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# The State of Wisconsin



Local Income Continuation Insurance Plan Actuarial Review as of December 31, 2009

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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 2009, an estimate of the Plan's liability as of December 31, 2009, 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 \$28,097,196 and estimated liabilities of \$3,840,102. The asset balance does not include \$3.3 million in deferred market losses which will be smoothed in over the next four years. The large net fund balance is primarily due to a valuation methodology change, which took place at December 31, 1996.

We do not recommend a change in the premium rate 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. 2009 Experience Review

#### **Fund Balance**

During 2009, the fund balance increased from \$25,871,414 to \$28,097,196. Total revenues were \$2,953,881 with paid claims and administrative expenses totaling \$775,597. These components are shown in the following table along with figures for the previous three years for comparison purposes.

|                                  | 2009       | 2008       | 2007       | 2006       |
|----------------------------------|------------|------------|------------|------------|
| Beginning Balance                | 25,871,414 | 24,150,025 | 20,919,663 | 18,604,406 |
| Closing Adjustments              | 47,498     | (27,755)   | (25,656)   | (125,560)  |
| Adjusted Beginning Balance       | 25,918,912 | 24,122,270 | 20,894,007 | 18,478,846 |
| Revenues                         |            |            |            |            |
| Contributions                    | 1,839,354  | 1,716,186  | 1,602,545  | 1,504,430  |
| Investment Earnings              | 1,114,527  | 778,089    | 2,644,345  | 1,857,528  |
| Total                            | 2,953,881  | 2,494,275  | 4,246,890  | 3,361,958  |
| Expenses                         |            |            |            |            |
| Paid Claims                      | 644,811    | 594,077    | 828,881    | 760,539    |
| Administrative Expenses          | 130,787    | 151,054    | 161,991    | 160,602    |
| Total                            | 775,597    | 745,131    | 990,872    | 921,141    |
| Net Income                       | 2,178,284  | 1,749,144  | 3,256,018  | 2,440,817  |
| Ending Balance                   | 28,097,196 | 25,871,414 | 24,150,025 | 20,919,663 |
| Investment Earnings/Mean Balance | 4.2%       | 3.2%       | 12.5%      | 9.9%       |

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**

|          | Oper   | n Claims | Closed | Claims   | All Claims |          |  |
|----------|--------|----------|--------|----------|------------|----------|--|
| Year     |        | Average  |        | Average  |            | Average  |  |
| Incurred | Number | Benefit  | Number | Benefit  | Number     | Benefit  |  |
| 2009     | 23     | \$ 2,370 | 28     | \$ 2,700 | 51         | \$ 2,551 |  |
| 2008     | 7      | 1,566    | 22     | 1,931    | 29         | 1,843    |  |
| 2007     | 0      | -        | 0      | -        | 0          | -        |  |
| 2006     | 4      | 874      | 0      | -        | 4          | 874      |  |
| 2005     | 7      | 322      | 0      | -        | 7          | 322      |  |
| 2004     | 5      | 962      | 0      | -        | 5          | 962      |  |
| 2003     | 4      | 894      | 0      | -        | 4          | 894      |  |
| 2002     | 2      | 1,014    | 0      | -        | 2          | 1,014    |  |
| 2001     | 1      | -        | 1      | 180      | 2          | 90       |  |
| 2000     | 2      | 489      | 1      | 155      | 3          | 378      |  |
| 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     | 1      | 389      | 0      | -        | 1          | 389      |  |
| Total    | 58     | \$ 1,451 | 52     | \$ 2,277 | 110        | \$ 1,842 |  |

The following table shows the claim count and average net benefit amount for open, closed and total claims, respectively, as of December 31, 2009. In addition, historical claim counts and net benefit amounts for the last ten years are provided for comparison.

#### **Claims By Valuation Date**

|      | Open (  | Claims      | Closed | Claims      | All Claims |             |
|------|---------|-------------|--------|-------------|------------|-------------|
| Plan | Average |             |        | Average     |            | Average     |
| Year | Number  | Net Benefit | Number | Net Benefit | Number     | Net Benefit |
| 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       |
| 2001 | 33      | 1,643       | 14     | 1,479       | 47         | 1,594       |
| 2000 | 24      | 1,326       | 60     | 1,256       | 84         | 1,276       |

# III. Estimated Liability as of December 31, 2009

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'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 Wisconsin Retirement System ("WRS") valuation interest rate was reduced from 8% to 7.8% as of February 1, 2004, and has since remained at 7.8%. For consistency, and at the direction of ETF personnel, the valuation interest rate is tied to the WRS valuation rate; therefore a 7.8% discount rate was used in the December 31, 2009, 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, 2009. 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, 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 2009 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, 2009, 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, 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 Plan's own experience, we observed that 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, 2009, for the Local Income Continuation Insurance program is \$3,840,102, developed as follows:

| Reported Claim Liability            | \$3,104,299 |
|-------------------------------------|-------------|
| \$75 Supplement                     | 30,807      |
| Total Reported Liability            | 3,135,106   |
| Incurred But Not Reported Liability | 704,996     |
| Total Liability                     | \$3,840,102 |

This total liability is 1.2% less than the liability determined as of December 31, 2008. The decrease can be attributed primarily to the change in the composition and characteristics of the average claimant in the open claim cohort.

Exhibit 2 contains a breakdown of the \$3,135,106 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 \$28,097,196 and estimated liabilities of \$3,840,102 which produces a net fund balance of \$24,257,094.

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. Thus, in the near term, it is prudent to maintain a large fund balance in excess of estimated liabilities — perhaps 200%. The excess now represents 632% of the estimated liabilities. The following table shows the net fund balance as a percentage of the estimated liability by year. It is clear that this excess fluctuates from year to year.

|                            | 2009       | 2008       | 2007       | 2006       | 2005       | 2004       |
|----------------------------|------------|------------|------------|------------|------------|------------|
| Assets                     | 28,097,196 | 25,871,414 | 24,150,025 | 20,919,663 | 18,604,406 | 16,708,151 |
| <b>Estimated Liability</b> | 3,840,102  | 3,886,827  | 3,822,315  | 4,307,964  | 3,669,243  | 2,584,522  |
| Net Fund Balance           | 24,257,094 | 21,984,587 | 20,327,710 | 16,611,699 | 14,935,163 | 14,123,629 |
| Percentage                 | 632%       | 566%       | 532%       | 386%       | 407%       | 546%       |

The employer's premium contribution rate was reduced from .375% of covered payroll to .25% effective March 1, 2002. The \$75 Supplemental Add-on benefit was effective January 1, 2002. We will continue to monitor the experience under the revised plan. We do not recommend additional benefit or premium rate changes at this time.

### 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<br>Disablement | Maximum Duration of<br>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<br>Disablement | Termination Rate<br>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.

**Contingency Margins** — None.

## Exhibit 2

#### **Reported Claim Liability by Year of Disability**

|            | Open Claims as of December 31, 2009 <sup>1</sup> |           |           |           |              |          |          |             |  |  |
|------------|--|-----------|-----------|-----------|--------------|----------|----------|-------------|--|--|
| Year of    |  | Gross     | Offset    | Net       | Estimated    | \$75     | Ave.     | Est'd       |  |  |
| Disability | Count  | Benefit   | Amount    | Benefit   | Liability    | Supp.    | Benefit  | Liability   |  |  |
| 2009       | 23   | \$ 69,375 | \$ 14,868 | \$ 54,507 | \$ 1,024,773 | \$30,807 | \$ 2,370 | \$1,055,580 |  |  |
| 2008       | 7  | 21,088    | 10,123    | 10,965    | 487,087      |          | 1,566    | 487,087     |  |  |
| 2006       | 4  | 9,738     | 6,240     | 3,498     | 313,058      |          | 874      | 313,058     |  |  |
| 2005       | 7  | 14,525    | 12,270    | 2,255     | 162,262      |          | 322      | 162,262     |  |  |
| 2004       | 5  | 12,375    | 7,567     | 4,808     | 403,152      |          | 962      | 403,152     |  |  |
| 2003       | 4  | 12,005    | 8,428     | 3,577     | 346,680      |          | 894      | 346,680     |  |  |
| 2002       | 2  | 3,150     | 1,121     | 2,029     | 151,859      |          | 1,014    | 151,859     |  |  |
| 2001       | 1  | 1,388     | 1,388     | -         | -            |          | -        | -           |  |  |
| 2000       | 2  | 4,275     | 3,297     | 978       | 104,176      |          | 489      | 104,176     |  |  |
| 1997       | 1  | 1,942     | 950       | 992       | 101,074      |          | 992      | 101,074     |  |  |
| 1996       | 1  | 525       | 362       | 163       | 5,184        |          | 163      | 5,184       |  |  |
| 1993       | 1  | 833       | 444       | 389       | 4,993        |          | 389      | 4,993       |  |  |
| Total      | 58   | \$151,217 | \$67,057  | \$84,161  | \$3,104,299  | \$30,807 | \$ 1,451 | \$3,135,106 |  |  |

 $<sup>^{1}</sup>$ Open Claims presented by year of disability. For certain disability years (e.g. 2007, 1999, etc.), no claims remained open as of December 31, 2009.



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