Annual Actuarial Valuation
for
The Local Income Continuation Insurance Plan

As of December 31, 2014

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May 1, 2015

Ms. Deb Roemer
Director of the Benefit Services Bureau
Division of Retirement Services
Wisconsin Department of Employee Trust Funds
Madison, WI 53707

RE: Actuarial Valuation of Local Income Continuation Insurance Plan as of December 31, 2014

Dear Deb:

At your request, we have performed an actuarial valuation of the Local Income Continuation Insurance (ICI) Plan as of December 31, 2014. Our findings are set forth in this report.

The State of Wisconsin Department of Employee Trust Funds (ETF) has determined that the Local ICI Plan is not subject to the provisions of GASB 43 or 45, which govern the financial reporting of Other Post-Employment Benefits (OPEB's), and which require the use of pension accounting methods, including the calculation of a liability for active lives. We have therefore performed this valuation according to the requirements of GASB 10 ("Accounting and Reporting for Risk Financing and Related Insurance Issues"), which does not require the calculation of a liability for active lives. This approach is consistent with prior valuation work performed on the plans. Ultimately it is the responsibility of ETF and its auditors to determine the applicable accounting standards for the plans.

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No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by ETF, including historical claims data from Aetna and ETF. While Milliman has not audited this data, we have reviewed it for reasonableness and it is, in our opinion, sufficient and reliable for the purposes of our calculations. If any of this information as summarized in this report is inaccurate or incomplete, the results shown could be materially affected and this report may need to be revised.

The discount rate used for this valuation was prescribed by ETF and is specified in this report. We have performed no independent assessment of the reasonableness of these assumptions. ETF is solely responsible for establishing these assumptions and communicating any changes to Milliman for the purpose of this valuation.

This analysis is only an estimate of the Plan's financial condition as of a single date. It can neither predict the Plan's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of Plan benefits, only the timing of employer contributions. While this report is based on the assumptions documented here, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct. Determining results using alternative assumptions is outside the scope of our engagement.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements. ETF has the final decision regarding the appropriateness of the assumptions and actuarial cost methods.

The consultants who worked on this assignment are actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices.

I, Daniel D. Skwire, FSA, MAAA, am a consulting actuary for Milliman, Inc. I am a member of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

I, Paul L. Correia, FSA, MAAA, am a consulting actuary for Milliman, Inc. I am a member of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Sincerely,

Daniel D. Skwire, FSA, MAAA
Principal and Consulting Actuary
Milliman, Inc.

Paul L. Correia, FSA, MAAA
Consulting Actuary
Milliman, Inc.

Section I: Introduction and Executive Summary

This report contains the 12/31/2014 valuation for the Local Income Continuation Insurance (ICI) Plan administered by the Wisconsin Department of Employee Trust Funds (ETF).

Summary of Actuarial Liabilities

The actuarial liabilities for the Local ICI Plan as of 12/31/2014 are summarized below:

Table 1.1 Actuarial Liabilities for Local ICI Plan as of 12/31/2014				
Liability Component	Standard Benefit	Supplemental Benefit	$75 Add-on	Total Liability Amount
Open Claims	$3,761,704	$75	$42,594	$3,804,373
IBNR Claims	$161,895	$3	$1,833	$163,731
Loss Adjustment Expense	$178,991	$4	$2,027	$181,021
Total	$4,102,590	$82	$46,454	$4,149,125

The liability for loss adjustment expenses is included for the first time in the 12/31/2014 valuation. Although this liability was not included in the 12/31/2013 valuation, performed by the plan's prior actuary, it is our view that it is required by the applicable accounting standards.

A further discussion of these actuarial liabilities, including a description of methods and assumptions, a comparison to prior year values, and an assessment of the adequacy of the liabilities, is included in the body of this report.

Summary of Funding Analysis

As shown in the following table, the Local ICI plan had a significant surplus as of 12/31/2014:

Table 1.2 Local ICI Fund Balances			
	12/31/2012	12/31/2013	12/31/2014
Beginning Balance	$31,777,793	$31,431,619	$33,542,573
Closing Adjustments	($42,974)	$132,250	($113,013)
Adjusted Beginning Balance	$31,734,819	$31,563,869	$33,429,560
Plus: Premium Contributions	$318,695	$0	$0
Plus: Investment Earnings	$660,559	$3,366,398	$2,866,369
Less: Insurance Claims	$1,122,840	$1,250,198	$859,391
Less: Administrative Expenses	$159,613	$137,497	$163,578
Ending Balance	$31,431,619	$33,542,573	$35,272,960
Actuarial Liability	$5,676,212	$5,190,856	$4,149,125
Surplus / (Deficit)	$25,755,407	$28,351,717	$31,123,835

Our projection indicates that the Local ICI plan is expected to generate a significant level of surplus for the foreseeable future, with expected investment earnings on the existing fund exceeding the cost of expected new claims and expenses each year. It is therefore reasonable to continue waiving the premium contribution on this plan for the near term.

Section II: Actuarial Valuation

The actuarial liability for the Local ICI Plan discussed in this report contains three components:

- Open Claims: The expected present value of future benefits payable to members disabled prior to the valuation date whose claims had been reported to ETF on or before that date

- Incurred but not Reported (IBNR) Claims: The expected present value of future benefits payable to members disabled prior to the valuation date, but whose claims had not yet been reported to ETF as of that date

- Loss Adjustment Expenses: The expected present value of future expenses related to the ongoing management and payment of disability claims

The 12/31/2013 valuation performed by the plan's prior actuary included the first two items, but not the liability for loss adjustment expense. It is our view that the applicable accounting standards explicitly require the calculation of a liability for loss adjustment expenses. Consequently, we have included it in our valuation.

The following table compares the 12/31/2013 and 12/31/2014 liabilities for the Local ICI plan:

Table 2.1
Current Year and Prior Year Liabilities for the Local ICI Plan

Component	12/31/2013	12/31/2014
Open Claims	$4,513,788	$3,804,373
IBNR Claims	$677,068	$163,731
Loss Adjustment Expense	N/A	$181,021
Total	$5,190,856	$4,149,125

Appendix C of this report provides the detailed valuation assumptions used to compute the 12/31/2014 liabilities for the Local ICI plan. A discussion of each of the liability components is provided below.

Open Claims

The liability for open claims decreased by about 16% due to a combination of changes in the claim inventory and a change in assumptions. The change in assumptions involved the calculation of an estimated future offset for Social Security Disability Insurance (SSDI) benefit for those claimants that had been disabled less than five years and had not yet been approved for SSDI benefits. The inclusion of estimated offsets is the standard practice in the valuation of LTD plans, and we believe it is appropriate for the valuation of this plan as well, since a significant proportion of claimants are ultimately approved for SSDI benefits. The impact of including this offset for the 12/31/2014 liability calculation was a reduction of approximately $0.5 million in the liability for open claims.

In order to assess the adequacy of the liability for open claims, we performed a retrospective runoff test to determine whether the liabilities held at prior valuation dates had been sufficient to cover the emerging costs of ICI claims. The study used State and Local ICI claim experience combined (due to the small volume of Local ICI claims), from the period 1/1/2012 through 12/31/2013. The results shown represent two 12-month studies that were combined: (1) 1/2012 through 12/2012 and (2) 1/2013 through 12/2013. The results are shown below:

Table 2.2 Runout Study for ICI Plans		
Duration at Beginning of Study	Margin % without Est. Offsets	Margin % with Est. Offsets
1 – 12 months	38.6%	26.6%
13 – 24 months	22.2%	7.6%
25 – 36 months	8.9%	4.1%
37 – 48 months	5.6%	4.0%
49 – 60 months	0.7%	(0.7%)
61 + months	(0.8%)	(0.8%)
Total	14.1%	6.7%

In the preceding table, a positive margin indicates the liability was adequate to cover the runout of open disability claims during the study period, while a negative margin indicates a deficiency. The cost of the claim runout is computed as the present value of paid claims during the study period, plus the present value of the liability for these claims at the end of the study period. For this type of plan, we typically target a positive overall margin of 1% to 5%, with reasonably consistent patterns by claim duration.

Prior to the inclusion of the estimated SSDI offsets, the total margin of 14.1% was well above our target of 1% to 5%, with particularly high values in early claim durations. The use of the estimated SSDI offsets lowered the total margin to 6.7%, with a more reasonable pattern by duration. The margin in the first year of disability remains high, even when estimated offsets are included, but we believe that is because this plan can be used to cover short term disabilities as well as long term disabilities, and that the valuation assumptions in the first year of disability may not fully reflect the high level of recoveries often experienced on short term disability claims. This is an issue we will explore in future valuations, along with the modest negative margins that occur in later claim durations.

The Local ICI Plan provides an additional benefit of $75 per month to disabled employees whose disability lasts longer than 12 months, to help these employees with medical fees. The $75 monthly benefit is already included in the reported benefit amounts of employees disabled for 12 months or more as of the valuation date. Therefore, the additional liability for these claims was included as part of the open claim liability calculation. For employees that were disabled for fewer than 12 months as of the valuation date, the additional liability was determined using the same methods used in the open claim liability calculations, with an additional assumption that only 70% of these claims would remain open beyond 12 months. The additional liability for these claims was estimated to be $42,594 as of December 31, 2014.

The additional liability as of 12/31/2014, including a pro rata allocation of the IBNR and loss adjustment expense liabilities, is shown below. This table also provides a split between the liabilities pertaining to standard benefits (which cover up to $64,000 of annual earnings) and supplemental benefits (which cover annual earnings from $64,000 to $120,000).

Table 2.3 Actuarial Liabilities for Local ICI Plan as of 12/31/2014				
Liability Component	Standard Benefit	Supplemental Benefit	$75 Add-on	Total Liability Amount
Open Claims	$3,761,704	$75	$42,594	$3,804,373
IBNR Claims	$161,895	$3	$1,833	$163,731
Loss Adjustment Expense	$178,991	$4	$2,027	$181,021
Total	$4,102,590	$82	$46,454	$4,149,125

IBNR Claims

The liability for IBNR claims decreased by about 76% due to the change in valuation methodology. In prior valuations, this liability was computed as a percentage of the plan's open claim reserve, which we do not feel is the best index, since the IBNR liability relates to annual claim activity while the open claim liability reflects the cumulative liability from all prior plan years.
The liability for IBNR claims reflects the expected portion of the total cost of claims incurred in a given year that is attributable to those claims that had not been reported as of the end of the year. If, on average, claims are reported 6 months after the date of disability, then the IBNR liability would likely be approximately 50% of the expected total cost of new claims for the year. We therefore computed the IBNR liability by estimating the total cost of incurred claims for 2014 (based on recent trends) and by using historical claim data to determine the proportion of claims that were typically unreported at each year end.

Our IBNR calculation for the Local ICI plan is summarized below:

Table 2.4 Development of IBNR Liability for Local ICI Plan	
Estimated Incurred Claims	$1,091,540
Estimated Proportion of Unreported Claims	15.0%
IBNR Liability as of 12/31/2014	$163,731

Due to the relatively short period of time before benefits begin for the ICI plans, the estimated proportion of unreported claims is 15%.

Loss Adjustment Expense

The liability for loss adjustment expenses was computed by comparing the annual fees payable to Aetna, which are estimated to be $3,402,338 in 2015, to the expected annual incurred claims amount for all three plans combined. The fees as a percentage of expected annual incurred claims are approximately 4.6%. The loss adjustment expense liability was then calculated as 4.5% of the open claim liability and 6.0% of the IBNR liability. The factor is lower for open claims than for IBNR claims because the expenses related to initial claim investigation have already been incurred and do not need to be included in the liability.

Our loss adjustment expense calculation for the Local ICI plan is summarized below:

Table 2.5
Development of Loss Adjustment Expense Liability for Local ICI Plan

Component	Liability	Expense Factor	Loss Adjustment Expenses
Open Claims	$3,804,373	4.5%	$171,197
IBNR	$163,731	6.0%	$9,824
Total	$3,968,104	4.6%	$181,021

Section III: Discussion of Local ICI Funding Levels

The actuarial valuation of the Local ICI plan included an analysis of current and future funding levels. The following table shows the fund balances as of the three most recent fiscal year-ends (the 2012 and 2013 values were taken from prior valuation reports):

Table 3.1
Local ICI Fund Balances

	12/31/2012	12/31/2013	12/31/2014
Beginning Balance	$31,777,793	$31,431,619	$33,542,573
Closing Adjustments	($42,974)	$132,250	($113,013)
Adjusted Beginning Balance	$31,734,819	$31,563,869	$33,429,560
Plus: Premium Contributions	$318,695	$0	$0
Plus: Investment Earnings	$660,559	$3,366,398	$2,866,369
Less: Insurance Claims	$1,122,840	$1,250,198	$859,391
Less: Administrative Expenses	$159,613	$137,497	$163,578
Ending Balance	$31,431,619	$33,542,573	$35,272,960
Actuarial Liability	$5,676,212	$5,190,856	$4,149,125
Surplus / (Deficit)	$25,755,407	$28,351,717	$31,123,835

The Local ICI plan has run a large surplus for many years, and premium contributions have been waived since 2013. In order to evaluate the potential long-term performance of this fund, we prepared a financial projection. The projection reflects actual results for 2014 and projected values in 2015 and beyond. The key elements of this projection include the following:

- Beginning Balance: The projected beginning balance for each year is equal to the prior year's ending balance.

- Covered Payroll: Since the current covered payroll was not available, we estimated current payroll based on data for the State ICI plan and historical annual incurred claims experience. Future covered payroll is assumed to increase 3.20% per year, which is consistent with the assumptions used by ETF for retirement fund projections.

- Premium Contributions: Premiums are modeled as a percentage of covered payroll, but are assumed to be waived in the future given the plan's significant surplus.

- Investment Income: Investment income is projected using the valuation assumption of 7.2%.

- Insurance Claims: Annual paid insurance claims are the sum of projected payments on existing claims as of 12/31/2014, and of payments on expected future claims incurred after 12/31/2014. Future incurred claims are based on historical experience of 0.67% of covered payroll in 2014, adjusted for expected aging in subsequent years.

- Administrative Expenses: Administrative expenses are modeled as a constant percentage of paid insurance claims, based on actual values in 2014.

- Ending Balance: The projecting ending balance equals the starting balance, plus premiums, plus investment earnings, less claims, and less expenses.

- Actuarial Liability: The actuarial liability is modeled in a similar fashion to the insurance claims. It represents the sum of the decreasing liability on claims that existed as of 12/31/2014, and of the increasing liability for claims incurred after 12/31/2014.

- Surplus or Deficit: The projected surplus or deficit equals the ending balance less the actuarial liability.

Our projection, which is shown on the following page, indicates that the Local ICI plan is expected to generate a significant level of surplus for the foreseeable future, with expected investment earnings on the existing fund exceeding the cost of expected new claims and expenses each year. It is therefore reasonable to continue waiving the premium contribution on this plan for the near term.

Please note that these projections depend on a variety of actuarial assumptions about future experience, including but not limited to investment earnings, payroll growth, and disability claim experience. It is nearly certain that actual experience will vary from these assumptions, meaning that the plan's actual surplus or deficit will be higher or lower than the illustrated values.

Local ICI Fund Balance Analysis as of December 31, 2014

Premium Contributions Waived Indefinitely in 2012

Calendar Year	2014	2015	2016	2017	2018	2019	2020
BOY Fund Balance	33,429,560	35,272,960	36,727,757	38,225,411	39,663,824	41,094,596	42,508,127
Premium Contributions	-	-	-	-	-	-	-
Investment Income	2,866,369	2,539,653	2,644,399	2,752,230	2,855,795	2,958,811	3,060,585
Total Revenues	2,866,369	2,539,653	2,644,399	2,752,230	2,855,795	2,958,811	3,060,585
Insurance Claims	859,391	911,383	963,374	1,103,731	1,197,156	1,298,182	1,387,986
Carrier Administrative Expenses	100,433	106,509	112,585	128,987	139,906	151,712	162,207
Administrative Expense	63,145	66,965	70,785	81,098	87,963	95,386	101,984
Total Operating Expenses	1,022,969	1,084,857	1,146,745	1,313,816	1,425,024	1,545,279	1,652,177
Net Change in Fund Balance	1,843,400	1,454,796	1,497,654	1,438,413	1,430,771	1,413,532	1,408,408
EOY Fund Balance	35,272,960	36,727,757	38,225,411	39,663,824	41,094,596	42,508,127	43,916,536
Incurred Claim Liability	4,149,125	4,875,645	5,500,309	6,060,244	6,593,701	7,126,094	7,643,967
Surplus / (Deficit)	31,123,835	31,852,112	32,725,102	33,603,581	34,500,895	35,382,034	36,272,568

Appendix A: Plan Description

The Local ICI Plan provides short and long term disability benefits as summarized below:

- Elimination Period: Participating employees select an elimination period up to 180 days. Benefits are reduced for any vacation, sick leave, holiday or compensation pay received after the elimination period.

- Maximum Benefit Period: The following table shows the maximum duration of benefits:

Age at Disablement	Maximum Benefit Period
Before age 62	To age 65
62	3.50 years
63	3.00 years
64	2.50 years
65	2.00 years
66	1.75 years
67	1.50 years
68	1.25 years
69	To Age 70

- Benefit Amount: The Standard benefit provides up to 75% of a participant's average monthly earnings, capped at $4,000 per month. Supplemental Coverage is available to employees whose annual salary exceeds $64,000, and provides an additional benefit up to $3,500 per month. For disabilities lasting longer than 12 months, a supplement of $75 per month is added to the normal benefit amount.

- Benefit Increases: None

- Benefit Offsets: The ICI plan benefit is offset by income received from other sources including, but not limited to: Social Security (regular or disability), unemployment compensation, worker's compensation (except permanent disability awards), WRS benefits (retirement, disability retirement, Long Term Disability Insurance, or separation), work earnings, and Duty Disability benefits.

- Definition of Disability: During the first 12 months of disability, the participant is disabled if unable to perform his or her job and under the care of a physician. After the first 12 months of disability, the participant is disabled if unable to engage in any substantial gainful activity for which he or she is reasonably qualified.

- Premium Contributions: Premiums for Standard Coverage are paid by the employer and the employee. Premiums for Supplemental Coverage are paid entirely by the employee.

Appendix B: Data for Valuation

Number of Active Local ICI Claims by Year of Disability as of December 31, 2014

Year of Disability	Male	Female	Total
2001 and earlier	1	2	3
2002	1	1	2
2003	2	-	2
2004	2	2	4
2005	3	3	6
2006	1	1	2
2007	-	-	-
2008	-	-	-
2009	3	2	5
2010	6	1	7
2011	3	-	3
2012	7	3	10
2013	3	2	5
2014	4	14	18
Total	36	31	67

Total Net Monthly Benefit by Year of Disability as of December 31, 2014

Year of Disability	Male	Female	Total
2001 and earlier	366	1,604	1,970
2002	1,122	1,018	2,140
2003	3,437	-	3,437
2004	707	1,403	2,111
2005	586	1,421	2,007
2006	857	192	1,049
2007	-	-	-
2008	-	-	-
2009	368	1,453	1,821
2010	10,067	432	10,499
2011	3,449	-	3,449
2012	9,758	1,926	11,684
2013	5,066	1,597	6,663
2014	8,382	28,699	37,081
Total	44,165	39,745	83,910

Number of Active Local ICI Claims by Age at Disability
as of December 31, 2014

Age at Disability	Male	Female	Total
< 20	-	-	-
20-24	-	-	-
25-29	1	2	3
30-34	1	4	5
35-39	5	6	11
40-44	5	5	10
45-49	7	4	11
50-54	11	7	18
55-59	3	2	5
60-64	3	1	4
65+	-	-	-
Total	36	31	67

Total Net Monthly Benefit by Age at Disability
as of December 31, 2014

Age at Disability	Male	Female	Total
< 20	-	-	-
20-24	-	-	-
25-29	2,075	5,688	7,763
30-34	3,023	2,473	5,496
35-39	8,069	6,747	14,816
40-44	3,791	5,106	8,897
45-49	7,404	2,255	9,660
50-54	11,623	12,594	24,216
55-59	1,280	2,133	3,414
60-64	6,899	2,750	9,649
65+	-	-	-
Total	44,165	39,745	83,910

Appendix C: Actuarial Methods and Assumptions

- Valuation Date: 12/31/2014

- Discount Rate: 7.20%, specified by ETF

- Claim Termination Rates: Claim termination rate assumptions were derived from 1987 CGDT rates using the following adjustment factors:

Disability Duration	Termination Rate Adjustment Factor
1 – 24 months	2.50
25 – 36 months	2.40
37 – 48 months	2.20
49 – 60 months	2.00
61 – 72 months	1.80
73 – 84 months	1.60
85 – 96 months	1.40
97 – 108 months	1.20
109 + months	1.00

- Future Offset Approval Rates: Estimated Social Security offset assumptions are shown below. No future offsets are assumed on claimants disabled more than five years.

  Probability of being approved for Social Security benefits (if not already approved):

Claim Duration	Probability
1 – 12 months	69%
13 – 24 months	45%
25 – 36 months	17%
37 – 48 months	8%
49 – 60 months	5%
61 + months	0%

  Future Social Security offset amount as percentage of gross benefit amount: 44%.

- Incurred But Not Reported Claims: 15% of the estimated incurred claims for the current year, as determined from analyses of historical ICI claims experience.

- Loss Adjustment Expenses: 4.5% of the liability for open claims plus 6.0% of the liability for IBNR claims

Appendix D: Reliance Items

In performing the valuation, we relied, without audit, on certain data and information provided by ETF and Aetna. To the extent any of the data or other items was incomplete or inaccurate, the results of our work may be materially affected.

The principal items on which we relied included the following:

- Lists of active disability claims and related information provided by Aetna
- Asset balances, premium contributions, plan expenses, covered payroll, and other financial information provided by ETF
- Plan descriptions provided by ETF
- Discussions with ETF and Aetna personnel