

**WISCONSIN RETIREMENT SYSTEM**

**GAIN/LOSS ANALYSIS OF EXPERIENCE AMONG ACTIVE MEMBERS  
DURING CALENDAR YEAR 2009**

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August 27, 2010

The Employee Trust Funds Board  
Wisconsin Retirement System  
801 West Badger Road  
Madison, Wisconsin 53713

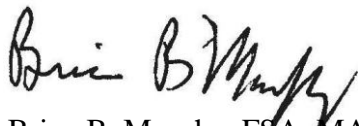
Ladies and Gentlemen:

The results of the *Gain/Loss Analysis of Experience Among Active Participants* of the Wisconsin Retirement System, *covering the calendar year 2009 are presented in this report.* (The results of the December 31, 2009 regular annual actuarial valuation of active members were submitted in our report dated June 8, 2010.)

Your Secretary and staff furnished the statistical data concerning active participant changes and related financial information that was required for this analysis. The actuary did not audit the data. The actuarial assumptions used are shown in the Appendix portion of the December 31, 2009 annual actuarial valuation of active participants.

To the best of our knowledge, this report is complete and accurate and was made in accordance with generally recognized actuarial methods. The actuaries submitting this statement are Members of the American Academy of Actuaries (MAAA), and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted,



Brian B. Murphy, FSA, MAAA



Mark Buis, FSA, MAAA

BBM/MB:lr

## ACTIVE MEMBER GAIN/LOSS ANALYSIS

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### Introduction

*Purpose of Gain/Loss Analysis.* Regular actuarial valuations provide information about the composite change in computed contribution rates and total liabilities -- whether or not the rates and related liabilities are increasing or decreasing, and by how much. However, valuations do not show the portion of the change attributable to each risk area within the Retirement System financial mechanism: the rate of recognized investment income on plan assets; the rates of withdrawal of active participants who leave covered employment; the rates of mortality; the rates of disability; the rates of salary increases; and the assumed ages at actual retirement. In an actuarial valuation, assumptions are made as to what these rates will be for the next year and for decades in the future.

*The objective of a gain and loss analysis is to determine the portion of the change that is attributable to each risk area.*

The fact that actual experience differs from assumed experience should be expected. The future cannot be predicted with complete precision. Further, year-to-year statistical fluctuations occur, even in very large groups. This year's report reflects just a single year's experience. Changes in the valuation assumed experience for a risk area should be made only when the differences between assumed and actual experience have been observed to be sizable and persistent. One year's gain and loss analysis may or may not be indicative of *long-term trends, which are the basis of actuarial assumptions*. In the Wisconsin Retirement System, longer term trends are reviewed in connection with the regular 3-year investigation of experience (the most recent 3-year investigation covered the period January 1, 2006 to December 31, 2008). It is the results of the 3-year investigation that lead to recommendations for changes in the actuarial assumptions.

## POPULATION DEVELOPMENT DURING CALENDAR YEAR 2009

|                                    | General | Executive<br>& Elected | Protective |              | Total   | Expected |
|------------------------------------|---------|------------------------|------------|--------------|---------|----------|
|                                    |         |                        | With S.S.  | Without S.S. |         |          |
| <b>Beginning Census</b>            | 238,994 | 1,430                  | 20,038     | 2,724        | 263,186 |          |
| (-) Normal Retirement              | 2,764   | 51                     | 253        | 39           | 3,107   | 4,139    |
| (-) Early Retirement               | 2,659   | 12                     | 58         | 5            | 2,734   | 4,253    |
| (-) Death                          | 267     | 2                      | 24         | 1            | 294     | 279      |
| (-) Disability Retirement          |         |                        |            |              |         |          |
| -Total Disabilities approved       | 166     | 0                      | 15         | 1            | 182     | 287      |
| -Less Pending at Beginning of Year | 50      | 0                      | 10         | 0            | 60      |          |
| -Net new from active status        | 116     | 0                      | 5          | 1            | 122     |          |
| (-) Other Separations              | 8,848   | 35                     | 362        | 24           | 9,269   | 10,880   |
| (-) Transfers Out                  | 867     | 23                     | 86         | 9            | 985     |          |
| (+) Transfers In                   | 785     | 40                     | 140        | 20           | 985     |          |
| (+) New Entrants                   | 16,143  | 80                     | 815        | 68           | 17,106  |          |
| <b>Ending Census</b>               | 240,401 | 1,427                  | 20,205     | 2,733        | 264,766 |          |

This schedule reconciles the active member populations reported in connection with the 2008 and 2009 valuations on an actual and expected basis. Assumptions related to population development are a primary focus of the gain/loss analysis. They generally tend to be more stable than economic assumptions, and therefore, measurements have more meaning. Please note also that the table above represents changes in actual and expected counts of members. Beginning with the 2009 valuations, some of the actuarial assumptions (retirement, turnover, etc) are based on liability weighted rates. Therefore, comparing actual to expected member counts alone may not form the basis for our conclusions.

## COMMENTS

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### **Population Results (refer to schedules on Pages 4 and 9)**

**Normal Retirements** varied by group and gender. Overall, there were fewer normal retirements than expected. In general, fewer normal retirements than assumed often creates a gain. However, looking at counts alone is not always an accurate predictor of whether a gain or loss occurs. If there are fewer retirements in shorter service, lower paid groups and more retirements than expected in longer service, higher paid groups, there will be a net loss to the System even if the actual total counts might be equal to or less than expected. In order to account for this, retirement rates are now developed partially on a liability weighted methodology. The net result for this past year was a small gain.

**Early Retirements** were less than expected in most groups, overall producing a small gain.

**Deaths** among active participants were slightly higher than expected. The net result for the past year was a small loss. While a gain is typical in such circumstances, a loss can occur depending on the distribution of people who die and what they might have done otherwise. For example, if a young person quits, a benefit of one times accumulated employee required contributions is paid. If the same person dies, a value of twice the contributions is paid.

**Disabilities** were less than expected and produced a gain in most groups. This means that the reserves needed for the disability benefit were slightly smaller than the reserves that had been held for retirement benefits.

**Other Separations** varied by group, gender, and service. Other separations among short (under 10 years) service were lower than expected. Separations among longer service participants were also less than expected. The net result was an actuarial loss.

**In total**, the population risk areas (retirement, death, disability, and other separations) produced a small actuarial loss in 2009.

## COMMENTS

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### **Economic Results (refer to schedules on Pages 9 and 12)**

**Investment Return** activity produced a loss for all groups. However, the recognized investment loss of \$1.0 billion was partially absorbed by a \$95 million loss in the combined value of variable excess benefits and money purchase benefits, resulting in a net liability loss of just over \$900 million.

**Pay Increases** were less than expected in most groups, producing a gain.

### **Other Analysis (refer to schedule on Page 10)**

The schedule on page 10 analyzes gains or losses due to sources other than the demographic and economic areas. The **Reserve difference** produced a loss of about \$28 million. This is primarily attributable to adjustments related to estimated annuities for which final computations have now been made. The **Re-established liability** represents the liability for new or rehired active members who were not active in the prior year. Typically, it is expected that a new hire will have very little liability. However, often new members appear with more than one year of service or with liability greater than contributions made on their behalf. Although this amount is difficult to determine accurately due to the timing of contribution amounts, we estimate the Re-established liability loss at about \$42 million.

### **Contribution Rate Change**

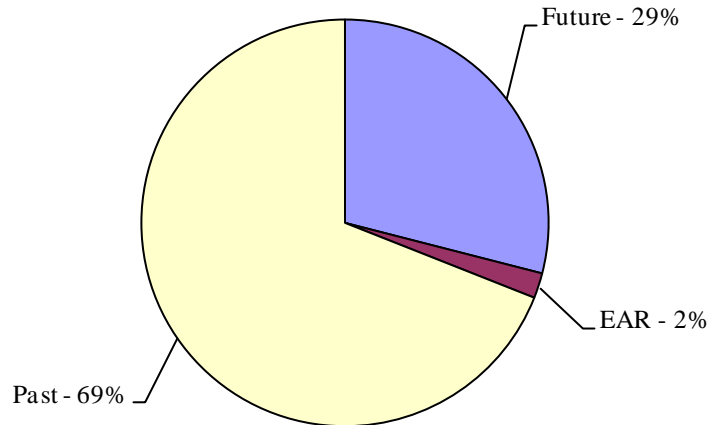
In total, the plan experienced a net loss of \$540 million. Losses were primarily attributable to unfavorable investment return. As a result, the total normal cost contribution increased for all valuation groups. The net losses have resulted in a reduction in the Experience Amortization Reserve (EAR). The EAR is used to minimize short-term fluctuations in contribution rates. As the EAR reduces in size, the ability to stabilize contribution rates will also be reduced. Contributions also increased due to changes in actuarial assumptions related to the most recent experience study.

This Gain/Loss Analysis is the first in the normal three-year experience cycle. It will be part of the basis for the experience investigation covering the period January 1, 2009 to December 31, 2011.

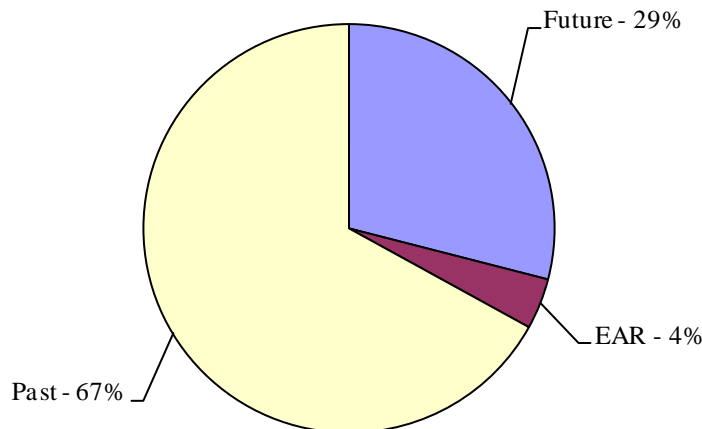
# FINANCING RETIREMENT SYSTEM BENEFIT LIABILITIES AT DECEMBER 31

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## 2009 - \$53.7 Billion



## 2008 - \$52.0 Billion



The gain/loss analysis studies changes in entry age normal accrued liabilities which are reflected in the Experience Amortization Reserve (EAR) as shown on page G-4. Future liabilities are financed via normal cost contributions each year as they accrue. Past liabilities are financed by application of present assets and unfunded liability contributions. The liabilities assigned to the EAR are technically part of the future. However, as part of the valuation method, they are financed as though they were part of the past. The EAR amortization period is selected each year to minimize short term contribution rate fluctuations.



**GAIN/LOSS ANALYSIS  
2009 EXPERIENCE  
DIVISIONS COMBINED**

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**ACTUARIAL GAINS & LOSSES DURING CALENDAR YEAR 2009**  
**(\$ MILLIONS)**

| Type of Activity                    | General           | Executive<br>& Elected | Protective       |                 | Total          |
|-------------------------------------|-------------------|------------------------|------------------|-----------------|----------------|
|                                     |                   |                        | With S.S.        | Without S.S.    |                |
| <b>Decrement Risk Areas</b>         |                   |                        |                  |                 |                |
| Normal Retirement                   | \$ 12.5           | \$(0.2)                | \$ 8.0           | \$3.2           | \$ 23.5        |
| Early Retirement                    | 7.7               | 0.1                    | 1.1              | 0.2             | 9.1            |
| Death with Benefit                  | (4.2)             | 0.0                    | 0.0              | (0.1)           | (4.3)          |
| Disability Retirement               | 18.7              | 0.1                    | 1.9              | 0.8             | 21.5           |
| Other Separations                   | (56.4)            | (1.2)                  | (9.1)            | (1.2)           | (67.9)         |
| <b>Economic Risk Areas</b>          |                   |                        |                  |                 |                |
| Salary Increases                    | 360.5             | 7.9                    | 74.6             | 5.7             | 448.7          |
| Investment Return                   | (762.1)           | (10.4)                 | (110.9)          | (28.6)          | (912.0)        |
| <b>Other Activity (See Page 10)</b> | (47.0)            | (5.0)                  | (4.2)            | (2.6)           | (58.8)         |
| <b>Total Gain(Loss)</b>             | <b>\$ (470.3)</b> | <b>\$(8.7)</b>         | <b>\$ (38.6)</b> | <b>\$(22.6)</b> | <b>(540.2)</b> |
| <b>-% of accrued liability</b>      | <b>(1.5)%</b>     | <b>(3.0)%</b>          | <b>(1.2)%</b>    | <b>(2.9)%</b>   | <b>(1.5)%</b>  |

**ANALYSIS OF OTHER ACTIVITY**  
**(\$ MILLIONS)**

|  | General | Executive<br>& Elected | Protective |              | Total   |
|--|---------|------------------------|------------|--------------|---------|
|  |         |                        | With S.S.  | Without S.S. |         |
| Expected Reserve Transfers                       |         |                        |            |              |         |
| Normal Retirement                                | \$1,428 | \$21                   | \$ 130     | \$34         | \$1,612 |
| Early Retirement                                 | 830     | 3                      | 31         | 4            | 868     |
| Death  | 39      | 0                      | 5          | 0            | 44      |
| Disability Retirement                            | 38      | 0                      | 2          | 1            | 41      |
| Deferred Retirement                              | 301     | 4                      | 17         | 3            | 325     |
| Expected Total Reserve Transfers                 | 2,636   | 28                     | 185        | 42           | 2,890   |
| Actual Reserve Transfer<br>(From Retiree Report) | 2,657   | 30                     | 189        | 42           | 2,918   |
| <b>Reserve Difference</b>                        | (21)    | (2)                    | (4)        | 0            | (28)    |
| Expected Refunds                                 | 23      | 0                      | 1          | 0            | 24      |
| Actual Refunds                                   | 22      | 0                      | 2          | 0            | 24      |
| <b>Refund Difference</b>                         | 1       | 0                      | (1)        | 0            | 0       |
| <b>Re-established Liability</b>                  | (38)    | (1)                    | (3)        | 0            | (42)    |
| Total Explained Difference                       | (58)    | (3)                    | (8)        | 0            | (69)    |
| Unknown Difference                               | 11      | (2)                    | 4          | (3)          | 10      |
| Total Other Activity                             | (47)    | (5)                    | (4)        | (3)          | (59)    |
| Other Activity as % of Liabilities               | -0.15%  | -1.72%                 | -0.12%     | -0.38%       | -0.16%  |

This schedule analyzes reserve transfers and contribution refunds and shows the portion of “other” activity that can be explained by those sources.

**COMPARATIVE SCHEDULE OF EXPERIENCE  
5-YEAR HISTORY OF GAINS AND (LOSSES)  
(\$ MILLIONS)**

| Year                                      | Normal<br>& Early<br>Retmt. | Disability<br>Retmt. | Other<br>Separations* | Salary<br>Increases | Investment<br>Return | Other         | Total          |
|---|-----------------------------|----------------------|-----------------------|---------------------|----------------------|---------------|----------------|
| <b>GENERAL</b>                            |                             |                      |                       |                     |                      |               |                |
| 2005                                      | \$ (3.9)                    | \$ 15.8              | \$ (5.0)              | \$ 231.8            | \$ (211.5)           | \$ (166.6)    | \$ (139.4)     |
| 2006                                      | (8.5)                       | 13.5                 | (14.8)                | 124.8               | 277.3                | (192.0)       | 200.3          |
| 2007                                      | (6.5)                       | 14.1                 | (27.3)                | 78.6                | 830.8                | (210.4)       | 679.3          |
| 2008                                      | (7.4)                       | 20.3                 | (28.5)                | 66.3                | (832.7)              | (144.0)       | (926.0)        |
| 2009                                      | <b>20.2</b>                 | <b>18.7</b>          | <b>(60.6)</b>         | <b>360.5</b>        | <b>(762.1)</b>       | <b>(47.0)</b> | <b>(470.3)</b> |
| <b>EXECUTIVE &amp; ELECTED</b>            |                             |                      |                       |                     |                      |               |                |
| 2005                                      | \$ 0.4                      | \$ 0.1               | \$ 0.7                | \$ 3.5              | \$ (3.3)             | \$ (4.5)      | \$ (3.1)       |
| 2006                                      | 0.4                         | 0.1                  | (0.6)                 | 2.6                 | 1.1                  | (5.0)         | (1.4)          |
| 2007                                      | (0.8)                       | 0.1                  | 0.3                   | (0.2)               | 10.2                 | (6.1)         | 3.5            |
| 2008                                      | 2.2                         | 0.1                  | (1.5)                 | (1.3)               | (2.8)                | (4.1)         | (7.4)          |
| 2009                                      | <b>(0.1)</b>                | <b>0.1</b>           | <b>(1.2)</b>          | <b>7.9</b>          | <b>(10.4)</b>        | <b>(5.0)</b>  | <b>(8.7)</b>   |
| <b>PROTECTIVE WITH SOCIAL SECURITY</b>    |                             |                      |                       |                     |                      |               |                |
| 2005                                      | \$ 1.1                      | \$ 0.5               | \$ 3.0                | \$ 47.8             | \$ (33.6)            | \$ (13.4)     | \$ 5.4         |
| 2006                                      | (1.6)                       | 0.5                  | (2.0)                 | (21.3)              | 51.0                 | (24.6)        | 2.0            |
| 2007                                      | 3.0                         | (0.7)                | (3.8)                 | 0.3                 | 102.2                | (21.2)        | 79.8           |
| 2008                                      | 4.2                         | 2.2                  | (6.8)                 | 4.6                 | (144.7)              | (7.4)         | (147.9)        |
| 2009                                      | <b>9.1</b>                  | <b>1.9</b>           | <b>(9.1)</b>          | <b>74.6</b>         | <b>(110.9)</b>       | <b>(4.2)</b>  | <b>(38.6)</b>  |
| <b>PROTECTIVE WITHOUT SOCIAL SECURITY</b> |                             |                      |                       |                     |                      |               |                |
| 2005                                      | \$ 1.0                      | \$ 0.6               | \$ 0.1                | \$ 6.4              | \$ (9.9)             | \$ (2.7)      | \$ (4.5)       |
| 2006                                      | (0.2)                       | 0.7                  | (0.5)                 | 3.6                 | 14.6                 | (4.9)         | 13.3           |
| 2007                                      | 1.1                         | -                    | (0.5)                 | 0.8                 | 34.8                 | (4.6)         | 31.6           |
| 2008                                      | 1.2                         | 0.8                  | 0.3                   | 1.6                 | (46.9)               | (3.0)         | (46.0)         |
| 2009                                      | <b>3.4</b>                  | <b>0.8</b>           | <b>(1.3)</b>          | <b>5.7</b>          | <b>(28.6)</b>        | <b>(2.6)</b>  | <b>(22.6)</b>  |

\* Includes separation due to death.

**GAIN (LOSS) FROM INVESTMENT INCOME DURING CALENDAR YEAR 2009**  
**(\$ MILLIONS)**

|  | General           | Executive<br>& Elected | Protective        |                 | Total             |
|--|-------------------|------------------------|-------------------|-----------------|-------------------|
|  |                   |                        | With SS           | Without SS      |                   |
| (1) Beginning of Year Active Participant Assets  |                   |                        |                   |                 |                   |
| (a) Participant Accumulation Reserve (PAR)   | \$14,274.8        | \$94.8                 | \$1,210.1         | \$317.6         | \$15,897.3        |
| (b) PAR Closing Adjustment   | 0.0               | 0.0                    | 0.0               | 0.0             | 0.0               |
| (c) Employer Accumulation Reserve (EAR)  | 19,467.8          | 193.7                  | 2,310.2           | 594.7           | 22,566.4          |
| (d) EAR Closing Adjustment   | 28.0              | 0.3                    | 3.4               | 0.9             | 32.6              |
| (e) Total  | 33,770.6          | 288.8                  | 3,523.7           | 913.2           | 38,496.3          |
| (2) End of Year Active Participant Assets  |                   |                        |                   |                 |                   |
| (a) Participant Accumulation Reserve   | 14,353.5          | 88.6                   | 1,244.5           | 321.1           | 16,007.7          |
| (b) Employer Accumulation Reserve  | 19,654.1          | 194.6                  | 2,407.2           | 620.3           | 22,876.2          |
| (c) Total  | 34,007.6          | 283.2                  | 3,651.7           | 941.4           | 38,883.9          |
| (3) Investment Earnings Credited   |                   |                        |                   |                 |                   |
| (a) Participant Accumulation Reserve   | 741.1             | 4.4                    | 65.0              | 17.0            | 827.5             |
| (b) Employer Accumulation Reserve  | 963.2             | 8.7                    | 108.2             | 27.9            | 1,108.0           |
| (c) Total  | 1,704.3           | 13.1                   | 173.2             | 44.9            | 1,935.5           |
| (4) Average Balance: $.5 \times \{(1e)+(2c)-(3c)\}$  | 33,037.0          | 279.5                  | 3,501.1           | 904.9           | 37,722.5          |
| (5) Expected Earnings: $.078 \times (4)$   | 2,576.9           | 21.8                   | 273.1             | 70.6            | 2,942.4           |
| (6) Gain (Loss) for year from investment<br>experience: $(3c)-(5)$                             | (872.6)           | (8.7)                  | (99.9)            | (25.7)          | (1,006.9)         |
| (7) Portion applied to Change in Variable Excess<br>Reserve and Money Purchase Minimum Benefit | (110.5)           | 1.7                    | 11.0              | 2.9             | (94.9)            |
| <b>(8) Remaining Gain (Loss): (6)-(7)</b>  | <b>\$ (762.1)</b> | <b>\$ (10.4)</b>       | <b>\$ (110.9)</b> | <b>\$(28.6)</b> | <b>\$ (912.0)</b> |

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**SECTION A**

**WITHDRAWAL EXPERIENCE**

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**GENERAL MALES  
WITHDRAWAL EXPERIENCE**

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**Male Service-Based Withdrawals**

| <b>Service Index</b> | <b>Withdrawals</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Withdrawals</b> |
|----------------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 1                    | 369                | 1,929           | 0.1913             | 0.2100               | 405                         |
| 2                    | 393                | 3,446           | 0.1140             | 0.1300               | 448                         |
| 3                    | 214                | 2,608           | 0.0821             | 0.0900               | 235                         |
| 4                    | 160                | 2,142           | 0.0747             | 0.0700               | 150                         |
| 5                    | 115                | 1,686           | 0.0682             | 0.0580               | 98                          |
| 6                    | 65                 | 1,226           | 0.0530             | 0.0470               | 58                          |
| 7                    | 65                 | 1,325           | 0.0491             | 0.0430               | 57                          |
| 8                    | 51                 | 1,438           | 0.0355             | 0.0400               | 58                          |
| 9                    | 40                 | 1,696           | 0.0236             | 0.0350               | 59                          |
| 10                   | 33                 | 1,559           | 0.0212             | 0.0300               | 47                          |
| <b>Totals</b>        | <b>1,505</b>       | <b>19,055</b>   | <b>0.0790</b>      | <b>0.0848</b>        | <b>1,615</b>                |

**Male Age-Based Withdrawals**

| <b>Age</b>    | <b>Withdrawals</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Withdrawals</b> |
|---------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 25-29         | -                  | 4               | 0.0000             | 0.0300               | -                           |
| 30-34         | 4                  | 286             | 0.0140             | 0.0300               | 9                           |
| 35-39         | 21                 | 1,350           | 0.0156             | 0.0210               | 28                          |
| 40-44         | 30                 | 2,689           | 0.0112             | 0.0170               | 46                          |
| 45-49         | 42                 | 4,596           | 0.0091             | 0.0135               | 62                          |
| 50-54         | 69                 | 6,308           | 0.0109             | 0.0120               | 76                          |
| Over 54       | 114                | -               | N/A                |                      | 114                         |
| <b>Totals</b> | <b>280</b>         | <b>15,233</b>   | <b>0.0184</b>      | <b>0.0220</b>        | <b>335</b>                  |

**GENERAL FEMALES  
WITHDRAWAL EXPERIENCE**

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**Female Service-Based Withdrawals**

| <b>Service Index</b> | <b>Withdrawals</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Withdrawals</b> |
|----------------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 1                    | 892                | 5,257           | 0.1697             | 0.2000               | 1,051                       |
| 2                    | 939                | 8,238           | 0.1140             | 0.1400               | 1,153                       |
| 3                    | 502                | 6,133           | 0.0819             | 0.1000               | 613                         |
| 4                    | 325                | 5,042           | 0.0645             | 0.0820               | 413                         |
| 5                    | 277                | 3,995           | 0.0693             | 0.0720               | 288                         |
| 6                    | 202                | 3,490           | 0.0579             | 0.0620               | 216                         |
| 7                    | 186                | 3,408           | 0.0546             | 0.0530               | 181                         |
| 8                    | 147                | 3,281           | 0.0448             | 0.0470               | 154                         |
| 9                    | 132                | 3,282           | 0.0402             | 0.0440               | 144                         |
| 10                   | 102                | 2,760           | 0.0370             | 0.0400               | 110                         |
| Totals               | 3,704              | 44,886          | 0.0825             | 0.0963               | 4,323                       |

**Female Age-Based Withdrawals**

| <b>Age</b> | <b>Withdrawals</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Withdrawals</b> |
|------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 25-29      | -                  | 9               | 0.0000             | 0.0400               | -                           |
| 30-34      | 16                 | 484             | 0.0331             | 0.0350               | 17                          |
| 35-39      | 43                 | 1,931           | 0.0223             | 0.0300               | 58                          |
| 40-44      | 47                 | 3,612           | 0.0130             | 0.0240               | 87                          |
| 45-49      | 84                 | 6,430           | 0.0131             | 0.0190               | 122                         |
| 50-54      | 124                | 9,398           | 0.0132             | 0.0170               | 160                         |
| Over 54    | 167                | -               | N/A                |                      | 167                         |
| Totals     | 481                | 21,864          | 0.0220             | 0.0279               | 611                         |



**PUBLIC SCHOOLS MALES  
WITHDRAWAL EXPERIENCE**

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**Male Service-Based Withdrawals**

| <b>Service Index</b> | <b>Withdrawals</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Withdrawals</b> |
|----------------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 1                    | 64                 | 552             | 0.1159             | 0.1650               | 91                          |
| 2                    | 103                | 1,057           | 0.0974             | 0.1100               | 116                         |
| 3                    | 44                 | 922             | 0.0477             | 0.0710               | 65                          |
| 4                    | 30                 | 858             | 0.0350             | 0.0520               | 45                          |
| 5                    | 30                 | 848             | 0.0354             | 0.0420               | 36                          |
| 6                    | 17                 | 763             | 0.0223             | 0.0340               | 26                          |
| 7                    | 16                 | 755             | 0.0212             | 0.0290               | 22                          |
| 8                    | 27                 | 836             | 0.0323             | 0.0250               | 21                          |
| 9                    | 18                 | 919             | 0.0196             | 0.0225               | 21                          |
| 10                   | 8                  | 901             | 0.0089             | 0.0200               | 18                          |
| Totals               | 357                | 8,411           | 0.0424             | 0.0548               | 461                         |

**Male Age-Based Withdrawals**

| <b>Age</b> | <b>Withdrawals</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Withdrawals</b> |
|------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 25-29      | -                  | -               | N/A                | 0.0200               | -                           |
| 30-34      | 1                  | 243             | 0.0041             | 0.0150               | 4                           |
| 35-39      | 17                 | 1,784           | 0.0095             | 0.0120               | 21                          |
| 40-44      | 25                 | 2,380           | 0.0105             | 0.0110               | 26                          |
| 45-49      | 28                 | 2,311           | 0.0121             | 0.0090               | 21                          |
| 50-54      | 28                 | 2,683           | 0.0104             | 0.0080               | 21                          |
| Over 54    | 22                 | -               | N/A                |                      | 22                          |
| Totals     | 121                | 9,401           | 0.0129             | 0.0122               | 115                         |

**PUBLIC SCHOOLS FEMALES  
WITHDRAWAL EXPERIENCE**

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**Female Service-Based Withdrawals**

| <b>Service Index</b> | <b>Withdrawals</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Withdrawals</b> |
|----------------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 1                    | 156                | 1,737           | 0.0898             | 0.1300               | 226                         |
| 2                    | 278                | 3,158           | 0.0880             | 0.0950               | 300                         |
| 3                    | 170                | 2,891           | 0.0588             | 0.0720               | 208                         |
| 4                    | 135                | 2,696           | 0.0501             | 0.0610               | 164                         |
| 5                    | 92                 | 2,411           | 0.0382             | 0.0500               | 121                         |
| 6                    | 71                 | 2,310           | 0.0307             | 0.0430               | 99                          |
| 7                    | 75                 | 2,279           | 0.0329             | 0.0370               | 84                          |
| 8                    | 65                 | 2,389           | 0.0272             | 0.0320               | 76                          |
| 9                    | 50                 | 2,461           | 0.0203             | 0.0270               | 66                          |
| 10                   | 47                 | 2,388           | 0.0197             | 0.0250               | 60                          |
| <b>Totals</b>        | <b>1,139</b>       | <b>24,720</b>   | <b>0.0461</b>      | <b>0.0568</b>        | <b>1,404</b>                |

**Female Age-Based Withdrawals**

| <b>Age</b>    | <b>Withdrawals</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Withdrawals</b> |
|---------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 25-29         | -                  | -               | N/A                | 0.0200               | -                           |
| 30-34         | 8                  | 645             | 0.0124             | 0.0190               | 12                          |
| 35-39         | 24                 | 4,123           | 0.0058             | 0.0150               | 62                          |
| 40-44         | 42                 | 5,623           | 0.0075             | 0.0120               | 67                          |
| 45-49         | 39                 | 5,518           | 0.0071             | 0.0100               | 55                          |
| 50-54         | 52                 | 6,623           | 0.0079             | 0.0090               | 60                          |
| Over 54       | 62                 | -               | N/A                |                      | 62                          |
| <b>Totals</b> | <b>227</b>         | <b>22,532</b>   | <b>0.0101</b>      | <b>0.0141</b>        | <b>318</b>                  |

**UNIVERSITY MALES  
WITHDRAWAL EXPERIENCE**

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**Male Service-Based Withdrawals**

| <b>Service Index</b> | <b>Withdrawals</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Withdrawals</b> |
|----------------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 1                    | 62                 | 355             | 0.1746             | 0.1800               | 64                          |
| 2                    | 107                | 657             | 0.1629             | 0.1600               | 105                         |
| 3                    | 81                 | 601             | 0.1348             | 0.1250               | 75                          |
| 4                    | 47                 | 470             | 0.1000             | 0.1050               | 49                          |
| 5                    | 34                 | 400             | 0.0850             | 0.0880               | 35                          |
| 6                    | 34                 | 406             | 0.0837             | 0.0760               | 31                          |
| 7                    | 20                 | 331             | 0.0604             | 0.0620               | 21                          |
| 8                    | 19                 | 355             | 0.0535             | 0.0530               | 19                          |
| 9                    | 11                 | 357             | 0.0308             | 0.0410               | 15                          |
| 10                   | 12                 | 354             | 0.0339             | 0.0360               | 13                          |
| <b>Totals</b>        | <b>427</b>         | <b>4,286</b>    | <b>0.0996</b>      | <b>0.0996</b>        | <b>427</b>                  |

**Male Age-Based Withdrawals**

| <b>Age</b>    | <b>Withdrawals</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Withdrawals</b> |
|---------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 25-29         | -                  | -               | N/A                | 0.0350               | -                           |
| 30-34         | -                  | 25              | 0.0000             | 0.0350               | 1                           |
| 35-39         | 5                  | 169             | 0.0296             | 0.0350               | 6                           |
| 40-44         | 14                 | 413             | 0.0339             | 0.0300               | 12                          |
| 45-49         | 13                 | 653             | 0.0199             | 0.0240               | 16                          |
| 50-54         | 17                 | 966             | 0.0176             | 0.0150               | 14                          |
| Over 54       | 11                 | -               | N/A                |                      | 11                          |
| <b>Totals</b> | <b>60</b>          | <b>2,226</b>    | <b>0.0270</b>      | <b>0.0270</b>        | <b>60</b>                   |

**UNIVERSITY FEMALES  
WITHDRAWAL EXPERIENCE**

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**Female Service-Based Withdrawals**

| <b>Service Index</b> | <b>Withdrawals</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Withdrawals</b> |
|----------------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 1                    | 85                 | 461             | 0.1844             | 0.2000               | 92                          |
| 2                    | 105                | 807             | 0.1301             | 0.1600               | 129                         |
| 3                    | 97                 | 704             | 0.1378             | 0.1400               | 99                          |
| 4                    | 48                 | 619             | 0.0775             | 0.1200               | 74                          |
| 5                    | 45                 | 511             | 0.0881             | 0.0975               | 50                          |
| 6                    | 36                 | 459             | 0.0784             | 0.0915               | 42                          |
| 7                    | 22                 | 373             | 0.0590             | 0.0775               | 29                          |
| 8                    | 23                 | 409             | 0.0562             | 0.0675               | 28                          |
| 9                    | 14                 | 372             | 0.0376             | 0.0600               | 22                          |
| 10                   | 8                  | 341             | 0.0235             | 0.0525               | 18                          |
| <b>Totals</b>        | <b>483</b>         | <b>5,056</b>    | <b>0.0955</b>      | <b>0.1153</b>        | <b>583</b>                  |

**Female Age-Based Withdrawals**

| <b>Age</b>    | <b>Withdrawals</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Withdrawals</b> |
|---------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 25-29         | -                  | -               | N/A                | 0.0525               | -                           |
| 30-34         | 1                  | 23              | 0.0435             | 0.0525               | 1                           |
| 35-39         | 6                  | 200             | 0.0300             | 0.0525               | 10                          |
| 40-44         | 11                 | 427             | 0.0258             | 0.0375               | 16                          |
| 45-49         | 12                 | 677             | 0.0177             | 0.0250               | 17                          |
| 50-54         | 25                 | 897             | 0.0279             | 0.0150               | 13                          |
| Over 54       | 9                  | -               | N/A                |                      | 9                           |
| <b>Totals</b> | <b>64</b>          | <b>2,224</b>    | <b>0.0288</b>      | <b>0.0297</b>        | <b>66</b>                   |

**PROTECTIVE WITH SOCIAL SECURITY  
WITHDRAWAL EXPERIENCE**

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**Male and Female Service-Based Withdrawals**

| <b>Service Index</b> | <b>Withdrawals</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Withdrawals</b> |
|----------------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 1                    | 48                 | 474             | 0.1013             | 0.1300               | 62                          |
| 2                    | 61                 | 1,124           | 0.0543             | 0.0700               | 79                          |
| 3                    | 30                 | 1,011           | 0.0297             | 0.0460               | 47                          |
| 4                    | 23                 | 819             | 0.0281             | 0.0415               | 34                          |
| 5                    | 27                 | 717             | 0.0377             | 0.0325               | 23                          |
| 6                    | 15                 | 782             | 0.0192             | 0.0300               | 23                          |
| 7                    | 14                 | 740             | 0.0189             | 0.0275               | 20                          |
| 8                    | 20                 | 922             | 0.0217             | 0.0250               | 23                          |
| 9                    | 16                 | 1,067           | 0.0150             | 0.0225               | 24                          |
| 10                   | 13                 | 917             | 0.0142             | 0.0190               | 17                          |
| <b>Totals</b>        | <b>267</b>         | <b>8,573</b>    | <b>0.0311</b>      | <b>0.0411</b>        | <b>352</b>                  |

**Male and Female Age-Based Withdrawals**

| <b>Age</b>    | <b>Withdrawals</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Withdrawals</b> |
|---------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 25-29         | -                  | 11              | 0.0000             | 0.0190               | -                           |
| 30-34         | 7                  | 617             | 0.0113             | 0.0190               | 12                          |
| 35-39         | 21                 | 2,169           | 0.0097             | 0.0150               | 33                          |
| 40-44         | 23                 | 2,616           | 0.0088             | 0.0120               | 31                          |
| 45-49         | 19                 | 2,355           | 0.0081             | 0.0110               | 26                          |
| 50-54         | 12                 | 501             | 0.0240             | 0.0100               | 5                           |
| Over 54       | 13                 | -               | N/A                |                      | 13                          |
| <b>Totals</b> | <b>95</b>          | <b>8,269</b>    | <b>0.0115</b>      | <b>0.0145</b>        | <b>120</b>                  |

**PROTECTIVE WITHOUT SOCIAL SECURITY  
WITHDRAWAL EXPERIENCE**

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**Male and Female Service-Based Withdrawals**

| <b>Service Index</b> | <b>Withdrawals</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Withdrawals</b> |
|----------------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 1                    | 1                  | 47              | 0.0213             | 0.0520               | 2                           |
| 2                    | 4                  | 97              | 0.0412             | 0.0340               | 3                           |
| 3                    | 2                  | 80              | 0.0250             | 0.0210               | 2                           |
| 4                    | 1                  | 114             | 0.0088             | 0.0150               | 2                           |
| 5                    | -                  | 66              | 0.0000             | 0.0140               | 1                           |
| 6                    | -                  | 79              | 0.0000             | 0.0130               | 1                           |
| 7                    | 1                  | 90              | 0.0111             | 0.0120               | 1                           |
| 8                    | -                  | 68              | 0.0000             | 0.0100               | 1                           |
| 9                    | 1                  | 127             | 0.0079             | 0.0090               | 1                           |
| 10                   | 1                  | 133             | 0.0075             | 0.0085               | 1                           |
| Totals               | 11                 | 901             | 0.0122             | 0.0166               | 15                          |

**Male and Female Age-Based Withdrawals**

| <b>Age</b> | <b>Withdrawals</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Withdrawals</b> |
|------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 25-29      | -                  | -               | N/A                | 0.0085               | -                           |
| 30-34      | 1                  | 65              | 0.0154             | 0.0080               | 1                           |
| 35-39      | 2                  | 316             | 0.0063             | 0.0075               | 2                           |
| 40-44      | 2                  | 396             | 0.0051             | 0.0070               | 3                           |
| 45-49      | -                  | 478             | 0.0000             | 0.0065               | 3                           |
| 50-54      | 5                  | 72              | 0.0694             | 0.0060               | -                           |
| Totals     | 10                 | 1,327           | 0.0075             | 0.0068               | 9                           |

**EXECUTIVE AND ELECTED MALES  
WITHDRAWAL EXPERIENCE**

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**Male and Female Service-Based Withdrawals**

| <b>Service Index</b> | <b>Withdrawals</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Withdrawals</b> |
|----------------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 1                    | 5                  | 52              | 0.0962             | 0.2000               | 10                          |
| 2                    | 8                  | 87              | 0.0920             | 0.1450               | 13                          |
| 3                    | 5                  | 86              | 0.0581             | 0.1250               | 11                          |
| 4                    | 1                  | 31              | 0.0323             | 0.1050               | 3                           |
| 5                    | 3                  | 42              | 0.0714             | 0.1000               | 4                           |
| 6                    | -                  | 18              | 0.0000             | 0.0950               | 2                           |
| 7                    | 2                  | 29              | 0.0690             | 0.0900               | 3                           |
| 8                    | 2                  | 13              | 0.1538             | 0.0750               | 1                           |
| 9                    | 1                  | 23              | 0.0435             | 0.0700               | 2                           |
| 10                   | -                  | 18              | 0.0000             | 0.0650               | 1                           |
| <b>Totals</b>        | <b>27</b>          | <b>399</b>      | <b>0.0677</b>      | <b>0.1253</b>        | <b>50</b>                   |

**Male and Female Age-Based Withdrawals**

| <b>Age</b>    | <b>Withdrawals</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Withdrawals</b> |
|---------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 25-29         | -                  | -               | N/A                | 0.0650               | -                           |
| 30-34         | -                  | 1               | 0.0000             | 0.0650               | -                           |
| 35-39         | -                  | 17              | 0.0000             | 0.0600               | 1                           |
| 40-44         | -                  | 40              | 0.0000             | 0.0450               | 2                           |
| 45-49         | 3                  | 96              | 0.0313             | 0.0400               | 4                           |
| 50-54         | 2                  | 147             | 0.0136             | 0.0375               | 6                           |
| Over 54       | 3                  | -               | N/A                |                      | 3                           |
| <b>Totals</b> | <b>8</b>           | <b>301</b>      | <b>0.0266</b>      | <b>0.0532</b>        | <b>16</b>                   |

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**SECTION B**

**DISABILITY EXPERIENCE**

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**GENERAL  
DISABILITY EXPERIENCE  
DURING CALENDAR YEAR 2009**

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**Male Disability Experience**

| <b>Age</b>    | <b>Disabilities</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Disabilities</b> |
|---------------|---------------------|-----------------|--------------------|----------------------|------------------------------|
| Under 20      | -                   | -               | N/A                | 0.0001               | -                            |
| 20-24         | -                   | 10              | 0.0000             | 0.0001               | -                            |
| 25-29         | -                   | 532             | 0.0000             | 0.0001               | -                            |
| 30-34         | -                   | 1,725           | 0.0000             | 0.0001               | -                            |
| 35-39         | -                   | 2,856           | 0.0000             | 0.0002               | 1                            |
| 40-44         | -                   | 4,187           | 0.0000             | 0.0006               | 3                            |
| 45-49         | 2                   | 6,219           | 0.0003             | 0.0008               | 5                            |
| 50-54         | 11                  | 7,780           | 0.0014             | 0.0023               | 18                           |
| 55-59         | 19                  | 6,615           | 0.0029             | 0.0041               | 27                           |
| 60-64         | 7                   | 3,095           | 0.0023             | 0.0082               | 25                           |
| 65-69         | -                   | 499             | 0.0000             | 0.0031               | 2                            |
| 70-74         | -                   | 192             | 0.0000             | 0.0028               | 1                            |
| 75 and over   | -                   | -               | N/A                | 0.0028               | -                            |
| <b>Totals</b> | <b>39</b>           | <b>33,710</b>   | <b>0.0012</b>      | <b>0.0024</b>        | <b>82</b>                    |

**Female Disability Experience**

| <b>Age</b>    | <b>Disabilities</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Disabilities</b> |
|---------------|---------------------|-----------------|--------------------|----------------------|------------------------------|
| Under 20      | -                   | -               | N/A                | 0.0001               | -                            |
| 20-24         | -                   | 59              | 0.0000             | 0.0001               | -                            |
| 25-29         | -                   | 1,056           | 0.0000             | 0.0001               | -                            |
| 30-34         | -                   | 3,023           | 0.0000             | 0.0003               | 1                            |
| 35-39         | -                   | 4,377           | 0.0000             | 0.0004               | 2                            |
| 40-44         | -                   | 6,692           | 0.0000             | 0.0007               | 5                            |
| 45-49         | 4                   | 10,817          | 0.0004             | 0.0009               | 10                           |
| 50-54         | 14                  | 13,941          | 0.0010             | 0.0016               | 23                           |
| 55-59         | 18                  | 11,492          | 0.0016             | 0.0031               | 35                           |
| 60-64         | 7                   | 6,351           | 0.0011             | 0.0038               | 24                           |
| 65-69         | 1                   | 1,036           | 0.0010             | 0.0031               | 3                            |
| 70-74         | -                   | 249             | 0.0000             | 0.0026               | 1                            |
| 75 and over   | -                   | -               | N/A                | 0.0026               | -                            |
| <b>Totals</b> | <b>44</b>           | <b>59,093</b>   | <b>0.0007</b>      | <b>0.0018</b>        | <b>104</b>                   |

The people shown on this page are cases involving \$40.63 disability benefits and includes those who were either active or inactive with pending benefits at the beginning of the year. The LTDI plan is described in a separate report.

**PUBLIC SCHOOLS  
DISABILITY EXPERIENCE  
DURING CALENDAR YEAR 2009**

**Male Disability Experience**

| <b>Age</b>    | <b>Disabilities</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Disabilities</b> |
|---------------|---------------------|-----------------|--------------------|----------------------|------------------------------|
| Under 20      | -                   | -               | N/A                | 0.0001               | -                            |
| 20-24         | -                   | 1               | 0.0000             | 0.0001               | -                            |
| 25-29         | -                   | 362             | 0.0000             | 0.0001               | -                            |
| 30-34         | -                   | 2,156           | 0.0000             | 0.0001               | -                            |
| 35-39         | -                   | 2,808           | 0.0000             | 0.0001               | -                            |
| 40-44         | -                   | 2,965           | 0.0000             | 0.0003               | 1                            |
| 45-49         | -                   | 2,732           | 0.0000             | 0.0005               | 1                            |
| 50-54         | 3                   | 2,978           | 0.0010             | 0.0020               | 6                            |
| 55-59         | 4                   | 2,301           | 0.0017             | 0.0026               | 6                            |
| 60-64         | 4                   | 798             | 0.0050             | 0.0046               | 4                            |
| 65-69         | -                   | 69              | 0.0000             | 0.0065               | -                            |
| 70-74         | -                   | 21              | 0.0000             | 0.0067               | -                            |
| 75 and over   | -                   | -               | N/A                | 0.0067               | -                            |
| <b>Totals</b> | <b>11</b>           | <b>17,191</b>   | <b>0.0006</b>      | <b>0.0010</b>        | <b>18</b>                    |

**Female Disability Experience**

| <b>Age</b>    | <b>Disabilities</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Disabilities</b> |
|---------------|---------------------|-----------------|--------------------|----------------------|------------------------------|
| Under 20      | -                   | -               | N/A                | 0.0001               | -                            |
| 20-24         | -                   | -               | N/A                | 0.0001               | -                            |
| 25-29         | -                   | 1,256           | 0.0000             | 0.0001               | -                            |
| 30-34         | -                   | 5,675           | 0.0000             | 0.0001               | 1                            |
| 35-39         | -                   | 6,605           | 0.0000             | 0.0001               | 1                            |
| 40-44         | -                   | 7,217           | 0.0000             | 0.0003               | 2                            |
| 45-49         | 2                   | 6,950           | 0.0003             | 0.0012               | 8                            |
| 50-54         | 5                   | 7,844           | 0.0006             | 0.0016               | 12                           |
| 55-59         | 5                   | 6,906           | 0.0007             | 0.0024               | 17                           |
| 60-64         | 2                   | 2,545           | 0.0008             | 0.0034               | 9                            |
| 65-69         | -                   | 188             | 0.0000             | 0.0019               | -                            |
| 70-74         | -                   | 41              | 0.0000             | 0.0016               | -                            |
| 75 and over   | -                   | -               | N/A                | 0.0016               | -                            |
| <b>Totals</b> | <b>14</b>           | <b>45,227</b>   | <b>0.0003</b>      | <b>0.0011</b>        | <b>50</b>                    |

The people shown on this page are cases involving \$40.63 disability benefits and includes those who were either active or inactive with pending benefits at the beginning of the year. The LTDI plan is described in a separate report.

**UNIVERSITY  
DISABILITY EXPERIENCE  
DURING CALENDAR YEAR 2009**

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**Male Disability Experience**

| <b>Age</b>    | <b>Disabilities</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Disabilities</b> |
|---------------|---------------------|-----------------|--------------------|----------------------|------------------------------|
| Under 20      | -                   | -               | N/A                | 0.0001               | -                            |
| 20-24         | -                   | -               | N/A                | 0.0001               | -                            |
| 25-29         | -                   | 34              | 0.0000             | 0.0001               | -                            |
| 30-34         | -                   | 257             | 0.0000             | 0.0001               | -                            |
| 35-39         | -                   | 630             | 0.0000             | 0.0001               | -                            |
| 40-44         | -                   | 926             | 0.0000             | 0.0001               | -                            |
| 45-49         | -                   | 1,059           | 0.0000             | 0.0003               | -                            |
| 50-54         | 1                   | 1,283           | 0.0008             | 0.0006               | 1                            |
| 55-59         | 2                   | 1,239           | 0.0016             | 0.0019               | 2                            |
| 60-64         | 1                   | 705             | 0.0014             | 0.0018               | 1                            |
| 65-69         | -                   | 84              | 0.0000             | 0.0022               | -                            |
| 70-74         | -                   | 22              | 0.0000             | 0.0020               | -                            |
| 75 and over   | -                   | -               | N/A                | 0.0020               | -                            |
| <b>Totals</b> | <b>4</b>            | <b>6,239</b>    | <b>0.0006</b>      | <b>0.0006</b>        | <b>4</b>                     |

**Female Disability Experience**

| <b>Age</b>    | <b>Disabilities</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Disabilities</b> |
|---------------|---------------------|-----------------|--------------------|----------------------|------------------------------|
| Under 20      | -                   | -               | N/A                | 0.0001               | -                            |
| 20-24         | -                   | -               | N/A                | 0.0001               | -                            |
| 25-29         | -                   | 81              | 0.0000             | 0.0001               | -                            |
| 30-34         | -                   | 407             | 0.0000             | 0.0001               | -                            |
| 35-39         | -                   | 693             | 0.0000             | 0.0005               | -                            |
| 40-44         | -                   | 934             | 0.0000             | 0.0006               | 1                            |
| 45-49         | 1                   | 1,087           | 0.0009             | 0.0005               | -                            |
| 50-54         | -                   | 1,211           | 0.0000             | 0.0011               | 1                            |
| 55-59         | 3                   | 1,149           | 0.0026             | 0.0015               | 2                            |
| 60-64         | -                   | 605             | 0.0000             | 0.0023               | 1                            |
| 65-69         | -                   | 74              | 0.0000             | 0.0016               | -                            |
| 70-74         | -                   | 18              | 0.0000             | 0.0013               | -                            |
| 75 and over   | -                   | -               | N/A                | 0.0013               | -                            |
| <b>Totals</b> | <b>4</b>            | <b>6,259</b>    | <b>0.0006</b>      | <b>0.0008</b>        | <b>5</b>                     |

The people shown on this page are cases involving \$40.63 disability benefits and includes those who were either active or inactive with pending benefits at the beginning of the year. The LTDI plan is described in a separate report.

**PROTECTIVE WITH SOCIAL SECURITY  
DISABILITY EXPERIENCE  
DURING CALENDAR YEAR 2009**

---

**Male and Female Disability Experience**

| <b>Age</b>    | <b>Disabilities</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Disabilities</b> |
|---------------|---------------------|-----------------|--------------------|----------------------|------------------------------|
| Under 20      | -                   | -               | N/A                | 0.0002               | -                            |
| 20-24         | -                   | 23              | 0.0000             | 0.0002               | -                            |
| 25-29         | -                   | 843             | 0.0000             | 0.0002               | -                            |
| 30-34         | -                   | 2,367           | 0.0000             | 0.0002               | -                            |
| 35-39         | -                   | 3,188           | 0.0000             | 0.0003               | 1                            |
| 40-44         | -                   | 3,161           | 0.0000             | 0.0004               | 1                            |
| 45-49         | 1                   | 2,736           | 0.0004             | 0.0007               | 2                            |
| 50-54         | 4                   | 1,883           | 0.0021             | 0.0011               | 2                            |
| 55-59         | -                   | 363             | 0.0000             | 0.0238               | 9                            |
| 60-64         | -                   | 153             | 0.0000             | 0.0255               | 4                            |
| 65-69         | -                   | 27              | 0.0000             | 0.0017               | -                            |
| 70-74         | -                   | -               | N/A                | 0.0017               | -                            |
| 75 and over   | -                   | -               | N/A                | 0.0017               | -                            |
| <b>Totals</b> | <b>5</b>            | <b>14,744</b>   | <b>0.0003</b>      | <b>0.0013</b>        | <b>19</b>                    |

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**PROTECTIVE WITHOUT SOCIAL SECURITY  
DISABILITY EXPERIENCE  
DURING CALENDAR YEAR 2009**

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**Male and Female Disability Experience**

| <b>Age</b>    | <b>Disabilities</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Disabilities</b> |
|---------------|---------------------|-----------------|--------------------|----------------------|------------------------------|
| Under 20      | -                   | -               | N/A                | 0.0005               | -                            |
| 20-24         | -                   | -               | N/A                | 0.0005               | -                            |
| 25-29         | -                   | 75              | 0.0000             | 0.0005               | -                            |
| 30-34         | -                   | 279             | 0.0000             | 0.0005               | -                            |
| 35-39         | -                   | 460             | 0.0000             | 0.0006               | -                            |
| 40-44         | -                   | 468             | 0.0000             | 0.0010               | -                            |
| 45-49         | -                   | 499             | 0.0000             | 0.0020               | 1                            |
| 50-54         | 1                   | 299             | 0.0033             | 0.0140               | 4                            |
| 55-59         | -                   | 13              | 0.0000             | 0.0020               | -                            |
| 60-64         | -                   | 4               | 0.0000             | 0.0020               | -                            |
| 65-69         | -                   | -               | N/A                | 0.0020               | -                            |
| 70-74         | -                   | -               | N/A                | 0.0020               | -                            |
| 75 and over   | -                   | -               | N/A                | 0.0020               | -                            |
| <b>Totals</b> | <b>1</b>            | <b>2,097</b>    | <b>0.0005</b>      | <b>0.0024</b>        | <b>5</b>                     |

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**EXECUTIVE AND ELECTED  
DISABILITY EXPERIENCE  
DURING CALENDAR YEAR 2009**

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**Male and Female Disability Experience**

| <b>Age</b>  | <b>Disabilities</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Disabilities</b> |
|-------------|---------------------|-----------------|--------------------|----------------------|------------------------------|
| Under 20    | -                   | -               | N/A                | 0.0000               | -                            |
| 20-24       | -                   | -               | N/A                | 0.0000               | -                            |
| 25-29       | -                   | -               | N/A                | 0.0000               | -                            |
| 30-34       | -                   | 9               | 0.0000             | 0.0000               | -                            |
| 35-39       | -                   | 41              | 0.0000             | 0.0001               | -                            |
| 40-44       | -                   | 62              | 0.0000             | 0.0001               | -                            |
| 45-49       | -                   | 130             | 0.0000             | 0.0002               | -                            |
| 50-54       | -                   | 183             | 0.0000             | 0.0004               | -                            |
| 55-59       | -                   | 229             | 0.0000             | 0.0016               | -                            |
| 60-64       | -                   | 128             | 0.0000             | 0.0014               | -                            |
| 65-69       | -                   | 40              | 0.0000             | 0.0012               | -                            |
| 70-74       | -                   | 15              | 0.0000             | 0.0012               | -                            |
| 75 and over | -                   | -               | N/A                | 0.0012               | -                            |
| Totals      | -                   | 837             | N/A                | N/A                  | -                            |

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**SECTION C**  
**PAY INCREASES**

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**GENERAL  
PAY INCREASE ASSUMPTION**

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**Service-Based Pay Increase Experience**

| <b>Service Group</b>     |                | <b>Total % Increase</b> |                 |
|--------------------------|----------------|-------------------------|-----------------|
| <b>Beginning of Year</b> | <b>Number</b>  | <b>Actual</b>           | <b>Expected</b> |
| 1-5                      | 37,977         | 7.37 %                  | 7.50 %          |
| 6-10                     | 29,099         | 3.29 %                  | 6.00 %          |
| 11-15                    | 20,569         | 2.78 %                  | 5.40 %          |
| 16-20                    | 15,745         | 2.36 %                  | 5.20 %          |
| 21-25                    | 11,175         | 1.85 %                  | 5.00 %          |
| 26-30                    | 7,400          | 1.50 %                  | 4.80 %          |
| 31-35                    | 4,821          | 1.25 %                  | 4.60 %          |
| 36-40                    | 1,303          | 1.08 %                  | 4.40 %          |
| Over 40                  | 168            | (0.12)%                 | 4.40 %          |
| <b>Total</b>             | <b>128,257</b> |                         |                 |



**PUBLIC SCHOOLS  
PAY INCREASE ASSUMPTION**

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**Service-Based Pay Increase Experience**

| <b>Service Group</b>     |               | <b>Total % Increase</b> |                 |
|--------------------------|---------------|-------------------------|-----------------|
| <b>Beginning of Year</b> | <b>Number</b> | <b>Actual</b>           | <b>Expected</b> |
| 1-5                      | 16,281        | 11.98 %                 | 10.00 %         |
| 6-10                     | 17,133        | 6.90 %                  | 8.00 %          |
| 11-15                    | 14,978        | 5.50 %                  | 6.80 %          |
| 16-20                    | 11,937        | 3.89 %                  | 5.20 %          |
| 21-25                    | 8,014         | 3.14 %                  | 4.70 %          |
| 26-30                    | 4,877         | 2.99 %                  | 4.30 %          |
| 31-35                    | 3,518         | 2.47 %                  | 4.30 %          |
| 36-40                    | 892           | 2.76 %                  | 4.20 %          |
| Over 40                  | 117           | 2.47 %                  | 4.20 %          |
| <b>Total</b>             | <b>77,747</b> |                         |                 |

**UNIVERSITY  
PAY INCREASE ASSUMPTION**

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**Service-Based Pay Increase Experience**

| <b>Service Group</b>     |               | <b>Total % Increase</b> |                 |
|--------------------------|---------------|-------------------------|-----------------|
| <b>Beginning of Year</b> | <b>Number</b> | <b>Actual</b>           | <b>Expected</b> |
| 1-5                      | 4,937         | 14.96 %                 | 7.50 %          |
| 6-10                     | 4,168         | 3.74 %                  | 7.00 %          |
| 11-15                    | 2,820         | 2.64 %                  | 6.50 %          |
| 16-20                    | 2,067         | 2.57 %                  | 6.00 %          |
| 21-25                    | 1,589         | 1.68 %                  | 5.50 %          |
| 26-30                    | 996           | 1.34 %                  | 5.20 %          |
| 31-35                    | 577           | 1.34 %                  | 5.00 %          |
| 36-40                    | 243           | 1.32 %                  | 4.70 %          |
| Over 40                  | 71            | 1.24 %                  | 4.60 %          |
| <b>Total</b>             | <b>17,468</b> |                         |                 |

**PROTECTIVE WITH SOCIAL SECURITY  
PAY INCREASE ASSUMPTION**

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**Male and Female Service-Based Pay Increase Experience**

| <b>Service Group</b>     |               | <b>Total % Increase</b> |                 |
|--------------------------|---------------|-------------------------|-----------------|
| <b>Beginning of Year</b> | <b>Number</b> | <b>Actual</b>           | <b>Expected</b> |
| 1-5                      | 3,942         | 8.98 %                  | 9.00 %          |
| 6-10                     | 4,584         | 2.41 %                  | 5.80 %          |
| 11-15                    | 4,116         | 2.18 %                  | 5.20 %          |
| 16-20                    | 3,089         | 2.06 %                  | 5.00 %          |
| 21-25                    | 1,951         | 2.20 %                  | 4.90 %          |
| 26-30                    | 1,094         | 1.80 %                  | 4.70 %          |
| 31-35                    | 419           | 1.98 %                  | 4.60 %          |
| 36-40                    | 51            | 2.28 %                  | 4.50 %          |
| Over 40                  | 4             | 1.78 %                  | 4.40 %          |
| <b>Total</b>             | <b>19,250</b> |                         |                 |

**PROTECTIVE WITHOUT SOCIAL SECURITY  
PAY INCREASE ASSUMPTION**

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**Male and Female Service-Based Pay Increase Experience**

| <b>Service Group</b>     |               | <b>Total % Increase</b> |                 |
|--------------------------|---------------|-------------------------|-----------------|
| <b>Beginning of Year</b> | <b>Number</b> | <b>Actual</b>           | <b>Expected</b> |
| 1-5                      | 392           | 18.15 %                 | 9.00 %          |
| 6-10                     | 496           | 4.32 %                  | 5.55 %          |
| 11-15                    | 571           | 4.59 %                  | 4.75 %          |
| 16-20                    | 511           | 3.96 %                  | 4.65 %          |
| 21-25                    | 364           | 4.45 %                  | 4.55 %          |
| 26-30                    | 237           | 3.32 %                  | 4.45 %          |
| 31-35                    | 71            | 3.04 %                  | 4.35 %          |
| 36-40                    | 3             | 3.32 %                  | 4.25 %          |
| Over 40                  | -             | N/A                     | 4.15 %          |
| Total                    | 2,645         |                         |                 |

**EXECUTIVE AND ELECTED  
PAY INCREASE ASSUMPTION**

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**Service-Based Pay Increase Experience**

| <b>Service Group</b>     |               | <b>Total % Increase</b> |                 |
|--------------------------|---------------|-------------------------|-----------------|
| <b>Beginning of Year</b> | <b>Number</b> | <b>Actual</b>           | <b>Expected</b> |
| 1-5                      | 394           | 10.33 %                 | 5.20 %          |
| 6-10                     | 190           | 1.29 %                  | 5.10 %          |
| 11-15                    | 175           | 1.30 %                  | 5.00 %          |
| 16-20                    | 168           | 1.17 %                  | 4.90 %          |
| 21-25                    | 146           | (2.09)%                 | 4.70 %          |
| 26-30                    | 104           | 0.17 %                  | 4.50 %          |
| 31-35                    | 86            | 1.24 %                  | 4.40 %          |
| 36-40                    | 33            | (1.31)%                 | 4.00 %          |
| Over 40                  | 11            | 0.65 %                  | 4.00 %          |
| <b>Total</b>             | <b>1,307</b>  |                         |                 |

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**SECTION D**

**NORMAL AND EARLY RETIREMENT EXPERIENCE**

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**GENERAL MALES  
NORMAL RETIREMENT EXPERIENCE**

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**Male Age-Based Retirement Experience**

| <b>Age</b> | <b>Retirements</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Retirements</b> |
|------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 57         | 60                 | 398             | 0.1508             | 0.2400               | 96                          |
| 58         | 78                 | 403             | 0.1935             | 0.2400               | 97                          |
| 59         | 45                 | 330             | 0.1364             | 0.2400               | 79                          |
| 60         | 64                 | 324             | 0.1975             | 0.2400               | 78                          |
| 61         | 57                 | 267             | 0.2135             | 0.2000               | 53                          |
| 62         | 60                 | 241             | 0.2490             | 0.3300               | 80                          |
| 63         | 57                 | 169             | 0.3373             | 0.3300               | 56                          |
| 64         | 25                 | 80              | 0.3125             | 0.2400               | 19                          |
| 65         | 58                 | 431             | 0.1346             | 0.2600               | 112                         |
| 66         | 75                 | 331             | 0.2266             | 0.2800               | 93                          |
| 67         | 23                 | 239             | 0.0962             | 0.1500               | 36                          |
| 68         | 15                 | 178             | 0.0843             | 0.1500               | 27                          |
| 69         | 9                  | 156             | 0.0577             | 0.1500               | 23                          |
| 70         | 9                  | 108             | 0.0833             | 0.1500               | 16                          |
| 71         | 8                  | 112             | 0.0714             | 0.1500               | 17                          |
| 72         | 5                  | 85              | 0.0588             | 0.1500               | 13                          |
| 73         | 7                  | 97              | 0.0722             | 0.1500               | 15                          |
| 74         | 4                  | 74              | 0.0541             | 0.1500               | 11                          |
| Totals     | 659                | 4,023           | 0.1638             | 0.2289               | 921                         |
| 75 & Over  | 19                 | 271             |                    |                      | 271                         |
| Totals     | 678                | 4,294           |                    |                      | 1,192                       |

**GENERAL MALES**  
**EARLY RETIREMENT EXPERIENCE**

---

**Male Age-Based Early Retirement Experience**

| <b>Age</b>    | <b>Retirements</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Retirements</b> |
|---------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 55            | 84                 | 1,752           | 0.0479             | 0.0800               | 140                         |
| 56            | 80                 | 1,554           | 0.0515             | 0.0800               | 124                         |
| 57            | 36                 | 1,249           | 0.0288             | 0.0450               | 56                          |
| 58            | 49                 | 1,116           | 0.0439             | 0.0500               | 56                          |
| 59            | 35                 | 944             | 0.0371             | 0.0550               | 52                          |
| 60            | 31                 | 807             | 0.0384             | 0.0800               | 65                          |
| 61            | 49                 | 776             | 0.0631             | 0.0800               | 62                          |
| 62            | 69                 | 664             | 0.1039             | 0.1700               | 113                         |
| 63            | 65                 | 529             | 0.1229             | 0.1700               | 90                          |
| 64            | 47                 | 319             | 0.1473             | 0.1700               | 54                          |
| <b>Totals</b> | <b>545</b>         | <b>9,710</b>    | <b>0.0561</b>      | <b>0.0836</b>        | <b>812</b>                  |



**GENERAL FEMALES  
NORMAL RETIREMENT EXPERIENCE**

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**Female Age-Based Retirement Experience**

| <b>Age</b> | <b>Retirements</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Retirements</b> |
|------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 57         | 52                 | 381             | 0.1365             | 0.1900               | 72                          |
| 58         | 49                 | 360             | 0.1361             | 0.1900               | 68                          |
| 59         | 43                 | 304             | 0.1414             | 0.1900               | 58                          |
| 60         | 66                 | 297             | 0.2222             | 0.1900               | 56                          |
| 61         | 43                 | 211             | 0.2038             | 0.1900               | 40                          |
| 62         | 58                 | 201             | 0.2886             | 0.2900               | 58                          |
| 63         | 34                 | 129             | 0.2636             | 0.2900               | 37                          |
| 64         | 24                 | 90              | 0.2667             | 0.2500               | 23                          |
| 65         | 132                | 765             | 0.1725             | 0.2500               | 191                         |
| 66         | 115                | 589             | 0.1952             | 0.2800               | 165                         |
| 67         | 66                 | 416             | 0.1587             | 0.1500               | 62                          |
| 68         | 26                 | 246             | 0.1057             | 0.1500               | 37                          |
| 69         | 22                 | 235             | 0.0936             | 0.1500               | 35                          |
| 70         | 25                 | 166             | 0.1506             | 0.1500               | 25                          |
| 71         | 15                 | 134             | 0.1119             | 0.1500               | 20                          |
| 72         | 7                  | 115             | 0.0609             | 0.1500               | 17                          |
| 73         | 3                  | 103             | 0.0291             | 0.1500               | 15                          |
| 74         | 6                  | 80              | 0.0750             | 0.1500               | 12                          |
| Totals     | 786                | 4,822           | 0.1630             | 0.2055               | 991                         |
| 75 & Over  | 32                 | 285             |                    |                      | 285                         |
| Totals     | 818                | 5,107           |                    |                      | 1,276                       |

**GENERAL FEMALES  
EARLY RETIREMENT EXPERIENCE**

---

**Female Age-Based Early Retirement Experience**

| <b>Age</b>    | <b>Retirements</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Retirements</b> |
|---------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 55            | 84                 | 2,865           | 0.0293             | 0.0600               | 172                         |
| 56            | 116                | 2,678           | 0.0433             | 0.0600               | 161                         |
| 57            | 55                 | 2,135           | 0.0258             | 0.0450               | 96                          |
| 58            | 64                 | 2,035           | 0.0314             | 0.0550               | 112                         |
| 59            | 49                 | 1,779           | 0.0275             | 0.0550               | 98                          |
| 60            | 83                 | 1,647           | 0.0504             | 0.0800               | 132                         |
| 61            | 67                 | 1,610           | 0.0416             | 0.0800               | 129                         |
| 62            | 149                | 1,375           | 0.1084             | 0.1600               | 220                         |
| 63            | 116                | 1,028           | 0.1128             | 0.1600               | 164                         |
| 64            | 60                 | 691             | 0.0868             | 0.1600               | 111                         |
| <b>Totals</b> | <b>843</b>         | <b>17,843</b>   | <b>0.0472</b>      | <b>0.0782</b>        | <b>1,395</b>                |

**PUBLIC SCHOOL MALES  
NORMAL RETIREMENT EXPERIENCE**

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**Male Age-Based Retirement Experience**

| <b>Age</b> | <b>Retirements</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Retirements</b> |
|------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 57         | 95                 | 300             | 0.3167             | 0.4000               | 120                         |
| 58         | 60                 | 249             | 0.2410             | 0.3500               | 87                          |
| 59         | 47                 | 217             | 0.2166             | 0.2800               | 61                          |
| 60         | 50                 | 163             | 0.3067             | 0.2800               | 46                          |
| 61         | 24                 | 119             | 0.2017             | 0.2800               | 33                          |
| 62         | 40                 | 107             | 0.3738             | 0.3800               | 41                          |
| 63         | 25                 | 70              | 0.3571             | 0.3500               | 24                          |
| 64         | 10                 | 34              | 0.2941             | 0.2500               | 9                           |
| 65         | 11                 | 89              | 0.1236             | 0.2500               | 22                          |
| 66         | 11                 | 61              | 0.1803             | 0.2500               | 15                          |
| 67         | 4                  | 44              | 0.0909             | 0.2000               | 9                           |
| 68         | 5                  | 33              | 0.1515             | 0.2000               | 7                           |
| 69         | 2                  | 18              | 0.1111             | 0.2000               | 4                           |
| 70         | 1                  | 13              | 0.0769             | 0.2500               | 3                           |
| 71         | -                  | 18              | 0.0000             | 0.2500               | 5                           |
| 72         | -                  | 8               | 0.0000             | 0.2500               | 2                           |
| 73         | 1                  | 7               | 0.1429             | 0.2500               | 2                           |
| 74         | -                  | 5               | 0.0000             | 0.2500               | 1                           |
| Totals     | 386                | 1,555           | 0.2482             | 0.3158               | 491                         |
| 75 & Over  | 2                  | 23              |                    |                      | 23                          |
| Totals     | 388                | 1,578           |                    |                      | 514                         |

**PUBLIC SCHOOL MALES  
EARLY RETIREMENT EXPERIENCE**

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**Male Age-Based Early Retirement Experience**

| <b>Age</b>    | <b>Retirements</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Retirements</b> |
|---------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 55            | 65                 | 714             | 0.0910             | 0.1500               | 107                         |
| 56            | 66                 | 639             | 0.1033             | 0.1500               | 96                          |
| 57            | 21                 | 353             | 0.0595             | 0.1500               | 53                          |
| 58            | 33                 | 345             | 0.0957             | 0.1400               | 48                          |
| 59            | 15                 | 250             | 0.0600             | 0.1100               | 27                          |
| 60            | 18                 | 249             | 0.0723             | 0.1500               | 37                          |
| 61            | 15                 | 188             | 0.0798             | 0.1400               | 26                          |
| 62            | 22                 | 175             | 0.1257             | 0.2300               | 40                          |
| 63            | 12                 | 119             | 0.1008             | 0.2300               | 27                          |
| 64            | 7                  | 67              | 0.1045             | 0.1600               | 11                          |
| <b>Totals</b> | <b>274</b>         | <b>3,099</b>    | <b>0.0884</b>      | <b>0.1523</b>        | <b>472</b>                  |

**PUBLIC SCHOOL FEMALES  
NORMAL RETIREMENT EXPERIENCE**

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**Female Age-Based Retirement Experience**

| <b>Age</b> | <b>Retirements</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Retirements</b> |
|------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 57         | 142                | 552             | 0.2572             | 0.3000               | 166                         |
| 58         | 108                | 467             | 0.2313             | 0.3000               | 140                         |
| 59         | 86                 | 337             | 0.2552             | 0.3000               | 101                         |
| 60         | 77                 | 287             | 0.2683             | 0.3000               | 86                          |
| 61         | 44                 | 182             | 0.2418             | 0.3000               | 55                          |
| 62         | 43                 | 156             | 0.2756             | 0.3800               | 59                          |
| 63         | 17                 | 68              | 0.2500             | 0.3200               | 22                          |
| 64         | 11                 | 43              | 0.2558             | 0.2600               | 11                          |
| 65         | 45                 | 238             | 0.1891             | 0.3100               | 74                          |
| 66         | 32                 | 132             | 0.2424             | 0.2700               | 36                          |
| 67         | 16                 | 82              | 0.1951             | 0.2600               | 21                          |
| 68         | 7                  | 50              | 0.1400             | 0.2400               | 12                          |
| 69         | 5                  | 40              | 0.1250             | 0.2200               | 9                           |
| 70         | 3                  | 43              | 0.0698             | 0.1800               | 8                           |
| 71         | 4                  | 25              | 0.1600             | 0.1800               | 5                           |
| 72         | 1                  | 23              | 0.0435             | 0.1800               | 4                           |
| 73         | 3                  | 15              | 0.2000             | 0.1800               | 3                           |
| 74         | -                  | 18              | 0.0000             | 0.1800               | 3                           |
| Totals     | 644                | 2,758           | 0.2335             | 0.2955               | 815                         |
| 75 & Over  | 2                  | 35              |                    |                      | 35                          |
| Totals     | 646                | 2,793           |                    |                      | 850                         |

**PUBLIC SCHOOL FEMALES  
EARLY RETIREMENT EXPERIENCE**

---

**Female Age-Based Early Retirement Experience**

| <b>Age</b> | <b>Retirements</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Retirements</b> |
|------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 55         | 121                | 1,812           | 0.0668             | 0.1250               | 227                         |
| 56         | 158                | 1,796           | 0.0880             | 0.1250               | 225                         |
| 57         | 86                 | 1,175           | 0.0732             | 0.1150               | 135                         |
| 58         | 71                 | 1,141           | 0.0622             | 0.1250               | 143                         |
| 59         | 75                 | 982             | 0.0764             | 0.1250               | 123                         |
| 60         | 83                 | 798             | 0.1040             | 0.1500               | 120                         |
| 61         | 83                 | 656             | 0.1265             | 0.1600               | 105                         |
| 62         | 85                 | 557             | 0.1526             | 0.2300               | 128                         |
| 63         | 58                 | 330             | 0.1758             | 0.2100               | 69                          |
| 64         | 29                 | 204             | 0.1422             | 0.1900               | 39                          |
| Totals     | 849                | 9,451           | 0.0898             | 0.1390               | 1,314                       |

**UNIVERSITY MALES  
NORMAL RETIREMENT EXPERIENCE**

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**Male Age-Based Retirement Experience**

| <b>Age</b> | <b>Retirements</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Retirements</b> |
|------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 57         | 2                  | 33              | 0.0606             | 0.1500               | 5                           |
| 58         | 7                  | 43              | 0.1628             | 0.1500               | 6                           |
| 59         | 10                 | 51              | 0.1961             | 0.1500               | 8                           |
| 60         | 7                  | 48              | 0.1458             | 0.1500               | 7                           |
| 61         | 6                  | 47              | 0.1277             | 0.1500               | 7                           |
| 62         | 8                  | 65              | 0.1231             | 0.1700               | 11                          |
| 63         | 15                 | 60              | 0.2500             | 0.1700               | 10                          |
| 64         | 7                  | 58              | 0.1207             | 0.1700               | 10                          |
| 65         | 17                 | 144             | 0.1181             | 0.2000               | 29                          |
| 66         | 20                 | 119             | 0.1681             | 0.2200               | 26                          |
| 67         | 14                 | 86              | 0.1628             | 0.1800               | 15                          |
| 68         | 9                  | 52              | 0.1731             | 0.1800               | 9                           |
| 69         | 8                  | 51              | 0.1569             | 0.1800               | 9                           |
| 70         | 6                  | 36              | 0.1667             | 0.2000               | 7                           |
| 71         | 5                  | 26              | 0.1923             | 0.2000               | 5                           |
| 72         | 2                  | 19              | 0.1053             | 0.1800               | 3                           |
| 73         | 4                  | 19              | 0.2105             | 0.1800               | 3                           |
| 74         | 2                  | 9               | 0.2222             | 0.1800               | 2                           |
| Totals     | 149                | 966             | 0.1542             | 0.1781               | 172                         |
| 75 & Over  | 8                  | 45              |                    |                      | 45                          |
| Totals     | 157                | 1,011           |                    |                      | 217                         |

**UNIVERSITY MALES  
EARLY RETIREMENT EXPERIENCE**

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**Male Age-Based Early Retirement Experience**

| <b>Age</b> | <b>Retirements</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Retirements</b> |
|------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 55         | 5                  | 281             | 0.0178             | 0.0500               | 14                          |
| 56         | 4                  | 270             | 0.0148             | 0.0450               | 12                          |
| 57         | 6                  | 231             | 0.0260             | 0.0250               | 6                           |
| 58         | 3                  | 240             | 0.0125             | 0.0350               | 8                           |
| 59         | 10                 | 217             | 0.0461             | 0.0400               | 9                           |
| 60         | 5                  | 163             | 0.0307             | 0.0550               | 9                           |
| 61         | 5                  | 155             | 0.0323             | 0.0750               | 12                          |
| 62         | 5                  | 154             | 0.0325             | 0.1000               | 15                          |
| 63         | 10                 | 143             | 0.0699             | 0.0950               | 14                          |
| 64         | 9                  | 90              | 0.1000             | 0.0850               | 8                           |
| Totals     | 62                 | 1,944           | 0.0319             | 0.0550               | 107                         |



**UNIVERSITY FEMALES  
NORMAL RETIREMENT EXPERIENCE**

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**Female Age-Based Retirement Experience**

| <b>Age</b> | <b>Retirements</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Retirements</b> |
|------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 57         | 6                  | 50              | 0.1200             | 0.1700               | 9                           |
| 58         | 7                  | 38              | 0.1842             | 0.1400               | 5                           |
| 59         | 2                  | 35              | 0.0571             | 0.1400               | 5                           |
| 60         | 4                  | 29              | 0.1379             | 0.1400               | 4                           |
| 61         | 5                  | 32              | 0.1563             | 0.2200               | 7                           |
| 62         | 5                  | 21              | 0.2381             | 0.2000               | 4                           |
| 63         | 3                  | 29              | 0.1034             | 0.2000               | 6                           |
| 64         | 4                  | 22              | 0.1818             | 0.2000               | 4                           |
| 65         | 13                 | 65              | 0.2000             | 0.2200               | 14                          |
| 66         | 8                  | 44              | 0.1818             | 0.2000               | 9                           |
| 67         | 5                  | 42              | 0.1190             | 0.1800               | 8                           |
| 68         | 3                  | 27              | 0.1111             | 0.1800               | 5                           |
| 69         | 3                  | 25              | 0.1200             | 0.1800               | 5                           |
| 70         | 5                  | 23              | 0.2174             | 0.1800               | 4                           |
| 71         | 1                  | 7               | 0.1429             | 0.1800               | 1                           |
| 72         | -                  | 2               | 0.0000             | 0.1800               | -                           |
| 73         | 1                  | 6               | 0.1667             | 0.1800               | 1                           |
| 74         | 1                  | 4               | 0.2500             | 0.1800               | 1                           |
| Totals     | 76                 | 501             | 0.1517             | 0.1836               | 92                          |
| 75 & Over  | 1                  | 14              |                    |                      | 14                          |
| Totals     | 77                 | 515             |                    |                      | 106                         |

**UNIVERSITY FEMALES  
EARLY RETIREMENT EXPERIENCE**

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**Female Age-Based Early Retirement Experience**

| <b>Age</b>    | <b>Retirements</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Retirements</b> |
|---------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 55            | 9                  | 286             | 0.0315             | 0.0600               | 17                          |
| 56            | 11                 | 267             | 0.0412             | 0.0600               | 16                          |
| 57            | 2                  | 209             | 0.0096             | 0.0600               | 13                          |
| 58            | 7                  | 222             | 0.0315             | 0.0600               | 13                          |
| 59            | 8                  | 165             | 0.0485             | 0.0600               | 10                          |
| 60            | 6                  | 149             | 0.0403             | 0.0700               | 10                          |
| 61            | 14                 | 149             | 0.0940             | 0.0750               | 11                          |
| 62            | 12                 | 118             | 0.1017             | 0.1400               | 17                          |
| 63            | 7                  | 91              | 0.0769             | 0.1400               | 13                          |
| 64            | 10                 | 98              | 0.1020             | 0.1600               | 16                          |
| <b>Totals</b> | <b>86</b>          | <b>1,754</b>    | <b>0.0490</b>      | <b>0.0775</b>        | <b>136</b>                  |

**PROTECTIVE WITH SOCIAL SECURITY  
NORMAL RETIREMENT EXPERIENCE**

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**Male and Female Age-Based Retirement Experience**

| <b>Age</b> | <b>Retirements</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Retirements</b> |
|------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 50         | 15                 | 291             | 0.0515             | 0.0750               | 22                          |
| 51         | 22                 | 298             | 0.0738             | 0.0800               | 24                          |
| 52         | 25                 | 356             | 0.0702             | 0.0850               | 30                          |
| 53         | 38                 | 301             | 0.1262             | 0.2800               | 84                          |
| 54         | 35                 | 379             | 0.0923             | 0.2000               | 76                          |
| 55         | 28                 | 317             | 0.0883             | 0.1700               | 54                          |
| 56         | 22                 | 247             | 0.0891             | 0.1700               | 42                          |
| 57         | 21                 | 231             | 0.0909             | 0.1700               | 39                          |
| 58         | 15                 | 193             | 0.0777             | 0.1700               | 33                          |
| 59         | 12                 | 157             | 0.0764             | 0.1700               | 27                          |
| 60         | 15                 | 116             | 0.1293             | 0.1700               | 20                          |
| 61         | 14                 | 89              | 0.1573             | 0.2000               | 18                          |
| 62         | 13                 | 80              | 0.1625             | 0.2000               | 16                          |
| 63         | 12                 | 59              | 0.2034             | 0.3000               | 18                          |
| 64         | 1                  | 27              | 0.0370             | 0.1800               | 5                           |
| 65         | 9                  | 20              | 0.4500             | 0.3000               | 6                           |
| 66         | 5                  | 11              | 0.4545             | 0.3000               | 3                           |
| 67         | 2                  | 4               | 0.5000             | 0.2300               | 1                           |
| 68         | 3                  | 8               | 0.3750             | 0.2300               | 2                           |
| 69         | 2                  | 5               | 0.4000             | 0.2000               | 1                           |
| 70         | 1                  | 5               | 0.2000             | 1.0000               | 5                           |
| 71         | 1                  | 1               | 1.0000             | 1.0000               | 1                           |
| 72         | -                  | -               | N/A                | 1.0000               | -                           |
| 73         | -                  | -               | N/A                | 1.0000               | -                           |
| 74         | -                  | 1               | 0.0000             | 1.0000               | 1                           |
| Totals     | 311                | 3,196           | 0.0973             | 0.1652               | 528                         |
| 75 & Over  | -                  | -               |                    |                      | -                           |
| Totals     | 311                | 3,196           |                    |                      | 528                         |

**PROTECTIVE WITHOUT SOCIAL SECURITY  
NORMAL RETIREMENT EXPERIENCE**

---

**Male and Female Age-Based Retirement Experience**

| <b>Age</b> | <b>Retirements</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Retirements</b> |
|------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 50         | 1                  | 62              | 0.0161             | 0.0350               | 2                           |
| 51         | 4                  | 65              | 0.0615             | 0.0350               | 2                           |
| 52         | 1                  | 69              | 0.0145             | 0.0600               | 4                           |
| 53         | 6                  | 68              | 0.0882             | 0.2300               | 16                          |
| 54         | 10                 | 69              | 0.1449             | 0.2800               | 19                          |
| 55         | 4                  | 50              | 0.0800             | 0.2800               | 14                          |
| 56         | 9                  | 45              | 0.2000             | 0.2800               | 13                          |
| 57         | -                  | 24              | 0.0000             | 0.3700               | 9                           |
| 58         | 4                  | 17              | 0.2353             | 0.3200               | 5                           |
| 59         | 2                  | 14              | 0.1429             | 0.3500               | 5                           |
| 60         | -                  | -               | N\A                | 0.2200               | -                           |
| 61         | -                  | 2               | 0.0000             | 0.1500               | -                           |
| 62         | -                  | 6               | 0.0000             | 0.2000               | 1                           |
| 63         | 1                  | 2               | 0.5000             | 0.2000               | -                           |
| 64         | 1                  | 2               | 0.5000             | 0.2000               | -                           |
| 65         | -                  | -               | N\A                | 0.4000               | -                           |
| 66         | 1                  | 1               | 1.0000             | 0.4000               | -                           |
| 67         | -                  | -               | N/A                | 0.4000               | -                           |
| 68         | -                  | -               | N/A                | 0.4000               | -                           |
| 69         | -                  | -               | N/A                | 0.4000               | -                           |
| 70         | -                  | -               | N/A                | 1.0000               | -                           |
| 71         | -                  | -               | N/A                | 1.0000               | -                           |
| 72         | -                  | -               | N/A                | 1.0000               | -                           |
| 73         | -                  | -               | N/A                | 1.0000               | -                           |
| 74         | -                  | -               | N/A                | 1.0000               | -                           |
| Totals     | 44                 | 496             | 0.0887             | 0.1815               | 90                          |
| 75 & Over  | -                  | -               | N/A                |                      | -                           |
| Totals     | 44                 | 496             |                    |                      | 90                          |

**EXECUTIVE AND ELECTED  
NORMAL RETIREMENT EXPERIENCE**

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**Male and Female Age-Based Retirement Experience**

| <b>Age</b> | <b>Retirements</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Retirements</b> |
|------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 57         | 1                  | 12              | 0.0833             | 0.1700               | 2                           |
| 58         | -                  | 13              | 0.0000             | 0.1700               | 2                           |
| 59         | 1                  | 10              | 0.1000             | 0.1700               | 2                           |
| 60         | 2                  | 7               | 0.2857             | 0.1100               | 1                           |
| 61         | 3                  | 16              | 0.1875             | 0.1100               | 2                           |
| 62         | 5                  | 46              | 0.1087             | 0.1100               | 5                           |
| 63         | 6                  | 43              | 0.1395             | 0.1100               | 5                           |
| 64         | 6                  | 34              | 0.1765             | 0.0800               | 3                           |
| 65         | 5                  | 26              | 0.1923             | 0.0800               | 2                           |
| 66         | 4                  | 25              | 0.1600             | 0.2000               | 5                           |
| 67         | 8                  | 20              | 0.4000             | 0.1700               | 3                           |
| 68         | -                  | 12              | 0.0000             | 0.1700               | 2                           |
| 69         | 1                  | 8               | 0.1250             | 0.1700               | 1                           |
| 70         | 1                  | 7               | 0.1429             | 0.1500               | 1                           |
| 71         | 2                  | 9               | 0.2222             | 0.1500               | 1                           |
| 72         | 1                  | 5               | 0.2000             | 0.1500               | 1                           |
| 73         | -                  | 3               | 0.0000             | 0.1000               | -                           |
| 74         | -                  | 5               | 0.0000             | 0.1000               | 1                           |
| Totals     | 46                 | 301             | 0.1528             | 0.1296               | 39                          |
| 75 & Over  | 5                  | 22              |                    |                      | 22                          |
| Totals     | 51                 | 323             |                    |                      | 61                          |

**EXECUTIVE AND ELECTED  
EARLY RETIREMENT EXPERIENCE**

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**Male and Female Age-Based Early Retirement Experience**

| <b>Age</b>    | <b>Retirements</b> | <b>Exposure</b> | <b>Crude Rates</b> | <b>Current Rates</b> | <b>Expected Retirements</b> |
|---------------|--------------------|-----------------|--------------------|----------------------|-----------------------------|
| 55            | 1                  | 51              | 0.0196             | 0.0550               | 3                           |
| 56            | 2                  | 39              | 0.0513             | 0.0550               | 2                           |
| 57            | 1                  | 49              | 0.0204             | 0.0550               | 3                           |
| 58            | 3                  | 52              | 0.0577             | 0.0550               | 3                           |
| 59            | -                  | 38              | 0.0000             | 0.0550               | 2                           |
| 60            | 2                  | 42              | 0.0476             | 0.0550               | 2                           |
| 61            | 3                  | 36              | 0.0833             | 0.0550               | 2                           |
| 62            | -                  | 9               | 0.0000             | 0.0550               | -                           |
| 63            | -                  | 8               | 0.0000             | 0.0550               | -                           |
| 64            | -                  | 9               | 0.0000             | 0.0550               | -                           |
| Over 64       | -                  | 74              | 0.0000             |                      |                             |
| <b>Totals</b> | <b>12</b>          | <b>407</b>      |                    |                      | <b>17</b>                   |

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**SECTION E**

**MORTALITY EXPERIENCE**

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## DEATH-IN-SERVICE

### Male

| Age         | Deaths | Exposure | Crude Rates | Current Rates | Expected Deaths |
|-------------|--------|----------|-------------|---------------|-----------------|
| Under 20    | -      | 28       | 0.0000      | 0.0002        | -               |
| 20-24       | 1      | 1,683    | 0.0006      | 0.0003        | -               |
| 25-29       | 4      | 6,931    | 0.0006      | 0.0003        | 2               |
| 30-34       | 5      | 9,523    | 0.0005      | 0.0004        | 4               |
| 35-39       | 7      | 11,808   | 0.0006      | 0.0004        | 5               |
| 40-44       | 6      | 13,202   | 0.0005      | 0.0006        | 8               |
| 45-49       | 20     | 14,687   | 0.0014      | 0.0009        | 13              |
| 50-54       | 25     | 16,100   | 0.0016      | 0.0015        | 24              |
| 55-59       | 41     | 14,759   | 0.0028      | 0.0025        | 36              |
| 60-64       | 25     | 7,824    | 0.0032      | 0.0033        | 26              |
| 65-69       | 10     | 2,170    | 0.0046      | 0.0059        | 13              |
| 70-74       | 2      | 666      | 0.0030      | 0.0100        | 7               |
| 75 and over | 5      | -        | N/A         | 0.0193        | -               |
| Totals      | 151    | 99,381   | 0.0015      | 0.0014        | 138             |

### Female

| Age         | Deaths | Exposure | Crude Rates | Current Rates | Expected Deaths |
|-------------|--------|----------|-------------|---------------|-----------------|
| Under 20    | -      | 74       | 0.0000      | 0.0001        | -               |
| 20-24       | 1      | 2,845    | 0.0004      | 0.0001        | -               |
| 25-29       | -      | 12,308   | 0.0000      | 0.0001        | 1               |
| 30-34       | 3      | 15,359   | 0.0002      | 0.0002        | 2               |
| 35-39       | 5      | 17,229   | 0.0003      | 0.0002        | 4               |
| 40-44       | 11     | 20,914   | 0.0005      | 0.0003        | 7               |
| 45-49       | 16     | 25,080   | 0.0006      | 0.0005        | 13              |
| 50-54       | 24     | 27,594   | 0.0009      | 0.0008        | 22              |
| 55-59       | 31     | 25,010   | 0.0012      | 0.0017        | 43              |
| 60-64       | 32     | 12,837   | 0.0025      | 0.0025        | 32              |
| 65-69       | 8      | 3,043    | 0.0026      | 0.0038        | 12              |
| 70-74       | 4      | 776      | 0.0052      | 0.0068        | 5               |
| 75 and over | 8      | -        | N/A         | 0.0122        | -               |
| Totals      | 143    | 163,069  | 0.0009      | 0.0009        | 141             |



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**SECTION F**

**ACTIVE PARTICIPANTS IN 12/31/2009  
VALUATIONS**

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**ACTIVE PARTICIPANTS AS OF DECEMBER 31, 2009**  
**GENERAL PARTICIPANTS**  
**BY ATTAINED AGE AND YEARS OF SERVICE**

| Attained<br>Ages | Years of Service to Valuation Date |               |               |               |               |               |               | Totals         |                         |
|------------------|------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|-------------------------|
|                  | 0-4                                | 5-9           | 10-14         | 15-19         | 20-24         | 25-29         | 30 Plus       | No.            | Valuation<br>Payroll    |
| 15-19            | 161                                |               |               |               |               |               |               | 161            | \$ 2,512,245            |
| 20-24            | 4,571                              | 28            |               |               |               |               |               | 4,599          | 113,999,092             |
| 25-29            | 14,980                             | 2,226         | 21            |               |               |               |               | 17,227         | 607,543,557             |
| 30-34            | 9,966                              | 10,517        | 1,717         | 7             |               |               |               | 22,207         | 934,470,692             |
| 35-39            | 8,128                              | 7,365         | 8,494         | 1,165         | 19            |               |               | 25,171         | 1,173,839,620           |
| 40-44            | 8,573                              | 6,880         | 7,080         | 6,937         | 1,265         | 14            |               | 30,749         | 1,463,110,541           |
| 45-49            | 8,611                              | 7,570         | 6,520         | 6,293         | 5,745         | 1,452         | 85            | 36,276         | 1,699,690,772           |
| 50-54            | 6,724                              | 7,107         | 6,841         | 6,036         | 5,924         | 5,311         | 2,679         | 40,622         | 1,978,640,114           |
| 55               | 1,062                              | 1,272         | 1,253         | 1,258         | 1,085         | 1,055         | 1,362         | 8,347          | 423,280,857             |
| 56               | 1,004                              | 1,091         | 1,154         | 1,164         | 1,155         | 948           | 1,314         | 7,830          | 401,310,735             |
| 57               | 900                                | 1,029         | 1,102         | 1,164         | 1,017         | 836           | 1,378         | 7,426          | 380,506,609             |
| 58               | 851                                | 924           | 1,095         | 1,115         | 992           | 810           | 1,269         | 7,056          | 361,559,719             |
| 59               | 801                                | 824           | 894           | 1,029         | 928           | 715           | 1,141         | 6,332          | 318,368,533             |
| 60               | 648                                | 767           | 777           | 848           | 811           | 613           | 966           | 5,430          | 277,808,352             |
| 61               | 607                                | 633           | 726           | 754           | 720           | 517           | 778           | 4,735          | 237,413,588             |
| 62               | 570                                | 503           | 630           | 627           | 635           | 443           | 593           | 4,001          | 194,510,254             |
| 63               | 505                                | 476           | 495           | 539           | 542           | 374           | 516           | 3,447          | 170,883,405             |
| 64               | 331                                | 292           | 285           | 318           | 276           | 190           | 269           | 1,961          | 92,807,496              |
| 65               | 304                                | 244           | 248           | 257           | 241           | 142           | 225           | 1,661          | 74,585,947              |
| 66               | 227                                | 181           | 156           | 175           | 156           | 93            | 174           | 1,162          | 52,856,150              |
| 67               | 215                                | 151           | 128           | 117           | 106           | 66            | 113           | 896            | 38,633,272              |
| 68               | 190                                | 111           | 76            | 62            | 59            | 45            | 74            | 617            | 24,658,344              |
| 69               | 142                                | 75            | 74            | 59            | 42            | 25            | 61            | 478            | 17,848,483              |
| 70               | 150                                | 55            | 50            | 43            | 35            | 15            | 51            | 399            | 13,866,471              |
| 71               | 114                                | 45            | 34            | 36            | 21            | 13            | 36            | 299            | 9,950,093               |
| 72               | 98                                 | 53            | 26            | 26            | 18            | 9             | 25            | 255            | 7,933,563               |
| 73               | 91                                 | 39            | 24            | 15            | 13            | 9             | 17            | 208            | 5,720,976               |
| 74               | 96                                 | 43            | 21            | 15            | 13            | 6             | 18            | 212            | 5,675,392               |
| 75 & Up          | 321                                | 139           | 56            | 39            | 19            | 16            | 47            | 637            | 14,134,194              |
| <b>Totals</b>    | <b>70,941</b>                      | <b>50,640</b> | <b>39,977</b> | <b>30,098</b> | <b>21,837</b> | <b>13,717</b> | <b>13,191</b> | <b>240,401</b> | <b>\$11,098,119,066</b> |

**ACTIVE PARTICIPANTS AS OF DECEMBER 31, 2009**  
**PROTECTIVE PARTICIPANTS WITH SOCIAL SECURITY**  
**BY ATTAINED AGE AND YEARS OF SERVICE**

| Attained<br>Ages | Years of Service to Valuation Date |              |              |              |              |              |            | Totals        |                        |
|------------------|------------------------------------|--------------|--------------|--------------|--------------|--------------|------------|---------------|------------------------|
|                  | 0-4                                | 5-9          | 10-14        | 15-19        | 20-24        | 25-29        | 30 Plus    | No.           | Valuation<br>Payroll   |
| 15-19            | 5                                  |              |              |              |              |              |            | 5             | \$ 135,683             |
| 20-24            | 730                                | 9            |              |              |              |              |            | 739           | 26,103,399             |
| 25-29            | 1,815                              | 656          | 11           |              |              |              |            | 2,482         | 111,872,000            |
| 30-34            | 766                                | 1,595        | 661          |              |              |              |            | 3,022         | 156,248,813            |
| 35-39            | 454                                | 900          | 1,736        | 421          | 5            |              |            | 3,516         | 196,730,284            |
| 40-44            | 283                                | 501          | 1,008        | 1,340        | 331          | 4            |            | 3,467         | 203,821,609            |
| 45-49            | 181                                | 351          | 419          | 739          | 918          | 300          | 6          | 2,914         | 179,636,832            |
| 50               | 20                                 | 58           | 61           | 106          | 119          | 135          | 22         | 521           | 33,360,465             |
| 51               | 23                                 | 69           | 55           | 94           | 99           | 137          | 43         | 520           | 33,066,320             |
| 52               | 28                                 | 48           | 38           | 78           | 116          | 142          | 65         | 515           | 32,806,551             |
| 53               | 32                                 | 48           | 37           | 63           | 80           | 137          | 80         | 477           | 30,380,973             |
| 54               | 24                                 | 48           | 40           | 60           | 70           | 80           | 55         | 377           | 22,664,172             |
| 55               | 18                                 | 42           | 33           | 52           | 66           | 80           | 73         | 364           | 22,616,751             |
| 56               | 10                                 | 27           | 24           | 45           | 41           | 38           | 51         | 236           | 14,483,997             |
| 57               | 13                                 | 27           | 32           | 41           | 41           | 32           | 43         | 229           | 13,623,278             |
| 58               | 13                                 | 29           | 16           | 34           | 36           | 26           | 32         | 186           | 10,939,036             |
| 59               | 7                                  | 34           | 15           | 29           | 29           | 26           | 46         | 186           | 10,991,456             |
| 60               | 8                                  | 13           | 15           | 18           | 26           | 21           | 22         | 123           | 7,356,996              |
| 61               | 7                                  | 17           | 9            | 19           | 16           | 14           | 15         | 97            | 5,361,603              |
| 62               | 4                                  | 15           | 11           | 12           | 11           | 10           | 10         | 73            | 4,112,495              |
| 63               | 6                                  | 11           | 6            | 10           | 10           | 9            | 9          | 61            | 3,351,863              |
| 64               | 2                                  | 2            | 8            | 7            | 5            | 2            | 6          | 32            | 1,779,395              |
| 65               | 2                                  | 5            | 6            | 2            | 2            | 3            | 3          | 23            | 1,286,249              |
| 66               | 2                                  | 1            | 1            | 1            | 1            |              | 1          | 7             | 316,433                |
| 67               | 4                                  | 1            |              | 2            | 1            |              | 1          | 9             | 352,310                |
| 68               | 4                                  | 2            |              | 2            |              | 1            |            | 9             | 265,732                |
| 69               | 2                                  | 1            |              | 2            |              |              |            | 5             | 154,182                |
| 70 & Up          | 4                                  | 1            | 3            | 2            |              |              |            | 10            | 306,436                |
| <b>Totals</b>    | <b>4,467</b>                       | <b>4,511</b> | <b>4,245</b> | <b>3,179</b> | <b>2,023</b> | <b>1,197</b> | <b>583</b> | <b>20,205</b> | <b>\$1,124,125,313</b> |

**ACTIVE PARTICIPANTS AS OF DECEMBER 31, 2009**  
**PROTECTIVE PARTICIPANTS WITHOUT SOCIAL SECURITY**  
**BY ATTAINED AGE AND YEARS OF SERVICE**

| Attained<br>Ages | Years of Service to Valuation Date |            |            |            |            |            |           | Totals       |                      |
|------------------|------------------------------------|------------|------------|------------|------------|------------|-----------|--------------|----------------------|
|                  | 0-4                                | 5-9        | 10-14      | 15-19      | 20-24      | 25-29      | 30 Plus   | No.          | Valuation<br>Payroll |
| 20-24            | 61                                 |            |            |            |            |            |           | 61           | \$ 2,975,707         |
| 25-29            | 181                                | 61         | 1          |            |            |            |           | 243          | 13,416,120           |
| 30-34            | 122                                | 181        | 68         |            |            |            |           | 371          | 22,762,359           |
| 35-39            | 47                                 | 135        | 247        | 61         | 1          |            |           | 491          | 32,877,419           |
| 40-44            | 21                                 | 63         | 172        | 183        | 57         |            |           | 496          | 35,048,950           |
| 45-49            | 5                                  | 20         | 65         | 127        | 190        | 80         | 1         | 488          | 36,213,552           |
| 50               | 1                                  |            | 15         | 21         | 34         | 35         | 1         | 107          | 8,148,091            |
| 51               | 1                                  | 2          | 4          | 21         | 20         | 38         | 7         | 93           | 7,236,269            |
| 52               |                                    | 2          | 4          | 12         | 26         | 29         | 15        | 88           | 6,758,872            |
| 53               |                                    |            | 3          | 13         | 19         | 27         | 14        | 76           | 5,901,829            |
| 54               |                                    | 1          | 1          | 5          | 15         | 22         | 9         | 53           | 4,223,670            |
| 55               |                                    |            | 1          | 8          | 18         | 14         | 13        | 54           | 4,444,804            |
| 56               | 1                                  | 1          |            | 8          | 13         | 10         | 9         | 42           | 3,322,315            |
| 57               |                                    |            | 1          | 2          | 7          | 5          | 10        | 25           | 1,922,685            |
| 58               |                                    |            |            | 2          | 4          | 6          | 6         | 18           | 1,411,192            |
| 59               |                                    |            | 2          | 1          | 3          | 3          | 3         | 12           | 1,075,806            |
| 60               |                                    | 1          |            |            | 1          | 1          | 2         | 5            | 399,835              |
| 61               |                                    |            |            |            |            |            | 1         | 1            | 108,222              |
| 62               |                                    | 1          |            |            |            | 2          | 1         | 4            | 371,311              |
| 63               |                                    | 1          | 1          |            |            | 2          |           | 4            | 330,900              |
| 64               |                                    |            |            |            |            |            |           |              |                      |
| 65               |                                    |            | 1          |            |            |            |           | 1            | 35,112               |
| <b>Totals</b>    | <b>440</b>                         | <b>469</b> | <b>586</b> | <b>464</b> | <b>408</b> | <b>274</b> | <b>92</b> | <b>2,733</b> | <b>\$188,985,020</b> |

**ACTIVE PARTICIPANTS AS OF DECEMBER 31, 2009**  
**ELECTIVE AND ELECTED OFFICIALS**  
**BY ATTAINED AGE AND YEARS OF SERVICE**

| Attained<br>Ages | Years of Service to Valuation Date |            |            |            |            |            |            | Totals       |                      |
|------------------|------------------------------------|------------|------------|------------|------------|------------|------------|--------------|----------------------|
|                  | 0-4                                | 5-9        | 10-14      | 15-19      | 20-24      | 25-29      | 30 Plus    | No.          | Valuation<br>Payroll |
| 20-24            | 1                                  |            |            |            |            |            |            | 1            | \$ 46,063            |
| 25-29            | 5                                  |            |            |            |            |            |            | 5            | 165,475              |
| 30-34            | 20                                 | 10         | 1          |            |            |            |            | 31           | 1,565,873            |
| 35-39            | 37                                 | 25         | 15         | 3          |            |            |            | 80           | 5,550,454            |
| 40-44            | 50                                 | 20         | 22         | 19         | 2          |            |            | 113          | 6,686,608            |
| 45-49            | 61                                 | 26         | 27         | 34         | 21         | 6          |            | 175          | 12,249,172           |
| 50-54            | 58                                 | 35         | 36         | 29         | 40         | 28         | 19         | 245          | 18,226,715           |
| 55               | 14                                 | 4          | 4          | 7          | 6          | 7          | 11         | 53           | 3,626,151            |
| 56               | 19                                 | 10         | 8          | 7          | 7          | 6          | 8          | 65           | 4,765,889            |
| 57               | 9                                  | 8          | 3          | 8          | 6          | 6          | 13         | 53           | 4,475,600            |
| 58               | 15                                 | 9          | 9          | 6          | 14         | 13         | 13         | 79           | 6,392,625            |
| 59               | 13                                 | 8          | 8          | 10         | 10         | 8          | 8          | 65           | 5,775,666            |
| 60               | 14                                 | 11         | 7          | 4          | 12         | 8          | 5          | 61           | 4,460,114            |
| 61               | 8                                  | 7          | 4          | 8          | 11         | 8          | 8          | 54           | 4,873,144            |
| 62               | 14                                 | 9          | 5          | 8          | 4          | 4          | 10         | 54           | 4,139,323            |
| 63               | 12                                 | 9          | 5          | 4          | 6          | 9          | 12         | 57           | 4,401,437            |
| 64               | 7                                  | 5          | 4          | 7          | 3          | 4          | 5          | 35           | 2,532,564            |
| 65               | 8                                  | 3          | 5          | 3          | 3          | 4          | 6          | 32           | 2,658,901            |
| 66               | 5                                  | 2          | 3          | 5          | 4          | 2          | 4          | 25           | 1,978,424            |
| 67               | 12                                 | 5          | 2          | 3          | 3          | 1          | 3          | 29           | 1,688,848            |
| 68               | 3                                  |            | 2          | 2          |            |            |            | 7            | 432,629              |
| 69               | 7                                  | 4          | 2          | 3          | 2          |            | 5          | 23           | 1,384,811            |
| 70               | 6                                  |            | 2          | 1          | 1          | 1          | 1          | 12           | 477,710              |
| 71               | 11                                 | 1          | 1          | 1          | 1          |            | 1          | 16           | 555,688              |
| 72               | 2                                  |            |            | 2          |            |            | 4          | 8            | 601,150              |
| 73               | 4                                  | 1          |            | 1          |            | 1          |            | 7            | 215,446              |
| 74               | 1                                  | 2          |            |            |            | 1          |            | 4            | 158,356              |
| 75 & Up          | 23                                 | 6          | 4          | 1          |            | 1          | 3          | 38           | 926,194              |
| <b>Totals</b>    | <b>439</b>                         | <b>220</b> | <b>179</b> | <b>176</b> | <b>156</b> | <b>118</b> | <b>139</b> | <b>1,427</b> | <b>\$101,011,030</b> |

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**APPENDIX**

**ACTUARIAL METHODS**

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## ACTUARIAL VALUATION METHOD

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The actuarial funding method prescribed in the statute for WRS is the **Frozen Initial Liability Method**. Under this method, the amount of remaining unfunded accrued actuarial liabilities at any valuation date is affected only by the monthly amortization payments, compound interest, the added liability created by new employer units, and any added liabilities caused by changes in benefit provisions.

Actuarial gains or losses arising from the difference between actual and assumed experience are reflected in the determination of the normal cost. In this manner, experience gains or losses in any year are amortized (spread) over the average future working lifetime of the active participant group - a period of approximately 13 years. Hence, the computed normal cost is made up of two parts:

- The pure entry-age normal cost (EANC) determined without regard to past gains or losses, and
- an experience amortization component.

Section 40.04(1) of the Wisconsin Statutes provides authority to maintain accounts and reserves determined to be “useful in achieving the funds’ purposes - -”. A fundamental WRS objective is stable contribution rates. Accordingly, based on the authority granted under Section 40.04, the experience portion of the normal cost is separately calculated each year and the amortization period is varied upward or downward in order to minimize short-term rate fluctuations.

## ASSET VALUATION METHOD

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An essential step in the valuation process is comparing valuation assets with computed liabilities. Computed liabilities result from actuarial calculations involving the covered population, the benefits, and actuarial assumptions. Valuation assets are those assets that are recognized and available to fund the System's liabilities. WRS assets are invested in the Core Investment Trust, and in the Variable Investment Trust, both of which are managed by the State of Wisconsin Investment Board (SWIB). Assets in the Variable Investment Trust are marked to market each year. Assets in the Core Investment Trust (most of the assets) are valued (or recognized) using an "asset valuation method."

Asset valuation methods are distinguished by the timing of the recognition of investment return. Total investment return is the sum of ordinary income and capital value changes. Under a pure market value approach, ordinary investment income and all capital value changes are recognized immediately. Because of market volatility, use of pure market values in retirement funding can result in volatile contribution rates and unstable financial ratios, contrary to WRS objectives.

The asset valuation method used for WRS valuations is statutory, and is referred to as the "Market Recognition Account" or MRA. Act 11 of 1999 closed the former Transaction Amortization Account (TAA) and created the Market Recognition Account. The MRA recognizes assumed return fully each year. Differences between actual and assumed return are phased in over a closed 5-year period. The objective is to give recognition to long-term changes in asset values while minimizing the effect of short-term fluctuations in the capital markets. In accordance with its smoothing objective, the MRA will tend to exceed the market value when the markets are doing poorly, and will fall short of the market value when markets are doing well. Some retirement systems set limits on the amount by which the recognized value of assets can differ from the market value.

The development of the Market Recognition Account is shown on the following page. The Core Investment Trust includes assets for other programs, such as Sick Leave, that are not related to the funding of the Wisconsin Retirement System, and does not include assets related to the Variable Investment Trust. Consequently, the asset value developed on the next page will not balance to the total system assets. ETF Staff maintains the breakdown of the separate asset accounts.



## DEVELOPMENT OF EAR AS OF DECEMBER 31, 2009

|   | General         | Executive<br>& Elected<br>Officials | Protective Occupation |                      | Total             |
|---|-----------------|-------------------------------------|-----------------------|----------------------|-------------------|
|   |                 |                                     | With<br>Soc. Sec      | Without<br>Soc. Sec. |                   |
| <b>\$ Millions</b>                                  |                 |                                     |                       |                      |                   |
| 1. Present Value of Future Benefits for Non-Retired | \$46,651.1      | \$390.1                             | \$5,415.0             | \$1,244.9            | \$53,701.1        |
| 2. Present Value of Future Entry Age Normal Costs   | 13,320.2        | 91.1                                | 1,920.2               | 396.3                | 15,727.8          |
| 3. Entry Age Accrued Liability: (1)-(2)             | 33,330.9        | 299.0                               | 3,494.8               | 848.6                | 37,973.3          |
| 4. Non-Retired Assets-WRS                           | 34,007.0        | 283.1                               | 3,651.7               | 941.4                | 38,883.2          |
| -LTDI   | 111.8           | 1.3                                 | 25.9                  | 5.3                  | 144.3             |
| -Total  | 34,118.8        | 284.4                               | 3,677.6               | 946.7                | 39,027.5          |
| 5. Entry Age Unfunded Accrued Liability:(3)-(4)     | (787.9)         | 14.6                                | (182.8)               | (98.1)               | (1,054.2)         |
| 6. WRS Frozen Unfunded Accrued Liability            | 179.7           | 0.7                                 | 6.1                   | 6.8                  | 193.3             |
| <b>7. EAR:(6)-(5)</b>                               | <b>\$ 967.6</b> | <b>\$(13.9)</b>                     | <b>\$ 188.9</b>       | <b>\$ 104.9</b>      | <b>\$ 1,247.5</b> |

**ACTUAL VS. EXPECTED CHANGES IN EXPERIENCE AMORTIZATION RESERVE (EAR) - CALENDAR YEAR 2009**  
**(\$ MILLIONS)**

|   | <b>December 31, 2009</b> |                                    |                   |                     |                   |
|---|--------------------------|------------------------------------|-------------------|---------------------|-------------------|
|   | <b>General</b>           | <b>Executive<br/>&amp; Elected</b> | <b>Protective</b> |                     | <b>Total</b>      |
|   |                          |                                    | <b>With S.S.</b>  | <b>Without S.S.</b> |                   |
| (1) Entry Age UAAL at start of year                     | \$ (1,483.3)             | \$ 0.5                             | \$ (277.9)        | \$ (139.1)          | \$ (1,899.8)      |
| (2) Normal cost from last valuation (Total)             | 1,376.9                  | 12.9                               | 186.0             | 39.7                | 1,615.5           |
| (3) Actual contributions                                | 1,243.6                  | 11.9                               | 149.9             | 26.8                | 1,432.2           |
| (4) Interest  | (110.5)                  | 0.1                                | (20.3)            | (10.3)              | (141.0)           |
| (5) Expected UAAL before changes: (1) + (2) - (3) + (4) | (1,460.5)                | 1.6                                | (262.1)           | (136.5)             | (1,857.5)         |
| (6) Change from experience study                        | 202.3                    | 4.3                                | 40.7              | 15.8                | 263.1             |
| (7) Other changes                                       | 0.0                      | 0.0                                | 0.0               | 0.0                 | 0.0               |
| (8) Expected UAAL after changes: (5) + (6) + (7)        | (1,258.2)                | 5.9                                | (221.4)           | (120.7)             | (1,594.4)         |
| (9) Actual Entry Age UAAL at end of year                | (787.9)                  | 14.6                               | (182.8)           | (98.1)              | (1,054.2)         |
| <b>(10) Gain (loss): (8) - (9)</b>                      | <b>\$ (470.3)</b>        | <b>\$ (8.7)</b>                    | <b>\$ (38.6)</b>  | <b>\$ (22.6)</b>    | <b>\$ (540.2)</b> |

The gain loss analysis is intended to explain the financial effect of differences between actual and assumed experience in basic risk areas: Investment Income, Pay increases, retirement rates, turnover rates, etc. In order for the gain loss analysis to proceed, the change in the Entry Age Unfunded Actuarial Accrued Liabilities from one year to the next is analyzed to remove the effect of expected changes. The table above develops this year's gain or loss (line 10) which is added to the Experience Amortization Reserve (EAR). When the EAR increases "unexpectedly," this is favorable experience and downward pressure is exerted on contribution rates. Similarly, an unexpected decrease in the EAR is unfavorable experience and upward pressure is exerted on contribution rates. In addition to the gain or (loss) described in line 10, non-recurring changes in lines 6 and 7 also may affect contribution rates.

By measuring gains and losses each year and, to the extent possible, determining the "responsible" assumptions, insight is gained into how well the actuarial assumptions estimate WRS liabilities. Such information aids in understanding financial effects of emerging trends and is particularly useful during preparation of the WRS experience study.

August 27, 2010

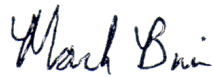
Mr. David Stella, Deputy Secretary  
Wisconsin Department of Employee Trust Funds  
801 West Badger Road  
Madison, Wisconsin 53713

**Re: 2009 Gain Loss Analysis**

Dear Dave:

Enclosed are 75 bound copies of this report.

Sincerely,

A handwritten signature in black ink that reads "Mark Buis". The signature is written in a cursive style with a large initial "M".

Mark Buis

MB:lr  
Enclosures