



STATE OF WISCONSIN
Department of Employee Trust Funds
Robert J. Conlin
SECRETARY

801 W Badger Road
PO Box 7931
Madison WI 53707-7931

1-877-533-5020 (toll free)
Fax 608-267-4549
etf.wi.gov

CORRESPONDENCE MEMORANDUM

DATE: November 9, 2015
TO: Employee Trust Funds Board (ETF)
Teachers Retirement Board (TR)
Wisconsin Retirement Board (WR)
FROM: Gene Janke Jr., Policy Analyst, Division of Retirement Services
SUBJECT: Definition of Public Pension Funding Status

This memo is for informational purposes only. No Board action is required.

This memo is in response to a request from the September 24, 2015, meeting of the Teachers Retirement Board to define funding status in regards to public pensions. Public pension system funding status has been a much discussed subject in the past decade. Simply stated, funding status is a way to measure the financial health of a pension system by comparing its assets to its liabilities.

Funding Status

Funding Status Percentage = Assets (Money) ÷ Liabilities (Future debts)

Assets are economic resources. The Wisconsin Retirement System's (WRS) assets are the trust funds administered by the Department of Employee Trust Funds (ETF) and invested by State of Wisconsin Investment Board (SWIB). Assets are accumulated through employee and employer contributions and investment earnings.

Liabilities are the future obligations owed. For the WRS, liabilities are the future transfer of assets to pay the defined benefit payments for retirees. Funding status is a recognition of the future transfer of assets due to liabilities.

By all generally accepted standards, the WRS is regarded as one of the most well-funded public pension plans in the United States¹. The WRS applies actuarial standards and methods to continuously review, and if needed, adjust the actuarial assumptions used in determining the amount of contributions needed in the present time to pay future benefits. The WRS has maintained fully-funded status since 2003, which means it has 100% of the assets to pay future liabilities. The WRS has been more than 90% funded since 1990.

¹ [Morningstar](#), 2013; [Pew Charitable Trusts](#), 2015.

Reviewed and approved by Matt Stohr, Administrator,
Division of Retirement Services

Electronically Signed 11/25/15

Board	Mtg Date	Item #
JM	12.10.15	4B

The ETF Board adopted a [funding policy](#) that details the guidelines and methods used by the WRS to meet the main financial objective of the plan. “The main financial objective of the WRS is to fully fund the long-term cost of benefits provided by statute, through disciplined and timely accumulation of sufficient assets to deliver earned benefits on a continuing basis.”

Variables and Actuarial Assumptions

Defined benefit plans are complex financial structures that must use a series of mathematical calculations to determine the amount of contributions to be paid in the present time for the future distribution of defined benefit amounts. There are several ways to calculate assets and liabilities, and there are many different variables based on actuarial assumptions used in those calculations. The methodology used, along with the assumptions made, are critical to determining a pension systems' funding status.

The WRS, like all public pensions, attempts to project the life and employment experience for members in order to acquire enough assets during the working career of a member to pay the retirement income over the member's lifetime. These projected assumptions are challenging because they relate to human behavior and can be influenced by economic and societal factors -- which can be short-term or long-term. The assumptions are future predictions that must be periodically adjusted to reconcile with actual pension plan experience. As a result, the term “fully-funded” is preferred over the term “100% funded.”

The variables in the calculation of assets and liabilities are interdependent. Included is the current actuarial assumptions applied to each variable and how frequently each assumption is reviewed and adjusted.

Staff will be at the Board meeting to answer any questions.

Wisconsin Retirement System Funding & Liability Variables			
Variable	Determined by	Current Rate ²	Evaluation Period
Wage Growth	Actuarial Evaluation	3.2%	Every 3 years
Assumed Rate of Return ³	Actuarial Evaluation	7.2%	Every 3 years
Assumed Benefit Rate ⁴	Statute	5.0%	N/A
Formula Calculation ⁵	Statute	N/A ⁶	N/A
Money Purchase Factor	Actuarial Evaluation	N/A ⁷	Every 3 years
Population Experience ⁸	Actuarial Evaluation	N/A	Annually
Mortality Rates	Actuarial Evaluation	N/A	Every 3 years
Actuarially Required Contribution Rate	Actuarial Evaluation	13.6% ⁹	Annually
Actual Investment Returns ¹⁰	Actuarial Evaluation	N/A	Annually

² 2015.

³ Assumed Rate at which WRS assets will grow through investments.

⁴ Assumed Rate at which the annuity reserve for retirees will grow through investments.

⁵ The formula benefit is the traditional defined benefit that is the constant in the WRS asset and liabilities equation.

⁶ For more information on the formula calculation please see [Calculating Your Retirement Benefits](#) booklet.

⁷ For more information see page 16-19 of [Calculating Your Retirement Benefits](#) booklet.

⁸ Includes estimates and reconciliation of normal retirements, early retirements, deaths, disability retirements, separations, transfers out, transfers in, and new employees. This information is included in the annual [Gain/Loss Analysis](#).

⁹ General category employees. A complete listing of [contribution rates and history](#) can be found on [etf.wi.gov](#).

¹⁰ [The Rates, Returns, and Adjustments Chart](#) on [etf.wi.gov](#) provides more information.