



Wisconsin Retirement System

Board Member Orientation WRS Funding and Benefits

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WRS Funding



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Basic Funding Formula: $B = C + I - E$

(Benefits = Contributions + Investment Earnings – Expenses)

Benefits

- WRS benefits established by statute
- Members and their beneficiaries have rights to the benefits provided by law

Expenses

- Administrative expenses are paid from the investment earnings of the trust fund and remain low in comparison to other public retirement systems



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Funding Sources

There are two sources of WRS funding:

1. Contributions
2. Investment earnings



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Funding Sources

ETF Board has a fiduciary responsibility to assure sufficient assets are available to pay benefits

When investment returns are high, contribution rates *decrease*



When investment returns are low, contribution rates *increase*

Each year the consulting actuary analyzes data provided by ETF and recommends contribution rate changes

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What is an Actuary?

- An actuary deals with the financial impact of risk and uncertainty by . . .
 - Evaluating the likelihood of future events - using mathematics, economics, computer science and business knowledge
 - Designing creative ways to reduce the likelihood of undesirable events
 - Minimizing the financial impact of undesirable events that do occur

$$\begin{aligned}
 A_x &= E[Z] = E[v^T] \\
 &= \sum_{t=0}^{\infty} v^t P_T[T=t] = \sum_{t=0}^{\infty} v^{t+1} P_T[T(G,x)=t+1] \\
 &= \sum_{t=0}^{\infty} v^{t+1} P_T[t < G-x \leq t+1 | G > x] \\
 &= \sum_{t=0}^{\infty} v^{t+1} \left(\frac{P(G > x+t)}{P(G > x)} \right) \left(\frac{P[x+t < G \leq x+t+1]}{P(G > x+t)} \right) \\
 &= \sum_{t=0}^{\infty} v^{t+1} d_{x+t} \cdot q_{x+t}
 \end{aligned}$$



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ETF Actuaries

- Provide reports and recommendations regarding financial aspects of the WRS based on WI Stat. §40.04(1)(d)
 - Annual Valuation of *Retired* and *Active* Lives:
 - Used to recommend WRS annuity adjustments and contribution rates to ETF Board
 - Three-Year Experience Study reviews actuarial assumptions used by the WRS and compares:
 - Current assumptions against the actual experience of the WRS
 - Trends regarding mortality, disability, retirement, separation, interest, employee earnings, and other factors deemed pertinent
 - Gain/Loss Analysis:
 - Measures differences between actual and assumed experience in each risk area

ETF INTERNAL CONTROLS:
Methods used by actuary are
audited every 5 years by a separate actuary



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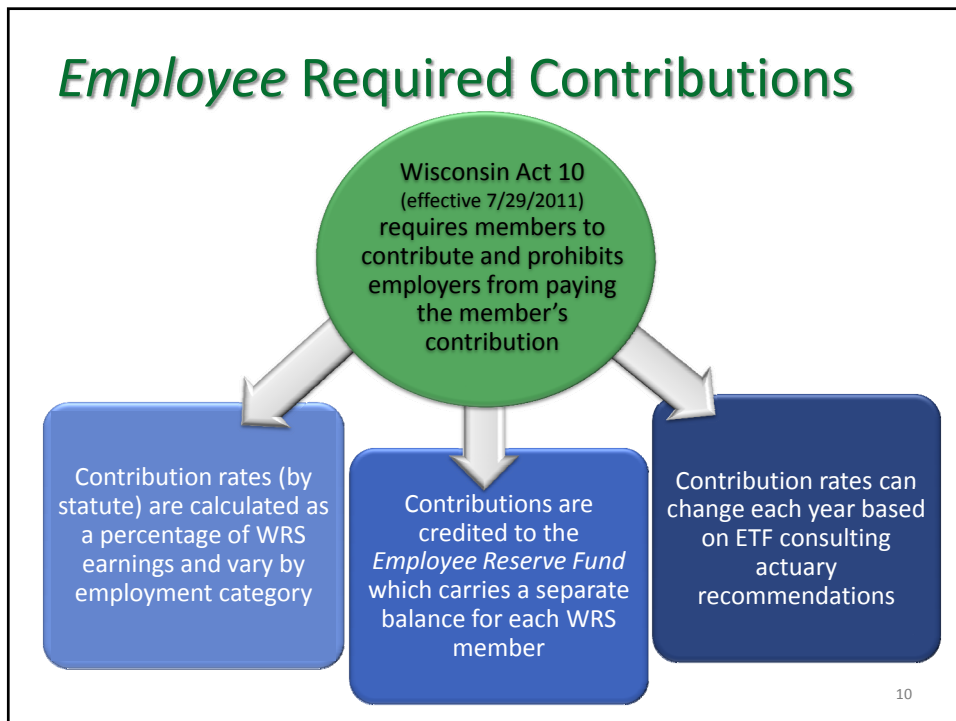
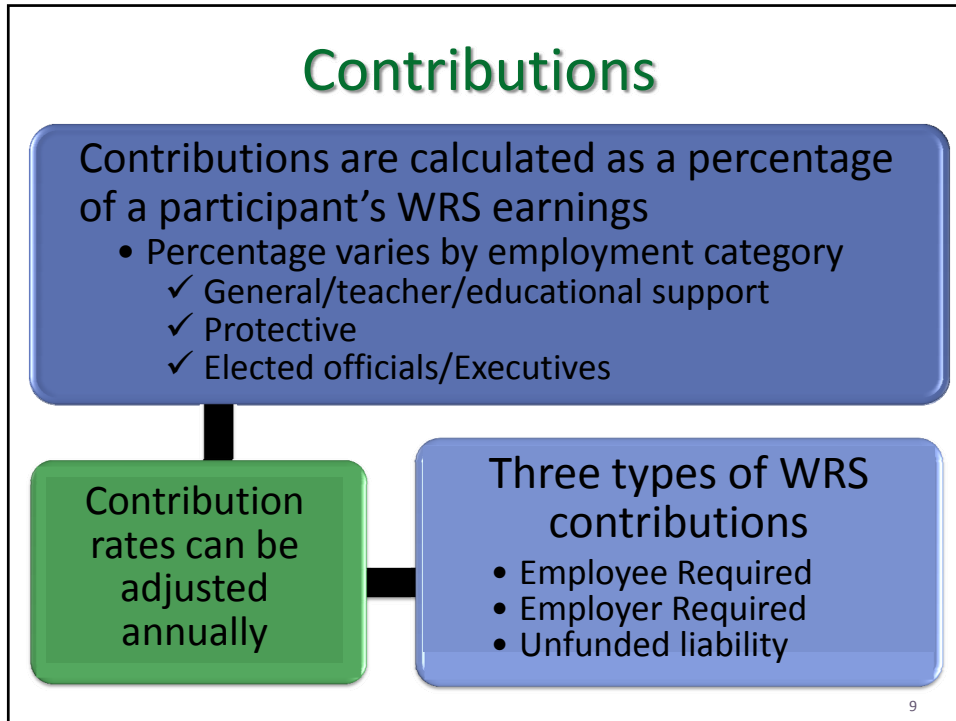
The Three Reserves

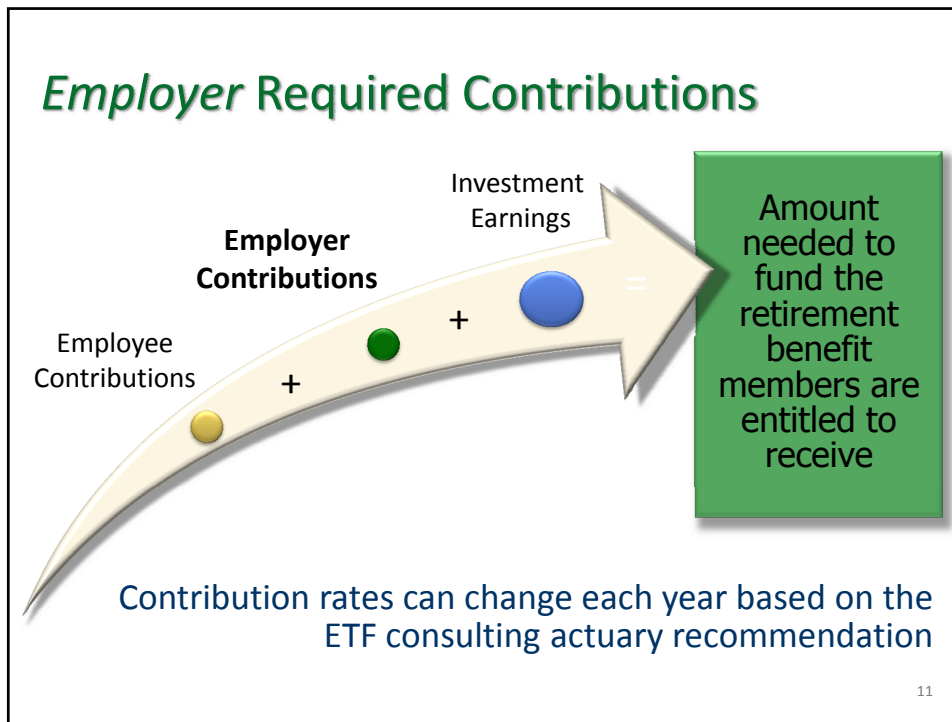
1. Employee Reserve (Employee Required contributions)
 - Each member carries an individual balance :
 - Includes Voluntary Additional Contributions (if applicable)
2. Employer Reserve (Employer Required contributions)
 - No individual member or employer accounts
3. Annuity Reserve – The fund from which all WRS annuities are paid
 - When members retire, funds needed to pay annuities for projected lifetimes are transferred from the Employee/Employer reserves to the annuity reserve



Each reserve is credited with annual interest

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Unfunded Liability Contributions

- Employers can buy their employees' years of service
 - For years worked prior to employer's participation in the WRS
- Cost amortized over 30 years
 - Rate varies by employer
- Contributions are credited to the Employer Reserve


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WRS Benefits

- Separation
- Retirement
- Disability
- Survivor

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Separation Benefits

- Member must terminate employment and apply for benefit before age 55 (age 50 if protective)
- Lump sum payment includes:
 - Employee required contributions
 - Voluntary additional contributions (if applicable)
 - Accumulated interest

Employer contributions and years of service are forfeited

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Retirement Benefits

Must be minimum retirement age (MRA) of 55 (or 50 if protective)

Benefit is always the higher of two calculations

Formula

- Final Average Earnings
- Formula Multipliers
- Years of Creditable Service
- Age Reduction *
- Variable Adjustment *

Money Purchase

- Account Balance
- Age

* If applicable



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Disability Benefits

- Members can choose between either *Disability Retirement* or *Long Term Disability Insurance (LTDI)* benefits if continuously employed since October 16, 1992
 - If employment began later, eligible for LTDI only
- Must terminate employment due to a mental or physical impairment expected to be permanent or of an indefinite duration



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Survivor (Death) Benefits

- Active death benefit
 - Employee and employer required contributions
 - Additional contributions (if applicable)
 - Accumulated interest
- Inactive death benefit
 - Employee contributions
 - Additional contributions (if applicable)
 - Accumulated interest
- Annuitants
 - Whether a benefit is payable and the amount is based on the annuity payment option selected at retirement



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Summary



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