	0.832	0.526
70	131.26	141.93	17.1	19.2	1.347	0.870
75	109.81	120.31	13.2	15.0	2.257	1.573
80	87.08	96.94	9.7	11.1	4.138	2.962
85	65.62	73.71	6.8	7.9	7.741	5.961

\*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 2020. For disabled participants, the following table is used:

**Single Life Retirement Values (Disabled Participants)**

Wisconsin 2018 Mortality Table With 5% Interest

Sample Attained Ages	Present Value of \$1 Monthly for Life		Future Life Expectancy (years)		Mortality Rates*	
	Males	Females	Males	Females	Males	Females
40	\$ 199.65	\$ 207.91	37.8	41.8	0.144%	0.103%
45	188.03	198.23	32.8	36.8	0.236	0.154
50	174.63	186.48	28.1	31.9	0.464	0.270
55	158.90	172.41	23.5	27.1	0.626	0.397
60	140.43	155.56	19.1	22.4	1.093	0.614
65	120.05	135.91	15.0	18.0	1.778	1.051
70	98.05	113.95	11.4	13.9	3.063	1.893
75	75.91	90.50	8.2	10.2	5.791	3.568
80	56.28	67.87	5.7	7.1	10.654	7.302
85	40.23	49.64	3.9	4.9	17.198	12.618

\*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	Mortality Rates*	
	Males	Females
20	0.000135	0.000081
25	0.000165	0.000091
30	0.000214	0.000124
35	0.000380	0.000224
40	0.000500	0.000310
45	0.000621	0.000462
50	0.000805	0.000668
55	0.001873	0.001205
60	0.002713	0.001760
65	0.004161	0.002634
70	0.006737	0.004356
75	0.011283	0.007870
80	0.020691	0.014823

*\*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.*



## ACTUARIAL SECTION

**Rates of Retirement for Those Eligible to Retire—Normal Retirement Pattern**

% Retiring Next Year

Age	General		Public School		University		Protective*		Exec.& Elected
	Male	Female	Male	Female	Male	Female	With S.S.	W/O S.S.	
50	0%	0%	0%	0%	0%	0%	6%	2%	0%
51	0	0	0	0	0	0	8	4	0
52	0	0	0	0	0	0	10	4	0
53	0	0	0	0	0	0	25	17	0
54	0	0	0	0	0	0	20	23	0
55	0	0	0	0	0	0	20	25	0
56	0	0	0	0	0	0	20	25	0
57	19	17	33	27	12	15	20	25	8
58	19	17	29	27	12	15	20	33	8
59	19	17	24	27	12	10	20	33	8
60	19	17	25	27	12	12	20	20	20
61	19	17	25	27	12	16	20	20	12
62	26	27	35	37	12	15	30	40	12
63	29	27	32	30	12	20	30	40	12
64	28	27	29	28	12	20	30	40	15
65	30	30	29	37	15	20	40	40	15
66	35	35	35	39	20	24	40	100	15
67	30	30	33	33	20	20	40	100	15
68	19	25	27	30	18	17	40	100	15
69	19	25	23	28	16	17	40	100	20
70	19	25	25	38	20	18	100	100	20
71	19	20	20	20	18	18	100	100	20
72	19	20	15	20	16	18	100	100	20
73	19	20	15	20	16	15	100	100	20
74	19	20	15	20	16	15	100	100	20
75	100	100	100	100	100	100	100	100	100

\*Includes reduced retirements for protective with 20+ years of service.

**Rates of Retirement for Those Eligible to Retire—Early Retirement Pattern**

% Retiring Next Year

Age	General		Public School		University		Exec.& Elected
	Male	Female	Male	Female	Male	Female	
55	8.0%	7.0%	13.0%	12.0%	3.0%	5.0%	3.0%
56	8.0	7.0	13.0	12.0	3.0	5.0	3.0
57	4.8	5.5	12.0	12.0	3.0	5.0	3.0
58	5.7	6.5	13.0	12.0	3.0	5.0	3.0
59	6.8	7.0	14.0	13.0	4.0	5.0	3.0
60	8.5	9.5	14.0	17.0	5.5	9.0	5.0
61	9.0	9.5	15.0	17.0	5.5	9.0	5.0
62	17.0	16.0	21.0	23.0	7.4	12.0	2.0
63	18.0	18.0	21.0	23.0	7.4	12.0	2.0
64	17.0	18.0	21.0	23.0	10.0	15.0	2.0

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.



## ACTUARIAL SECTION

**Assumed Termination Rates**  
**% of Active Participants Terminating**

Age & Service	Protective		Public Schools		University		Exec. & Elected	General	
	With S.S.	W/O S.S.	Male	Female	Male	Female		Male	Female
0	16.0%	4.0%	18.5%	15.0%	16.0%	14.5%	14.0%	17.0%	20.0%
1	9.5	3.5	11.0	11.0	15.0	14.0	13.0	12.3	15.0
2	6.0	1.5	8.0	8.0	13.0	13.0	12.0	9.3	11.5
3	5.0	1.3	6.5	6.0	11.0	10.0	10.0	7.6	10.0
4	4.5	1.1	5.5	5.5	9.0	9.5	10.0	7.5	9.5
5	4.0	1.1	4.0	5.0	8.0	9.0	5.0	5.8	7.8
6	3.8	1.0	3.5	4.0	7.5	7.0	5.0	4.8	7.0
7	3.5	0.9	3.2	3.7	6.0	6.0	5.0	4.7	6.0
8	3.0	0.8	3.0	3.3	5.5	5.0	5.0	4.1	5.7
9	2.5	0.7	2.8	3.0	5.0	4.0	5.0	4.0	5.3
25 10 & Over	2.5	0.7	2.5	2.5	5.0	4.0	5.0	4.0	5.0
30	2.3	0.7	2.2	2.4	4.7	4.0	5.0	3.7	4.7
35	2.0	0.7	1.8	1.9	4.2	4.0	5.0	3.0	3.9
40	1.6	0.6	1.5	1.5	3.4	3.7	5.0	2.4	3.2
45	1.4	0.6	1.4	1.3	2.7	3.2	4.7	2.0	2.7
50	1.2	0.5	1.3	1.2	2.2	2.7	4.2	1.7	2.2
55	1.2	0.5	1.3	1.2	2.0	2.5	4.0	1.6	2.0
60	1.2	0.5	1.3	1.2	2.0	2.5	4.0	1.6	2.0

**Disability Rates**  
**% of Active Participants Becoming Disabled**

Age	Protective		Public Schools		University		Exec. & Elected		General	
	With S.S.	W/O S.S.	Male	Female	Male	Female	Male	Female	Male	Female
20	0.01%	0.03%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
25	0.01	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
30	0.01	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.02
35	0.01	0.03	0.00	0.01	0.00	0.02	0.01	0.01	0.01	0.02
40	0.02	0.04	0.01	0.01	0.00	0.02	0.01	0.01	0.02	0.03
45	0.02	0.08	0.02	0.04	0.01	0.02	0.01	0.01	0.04	0.04
50	0.04	0.46	0.06	0.07	0.01	0.04	0.02	0.02	0.09	0.06
55	0.61	0.34	0.12	0.10	0.04	0.06	0.09	0.09	0.17	0.12
60	1.02	0.10	0.19	0.15	0.06	0.09	0.11	0.11	0.30	0.16



## 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
12/31/2011	1,450	232,518	\$ 10,947.0	\$ 47,080	0.9%
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

## Executive Group and Elected Officials

Valuation Date	Participating Employers	Active Participants	Annual Payroll (In Millions)	Annual Average Pay (\$)	% Increase In Average Pay
12/31/2011	257	1,393	\$ 98.6	\$ 70,802	(0.8)%
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

## Protective with Social Security

Valuation Date	Participating Employers	Active Participants	Annual Payroll (In Millions)	Annual Average Pay (\$)	% Increase In Average Pay
12/31/2011	503	19,610	\$ 1,119.0	\$ 57,065	1.6%
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



## ACTUARIAL SECTION

### Protective Without Social Security

Valuation Date	Participating Employers	Active Participants	Annual Payroll (In Millions)	Annual Average Pay (\$)	% Increase In Average Pay
12/31/2011	57	2,711	\$ 189.5	\$ 69,898	2.0%
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

### All Participants

Valuation Date	Participating Employers	Active Participants	Annual Payroll (In Millions)	Annual Average Pay (\$)	% Increase In Average Pay
12/31/2011	1,480	256,232	\$ 12,354.1	\$ 48,215	1.0%
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



**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
2011	\$ 79,039.3	\$ 78,940.0	99.9%	\$ 99.3	\$ 12,855.6	0.8%
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

**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
2011	\$ 78,940.0	\$ 43,609.4	\$ 14,434.4	\$ 20,995.5	\$ 79,039.3	100.0%	100.0%	99.5%	99.9%
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

## ACTUARIAL SECTION

## 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

	Current Cost	Prior Cost	Employer Total	Employee	BAC	Total
2011	5.1%	0.1%	5.2%	5.0%	1.5%	11.7%
2011*	5.8	0.1	5.9	5.8	0.0	11.7
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

#### Executive Group and Elected Officials

	Current Cost	Prior Cost	Employer Total	Employee	BAC	Total
2011	9.4%	0.0%	9.4%	3.9%	0.0%	13.3%
2011*	6.65	0.0	6.65	6.65	0.0	13.3
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

\* 2011 WI Act 10 adjusted employee and employer contribution rates effective June 28, 2011.

**Protective with Social Security**

	<b>Current Cost</b>	<b>Prior Cost</b>	<b>Duty Disability</b>	<b>Employer Total</b>	<b>Employee</b>	<b>BAC</b>	<b>Total</b>
2011	8.9%	0.0%	4.0%	12.9%	5.8%	0.0%	18.7%
2011*	8.9	0.0	4.0	12.9	5.8	0.0	18.7
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

**Protective without Social Security**

	<b>Current Cost</b>	<b>Prior Cost</b>	<b>Duty Disability</b>	<b>Employer Total</b>	<b>Employee</b>	<b>BAC</b>	<b>Total</b>
2011	12.2%	0.3%	4.0%	16.5%	4.8%	0.0%	21.3%
2011*	11.2	0.3	4.0	15.5	5.8	0.0	21.3
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

\* 2011 WI Act 10 adjusted employee and employer contribution rates effective June 28, 2011

## ACTUARIAL SECTION

## Analysis of Actuarial Experience WRS

### Gains and Losses in Accrued Liabilities During 2020 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.	\$(16.6)	\$(0.1)	\$(14.3)	\$(2.5)	\$(33.5)
<b>Early Retirement</b>					
If fewer members choose early retirement than assumed, there is a loss. If more early retirements, there is a gain.	(18.5)	(0.7)	(3.2)	(0.3)	(22.7)
<b>Death with Benefit</b>					
If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.6)	0.0	(0.2)	0.1	(1.7)
<b>Disability Retirement</b>					
If disability claims are less than assumed, there is a gain. If more claims, a loss.	(6.5)	0.1	(3.4)	(0.7)	(10.5)
<b>Other Separations</b>					
If more liabilities are released by separations than assumed, there is a gain. If smaller releases, a loss.	(32.8)	(0.4)	(6.4)	(0.8)	(40.4)
<b>Salary Increases</b>					
If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	(264.0)	(3.3)	(150.5)	(21.3)	(439.1)
<b>Investment Return</b>					
If there is greater investment income than assumed, there is a gain. If less income, a loss.	1,012.9	4.1	145.7	36.0	1,198.7
<b>Other Activity</b>	(113.3)	(5.5)	(23.6)	(6.6)	(149.0)
<b>Total Gain (Loss)</b>	\$559.6	\$(5.8)	\$(55.9)	\$3.9	\$501.8
<b>% of accrued liability</b>	1.4%	(3.3)%	(1.2)%	0.4%	1.1%

**Changes in Number of Annuities - WRS**

Year	Annuity Type	Beginning	Additions	Deletions	Ending
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>
2011	Retirement	148,380	15,096	3,432	160,044
	Disability	6,194	196	189	6,201
	Beneficiary	1,201	60	53	1,208
	<b>Total</b>	<b>155,775</b>	<b>15,352</b>	<b>3,674</b>	<b>167,453</b>

Beginning in 2018, disability count includes Long-Term Disability Insurance annuities.



**INVESTMENT SECTION**



## INVESTMENT SECTION

## Investments

Prepared by the State of Wisconsin Investment Board

### » MESSAGE FROM THE EXECUTIVE DIRECTOR/CHIEF INVESTMENT OFFICER

The COVID-19 pandemic, and the economic fallout that came with it, made 2020 a year unlike any other. Amidst a great deal of volatility in the financial markets, the State of Wisconsin Investment Board (SWIB) stayed the course and was able to take advantage of market opportunities to generate returns and add tremendous value to the Wisconsin Retirement System (WRS). Through a true team effort, SWIB helped create stability in an otherwise unstable year. That stability allowed SWIB to accomplish several major initiatives in 2020 while positioning portfolios to add value and moving forward key projects started prior to the pandemic.

In mid-March, SWIB shifted to a remote working environment and, without missing a beat, teams across the organization worked to find ways to continue to deliver on key goals and meet new challenges. SWIB delivered exceptional results on multiple fronts, including onboarding new employees, adding new portfolios and technology to continue successful implementation of a sophisticated investment strategy, delivering strong returns, and solidifying the planning process for a new facility.

The Core Fund achieved a net return of 15.2% in 2020, representing outperformance of 106 basis points relative to its benchmark. The Variable Fund, an optional stock-only fund, ended 2020 with a net return of 17.5%. The Core Fund and Variable Fund had assets of over \$120 billion and about \$9.6 billion, respectively, as of December 31, 2020.

While an annual report necessarily focuses mainly on the previous year, it is important to note that SWIB's success, sustained over many years, has helped keep the WRS strong. SWIB's one-, five-, and ten-year returns for the Core Fund all exceed the long-term WRS investment target of 7.0%. When looking over the last 20 years, SWIB's active management and its diversified holdings generated \$34.5 billion for the Core Fund above what SWIB would have earned by simply investing in a low-cost passive portfolio consisting of 60% global equities and 40% domestic bonds.

SWIB has helped fuel one of the only fully funded pension systems in the U.S. during a time when many public pension plans are struggling with underfunding. Investment earnings generated by SWIB comprise about 80% of the revenues needed to fund the WRS, thereby reducing the burden on public employers and employees. The WRS is consistently among the top ten largest public pension funds in the U.S. More than 652,000 current and former state and local government employees and their families count on the WRS for some portion of their retirement security.

SWIB's previous Executive Director/Chief Investment Officer, David Villa, was passionate about SWIB's mission to help public employees retire with dignity. Sadly, David passed away February 13, 2021. I am grateful for the trust the SWIB Board has placed in me and I am eager to build on David's vision for SWIB as we continue to create a world-class investment organization.



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 652,000 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 costs return of 15.2 percent in 2020, which is ahead of its benchmark of 14.2 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 \$120.2 billion as of December 31, 2020, also outperformed its three-, five-, and ten-year benchmarks.

The objective of the Core Fund investment strategy is to earn returns comparable to the actuarial objective of 7.0 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, 2020, was 6.9 percent, which is ahead of its benchmark of 6.6 percent.

## INVESTMENT SECTION

The Variable Fund, an optional, U.S. and international stock fund, ended the year with a net of all costs return of 17.5 percent, compared to its benchmark of 17.9 percent. The Variable Fund's net asset value was approximately \$9.6 billion as of December 31, 2020. As of December 31, 2020, the Variable Fund's 20-year net of external management fees annualized return was 7.1 percent, outperforming the benchmark return of 6.9 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, 2020 are based on actual September 30, 2020 reporting, which has been adjusted to reflect cash flows occurring from October 1, 2020 through December 31, 2020. As a result, the fair value reported is considered an estimate that may significantly differ from the value that could be realized in a secondary market transaction and/or from the amounts 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 properties wholly owned by SWIB 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 ED/CIO 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 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



## INVESTMENT SECTION

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, 2020</b>			
	<b>1-Year Return %</b>	<b>5-Year Return %</b>	<b>10-Year Return %</b>
Core Fund	15.2	10.7	8.5
<i>Benchmark</i>	14.2	10.3	8.1
Public Equities	16.4	12.8	9.9
<i>Aggregated Equities Benchmark</i>	17.1	13.0	9.8
Fixed Income	8.9	5.6	4.3
<i>Aggregated Fixed Income Benchmark</i>	8.7	5.3	4.1
Inflation Sensitive	11.4	5.7	3.5
<i>Aggregated Inflation Sensitive Benchmark</i>	11.0	5.5	3.3
Real Estate	1.1	6.7	11.1
<i>100% ODCE Benchmark (since 1/1/13)</i>	0.5	5.7	9.0
Private Equity/Debt	19.1	14.0	13.4
<i>Aggregated Private Equity Benchmark</i>	11.6	10.7	11.1
Multi Asset	14.9	9.4	7.0
<i>Aggregated Multi Asset Benchmark</i>	14.2	10.6	7.7

<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, 2020</b>			
	<b>1-Year Return %</b>	<b>5-Year Return %</b>	<b>10-Year Return %</b>
Variable Fund	17.5	13.7	11.3
<i>Benchmark</i>	17.9	13.6	11.2
Public Equities	17.5	13.6	11.3
<i>Aggregated Equities Benchmark</i>	17.9	13.6	11.2

<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 ED/CIO, and the Managing Director 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, 2020.



## INVESTMENT SECTION

**Retirement Funds**  
**Asset Allocation Targets and Expected Returns<sup>2</sup>**  
 As of December 31, 2020

<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	51.0 %	7.2 %	4.7 %
Fixed Income	25.0	3.2	0.8
Inflation Sensitive Assets	16.0	2.0	(0.4)
Private Equity/Debt	11.0	10.2	7.6
Real Estate	8.0	5.6	3.1
Multi-Asset	4.0	5.8	3.3
<b>Total Core Fund</b>	<b>115.0 %</b>	<b>6.6 %</b>	<b>4.1 %</b>
<b>Variable Fund Asset Class</b>			
U.S. Equities	70.0 %	6.6 %	4.1 %
International Equities	30.0	7.4	4.9
<b>Total Variable Fund</b>	<b>100.0 %</b>	<b>7.1 %</b>	<b>4.6 %</b>

<sup>1</sup> New England Pension Consultants Long Term U.S. CPI (Inflation) Forecast: 2.4%

<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, 2020</b>				
<b>(In Thousands)</b>				
<b>Issuer</b>	<b>Shares</b>	<b>Fair Value</b>	<b>% of Total Equities</b>	
APPLE INC	14,159,529	\$ 1,878,828	2.61 %	
MICROSOFT CORP	7,028,370	1,563,250	2.17	
AMAZON.COM INC	408,082	1,329,095	1.84	
ALPHABET INC	624,008	1,093,433	1.52	
FACEBOOK INC	2,297,151	627,490	0.87	
TESLA INC	617,448	435,715	0.60	
VISA INC	1,787,362	390,950	0.54	
UNITEDHEALTH GROUP INC	1,084,640	380,362	0.53	
NESTLE SA	3,223,136	380,162	0.53	
PROCTER & GAMBLE CO/ THE	2,449,374	340,806	0.47	

<b>WRS Largest Fixed Income Holdings</b>					
<b>As of December 31, 2020</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	\$ 809,242	1.94 %	
U.S. TREAS-CPI INFLAT	0.125	1/15/2023	768,643	1.84	
U.S. TREAS-CPI INFLAT	0.375	7/15/2023	747,007	1.79	
U.S. TREAS-CPI INFLAT	0.125	7/15/2030	691,301	1.66	
U.S. TREAS-CPI INFLAT	0.250	1/15/2025	688,560	1.65	
U.S. TREAS-CPI INFLAT	0.625	1/15/2024	667,851	1.60	
U.S. TREAS-CPI INFLAT	0.125	7/15/2024	617,346	1.48	
U.S. TREAS-CPI INFLAT	0.625	4/15/2023	593,872	1.42	
U.S. TREAS-CPI INFLAT	0.125	7/15/2022	593,343	1.42	
U.S. TREAS-CPI INFLAT	0.375	1/15/2027	576,580	1.38	

<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, 2020</b>			
(In Thousands)			
	<b>Core Fund</b>		<b>Variable Fund</b>
Investment Income (Loss)	\$ 16,603,027	\$	1,434,579
Less:			
Investment Operating Expense*	208,228		45
Internal Operating Expense*	60,380		2,256
Custodial, Bank Fees & Operating Services*	5,011		440
Professional Services Expenses*	31,821		944
External Investment Management Fees*	427,099		5,337
Securities Lending Fees	2,315		481
<b>Net Investment Income (Loss)</b>	<b>\$ 15,868,173</b>	<b>\$</b>	<b>1,425,076</b>

\* These expenses are combined and reported as "Investment Expense" on the Schedule of Changes in Fiduciary Net Position

Investment expenses include most transaction related expenses, external management fees, and expenses for 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 include internal operating expenses, legal fees, custodial bank fees, research and data services, and investment consulting fees.



**» INVESTMENT SUMMARY**
**Core Fund Summary of Investments by Asset Type<sup>1</sup>**
**As of December 31, 2020**

(In Thousands)

<b>Asset Type</b>	<b>Fair Value</b>	<b>% of Total Investments</b>
Equities	\$ 62,940,541	48.6 %
Fixed Income	42,385,338	32.7
Limited Partnerships	16,889,530	13.0
Multi Asset	5,967,126	4.6
Real Estate	1,379,939	1.1
Preferred Securities	581,500	0.4
Convertible Securities	1,156	0.0
To Be Announced Securities	(685,009)	(0.5)
Foreign Currency Contracts	15,060	0.0
Option Contracts	(8,402)	0.0
Futures Contracts	30,252	0.0
Swaps	107,239	0.1
<b>Total Core Fund Investments</b>	<b>\$ 129,604,270</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, 2020**

(In Thousands)

<b>Asset Type</b>	<b>Fair Value</b>	<b>% of Total Investments</b>
Equities	\$ 9,406,683	99.7 %
Preferred Securities	26,171	0.3
Foreign Currency Contracts	71	0.0
Futures Contracts	1,969	0.0
<b>Total Variable Fund Investments</b>	<b>\$ 9,434,894</b>	<b>100.0 %</b>



**CONTRIBUTIONS PAID  
AND EMPLOYER  
UNFUNDED LIABILITY  
BALANCES**



## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
<b>State Agencies</b>					
ADMINISTRATION, DEPT OF	\$ 97,367,487	\$ 7,895,559	\$ 6,574,831	\$ 14,470,390	\$ 0
AGRIC TRADE CONS PROT, DEPT OF	39,901,337	3,172,171	2,693,338	5,865,509	0
BD FOR PEOPLE WITH DEVELOP DIS	586,087	46,594	39,561	86,155	0
BOARD AGING & LONG TERM CARE	1,991,416	158,320	134,419	292,739	0
BRD OF COMMSRS OF PUBLIC LANDS	739,724	58,808	49,931	108,739	0
CHILDREN & FAMILIES, DEPT OF	49,707,064	3,951,791	3,355,282	7,307,073	0
CORRECTIONS, DEPT OF	579,978,449	64,841,274	39,153,501	103,994,775	0
COURTS - STATE	80,216,469	6,377,273	5,414,580	11,791,853	0
DISTRICT ATTORNEYS	39,974,103	3,177,955	2,698,251	5,876,206	0
EDUCATIONAL COMMUNICATIONS BD	3,240,515	257,622	218,734	476,356	0
ELECTIONS COMMISSION	2,236,608	177,811	150,971	328,782	0
EMPLOYEE TRUST FUNDS, DEPT OF	19,562,676	1,555,239	1,320,482	2,875,721	0
EMPLOYMENT RELATIONS COMM	526,036	41,820	35,507	77,327	0
ETHICS COMMISSION	566,858	45,066	38,263	83,329	0
EXECUTIVE OFFICE	2,349,559	186,791	158,595	345,386	0
FINANCIAL INSTITUTIONS, DEPT	9,639,522	766,345	650,668	1,417,013	0
HEALTH SERVICES, DEPT OF	380,622,477	33,931,034	25,695,635	59,626,669	0
HIGHER EDUCATIONAL AIDS BOARD	544,202	43,264	36,733	79,997	0
HISTORICAL SOCIETY - STATE	9,677,316	769,350	653,221	1,422,571	0
INSURANCE COMMISSIONR'S OFFICE	9,168,748	728,920	618,889	1,347,809	0
INVESTMENT BOARD	39,034,754	3,104,230	2,635,655	5,739,885	0
JUDICIAL COMMISSION	146,835	11,673	9,911	21,584	0
JUSTICE, DEPT OF	56,506,557	5,077,930	3,814,195	8,892,125	0
KICKAPOO RESERVE MANGMT BD	272,374	21,654	18,385	40,039	0
LABOR & INDUSTRY REVIEW COMM	1,429,159	113,619	96,468	210,087	0
LEGIS ASSEMBLY - CHIEF CLERK	16,106,511	1,282,739	1,088,846	2,371,585	0
LEGISLATIVE AUDIT BUREAU	5,339,813	424,516	360,438	784,954	0
LEGISLATIVE COUNCIL STAFF	2,187,777	173,929	147,675	321,604	0
LEGISLATIVE FISCAL BUREAU	2,386,787	189,750	161,108	350,858	0
LEGISLATIVE REFERENCE BUREAU	3,395,441	269,938	229,193	499,131	0
LEGISLATIVE TECH SERV BUREAU	3,024,653	240,460	204,164	444,624	0
LEGISLATURE - SENATE	11,490,723	913,513	775,626	1,689,139	0
LIEUTENANT GOVERNOR'S OFFICE	310,514	24,686	20,960	45,646	0
LOWER WIS. STATE RIVERWAY BD.	139,245	11,070	9,399	20,469	0
MILITARY AFFAIRS, DEPT OF	28,554,685	2,648,704	1,927,278	4,575,982	0
NATURAL RESOURCES, DEPT OF	167,171,113	14,841,531	11,284,619	26,126,150	0
PUBLIC DEFENDER'S OFFICE	40,287,042	3,212,562	2,727,608	5,940,170	0
PUBLIC INSTRUCTION, DEPT OF	39,335,156	3,127,293	2,655,235	5,782,528	0
PUBLIC SERVICE COMMISSION	10,696,393	850,367	722,006	1,572,373	0
REVENUE, DEPT OF	72,936,845	5,842,616	4,924,356	10,766,972	0
SAFETY & PROFESS SVCES, DEPT	14,308,532	1,138,472	966,614	2,105,086	0
SECRETARY OF STATE'S OFFICE	184,032	14,631	12,422	27,053	0
STATE FAIR PARK BOARD	4,769,952	388,345	322,228	710,573	0
TOURISM, DEPARTMENT OF	2,031,316	161,490	137,114	298,604	0
TRANSPORTATION, DEPT OF	207,318,665	20,060,370	13,012,082	33,072,452	0
TREASURER'S OFFICE - STATE	76,737	6,101	5,180	11,281	0
VETERANS AFFAIRS, DEPT OF	53,377,125	4,266,322	3,602,377	7,868,699	0



Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
WIS TECH COLLEGE SYS BOARD	\$ 4,208,525	\$ 334,579	\$ 284,075	\$ 618,654	\$ 0
WISCONSIN ECON DEVELOP CORP	8,872,595	602,411	595,389	1,197,800	0
WORKFORCE DEVELOPMENT, DEPT OF	87,980,442	6,994,477	5,938,680	12,933,157	0
Total State Agencies (50)	\$ 2,212,476,951	\$ 204,532,985	\$ 148,380,678	\$ 352,913,663	\$ 0
UNIVERSITY OF WISCONSIN SYSTEM	\$ 2,197,452,793	\$ 175,578,592	\$ 148,365,708	\$ 323,944,300	\$ 0
<b>Public Authorities</b>					
BEYOND VISION*	\$ 3,322,941	\$ 284,113	\$ 224,298	\$ 508,411	\$ 574,528
FOX RIVER NAVIGATION SYS AUTH	150,741	12,998	9,161	22,159	0
HEALTH & EDUC FACILITIES AUTH	371,202	50,112	—	50,112	0
HOUSING & ECON DEVELOP AUTH	12,346,825	981,576	833,412	1,814,988	0
UW HOSPITAL AUTHORITY	601,649,615	47,953,147	40,489,837	88,442,984	0
Total Public Authorities (5)	\$ 617,841,324	\$ 49,281,946	\$ 41,556,708	\$ 90,838,654	\$ 574,528
Total State of Wisconsin (56)	\$ 5,027,771,068	\$ 429,393,523	\$ 338,303,094	\$ 767,696,617	\$ 574,528

\*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	\$ 597,264	\$ 40,316	\$ 40,316	\$ 80,632	\$ 0
ADAMS, CITY OF	577,290	47,194	38,967	86,161	71,379
ALGOMA, CITY OF	3,511,291	253,235	237,012	490,247	0
ALMA, CITY OF	304,033	20,522	20,522	41,044	48,067
ALTOONA, CITY OF	2,802,006	249,006	189,135	438,141	0
AMERY, CITY OF	1,380,868	114,640	93,209	207,849	0
ANTIGO, CITY OF	4,670,846	476,109	315,282	791,391	0
APPLETON, CITY OF	44,636,757	4,292,202	3,012,963	7,305,165	0
ARCADIA, CITY OF	1,670,896	133,892	104,086	237,978	0
ASHLAND, CITY OF	5,704,185	647,536	336,064	983,600	0
AUGUSTA, CITY OF	611,944	55,026	37,364	92,390	0
BARABOO, CITY OF	6,340,291	630,447	337,883	968,330	0
BARRON, CITY OF	1,869,379	146,642	126,183	272,825	0
BAYFIELD, CITY OF	703,660	56,508	47,497	104,005	0
BEAVER DAM, CITY OF	8,193,994	856,403	553,094	1,409,497	2,595,570
BELOIT, CITY OF	23,653,014	2,460,899	1,598,622	4,059,521	0
BERLIN, CITY OF	2,372,020	193,635	160,857	354,492	0
BLACK RIVER FALLS, CITY OF	2,733,369	213,328	184,503	397,831	0
BLAIR, CITY OF	402,182	32,131	27,147	59,278	0
BLOOMER, CITY OF	471,445	69,548	17,623	87,171	0
BOSCOBEL, CITY OF	1,676,499	133,015	113,164	246,179	0
BRILLION, CITY OF	1,114,310	104,048	75,216	179,264	0
BRODHEAD, CITY OF	1,492,309	122,314	100,725	223,039	0
BROOKFIELD, CITY OF	27,642,864	2,838,325	1,866,018	4,704,343	0
BUFFALO CITY, CITY OF	68,461	4,621	4,621	9,242	0
BURLINGTON, CITY OF	5,129,715	496,332	346,255	842,587	0
CEDARBURG, CITY OF	6,898,852	556,987	465,673	1,022,660	0
CHETEK, CITY OF	260,483	41,878	6,285	48,163	0
CHILTON, CITY OF	1,388,635	119,117	93,733	212,850	0
CHIPPEWA FALLS, CITY OF	7,181,266	883,786	360,020	1,243,806	0
CLINTONVILLE, CITY OF	2,792,280	228,060	188,479	416,539	0
COLBY, CITY OF	444,637	30,013	30,013	60,026	0
COLUMBUS, CITY OF	2,756,065	227,151	174,744	401,895	0
CORNELL, CITY OF	619,940	50,186	41,846	92,032	0
CRANDON, CITY OF	678,147	58,783	41,757	100,540	0
CUBA CITY, CITY OF	763,438	62,906	51,532	114,438	0
CUDAHY, CITY OF	9,070,776	959,915	612,551	1,572,466	0
CUMBERLAND, CITY OF	966,861	87,774	64,967	152,741	0
DARLINGTON, CITY OF	976,567	85,750	60,839	146,589	0
DE PERE, CITY OF	11,200,081	1,156,893	756,005	1,912,898	0
DELAFIELD, CITY OF	2,972,353	271,293	200,633	471,926	0
DELAVAN, CITY OF	3,802,680	380,014	215,778	595,792	0
DODGEVILLE, CITY OF	1,866,323	161,263	125,977	287,240	0
DURAND, CITY OF	685,088	57,547	46,243	103,790	0
EAGLE RIVER, CITY OF	1,805,416	144,746	121,866	266,612	0
EAU CLAIRE, CITY OF	36,373,804	3,570,030	2,456,700	6,026,730	0
EDGERTON, CITY OF	1,896,810	161,003	128,035	289,038	0



Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
ELKHORN, CITY OF	3,929,872	328,327	265,267	593,594	0
ELROY, CITY OF	789,714	61,176	53,306	114,482	0
EVANSVILLE, CITY OF	2,564,075	207,485	173,073	380,558	0
FENNIMORE, CITY OF	1,417,799	113,534	95,702	209,236	0
FITCHBURG, CITY OF	13,000,957	1,180,365	877,715	2,058,080	0
FOND DU LAC, CITY OF	23,684,460	2,651,922	1,473,327	4,125,249	0
FORT ATKINSON, CITY OF	5,185,422	456,102	347,125	803,227	0
FOUNTAIN CITY, CITY OF	204,558	13,810	13,805	27,615	0
FOX LAKE, CITY OF	574,624	44,323	38,787	83,110	0
FRANKLIN, CITY OF	15,176,375	1,568,172	1,024,404	2,592,576	0
GALESVILLE, CITY OF	594,330	47,093	36,444	83,537	0
GILLETT, CITY OF	544,869	46,733	36,777	83,510	0
GLENDALE, CITY OF	5,733,352	621,540	387,001	1,008,541	0
GLENWOOD CITY, CITY OF	402,781	32,790	27,188	59,978	0
GREEN BAY, CITY OF	64,488,737	6,798,078	4,352,975	11,151,053	0
GREEN LAKE, CITY OF	649,198	63,629	33,842	97,471	0
GREENFIELD, CITY OF	17,495,793	1,730,733	1,181,341	2,912,074	0
GREENWOOD, CITY OF	521,054	50,109	28,042	78,151	0
HARTFORD, CITY OF	8,292,627	690,310	559,976	1,250,286	0
HAYWARD, CITY OF	877,489	79,954	59,231	139,185	0
HILLSBORO, CITY OF	578,487	45,332	39,048	84,380	0
HORICON, CITY OF	1,434,208	126,011	96,809	222,820	0
HUDSON, CITY OF	6,345,452	614,902	364,067	978,969	0
HURLEY, CITY OF	1,001,661	87,685	67,441	155,126	0
INDEPENDENCE, CITY OF	468,486	40,516	31,623	72,139	11,494
JANESVILLE, CITY OF	34,629,837	3,547,695	2,337,513	5,885,208	0
JEFFERSON, CITY OF	4,290,831	338,232	289,631	627,863	0
JUNEAU, CITY OF	1,272,023	104,127	79,307	183,434	0
KAUKAUNA, CITY OF	12,302,169	1,086,289	829,058	1,915,347	0
KENOSHA, CITY OF	59,343,871	6,256,491	3,980,226	10,236,717	0
KEWAUNEE, CITY OF	1,158,638	99,272	76,135	175,407	0
KIEL, CITY OF	1,973,912	160,196	133,239	293,435	0
LA CROSSE, CITY OF	36,278,721	3,719,055	2,169,600	5,888,655	0
LADYSMITH, CITY OF	1,796,127	146,169	120,091	266,260	0
LAKE GENEVA, CITY OF	5,657,923	600,631	285,628	886,259	0
LAKE MILLS, CITY OF	3,415,473	271,811	230,545	502,356	0
LANCASTER, CITY OF	1,573,405	129,518	106,205	235,723	0
LODI, CITY OF	1,534,150	121,015	103,555	224,570	0
LOYAL, CITY OF	454,034	40,249	30,647	70,896	12,091
MADISON, CITY OF	226,971,325	21,530,670	15,320,810	36,851,480	0
MANAWA, CITY OF	564,417	46,761	38,098	84,859	93,951
MANITOWOC, CITY OF	23,759,770	2,228,643	1,604,436	3,833,079	0
MARINETTE, CITY OF	6,139,314	742,708	288,544	1,031,252	0
MARION, CITY OF	461,286	42,136	31,137	73,273	0
MARKESAN, CITY OF	530,380	46,797	35,801	82,598	0
MARSHFIELD, CITY OF	12,730,862	1,324,071	872,075	2,196,146	0
MAUSTON, CITY OF	1,835,842	158,044	123,919	281,963	0
MAYVILLE, CITY OF	1,841,932	153,579	123,506	277,085	0



## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
MEDFORD, CITY OF	2,272,814	183,722	153,415	337,137	0
MELLEN, CITY OF	394,318	31,473	26,406	57,879	0
MENASHA, CITY OF	10,343,127	1,072,832	698,162	1,770,994	0
MENOMONIE, CITY OF	7,981,957	920,492	478,711	1,399,203	0
MEQUON, CITY OF	8,806,723	808,367	594,452	1,402,819	0
MERRILL, CITY OF	7,389,371	760,565	498,809	1,259,374	0
MIDDLETON, CITY OF	11,116,057	975,497	750,334	1,725,831	0
MILTON, CITY OF	2,336,003	197,071	157,681	354,752	0
MINERAL POINT, CITY OF	972,009	83,357	65,611	148,968	0
MONDOVI, CITY OF	839,027	72,659	53,728	126,387	0
MONONA, CITY OF	5,014,948	462,700	335,048	797,748	0
MONROE, CITY OF	4,918,966	424,481	331,997	756,478	0
MONTELLO, CITY OF	363,216	24,517	24,517	49,034	49,758
MONTREAL, CITY OF	182,080	12,290	12,290	24,580	0
MOSINEE, CITY OF	1,243,995	110,305	83,868	194,173	0
MUSKEGO, CITY OF	7,855,869	705,458	530,271	1,235,729	0
NEENAH, CITY OF	14,842,458	1,515,541	1,001,866	2,517,407	0
NEILLSVILLE, CITY OF	1,063,199	87,079	71,766	158,845	0
NEKOOSA, CITY OF	1,576,773	149,031	90,641	239,672	0
NEW BERLIN, CITY OF	17,748,853	1,710,103	1,198,049	2,908,152	0
NEW HOLSTEIN, CITY OF	2,059,121	164,224	140,146	304,370	0
NEW LISBON, CITY OF	860,913	69,703	58,112	127,815	0
NEW LONDON, CITY OF	4,404,916	364,580	297,332	661,912	0
NEW RICHMOND, CITY OF	5,279,331	439,671	356,354	796,025	0
NIAGARA, CITY OF	679,616	67,692	33,822	101,514	0
OAK CREEK, CITY OF	21,581,422	2,049,113	1,456,835	3,505,948	0
OCONOMOWOC, CITY OF	9,132,036	715,182	616,412	1,331,594	0
OCONTO FALLS, CITY OF	1,640,973	135,942	110,766	246,708	0
OCONTO, CITY OF	2,645,161	299,242	189,191	488,433	0
OMRO, CITY OF	1,310,946	111,294	88,489	199,783	0
ONALASKA, CITY OF	6,604,464	727,365	353,638	1,081,003	0
OSHKOSH, CITY OF	39,367,937	3,951,811	2,657,387	6,609,198	0
OSSEO, CITY OF	624,758	53,840	42,171	96,011	0
OWEN, CITY OF	438,973	35,281	29,631	64,912	0
PARK FALLS, CITY OF	1,237,238	105,407	82,203	187,610	0
PESHTIGO, CITY OF	366,234	55,749	11,968	67,717	0
PHILLIPS, CITY OF	834,587	73,690	51,316	125,006	0
PITTSVILLE, CITY OF	78,502	9,216	5,299	14,515	0
PLATTEVILLE, CITY OF	4,396,226	364,424	296,943	661,367	0
PLYMOUTH, CITY OF	4,534,352	369,820	306,069	675,889	0
PORT WASHINGTON, CITY OF	5,592,703	477,241	377,504	854,745	0
PORTAGE, CITY OF	4,781,123	448,362	322,725	771,087	0
PRAIRIE DU CHIEN, CITY OF	2,112,092	214,366	110,686	325,052	0
PRESCOTT, CITY OF	1,535,914	138,317	103,674	241,991	0
PRINCETON, CITY OF	621,299	54,872	41,938	96,810	0
RACINE, CITY OF	57,250,278	5,962,305	3,864,387	9,826,692	0
REEDSBURG, CITY OF	6,560,275	524,441	442,957	967,398	0
RHINELANDER, CITY OF	5,653,116	595,921	381,586	977,507	0





Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
RICE LAKE, CITY OF	5,946,564	572,746	399,836	972,582	0
RICHLAND CENTER, CITY OF	2,985,268	236,194	201,505	437,699	0
RIPON, CITY OF	3,374,316	294,000	210,237	504,237	0
RIVER FALLS, CITY OF	8,662,506	680,061	584,164	1,264,225	0
SCHOFIELD, CITY OF	487,407	32,900	32,900	65,800	0
SEYMOUR, CITY OF	1,153,072	96,564	77,832	174,396	0
SHAWANO, CITY OF	3,678,276	324,667	248,322	572,989	0
SHEBOYGAN FALLS, CITY OF	3,012,332	295,771	169,300	465,071	0
SHEBOYGAN, CITY OF	28,441,105	2,769,651	1,920,210	4,689,861	0
SHELL LAKE, CITY OF	590,733	48,358	39,875	88,233	0
SHULLSBURG, CITY OF	438,594	32,828	29,605	62,433	0
SOUTH MILWAUKEE, CITY OF	10,260,075	1,133,845	692,555	1,826,400	0
SPARTA, CITY OF	3,685,330	327,607	245,563	573,170	0
SPOONER, CITY OF	1,644,297	145,342	97,855	243,197	0
ST CROIX FALLS, CITY OF	977,948	102,145	49,845	151,990	0
ST FRANCIS, CITY OF	4,892,774	585,837	330,262	916,099	0
STANLEY, CITY OF	805,558	83,904	40,416	124,320	0
STEVENS POINT, CITY OF	15,177,721	1,575,633	1,047,629	2,623,262	0
STOUGHTON, CITY OF	7,015,788	563,118	473,566	1,036,684	0
STURGEON BAY, CITY OF	6,286,298	617,398	424,325	1,041,723	0
SUN PRAIRIE, CITY OF	13,818,277	1,212,675	934,063	2,146,738	0
SUPERIOR, CITY OF	17,386,895	1,747,010	1,173,615	2,920,625	0
THORP, CITY OF	481,505	40,066	32,226	72,292	0
TOMAH, CITY OF	5,397,611	543,220	310,699	853,919	0
TOMAHAWK, CITY OF	1,709,628	148,970	111,515	260,485	0
TWO RIVERS, CITY OF	8,722,183	899,533	588,748	1,488,281	0
VERONA, CITY OF	6,234,971	556,609	420,860	977,469	0
VIROQUA, CITY OF	1,986,652	167,412	132,885	300,297	0
WASHBURN, CITY OF	992,105	81,351	66,967	148,318	0
WATERLOO, CITY OF	1,856,687	152,665	125,327	277,992	0
WATERTOWN, CITY OF	10,683,303	1,027,146	721,167	1,748,313	0
WAUKESHA, CITY OF	42,565,267	4,317,270	2,879,725	7,196,995	0
WAUPACA, CITY OF	3,476,352	319,437	206,258	525,695	0
WAUPUN, CITY OF	4,469,192	395,635	281,995	677,630	0
WAUSAU, CITY OF	21,575,782	2,242,131	1,456,328	3,698,459	0
WAUTOMA, CITY OF	832,963	72,057	56,225	128,282	0
WAUWATOSA, CITY OF	34,387,823	3,717,738	2,335,172	6,052,910	0
WEST ALLIS, CITY OF	40,429,413	4,215,006	2,728,487	6,943,493	0
WEST BEND, CITY OF	15,407,868	1,652,383	1,045,233	2,697,616	0
WESTBY, CITY OF	978,322	78,495	66,037	144,532	0
WEYAUWEGA, CITY OF	784,611	68,892	52,961	121,853	0
WHITEHALL, CITY OF	1,010,241	79,222	68,191	147,413	0
WHITEWATER, CITY OF	5,494,005	463,761	370,845	834,606	0
WISCONSIN DELLS, CITY OF	3,597,645	300,715	242,841	543,556	0
WISCONSIN RAPIDS, CITY OF	16,207,345	1,528,876	1,099,022	2,627,898	0
Total Cities (188)	\$ 1,531,652,893	\$ 150,011,214	\$ 101,912,383	\$ 251,923,597	\$ 2,882,310

## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
<b>Villages</b>					
ADELL, VILLAGE OF	\$ 137,635	\$ 9,290	\$ 9,290	\$ 18,580	\$ 0
ALBANY, VILLAGE OF	434,422	37,252	29,324	66,576	0
ALLOUEZ, VILLAGE OF	2,042,575	137,874	137,873	275,747	0
ALMOND, VILLAGE OF	43,235	2,918	2,919	5,837	0
AMHERST, VILLAGE OF	247,419	16,701	16,701	33,402	0
ARENA, VILLAGE OF	234,818	21,396	15,850	37,246	0
ARGYLE, VILLAGE OF	283,977	25,885	15,307	41,192	0
ARLINGTON, VILLAGE OF	134,816	9,355	8,845	18,200	0
ASHWAUBENON, VILLAGE OF	9,021,949	877,740	608,402	1,486,142	0
ATHENS, VILLAGE OF	210,057	17,168	14,179	31,347	0
AVOCA, VILLAGE OF	144,037	9,723	9,723	19,446	0
BALDWIN, VILLAGE OF	1,684,362	164,715	106,700	271,415	0
BALSAM LAKE, VILLAGE OF	284,766	19,239	19,205	38,444	0
BANGOR, VILLAGE OF	822,605	62,445	55,526	117,971	0
BAY CITY, VILLAGE OF	129,850	8,798	8,732	17,530	0
BAYSIDE, VILLAGE OF	3,445,779	281,712	232,246	513,958	0
BELGIUM, VILLAGE OF	334,776	22,598	22,598	45,196	0
BELLEVILLE, VILLAGE OF	1,120,461	95,357	75,631	170,988	0
BELLEVUE, VILLAGE OF (BROWN)	2,077,054	169,115	140,202	309,317	0
BELMONT, VILLAGE OF	422,663	33,629	28,530	62,159	0
BENTON, VILLAGE OF	292,847	21,970	19,767	41,737	0
BIG BEND, VILLAGE OF	472,468	45,398	31,892	77,290	0
BIRCHWOOD, VILLAGE OF	193,274	16,058	13,046	29,104	0
BIRNAMWOOD, VILLAGE OF	82,327	5,557	5,557	11,114	0
BIRON, VILLAGE OF	243,840	19,417	13,500	32,917	0
BLACK CREEK, VILLAGE OF	354,238	26,823	23,911	50,734	0
BLACK EARTH, VILLAGE OF	342,624	27,389	27,356	54,745	0
BLANCHARDVILLE, VILLAGE OF	218,851	16,408	14,772	31,180	0
BLOOMFIELD, VILLAGE OF	1,119,682	110,007	70,567	180,574	0
BLUE MOUNDS, VILLAGE OF	233,380	18,969	15,753	34,722	0
BLUE RIVER, VILLAGE OF	129,494	8,749	8,733	17,482	0
BOWLER, VILLAGE OF	42,457	5,493	239	5,732	0
BOYCEVILLE, VILLAGE OF	388,506	31,521	26,222	57,743	0
BOYD, VILLAGE OF	203,958	14,488	13,767	28,255	0
BRANDON, VILLAGE OF	326,826	23,865	22,061	45,926	0
BRISTOL, VILLAGE OF	924,543	81,062	48,226	129,288	321,069
BROOKLYN, VILLAGE OF	421,795	34,549	28,471	63,020	0
BROWN DEER, VILLAGE OF	5,541,702	514,804	374,065	888,869	0
BROWNSVILLE, VILLAGE OF	167,136	11,282	11,282	22,564	0
BROWNTOWN, VILLAGE OF	78,653	5,309	5,309	10,618	0
BRUCE, VILLAGE OF	197,954	14,784	11,940	26,724	0
BUTLER, VILLAGE OF	1,087,279	107,089	73,390	180,479	0
BUTTERNUT, VILLAGE OF	80,762	5,452	5,452	10,904	0
CADOTT, VILLAGE OF	586,850	54,760	32,110	86,870	0
CALEDONIA, VILLAGE OF (RACINE)	11,328,364	1,167,839	782,323	1,950,162	0
CAMBRIA, VILLAGE OF	233,343	15,751	15,751	31,502	0
CAMBRIDGE, VILLAGE OF	463,162	31,263	31,263	62,526	0



Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
CAMERON, VILLAGE OF	500,297	41,732	33,770	75,502	0
CAMP DOUGLAS, VILLAGE OF	130,341	8,799	8,798	17,597	0
CAMPBELLSPORT, VILLAGE OF	452,051	33,234	30,379	63,613	0
CASCADE, VILLAGE OF	124,045	8,373	8,373	16,746	0
CASCO, VILLAGE OF	65,575	4,426	4,426	8,852	0
CASHTON, VILLAGE OF	578,895	43,505	39,075	82,580	0
CEDAR GROVE, VILLAGE OF	386,102	26,150	25,974	52,124	0
CENTURIA, VILLAGE OF	284,233	16,223	22,149	38,372	112,455
CHASEBURG, VILLAGE OF	74,642	5,038	5,038	10,076	0
CHENEQUA, VILLAGE OF	1,013,939	107,813	68,441	176,254	0
CLAYTON, VILLAGE OF	180,319	14,698	12,172	26,870	0
CLEAR LAKE, VILLAGE OF	510,000	43,551	34,425	77,976	0
CLEVELAND, VILLAGE OF	447,106	36,664	30,180	66,844	0
CLINTON, VILLAGE OF	730,583	65,022	49,314	114,336	0
CLYMAN, VILLAGE OF	119,561	8,070	8,071	16,141	0
COBB, VILLAGE OF	91,289	6,162	6,162	12,324	0
COCHRANE, VILLAGE OF	111,456	7,523	7,523	15,046	0
COLEMAN, VILLAGE OF	227,013	17,692	15,323	33,015	0
COLFAX, VILLAGE OF	555,537	41,463	37,499	78,962	0
COLOMA, VILLAGE OF	250,454	18,368	16,821	35,189	0
COMBINED LOCKS, VILLAGE OF	432,389	29,187	29,186	58,373	0
COON VALLEY, VILLAGE OF	228,254	17,872	15,407	33,279	0
COTTAGE GROVE, VILLAGE OF	2,061,370	181,096	137,526	318,622	0
CRIVITZ, VILLAGE OF	264,574	20,408	17,657	38,065	0
CROSS PLAINS, VILLAGE OF	1,345,409	109,118	90,815	199,933	22,218
DALLAS, VILLAGE OF	37,638	2,541	2,541	5,082	0
DANE, VILLAGE OF	180,969	12,215	12,215	24,430	0
DARIEN, VILLAGE OF	399,317	26,954	26,954	53,908	0
DE SOTO, VILLAGE OF	78,551	5,302	5,302	10,604	0
DEERFIELD, VILLAGE OF	503,747	34,003	34,002	68,005	0
DEFORREST, VILLAGE OF	3,651,984	323,466	246,509	569,975	0
DENMARK, VILLAGE OF	343,704	23,200	23,200	46,400	0
DICKEYVILLE, VILLAGE OF	259,719	20,468	17,498	37,966	0
DOUSMAN, VILLAGE OF	251,456	16,973	16,973	33,946	0
DRESSER, VILLAGE OF	285,791	26,447	15,176	41,623	0
EAGLE, VILLAGE OF	403,858	39,183	27,187	66,370	0
EAST TROY, VILLAGE OF	1,651,295	146,145	111,462	257,607	0
EASTMAN, VILLAGE OF	75,330	5,085	5,085	10,170	0
EDGAR, VILLAGE OF	314,474	23,371	21,227	44,598	0
EGG HARBOR, VILLAGE OF	579,480	39,303	38,927	78,230	0
ELEVA, VILLAGE OF	204,410	16,242	13,798	30,040	0
ELK MOUND, VILLAGE OF	409,645	31,776	27,651	59,427	0
ELKHART LAKE, VILLAGE OF	697,282	57,704	47,067	104,771	0
ELLSWORTH, VILLAGE OF	1,020,194	104,808	50,712	155,520	0
ELM GROVE, VILLAGE OF	3,419,776	310,085	230,835	540,920	0
ELMWOOD, VILLAGE OF	185,803	14,244	12,542	26,786	0
EPHRAIM, VILLAGE OF	396,222	26,746	26,745	53,491	0
ETTRICK, VILLAGE OF	167,111	11,280	11,280	22,560	0

## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
FAIRWATER, VILLAGE OF	72,971	4,926	4,926	9,852	0
FALL CREEK, VILLAGE OF	377,336	31,539	25,470	57,009	0
FALL RIVER, VILLAGE OF	302,867	25,737	20,444	46,181	0
FERRYVILLE, VILLAGE OF	38,860	2,634	2,612	5,246	0
FONTANA ON GNVA LK, VILLAGE OF	1,493,574	126,715	100,813	227,528	0
FOX CROSSING, VILLAGE OF	5,761,006	525,564	388,868	914,432	0
FOX POINT, VILLAGE OF	3,132,860	291,146	211,469	502,615	0
FREDERIC, VILLAGE OF	342,376	25,003	23,110	48,113	0
FREMONT, VILLAGE OF	140,461	12,564	9,481	22,045	0
FRIENDSHIP, VILLAGE OF	182,853	12,343	12,342	24,685	0
GAYS MILLS, VILLAGE OF	152,854	10,318	10,318	20,636	0
GENOA CITY, VILLAGE OF	972,989	82,563	63,434	145,997	0
GERMANTOWN, VILLAGE OF	8,273,950	747,915	558,458	1,306,373	0
GILMAN, VILLAGE OF	219,977	17,618	14,849	32,467	0
GRAFTON, VILLAGE OF	5,501,940	480,961	371,381	852,342	0
GRANTON, VILLAGE OF	153,249	10,344	10,344	20,688	0
GRANTSBURG, VILLAGE OF	567,144	46,951	38,282	85,233	0
GRATIOT, VILLAGE OF	48,000	3,240	3,240	6,480	0
GREENDALE, VILLAGE OF	7,316,377	820,689	494,333	1,315,022	0
GRESHAM, VILLAGE OF	491,460	33,174	33,174	66,348	0
HALES CORNERS, VILLAGE OF	3,014,559	301,117	207,316	508,433	0
HAMMOND, VILLAGE OF	586,661	48,866	39,600	88,466	0
HARRISON, VILLAGE OF	1,257,777	84,900	84,900	169,800	0
HARTLAND, VILLAGE OF	3,667,060	339,430	247,527	586,957	0
HAUGEN, VILLAGE OF	35,880	2,422	2,422	4,844	0
HAWKINS, VILLAGE OF	64,740	4,370	4,370	8,740	914
HAZEL GREEN, VILLAGE OF	495,753	38,898	33,427	72,325	0
HIGHLAND, VILLAGE OF	207,497	16,185	14,006	30,191	0
HILBERT, VILLAGE OF	288,910	19,501	19,501	39,002	0
HIXTON, VILLAGE OF	56,859	3,838	3,838	7,676	10,003
HOBART, VILLAGE OF	1,411,725	134,510	95,292	229,802	0
HOLLANDALE, VILLAGE OF	64,249	4,337	4,337	8,674	0
HOLMEN, VILLAGE OF	2,325,154	202,583	156,948	359,531	0
HORTONVILLE, VILLAGE OF	1,030,599	87,349	69,627	156,976	0
HOWARD, VILLAGE OF	3,474,915	253,148	234,048	487,196	0
HOWARDS GROVE, VILLAGE OF	365,768	24,689	24,689	49,378	0
HUSTISFORD, VILLAGE OF	639,902	43,690	42,697	86,387	59,538
IOLA, VILLAGE OF	451,181	39,419	30,138	69,557	0
IRON RIDGE, VILLAGE OF	146,371	12,453	9,878	22,331	0
JACKSON, VILLAGE OF	2,784,138	252,416	187,696	440,112	0
JOHNSON CREEK, VILLAGE OF	879,053	68,074	59,336	127,410	0
JUNCTION CITY, VILLAGE OF	85,570	5,776	5,776	11,552	0
KENDALL, VILLAGE OF	152,880	10,319	10,319	20,638	0
KEWASKUM, VILLAGE OF	1,309,360	119,377	88,382	207,759	0
KIMBERLY, VILLAGE OF	1,537,445	103,778	103,778	207,556	0
KOHLER, VILLAGE OF	1,210,473	112,023	81,707	193,730	0
KRONENWETTER, VILLAGE OF	1,381,759	123,113	93,269	216,382	0
LA FARGE, VILLAGE OF	434,061	31,409	29,299	60,708	0



Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
LA VALLE, VILLAGE OF	61,452	4,148	4,148	8,296	0
LAC LA BELLE, VILLAGE OF	48,725	2,784	3,892	6,676	0
LAKE DELTON, VILLAGE OF	3,197,690	313,544	215,845	529,389	0
LAKE HALLIE, VILLAGE OF	966,541	99,850	60,968	160,818	0
LAKE NEBAGAMON, VILLAGE OF	218,733	14,764	14,764	29,528	0
LANNON, VILLAGE OF	116,663	10,246	7,875	18,121	0
LENA, VILLAGE OF	246,368	19,280	16,630	35,910	0
LINDEN, VILLAGE OF	150,112	10,929	10,133	21,062	0
LITTLE CHUTE, VILLAGE OF	4,345,624	388,670	293,330	682,000	0
LOGANVILLE, VILLAGE OF	45,344	3,061	3,061	6,122	0
LOMIRA, VILLAGE OF	673,417	58,907	45,312	104,219	0
LONE ROCK, VILLAGE OF	82,080	5,541	5,541	11,082	0
LUCK, VILLAGE OF	554,849	45,104	37,453	82,557	19,472
LUXEMBURG, VILLAGE OF	300,213	22,842	20,264	43,106	0
MAPLE BLUFF, VILLAGE OF	1,198,369	121,177	80,890	202,067	0
MARATHON CITY, VILLAGE OF	555,108	49,689	33,021	82,710	0
MARSHALL, VILLAGE OF	1,161,591	108,020	78,408	186,428	0
MATTOON, VILLAGE OF	93,027	6,279	6,279	12,558	0
MAZOMANIE, VILLAGE OF	407,507	27,669	27,348	55,017	0
MCFARLAND, VILLAGE OF	3,973,133	362,791	268,187	630,978	0
MENOMONEE FALLS, VILLAGE OF	15,153,314	1,655,051	805,649	2,460,700	0
MILLTOWN, VILLAGE OF	395,988	32,716	26,729	59,445	0
MINONG, VILLAGE OF	266,080	23,109	18,032	41,141	0
MISHICOT, VILLAGE OF	368,812	33,625	24,895	58,520	0
MONTFORT, VILLAGE OF	155,523	10,498	10,498	20,996	0
MONTICELLO, VILLAGE OF	384,833	33,556	25,976	59,532	0
MOUNT HOREB, VILLAGE OF	3,514,680	289,782	237,260	527,042	0
MT PLEASANT, VILLAGE OF	13,241,741	1,420,056	893,818	2,313,874	0
MUKWONAGO, VILLAGE OF	4,038,150	360,442	272,575	633,017	0
MUSCODA, VILLAGE OF	612,308	49,337	41,331	90,668	0
NECEDAH, VILLAGE OF	343,815	24,644	22,520	47,164	0
NESHKORO, VILLAGE OF	75,230	5,078	5,078	10,156	97,714
NEW GLARUS, VILLAGE OF	1,193,785	96,263	80,580	176,843	0
NEWBURG, VILLAGE OF	124,901	9,235	8,431	17,666	0
NICHOLS, VILLAGE OF	48,265	3,258	3,258	6,516	0
NORTH FOND DU LAC, VILLAGE OF	2,418,655	220,204	163,259	383,463	0
NORTH FREEDOM, VILLAGE OF	118,458	7,996	7,996	15,992	0
NORTH HUDSON, VILLAGE OF	689,410	63,649	46,535	110,184	0
OCONOMOWOC LAKE, VILLAGE OF	679,064	74,281	45,832	120,113	0
ONTARIO, VILLAGE OF	171,756	13,423	11,594	25,017	0
OOSTBURG, VILLAGE OF	444,443	30,000	30,000	60,000	0
OREGON, VILLAGE OF	3,728,326	319,467	250,269	569,736	0
ORFORDVILLE, VILLAGE OF	463,284	37,743	31,271	69,014	0
OSCEOLA, VILLAGE OF	1,046,803	98,365	60,216	158,581	0
OXFORD, VILLAGE OF (MARQUETTE)	127,324	9,289	8,595	17,884	0
PADDOCK LAKE, VILLAGE OF	436,898	29,491	29,491	58,982	0
PARDEEVILLE, VILLAGE OF	716,379	48,356	48,356	96,712	0
PEPIN, VILLAGE OF	254,203	31,088	6,010	37,098	0

## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
PEWAUKEE, VILLAGE OF	3,091,538	280,836	208,679	489,515	0
PLAIN, VILLAGE OF	238,363	16,090	16,090	32,180	0
PLAINFIELD, VILLAGE OF	211,379	16,629	14,268	30,897	0
PLEASANT PRAIRIE, VILLAGE OF	15,055,975	1,278,442	1,016,279	2,294,721	0
PLOVER, VILLAGE OF	4,507,293	408,403	304,241	712,644	0
PORT EDWARDS, VILLAGE OF	695,414	54,835	46,940	101,775	0
POUND, VILLAGE OF	84,979	5,736	5,736	11,472	0
POYNETTE, VILLAGE OF	893,460	74,098	60,309	134,407	0
PRAIRIE DU SAC, VILLAGE OF	1,269,639	85,701	85,701	171,402	0
PRAIRIE FARM, VILLAGE OF	733,653	49,573	49,469	99,042	0
PULASKI, VILLAGE OF	1,156,283	103,190	78,049	181,239	0
RANDOLPH, VILLAGE OF	489,365	38,805	33,032	71,837	53,787
RANDOM LAKE, VILLAGE OF	424,824	30,441	28,676	59,117	0
RAYMOND, VILLAGE OF	250,445	18,500	15,310	33,810	0
RIB LAKE, VILLAGE OF	221,427	17,334	14,946	32,280	0
RIO, VILLAGE OF	339,816	28,468	22,938	51,406	0
RIVER HILLS, VILLAGE OF	1,679,835	164,407	113,388	277,795	0
ROBERTS, VILLAGE OF	628,783	56,851	38,244	95,095	0
ROCHESTER, VILLAGE OF	264,815	17,875	17,875	35,750	0
ROCK SPRINGS, VILLAGE OF	63,846	4,310	4,310	8,620	0
ROCKLAND, VILLAGE OF	89,180	6,028	6,011	12,039	0
ROSENDALE, VILLAGE OF	229,808	19,082	15,487	34,569	0
ROSHOLT, VILLAGE OF	76,172	5,142	5,142	10,284	0
ROTHSCHILD, VILLAGE OF	2,008,035	183,835	135,542	319,377	0
SALEM LAKES, VILLAGE OF	1,980,042	171,013	130,511	301,524	0
SAUK CITY, VILLAGE OF	1,141,783	77,071	77,070	154,141	0
SAUKVILLE, VILLAGE OF	2,014,018	180,231	135,946	316,177	0
SHARON, VILLAGE OF	587,006	52,801	39,452	92,253	0
SHERWOOD, VILLAGE OF	368,173	24,895	24,808	49,703	0
SHIOCTON, VILLAGE OF	316,442	25,658	21,360	47,018	0
SHOREWOOD HILLS, VILLAGE OF	1,221,830	106,938	81,365	188,303	0
SHOREWOOD, VILLAGE OF	5,284,719	468,751	356,718	825,469	0
SIREN, VILLAGE OF	426,809	37,704	28,810	66,514	0
SISTER BAY, VILLAGE OF	825,329	55,710	55,710	111,420	0
SLINGER, VILLAGE OF	2,141,293	188,816	144,538	333,354	0
SOLDIERS GROVE, VILLAGE OF	153,052	11,109	9,553	20,662	0
SOLON SPRINGS, VILLAGE OF	151,459	10,223	10,223	20,446	0
SOMERS, VILLAGE OF	2,010,497	183,664	135,265	318,929	0
SOMERSET, VILLAGE OF	1,203,124	99,760	81,084	180,844	0
SOUTH WAYNE, VILLAGE OF	87,990	5,940	5,940	11,880	0
SPENCER, VILLAGE OF	663,497	61,133	41,189	102,322	0
SPRING GREEN, VILLAGE OF	546,067	43,614	36,860	80,474	0
SPRING VALLEY, VILLAGE OF	248,598	18,106	16,780	34,886	0
ST NAZIANZ, VILLAGE OF	171,442	11,577	11,567	23,144	0
STAR PRAIRIE, VILLAGE OF	108,363	7,315	7,315	14,630	0
STOCKBRIDGE, VILLAGE OF	29,333	1,980	1,980	3,960	0
STODDARD, VILLAGE OF	187,882	12,682	12,682	25,364	0
STRATFORD, VILLAGE OF	537,161	43,751	36,259	80,010	0



Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
STRUM, VILLAGE OF	332,797	28,564	22,352	50,916	8,955
STURTEVANT, VILLAGE OF	1,289,265	131,876	87,025	218,901	0
SUAMICO, VILLAGE OF	1,469,912	106,026	99,220	205,246	0
SULLIVAN, VILLAGE OF	115,114	7,793	7,770	15,563	0
SUMMIT, VILLAGE OF (WAUKESHA)	1,343,216	135,664	90,667	226,331	0
SURING, VILLAGE OF	244,222	19,123	16,485	35,608	0
SUSSEX, VILLAGE OF	3,279,222	252,151	221,348	473,499	0
THIENSVILLE, VILLAGE OF	1,311,676	120,476	88,538	209,014	0
TREMPEALEAU, VILLAGE OF	783,317	61,488	52,867	114,355	0
TURTLE LAKE, VILLAGE OF	746,893	75,866	39,754	115,620	0
TWIN LAKES, VILLAGE OF	2,399,937	220,725	149,835	370,560	0
UNION CENTER, VILLAGE OF	106,707	7,842	7,155	14,997	0
UNION GROVE, VILLAGE OF	919,052	61,734	61,733	123,467	0
VALDERS, VILLAGE OF	490,498	33,109	33,109	66,218	0
VERNON, VILLAGE OF (WAUKESHA)	466,133	35,856	31,464	67,320	0
WALWORTH, VILLAGE OF	966,984	90,193	65,271	155,464	0
WARRENS, VILLAGE OF	134,770	9,097	9,097	18,194	0
WATERFORD, VILLAGE OF	1,369,781	127,180	92,418	219,598	0
WAUKESHA, VILLAGE OF (WAUKESHA)	399,057	35,856	26,530	62,386	0
WAUNAKEE, VILLAGE OF	4,907,390	417,667	331,249	748,916	0
WAUSAUKEE, VILLAGE OF	178,238	12,031	12,031	24,062	0
WAUZEKA, VILLAGE OF	107,937	7,285	7,286	14,571	0
WEBSTER, VILLAGE OF	138,132	16,217	9,324	25,541	0
WEST BARABOO, VILLAGE OF	234,643	16,285	15,392	31,677	0
WEST MILWAUKEE, VILLAGE OF	2,966,882	289,884	200,264	490,148	998,576
WEST SALEM, VILLAGE OF	1,040,204	93,603	70,214	163,817	0
WESTFIELD, VILLAGE OF	333,536	27,334	22,514	49,848	0
WESTON, VILLAGE OF (MARATHON)	2,391,281	161,412	161,411	322,823	0
WHITE LAKE, VILLAGE OF	139,675	9,428	9,428	18,856	0
WHITEFISH BAY, VILLAGE OF	4,597,396	420,174	310,324	730,498	0
WHITELAW, VILLAGE OF	102,389	6,911	6,911	13,822	0
WHITING, VILLAGE OF	276,835	18,686	18,686	37,372	0
WILD ROSE, VILLAGE OF	283,427	24,276	19,131	43,407	0
WILLIAMS BAY, VILLAGE OF	1,312,664	117,095	88,562	205,657	53,476
WILSON, VILLAGE OF	47,003	3,173	3,173	6,346	4,984
WIND POINT, VILLAGE OF	252,942	17,236	17,073	34,309	0
WINDSOR, VILLAGE OF	1,048,363	70,765	70,765	141,530	0
WINNECONNE, VILLAGE OF	916,553	77,146	61,832	138,978	0
WITHEE, VILLAGE OF	105,141	7,097	7,097	14,194	0
WONEWOC, VILLAGE OF	358,232	28,884	22,507	51,391	0
WOODVILLE, VILLAGE OF	616,844	53,701	41,637	95,338	0
WRIGHTSTOWN, VILLAGE OF	893,818	74,253	60,332	134,585	0
WYOCENA, VILLAGE OF	144,585	9,759	9,759	19,518	0
YORKVILLE, VILLAGE OF	119,959	8,097	8,097	16,194	0
Total Villages (283)	\$ 309,001,996	\$ 27,607,996	\$ 20,522,058	\$ 48,130,054	\$ 1,763,161

## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
<b>Special Districts</b>					
ADRC OF THE NORTHWOODS	\$ 428,927	\$ 28,105	\$ 29,801	\$ 57,906	\$ 0
ALBANY HOUSING AUTHORITY	43,328	2,925	2,925	5,850	0
ALGOMA CITY HOUSING AUTH	28,054	1,894	1,894	3,788	0
ALGOMA SANITARY DIST	508,303	34,310	34,310	68,620	0
ALLENTON SANITARY DIST	15,627	1,055	1,055	2,110	0
ANTIGO CITY HOUSING AUTH	332,367	22,435	22,435	44,870	0
APPLETON CITY HOUSING AUTH	931,297	62,864	62,863	125,727	0
ASHLAND CITY HOUSING AUTH	377,114	25,456	25,455	50,911	6,725
ASHLAND COUNTY HOUSING AUTH	595,328	40,202	40,168	80,370	0
BALSAM LK-CENTURIA JOINT PD	145,774	17,114	9,840	26,954	0
BARABOO DISTRICT AMBULANCE	1,418,947	161,768	95,779	257,547	0
BARRON CO HOUSING AUTHORITY	217,403	14,675	14,675	29,350	0
BAY AREA RURAL TRANSIT COMMISS	483,554	32,640	32,640	65,280	0
BAYFIELD COUNTY HOUSING AUTH	121,675	8,214	8,213	16,427	0
BAY-LAKE REGIONAL PLAN COMM	507,863	34,281	34,281	68,562	0
BIG CEDAR LAKE PROT/REHAB DIST	20,669	1,536	1,395	2,931	0
BROCKWAY SANITARY DISTRICT #1	68,508	4,624	4,624	9,248	0
BRUCE VILLAGE HOUSING AUTH	92,432	6,239	6,239	12,478	0
BURLINGTON CITY HOUSING AUTH	54,026	3,647	3,647	7,294	0
CAMBRIDGE FIRE & EMS COMM	307,710	36,281	20,615	56,896	0
CAMBRIDGE-OAKLAND WSTEWTR COMM	139,076	9,388	9,388	18,776	0
CAPITAL AREA REG PLAN COMM	614,279	41,464	41,464	82,928	0
CENTRAL BROWN CTY WATER AUTH	117,993	7,965	7,965	15,930	0
CHILTON CITY HOUSING AUTH	40,978	2,766	2,766	5,532	0
CHIPPEWA CO HOUSING AUTH	539,548	36,420	36,420	72,840	0
CHIPPEWA FIRE DISTRICT	924,561	106,667	62,408	169,075	0
CITY-COUNTY DATA CENTER COMM	2,275,940	153,623	153,623	307,246	0
CLINTONVILLE CITY HOUS AUTH	112,818	7,615	7,615	15,230	0
COLBY/ABBOTSFORD JT POLICE COM	525,916	68,910	26,392	95,302	0
CONSOL KOSHKONONG SANITARY DIS	350,075	23,630	23,630	47,260	0
COUNTRY ESTATES SAN DIST	32,549	2,210	2,184	4,394	0
CROSS PLAINS AREA EMS	160,559	19,613	10,074	29,687	0
CUMBERLAND MUNICIPAL UTILITY	953,133	64,336	64,336	128,672	0
DANE COUNTY DIST #1 EMS	68,332	8,022	4,612	12,634	0
DANE COUNTY HOUSING AUTHORITY	575,624	39,006	38,703	77,709	443,002
DANE-IOWA WASTEWATER COMM	180,078	12,155	12,155	24,310	0
DARBOY JOINT SANITARY DIST #1	331,539	22,379	22,379	44,758	0
DEER-GROVE EMS DIST	595,879	69,956	40,222	110,178	0
DEFORREST WINDSOR FIRE & EMS	605,634	69,588	40,704	110,292	0
DELAFIELD-HARTL WATER POL CNTL	574,795	38,799	38,799	77,598	0
DELAVAN LAKE SANITARY DISTRICT	547,385	36,949	36,949	73,898	0
DELLS-DELTON EMS COMM	1,378,217	160,191	93,029	253,220	0
DELTON FIRE & AMBULANCE COMM	176,121	19,444	11,888	31,332	0
DODGE COUNTY HOUSING AUTHORITY	173,909	11,752	11,726	23,478	0
DOOR CTY TOURISM ZONE COMM	58,600	3,956	3,956	7,912	0
EAGLE RIVER UNION AIRPORT	111,792	7,546	7,546	15,092	0
EAST CENTRAL WIS REG PLAN COMM	1,052,602	71,051	71,051	142,102	0





Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
EASTERN COLUMBIA CTY JM COURT	59,643	4,026	4,026	8,052	0
EAU CLAIRE CITY HOUSING AUTH	552,769	37,312	37,312	74,624	0
EAU CLAIRE COUNTY HOUSING AUTH	146,647	9,899	9,899	19,798	0
EAUCLAIRE CITY-CO HEALTH DPT	4,039,551	272,672	272,669	545,341	0
EDGERTON CITY HOUSING AUTH	139,543	9,419	9,419	18,838	0
EDGERTON FIRE PROT DIST	446,211	52,522	29,982	82,504	0
ELLSWORTH AREA AMBULANCE SERV	219,558	14,820	14,820	29,640	0
EVEREST METRO POLICE COMM	2,465,700	279,462	166,434	445,896	0
FISH CREEK SANITARY DIST #1	287,616	19,433	19,395	38,828	0
FITCH-RONA EMS DISTRICT	1,798,633	211,157	121,405	332,562	0
FOND DU LAC CITY HOUSING AUTH	742,286	50,104	50,104	100,208	0
FONTANA/WALWORTH WTR POL CN CM	368,575	24,879	24,879	49,758	0
FOX LAKE INL LAKE PROT & REHAB	47,143	3,191	3,174	6,365	0
FOX LAKE WASTEWATER CONTR COMM	14,695	992	992	1,984	0
FOX WEST REGIONAL SEWER COMM	209,201	14,121	14,121	28,242	0
FREEDOM SANITARY DISTRICT #1	172,142	11,645	11,594	23,239	0
GB/BROWN CO PRO FTBLL STAD DIS	46,282	3,124	3,124	6,248	0
GOODMAN SANITARY DISTRICT NO 1	64,420	11,489	8,008	19,497	0
GREAT DIVIDE AMB SERV	1,478,462	99,797	99,796	199,593	0
GREEN BAY METRO SEWERAGE DIST	8,717,053	588,403	588,401	1,176,804	0
GREEN LAKE SANITARY DISTRICT	250,641	16,918	16,918	33,836	0
HA OF THE CITY OF S MILWAUKEE	192,466	12,991	12,991	25,982	0
HARMONY GROVE-OKEE JT SEW COMM	154,572	10,434	10,434	20,868	0
HEART OF THE VALLEY MET SEW DS	775,094	52,319	52,319	104,638	0
HOLMEN AREA FIRE DEPT	342,459	40,205	23,116	63,321	0
HUDSON CITY HOUSING AUTHORITY	58,692	3,962	3,962	7,924	0
HUM SRV CTR ONIDA VILAS FORST	2,418,033	163,219	163,218	326,437	0
HURLEY HOUSING AUTHORITY	59,155	3,993	3,993	7,986	0
IFLS LIBRARY SYSTEMS	723,198	48,816	48,816	97,632	0
IRON RIVER SANITARY DIST #1	102,313	6,906	6,906	13,812	0
JEFFERSON CITY HOUSING AUTH	96,529	6,516	6,516	13,032	0
KAUKAUNA CITY HOUSING AUTH	136,781	9,232	9,233	18,465	0
KEGONSA SANITARY DISTRICT	78,324	5,287	5,287	10,574	0
KELLY LAKE SANITARY DIST #1	39,581	2,672	2,672	5,344	0
KENOSHA JOINT SERVICES	4,569,937	308,472	308,471	616,943	0
LA CROSSE CITY HOUSING AUTH	1,057,354	71,373	71,372	142,745	0
LADYSMITH HOUSING AUTH	114,356	7,719	7,719	15,438	0
LAKE COMO SANITARY DIST #1	382,625	25,827	25,827	51,654	20,683
LAKE COUNTRY FIRE & RESCUE	1,188,717	136,266	80,220	216,486	0
LAKE MILLS CITY HOUSING AUTH	105,984	7,154	7,154	14,308	0
LAKE RIPLEY MGT DISTRICT	37,950	2,562	2,562	5,124	0
LAKELAND SANITARY DISTRICT #1	292,786	19,764	19,763	39,527	0
LAKESHORES LIBRARY SYSTEM	404,877	27,329	27,329	54,658	0
LAONA SANITARY DISTRICT #1	84,075	5,675	5,675	11,350	0
LEAGUE OF WISC MUNICIPALITIES	956,274	64,549	64,549	129,098	0
LINCOLN COUNTY HOUSING AUTH	108,753	7,341	7,341	14,682	0
LODI COMMUNITY AMBULANCE SERV	198,856	23,902	12,866	36,768	0
LYONS SANITARY DISTRICT #2	94,890	6,405	6,405	12,810	0

## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
MADLINE SANITARY DISTRICT	64,268	4,410	4,266	8,676	0
MADISON METRO SEWERAGE DIST	9,968,984	672,908	672,907	1,345,815	0
MANITOWOC CITY HOUSING AUTH	112,164	7,571	7,571	15,142	0
MANITOWOC-CALUMET LIB SYS	107,767	7,274	7,274	14,548	0
MARINETTE CITY HOUSING AUTH	209,492	14,141	14,141	28,282	0
MARSHALL AREA EMS DIST #14	224,339	25,403	15,143	40,546	0
MARSHFIELD CDA	302,001	20,385	20,385	40,770	0
MARSHFIELD ELECTRIC & WATER	3,520,121	237,609	237,608	475,217	0
MENASHA ELECTRIC & WATER	3,130,942	211,339	211,339	422,678	0
MENOMONIE CITY HOUSING AUTH	218,447	14,744	14,745	29,489	0
MEQUON - THIENSVILLE LIBRARY	537,571	36,285	36,285	72,570	0
MERCER SANITARY DISTRICT #1	141,957	9,582	9,582	19,164	0
MERRILL CITY HOUSING AUTHORITY	389,656	26,302	26,302	52,604	0
MIDDLETON FIRE DISTRICT	463,135	65,797	31,262	97,059	0
MID-MORAINNE MUNICIPAL COURT	377,101	25,454	25,454	50,908	0
MILTON & MILTON TOWNSHIP FIRE DEPT	479,934	54,527	32,396	86,923	0
MILWAUKEE AREA DOMESTIC ANIMAL CONTROL COMM	1,516,410	102,360	102,356	204,716	0
MILWAUKEE CO FED LIB SYS	381,268	25,736	25,736	51,472	0
MISSISSIPPI RIVER REG PLAN COM	238,997	16,132	16,132	32,264	0
MONARCH LIBRARY SYSTEM	497,179	33,560	33,560	67,120	0
MONROE CITY HOUSING AUTHORITY	167,204	11,286	11,286	22,572	0
MOSINEE FIRE DIST	149,362	17,535	10,082	27,617	0
MT HOREB AREA FIRE DEPT	442,216	72,258	29,850	102,108	0
MUNI COURT W WAUKESHA COUNTY	174,285	11,764	11,764	23,528	0
NEW GLARUS EMS	98,221	18,161	0	18,161	0
NEW LONDON CITY HOUSING AUTH	89,785	6,005	6,001	12,006	0
NEW RICHMOND AMBULANCE	562,578	37,974	37,974	75,948	0
NICOLET FEDERATED LIBRARY SYS	253,415	17,106	17,106	34,212	0
NORTH CENTRAL HEALTH CARE FAC	38,346,585	2,588,451	2,588,348	5,176,799	0
NORTH CENTRAL WIS REG PLAN COM	387,521	26,158	26,158	52,316	0
NORTH SHORE FIRE DEPT	9,363,165	1,691,749	633,841	2,325,590	0
NORTH SHORE WATER COMMISSION	511,740	34,543	34,542	69,085	0
NORTHERN MORAINNE UTILITY COMM	153,956	10,392	10,392	20,784	0
NORTHERN WATERS LIBRARY SERV	335,111	22,620	22,620	45,240	0
NORTHWEST REGIONAL PLAN COMM	955,620	66,192	62,817	129,009	0
NORWAY SANITARY DISTRICT #1	307,227	20,738	20,738	41,476	0
OCONTO CITY HOUSING AUTHORITY	177,114	11,955	11,955	23,910	0
ONEIDA-VILAS TRANSIT COMM	264,679	17,866	17,866	35,732	0
OREGON AREA FIRE - EMS DIST	744,772	87,436	50,272	137,708	0
ORFORDVILLE VOL FIRE PROT DIST	47,631	5,595	3,211	8,806	0
OSHKOSH CITY HOUSING AUTHORITY	1,615,943	109,076	109,076	218,152	0
OUTAGAMIE COUNTY HOUSING AUTH	1,055,921	71,312	71,237	142,549	0
OUTAGAMIE WAUPAC CO FED LIBR SY	519,924	35,095	35,095	70,190	0
PHELPS SANITARY DISTRICT #1	52,275	3,529	3,529	7,058	0
PLEASANT SPRINGS SAN DIS #1	119,529	8,068	8,068	16,136	0
PLYMOUTH CITY HOUSING AUTH	45,013	3,038	3,038	6,076	0
PORTAGE COUNTY HOUSING AUTH	175,334	11,835	11,835	23,670	0
PRAIRIE DU SAC JT SEWER COMM	72,023	4,873	4,850	9,723	0

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
RACINE COUNTY HOUSING AUTH	517,583	34,937	34,936	69,873	0
REEDSBURG AREA AMBULANCE SVCES	569,777	66,892	38,460	105,352	0
REEDSVILLE VIL HOUSING AUTH	33,921	2,290	2,290	4,580	0
RHINELANDER CITY HOUSING AUTH	146,668	9,900	9,900	19,800	0
RIB MOUNTAIN METRO SEW DIST	584,350	39,444	39,444	78,888	0
RICE LAKE CITY HOUSING AUTH	234,651	15,857	15,822	31,679	0
RICHLAND CENTER CITY HOUS AUTH	116,543	7,868	7,867	15,735	0
RICHLAND FIRE DEPARTMENT	16,630	1,952	1,122	3,074	0
RIPON AREA FIRE DISTRICT	71,115	8,349	4,800	13,149	0
RIVER FALLS CITY HOUSING AUTH	381,298	25,738	25,738	51,476	5,933
SAUK CITY HOUSING AUTHORITY	41,633	2,810	2,810	5,620	0
SAUK COUNTY HOUSING AUTHORITY	274,202	18,509	18,509	37,018	0
SAUK PRAIRIE AMBULANCE ASSOC	91,071	10,692	6,147	16,839	0
SAUK PRAIRIE POLICE COMMISSION	1,179,598	153,277	60,141	213,418	0
SAUK PRAIRIE RECREATION COMM	116,141	7,840	7,839	15,679	0
SAWYER COUNTY HOUSING AUTH	153,114	10,335	10,335	20,670	0
SHAWANO CITY HOUSING AUTHORITY	216,371	14,762	14,448	29,210	0
SHAWANO COUNTY HOUSING AUTH	273,992	18,495	18,494	36,989	0
SHAWANO LAKE SANITARY DIST #1	710,540	47,962	47,962	95,924	0
SHAWANO MUNICIPAL UTILITIES	1,221,448	82,448	82,448	164,896	0
SHEBOYGAN CITY HOUSING AUTH	398,592	26,908	26,901	53,809	0
SHELL LAKE CITY HOUS AUTH	55,002	3,713	3,713	7,426	0
SILVER LAKE SAN. DIST.	287,177	19,384	19,385	38,769	0
SLINGER VILLAGE HOUSING AUTH	43,202	2,916	2,916	5,832	0
SOUTH AREA FIRE & EMS DIST	1,339,081	157,210	90,386	247,596	0
SOUTH CENTRAL LIBRARY SYSTEM	2,828,892	190,952	190,950	381,902	0
SOUTHEASTERN WIS REG PLAN COMM	4,331,799	292,402	292,391	584,793	0
SOUTHWEST WIS LIBRARY SYSTEM	139,269	9,401	9,401	18,802	0
SOUTHWESTERN WIS REG PLAN COMM	317,168	21,409	21,409	42,818	0
SPOONER FIRE DISTRICT	67,526	7,927	4,558	12,485	0
ST JOSEPH SANITARY DISTRICT #1	32,644	2,204	2,204	4,408	0
STEVENS POINT CITY HOUS AUTH	551,744	37,243	37,243	74,486	0
SUPERIOR CITY HOUSING AUTH	1,248,619	86,540	82,024	168,564	0
TAYLOR COUNTY HOUSING AUTH	52,290	3,530	3,530	7,060	0
THORP CITY HOUSING AUTHORITY	117,251	7,988	7,841	15,829	0
THREE LAKES SANITARY DIST #1	74,260	5,012	5,013	10,025	0
TREMPEALEAU COUNTY HOUS AUTH	267,627	18,065	18,065	36,130	21,361
UNIFIED COMMUNITY SERVICES	1,909,029	128,860	128,859	257,719	0
VALLEY RIDGE CLEAN WATER COMM	62,466	4,217	4,217	8,434	0
VANGUARD ELECTRIC UTIL COMM	472,508	31,894	31,894	63,788	0
VIROQUA CITY HOUSING AUTHORITY	196,140	13,239	13,240	26,479	0
WABENO SANITARY DISTRICT #1	47,607	3,214	3,214	6,428	0
WALES/GENESEE JOINT FIRE BD	204,569	24,919	12,906	37,825	0
WALTER E OLSON MEMORIAL LIB	127,081	8,578	8,578	17,156	0
WALWORTH COUNTY METRO SEW DIST	1,252,269	84,528	84,528	169,056	88,274
WASHBURN CITY HOUSING AUTH	124,706	8,418	8,418	16,836	0
WASHBURN COUNTY HOUSING AUTH	93,711	6,325	6,325	12,650	0
WATERTOWN CITY HOUSING AUTH	134,753	9,096	9,096	18,192	7,483

## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
WAUKESHA CITY HOUSING AUTH	728,142	49,150	49,150	98,300	0
WAUNAKEE AREA EMS	433,998	50,951	29,295	80,246	0
WAUNAKEE AREA FIRE DIST	71,066	4,797	4,797	9,594	0
WAUNAKEE WATER & LIGHT	1,505,794	101,641	101,641	203,282	0
WAUPACA CHAIN O'LAKES SAN DIST	66,150	4,465	4,465	8,930	0
WAUSAUKEE VILLAGE HOUS AUTH	142,458	9,616	9,616	19,232	0
WEST BEND CITY HOUSING AUTH	258,922	17,478	17,477	34,955	0
WEST CENTRAL WI BISOLIDS COMM	170,430	11,504	11,504	23,008	0
WEST CENTRAL WIS REG PLAN COMM	902,816	60,940	60,940	121,880	0
WESTERN LAKES FIRE DIST	2,423,460	283,054	163,584	446,638	0
WESTERN RACINE CO SEWERAGE DIS	122,904	8,296	8,296	16,592	0
WINDING RIVERS LIBRARY SYS	525,073	35,596	35,289	70,885	0
WINNEFOX LIBRARY SYSTEM	773,336	52,201	52,200	104,401	0
WIS DELLS-LAKE DELTON SEW COMM	282,660	19,080	19,079	38,159	0
WISCONSIN COUNTIES ASSOCIATION	2,335,527	157,649	157,648	315,297	0
WISCONSIN MUNIC MUTAL INS CO	822,034	66,952	44,023	110,975	0
WISCONSIN RAPIDS CITY HS AUTH	399,159	26,944	26,943	53,887	0
WISCONSIN TOWNS ASSOCIATION	600,955	40,565	40,564	81,129	0
WISCONSIN VALLEY LIBRARY SRV	451,373	30,468	30,468	60,936	0
WPPI ENERGY	11,512,360	777,087	777,084	1,554,171	0
Total Special Districts (211)	\$ 185,284,367	\$ 14,710,953	\$ 12,458,801	\$ 27,169,754	\$ 593,461



Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
<b>Towns</b>					
ADDISON, TOWN OF(WASHINGTON)	\$ 171,889	\$ 11,602	\$ 11,602	\$ 23,204	\$ 0
ALBAN, TOWN OF (PORTAGE)	81,139	5,517	5,437	10,954	0
ALBION, TOWN OF (DANE)	164,233	11,086	11,086	22,172	0
ALBION, TOWN OF (JACKSON)	46,457	3,229	3,043	6,272	0
ALGOMA, TOWN OF (WINNEBAGO)	191,547	12,930	12,930	25,860	0
ANSON, TOWN OF (CHIPPEWA)	62,742	4,235	4,235	8,470	0
ARBOR VITAE, TOWN OF (VILAS)	211,358	14,267	14,267	28,534	0
ASHIPPUN, TOWN OF (DODGE CO)	131,771	8,895	8,895	17,790	0
ASHLAND, TOWN OF (ASHLAND)	87,037	5,903	5,847	11,750	0
ATHELSTANE, TOWN OF(MARINETTE)	104,320	7,042	7,042	14,084	0
AZTALAN, TOWN OF(JEFFERSON)	68,443	4,620	4,620	9,240	0
BAILEYS HARBOR, TOWN OF (DOOR)	499,439	33,712	33,712	67,424	0
BALSAM LAKE, TOWN OF (POLK)	49,294	3,327	3,327	6,654	0
BARABOO, TOWN OF (SAUK)	54,200	3,665	3,652	7,317	0
BARKSDALE, TOWN OF (BAYFIELD)	64,863	4,378	4,378	8,756	0
BARRON, TOWN OF (BARRON)	54,285	3,664	3,664	7,328	0
BAYVIEW, TOWN OF (BAYFIELD)	74,330	5,399	4,636	10,035	0
BEAR CREEK, TOWN OF (SAUK)	82,929	5,598	5,598	11,196	0
BELOIT, TOWN OF (ROCK)	2,657,717	288,682	179,396	468,078	0
BENNETT, TOWN OF (DOUGLAS)	94,978	6,411	6,411	12,822	0
BERGEN, TOWN OF (VERNON)	54,081	6,068	1,233	7,301	0
BERRY, TOWN OF (DANE)	84,530	5,706	5,705	11,411	0
BLACK EARTH, TOWN OF (DANE)	63,275	4,271	4,271	8,542	0
BLOOMING GROVE, TOWN OF(DANE)	194,853	13,152	13,153	26,305	0
BLUE MOUNDS, TOWN OF (DANE)	50,753	3,434	3,418	6,852	0
BOULDER JUNCTION, TOWN (VILAS)	216,082	14,586	14,585	29,171	0
BRADLEY, TOWN OF (LINCOLN)	127,715	8,621	8,621	17,242	0
BRIGHAM, TOWN OF (IOWA)	118,808	8,020	8,019	16,039	0
BRISTOL, TOWN OF (DANE)	97,543	6,584	6,584	13,168	0
BROCKWAY, TOWN OF (JACKSON)	158,735	10,715	10,715	21,430	0
BROOKFIELD, TOWN OF (WAUKESHA)	3,400,579	337,567	229,525	567,092	0
BROOKLYN, TOWN OF (GREEN)	79,058	5,336	5,336	10,672	0
BROTHERTOWN, TOWN OF(CALUMET)	51,077	3,448	3,448	6,896	0
BUCHANAN, TOWN OF(OUTAGAMIE)	153,195	10,341	10,341	20,682	0
BURKE, TOWN OF (DANE)	197,988	13,365	13,364	26,729	0
BURLINGTON, TOWN OF (RACINE)	333,705	24,531	22,525	47,056	0
CABLE, TOWN OF (BAYFIELD)	202,912	13,776	13,617	27,393	0
CAMPBELL, TOWN OF (LA CROSSE)	675,745	64,089	45,613	109,702	0
CAREY, TOWN OF (IRON)	54,122	3,653	3,653	7,306	0
CASSIAN, TOWN OF (ONEIDA)	108,375	7,315	7,315	14,630	0
CEDAR LAKE, TOWN OF (BARRON)	67,588	4,576	4,549	9,125	0
CEDARBURG, TOWN OF (OZAUKEE)	586,372	39,580	39,580	79,160	0
CHETEK, TOWN OF (BARRON)	85,565	5,776	5,776	11,552	0
CHIPPEWA, TOWN OF (ASHLAND)	85,355	5,761	5,761	11,522	0
CHRISTIANA, TOWN OF (DANE)	160,121	10,808	10,808	21,616	0
CLAYTON, TOWN OF (POLK)	49,590	3,356	3,339	6,695	0
CLAYTON, TOWN OF (WINNEBAGO)	663,836	50,411	44,809	95,220	0

## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
CLEAR LAKE, TOWN OF (POLK)	51,861	3,501	3,501	7,002	0
CLEVELAND, TOWN OF (MARATHON)	35,416	2,391	2,390	4,781	0
CLIFTON, TOWN OF (MONROE)	51,266	3,461	3,460	6,921	0
CLINTON, TOWN OF (BARRON)	54,921	3,707	3,707	7,414	0
CLINTON, TOWN OF (ROCK)	8,988	607	607	1,214	0
CLOVER, TOWN OF (BAYFIELD)	108,740	7,340	7,340	14,680	0
CLOVERLAND, TOWN OF (VILAS)	22,425	1,514	1,514	3,028	0
COLBY, TOWN OF (CLARK)	48,924	3,302	3,303	6,605	0
COLFAX, TOWN OF (DUNN)	38,358	2,589	2,589	5,178	0
CORNING, TOWN OF (LINCOLN)	39,425	2,661	2,661	5,322	0
COTTAGE GROVE, TOWN OF (DANE)	289,437	19,537	19,537	39,074	0
CRESCENT, TOWN OF (ONEIDA)	155,126	10,471	10,471	20,942	0
CROSS PLAINS, TOWN OF (DANE)	85,001	5,738	5,738	11,476	0
CRYSTAL LAKE, TOWN OF (BARRON)	69,091	4,664	4,664	9,328	0
DAIRYLAND, TOWN OF (DOUGLAS)	63,545	4,561	4,548	9,109	0
DARIEN, TOWN OF (WALWORTH)	100,654	6,794	6,794	13,588	0
DELAVAN, TOWN OF (WALWORTH)	1,560,549	200,198	65,769	265,967	0
DELTA, TOWN OF (BAYFIELD)	99,684	6,729	6,729	13,458	0
DELTON, TOWN OF (SAUK)	183,681	12,399	12,399	24,798	0
DOVER, TOWN OF (RACINE)	82,450	5,574	5,557	11,131	0
DOVRE, TOWN OF (BARRON)	48,999	3,313	3,302	6,615	0
DRAPER, TOWN OF (SAWYER)	42,396	2,865	2,858	5,723	0
DRUMMOND, TOWN OF (BAYFIELD)	263,152	17,764	17,763	35,527	0
DUNBAR, TOWN OF (MARINETTE)	45,908	3,099	3,099	6,198	0
DUNKIRK, TOWN OF (DANE)	135,470	9,144	9,144	18,288	0
DUNN, TOWN OF (DANE)	546,340	36,878	36,878	73,756	0
EAGLE POINT, TOWN OF (CHIPPEWA)	123,286	8,592	8,052	16,644	0
EAGLE, TOWN OF (WAUKESHA)	358,211	28,324	24,179	52,503	0
EAST TROY, TOWN OF (WALWORTH)	773,096	73,974	52,114	126,088	0
EASTON, TOWN OF (MARATHON)	93,108	6,294	6,276	12,570	0
EAU GALLE, TOWN OF (DUNN)	50,844	3,432	3,432	6,864	0
EGG HARBOR, TOWN OF (DOOR)	56,125	3,788	3,788	7,576	0
ELK MOUND, TOWN OF (DUNN)	46,986	619	5,724	6,343	0
ERIN, TOWN OF (WASHINGTON)	162,041	10,938	10,938	21,876	0
EUREKA, TOWN OF (POLK)	61,177	4,130	4,129	8,259	0
EXETER, TOWN OF (GREEN)	83,485	5,635	5,635	11,270	0
FARMINGTON, TOWN OF (LACROSSE)	77,443	5,227	5,227	10,454	0
FARMINGTON, TOWN OF (WAUPACA)	37,725	2,546	2,546	5,092	0
FLAMBEAU, TOWN OF (RUSK)	17,376	1,173	1,173	2,346	0
FLORENCE, TOWN OF (FLORENCE)	932,128	62,919	62,919	125,838	0
FRANKLIN, TOWN OF (MANITOWOC)	70,888	4,785	4,785	9,570	0
FREEDOM, TOWN OF (OUTAGAMIE)	249,293	16,827	16,827	33,654	0
FREEDOM, TOWN OF (SAUK)	68,124	4,598	4,598	9,196	0
FULTON, TOWN OF (ROCK)	58,066	3,919	3,919	7,838	0
GENEVA, TOWN OF (WALWORTH)	908,779	88,705	61,343	150,048	0
GEORGETOWN, TOWN OF (POLK)	46,627	3,162	3,132	6,294	180,513
GERMANTOWN, TOWN (JUNEAU)	131,832	8,899	8,899	17,798	0
GIBRALTAR, TOWN OF (DOOR)	427,047	35,562	28,825	64,387	0



Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
GILMAN, TOWN OF (PIERCE)	58,420	3,943	3,943	7,886	0
GOODMAN, TOWN OF (MARINETTE)	82,151	5,546	5,545	11,091	0
GORDON, TOWN OF (DOUGLAS)	75,634	5,230	4,980	10,210	0
GRAND CHUTE, TOWN OF (OUTAGAMIE)	7,627,459	740,634	514,903	1,255,537	0
GRAND RAPIDS, TOWN OF (WOOD)	783,643	77,015	52,896	129,911	0
GRANT, TOWN OF (PORTAGE)	45,181	3,050	3,050	6,100	0
GRATIOT, TOWN OF (LAFAYETTE)	77,552	5,235	5,235	10,470	0
GREEN LAKE, TOWN OF (GRN LAKE)	48,644	3,284	3,283	6,567	0
GREENFIELD, TOWN OF (LACROSSE)	78,532	5,301	5,301	10,602	0
GREENVILLE, TOWN OF (OUTAGAMIE)	2,085,243	158,551	140,754	299,305	0
GREENWOOD, TOWN OF (VERNON)	39,369	2,657	2,657	5,314	0
HAMBURG, TOWN OF (VERNON)	61,976	4,183	4,183	8,366	0
HARRISON, TOWN OF (GRANT)	45,971	3,154	3,052	6,206	0
HAY RIVER, TOWN OF (DUNN)	53,960	3,642	3,642	7,284	0
HAYWARD, TOWN OF (SAWYER)	221,744	17,773	14,950	32,723	0
HAZELHURST, TOWN OF (ONEIDA)	140,703	8,203	8,202	16,405	0
HIGHLAND, TOWN OF (IOWA)	90,370	6,100	6,100	12,200	0
HUGHES, TOWN OF (BAYFIELD)	61,957	4,182	4,182	8,364	0
HULL, TOWN OF (PORTAGE)	311,710	21,041	21,040	42,081	0
IRON RIVER, TOWN OF (BAYFIELD)	412,356	41,480	24,371	65,851	0
ITHACA, TOWN OF (RICHLAND)	47,969	3,238	3,238	6,476	0
IXONIA, TOWN OF (JEFFERSON)	394,843	26,653	26,652	53,305	0
JACKSON, TOWN OF (WASHINGTON)	251,669	16,988	16,988	33,976	0
JEFFERSON, TOWN OF (JEFFERSON)	51,869	3,501	3,501	7,002	0
KIMBALL, TOWN OF (IRON)	105,283	14,213	0	14,213	0
KNIGHT, TOWN OF (IRON)	63,949	4,317	4,317	8,634	0
KNOWLTON, TOWN OF (MARATHON)	56,598	3,820	3,820	7,640	0
KOMENSKY, TOWN OF (JACKSON)	50,149	6,770	0	6,770	0
KOSHKONONG, TOWN OF (JEFFERSON)	99,732	6,748	6,716	13,464	0
LA POINTE, TOWN OF (ASHLAND)	797,455	63,112	53,822	116,934	0
LA VALLE, TOWN OF (SAUK)	203,717	16,345	13,751	30,096	0
LAC DU FLAMBEAU, TOWN (VILAS)	311,531	21,029	21,028	42,057	0
LAFAYETTE, TOWN OF (CHIPPEWA)	214,194	14,465	14,452	28,917	0
LAFAYETTE, TOWN OF (WALWORTH)	95,475	6,445	6,445	12,890	0
LAKE HOLCOMBE, TOWN (CHIPPEWA)	54,218	3,802	3,517	7,319	0
LAKE, TOWN OF (MARINETTE)	46,521	3,140	3,140	6,280	0
LAKETOWN, TOWN OF (POLK)	60,205	4,064	4,064	8,128	0
LANARK, TOWN OF (PORTAGE)	45,279	3,056	3,056	6,112	0
LAND O LAKES, TOWN OF (VILAS)	311,716	21,041	21,041	42,082	0
LAONA, TOWN OF (FOREST)	171,874	12,795	11,559	24,354	0
LAWRENCE, TOWN OF (BROWN CO)	560,729	37,849	37,849	75,698	0
LEBANON, TOWN OF (DODGE)	115,623	7,805	7,805	15,610	0
LEDGEVIEW, TOWN OF (BROWN)	713,500	48,161	48,161	96,322	0
LINCOLN, TOWN OF (TREMPEALEAU)	53,364	3,602	3,602	7,204	0
LINCOLN, TOWN OF (VILAS)	50,000	3,375	3,375	6,750	0
LINN, TOWN OF (WALWORTH)	797,589	80,393	53,393	133,786	0
LINWOOD, TOWN OF (PORTAGE)	47,817	3,228	3,228	6,456	0
LISBON, TOWN OF (WAUKESHA)	1,032,658	94,512	63,924	158,436	0

## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
LODI, TOWN OF (COLUMBIA)	89,692	6,054	6,054	12,108	0
LUCAS, TOWN OF (DUNN)	56,144	3,790	3,790	7,580	0
LUDINGTON, TOWN OF(EAU CLAIRE)	46,120	3,715	2,511	6,226	0
LYONS, TOWN OF (WALWORTH)	191,792	12,946	12,946	25,892	0
MADISON, TOWN OF (DANE)	2,473,921	261,939	166,990	428,929	0
MANITOWOC RAPIDS,TOWN(MANITWC)	87,774	5,925	5,925	11,850	0
MAPLE, TOWN OF (DOUGLAS)	80,107	5,407	5,407	10,814	0
MARENGO, TOWN OF (ASHLAND)	80,569	5,445	5,432	10,877	0
MARION, TOWN OF (WAUSHARA)	29,720	2,006	2,006	4,012	0
MARTELL, TOWN OF (PIERCE)	62,502	4,219	4,219	8,438	0
MAZOMANIE, TOWN OF (DANE)	88,290	5,962	5,957	11,919	0
MEDFORD, TOWN OF (TAYLOR)	50,120	3,383	3,383	6,766	0
MEDINA, TOWN OF (DANE)	136,789	9,233	9,233	18,466	0
MERCER, TOWN OF (IRON)	418,834	28,270	28,271	56,541	0
MERTON, TOWN OF (WAUKESHA)	785,340	53,015	53,007	106,022	0
MIDDLETON, TOWN OF (DANE)	470,589	31,764	31,764	63,528	0
MILLTOWN, TOWN OF (POLK)	129,140	8,717	8,717	17,434	0
MINOCQUA, TOWN OF(ONEIDA)	1,622,797	145,797	109,539	255,336	377,198
MINONG, TOWN OF (WASHBURN)	206,702	13,982	13,923	27,905	0
MISHICOT, TOWN OF(MANITOWOC)	57,448	3,878	3,878	7,756	0
MONTROSE, TOWN OF (DANE)	61,476	4,150	4,150	8,300	0
MORSE, TOWN OF (ASHLAND)	98,155	6,626	6,626	13,252	0
MUKWONAGO, TOWN (WAUKESHA)	885,425	85,334	59,766	145,100	0
NAMAKAGON, TOWN OF (BAYFIELD)	132,472	8,942	8,942	17,884	0
NEENAH, TOWN OF (WINNEBAGO)	47,521	3,208	3,208	6,416	0
NEW GLARUS, TOWN OF (GREEN)	85,276	6,042	5,470	11,512	0
NEW HAVEN, TOWN OF (DUNN)	57,075	3,853	3,853	7,706	0
NEWBOLD, TOWN OF (ONEIDA)	327,187	22,085	22,085	44,170	0
NORWAY, TOWN OF (RACINE)	545,538	40,166	36,824	76,990	0
OAK GROVE, TOWN OF (BARRON)	65,779	4,440	4,440	8,880	0
OAKDALE, TOWN OF (MONROE)	83,361	5,627	5,627	11,254	0
OAKLAND, TOWN OF (JEFFERSON)	193,853	13,085	13,085	26,170	0
OCONOMOWOC, TOWN OF (WAUKESHA)	1,635,681	158,472	110,094	268,566	0
OMA, TOWN OF (IRON)	121,499	8,201	8,201	16,402	0
ONALASKA, TOWN OF (LA CROSSE)	202,585	13,675	13,675	27,350	0
OREGON, TOWN OF (DANE)	210,207	14,189	14,189	28,378	0
ORIENTA, TOWN OF (BAYFIELD)	46,284	3,124	3,124	6,248	0
OSCEOLA, TOWN OF (POLK)	84,954	5,799	5,670	11,469	0
OTTAWA, TOWN OF (WAUKESHA)	101,167	6,830	6,829	13,659	0
PARKLAND, TOWN OF (DOUGLAS)	103,652	7,050	6,943	13,993	1,527
PELICAN, TOWN OF (ONEIDA)	103,312	6,973	6,973	13,946	0
PEMBINE, TOWN OF (MARINETTE)	87,247	5,889	5,889	11,778	0
PEWAUKEE, CITY OF	5,889,107	536,085	397,514	933,599	0
PHELPS, TOWN OF (VILAS)	245,056	16,541	16,541	33,082	0
PINE LAKE, TOWN OF (ONEIDA)	130,956	8,840	8,840	17,680	0
PLEASANT SPRINGS, TOWN(DANE)	214,415	14,619	14,327	28,946	0
PLEASANT VALLEY, TOWN(EAUCLER)	144,068	9,725	9,725	19,450	0
PLOVER, TOWN OF (PORTAGE)	58,636	3,958	3,958	7,916	0





Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
PORT WASHINGTON, TOWN(OZAUKEE)	44,750	3,021	3,021	6,042	0
PORT WING, TOWN OF (BAYFIELD)	127,680	8,618	8,618	17,236	0
PRAIRIE LAKE, TOWN OF (BARRON)	124,424	8,399	8,399	16,798	0
PRESQUE ISLE, TOWN OF(VILAS)	260,721	17,599	17,599	35,198	0
PRESTON, TOWN OF (ADAMS)	72,699	4,910	4,904	9,814	0
PRIMROSE, TOWN OF (DANE)	56,456	3,811	3,811	7,622	0
QUINCY, TOWN OF (ADAMS)	106,581	7,195	7,194	14,389	0
RIB MOUNTAIN, TOWN (MARATHON)	710,191	48,109	48,105	96,214	0
RICE LAKE, TOWN OF (BARRON)	138,190	9,328	9,328	18,656	0
RICHFIELD, VILLAGE OF	724,070	48,875	48,875	97,750	0
RICHMOND, TOWN OF (WALWORTH)	73,546	5,033	4,896	9,929	0
RIPON, TOWN OF(FOND DU LAC)	105,452	10,389	7,118	17,507	0
RIVER FALLS, TOWN OF (PIERCE)	114,669	7,740	7,740	15,480	0
ROME, TOWN OF (ADAMS)	1,318,808	126,188	79,036	205,224	0
RUDOLPH, TOWN OF (WOOD)	56,332	3,802	3,802	7,604	0
RUTLAND, TOWN OF (DANE)	142,900	9,646	9,646	19,292	0
SANBORN, TOWN OF (ASHLAND)	91,914	6,204	6,204	12,408	0
SCOTT, TOWN OF (BROWN)	281,366	18,992	18,992	37,984	0
SCOTT, TOWN OF (SHEBOYGAN)	64,144	4,341	4,318	8,659	0
SEVASTOPOL, TOWN OF (DOOR)	58,700	3,962	3,962	7,924	0
SHARON, TOWN OF (PORTAGE)	119,811	8,087	8,087	16,174	0
SHARON, TOWN OF (WALWORTH)	36,292	2,450	2,450	4,900	0
SHEBOYGAN, TOWN OF (SHEBOYGAN)	542,545	36,574	36,417	72,991	0
SHELBY, TOWN OF (LA CROSSE)	683,814	52,340	45,051	97,391	0
SOMERS, TOWN OF (KENOSHA)	0	103	101	204	0
SOMERSET, TOWN OF (ST CROIX)	196,050	13,233	13,233	26,466	0
SOUTH LANCASTER, TOWN (GRANT)	49,381	3,333	3,333	6,666	0
SPARTA, TOWN OF (MONROE)	92,588	6,250	6,250	12,500	0
SPIRIT, TOWN OF (PRICE)	37,656	2,542	2,542	5,084	0
SPRING GREEN, TOWN OF (SAUK)	53,409	3,605	3,605	7,210	0
SPRING LAKE, TOWN OF (PIERCE)	58,445	3,945	3,945	7,890	0
SPRINGDALE, TOWN OF (DANE)	102,161	7,057	6,735	13,792	0
SPRINGFIELD, TOWN OF (DANE)	163,309	11,023	11,023	22,046	0
SPRINGFIELD, TOWN OF (JACKSON)	53,067	3,582	3,582	7,164	45,218
ST CROIX FALLS, TOWN OF (POLK)	79,674	5,378	5,378	10,756	0
ST GERMAIN, TOWN OF (VILAS)	379,284	25,781	25,471	51,252	0
STANTON, TOWN OF (DUNN)	78,278	5,314	5,254	10,568	0
STETTIN, TOWN OF (MARATHON)	177,457	11,978	11,978	23,956	0
STOCKTON, TOWN OF (PORTAGE)	177,397	11,974	11,974	23,948	0
STRONGS PRAIRIE, TOWN OF(ADMS)	37,440	2,527	2,527	5,054	0
SUGAR CREEK, TOWN OF(WALWORTH)	121,926	8,231	8,230	16,461	0
SULLIVAN, TOWN OF (JEFFERSON)	98,471	6,654	6,640	13,294	0
SUMMIT, TOWN OF (DOUGLAS)	140,218	9,465	9,465	18,930	0
SUMMIT, TOWN OF (JUNEAU)	49,128	3,316	3,316	6,632	0
SUMNER, TOWN OF (BARRON)	57,309	3,868	3,868	7,736	0
SUPERIOR, TOWN OF (DOUGLAS)	127,816	8,628	8,628	17,256	0
TAINTER, TOWN OF (DUNN)	138,570	9,354	9,354	18,708	0
THERESA, TOWN OF (DODGE)	77,240	5,214	5,214	10,428	0

## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
THREE LAKES, TOWN OF (ONEIDA)	788,826	68,161	53,246	121,407	0
TIFFANY, TOWN OF (DUNN)	49,064	3,311	3,311	6,622	0
TRADE LAKE, TOWN OF (BURNETT)	67,224	4,538	4,538	9,076	0
TREMPELEAU, TOWN (TREMPELEAU)	91,650	6,186	6,186	12,372	0
TRENTON, TOWN OF (WASHINGTON)	248,075	16,745	16,745	33,490	0
TRIPP, TOWN OF (BAYFIELD)	62,234	4,222	4,179	8,401	0
TROY, TOWN OF (WALWORTH)	168,827	11,396	11,396	22,792	0
TURTLE LAKE, TOWN OF (BARRON)	81,061	5,472	5,472	10,944	0
UNION, TOWN OF (ROCK)	60,590	4,100	4,080	8,180	0
UNITY, TOWN OF (CLARK)	34,216	2,310	2,310	4,620	0
VERMONT, TOWN OF (DANE)	53,061	3,582	3,582	7,164	0
VERONA, TOWN OF (DANE)	207,758	14,049	13,999	28,048	0
VIENNA, TOWN OF (DANE)	183,572	12,391	12,391	24,782	0
VIROQUA, TOWN OF (VERNON)	157,269	10,616	10,616	21,232	0
WABENO, TOWN OF (FOREST)	78,888	5,326	5,324	10,650	0
WALWORTH, TOWN OF (WALWORTH)	121,388	8,194	8,194	16,388	0
WARREN, TOWN OF (ST CROIX)	42,642	2,878	2,878	5,756	0
WASCOTT, TOWN OF (DOUGLAS)	260,807	18,299	17,604	35,903	0
WASHINGTON, TOWN OF (DOOR)	500,347	40,376	34,037	74,413	0
WASHINGTON, TOWN OF (LACROSSE)	60,015	4,056	4,046	8,102	0
WASHINGTON, TOWN OF (SAUK)	67,818	4,578	4,578	9,156	0
WASHINGTON, TOWN OF (VILAS)	175,325	11,835	11,834	23,669	0
WASHINGTON, TOWN OF (EAUCLAIRE)	351,422	23,721	23,721	47,442	0
WATERFORD, TOWN OF (RACINE)	1,085,660	106,968	73,282	180,250	0
WAYNE, TOWN OF (LAFAYETTE)	57,312	3,869	3,869	7,738	0
WESCOTT, TOWN OF (SHAWANO)	292,117	19,717	19,718	39,435	0
WEST BEND, TOWN OF (WASHINGTON)	176,140	11,889	11,889	23,778	0
WEST POINT, TOWN (COLUMBIA)	24,610	1,661	1,661	3,322	0
WEST SWEDEN, TOWN OF (POLK)	39,896	2,693	2,693	5,386	0
WESTFIELD, TOWN OF (SAUK)	7,753	523	523	1,046	0
WESTFORD, TOWN OF (RICHLAND)	20,960	1,633	1,196	2,829	0
WESTPORT, TOWN OF (DANE)	585,814	55,361	23,724	79,085	0
WHEATLAND, TOWN OF (VERNON)	59,587	4,039	4,005	8,044	0
WHEATON, TOWN OF (CHIPPEWA)	110,962	7,490	7,490	14,980	0
WILSON, TOWN OF (SHEBOYGAN)	166,993	11,272	11,272	22,544	0
WILTON, TOWN OF (MONROE)	42,168	2,846	2,846	5,692	0
WINTER, TOWN OF (SAWYER)	208,775	14,092	14,092	28,184	0
WIOTA, TOWN OF (LAFAYETTE)	45,438	3,067	3,067	6,134	0
WOOD RIVER, TOWN OF (BURNETT)	59,767	4,034	4,034	8,068	0
WOODRUFF, TOWN OF (ONEIDA)	614,159	59,066	41,456	100,522	0
Total Towns (279)	\$ 76,586,977	\$ 6,412,033	\$ 5,078,759	\$ 11,490,792	\$ 604,456



Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
<b>Counties</b>					
ADAMS COUNTY	\$ 13,249,449	\$ 994,240	\$ 897,029	\$ 1,891,269	\$ 0
ASHLAND COUNTY	8,291,460	684,343	506,575	1,190,918	0
BARRON COUNTY	19,475,339	1,422,465	1,314,585	2,737,050	0
BAYFIELD COUNTY	9,438,223	752,634	594,767	1,347,401	0
BROWN COUNTY	86,165,816	6,555,895	5,820,330	12,376,225	0
BUFFALO COUNTY	5,845,148	455,211	369,071	824,282	0
BURNETT COUNTY	8,002,303	597,662	540,157	1,137,819	0
CALUMET COUNTY	15,849,543	1,174,489	1,069,845	2,244,334	0
CHIPPEWA COUNTY	21,549,698	1,571,495	1,454,250	3,025,745	0
CLARK COUNTY	25,698,506	1,832,317	1,734,580	3,566,897	0
COLUMBIA COUNTY	27,687,620	2,154,823	1,754,799	3,909,622	0
CRAWFORD COUNTY	7,546,963	645,606	453,441	1,099,047	0
DANE COUNTY	188,352,824	14,989,794	12,713,802	27,703,596	0
DODGE COUNTY	43,603,578	3,165,904	2,911,352	6,077,256	0
DOOR COUNTY	20,745,052	1,706,906	1,400,280	3,107,186	0
DOUGLAS COUNTY	15,054,812	1,170,349	1,017,569	2,187,918	0
DUNN COUNTY	22,917,572	1,747,702	1,483,232	3,230,934	0
EAU CLAIRE COUNTY	32,389,646	2,358,703	2,188,886	4,547,589	0
FLORENCE COUNTY	3,588,752	285,181	240,732	525,913	0
FOND DU LAC COUNTY	44,288,484	3,328,266	2,882,534	6,210,800	0
FOREST COUNTY	5,519,521	455,396	371,028	826,424	0
GRANT COUNTY	17,516,095	1,280,696	1,181,118	2,461,814	0
GREEN COUNTY	18,289,234	1,369,481	1,234,523	2,604,004	0
GREEN LAKE COUNTY	11,112,260	819,397	750,079	1,569,476	0
IOWA COUNTY	10,890,238	841,602	735,092	1,576,694	0
IRON COUNTY	4,842,684	362,771	326,881	689,652	0
JACKSON COUNTY	10,433,800	780,733	702,590	1,483,323	0
JEFFERSON COUNTY	31,671,675	2,505,699	2,137,819	4,643,518	0
JUNEAU COUNTY	13,408,624	1,060,378	905,027	1,965,405	0
KENOSHA COUNTY	61,087,862	5,094,965	3,687,340	8,782,305	0
KEWAUNEE COUNTY	8,318,807	644,346	561,519	1,205,865	0
LA CROSSE COUNTY	53,518,460	3,761,939	3,611,107	7,373,046	0
LAFAYETTE COUNTY	17,372,578	1,265,029	1,173,975	2,439,004	0
LANGLADE COUNTY	8,620,978	670,829	560,889	1,231,718	0
LINCOLN COUNTY	12,616,586	968,447	851,618	1,820,065	0
MANITOWOC COUNTY	27,506,179	2,301,545	1,661,456	3,963,001	0
MARATHON COUNTY	46,485,527	3,455,698	3,138,754	6,594,452	0
MARINETTE COUNTY	19,029,337	1,416,733	1,286,057	2,702,790	0
MARQUETTE COUNTY	10,301,787	838,445	695,370	1,533,815	0
MENOMINEE COUNTY	3,455,843	257,927	233,178	491,105	0
MONROE COUNTY	19,228,051	1,384,367	1,299,411	2,683,778	0
OCONTO COUNTY	14,865,131	1,127,431	1,003,400	2,130,831	0
ONEIDA COUNTY	15,356,459	1,184,521	1,036,586	2,221,107	0
OUTAGAMIE COUNTY	63,293,438	4,606,393	4,275,630	8,882,023	0
OZAUKEE COUNTY	33,832,258	2,493,353	2,285,306	4,778,659	0
PEPIN COUNTY	4,837,858	392,186	313,226	705,412	0
PIERCE COUNTY	16,561,822	1,368,706	1,022,027	2,390,733	0

## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
POLK COUNTY	20,744,093	1,610,011	1,307,537	2,917,548	0
PORTAGE COUNTY	29,808,942	2,283,867	1,919,564	4,203,431	0
PRICE COUNTY	6,983,382	529,590	471,379	1,000,969	0
RACINE COUNTY	47,684,934	4,117,068	3,224,689	7,341,757	0
RICHLAND COUNTY	12,474,415	898,571	841,639	1,740,210	0
ROCK COUNTY	69,036,386	5,446,601	4,481,429	9,928,030	0
RUSK COUNTY	7,683,215	613,314	514,517	1,127,831	0
SAUK COUNTY	35,001,609	2,731,883	2,362,713	5,094,596	0
SAWYER COUNTY	9,919,103	753,625	669,539	1,423,164	0
SHAWANO COUNTY	18,137,421	1,392,542	1,224,129	2,616,671	0
SHEBOYGAN COUNTY	44,602,607	3,295,048	3,010,674	6,305,722	0
ST CROIX COUNTY	34,269,070	2,627,448	2,313,163	4,940,611	0
TAYLOR COUNTY	9,194,407	684,207	621,564	1,305,771	0
TREMPEALEAU COUNTY	25,350,706	1,874,899	1,646,337	3,521,236	0
VERNON COUNTY	13,525,249	1,057,479	843,538	1,901,017	0
VILAS COUNTY	10,380,797	835,486	705,622	1,541,108	0
WALWORTH COUNTY	48,905,602	3,957,021	3,011,898	6,968,919	0
WASHBURN COUNTY	9,337,440	687,623	630,278	1,317,901	0
WASHINGTON COUNTY	37,140,349	2,816,480	2,506,974	5,323,454	0
WAUKESHA COUNTY	91,735,607	6,867,376	6,192,150	13,059,526	0
WAUPACA COUNTY	22,965,639	1,730,698	1,550,181	3,280,879	0
WAUSHARA COUNTY	14,171,035	1,116,740	956,546	2,073,286	0
WINNEBAGO COUNTY	59,070,443	4,731,440	3,757,124	8,488,564	0
WOOD COUNTY	32,216,008	2,456,810	2,051,801	4,508,611	0
Total Counties (71)	\$ 1,890,052,339	\$ 145,418,825	\$ 125,203,807	\$ 270,622,632	\$ 0



Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
<b>School Districts</b>					
ABBOTSFORD SCHOOL DISTRICT	\$ 4,219,378	\$ 285,376	\$ 284,241	\$ 569,617	\$ 0
ADAMS-FRIENDSHIP AREA SCH DIST	9,813,600	662,619	662,221	1,324,840	0
ALBANY SCHOOL DISTRICT	2,697,839	182,105	182,104	364,209	0
ALGOMA SCHOOL DISTRICT	4,401,708	297,118	297,116	594,234	0
ALMA CENTER-HUMBRD-MERIL SCH D	4,073,087	274,935	274,934	549,869	0
ALMA SCHOOL DISTRICT	1,833,989	123,795	123,795	247,590	0
ALMOND-BANCROFT SCHOOL DIST	2,548,806	172,782	172,725	345,507	0
ALTOONA SCHOOL DISTRICT	10,525,473	711,271	710,200	1,421,471	0
AMERY SCHOOL DISTRICT	11,379,890	768,151	768,139	1,536,290	0
ANTIGO UNIFIED SCHOOL DISTRICT	13,703,747	925,014	925,006	1,850,020	0
APPLETON AREA SCHOOL DISTRICT	97,198,589	6,561,772	6,560,086	13,121,858	0
ARBOR VITAE-WOODRUFF JSD #1	3,820,262	257,870	257,868	515,738	0
ARCADIA SCHOOL DISTRICT	9,005,864	607,899	607,895	1,215,794	0
ARGYLE SCHOOL DISTRICT	1,990,364	134,350	134,350	268,700	0
ARROWHEAD UNION HIGH SCH DIST	13,921,372	939,696	939,693	1,879,389	0
ASHLAND SCHOOL DISTRICT	12,097,550	816,591	816,584	1,633,175	0
ASHWAUBENON SCHOOL DISTRICT	20,385,313	1,378,773	1,376,010	2,754,783	0
ATHENS SCHOOL DISTRICT	2,558,103	172,673	172,671	345,344	0
AUBURNDALE SCHOOL DISTRICT	4,562,853	307,994	307,992	615,986	0
AUGUSTA SCHOOL DISTRICT	4,909,039	331,361	331,361	662,722	0
BALDWIN-WOODVILLE AREA SCH DIS	11,679,673	788,388	788,381	1,576,769	0
BANGOR SCHOOL DISTRICT	3,757,924	253,662	253,660	507,322	0
BARABOO SCHOOL DISTRICT	19,960,477	1,347,340	1,347,333	2,694,673	0
BARNEVELD SCHOOL DISTRICT	2,690,872	181,634	181,634	363,268	0
BARRON AREA SCHOOL DISTRICT	8,840,117	596,712	596,708	1,193,420	0
BAYFIELD SCHOOL DISTRICT	4,964,468	335,103	335,101	670,204	0
BEAVER DAM UNIFIED SCHOOL DIST	22,857,497	1,542,889	1,542,881	3,085,770	0
BEECHER DUNBAR PEMBINE SCH DIS	1,970,476	133,096	132,917	266,013	0
BELLEVILLE SCHOOL DISTRICT	5,820,661	392,897	392,895	785,792	0
BELMONT COMMUNITY SCHOOL DIST	2,361,325	159,391	159,390	318,781	0
BELOIT SCHOOL DISTRICT	43,852,411	2,960,023	2,959,990	5,920,013	0
BELOIT TURNER SCHOOL DISTRICT	9,722,882	656,136	656,092	1,312,228	0
BENTON SCHOOL DISTRICT	1,462,718	98,735	98,734	197,469	0
BERLIN AREA SCHOOL DISTRICT	9,935,003	670,616	670,613	1,341,229	0
BIG FOOT UHS SCH DIST	3,277,218	221,494	221,489	442,983	0
BIRCHWOOD SCHOOL DISTRICT	1,940,812	131,005	131,005	262,010	0
BLACK HAWK SCHOOL DISTRICT	2,864,481	193,355	193,353	386,708	0
BLACK RIVER FALLS SCH DIST	11,582,759	781,842	781,837	1,563,679	0
BLAIR-TAYLOR SCHOOL DISTRICT	3,939,198	267,141	264,652	531,793	0
BLOOMER SCHOOL DISTRICT	7,108,436	479,823	479,820	959,643	0
BONDUEL SCHOOL DISTRICT	4,728,114	319,249	319,148	638,397	0
BOSCOBEL SCHOOL DISTRICT	5,713,694	385,677	385,674	771,351	0
BOWLER SCHOOL DISTRICT	2,857,092	192,855	192,854	385,709	0
BOYCEVILLE COMMUNITY SCH DIST	4,561,305	307,888	307,887	615,775	0
BRIGHTON SCH DIST #1	931,192	62,855	62,855	125,710	0
BRILLION PUBLIC SCHOOL DIST	5,685,605	383,781	383,779	767,560	0
BRISTOL, TOWN, SCH DIST #1	5,064,227	341,838	341,839	683,677	0

## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
BRODHEAD SCHOOL DISTRICT	7,122,777	480,792	480,789	961,581	0
BROWN DEER SCHOOL DISTRICT	12,162,414	830,594	811,335	1,641,929	0
BRUCE SCHOOL DISTRICT	3,259,292	220,004	220,002	440,006	0
BURLINGTON AREA SCHOOL DIST	22,059,486	1,488,740	1,488,733	2,977,473	0
BUTTERNUT SCHOOL DISTRICT	1,684,423	113,740	113,658	227,398	0
CADOTT COMM SCHOOL DISTRICT	5,885,595	397,280	397,277	794,557	0
CAMBRIA-FRIESLAND SCHOOL DIST	3,096,791	209,034	209,033	418,067	0
CAMBRIDGE SCHOOL DISTRICT	6,402,175	432,150	432,147	864,297	0
CAMERON SCHOOL DISTRICT	6,923,185	467,321	467,317	934,638	0
CAMPBELLSPORT SCHOOL DISTRICT	8,548,292	577,013	577,010	1,154,023	0
CASHTON SCHOOL DISTRICT	3,896,720	263,030	263,028	526,058	0
CASSVILLE SCHOOL DISTRICT	1,607,356	108,497	108,497	216,994	0
CEDAR GROVE-BELGIUM SCH DIST	6,037,905	407,561	407,559	815,120	0
CEDARBURG SCHOOL DISTRICT	19,588,521	1,322,230	1,322,225	2,644,455	0
CHEQUAMEGON SCHOOL DISTRICT	5,618,196	379,234	379,225	758,459	0
CHETEK-WEYERHAEUSER AREA SD	6,779,622	457,628	457,625	915,253	0
CHILTON SCHOOL DISTRICT	7,312,943	493,624	493,624	987,248	0
CHIPPEWA FALLS AREA UNIF SCH	32,243,298	2,176,444	2,176,428	4,352,872	0
CLAYTON SCHOOL DISTRICT	2,578,757	174,067	174,066	348,133	0
CLEAR LAKE SCHOOL DISTRICT	3,877,508	261,734	261,732	523,466	0
CLINTON COMMUNITY SCHOOL DIST	7,544,300	509,242	509,240	1,018,482	0
CLINTONVILLE PUBLIC SCH DIST	9,670,727	652,780	652,775	1,305,555	0
COCHRANE-FOUNTAIN CITY SCH DIS	3,586,516	242,091	242,090	484,181	0
COLBY SCHOOL DISTRICT	4,533,210	305,999	305,998	611,997	0
COLEMAN SCHOOL DISTRICT	4,017,816	271,206	271,204	542,410	0
COLFAX SCHOOL DISTRICT	5,133,419	346,508	346,506	693,014	0
COLUMBUS SCHOOL DISTRICT	7,935,519	535,645	535,641	1,071,286	0
CORNELL SCHOOL DISTICT	2,584,335	174,443	174,443	348,886	0
CRANDON SCHOOL DISTRICT	6,009,479	405,644	405,639	811,283	0
CRIVITZ SCHOOL DISTRICT	4,276,840	288,690	288,688	577,378	0
CUBA CITY SCHOOL DISTRICT	5,032,013	339,664	339,662	679,326	0
CUDAHY SCHOOL DISTRICT	19,527,942	1,319,847	1,316,434	2,636,281	0
CUMBERLAND SCHOOL DISTRICT	6,334,746	427,599	427,596	855,195	0
DARLINGTON COMM SCHOOL DIST	5,741,977	387,568	387,566	775,134	0
DC EVEREST AREA SCHOOL DIST	41,992,788	2,834,634	2,834,404	5,669,038	0
DEERFIELD COMM SCHOOL DISTRICT	5,057,752	341,401	341,398	682,799	0
DEFOREST AREA SCHOOL DISTRICT	25,486,595	1,720,349	1,720,342	3,440,691	0
DELAVAN-DARIEN SCHOOL DISTRICT	13,481,008	910,631	909,631	1,820,262	0
DENMARK SCHOOL DISTRICT	9,391,009	633,896	633,893	1,267,789	0
DEPERE UNIFIED SCHOOL DISTRICT	25,149,025	1,697,566	1,697,561	3,395,127	0
DESOTO AREA SCHOOL DISTRICT	3,409,526	231,395	228,893	460,288	0
DODGELAND SCHOOL DISTRICT	5,893,247	397,802	397,798	795,600	0
DODGEVILLE SCHOOL DISTRICT	8,927,981	602,638	602,636	1,205,274	0
DRUMMOND SCHOOL DISTRICT	2,539,997	171,451	171,450	342,901	0
DURAND-ARKANSAW SCHOOL DIST	5,455,189	368,228	368,226	736,454	0
EAST TROY COMMUNITY SCH DIST	11,057,000	746,456	746,348	1,492,804	0
EAU CLAIRE AREA SCHOOL DIST	68,335,718	4,613,388	4,612,882	9,226,270	0
EDGAR SCHOOL DISTRICT	3,246,717	219,155	219,153	438,308	0



Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
EDGERTON SCHOOL DISTRICT	11,981,951	808,784	808,781	1,617,565	0
ELCHO SCHOOL DISTRICT	2,519,327	175,220	164,889	340,109	0
ELEVA-STRUM SCHOOL DISTRICT	4,210,909	284,238	284,237	568,475	0
ELK MOUND AREA SCHOOL DISTRICT	7,032,704	474,707	474,706	949,413	0
ELKHART LAKE-GLENBEULAH SCH DS	3,488,096	235,448	235,447	470,895	0
ELKHORN AREA SCHOOL DISTRICT	21,936,655	1,480,737	1,480,728	2,961,465	0
ELLSWORTH COMM SCH DIST	10,662,862	719,746	719,744	1,439,490	0
ELMBROOK SCHOOL DISTRICT	53,197,210	3,590,826	3,590,814	7,181,640	0
ELMWOOD SCHOOL DISTRICT	2,667,832	180,080	180,079	360,159	0
ERIN SCH DIST #2	1,794,989	121,162	121,161	242,323	0
EVANSVILLE COMM SCH DIST	12,276,119	828,640	828,638	1,657,278	0
FALL CREEK SCHOOL DISTRICT	4,966,906	335,268	335,266	670,534	0
FALL RIVER SCHOOL DISTRICT	3,122,661	211,089	211,055	422,144	0
FENNIMORE COMMUNITY SCH DIST	5,748,477	388,187	388,022	776,209	0
FLAMBEAU SCHOOL DISTRICT	3,944,020	266,224	266,222	532,446	0
FLORENCE COUNTY SCH DIST	3,648,258	248,380	248,170	496,550	0
FOND DU LAC SCHOOL DISTRICT	48,691,443	3,307,437	3,306,817	6,614,254	0
FONTANA JT SCH DIST #8 ETAL	1,709,683	115,405	115,404	230,809	0
FORT ATKINSON SCHOOL DISTRICT	20,856,769	1,401,922	1,413,732	2,815,654	0
FOX POINT JT SCH DIST # 2 ETAL	7,409,697	500,159	500,156	1,000,315	0
FRANKLIN PUBLIC SCHOOL DIST	32,140,465	2,171,014	2,168,207	4,339,221	0
FREDERIC SCHOOL DISTRICT	3,550,221	239,642	239,640	479,282	0
FREEDOM AREA SCHOOL DISTRICT	9,822,655	663,033	663,028	1,326,061	0
GALESVILLE SCHOOL DISTRICT ETAL	9,629,779	650,015	650,011	1,300,026	0
GENEVA JT SCH DIST #4 ETAL	1,364,732	92,120	92,120	184,240	0
GENOA CITY JT SCH DIST #2 ETAL	3,507,398	236,752	236,749	473,501	0
GERMANTOWN SCHOOL DISTRICT	27,617,921	1,864,219	1,864,212	3,728,431	0
GIBRALTAR AREA SCHOOL DISTRICT	6,475,134	437,073	437,072	874,145	0
GILLETT SCHOOL DISTRICT	3,775,424	254,842	254,841	509,683	0
GILMAN SCHOOL DISTRICT	2,541,474	171,550	171,551	343,101	0
GILMANTON SCHOOL DISTRICT	796,682	53,776	53,776	107,552	0
GLENDALE-RIVER HILLS SCH DIST	8,537,778	576,303	576,300	1,152,603	0
GLENWOOD CITY SCHOOL DISTRICT	4,316,602	291,373	291,371	582,744	0
GOODMAN-ARMSTRONG SCHOOL DIST	1,086,889	73,366	73,365	146,731	0
GRAFTON SCHOOL DISTRICT	13,404,352	904,797	904,795	1,809,592	0
GRANTON AREA SCHOOL DISTRICT	1,854,312	125,167	125,166	250,333	0
GRANTSBURG SCHOOL DISTRICT	7,302,856	503,342	502,950	1,006,292	0
GREEN BAY AREA PUBLIC SCHOOLS	156,119,808	10,544,196	10,531,431	21,075,627	0
GREEN LAKE SCHOOL DISTRICT	2,360,045	159,523	159,084	318,607	0
GREENDALE SCHOOL DISTRICT	19,915,884	1,344,336	1,344,327	2,688,663	0
GREENFIELD SCHOOL DISTRICT	24,173,030	1,631,615	1,631,610	3,263,225	0
GREENWOOD SCHOOL DISTRICT	2,796,952	188,795	188,794	377,589	0
GRESHAM SCHOOL DIST	2,013,506	135,915	135,911	271,826	0
HAMILTON SCHOOL DISTRICT	32,681,803	2,206,414	2,205,734	4,412,148	0
HARTFORD JT SCH DIST #1 ETAL	10,457,955	705,917	705,913	1,411,830	0
HARTFORD UNION HIGH SCH DIST	9,191,515	622,056	621,972	1,244,028	0
HARTLAND JT SCH DIST #3 ETAL	7,449,977	502,881	502,874	1,005,755	0
HAYWARD COMMUNITY SCHOOL DIST	11,782,662	795,331	795,328	1,590,659	0

## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
HERMAN-NEOSHO-RUBICON SD	2,277,484	153,731	153,730	307,461	0
HIGHLAND SCHOOL DISTRICT	1,534,958	103,610	103,610	207,220	0
HILBERT SCHOOL DISTRICT	2,945,976	198,854	198,854	397,708	0
HILLSBORO SCHOOL DISTRICT	3,879,717	261,826	261,825	523,651	0
HOLMEN SCHOOL DISTRICT	28,478,241	1,922,291	1,922,283	3,844,574	0
HOLY HILL AREA SCHOOL DIST	2,647,270	179,719	177,663	357,382	0
HORICON SCHOOL DISTRICT	4,952,208	334,277	334,275	668,552	0
HORTONVILLE AREA SCHOOL DIST	22,757,318	1,536,125	1,536,121	3,072,246	0
HOWARDS GROVE SCHOOL DISTRICT	6,058,911	408,979	408,977	817,956	0
HOWARD-SUAMICO SCHOOL DISTRICT	36,352,512	2,453,805	2,453,794	4,907,599	0
HUDSON SCHOOL DISTRICT	39,097,009	2,639,061	2,639,050	5,278,111	0
HURLEY SCHOOL DISTRICT	3,460,272	233,824	233,569	467,393	0
HUSTISFORD SCHOOL DISTRICT	2,949,600	199,101	199,099	398,200	0
INDEPENDENCE SCHOOL DISTRICT	2,685,718	181,287	181,286	362,573	0
IOLA-SCANDINAVIA SCHOOL DIST	4,271,922	288,355	288,354	576,709	0
IOWA-GRANT SCHOOL DISTRICT	5,671,175	382,809	382,806	765,615	0
ITHACA SCHOOL DISTRICT	2,856,259	192,799	192,798	385,597	0
JANESVILLE SCHOOL DISTRICT	70,518,047	4,759,994	4,759,969	9,519,963	0
JEFFERSON SCHOOL DISTRICT	13,021,127	878,936	878,921	1,757,857	0
JOHNSON CREEK SCHOOL DISTRICT	4,506,869	304,216	304,214	608,430	0
JUDA SCHOOL DISTRICT	1,692,148	114,221	114,220	228,441	0
KANSASVILLE DOVER DIST #1	653,797	44,131	44,131	88,262	0
KAUKAUNA AREA SCHOOL DISTRICT	23,620,549	1,594,394	1,594,387	3,188,781	0
KENOSHA UNIFIED SCH DIST #1	152,200,267	10,290,232	10,287,403	20,577,635	0
KETTLE MORAINES SCHOOL DISTRICT	24,433,815	1,649,294	1,649,285	3,298,579	0
KEWASKUM SCHOOL DISTRICT	11,380,806	768,209	768,205	1,536,414	0
KEWAUNEE SCHOOL DISTRICT	6,091,935	411,209	411,206	822,415	0
KICKAPOO AREA SCHOOL DISTRICT	3,354,155	226,406	226,405	452,811	0
KIEL AREA SCHOOL DISTRICT	7,507,345	506,748	506,746	1,013,494	0
KIMBERLY AREA SCHOOL DISTRICT	28,845,966	1,947,114	1,947,105	3,894,219	0
KOHLER SCHOOL DISTRICT	4,166,978	281,271	281,273	562,544	0
LA CROSSE SCHOOL DISTRICT	55,861,852	3,770,693	3,770,679	7,541,372	0
LAC DU FLAMBEAU SCH DIST #1	7,227,537	486,864	486,640	973,504	0
LADYSMITH-HAWKINS SCH DIST	5,380,794	370,954	358,303	729,257	0
LAFARGE SCHOOL DISTRICT	1,876,569	126,670	126,669	253,339	0
LAKE COUNTRY SCH DIST	3,264,666	223,241	221,100	444,341	0
LAKE GENEVA GENOA CITY UHS	10,519,957	710,102	710,099	1,420,201	0
LAKE GENEVA JT SCH DIS #1 ETAL	11,610,288	783,701	783,697	1,567,398	0
LAKE HOLCOMBE SCHOOL DISTRICT	2,380,511	160,686	160,684	321,370	0
LAKE MILLS AREA SCHOOL DIST	9,462,245	638,707	638,703	1,277,410	0
LAKELAND UNION HIGH SCH DIST	7,194,614	485,756	485,637	971,393	0
LANCASTER COMM SCH DIST	6,622,978	447,059	447,054	894,113	0
LAONA SCHOOL DISTRICT	1,961,196	132,382	132,381	264,763	0
LENA PUBLIC SCHOOL DISTRICT	2,444,235	164,988	164,987	329,975	0
LINN JT SCH DIST #4 ETAL	1,045,573	70,576	70,576	141,152	0
LINN JT SCH DIST #6 ETAL	862,257	58,270	58,134	116,404	0
LITTLE CHUTE AREA SCHOOL DIST	9,505,183	641,767	641,551	1,283,318	0
LODI SCHOOL DISTRICT	10,612,299	716,393	716,278	1,432,671	0





Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
LOMIRA SCHOOL DISTRICT	6,797,277	458,818	458,817	917,635	0
LOYAL SCHOOL DISTRICT	3,192,918	215,529	215,515	431,044	0
LUCK SCHOOL DISTRICT	3,304,755	223,072	223,071	446,143	0
LUXEMBURG-CASCO SCHOOL DIST	10,287,553	695,622	693,201	1,388,823	0
MADISON METRO SCHOOL DISTRICT	238,758,460	16,122,263	16,117,836	32,240,099	0
MANAWA SCHOOL DISTRICT	3,789,536	255,795	255,794	511,589	0
MANITOWOC PUBLIC SCHOOL DIST	35,617,091	2,404,163	2,404,152	4,808,315	0
MAPLE DALE-INDIAN HILL SCH DIS	4,110,671	277,472	277,471	554,943	0
MAPLE SCHOOL DISTRICT	8,188,176	552,820	552,702	1,105,522	0
MARATHON CITY SCHOOL DISTRICT	3,787,544	255,450	255,659	511,109	0
MARINETTE SCHOOL DISTRICT	11,781,692	795,268	795,265	1,590,533	0
MARION SCHOOL DISTRICT	2,209,390	149,135	149,134	298,269	0
MARKESAN SCHOOL DISTRICT	5,052,982	341,077	341,076	682,153	0
MARSHALL JT SCH DIST #2 ETAL	7,387,967	498,694	498,683	997,377	0
MARSHFIELD UNIFIED SCHOOL DIST	24,188,892	1,632,759	1,632,752	3,265,511	0
MAUSTON SCHOOL DISTRICT	9,245,196	624,054	624,051	1,248,105	0
MAYVILLE SCHOOL DISTRICT	7,579,426	511,615	511,612	1,023,227	0
MCFARLAND SCHOOL DISTRICT	18,447,647	1,245,226	1,245,218	2,490,444	0
MEDFORD AREA PUBLIC SCHL DIST	16,727,678	1,129,137	1,129,107	2,258,244	0
MELLEN SCHOOL DISTRICT	1,683,326	113,626	113,625	227,251	0
MELROSE-MINDORO SCHOOL DIST	4,933,276	332,998	332,996	665,994	0
MENASHA JOINT SCHOOL DISTRICT	24,427,677	1,648,878	1,648,870	3,297,748	0
MENOMINEE INDIAN SCHOOL DIST	8,851,168	597,456	597,453	1,194,909	0
MENOMONEE FALLS SCHOOL DISTRICT	28,208,254	1,904,065	1,904,057	3,808,122	0
MENOMONIE AREA SCHOOL DISTRICT	19,936,330	1,345,707	1,345,701	2,691,408	0
MEQUON-THIENSVILLE SCHOOL DIST	24,654,006	1,664,150	1,664,147	3,328,297	0
MERCER SCHOOL DISTRICT	1,354,294	92,942	91,415	184,357	0
MERRILL AREA COMMON PUB SCH	19,384,419	1,308,463	1,308,438	2,616,901	0
MERTON COMMUNITY SCHOOL DIST	4,896,870	330,540	330,539	661,079	0
MIDDLETON-CROSS PLNS SCH DIST	55,372,398	3,737,603	3,737,521	7,475,124	0
MILTON SCHOOL DISTRICT	21,729,976	1,466,805	1,466,773	2,933,578	0
MILWAUKEE TEACHERS RETIREM SYS	368,791,601	24,887,653	24,875,766	49,763,419	0
MINERAL POINT UNIF SCH DIST	4,743,221	320,170	320,168	640,338	0
MINOCQUA JT SCH DIST #1 M-H-LT	4,462,536	301,222	301,221	602,443	0
MISHICOT SCHOOL DISTRICT	5,591,122	377,402	377,401	754,803	0
MONDOVI SCHOOL DISTRICT	6,476,370	437,157	437,155	874,312	0
MONONA GROVE SCHOOL DISTRICT	24,779,283	1,672,249	1,672,242	3,344,491	0
MONROE SCHOOL DISTRICT	17,599,849	1,187,995	1,187,990	2,375,985	0
MONTELLO SCHOOL DISTRICT	5,136,324	346,703	346,702	693,405	0
MONTICELLO SCHOOL DISTRICT	2,727,813	184,128	184,127	368,255	0
MOSINEE SCHOOL DISTRICT	13,391,916	903,959	903,955	1,807,914	0
MOUNT HOREB AREA SCHOOL DIST	16,517,333	1,114,844	1,114,828	2,229,672	0
MUKWONAGO SCHOOL DISTRICT	30,752,468	2,075,805	2,075,793	4,151,598	0
MUSKEGO-NORWAY SCHOOL DISTRICT	31,543,925	2,129,228	2,129,215	4,258,443	0
NECEDAH AREA SCHOOL DISTRICT	4,911,451	331,523	331,522	663,045	0
NEENAH JOINT SCHOOL DISTRICT	38,738,269	2,615,429	2,614,836	5,230,265	0
NEILLSVILLE SCHOOL DISTRICT	5,206,662	350,621	351,836	702,457	0
NEKOOSA SCHOOL DISTRICT	6,648,873	448,802	448,799	897,601	0

## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
NEW AUBURN SCHOOL DISTRICT	2,314,172	156,207	156,206	312,413	0
NEW BERLIN SCHOOL DISTRICT	26,298,178	1,779,557	1,771,183	3,550,740	0
NEW GLARUS SCHOOL DISTRICT	6,534,690	441,094	441,093	882,187	0
NEW HOLSTEIN SCHOOL DISTRICT	6,074,237	410,013	410,012	820,025	0
NEW LISBON SCHOOL DISTRICT	4,022,448	271,516	271,515	543,031	0
NEW LONDON SCHOOL DISTRICT	13,378,479	903,050	903,046	1,806,096	0
NEW RICHMOND SCHOOL DISTRICT	20,789,001	1,404,259	1,402,262	2,806,521	0
NIAGARA SCHOOL DISTRICT	2,922,966	197,189	197,188	394,377	0
NICOLET HIGH SCHOOL DISTRICT	11,235,345	758,389	758,386	1,516,775	0
NORRIS SCHOOL DISTRICT	1,402,715	94,683	94,683	189,366	0
NORTH CAPE CONSOLIDATED S D	1,407,861	95,165	95,031	190,196	0
NORTH CRAWFORD SCHOOL DISTRICT	3,430,391	231,552	231,551	463,103	0
NORTH FOND DU LAC SCH DIST	9,332,283	629,932	629,929	1,259,861	0
NORTH LAKE SCHOOL DISTRICT	1,678,527	113,302	113,301	226,603	0
NORTH LAKELAND SCHOOL DISTRICT	1,746,235	117,871	117,871	235,742	0
NORTHERN OZAUKEE SCHOOL DIST	5,129,475	299,848	311,156	611,004	0
NORTHLAND PINES SCHOOL DIST	10,558,140	712,679	712,676	1,425,355	0
NORTHWOOD SCHOOL DISTRICT	2,692,276	181,516	181,514	363,030	0
NORWALK-ONTARIO SCHOOL DIST	4,585,839	309,543	309,542	619,085	0
NORWAY-RAYMOND JT#7 SD	594,632	40,138	40,138	80,276	56,855
OAK CREEK-FRANKLIN JT SCH DIST	41,501,887	2,803,077	2,799,688	5,602,765	0
OAKFIELD SCHOOL DISTRICT	3,866,345	260,999	260,960	521,959	0
OCONOMOWOC AREA SCHOOL DIST	32,735,734	2,209,681	2,209,669	4,419,350	0
OCONTO FALLS PUBLIC SCH DIST	11,850,724	799,924	799,922	1,599,846	0
OCONTO UNIFIED SCHOOL DISTRICT	6,576,496	444,449	443,914	888,363	0
OMRO SCHOOL DISTRICT	7,327,065	494,581	494,578	989,159	0
ONALASKA SCHOOL DISTRICT	21,010,404	1,418,208	1,418,205	2,836,413	0
OOSTBURG SCHOOL DISTRICT	6,394,069	431,601	431,599	863,200	0
OREGON SCHOOL DISTRICT	30,069,969	2,029,711	2,029,701	4,059,412	0
OSCEOLA SCHOOL DISTRICT	11,623,389	784,581	784,578	1,569,159	0
OSHKOSH AREA SCHOOL DISTRICT	66,598,082	4,496,029	4,495,551	8,991,580	0
OSSEO-FAIRCHILD SCHOOL DIST	5,755,436	388,496	388,493	776,989	0
OWEN-WITHEE SCHOOL DISTRICT	3,174,544	214,285	214,283	428,568	0
PALMYRA-EAGLE AREA SCHOOL DIST	4,131,073	278,966	278,734	557,700	0
PARDEEVILLE AREA SCHOOL DIST	5,327,624	359,616	359,614	719,230	434,704
PARIS JT SCH DIST #1 ETAL	1,362,669	91,980	91,980	183,960	0
PARKVIEW SCHOOL DISTRICT	5,796,291	391,252	391,250	782,502	0
PECATONICA AREA SCHOOL DIST	3,537,067	238,754	238,753	477,507	0
PEPIN AREA SCHOOL DISTRICT	2,079,876	140,392	140,392	280,784	0
PESHTIGO SCHOOL DISTRICT	6,655,758	448,226	448,206	896,432	0
PEWAUKEE SCHOOL DISTRICT	18,920,124	1,277,114	1,277,107	2,554,221	0
PHELPS SCHOOL DISTRICT	1,328,191	89,653	89,653	179,306	0
PHILLIPS SCHOOL DISTRICT	5,277,320	357,375	357,344	714,719	0
PITTSVILLE SCHOOL DISTRICT	3,826,180	258,268	258,267	516,535	0
PLATTEVILLE SCHOOL DISTRICT	9,551,507	644,733	644,729	1,289,462	0
PLUM CITY SCHOOL DISTRICT	1,741,424	117,547	117,546	235,093	0
PLYMOUTH JOINT SCHOOL DISTRICT	15,202,427	1,026,170	1,026,165	2,052,335	0
PORT EDWARDS SCHOOL DISTICT	2,941,512	198,552	198,551	397,103	0



Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
PORT WASHINGTON-SAUKVILLE SCH	18,273,383	1,233,459	1,233,453	2,466,912	0
PORTAGE COMMUNITY SCHOOL DIST	15,046,823	1,015,670	1,015,663	2,031,333	0
POTOSI SCHOOL DISTRICT	2,577,578	173,987	173,987	347,974	0
POYNETTE SCHOOL DISTRICT	6,722,933	453,801	453,799	907,600	0
PRAIRIE DU CHIEN AREA SCH DIST	7,835,638	529,349	529,337	1,058,686	0
PRAIRIE FARM PUBLIC SCH DIST	2,518,382	169,993	169,992	339,985	0
PRENTICE SCHOOL DISTRICT	2,557,675	172,645	172,644	345,289	0
PRESCOTT SCHOOL DISTRICT	8,406,110	567,414	567,413	1,134,827	0
PRINCETON SCHOOL DISTRICT	2,353,263	158,869	158,823	317,692	0
PULASKI COMMUNITY SCHOOL DIST	25,523,911	1,723,192	1,723,161	3,446,353	0
RACINE UNIFIED SCHOOL DISTRICT	143,949,085	9,716,599	9,716,569	19,433,168	0
RANDALL JT SCH DIST #1 ETAL	4,421,985	298,485	298,484	596,969	0
RANDOLPH SCHOOL DISTRICT	3,684,768	248,723	248,722	497,445	0
RANDOM LAKE SCHOOL DISTRICT	5,165,370	348,665	348,663	697,328	0
RAYMOND SCH DIST #14	2,449,145	166,179	164,456	330,635	0
REEDSBURG SCHOOL DISTRICT	19,377,762	1,308,004	1,307,998	2,616,002	0
REEDSVILLE SCHOOL DISTRICT	3,962,509	267,471	267,470	534,941	0
RHINELANDER SCHOOL DISTRICT	15,692,472	1,059,296	1,059,243	2,118,539	0
RIB LAKE SCHOOL DISTRICT	2,960,375	199,935	199,716	399,651	0
RICE LAKE AREA SCHOOL DISTRICT	17,078,423	1,151,176	1,154,428	2,305,604	0
RICHLAND SCHOOL DISTRICT	8,460,838	571,109	571,107	1,142,216	0
RICHMOND SCHOOL DISTRICT	2,193,069	148,033	148,032	296,065	0
RIO COMMUNITY SCHOOL DISTRICT	3,078,896	207,828	207,826	415,654	0
RIPON AREA SCHOOL DISTRICT	10,553,129	712,339	712,337	1,424,676	0
RIVER FALLS SCHOOL DISTRICT	21,166,799	1,428,769	1,428,760	2,857,529	0
RIVER RIDGE SCHOOL DISTRICT	3,702,374	249,282	249,281	498,563	0
RIVER VALLEY SCHOOL DISTRICT	8,166,308	551,229	551,226	1,102,455	0
RIVERDALE SCHOOL DISTRICT	3,834,305	258,817	258,816	517,633	0
ROSENDALE-BRANDON SCHOOL DIST	6,117,767	412,951	412,949	825,900	0
ROSHOLT SCHOOL DISTRICT	3,266,950	220,519	220,519	441,038	0
ROYALL SCHOOL DISTRICT	3,791,815	255,950	255,948	511,898	0
SALEM SCHOOL DISTRICT	6,771,302	457,066	457,064	914,130	0
SAUK PRAIRIE SCHOOL DISTRICT	19,001,923	1,282,639	1,282,632	2,565,271	0
SENECA SCHOOL DISTRICT	1,717,131	115,908	115,907	231,815	0
SEVASTOPOL SCHOOL DISTRICT	4,993,563	337,065	337,065	674,130	0
SEYMOUR COMMUNITY SCHOOL DIST	13,722,276	926,257	926,254	1,852,511	0
SHARON JT SCH DIST # 11 ETAL	1,593,124	107,537	107,536	215,073	0
SHAWANO SCHOOL DIST	14,825,426	1,001,264	1,000,515	2,001,779	0
SHEBOYGAN AREA SCHOOL DISTRICT	67,893,370	4,582,818	4,582,812	9,165,630	0
SHEBOYGAN FALLS SCHOOL DIST	10,835,615	731,406	731,404	1,462,810	0
SHELL LAKE SCHOOL DISTRICT	4,643,330	313,449	313,401	626,850	0
SHIOCTON SCHOOL DISTRICT	5,015,860	338,572	338,571	677,143	0
SHOREWOOD SCHOOL DISTRICT	17,230,591	1,175,090	1,151,046	2,326,136	0
SHULLSBURG SCHOOL DISTRICT	2,342,198	158,099	158,098	316,197	0
SILVER LAKE JT SCH DIS #1 ETAL	2,676,107	180,655	180,622	361,277	0
SIREN SCHOOL DISTRICT	3,475,396	234,589	234,589	469,178	0
SLINGER SCHOOL DISTRICT	18,174,295	1,226,774	1,226,767	2,453,541	0
OLON SPRINGS SCHOOL DISTRICT	2,285,884	154,297	154,297	308,594	0

## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
SOMERSET SCHOOL DISTRICT	10,413,170	702,895	702,890	1,405,785	0
SOUTH MILWAUKEE SCHOOL DIST	23,160,617	1,575,928	1,575,204	3,151,132	0
SOUTH SHORE SCHOOL DISTRICT	1,730,206	116,789	116,789	233,578	0
SOUTHERN DOOR COUNTY SCH DIST	7,652,194	516,528	516,524	1,033,052	0
SOUTHWESTERN WISC COMM SCH DIS	2,878,709	194,313	194,312	388,625	0
SPARTA AREA SCHOOL DISTRICT	19,763,145	1,334,022	1,334,013	2,668,035	0
SPENCER SCHOOL DISTRICT	3,566,618	240,749	240,747	481,496	0
SPOONER AREA SCHOOL DISTRICT	8,163,938	551,068	551,066	1,102,134	0
SPRING VALLEY SCHOOL DISTRICT	4,906,221	331,174	331,171	662,345	0
ST CROIX CENTRAL SCH DIST	11,115,479	750,299	750,296	1,500,595	0
ST CROIX FALLS SCHOOL DISTRICT	8,368,755	564,894	564,891	1,129,785	0
ST FRANCIS SCHOOL DISTRICT #6	7,234,297	488,318	488,315	976,633	0
STANLEY-BOYD AREA SCHOOL DIST	6,474,307	437,020	437,017	874,037	0
STEVENS POINT AREA PUB SCH DIS	47,260,547	3,191,346	3,191,391	6,382,737	0
STOCKBRIDGE SCH DIST	1,425,266	96,386	96,025	192,411	0
STONE BANK SCHOOL DISTRICT	2,253,334	152,183	152,017	304,200	0
STOUGHTON AREA SCHOOL DISTRICT	21,278,276	1,437,100	1,436,963	2,874,063	0
STRATFORD SCHOOL DISTRICT	5,186,483	350,093	350,085	700,178	0
STURGEON BAY SCHOOL DISTRICT	9,257,284	624,869	624,866	1,249,735	0
SUN PRAIRIE AREA SCH DIS	61,415,396	4,145,560	4,145,540	8,291,100	0
SUPERIOR SCHOOL DISTRICT	33,116,396	2,298,108	2,236,323	4,534,431	0
SURING PUBLIC SCHOOL DISTRICT	2,735,469	184,645	184,644	369,289	0
SWALLOW SCHOOL DISTRICT	2,696,480	182,013	182,012	364,025	0
THORP SCHOOL DISTRICT	3,848,999	258,385	258,207	516,592	0
THREE LAKES SCHOOL DISTRICT	5,033,699	338,584	338,582	677,166	0
TIGERTON SCHOOL DISTRICT	1,505,992	101,655	101,655	203,310	0
TOMAH AREA SCHOOL DISTRICT	20,371,485	1,375,214	1,374,943	2,750,157	0
TOMAHAWK SCHOOL DISTRICT	8,577,575	578,989	578,987	1,157,976	0
TOMORROW RIVER SCHOOL DISTRICT	7,018,492	473,752	473,749	947,501	0
TREVOR-WILMOT CONS GR S.D.	3,704,628	250,156	250,054	500,210	0
TRI-COUNTY AREA SCH DIST-PLNFD	4,393,807	296,583	296,582	593,165	0
TURTLE LAKE SCHOOL DISTRICT	2,828,473	190,925	190,923	381,848	0
TWIN LAKES SCH DIST #4	2,477,238	167,494	167,011	334,505	0
TWO RIVERS PUBLIC SCHOOL DIST	12,001,629	811,498	809,799	1,621,297	0
UNION GROVE JT SCH DIS #1 ETAL	5,383,246	363,371	363,369	726,740	0
UNION GROVE UNION HIGH SCH DIS	6,018,895	406,288	406,262	812,550	0
UNITY SCHOOL DISTRICT	6,821,910	460,482	460,480	920,962	0
VALDERS AREA SCHOOL DISTRICT	6,480,903	437,473	437,451	874,924	0
VERONA AREA SCHOOL DISTRICT	41,000,852	2,790,337	2,789,477	5,579,814	0
VIROQUA AREA SCHOOL DISTRICT	7,442,896	502,397	502,394	1,004,791	0
WABENO AREA SCHOOL DISTRICT	3,729,363	251,734	251,733	503,467	0
WALWORTH JT SCH DIST # 1 ETAL	2,498,220	168,631	168,630	337,261	0
WASHBURN SCHOOL DISTRICT	4,142,927	279,649	279,647	559,296	0
WASHINGTON SCHOOL DISTRICT	661,687	44,688	44,639	89,327	0
WASHINGTON-CALDWELL SCH DIST	1,076,139	72,640	72,640	145,280	0
WATERFORD UNION HIGH SCH DIST	8,349,442	563,589	563,587	1,127,176	0
WATERFORD VIL JT SCH DIST #1	9,297,329	627,572	627,572	1,255,144	0
WATERLOO SCHOOL DISTRICT	5,108,646	344,835	344,835	689,670	0



Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
WATERTOWN UNIFIED SCHOOL DIST	24,249,379	1,636,842	1,636,831	3,273,673	0
WAUKESHA SCHOOL DISTRICT	84,570,798	5,708,549	5,708,543	11,417,092	0
WAUNAKEE COMMUNITY SCHOOL DIST	30,376,746	2,050,440	2,050,433	4,100,873	0
WAUPACA SCHOOL DISTRICT	14,764,998	997,114	996,176	1,993,290	0
WAUPUN AREA SCHOOL DISTRICT	12,896,871	870,545	870,540	1,741,085	0
WAUSAU SCHOOL DISTRICT	61,563,422	4,155,557	4,155,531	8,311,088	0
WAUSAUKEE SCHOOL DISTRICT	2,875,155	194,074	194,072	388,146	0
WAUTOMA AREA SCHOOL DISTRICT	9,018,409	613,284	613,171	1,226,455	0
WAUWATOSA SCHOOL DISTRICT	47,883,743	3,234,303	3,232,152	6,466,455	0
WAUZEKA JT SCH DIST ETAL	2,044,009	137,972	137,970	275,942	0
WEBSTER SCHOOL DISTRICT	4,720,245	318,621	318,618	637,239	0
WEST ALLIS-WEST MILW SCH DIST	49,932,186	3,590,027	3,366,226	6,956,253	0
WEST BEND JT SCH DIST #1	41,127,666	2,778,719	2,778,487	5,557,206	0
WEST DEPERE SCHOOL DISTRICT	19,545,761	1,319,347	1,319,340	2,638,687	0
WEST SALEM SCHOOL DISTRICT	12,312,997	830,689	834,189	1,664,878	0
WESTBY AREA SCHOOL DISTRICT	6,848,716	462,292	462,289	924,581	0
WESTFIELD SCHOOL DISTRICT	6,657,362	449,375	449,373	898,748	0
WESTON SCHOOL DISTRICT	2,015,150	138,694	135,439	274,133	0
WESTOSHA CENTRAL HIGH SCH DIST	7,687,617	518,955	518,876	1,037,831	0
WEYAUWEGA-FREMONT SCHOOL DIST	5,087,254	343,918	343,391	687,309	0
WHEATLAND JT SCH DIST #1 ETAL	3,983,712	268,902	268,901	537,803	0
WHITE LAKE SCHOOL DISTRICT	1,187,767	80,175	80,175	160,350	0
WHITEFISH BAY SCHOOL DISTRICT	19,316,754	1,303,885	1,303,883	2,607,768	0
WHITEHALL SCHOOL DISTRICT	4,917,886	331,960	331,958	663,918	0
WHITEWATER UNIFIED SCHOOL DIST	13,523,044	912,809	912,806	1,825,615	0
WHITNALL SCHOOL DISTRICT	17,377,954	1,173,025	1,173,011	2,346,036	0
WILD ROSE SCHOOL DISTRICT	3,433,664	231,899	231,646	463,545	0
WILLIAMS BAY SCHOOL DISTRICT	4,271,373	288,684	287,847	576,531	0
WILMOT UNION HIGH SCHOOL DIST	8,850,797	597,431	597,429	1,194,860	0
WINNECONNE COMM SCHOOL DIST	10,555,238	712,482	712,479	1,424,961	0
WINTER SCHOOL DISTRICT	2,132,772	143,966	143,959	287,925	0
WISCONSIN DELLS SCHOOL DIST	11,296,308	762,576	762,431	1,525,007	0
WISCONSIN HEIGHTS SCHOOL DIST	5,653,336	381,603	381,602	763,205	0
WISCONSIN RAPIDS SCHOOL DIST	34,036,393	2,297,493	2,297,447	4,594,940	0
WITTENBERG-BIRNAMWOOD SCH DIST	7,187,038	486,160	486,123	972,283	0
WONEWOC & UNION CENTER SCH DIS	2,151,246	145,210	145,209	290,419	0
WRIGHTSTOWN COMMUNITY SCH DIST	7,633,792	515,287	515,284	1,030,571	0
YORKVILLE JT SCH DIST #2 ETAL	2,724,854	184,015	183,842	367,857	0
Total School Districts (421)	\$ 5,621,576,237	\$ 379,860,000	\$ 379,441,167	\$ 759,301,167	\$ 491,559

## CONTRIBUTIONS PAID AND UAAL

Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
<b>Technical Colleges</b>					
BLACKHAWK TECHNICAL COLLEGE	\$ 15,219,033	\$ 1,027,544	\$ 1,027,286	\$ 2,054,830	\$ 0
CHIPPEWA VALLEY TECH COLLEGE	32,898,151	2,221,637	2,220,624	4,442,261	0
FOX VALLEY TECHNICAL COLLEGE	65,048,971	4,395,274	4,393,189	8,788,463	0
GATEWAY TECH COLLEGE	51,693,784	3,489,345	3,489,333	6,978,678	0
LAKESHORE TECHNICAL COLLEGE	18,658,103	1,259,428	1,259,422	2,518,850	0
MADISON AREA TECH COLLEGE	98,817,617	6,669,671	6,673,909	13,343,580	0
MID-STATE TECHNICAL COLLEGE	17,027,189	1,149,340	1,149,336	2,298,676	0
MILWAUKEE AREA TECH COLLEGE	115,145,535	7,786,686	7,774,631	15,561,317	0
MORAINES PARK TECHNICAL COLLEGE	28,768,594	1,941,886	1,941,884	3,883,770	0
NICOLET AREA TECHNICAL COLLEGE	12,102,297	816,908	816,906	1,633,814	0
NORTH CENTRAL TECH COLLEGE	27,500,490	1,856,418	1,856,401	3,712,819	0
NORTHEAST WISC TECH COLLEGE	57,562,419	3,891,101	3,885,468	7,776,569	0
SOUTHWEST WISC TECH COLLEGE	12,386,135	836,067	836,063	1,672,130	0
WAUKESHA CO TECHNICAL COLLEGE	40,789,124	2,753,873	2,753,114	5,506,987	0
WESTERN TECH COLLEGE	29,844,503	2,015,314	2,015,297	4,030,611	0
WISCONSIN INDIANHEAD TECH COLL	24,903,372	1,681,051	1,680,978	3,362,029	0
Total Technical Colleges (16)	\$ 648,365,317	\$ 43,791,543	\$ 43,773,841	\$ 87,565,384	\$ 0



Name	Contributions				Unfunded Liability Balance
	Covered Payroll	Employer Paid*	Employee Paid	Total	
<b>CESAs</b>					
CESA #1	\$ 5,575,661	\$ 376,359	\$ 376,357	\$ 752,716	\$ 0
CESA #2	6,886,220	464,822	464,820	929,642	0
CESA #3, FENNIMORE	1,845,384	124,565	124,564	249,129	0
CESA #4, LACROSSE	2,630,816	177,581	177,580	355,161	0
CESA #5, PORTAGE	11,517,688	777,340	777,319	1,554,659	0
CESA #6, OSHKOSH	8,538,861	577,830	576,375	1,154,205	0
CESA #7, GREEN BAY	7,606,625	513,450	513,447	1,026,897	0
CESA #8, GILLETT	4,892,905	330,296	330,294	660,590	0
CESA #9, TOMAHAWK	2,315,666	156,308	156,308	312,616	0
CESA #10, CHIPPEWA FALLS	8,612,755	581,365	581,361	1,162,726	0
CESA #11	7,437,890	502,687	502,657	1,005,344	0
CESA #12, ASHLAND	1,776,357	119,905	119,905	239,810	0
Total CESAs (12)	\$ 69,636,828	\$ 4,702,508	\$ 4,700,987	\$ 9,403,495	\$ 0
<b>Total WRS (1537)</b>	<b>\$ 15,359,928,022</b>	<b>\$ 1,201,908,595</b>	<b>\$ 1,031,394,897</b>	<b>\$ 2,233,303,492</b>	<b>\$ 6,909,475</b>

\* Includes contributions for WRS, Accumulated Sick Leave Conversion and Duty Disability