## Actuarial Valuation of the State of Wisconsin Duty Disability Program Under GASB 43

As of January 1, 2017

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#### **Actuarial Valuation of Duty Disability Plan**

#### Limitations of Analysis

- We relied on information provided by the Department of Employee Trust Funds (ETF). If it is inaccurate or incomplete, our results may be affected.
- The valuation uses actuarial assumptions about future experience pertaining to the the Duty Disability plan. To the extent that actual experience varies from these 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 ETF accounting requirements and goals. 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.

# Duty Disability Valuation Results

#### **Duty Disability Valuation Actuarial Accrued Liability**

	(\$ Millions)		
	1/1/2016	1/1/2017	
Active Lives	\$104.3	\$104.9	
Disabled Lives and Survivors	\$418.9	\$453.4	
Total	\$523.2	\$558.3	

• The primary change from 1/1/2016 to 1/1/2017 is an increase in the disabled life liability, which is primarily due to an increase in the number of disabled lives and an increase in the average monthly benefit amount.

#### Duty Disability Valuation Funded Status

	(\$ Millions)	
	1/1/2016	1/1/2017
Actuarial Accrued Liability (AAL)	\$523.2	\$558.3
Actuarial Value of Assets (AVA)	\$603.7	\$615.5
Unfunded/(Over) Funded Actuarial Accrued Liabilities (U/(O) AAL) (Actuarial Accrued Liability – Actuarial Value of Assets)	(\$80.5)	(\$57.2)
Funded Ratio	115.4%	110.2%

### Duty Disability Valuation GASB 43 Annual Required Contribution (ARC)

	(\$ Millions)	
	Fiscal Year End 12/31/2016	Fiscal Year End 12/31/2017
Normal Cost	\$11.9	\$12.4
Interest to End of Year	\$0.9	\$0.9
Amortization of U/(O) AAL	(\$4.7)	(\$3.4)
Annual Required Contribution	\$8.1	\$9.9

GASB 43 provides parameters to calculate an "Annual Required Contribution." This amount is required to be calculated under GASB 43. However, there is no requirement that this amount be paid.

GASB 74 will be implemented for the 12/31/2017 Fiscal Year End. The Annual Required Contribution will be replaced by the net OPEB Expense calculated under GASB 74 parameters. Milliman and ETF staff are currently working on a project to implement GASB 74. The results of that project will be reported at a later date.

This work product was prepared solely for ETF. It may not be appropriate to use this for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

6

### Duty Disability Valuation Long-Term Trends

(\$ Millions)

	(+		
Valuation Date	Funded Ratio	GASB 43 Annual Required Contribution	Employer Contribution
1/1/2008	66.1%	\$47.7	\$50.6
1/1/2010	72.7%	\$53.2	\$51.9
1/1/2011	82.8%	\$50.4	\$52.3
1/1/2012	94.2%	\$48.4	\$53.0
1/1/2013	96.7%	\$49.8	\$53.9
1/1/2014	110.6%	\$ 8.2	\$ 9.3
1/1/2015	132.0%	\$ 3.2	\$ 8.6
1/1/2016	115.4%	\$ 8.1	\$ 3.8
1/1/2017	110.2%	\$ 9.9	TBD

#### Duty Disability Valuation Liabilities for Disabled Lives and Survivors

#### Detail of Liability for Disabled Lives and Survivors for the Duty Disability Program

Liability Component	1/1/2016	1/1/2017
Disabled Members	\$357,957,126	\$385,179,701
Survivors	\$15,622,416	\$18,779,356
Future Death Benefits	\$29,795,815	\$34,724,572
IBNR	\$9,975,689	\$8,704,812
Total	\$413,351,046	\$447,388,441

- The number of open claims increased by approximately 0.5% from 1/1/2016 to 1/1/2017
- The average monthly benefit amount for disabled members increased by approximately 6.4%
- The average monthly benefit amount for survivors increased by approximately 13.1%
- The estimated liability for future death benefits increased by approximately 24.5% as a result of data issues which were identified and resolved in 2016 by ETF.

### Duty Disability Valuation Liability Runoff Study

Margin as % of Initial Liability Study Period: 2012 - 2016		
Segment	Margin	
<b>Disabled Members</b>	0.38%	
Survivors	2.11%	

- Runoff studies were performed using Duty Disability claims experience from 2012 2016
- Positive margins of 0.38% and 2.11% indicate the liability was adequate to cover the runout of open disability claims during the study period