

Actuarial Valuation of Duty Disability Plan of January 1, 2015



**Milliman Presentation at ETF Board Meeting
Madison, Wisconsin
June 25, 2015**

Daniel D. Skwire, FSA, MAAA
Timothy J. Herman, FSA, EA, MAAA
Paul L. Correia, FSA, MAAA
Milliman, Inc.

Actuarial Valuation of Duty Disability Plan

Limitations of Analysis

- This work product was prepared solely for ETF for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.
- This work product is based on the January 1, 2015 actuarial valuation report for the Duty Disability plan. The valuation report and this work product are a complex, technical analyses that assume a high level of knowledge concerning ETF's operations, and uses data from ETF, which Milliman has not audited.
- Any third party recipient of Milliman's work product who desires professional guidance should not rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs.
- Emerging costs and liabilities will vary from those presented to the extent that actual experience differs from that projected by the actuarial assumptions.
- This report and its use are subject to the terms and provisions of our Consulting Services Agreement with ETF effective October 1, 2014.
- The prior year valuation (1/1/2014) was performed by ETF's prior actuary and the results are shown here for comparison purposes only.

Duty Disability Valuation Results

Duty Disability GASB 43 Valuation Actuarial Accrued Liability (\$000)

	1/1/2014	1/1/2015
Active Lives	\$98,718	\$95,329
Disabled Lives and Survivors	\$414,447	\$352,768
Total	\$513,165	\$448,097

Duty Disability GASB 43 Valuation Funded Status (\$000)

	1/1/2014	1/1/2015
Actuarial Accrued Liability	\$513,165	\$448,097
Actuarial Value of Assets	(\$567,329)	(\$592,774)
Unfunded Actuarial Accrued Liability	(\$54,164)	(\$144,677)
Funded Ratio	110.6%	132.3%

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.

Duty Disability GASB 43 Valuation Annual Required Contribution (ARC) (\$000)

	Fiscal Year End 12/31/2014	Fiscal Year End 12/31/2015
Normal Cost	\$10,594	\$10,983
Interest to End of Year	\$549	\$791
Amortization of UAAL	(\$2,970)	(\$8,505)
Annual Required Contribution	\$8,173	\$3,269

Duty Disability GASB 43 Valuation Long Term Trends (\$000)

Valuation Date	Funded Ratio	ARC	Employer Contribution
1/1/2006	52.1%	\$44,397	\$44,566
1/1/2008	66.1%	\$47,684	\$50,574
1/1/2010	72.7%	\$53,181	\$51,861
1/1/2011	82.8%	\$50,364	\$52,335
1/1/2012	94.2%	\$48,377	\$52,978
1/1/2013	96.7%	\$49,755	\$53,902
1/1/2014	110.6%	\$8,173	\$9,335
1/1/2015	132.0%	\$3,269	TBD

Duty Disability GASB 43 Valuation Assumption Changes (\$000)

Reduced estimate of future death benefits	(\$56,242)
Added provision for administrative expenses	\$4,755
Total Impact of assumption changes	(\$51,487)

Duty Disability GASB 43 Valuation Liability Runoff Study

Segment	Margin as % Liability
Disabled Members	(0.9%)
Survivors	(0.2%)