

The State of Wisconsin Employee Trust Funds Board



Section 40.65
Duty Disability Plan
Actuarial Review
As of December 31, 2007

Table of Contents

I. Overview	1
II. 2007 Experience Review	2
III. Estimated Liability as of December 31, 2007	4
IV. Analysis of Funding Levels	6
Exhibit 1	7
Exhibit 2	8
Exhibit 3	9
Exhibit 4	10

I. Overview

The purpose of this report is to summarize our review of the Section 40.65 Duty Disability Plan. Included is 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 the Department of Employee Trust Funds. 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 Duty Disability Plan has assets of \$321.6 million and estimated liabilities of \$383.4 million as of December 31, 2007. The accrued funding shortfall is \$61.8 million, which represents about 5.1% of the \$1,213 million in covered payroll. This is a 3.5% decrease to the shortfall as a percentage of covered payroll from last year. The asset balance does not include \$4.1 million in deferred market gains which will be recognized over the next four years.

If experience continues at recent levels, the present premium level will be sufficient to eliminate the accrued funding shortfall in approximately four years. Funding at such levels is consistent with the Board's past practice. Therefore, no premium increase is recommended at this time.

The remainder of this report summarizes the review in more detail. A number of assumptions have been made in estimating the State's liability. Such assumptions are described throughout the report and summarized in Exhibit 2.

II. 2007 Experience Review

Fund Balance

During 2007 the fund balance increased from \$266,223,389 to \$321,640,407. Investment earnings were \$34,437,480 with paid claims and administrative expenses totaling \$26,434,713. These components are shown in the following table along with figures for the prior years for comparison purposes.

Year	Contributions	Benefits		Admin Charge	Interest Credit (Charge)	Ending Balance	Average Contribution Rate
		Annual \$	% Increase				
1984	\$ -	\$ -	0%	\$ -	\$ -	\$ 57,193	0.00%
1985	633,501	1,343,755	0%	-	(160,822)	(813,893)	0.20%
1986	1,259,167	2,474,345	84.1%	-	(417,606)	(2,446,677)	0.40%
1987	1,739,234	3,262,157	31.8%	-	(416,385)	(4,385,985)	0.50%
1988	3,939,946	4,662,629	42.9%	348,018 #	(486,800)	(5,943,496)	1.10%
1989	5,257,471	5,906,152	26.7%	144,629	(1,121,646)	(7,858,452)	1.40%
1990	9,125,470 *	7,178,185	21.5%	75,481	(701,016)	(6,687,664)	2.10%
1991	10,653,019	8,188,603	14.1%	130,203	(773,655)	(5,127,106)	2.30%
1992	12,244,608	9,288,487	13.4%	120,462	(476,392)	(2,767,839)	2.50%
1993	14,410,852	10,392,896	11.9%	160,981	(105,814)	983,322	2.80%
1994	16,242,342 *	11,786,839	13.4%	161,127	219,777	5,524,539	3.00%
1995	19,738,999 *	12,748,266	8.2%	183,922	1,007,019	13,322,102	3.40%
1996	20,670,838 *	13,527,755	6.1%	355,847	2,087,053	22,196,391	3.30%
1997	21,924,843 *	14,432,206	6.7%	119,017	3,060,768	32,630,779	3.28%
1998	26,205,796	15,484,812	7.3%	235,334	4,795,610	47,912,039	3.69%
1999	26,585,142	16,802,277	8.5%	612,691	7,020,204	66,102,416	3.36%
2000	32,188,231	18,337,714	9.1%	153,551	7,273,165	87,072,547	3.76%
2001	35,120,406	19,857,704	8.3%	290,919	10,127,493 ¹	112,171,824	3.84%
2002	36,662,252	21,592,121	8.7%	349,523	9,696,940 ²	136,589,372	3.83%
2003	39,308,775	22,984,246	6.4%	460,353	10,925,975 ³	163,379,523	3.87%
2004	40,776,886	23,176,779	0.8%	338,041	13,960,608 ⁴	194,602,196	3.84%
2005	42,076,545	24,185,758	4.4%	302,193	13,187,206 ⁵	225,377,997	3.86%
2006	44,573,058	26,091,024	7.9%	318,381	22,681,739 ⁶	266,223,389	3.87%
2007	\$ 47,765,354	\$ 26,198,090	0.4%	\$ 236,623	\$ 34,086,377 ⁷	\$ 321,640,407	3.94%

* Includes adjustment to beginning balance.

¹ Includes a \$5,601,954 adjustment for 1999 Wisconsin Act 11.

² Includes a \$3,838,988 adjustment for understated interest during 2002 (including Wisc Act 11).

³ Includes a \$215,444 adjustment for understated interest during 2003 (including Wisc Act 11).

⁴ Includes a \$63,179 adjustment for understated interest during 2004 (including Wisc Act 11).

⁵ Includes a \$31,517 adjustment for understated interest during 2005 (including Wisc Act 11).

⁶ Includes a \$473,544 adjustment for understated interest during 2006 (including Wisc Act 11).

⁷ Includes a \$351,103 adjustment for understated interest during 2007 (including Wisc Act 11).

Includes 3 1/2 years of administrative expense charges.

As of December 31, 2007 there were 902 claims in payment status with annual benefits totaling \$25,806,128. 859 of the claims were for disabled participants and 43 were for beneficiaries. The number of claims and benefits being paid increased over last year from 894 and \$25,275,061 respectively. The following table shows annual benefits as a dollar amount and as a percentage of payroll by recipient type.

	Claims in Payment Status		
	No.	Annual \$	% of Payroll
Disabled Participants	859	\$25,151,479	2.07%
Survivor Beneficiaries	43	\$654,648	0.05%
Total	902	\$25,806,128	2.13%

III. Estimated Liability as of December 31, 2007

The liability for outstanding claims under the Duty Disability Plan was estimated in two parts - reported claims and incurred claims not yet in pay status. The following paragraphs summarize the methods used and results.

Claims in Pay Status

The total liability for claims in payment status as of December 31, 2007, \$334 million, is approximately \$4 million greater than the liability as of December 31, 2006.

Incurred Claims Not Yet in Pay Status

A review of recent claims data showed lags in the time between when claims are incurred and when they are reported and reach pay status. There were 84 claims which are likely to be approved for pay status that were in either pending or appeal status as of December 31, 2007. This includes 10 claims for which applications were received during the first two months of 2008. Note that 6 of the 84 claims were approved in 2007 but, due to the timing of their incurrals, data necessary to value their liability as a reported claim was unavailable at the time of our valuation. As a result, these claims were included in the incurred but not reported (IBNR) liability.

The IBNR liability for December 31, 2007, \$49 million, was developed using claims that are currently either in appeal or pending status or for which sufficient data is not available to value their liability as a typical claim in payment status, average projected reserve factors, and a 10% load for conservatism.

Results

The total estimated liability as of December 31, 2007 for the Duty Disability plan is \$383,431,938, developed as follows:

	Offsets \$	Annual \$
Annual Benefits Before Offsets		40,472,247
Offsets		
Social Security	3,632,340	
Unemployment Compensation	0	
Worker's Compensation	472,542	
WRS Benefits		
- Separation	901,825	
- Disability	5,408,219	
- Normal Retirement	6,249,949	
Earnings	675,678	
Total Offsets*	17,340,553	
Adjustment for offsets greater than base benefit	2,674,433	
Net Offsets*	14,666,119	
Annual benefits after offsets*		25,806,128
Present value of benefits being paid		334,235,938
Reserve for incurred but not paid claims		49,196,000
Total		383,431,938

*Subtotals may not tie to the sum of items due to rounding.

Total net offsets are 36.2% of gross benefits before offsets.

IV. Analysis of Funding Levels

Financial Progress

As of December 31, 2007 the payout rate from this plan decreased to 2.18% of covered payroll (down from 2.29% a year ago). Pertinent elements of the present financial picture include:

- During 2007 benefit reserves to pay claims increased from \$266.2 million to \$321.6 million.
- The contribution rate currently in effect (December 31, 2007) will generate approximately 3.94% of covered payroll. This rate appears to be sufficient to achieve a fully reserved status over a 4-year period (down from 21 years at December 31, 2000, 16 years at December 31, 2003 and 7 years at December 31, 2006). These calculations assume that the group size stabilizes at about its current level, as follows:

Provision for annual incurred claims*	2.18%
Amortization of accrued shortfall	<u>1.76%</u>
Total	3.94%

* Includes (Benefit Payments + Expenses) as a % of covered payroll as indicated in ETF Trust Statement.

Recent funding practice has been to limit the period of amortization of the shortfall to approximately 30 years. The data above verifies that the current rate schedule is projected to fund the shortfall in a shorter period of time. In 1998 the Board approved a rate increase of approximately .22% of payroll. At that time, we expected the increase to be sufficient to meet the funding policy for two years. After nine years, it still appears that the new contribution level is sufficient for at least one more year. Therefore, we do not recommend a contribution increase at this time.

Exhibit 1

Section 40.65 duty disability benefits for protective occupation participants were added in 1982. Benefits are summarized below:

Eligibility. Duty-related injury or disease that is likely to be permanent, which causes a protective occupation participant to retire, accept reduced pay or light duty assignment, or in some cases, that impairs promotional opportunities.

Amount. 80% of salary (75% if partially disabled and not a State Employee), less the following offsets:

- Social Security
- Unemployment Compensation
- Worker's Compensation
- Any other WRS benefit
- All earnings from the employer under which the disability occurred
- A percent of other earnings as follows:
 - 1/3 of earnings less than 40% of monthly salary
 - 1/2 of earnings between 40% and 80% of monthly salary
 - 2/3 of earnings over 80% of monthly salary

Survivor Benefits.

- All survivor benefits are offset by any Chapter 102 death benefits
- Pre-5/3/88 and certain state employees:
 - 1/3 of the participant's monthly salary at time of death to surviving spouse, plus
 - \$15/month to each unmarried child under the age of 18
 - Not to exceed 65% of participant's monthly salary at time of death
 - State employees are included
- Post-5/3/88 and certain state employees:
 - 1/2 of the participants monthly salary at time of death to surviving spouse, less other income sources that are based on the participant's earnings record
 - 1/10 of the participant's monthly salary at time of death to each unmarried child under the age of 18
 - Not to exceed 70% of participant's monthly salary at time of death
 - State employees are not included (with the exception of cancer presumptive)
- Cancer Presumptive Law:
 - 70% of the participant's monthly salary at time of death to surviving spouse, less other income sources that are based on the participant's earnings record
 - 1/10 of the participant's monthly salary at time of death to the guardian of any minor child, as long as there is no surviving spouse
 - There is no maximum

Annual Increases.

- To age 60: In accordance with WRS salary index.
- After age 60: In accordance with WRS dividend increases (as long as the claimant is not also receiving a disability retirement benefit.)

Contributions. Vary by experience.

Exhibit 2

Mortality: Wisconsin Projected Experience Table - 93; 98% of male mortality and 97% of female mortality.

Set Forward: 3 years for males only.

Recovery: None.

Sex: All disabled recipients are assumed to be male; all beneficiary recipients are assumed to be female.

Benefit Form: Life annuity for unmarried disabled recipients and all beneficiaries; 50% joint and survivor annuity for married disabled recipients.

Interest: 4.8% (which approximates a 7.8% valuation rate with 3.0% annual benefit increases). The valuation rate was changed for the December 31, 2004 valuation to match the WRS interest rate. The WRS interest rate was reduced from 8.0% to 7.8% as of February 1, 2004.

IBNR Loading: 10% margin for conservatism

Exhibit 3

Benefits Being Paid and Reported Claim Liability by Year of Incurral

Year Incurred	Number Valued	No Benefit Payable	Total	Annual Benefit	% of Payroll	Actuarial Liability
2007	9	1	10	\$ 286,897	0.02%	\$ 4,428,064
2006	17	2	19	421,123	0.03%	6,012,177
2005	28	0	28	795,619	0.07%	12,611,427
2004	31	3	34	1,127,893	0.09%	17,043,013
2003	26	0	26	664,656	0.02%	10,192,607
2002	32	2	34	1,144,274	0.09%	17,131,014
2001	26	0	26	861,561	0.07%	13,032,140
2000	21	2	23	554,071	0.05%	8,157,792
1999	29	1	30	1,101,741	0.09%	16,175,921
1998	39	2	41	1,214,612	0.10%	17,163,376
1997	26	2	28	756,082	0.06%	10,918,725
1996	21	1	22	686,567	0.06%	9,419,769
1995	30	3	33	974,994	0.08%	13,235,465
1994	30	2	32	1,042,616	0.09%	13,767,619
1993	45	7	52	1,318,757	0.11%	17,618,152
1992	52	5	57	1,499,625	0.12%	19,604,551
1991	43	9	52	1,061,663	0.09%	13,202,049
1990	40	8	48	1,039,504	0.09%	13,311,277
1989	54	7	61	1,444,356	0.12%	17,205,405
1988	55	2	57	1,651,552	0.14%	19,394,734
1987	40	2	42	1,229,648	0.10%	13,632,531
1986	42	3	45	1,511,193	0.12%	15,612,643
1985	44	2	46	1,455,728	0.12%	15,460,193
1984	30	0	30	1,035,373	0.09%	10,953,180
1983	16	0	16	540,563	0.04%	4,900,253
1982	9	0	9	351,238	0.03%	3,598,843
1979	1	0	1	34,220	0.00%	453,018
Total	836	66	902	\$ 25,806,128	2.13%	\$ 334,235,938

Exhibit 4

Rate Schedule: Present & Proposed December 31, 2007 Valuation

% of Covered Payroll	Applicable To
1.9	Groups with claims payout during the prior year of less than or equal to 0.5% of payroll.
2.4	Groups with one claim in which the payout during the prior year exceeded 0.5% of payroll, and groups with two or more claims in which the payout was more than 0.5% but less than 1.0% of payroll.
3.6	Groups with two or more claims in which the payout during the prior year was more than 1.0% but less than 2.0% of payroll.
5.4	Groups with two or more claims in which the payout during the prior year was more than 2.0% and less than 3.0% of payroll.
6.6	Groups with two or more claims in which the payout exceeded 3.0% but was less than 6.6% of payroll during the prior year.
6.6 + ½ of claims over 6.6%	Groups with two or more claims in which the payout exceeded 6.6% of payroll during the prior year.



Deloitte Consulting LLP
111 S. Wacker Drive
Chicago, IL 60606-4301
United States
Tel: 312 486 1000
Fax: 312 247 2265
www.deloitte.com

About Deloitte

Deloitte refers to one or more of Deloitte Touche Tohmatsu, a Swiss Verein, its member firms and their respective subsidiaries and affiliates. Deloitte Touche Tohmatsu is an organization of member firms around the world devoted to excellence in providing professional services and advice, focused on client service through a global strategy executed locally in nearly 140 countries. With access to the deep intellectual capital of approximately 135,000 people worldwide, Deloitte delivers services in four professional areas, audit, tax, consulting and financial advisory services, and serves more than 80 percent of the world's largest companies, as well as large national enterprises, public institutions, locally important clients, and successful, fast-growing global growth companies. Services are not provided by the Deloitte Touche Tohmatsu Verein and, for regulatory and other reasons, certain member firms do not provide services in all four professional areas.

As a Swiss Verein (association), neither Deloitte Touche Tohmatsu nor any of its member firms has any liability for each other's acts or omissions. Each of the member firms is a separate and independent legal entity operating under the names "Deloitte", "Deloitte & Touche", "Deloitte Touche Tohmatsu" or other related names.

In the United States, Deloitte & Touche USA LLP is the U.S. member firm of Deloitte Touche Tohmatsu and services are provided by the subsidiaries of Deloitte & Touche USA LLP (Deloitte & Touche LLP, Deloitte Consulting LLP, Deloitte Financial Advisory Services LLP, Deloitte Tax LLP, and their subsidiaries), and not by Deloitte & Touche USA LLP. The subsidiaries of the U.S. member firm are among the nation's leading professional services firms, providing audit, tax, consulting, and financial advisory services through nearly 40,000 people in more than 90 cities. Known as employers of choice for innovative human resources programs, they are dedicated to helping their clients and their people excel. For more information, please visit the U.S. member firm's Web site at www.deloitte.com