

# State of Wisconsin



## Local Income Continuation Insurance Plan Actuarial Review as of December 31, 2011

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# I. Overview

The purpose of this report is to summarize our review of the Local Income Continuation Insurance Plan. Included are a brief review of the Plan's experience during 2011, an estimate of the Plan's liability as of December 31, 2011, and an analysis of current funding levels.

In preparing this report, we have relied on claim information provided by Aetna and the Department of Employee Trust Funds ("ETF"). We have not audited this information, but have relied on it as submitted after making reasonableness checks as we deemed appropriate under the circumstances.

The results of this review indicate that the Local Income Continuation Insurance Plan (including supplemental benefits) is in a strong financial position, with assets of \$31.8 million and estimated liabilities of \$4.9 million. The asset balance does not include \$2.1 million in deferred market losses which will be smoothed in over the next four years. We note that the deferred market losses listed here and as used in our financial projections are draft amounts provided by ETF due to the timing of our reports and the finalization of the deferred amounts.

In 2011, plan assets increased by 4.3%, while estimated liabilities increased 22.3%. This resulted in the plan's annual net fund balance decreasing from 663% of liabilities in 2010 to 551% of liabilities in 2011. As a result of the continued positive funded status of the plan, we recommend contributions not be reinstated at this time.

The remainder of this report summarizes the review in more detail. A number of assumptions have been made in estimating the Plan's liability. These assumptions are described throughout the report and summarized in Exhibit 1.

## II. 2011 Experience Review

### Fund Balance

During 2011, the fund balance increased from \$30,457,781 to \$31,777,793. Total revenues were \$2,389,720 with paid claims and administrative expenses totaling \$1,017,157. These components are shown in the following table along with figures for the previous three years for comparison purposes. The Net Ending Balance does not include \$2.1 million in deferred market losses which will be smoothed in over the next four years.

	2011	2010	2009	2008
<b>Beginning Balance</b>	30,457,781	28,097,196	25,871,414	24,150,025
Closing Adjustments	(52,551)	(11,837)	47,498	(27,755)
<b>Adjusted Beginning Balance</b>	<b>30,405,230</b>	<b>28,085,359</b>	<b>25,918,912</b>	<b>24,122,270</b>
<b>Revenues</b>				
Contributions	1,926,819	1,898,818	1,839,354	1,716,186
Investment Earnings	462,901	1,374,714	1,114,527	778,089
<b>Total</b>	<b>2,389,720</b>	<b>3,273,533</b>	<b>2,953,881</b>	<b>2,494,275</b>
<b>Expenses</b>				
Paid Claims	890,905	764,408	644,811	594,077
Administrative Expenses	126,252	136,702	130,787	151,054
<b>Total</b>	<b>1,017,157</b>	<b>901,111</b>	<b>775,597</b>	<b>745,131</b>
<b>Net Income</b>	<b>1,372,563</b>	<b>2,372,422</b>	<b>2,178,284</b>	<b>1,749,144</b>
<b>Ending Balance</b>	<b>31,777,793</b>	<b>30,457,781</b>	<b>28,097,196</b>	<b>25,871,414</b>
<b>Estimated Liability</b>	<b>4,882,791</b>	<b>3,992,238</b>	<b>3,840,102</b>	<b>3,886,827</b>
<b>Net Fund Balance</b>	<b>26,895,001</b>	<b>26,465,543</b>	<b>24,257,094</b>	<b>21,984,587</b>
<b>Investment Earnings/Mean Ending Balance</b>	<b>1.5%</b>	<b>4.8%</b>	<b>4.2%</b>	<b>3.2%</b>

The following table shows the number of open and closed claims by year incurred and the average net monthly benefit.

### Claims By Year of Incurral

Year Incurred	Open Claims		Closed Claims		All Claims	
	Number	Average Benefit	Number	Average Benefit	Number	Average Benefit
2011	20	\$ 1,880	40	\$ 2,653	60	\$ 2,395
2010	9	1,862	36	1,918	45	1,906
2009	6	1,423	0	-	6	1,423
2008	2	1,050	1	913	3	1,004
2007	0	-	0	-	0	-
2006	2	524	1	1,066	3	705
2005	6	334	0	-	6	334
2004	5	896	0	-	5	896
2003	4	1,134	0	-	4	1,134
2002	2	1,070	0	-	2	1,070
2001	0	-	0	-	0	-
2000	2	489	0	-	2	489
1999	0	-	0	-	0	-
1998	0	-	0	-	0	-
1997	1	992	0	-	1	992
1996	1	163	0	-	1	163
1995	0	-	0	-	0	-
1994	0	-	0	-	0	-
1993	0	-	1	389	1	389
<b>Total</b>	<b>60</b>	<b>\$ 1,356</b>	<b>79</b>	<b>\$ 2,247</b>	<b>139</b>	<b>\$ 1,862</b>

The following table shows the claim count and average net benefit amount for open, closed and total claims, respectively, as of December 31, 2011, and each of the nine prior plan year ends.

### Claims By Valuation Date

Plan Year	Open Claims		Closed Claims		All Claims	
	Number	Average Net Benefit	Number	Average Net Benefit	Number	Average Net Benefit
2011	60	\$ 1,356	79	\$ 2,247	139	\$ 1,862
2010	50	1,355	74	2,098	124	1,798
2009	58	1,451	52	2,277	110	1,842
2008	50	1,319	64	2,377	114	1,913
2007	51	1,164	94	866	145	971
2006	62	1,183	62	1,170	124	1,176
2005	52	1,376	49	1,195	101	1,288
2004	37	1,368	47	1,798	84	1,609
2003	27	1,276	48	1,746	75	1,577
2002	34	1,569	46	1,299	80	1,414

# III. Estimated Liability as of December 31, 2011

The Plan's liability for outstanding claims under the Local Income Continuation Insurance program was estimated in two parts — reported claims and incurred but unreported claims. The following paragraphs summarize the method used and results.

## Reported Claims

Disabled life reserve factors were calculated using the 1987 Commissioner's Group Basic Disability table adjusted for the State of Wisconsin's own termination experience. These factors represent the present value of future payments, at 7.2% interest, to a disabled person with a monthly benefit of \$1.00. In 2010, the Employee Trust Funds Board reduced the investment return assumption relied upon by the Wisconsin Retirement System ("WRS") from 7.8% to 7.2%, which has since remained at 7.2%. For consistency, and at the direction of ETF personnel, the valuation interest rate is tied to the WRS valuation rate; therefore a 7.2% discount rate was used in the December 31, 2011, valuation. The factors are indexed by age at disablement, duration of disablement, and duration to the end of the benefit period.

Aetna provided a listing of those persons known to be disabled as of December 31, 2011. The age at disablement, duration of disability and benefit end date, based on the maximum allowable duration of benefits under the plan, was calculated for each individual. The appropriate factors were then multiplied by the amount of benefit for each disabled person. The results were summarized by year incurred and in total.

For disabilities that last over one year, an additional \$75 per month is included in the normal benefit amount for the purpose of defraying medical costs. This supplemental benefit was effective January 1, 2002, for all claims in pay status. A liability was added for those claims incurred in 2011 representing the probability that claims will continue beyond the first year and the present value of the additional benefit. The liability for the \$75 supplement is already included in the liability for claims over one year in duration.

## Incurred But Unreported Claims

In addition to those claims reported as of December 31, 2011, there presumably are other claims incurred prior to that date but which are not yet reported. The Plan's liability for long-term disability claims begins on the date an employee is disabled, even though the employee is not eligible for payments during the waiting period or has not yet filed a claim. Thus, an estimate of the additional liability for claims incurred but not reported as of the valuation date is necessary.

Besides the waiting period, delays in the reporting and processing of claims normally occur. From the Plan's own experience, we observed that on average approximately 17% of claims incurred during any twelve month period are unreported as of the end of that twelve month period. Thus, the Plan's liability for claims incurred but not yet reported was calculated as the estimated number of incurred but not yet reported claims times an average liability for reported claims.

## Results

The total estimated liability as of December 31, 2011, for the Local Income Continuation Insurance program is \$4,882,791, developed as follows:

Reported Claim Liability	\$4,043,598
<u>\$75 Supplement</u>	<u>35,125</u>
Total Reported Liability	4,078,723
<u>Incurred But Not Reported Liability</u>	<u>804,068</u>
Total Liability	\$4,882,791

This total liability is 22.3% greater than the liability determined as of December 31, 2010. The increase can be attributed primarily to a 20.0% increase in the number of open claims as well as a change in the composition and characteristics of the average claimant in the open claim cohort.

Exhibit 2 contains a breakdown of the \$4,078,723 reported liability by year of disability.

## IV. Analysis of Funding Levels

The Local Income Continuation Insurance Plan continues to be in a strong financial position with assets of \$31,777,793 and estimated liabilities of \$4,882,791 which produces a net fund balance of \$26,895,001.

A reasonable long-term objective would be to maintain a net fund balance of more than 100% of the estimated liabilities as a hedge against future adverse experience. Substantial year-to-year fluctuations can occur under disability income programs, particularly for the relatively small size of this program.

Maintaining a large funding balance in excess of estimated liabilities, perhaps 200% in excess, is prudent.

The excess now represents 551% of the estimated liabilities. The following table shows the net fund balance as a percentage of the estimated liability by year. The table demonstrates the fluctuating, although consistently sufficient, excess funding from year to year.

	2011	2010	2009	2008	2007	2006
<b>Assets</b>	31,777,793	30,457,781	28,097,196	25,871,414	24,150,025	20,919,663
<b>Estimated Liability</b>	4,882,791	3,992,238	3,840,102	3,886,827	3,822,315	4,307,964
<b>Net Fund Balance</b>	26,895,001	26,465,543	24,257,094	21,984,587	20,327,710	16,611,699
<b>Percentage</b>	551%	663%	632%	566%	532%	386%

The employer's premium contribution rate was reduced from .375% of covered payroll to .25% effective March 1, 2002. Effective 2012, all premium contributions are indefinitely waived. The \$75 Supplemental Add-on benefit was effective January 1, 2002.

Historically, the investment earnings of the plan have been large enough to fund the paid claims and administrative expenses of the plan. As a result, the assets of the plan have increased over time. Due to the continued large positive funded status of the plan, we are recommending a continuation of the waiver of premium with reinstatement when necessary pending the annual review of the plan's funded status.



## Exhibit 1

**Elimination Period** — 90 days average. Actual waiting period can vary between 30 and 180 days.

**Benefit Period** — The maximum duration of benefits for disabled insured employees is:

Age at Disablement	Maximum Duration of Benefits in Years
61 or Younger	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	1.00 years

In no event are benefits payable beyond the 70th birthday.

**Termination Rates** — Deloitte Consulting completed a claim termination rate experience study using WRS disability program claims experience for claims incurred 5/13/2006 – 12/31/2010. The results of the claim termination rate study supported a reduction in the termination rate adjustment factor for the first and second year of disablement (from 280% and 260%, respectively). The percentage of the 1987 Commissioner's Basic Disability Table three month elimination period termination rates based on the State of Wisconsin's own experience are shown below:

Duration of Disablement	Termination Rate Adjustment
First Year	250%
Second Year	250%
Third Year	240%
Fourth Year	220%
Fifth Year	200%
Sixth Year	180%
Seventh Year	160%
Eighth Year	140%
Ninth Year	120%
Tenth Year & Later	100%

**Interest** — 7.2% per year.

**Contingency Margins** — None.

## Exhibit 2

### Reported Claim Liability by Year of Disability

Open Claims as of December 31, 2011 <sup>1</sup>								
Year of Disability	Count	Gross Benefit	Offset Amount	Net Benefit	Estimated Liability	75 Supp	Ave. Benefit	Est'd Liability
2011	20	\$ 51,750	\$ 14,145	\$ 37,605	\$ 1,026,243	\$ 35,125	\$1,880	\$ 1,061,367
2010	9	26,363	9,607	16,755	843,589		1,862	843,589
2009	6	20,575	12,035	8,540	687,073		1,423	687,073
2008	2	6,150	4,050	2,100	35,928		1,050	35,928
2006	2	5,150	4,101	1,049	104,837		524	104,837
2005	6	13,450	11,443	2,007	133,914		334	133,914
2004	5	12,375	7,895	4,480	399,199		896	399,199
2003	4	11,999	7,462	4,536	454,008		1,134	454,008
2002	2	3,150	1,010	2,140	151,218		1,070	151,218
2000	2	4,275	3,297	978	104,535		489	104,535
1997	1	1,942	950	992	100,898		992	100,898
1996	1	525	362	163	2,156		163	2,156
<b>Total</b>	<b>60</b>	<b>\$157,703</b>	<b>\$76,357</b>	<b>\$ 81,346</b>	<b>\$ 4,043,598</b>	<b>\$ 35,125</b>	<b>\$ 1,356</b>	<b>\$ 4,078,723</b>

<sup>1</sup>Open Claims presented by year of disability. For certain disability years (e.g. 2007, 1999, etc.), no claims remained open as of December 31, 2011.



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