

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

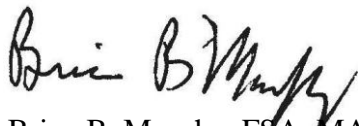
Ladies and Gentlemen:

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

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ACTIVE MEMBER GAIN/LOSS ANALYSIS

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 & Elected	Protective		Total	Expected
			With S.S.	Without S.S.		
Beginning Census	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	
Ending Census	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

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

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.

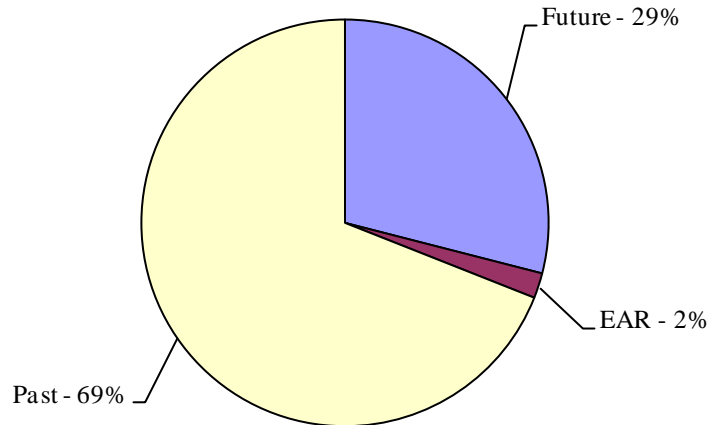
Contribution Rate Change

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.

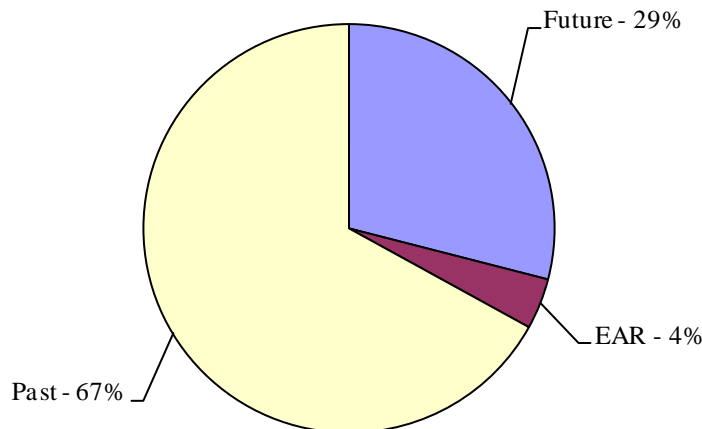
This Gain/Loss Analysis is the first in the normal three-year experience cycle. It will be part of the basis for the experience investigation covering the period January 1, 2009 to December 31, 2011.

FINANCING RETIREMENT SYSTEM BENEFIT LIABILITIES AT DECEMBER 31

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**



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

Type of Activity	General	Executive & Elected	Protective		Total
			With S.S.	Without S.S.	
Decrement Risk Areas					
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)
Economic Risk Areas					
Salary Increases	360.5	7.9	74.6	5.7	448.7
Investment Return	(762.1)	(10.4)	(110.9)	(28.6)	(912.0)
Other Activity (See Page 10)	(47.0)	(5.0)	(4.2)	(2.6)	(58.8)
Total Gain(Loss)	\$ (470.3)	\$(8.7)	\$ (38.6)	\$(22.6)	(540.2)
-% of accrued liability	(1.5)%	(3.0)%	(1.2)%	(2.9)%	(1.5)%

ANALYSIS OF OTHER ACTIVITY
(\$ MILLIONS)

	General	Executive & 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 (From Retiree Report)	2,657	30	189	42	2,918
Reserve Difference	(21)	(2)	(4)	0	(28)
Expected Refunds	23	0	1	0	24
Actual Refunds	22	0	2	0	24
Refund Difference	1	0	(1)	0	0
Re-established Liability	(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 & Early Retmt.	Disability Retmt.	Other Separations*	Salary Increases	Investment Return	Other	Total
GENERAL							
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	20.2	18.7	(60.6)	360.5	(762.1)	(47.0)	(470.3)
EXECUTIVE & ELECTED							
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	(0.1)	0.1	(1.2)	7.9	(10.4)	(5.0)	(8.7)
PROTECTIVE WITH SOCIAL SECURITY							
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	9.1	1.9	(9.1)	74.6	(110.9)	(4.2)	(38.6)
PROTECTIVE WITHOUT SOCIAL SECURITY							
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	3.4	0.8	(1.3)	5.7	(28.6)	(2.6)	(22.6)

* Includes separation due to death.

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

	General	Executive & 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 experience: $(3c)-(5)$	(872.6)	(8.7)	(99.9)	(25.7)	(1,006.9)
(7) Portion applied to Change in Variable Excess Reserve and Money Purchase Minimum Benefit	(110.5)	1.7	11.0	2.9	(94.9)
(8) Remaining Gain (Loss): (6)-(7)	\$ (762.1)	\$ (10.4)	\$ (110.9)	\$(28.6)	\$ (912.0)

SECTION A

WITHDRAWAL EXPERIENCE

**GENERAL MALES
WITHDRAWAL EXPERIENCE**

Male Service-Based Withdrawals

Service Index	Withdrawals	Exposure	Crude Rates	Current Rates	Expected Withdrawals
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
Totals	1,505	19,055	0.0790	0.0848	1,615

Male Age-Based Withdrawals

Age	Withdrawals	Exposure	Crude Rates	Current Rates	Expected Withdrawals
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
Totals	280	15,233	0.0184	0.0220	335

**GENERAL FEMALES
WITHDRAWAL EXPERIENCE**

Female Service-Based Withdrawals

Service Index	Withdrawals	Exposure	Crude Rates	Current Rates	Expected Withdrawals
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

Age	Withdrawals	Exposure	Crude Rates	Current Rates	Expected Withdrawals
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**

Male Service-Based Withdrawals

Service Index	Withdrawals	Exposure	Crude Rates	Current Rates	Expected Withdrawals
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

Age	Withdrawals	Exposure	Crude Rates	Current Rates	Expected Withdrawals
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**

Female Service-Based Withdrawals

Service Index	Withdrawals	Exposure	Crude Rates	Current Rates	Expected Withdrawals
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
Totals	1,139	24,720	0.0461	0.0568	1,404

Female Age-Based Withdrawals

Age	Withdrawals	Exposure	Crude Rates	Current Rates	Expected Withdrawals
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
Totals	227	22,532	0.0101	0.0141	318

**UNIVERSITY MALES
WITHDRAWAL EXPERIENCE**

Male Service-Based Withdrawals

Service Index	Withdrawals	Exposure	Crude Rates	Current Rates	Expected Withdrawals
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
Totals	427	4,286	0.0996	0.0996	427

Male Age-Based Withdrawals

Age	Withdrawals	Exposure	Crude Rates	Current Rates	Expected Withdrawals
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
Totals	60	2,226	0.0270	0.0270	60

**UNIVERSITY FEMALES
WITHDRAWAL EXPERIENCE**

Female Service-Based Withdrawals

Service Index	Withdrawals	Exposure	Crude Rates	Current Rates	Expected Withdrawals
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
Totals	483	5,056	0.0955	0.1153	583

Female Age-Based Withdrawals

Age	Withdrawals	Exposure	Crude Rates	Current Rates	Expected Withdrawals
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
Totals	64	2,224	0.0288	0.0297	66

**PROTECTIVE WITH SOCIAL SECURITY
WITHDRAWAL EXPERIENCE**

Male and Female Service-Based Withdrawals

Service Index	Withdrawals	Exposure	Crude Rates	Current Rates	Expected Withdrawals
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
Totals	267	8,573	0.0311	0.0411	352

Male and Female Age-Based Withdrawals

Age	Withdrawals	Exposure	Crude Rates	Current Rates	Expected Withdrawals
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
Totals	95	8,269	0.0115	0.0145	120

**PROTECTIVE WITHOUT SOCIAL SECURITY
WITHDRAWAL EXPERIENCE**

Male and Female Service-Based Withdrawals

Service Index	Withdrawals	Exposure	Crude Rates	Current Rates	Expected Withdrawals
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

Age	Withdrawals	Exposure	Crude Rates	Current Rates	Expected Withdrawals
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**

Male and Female Service-Based Withdrawals

Service Index	Withdrawals	Exposure	Crude Rates	Current Rates	Expected Withdrawals
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
Totals	27	399	0.0677	0.1253	50

Male and Female Age-Based Withdrawals

Age	Withdrawals	Exposure	Crude Rates	Current Rates	Expected Withdrawals
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
Totals	8	301	0.0266	0.0532	16

SECTION B

DISABILITY EXPERIENCE

**GENERAL
DISABILITY EXPERIENCE
DURING CALENDAR YEAR 2009**

Male Disability Experience

Age	Disabilities	Exposure	Crude Rates	Current Rates	Expected Disabilities
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	-
Totals	39	33,710	0.0012	0.0024	82

Female Disability Experience

Age	Disabilities	Exposure	Crude Rates	Current Rates	Expected Disabilities
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	-
Totals	44	59,093	0.0007	0.0018	104

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

Male Disability Experience

Age	Disabilities	Exposure	Crude Rates	Current Rates	Expected Disabilities
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	-
Totals	11	17,191	0.0006	0.0010	18

Female Disability Experience

Age	Disabilities	Exposure	Crude Rates	Current Rates	Expected Disabilities
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	-
Totals	14	45,227	0.0003	0.0011	50

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**UNIVERSITY
DISABILITY EXPERIENCE
DURING CALENDAR YEAR 2009**

Male Disability Experience

Age	Disabilities	Exposure	Crude Rates	Current Rates	Expected Disabilities
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	-
Totals	4	6,239	0.0006	0.0006	4

Female Disability Experience

Age	Disabilities	Exposure	Crude Rates	Current Rates	Expected Disabilities
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	-
Totals	4	6,259	0.0006	0.0008	5

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

Male and Female Disability Experience

Age	Disabilities	Exposure	Crude Rates	Current Rates	Expected Disabilities
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	-
Totals	5	14,744	0.0003	0.0013	19

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

Male and Female Disability Experience

Age	Disabilities	Exposure	Crude Rates	Current Rates	Expected Disabilities
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	-
Totals	1	2,097	0.0005	0.0024	5

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

Male and Female Disability Experience

Age	Disabilities	Exposure	Crude Rates	Current Rates	Expected Disabilities
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

**GENERAL
PAY INCREASE ASSUMPTION**

Service-Based Pay Increase Experience

Service Group		Total % Increase	
Beginning of Year	Number	Actual	Expected
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 %
Total	128,257		

**PUBLIC SCHOOLS
PAY INCREASE ASSUMPTION**

Service-Based Pay Increase Experience

Service Group		Total % Increase	
Beginning of Year	Number	Actual	Expected
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 %
Total	77,747		

**UNIVERSITY
PAY INCREASE ASSUMPTION**

Service-Based Pay Increase Experience

Service Group		Total % Increase	
Beginning of Year	Number	Actual	Expected
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 %
Total	17,468		

**PROTECTIVE WITH SOCIAL SECURITY
PAY INCREASE ASSUMPTION**

Male and Female Service-Based Pay Increase Experience

Service Group		Total % Increase	
Beginning of Year	Number	Actual	Expected
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 %
Total	19,250		

**PROTECTIVE WITHOUT SOCIAL SECURITY
PAY INCREASE ASSUMPTION**

Male and Female Service-Based Pay Increase Experience

Service Group		Total % Increase	
Beginning of Year	Number	Actual	Expected
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**

Service-Based Pay Increase Experience

Service Group		Total % Increase	
Beginning of Year	Number	Actual	Expected
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 %
Total	1,307		

SECTION D

NORMAL AND EARLY RETIREMENT EXPERIENCE

GENERAL MALES
NORMAL RETIREMENT EXPERIENCE

Male Age-Based Retirement Experience

Age	Retirements	Exposure	Crude Rates	Current Rates	Expected Retirements
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

Age	Retirements	Exposure	Crude Rates	Current Rates	Expected Retirements
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
Totals	545	9,710	0.0561	0.0836	812

**GENERAL FEMALES
NORMAL RETIREMENT EXPERIENCE**

Female Age-Based Retirement Experience

Age	Retirements	Exposure	Crude Rates	Current Rates	Expected Retirements
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

Age	Retirements	Exposure	Crude Rates	Current Rates	Expected Retirements
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
Totals	843	17,843	0.0472	0.0782	1,395

**PUBLIC SCHOOL MALES
NORMAL RETIREMENT EXPERIENCE**

Male Age-Based Retirement Experience

Age	Retirements	Exposure	Crude Rates	Current Rates	Expected Retirements
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**

Male Age-Based Early Retirement Experience

Age	Retirements	Exposure	Crude Rates	Current Rates	Expected Retirements
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
Totals	274	3,099	0.0884	0.1523	472

**PUBLIC SCHOOL FEMALES
NORMAL RETIREMENT EXPERIENCE**

Female Age-Based Retirement Experience

Age	Retirements	Exposure	Crude Rates	Current Rates	Expected Retirements
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

Age	Retirements	Exposure	Crude Rates	Current Rates	Expected Retirements
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**

Male Age-Based Retirement Experience

Age	Retirements	Exposure	Crude Rates	Current Rates	Expected Retirements
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**

Male Age-Based Early Retirement Experience

Age	Retirements	Exposure	Crude Rates	Current Rates	Expected Retirements
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**

Female Age-Based Retirement Experience

Age	Retirements	Exposure	Crude Rates	Current Rates	Expected Retirements
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**

Female Age-Based Early Retirement Experience

Age	Retirements	Exposure	Crude Rates	Current Rates	Expected Retirements
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
Totals	86	1,754	0.0490	0.0775	136

**PROTECTIVE WITH SOCIAL SECURITY
NORMAL RETIREMENT EXPERIENCE**

Male and Female Age-Based Retirement Experience

Age	Retirements	Exposure	Crude Rates	Current Rates	Expected Retirements
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

Age	Retirements	Exposure	Crude Rates	Current Rates	Expected Retirements
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**

Male and Female Age-Based Retirement Experience

Age	Retirements	Exposure	Crude Rates	Current Rates	Expected Retirements
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**

Male and Female Age-Based Early Retirement Experience

Age	Retirements	Exposure	Crude Rates	Current Rates	Expected Retirements
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		
Totals	12	407			17

SECTION E

MORTALITY EXPERIENCE

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

SECTION F

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

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

Attained Ages	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation 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
Totals	70,941	50,640	39,977	30,098	21,837	13,717	13,191	240,401	\$11,098,119,066

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

Attained Ages	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation 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
Totals	4,467	4,511	4,245	3,179	2,023	1,197	583	20,205	\$1,124,125,313

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

Attained Ages	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation 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
Totals	440	469	586	464	408	274	92	2,733	\$188,985,020

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

Attained Ages	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation 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
Totals	439	220	179	176	156	118	139	1,427	\$101,011,030

APPENDIX

ACTUARIAL METHODS

ACTUARIAL VALUATION METHOD

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

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 & Elected Officials	Protective Occupation		Total
			With Soc. Sec	Without Soc. Sec.	
\$ Millions					
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
7. EAR:(6)-(5)	\$ 967.6	\$(13.9)	\$ 188.9	\$ 104.9	\$ 1,247.5

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

	December 31, 2009				
	General	Executive & Elected	Protective		Total
			With S.S.	Without S.S.	
(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)
(10) Gain (loss): (8) - (9)	\$ (470.3)	\$ (8.7)	\$ (38.6)	\$ (22.6)	\$ (540.2)

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

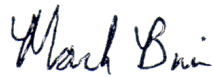
Mr. David Stella, Deputy Secretary
Wisconsin Department of Employee Trust Funds
801 West Badger Road
Madison, Wisconsin 53713

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, slightly slanted style.

Mark Buis

MB:lr
Enclosures