State of Wisconsin

State Income Continuation Insurance Plan
Actuarial Review
as of December 31, 2013

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I. Overview

The purpose of this report is to summarize our review of the State Income Continuation Insurance Plan. Included are a brief review of the Plan's experience during 2013, an estimate of the State's liability as of December 31, 2013, 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 and recommended corrections to Aetna as we deemed appropriate under the circumstances.

The results of this review indicate that the State Income Continuation Insurance Plan (including supplemental benefits) has assets of $51.2 million and estimated liabilities of $85.6 million as of December 31, 2013. The asset balance does not include $2.9 million in deferred market gains which will be smoothed in over the next four years. We note that the deferred market gains 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. The net fund balance, or plan assets less estimated liabilities, is $(34.3) million. This net fund balance represents approximately (40.1)% of liabilities. Traditionally, a long-term objective of maintaining a net fund balance of 15% to 25% in excess of estimated liabilities has been considered reasonable.

Premiums were reinstated for this plan on August 1, 1996. These premiums stabilized the funded status of the plan from 2000 through 2004. Since 2005, the net fund balance has been negative. Despite 7% increases in premium revenue that took effect February 1, 2007, January 1, 2010 and January 1, 2012, and a 4.5% increase that took effect January 1, 2013, the funded status of the plan has continued to deteriorate. The funded status of the plan has not been in the targeted range since 2004.

Last year we recommended a 4.5% premium rate increase for 2014 and also anticipated that additional increases of 4.0% may be needed in 2015 through 2018 to return the net fund balance to target levels. The Group Insurance Board ("the Board") approved the recommended 4.5% premium rate increase which was implemented effective January 1, 2014. The impact of this premium rate increase on the net fund balance will not be fully realized until year-end 2014, which has been accounted for in our projections of future experience.

In 2013, plan assets increased by 9.2% while estimated liabilities increased by 11.8%. This resulted in contiunued erosion of the plan's net fund balance, declining from (38.7)% of liabilities in 2012 to (40.1)% of liabilities in 2013. As a result of the continued deterioration of the funded status of the plan in 2013, we recommend a 7.0% premium rate increase for 2015 and anticipate additional 7.0% annual increases may be needed for 2016 and 2017. The anticipated premium increases for 2016 and 2017 are subject to change as actual assets and liabilities emerge and will be reevaluated during the annual analysis of funding levels.

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

II. 2013 Experience Review

Fund Balance

During 2013, the assets of the plan increased from $46,907,891 to $51,234,976. Total revenues were $20,368,056 with paid claims and administrative expenses totaling $19,695,754. As shown below, plan revenues increased by $5.0 million and expenses decreased by $3.0 million, resulting in a 109% increase in net income and 9.2% increase in the ending asset balance. This was the first year since 2007 that the plan experienced positive net income. The components of the cash flows are shown in the following table along with figures for the previous three years for comparison purposes. The net fund balance does not include $2.9 million in deferred market gains which will be smoothed in over the next four years.

	2010	2011	2012	2013
Beginning Asset Balance	59,367,041	59,219,088	54,368,602	46,907,891
Closing Adjustments	(24,781)	(105,055)	(195,413)	3,654,782
Adjusted Beginning Asset Balance	**59,342,260**	**59,114,033**	**54,173,189**	**50,562,673**
Revenues				
Premium Contributions	14,081,359	13,687,699	14,338,544	14,985,434
Investment Earnings	2,839,973	905,077	1,056,009	5,382,623
Total	**16,921,332**	**14,592,776**	**15,394,553**	**20,368,056**
Expenses				
Paid Claims	15,180,515	17,517,513	20,602,901	17,865,831
Administrative Expenses	1,863,988	1,820,694	2,056,951	1,829,922
Total	**17,044,504**	**19,338,207**	**22,659,852**	**19,695,754**
Net Income	**(123,172)**	**(4,745,431)**	**(7,265,298)**	**672,303**
Ending Asset Balance	**59,219,088**	**54,368,602**	**46,907,891**	**51,234,976**
Estimated Liability	**70,099,863**	**83,256,262**	**76,526,919**	**85,563,963**
Net Fund Balance	**(10,880,775)**	**(28,887,659)**	**(29,619,028)**	**(34,328,987)**
Investment Earnings/Mean Ending Balance	**4.9%**	**1.6%**	**2.1%**	**11.2%**

As of December 31, 2013, there were 1,201 open claims. During 2013, 1,377 claims were closed. Total reported claims incurred during 2013 were 1,091. The following table shows the number of open and closed claims by year incurred and the average net monthly benefit within the 2013 valuation dataset.

Claims by Year of Incurral

	Open Claims		Closed Claims		All Claims*	
Year Incurred	Number	Average Net Benefit	Number	Average Net Benefit	Number	Average Net Benefit
2013	314	$2,344	777	$2,724	1,091	$2,615
2012	138	1,694	511	2,230	649	2,116
2011	99	986	31	1,381	130	1,080
2010	83	988	13	959	96	985
2009	69	1,042	11	820	80	1,011
2008	56	722	3	156	59	693
2007	62	938	3	323	65	910
2006	56	772	4	1,027	60	789
2005	52	847	6	838	58	846
2004	44	794	2	126	46	765
2003	31	613	1	57	32	596
2002	33	800	5	682	38	785
2001	24	771	1	103	25	744
2000	22	505	1	2,456	23	590
1999	18	985	3	363	21	896
1998	14	673	1	1,095	15	701
1997	9	536	1	318	10	514
1996	17	694	-	-	17	694
1995 & Prior	60	844	3	789	63	842
Total	**1,201**	**$1,342**	**1,377**	**$2,427**	**2,578**	**$1,922**

* Includes incurred claims which remain open as of 12/31/2013 and claims closing during 2013; does not include incurred claims closed in prior years.

The number of open claims and their respective average net benefit amounts in 2013 increased compared to the previous year. The number of closed claims decreased and their respective average net benefit amounts in 2013 increased when compared to last year. The following table shows this comparison for the last ten years. There was one 2011 incurred claim which was cancelled in 2012. This claim is included in the 'All Claims' columns below.

Claims By Valuation Date

	Open Claims		Closed Claims		All Claims	
Plan Year	Number	Average Net Benefit	Number	Average Net Benefit	Number	Average Net Benefit
2013	1,201	$ 1,342	1,377	$ 2,427	2,578	$ 1,922
2012	1,105	1,305	1,463	2,300	2,569	1,872
2011	1,170	1,350	1,381	2,317	2,551	1,873
2010	1,067	1,231	1,372	2,237	2,439	1,797
2009	1,124	1,264	1,189	2,306	2,313	1,799
2008	1,130	1,325	1,440	2,160	2,570	1,793
2007	1,064	1,128	1,412	997	2,476	1,054
2006	1,123	1,146	1,295	881	2,418	1,004
2005	1,054	1,211	1,215	1,009	2,269	1,103
2004	972	1,168	1,205	1,042	2,177	1,098

III. Estimated Liability as of December 31, 2013

The State's liability for outstanding claims under the State Income Continuation Insurance Plan 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 per the direction of ETF personnel, the valuation interest rate is tied to the WRS valuation rate; therefore a 7.2% discount rate was used for the December 31, 2013, 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, 2013. 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 2013 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, 2013, there presumably are other claims incurred prior to that date but which are not yet reported. The State'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. Besides the waiting period, delays in the reporting and processing of claims normally occur. Thus, an estimate of the additional liability for claims incurred but not reported as of the valuation date is necessary.

We performed a historical recast analysis from the Plan's own experience to determine the sufficiency of our past IBNR methodology. As a result of the analysis performed in the prior year, a fixed percentage of 10% of the reported liability was established based on the observed historical levels of IBNR claims as a percent of the reported claim liability within the recast analysis. We performed a similar analysis this year and the results indicated that the established IBNR is sufficient and therefore the IBNR factor remained at 10% of the actuarial present value of claims in payment status. We will continue to monitor the effectiveness of the 10% factor over time and make adjustments as needed.

Results

The total estimated liability as of December 31, 2013, for the State Income Continuation Insurance Plan is $85,563,963, developed as follows:

Reported Claim Liability	$77,262,634
$75 Supplement	522,787
Total Reported Liability	77,785,421
Incurred But Not Reported Liability	7,778,542
Total Liability	$85,563,963

When compared to their respective liabilities as of December 31, 2012, the December 31, 2013, total reported claim liability and incurred but not reported liability increased 11.8%, resulting in an 11.8% increase in the total liability. The increase in the reported liability is due to the combined effect of an 8.7% increase in the count of open claims and 2.9% increase in the average net benefit per open claim. As the incurred but not reported liability is a fixed percentage of the reported claim liability, the decrease in the incurred but not reported liability is consistent with the decrease in the reported claim liability.

Exhibit 2 contains a breakdown of the $77,785,421 reported liability by year of disability.

IV. Analysis of Funding Levels

The State Income Continuation Insurance Plan has assets of $51.2 million and estimated liabilities of $85.6 million, producing a net fund balance of $(34.4) million. In 2013, the collected premiums covered 76% of paid claims and administrative expenses, while investment earnings covered 27% of the paid claims and administrative expense balance. In total, plan revenue covered all paid claim and administrative expenses, and cash flow in the trust was positive.

Considerable year-to-year fluctuations can occur under disability income plans, even for a plan as large as that of the State. Thus, maintaining a fund balance in excess of estimated liabilities is prudent. A reasonable long-term objective has been to maintain an asset balance of 115% to 125% of estimated liabilities as a hedge against future adverse experience. The current asset balance covers 59.9% of liabilities (as compared to 61.3% last year). Therefore, the net fund balance is below the targeted range.

The following table summarizes the plan's historical funded status, actuarial proposed and Board approved premium rate increases, and the anticipated future needed premium rate increases by valuation date. The actuarial recommendations are based on current assets, liabilities, resulting funding status, and the projection of future experience.

Historical Proposed & Approved Premium Rate Increases by Valuation Date

Plan Year	Funded Status (% of Liability)	Premium Increase (% Increase / Effective Yr)		Anticipated Future Increases
		Actuary Proposed	Board Approved	
2005	-1.5%	7% / 2007	7% / Feb-2007	N/A
2006	-9.4%	None	None	N/A
2007	-4.3%	None	None	N/A
2008	-17.1%	7% / 2010	7% / 2010	7% / 2012 & 2014
2009	-13.9%	None	None	7% / 2012 & 2014
2010	-15.5%	7% / 2012	7% / 2012	7% / 2014 & 2016
2011	-34.7%	None	4.5% / 2013	9% / 2014 & 2016
2012	-38.7%	4.5% / 2014	4.5% / 2014	4% / 2015-2018
2013	-40.1%	7.0% / 2015	Pending	7% / 2016 & 2017

Last year, as a result of the worsening funded status of the plan in 2012, (34.7)% to (38.7)%, we revised the anctipated 2014 and 2016 premium rate increases to plan premium proposed in 2011 from 9% to a 4.5% increase in 2014 and anticipated annual premium rate increases of 4% in 2015 through 2018. In 2013, the funded status of the plan eroded further from (38.7)% to (40.1)%. In light of the 4.5% premium rate increase effective 2014 and the continued deterioration of the funded status of the plan, we recommend a 7.0% premium rate increase be implemented in 2015. While a 4% rate increase for 2015 was anticipated last year, we believe a 7% increase is prudent given deterioration of the funded status of the plan in 2013 beyond that projected based on experience through 2012.

Based on current financial projections, we anticipate that additional 7% annual premium increases effective in 2016 and 2017 will likely be nessessary in order to return the net fund balance to target levels over the longer term. As future asset and liability experience emerges, we will continue to evaluate the need for the future additional premium increases.

The premium increases needed to bring the fund balance up to targeted levels are based on projected estimates of future plan experience using underlying actuarial assumptions for future claims incidence rates, claim termination rates, investment earnings rates and other factors. Due to the long-term nature of the plan's benefit obligations and the uncertainties inherent in the projected future experience resulting from normal statistical fluctuations as seen in the historical experience, the exact amount of the corrective rate action needed at any given time will not be known for several years. As a result, it is prudent to apply periodic incremental premium rate adjustments rather than a single large increase. In this way, the incremental rate adjustments can be calibrated and updated periodically as actual experience emerges. This also helps avoid the need to reduce rates in the future if the increase would turn out to be too high. Another advantage of smaller incremental increases is that it dampens the disruption on plan participants of a larger premium increase and the resulting potential for adverse selection. Lastly, applying incremental increases helps maintain greater inter-generational equity among premium contributors in recognition of the volatility of plan experience over longer time frames.

Exhibit 1– Summary of Actuarial Assumptions

Elimination Period — 90 day average. Actual waiting period varies with accumulated sick leave and for University faculty, the elimination period selected.

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.

IBNR – 10% of the liability for reported claims

Contingency Margins — None.

Exhibit 2: Reported Claim Liability by Year of Disability

Open Claims as of December 31, 2013

Year of Disability	Count	Gross Benefit	Offset Amount	Net Benefit	Ave. Net Ben	Estimated Base Liabilty	Estimated $75 Supp Liability	Estimated Total Liability
2013	314	$852,094	$116,126	$735,968	$2,344	$19,550,655	$522,787	$20,073,441
2012	138	429,976	196,198	233,778	1,694	11,421,190		11,421,190
2011	99	285,925	188,290	97,635	986	6,823,221		6,823,221
2010	83	238,413	156,367	82,045	988	6,146,579		6,146,579
2009	69	202,386	130,495	71,891	1,042	5,580,845		5,580,845
2008	56	173,200	132,784	40,416	722	3,121,729		3,121,729
2007	62	168,858	110,698	58,160	938	4,517,933		4,517,933
2006	56	140,368	97,146	43,223	772	3,555,033		3,555,033
2005	52	124,692	80,655	44,037	847	3,673,009		3,673,009
2004	44	98,673	63,721	34,951	794	2,686,131		2,686,131
2003	31	66,730	47,720	19,010	613	1,607,651		1,607,651
2002	33	71,844	45,442	26,402	800	1,669,087		1,669,087
2001	24	48,058	29,552	18,505	771	1,289,154		1,289,154
2000	22	39,776	28,658	11,118	505	609,478		609,478
1999	18	41,421	23,685	17,737	985	1,080,448		1,080,448
1998	14	30,883	21,458	9,425	673	382,738		382,738
1997	9	17,027	12,201	4,826	536	266,234		266,234
1996	17	26,850	15,057	11,793	694	687,225		687,225
1995	9	14,395	5,594	8,801	978	356,351		356,351
1994	10	17,368	10,050	7,318	732	362,772		362,772
1993	7	12,572	7,957	4,615	659	238,527		238,527
1992	5	7,669	2,715	4,955	991	261,968		261,968
1991	7	11,645	2,804	8,841	1,263	518,746		518,746
1990	5	5,821	2,646	3,175	635	210,229		210,229
1989	4	5,691	2,273	3,417	854	159,480		159,480
1988	4	6,109	2,006	4,103	1,026	207,947		207,947
1987	2	2,212	935	1,277	638	60,660		60,660
1986	1	1,161	527	634	634	19,284		19,284
1984	2	2,023	1,046	977	488	68,342		68,342
1983	2	2,153	431	1,722	861	84,151		84,151
1982	1	825	416	409	409	30,005		30,005
1980	1	727	308	419	419	15,832		15,832
Total	**1,201**	**$3,147,543**	**$1,535,960**	**$1,611,583**	**$1,342**	**$77,262,634**	**$522,787**	**$77,785,421**

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