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The State of Wisconsin



State Income Continuation Insurance Plan Actuarial Review as of December 31, 2007

> Prepared By: Timothy D. Gustafson, FSA, MAAA Deloitte Consulting LLP

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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 2007, an estimate of the State's liability as of December 31, 2007, 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. We have not audited this information, but have relied on it as submitted after making reasonableness checks and corrections 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 \$62.0 million and estimated liabilities of \$64.8 million as of December 31, 2007. The asset balance does not include \$13.8 million in deferred market gains which will be smoothed in over the next four years. The net fund balance is \$(2.8) million. This net fund balance represents approximately (4.3)% of liabilities. Traditionally, a long-term objective of maintaining a net fund balance of 15% to 25% 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 for a number of years. The annual net fund balances (as a percentage of liabilities) were 15% in 2001, 13% in 2002, 17% in 2003, 10% in 2004, (1.5)% in 2005 and (9.4)% in 2006. Throughout the course of 2005 and 2006, the funded status of the plan deteriorated and is no longer in the targeted range. The funded status of the plan is (4.3)% at the end of 2007. An increase in premium revenue of approximately 7% took effect February 1, 2007. While the net fund balance remains in a deficit position, the early affects of the increase in premium can be seen in the 5.1% increase of the net fund proportion of total liabilities. As the increased premium level had only been in effect for 11 months at the time of the valuation, further impacts of the new premium level are expected to be evident in future valuations.

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

II. 2007 Experience Review

Fund Balance

During 2007, the fund balance increased from \$60,722,872 to \$62,022,782; investment earnings were \$7,011,277 with paid claims and administrative expenses totaling \$17,094,666. As shown below, there was a positive cash flow in 2007, which is driven by the 7% premium increase which took effect February 1, 2007, as well as higher rates of recognized investment earnings. These components are shown in the following table along with figures for the previous three years for comparison purposes.

	2007	2006	2005	2004
Beginning Balance	60,722,872	62,548,480	64,107,888	64,035,892
Closing Adjustments	(47,211)	22,594	(18,654)	(190,862)
Adjusted Beginning Balance	60,675,661	62,571,074	64,089,234	63,845,030
Revenues				
Contributions	11,430,510	9,961,219	9,777,198	9,621,923
Investment Earnings	7,011,277	5,812,959	3,986,175	5,090,324
Total	18,441,787	15,774,178	13,763,373	14,712,247
Expenses				
Paid Claims	14,875,149	15,345,079	13,341,722	12,453,660
Administrative Expenses	2,219,517	2,277,300	1,962,404	1,995,729
Total	17,094,666	17,622,379	15,304,126	14,449,389
Net Income	1,347,121	(1,848,201)	(1,540,754)	262,858
Ending Balance	62,022,782	60,722,872	62,548,480	64,107,888
Investment Earnings/Mean Balance	12.1%	9.9%	6.5%	8.3%

As of December 31, 2007 there were 1,064 open claims. During 2007, 1,412 claims were closed. Total reported claims incurred during 2007 were 2,476. 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

	Open Claims		Closed Claims		All Claims	
Year		Average		Average		Average
Incurred	Number	Benefit	Number	Benefit	Number	Benefit
2007	308	\$ 1,845	689	\$ 1,071	997	\$ 1,310
2006	116	1,135	588	897	704	936
2005	114	1,108	54	904	168	1,042
2004	103	843	31	697	134	809
2003	63	641	11	865	74	675
2002	55	721	8	496	63	692
2001	36	604	7	534	43	592
2000	34	696	3	502	37	680
1999	28	791	2	1,524	30	840
1998	27	671	2	12,863	29	1,512
1997	21	553	4	483	25	542
1996	29	756	1	1,843	30	792
1995	23	612	2	504	25	604
1994	25	577	0	-	25	577
1993	11	531	3	362	14	495
1992	11	727	0	-	11	727
1991	12	1,156	0	-	12	1,156
1990	12	627	1	456	13	614
1989 & Prior	36	683	6	414	42	645
Total	1,064	\$ 1,128	1,412	\$ 997	2,476	\$ 1,065

The number of open claims for 2007 decreased compared to last year, while the average benefit amount increased slightly for these open claims. Both the count of closed claims and their average benefit increased in 2007. The following table shows this comparison for the last few years.

Claims by Valuation Date

	Open Claims		Closed Claims		All Claims	
Valuation		Average		Average		Average
Year	Number	Benefit	Number	Benefit	Number	Benefit
2007	1,064	\$ 1,128	1,412	\$ 997	2,476	\$ 1,065
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
2003	876	1,255	1,148	1,261	2,024	1,258
2002	895	1,042	1,086	1,012	1,981	1,025
2001	1,084	1,132	662	2,044	1,746	1,478
2000	809	1,078	1,246	1,465	2,055	1,313
1999	757	998	1,323	1,381	2,080	1,242
1998	855	1,040	1,501	1,339	2,356	1,231
1997	859	1,004	1,068	1,364	1,927	1,203
1996	839	1,036	1,283	1,281	2,122	1,184
1995	872	933	1,094	1,309	1,966	1,142

III. Estimated Liability as of December 31, 2007

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's own termination experience. These factors represent the present value of future payments, at 7.8% interest, to a disabled person with a monthly benefit of \$100. The WRS valuation rate was reduced from 8.0% to 7.8% as of February 1, 2004 and has remained at 7.8% since. For consistency and per the direction of ETF personnel, the valuation interest rate is tied to the WRS valuation rate; therefore a 7.8% discount rate was used for the December 31, 2007 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, 2007. The age at disablement, duration of disability, and duration to the end of the benefit period 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, a supplement of \$75 per month is included in the normal benefit amount for the purpose of defraying medical costs. A liability was added for those claims incurring in 2007 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.

Incurred But Unreported Claims

In addition to those claims reported as of December 31st, there presumably are other claims incurred prior to that date but which are not as 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. Thus, it is necessary to estimate the additional liability for claims incurred but not reported as of the valuation date.

Besides the waiting period, delays in the reporting and processing of claims normally occur. From the State's own experience, we observed that approximately 25% of claims open and closed during the previous twelve months are unreported as of year end. Thus, the State'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 benefit amount times an average disabled life reserve factor. This methodology has produced stable results over the past several years.

Results

The total estimated liability as of December 31, 2007 for the State Income Continuation Insurance Plan is \$64,830,406, developed as follows:

Reported Claim Liability	\$55,715,554
\$75 Supplement	489,025
Total Reported Liability	\$56,204,579
Incurred But Not Reported Liability	8,625,827
Total Liability	\$64,830,406

This total liability is 3.3% lower than the liability determined as of December 31, 2006 due to the combined effect of a decrease in the open claims and a decrease in the average net benefit.

Exhibit 2 contains a breakdown of the \$56,204,579 reported liability by year of disability.

IV. Analysis of Funding Levels

The State Income Continuation Insurance Plan has assets of \$62.7 million and estimated liabilities of \$64.8 million, producing a net fund balance of \$(2.8) million. Investment earnings covered 41% of paid claims and administrative expenses. The premiums cover 67% of paid claims and administrative expenses. Premiums plus investment earnings combined covered the entirety of paid claims and administrative expenses. Thus, cash flow in the trust was positive this year. Cumulative cash flows for plan years 2002 through 2007 are (\$501,080).

Considerable year-to-year fluctuations can occur under disability income plans, even for a plan as large as that of the State. Thus, it is prudent to maintain a fund balance in excess of estimated liabilities. A reasonable long-term objective has been to maintain a net fund balance of 15% to 25% of estimated liabilities as a hedge against future adverse experience. The current total fund balance is 96.8% of liabilities (as compared to 90.6% last year). The net fund balance is not in the targeted range for the second consecutive year. As part of the December 31, 2005 valuation, Deloitte recommended a 7% increase in premium revenue, which took effect February 1, 2007. However the premium increase did not fully impact the December 31, 2007 valuation, as it had only been in effect for eleven months.

Also, there is currently in excess of \$13.8 million of deferred investment gains which will be gradually smoothed into the fund by 2011. Hence we recommend that the plan's experience be monitored for 1 to 2 years before another premium increase is considered.

Exhibit 1

Elimination Period — 90 days 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 — Percentage of the 1987 Commissioner's Basic Disability Table three month elimination period termination rates based on the State's own experience, as shown below:

Duration of Disablement	Termination Rate Adjustment
First Year	280%
Second Year	260%
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 — 7.8% per year.

 ${\bf Contingency\ Margins-None}.$

Exhibit 2

Reported Claim Liability by Year of Disability

Open Claims as of December 31, 2007						
Year of	Year of		Offset	Net	\$75	Estimated
Disability	Number	Gross Benefit	Amount	Benefit	Supplement	Liability
2007	308	\$ 645,040	\$ 76,725	\$ 568,315	\$ 489,025	\$ 15,010,725
2006	116	269,456	137,840	131,616	-	7,149,827
2005	114	264,699	138,379	126,321	-	8,006,650
2004	103	226,538	139,688	86,850	-	6,285,479
2003	63	140,397	99,991	40,406	-	2,916,775
2002	55	120,630	80,993	39,637	-	2,564,498
2001	36	71,378	49,640	21,738	-	1,817,272
2000	34	66,556	42,902	23,653	-	1,894,342
1999	28	63,158	41,009	22,149	-	1,760,475
1998	27	59,766	41,647	18,119	-	1,162,078
1997	21	41,087	29,465	11,622	-	678,554
1996	29	53,429	31,518	21,911	-	1,421,589
1995	23	42,097	28,012	14,085	-	805,927
1994	25	40,815	26,402	14,413	-	880,665
1993	11	15,543	9,700	5,843	-	434,288
1992	11	16,988	8,992	7,996	-	553,409
1991	12	19,765	5,892	13,874	-	1,024,808
1990	12	19,036	11,514	7,522	-	400,341
1989	11	14,647	7,059	7,588	-	392,673
1988	7	11,479	4,152	7,327	-	528,659
1987	6	7,580	3,741	3,839	-	137,602
1986	2	2,049	1,415	634	-	45,149
1984	3	2,992	1,579	1,413	-	95,003
1983	2	2,153	431	1,722	-	135,984
1982	1	825	416	409	-	38,225
1980	1	727	308	419	-	31,002
1979	2	1,764	997	767	-	32,580
1972	1	474	-	474	-	
Total	1,064	\$ 2,221,069	\$ 1,020,407	\$ 1,200,662	\$ 489,025	\$ 56,204,579

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Deloitte Consulting LLP 111 S Wacker Dr Chicago, IL 60606 United States

Tel: 312 486 2265 Fax: 312 486 2265 www.deloitte.com

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