



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 18, 2015
To: Employee Trust Funds Board
From: Steve Hurley, Director, Office of Policy, Privacy & Compliance
Subject: Wisconsin Retirement System (WRS) Investment Risk Discussion

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

Investment risk management has been a topic of discussion throughout this year by both the Employee Trust Funds (ETF) Board and the State of Wisconsin Investment Board (SWIB).

- In April, the ETF Board briefly discussed investment risks and dividend reserves.
- Also in April, SWIB's board discussed stress test scenarios for the WRS, including possible effects of a -26% investment return, similar to what the WRS Core Fund experienced in the 2009 recession.
- In June, the ETF Board based a discussion on the memo, [WRS Dividends and Annuity Reserve Options: Effect of Investment Performance](#). At that discussion ETF staff presented basic information and perspective about the effects of market volatility on the WRS, tradeoffs associated with certain approaches for mitigating effects of volatility, and effects on employers, active employees, and annuitants. The ETF Board directed ETF to work with the ETF Board's actuary (GRS) and SWIB to develop models to demonstrate the effects of various investment return simulations outside of the normal expected range of returns.
- At the September meeting, the ETF Board used the memo, [WRS Investment Risk and Market Volatility](#) to discuss high-level pros and cons of possible approaches for mitigating volatility.
- And finally, at a SWIB workshop in October, the WRS consulting actuary presented projections and included information to assist SWIB staff in analyzing potential asset allocation models and portfolio structures.

Reviewed and approved by Pamela Henning, Assistant Deputy Secretary

Electronically Signed 12/1/15

Board	Mtg Date	Item #
ETF	12.10.15	4B

It is clear from these investment risk discussions that both WRS plan design and investment strategy are critical components for maintaining stability. The WRS has mechanisms that assist in maintaining fund stability, such as dividend risk sharing, smoothing of gains/losses and the Experience Amortization Reserve. These “plan-side” features complement SWIB’s long-term investment strategy and the effort to diversify investment assets to minimize fluctuation in returns and maximize earnings.

Over the next year, we intend to extend upon the work that has been done recently by ETF, GRS and SWIB in better understanding the effects of investment performance on the WRS. ETF plans to work with GRS, to develop a small number of detailed models that describe the actuarial effects and viability of possible “plan-side” measures for mitigating risk from unexpected volatility and serious market downturn. This analysis supports the WRS Funding Policy and will assist the Board by providing sufficiently detailed information to evaluate WRS risk mitigation options and to better prepare for any unexpected investment market fluctuations in the years ahead.

An example of some approaches that could be analyzed further are:

Examples of Approaches	Mitigates...
Increase the Core Fund asset smoothing period (Market Recognition Account).	Volatility in contribution rates and dividends
Create an additional smoothing period for dividends.	Volatility in dividends
“Cap and Reserve” positive dividends (limit positive dividends to the annual rate of inflation when possible, and accumulate a reserve for overall stability and to offset negative dividends).	Volatility in dividends
Allow a deficit in the Annuity Reserve to limit a significant negative dividend adjustment.	Dividend reserve depletion
Develop a contingency reserve to gradually accumulate funds to be used only to offset losses meeting a pre-determined severity.	Investment market downturn

Staff will bring the results of this research to the Board as warranted. Staff will be at the Board meeting to answer any questions.