## Welcome to the Employee Trust Funds Board

Thursday, June 19, 2025



**WI-GUEST** 

No Password is needed



Meeting will begin at: ~9:00 a.m.

- Please Sign In
- Who? All meeting attendees
- Sheet available at the door



#### **Meeting Materials**

- Scan the QR Code
- Available at etf.wi.gov



Please Silence your Cell Phone and Mute your Microphone

### Announcements

Item 1 – No Memo

Patti Epstein, Chief Benefits Officer Division of Benefits Administration



## Consideration of: Open and Closed Minutes of March 27, 2025, Meeting





## **Action Needed**

Motion needed to accept the Open and Closed Minutes of the March 27, 2025, Meeting as presented by the Board Liaison.

## Committee Reports

Items 3A – 3C – No Memos



# Actuarial Audit of the Wisconsin Retirement System (WRS)

Item 4A - Employee Trust Funds Board

Erin Scharlau, CPA, Financial Audit Director Legislative Audit Bureau

Janet Cranna, FSA, FCA, EA, MAAA Graham Schmidt, FSA, FCA, EA, MAAA Cheiron



## Informational Item Only

No Board action is required.



Classic Values, Innovative Advice

## State of Wisconsin Legislative Audit Bureau

Actuarial Audit Report on the Wisconsin Retirement System December 31, 2023 Actuarial Valuation and Peer Review of the December 31, 2020 Experience Study

Janet Cranna, FSA, FCA, EA, MAAA Graham Schmidt, FSA, FCA, EA, MAAA





#### Today's Discussion



- Background
- Summary of Key Findings
  - Valuation Report
  - -Experience Study

#### Background

- Cheiron was retained to perform an actuarial review of the December 31, 2023 Actuarial Valuation and the January 1, 2018 -December 31, 2020 Experience Study
  - -Full replication audit of the December 31, 2023 Actuarial Valuation
    - Comprehensive review, involving independent coding of valuation software to calculate and verify valuation results
  - Peer review of the Experience Study for the three years ending December 31, 2020
    - Review methods and assumptions for reasonableness and internal consistency
    - Does not include a full replication of calculations



#### Summary of Key Findings



- Valuation Report
  - 43<sup>rd</sup> Annual Actuarial Valuation and Gain/Loss Analysis
  - 41<sup>st</sup> Annual Actuarial Valuation of Retired Lives

#### Calculations and Results

- We found that based on the adopted assumptions and methods, GRS's 2023 actuarial valuation results are reasonable and accurate
  - Total liability results were within 1% of GRS
- The actuarial valuation was performed in accordance with principles and practices prescribed by the Actuarial Standards Board and Actuarial Standards of Practice (ASOPs)
- We found that GRS's recommended assumptions shown in the December 31, 2020 Experience Study were generally reasonable and performed in accordance with the ASOPs
  - We recommend that the salary increase assumption be increased for certain member classifications



#### Calculations and Results

- We confirm that the employer and employee contributions are expected to be sufficient to appropriately fund the system, assuming all assumptions are met
- In general, the actuarial valuation reports prepared by GRS meet the professional standards set by the ASOPs
  - However, additional disclosures related to certain elements of the funding policy may be required to comply with relevant ASOPs
  - We have made other recommendations that GRS could incorporate to improve the clarity of the reports





#### Replication – December 31, 2023 Valuation

## Wisconsin Retirement System December 31, 2023 \$ in Millions

| Total System                       | GRS   |         | Cheiron |         | Ratio |
|------------------------------------|-------|---------|---------|---------|-------|
| Present Value of Future Benefits   | \$    | 156,981 | \$      | 156,601 | 100%  |
| Entry Age Accrued Liability        | \$    | 133,994 | \$      | 133,774 | 100%  |
| Assets for Funding                 |       | 132,133 |         | 132,133 | 100%  |
| Total Entry Age Unfunded Liability | \$    | 1,862   | \$      | 1,641   | 88%   |
| Pooled Amortization Rate           | 0.8%  |         | 0.7%    |         | 84%   |
| Pooled Entry Age Normal Cost Rate  | 14.1% |         | 13.9%   |         | 98%   |
| Total Pooled Rate                  | 14.9% |         | 14.6%   |         | 98%   |
| 2025 FIL Normal Cost Rates         |       |         |         |         |       |
| Participant                        |       | 7.0%    |         | 6.9%    | 99%   |
| Employer Normal Cost Rate          |       | 8.0%    |         | 7.7%    | 97%   |
| Total                              |       | 14.9%   |         | 14.6%   | 98%   |
| Entry Age Funded Ratio             |       | 98.6%   | 9       | 98.8%   | 100%  |



#### Replication – Data Review

| Wisconsin Retirement System December 31, 2023 Membership Data \$ in Millions |    |         |    |         |        |  |  |  |  |
|--|----|---------|----|---------|--------|--|--|--|--|
|  |    | GRS     |    | Cheiron | Ratio  |  |  |  |  |
| Number of Actives  |    | 263,737 |    | 264,581 | 100.3% |  |  |  |  |
| Average Age  |    | 44.2    |    | 44.2    | 100.1% |  |  |  |  |
| Average Service  |    | 10.7    |    | 10.7    | 100.1% |  |  |  |  |
| Total Current Earnings   | \$ | 17,136  | \$ | 17,978  | 104.9% |  |  |  |  |
| Number of Inactives  |    | 186,977 |    | 186,977 | 100.0% |  |  |  |  |
| Average Service  |    | 3.5     |    | 3.5     | 100.0% |  |  |  |  |
| Money Purchase Balance   | \$ | 22,026  | \$ | 22,411  | 101.7% |  |  |  |  |
| <b>Total Annuities being Paid</b>  |    |         |    |         |        |  |  |  |  |
| Number of Retirees   |    | 229,091 |    | 229,295 | 100.1% |  |  |  |  |
| Annual Amount  | \$ | 6,864.0 | \$ | 6,860.0 | 99.9%  |  |  |  |  |
| Number of Disabilities   |    | 7,532   |    | 7,196   | 95.5%  |  |  |  |  |
| Annual Amount  | \$ | 203.0   | \$ | 203.1   | 100.1% |  |  |  |  |
| Number of Death-In-Service   |    | 1,488   |    | 1,407   | 94.6%  |  |  |  |  |
| Annual Amount  | \$ | 30.0    | \$ | 29.0    | 96.7%  |  |  |  |  |

#### **Funding Objectives**

As stated in the funding policy document, the Funding Objective is:

"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."

- The policy seeks to balance three main objectives:
  - Contribution Adequacy
  - Contribution Stability and Predictability
  - Intergenerational Equity

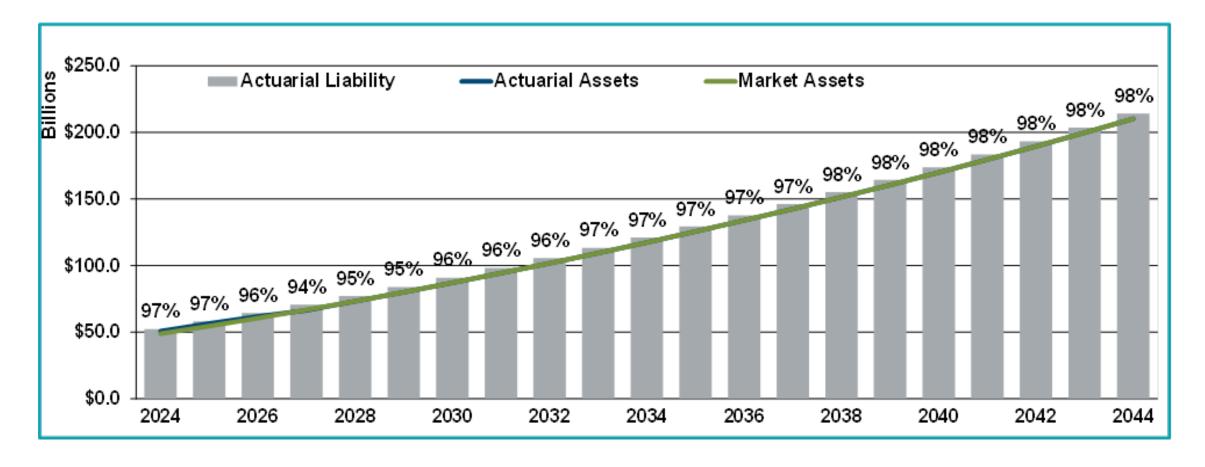


#### Funding Objectives – Recommendations

- Enhance risk disclosures
  - GRS identifies key risks to the system as required by actuarial standard of practice on risk (ASOP 51)
  - For each of the risks identified, we recommend that GRS also provide an assessment that takes into account circumstances **specific to the plan** 
    - The assessments preferably should be quantitative
- Include projections of assets, liabilities and contributions in their valuation reports and provide a discussion of funded status
  - Cheiron has performed projections to assess whether the funding objectives are expected to be achieved
    - Based on the same assumptions and methods used in the actuarial valuation
    - Future experience may be significantly different

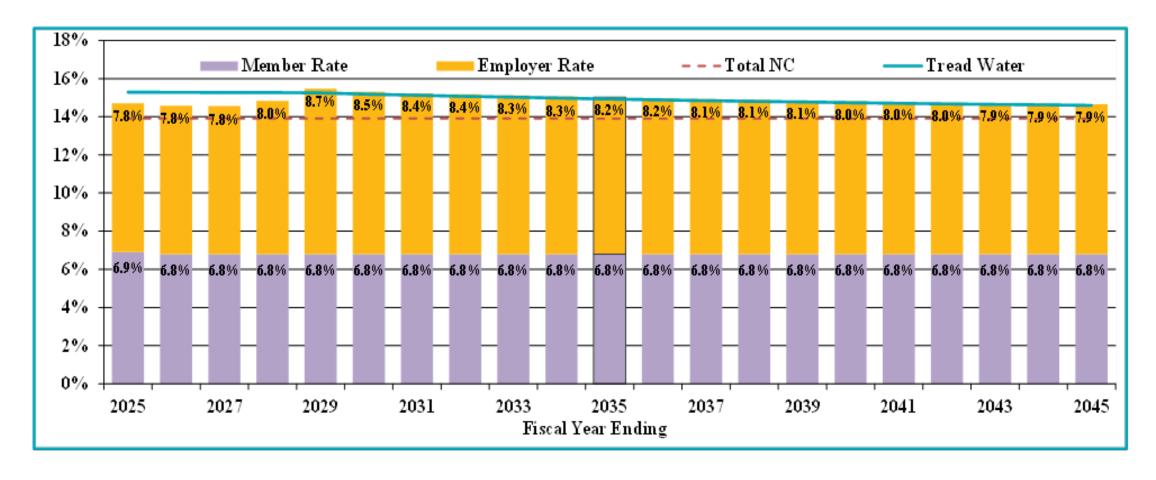


#### Cheiron Projections – Funded Status





#### Cheiron Projections – Contributions



Tread water measure is the normal cost plus interest on the unfunded actuarial liability.



#### Summary of Key Findings



Experience Study



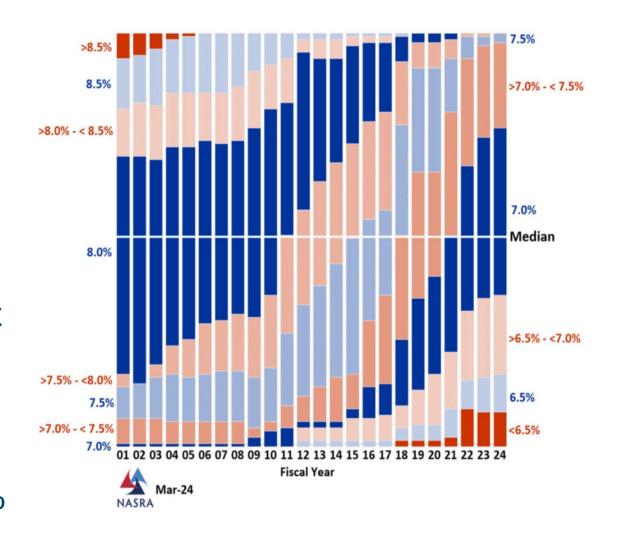
#### **Economic Assumptions**

- Recommended economic assumptions in general, are reasonable and in compliance with relevant Actuarial Standard of Practice (ASOP 27), including
  - Investment return assumption of 6.8% pre-retirement and 5.0% post retirement
    - 5.0% is mandated by Section 40.02 of the Wisconsin Statutes
  - -Inflation of 2.4%



#### **Economic Assumptions**

- Investment Return Analysis
  - National Association of State
     Retirement Administrator's
     (NASRA) survey of 131 State
     and Local Plans
  - –Since 2020, 94 of 131 plans(72%) have reduced investment return assumption
  - Since 2010, all have reduced investment return assumption
  - -Average assumption was 6.91%





#### Economic Assumptions – Recommendations

- We strongly recommend that the merit and longevity portion of the salary increase assumption be increased for some classifications
  - Merit and longevity salary increases are the increases that apply to individuals in addition to "base" wage inflation
  - The merit and longevity salary increase assumption varies by service level and employment classification
  - -For several classifications, the actual experience was significantly higher than the assumptions, namely:
    - General State, Public Schools Non-State, Protective with Social Security and Executive and Elected



#### **Demographic Assumptions**

- Overall recommended demographic assumptions are reasonable and comply with applicable Actuarial Standards of Practice
  - -Formerly ASOP 35, now ASOP 27
- We find the recommendations for the following assumptions are reasonable and consistent with the information presented in the Experience Study report:
  - Pre- and Post-Retirement Mortality
  - -Retirement
  - -Withdrawal
  - Disability Retirement



#### Demographic Assumptions – Recommendations

- We recommend that the deferred retirement age for terminated vested participants be reviewed in the next Experience Study
- We recommend that future Experience Studies include:
  - A discussion of credibility to address whether there is enough data to discern an actual trend in behavior
  - -Graphs showing actual, current, and recommended rates to make it easier for the reader to understand the analysis
  - -The Actual-to-Expected (A/E) ratios for the current and recommended assumptions
    - Actual observances compared to the number that would be expected based on the assumption



#### Funding Policy – Actuarial Cost Method

- The valuation report states that actuarial cost method being used is the Frozen Initial Liability (FIL) method
- Based on our review of the actual methods used to determine the contribution rates, we recommend that GRS include several clarifications in the valuation report
  - -Given the small size of the remaining FIL, the actual method being used is more accurately described as the Aggregate Entry Age method
  - -The unfunded liabilities (net of FIL) are amortized over the period defined in the Experience Amortization Reserve (EAR) Policy, and not the average future working lifetime



#### Funding Policy – Amortization Method

- The unfunded liability (net of FIL) is amortized over a rolling 20-year period as a level percentage of payroll under the current EAR policy
- We recommend that GRS include additional disclosures regarding the amortization method:
  - –An assessment and disclosure in the valuation report as to whether the policy satisfies condition to fully amortize the unfunded liability over a reasonable period of time, and
  - A discussion of the appropriate standard amortization period for the EAR in the experience study report



#### Funding Policy – Asset Method

- The actuarial value of Core assets is based on a five-year smoothed market value, while the assets in the Variable Investment Trust are marked to market each year
  - These method are reasonable and comply with relevant Actuarial Standard of Practice (ASOP 44)
  - Recommend clarification in the valuation report regarding the methods used to determine dividends



#### Funding Policy – Overall Evaluation

- The combined funding policies result in a contribution expected to achieve the financing objectives of the System
  - The use of a rolling amortization period may result in unfunded liabilities that are not expected to be fully amortized, however
  - -The System's risk sharing mechanisms are designed the keep the System well-funded, and thus the unfunded liability balances and associated payments should constitute a minor portion of the overall funding requirements



#### Funding Policy – Additional Disclosures

- We recommend additional disclosures to comply with recent revisions to ASOP 4 (Measuring Pension Obligations and Determining Pension Plan Costs or Contributions)
  - The Annual Actuarial Valuation report should include a statement on whether the computed contribution rates meet the definition of a reasonable actuarially determined contribution (ADC)
  - -If the computed contribution rate does **not** meet the definition of a reasonable ADC, GRS should compute one and describe any material assumptions or methods used in the calculation that are not disclosed elsewhere





#### Reliance



The purpose of this presentation is to present the actuarial audit results for the Wisconsin Retirement System.

In preparing this presentation, we relied on information supplied by the Wisconsin Legislative Audit Bureau, the Wisconsin Retirement System and GRS.

Cheiron utilizes and relies upon ProVal, an actuarial valuation software leased from Winklevoss Technologies for the intended purpose of calculating liabilities and projected benefit payments. Projected expected results of future valuations in this presentation were developed using *PScan*, our proprietary tool for the intended purpose of developing projections. As part of the review process for this presentation, we have performed a number of tests to verify that the results are reasonable and appropriate. We are not aware of any material inconsistencies, unreasonable output resulting from the aggregation of assumptions, material limitations or known weaknesses that would affect this presentation.

This presentation and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this presentation. This presentation does not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

This presentation was prepared exclusively for the Wisconsin Legislative Audit Bureau for the purposes described herein. Other users of this presentation are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to such other users.

Janet Cranna, FSA, FCA, EA, MAAA Principal Consulting Actuary Graham Schmidt, FSA, EA, MAAA Principal Consulting Actuary



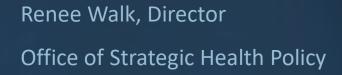


Classic Values, Innovative Advice

## Questions?

## Group Insurance Board Programs

Item 4B – Employee Trust Funds Board





## Informational Item Only

No Board action is required.

## Agenda

- Programs Offered
- Who We Serve
- Program Costs
- Focus Areas
- Program Administration

(Ref. GIB | 11.13.19 | 5C)



## **Programs Offered**

#### Group Health Insurance Program



Health\*



Pharmacy\*



Uniform Dental\*



Wellness\*

#### **Other Programs**



Life\*



Pre-tax Savings\*



Accident\*



Supplemental Dental\*



Vision\*



Long-Term Care



Income Continuation Insurance\*



<sup>\*</sup>Included in IAS implementation

### Life Insurance

- First program overseen by the then Group Life Insurance Board
- Single vendor
- Three products offered



### Health/Medical Insurance

Group Life
Insurance Board
expands to medical
in 1959

1960: Begins
offering Standard
Plan under State
Group Health
Insurance Program

Managed care and managed competition model starts in the 90s

Today most employees are in managed care plans



## **Uniform Benefits**

- Medical and prescription drug benefits standardized in 1994
- Updated periodically for state mandates
- Major update in 2010 for Affordable Care Act
  - All Essential Health Benefits (EHB) covered
  - Four non-EHB benefits included
- Prescription drug benefits moved to Uniform Pharmacy Benefits in 2019

## **Pharmacy Benefit Carve Out**

Staff investigation of carve out began in 2002, RFP released

Board selects DeanPoint, which became Navitus Health Solutions

Single, consistent pharmacy benefit provided to all members



## **Uniform Dental Benefits (UDB)**

- Strategic Workgroup recommendation
- Carved out in 2016
- Preventive-focused benefit
- Single administrator and self-funded, similar to Pharmacy

## Wellness Program

All health plans offer wellness starting in 2013

Incentive standardized to \$150 in 2014; participation still minimal

ETF issued first
wellness vendor RFP in
2016; awarded contract
to StayWell (now
WebMD)



### **Additional Benefit Plans**

#### **Pre-Tax Savings Accounts**

- Flex-spending accounts (FSAs)
- Limited-purpose flex spending accounts (LPFSAs)
- Health Savings Accounts (HSAs)
- Commuter Fringe Benefit Accounts
- Dependent Daycare Accounts

#### **Income Continuation Insurance**

#### Employee-pay-all plans

- Accident
- Supplemental Dental
- Vision
- Long-Term Care (individual plan)



### Who We Serve

~268,000 covered lives in GHIP 217,000 covered lives in Life Insurance

211,110 Uniform Dental members

32,588 Accident Plan members

57,232 Supplemental Dental members

57,776 Vision Plan members



## **GHIP Eligibility**

- State and local employees, retirees, and their dependents
- Defined in statute
- All state agencies must participate in GHIP
- Local employers can opt in/out

## **Program Costs**

- Health Insurance: \$2.2 billion in 2024
  - Up from \$2.02 billion in 2023
- Annual cost trend 6.7%
  - Medical = 7.9%
  - Drug = 2.4%
  - Dental = 3.6%
- Medical costs driven primarily by outpatient utilization

### **Focus Areas**

#### Plan Design

- Comparison to other states, employers
- Simplification/ease of use
- Cost control options

## Local Employer Program

 Opportunities for managing annual premium increases

## Benefits and Coverage

GLP-1s and weight management



## **Program Administration**

- Group Insurance Board Oversight
- Rates and valuations work done with contracted actuaries
  - Delegated to GIB by ETF Board



## Office of Strategic Health Policy

#### Staff:

- Director
- 2 Section Chiefs
- 18 Staff (Program Managers & Analysts)

#### Services:

- Contract oversight
- Rate & contract negotiations
- Program & policy development
- Data analysis & research
- Benefits communication & education



# Questions?

## Wisconsin Sick Leave Conversion **Credit Programs Annual Actuarial** Valuation – Dec. 31, 2024



Item 5A – Employee Trust Funds Board

Jim Anderson, FSA, EA, FCA, MAAA Rich Koch, FSA, EA, MAAA Gabriel, Roeder, Smith & Company (GRS)



## **Action Needed**

Motion needed to approve the Sick Leave Conversion Credit Programs Actuarial Valuation as of Dec. 31, 2024.





## Wisconsin Sick Leave Conversion Credit Programs (SLCC) - Valuation

- Benefit provided to State of Wisconsin employees and eligible dependents
  - Covers cost of health insurance premiums until sick leave credits are exhausted
- Assets based on 5-year smoothing of investment earnings in connection with the Market Recognition Account developed for Wisconsin Retirement System (WRS) valuation
- Assumptions and actuarial cost method consistent with the WRS valuation
  - 2024 valuation reflects the Board's adoption of new assumptions pursuant to the 2021-2023 Experience Study



### Summary of Assumption Changes

- Reflect Wisconsin Retirement System experience study recommendations
  - State-specific demographic assumption changes
  - Confirmed economic assumptions
    - No changes to price inflation, wage inflation or investment return
- Reflect recommended Sick Leave specific assumptions developed in Wisconsin SLCC experience study
  - Update health care cost trend assumption
  - Decrease future retiree participation assumption from 100% to 95%
  - Decrease escrow/on-hold retiree usage assumption from 50% to 45%



## Accumulated Sick Leave Conversion Credit Program (ASLCC/Basic)

|                  | ASLCC Plan   |
|------------------|--|
| Eligibility      | Termination with 20 or more years of WRS creditable service (not necessarily all State Service) or eligible for an immediate annuity |
| ASLCC<br>Credits | Credit computed at time of retirement, disability, or death while employed = (# days unused sick leave) x (highest basic pay rate)   |

Conversion credits used to cover cost of Health Insurance premiums for Employee and Dependents. Unused portion carried forward without interest and may be continued to an insured spouse after the death of the primary annuitant.



## Supplemental Health Insurance Conversion Credit Program (SHICC/Supplemental)

|   | SHICC Plan  |                              |                                    |
|---|---|------------------------------|------------------------------------|
| Eligibility   | Termination with at least 15 years of continuous service with State of Wisconsin (not the same as WRS creditable service) |                              |                                    |
|   | Employment<br><u>Category</u>   | First 24 Years of<br>Service | Over 24 Years of<br><u>Service</u> |
| SHICC   | Protective  | 78 Hours/year                | 104 Hours/year                     |
| Matching Credits  | Non-Protective  | 52 Hours/year                | 104 Hours/year                     |
| Conversion credits used to cover cost of Health Insurance premiums for Employee and Dependents. Unused portion carried forward without interest and may be continued to an insured spouse after the death of the primary annuitant. |   |                              |                                    |



### Summary of Participant Data Report Page 3



#### **Active Participants**

| State Employees  |   | University   |   |
|------------------|---|--|---|
| (Non-University) | University  | Hospital   | Total   |
|                  |   |  |   |
| 34,025           | 33,166  | 11,971   | 79,162  |
| \$2,714,854,064  | \$3,009,294,712   | \$990,953,662  | \$6,710,942,438   |
| 2,742,179 days   | 2,887,587 days  | 385,887 days   | 6,015,653 days  |
| 44.4 years       | 45.5 years  | 40.3 years   | 44.3 years  |
| 10.9 years       | 10.5 years  | 7.3 years  | 10.2 years  |
| 80.6 days        | 87.1 days   | 32.2 days  | 76.0 days   |
|                  | 34,025<br>\$2,714,854,064<br>2,742,179 days<br>44.4 years<br>10.9 years | (Non-University) University  34,025 33,166 \$2,714,854,064 \$3,009,294,712 2,742,179 days 2,887,587 days 44.4 years 45.5 years 10.9 years 10.5 years | (Non-University)       University       Hospital         34,025       33,166       11,971         \$2,714,854,064       \$3,009,294,712       \$990,953,662         2,742,179 days       2,887,587 days       385,887 days         44.4 years       45.5 years       40.3 years         10.9 years       10.5 years       7.3 years |

#### **Terminated Vested Participants**

| Number | Basic Sick    | Supplemental Sick | Total Sick Leave |
|--------|---------------|-------------------|------------------|
|        | Leave Balance | Leave Balance     | Balance          |
| 551    | \$24,157,034  | \$15,631,216      | \$39,788,250     |



#### Summary of Participant Data Report Page 3

#### **Retirees & Beneficiaries**

|   |        | <b>ASLCC Sick</b>    | SHICC Sick     | <b>Total Sick</b>    |
|---|--------|----------------------|----------------|----------------------|
| Status                                      | Number | <b>Leave Balance</b> | Leave Balance  | <b>Leave Balance</b> |
| Current Retirees with 1-Person Coverage     | 9,763  | \$285,091,077        | \$ 478,566,309 | \$ 763,657,386       |
| Current Retirees with Multi-Person Coverage | 9,269  | 422,661,454          | 650,432,824    | 1,073,094,278        |
| Escrowed/On-Hold Retirees                   | 5,999  | 278,867,333          | 202,647,523    | 481,514,856          |
| Total                                       | 25,031 | 986,619,864          | 1,331,646,656  | 2,318,266,520        |

In addition to the counts above, retirees provided in the data with any of the following were excluded from the valuation:

- An account that is in a closed status;
- A new account that is still being processed and has a status of pending; or
- An account with a \$0 sick leave balance.



#### Blended Net Premium Calculation Report Page 5

#### **Retirees and Beneficiaries**

|  | Rate Category                       |                                   |
|--|-------------------------------------|-----------------------------------|
|  | Non-Medicare                        | Medicare                          |
| <ol> <li>Number of 1-Person Contracts<sup>(1)</sup></li> <li>Total Monthly Premium of 1-Person Contracts</li> <li>Average 1-Person Premium as of 1/1/2025 (2./1.)</li> </ol>                                   | 1,883<br>\$2,001,101<br>\$ 1,062.72 | 7,876<br>\$3,748,657<br>\$ 475.96 |
| <ul> <li>4. Number of Multiple-Person Contracts<sup>(1),(2)</sup></li> <li>5. Total Monthly Premium of Multiple-Person Contracts</li> <li>6. Average Multiple-Person Premium as of 1/1/2025 (5./4.)</li> </ul> | 1,164<br>\$2,983,301<br>\$ 2,562.97 | 6,780<br>\$6,006,036<br>\$ 885.85 |
| 7. Blended Net Premium as of 1/1/2025 (50%*3. + 50%*6.) <sup>(3)</sup>   | \$ 1,812.85                         | \$ 680.91                         |
| First Prior Year   | \$ 1,685.33                         | \$ 609.72                         |

<sup>(1)</sup> Retirees with an account status of active, a premium populated in the data provided and a sick leave balance greater than \$0. The number counts above were used strictly for developing average premiums and may be different from retiree counts shown throughout this report.



<sup>(2)</sup> Beginning with the December 31, 2023 valuation, excludes all split contracts where one person covered is non-Medicare and the other is Medicare.

<sup>(3)</sup> Used in the valuation of all current employees, terminated vested members and escrowed/on-hold retirees. For retirees currently using sick leave credits, the valuation uses actual premiums provided in the data.

Blended net premium is a blend of the 1-person and Multiple-person average premiums based on the 50% 1-person/Multiple-person election percent assumption.

### Summary of Sick Leave Asset Data Report Page 6

|                                    | ASLCC           | SHICC           |                 |
|------------------------------------|-----------------|-----------------|-----------------|
|                                    | Program         | Program         | Total           |
| Beginning Balance                  | \$1,966,034,487 | \$1,277,928,374 | \$3,243,962,861 |
| Adjustment                         | 66,989          | (57,642)        | 9,347           |
| Adjusted Beginning Balance         | \$1,966,101,476 | \$1,277,870,732 | \$3,243,972,208 |
| Revenues                           |                 |                 |                 |
| Contributions                      | \$ 45,508,083   | \$ 13,007,349   | \$ 58,515,432   |
| Other                              | 55              | 0               | 55              |
| Investment Income                  | 137,092,769     | 89,437,184      | 226,529,953     |
| Total Revenues                     | \$ 182,600,907  | \$ 102,444,533  | \$ 285,045,440  |
| Expenses                           |                 |                 |                 |
| Insurance Premiums                 | \$ 127,558,943  | \$ 63,083,787   | \$ 190,642,730  |
| Other                              | 0               | 0               | 0               |
| Administration                     | 544,754         | 521,156         | 1,065,910       |
| Total Expenses                     | \$ 128,103,697  | \$ 63,604,943   | \$ 191,708,640  |
| Ending Balance - December 31, 2024 | \$2,020,598,686 | \$1,316,710,322 | \$3,337,309,008 |
| Internal Rate of Return            | 7.1%            | 7.1%            | 7.1%            |



### **Development of Contribution Rates**

|  | ASLCC            | SHICC            |
|--|------------------|------------------|
| 1. Present Value (PV) of Future Benefits | \$2,654,238,991  | \$1,666,516,538  |
| 2. Assets                                | \$2,020,598,686  | \$1,316,710,322  |
| 3. Unfunded Frozen Initial Liability     | <u>\$6,091</u>   | <u>\$5,196</u>   |
| 4. PV of Future Normal Cost $(1 2 3.)$   | \$633,634,214    | \$349,801,020    |
| 5. PV of Future Salary                   | \$63,313,362,524 | \$63,313,362,524 |
| 6. Normal Cost Rate (4. / 5.)            | 1.0%             | 0.6%             |



## December 31, 2024 Sick Leave Valuation Results – Employer Contribution Rates Report Page 1

| Valuation Date December 31  | Fiscal<br>Year Ending<br>December 31 | ASLCC | SHICC | Total | UAAL <sup>(1)</sup><br>Amortization<br>Years |
|-----------------------------|--------------------------------------|-------|-------|-------|--|
|                             |                                      |       |       |       |  |
| 2015 <sup>(2)</sup>         | 2017                                 | 0.9%  | 0.4%  | 1.3%  | 10   |
| 2016                        | 2018                                 | 0.8%  | 0.4%  | 1.2%  | 9  |
| 2017                        | 2019                                 | 0.8%  | 0.3%  | 1.1%  | 8  |
| 2018 <sup>(2)</sup>         | 2020                                 | 0.9%  | 0.3%  | 1.2%  | 7  |
| 2019                        | 2021                                 | 0.8%  | 0.3%  | 1.1%  | 6  |
| 2020                        | 2022                                 | 0.7%  | 0.1%  | 0.8%  | 5  |
| 2020<br>2021 <sup>(2)</sup> |                                      |       |       |       |  |
|                             | 2023                                 | 0.7%  | 0.2%  | 0.9%  | 4  |
| 2022                        | 2024                                 | 0.7%  | 0.2%  | 0.9%  | 3  |
| 2023                        | 2025                                 | 0.9%  | 0.3%  | 1.2%  | 2  |
| 2024 <sup>(2)</sup>         | 2026                                 | 1.0%  | 0.6%  | 1.6%  | 1  |

<sup>&</sup>lt;sup>(1)</sup> Unfunded Actuarial Accrued Liabilities are for one employer Beyond Vision (formerly Wiscraft).



<sup>(2)</sup> Assumption change.

### Reasons for Change in Contribution Rates

|   | ASLCC         | SHICC  |
|---|---------------|--------|
| 2023 Contribution Rate (2 decimals)                         | 0.96%         | 0.34%  |
| Effect of Asset Experience                                  | -0.01%        | -0.01% |
| Effect of Other Plan Experience (Demographics and Premiums) | 0.07%         | 0.10%  |
| Effect of Assumption Changes                                | <u>-0.02%</u> | 0.12%  |
| 2024 Contribution Rate                                      | 1.00%         | 0.55%  |

Since ASLCC balances must be used first, the impact of changing assumptions, particularly the health care trend, will be different for the ASLCC Program versus the SHICC Program.

Note that while the rounded SHICC rate increased from 0.3% to 0.6%, you can see from the exhibit above that 0.1% of the increase is due to rounding.



#### Actuarial Audit of the Sick Leave Valuation

- Milliman performed an audit in late 2024
- Their report noted

"We independently calculated the key actuarial components for the ASLCC and SHICC programs as of December 31, 2023. Under the applicable actuarial cost method, the key actuarial components are the Present Value of Benefits and the Present Value of Future Earnings. We found that all significant benefit provisions were accounted for in an accurate manner, the actuarial assumptions and methods were applied correctly, and our total present values are moderately close to GRS's calculations."



### Sick Leave Actuarial Audit: Valuation Report

| <b>Audit Recommendation</b>  | Plan of Action   |
|--|--|
| Include the extent for which the census data was reviewed  | 2024 valuation - added description                                     |
| Include the market value of assets for informational purposes  | 2025 valuation: GRS will consider including the market value of assets |
| Add the normal cost and amortization period under the Entry Age cost method for informational purposes | 2025 valuation: GRS will consider adding Entry Age results             |



### Sick Leave Actuarial Audit: Experience Study

| Audit<br>Recommendation   | Plan of Action:2024-2026 Experience Study  |
|---|--|
| Provide reasoning when changing methodology used to set an assumption   | GRS will add additional disclosure when changing methodology   |
| Review period of time from termination to commencement for escrowed members   | GRS will consider taking this into account   |
| Update post-withdrawal commencement age assumptions for active members to make consistent assumptions for current terminated vested members | GRS will confirm the benefit commencement ages provided for current terminated vested members and review |



### Sick Leave Actuarial Audit: Experience Study

| Audit                                     | Plan of Action:2024-2026                |
|---|---|
| Recommendation                            | <b>Experience Study</b>                 |
| Review sick leave accumulation assumption | GRS will review the methodology again   |
| Review premium modeling                   | GRS will review the premium methodology |



### **Concluding Remarks**

Revised actuarial assumptions were reflected putting upward pressure on SHICC contribution rates

During 2024, the increase in health care premiums was higher than anticipated based on actuarial assumptions

During 2024, investment return on a market value basis was higher than the assumed level of 6.8%

The Market Recognition Account phases-in gains and losses over 5 years -- resulting in an 7.1% return on a smoothed basis

- This put downward pressure on contribution rates
- If actuarial assumptions are realized, there will be upward pressure on contributions in future years



#### **Disclaimers**

- This presentation shall not be construed to provide tax advice, legal advice or investment advice.
- James D. Anderson and Richard Koch Jr. are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.
- This is one of multiple documents comprising the actuarial report. Additional information regarding actuarial assumptions and methods, and important additional disclosures are provided in the full report entitled "Wisconsin Accumulated Sick Leave Conversion Credit Programs Annual Actuarial Valuation, December 31, 2024."
- If you need additional information to make an informed decision about the contents of this presentation or the contents of the full report, or if anything appears to be missing or incomplete, please contact us before making use of the information.



# Questions?

# **Action Needed**

Motion needed to approve the Sick Leave Conversion Credit Programs Actuarial Valuation as of Dec. 31, 2024.

## BREAK

The Board is on a short break. Audio and visual feed will resume upon the Board's return.



## WRS Active Lives Valuation and Gain/Loss Analysis - Dec. 31, 2024



Regional Region 
Item 5B – Employee Trust Funds Board

Jim Anderson, FSA, EA, FCA, MAAA

Mark Buis, FSA, EA, FCA, MAAA

Rich Koch, FSA, EA, MAAA

Gabriel, Roeder, Smith & Company (GRS)



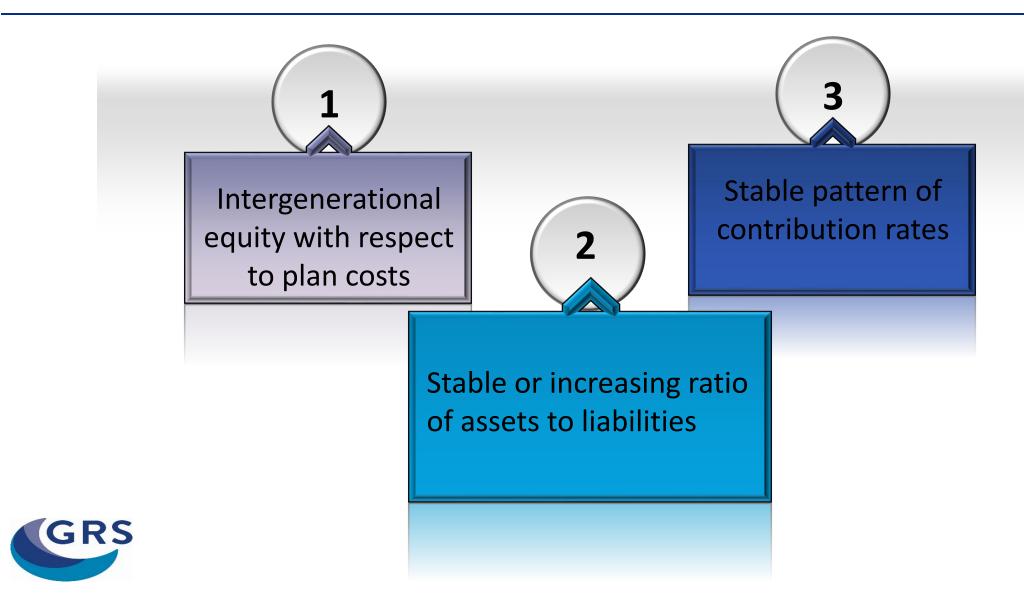
# **Action Needed**

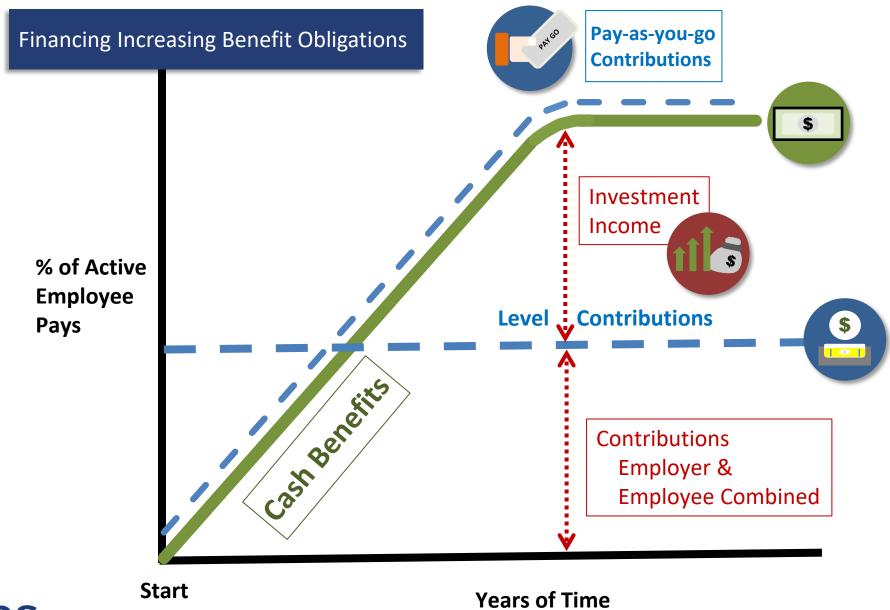
Motion needed to approve the WRS Annual Actuarial Valuation and Gain/Loss Analysis as of Dec. 31, 2024.





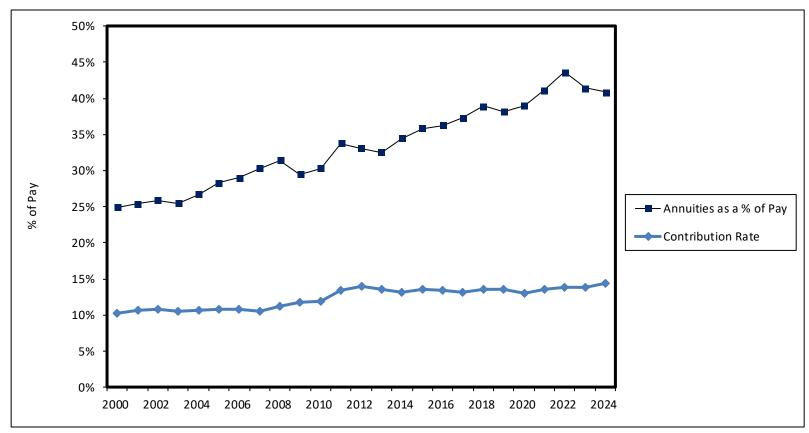
### **Funding Objectives**







# Annuities as a % of Payroll and WRS Average Total Contribution Rate\*

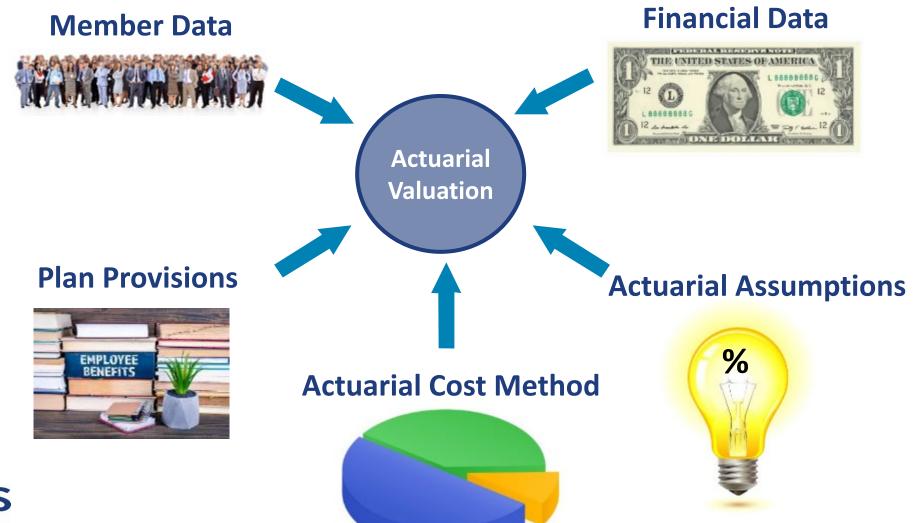


Annuities are expected to continue to increase as a percent of payroll for several more decades.

<sup>\*</sup>Average total rate shown is for General Participants.



#### **Actuarial Valuation Process**





### Active Participants at December 31, 2024

|   |         | Annual        | Group Averages |      |          |                   |
|---|---------|---------------|----------------|------|----------|-------------------|
|   |         | Earnings      | _              |      | Years of | -                 |
| Valuation Group                               | Number  | (\$ Millions) | Earnings       | Age  | Service  | Contribs.         |
| General                                       | 242,903 | \$16,030.0    | \$65,993       | 44.6 | 10.5     | \$72,355          |
| Executive Group & Elected Officials           | 1,180   | 127.0         | 107,664        | 54.3 | 14.9     | 150,111           |
| Protective Occupation with Social Security    | 21,130  | 1,931.5       | 91,413         | 39.1 | 11.1     | 84,623            |
| Protective Occupation without Social Security | 3,032   | 281.8         | 92,938         | 38.8 | 11.9     | 96,702            |
| Total Active Participants                     | 268,245 | \$18,370.3    | \$68,483       | 44.1 | 10.6     | \$73 <i>,</i> 938 |
| Prior Year                                    | 263,737 | \$17,136.2    | \$64,974       | 44.2 | 10.7     | \$72,050          |



Page E-2

### All Participants at December 31, 2024



| Valuation Group          | Number  | Average Annual<br>Earnings/Benefits <sup>1</sup> |
|--------------------------|---------|--|
| Actives                  | 268,245 | \$68,483   |
| Inactives                | 190,051 | \$22,901   |
| Retirees & Beneficiaries | 242,226 | \$30,993   |
| Total Participants       | 700,522 |  |

Retired Lives
Valuation



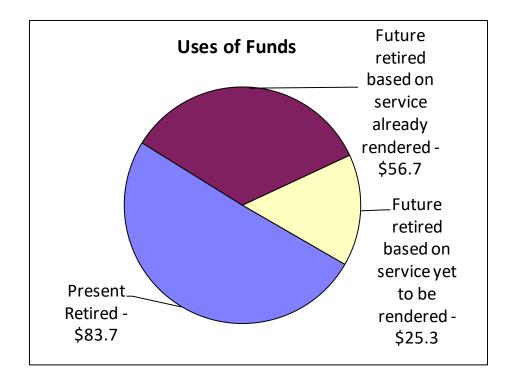
<sup>&</sup>lt;sup>1</sup> For inactives, average money purchase balance.

# From Experience Study: Summary of Demographic Recommendations

| Assumption                              | Recommendation | Financial Impact on Plan Liabilities and Contribution Rates |
|---|----------------|---|
| Withdrawal Rates                        | Varies         | Decrease  |
| Disability Rates                        | Higher Rates   | Increase  |
| Retirement Rates                        | Higher Rates   | Increase  |
| Mortality Rates                         | No Change      | N/A   |
| Pay Increases Due to<br>Merit/Longevity | Higher Rates   | Increase  |



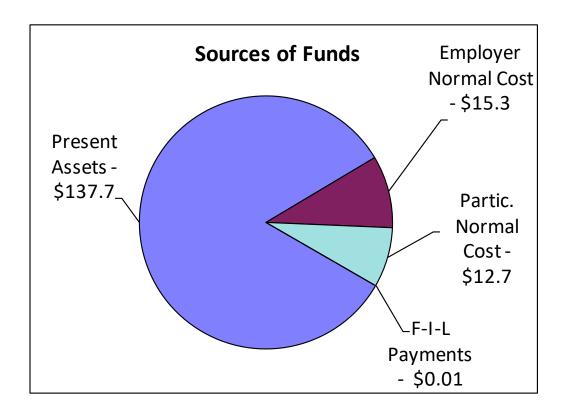
# \$165.7 Billion\* of Benefit Promises to Present Active and Retired Members



<sup>\*</sup> Present value of future benefits; all divisions combined.

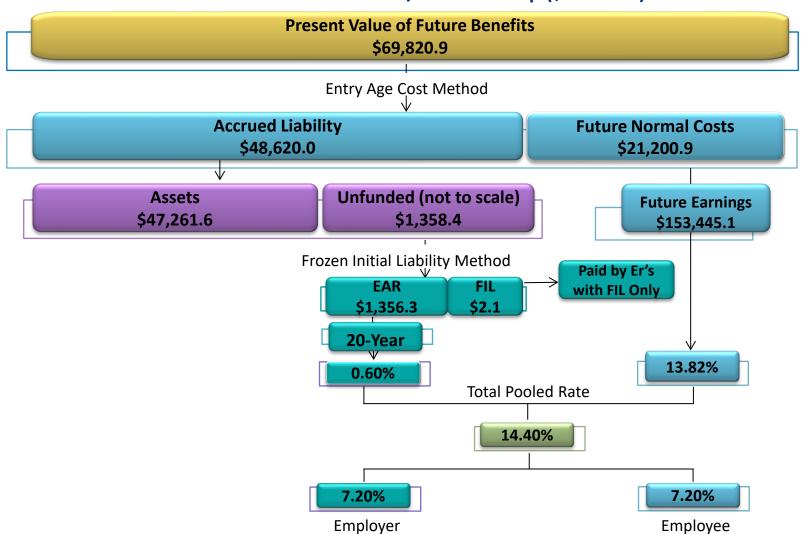


# Sources of Funds for Financing \$165.7 Billion of Benefit Promises





### Actuarial Valuation Process Illustration for General/Elected Group (\$ Millions)





# Summary of December 31, 2024 Valuation Results

|                                   |             |            | Protective Occupation |         |           |        |         |
|-----------------------------------|-------------|------------|-----------------------|---------|-----------|--------|---------|
|                                   | General, Ex | kecutive & | With                  |         | Without   |        |         |
|                                   | Elected (   | Officials  | Soc. Sec.             |         | Soc. Sec. |        | Average |
|                                   | 2026        | 2025       | 2026                  | 2025    | 2026      | 2025   | 2026    |
|                                   |             |            |                       |         |           |        |         |
| Employer Normal Cost              | 7.20%       | 6.95%      | 14.70%                | 14.95%  | 18.50%    | 18.95% | 8.20%   |
|                                   |             |            |                       |         |           |        |         |
| Participant Normal Cost           | 7.20%       | 6.95%      | 7.20%                 | 6.95%   | 7.20%     | 6.95%  | 7.20%   |
|                                   |             |            |                       |         |           |        |         |
| Total Normal Cost                 | 14.4%       | 13.9%      | 21.9%                 | 21.9%   | 25.7%     | 25.9%  | 15.4%   |
|                                   |             |            |                       |         |           |        |         |
| Estimated Total NC (\$ millions)* | \$2,468.3   | \$2,241.5  | \$448.8               | \$388.0 | \$76.8    | \$73.1 |         |

<sup>\*</sup> Based on payroll projected from valuation date to fiscal year using the payroll growth assumption.



#### Comparative Statement of Total Average Contribution Rates

| Valuation |         | Executive | Protective<br>with | Protective<br>without |
|-----------|---------|-----------|--------------------|-----------------------|
| 12/31     | General | & Elected | Soc. Sec.          | Soc. Sec.             |
| 2008      | 11.15%  | 11.95%    | 14.14%             | 15.46%                |
| 2013      | 13.60%  | 15.40%    | 16.30%             | 20.20%                |
| 2018      | 13.54%  | 13.54%    | 18.41%             | 23.02%                |
| 2019      | 13.53%  | 13.53%    | 18.51%             | 23.11%                |
| 2020      | 13.00%  | 13.00%    | 18.52%             | 23.86%                |
| 2021      | 13.60%  | 13.60%    | 20.03%             | 24.90%                |
| 2022      | 13.81%  | 13.81%    | 21.20%             | 26.00%                |
| 2023      | 13.90%  | 13.90%    | 21.90%             | 25.90%                |
| 2024      | 14.41%  | 14.41%    | 21.93%             | 25.70%                |

Executive and Elected employee and employer rates for CY 2016 and beyond are made in accordance with the combined General/Executive & Elected results.



#### Reasons for Contribution Changes

Generally zero when not an experience study year

Overall, changes to salary assumptions increased rates, offset by changes to load assumptions for Protectives

|                                  | General,    | Protective | Protective |
|----------------------------------|-------------|------------|------------|
|                                  | Executive & | with       | without    |
|                                  | Elected     | Soc. Sec.  | Soc. Sec.  |
| 2025 Normal Cost Rate            | 13.90%      | 21.90%     | 25.90%     |
| Effect of Benefit Change         | 0.00%       | 0.00%      | 0.00%      |
| Effect of Assumption Change      | 0.20%       | (0.10)%    | (0.10)%    |
| Effect of Asset Performance      | (0.04)%     | (0.17)%    | (0.25)%    |
| Effect of Salary Experience      | 0.18%       | 0.21%      | 0.10%      |
| Effect of Money Purchase Benefit | 0.15%       | 0.05%      | 0.01%      |
| Demographic and Other Experience | 0.01%       | 0.01%      | 0.04%      |
| 2026 Normal Cost Rate            | 14.40%      | 21.90%     | 25.70%     |

The effect of Asset Performance is different for each group because the ratio of assets to payroll is different for each group.



# From Experience Study: Summary of Results – Active Lives Valuation

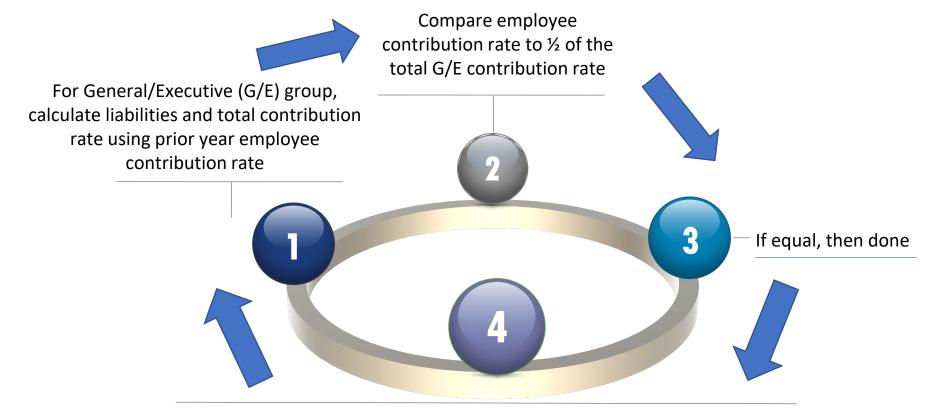
|                                    | 12/31/2023<br>Actual<br>Results | Hypothetical Results as of 12/31/2023*  Demographic Changes Only |
|------------------------------------|---------------------------------|--|
| Price Inflation                    | 2.40%                           | 2.40%  |
| Wage Inflation                     | 3.00%                           | 3.00%  |
| Investment Return                  | 6.80%                           | 6.80%  |
| General and Executive & Elected    | 13.9%                           | 14.1%  |
| Protective With Social Security    | 21.9%                           | 21.8%  |
| Protective Without Social Security | 25.9%                           | 25.8%  |



Contribution rate changes from new assumptions: General increase 20 bp, Protectives decrease 10 bp

<sup>\*</sup>New assumptions would first be used in the December 31, 2024 valuation which would first impact rates in 2026.

### What is the Money Purchase Effect?



Run iterations until the employee contribution rate used to develop liabilities = ½ of the total contribution rate for the G/E group



#### Impact of Asset Gains/Losses



- Asset gains and losses above or below the assumed rate of return are smoothed in over the current year and four future years
- Four years after a valuation date, all asset gains or losses known at valuation date are fully recognized
- Statutory smoothing method in WRS is referred to as the Market Recognition Account (MRA)



#### Operation of Market Recognition Account (MRA) - \$ Millions

|                                       | <u>2024</u>  | <u>2025</u> | <u> 2026</u>  | <u>.</u> | <u> 2027</u> | <u> 2028</u> |
|---------------------------------------|--------------|-------------|---------------|----------|--------------|--------------|
| Actual Investment Return              | \$<br>10,311 |             |               |          |              |              |
| Assumed Investment Return             | 8,477        |             |               |          |              |              |
| Gain/(Loss) to be phased-in           | 1,834        |             |               |          |              |              |
| Phased-in recognition                 |              |             |               |          |              |              |
| <ul><li>Current year</li></ul>        | \$<br>367    | ?           | ?             |          | ?            | ?            |
| <ul><li>First prior year</li></ul>    | 928          | \$ 367      | ?             |          | ?            | ?            |
| <ul> <li>Second prior year</li> </ul> | (5,068)      | 928         | \$<br>367     |          | ?            | ?            |
| <ul> <li>Third prior year</li> </ul>  | 2,495        | (5,068)     | 928           | \$       | 367          | ?            |
| <ul> <li>Fourth prior year</li> </ul> | 1,773        | 2,495       | (5,068)       |          | 928          | \$<br>367    |
| Total recognized gain (loss)          | \$<br>495    | \$(1,278)   | \$<br>(3,773) | \$       | 1,295        | \$<br>367    |



#### Reconciliation of Market Recognition Account (MRA)

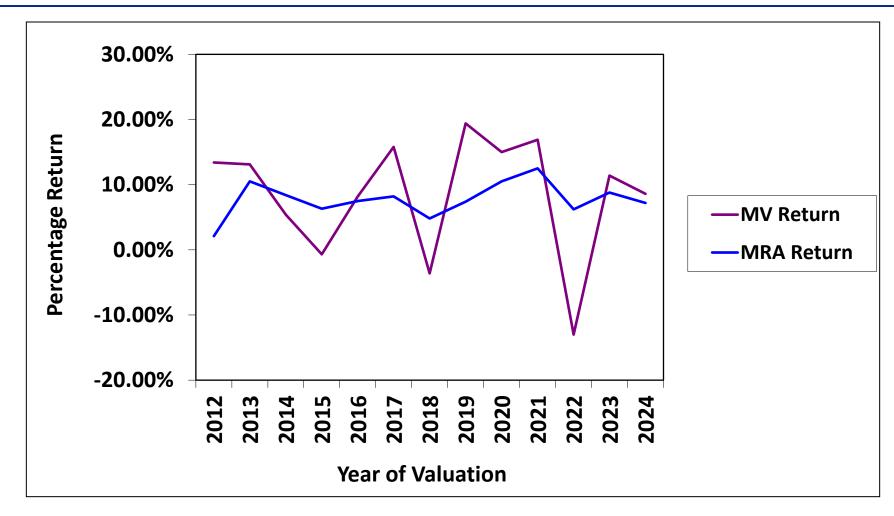
|                             | \$ Millions |
|-----------------------------|-------------|
| MRA at Beginning of Year    | \$126,948.3 |
| Non-Investment Cash Flow    | (4,586.1)   |
| Assumed Return (at 6.8%)    | 8,476.6     |
| Phase-in of Gains/(Losses)  | 494.4       |
| MRA at End of Year          | \$131,333.2 |
| MRA Rate of Return          | 7.20%       |
| Market Value Rate of Return | 8.60%       |

Assets in MRA include non WRS programs such as Sick Leave, Duty Disability, etc.

Market value rate of return shown as calculated by GRS and may differ from returns calculated by SWIB and/or ETF.



#### Market Value Return vs. Market Recognition (Actuarial) Return





#### **WRS Funded Status**



| Initial | Age   |
|---------|-------|
|         |       |
| 100.0%  | 99.1% |
| 100.0%  | 99.3% |
| 100.0%  | 98.8% |
| 100.0%  | 98.6% |
| 100.0%  | 98.1% |
|         |       |

Frozen

2020

2021

2022

2023

2024

**Entry** 



#### **Concluding Remarks**

- There are \$3.4 billion of unrecognized losses in the MRA
- Due to the cost sharing nature of WRS, asset gains/losses have been traditionally shared by:

| Employees                     | Employers        | Retirees     |
|-------------------------------|------------------|--------------|
| ↑↓ Money<br>Purchase Benefits | ↓↑ Contributions | ↑↓ Dividends |
| ↓↑ Contributions              |                  |              |







### 2024 Gain/Loss Analysis



A Gain/Loss Analysis measures differences between actual and assumed experience in each Risk Area.

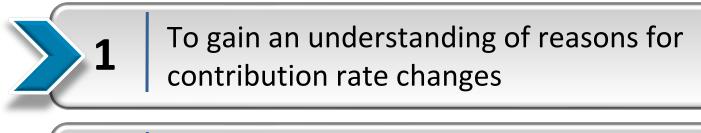


### WRS Assumption Risk Areas

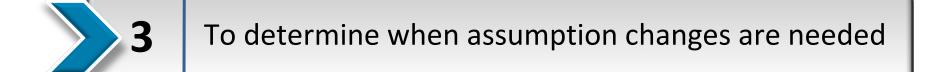
| Primary Risks     |                   |  |  |  |  |
|-------------------|-------------------|--|--|--|--|
| Demographic       | Economic          |  |  |  |  |
| Normal retirement | Salary increases  |  |  |  |  |
| Early retirement  | Investment return |  |  |  |  |
| Death-in-service  |                   |  |  |  |  |
| Disability        |                   |  |  |  |  |
| Other separations |                   |  |  |  |  |



#### Why Have a Gain/Loss Analysis?







To understand the nature of risk



#### The Nature of Defined Benefit Plan Risk

#### **Investment Risk**

 The risk that actual returns will differ from assumed returns.

### Asset/Liability Mismatch

 The potential that changes in assets are not offset by changes in liabilities. Because of the way assets are invested in most public plans, this is almost synonymous with investment risk.

#### **Contribution Risk**

• The risk that actual contributions will differ from expected contributions. This could occur, for example, if the plan's funding policy is not followed, or if there are changes in the covered population.



#### **Retirement Sustainability Equation**

- Asset/Liability Mismatch

**B** depends on

- ▶ Plan Provisions at retirement, member receives x% of Final Average Pay times years of service
- ► Participant Experience tenure, pay increases, etc.

Most Systems do not have asset changes offset by liability changes



#### Retirement Sustainability Equation

- Smaller Asset/Liability Mismatch in WRS

# B depends on plan provisions, which incorporates | Experience

- ► Money Purchase Defined Contribution benefit (changes with I results)
- ► Annual post-retirement adjustments to the monthly annuity benefit are based solely on investment returns
  - Dividends can increase or decrease



#### The Nature of Defined Benefit Plan Risk

## Salary and Payroll Risk

 Individual pays and/or total covered payroll may not grow at the assumed rate.
 If covered payroll grows more slowly than assumed, or shrinks, actual contributions may fall short of expected contributions.

#### **Longevity Risk**

 Members may live for more or fewer years than expected, affecting the amount of pension income they will receive from the plan.

### Other Demographic Risks

 Members may terminate, retire, or become disabled at rates other than expected, affecting both contribution rates and funded status.



### Population Development During 2024

| Beginning Census     |                                    | 263,737 | Expected |
|----------------------|------------------------------------|---------|----------|
| (-)                  | Normal Retirement                  | 3,912   | 4,814    |
| (-)                  | Reduced Retirement                 | 3,193   | 3,965    |
| (-)                  | Death                              | 83      | 274      |
| (-)                  | Disability Retirement              |         |          |
|                      | <ul> <li>Total Approved</li> </ul> | 195     | 173      |
|                      | - Less Pending                     | 64      | _        |
|                      | - Net New                          | 131     | _        |
| (-)                  | Other Separations                  | 16,395  | 14,902   |
| (-)                  | Transfers Out                      | 3,647   |          |
| (+)                  | Transfers In                       | 3,647   |          |
| (+)                  | New Entrants                       | 28,222  |          |
| <b>Ending Census</b> |                                    | 268,245 |          |



### Population Development During 2024

| Normal Retirements  | Varied by group and gender. Overall, lower than expected, but net result on liabilities is a small loss. |
|---------------------|--|
| Reduced Retirements | Lower than expected, overall producing a small loss.   |
| Deaths              | Among active participants were lower than expected. The net result for the past year was a small loss.   |
| Disabilities        | Slightly higher than expected, producing a small gain.   |
| Other Separations   | Varied by group, gender and service. Overall, higher than expected. The net result was a small loss.     |



# Comparative Schedule of Experience Gains/Losses by Decrement

#### **Divisions Combined (Millions)**

|   | 2023  | 2024   |
|---|---|--|
| Normal Retirement<br>Reduced Retirement<br>Disability Retirement<br>Death with Benefit<br>Other Separations | \$ (14.7)<br>(10.8)<br>4.6<br>(1.7)<br>(20.9) | \$ (7.2)<br>(12.5)<br>7.4<br>(2.8)<br>(23.0) |
| Total As % of Liabilities   | \$ (43.5)<br>-0.09%                           | \$ (38.1)<br>-0.07%                          |



#### Components of Total Gain/(Loss)

|                      | Gain/(Loss) in Millions |         |
|----------------------|-------------------------|---------|
|                      | 2023                    | 2024    |
| Economic Risk Areas  | \$(320)                 | \$(629) |
| Decrement Risk Areas | (44)                    | (38)    |
| Other Activity       | (95)                    | 50      |
| Total Gain/(Loss)    | \$(459)                 | \$(618) |



# Investment Earnings in 2024 (Active Participants)

|  | \$ Millions |
|--|-------------|
| A. Average balance on Participant and Employer Accumulation Reserves   | \$50,379    |
| B. Expected earnings: 6.8%   | 3,426       |
| C. Earnings credited to Participant and Employer Accumulation Reserves | 4,181       |
| D. Gain (loss) from earnings: C - B                                    | \$ 755      |



# Investment Earnings in 2024 (Active Participants)

- \$755 million is the total recognized asset gain for the year for active participants
- However, part of the total gain/loss is allocated to Variable Excess accounts
- Some of the gain/loss flows through to members via the operation of Money Purchase minimum benefits
- Must net these out to determine remaining core fund gain or loss
- Remaining portion affects contribution rates



# Investment Earnings in 2024 (Active Participants)



| \$ | Millions |
|----|----------|
|----|----------|

Gross Gain/(Loss) for the Year (for Actives) \$755

Less Estimated Gain/(Loss) due to Money Purchase 97
Less Estimated Gain/(Loss) due to Variable Excess 504

Net Core Fund Asset Gain/(Loss) \$154



#### Salary Related Gain/Loss

 Pay increases were overall higher than expected, resulting in a loss



General, Executive & Elected Protective w/Soc. Sec. Protective w/o Soc. Sec.

|   | Gain/Loss   | % of Group  |
|---|-------------|-------------|
|   | \$ Millions | Liabilities |
| ť | \$(429.8)   | (0.9)%      |
|   | (144.7)     | (2.4)%      |
|   | (4.3)       | (0.4)%      |
|   | \$(578.8)   | (1.1)%      |



#### **Concluding Remarks**

Recognition of remaining prior asset gains and losses are expected over the next few years

This Gain/Loss Analysis is the first in a regular 3-year experience cycle

This study, together with the 2025 and 2026 results, will form the basis for the next experience study to be performed after the December 31, 2026 valuation cycle







#### Five-year Actuarial Audit of the WRS

- Cheiron reported their results earlier today
- Their report noted

"Based on our review, we believe the December 31, 2023 Actuarial Valuation is accurate and produces reasonable required employer contributions, based on the assumptions and methods in effect at the time the valuation was prepared. However, we have recommendations for GRS and/or ETF to consider. None of these recommendations would materially change the valuation results."



#### WRS Actuarial Audit: Valuation Report

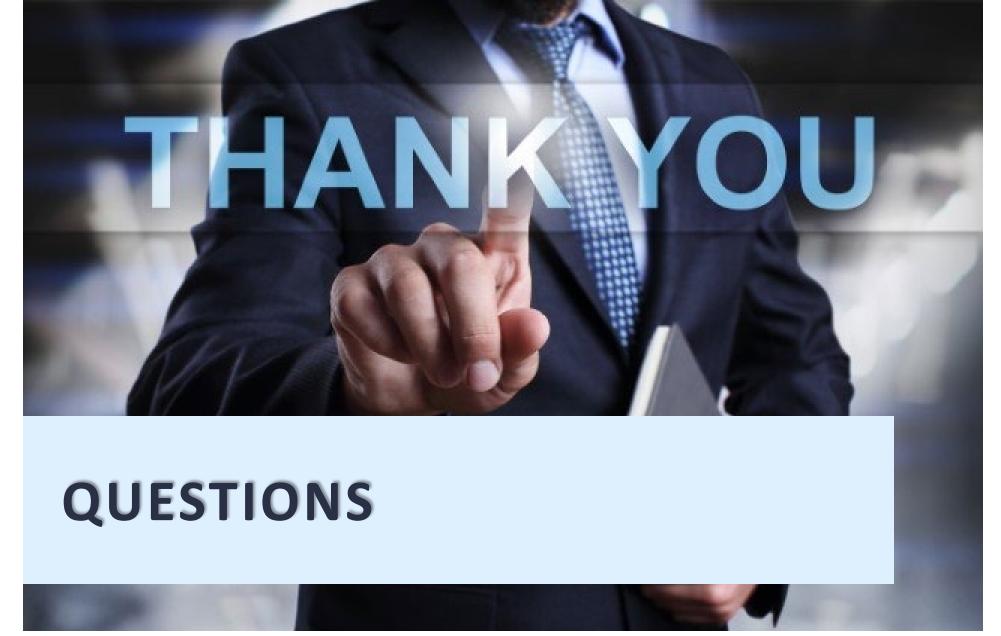
| <b>Audit Recommendation</b>  | Plan of Action   |
|--|--|
| Add a description of Current Earnings, review methodology                          | <ul><li>2024 valuation - added description</li><li>2025 - methodology review</li></ul> |
| Review risk disclosures  | 2025 item  |
| Clarify funding method description   | 2025 item  |
| Add additional disclosure relating to the unfunded liability amortization          | 2024 valuation - added disclosure  |
| Add additional disclosure regarding reasonable actuarially determined contribution | 2024 valuation - added disclosure  |



#### WRS Actuarial Audit: Experience Study

| Audit Recommendation for next Experience Study  | Plan of Action   |
|---|--|
| Add credibility discussion; graphs; results showing the A/E ratio for the current and recommended assumptions | GRS will consider adding graphs, credibility information, and enhanced Actual/Expected ratios  |
| Review the retirement age assumption for<br>Terminated Vested Participants                                    | GRS will investigate when terminated vested members ultimately retire  |
| Discussion regarding the amortization period  | GRS reviews the amortization period during funding policy review occurring separately and after the experience study - will document recommendations in next study |







#### **Disclaimers**

- This presentation shall not be construed to provide tax advice, legal advice or investment advice.
- Jim Anderson, Mark Buis and Richard C. Koch Jr. are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.
- This is one of multiple documents comprising the actuarial report. Additional information regarding actuarial assumptions and methods, and important additional disclosures are provided in the full report entitled "Forty-Fourth Annual Actuarial Valuation and Gain/Loss Analysis."
- If you need additional information to make an informed decision about the contents of this presentation or the contents of the full report, or if anything appears to be missing or incomplete, please contact us before making use of the information.



# **Action Needed**

Motion needed to approve the WRS Annual Actuarial Valuation and Gain/Loss Analysis as of Dec. 31, 2024.

# Actuarial Valuation of the State of Wisconsin Duty Disability Insurance Program

As of December 31, 2024

Maxwell Berube, FSA, MAAA
Paul Correia, FSA, MAAA
Milliman, Inc.
June 2025



#### **Valuation Assumptions**

- Same discount rate, claim termination rate, and estimated offset assumptions as last year.
- Experience studies for next year's assumptions are planned for this fall including an analysis of the target surplus level.



#### **Duty Disability Liabilities As of December 31, 2024**

| Liability Component      | Estimated Liability |
|--------------------------|---------------------|
| Open Claims              | \$519,874,506       |
| Future Survivors         | \$37,726,364        |
| IBNR Claims              | \$46,260,945        |
| Loss Adjustment Expenses | \$12,398,593        |
| Overpayment Recovery     | (\$402,073)         |
| Total                    | \$615,858,336       |

- 1,014 open claims as of December 31, 2024
  - 955 disabled members
  - 59 survivors



#### **Comparison to Prior Year**

| Liability Component      | 12/31/2023    | 12/31/2024    |
|--------------------------|---------------|---------------|
| Open Claims              | \$499,922,132 | \$519,874,506 |
| Future Survivors         | \$35,883,664  | \$37,726,364  |
| IBNR Claims              | \$46,660,191  | \$46,260,945  |
| Loss Adjustment Expenses | \$12,000,058  | \$12,398,593  |
| Overpayment Recovery     | \$(323,051)   | (\$402,073)   |
| Total                    | \$594,142,994 | \$615,858,336 |

• Benefits increased by 4.4% (national wage index) and 3.6% (core annuity index) on 1/1/2025.



#### **Duty Disability Funding Status as of December 31, 2024**

| Balance Sheet Component                           | 2024               |  |
|---|--------------------|--|
| Beginning of Year Fund Balance                    | \$778,048,729      |  |
| Plus: Smoothed Investment Income and Misc. Income | \$54,547,831       |  |
| Plus: Premium Contributions                       | \$1,231,526        |  |
| Less: Insurance Claims                            | \$42,223,159       |  |
| Less: Administrative Expenses                     | <u>\$1,210,660</u> |  |
| End of Year Fund Balance                          | \$790,394,267      |  |
| Estimated Liability as of December 31, 2024       | \$615,858,336      |  |
| Surplus (\$)                                      | \$174,535,931      |  |
| Fund Ratio (% of Estimated Liability)             | 128.3%             |  |

The fund ratio of 128.3% is within the target range of 125% to 135%.



#### **Duty Disability Funding Analysis**

| Oceanic  | Assumed   | Assumed<br>Investment<br>Income | Projected Fund Ratio |            |
|----------|---|---------------------------------|----------------------|------------|
| Scenario | Contribution<br>Rate  |                                 | 12/31/2025           | 12/31/2033 |
| Baseline | Current rates are held level in all years                                   | 6.8% in all years               | 127%                 | 116%       |
| 1        | Current rates are held level in all years                                   | -15% in 2025 then 6.8% in 2026+ | 100%                 | 75%        |
| 2        | Rates increased by 0.1% of payroll each year from 2026-2029                 | 6.8% in all years               | 127%                 | 129%       |
| 3        | Rates increased to 0.506% of payroll in 2026 and held level in future years | 6.8% in all years               | 127%                 | 130%       |
| 4        | Claim termination rates are 10% lower                                       | 6.8% in all years               | 125%                 | 113%       |

- The fund is sensitive to investment income.
- The projected fund ratio reduces to 99.9% when we assume -15% investment income in 2025 and remains below target in future years.



#### Questions



#### **Limitations**

- We relied on information provided by the Department of Employee Trust Funds (ETF). If any of this information is inaccurate or incomplete, our results may be affected and may need to be revised.
- The valuation uses actuarial assumptions that are individually reasonable and that, in combination, offer our
  best estimate of anticipated experience. A model was developed for the purpose of projecting future experience.
  To the extent that actual experience varies from the assumptions, the emerging costs of the plan will vary from
  the projections we have prepared.
- The calculations in this presentation are consistent with our understanding of Duty Disability funding objectives and requirements. Additional determinations may be needed for other purposes.
- Milliman's work product was prepared exclusively for ETF for a specific and limited purpose. It is not for the use or benefit of any third party for any purpose.
- We, Max Berube and Paul Correia, are consulting actuaries with Milliman. We are members of the American Academy of Actuaries, and meet its Qualification Standards to render the actuarial opinion contained herein.





Marie Ruetten, Deputy Administrator

**Division of Trust Finance** 



# **Action Needed**

Motion needed to approve the Duty Disability Insurance Program Actuarial Valuation as of Dec. 31, 2024, and increase 2026 contributions rates by 0.1% of covered payroll.

### **Duty Disability Program Reserves**

|                                      | 2023          | 2024          |
|--------------------------------------|---------------|---------------|
| Actuarial Liability                  | \$594,142,994 | \$615,858,336 |
| Reserve Balance                      | \$778,057,202 | \$790,394,267 |
| Surplus/(Deficit)                    | \$183,914,208 | \$174,535,931 |
| Funded Ratio *Target Range 125%-135% | 131%          | 128%          |



#### **Duty Disability Rates:**

#### Contribution rates are based on an experience-rated tier schedule

| Tier | Number of Claims | Claims as a % of<br>Covered Payroll | 2025 Contribution Rate as a % of Covered Payroll |
|------|------------------|-------------------------------------|--|
| 1    | 1                | <=1.5%                              | 0.06%  |
| 2    | 2                | >1.5% but ≤ 3.0%                    | 0.12%  |
| 3    | 3                | $>3.0\%$ but $\leq 4.5\%$           | 0.24%  |
| 4    | 4                | $>4.5\%$ but $\leq 6.0\%$           | 0.42%  |
| 5    | 5                | >6.0% but ≤ 7.5%                    | 0.67%  |
| 6    | 6                | $>7.5\%$ but $\leq 9.0\%$           | 0.97%  |
| 7    | 7                | >9.0% but ≤ 10.5%                   | 1.33%  |
| 8    | 8 or more        | Claims > 10.5%                      | 1.60%  |

#### Recommended 2026 Rates

| Tier | Base<br>Contribution<br>Rate | Actuarial<br>Adjustment<br>Rate | Recommended<br>2026<br>Contribution<br>Rate | # of Employers |
|------|------------------------------|---------------------------------|---|----------------|
| 1    | 0.25%                        | -0.15%                          | 0.10%                                       | 425            |
| 2    | 0.50%                        | -0.30%                          | 0.20%                                       | 46             |
| 3    | 1.00%                        | -0.59%                          | 0.41%                                       | 24             |
| 4    | 1.75%                        | -1.04%                          | 0.71%                                       | 8              |
| 5    | 2.75%                        | -1.63%                          | 1.12%                                       | 6              |
| 6    | 4.00%                        | -2.37%                          | 1.63%                                       | 5              |
| 7    | 5.50%                        | -3.26%                          | 2.24%                                       | 0              |
| 8    | 6.60%                        | -3.91%                          | 2.69%                                       | 1              |



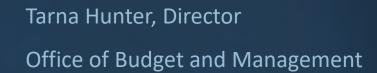


# **Action Needed**

Motion needed to approve the Duty Disability Insurance Program Actuarial Valuation as of Dec. 31, 2024, and increase 2026 contributions rates by 0.1% of covered payroll.

# Legislative Update and 2025-2027 Biennial Budget Update

Items 6A-6B – Employee Trust Funds Board





# Questions?

## Secretary's Report

**Item 6C – Employee Trust Funds Board** 

John Voelker, Secretary
Office of the Secretary



# Questions?

## **Operational Updates**

Items 6D - 6J - Memos Only



### **Informational Items Only**

No Board action is required.

# Questions?

## Tentative October 2025 Agenda

Item 7A – Memo Only

Patti Epstein, Chief Benefits Officer

Division of Benefits Administration



### Informational Item Only

No Board action is required.

# Questions?

## Move to Closed Session





# **Action Needed**

The Board will be required to meet in closed session pursuant to the exemptions contained in Wis. Stats. § 19.85 (1) (a) for quasi-judicial deliberations and Wis. Stats. § 19.85 (1) (c) to discuss employment, promotion compensation or performance evaluation data of any public employee over which the governmental body has jurisdiction or exercises responsibility. The Board will vote to reconvene in open session following the closed session.



# The Board is meeting in closed session. Audio and visual feed will resume upon the Board's return.



# Announcement of Action Taken on Appeal Deliberated During Closed Session

Item 12 – No Memo



Bill Ford, Chair
Employee Trust Funds Board

# Announcement of Business Deliberated and Action Taken During Closed Session

Item 13 - No Memo



Bill Ford, Chair
Employee Trust Funds Board

# Adjournment Representation 14 - No Memo

