Wisconsin Retirement System

Informational
Paper
82

Wisconsin Legislative Fiscal Bureau

January, 2019

Wisconsin Retirement System

Prepared by

Rachel Janke

Wisconsin Legislative Fiscal Bureau
One East Main, Suite 301
Madison, WI 53703
http://legis.wisconsin.gov/lfb

TABLE OF CONTENTS

CHAPTER 1: HISTORY OF THE WISCONSIN RETIREMENT SYSTEM 1
Pre-1948 Milestones 1
Changes Since 1948 3

CHAPTER 2: COVERAGE OF THE WISCONSIN RETIREMENT SYSTEM 10
Employer Participants 10
Employee Participants 11

CHAPTER 3: ADMINISTRATIVE AND OVERSIGHT STRUCTURE OF THE WISCONSIN RETIREMENT SYSTEM 15
WRS Policy Boards 15
Other Employee Trust Funds Boards 18
The Department of Employee Trust Funds 19
The State of Wisconsin Investment Board 21
Legislative Oversight 24

CHAPTER 4: FUNDING THE WISCONSIN RETIREMENT SYSTEM 27
WRS Accounts and Reserves 28
Management and Investment of WRS Assets 29
Retirement Funds: Valuation and Distribution of Investment Earnings 32
Retirement Funds: Crediting the Annual Investment Experience 36
Retirement Funds: Long-Term Investment Objectives and Performance 38
Funding the Retirement System: The Impact of Revenues from Investment Earnings 40
Funding the Retirement System: Employee Contributions 42
Funding the Retirement System: Employer Contributions 47
Long-Term Employee and Employer Contribution Rate Stabilization 52

CHAPTER 5: WRS BENEFITS 54
Separation Benefits 55
Retirement Benefits: The Formula Benefit Annuity 57
Retirement Benefits: Adjustments Applicable to the Formula Benefit Annuity 62
Retirement Benefits: The Money Purchase Annuity 64
Retirement Benefits: Calculation of Benefit Amount 65
Retirement Benefits: Annuity Payments 68
Division of WRS Benefits and Annuities 71
Disability and Survivor's Benefits 73

CHAPTER 6: POST-RETIREMENT BENEFIT ADJUSTMENTS 78
Post-Retirement Dividend Payments 78
Post-Retirement Benefit Supplements 81

CHAPTER 1

HISTORY OF THE WISCONSIN RETIREMENT SYSTEM

The present Wisconsin Retirement System (WRS) is the result of a long history of mergers and consolidations of a variety of predecessor state and local public employee pension systems. The WRS now provides retirement, disability and death benefits to all state employees and to most local government employees in Wisconsin. This chapter traces the history of the emergence of the current Wisconsin Retirement System.

The essential history of the WRS can be viewed most meaningfully in terms of events that occurred before 1948 and those developments that occurred in 1948 and after. Legislative changes adopted by the 1947 Legislature, which became effective on January 1, 1948, constituted a major watershed in the operation of public employee pension plans in Wisconsin. Prior to that date, the general trend in Wisconsin had been one of a proliferation of state and municipal pension funds. Following that date, the state chose to follow a long-term policy of merger, consolidation and uniformity of benefit rights and obligations. The current WRS has emerged from that policy of consolidation.

Pre-1948 Milestones

The first public pension funds in Wisconsin were established by the Legislature for protective service employees late in the nineteenth century when Chapter 287, Laws of 1891, created the Milwaukee Police Pension Plan and the Milwaukee Fire Pension Plan. Both plans were substantially modified in subsequent legislation: Chapter 589, Laws of 1921, created a Milwaukee Policemen's Annuity and Benefit Fund while Chapter 423, Laws of 1923, created a Milwaukee Firemen's Annuity and Benefit Fund.

Following the original creation of the Milwaukee Police Pension Plan and the Milwaukee Fire Pension Plan, the Legislature took further steps in 1907 by passing enabling legislation that authorized the establishment of similar types of local police and fire pension funds elsewhere in the state (Chapter 671, Laws of 1907). Over the next several years, approximately 60 separate police and fire pension funds were established as a direct result of the 1907 authorizing legislation.

The Milwaukee Teachers Annuity and Retirement Fund was established by Chapter 510, Laws of 1909. As originally created, employee participation in this plan was voluntary. However, four years later in 1913, participation was made mandatory. The first statewide teacher retirement law was enacted by Chapter 323, Laws of 1911, and applied to all non-Milwaukee public school, normal school, and university teachers. Participation in the plan was also voluntary, and no employer contributions were required. Chapter 459, Laws of 1921, substantially modified the statewide teacher retirement law by establishing it as a compulsory system (termed the State Retirement System) with contributions required jointly from employers and employees. Three separate annuity fund boards (Public School, Normal School and University) were created to administer the pension fund assets of the respective participant classes. Each board's responsibility for the management of its assets was later abolished in 1929 (Chapter 491, Laws of 1929), when the State Annuity and Investment Board was created to manage and invest state pension assets and other state funds. The Public

School, Normal School and University Retirement Boards continued to function as the policy-setting boards for their respective retirement plans.

Several years later, Chapter 227, Laws of 1935, established the first mandatory pension fund for nonteaching state employees when the Conservation Warden Pension Fund was created. Shortly thereafter, the 1937 Legislature established several new pension funds for certain categories of employees in the City of Milwaukee and in Milwaukee County. These new plans included the Milwaukee County Sheriffs' Annuity and Benefit Fund (created by Chapter 155, Laws of 1937), the Milwaukee County Employees' Retirement System (created by Chapter 201, Laws of 1937) and the City of Milwaukee Employees' Retirement System (created by Chapter 396, Laws of 1937). These three new Milwaukee pension funds were precursors to the establishment of a statewide municipal retirement system for all non-Milwaukee local government employees. Such a statewide pension system (the Wisconsin Municipal Retirement Fund) was subsequently created by Chapter 175, Laws of 1943. The same 1943 Legislature also established a comparable statewide retirement system for state government workers (the State Employees Retirement Fund) with the enactment of Chapter 176, Laws of 1943. This new state employee pension system was subject to oversight and asset management by the State Annuity and Investment Board.

By 1945 the Legislature had come to recognize that the increasingly haphazard and uncoordinated manner by which public employee pension systems had been established in Wisconsin was resulting in an unwieldy and potentially financially unsound retirement fund structure. Accordingly, a Joint Legislative Interim Committee on Pensions and Retirement Plans in Wisconsin was created, pursuant to 1945 Joint Resolution 46, "to investigate and study any and all matters relating to the advisability of the need for changes or clarification, and consolidation of the pension and retirement plans and laws of this state." The Committee first met in the summer of 1945, worked through 1946, and reported to the Legislature in early 1947.

The Committee developed conclusions and recommendations in two major areas: one relating to identifying the characteristics of a desirable pension plan and the other embodying specific recommendations for changes to the various existing public employee pension funds in the state.

The Committee recommended that a desirable public retirement plan contain the following features:

- The plan should embrace a sufficient number of employees so that ordinary actuarial forecasts could be made to a reasonable degree of accuracy. Small pension plans should be avoided.

- The plan's benefits and retirement provisions should not create situations that encourage retirement at a relatively young age or necessitate continued employment beyond what might be considered a normal retirement age.

- The plan should be equitable between employees of the same service status.

- All benefits allowable under the plan for current service should be supported through direct contributions during the period of that service, and the cost of prior service benefits should be amortized over a reasonable period of time.

- The plan should provide for: (1) disability benefits; (2) the payment of a separation benefit, if requested by an employee upon leaving covered service prior to retirement; and (3) some kind of benefit entitlement or vesting feature that would guarantee the payment of an annuity at retirement after a certain period of covered service.

- The cost of the retirement plan should be shared by employees and employers.

- Any future changes to the plan should be accompanied by an actuarial analysis of the impact of such modifications.

- The plan should be subject to periodic audits.

- Finally, any policy board charged with managing the retirement fund should contain only as many members as are necessary for the board's efficient operation.

Based on these guiding principles, the special Committee also recommended that the Legislature consider the following changes leading to the consolidation and merger of many of the existing public pension systems of the state:

- The separate Wisconsin Municipal Retirement Fund and the State Employees Retirement Fund should be closed to new participants.

- The basic framework of the old State Employees Retirement Fund should be broadened to incorporate all new nonteaching, non-Milwaukee public employees. This new and expanded pension system would be designated the Wisconsin Retirement Fund (WRF).

- The Conservation Warden Pension Fund and some sixty municipal police and fire funds should also be closed to new participants and ultimately phased-out, with all new participants becoming members of the WRF.

- All of the separate City of Milwaukee employee pension funds and Milwaukee County employee pension funds should be closed to new participants, with all new participants becoming members of the WRF.

- Finally, the Committee recommended that no changes should be made to any of the teacher retirement pension funds, since most teachers were already members of a pension fund that was statewide in scope. (Milwaukee school district teachers were the only exception, and the special Committee proposed no change in status for these employees.)

Most of the Committee's consolidation and merger recommendations were subsequently enacted by Chapter 206, Laws of 1947, and became effective January 1, 1948. Although the various nonteacher City of Milwaukee pension systems were consolidated into a single City of Milwaukee pension plan and the various Milwaukee County pension systems were consolidated into a single Milwaukee County pension plan, they were not then merged with the WRF, as had been originally recommended. Instead, these separate Milwaukee pension plans both continued as independent pension systems outside of the WRF.

In addition, Chapter 441, Laws of 1947, granted explicit home rule power to the City of Milwaukee Retirement Fund. This legislation declared that the operation of the Milwaukee pension system was entirely a local matter. As such, the plan was under the exclusive control of the Milwaukee Retirement Fund Board, notwithstanding any other previously passed state legislation affecting the Fund. The Milwaukee County pension system was not granted similar home rule authority until the enactment of Chapter 405, Laws of 1965.

Finally, the 1947 Legislature enacted Chapter 376, Laws of 1947, which created the Joint Survey Committee on Retirement Systems. This Joint Survey Committee was established as a permanent legislative body to monitor public employee pension funds on a continuing basis. (The Joint Survey Committee's functions are described further in Chapter 3.)

Changes Since 1948

The 1947 Legislature set the state on a course

of consolidation and merger of existing public employee pension funds.

In the 1951 legislative session, Chapter 511, Laws of 1951, abolished the Public School, Normal School and University Retirement Boards, originally created in 1921, and the State Annuity and Investment Board, originally created in 1929. The Legislature replaced these entities with the State Teachers Retirement Board and the State Investment Board. The former board became the retirement plan policy-setting body for all non-Milwaukee teachers while the latter became responsible for managing the invested assets of the state teacher retirement funds, effective July 1, 1951. The State Investment Board was also granted authority in that legislation to manage the pension funds of nonteaching, non-Milwaukee public employees under the jurisdiction of the WRF Board. Asset management for the independent Milwaukee pension systems remained under the control of their respective boards; however, Chapter 430, Laws of 1957, did subsequently bring the investments of the Milwaukee Teachers Annuity and Retirement Fund under the control of the State Investment Board.

Two other measures of the 1951 Legislature included enactments to: (1) make Wisconsin the first state in the nation to authorize some state and local government employees to be covered under the federal Social Security program (Chapter 60, Laws of 1951); and (2) authorize Justices of the Supreme Court and Circuit Court judges to participate in the WRF (Chapter 475, Laws of 1951). Chapter 461, Laws of 1953, added county judges as participants in the WRF. Elected state officials were provided the option to participate in the WRF under Chapter 617, Laws of 1957, and their participation was made mandatory, effective January 1, 1974, under Chapter 288, Laws of 1973.

Chapter 381, Laws of 1957 divided the invested assets of the WRF into two divisions: the Fixed Fund and the Variable Fund. Employee participants were given the option either of having all of their pension contributions held in the Fixed Fund or of having half of their pension contributions held in each fund. [Separate legislation in the 1957 session created comparable fixed and variable divisions in the Milwaukee Teachers Retirement Fund and the State Teachers Retirement Fund.] The assets of the Fixed Fund (now denominated the Core Fund) are invested in a wide variety of types of investment while the assets of the Variable Fund are invested primarily in common stocks. The Core Fund and the Variable Fund, and their impact on retirement benefits, are described in detail in Chapter 4.

Chapter 75, Laws of 1967, resulted in another significant step towards retirement system consolidation. That Act created the Department of Employee Trust Funds (ETF), under the direction and supervision of the ETF Board. Chapter 75 also resulted in the administrative attachment of the existing pension system management boards (other than those of the independent Milwaukee pension systems) to the new Department.

Chapter 83, Laws of 1969, abolished the Milwaukee County Sheriffs' Fund, which had been closed to new members since the beginning of 1948, and merged its remaining assets into the Milwaukee County Employees' Retirement System. Similarly, the Conservation Warden Pension Fund was abolished, and its assets were merged into the WRF by Chapter 151, Laws of 1973. The 1973 Legislature also granted authority to the Wisconsin Retirement Fund, the State Teachers Retirement System and the Milwaukee Teachers Retirement Fund under Chapter 137, Laws of 1973 to pool their respective Fixed and Variable Fund holdings into a newly created Fixed Retirement Investment Trust and Variable Retirement Investment Trust under the management of the State Investment Board. Then, in 1975, Chapter 39 transferred all remaining annuitants under the former State Employees Retirement System to the WRF.

Perhaps the most significant advancement of the post-1948 pension fund merger philosophy was embodied in Chapter 280, Laws of 1975. In that Act, the Legislature declared that as "a means of assuring the continued orderly development, economical administration and sound financing of state administered public employee retirement programs, the Wisconsin Retirement Fund, the State Teachers Retirement System and the Milwaukee Teachers Retirement Fund are merged into one public employee retirement system to be known as the Wisconsin Retirement System" or WRS. Rulemaking authority and the "operational planning functions" of the three separate retirement boards were transferred to the ETF Board, although each board's responsibility for approving retirement and disability annuity benefits remained unchanged. Further, the ETF Board was directed to submit to the 1977 Legislature the appropriate implementing legislation to effect the merger of the three retirement systems. While this required legislation was introduced in 1977 (and again in 1979), it was not actually enacted until the 1981 legislative session. However, the 1977 session did see the enactment of Chapter 182, which achieved the complete merger of all remaining non-Milwaukee police and fire pension funds into the WRS, once the new entity was formally established by the Legislature.

The full implementation of the pension funds merger mandated by Chapter 280, Laws of 1975, was finally achieved with the enactment of Chapter 96, Laws of 1981. That Act restructured the three pension fund boards into a Wisconsin Retirement Board and a Teachers Retirement Board (consolidated from the former State Teachers Retirement Board and the former Milwaukee Teachers Retirement Board), defined the program responsibilities of each of the new boards in relation to the ETF Board, and merged and recodified the statutes related to public employee pensions.

Upon the enactment of Chapter 96, approximately 90% of all public employees in Wisconsin became participants under one unified pension system. The only public employees not affected by the merger were those in the independent, non-teacher Milwaukee pension systems and those enrolled in a few small non-WRS affiliated independent municipal pension systems.

The Milwaukee County Employees' Retirement System and the City of Milwaukee Employees' Retirement Fund continue as independent retirement systems to this day and remain subject to their own management and control. However, 1983 Act 247 did authorize these two funds, subject to ETF Board rules, to invest their assets in the WRS Fixed Fund and Variable Fund managed by the State of Wisconsin Investment Board. The City of Milwaukee Employees' Retirement Fund first took advantage of this opportunity beginning in 1988 by having the state manage a portion of the system's assets.

Beginning in the late 1980s, the Legislature began to address the issue of the preservation and portability of pension system accruals between qualified retirement plans. Provisions of 1989 Act 323 granted retirement benefits portability and reciprocity for participants of the WRS and the Milwaukee County Employees' Retirement System and the City of Milwaukee Employees' Retirement Fund who move between any of these systems. For persons joining the WRS after having earned service under another qualified pension fund, provisions of 1991 Act 141 newly authorized "rollovers" of distributions from the other retirement system into the WRS. These rollover amounts could be credited as employee additional contributions and used to purchase a supplemental annuity upon retirement. For individuals who have not reached minimum retirement age, leave the WRS and subsequently join another tax qualified pension plan, Act 141 also permitted the transfer of a lump sum distribution from the WRS directly to the other retirement system. The ETF is currently permitting rollovers of WRS balances to other tax qualified pension funds; however, except under limited circumstances, no rollovers into the WRS are being permitted pending resolution of a

variety of complex issues relating to the crediting of future interest earnings to the rollover amounts transferred into the WRS. The exception relates to direct transfers from certain other plans qualified under federal law for the purpose of purchasing WRS creditable service.

In the 1995 legislative session, Act 302 made a number of significant changes to the WRS to conform its operation to the requirements of the federal Internal Revenue Code. Compliance with applicable Code requirements was deemed necessary to ensure that the WRS continued to operate as a tax-qualified governmental retirement plan. Under the provisions of Act 302, the following major modifications were enacted: (1) an annual ceiling was established governing the maximum amount of contributions that may be made to a participant's account; (2) an annual ceiling was established governing the maximum amount of benefits that may be paid to an annuitant; (3) a required beginning date for annuity benefit payments was established, based on the age of the participant; (4) procedures were established for determining annuity options and the value of annuities payable to former spouses under a divorce decree; (5) revised procedures were set in place for the distribution of abandoned retirement accounts; and (6) a 30-day break in service standard was established governing the minimum time period that must elapse before a new WRS retiree could reenter WRS covered service as an active employee without having his or her annuity terminated.

The 1999 Legislature enacted important WRS benefit improvements and funding changes in 1999 Act 11. Act 11 provided the following major benefit increases: (1) WRS formula benefit multipliers were increased for all creditable service earned prior to January 1, 2000; (2) the maximum initial amount of a formula-based retirement annuity was increased for certain WRS participant classifications; (3) annual interest crediting caps that applied to WRS participants first hired after December 31, 1981, were repealed, effective December 30, 1999; (4) the Variable Fund was reopened to all WRS participants, first effective January 1, 2001; and (5) death benefits payable to WRS participants who die before reaching minimum retirement age were increased, effective December 30, 1999.

Act 11 also made important changes to the way that the WRS is currently funded: (1) the Transaction Amortization Account (TAA), to which are credited the gains and losses in market value of the invested assets of the Fixed Fund, was frozen as of December 31, 2000, and all of the remaining TAA balances were directed to be liquidated in equal annual installments over a five-year period; (2) in place of the TAA, a new Market Recognition Account was established to distribute investment gains and losses accruing to the Fixed Trust; and (3) the actuarial assumptions governing the annual funding needs of the WRS were adjusted.

Upon the enactment of Act 11, the constitutionality of many of the new law's provisions was challenged. On December 29, 1999, the Wisconsin Supreme Court granted ETF injunctive relief from implementing any of the provisions of Act 11 until further ordered by the Court. On June 12, 2001, the Court handed down an opinion (2001 WI 59) upholding all of the Act 11 benefit improvements and funding changes in their entirety. The effects of these Act 11 changes are discussed more fully in Chapters 4 and 5.

In the 2003 legislative session, Act 33 included provisions that authorized WRS participants to transfer funds from certain tax sheltered annuity plans to ETF for the purpose of buying forfeited service, other governmental service and a variety of other types of service, which at various times in the past did not earn WRS creditable service.

Under 2005 Act 153, the Fixed Annuity division of the WRS and the related Fixed Retirement Investment Trust under the management of the State Investment Board were redesignated as the "Core" Annuity Division and the "Core"

Retirement Investment Trust. The modified nomenclature took effect April 5, 2006.

Under 2009 Act 28, provisions were enacted to create a domestic partner registry under Chapter 40 of the statutes and require that domestic partners be treated in the same manner as spouses with respect to: (1) all pension benefits provided to public employees participating in the WRS; and (2) benefits provided to state employees and certain local government employees participating in ETF group insurance programs. For the purposes of the WRS and state employee benefits, a domestic partnership is defined as a relationship between two individuals (either same-sex or opposite-sex) that satisfies certain age and relationship conditions. With respect to the WRS, the primary Act 28 domestic partner provisions included: (1) modifying the definition of a beneficiary to treat a domestic partner the same as a spouse under the standard sequence of providing a benefit in the absence of a written designation of a beneficiary; (2) providing a domestic partner with the same rights as a spouse with respect to retirement annuity options; and (3) allowing WRS accounts and annuities to be divided between a participant and a domestic partner under a Qualified Domestic Relations Order.

The 2011 legislative session resulted in significant changes to the WRS. Under 2011 Act 10, the authority of WRS employers (both the state and local employers), to pay all or part of the contributions required of participating employees was repealed, unless the pickup of the employee contributions is required in a collective bargaining agreement with represented local police, local firefighters, state troopers, or state motor vehicle inspectors (now defined in law as "public safety employees").

Act 10 also provided that a WRS general participant and an executive or elected official participant are required to make an employee contribution to the WRS in an amount equal to one-half of all actuarially-required contributions, as approved by the ETF Board. [Under the 2017 rates, one-half of the general-participant rate and one-half the executive/elected-official rate is 6.8%.] WRS participants who are protective occupation employees (both those who are and are not covered by social security) are now required to contribute the percentage of earnings that would be paid by general participants (6.8% in 2017). [However, if the protective occupation employees are public safety employees, an employer pickup of the employee contribution may be negotiated in a collective bargaining agreement].

Further, Act 10 created equivalent restrictions on the employer pickup of employee-required retirement contributions that are applicable to the retirement systems operated by the City of Milwaukee and Milwaukee County.

Under 2011 Act 32 (the 2011-13 biennial budget act), the Act 10 retirement contribution provisions were modified in several ways. First, Act 32 required that state and local employee retirement contributions be made from the employee's pre-tax income for purposes of federal and state income taxes, but not for federal employment (FICA) taxes. The effect of the provision is to reduce the employee's taxable income.

Second, Act 32 prohibited a municipal employer of law enforcement and fire personnel, or the state as the employer of state troopers and motor vehicle inspector personnel, from paying, on behalf of such employees, the employee-required retirement contributions specified in Act 10, if that employee first becomes an employee of the municipality or the state on or after July 1, 2011.

Third, a municipal employer is required under Act 32 to pay, on behalf of a nonrepresented law enforcement or firefighting managerial employee who was initially employed by the municipal employer before July 1, 2011, the same retirement contributions that are paid by the municipal employer for represented law enforcement or firefighting personnel who were initially employed by the municipal employer before July 1, 2011. These

retirement contribution pickup provisions relating to nonrepresented managerial employees are also required of the state with respect to state troopers and motor vehicle inspectors. In addition, for municipal employers, this required retirement contribution pickup provision also applies to a represented law enforcement or firefighting employee who was initially employed by the municipal employer before July 1, 2011, and who on or after this date becomes employed in a nonrepresented law enforcement or firefighting managerial position with the same municipal employer, or a successor municipal employer in the event of a combined department that is created on or after July 1, 2011.

Fourth, Act 32 expanded the definition of a public safety employee under Act 10 to include an emergency medical service provider for an emergency medical services department. As a result, such emergency medical service providers retain collective bargaining rights, including the ability to bargain for an employer pickup of employee-required retirement contributions.

Fifth, under Act 32, the Wisconsin Employment Relations Commission (WERC) was required to determine that any municipal employee is a "transit employee" if the Commission determines that the municipal employer who employs the municipal employee would lose federal transit funding available under 49 USC 5333(b), if the municipal employee is not a transit employee. An employee determined by WERC to be a transit employee remains under prior law collective bargaining provisions, allowing represented employees to bargain for an employer pickup of employee-required retirement contributions.

In addition to modifying employee contribution requirements, Act 10 also changed future retirement benefits for certain elected and executive officials. Under Act 10, for WRS creditable service performed on or after June 29, 2011 (subject to varying initial applicability provisions), the multiplier used to calculate the normal pension benefit was reduced from 2% to 1.6% for state and local elected officials and state executives. The provision has the effect of lowering the pension benefit for service performed after the effective date of the provision. The provision first applies to creditable service that is performed by elected officials (other than judges) on the first day of a term of office that begins after June 29, 2011. For Supreme Court justices, Court of Appeals judges, and Circuit Court judges, the provision would first apply to creditable service that is performed on the day on which the next Supreme Court justice, Court of Appeals judge, or Circuit Court judge assumes office after June 29, 2011. Act 32 further clarified that the retirement multiplier provision under Act 10 first applies to creditable service that is performed by officials on fixed-term appointments whose salaries cannot be modified during a term, on the first day of a term of office that begins after the effective date of the provision.

Finally, Act 32 made two substantive modifications to the WRS affecting employee participation. First, for individuals hired on or after July 1, 2011, Act 32 provided that, to become a participant in the WRS, an individual must work for a covered employer at least two-thirds of what is considered full-time employment, as determined by ETF by rule (generally 1,200 hours per year, and 880 hours per year for teachers, school librarians, school administrators, and educational support personnel). [For those initially hired by a WRS employer prior to July 1, 2011, an individual must work for a covered employer at least one-third of what is considered full-time employment, as determined by ETF by rule (generally 600 hours per year, and 440 hours per year for teachers, librarians, administrators, and educational support personnel).]

Second, Act 32 provided that any employee of a WRS participating employer who is initially hired on or after July 1, 2011, must have five years of creditable service to be vested in a formula-based annuity or a money purchase annuity. [For those initially hired by a WRS employer prior to

July 1, 2011, an individual is immediately vested in a formula-based annuity or a money purchase annuity.]

Under 2013 Act 20 (the 2013-15 biennial budget act), a modification was made to the required break-in-service provision for rehiring WRS annuitants from 30 days, as specified in 1995 Act 302, to 75 days. Specifically, for WRS participants who terminated covered employment after July 1, 2013, the participant must have a minimum 75-day break in employment with a WRS employer to remain eligible to receive a WRS annuity benefit. In addition, for WRS participants who terminated covered employment after July 1, 2013, but who work at least two-thirds of what is considered full-time employment for a participating WRS employer (either directly as an employee or through a contract), the participant's WRS annuity must be suspended and no annuity payments may be made (notwithstanding compliance with the 75-day break rule) until after the participant terminates covered employment or no longer provides employee services under the contract.

Under 2015 Act 55, ETF was authorized to combine the state and local elected officials and state executives employee category with the general employee category under the WRS for purposes of establishing annual employer and employee contribution rates, if such a combination would be in the actuarial interest of the fund and would result in administrative efficiency. The categories were subsequently combined for rate-setting purposes. Act 55 also specified that state and local elected officials and state executive employees who initially assume office or begin employment after December 31, 2016, would have a normal retirement date of 65 years of age, rather than 62 years of age.

While under prior law, any local unit of government electing to participate in the WRS generally had to include all of its employees in the WRS at the time of the election, under 2015 Act 174 any local unit of government electing to participate in the WRS on or after March 2, 2016, may elect to be a participating WRS employer only with respect to employees hired on or after the date on which the employer elects to participate in the WRS. However, any such local employer electing to participate in the WRS on or after March 2, 2016, that elects to be a participating WRS employer only with respect to employees hired on or after its WRS participation date, may nonetheless offer its current employees the option of participating in the WRS if they make the election in writing on a form provided by ETF before the effective date that the local employer becomes a WRS employer. Finally, any local employer that elects to become a WRS employer on or after March 2, 2016, may choose to not include any of its public utility employees in the WRS.

Under 2017 Act 59, the ETF-administered domestic partner program was closed to new applications and health insurance coverage for domestic partners of active employees and retirees was discontinued, effective January 1, 2018. Act 59 additionally discontinued domestic partner benefits under the duty disability program for protective occupation participants whose disability occurred on or after January 1, 2018. Further, with regard to deferred compensation plan assets in particular, Act 59 removed domestic partners from the standard sequence for such benefits and eliminated statutory provisions that allowed a court to issue a domestic relations order assigning all or part of a participant's deferred compensation assets to a domestic partner or former domestic partner to satisfy a family support obligation. However, a former domestic partner may still be named as an alternate payee in a qualified domestic relations order as having a right to receive a portion of the WRS benefits of a participant.

Under 2017 Act 362, statute was modified to specify that the threshold for WRS participation of two-thirds of what is considered full-time employment would apply to individuals who were not WRS participants before July 1, 2011, rather than individuals who were initially employed by a WRS employer on or after July 1, 2011.

CHAPTER 2

COVERAGE OF THE WISCONSIN RETIREMENT SYSTEM

This chapter describes the current employer and employee participation levels under the Wisconsin Retirement System (WRS).

Employer Participants

Under s. 40.21 of the statutes, any public employer may elect to participate in the WRS. The statutes further define "employer" to include the state, cities, villages, towns, all forms of school districts, city-county hospitals, sewerage commissions and sanitary districts, a metropolitan sewerage district, or any other unit of government, as well as any agency of two or more units of government.

Although participation in the WRS is optional for most public employers, the statutes specify that certain employer categories must join the retirement system. Mandatory participation in the WRS is required for all of the following types of employers:

- The state;
- All counties (except Milwaukee County);
- All second-, third- and fourth-class cities must continue to cover police officers and paid firefighters, if the city had been mandated to include them under the former Wisconsin Retirement Fund (WRF) prior to March 31, 1978;
- All villages with a population of 5,000 or more must continue to cover past, present and future police officers, if the village had been mandated to include them under the former WRF prior to March 31, 1978;
- All villages with a population of 5,500 or more must continue to cover past, present and future firefighters as well as police officers, if the village had been mandated to include them under the former WRF prior to March 31, 1978;
- All school districts must provide coverage for teaching personnel. Coverage is optional for a school district's nonteaching personnel, but if the district elects to cover any of its nonteaching personnel, all nonteaching staff must be covered;
- Any newly-created school districts must provide coverage for nonteaching personnel (but only if the new district's territory includes more than one-half of the most recent assessed valuation of a school district that was a WRS employer at the time of creation); and
- Any other governmental entity that assumes the functions of another previously participating WRS employer through consolidation or merger must continue WRS coverage for the employees affected by the merger.

If a nonparticipating public employer wishes to join the WRS, its governing body must first adopt a formal resolution of inclusion. Once the governing body adopts the resolution, the decision becomes irrevocable. Table 1 summarizes the number of employers participating in the WRS by category at the end of the 2017 calendar year.

Once a public employer elects to participate in the WRS, all employees hired on or after its WRS participation date must generally be enrolled in the system. A public employer may also offer its existing employees the option of participating in the WRS. At the time the employer joins the WRS, a determination must be made of the amount of

Table 1: Employer Participation by Employer Category (December 31, 2017)

Employer Category	Participating Number of Employers
State Agencies*	57
Counties	71
Cities	188
Towns	257
Villages	268
School Districts	422
Technical College Districts	16
Cooperative Educational Service Agencies	12
Other	208
Total	1,499

*Each state agency is counted as a separate employer.

"prior service credits" that the employer wishes to recognize for its current employees. These prior service credits represent the allowances for future retirement benefits that are applicable to employment service rendered by the current employees before the employer joined the WRS.

By statute, the employer may recognize 0%, 25%, 50%, 75% or 100% of the prior employment service credits earned by each employee who becomes a new WRS participant on the effective date. For example, an employee with 20 years of service with an employer before the employer joined the WRS could receive credit for future retirement purposes of 0, 5, 10, 15 or 20 years of service, depending on the percentage of such prior service that the employer elected to recognize.

Where an employer initially recognizes less than 100% of all prior service, the employer may subsequently adopt a resolution to increase the percentage of such credits previously recognized, in 25% increments, up to the 100% maximum. In such cases, the increased prior service credit may be granted only to those employees covered under the initial resolution of participation who remain in WRS covered service on the date of the subsequent resolution.

When an employer recognizes any prior service credits, all the associated costs become an obligation solely of the employer. Since most employers are unable to fully fund these costs from current operating revenues, these obligations are amortized over an extended period and become a component of the employer's unfunded liability payments. (Employer unfunded liabilities are discussed more fully in Chapter 4).

Employee Participants

Under ss. 40.22(2) and (2m) of the statutes, an employee participating in the WRS before July 1, 2011, is eligible for WRS coverage if they were expected to be employed at least one-third of what is considered full-time employment for at least one year. This threshold equates to 600 hours per year for participants who are not teachers or educational support personnel and 440 hours per year for participants who are teachers or educational support personnel. Whenever the actual hours cannot be accurately determined in advance, any employee who works 600 hours per year (440 hours per year for teachers or educational support personnel) will automatically be enrolled in the WRS beginning with the 601st hour (441st hour for teachers or educational support personnel).

Under ss. 40.22(2) and (2r), for an employee who was not a WRS participant before July 1, 2011, the individual is eligible for WRS coverage if they were expected to be employed at least two-thirds of what is considered full-time employment for at least one year. This threshold equates to 1,200 hours per year for participants who are not teachers or educational support personnel and 880 hours per year for participants who are teachers or educational support personnel. Again, if the hours cannot be accurately determined in advance, any employee who works 1,200 hours per year (880 hours per year for teachers or educational support personnel) will automatically be enrolled in the WRS when the minimum threshold is exceeded.

These eligibility provisions also apply to individuals who are public employees by virtue of holding elective office. For local elected officials who are serving in positions not considered full-time by the local unit of government, the employer is required to report the amount of service as follows. For employment which is essentially ministerial in nature, the number of hours reported by the employer must be the actual number of hours for which the employee is paid if a regular work schedule has been established. Otherwise, the number of hours is determined by dividing the official's yearly salary by twice the nonfarm federal minimum wage for that year. For example, if an official, who was a WRS participant prior to July 1, 2011, received $9,500 annually, this figure would be divided by $14.50 (twice the current federal nonfarm minimum wage), yielding the equivalent of approximately 655 hours worked. Accordingly, the official in this example would be enrolled as a participant under the WRS, since the 600-hour threshold is exceeded.

For members of governing bodies or other policy-making groups, the number of hours reported is the number of hours in actual attendance at meetings of a governing body, a policy-making group, or any appropriate subcommittee, and a reasonable number of hours for time spent in preparation for the meetings. However, the number of hours of preparation time may not exceed twice the number of hours actually spent in the meetings. Eligibility for these types of officials, depending on the initial employment date with a WRS employer, would require that the 600-hour or 1,200-hour annual threshold is exceeded.

For state agencies, eligible employees include any full- or part-time permanent and project positions where the employee, depending on their initial employment date with a WRS employer, either worked at least 600 or 1,200 hours in the immediately preceding 12-month period, or is expected to work for one year for at least 600 or 1,200 hours. Typically, limited-term employees will also be covered if the 600-hour or 1,200-hour threshold is expected or actually worked during the calendar year.

Notwithstanding these employee eligibility standards, the statutes specifically exclude from WRS coverage certain classes of employees who might otherwise qualify for participation. These categories of employees include the following:

- Persons hired under a contract to provide more than personal services;

- University of Wisconsin System teaching assistants;

- Visiting professors in the University of Wisconsin System employed for less than twelve consecutive calendar months;

- Persons eligible to receive similar benefits from any other state covering the same service and earnings;

- Certain classes of public employees in Milwaukee who could participate in the WRS but are already covered by other independent Milwaukee pension systems (for example, some employees of the Milwaukee Technical College district and employees covered under the Milwaukee Transport Employees Pension Plan); and

- Students under age 20 who are regularly enrolled or expected to be enrolled as full-time students in a public, private or parochial elementary or secondary school.

When an employee becomes a WRS participant, the individual will be enrolled in one of the following four participant categories:

- **Elected Officials and Appointed State Executives.** These participants include legislators, constitutional officers, judges and local elected officials or persons appointed to fill an elected position. Also included are state executive salary group (ESG) appointees.

• **Protectives with Social Security Coverage.** These participants include persons involved in law enforcement who are also exposed to a high degree of danger or peril and who must have a high degree of physical conditioning. Some types of occupations are specifically included in this category by statute, whether or not the above criteria are met.

• **Protectives without Social Security Coverage.** These participants are limited to persons involved in local firefighting who also meet the above protective requirements and are not covered under the federal Social Security program.

• **General.** These participants are those state and local employees not specifically designated under any of the above employment categories.

Table 2 summarizes the total number of active employee participants in the WRS from 2008 to 2017 by employment category.

As a point of comparison, the separate City of Milwaukee pension system had 10,845 active employee participants and the separate Milwaukee County pension system had 3,488 active employee participants as of the end of the 2017 calendar year. Combining the active participant enrollment figures as of December 31, 2017, for the WRS and the Milwaukee pension systems, there were 271,746 active participants in the three public employee pension systems in the state. Of this total, 94.7% were under the WRS, 4.0% were under the City of Milwaukee system and the remaining 1.3% were under the Milwaukee County system.

Tables 3 and 4 further detail the active participant data presented in Table 2. Table 3 summarizes the total number of active state government participants by employment category. Table 4 presents similar data for active local government participants. Table 5 further elaborates the data presented in Table 4 by showing the number of school teacher participants among general category local government active participants. Almost half of all local government general category active employees are public school teachers.

Table 2: Total Number of Active Employee Participants By Employment Category

End of Calendar Year	Employment Category: General		Elected/Executive		Protective with Social Security		Protective without Social Security		Total
	Number	%	Number	%	Number	%	Number	%	
2008	241,425	90.86%	1,453	0.55%	20,116	7.57%	2,727	1.02%	265,721
2009	242,821	90.84	1,453	0.54	20,279	7.59	2,740	1.03	267,293
2010	242,328	90.89	1,430	0.54	20,110	7.54	2,761	1.04	266,629
2011	233,465	90.75	1,437	0.56	19,634	7.63	2,718	1.06	257,254
2012	233,269	90.83	1,420	0.55	19,410	7.56	2,734	1.06	256,833
2013	233,380	90.88	1,409	0.55	19,254	7.50	2,745	1.07	256,788
2014	233,500	90.76	1,409	0.55	19,603	7.62	2,743	1.07	257,255
2015	232,646	90.84	1,396	0.55	19,301	7.54	2,734	1.07	256,077
2016	233,693	90.83	1,369	0.53	19,468	7.57	2,755	1.07	257,285
2017	233,845	90.85	1,351	0.52	19,465	7.56	2,752	1.07	257,413

Table 3: State Government Active Employee Participation By Employment Category

End of Calendar Year	Employment Category: General Number	General %	Elected/Executive Number	Elected/Executive %	Protective with Social Security Number	Protective with Social Security %	Protective without Social Security Number	Protective without Social Security %	Total
2008	62,632	86.79%	709	0.98%	8,824	12.23%	None in		72,165
2009	62,816	86.74	709	0.98	8,890	12.28	state		72,415
2010	63,287	87.00	697	0.96	8,756	12.04	service		72,740
2011	61,320	87.11	717	1.02	8,354	11.87			70,391
2012	63,209	87.46	733	1.02	8,327	11.52			72,269
2013	63,963	87.51	730	1.00	8,398	11.49			73,091
2014	64,261	86.97	732	0.99	8,900	12.04			73,893
2015	63,780	87.33	728	1.00	8,528	11.67			73,036
2016	64,182	87.30	727	0.99	8,605	11.71			73,514
2017	64,839	87.51	715	0.97	8,531	11.52			74,085

Table 4: Local Government Active Employee Participation By Employment Category

End of Calendar Year	Employment Category: General Number	General %	Elected/Executive Number	Elected/Executive %	Protective with Social Security Number	Protective with Social Security %	Protective without Social Security Number	Protective without Social Security %	Total
2008	178,793	92.37%	744	0.38%	11,292	5.83%	2,727	1.42%	193,556
2009	180,005	92.37	744	0.38	11,389	5.84	2,740	1.41	194,878
2010	179,041	92.34	733	0.38	11,354	5.86	2,761	1.42	193,889
2011	172,145	92.12	720	0.39	11,280	6.04	2,718	1.45	186,863
2012	170,060	92.14	687	0.37	11,083	6.01	2,734	1.48	184,564
2013	169,417	92.23	679	0.37	10,856	5.91	2,745	1.49	183,697
2014	169,239	92.30	677	0.37	10,703	5.84	2,743	1.49	183,362
2015	168,866	92.26	668	0.36	10,773	5.89	2,734	1.49	183,041
2016	169,511	92.24	642	0.35	10,863	5.91	2,755	1.50	183,771
2017	169,006	92.19	636	0.35	10,934	5.96	2,752	1.50	183,328

Table 5: Public School Teachers as a Percentage of General Employment Category (Local Government Active Employee Participants)

Calendar Year	Total General Employees	Teachers Only: Number	Teachers Only: % of Total
2008	178,793	82,520	46.15%
2009	180,005	82,516	45.84
2010	179,041	81,866	45.72
2011	172,145	78,348	45.51
2012	170,060	77,938	45.83
2013	169,417	77,995	46.04
2014	169,239	78,339	46.29
2015	168,866	77,979	46.18
2016	169,511	78,128	46.09
2017	169,006	78,384	46.38

CHAPTER 3

ADMINISTRATIVE AND OVERSIGHT STRUCTURE OF THE WISCONSIN RETIREMENT SYSTEM

There are five different statutory boards with responsibilities for programs operated by the Department of Employee Trust Funds (ETF). These five boards are: the Employee Trust Funds Board, the Teachers Retirement Board, the Wisconsin Retirement Board, the Group Insurance Board, and the Deferred Compensation Board. Each of these boards has some responsibility for one or more of the benefit programs administered by ETF. Under provisions of s. 40.015 of the statutes, no benefit plan operated by any of these boards may be administered in such a manner that it would violate an applicable federal Internal Revenue Code (IRC) provision or would cause an otherwise tax exempt benefit to become taxable under the IRC.

Of these five boards, only the Employee Trust Funds Board, the Teachers Retirement Board and the Wisconsin Retirement Board have legal and fiduciary responsibilities relating to the Wisconsin Retirement System (WRS). Each of these three entities is a board of trustees for some or all of the benefit programs offered under the WRS. The ETF Board is both the overall governing body for the Department and the general policy-setting and trustee board for the entire WRS. The other two retirement boards are generally advisory to the ETF Board, although they also have some specific policy-setting duties, as will be described below.

Subject to the policies set by the three retirement boards, the day-to-day administration of the WRS is the responsibility of the staff of ETF. The Department is responsible for collecting all monies due the WRS and for handling all payments of benefits to WRS participants. However, the Department is not responsible for the management of invested retirement system assets; these duties are assigned to the State of Wisconsin Investment Board (SWIB).

In addition to the executive branch statutory boards and agencies that oversee the administration and management of the WRS, the Joint Survey Committee on Retirement Systems provides oversight of the WRS for the Legislature and is responsible for the review of all proposed retirement legislation.

This chapter describes the roles and interrelationships of these various boards, agencies, and the committee as they affect the operation of the WRS.

WRS Policy Boards

Employee Trust Funds Board. Under s. 15.16 of the statutes, a 13-member Employee Trust Funds Board is responsible for the general direction and supervision of the Department of Employee Trust Funds. In addition, s. 40.03 of the statutes assigns the ETF Board various responsibilities relating to the management of the WRS. Specifically, the ETF Board has the following primary statutory duties:

- Ensuring that the WRS complies with the federal IRC as a qualified retirement plan for income tax purposes and that each benefit plan is administered in a manner consistent with the appropriate federal IRC regulations;

- Appointing the ETF Secretary;

- Employing or selecting the medical, legal or actuarial assistance required for the proper administration of the WRS;

- Approving the tables used for benefits, contribution rates and actuarial assumptions, all as determined by the actuary;

- Authorizing and terminating the payment of all WRS annuities (except for disability annuities that must instead be approved by the Teachers Retirement Board or by the Wisconsin Retirement Board for participants subject to their respective jurisdiction);

- Approving or rejecting all pension plan administrative rules proposed by the Secretary (the Teachers Retirement Board and the Wisconsin Retirement Board have concurrent approval authority for those rules affecting matters within each Board's purview); and

- Hearing appeals from determinations made by the Department (except for disability application appeals that must instead be heard by the Teachers Retirement Board or the Wisconsin Retirement Board).

Members of the ETF Board are the Governor, or the person who is the Governor's designee on the Group Insurance Board; the Administrator of the Division of Personnel Management, or his or her designee; and the following 11 persons appointed or elected to staggered, four-year terms: (1) four members from the Teachers Retirement Board, appointed by that body; (2) four members from the Wisconsin Retirement Board, appointed by that body; (3) one member, appointed by the Governor as a public representative, who may not be a member of the WRS and must have at least five years of actuarial, insurance or employee benefits plan experience; (4) one annuitant member, elected by retired WRS participants; and (5) one member who is an active WRS participant and must be either a technical college or educational support personnel employee, elected by WRS participating employees who meet the same employment criteria.

Those members of the ETF Board selected from the membership of the Teachers Retirement Board and the Wisconsin Retirement Board must represent a mix of state and local government employees and employers, annuitants and the general public.

The statutes prescribe that the four ETF Board appointees from the Teachers Retirement Board represent the following constituencies: (1) one appointee must be either a public school teacher or a technical college district teacher; (2) one appointee must be a University of Wisconsin System teacher; (3) one appointee must be a Milwaukee public school teacher; and (4) one appointee must be either a local school administrator or a school board member.

The statutes also prescribe that three of the four ETF Board appointees from the Wisconsin Retirement Board represent the following constituencies: (1) at least one appointee must be one of the following: (a) a city or village chief executive or governing board member; (b) a city or village finance officer; (c) a town or county governing board chair or member; (d) a clerk or deputy clerk; or (e) the public member of the Board; (2) at least one appointee must be one of the following: (a) an employee of a participating city or village; (b) an employee of a participating local employer other than a city or village, or (c) a state employee; and (3) at least one appointee must be either a state employee or the public member of the Wisconsin Retirement Board.

Since s. 15.16(1)(b) of the statutes establishes only three broad categories from which the four Wisconsin Retirement Board appointees to the ETF Board must be drawn, at least two of the appointees will be designated from the same constituency category.

The ETF Board meets quarterly, or more often

as required.

Teachers Retirement and Wisconsin Retirement Boards. The 13-member Teachers Retirement Board and the nine-member Wisconsin Retirement Board are established under s. 15.165(3) of the statutes, and their duties and responsibilities are described respectively under ss. 40.03(7) and (8) of the statutes. These two Boards act primarily in a consultative capacity to the ETF Board and to the ETF Secretary on all matters relating to either teacher or nonteacher WRS participants.

The Teachers Retirement Board has the following principal statutory duties:

- Appointing four of its members to the ETF Board;

- Studying and recommending to the ETF Secretary and to the ETF Board alternative administrative policies and rules;

- Appointing one of its members to the State of Wisconsin Investment Board;

- Approving or rejecting all administrative rules proposed by the ETF Secretary that relate to teacher participants;

- Authorizing and terminating the payment of disability benefits for teachers; and

- Hearing appeals on disability annuity determinations for teacher participants.

Members of the Teachers Retirement Board serve staggered, five-year terms and are appointed to represent a mix of employees and employers of various participating educational entities. The Board is composed of the following members: (1) six public school teachers, elected by non-Milwaukee public school teachers; (2) one technical college district teacher, elected by technical college district teachers; (3) one Milwaukee public school teacher, elected by City of Milwaukee public school teachers; (4) one teacher annuitant, elected by WRS annuitants who are former teachers; (5) two University of Wisconsin System teachers, appointed by the Governor; (6) one public school administrator, appointed by the Governor; and (7) one public school board member, appointed by the Governor.

The nine-member Wisconsin Retirement Board has the same general duties as the Teachers Retirement Board except that these responsibilities relate only to nonteacher WRS participants.

Members on the Wisconsin Retirement Board serve staggered, five-year terms and are appointed to represent a mix of employees and employers drawn from the various participating governmental units. The Board is composed of the following members: (1) one city or village chief executive or governing board member, appointed by the Governor from a list of five names submitted by the League of Wisconsin Municipalities; (2) one city or village finance officer, appointed by the Governor; (3) one city or village employee, appointed by the Governor; (4) one member of a town or county governing body, appointed by the Governor from a list of five names submitted by the Wisconsin Counties Association; (5) one county clerk or deputy county clerk, appointed by the Governor; (6) one town or county employee, appointed by the Governor; (7) one state employee, appointed by the Governor, (8) one public member who is not a WRS participant or beneficiary, appointed by the Governor; and (9) the Commissioner of Insurance (or the Commissioner's designee) or an experienced actuary in the Office of the Commissioner of Insurance.

The Teachers Retirement Board and the Wisconsin Retirement Board are both carryovers from the period before the consolidation of the major public employee pension funds into the WRS by Chapter 96, Laws of 1981. That Act created the

Teachers Retirement Board as an advisory board to supersede the former State Teachers Retirement System Board and the Milwaukee Teachers Retirement Fund Board.

Chapter 96 also established the current appointment procedures for Teachers Retirement Board members. Previously, all members of the State Teachers Retirement System Board had been appointed by the Governor while half the members of the Milwaukee Teachers Retirement Fund Board had been elected by Milwaukee teachers and the remaining half had been appointed by the Milwaukee School Board. That same legislation also created the Wisconsin Retirement Board as an advisory board to supersede the former Wisconsin Retirement Fund Board. Membership and selection procedures for that Board were not modified by the merger legislation.

The Teachers Retirement and Wisconsin Retirement Boards meet quarterly, or more often as required. Typically, these Boards meet concurrently with the scheduled quarterly meetings of the ETF Board.

Other Employee Trust Funds Boards

Neither the Group Insurance Board nor the Deferred Compensation Board has any formal responsibility for the operation of the WRS. However, because their activities and benefits frequently impact WRS participants, the principal features of these two boards are briefly summarized here.

Group Insurance Board. The eleven-member Group Insurance Board oversees the administration and the establishment of policies for four major insurance plans for state employees and certain local government employees. The four plans are:

- Group health insurance for WRS annuitants, state employees and employees of those local governments that choose to offer this benefit;
- Group income continuation insurance for state employees and employees of those local governments that choose to offer this benefit;
- Group life insurance benefits for annuitants, state employees and employees of those local governments that choose to offer this benefit; and
- Long-term care insurance for annuitants and state employees.

The Board may offer other optional forms of insurance, in addition to those listed above, provided that employees pay the entire premium amount.

Membership on the Group Insurance Board is governed by s. 15.165(2) of the statutes. Five members of the Board serve ex officio as a result of the positions that they hold. These ex officio members are the Governor, the Attorney General, the Commissioner of Insurance, the Secretary of the Department of Administration, and the Administrator of the Division of Personnel Management. Any of these ex officio members may appoint a designee to serve on the Board in his or her stead. The remaining six members of the Board are appointed by the Governor to two-year terms. The statutes require that at least five of the six appointees represent specific constituencies in order to ensure a diversity of views on the Board. At least one gubernatorial appointee must be an insured teacher who is a WRS participant, a second must be an insured nonteacher WRS participant, a third must be an insured local employee WRS participant, a fourth must be an insured retired WRS participant, and a fifth must be the chief executive or a member of the governing body of a local unit of government that is a participating employer in the WRS. There is no specific membership requirement for the sixth gubernatorial appointee to the Board.

The Board meets at least quarterly, or more often as required.

Deferred Compensation Board. The five-member Deferred Compensation Board is established under s. 15.165(4) of the statutes to oversee the operation of the state's deferred compensation program. In 1978, the federal government authorized the establishment of deferred compensation plans. A program for state employees was created by Chapter 187, Laws of 1981, and was then modified by 1983 Act 120 to allow participation by local government employees. The program, authorized under Section 457 of the federal Internal Revenue Code, allows public employees to lower their taxable income by deferring on a pre-tax basis a portion of gross wages into a variety of investment options. These deferrals, plus earnings, accumulate as additional savings for retirement. Disbursements from the deferrals may begin once a participant has separated from state or local service, typically at the time of retirement, but must begin by April 1 of the calendar year following the year in which the participant attains the age of 70-1/2 (or the year following termination of employment, if later.). Although these disbursements are fully taxable when received, the retiree is more likely to be in a lower tax bracket than before retirement and will have had the benefit of any investment earnings on untaxed compensation during the interim period.

The Deferred Compensation Board's duties and responsibilities include:

- Serving as trustee of any deferred compensation plan established under state law, holding the assets and income of the plan in trust for the exclusive benefit of the employees who participate in the plan and their beneficiaries, and maintaining the plan as an eligible deferred compensation plan and as a governmental plan for eligible employers, as defined in federal law;

- Determining the requirements for and the qualifications of deferred compensation plan providers;

- Selecting and contracting with deferred compensation providers;

- Approving the terms and conditions of proposed contracts;

- Determining procedures for the selection of deferred compensation plan providers;

- Approving the terms and conditions of model salary reduction agreements to be used by state agencies; and

- Ensuring that contractual agreements with the plan providers include participant services as approved by the Board and providing reimbursement to ETF for its expenses associated with the plan.

Members of the Deferred Compensation Board serve staggered, four-year terms and are appointed by the Governor. There is no specific statutory membership or qualification requirement for members of the Board.

The Board generally meets three to four times a year, or more often as required.

The Department of Employee Trust Funds

The Department of Employee Trust Funds (ETF) was created by Chapter 75, Laws of 1967. That legislation implemented many of the Kellett Commission's proposals to reorganize state government. Provisions of Chapter 75 included the administrative consolidation of six separate pension agencies (the Conservation Warden Pension Fund Board, the Group Insurance Board, the Milwaukee Teachers Retirement Fund Board, the Public Employees Social Security Board, the State Teachers Retirement System Board, and the

Wisconsin Retirement Fund Board) into the current Department.

While each of the Boards described in the preceding two sections has policy-making responsibility for the programs under its jurisdiction, the actual implementation of retirement system policies and the day-to-day operation and management of the WRS are the responsibilities of the Department. Either by Board delegation or by statutory assignment, the agency is charged with:

- Collecting and accounting for all monies due the retirement trust funds;

- Calculating and accurately disbursing all benefit payments;

- Providing information and responding to inquiries from participating employers and employees; and

- Accounting for all WRS benefit transactions.

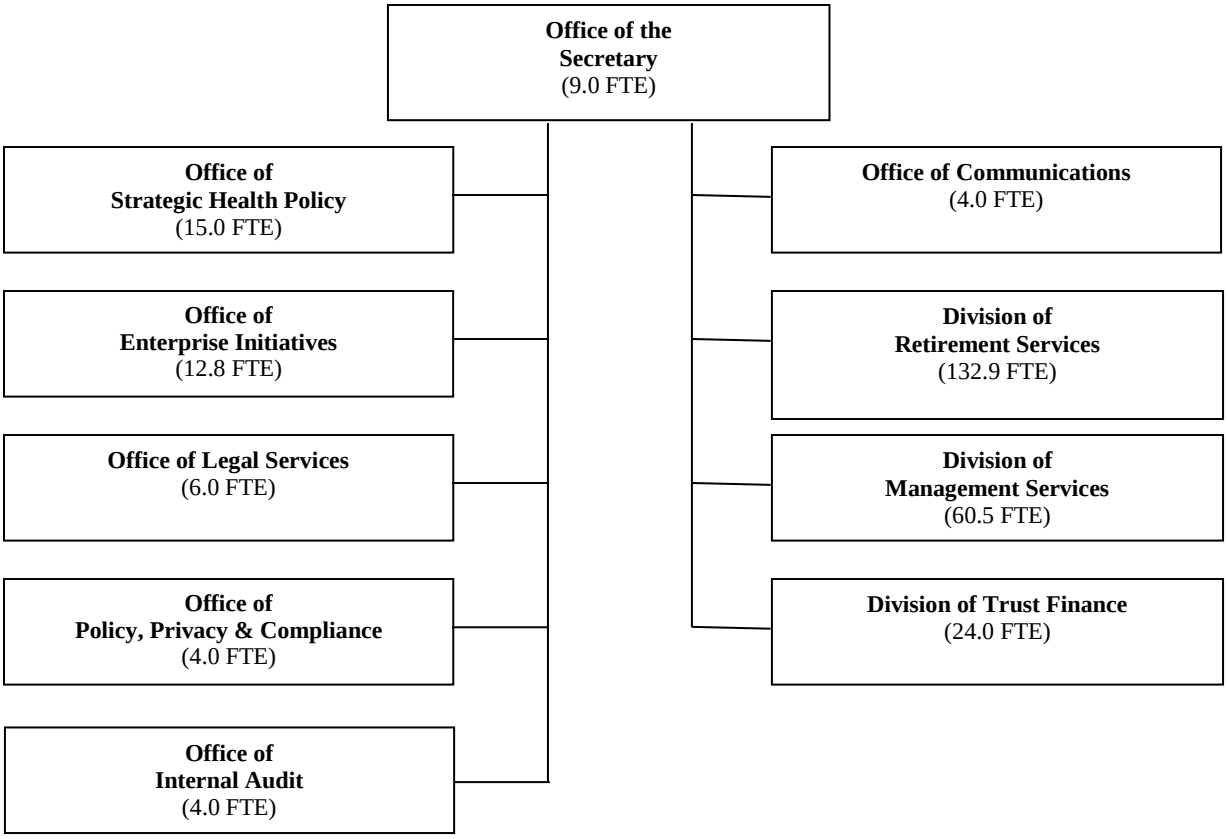
Under s. 40.03(2) of the statutes, the administration of these tasks is formally vested in the ETF Secretary, who is appointed by and serves at the pleasure of the ETF Board. The Secretary is also responsible for appointing a Deputy Secretary and Assistant Deputy Secretary and employing the necessary administrative, clerical and policy staff in the agency. The Secretary is further charged with establishing the internal organization of the Department, developing administrative policies and preparing and controlling the ETF budget. The Secretary must also ensure that the WRS complies with the federal Internal Revenue Code (IRC) as a qualified retirement plan for income tax purposes and that each of the Department's benefit plans is administered in a manner consistent with the IRC provisions that authorize and regulate the benefit plan.

The organizational chart for the Department is presented in Table 6. This organizational chart also identifies the number of full-time equivalent (FTE) positions authorized in each major organizational unit.

The Department is currently organized into six Offices (Strategic Health Policy; Enterprise Initiatives; Legal Services; Policy, Privacy, and Compliance; Internal Audit; and Communications) and three Divisions (Retirement Services; Management Services; and Trust Finance). The Department has a total of 272.2 FTE staff positions authorized in 2018-19. The Department's 2018-19 administrative budget is $46,671,500 (all funds) of which $68,000 of general purpose revenue (GPR) is primarily for post-retirement annuity and health insurance supplements and $46,603,500 of segregated trust fund monies (SEG) is budgeted for program administration. The funds for administrative costs derive from allocations made from the several benefit plans administered by the Department.

Under the statutes, premium and benefit payments are not shown in the appropriated amounts budgeted to the Department. However, ETF expects to disburse segregated funds totaling approximately $7.27 billion in 2018-19 for its various benefit plans. The following expenditures are projected: (a) $5,300 million for WRS benefit payments; (b) $1,700 million for health insurance premiums; (c) $20 million for income continuation insurance premiums; (d) $30 million for employee reimbursement account premiums; (e) $31 million for duty disability premiums; (f) $187 million for sick leave conversion credit payments; and (g) $2 million for commuter benefit payments.

Table 6: Organization of the Department of Employee Trust Funds (July, 2018)



The State of Wisconsin Investment Board

The State of Wisconsin Investment Board (SWIB) is an independent state agency responsible for the prudent management and investment of all funds entrusted to it, including the assets of the WRS. The assets of the WRS constitute over 92% of the total funds invested by SWIB. The retirement funds are managed in both long-term and short-term investments. For the purpose of investment, the retirement system's assets are divided into two funds, a Core Retirement Investment Trust (the "Core Fund") and a Variable Retirement Investment Trust (the "Variable Fund"). The Core Fund is a diversified portfolio of bonds, common stocks, mortgages, real estate holdings, and private equity, while the Variable Fund is comprised primarily of common stock investments.

As of June 30, 2018, WRS assets managed by the Board were approximately $107.1 billion, representing about 92.2% of SWIB's total investment holdings of $116.1 billion. In addition, SWIB manages the State Investment Fund, which was established to invest the temporary cash balances of all state funds on a commingled basis in short-term instruments. The monies in this fund consist of retirement fund deposits awaiting permanent investment and the amounts in more than thirty other accounts, including the state's general fund, various agency segregated funds and funds for a number of local governments. The assets of the State Investment Fund accounted for $7.2 billion (6.2%) of the total $116.1 billion being managed by SWIB. Finally, the Board also manages several

small, miscellaneous accounts (State Life Insurance Fund, Local Government Property Insurance Fund, the Historical Society Endowment Fund, Edvest, the Injured Patients and Families Compensation Fund, and UW Trust Funds). These accounts represented the remaining $1.8 billion or 1.6% of the total $116.1 billion being managed by SWIB.

The State of Wisconsin Investment Board is comprised of the following nine members: (1) five trustees are public members, appointed by the Governor with the advice and consent of the Senate, to staggered six-year terms; (2) two trustees are WRS participants, one of whom is appointed by the Teachers Retirement Board from among WRS teacher participants and one of whom is appointed by the Wisconsin Retirement Board from among WRS nonteacher participants, to six-year terms; (3) one trustee is the Secretary of the Department of Administration (or the Secretary's designee); and (4) one trustee is a member representing a local government that participates in the SWIB-managed Local Government Pooled-Investment Fund, appointed by the Governor with the advice and consent of the Senate, to a six-year term.

The statutes require that four of the Board's public members possess at least 10 years of professional investment experience. The statutes further prescribe that the Board member representing local governments meet all of the following additional eligibility criteria: (1) be employed by the local government in a finance position and possess at least 10 years of investment experience; (2) may not be an elected official; and (3) may not be an employee either of a county with a population greater than 450,000 or of a city, town or village with a population greater than 150,000. Furthermore, if the Board member representing local governments subsequently loses the status on which the appointment was based, he or she shall cease being a trustee.

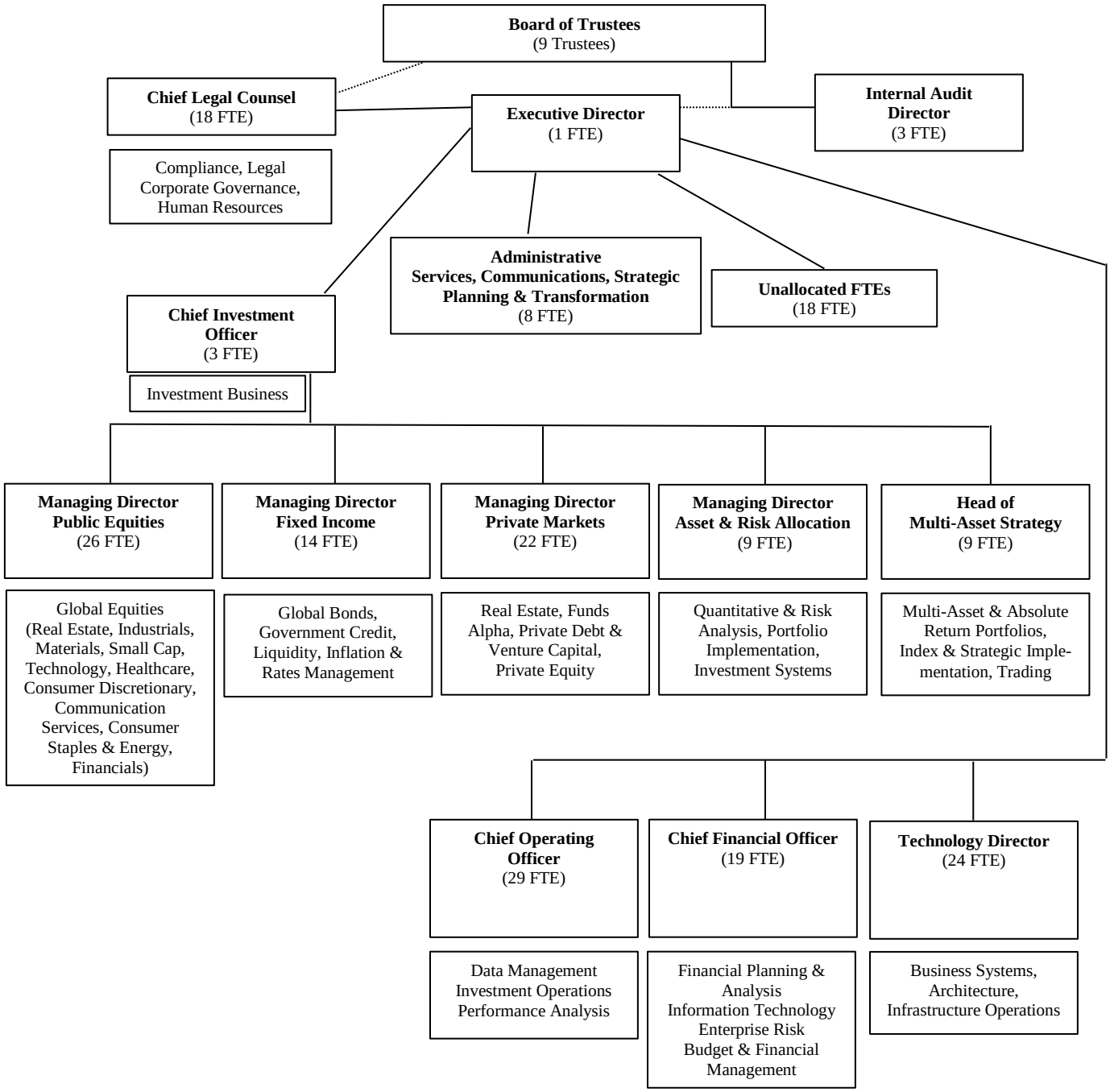
The Board appoints an Executive Director who administers the operations of the agency. The agency itself is organized into broad investment groups (public equities, including both domestic and international stocks, fixed income, and private markets, including real estate) and administrative units providing quantitative analysis, information technology, legal services, and other support functions. As of June, 2018, the agency has an authorized staff level of 203.0 full-time equivalent positions.

A current organizational chart for the Board is presented in Table 7. This organizational chart also identifies the number of full-time equivalent positions and temporary project positions authorized in each major organizational unit.

From 1999-00, through 2010-11, the general program operations of SWIB were funded by providing the agency a percent of assets under management for staff resources and overall administrative costs. Provisions of 1999 Wisconsin Act 9 authorized the Board to establish each fiscal year's total budgeted expenditure authority at 0.0275% of assets under management on April 30 of the preceding fiscal year, or a minimum of $17,720,500 (equivalent to about $64.4 billion under management), whichever is larger. Under 2005 Act 25, the provision was modified to authorize annual expenditure authority equaling 0.0275% of the average market value of the assets of the funds at the end of each month between November 30 and April 30 of the preceding fiscal year, or a minimum of $20,352,800 (equivalent to about $74.0 billion under management). This figure was permitted to increase to 0.03% of the market value of the assets with the approval of the Joint Committee on Finance.

Under 2007 Act 20, SWIB was provided budget authority based on the greater of: (1) the amount that the Board could have assessed the funds in the second year of the prior fiscal biennium; or (2) 0.0285% in 2007-08 and 0.0325% in 2008-09 and subsequent years of the average

Table 7: Organization of the State Investment Board (July, 2018)



market value of the assets of the funds at the end of each month between November 30 and April 30 of the prior fiscal year. Because the average monthly value of assets under management between November, 2010, and April, 2011, totaled $86.71 billion, the Board's 2011-12 expenditure authority was established at $30.0 million for general program operations (which was the amount assessed in the second year of the prior fiscal biennium, that is 2010-11).

The 2011-13 biennial budget act (Act 32) authorized SWIB to establish its operating budget each year and monitor the fiscal management of the budget. Act 32 also authorized SWIB to create or abolish staff positions for the agency. The prior-law provision that established SWIB's operating budget as a specified percentage of assets under management or an amount provided in the second year of the prior fiscal biennium was repealed.

In addition, Act 32 required that SWIB provide quarterly reports to the Department of Administration, the Co-Chairpersons of the Joint Committee on Finance and the Co-Chairpersons of the Joint Committee on Audit, identifying all operating expenditures and the number of full-time equivalent positions created or abolished during that quarter. Finally, SWIB officials are now required to appear each fiscal year at the first quarterly meeting of the Joint Committee on Finance under s. 13.10 of the statutes to provide an update of SWIB's budget changes, position authorization changes, assessment of the funds under management, and performance of the funds under management for the current and next fiscal year.

In June, 2018, the Board approved an operating budget for 2018-19 of $62.4 million. By statute, some of the Board's administrative expenses are not included in the budgeted appropriations for the agency. These types of expenditures include custodial and banking fees, legal fees, investment research and consulting fees and external management fees. For calendar year 2017, these expenditures amounted to approximately $338.9 million.

Legislative Oversight

Joint Survey Committee on Retirement Systems. The ten-member Joint Survey Committee on Retirement Systems (JSCRS) was established by Chapter 376, Laws of 1947, to function as the Legislature's oversight committee for all matters relating to proposed statutory changes to state-operated public employee pension plans.

Because of the complexity and potential costs to public employers of any proposed change in WRS law, a diverse JSRCS membership was established as a safeguard to ensure that complex pension legislation could receive adequate review.

The Joint Survey Committee on Retirement Systems is comprised of the following members: (1) three senators and three representatives, one of whom from each house must be from the minority party, appointed as are members of standing committees in their respective houses; (2) an assistant Attorney General appointed by the Attorney General; (3) a public member who is neither a WRS participant nor a WRS annuitant, appointed by the Governor; (4) the Commissioner of Insurance or an experienced actuary designated by the Commissioner from that agency; and (5) the Secretary of ETF or the Secretary's designee.

The Committee is co-chaired by one of its Senate members and by one of its Assembly members. The legislative members, the assistant Attorney General and the public member serve four-year terms and continue in office until a successor is appointed and qualified. (In practice, the legislative members receive appointment or reappointment to the JSCRS every two years at the commencement of a new Legislature.) Any member of the JSCRS ceases to be a member upon losing the status on which membership is based.

Under s. 13.50(6) of the statutes, the Legislature is prohibited from acting on any bill or amendment that would create, modify or in any way provide for the retirement or payment of pensions to public employees unless the proposal has first been referred to the JSCRS, and the Committee has provided a written report on the bill or amendment. All actions of the JSCRS require the approval of an absolute majority (six) of its members.

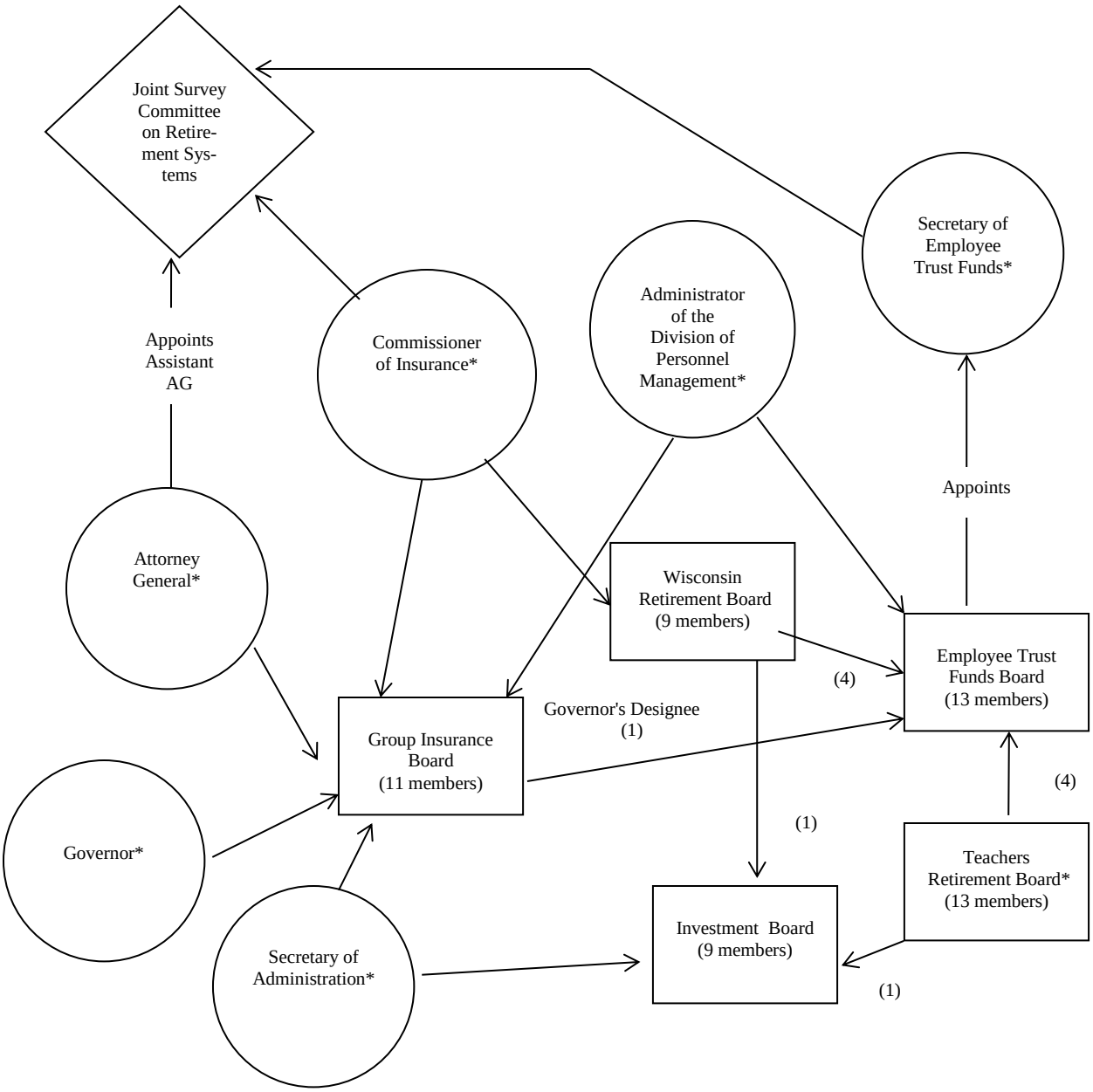
A JSCRS report on a retirement bill (or amendment) includes a description of what the bill would do, the probable costs of the proposal, the impact of the proposal on employer and employee contribution rates, the likely effect of the bill on the actuarial soundness of the WRS and the judgment of the Committee as to whether or not the bill is desirable as a matter of good public policy. In performing this work, the Committee may contract for actuarial studies or opinions.

The Committee may hold hearings, receive testimony and review legislation; however, it does not have the authority to introduce retirement legislation or amendments to that legislation. This is because the Committee, as a Joint Survey Committee, is comprised both of public, nonelected members and legislator members. Due to the presence of these public members, the JSCRS cannot be a standing committee of the Legislature with the power to introduce or modify legislation. While the JSCRS itself cannot introduce legislation, the Committee may conclude that the proposed legislation would be good public policy if amended in a certain fashion. In such instances, the Committee's report typically indicates that fact. Subsequently, an amendment to the bill accomplishing the recommended changes may be introduced by one or both of the legislative co-chairs of the JSCRS.

The Legislative Council staff is required to assist the JSCRS in the performance of its duties, as follows: (1) provide legal and research staff services; (2) prepare fiscal estimates on bills referred to the Committee; (3) facilitate communication between the Legislature and participants in the WRS on issues relating to public employee retirement systems; and (4) prepare a comparative study of major public employee retirement systems in the United States every two years. In addition, Legislative Council staff, in consultation with groups representing participants in the WRS, are required to suggest to the Co-chairpersons of the Joint Legislative Council any feasible subjects for study or investigation of public employee retirement issues.

While the various trust funds boards, agencies, and the legislative committee described above are all separate legal entities, the overlapping memberships at the policy-making levels in these bodies is intended to provide a level of coordination of WRS activities. These interrelationships are characterized in Table 8.

Table 8: Overlapping Memberships on Retirement-Related Committee and Boards



*	=	Indicates that the official or his or her designee serves as a member of the indicated board or other entity.
○	=	Executive Branch Officer
▭	=	Executive Branch Board
◊	=	Legislative Branch Committee
( )	=	Number of members from one board or committee designated to serve on another board or committee.

CHAPTER 4

FUNDING THE WISCONSIN RETIREMENT SYSTEM

The financing principle governing the operation of the Wisconsin Retirement System (WRS) holds that the funds generated from three distinct sources (employee contributions, employer contributions, and investment earnings) together must be sufficient to meet all of the present and the long-term future retirement benefit commitments of the system. Under this principle, at any point in time the expected total retirement benefit obligations ("liabilities") should equal the resources ("assets") ultimately expected to be available to the system.

The obligations of the retirement system consist of the sum of all benefits to be paid to current annuitants plus the present value of all benefits expected to be paid in the future to current employees. The expected resources of the system consist of the sum of all present assets, the estimated present value of future employer-paid prior service liability contributions (plus investment earnings) and of all future employee and employer contributions (plus investment earnings).

Actuarial present value represents the amount of funds currently required to provide promised payments in the future, discounting those future payments at a predetermined rate of interest and taking into account the probability of those future payments being incurred.

The most recently completed actuarial valuation of current WRS resources and obligations (December 31, 2017) is summarized in Table 9. While this actuarial review indicates that present and projected future WRS resources are in balance with the present and the projected future WRS obligations, the amounts ultimately needed to fund the system will be affected by the extent to which these estimates accurately reflect what happens in the future. Since actuarial estimates cover a very long period of time (typically, a time span of 40 years or more), there is a strong likelihood that actual experience will depart to some degree from these estimates. Thus, to account for these changing conditions, an annual actuarial valuation of the fund and its operating experience is conducted, and the contribution rate is set annually to ensure the continued adequate funding of the system. On a triennial basis, a more extensive review of the underlying actuarial assumptions for the system is undertaken and additional adjustments, as appropriate, are made.

Table 9: WRS Obligations and Resources-In Thousands (December 31, 2017)

	Present Value
Obligations	
Benefit Payments to Current Annuitants and Beneficiaries	$59,224,900
Future Benefit Payments to Current Active and Inactive Participants	59,608,800
Total Value of Expected Benefit Obligations	$118,833,700
Resources	
Current WRS Assets	$100,802,500
Estimated Employer Payments for Prior Service Liabilities	17,000
Estimated Future Employee Contributions	8,609,900
Estimated Future Employer Contributions	9,404,300
Total value of Expected Resources	$118,833,700

The purpose of this chapter is to describe how funds contributed to the system are accounted for, how these funds are managed and invested, how these invested funds have been valued and have performed and, finally, how employee and employer contribution rates are established.

WRS Accounts and Reserves

Employee and employer contributions to the WRS, plus all investment earnings credited to these contributions, are maintained in three separate accounts or reserves: the employee accumulation account, the employer accumulation account, and the annuity reserve account.

Employee Accumulation Account. An individual employee accumulation account is maintained for each WRS participant. All employee regular contributions, whether paid by the employee or by the employer on behalf of the employee, are credited to the participant's individual account. Further, any voluntary additional contributions, whether made by the employee or by the employer on behalf of the employee, are likewise deposited into this account. Finally, investment earnings are also credited to the individual account balances in the employee accumulation account under procedures described in a subsequent section of this chapter. All of these individual participant account balances, when taken together, constitute the employee accumulation account.

Table 10 summarizes the amounts credited to the employee accumulation account for 2008 to 2017, derived from employee-required contributions (whether paid by the employee or by the employer on behalf of the employee) and from voluntary additional contributions (discussed below). The balances in the employee accumulation account are invested primarily in the Core Retirement Investment Trust ("Core Fund") and for some participants may also be invested in the Variable Retirement Investment Trust ("Variable Fund"). These funds are described in the next section of this chapter.

Employer Accumulation Account. All WRS participating employers contribute to a single, merged employer accumulation account. Unlike the employee accumulation account, employer contributions are not maintained in separate employer accounts but are pooled. This ensures moneys sufficient to fund the retirement system's current year obligations are available. All employer contributions are credited to this account, as are any annual amounts an employer is obligated to pay to amortize the employer's share of unfunded accrued liabilities. Finally, investment earnings are also credited on the entire employer accumulation account balance under procedures described in a subsequent section of this chapter.

Table 10: Annual Contribution Amounts Credited to the Employee Accumulation Account -- In Thousands

Calendar Year	Employee-Required	Employee Additional	Annual Total
2008	$613,151	$7,480	$620,631
2009	627,146	4,241	631,387
2010	640,142	6,162	646,304
2011	684,348	5,545	689,893
2012	746,678	10,846	757,524
2013	858,770	8,180	866,950
2014	932,558	9,906	942,464
2015	927,086	10,910	937,996
2016	911,624	17,903	929,527
2017	961,583	13,854	975,437

Employee-required contributions exclude benefit adjustment contributions. Benefit adjustment contributions are accounted for, in all circumstances, as if they were employer-required payments (See Table 11 for a summary of benefit adjustment contribution payments.)

Table 11 summarizes the amounts credited to the employer accumulation account over a 10-year period derived from employer-required contributions (including unfunded accrued liabilities payments) and from benefit adjustment contributions. Benefit adjustment contributions (described later in this chapter) were paid by WRS active employees but were required to be credited to the employer accumulation account. [As described below, benefit adjustment contributions were eliminated under 2011 Act 10.] The balances in the employer accumulation account are invested primarily in the Core Fund with smaller amounts invested in the Variable Fund. These funds are

Table 11: Annual Contribution Amounts Credited to the Employer Accumulation Account -- In Thousands

Calendar Year	Employer-Required*	Benefit Adjustment Contribution Credits**	Annual Total
2008	$677,531	$109,383	$786,914
2009	699,276	101,034	800,310
2010	743,402	135,978	879,380
2011	781,068	99,262	880,330
2012	826,143	45	826,188
2013	912,371	80	912,451
2014	982,968	83	983,051
2015	978,740	18	978,758
2016	955,407	54	955,461
2017	1,015,937	60	1,015,997

*Includes payments to amortize unfunded accrued liabilities.
**Benefit adjustment contributions from certain WRS employee categories were required beginning January 1, 1986, and ending in August, 2011. The contribution rate was initially set at 1% of gross earnings, but was subject to annual adjustment. This contribution was accounted for as an employer-required payment regardless of whether it was paid by the employee or the employer on behalf of the employee.

described in the next section of this chapter.

Annuity Reserve Account. Whenever a participating employee retires, becomes disabled and begins to receive a disability annuity under s. 40.63 of the statutes, or dies leaving a beneficiary eligible for benefit payments, funds sufficient to meet the total estimated annuity, disability annuity or survivor's benefit obligation are transferred to an annuity reserve account established for the individual. The amounts transferred to the annuity reserve are: (1) the entire balance in the individual's Core Fund employee accumulation account; and (2) an amount from the employer accumulation account that when increased by an annual interest income assumption of 5% will be sufficient to finance the annuitant's projected future benefit payments, based on standard mortality tables. Where the participant also had an employee accumulation account established in the Variable Fund, the transfer mechanism is somewhat more involved and is described in the discussion of that Fund later in this chapter. The balances in the annuity reserve are invested primarily in the Core Fund with smaller amounts invested in the Variable Fund, described in the next section of this chapter.

Table 12 shows the year-end balances in the employee accumulation account, the employer accumulation account and the annuity reserve account from 2008 to 2017. The amounts shown include contributions plus credited investment earnings.

Table 12: Employee and Employer Accumulation and Annuity Reserve Accounts (End of Year Book Value) -- In Millions

Calendar Year	Employee Account	Employer Account*	Annuity Reserve Account
2008	$16,045.3	$22,839.8	$38,370.1
2009	16,152.5	23,059.3	39,731.6
2010	16,250.0	23,247.5	41,135.4
2011	14,434.4	20,822.8	43,609.4
2012	14,259.7	20,100.6	44,055.5
2013	15,407.7	21,237.1	48,460.5
2014	16,242.8	22,033.7	51,133.2
2015	16,537.9	20,759.1	52,925.0
2016	17,178.3	22,310.8	55,761.8
2017	18,237.4	23,065.5	59,581.3

*Includes benefit adjustment contributions.

Management and Investment of WRS Assets

The assets of the WRS are managed and invested by the State of Wisconsin Investment Board (SWIB). Although the employee, employer and annuity reserve accounts are separately maintained and accounted for by ETF, SWIB does not actually manage the retirement system's assets according to these account categories. Instead, SWIB pools all WRS assets and manages them as either part of the Core Retirement Investment Trust Fund (Core Fund) or the Variable Retirement Investment Trust Fund (Variable Fund). Shares in the Core Fund and the Variable Fund are

purchased as monies are made available from retirement contributions. The relative sizes of these two funds are indicated in Table 13.

Table 13: Core and Variable Retirement Investment Trusts Assets--In Millions (June 30, 2018)

Trust	Amount	%
Core	$99,141	92.6%
Variable	7,952	7.4
Total	$107,093	100.0%

Core Retirement Investment Trust Fund (Core Fund)

The Core Fund is a pooled fund consisting of monies from all of the following sources:

- The retirement contributions made by or for most participants in the WRS (monies in the employee and employer accumulation accounts);

- The amounts reserved for the annuity payments of most retired WRS participants (monies in the annuity reserve account); and

- The assets of a small number of nonretirement-related accounts. As of December 31, 2017, the core trust fund assets under management in these accounts were as follows: the income continuation program ($107,605,777), the accumulated sick leave conversion program ($2,595,778,178), the duty disability program under s. 40.65 of the statutes ($658,629,553), reserves for the group health insurance program ($250,648,366), funds which the City of Milwaukee pension system has requested that SWIB invest on the City's behalf ($173,034,489), and funds from the Police and Firefighters Pension Group ($16,169,541).

The assets of the Core Fund, from all of the above sources, are invested in a variety of holdings. Table 14 details the amount of Core Fund exposure in each major category of investments at the end of the 2017-18 fiscal year.

Table 14: Core Retirement Investment Trust Fund Exposure* -- In Millions (June 30, 2018)

Type of Investment	Amount	%
Common and Preferred Stocks	$49,747	45.6%
Fixed Income	25,368	23.3
Private Equity/Private Debt	8,668	7.9
Real Estate	6,754	6.2
Multi-Asset	2,561	2.3
Inflation-Protected	15,506	14.2
Cash	488	0.4
Total	$109,092	100.0%

*Actual holdings (as shown in Table 13) plus approximately 10% leverage represent the Core Fund's total exposure to the markets.

All contributions credited to the employee and employer accumulation accounts are invested in the Core Fund, except for: (1) those employees hired before April 30, 1980, who had previously elected to contribute to the Variable Fund; and (2) those employees who elect to enroll (or reenroll) in the Variable Fund, commencing on or after January 1, 2001, as authorized by 1999 Act 11. For those participants who have made an election to participate in the Variable Fund, 50% of all employee- and employer-required contributions is credited to the employee and employer accumulation account balances in the Core Fund, while the remaining 50% of all employee- and employer-required contributions is credited to the employee and employer accumulation account balances in the Variable Fund.

When a participant retires with employee accumulation account balances solely in the Core Fund, the amounts transferred from that account and from the employer accumulation account to the annuity reserve to fund the individual's retirement benefit will continue to be invested exclusively in the Core Fund. A Core Fund annuity benefit is guaranteed never to be less than the initial monthly amount paid.

Variable Retirement Investment Trust Fund (Variable Fund)

The Variable Fund is also a pooled fund consisting of monies from a portion of the retirement contributions and a portion of the annuity accounts of those WRS participants who have elected to enroll in the Fund.

The Variable Fund was designed to afford WRS participants the opportunity to increase their ultimate retirement benefit by directing a portion of employee- and employer-required contributions into equity investments. However, since the Variable Fund is invested almost exclusively in stocks, it carries a higher level of risk than does the Core Fund, which is invested in a greater variety of investment vehicles designed to spread risk more broadly. Consequently, Variable Fund active participants must be prepared for the possibility that stock market performance could adversely affect their account balances, which would result in a lower initial annuity. For annuitants participating in the Variable Fund, adverse market performance can also result in a reduction to their monthly annuity payment level.

Table 15 details the types of investment holdings of the Variable Fund at the end of the 2017-18 fiscal year.

Table 15: Variable Retirement Investment Trust Fund Holdings--In Millions (June 30, 2018)

Type of Investment	Amount	%
Common and Preferred Stocks	$7,924	99.6%
Cash	28	0.4
Total	$7,952	100.0%

Participation in the Variable Fund. Provisions of 1999 Act 11 provided WRS active participants with the option of enrolling in the Variable Fund, first effective for contributions paid on and after January 1, 2001. Previously, any WRS participant first hired before the enactment of Chapter 221, Laws of 1979 (April 30, 1980), could elect to have 50% of his or her retirement contributions (including 50% of any voluntary additional contributions) and a matching amount of employer contributions credited to the Variable Fund. For participants making this election, the remaining 50% of employee- and employer-required contributions was credited to the Core Fund. During the nearly 20-year period between the enactments of Chapter 221, Laws of 1979, and 1999 Act 11, the option to participate in the Variable Fund was closed to new WRS participants; however, any employee already participating in the Variable Fund could continue in it.

Under the Act 11 provisions, any WRS active employee who does not currently participate in the Variable Fund (including any former Variable Fund participants who had previously cancelled their earlier participation) has an opportunity, on a one-time basis, to direct 50% of all future employee- and employer-required contributions (and 50% of any future voluntary employee additional contributions) to an account in the Variable Fund, with the remaining 50% of contributions credited to the Core Fund. This Act 11 election governs future WRS contributions only. Any past contributions made before January 1, 2001, and credited exclusively to the Core Fund, cannot be transferred to the Variable Fund.

Active employees currently making contributions to the Variable Fund may, at any time, terminate all future contributions to it by redirecting them instead to the Core Fund. Once an election is made to cancel participation in the Variable Fund, the participant can never again reenroll in the Variable Fund. Employees making an election to cancel further crediting of contributions to the Variable Fund may continue to maintain their prior Variable Fund account balances. Alternatively, employees (or annuitants who elect to cancel variable participation) may transfer their previous variable contribution accumulations to the Core Fund. Employees and annuitants also have the option to conditionally transfer their account balances to the

Core Fund. In the case of annuitants who elect this option, the transfer is made when the amount of the annuity received is greater than or equal to the amount of the annuity that he or she would have received if the annuitant had not elected variable participation. In the case of active employees who elect this option, the transfer is made once the value of the Variable Fund account equals or exceeds the amount that would have been present had those contributions originally been placed entirely in the Core Fund.

Upon the retirement of an employee whose contributions have been invested in the Variable Fund and the Core Fund, the amounts transferred from the employee accumulation account and the employer accumulation account to the annuity reserve are accomplished in the following fashion, in order to recognize any additional gains (or losses) that have occurred from participation in the Variable Fund.

First, the employee accumulation account balance invested in the Variable Fund is compared to an alternative balance computed as if all contributions and associated earnings had been invested exclusively in the Core Fund. The difference between the employee's actual Variable Fund balance and the alternative Core Fund balance is treated as a "variable excess" amount (where there has been a net investment gain) or as a "variable deficiency" (where there has been a net investment loss). This variable excess or deficiency amount is then matched with a similar dollar amount from the employer accumulation account in the Variable Fund. Then, based on the participant's age, a money purchase factor is applied to the resulting total to determine a supplemental money purchase annuity amount. This supplemental annuity amount will be added to (or subtracted from) the regular annuity payment levels for the participant, as calculated under the appropriate WRS benefit formula (see Chapter 5).

Second, the full balance in the participant's employee accumulation account that is invested in the Core Fund is transferred to the annuity reserve.

Third, an amount from the employer accumulation account invested in the Core Trust is transferred to the annuity reserve. The sum transferred is the calculated amount which, when increased by a projected interest income of 5% per year and in combination with the other transfers, will be sufficient to fully finance the annuitant's regular benefit entitlements, based on standard mortality tables and excluding any supplemental money purchase annuity amount.

The amounts transferred to the annuity reserve account will continue to be invested in the Core and the Variable Funds in proportion to the amounts held in each at the time of retirement. Benefits paid from the Core Fund-supported annuity reserve account are guaranteed never to be less than the initial monthly amount paid. Those benefits paid from the Variable Fund-supported annuity reserve account will be adjusted upward or downward annually to reflect the Variable Fund's investment experience.

At any time after retirement, an annuitant may elect to close out the Variable Fund portion of his or her annuity reserve account. This election must be made prior to January 1 each year. On that date, the present value of the retiree's annuity reserve account balance invested in the Variable Fund is transferred to the Core Fund. The annuitant will then be "locked in" at the annuity payment level received on January 1, except for any future Core Fund post-retirement dividends or supplements.

Retirement Funds: Valuation and Distribution of Investment Earnings

Investment earnings on the assets held in the WRS accounts and reserves and invested in the Core Fund or in the Variable Fund are not accounted for in the same manner.

Core Fund Investments

As previously summarized in Table 14, the assets held in the Core Fund consist not only of equities (45.6%), but also fixed income investments (bonds) (23.3%), private equity and private debt investments (7.9%); real estate (6.2%); multi-asset investments (2.3%); inflation-protected assets (14.2%); and short-term cash holdings (0.4%). While equities, bonds and mortgage-backed securities and many nontraditional investments are valued at market, real estate and some nontraditional private investments are valued by an independent third-party appraisal every third year and by an income valuation approach in other years. Some investment earnings from these latter types of assets are recognized as current income to be added periodically to the respective employee, employer and annuitant reserves.

Stock dividends and interest paid on fixed income securities (public holdings, private placements and real estate mortgages) plus interest earnings on any cash assets held pending long-term investment are recognized in the year which they occur and are treated as current income. However, certain other types of investment earnings are not recognized as current income. Rather, through 2000, these earnings (and losses) were initially credited to a holding account within the Core Fund. This holding account was known as the Transaction Amortization Account, or TAA.

Earnings that were credited to the TAA were gradually recognized over time as income. Investment earnings treated in this manner included profits or losses from stock sales, increases or decreases in the value of stocks and convertible bonds, discounts or premiums on public bonds or private placements and similar market adjustments.

Distribution of Core Fund Investment Gains and Losses through the Transaction Amortization Account (TAA). The TAA was established by Chapter 137, Laws of 1973, effective January 1, 1975. Through 2000, all realized and unrealized gains and losses in market value of the invested assets of the Core Fund were credited to the TAA as they were incurred. Then, in accordance with s. 40.04(3)(a) of the statutes, an annual transfer of 20% of the entire TAA balance (as of December 31) was credited as current income to the Core Fund. These annual allocations were then credited to the employee accumulation account, the employer accumulation account and the annuity reserve in proportion to the amount which each account or reserve represents of the total Core Fund balance.

The purpose of the TAA was to smooth the impact of investment gains or losses on the accounts and reserves of the Core Fund. By extending the time period over which investment experience was recognized as current income (or loss), the TAA tended to stabilize contribution rates. The consequences of this feature of the TAA were particularly significant for WRS employers, most of whom, at the time, assumed the payment of virtually all employee-required contributions as well as the payment of employer-required contributions. In the absence of a mechanism like the TAA, if actual investment experience was reflected immediately in the Core Fund's accounts and reserves, employers would be more likely to experience greater year-to-year volatility in their required WRS contribution rates. Sharp contribution rate fluctuations, in turn, would introduce an element of unpredictability in employers' annual budgeting since the amounts appropriated for employer contributions in one year might have little bearing on the amounts required for the following year.

For example, in calendar years 1990 and 1994, investments of the Core Fund did not achieve the assumed rate of return for the WRS and net investment losses were experienced. This situation would have resulted in higher contribution rate increases for WRS employers and active employees in succeeding years had not these losses been fully offset by the annual amounts transferred from the TAA.

The TAA had a similar effect with respect to its impact on the Core Fund's annuity reserve. WRS annuitants receive dividends (increases) in their monthly annuities based on surpluses that accrue in the annuity reserve. These dividends are not guaranteed by law and may be reduced or eliminated in future years if declines in the financial markets cause asset values to decrease in the annuity reserve. Over time, however, the annual distributions from the TAA to the Core Fund's annuity reserve tended to be beneficial for annuitants since these allocations increased the likelihood that a dividend would actually be paid. In fact, there were Core Fund dividend increases for WRS annuitants each year from 1978, the first year in which the TAA achieved a positive end of year account balance, through 2000, the year the TAA was frozen in preparation for being phased out.

Through 2000, the balance in the TAA represented the accumulation of undistributed premiums, discounts, profits, losses and other credits and charges since the inception of the annual TAA transfer mechanism. This balance was not actually the true difference between book value and market value of the Core Fund (although it approximated this difference) because of the long-term amortization of investment gains and losses and because some investments, such as real estate, were not valued on a strictly market basis. The annual transfer amounts to current income in the Core Fund and the year-end balances of the TAA following the transfers in 1995 through 2004 are summarized in Table 16.

Although the statutes provided for recognition of 20% of the year-end TAA balance as current income to the Core Fund, the Legislature occasionally authorized supplemental transfers. Provisions of 1987 Act 27 directed a one-time transfer of an additional $230 million from the TAA to the Core Fund to be apportioned among the employee and employer accumulation accounts and the annuitant reserve, effective September 30, 1987. Subsequently, 1989 Act 13 directed an additional one-time transfer of $500 million from the TAA to the Core Fund to be apportioned among the three reserves, effective June 30, 1989, to partially fund retirement benefit improvements authorized by that Act. Finally, provisions of 1999 Act 11 directed a one-time transfer of an additional $4.0 billion from the TAA, effective December 31, 1999.

Table 16: Transaction Amortization Account

December 31	Allocation to Current Income	Year-End Balance* (After All Transfers)
1995	$1,473,012,672	$5,892,050,688
1996	1,851,271,894	7,405,087,576
1997	2,450,172,247	9,801,104,202
1998	2,873,692,740	11,494,770,960
1999	7,477,538,736**	9,910,154,943
2000	1,982,030,989	7,927,123,956
2001	1,982,030,989	5,946,092,907
2002	1,982,030,989	3,964,061,918
2003	1,982,030,989	1,982,030,929
2004	1,982,030,929	0

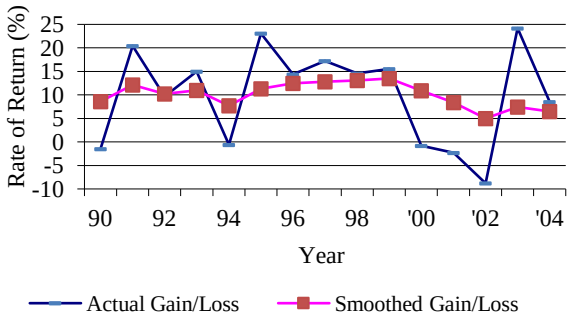
*Year end balance includes both the reduction in the balance due to the statutorily-required annual transfer and the investment gains or losses recognized during the year, plus any other required transfers.

** Provisions of 1999 Wisconsin Act 11 also directed a one-time transfer of an additional $4.0 billion from the TAA, effective December 31, 1999. This transfer took place after the annual 20% transfer amount had been determined and recognized as current income.

Table 17 illustrates the smoothing effect that the TAA had on annual Core Fund earnings. The data in Table 17 compare the Core Fund's actual investment return, as reported by the State of Wisconsin Investment Board with the Core Fund's effective rate of earnings, as reported by ETF following each annual allocation from the TAA. By recognizing a single year's actual investment gains or losses over a multi-year period, the TAA transfers served to dampen the impact of abrupt year-to-year changes in investment results. This relationship is readily apparent in Table 17 by comparing the relatively modest yearly changes in "smoothed gains and losses" to the more pronounced swings in "actual gains and losses."

Phase-out of the TAA. Provisions of 1999 Act

Table 17: Actual vs. Smoothed Core Trust Market Gain/Loss Under TAA



11 directed the phase-out of the TAA over a five-year period and established in its place a new Market Recognition Account. Under Act 11, the final TAA balance was determined as of December 31, 2000, and was frozen at that amount. On that date, 20% of the frozen December 31, 2000, TAA balance was distributed proportionately as current income to the employee accumulation reserve, the employer accumulation reserve and the annuity reserve. On each successive December 31, another 20% of the original frozen balance was to be transferred until the entire TAA balance was liquidated. The TAA balance was completely distributed as of December 31, 2004, at which time ETF was directed to close the account.

Distribution of Core Fund Investment Gains and Losses through the Market Recognition Account (MRA). Commencing January 1, 2000, provisions of 1999 Act 11 directed ETF to establish and administer a new Market Recognition Account (MRA) within the Core Fund. Annually, beginning on December 31, 2000, the total market value investment return earned by all Core Fund assets must be credited to the new MRA. Act 11 directed that annually all of the following amounts be distributed from the MRA:

- An amount equal to the assumed rate of Core Fund earnings on a long-term basis. This rate was 8% annually in 2000 through 2002, 7.8% annually in 2003 through 2010, and, beginning in 2011, 7.2%;

- An amount equal to 20% of the difference between the assumed rate of return and the market value investment return earned by Core Fund assets for that immediate year; and

- An amount equal to the sum of 20% of the difference between the assumed rate of return and the market value investment return earned by Core Fund assets for each of the four preceding years. (Act 11 included a transition provision for calculating these amounts during the phase-out of the TAA and the start-up of the MRA. During this transition period, the prior MRA balances for any years before 2000 was to be counted as $0.)

These MRA distribution amounts are to be apportioned as income to the employee accumulation, employer accumulation and annuity reserves.

Under the MRA, which was fully phased-in on December 31, 2004, five separate capital gains amortization periods are blended each year and flowed annually into the Core Fund. At the end of five years, the entire amount of capital gains (or losses) for any given year will have been recognized. Compared to the former TAA mechanism, the new MRA procedure results in a more rapid recognition of capital gains (or losses) to the Core Fund. Under the TAA, at least 10 years was required to distribute 90% of the value of a given year's capital gains or losses.

In general, the new MRA's more rapid recognition of investment gains to the Core Fund can be expected to result in higher interest credits to WRS participant accounts, higher income for employer accounts and higher dividends for WRS annuitants than was the case under the old TAA mechanism. Similarly, in periods of market downturn, investment losses to the Core Fund can be expected to result in lower interest credits to WRS participant accounts, lower income for employer accounts and lower dividends for WRS annuitants than was the case under the TAA.

Table 18 summarizes the total annual investment income recognized for the Core Fund for the years 2010 through 2017 under the MRA mechanism. The table shows the investment earnings amounts subject to immediate recognition in each year, as well as the phased-in investment gain (or loss) amounts.

Variable Fund Investments

The assets (largely equities) of the Variable Fund are valued at the market price at the end of a given day for these individual securities.

Annual investment income adjustments paid to Variable Trust participants derive both from dividends or interest and from gains (or losses) in common stock values. These income adjustments are apportioned annually to the employee accumulation account, employer accumulation account and annuitant reserve in proportion to the amounts in the employee or employer accumulation account or in the annuity reserve that are invested in the Variable Fund.

Retirement Funds: Crediting the Annual Investment Experience

Given the different make-up of the investment holdings of the Core and Variable Funds, the different manner by which each Fund's respective assets are valued and the way in which investment gains and losses are credited to each Fund, the annual investment experience of each Fund would also be expected to differ. This discussion now turns to an examination of the annual investment experience of the two Funds. Table 19 summarizes the experience of each Fund over the period 2008 to 2017.

Crediting Investment Earnings to Employee Accounts. The "effective rate" of Core Fund investment earnings (a rate defined by statute that reflects recognized earnings, reserves, prorated interest, administrative costs, and benefit payments) is credited annually to individual employee accumulation account balances for all of the following groups of WRS participants:

- Any WRS employee participants first hired before 1982;

Table 18: Income Recognition Under Market Recognition Account -- In Millions

	2010	2011	2012	2013	2014	2015	2016	2017
Assumed Rate	7.8%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%
Immediate Income Recognition: MRA	$5,916	$5,547	$5,450	$5,393	$5,795	$6,111	$6,279	$6,536
Phased-in Recognition: MRA								
Current year	$399	-$936	$793	$953	-$243	-$1,346	$119	$1,461
First prior year	1,288	399	-936	793	953	-243	-1,346	119
Second prior year	-5,370	1,288	399	-936	793	953	-243	-1,346
Third prior year	212	-5,370	1,288	399	-936	793	953	-243
Fourth prior year	1,065	212	-5,370	1,288	399	-936	793	953
Total Phased-in Recognition	-$2,406	-$4,407	-$3,826	$2,497	$966	-$779	$276	$944
Total Income Recognized	$3,510	$1,140	$1,624	$7,890	$6,761	$5,332	$6,555	$7,480

Table 19: Annual Investment Results for the Core and Variable Funds

Year Ending December 31	Core Fund Effective Rate of Earnings	Variable Fund Net Gain or Loss
2008	3.3%	-40.0%
2009	4.2	33.0
2010	4.8	16.0
2011	1.5	-3.0
2012	2.2	17.0
2013	10.9	31.0
2014	8.7	7.0
2015	6.4	0.0
2016	7.9	10.0
2017	8.5	24.0

- Any WRS employee participant hired on or after January 1, 1982, who was also an active participant on December 30, 1999; and

- Any WRS employee participant first hired on or after December 30, 1999.

For WRS participants making employee additional contributions to the Core Fund, annual interest is credited at the effective rate, regardless of when they were first hired. For participants in the Variable Fund, the annual rate of investment earnings credited to the Variable Fund portion of the employee's account is always at that Fund's effective rate.

Limitations on Crediting Investment Earnings to Certain Participant Accounts from 1982 through 1999. Participants in the WRS who were first hired on or after January 1, 1982, through December 29, 1999, were subject to a 5.0% limit on the annual amount of earnings credited each year to their Core Fund employee accumulation account balances. This 5.0% earnings cap had the long-term effect of reducing separation benefit, money purchase, and death benefit amounts payable to these WRS participants, compared to what would have been payable if earnings had been credited at the effective rate. Further, beginning on January 1, 1990, the rate of earnings credited to the account balances of employees subject to the earnings cap was further reduced from 5.0% to 3.0% for any participant who left WRS covered service and requested a separation benefit. This reduction to the earnings rate applied only to separation benefits and did not further affect money purchase or death benefit values, which continued to receive crediting at the rate of 5.0% annually. These changes were adopted as internal funding mechanisms to help pay for benefit improvements provided by 1983 Act 141 and 1989 Act 13.

For a participant who was subject to the 5.0% annual earnings cap but also planned to be a career employee under the WRS, the limitation did not adversely affect the calculated retirement benefit amount the individual would ultimately receive under the WRS defined benefit formula. However, this 5.0% cap effectively ended the participant's ability to qualify for a money purchase type of annuity benefit at retirement. (See Chapter 5 for a more detailed discussion of these benefits.)

These earnings limitations served to reduce the annual amounts apportioned to the employee accumulation accounts of post-1981 new participants while correspondingly increasing the amounts allocated to the employer accumulation account. This redistribution had the effect of lowering the aggregate annual contribution requirement of WRS employers.

Elimination of Investment Earnings Crediting Limitations. Effective December 30, 1999, provisions of 1999 Act 11 prospectively eliminated the investment earnings crediting caps that had applied to post-1981 new hires under the WRS. Commencing with interest credits posted to Core Fund employee accumulation account balances on December 31, 1999, all WRS active participants now receive interest at the effective rate of earnings. For those former participants who were subject to the interest crediting caps but terminated WRS employment before the general effective date of Act 11 and left their accumulations on account, the prior law interest caps continue to

apply. However, if such an inactive participant subsequently returns to WRS employment, annual interest will then begin to be credited to the individual's account at the effective rate of earnings.

The Act 11 elimination of the Core Fund interest caps for post-1981 WRS active participants also had the effect of increasing all benefits that are based on the amount of the participant's employee-accumulation account balance. This change prospectively increased the value of any separation benefit or death benefit. In addition, this change could ultimately affect whether a participant receives a money purchase retirement annuity, rather than a formula-based retirement annuity (an annuitant always receives the higher of the two types of annuities).

Crediting Employer and Annuitant Accounts. Investment credits are also allocated to the employer accumulation account at the effective rates indicated in Table 19. As discussed later in this chapter, the investment credits posted to the employer accumulation account in the Core Fund have a direct impact on employer-required contribution rates.

Investment income is likewise allocated to the annuity reserve account at the rates indicated in Table 19, less approximately 5.0% (to account for the post-retirement earnings rate already projected for this reserve in the annual actuarial valuation of the WRS). Any remaining investment earnings are then available for potential distribution as annuity dividend increases (discussed in Chapter 6).

Retirement Funds: Long-Term Investment Objectives and Performance

The discussion now turns to a consideration of the long-term investment objectives that have been set for the management of WRS assets, followed by an examination of the investment performance of the WRS. This latter examination reviews whether the annual investment results summarized earlier in Table 19 have been sufficient to fund the retirement system's obligations and to maintain stable contribution rates.

Core Fund Investment Objectives. The State of Wisconsin Investment Board's stated investment performance objective for the Core Trust is to generate investment earnings that exceed WRS wage rate growth by an average of 4.0% annually over the long-term.

The current 4.0% investment performance objective is based on the difference between two key actuarial assumptions that have been approved by the ETF Board for the operation of the WRS. These two assumptions are:

- The rate of return on invested WRS assets [currently 7.2%]; and

- The assumed rate of increase in average earnings of WRS participants [currently 3.2%].

These long-term projections are developed by the WRS consulting actuary and are approved by the ETF Board for the purposes of setting annual contribution rates and valuing the retirement system's unfunded liabilities. To the extent that these long-term economic assumptions prove to be on target, stable contribution rates from year to year will be the principal benefit for both employee and employer participants.

The assumed annual rates of long-term investment return and of long-term across-the-board salary increases are also codified under s. 40.02(7) of the statutes. Provisions of 1999 Act 11 revised these statutory assumptions by establishing the assumed rate of long-term investment return at 8.0% annually and the assumed rate for long-term across-the-board salary increases at 4.6% annually (3.4% less than the investment rate). Prior to Act 11, these statutory assumptions had originally been set by 1989 Act 13 at 7.5% for the assumed

rate of long-term investment return, with the assumed rate for long-term salary increases at 5.6% annually (1.9% less than the investment rate).

Separate statutory provisions authorize the ETF Board to alter the statutory amount of either of these two assumptions, upon recommendation of the Board's consulting actuary. Under s. 40.03(5)(b) of the statutes, the WRS consulting actuary must undertake an experience study of the WRS at least once every three years. The purpose of these periodic reviews is to test the continuing validity of the underlying actuarial assumptions employed by the actuary in developing annual contribution rates and setting the total unfunded liabilities balance for the WRS.

Based on these periodic investigations, the actuary may recommend that changes to the rates associated with the actuarial assumptions are warranted. When the actuary recommends to the ETF Board that one or more of the current assumptions be modified, s. 40.03(1)(e) of the statutes provides that the Board "shall approve the contribution rates and actuarial assumptions determined by the actuary."

As a result of periodic ETF Board actions taken between 1990 and 1999, the pre-Act 11 statutory assumed rate of long-term investment earnings was increased from 7.5% to 8.0%, and the long-term annual salary increase assumption was decreased from 5.6% to 4.8%. The new statutory assumptions made under Act 11 were also periodically modified by the ETF Board, on recommendation of its consulting actuary. The current investment performance objectives are the result of the following ETF Board actions since 1990.

- In 1990, the WRS consulting actuary recommended, and the ETF Board approved, an adjustment in the assumed rate of investment return from 7.5% to 7.8%. The annual wage inflation rate assumption was retained at 5.6%.

- In 1992, the WRS actuary recommended, and the ETF Board approved, another change in the assumed rate of investment return from 7.8% to 8.0%. The annual wage inflation rate assumption continued at 5.6%.

- In 1994, the WRS actuary recommended, and the ETF Board approved, a reduction in the long-term annual wage increase assumption from 5.6% to 5.3%. No further change was recommended to the assumed rate of investment return assumption.

- In 1997, the WRS actuary recommended, and the ETF Board approved, a further reduction in the long-term annual wage increase assumption from 5.3% to 4.8%. The long-term rate of investment earnings assumption was not adjusted and remained at 8.0%.

- In 1999, Act 11 provided for an assumed rate of investment return of 8.0% annually and an assumed rate of long-term wage increases of 4.6% annually.

- In 2000, the WRS actuary recommended, and the ETF Board approved, a further reduction in the long-term wage increase assumption to 4.5% annually.

- In 2003, the WRS actuary recommended, and the ETF Board approved, a decrease in the assumed rate of investment earnings from 8.0% to 7.8%, and a reduction in the long-term wage increase assumption from 4.5% to 4.1%.

- Under the 2009 experience study, the WRS actuaries recommended, and the ETF Board approved, a decrease in the assumed average earnings rate to 4.0%. The investment earnings rate of 7.8% was retained.

- In 2011, on the recommendation of the actuaries, both the investment and wage assumptions were lowered to 7.2% and 3.2% respectively.

- In 2018, the ETF Board approved the recommendation of the WRS actuaries to lower the

investment and wage assumptions to 7.0% and 3.0% respectively, effective January 1, 2020.

Because the current assumed long-term annual investment rate of return is set at 7.2% and the long-term annual wage increase assumption is set at 3.2%, the difference between these two assumptions (called the "spread") is 4.0% and is equivalent to SWIB's stated investment performance objective cited above.

The amount of the spread represents the rate by which WRS assets must increase each year over the rate of increase of the retirement system's liabilities in order for stable contributions to be maintained. The extent to which the system's actual experience meets or exceeds its annual investment factor or equals or falls below the across-the-board salary increase factor is key to evaluating the appropriateness of the two underlying actuarial assumptions. The impact of changing the amount of the spread between these two assumptions will be examined later in this chapter in the context of employer-required contribution rates and the appraisal of unfunded liabilities.

A separate statutory "assumed benefit rate" of 5.0% is established under s. 40.02(6) of the statutes and applies to the anticipated rate of investment earnings for amounts on deposit in the Core Fund's annuity reserve. When investment earnings on annuity reserve balances exceed this assumed benefit rate by at least 0.5% (except as otherwise provided under ETF rules), s. 40.27(2) of the statutes authorizes the payment of dividends to annuitants. This process will be described more fully in Chapter 6.

Variable Fund Investment Objectives. The State of Wisconsin Investment Board's current investment objective for the Variable Fund is to achieve returns equal to or above a benchmark that reflects a market cap-weighted broad-based index for domestic equities (Russell 3000 index) and the MSCI All-Country World Index Ex-U.S., which represents both developed and emerging market countries.

Core Fund Long-term Investment Performance. As summarized in Table 20, while the Core Fund has fallen below the retirement system's investment earnings objectives (7.2%) over the 10-year period, it has exceeded investment objectives over the one-, three-, and five-year periods.

Table 20: Core Trust Investment Performance Comparisons (as of June 30, 2018)

	WRS Assumed Rates	Actual Annual Average % Change* 1 Year	3 Years	5 Years	10 Years
Investment Earnings Rate	7.2%	8.6%	7.3%	8.0%	6.6%
Wage Rate Growth	3.2	3.0	1.8	2.2	2.1
Difference Between Earnings Rate and Wage Growth	4.0	5.6	5.5	5.8	4.5

*Investment earnings rate reflects SWIB investment return on the Core Fund. Wage rate growth data reflects national wage rate statistics.

Variable Fund Long-term Investment Performance. As summarized in Table 21, the Variable Fund's investment performance met or exceeded its investment benchmarks over the one-, three-, five- and 10-year periods.

Table 21: Variable Trust Investment Performance Comparisons (as of June 30, 2018)

	Actual Annual Average % Change 1 Year	3 Years	5 Years	10 Years
Investment Earnings Rate	12.7%	9.9%	11.3%	8.5%
Investment Benchmark	12.7	9.8	11.2	8.1

Funding the Retirement System: The Impact of Revenues from Investment Earnings

The actual investment experience of the Core Fund and the Variable Fund has important fiscal

consequences for the WRS. The funding of the system is premised on the assumption that a significant proportion of the costs of benefits will be paid from investment earnings. If investment earnings tend to be higher than assumed, lower costs will typically result because the amount of revenues that must be generated from employer- and employee-funded contributions can be reduced. Furthermore, increased payments to annuitants can be funded. Conversely, lower than expected investment results can mean higher taxpayer costs and lower or no post-retirement benefit increases, or benefit decreases, to annuitants through the dividend process.

Table 22 shows the comparative share of each major source of revenue for the WRS (employee contributions, employer contributions, and total investment income) over the last 10 years.

The data in Table 22 indicate that, during the 10-year period, investment income represents the most significant share of total annual retirement system revenues in most years; however, in 2008 and 2015, investment income experienced net losses. The proportionate share of investment income in other years tends to fall in the 83% to 90% range. However, in 2011, investment income fell to approximately $700 million, only 30.6% of the total revenues for that year.

Contribution amounts other than investment income have generally been trending upward over the 10-year period. The decline in the BAC contribution amount in 2011 reflects the repeal of this component in mid-2011 under the provisions of Act 10. The costs for the BAC will continue to be included in the overall WRS contribution rate, but will not be designated as a separate component. As discussed below, for most employees, the overall contribution rate each year will now be equally divided between the employee and the employer.

Finally, even though the WRS actually experienced a net loss in investment income in 2008 and 2015, the system's funding mechanisms are designed to spread the adverse impact of any such actual loss over an extended period of time. Consequently, downturns in investment income are not expected to significantly affect the financial status of the WRS system over the long-term; however, short-term effects of such downturns may include upward pressure on overall contribution rates and post-retirement dividend reductions.

Table 22: Annual Retirement System Revenues by Source -- In Thousands

Calendar	Contribution								
	Employee**		Benefit Adjustments*		Employer**		Investment Income***		
Year	Amount	%	Amount	%	Amount	%	Amount	%	Total
2008	$626,766	N.A.	$109,383	N.A.	$681,893	N.A.	-$22,728,404	N.A.	-$21,310,362
2009	635,655	4.4	101,034	0.7	703,884	4.9	13,021,434	90.0	14,462,007
2010	651,482	6.6	135,978	1.4	748,839	7.6	8,315,999	84.4	9,852,298
2011	698,591	30.6	99,262	4.3	787,636	34.5	699,764	30.6	2,285,253
2012	757,523	6.6	45	0.0	826,143	7.2	9,858,710	86.2	11,442,421
2013	866,950	6.6	80	0.0	912,371	7.0	11,343,231	86.4	13,122,632
2014	942,463	13.8	83	0.0	993,045	14.6	4,888,240	71.6	6,823,831
2015	937,242	74.7	-17	0.0	987,027	78.6	-669,159	-53.3	1,255,093
2016	921,810	10.1	54	0.0	963,122	10.5	7,271,872	79.4	9,156,858
2017	965,393	5.7	60	0.0	1,017,559	6.0	14,874,284	88.2	16,857,296

*Benefit adjustment contributions (BAC) for general classification employees and protective classification employees with Social Security were initially required beginning January 1, 1986. The contribution is treated for accounting purposes as if it were an employer-required amount regardless of whether the employer or employee pays it. The BAC was repealed under 2011 Act 10. Payments after 2011 are associated with subsequent adjustments/settlements regarding hours worked or compensation thru 2011.

**Employee and employer amounts include certain miscellaneous payments not reflected in the contributions amounts provided in Tables 10 and 11.

***Includes a small amount of miscellaneous income.

N.A. = Not applicable.

Funding the Retirement System: Employee Contributions

Like the majority of public pension plans, the WRS is a contributory plan based on the concept that employees should share in the funding of their ultimate retirement benefits through employee-required contributions. Actual employee-required contribution amounts are shown in Table 22. However, the requirements for these employee-required contributions are complex and were significantly altered under the provisions of 2011 Acts 10 and 32. These changes (first implemented in August, 2011), included modifications to the statutory employee contribution rates, the elimination of the benefit adjustment component of the overall WRS contribution rate, and major restrictions on any employer pickup of the employee-required share of contributions. To place these changes in context, both prior-law and current-law provisions relating to employee contributions are discussed below.

Employee-Required Contributions under Prior Law

Contributions Rates. Prior to 2011 Act 10, required employee contributions (expressed as a percent of gross earnings) were specified in statute, but with different rates depending on the participant's employment classification. These rates were 5% for general employees; 5.5% for elected officials and state executives; 6% for protective participants who are under Social Security; and 8% for protective participants who are not under Social Security.

Notwithstanding these statutory employee contribution rates, provisions of 1989 Act 13 created a procedure whereby the ETF Board could adjust the statutory rates, on recommendation of the consulting actuary, under certain circumstances. Under these circumstances, when the WRS actuary determined that modifications to existing required contribution rates were necessary to maintain the financial balance of the WRS, the contribution rate adjustments were required to be apportioned as follows:

- One-half of any increase or decrease was required to be reflected in the employee-required contribution rate. [Further, the change was first applied to the "benefit adjustment contribution" (a component of the rate payable by certain employee classifications, as described below). If the benefit adjustment contribution did not apply to a WRS employee classification, the rate increase or decrease was applied directly to the statutory employee-required contribution rate itself.]

- One-half of any increase or decrease was required to be reflected in adjustments to the employer contribution rates.

As a result of this contribution rate adjustment mechanism, the employee-required contribution rates for one or more employee classifications were actually modified in every calendar year since 1990.

Benefit Adjustment Contributions. Under 1983 Act 141, significant increases in WRS retirement benefits were authorized by the Legislature. In order to help fund these benefit improvements, a statutory contribution component known as the "benefit adjustment contribution" (BAC) was established.

Initially (January 1, 1986), the BAC rate was set at 1.0% of gross earnings and applied only to WRS participants in the general employee classification and the protective service with Social Security classification (that is, protective employees other than local firefighters). Because of the differing cost impacts of the Act 141 benefit improvements, elected and state executive classification employees and protective classification employees without Social Security coverage (local firefighters) were not initially required to make benefit adjustment contributions. Based on the actuarial needs of the WRS, the BAC rate, and the

type of participants subject to the contribution, varied year-to-year. In 2011, prior to passage of 2011 Act 10, the BAC rate was 1.5% and applied only to general participants.

The data presented in Table 22 includes the total amount of benefit adjustment contributions paid over a 10-year period.

The BAC contribution was required to be paid by the employee, but, like other employee-required contributions, an employer could elect to pay the BAC on behalf of the employee. Regardless of who actually paid the BAC, it was accounted for as if it were an employer-required contribution. Consequently, all BAC payments were credited to the employer accumulation account where they offset a portion of employers' increased costs arising from the benefit improvements granted under Act 141.

This accounting treatment of the BAC also meant that none of the benefit adjustment amounts contributed by (or on behalf of) the participant would be counted as part of the employee's accumulation account returnable as a separation benefit. By not returning the benefit contribution to short-term employees as part of a separation benefit, a larger portion of the cost of the Act 141 benefit improvements could be internally funded.

Employer "Pickup" of Employee-Required Contributions. Under prior law, the statutes authorized an employer to pay on behalf of the employee all or a part of any employee-required contributions, including the BAC. With the exception of the BAC, all employee-required contributions paid by the employer are credited to the participant's employee accumulation account and are available to an employee as a separation benefit upon termination of WRS covered employment prior to retirement age.

Over time, state employee groups negotiated or were provided an employer "pickup" of almost all employee-required WRS contributions. For example, prior to 2011 Act 10, the state had agreed to assume the payment of basic employee-required contributions equal to 5.0% of gross payroll for all employee classifications as well as up to 1.3% of gross payroll for any benefit adjustment contribution required from state employees in the general classification and up to 1% of gross payroll for any benefit adjustment contribution required from state employees in the protective with Social Security classification. For state protective service employees with Social Security coverage, the employee-required contribution rate in 2010 was 5.5%, which required these employees to make out-of-pocket WRS contributions of 0.5% of earnings. In 2011, the protective with social security rate increased to 5.8%, which required a 0.8% out-of-pocket contribution by these employees. Similarly, in 2011, the BAC rate for general employees increased to 1.5%, which meant that these employees were required to pay 0.2% of earnings out-of-pocket.

Most local employee groups had also negotiated similar "pickup" provisions with their employers. As a result, WRS employers had assumed most of the employee-required contributions, including benefit adjustment contributions for their employees.

Employee-Required Contributions under Current Law

The employee contribution provisions described above were significantly altered by 2011 Acts 10 and 32.

Contribution Rates. Act 10 modified the statutory employee-required contribution rates by providing that a WRS general participant and an executive or elected official participant are required to make an employee contribution to the WRS in an amount equal to one-half of all actuarially-required contributions, as approved by the ETF Board. [Under the 2019 contribution rates, one-half of the general-participant rate, which now includes executive and elected officials, is

Table 23: Statutory Employee-Required Contribution Rates - 2019

Employee Category	Statutory Contribution Rate	Types of Employees in Category
General	6.55%	State and local employees not specifically designated under any of the following employment categories. Most WRS participants fall into the general category.*
Protective (under Social Security	6.55%	*Only* those employees whose principal duties meet all of the following requirements: (1) involvement in active law enforcement or active fire suppression or prevention; (2) frequent exposure to a high degree of danger or peril; and (3) a high degree of physical conditioning.**
Protective (not under Social Security)	6.55%	Local firefighters who meet protective requirements are the only employees who qualify under this category.

*This category includes any employee engaged in the exercise of any educational function for compensation in the public schools or the University in instructing or controlling pupils or students, or in administering, directing, organizing or supervising any educational activity. Beginning January 1, 2016, this category also includes elected officials, cabinet secretaries, deputy secretaries, assistant deputy secretaries, executive assistants, commissioners, unclassified division administrators, selected agency heads, and the president, vice presidents, chancellors, and vice chancellors of the UW System.

**The statutes enumerate occupations which are deemed to meet these requirements [s. 40.02(48)]. The statutorily specified protective occupations are: police officer, firefighter, conservation warden, conservation patrol boat captain, conservation patrol boat engineer, conservation pilot, conservation patrol officer, forest fire control assistant, member of the state patrol, state motor vehicle inspector, elected sheriff, undersheriff, deputy sheriff, county traffic police officer, state forest ranger, fire watcher employed by the Wisconsin Veterans Home, state correctional-psychiatric officer, excise tax investigator employed by the Department of Revenue, special criminal investigation agent in the Department of Justice, assistant or deputy fire marshal, emergency medical technicians, if the participant's employer classifies the participant as a protective occupation employee and state probation and parole officers. Other positions may also qualify if the employer so determines unilaterally, or through collective bargaining, that they fall within the "law enforcement" requirement. An example of an occupation that has been covered in this manner is local jailers.

6.55% of earnings.] WRS participants who are protective occupation employees (both those who are and are not covered by social security) are now required to contribute the percentage of earnings that would be paid by general participants. [However, if the protective occupation employees are public safety employees, an employer pickup of the employee contribution may be negotiated in a collective bargaining agreement].

Table 23 summarizes the 2019 employee-required contribution rates for WRS participants and provides information on the WRS employment categories. Table 24 summarizes the contribution rate changes for each employment category from 2008 to 2011 under prior law, and for 2011 (the Act 10 provisions were effective in August, 2011) to 2017 under current law.

Benefit Adjustment Contributions. Act 10 repealed the benefit adjustment contribution (BAC) component of the employee-required contribution rate affecting certain types of WRS participants (described above). Also repealed were the rate adjustment procedures that resulted in increased or decreased BAC rates. The combined effect of increasing, for most participants, the employee-required contribution, and eliminating the BAC component of the employee-required contribution (which was credited to the employer accumulation account) is to increase, on average, the amounts credited to the accumulation accounts of employees. This will tend to increase future separation benefits for participants leaving WRS service prior to retirement, and may result in a greater number of retirements under the money purchase annuity option (discussed below).

Employer "Pickup" of Employee-Required Contributions. Under Act 10, the authority of

WRS employers (both the state and local employers), to pay all or part of the contributions required of participating employees was repealed, unless the pickup of the employee contributions is required in a collective bargaining agreement with represented local police, local firefighters, state troopers, or state motor vehicle inspectors (now defined in law as "public safety employees").

Under 2011 Act 32 (the 2011-13 biennial budget act) the contribution pickup provisions of Act 10 were modified in several ways. First, Act 32 prohibits a municipal employer of law enforcement and fire personnel, or the state as the employer of state troopers and motor vehicle inspector personnel, from paying, on behalf of such employees, the employee-required retirement contributions, if that employee first becomes an employee of the municipality or the state on or after July 1, 2011.

A municipal employer is also required under Act 32 to pay, on behalf of a nonrepresented law enforcement or fire-fighting managerial employee initially employed by the municipal employer before July 1, 2011, the same retirement contributions that are paid by the municipal employer for represented law enforcement or fire-fighting personnel who were initially employed by the municipal employer before July 1, 2011. These contribution pickup provisions relating to nonrepresented managerial employees is also required of the state with respect to state troopers and motor vehicle inspectors. In addition, for municipal employers, this required retirement

Table 24: Summary of Contribution Rates by Employee Category

Valuation of Dec 31	Contribution Rates Effective Jan 1*	Contribution Rates: Participant	Benefit Adjustment	Employer**	Total
General Employees					
2008	2010	5.0%	1.2%	5.0%	11.2%
2009	2011***	5.0	1.5	5.2	11.7
2009	2011****	5.8	0.0	5.9	11.7
2010	2012	5.9	0.0	6.0	11.9
2011	2013	6.65	0.0	6.75	13.4
2012	2014	7.0	0.0	7.0	14.0
2013	2015	6.8	0.0	6.8	13.6
2014	2016	6.6	0.0	6.6	13.2
2015	2017	6.8	0.0	6.8	13.6
2016	2018	6.7	0.0	6.7	13.4
2017	2019	6.55	0.0	6.55	13.1
Executives and Elected Officials					
2008	2010	3.2%	0.0%	8.7%	11.9%
2009	2011***	3.9	0.0	9.4	13.3
2009	2011****	6.65	0.0	6.65	13.3
2010	2012	7.05	0.0	7.05	14.1
2011	2013	7.0	0.0	7.0	14.0
2012	2014	7.75	0.0	7.75	15.5
2013	2015	7.7	0.0	7.7	15.4
2014	2016	6.6	0.0	6.6	13.2
2015	2017	6.8	0.0	6.8	13.6
2016	2018	6.7	0.0	6.7	13.4
2017	2019	6.55	0.0	6.55	13.1
Protective with Social Security					
2008	2010	5.5%	0.0%	8.6%	14.1%
2009	2011***	5.8	0.0	8.9	14.7
2009	2011****	5.8	0.0	8.9	14.7
2010	2012	5.9	0.0	9.0	14.9
2011	2013	6.65	0.0	9.75	16.4
2012	2014	7.0	0.0	10.1	17.1
2013	2015	6.8	0.0	9.5	16.3
2014	2016	6.6	0.0	9.4	16.0
2015	2017	6.8	0.0	10.6	17.4
2016	2018	6.7	0.0	10.7	17.4
2017	2019	6.55	0.0	10.55	17.1
Protective without Social Security					
2008	2010	3.9%	0.0%	11.6%	15.5%
2009	2011***	4.8	0.0	12.5	17.3
2009	2011****	5.8	0.0	11.5	17.3
2010	2012	5.9	0.0	11.6	17.5
2011	2013	6.65	0.0	12.65	19.3
2012	2014	7.0	0.0	13.7	20.7
2013	2015	6.8	0.0	13.1	19.9
2014	2016	6.6	0.0	13.2	19.8
2015	2017	6.8	0.0	14.9	21.7
2016	2018	6.7	0.0	14.9	21.6
2017	2019	6.55	0.0	14.95	21.5

*Act 10 modified the 2011 rates effective August, 2011.
**Employer-required contribution plus weighted average of individual employer unfunded accrued liability contribution rates.
***2011 rates prior to Act 10.
****2011 rates under Act 10.

contribution pickup provision also applies to a represented law enforcement or fire-fighting employee who was initially employed by the municipal employer before July 1, 2011, and who on or after this date becomes employed in a nonrepresented law enforcement or fire-fighting managerial position with the same municipal employer, or a successor municipal employer in the event of a combined department that is created on or after July 1, 2011.

Act 32 also expanded the definition of a public safety employee under Act 10 to include an emergency medical service provider for an emergency medical services department. As a result, such emergency medical service providers retained their collective bargaining rights, including the ability to bargain for an employer pickup of employee-required retirement contributions.

Finally, under Act 32, the Wisconsin Employment Relations Commission (WERC) is required to determine that any municipal employee is a "transit employee" if the Commission determines that the municipal employer who employs the municipal employee would lose federal transit funding available under 49 USC 5333 (b), if the municipal employee is not a transit employee. An employee determined by WERC to be a transit employee remains under prior law collective bargaining provisions, allowing represented employees to bargain for an employer pickup of employee-required retirement contributions.

The current extent of the employer "pickup" of employee-required contributions will be discussed later in this chapter.

Employee Additional Contributions. Under s. 40.05(1)(a)5. of the statutes, voluntary additional contributions may be made to a participant's employee accumulation account. These additional contributions may be used either to purchase an additional retirement annuity benefit to supplement the participant's regular WRS retirement benefit or to purchase any prior service credits for which the participant may be eligible.

Additional contributions are those made in excess of employee- and employer-required contributions. These additional contributions may be made by a participant or by an employer on behalf of a participant, but only in a calendar year in which the employee actually receives earnings from a WRS employer.

Further, under 1991 Act 141, participants who have moved to the WRS from another qualified pension plan in the United States have the option to transfer distributions from the other pension plan to their WRS employee additional contribution account. However, no such "roll-ins" from other pension systems are currently being permitted, pending the resolution of complex interest crediting issues involving the transferred amounts.

All additional contributions are administered and invested in the same manner as are the contributions in the participant's employee accumulation account. However, investment earnings on additional contributions were never subject to the 5.0% investment earnings cap that applied to new WRS participants first hired after 1981 through December 29, 1999. All employee additional contributions have always had investment earnings credited at the effective rate for the Core Fund (see Table 19). The annual amounts paid for additional employee contributions for the period 2008 to 2017 are shown in Table 10.

Annual Limitations on the Total Amount of Employee Contributions. Compliance with the federal Internal Revenue Code (IRC) is required in order for the WRS to operate as a tax-qualified governmental retirement plan. In general, if a retirement plan is "tax qualified," it is tax-exempt and its participants need not recognize their accrued plan benefits as income until they actually begin receiving them. For the WRS to comply with the IRC requirements, retirement system participants are subject to limitations on the maximum amount of contributions that may be credited

to their accounts during any calendar year.

The maximum amount of post-tax contributions credited to a WRS participant's account during a calendar year may not exceed the limits imposed under s. 415(c) of the IRC. At the end of the 2018 tax year, the following annual contribution maximums were in place for post-tax employee-required contributions: the lesser of 100% of gross earnings or $55,000. Since 2011 Act 32 required that the WRS contributions made by the employee be pre-tax contributions, such contributions will generally not count towards the IRC 415(c) post-tax contribution limit.

All of the following types of contributions made to a participant's account during a calendar year are subject to this general contribution limitation provision:

- All out-of-pocket employee-required contributions;
- All employee-required contributions subject to employer "pickup," paid on behalf of the employee and credited with interest at the effective rate;
- All employer-required contributions credited with interest at the effective rate; and
- Any employee voluntary additional contributions, whether paid by the participant or by the participant's employer.

Funding the Retirement System: Employer Contributions

Employer participants under the WRS are required to make contributions sufficient to fund the net costs of:

- The current discounted value of future retirement benefits likely to be paid for employees' service rendered in the current year; and
- The employer-specific costs of unfunded prior service credits (unfunded accrued liabilities).

These employer-required contribution amounts, expressed as a percentage of payroll and assessed against all participant employers, are determined as part of each annual actuarial evaluation of the WRS.

Setting Current Service Contribution Rates. Each year the WRS consulting actuary evaluates the funding requirements for the system in order to meet the costs of estimated future retirement benefits accrued during the year by current employees. This valuation process is typically conducted during the late spring of each year and is based upon an examination of the preceding calendar year's data.

The annual contribution rate developed for employers is the amount sufficient to fund such costs (called "normal costs") net of all revenues received from the statutory employee-required contributions and those investment earnings credited as current income. The employer contribution rates developed by the actuary are presented to the ETF Board for formal approval and become effective on the next January 1.

Unfunded Accrued Liabilities as an Employer Obligation. Pension system unfunded accrued liabilities may be created in one of two ways. First, liabilities are created when improvements in WRS retirement benefits are authorized by the Legislature and eligibility for these benefit improvements is granted retroactively to WRS participating employees for the years of service earned before the effective date of the benefit improvements. The Legislature has almost always provided that major benefit improvements be applied both prospectively and retroactively. However, provisions of 1999 Act 11 were an exception, inasmuch as the Act contained benefit

improvements that were retroactive only. Nonetheless, such provisions still create additional unfunded liabilities that must be funded.

When these types of changes occur, the amounts needed to pay for the higher benefit levels applicable to all the years of service prior to the enactment of the benefit improvement would never have been included in either the employee- or employer-required contributions collected during those earlier periods. Consequently, an unfunded accrued liability is created and must be paid for ("funded") in some fashion.

Under s. 40.05(2)(b) of the statutes, all WRS unfunded accrued liabilities are treated as an employer cost. These costs are to be amortized through additional contributions paid by employers over an extended period of time (unless the benefit improvement legislation specifies a different funding procedure).

When improvements to retirement benefits are enacted, the new unfunded liabilities become an obligation spread across all employers in the system at the time the legislation becomes effective. The amortization period to pay off the retirement system's current unfunded accrued liabilities was set on January 1, 1989, for a period of 40 years. Therefore, for most WRS employers, payments to retire the unfunded accrued liabilities arising from previous benefit improvements will continue through 2028. Under 2007 Act 131, effective April 5, 2008, the amortization period for future liabilities incurred as a result of benefit enhancements is set at 30 years.

Second, unfunded accrued liabilities can also result when an employer first elects to join the WRS. When this occurs, the statutes authorize the employer to recognize for retirement crediting purposes either 100%, 75%, 50%, 25% or 0% of the prior service of its employees for the period prior to WRS coverage. If an employer initially recognizes less than 100% of its employees' prior service, the employer may subsequently increase the amount of service recognized to any one of the above higher coverage increments. Where the employer chooses to recognize some or all of these types of prior service credits, the credits become an additional unfunded accrued liability; however, they are specific to that employer. Effective April 5, 2008, 2007 Act 131 established a 30-year amortization period for the payment of future liabilities incurred by new employers joining the system.

Unfunded Accrued Liability: Major Benefit Improvement Legislation. The major source of unfunded accrued liability costs for WRS employers has been due to the enactment of benefit improvement measures that have been applied retroactively. Since the establishment of the WRS, the following legislative enactments have included major benefit improvement provisions that have resulted in significant new unfunded accrued liabilities for WRS employers.

- **Chapter 96, Laws of 1981.** When Chapter 96, Laws of 1981, merged the Wisconsin Retirement Fund, the State Teachers Retirement System and the Milwaukee Teachers Retirement Fund into the WRS, a total of $587,957,200 of unfunded accrued liabilities carried by those three pension systems was assumed by the new pension system. An additional $69,292,200 of new unfunded accrued liabilities due to a variety of benefit improvements included in the 1981 merger legislation were also generated. In total, Chapter 96 created total unfunded accrued liabilities for the new WRS of $657,249,400.

- **1983 Act 141**. Act 141 increased the pension formula multiplier for all classes of WRS participants. These changes resulted in the creation of additional unfunded accrued liabilities of $463,272,200.

- **1989 Act 13**. Act 13 significantly modified the pension benefit reduction factors that had previously been applied to WRS participants who chose to take an early retirement. The effect of these changes was to reduce the impact of these

factors as a disincentive to early retirement. As a result, long-term WRS general employees age 57 or older could retire before age 65 with little or no reduction in pension benefits, depending on their age and years of service. Act 13 also reduced the minimum age of retirement for WRS law enforcement employees. These changes created additional unfunded accrued liabilities of $512,547,500.

- **1999 Act 11**. Act 11 increased the pension formula multipliers for all classes of WRS participants for creditable service earned before 2000, increased the amount of the maximum initial formula benefit annuity for nonprotective employee classifications and increased the amount of death benefits payable to beneficiaries of WRS participants who died before reaching minimum retirement age. Act 11 also directed that the amounts credited to the employer accumulation account from a one-time distribution of $4 billion from the TAA be used to fund any new or existing unfunded accrued liabilities.

Unfunded Accrued Liability: Changes in Actuarial Assumptions. In addition to specific benefit improvement changes enacted by the Legislature, WRS unfunded accrued liability totals can be affected by adjustments to the actuarial assumptions that govern the overall funding requirements for the WRS. These assumptions have been changed a number of times since 1990.

In general, when adjustments are made to WRS actuarial assumptions resulting in an increase in the net difference (or "spread") between the assumed rate of investment return and the assumed annual wage inflation rate, employers' unfunded accrued liability balances will decrease. If a change results in a decrease in the "spread" between the investment income and wage increase assumptions, employer unfunded liability amounts will increase.

Every change in the assumptions relating to investment returns or wage growth since 1990 has resulted in an increase to the "spread." In 1990 and 1992 the ETF Board approved the actuary's recommendation to increase the rate of investment return assumption, thereby, increasing the "spread." In 1994, 1997, 1999, 2000, and 2009, the ETF Board approved the actuary's recommendation to decrease the rate of the long-term annual wage increase assumption, again increasing the "spread." Finally, in 2003 and 2010, both the investment return and wage assumptions were changed in a manner that increased the "spread."

Increasing the "spread" effectively lowers future retirement benefit obligations, (including the impact of previous benefit improvements). As a result, the amount of WRS funding that must be derived from employee and employer contributions is reduced and unfunded liabilities can be lowered.

Notwithstanding the ETF Board's previous actions to adjust employer unfunded accrued liability balances, the Attorney General advised the Board in 1999 that it lacked the statutory authority to make such adjustments in the absence of specific authorizing legislation. Subsequently, provisions of 1999 Act 11 specifically authorized the ETF Board to adjust the unfunded accrued liability balance of the WRS and of each participating employer to reflect actuarial assumption changes recommended by the actuary and approved by the Board, or if otherwise provided by law.

Unfunded Accrued Liability: Annual Interest Charges. Finally, employers' outstanding unfunded accrued liability balances are subject to an annual interest charge assessment of 7.2%. This rate is the same as the current assumed rate of return on pension funds that are invested in the Core Fund.

The rationale for requiring employers to make periodic interest payments at the assumed rate on outstanding unfunded accrued liability balances is that the WRS should receive interest payments at least equivalent to what the system would have

earned had the unpaid balances actually been on hand and available for investment. Currently, for most employers, the annual amount of interest due the WRS typically exceeds the annual required contribution towards the outstanding balance.

Consequently, in the near term many employers will find that their total unfunded liability obligation is actually increasing from year-to-year despite the annual payments. However, over time, most employers' payrolls will increase (due to such factors as salary increases and growth in the number of employees) to a level where annual unfunded liability contributions will begin to reduce (and ultimately eliminate) the outstanding balances. Originally, WRS unfunded liability balances were to be retired by 2029. However, because actuarial experience has varied from the assumptions used to set the contribution rates, the liabilities for some employers will not be fully paid by that time. These employers will be required to continue making contributions until the liabilities are fully paid.

The total unfunded accrued liabilities of the WRS for the period 2008 to 2017, as reported by the system's actuary, are presented in Table 25.

Table 25: WRS Unfunded Accrued Liabilities

Valuation for December 31	Total Unfunded Liabilities
2008	$252,598,387
2009	193,292,956
2010	131,932,403
2011	99,276,076
2012	69,722,604
2013	52,604,525
2014	31,749,855
2015	24,072,901
2016	17,833,178
2017	16,829,003

Setting Contribution Rates to Amortize Unfunded Liabilities. The WRS actuary determines each employer's proportionate share of the system's unfunded accrued liabilities that is due to benefit improvement legislation. Consistent with the amortization schedule prescribed by the benefit improvement legislation and the current WRS investment return and wage increase actuarial assumptions, each employer's share of the unfunded liability balance is converted to a uniform contribution requirement as a level percentage of payroll. Where an employer also has specific unfunded liabilities due to the recognition of prior service credits, that employer's contribution rate will be increased to account for those additional specific costs. The resulting individually determined employer contribution rate for unfunded liabilities then becomes set for the duration of the amortization schedule (unless subsequently changed by future legislative enactments).

In general, most employers contribute at the same rate to retire their unfunded accrued liabilities. These rates are included in the summary of employer contribution rates in Table 26. Where the employer makes these required, uniform contributions over the course of the statutory amortization period, the liquidation of the employer's unfunded accrued liability obligation will normally be expected at the end of that period.

Not every WRS employer is currently required to make contributions to retire unfunded accrued liabilities. At any time, an employer may elect to prepay its entire unfunded accrued liability balance, after which no further payments for that purpose are required. Further, where a WRS employer has joined the WRS since the date of the last benefit improvement legislation and has not elected to provide any prior service credits, that employer will also have no unfunded accrued liabilities attributable to its employees.

As of December 31, 2017, 1,420 of the 1,499 WRS employers had no unfunded accrued liability, either because they had made additional payments to retire their outstanding balance or had no liabilities because they had been created after the date of the last benefit improvement legislation. The state itself is now an employer with no

Table 26: Employer-Required Contribution Rates

For Cal. Year	For General Employees			For Protective Employees: With Social Security			For Protective Employees: Without Social Security			For Elected Officials and State Executives			OVERALL RATE (Weighted Average)
	Current Service	Unfunded Liabilities*	Total	Current Service	Unfunded Liabilities*	Total	Current Service	Unfunded Liabilities*	Total	Current Service	Unfunded Liabilities*	Total	
2010	4.8%	0.2%	5.0%	8.6%	0.0%	8.6%	11.3%	0.3%	11.6%	8.7%	0.0%	8.7%	5.3%
2011**	5.1	0.1	5.2	8.9	0.0	8.9	12.2	0.3	12.5	9.4	0.0	9.4	5.6
2011***	5.8	0.1	5.9	8.9	0.0	8.9	11.2	0.3	11.5	6.65	0.0	6.65	5.8
2012	5.9	0.1	6.0	9.0	0.0	9.0	11.3	0.3	11.6	7.05	0.0	7.05	6.3
2013	6.65	0.1	6.75	9.75	0.0	9.75	12.35	0.3	12.65	7.0	0.0	7.0	7.0
2014	7.0	0.0	7.0	10.1	0.0	10.1	13.7	0.3	14.0	7.75	0.0	7.75	7.4
2015	6.8	0.0	6.8	9.5	0.0	9.5	13.1	0.3	13.4	7.7	0.0	7.7	7.1
2016	6.6	0.0	6.6	9.4	0.0	9.4	13.2	0.2	13.4	6.6	0.0	6.6	7.0
2017	6.8	0.1	6.9	10.6	0.1	10.7	14.9	0.1	15.0	6.8	0.1	6.9	7.3
2018	6.7	0.0	6.7	10.7	0.0	10.7	14.9	0.1	15.0	6.7	0.0	6.7	7.2
2019	6.55	0.0	6.55	10.55	0.0	10.55	14.95	0.1	15.05	6.55	0.0	6.55	7.1

*The amount indicated is the overall average rate. Individual employer rates may differ from this average.
**2011 rates prior to Act 10.
***2011 rates under Act 10.

unfunded accrued liability. Under the 2003-05 biennial budget act (2003 Act 33), bonding obligations were issued to allow the state to pay off its unfunded accrued pension liabilities and its unfunded accumulated sick leave conversion credit program liabilities. As a result, the 2017 balance of total unfunded liabilities identified in Table 25 ($16,829,003) is entirely attributable to non-state WRS employers.

Total Employer Contribution Rates. Employer contribution rates are set to fully fund future retirement benefits, but only in the amount necessary once the employee contributions and investment gains have been credited. Normally (that is, apart from legislatively mandated rate changes as occurred under 2011 Act 10), any rate increases or decreases are primarily driven by investment experience. Table 26 summarizes for each WRS employee classification the components of the employer-required contribution rates, approved by the ETF Board during the last 10 years. These employer contributions consist of current service or "normal cost" amounts (to fund the employer's share of that year's cost of future retirement benefits for active participants) and unfunded accrued liabilities amounts. The rates for each of these two components are identified in Table 26. Because rates changed in August, 2011, due to the Act 10 provisions, both the pre-Act 10 and post-Act 10 rates for that year are shown in Table 26.

The data in Table 26 show that, with the exception of the elected officials and state executives, employer-required contribution rates have generally increased through the 10-year period. However, contribution rates have decreased somewhat in recent years. The increases seen in 2010 to 2014 were driven, in part, by the significant investment losses experienced in 2008. The elected officials and state executives employer-required contribution rate generally increased over the years until the Act 10 provisions reduced the employer rate in 2011. The rates associated with unfunded liabilities have been low or nonexistent through the period.

It should be noted that, although the employer-required contribution rates have generally increased over time, the actual payments made to the system by WRS employers have decreased significantly because the Act 10 provisions now prohibit any employer pickup of employee-required contributions for most employees. These actual payments are discussed next.

Impact of Employer "Pickup" of Employee-Required Contributions. Until August, 2011, a WRS employer was permitted to pay, on behalf of its employees nearly all of the employee-required contributions. For many years, WRS employers had actually assumed the payment of virtually all employee-required contributions in addition to their employer-required contribution amounts. Table 27 shows who actually pays the employee- and employer-required contribution amounts. The amount shown as paid by employees is the aggregate amount paid by all employee classifications.

Table 27 indicates that, until 2011, the percentage of employee and employer-paid contributions remained quite stable. Through these years, employees in the WRS paid, on average, 0.8% or less of total required contributions for their retirement benefit. This reflected the fact that WRS employers generally picked up the employee-required share of WRS contributions as a component of employees' overall compensation package.

Under 2011 Act 10, the employer pickup of the employee-required contributions was prohibited for most employees in the WRS. Because the Act 10 provision was effective in August, 2011, it can be seen in the table that the actual payments by employees increase significantly in 2011, while the employer-paid contributions decline. The full effect of this change occurred in 2012, when the pickup prohibition applied for the entire year.

Table 27: Actual Payee of Required Contributions -- In Thousands*

Calendar	Employees		Employers		
Year	Amount	%	Amount	%	Total
State Employees					
2008	$1,749	0.4%	$421,699	99.6%	$423,448
2009	1,248	0.3	415,566	99.7	416,814
2010	3,602	0.8	444,358	99.2	447,960
2011	81,963	17.5	386,070	82.5	468,033
2012	213,447	44.7	263,731	55.3	477,178
2013	249,681	45.0	305,657	55.0	555,338
2014	279,067	45.9	328,856	54.1	607,923
2015	293,010	48.8	307,323	51.2	600,333
2016	286,506	48.7	301,918	51.3	588,424
2017	302,292	48.4	322,430	51.6	624,722
Local Employees					
2008	$5,211	0.6%	$970,781	99.4%	$975,992
2009	6,705	0.7	1,003,556	99.3	1,010,261
2010	8,103	0.8	1,063,114	99.2	1,071,217
2011	135,256	12.3	961,141	87.7	1,096,397
2012	398,207	36.3	697,436	63.7	1,095,643
2013	511,329	42.1	704,475	57.9	1,215,804
2014	612,782	46.9	694,904	53.1	1,307,686
2015	628,053	48.1	677,458	51.9	1,305,511
2016	609,882	48.0	661,555	52.0	1,271,437
2017	638,509	47.7	700,964	52.3	1,339,473
Totals					
2008	$6,960	0.5%	$1,392,480	99.5%	$1,399,440
2009	7,953	0.6	1,419,122	99.4	1,427,075
2010	11,705	0.8	1,507,472	99.2	1,519,177
2011	217,219	13.9	1,347,211	86.1	1,564,430
2012	611,654	38.9	961,167	61.1	1,572,821
2013	761,010	43.0	1,010,132	57.0	1,771,142
2014	891,849	46.6	1,023,760	53.4	1,915,609
2015	921,063	48.3	984,781	51.7	1,905,844
2016	896,388	48.2	963,473	51.8	1,859,861
2017	940,810	47.9	1,023,394	52.1	1,964,195

*Benefit adjustment contributions are included in these amounts.

Long-Term Employee and Employer Contribution Rate Stabilization

Under s. 40.04(1) of the statutes, ETF has the authority to establish such supplemental accounts and reserves as will be useful in achieving the purposes of the retirement trusts. Among these purposes is the maintenance of stable contribution rates. Accordingly, there has been established an Experience Amortization Reserve (EAR) to help minimize short-term contribution rate fluctuations.

Short-term fund balance gains or losses arising from differences between actual and assumed experience in any given year in a variety of areas (such as rates of separation from WRS service,

rates of disability, rates of retirement, rates of mortality or patterns of salary increases and long-term investment return) are allocated to the EAR. The short-term experience gains and losses in any year are then amortized over the average future working lifetime of active WRS participants (a period of approximately thirteen years) thereby enhancing long-term contribution rate stability. For example, losses being amortized in the EAR and applied to 2019 calendar year contribution rates have provided contribution rate increases averaging 0.27% of payroll for all categories of WRS active participants.

CHAPTER 5

WRS BENEFITS

This chapter describes the various types of benefits available to Wisconsin Retirement System (WRS) participants. Typically, public retirement plans are premised on a benefit structure that will provide a career employee leaving active service at the plan's "normal retirement age" with sufficient income, when added to Social Security benefits and personal savings, to sustain the employee's standard of living during retirement years. For the WRS, the general expectation is that upon retirement a career employee will no longer incur Social Security tax payments or work-related expenses and will usually move into a lower post-retirement income tax bracket. The goal is that these expenditure reductions coupled with the start of Social Security benefits, a WRS retirement annuity and personal savings should typically provide the individual with spendable income approximately equal to his or her pre-retirement disposable earnings. In actual experience, a WRS career public employee retiring with 30 years of creditable service can usually expect an income of approximately 60% to 85% of his or her previous gross earnings when WRS annuity and Social Security benefits are combined. The WRS, like most retirement plans, provides income replacement at a proportionately lower percentage of pre-retirement gross income for shorter-term employees.

Benefits available under a retirement plan will be determined based on whether the plan is a:

- Defined benefit plan; or
- Defined contribution plan.

Under a defined benefit plan, the participant is promised a specific level of benefits upon retirement, based on the operation of a formula that takes into account each participant's length of service, final average salary and employment classification. When taken together, the product of all of the elements of the formula determine ("define") the employee's basic retirement benefit. Essentially, this benefit is promised regardless of how the funding for the benefit is to be provided and regardless of how much funding for the benefit is actually available in the employee's own retirement account prior to retirement. Under a defined benefit plan, the employer is ultimately responsible for ensuring that adequate funding is provided to pay the formula-generated level of benefits.

Under a defined contribution plan, the employer regularly places a specified amount of money in an individual account for an employee. The employer's action may be taken independently of any contribution effort by the employee or may be in conjunction with an optional or mandatory employee contribution amount. The amount contributed might be a flat dollar amount, a percent of salary, or an amount determined on some other basis. At retirement, an employee's retirement benefit is calculated on the basis of the annuity amount that can be purchased from the balance available in the employee's account. This balance would include all employer contributions, any employee contributions (required or voluntary) and any gains from investment earnings.

According to a 2018 U. S. Bureau of Labor Statistics (BLS) survey, approximately 91% of all state and local government workers in the U.S. had access to some form of retirement benefit: 86% of workers had access to a defined benefit plan (with 77% actually participating) and 37% had access to a defined contribution plan (with 17% participating). (Note that some employees have access to both types of plans.) By contrast, in private

industry, 68% of private sector workers had access to some form of retirement benefit: 17% of workers had access to a defined benefit plan (with 13% actually participating) and 64% had access to a defined contribution plan (with 47% participating). However, for establishments of 500 workers or more, 88% of private sector workers had access to some form of retirement benefit: 41% had access to a defined benefit plan (with 32% actually participating) and 82% had access to a defined contribution plan (with 68% participating).

Prior to 1966, the predecessor pension systems to the WRS (the Wisconsin Retirement Fund, the State Teachers Retirement System and the Milwaukee Teachers Retirement Fund) were defined contribution plans. The current WRS is categorized by the Internal Revenue Service as a defined benefit plan as are most other public sector pension plans. While the WRS is categorized as a defined benefit plan, participants receive their retirement annuities either based on a formula-generated benefit or based on the value of their individual and associated employer accumulated balances.

The first of the two benefit determination forms is a formula-generated benefit based on final average earnings, years of creditable service, and a formula factor. The second form is a money purchase annuity option, which matches the employee's final account balance with an equal amount from the employer accumulation account. Under s. 40.23(3) of the statutes, the retiree will always receive the higher of either the formula-based annuity or the money purchase annuity. These two benefit options are discussed in detail below.

While the goal of the WRS is to provide an adequate retirement income for career employees, not all employees remain in WRS covered service for their entire working lives. Such employees have the option of requesting a separation benefit from the system. A separation benefit will include all employee-required contributions (whether paid by the employee or by the employer on behalf of the employee) plus varying amounts of credited interest earnings, depending on when the individual first entered WRS covered service. In some cases, a married participant may become divorced or a participant's domestic partnership may dissolve, which can result in the division of various WRS benefits between the participant and an alternate payee. In other instances, WRS participants may become disabled prior to reaching the minimum WRS retirement age and qualify for a disability annuity. Finally, some participants may die in service, resulting in the payment of a survivor's benefit to a beneficiary. The remainder of this chapter describes these alternative types of benefits as well as the formula-based and money purchase benefits available to a WRS participant.

Separation Benefits

If a participant leaves WRS service before age 55 (age 50 for protective classification employees), the individual may apply for a separation benefit. However, once a participant reaches these age thresholds, he or she becomes eligible for a retirement benefit and can no longer receive a separation benefit.

A separation benefit is not a retirement benefit. Rather, it is a withdrawal of amounts in the employee's accumulation account. The separation benefit generally includes the total of: (1) all employee-required contributions made to the participant's account, whether paid by the participant or by the employer on behalf of the participant; (2) any additional voluntary contributions made by the employee; and (3) the accumulated interest credited to the employee's account.

There are two limitations on the amounts that can be returned as a separation benefit to a former participant. First, no benefit adjustment contributions collected from the employee (regardless of

who actually paid the benefit adjustment contributions) are included in the separation benefit. Although benefit adjustment contributions are classified as employee-required contributions, they are credited to the employer accumulation account. As a result, they are retained in that account and are not available to be returned as part of any separation benefit.

Second, annual interest earnings are credited on Core Fund employee accumulation account balances that have been on deposit in the system for a full calendar year. All Core Fund contributions for participants first employed before 1982 are credited with interest at the effective (actual) earnings rate, and all such interest credits are returnable as part of a separation benefit. For participants first hired between January 1, 1982, and December 29, 1999, investment earnings were credited at the rate of 5.0% annually on Core Fund employee accumulation account balances for the period through 1989. Furthermore, for participants who were subject to this interest crediting cap and continued covered employment after January 1, 1990, annual interest credits on Core Fund employee accumulation account balances were capped for separation benefit purposes *only* at 3.0%. These limitations on interest earnings were originally enacted as a part of 1984 and 1989 benefit improvement legislation to help fund the increased costs of retirement benefit improvements.

Effective December 30, 1999, provisions of 1999 Act 11 eliminated prospectively the investment earnings crediting caps that had applied to post-1981 new WRS participants. Starting with interest earnings credited to employee Core Fund accounts on December 31, 1999, all WRS active participants began receiving interest at the effective (actual) rate of earnings. However, for those participants who were subject to these interest crediting caps, terminated their WRS employment before the general effective date of Act 11 but left their accumulations on account, the prior law interest caps continue to apply to these participants' accounts.

The elimination of the Core Fund interest caps for post-1981 WRS active participants by Act 11 also has had the effect of increasing all benefits that are based on the amount of the participant's employee-accumulation account balance. This change prospectively increases the value of any separation benefit or death benefit.

When a former employee takes a separation benefit, it is paid in a lump sum. There is no provision for a partial separation payment. As a result of 1991 Act 141, if an employee taking a separation benefit subsequently becomes employed by another qualified pension plan in the United States, the former employee may request that the benefit be paid directly to another pension plan.

Further, for former employees taking a separation benefit who have also made additional contributions, the additional contribution portion may be returned as any of the following: (1) a lump sum payment at any age; (2) an annuity certain with a term of from 24 to 180 months at any age; or (3) a life annuity at age 55 (or age 50 for protective classification employees).

Table 28 summarizes the number and amount of WRS separation benefits that have been taken during the period 2008 to 2017.

Separation benefit payments or portions of such payments that derive from contributions not

Table 28: Separation Benefits Paid

Calendar Year	Number of Applications	Total Benefits Paid
2008	2,338	$27,375,244
2009	2,817	24,754,766
2010	3,093	26,415,084
2011	2,979	28,006,284
2012	2,725	26,562,924
2013	3,998	33,271,143
2014	4,061	34,401,181
2015	4,167	37,642,404
2016	4,155	39,275,602
2017	4,250	38,358,098

actually paid by the participant are subject to federal and state income tax liability in the year the separation benefit is paid. Further, an additional tax is imposed on separation benefits taken prior to age 55. This tax is equal to 10% of the portion of the withdrawal that is includable as gross income. However, any tax liability on the separation benefits may be avoided if the distribution is immediately rolled over into another qualified retirement plan.

As a general rule, when an individual requests a separation benefit payment, the person forfeits: (1) all employer-required contributions made on behalf of the former employee and credited to the employer accumulation account; and (2) all benefit rights associated with the period of WRS service. In the event that an employee subsequently returns to WRS covered employment after taking a separation benefit, the employee's WRS accumulation account will be treated as if he or she were a new entrant in the system.

Even though an employee may leave WRS covered employment prior to being eligible for an immediate retirement benefit, the individual does not have to take a separation benefit. The separating employee may leave his or her employee-required contributions on account until reaching the minimum age for receiving a retirement benefit. Contributions left on account in this manner will continue to receive annual interest credits at the appropriate rate for the former participant. As noted earlier, former participants first hired after 1981 who left covered service before December 30, 1999, [the general effective date of 1999 Act 11] will continue to have their dormant accounts subject to the annual interest crediting limitations that applied during that period. Upon reaching age 55 (50 for protective classification employees), the former participant becomes eligible for an annuity and may, but is not required to, begin to receive such payments at any time thereafter. However, in order to comply with federal Internal Revenue Code requirements, separated participants who leave their contributions on account must begin taking a retirement annuity no later than April 1 of the calendar year following the calendar year in which they attain the age of 70-1/2.

Retirement Benefits: The Formula Benefit Annuity

For employees who remain under the WRS until retirement or who leave WRS employment but do not take a separation benefit before reaching normal retirement age, the WRS offers two distinct retirement options: the *formula benefit* retirement option and the *money purchase* retirement option. In general, the former will often result in a higher annuity payment for employees that remain in WRS covered employment right up to retirement, while the latter will normally result in a higher annuity payment for persons that ended WRS covered employment many years before applying for a retirement benefit. The statutes provide that the greater of the formula benefit annuity or the money purchase annuity will always be paid to the retiree.

For retirement annuities finalized in 2017, approximately 73% were determined under the formula benefit option and 27% were determined under the money purchase option.

Note that, under 2011 Act 32, an employee who is initially hired by a WRS employer on or after July 1, 2011, would not be vested in either a formula-based annuity or a money purchase annuity until completing five years of creditable service. Such participants who do not complete five years of creditable service, and who take, or do not take, a separation benefit, would receive only the amounts derived from employee regular contributions, whether paid by the employee or by the employer on behalf of the employee, or any voluntary additional contributions, whether made by the employee or by the employer on behalf of the employee. The following discussion applies to

participants hired before July 1, 2011, or to participants hired after that date who complete five years of creditable service.

For a WRS participant who has reached "normal retirement age," the individual's initial formula-based annuity is determined by multiplying together the following three elements:

- The number of **years of creditable service** earned;
- The participant's monthly **final average earnings** amount; and
- The appropriate **formula factor** for the participant's employment classification.

The resulting calculated annuity amount may not exceed 70% of the participant's final average earnings figure (65% for protective employees covered by Social Security, or 85% for those participants not covered by Social Security). However, these maximum initial formula benefit limits may be exceeded to allow the payment of additional annuity amounts from Variable Fund accumulations or from employee additional contribution accumulations. Also, as described in the next section of this chapter, the calculated annuity amount may be reduced if the participant elects to retire before reaching "normal retirement age."

Elements of the Formula: Years of Creditable Service

Basic Creditable Service Determination. "Creditable service" means the number of years a participant was employed by one or more WRS participating employers in a capacity that entitled the employee to the accrual of retirement benefits. All required contributions must have been made for each year of creditable service recorded. Furthermore, service credits are earned whether the employee actually paid the employee-required contributions or whether the employer paid these amounts on behalf of the employee. For some local employees, creditable service can also include credit for periods of employment recognized by the employer for periods before the date the employer joined the WRS.

The reporting of a full year of creditable service will be granted for each year of full-time equivalent employment. However, what constitutes full-time equivalent employment differs for nonteaching and for teaching employees. For example, all nonteaching classification employees will receive a full year of creditable service for 1,904 hours or more of covered employment annually. A teaching classification employee (including librarians and administrators) will receive a full year of creditable service for 1,320 hours or more of covered employment annually. No more than one year of creditable service may be granted for any annual earnings period regardless of the number of hours which exceed the above minimums. Part-time employees will receive a prorated service credit based on the total number of hours worked during the year compared to the appropriate full-time minimum and expressed in fractions of a year to the nearest hundredth.

In addition to years of creditable service earned through regular WRS employment, years of service may also be established for certain WRS participants through repurchasing previously forfeited service, purchasing certain non-WRS governmental service, purchasing "qualifying" service, or meeting certain military service eligibility criteria.

Purchase of Additional Creditable Service: Forfeited Service, Other Governmental Service and Other Qualifying Service. An employee returning to covered service who had previously taken a WRS separation benefit may elect to "buy back" some or all of those forfeited service credits, once certain eligibility requirements have been met.

To be eligible to purchase previously forfeited service credits, the participant must have at least three years of continuous service since returning

to WRS covered employment. The cost of buying the forfeited service credits is determined by multiplying the employee-required contribution rate for the participant's employment classification times the average amount of gross earnings for the three highest years (as determined at the time of application) times the number of years of service being purchased.

A participant who repurchases forfeited service must pay for all the creditable service for which the person is eligible at the time of the application, subject to an overall maximum of 10 years of prior service credits. For example, a participant with 10 years of forfeited service available for repurchase could buy the first three-year block of service credits after three years of WRS service and then repurchase an additional year of prior service in each of the seven years thereafter. However, if the participant waits and applies for 10 years of forfeited service once 10 years of new WRS service have elapsed, the participant would have to pay for all 10 years of the forfeited service in one lump sum. Any available employee additional contribution account amounts may be applied towards the total cost of the forfeited service buy-back.

The purchase of prior service credits is also available to current WRS participants who had earned non-military creditable service under a non-WRS federal, state or municipal retirement plan. Such service may be purchased, if the participant: (1) has at least three years of creditable service under the WRS; (2) furnishes acceptable evidence of non-WRS covered prior governmental service; and (3) makes a lump sum payment (or elects an alternative two-payment option) for the total amount of service being applied for. In addition, the required payment must be sufficient to fund the full actuarial costs of the resulting increased benefits. The number of years of creditable service applied for may not exceed the number of years of creditable service that the participant has at the date of his or her application. Any available employee additional contribution account balances may be applied to the lump sum payment. A participant may not receive creditable service under this option for any service that is also being used to establish entitlement to a benefit payable by the non-WRS federal, state or municipal retirement plan. Any employee additional contribution amounts used for the purchase of other non-WRS governmental service are not subject to IRS annual contribution limitations.

Until January 1, 1973, participants in the former Wisconsin Retirement Fund had to serve a qualifying period (normally the first six months of employment). During this period, the employee did not earn retirement system creditable service and no retirement contributions were made. Current participants who were subject to this six-month delay in enrollment in the retirement system may purchase that qualifying service. Similar creditable service purchase provisions also apply to other classes of WRS participants who did not receive creditable service in the past. These include: certain teachers who served as "junior teachers" before July 1, 1957, certain teachers under the former Wisconsin State College system who took paid teacher improvement leaves, and certain state executive participants who had attained age 62 prior to May 3, 1988.

Effective July 26, 2003, WRS participants may transfer funds from certain other plans qualified under federal law to the WRS for the purpose of buying creditable service for the types of service described above.

Purchase of prior service credits may have several advantages for the employee: future monthly retirement benefits will increase, the ability to qualify for increased military service credits may result, and retirement at a lower age with full benefits may be possible.

Military Service Credits. Additional years of creditable service for retirement benefit calculation purposes may be granted for active military service, other than service in the military reserves

or the National Guard. Military service credits are added to an eligible participant's total earned service credits upon retirement under two types of procedures:

The first procedure is applied to participants with veteran's status who served in the military prior to entering WRS covered employment, provided all of the following additional conditions are satisfied: (1) previous military service credits have not been granted; (2) the military service was performed prior to 1974; (3) the military service time is not being used for federal retirement benefit purposes; and (4) discharge from military service was under conditions other than dishonorable. For WRS participants who meet all of these conditions, if the individual at retirement has at least five years of regular creditable service under the WRS, then one year of military service credits may be granted for each five years of creditable service (up to a maximum total of four years of military service credits).

The second procedure is applied to WRS participants who left WRS covered employment at any time for military service and then returned to the same employer within 180 days of discharge from the military service. For this category of employee, military service credits of up to four years (longer if the military service was involuntarily extended) may be granted. To qualify for this second type of military service credit, the employee would have to have been discharged from military service under conditions other than dishonorable. Further, this type of military service that resulted in a break in continuous WRS covered employment may also be used towards a federal benefit.

Under 2013 Act 191, participating employees in the WRS who terminate covered employment after April 5, 2014, may apply to receive creditable service for service in the U.S. armed forces or national guard, provided the employee was discharged from the U.S. armed forces or national guard under honorable or general conditions.

Elements of the Formula: Final Average Earnings

The "final average earnings" factor is defined as the average earnings rate derived from the participant's three highest years of earnings under the WRS. The three years used for this determination need not be consecutive years. Further, for participants hired after 1995, not more than $275,000 during calendar year 2018 may be used to calculate the final average earnings figure. This cap amount is subject to an annual inflationary adjustment by the U.S. Secretary of the Treasury. For any WRS participants hired before this period, the $275,000 limit does not apply. While the final average earnings for most WRS participants is based on the average of the three years of highest earnings, the final average earnings amount for state elected officials is based on the annual salary rate for the office that would have been payable to the participant during the last completed month in which the individual was a participating employee as a state elected official. This earnings calculation procedure recognizes the fact that a state elected official is prohibited by law from receiving an increase in salary during his or her term of office.

During the 2009-11 biennium, state employees were required to take eight days of unpaid leave each year, reducing each employee's earnings by approximately 3.1%. However, 2009 Act 28 provided that, for WRS purposes only, the earnings of a state employee includes compensation that would have been payable to the participant during the period July 1, 2009, through June 30, 2011, for service that would have been rendered by the participant during that period if the mandatory, temporary reduction of work hours or days had not been ordered. WRS contributions on these "deemed earnings" were required to be paid and the deemed earnings must be considered in the calculation of final average earnings for WRS purposes. Finally, the service for which a participating employee is considered to have received deemed earnings, and for which contributions have been made, is counted as creditable service.

For most WRS participants, annual earnings are determined on a calendar year basis. However, for judges, teachers and all other school district, technical college, and cooperative educational service agency support staff, annual earnings are determined on a state fiscal year basis.

Elements of the Formula: Formula Multipliers

The factors used as multipliers in computing a formula benefit are established by statute. These factors differ according to the participant's employment classification and, the years in which the service was earned. The current variations in how multipliers are applied were established under 1999 Act 11 and 2011 Act 10.

Under Act 11, an additional 0.165 was added to the formula multiplier factors for each WRS employment classification. This adjustment applied to all WRS creditable service earned before January 1, 2000, by active WRS participants. For creditable service earned on and after January 1, 2000, the formula multipliers for each WRS employment classification returned to the levels that applied prior to the enactment of Act 11. These varying WRS formula multiplier factors are indicated in Table 29.

The formula factor increases for service earned before January 1, 2000, also apply to: (1) the repurchase of any creditable service that was previously forfeited by a participating employee before that date; (2) the purchase of any creditable service under the WRS for service performed before that date with a non-WRS governmental employer; and (3) the determination of additional creditable military service based on regular WRS creditable service earned before that date.

To be eligible for the Act 11 higher formula multipliers for WRS covered service performed before 2000, a participant must have been actively employed under the WRS on or after January 1, 2000, prior to retirement. A participant who terminated WRS covered employment before January 1, 2000, is not eligible for the higher multiplier. However, if such an inactive participant did not close his or her WRS employee account by taking a separation benefit and subsequently returned to WRS covered employment, the increased Act 11 formula factors would then apply to creditable service performed before 2000 when the participant ultimately takes a retirement benefit.

Table 29: Annuity Benefit Formula Multipliers

Participant Classification	Formula Multiplier: For service before Jan. 1, 2000	Formula Multiplier: For service on/after Jan. 1, 2000
General	1.765%	1.6%
Elected and State Executives	2.165	2.0*
Protective (under Social Security)	2.165	2.0
Protective (not under Social Security)	2.665	2.5

*Reduced to 1.6% under 2011 Act 10, effective June 29, 2011, but with some variation in the initial applicability of the provision.

Under 2011 Act 10, effective June 29, 2011, the multiplier used to calculate the normal pension benefit for state and local elected officials and state executives participating in the WRS was reduced from 2% to 1.6%. For state executives, the change first applied to creditable service performed on June 29, 2011. The provision first applies to creditable service that is performed by elected officials (other than judges) on the first day of a term of office that begins after the effective date of the provision. For Supreme Court justices, Court of Appeals judges, and Circuit Court judges, the provision first applied to creditable service performed on the day on which the next Supreme Court justice, Court of Appeals judge, or Circuit Court judge assumed office after the effective date of June 29, 2011. This date was July 17, 2011.

Provisions of the federal Tax Reform Act of 1986 require the Internal Revenue Service to ensure that the design and operation of private and

public sector retirement plans are nondiscriminatory. That is, the design and operation of the plan may not unduly benefit highly compensated employees. From time-to-time it has been suggested that the differences in WRS formula multipliers shown in Table 29 between general participants and elected and state executive participants could be deemed to be discriminatory in nature. However, provisions of the federal Taxpayer Relief Act of 1997 permanently exempted public retirement plans from nondiscrimination tests with respect to differences in employment category formula factors.

Retirement Benefits: Adjustments Applicable to the Formula Benefit Annuity

When a WRS participant retires under a formula-generated retirement benefit, adjustments to the computed initial annuity amount may be required if the individual retires before normal retirement age or if the individual has participated in the Variable Fund.

Normal Retirement Age. The term "normal retirement age" refers to the age at which a participant may begin to receive an unrestricted regular retirement annuity under the employer's retirement plan. Normal retirement age for the WRS is established by statute and varies depending upon the participant's employment classification. Table 30 lists the current WRS normal retirement ages.

A participant is eligible for unreduced retirement benefits at any time after he or she reaches the normal retirement age threshold for the employment classification in which the creditable service was earned. However, a participant is not required to retire upon reaching normal retirement age. The participant may continue to work beyond that date and will continue to accrue additional years of creditable service.

Table 30: Normal Retirement Age by Employment Category

Employment Classification of Participant	Normal Retirement Age
Protective occupation participants with 25 or more years of creditable service.	Age 53
Protective occupation participants with less than 25 years of creditable service.	Age 54
All general employees (teaching and nonteaching).*	Age 65

*Includes elected officials and state executive salary group employees who initially assume office or begin employment after December 31, 2016. Normal retirement age is 62 for elected officials and state executive salary group employees who initially assumed office or began employment prior to 2017.

Under 2015 Act 55, state and local elected officials and state executive employees who initially assume office or begin employment after December 31, 2016, have a normal retirement date of 65 years of age, rather than 62 years of age. Individuals in such positions who initially assumed office or began employment prior to 2017 continue to have a normal retirement date of 62 years of age.

Early Retirement. A formula benefit will be paid to a WRS participant who is no longer in covered employment and has reached age 55 (age 50 for protective classification employees) and requests an annuity. Upon reaching these age thresholds, payment of a separation benefit is no longer permitted should the participant leave WRS covered employment.

Participants requesting an annuity after reaching the minimum retirement age threshold but before attaining the "normal retirement age" for their employment classification, are deemed to have taken an "early retirement." For individuals taking an early retirement, an actuarial discount is applied against the formula-generated annuity amount received. This discount is not a penalty for early retirement. Instead, it is designed to compensate the retirement system for a longer annuity

payout period and a shorter asset accumulation period than had been assumed under the system's valuation process.

For participants taking an early retirement, a standard 0.4% per month actuarial discount factor is applied for each month of early retirement before the participant's normal retirement date (4.8% per year). Then, depending on the participant's employment classification, a two-step series of adjustments are made.

First, for any general or elected or state executive classification employee who has attained the age of 55, the standard 0.4% monthly reduction factor is itself reduced by 0.001111% for each month of total creditable service the participant has earned. [Further, for the purposes of calculating this reduction factor only, if a participant has worked part-time in five of the last 10 years prior to the year in which the annuity will begin, creditable service in any annual earnings period would be treated as the amount of creditable service that a teacher would earn for that earnings period. Therefore, those years in which at least 1,320 hours have been worked can be treated as a full year of creditable service for purposes of calculating this reduction factor.] Since the 0.4% monthly reduction factor cannot be reduced below zero, a participant with at least 360 months (30 years) of service credits will no longer have any actuarial reduction applied (except as described below) to his or her formula annuity amount upon taking an early retirement.

Second, the 0.001111% offset to the standard 0.4% monthly discount factor does not apply for any retirement months taken before the general or elected and state executive participant attains age 57. Consequently, for any such participant retiring before age 57, a full 0.4% actuarial reduction factor will be applied for each month of retirement before age 57. This 0.4% monthly reduction applies regardless of the amount of creditable service previously earned.

The full 0.4% monthly reduction factor also applies to any early retirement taken by protective category employees.

Table 31 illustrates the total actuarial reductions that would be applied for general category employees retiring after age 55 but before normal retirement age at selected levels of creditable service.

Table 31: Comparison of Actuarial Discounts Applied to Annuities (General Category Employees)

	Years of Creditable Service				
Age	10 Years	15 Years	20 Years	25 Years	30 Years
65	0.0%	0.0%	0.0%	0.0%	0.0%
64	3.2	2.4	1.6	0.8	0.0
63	6.4	4.8	3.2	1.6	0.0
62	9.6	7.2	4.8	2.4	0.0
61	12.8	9.6	6.4	3.2	0.0
60	16.0	12.0	8.0	4.0	0.0
59	19.2	14.4	9.6	4.8	0.0
58	22.4	16.8	11.2	5.6	0.0
57	25.6	19.2	12.8	6.4	0.0
56	30.4	24.0	17.6	11.2	4.8
55	35.2	28.8	22.4	16.0	9.6

As a result of the operation of the current WRS actuarial reduction mechanism, there is no plan-driven disincentive to early retirement for career WRS general classification employees or elected and state executive classification employees who are age 57 or older and have 30 or more years of creditable service.

Variable Fund Add-On. Upon the retirement of an employee with accounts in both the Core Fund and the Variable Fund, the employee's accumulation account balance in the Variable Fund is compared to an alternative balance computed as if all contributions and associated earnings over the years of employment had instead been invested in the Core Fund. The amount of the difference between the employee's actual Variable Fund balance and the alternative Core Fund balance is treated as a "variable excess" amount (if there has

been a net investment gain) or as a "variable deficiency" (if there has been a net investment loss). This variable excess or deficiency amount is then matched with a similar dollar amount from the Variable Fund employer accumulation account. Then, based on the participant's age, a money purchase factor is applied to the resulting total to generate a supplemental annuity amount. This annuity amount will be added to (or subtracted from) the formula based annuity payment level determined for the participant.

Retirement Benefits: The Money Purchase Annuity

As noted above, under 2011 Act 32, an employee who is initially hired by a WRS employer on or after July 1, 2011, would not be vested in either a formula-based annuity or a money purchase annuity until completing five years of creditable service. The following discussion applies to participants hired before July 1, 2011, or to participants hired after that date who complete five years of creditable service.

The money purchase annuity option provides that if an employee's total accumulation account, when supplemented by an equal amount from the employer accumulation account, would purchase a larger annuity than would result from a formula benefit annuity, the higher money purchase annuity will be paid. Under s. 40.23(3) of the statutes, the retiree will always receive the higher of either the money purchase annuity or the formula benefit annuity.

For WRS participants who leave WRS covered service but do not take a separation benefit, most will ultimately receive a retirement annuity determined by the money purchase method, rather than the formula benefit method. A money purchase annuity will usually exceed a formula based benefit when the period that elapses between the termination of WRS covered service and retirement exceeds five years. This result is due in large part to the compounding effect of interest credited to contributions left on account. A money purchase annuity from such balances will eventually surpass a formula generated annuity since the latter would be based only on a limited number of years of creditable service and a final average earnings component that is increasingly eroded by inflation.

In recent years, some highly compensated, long-term WRS career employees first hired before 1981 have found that their employee accumulation account balances have grown to such a level that a money purchase annuity will exceed a formula annuity. This is because annual interest earnings have been credited to the employee's account at the actual rate of earnings and overall investment results have generally been favorable in most years. As a result, when these balances are matched with an equal amount from the employer accumulation account, the money purchase option yields a higher monthly annuity.

Money purchase annuities are not subject to the maximum initial annuity limitations that apply to formula benefit annuities. That limitation specifies that the initial formula-based annuity cannot exceed specified percentages of final average earnings, based on the participant's employment classification (see Table 33, 1.). Further, the actuarial reduction mechanism that may affect early retirements under a formula benefit annuity does not apply in the same manner for money purchase annuities. Instead, a money purchase benefit factor is applied to the total value of the participant's money purchase account to determine the initial monthly annuity amount. This money purchase factor is actuarially determined and varies depending on the age of the participant at the time of retirement.

Table 32 summarizes the number of annuities and the annual level of WRS annuity payments (both formula based and money purchase) during the last 10 years.

Table 32: WRS Annuity Benefits Payments

Year Ending December 31	Number of Annuities In Force*	Total Annuity Payments for Year*
2008	144,033	$3,760,305,276
2009	150,671	3,734,933,124
2010	155,775	3,801,964,124
2011	167,453	4,061,224,242
2012	173,655	4,142,006,611
2013	180,056	4,134,196,884
2014	185,605	4,497,944,907
2015	191,795	4,780,408,506
2016	197,647	4,951,649,846
2017	205,643	5,211,266,989

*Disability annuities in force are included in these totals.

Retirement Benefits: Calculation of Benefit Amount

A retirement annuity may be paid at any time after age 55 (age 50 for protective classification employees), if the participant has left all WRS covered employment. In determining an individual's basic entitlement, three different computations must generally be undertaken. These computations are diagrammed in Table 33.

The "money purchase benefit factor" used in Equation III is an actuarially determined figure that will result in the payment of a straight life annuity, based on the participant's current age. The retirement benefit payable to the annuitant will always be the greater of the formula based benefit or the money purchase benefit. The finalized monthly annuity amount at retirement can never be reduced.

Table 33: Equation Worksheet

1. **Equation I (Calculation of Maximum Benefit Limitation).** The maximum amount of the formula benefit is determined. The maximum amount of a "normal form" annuity (a formula based benefit payable as a straight life annuity for the life of the annuitant) may not exceed 70% (65% for protectives covered by Social Security and 85% for protectives not covered by Social Security) of final average earnings. These limits do not apply with respect to the payment of those additional annuity amounts deriving from Variable Fund or employee additional contribution balances. This calculation is illustrated for a general category employee:

Monthly Final Average Earnings	x	70%	=	Maximum Formula Benefit Payable

2. **Equation II (Calculation of Formula Based Benefit).** The participant's formula based benefit amount is determined.

Years of Creditable Service	x	Monthly Final Average Earnings	x	Formula Factor 1.765% [pre-2000 service] 1.6% [service on and after January 1, 2000]	=	Monthly Formula Based Annuity

3. **Equation III (Calculation of Money Purchase Benefit).** The value of the participant's potential money purchase annuity is determined.

Employee Accumulation Account Balance	+	Equal Amount from Employer Accumulation Account	x	Money Purchase Benefit Factor	=	Monthly Money Purchase Annuity

Example of Benefit Calculations. For the purpose of illustration, the calculation procedures for a formula-based annuity and a money purchase annuity are presented for a hypothetical 65-year-old WRS general employee who retired on January 1, 2018. For this example, it is assumed that this employee had: (1) 25 years of WRS covered service; (2) three highest annual earnings of $42,100, $43,600 and $45,100; and (3) a total employee accumulation account balance of $109,400.

First, the employee's monthly final average earnings is computed:

$42,100	for	12 months	
43,600	for	12 months	
45,100	for	12 months	
$130,800	for	36 months	= $3,633.33/month

Then, the maximum permissible formula benefit as a percentage of the final average earnings figure is calculated:

$3,633.33 x 70% = $2,543.33 (maximum allowable monthly annuity)

Next, the formula based benefit is determined. If seven years of creditable service was earned prior to January 1, 2000, and 18 years were earned in 2000 through 2017, the formula multipliers authorized under 1999 Act 11 are applied as follows:

7 years of creditable service	x $3,633.33	x	1.765%	=	$448.90
18 years of creditable service	x $3,633.33	x	1.6%	=	$1,046.40

Total monthly annuity = $1,495.30

Finally, the alternative money purchase guarantee amount is computed:

Employee Accumulation Account Balance		Equal Amount from Employer Accumulation Account		Age 65 Money Purchase Factor	Monthly Annuity
$109,400	+	$109,400	x	0.664% =	$1,452.83

In this example, the annuitant would receive the full monthly amount of the formula generated annuity ($1,495.30) since it is greater than the monthly money purchase annuity amount ($1,452.83) and does not exceed the maximum initial monthly formula benefit limitation ($2,543.33).

Also in this example, the age 65 money purchase factor (0.664%) means that for every $1,000 in an individual's combined employee and employer accumulation account, the individual would qualify for a monthly lifetime annuity of $6.64. This money purchase factor varies by the retirement age of the individual. Table 34 shows these calculation factors for each retirement age between 50 and 70 years. Beginning January 1, 2020, the money purchase calculation factors in Table 34 will be reduced based on updated mortality assumptions.

Had the employee in this example taken an early retirement at age 60 (and all other factors remained the same), the formula benefit amount would have been subject to an actuarial discount

Table 34: Money Purchase Calculation Factors

Age	Monthly Benefit Per $1	Age	Monthly Benefit Per $1
50	.00517	61	.00609
51	.00523	62	.00621
52	.00530	63	.00634
53	.00537	64	.00649
54	.00544	65	.00664
55	.00552	66	.00680
56	.00560	67	.00698
57	.00568	68	.00718
58	.00577	69	.00739
59	.00587	70	.00761
60	.00598		

of 4.0% ($59.81), resulting in a monthly annuity amount of $1,435.49.

If the computed monthly benefit in the normal form (that is, a benefit for the annuitant's life only) would be less than $198 (calendar year 2018 threshold), the annuitant would be required to take a single sum payment of the present value (employee plus employer contributions) of his or her annuity. The participant may elect this option if the computed monthly benefit in the normal form is at least $198 but less than $405. These threshold amounts are indexed annually to reflect the average increase in salaries.

A career WRS employee retiring at normal retirement age can typically expect an annuity benefit (when combined with Social Security benefits) sufficient to replace a significant portion of his or her pre-retirement earnings. Table 35 illustrates the extent to which the WRS retirement system achieves this end. This table shows the amount of income replaced by the formula benefit annuity in combination with the estimated Social Security benefit for a 65-year-old employee at various earnings levels and years of creditable service, based on a straight life annuity for a general category employee. For WRS annuity amounts, eighteen years of creditable service is assumed to have been earned after 1999, and the remainder earned before 2000. Social security payment estimates were determined using the Social Security Administration's detailed calculator tool for a 65-year-old individual. However, it should be noted that the full retirement age for Social Security benefits for individuals born in 1943 and later years is between 66 and 67 years of age. Although the earliest an individual can start receiving Social Security retirement benefits is age 62, a retiring employee may choose to delay such benefits until reaching full retirement age for the purpose of maximizing benefits.

Table 35: Illustrations of Normal Age 65 Retirement Monthly Annuity Amounts

Monthly Final Average Earnings (FAE)	WRS Annuity	Social Security	Monthly Total Amount	Monthly Total % of FAE
35 Years of Service				
$2,000	$1,176	$1,071	$2,247	112%
3,000	1,764	1,363	3,127	104
4,000	2,352	1,655	4,007	100
5,000	2,940	1,947	4,887	98
25 Years of Service				
$2,000	$823	$1,071	$1,894	95%
3,000	1,235	1,363	2,598	87
4,000	1,646	1,655	3,301	83
5,000	2,058	1,947	4,005	80
15 Years of Service				
$2,000	$480	$1,071	$1,551	78%
3,000	720	1,363	2,083	69
4,000	960	1,655	2,615	65
5,000	1,200	1,947	3,147	63

In general, shorter-term employees and employees at higher salaries will have less of their pre-retirement gross income replaced by the combined total of the WRS annuity and Social Security benefits. For the former group of employees, this result is almost entirely due to the impact of fewer years of creditable service on the operation of the WRS benefit computation formula. For the latter group of employees, the benefit computation ceilings inherent in Social Security benefit calculations tend to provide proportionately greater benefits to lower salaried employees than higher salaried employees.

Annual Federal Limitation on Maximum Amount of Retirement Benefit. Compliance with provisions of the federal Internal Revenue Code (IRC) is required for the WRS to operate as a tax-qualified governmental retirement trust. Consequently, WRS annuitants are subject to calendar year limitations on the maximum retirement benefit that may be paid by the plan. The maximum retirement benefit payable to a WRS participant during a calendar year may not exceed the limits imposed under IRC s. 415(b). For the 2018 tax year, annual retirement benefit payments generally cannot exceed either: (1) $220,000, calculated as a straight-life annuity terminating at the death of the annuitant; or (2) an amount equal to the actuarial equivalent of a straight life annuity

terminating at the death of the annuitant and paying $220,000 per year, if the actual retirement benefit is taken in a form other than a straight life annuity. These limitations may be adjusted based on certain other factors specified in the IRC, including the age of the annuitant.

Retirement Benefits: Annuity Payments

Monthly retirement benefits are always payable for the lifetime of the annuitant. However, an annuitant has a choice of payout options that determine whether or not the benefits will continue to any eligible beneficiaries following the death of the annuitant. The selection of annuity payment options is made at the time the individual first applies for retirement benefits and is subject to the following requirements: (1) the annuity must commence by April 1 of the year following the calendar year in which the individual attains the age of 70-1/2 (but only if the individual is an inactive participant not currently working for a WRS employer); and (2) if the annuity has a long-term (180 month) guaranteed payment provision, the annuity is not available if payment would extend beyond the actuarially determined life expectancy of the participant and joint survivor.

With one limited exception, this initial selection may be changed only within 60 days of the date of the first annuity check. For all intents and purposes, the annuity payment option becomes irrevocable after this initial 60-day period. The single exception applies to an initial selection after January 1, 1992, of a joint survivorship annuity with a 100% or 75% continuation to a named beneficiary. Where the named beneficiary dies within the first five years of annuity payments, the joint survivor annuity automatically reverts to a straight life annuity.

There are three basic types of annuity options available under the WRS:

- **Straight Life Annuity.** This type of annuity is payable for the life of the annuitant. It will end at the annuitant's death with no payments made to any beneficiary.

- **Life Annuity With Guarantee Period**. This type of annuity will be paid for the life of the annuitant and also has a guarantee of a specific number of monthly payments. The guarantee will provide annuity payments to a surviving beneficiary until the end of the guarantee period, provided the retiree dies prior to the expiration of that period.

- **Joint and Survivor Annuity**. This type of annuity provides for a continuation of some level of monthly payment to a designated beneficiary if the beneficiary survives the annuitant. This type of annuity is paid for as long as either the retiree or the named survivor is alive.

Under these basic annuity payment types, the WRS offers seven different payout options. These options are described in Table 36.

Because of the varying guarantee periods and death benefit provisions associated with these annuity options, the monthly benefit amounts payable under each will vary. Actuarially, the total amount estimated to be required to fund each benefit option will be the same. However, the monthly payments will differ because a longer guarantee period requires a larger estimated death benefit than with a shorter guarantee. Consequently, the projected higher death benefit must be actuarially accounted for by reducing the monthly benefits likely to be paid before the payment of any death benefit.

Table 37 compares the current annuity payment rates under each annuity option. The figures in Table 37 represent the amounts that would be paid to an annuitant and a named survivor at three

Table 36: WRS Annuity Payout Options

Annuity Option Type	Characteristics
Straight Life Annuity	Payable to the annuitant for life. Monthly annuity payment terminates at annuitant's death. No death benefit payable to any beneficiaries.
Modified Life Annuity	
•60 Payments Guaranteed	Provides an annuity payable to annuitant for life. If annuitant dies before 60 monthly payments have been made, remainder of the 60 monthly payments are paid to any beneficiaries.
•180 Payments Guaranteed	Provides an annuity payable to annuitant for life. If annuitant dies before 180 monthly payments have been made, remainder of the 180 monthly payments are paid to any beneficiaries. Available only to participants under age 85. [If over age 85, the guarantee period will be a variable number of months, based on the annuitant's age.]
Joint and Survivor Annuity	
•75% Continued to Named Survivor	Provides an annuity payable to annuitant for life. Annuitant may name one survivor. When annuitant dies, named survivor receives for life 75% of the annuity paid to annuitant prior to death. If the named survivor dies before the annuitant, annuity stops upon the annuitant's death.
•100% Continued to Named Survivor	Provides an annuity payable to annuitant for life. Annuitant may name one survivor. When annuitant dies, named survivor receives for life the same amount of annuity as paid to annuitant prior to death. If the named survivor dies before the annuitant, annuity stops upon the annuitant's death.
•Payments Reduced 25% Upon the Death of Annuitant or Survivor	Provides an annuity payable to the annuitant and one named survivor for life. Upon the death of either the annuitant or named survivor, the survivor receives 75% of the amount of the annuity previously paid.
•100% Continued to One Named Survivor Combined With 180 Payments Guaranteed	Provides an annuity payable to annuitant for life. Annuitant may name one survivor, who can never be changed. Annuitant may also name secondary beneficiaries, who can be changed at any time. When annuitant dies, the named survivor receives for life, the same amount of annuity as paid prior to annuitant's death. If both annuitant and the named survivor die before 180 payments have been made, the remainder of the 180 monthly payments are paid to the secondary beneficiary or beneficiaries. Available only to participants/named survivors whose joint life expectancy is 15 years or more.

different sample ages compared to a $100 per month formula-based benefit paid as a straight life annuity.

Temporary Accelerated Payment Annuity. In addition to an annuity paid under any of the options described above, annuitants who are not yet 62 may receive a temporary accelerated payment annuity until age 62. The monthly amount of this temporary annuity is equal to the estimated monthly Social Security benefit that the retiree will be eligible for at age 62, based on the individual's salary at retirement and assuming full career employment under Social Security. The purpose of this temporary annuity is to provide total retirement income that will be approximately the same before age 62 as after age 62 when the retiree becomes eligible for a Social Security benefit. The cost of the temporary accelerated payment annuity is recouped through reduced WRS payments after age 62.

Taxation of Annuity Payments. The tax treatment of WRS benefits is generally the same for both federal and Wisconsin income tax purposes. There are some limited exceptions to this general rule, however. Some WRS payments are exempt from Wisconsin income tax liability if they were received by: (1) a beneficiary of a deceased annuitant who died before 1968; or (2) an annuitant who was an active employee under the former State Teachers Retirement System or

Table 37: Comparative Monthly Payments Under WRS Formula Annuity Payment Options

	Comparative Initial Monthly Benefit Amount of Annuitant and Beneficiary		
Age of Annuitant/Beneficiary	65/62	65/70	62/65
Type of Annuity Payment Option			
Straight Life Annuity	$100	$100	$100
Modified Life Annuity			
60 Monthly Payments Guaranteed	100	99	99
180 Monthly Payments Guaranteed	95	94	95
Joint and Survivor Annuity*			
75% Continued to One Named Survivor	91	95	92
100% Continued to One Named Survivor	88	93	90
Payments Reduced 25% Upon Death of Annuitant or Named Survivor	93	101	96
100% Continued to One Named Survivor Combined With 180 Monthly Payments Guaranteed	87	92	89

*The amounts under the joint and survivor options are based on the age of both the annuitant and the beneficiary. All other options are based solely on the age of the annuitant. Different age combinations produce different results.

the Milwaukee Teachers Annuity and Retirement Fund before 1964 or who had retired from one of those systems prior to 1964. This exemption also applies to a beneficiary of a person who was a member of one of these two systems prior to 1964 or was retired prior to that date.

In addition, effective with tax year 2009, state law provides an individual income tax exclusion for up to $5,000 of retirement income per person aged 65 or older for taxpayers with adjusted gross income of $15,000 or less ($30,000 or less for married-joint filers). The exclusion applies with respect to distributions from qualified retirement plans under the federal Internal Revenue Code, which includes otherwise taxable WRS payments.

If the annuity payments are not exempt from Wisconsin income tax under one of the above exceptions, they are taxable in full or in part according to the date on which the annuity began.

Effect on Annuity Payments of a Return to WRS Covered Service after Retirement. For WRS participants who retired after June 30, 1996, but before July 2, 2013, the participant must have a minimum 30-day break in WRS employment to remain eligible to receive an annuity benefit. Rehired annuitants will have their annuities canceled if they return to work before the latest of: (1) their annuity effective date; (2) 30 days after their original termination date; or (3) 30 days after ETF receives the annuity application.

However, once the 30-day minimum period has elapsed, if the annuitant is rehired by a WRS employer in a position that meets WRS covered employee participation standards, the annuitant has the option to rejoin WRS covered service at any time and have his or her annuity terminated. In this case the participant will accrue additional creditable service towards a future retirement benefit. A rehired annuitant may also choose not to return to WRS covered service, in which case the participant's current annuity will not be affected.

For WRS participants who retired after July 1, 2013, the participant must have a minimum 75-day break in WRS employment to remain eligible to receive an annuity benefit. In addition, for WRS participants who retired after July 1, 2013, but who work at least two-thirds of what is considered

full-time employment for a participating employer (either directly as an employee or through a contract), the participant's annuity must be suspended and no annuity payments may be made (notwithstanding compliance with the 75-day break rule) until after the participant terminates covered employment or no longer provides employee services under the contract.

Upon suspension of a WRS participant's annuity for re-employment with a participating employer (for participants who retired after July 1, 2013), the amount of the annuity payments which would have been paid under the suspended annuity must be credited to a memorandum account on behalf of the WRS participant. Upon re-employment an additional retirement account for the participant must be established which includes crediting of interest and any contributions made and creditable service earned during the subsequent participating employment.

Upon subsequent retirement (for participants who retired after July 1, 2013), the suspended annuity must be reinstated including any amounts credited to a memorandum account. Upon application, an additional subsequent annuity of the participant must be computed as an original annuity, based upon the participant's subsequent employment and attained age on the effective date of the subsequent annuity.

Division of WRS Benefits and Annuities

As a result of the enactment of 1989 Act 218, ETF is authorized to divide a participant's WRS account or annuity between the participant and his or her former spouse ("alternative payee"). However, such a division can occur only after receipt of a qualified domestic relations order (divorce decree) for a marriage terminated by a court on or after April 28, 1990. Provisions of 1997 Act 125 authorize ETF to divide a participant's WRS account and/or annuity for marriages terminated by a court during the period between January 1, 1982, and April 27, 1990, upon receiving a copy of the qualified domestic relations order. Under Act 125, however, the division applies only with respect to future benefits. Under 2009 Act 28, domestic partners were included in the definition of alternative payee, and could be a specified party in a qualified domestic relations order.

Initiation of a Division of a Participant's WRS Rights and Benefits. The division of a WRS participant's pension rights and benefits can be initiated by ETF upon service of a qualified domestic relations order issued by a court in accordance with the domestic relations law of any state or U.S. territory. In order for ETF to act on the order, *all* of the following provisions must be met by the order:

- The WRS must be named in the order;
- The names, dates of birth, addresses and Social Security numbers of the WRS participant and alternate payee must be specified;
- The decree date must be specified as the date to be used for valuing and dividing the participant's account;
- The alternate payee's percentage share of the participant's account, not to exceed 50% of its value, must be specified;
- The alternate payee's share may not be required to be paid to the Internal Revenue Service or to another alternate payee;
- The WRS participant must certify all potential military service credit;
- Benefits may not be ordered which exceed the value of benefits to which the participant would have been entitled, absent the order;

- Joint ownership of a participant's account may not be assigned;

- Any division of rights or benefits can be undertaken only as specified by law;

- The participant's employer must certify all earnings, service and contributions of the participant through the decree date; and

- ETF may not be required to enforce or monitor the benefits assigned to an alternative payee.

Once a qualified domestic relations order complying with all of the above provisions has been served on ETF, the participant's creditable service amounts and accounts (where the participant is not yet retired) or annuity values (where the participant is retired) are subject to division in the percentages specified in the court order. However, the nature of the division depends upon whether or not the participant is an annuitant or an active employee.

Division When the Participant Has Retired. If the participant has retired and is receiving a WRS annuity, the amount subject to division is the present value of the annuity then being paid. The annuity is divided in accordance with the percentage specified in the court order, and the participant's annuity is recalculated accordingly. The recalculated annuity continues to be paid under the annuity option originally chosen at retirement by the annuitant, provided that option was not a joint and survivor annuity with the alternate payee as the beneficiary. In that case, the annuity to the participant is recalculated and paid as a straight life annuity.

Further, if the annuitant is not receiving an annuity from all parts of the participant's account (for example, the annuitant may have additional contributions on account but has not begun taking an annuity based on those additional contributions), the dollar amounts and creditable service attributable to those accounts are also subject to division. With the exception of designating a joint and survivor annuity, the alternative payee may select any annuity payout option available to WRS participants.

Division When the Participant Has Not Retired. If the participant has not retired on the date of the court order, the creditable service and the dollar amounts credited to all parts of the participant's account are divided in accordance with the percentage specified in the order. The creditable service and dollar amounts due the alternate payee are transferred to a separate account established and maintained by ETF. The alternate payee then has complete control and ownership rights to this separate account.

If the participant has not attained the minimum age for retirement under current law, the alternate payee may request that the value of the new, separate account maintained in the WRS employee accumulation account be paid as a lump sum amount. The alternate payee also has the option of leaving the amounts in the account in order to qualify for an annuity at a later date.

Once the participant has reached minimum retirement age (but is still working), the alternate payee may no longer take a lump sum payment and must take an annuity. The alternate payee's annuity is the higher of the money purchase annuity or a formula-based annuity. Where the alternative payee receives a formula-based annuity, the final average earnings amounts used to compute the annuity are based on the participant's three highest years of earnings as of the first day of the annual earnings period in which the alternate payee's annuity was first effective. Thus, although the participant and the alternate payee have separate WRS accounts after the decree date, these accounts are still linked in that the participant's actual final average earnings amount is also applied to the alternate payee's annuity. The intent of this arrangement is to allow the alternate payee to benefit from the participant's future salary growth

following the divorce decree but prior to the start of a retirement benefit. As of August, 2018, 11,507 alternative payee accounts had been established by ETF pursuant to a qualified domestic relations order.

Although a participant's years of creditable service may be divided pursuant to a qualified domestic relations order, any benefit or right available to the participant based on the attainment of a certain length of service is not itself divisible. For example, if a participant had 30 years of creditable service and was eligible for an early retirement with an unreduced annuity and a qualified domestic relations order allocated 15 years of creditable service to an alternate payee, the participant would still be deemed to have 30 years of service for the purpose of taking the early retirement. Thus, the determination of the participant's normal retirement date is based on the individual's total service that would have been recognized had the number of years of creditable service not been divided by the court decree.

Disability and Survivor's Benefits

Under certain conditions, disability and survivor's benefits may be payable to WRS participants or their beneficiaries.

Section 40.63 Disability Benefits Program. Under s. 40.63 of the statutes, disability benefits are available to WRS active employees that become totally and permanently disabled prior to retirement. To qualify for this disability benefit, the employee must meet the following requirements:

- The employee is not receiving benefits under the long-term disability benefits program (described in the next section);
- The employee must not have reached the normal retirement age for his or her employment classification;
- During the period starting seven full calendar years before the date of the disability annuity application, the employee must have either a total of at least five years of creditable service, or at least one-half year of creditable service in each of five of the years (if the disability resulted from the covered employment, the service requirement does not have to be met, but the application for a disability benefit must be received by ETF within two years of the employee's last day of paid employment);
- The employee must not be eligible for any further earnings from his or her employer; and
- Medical evidence from two physicians must be submitted substantiating the fact that the disability is total and permanent and that it prevents the employee from any further gainful employment.

For protective employees only, the individual may qualify for disability benefits even though he or she may still be able to engage in some other type of work. Further, the protective service employee must also meet the following requirements:

- The disability must occur after age 50 but before age 55; and
- The employee must have at least 15 years of creditable service.

In determining the amount of a disability annuity, the benefit is computed by multiplying the formula factor for the individual's employment classification times the monthly final average earnings at the time of the disability times creditable service. However, in this case, the creditable service calculation includes all covered service from the date of initial coverage under WRS to the date of the disability plus assumed service from that latter date to the date of normal retirement age for the individual's employment classification. Military

service credits, if any, may also be applied.

For example, if a teacher was age 50 at the time of disability (January 1, 2000) and had 15 years of creditable service, the assumed service to normal retirement at age 65 would be 15 years (65 minus 50). The additional 15 years of service assumed in this case would give the disabled employee a total of 30 years of creditable service. Assuming monthly final average earnings of $2,000, a normal form straight life monthly annuity of $1,009.50 would result (1.765% formula factor for 15 years and 1.6% formula factor for 15 years times 30 years of creditable service times $2,000 monthly final average earnings).

The annuitant taking a disability benefit may also choose any of the annuity options described earlier, but only for that portion of the disability benefit which would have been payable as a regular retirement benefit. The temporary Social Security benefit option is not applicable to disability annuities because it is anticipated that anyone qualifying for a disability benefit from WRS will also qualify for a Social Security disability benefit. Also, no lump sum payments are permitted for disability annuities.

From 1992 to 2017, the s. 40.63 program was only available to employees who had been continuously employed under the WRS since before October 16, 1992. However, as noted in the following section, the program was reopened to all eligible WRS employees beginning January 1, 2018.

Long-term Disability Insurance Benefits Program. In addition to the program under s. 40.63 of the statutes, from 1992 to 2017, ETF administered a long-term disability insurance benefits program established by administrative rule in response to federal legislation relating to age discrimination in employment. Changes to federal age discrimination laws in the 1990 federal Older Workers Benefit Protection Act (OWBPA) prohibited employee benefit plans, including those offered by the WRS, from discriminating against older workers. Public employee pension systems were given until October 16, 1992, to bring any nonconforming benefit plans into compliance with the new federal law.

Discussions between ETF and federal officials at the time determined that the existing WRS s. 40.63 disability benefit plan would likely not be in compliance with the provisions of OWBPA. Consequently, a new disability benefit plan was developed to provide newly employed older workers under the WRS with benefits equal in amount or cost to those available to younger workers. However, under OWBPA, the existing s. 40.63 disability benefit plan was also permitted to remain available to current WRS participants, provided that: (1) a new nondiscriminatory plan was in place by October 16, 1992; and (2) current WRS participants who were covered under the s. 40.63 disability benefit plan were permitted to elect coverage under the new plan.

The s. 40.63 disability benefit plan was deemed not to be in compliance with OWBPA primarily because benefits under that plan are based on assumed service up to the employee's normal retirement age. From a benefits design standpoint, this type of arrangement is desirable since a disabled employee is ensured an annuity benefit based on his or her expected normal work life. However, under OWBPA provisions this mechanism was construed as discriminatory because employees of differing ages receive different disability annuity benefits solely because of their respective ages.

For example, a 36-year old general employee with six years of creditable service who becomes disabled under the s. 40.63 plan would be granted 29 years of additional service credits, based on an assumed normal retirement at age 65. As a result, the individual would have a total of 35 years of service on which the s. 40.63 disability benefit would be calculated. However, a 56-year old employee with the same six years of creditable service would only be granted nine years of additional service credits, based on an assumed normal

retirement at age 65. Both employees have the same number of years of creditable service at the outset and, assuming that each had the same final average salary, the 56-year old employee would receive a benefit equivalent to just 42.8% of the benefit the 36-year old employee would receive.

The long-term disability insurance benefit was promulgated by administrative rule to meet the federal OWBPA requirements. Under the revised plan, a disabled WRS participant received a basic benefit of 40% of his or her final average salary at the time of the disability. Protective classification employees not covered by Social Security received 50% of their final average salary at the time of the disability. Further, as long as the disabled participant continued to receive disability benefits and met certain other conditions, a contribution of 7% of the employee's final average salary was credited to the employee's additional contribution account. The actual final average salary of the employee used for these calculations was adjusted annually by the same percentage amount applied to post-retirement Core Fund annuity adjustments. These additional contributions were for the purpose of securing a money purchase annuity at the time the disabled participant reached normal retirement age.

Eligibility for this long-term disability insurance benefit program was generally similar to that required for the s. 40.63 program. However, minimum service requirements were eased somewhat, and required that an applicant need have only one-third year of creditable service in each of five calendar years during a period including the year of application and the seven preceding calendar years.

Payment of the long-term disability insurance benefit ceases upon the individual's recovery, death or attaining age 65. However, a WRS active participant who became disabled after attaining ages 61 to 70 would be subject to special benefit cessation provisions allowing from 12 months to five years of long-term disability insurance benefits coverage, depending upon the participant's age at the time of incurring the disability.

In 2008, the U.S. Supreme Court ruled in *Kentucky Retirement Systems v. EEOC* that Kentucky's disability benefits program, which is similar to the s. 40.63 program, did not violate federal laws prohibiting age discrimination. In 2016, based on an analysis conducted by its disability actuary, ETF proposed closing the newer disability benefits program and re-opening the s. 40.63 program to all participants for the purpose of reducing program complexity. On January 1, 2018, the long-term disability insurance benefits program was closed to new claims and the s. 40.63 disability benefits program was reopened to all eligible WRS employees.

Duty Disability Benefits. Under s. 40.65(2) of the statutes, members of protective service occupations may qualify for disability payments under the duty disability program. Under the duty disability program, a protective service worker is entitled to a duty disability benefit if the employee is injured while performing his or her duty or contracts a disease as a result of his or her occupation, and the disability is likely to be permanent. In addition, the disability must either:

- Cause the person to retire from his or her position;
- Cause a reduction in pay or position or result in assignment to light duty; or
- Adversely affect the employee's promotional opportunities.

Prior to 1982, benefits under this program enabled a protective worker with a permanent, job-related injury to retire and receive 50% of his or her final salary for life. Where the injury resulted in the employee's death, a surviving spouse received 33% of the employee's salary at the time of disability until the death or remarriage of the surviving spouse. Once an employee was determined

eligible for duty disability benefits, the employer paid the benefits directly to the disabled worker or surviving beneficiary.

The duty disability program was substantially modified in 1982 with the enactment of Chapter 278, Laws of 1981.

First, to provide for a sharing of risk, disability claims are paid from a fund supported by contributions from all WRS employers with protective workers. The program is administered entirely by ETF. Table 38 summarizes the calendar year 2019 employer contribution rates for the program. These contribution rates are applied to the employer's total payroll for protective classification employees. The rates are experience-based, tied to the employer's actual claims history during the preceding three years. These contribution rates are in addition to any regular WRS employer-required contributions for protective employees.

Table 38: Duty Disability Program Employer-Required Contributions (Calendar Year 2019)

Contribution Rate* (as a % of Covered Payroll	Claims as a % of Covered Payroll	Number of Claims
0.25%	<=1.5%	1
0.50	>1.5 but ≤3.0	2
1.00	>3.0 but ≤4.5	3
1.75	>4.5 but ≤6.0	4
2.75	>6.0 but ≤7.5	5
4.00	>7.5 but ≤9.0	6
5.50	>9.0 but ≤10.5	7
6.60	Claims > 10.5	8 or more

*Employers pay the lower of the contribution rate associated with either their claims as a percentage of payroll or their number of claims.

Second, to ensure that duty disability payments do not exceed the amount of regular employment-related income received at the time of the injury, the duty disability benefits are reduced by the amount of any income received from other employment, retirement annuities, other disability benefits, worker's compensation, unemployment compensation or Social Security.

Finally, benefits paid to disabled protective employees are set at 75-80% of salary at the time of the disability and are adjusted each year based on the previous year's Social Security salary index or the previous year's WRS Core annuity dividend (depending on the employee's age and other benefits they are receiving).

Survivor's Benefits. Upon the death of a WRS participant who has not yet started receiving a retirement annuity or a disability benefit, a survivor's benefit is payable. As discussed previously, when a WRS annuitant dies, the survivor's benefit (if any) is determined by the type of annuity option originally selected.

For those WRS participants who have not yet retired, the amount of the survivor's benefit will vary depending on the participant's age at the time of death, the amount of employee-required contributions in the individual's retirement account and the relationship of the beneficiary (or beneficiaries) to the decedent.

If a participant dies as an inactive member, the benefit will always include the full amount of employee-required and employee additional contributions in the decedent's employee accumulation account, plus accumulated earnings.

If an inactive participant dies whose employment began before 1966, the benefit may also include the employer contributions made to the employee accumulation account prior to the date the individual became subject to current law formula benefit provisions, plus accumulated earnings.

If a participant dies as an active WRS member *before* reaching the minimum retirement age threshold of 55 (50 for protectives), the amount of the benefit payable to the beneficiary is equal to twice the employee-required contribution

accumulations, plus any voluntary additional contributions that were made by the employee.

If a participant dies as an active WRS member *after* reaching the minimum retirement age threshold of 55 (50 for protectives), the amount of the benefit payable to a *living* beneficiary (or to a trust in which a living person has a beneficial interest), is equal to the *higher* of either: (1) twice the employee-required contribution accumulations, plus any voluntary additional contributions that were made by the employee or employer; or (2) a special death benefit based on both employee and employer contributions, including any voluntary additional contributions that were made by the employee or employer. This latter special death benefit amount is calculated as though the individual retired on the date of death and selected a joint and survivor annuity that is continued in full to the beneficiary(ies). The present value of this benefit may be paid to the beneficiary as a lump sum.

Table 39 summarizes the number of lump-sum death benefits paid by the WRS over the period 2008 to 2017.

Table 39: Lump-Sum Death Benefit Payments

Year Ending December 31	Death Benefits Granted	Payment Amounts
2008	512	$28,802,363
2009	534	23,455,677
2010	584	29,124,404
2011	670	33,130,309
2012	556	24,826,569
2013	740	37,971,937
2014	662	32,870,457
2015	855	31,746,259
2016	968	30,365,637
2017	1,362	31,302,003

If a participant dies as an active WRS member *after* reaching the minimum retirement age threshold of 55 (50 for protectives) and the beneficiary is an estate or another entity that is *not* a living person or a trust in which a living person has a beneficial interest, the amount of the benefit is equal to twice the employee-required contribution accumulations, plus any voluntary additional contributions that were made by the employee.

The preceding chapter described the principal types of retirement-related benefits available to WRS participants. This chapter describes the types of adjustments that may be made to annuity payments once a participant has retired.

Annuity payments under most retirement plans, particularly public plans, are deemed to be contractual in nature and are fixed at the time of retirement. Accordingly, it is not generally expected that the computed initial benefit will be subject to adjustment after that time. However, the Wisconsin Legislature has recognized that the impact of inflation over time reduces the value of annuities being paid to retirees. Consequently, it has acted to address the inflationary erosion of annuity values by providing a mechanism to grant annual post-retirement dividends. However, as discussed below, these dividends may also be reduced as a result of investment losses.

In addition, the Legislature has periodically granted special benefit supplements to compensate long-term retirees for the effects of inflation and to recognize that subsequent benefit improvements have been granted since the annuitant originally retired. Each of these types of post-retirement adjustment is described in this chapter.

Post-Retirement Dividend Payments

Post-retirement WRS annuity benefit adjustments in the form of annual dividend distributions have been authorized under s. 40.27(2) and s. 40.28(2) of the statutes. These dividends represent the payment to retirees of investment earnings accruing in the Core Fund and Variable Fund annuity reserves that exceed an assumed 5.0% annual rate of growth. The amounts in the annuity reserve are the funds set aside at the time of an employee's retirement for payment of the retiree's annuity benefit over the course of his or her expected lifetime, as increased by the annual earnings assumption rate of 5.0%.

Authority to Grant Dividends. Historically, the payment of any form of post-retirement dividend to annuitants of the state-administered retirement system was long subject to restrictions imposed by the Wisconsin Constitution. Prior to April, 1956, Article IV, Section 26 of the Wisconsin Constitution barred the Legislature from granting any retirement benefit increases to retirees. This provision of the State Constitution originally read as follows:

> "(Article IV) Section 26. The Legislature shall never grant any extra compensation to any public officer, agent, servant or contractor, after the services shall have been rendered or the contract entered into; nor shall the compensation of any public officer be increased or diminished during his term of office."

Despite this pre-1956 prohibition on dividend payments to retirees, the Legislature had earlier authorized the former State Teachers Retirement System to grant dividends. Under Chapter 459, Laws of 1921, the State Teachers Retirement System Board was required "…from time to time [to] order and make such distribution of gains and savings as it deems equitable..." (s. 42.34, 1921 Statutes). However, the Board did not actually grant a dividend until 1954, when a 4.5% increase was provided to annuitants. The increase was not

actually called a dividend but was characterized instead as a "correction" of annuity table errors that had occurred before 1954. This payout was not challenged in the courts. Following the successful distribution of these dividend payments, the State Teachers Retirement System Board continued to grant dividends on a periodic basis.

Subsequently, the Legislature enacted Chapter 110, Laws of 1967. This legislation authorized the former Wisconsin Retirement Fund to use certain annuity reserve surpluses to declare dividends to annuitants. However, an Attorney General's opinion (56 OAG 267) requested by the Secretary of the Department of Administration opined that the payout was constitutionally impermissible. The net effect of the opinion appeared to be that Wisconsin Retirement Fund reserves could not be used either to decrease employer contribution rates or to increase annuitant benefits.

Following this Attorney General's opinion, surpluses continued to build in the Wisconsin Retirement Fund's annuity reserves. In 1969, a new Attorney General issued an opinion (58 OAG 43) to the ETF Secretary opining that interest earned on annuitant benefits held in trust by the Fund could properly flow to retirees. This opinion stated that such a conclusion was warranted "since one of the fundamental principles involved in the establishment of an annuity is the inclusion in the calculation of the annuity of the expected interest income on amounts upon which the annuity is based. The distribution to annuitants of surpluses in the annuity reserve fund would therefore not be a grant of compensation within the purview of Art. IV, sec. 26, Wis. Const., but rather an adjustment of annuities to reflect the actual investment experience which created such surplus" (58 OAG at p. 45).

Following this ruling, the Wisconsin Retirement Fund Board granted a dividend in 1969 to annuitants who had retired before that year. A subsequent Attorney General's opinion (58 OAG 107) held that a proposed 1974 constitutional amendment to Article IV, Section 26 would remove all doubt as to the authority of the Board to grant a dividend to annuitants since the language of the amendment explicitly authorized expenditures to increase benefits. This constitutional amendment was subsequently ratified. The separate Milwaukee Teachers Retirement Fund did not grant any dividend distributions until 1978, primarily because sufficient surpluses had not been generated in its fixed annuity reserve account for such payments.

Investment Earnings Surpluses Required for the Payment of Dividends. Dividend allocations are made from investment earnings surpluses that accrue to the Core Fund and the Variable Fund annuity reserves. Prior to an individual's retirement, contributions are made by the employee and by the employer respectively to the employee's individual accumulation account and to the combined employer accumulation account. At retirement, assets from the individual employee's account, plus an actuarially determined additional amount from the employer accumulation account sufficient to pay a retirement benefit for the life of the annuitant, are transferred to the Core Fund (and when applicable, the Variable Fund) annuity reserve. The amounts transferred from the employer accumulation account are based on standard mortality tables and factor in a statutory assumed investment earnings rate of 5.0% annually on the transferred amounts.

Surpluses in the annuity reserve account can develop due to several factors. These include: (1) investment earnings in the annuity reserve above the 5.0% assumed rate; (2) earnings generated by carryover surpluses in the account itself; (3) gains from mortality experience; and (4) windfall gains from changes in actuarial assumptions governing the operation of the retirement system. The assumed interest rate of 5.0% annually is the key factor. This rate represents the actuarially assumed rate of investment earnings needed to maintain the Core Fund (and Variable Fund) annuity reserve in sound condition to meet all future annuity payouts.

Any earnings above the assumed level are available for distribution to annuitants as investment dividends.

When Chapter 96, Laws of 1981, merged the three state-administered predecessor retirement systems into the WRS, the 5.0% assumed benefit earnings rate was defined by statute for the first time. Previously, this rate had been set by rule by the ETF Board. Further, the Chapter 96 provisions required the ETF Board to distribute dividends whenever Core Fund or Variable Fund annuity reserve surpluses were sufficient to generate an increase of at least 2.0% annually for all annuities. This threshold was modified under 2003 Act 153, which provided that dividends were to be distributed when investment earnings on annuity reserve balances exceeded the assumed benefit rate by at least 0.5% (or by a different percent, as specified under ETF rules). The dividend amount is expressed as a percentage of the annuitant's current annuity [the original annuity plus any intervening dividend adjustments]. Dividends are not paid on any supplemental benefits amounts separately granted by the Legislature.

Dividend Calculations. Annually, the WRS actuary determines the amount of dividends available for payment from the Core Fund's annuity reserve by comparing the reserve's year-end balances to the actuarial present value of Core Fund annuities payable plus other reserve requirements. The Core Fund's annuity reserve dividend calculations for the 2017 calendar year (distributed in 2018) are presented in Table 40. A similar type of dividend calculation is made for the Variable Fund's annuity reserve; however, under s. 40.28(2) of the statutes the resulting dividend rate is always reduced to the next lowest whole number, with any portions of a full percentage increase disregarded.

Table 41 summarizes the Core Fund and Variable Fund annuity dividend rates that have been authorized by the ETF Board over a 10-year period.

Table 40: Development of the 2017 Core Fund Annuity Dividend Payable in 2018 -- In Thousands

	Assets	Liabilities
Ending Balance December 31, 2016	$51,972,000	$50,941,400
Closing Adjustments	-300	0
Variable Terminations	95,900	95,900
2017 Core Annuity Adj.: 2.0%	0	967,800
Beginning Balance January 1, 2017	$52,067,600	$52,005,100
Increases		
Reserve Transfers	$3,373,700	$3,373,700
Regular Interest	2,567,100	2,567,100
Additional Earnings	1,602,400	0
Addition for Study/Mortality Reserve	0	301,100
Other	0	53,800
Total Increases	$7,543,200	$6,295,700
Decreases		
Annuities & Lump Sums	$4,710,800	$4,710,800
Credit Re-establishments	0	0
Subtraction for Study/Mortality Reserve	0	0
Other	0	0
Total Decreases	$4,710,800	$4,710,800
Ending Balance December 31, 2017	$54,900,000	$53,590,000

Ratio:

$$\frac{\text{Assets in Excess of Liabilities}}{\text{Liabilities}} = 0.024 = 2.4\ \%\ \text{Dividend}$$

(Rounding affects some totals)

WRS Core Fund dividend payments are not permanent, on-going benefit increases payable for the remaining lifetime of the annuitant. The continued payment of the dividends is actually tied to future favorable investment experience for the Core Fund's annuity reserve that will be sufficient to maintain the surpluses from which the dividends are paid. Investment losses, if severe enough, can result in a reduction of dividends then being paid. Such reductions in Core Fund dividends were experienced in 2009 through 2013, due to significant 2008 declines in investment returns. Any increase or decrease in dividends is determined annually in March, and takes effect with the May 1 monthly annuity payment. Dividend payments on the Variable Fund's annuity reserve

Table 41: Post-Retirement Core and Variable Fund Dividend Adjustments -- By Year Payable

Year Payable	Percentage Change Core	Variable
2009	-2.1%	-42.0%
2010	-1.3*	22.0
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

*Because the initial amount of an annuity cannot be reduced and some annuitants were at this minimum, the reductions for remaining annuitants required additional adjustments of -0.2% in 2010, -0.3% in 2011, -3.0% in 2012, and -6.6% in 2013. The percentages shown in the table include these adjustments.

assets are directly tied to current investment returns realized in the equity markets. Unfavorable short-term investment results can actually translate into dividend reductions. As Table 41 demonstrates, dividend reductions associated with the Variable Fund occurred in 2009, 2012, and 2016.

Table 42 shows the amounts that have been reserved in the Core Fund annuity reserve during the last 10 years for the continued payment of current dividends from that Fund.

Table 42: Estimated Value of Core Annuities Dividends Distributions - In Millions

Year Dividend First Paid	Dividend Value Estimated Total (Current Year Plus Future Years Payouts)
2009	-$768.0
2010	-408.0
2011	-350.1
2012	-1,666.8
2013	-1,260.8
2014	1,972.7
2015	1,345.0
2016	249.5
2017	1,030.6
2018	1,310.0

Post-Retirement Benefit Supplements

A benefit supplement is an actuarially unfunded and unplanned increase in benefits for retirees that is granted by an employer, either through unilateral action or as a result of collective bargaining negotiations.

Authority to Grant Benefit Supplements. Prior to April, 1956, the Wisconsin Constitution prohibited the payment of supplemental retirement benefits to public employees. Even though this constitutional limitation was in place, the Legislature still enacted Chapter 551, Laws of 1951, providing a post-retirement annuity supplement to retirees under the former State Teachers Retirement System. Chapter 551 provided that teachers who had retired prior to June 20, 1951, would be paid an annuity supplement of $1 per month for each year of teaching experience in Wisconsin public schools, teachers colleges or the University. The supplement was to be paid from the annuity reserve fund of the State Teachers Retirement System. The Legislature further required each qualifying annuitant to pay $100 into the state's general fund as a condition for receiving the supplement. This provision was included in the new law to make it appear that each qualifying annuitant was entering into a new retirement contract with the state in order to receive the supplement. It was hoped that this type of arrangement would be able to withstand an anticipated constitutional challenge that any type of supplement would be extra compensation to a former public employee that was forbidden by Article IV, Section 26 of the Wisconsin Constitution.

The expected challenge came in *State ex rel. Thomson v. Giessel*, (1952) 262 Wis. 51 (the "first *Giessel* case"). In this case, the Attorney General sought a writ to require the Director of the Department of Budgets and Accounts to audit and certify vouchers for the payment of supplemental retirement benefits to 33 retired teachers. The

State Supreme Court held that these supplemental benefits were clearly extra compensation for services rendered in the past and were, therefore, constitutionally impermissible. The Court also rejected the idea that each qualifying annuitant's payment of $100 resulted in the creation of a new retirement contract that might make the supplements constitutionally valid.

In addition, the Court suggested that in light of the clear constitutional restriction on the payment of supplemental retirement benefits, the Legislature could consider amending the State Constitution: "If, now, to underwrite certain contracts against the effects of inflation is deemed, by the people, to be desirable, or if they considered that the cause of public service requires power in the Legislature to grant bonuses, compensation to retired public servants, the road to amending the Constitution is well travelled." (262 Wis. 64).

The Legislature responded to this case by enacting Chapter 434, Laws of 1953. Chapter 434 provided for the rehiring on a standby basis of teacher annuitants who had retired before June 30, 1951. These "rehired" annuitants were to serve as potential substitute teachers and were to be paid for such services. The supplemental payments were set at $25 per month for each month the retired teacher remained on the substitute teacher roster, subject to an overall monthly payment ceiling of $100 when the retiree's regular annuity and supplement were combined. These supplements were paid from a general purpose revenue (GPR), sum sufficient appropriation created under the Department of Public Instruction.

State ex rel. Thomson v. Giessel, (1953) 265 Wis. 558 (the "second *Giessel* case") was brought on a similar basis as the first *Giessel* case to compel payment of these new supplemental payments. In this decision, the Court declined to consider the motives of the Legislature in enacting the supplemental benefits and found the new contracts to be valid on their face. In effect, the Court held that a law providing compensation to retired teachers who made themselves available as substitute teachers created a valid employment contract between the state and the retired teachers. Accordingly, the Court ordered the payment of the supplements.

The Legislature further responded to the *Giessel* cases by passing joint resolutions in the 1953 and 1955 legislative sessions to amend Article IV, Section 26 of the State Constitution to permit the payment of post-retirement supplemental benefits solely to retired teachers. The proposed amendment also required the Legislature to adopt any such increases by a three-fourths roll call vote. The effect of this amendment was to permit the payment of annuity supplements to retirees under the State Teachers Retirement System and the Milwaukee Teachers Retirement Fund. It did not authorize supplements for members of the Wisconsin Retirement Fund. The amendment was adopted at referendum in April, 1956.

Subsequently, the 1971 and 1973 Legislatures adopted joint resolutions to further revise Article IV, Section 26. These changes authorized the Legislature to provide post-retirement supplements to retirees under *any* public retirement system and required that any such additional benefits be funded by appropriations from the state's general fund. The effect of this second constitutional amendment was to authorize the payment of supplements to retirees under the Wisconsin Retirement Fund. This amendment was adopted at referendum in April, 1974.

As a result of these constitutional amendments, the Legislature was free to grant post-retirement benefit supplements to retirees under the state-administered retirement systems. The Legislature has acted to provide post-retirement benefit supplements on several occasions since 1956. These legislative actions are summarized in Table 43.

Total Amount of Benefit Supplements Paid. Table 44 summarizes total general purpose revenue (GPR) spending on all post-retirement benefit

supplements since 1954, when the first supplements were paid. The table lists two types of supplement payments. The first column, headed "Substitute Teacher Roster Benefits," were "supplements" paid between 1953-54 and 1965-66 and found permissible by the Wisconsin Supreme Court prior to the constitutional amendment that explicitly authorized such supplements. The second column, headed "Supplemental Benefits" were supplements granted under the procedures authorized by the constitutional amendments. The figures for 1953-54 through 1974-75 represent supplemental benefit budgeted amounts, since actual expenditure data from this period is lacking. This data is presented on a fiscal year basis. Beginning in 1976, however, actual calendar year expenditure data is presented for the cost of the supplemental benefits.

The 1987 Special Investment Performance Dividend Lawsuit and Settlement. Provisions of 1987 Act 27 authorized a one-time transfer of $230 million from the Fixed (now Core) Fund's transaction amortization account. This amount was apportioned to the employee, employer and annuity reserves based on the ratio of each reserve to the total assets of the Fixed (now Core) Fund. The annuity reserve received a total of $84.7 million from the transfer and from certain carry-over balances remaining from the prior year. Act 27 directed the ETF Board to distribute the amounts received by the annuity reserve as a "special investment performance dividend" (SIPD) to any annuitant receiving GPR-funded supplemental benefits under Chapter 337, Laws of 1973 and 1983 Act 394. Where the SIPD payment equaled the supplemental benefit, the supplemental benefit was eliminated. Where the SIPD payment was less than the supplemental benefit, the supplemental benefit was reduced by the amount of the SIPD payment. In some cases, the SIPD payment even exceeded the former supplemental benefit payment, in which case the retiree received a benefit increase.

Litigation over the manner of this SIPD distribution was commenced in 1988 by certain employee and annuitant groups and continued for the next nine years. In early 1997, the Wisconsin Supreme Court held in *Wisconsin Retired Teachers Association, Inc. v. Employee Trust Funds Board* that the method of distribution of the SIPD within the annuity reserve resulted in an unconstitutional taking of private property without just compensation. Among other things, the Supreme Court ordered that: (1) the state return the amounts previously paid from the Fixed (now Core) Fund's annuity reserve under the SIPD legislation, together with accrued interest; (2) attorneys' fees be awarded from the recovered funds; (3) any undistributed SIPD funds remaining in the annuity reserve be unencumbered; and (4) the total recovered be equitably distributed to WRS annuitants.

Subsequently, under the direction of the Dane County Circuit Court, the parties agreed that the state would be required to pay a settlement in the amount of $215,000,000 GPR on or before November 1, 1997. Of this total amount, $8,387,402 would be reserved for attorneys' fees, and the balance of $206,612,598 would be restored to the WRS annuity reserve account for equitable distribution to WRS annuitants, as determined by the ETF Board. The necessary $215 million GPR to implement the settlement was appropriated by the 1997-99 biennial budget act.

All further SIPD payments were terminated in late 1997 and the settlement amounts were distributed under procedures approved by the ETF Board. Under the Board's distribution plan:

- Any retiree whose annuity was first effective November 1, 1987, or earlier received a 2.4% permanent increase in the amount of his or her annuity;

- Lump sum payments were distributed on December 1, 1997, to an estimated 42,400 current and former annuitants (these payments represented the amount of dividends that would have been payable over nearly 10 years, had the April 1, 1988, annuity dividend originally been 2.4%

Table 43: Post-Retirement Benefit Supplements				
Legislative Authority & Annuitant Group*	Supplement Amount	Requirements	Limitations	Effective Date
Chapter 376, Laws of 1957 STRS	•$1 per month for each year of state teaching, not to exceed 40 years.	•Retired state teacher whose annuity was granted prior to January 1, 1952. •Age 65 or older. •At least 20 years of state teaching.	•Supplement plus original annuity may not exceed $100 per month. •Supplement terminates at death of retiree; death benefits not affected. •Must elect either this supplement or earlier substitute teacher roster benefits (Chapter 434, Laws of 1953).	July 1, 1957
Chapter 549, Laws of 1957 MTRF	•$1 per month for each year of Milwaukee teaching, not to exceed 40 years.	•Retired state teacher whose annuity was granted prior to January 1, 1952. •Age 65 or older. •At least 20 years of state teaching.	•Supplement plus original annuity may not exceed $150 per month. •Supplement terminates at death of retiree; death benefits not affected. •Must elect either this supplement or earlier substitute teacher roster benefit.	August 1, 1957
Chapter 120, Laws of 1959 STRS	•Increase in the Chapter 376, Laws of 1957, supplement from $1 per month to $1.25 per month for each year of state teaching up to 20 years. •$1 per month for each year of teaching in excess of 20 years.	•Retired state teacher whose annuity was granted prior to January 1, 1952. •Age 65 or older. •At least 20 years of state teaching.	•Total supplement may not exceed $45 per month. •Supplement plus original annuity may not exceed $110 per month. •Supplement terminates at death of retiree; death benefits not affected. •Must elect either this supplement or earlier substitute teacher roster benefits.	July 1, 1959
Chapter 168, Laws of 1961 STRS	•Annuitants receiving supplement under Chapter 120, Laws of 1959, may also receive the substitute teacher roster benefit.		•Must have received substitute teacher roster benefit prior to December 1, 1960.	July 1, 1961
Chapter 324, Laws of 1965 STRS, MTRF	•$5 per month for each year of Wisconsin teaching, not to exceed 32 years.	•At least 20 years of Wisconsin teaching prior to June 1, 1965. •Age 60 or older. •Not eligible for formula annuity as created by Chapter 251, Laws of 1965 (1965 Retirement Benefit Improvement Act).	•Total calculated supplement payable reduced by the sum of the following: (a) retiree's initial monthly annuity amount; (b) dividend payments on the initial monthly annuity and other supplements; (c) teacher roster benefit payments; (d) Social Security payments; and (e) the value of any straight life annuity which could have been purchased by the retiree's account total at the date of retirement. •Supplement terminates at death of retiree; death benefits not affected.	January 1, 1966
Chapter 290, Laws of 1971 STRS, MTRF	•Increase in Chapter 324, Laws of 1965, supplement from $5 per month to $6 per month for each year of Wisconsin teaching, not to exceed 40 years.	•At least 10 years of Wisconsin teaching prior to June 1, 1965. •Age 60 or older. •Not eligible for formula annuity as created by Chapter 251, Laws of 1965.	•Total calculated supplement payable reduced by the sum of the following: (a) retiree's initial monthly annuity amount; (b) dividend payments on the initial monthly annuity and any other supplements; (c) teacher roster benefit payments; (d) Social Security payments; and (e) the value of any straight life annuity which could have been purchased by the retiree's account total at the date of retirement. •Supplement terminates at death of retiree; death benefits not affected.	July 1, 1972

Table 43: Post-Retirement Benefit Supplements (continued)

Legislative Authority & Annuitant Group*	Supplement Amount	Requirements	Limitations	Effective Date
Chapter 337, Laws of 1973 WRF, STRS, MTRF	• 4% x number of full calendar years between time annuity began and January 1, 1974, x the lesser of $250 or the initial monthly annuity amount. Supplement is in addition to any previous supplement received.	• Any retiree who received an annuity for the month of September, 1974.	• Supplement payable to surviving beneficiary. • Continued payment of supplement contingent upon future GPR appropriations for this purpose.	Sept. 1, 1974
Chapter 182, Laws of 1977 WRF	• 4% x number of full calendar years between time annuity began and January 1, 1974, x the lesser of $250 or the initial monthly annuity amount. Supplement is in addition to any previous supplement received.	• Any municipal police officer or fire fighter who received an annuity for the month of September, 1974. (Annuitants under the local police and fire pension funds previously had not received a supplemental benefit under provisions of Chapter 337, Laws of 1973.)	• Supplement payable to surviving beneficiary. • Continued payment of supplement contingent upon future GPR appropriations for this purpose.	August 1, 1978
Chapter 336, Laws of 1977 WRF, STRS, MTRF	• Chapter 337, Laws of 1973, supplements paid to a beneficiary is calculated based on beginning date of the decedent's annuity rather than the beginning date of the survivor annuity.			August 1, 1978
1983 Act 394 WRS	• 4% x 5 years x the lesser of $200 or the initial monthly annuity amount. Supplement is in addition to any previous supplement received.	• Any retiree who received an annuity for the month of September, 1974.	• $40 maximum benefit. • Supplement payable to surviving beneficiary. • Continued payment of supplement contingent upon future GPR appropriations for this purpose.	August 1, 1984
1997 Act 26 WRS	• An amount by which restored Chapter 337, Laws of 1973, and 1983 Act 394 payments are exceeded by the net of previous special investment performance dividend payments plus dividends less any base annuity increases arising under *Retired Teachers Assn v. ETF*.	• Any retiree who received an annuity in the month of September, 1974, who would experience a reduction in benefits as a result of a court ordered cessation of special investment performance dividend (SIPD) payments.	• The granting of this benefit supplement occurred as a consequence of a Wisconsin Supreme Court decision that found the SIPD unconstitutional. The Legislature did not wish to reduce an affected annuitant's benefit once SIPD payments were terminated.	December 1, 1997

*Affected annuitants covered under indicated retirement system: STRS = State Teachers Retirement System; MTRF = Milwaukee Teachers Retirement Fund; WRF = Wisconsin Retirement Fund; WRS = Wisconsin Retirement System

Table 44: Costs of Post-Retirement Supplemental Benefits (GPR)

Fiscal Year	Budgeted Amounts: Substitute Teacher Roster Benefits	Budgeted Amounts: Supplemental Benefits
1953-54	$200,000	$0
1954-55	450,000	0
1955-56	306,100	0
1956-57	294,400	0
1957-58	22,900	586,000
1958-59	22,000	642,000
1959-60	21,900	465,000
1960-61	22,000	455,000
1961-62	9,500	511,000
1962-63	8,600	490,000
1963-64	1,700	460,000
1964-65	1,000	440,000
1965-66	0	967,000
1966-67	0	1,349,000
1967-68	0	928,900
1968-69	0	880,000
1969-70	0	894,000
1970-71	0	877,000
1971-72	0	750,000
1972-73	0	1,545,800
1973-74	0	1,947,500
1974-75	0	9,980,000

Calendar Year	Actual Expenditures: Supplemental Benefits
1976	$9,631,000
1977	9,973,000
1978	9,849,000
1979	9,710,000
1980	9,089,000

Calendar Year	Actual Expenditures: Supplemental Benefits
1981	$8,500,000
1982	7,924,000
1982*	2,229,000
1983	7,178,000
1984	9,972,000
1985	11,984,000
1986	11,096,000
1987	9,458,000
1988**	845,000
1989	695,000
1990	635,000
1991	599,000
1992	565,000
1993	514,700
1994	437,000
1995	407,000
1996	358,000
1997***	1,578,000
1998	7,303,053
1999	6,271,468
2000	5,374,778
2001	4,516,904
2002	3,819,916
2003	3,183,051
2004	2,608,468
2005	2,140,922
2006	1,763,901
2007	1,422,116
2008	1,160,470
2009	912,217
2010	731,153
2011	601,702
2012	469,781
2013	342,476
2014	264,860
2015	210,002
2016	157,941
2017	112,102

*Transition year. After 1974-75 the expenditures reflect a consolidation of the former WRF, STRS and MTRF. The figures for the 1982 transition year represent 6 months of activity due to converting the STRS and the MTRF from a fiscal to a calendar year basis. Figures prior to transition 1982 (1976 to 1982) are on a calendar year basis for the former WRF and on a June 30 fiscal basis for the STRS and MTRF.

**The 1988 figure reflects the impact of the "special investment performance dividend" paid beginning in the 1987-88 fiscal year which reduced supplemental benefit payments.

***Starting in 1997, these figures reflect the resumption of certain supplemental benefit payments on November 1, 1997, following the termination of "special investment performance dividend" payments pursuant to a final judgment under *Retired Teachers Assn. v. ETF*.

higher);

- Interest was added to the lump sum payments at a rate of 8.8%, compounded monthly through November 1, 1997, to compensate the payee for lost opportunity costs; and

- Pre-October 1, 1974, annuitants who received the invalid SIPD payment had such payments deleted from their monthly benefit commencing December 1, 1997. However, no reduction in their monthly payment amounts actually resulted due to the 2.4% overall annuity increase and to the restoration of a GPR-funded supplemental annuity payment (through the enactment of 1997 Act 26.)