

## ACCUMULATED SICK LEAVE CONVERSION CREDIT PROGRAMS PRESENTED TO THE WISCONSIN DEPARTMENT OF EMPLOYEE TRUST FUNDS

ANNUAL ACTUARIAL VALUATION DECEMBER 31, 2008

June 5, 2009

**Employee Trust Funds Board** Wisconsin Retirement System 801 West Badger Road Madison, Wisconsin 55713-2526

Ladies and Gentlemen:

The results of the Annual Actuarial Valuation of benefit liabilities and costs of the Accumulated Sick Leave Conversion Credit Programs are presented in this report. The recommended contribution rates are shown below:

	University Hospital	Health and Education		Other State	
_	Authority	Facility	Wiscraft	Employers	Totals
Base Rate	0.9%	1.4%	1.7%	0.6%	0.6%
Supplemental Rate	0.4%	0.8%	1.1%	0.2%	0.2%
Total	1.3%	2.2%	2.8%	0.8%	0.8%

The date of the valuation was December 31, 2008.

The valuation was based upon data, furnished by the Department of Employee Trust Funds, concerning retired and non-retired participants and pertinent financial information.

Both actuaries submitting this report are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

The valuation was completed in accordance with standards of practice prescribed by the Actuarial Standards Board and in conformance with Chapter 40 of the Wisconsin Statutes. To the best of our knowledge, this report is complete and accurate, and the actuarial methods and assumptions produced results which are reasonable.

Respectfully submitted,

Brian B. Murphy, FSA, MAAA

BBM/MB:lr

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Mark Buis, FSA, MAAA

# **COMBINED RESULTS AND DISCUSSION**

### ASLCC PROGRAM BASE PLUS SUPPLEMENTAL COMPUTED TOTAL EMPLOYER CONTRIBUTION RATES

The financial objectives of the ASLCC Program are to establish and receive contributions to support benefits that will remain approximately level from year to year. Combined program valuation results for the last 10 years are presented below.

Base	Supplemental	Total	UAAL* Amortization Years
1.8%	0.9%	2.7%	25
1.7%	1.0%	2.7%	24
1.7%	1.1%	2.8%	24
1.8%	1.2%	3.0%	23
0.9%	0.5%	1.4%	22
0.9%	0.4%	1.3%	21
0.8%	0.4%	1.2%	20
0.7%	0.3%	1.0%	19
0.6%	0.2%	0.8%	18
0.6%	0.2%	0.8%	17
	$1.8\% \\ 1.7\% \\ 1.7\% \\ 1.8\% \\ 0.9\% \\ 0.9\% \\ 0.8\% \\ 0.7\% \\ 0.6\%$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1.8% $0.9%$ $2.7%$ $1.7%$ $1.0%$ $2.7%$ $1.7%$ $1.1%$ $2.8%$ $1.8%$ $1.2%$ $3.0%$ $0.9%$ $0.5%$ $1.4%$ $0.9%$ $0.4%$ $1.3%$ $0.8%$ $0.4%$ $1.2%$ $0.7%$ $0.3%$ $1.0%$ $0.6%$ $0.2%$ $0.8%$

\* Unfunded actuarial accrued liabilities.

*@* Assumption change.

& Method change.

- Based on the policy established at the June 2002 ETF Board meeting, the amortization period for unfunded actuarial accrued liabilities was closed. Therefore, the remaining period will decline one year at a time until the UAAL is fully amortized.
- The decrease in contribution rates shown above from 2002 to 2003 is primarily due to the issuance of Pension Obligation Bonds by the State of Wisconsin which paid off the majority of unfunded liabilities of the ASLCC Program.
- In computing the rates in this report, we used the frozen initial liability (FIL) method. This method was used because the Pension Obligation Bond paid off unfunded liabilities for some, but not all employers, requiring separate contribution rates for some of the employers. This method is described further on page 13.
- In total, during 2008, investment return was well below the assumed level of 7.8% on a market value basis. However, under the asset valuation method, gains and losses are phased in over a five year period, resulting in a 3.2% return on an actuarial value of assets basis. Overall contribution rates for the December 31, 2008 valuation remained unchanged from the prior year. Increases attributable to unfavorable asset performance were offset by a revision to the actuarial adjustment for future contingencies (see page 14).
- The Actuarial Value of Assets exceeds the Market Value of Assets by approximately 32% as of the valuation date. The statutory asset valuation method will recognize all of the differences between actuarial value and market value over four future years. The results will be strong upward pressure on contribution rates.

### ASLCC PROGRAM SUMMARY OF PARTICIPANT DATA DECEMBER 31, 2008

### **Active Participants**

	State Employees			
	(Non-University)	University	University Hospital	Total
Number	33,781	29,504	6,435	69,720
Annual Payroll	\$1,781,423,247	\$1,742,699,139	\$353,914,338	\$3,878,036,723
Accrued Unused Sick Days	3,020,185 days	2,740,245 days	172,059 days	5,932,489 days
Averages: Age	45.8 years	47.1 years	41.1 years	45.9 years
Service	13.1 years	11.8 years	8.5 years	12.1 years
Sick Leave Days	89.4 days	92.9 days	26.7 days	85.1 days

#### **Retirees & Beneficiaries**

	Rate Ca		
	Without Medicare	With Medicare	Total
Number*	4,198	7,897	12,095
Monthly Premiums			
Total	\$4,177,533	\$4,731,170	\$8,908,703
Average	\$ 995.12	\$ 599.11	
Prior Year Average	\$ 933.56	\$ 605.22	

\* Number count does not include 4,364 escrowed annuitants.

### ASLCC PROGRAM SUMMARY OF ASSETS DECEMBER 31, 2008

	Base Program		Supplemental Program		Total
Beginning Balance	\$1	,400,565,923	\$744,424,781	\$2	2,144,990,704
Adjustment		253,467	131,723		385,190
Adjusted Beginning Balance	\$1	,400,819,390	\$744,556,504	\$2	2,145,375,894
<b>Revenues</b> Contributions Investment Income Total Revenues	\$	27,654,197 43,762,602 71,416,799	\$ 12,262,232 23,441,675 \$ 35,703,907	\$	39,916,429 67,204,277 107,120,706
Expenses					
Insurance Premiums	\$	69,236,225	\$ 23,184,143	\$	92,420,368
Administration		162,095	86,563		248,658
Total Expenses	\$	69,398,320	\$ 23,270,706	\$	92,669,026
Ending Balance - December 31, 2008	\$1	,402,837,869	\$756,989,705	\$2	2,159,827,574
Internal Rate of Return		3.2%	3.2%		3.2%

### ASLCC PROGRAM UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL) DECEMBER 31, 2008

	University	Health and		Other	
	Hospital Authority	Education Facility	Wiscraft	State Employers	Totals
Balance December 31, 2007	\$ 13,411,117	\$ 54,148	\$224,279	\$ 0	\$ 13,689,544
Less: Adjustments	2,748,982	3,825	10,155	0	2,762,962
Less: Payments	(1,436,872)	(4,591)	(17,907)	0	(1,459,370)
Plus: Interest	1,148,412	4,164	16,889	0	1,169,465
Balance December 31, 2008	\$ 15,871,639	\$ 57,546	\$233,416	\$0	\$ 16,162,601
Base UAAL	\$ 8,784,447	\$ 33,035	\$127,262	\$ 0	\$ 8,944,744
Supplemental UAAL	\$ 7,087,192	\$ 24,511	\$106,154	\$0	\$ 7,217,857
Annual Payroll	\$239,236,763	\$306,047	\$942,469	\$3,637,551,444	\$3,878,036,723
Base Contribution Rate					
Normal Cost	0.6%	0.6%	0.6%	0.6%	0.6%
UAAL	0.3%	0.8%	1.1%	0.0%	0.0%
Total	0.9%	1.4%	1.7%	0.6%	0.6%
Supplemental Contribution Rate					
Normal Cost	0.2%	0.2%	0.2%	0.2%	0.2%
UAAL	0.2%	0.6%	0.9%	0.0%	0.0%
Total	0.4%	0.8%	1.1%	0.2%	0.2%
Total Contribution Rate	1.3%	2.2%	2.8%	0.8%	0.8%

**BASE PLAN RESULTS** 

### SECTION 40.05(4)(B) ACCUMULATED SICK LEAVE CONVERSION CREDIT PROGRAM SUMMARY OF ACCUMULATION AND PAYMENT CONDITIONS

Accumulation. For most participants, sick leave has historically accrued at the rate of 4 hours every two weeks to a maximum of 13 days a year. The potential accrual rate was increased to 5 hours per pay period in 1998, which corresponds to 16.25 days per year. Unused portions accumulate from year to year and are converted at retirement as indicated below. The average annual sick leave balance of Wisconsin State employees (other than University employees) in 2008 was 89.4 days. Based upon an average of 13.1 years of service, this would correspond to an average annual addition of 6.8 days per year to sick leave accounts for past years. For University and University Hospital employees, the average balance was 81.0 days. Based upon an average of 11.2 years of service, this would correspond to an average annual addition of 7.2 days per year to the sick leave accounts for past years. In the future, average annual additions are assumed to be higher because potential sick leave accrual rates have been increased. For purposes of estimating sick leave balances at retirement, each individual was assumed to continue using sick leave at the same rate as in the past but not less than 25% nor more than 75% of the person's annual accrual rate (usually 16.25 days).

**Eligibility for Payment of Accrued Sick Leave**. Termination of employment with 20 or more years of service or eligibility for an immediate annuity from the Wisconsin Retirement System. State elected officials and certain state administrative officials terminating before their minimum service retirement age retain eligibility for benefits at their minimum service retirement age providing they do not elect a WRS separation benefit.

Amount of Payment for Unused Sick Leave. A conversion credit is computed at the time of retirement or death by multiplying the number of days of unused sick leave by the highest basic pay rate. The conversion credit is then used to cover the cost of health insurance premiums for the employee and eligible dependents. Unused portions are carried forward from year to year without interest and when total health insurance premiums paid on behalf of the retired employee equal or exceed the conversion credit, no further payments are made under the ASLCC program. Payments from the sick leave account may be escrowed indefinitely after retirement for participants who provide evidence of comparable health insurance coverage from another source.

## 40.05(4)(B) - BASE ASLCC PROGRAM DEVELOPMENT OF NORMAL COST

	December 31				
Actuarial Present Value of	2008	2007			
<ol> <li>Future Amount to be paid on behalf of present retirants and beneficiaries</li> </ol>	\$ 288,114,097	\$ 270,542,067			
(2) Future Amount to be paid on behalf of future retirees and beneficiaries	1,337,187,301	1,325,445,865			
(3) Total Actuarial Present Value	\$ 1,625,301,398	\$ 1,595,987,932			
(4) Assets	1,402,837,869	1,394,425,084			
(5) Unfunded Actuarial Accrued Liabilities (UAAL)	\$ 8,944,744	\$ 7,187,132			
(6) Present Value of Future Normal Cost: (3) - (4) - (5)	\$ 213,518,785	\$ 194,375,716			
(7) Present Value of Future Salary	\$36,588,568,377	\$35,264,205,346			
(8) Normal Cost: (6) / (7)	0.6%	0.6%			

#### 40.05(4)(B) - BASE ASLCC PROGRAM COMPUTED EMPLOYER CONTRIBUTIONS DECEMBER 31, 2008

Contributions for	Computed Employer Contribution Rate as a % of Covered Payroll
Normal Cost UAAL*	0.6% 0.0%
Total	0.6%

\* Unfunded actuarial accrued liabilities of \$8.9 million were amortized over 17 years. Although this results in a 0.0% of pay contribution due to rounding, unfunded liabilities are allocated to individual employers as shown on page 5 and employers having an unfunded liability will make a separate contribution towards this unfunded liability.

#### **Discussion:**

The financial objective of the ASLCC program is to establish and receive contributions to support benefits that will remain approximately level from year to year. In 2003, the State of Wisconsin issued Pension Obligation Bonds which paid off the majority of unfunded liabilities of the ASLCC Program. Since unfunded liabilities remained for certain employers, the funding method was changed to the Frozen Initial Liability Actuarial Cost Method. Under this method, gains and losses arising from the difference between actual and assumed experience are reflected in the determination of the normal cost. Separate amortization schedules are established for employers with unfunded liabilities (see page 5), resulting in separate contribution rates for each participating employer.

## 40.05(4)(B) - BASE ASLCC PROGRAM COMPARATIVE STATEMENT OF RESULTS

				Average				Average
Valuation		Covered			Accr.	\$ Mil	lions	Computed
Date		Payroll			Sick			Employer
December 31	No. Active	\$ Millions	Age	Service	Days	Assets	UAAL	Rate
1989	48,247	\$1,434.5	43.4	12.2	80.7	\$ 50.0	\$ 383.5	2.1%
1990	49,983	1,624.3	43.5	12.1	80.8	73.9	377.4	2.1%
1991@	54,675	1,810.4	43.4	11.8	78.0	92.4	407.9	2.1%
1992	57,577	1,932.4	43.0	11.3	74.7	121.6	387.4	2.1%
1993	58,299	2,021.8	43.3	11.6	76.0	156.4	364.4	2.1%
1994@	58,971	2,136.9	43.6	11.8	77.0	186.7	380.4	1.9%
1995	57,941	2,151.9	44.2	12.5	80.3	236.8	370.1	1.9%
1996	57,920	2,184.3	44.2	12.3	79.4	283.2	354.4	1.8%
1997@#	58,872	2,260.8	44.3	12.3	79.5	337.2	251.8	1.8%
1998	60,502	2,415.5	44.4	12.2	79.9	392.9	241.9	1.9%
1999	62,158	2,521.6	44.6	12.2	81.0	457.0	260.0	1.8%
2000@	63,008	2,753.3	44.6	12.0	80.6	515.6	214.2	1.7%
2001	64,510	2,980.6	44.5	11.8	80.9	611.7	218.7	1.7%
2002	66,442	3,096.7	44.8	11.8	80.9	619.0	262.6	1.8%
2003@&	68,366	3,349.0	45.0	11.8	80.9	1,085.1	10.9	0.9%
2004	68,269	3,400.0	45.4	12.0	83.1	1,154.0	9.5	0.9%
2005	67,460	3,410.0	45.6	12.2	84.3	1,196.0	9.3	0.8%
2006@	67,892	3,592.5	45.8	12.2	85.5	1,272.7	9.2	0.7%
2007	68,789	3,726.4	45.9	12.2	87.1	1,394.4	7.2	0.6%
2008	69,720	3,878.0	45.9	12.1	85.1	1,402.8	8.9	0.6%

@ Assumption change.

# Benefit change.

& Method change.

# SUPPLEMENTAL PLAN RESULTS

#### ACCUMULATED SICK LEAVE CONVERSION CREDIT PROGRAM SUPPLEMENTAL PLAN DECEMBER 31, 2008

This supplemental plan provides matching credits for participants retiring with 15 or more years of state service as follows:

- Protective: Match up to 78 hours (9.75 days) per full year of service through 24 years, plus 104 hours (13 days) per full year of service over 24 years.
- Others: Match up to 52 hours (6.5 days) per full year of service through 24 years, plus up to 104 hours (13 days) per full year of service over 24 years.

The results below are for the supplemental program only. (The results on page 7 are for the ASLCC base program only.) The supplemental plan accrued liabilities are offset by supplemental plan assets which are accounted for separately by DETF. The contribution rate sufficient to amortize the UAAL over a period of 17 years (the same period as in the base program) is 0.2% of covered payroll as shown below.

Contributions for	Computed Employer Contribution Rate as a % of Covered Payroll
Normal Cost UAAL*	0.2% 0.0%
Total	0.2%

\* Unfunded actuarial accrued liabilities of \$7.2 million were amortized over 17 years. Although this results in a 0.0% of pay contribution due to rounding, unfunded liabilities are allocated to individual employers as shown on page 5 and employers having an unfunded liability will make a separate contribution towards this unfunded liability.

The contribution rate shown above was developed based upon the active participant data as shown on page 3. This is the same data that was used in the development of the base plan rates.

### 40.05(4)(B) – SUPPLEMENTAL ASLCC PROGRAM DEVELOPMENT OF NORMAL COST

			31		
	Actuarial Present Value of		2008		2007
(1)	Future Amount to be paid on behalf of present retirants and beneficiaries	\$	256,393,259	\$	232,145,537
(2)	Future Amount to be paid on behalf of future retirees and beneficiaries		591,733,583		590,950,919
(3)	Total Actuarial Present Value	\$	848,126,842	\$	823,096,456
(4)	Assets		756,989,705		744,424,781
(5)	Unfunded Actuarial Accrued Liabilities (UAAL)	\$	7,217,857	\$	6,502,446
(6)	Present Value of Future Normal Cost: (3) - (4) - (5)	\$	83,919,280	\$	72,169,229
(7)	Present Value of Future Salary	\$	36,588,568,377	\$ 3	35,264,205,346
(8)	Normal Cost: (6) / (7)		0.2%		0.2%

### ASLCC SUPPLEMENTAL PLAN COMPARATIVE STATEMENT OF RESULTS

		_		Average		_		Average
Valuation		Covered			Accr.	<b>\$</b> Mi	llions	Computed
Date		Payroll			Sick			Employer
December 31	No. Active	\$ Millions	Age	Service	Days	Assets	UAAL	Rate
1998	60,502	\$2,415.5	44.4	12.2	79.9	\$ 41.2	\$139.6	0.8%
1999	62,158	2,521.6	44.6	12.2	81.0	69.4	143.1	0.9%
2000@	63,008	2,753.3	44.6	12.0	80.6	97.3	212.6	1.0%
2001	64,510	2,980.6	44.5	11.8	80.9	133.4	245	1.1%
2002	66,442	3,096.7	44.8	11.8	80.9	154.2	273.9	1.2%
2003@&	68,366	3,349.0	45.0	11.8	80.9	519.9	9.1	0.5%
2004	68,269	3,400.0	45.4	12.0	83.1	570.6	7.9	0.4%
2005	67,460	3,410.0	45.6	12.2	84.3	609.7	7.8	0.4%
2006@	67,892	3,592.5	45.8	12.2	85.5	670.5	7.5	0.3%
2007	68,789	3,726.4	45.9	12.2	87.1	744.4	6.5	0.2%
2008	69,720	3,878.0	45.9	12.1	85.1	757.0	7.2	0.2%

@ Assumption change.

& Method change.

For the 2000 and subsequent valuations, retiree liabilities were separately calculated for the supplemental plan. For 1999 and prior, those liabilities were reported as base plan liabilities.

## **ACTUARIAL METHODS AND ASSUMPTIONS**

The actuarial funding method prescribed in the statute for WRS is the **Frozen Initial Liability Actuarial Cost Method**. This funding method is also used for the ASLCC valuation. 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.

#### **ASSET VALUATION METHOD**

The asset valuation method used for ASLCC valuations is referred to as the "Market Recognition Account" or MRA. The MRA recognizes assumed returns fully each year. Differences between actual and assumed returns are phased in over a closed 5-year period. The objective is to give recognition to long-term changes in asset values while the minimizing 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.

#### The principal areas of risk assumption are:

- long-term *rates of investment return* likely to be generated by system assets
- rates of mortality among participants, retirees and beneficiaries
- rates of withdrawal of active participants
- *rates of disability* among participants
- patterns of salary increases to be experienced by participants
- the age and service *distribution of actual retirements*
- future *rates of sick leave usage* by plan participants

In an actuarial valuation, the actuary projects the monetary effect of each risk assumption for each distinct experience group, for the next year and for each year over the next half-century or longer.

Once actual risk experience has occurred and been observed, it will not coincide exactly with assumed risk experience, regardless of the skill of the actuary, the completeness of the data, and the precision of the calculations. Each valuation provides a complete recalculation of assumed future risk experience and takes into account all past differences between assumed and actual risk experience. The result is a continual series of small adjustments to the computed contribution rate. From time to time it becomes necessary to adjust the package of risk measurements to reflect basic experience trends -- but not random year to year fluctuations.

The liabilities calculated in this report reflect a 3% adjustment for future contingencies. Examples of contingencies are:

- Actual data for some employers (including Health and Education Facility, Housing and Economic Development and Wiscraft) was not available at the time of this report. Based on prior calculations, they represent approximately 0.2% of total liabilities.
- Higher than the anticipated rate of increase in health care costs.

### SUMMARY OF ASSUMPTIONS USED FOR ANNUAL ACTUARIAL VALUATIONS ASSUMPTIONS ADOPTED BY ETF BOARD AFTER CONSULTING WITH ACTUARY

#### **Economic Assumptions**

The long-term rates of investment return used in making the valuation was 7.8% a year, compounded yearly.

**Salary adjustment factors** used to project earnings for each participant between the valuation date and the participant's retirement age are shown below for sample years of service. This assumption is used to project a participant's current earnings to the earnings upon which benefits will be based.

	% Merit and Longevity Increase Next Year										
		University	<b>Public School</b>	Prote	ective	Exec. &					
Service	General	Teachers	Teachers	With S.S.	W/O S.S.	Elec.					
1	3.5 %	3.5 %	5.5 %	5.0 %	4.8 %	1.2 %					
2	3.5 %	3.5 %	5.5 %	5.0 %	4.8 %	1.2 %					
3	3.2 %	3.4 %	5.1 %	4.4 %	4.1 %	1.2 %					
4	2.9 %	3.3 %	4.7 %	3.7 %	3.5 %	1.2 %					
5	2.6 %	3.2 %	4.4 %	3.1 %	2.8 %	1.1 %					
10	1.6 %	2.9 %	2.8 %	1.6 %	1.4 %	1.0 %					
15	1.3 %	2.4 %	1.6 %	1.0 %	0.7 %	0.9 %					
20	1.1 %	1.9 %	0.9 %	0.9 %	0.6 %	0.8 %					
25	0.9 %	1.3 %	0.5 %	0.7 %	0.5 %	0.6 %					
30	0.7 %	1.2 %	0.3 %	0.7 %	0.4 %	0.4 %					

If the number of active participants remains constant, then the total active participant payroll will increase 4.1% a year, the base portion of the individual salary increase assumptions. This increasing payroll was recognized in amortizing unfunded actuarial accrued liabilities. Premium payments from the ASLCC Program were also assumed to increase 4.1% a year.

Separate assumptions regarding secular trend of health care inflation and aging assumptions were not used. Because of the structure of the ASLCC program, use of these assumptions would not significantly affect results.

**The mortality table** used to measure mortality for retired participants was the Wisconsin Projected Experience Table - 2005 for men and women, as adopted by the Board in connection with the 2003-2005 Experience Study. Sample life expectancy values from this table are shown below. This assumption is used to measure the probabilities of participants dying before retirement and the probabilities of each benefit payment being made after retirement.

Sample	Future Life					
Attained	Expectancy (years)					
Ages	Males	Females				
40	40.9	45.3				
45	36.2	40.5				
50	31.5	35.7				
55	27.0	30.9				
60	22.7	26.4				
65	18.5	22.0				
70	14.5	17.8				
75	11.0	13.9				
80	8.1	10.4				
85	5.7	7.4				

#### Single Life Expectancy Wisconsin Projected Experience Table – 2005

The values shown above are for non-disabled participants.

Sample	Mortali	ty Rates
Attained Ages	Males	Females
20	0.000259	0.000077
25	0.000337	0.000085
30	0.000409	0.000115
35	0.000434	0.000203
40	0.000547	0.000285
45	0.000805	0.000446
50	0.001316	0.000614
55	0.002317	0.001281
60	0.003375	0.002174
65	0.005178	0.003325
70	0.009079	0.005327
75	0.016700	0.009751
80	0.030153	0.016934

This assumption is used to measure the probability of participants dying while in service.

## **RATES OF RETIREMENT FOR THOSE ELIGIBLE TO RETIRE**

	General		Public	School	Univ	ersity	Prote	ctive*	Exec. &
Age	Male	Female	Male	Female	Male	Female	With S.S.	W/O S.S.	Elected
50							8%	3%	
51							8%	3%	
52							8%	7%	
53							30%	25%	
54							20%	30%	
55							20%	30%	
56							18%	30%	
57	25%	20%	40%	30%	20%	15%	18%	35%	15%
58	25%	20%	35%	30%	15%	15%	18%	30%	15%
59	25%	20%	30%	30%	15%	15%	18%	20%	15%
60	25%	20%	30%	30%	15%	15%	18%	20%	15%
61	20%	20%	30%	35%	17%	25%	18%	20%	15%
62	35%	30%	40%	40%	17%	25%	20%	20%	10%
63	35%	30%	40%	35%	17%	20%	30%	20%	10%
64	25%	25%	25%	25%	17%	20%	20%	20%	10%
65	25%	25%	25%	30%	20%	20%	30%	40%	10%
66	25%	25%	25%	25%	20%	20%	25%	40%	20%
67	10%	15%	15%	25%	20%	20%	25%	40%	20%
68	10%	10%	15%	20%	20%	20%	25%	40%	20%
69	10%	10%	20%	20%	20%	20%	25%	40%	20%
70	10%	10%	20%	20%	20%	20%	100%	100%	10%
71	10%	10%	20%	20%	20%	20%	100%	100%	10%
72	10%	10%	20%	20%	20%	20%	100%	100%	10%
73	10%	10%	20%	20%	20%	20%	100%	100%	10%
74	10%	10%	20%	20%	20%	20%	100%	100%	10%
75	100%	100%	100%	100%	100%	100%	100%	100%	100%

#### **Normal Retirement Pattern**

\* Includes early retirements.

#### **Early Retirement Pattern**

	% Retiring Next Year									
	Ge	ne ral	Public	: School	Univ	University				
Age	Male	Female	Male	Female	Male	Female	Elected			
55	7.50%	5.25%	15.00%	11.00%	5.00%	6.00%	6.00%			
56	7.50%	5.25%	15.00%	11.00%	5.00%	6.00%	6.00%			
57	4.00%	4.00%	15.00%	11.00%	3.00%	5.00%	4.00%			
58	5.00%	5.00%	15.00%	12.00%	3.50%	6.00%	4.00%			
59	5.00%	5.00%	10.00%	12.00%	3.50%	8.00%	4.00%			
60	7.50%	7.50%	15.00%	15.00%	5.50%	10.00%	6.00%			
61	7.00%	7.50%	15.00%	15.00%	7.50%	7.50%	6.00%			
62	18.00%	15.00%	25.00%	25.00%	10.00%	15.00%				
63	18.00%	15.00%	25.00%	20.00%	9.00%	15.00%				
64	15.00%	15.00%	15.00%	15.00%	8.00%	15.00%				

Wisconsin Department of Employee Trust Funds

**The assumed rates of separation** from employment prior to service retirement due to disability and other causes are shown below for sample ages. For other terminations it was assumed that a percentage depending on age of participants terminating after age 35 with 5 or more years service will leave their contributions on deposit and be paid a benefit at normal retirement age and that the remaining participants would take a separation benefit. The percentage taking a separation benefit is 100% at age 35, grading downward to 0% at retirement eligibility. All participants terminating prior to normal retirement age with less than 5 years of service were assumed to take a separation benefit.

		% of Active Participants Terminating									
		Prote	ective	tive							
		With	Without								
		Soc.	Soc.	Public	Schools	Unive	rsity	Exec. &	Ot	Other	
Age	Service	Sec.	Sec.	Males	Females	Males	Females	Elected	Males	Females	
	0	12.0%	5.0%	14.0%	11.0%	20.0%	20.0%	16.0%	21.0%	20.0%	
	1	6.5%	3.0%	11.0%	9.0%	16.0%	17.0%	14.0%	13.0%	14.0%	
	2	4.5%	2.0%	7.0%	7.0%	13.0%	14.0%	12.0%	9.5%	10.0%	
	3	4.1%	1.5%	5.2%	6.0%	11.0%	12.0%	10.0%	7.5%	8.0%	
	4	3.2%	1.4%	4.0%	5.0%	9.0%	10.0%	9.5%	5.5%	7.0%	
	5	3.0%	1.3%	3.2%	4.3%	7.5%	9.0%	9.0%	4.5%	6.0%	
	6	2.7%	1.2%	2.7%	3.8%	6.0%	8.0%	8.5%	4.0%	5.0%	
	7	2.5%	1.1%	2.5%	3.2%	5.0%	7.0%	8.0%	3.8%	4.5%	
	8	2.3%	1.0%	2.3%	2.7%	4.0%	6.3%	7.5%	3.5%	4.3%	
	9	2.0%	0.9%	2.0%	2.5%	3.5%	5.5%	7.0%	3.2%	4.0%	
25	10 & Over	2.0%	0.9%	2.0%	2.5%	3.5%	5.5%	7.0%	3.0%	4.0%	
30		2.0%	0.8%	1.8%	2.2%	3.5%	5.5%	7.0%	3.0%	3.7%	
35		1.8%	0.8%	1.4%	1.8%	3.5%	5.5%	7.0%	2.6%	3.2%	
40		1.4%	0.8%	1.2%	1.4%	3.4%	4.7%	5.8%	2.0%	2.7%	
45		1.2%	0.7%	1.1%	1.2%	2.8%	3.4%	4.7%	1.6%	2.2%	
50		1.0%	0.7%	0.9%	1.0%	1.9%	2.1%	4.2%	1.3%	1.9%	
55		1.0%	0.7%	0.9%	1.0%	1.5%	1.6%	4.0%	1.3%	1.8%	
60		1.0%	0.7%	0.9%	1.0%	1.5%	1.6%	4.0%	1.3%	1.8%	

#### Assumed Termination Rates by Attained Age and Years of Service

#### **Disability Rates**

	% of Active Participants Becoming Disabled										
	Protective		Protective Public		Schools University		Exec. & Elected		Other		
Age	With SS	W/O SS	Males	Females	Males	Females	Males	Females	Males	Females	
20	0.02%	0.05%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	
25	0.02%	0.05%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	
30	0.02%	0.05%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.04%	
35	0.03%	0.06%	0.01%	0.01%	0.01%	0.04%	0.01%	0.01%	0.02%	0.05%	
40	0.05%	0.08%	0.02%	0.02%	0.01%	0.06%	0.01%	0.01%	0.05%	0.70%	
45	0.07%	0.16%	0.05%	0.08%	0.03%	0.05%	0.02%	0.02%	0.10%	0.10%	
50	0.11%	0.92%	0.14%	0.16%	0.05%	0.10%	0.04%	0.04%	0.23%	0.15%	
55	1.73%	0.68%	0.26%	0.23%	0.15%	0.15%	0.15%	0.15%	0.43%	0.28%	
60	2.92%	0.20%	0.43%	0.34%	0.20%	0.23%	0.19%	0.19%	0.77%	0.39%	

Wisconsin Department of Employee Trust Funds

June 5, 2009

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

#### **Re:** Accumulated Sick Leave Conversion Credit Programs

Dear Dave:

Enclosed are 75 bound copies and one unbound copy of the report of the December 31, 2008 annual actuarial valuations of the ASLCC Programs.

Sincerely,

Ward Bri

Mark Buis

MB:lr Enclosures