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CORRESPONDENCE MEMORANDUM

DATE: August 23, 2013
TO: Employee Trust Funds Board
FROM: Deb Roemer, Director
Disability Programs Bureau
Division of Insurance Services
SUBJECT: Acceptance of Long Term Disability Insurance Actuarial Valuation

Staff requests that the Employee Trust Funds Board accept the rates developed by the actuary and approved by the Group Insurance Board (GIB) for the Long-Term Disability Insurance (LTDI) Program.

At its meeting on Tuesday, August 27, 2013, the GIB accepted the attached *Long Term Disability Insurance Plan 2014 Premium Development & Liability Valuation as of December 31, 2012*, from Deloitte Consulting LLP, the GIB's actuary.

The GIB also approved the recommendation that the premium suspension currently in effect be discontinued and premium contributions be reinstated at a rate of 0.32% of covered salary effective January 2014.

A brief summary is found on page one of this report.

Staff will be at the Board meeting to answer any questions.

Attachment: LTDI Actuarial Valuation

Reviewed and approved by Lisa Ellinger, Administrator, Div. of Insurance Services.

Electronically Signed 9/04/13

Board	Mtg Date	Item #
ETF	9.26.13	5A

The State of Wisconsin Group Insurance Board



Long-Term Disability Insurance Plan 2014 Premium Development & Liability Valuation as of December 31, 2012

Prepared By:
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Deloitte Consulting LLP

Board	Mtg Date	Item #
GIB	8/27/2013	6

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I. Introduction

The purpose of this report is to summarize our actuarial review of the Long-Term Disability Insurance ("LTDI") Plan. Included are a brief review of the Plan's experience during 2012, development of the 2014 LTDI premium recommendation, a summary of benefits paid, an estimate of the Plan's net fund balance and a summary of the December 31, 2012 estimated benefits liability.

The results of our review indicate that the LTDI Plan assets of \$232.4 million exceed the estimated liabilities of \$213.1 million. The asset balance does not include \$7.9 million in deferred market gains which will be smoothed in over the next four years. As expected, the net fund balance has steadily decreased from \$218 million in 2004 to \$19.3 million in 2012, primarily due to the continued suspension of premium contributions in effect since 1999, combined with growth in open claims and low investment income.

As outlined in last year's report, at December 31, 2011 it was anticipated that premium contributions may need to be reestablished beginning in 2014. As a result of the continued deterioration of the net fund balance in 2012, we are recommending that premiums be reinstated in 2014. We recommend a premium rate of 0.32% of covered salary effective January 2014. Future plan experience may deviate from that currently projected and result in a necessary premium contribution level different from that recommended here. As plan experience emerges each year, we will continue to monitor the plan's net fund balance and the need for changes to the premium contribution in future years.

Our premium recommendation is based on current and projected assets and liabilities. The 2012 net fund balance as a percent of the incurred claim liability is 9%. Traditionally, a long-term objective of maintaining a net fund balance of 15% to 25% of estimated liabilities has been considered reasonable. The proposed premium structure is anticipated to return the net fund balance to approximately 15% of liabilities over the short-term and produce a more stable net fund balance for the longer-term. Section III discusses the contribution rate recommendation in more detail.

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

Deloitte Consulting LLP ("Deloitte Consulting") and Gabriel, Roeder, Smith & Company ("GRS") shared the development of the Wisconsin Retirement System ("WRS") employer contribution rate. The LTDI plan contributes to this rate based on the level of the net fund balance. Reinstatement of premium for the LTDI plan would result in an allocation of a portion contributions collected by WRS. Deloitte Consulting relied upon the LTDI Plan covered payroll provided by GRS to project total premium revenue in our financial projections. The results of the GRS work are contained in a separate document.

II. 2012 Experience and Highlights

	2012	2011	2010	2009
Beginning Balance	\$262,265,728	\$285,877,163	\$300,549,620	\$313,852,818
Closing Adjustments	(\$4,085,687)	(\$526,896)	(\$134,555)	(\$121,701)
Adjusted Beginning Balance	\$258,180,041	\$285,350,267	\$300,415,065	\$313,731,117
Revenues				
Contributions	\$0	\$0	\$0	\$0
Investment Earnings	\$5,130,023	\$4,077,789	\$13,742,607	\$12,634,570
Total	\$5,130,023	\$4,077,789	\$13,742,607	\$12,634,570
Expenses				
Paid Claims	\$28,732,557	\$25,040,196	\$26,298,530	\$23,663,985
Administrative Expenses	\$2,195,636	\$2,122,132	\$1,981,979	\$2,152,082
Total	\$30,928,193	\$27,162,328	\$28,280,509	\$25,816,067
Net Income	(\$25,798,170)	(\$23,084,539)	(\$14,537,902)	(\$13,181,497)
Ending Assets	\$232,381,871	\$262,265,728	\$285,877,163	\$300,549,620
Incurred Claim Liability	\$213,067,974	\$189,004,196	\$175,590,410	\$156,278,012
Net Fund Balance	\$19,313,896	\$73,261,532	\$110,286,753	\$144,271,608

During 2012, the net fund balance decreased from \$73,261,532 to \$19,313,896. Total revenues were \$5,130,023 with paid claims and administrative expenses totaling \$30,928,193. As shown above, investment earnings increased by approximately \$1.1 million in 2012 compared to 2011. The total claims and administrative expenses combined increased by approximately \$3.8 million. The unfavorable experience in paid claims outweighed the increase in investment income, resulting in a continued erosion of the plan assets.

The approximate \$53.9 million decrease in the net fund balance is attributable to an 11.4% decrease in the Plan's assets and a 12.7% increase in the Incurred Claims liability (which includes provisions for both the known and incurred but not reported claims). The increase of the Incurred Claims liability is primarily driven by an 11.5% growth in the number of open claims and a change in the composition and characteristics of the average claimant in the open claim cohort.

As premiums have been suspended since 1999, we would expect the net fund balance to decrease if the sum of the paid claims and the increase in the Incurred Claims liability is greater than investment earnings. The net fund balance does not include deferred market gains of \$7.9 million which will be smoothed into the asset balance over the next four years. The 9% net fund balance in 2012 is below the net fund balance target as a percentage of the liability. Traditionally a long-term objective of maintaining a net fund balance of 15% to 25% of estimated liabilities has been considered reasonable. Thus, we recommended that the Plan reinstate premiums in 2014. The development of the premium rate recommendation is discussed in the next section.

III. 2014 LTDI Premium Recommendations

Based on historical net fund balance targets, from 1999 to 2011 the LTDI assets have been sufficient to suspend premium contributions for the plan. Since 2008, cash flow has been negative for the Plan, implying the total paid claims and administrative expense balance has exceeded the investment earnings of the Plan. Currently, investment earnings are the only revenue source of the Plan. Because cost exceeds revenue, the asset balance has begun to decline in order to fund the shortfall. As the asset balance erodes, the opportunity to earn investment income also decreases, thereby limiting future revenue in absence of premium contributions.

Considerable year-to-year fluctuations can occur under long term disability 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 funding objective is to maintain a net fund balance of 15% to 25% of estimated liabilities to hedge against future adverse experience. Expressed as a percentage of the incurred claims liability, the net fund balance has decreased dramatically from 228% in 2005 to 9% in 2012. The ending asset and liability balances as of December 31, 2012, are \$232.4 million and \$213.1 million, respectively, resulting in a net fund balance of \$19.3 million.

At December 31, 2011, the net fund balance was 39%, and given the current and projected net fund balance relative to the long-term net fund levels, we recommended the continued suspension of premiums in 2013 and anticipated that premium collections may need to be reinstated in 2014. The 2012 experience and resulting projected future experience indicate that the plan is currently below the lowend of the target net fund balance range of 15% and projected future experience anticipates further erosion of the net fund balance. In order to return the net fund balance to the targeted level, we are recommending the reinstatement of premiums in 2014.

The LTDI program is supported by insurance premiums paid via inter-fund transfers from WRS rather than direct contributions from participants and employers. The reinstatement of premium for the LTDI plan would result in an allocation of the contributions collected by WRS to the LTDI plan assets. In order to establish the appropriate LTDI premium level, we considered the projected 2013 net fund balance shortfall (relative to a 15% target) and the anticipated 2013 costs of the plan, including the increase in claim liabilities, paid claims, and administrative expenses. The projected net fund balance shortfall relative to a 15% target is assumed to be amortized over a 3 year period. The resulting premium contribution rate is 0.32% of covered payroll. Based on projected covered payroll in 2014, this is approximately \$37.8 million in contributions.

Future plan experience may deviate from that projected and result in a necessary premium contribution level different from that recommended here. As plan experience emerges each year, we will continue to monitor the plan's net fund balance and the need for changes to the premium contribution in future years.

IV. Benefits Being Paid and Liabilities

By Year of Incurral as of December 31, 2012

	2007 & prior	2008	2009	2010	2011	2012	Total
General & Teachers							
Number	718	167	199	249	292	196	1,821
Annual Benefit	\$9,481,568	\$2,480,664	\$3,103,533	\$3,878,644	\$4,712,190	\$3,359,548	\$27,016,147
Act. Present Value	\$63,064,877	\$16,623,630	\$20,899,443	\$26,760,444	\$31,900,134	\$21,646,769	\$180,895,297
Prot w/ Social Sec							
Number	13	3	2	3	5	-	26
Annual Benefit	\$188,320	\$30,797	\$43,594	\$27,906	\$89,256	\$-	\$379,873
Act. Present Value	\$1,978,999	\$355,669	\$455,292	\$324,218	\$879,465	\$-	\$3,993,642
Prot w/o Social Sec							
Number	2	-	-	-	-	-	2
Annual Benefit	\$41,017	\$-	\$-	\$-	\$-	\$-	\$41,017
Act. Present Value	\$337,106	\$-	\$-	\$-	\$-	\$-	\$337,106
Education Support Personnel							
Number	-	-	-	-	1	-	1
Annual Benefit	\$-	\$-	\$-	\$-	\$8,107	\$-	\$8,107
Act. Present Value	\$-	\$-	\$-	\$-	\$50,455	\$-	\$50,455
Total							
Number	733	170	201	252	298	196	1,850
Annual Benefit	\$9,710,905	\$2,511,461	\$3,147,126	\$3,906,550	\$4,809,553	\$3,359,548	27,445,144
Act. Present Value	\$65,380,981	\$16,979,299	\$21,354,734	\$27,084,663	\$32,830,053	\$21,646,769	185,276,500

V. Estimated Liability and Summary of Funding Levels

December 31, 2012

LTDI Assets	\$232,381,871
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Actuarial Present Value of:	
Claims in payment status of as December 31, 2012	\$185,276,500
Incurred but not reported claims (IBNR)	\$27,791,474
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Total Incurred Claims Liability	\$213,067,974
Net Fund Balance	\$19,313,896

The methodology for calculating the actuarial present value of future disability payments uses the 1987 Commissioner's Group Basic Disability table ("87 CGDT") adjusted for the State of Wisconsin's own claim termination experience. The 87 CGDT is a commonly referenced source for group LTD claim termination rates and incidence rates. When estimating disability liabilities, it is a common actuarial practice to develop adjustment factors to apply to the 87 CGDT to reflect a group's experience, rather than develop completely new rates. The adjustment factors reflective of the State's actual LTD experience are summarized in the Appendix.

We completed a historical recast analysis of the LTDI IBNR. The LTDI IBNR recast results indicate that our historical established IBNR has been sufficient and therefore the LTDI IBNR factor remained at 15% of the actuarial present value of claims in payment status.

The total liability increased 12.7% from 2011 to 2012. The increase is largely due to a growth in the number of open claims and a change in the composition and characteristics of the average claimant in the open claim cohort.

Appendix

Assumptions

Methodology: The projected future benefit stream is reduced for both mortality and recovery from disability, using the 1987 Commissioner’s Group Basic Disability table adjusted for the State of Wisconsin’s own termination experience.

Termination Rates: The percentages of the 1987 Commissioner’s Basic Disability Table termination rates based on the State of Wisconsin’s own experience are shown below:

Duration of Disablement	Termination Rate Adjustment
First Year	60%
Second Year	60%
Third Year & Beyond	70%

Interest: 4.0% (which approximates a 7.2% valuation rate—consistent with the reduction from 7.8% during 2010—with 3.2% annual benefit increases) is used to discount the projected future benefit stream to the valuation date.

IBNR: 15% of the liability for reported claims (reduced from 25% in 2011 based on a study of the historical sufficiency of the recorded IBNR)

Eligibility: 1) Employees who begin or resume covered WRS employment on or after October 16th, 1992 or 2) employees who have been continuously employed under the WRS since before October 16th, 1992, and are eligible for coverage under the WRS disability program, but elect coverage under the LTDI program. (At the 2007 Group Insurance Board meeting, the Board voted to extend the open election between programs indefinitely.)

Benefit Period: The maximum duration of benefits for disabled employees is outlined below.

Age at Disablement	Benefit Period
Before age 61	End of the month in which you reach age 65
Age 61 or 62	End of the month in which you reach age 66
Age 63 or 64	End of the month in which you reach age 67
Age 65 or 66	End of the month in which you reach age 68
Age 67	End of the month in which you reach age 69
Age 68	End of the month in which you reach age 70
Age 69 or older	12 months after LTDI benefit effective date



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